Analytical Resources, LLC
Analytical Chemists and Consultants

07 June 2023

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

RE: AOC5 MR Phase 1

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

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

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

Associated Work Order(s)	Associated SDG ID(s)
23D0396	N/A

Susan Dunnihoo
Digitally signed by Susan Dunnihoo
Date: 2023.06.07 16:22:14 -07'00'

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

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

Analytical Resources, LLC

Susan Dunnihoo, Director, Client Services

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

Cert# 100006-012

1 of 1

CHAIN-OF-CUSTODY/TEST REQUEST FORM

№ 4059

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

Ship to: ARL
Attn: Sue Dunihoo
Shipper: courier
Form filled out by: KM

Shipping Date: 4/12/23
Airbill Number: —
Turnaround requested: std

Sample Collection Date (m/d/y)	Time	Sample Identification	Volume of Sample / # of Containers	Matrix	Test(s) Requested (check test(s) required) PCBs	SMS SVOCs	TOC/TS	SMS metals	DIF	Archive		Comments / Instructions [Jar tag number(s)]
4/12/23	0956	LOW23-SS1801	4	sediment	X	X	X	X	NA	X		
↓	1015	LOW23-SC1801	4	↓	X		X			X		
	1503	LOW23-SS1802	4		X	X	X	X	NA	X		
	1540	LOW23-SC1802	4		X		X			X		
		Total Number of Containers	16	Purchase Order / Statement of Work # APJ-110222-AOCS-ARL								

1) Released by:	1) Rec'd by:	2) Released by:	2) Rec'd by:
Print name: Kate McPeek	Phillip BR	Print name:	
Signature:	Company: AR	Signature:	Company:
Company: Windward	Date/Time: 4/12/23 1632	Company:	
Date/Time: 4/12/23 1632		Date/Time:	Date/Time:

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

Wind Ward environmental LLC

200 1st Ave W, Suite 500
Seattle, WA 98119

206.378.1364

To be completed by Laboratory upon sample receipt:

Date of receipt:: 4/12/23	Laboratory W.O. #: 23D0396
Condition upon receipt: good	Time of receipt: 16:32
Cooler temperature: 0.5 °C	Received by: Phillip Bates

Analytical Resources, LLC
Analytical Chemists and Consultants

Cooler Receipt Form

ARI Client: Anchor QEA/Windward Project Name: AOC 5 MR Phase 1

COC No(s): 4059 NA Delivered by: Fed-Ex UPS Courier Hand Delivered Other:

Assigned ARI Job No: 23D0396 Tracking No: NA

Preliminary Examination Phase:

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

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

Time	16:49	0.5					

If cooler temperature is out of compliance fill out form 00070F Temp Gun ID#: 100970B

Cooler Accepted by: PIB Date: 4/12/23 Time: 16:32

Complete custody forms and attach all shipping documents

Log-In Phase:

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

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

Samples Logged by: PIB Date: 4/17/23 Time: 12:25 Labels checked by: PIB

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

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

Additional Notes, Discrepancies, & Resolutions:

By: Date:

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle, WA 98101	Project Manager: Ali Judkins	06/07/2023 15:12

ANALYTICAL REPORT FOR SAMPLES

Laboratory ID	Sample ID	Matrix	Date Sampled	Date Received
23D0396-01	LDW23-SS1801	Solid	04/12/23 09:56	04/12/23 16:32
23D0396-02	LDW23-SC1801	Solid	04/12/23 10:15	04/12/23 16:32
23D0396-03	LDW23-SS1802	Solid	04/12/23 15:03	04/12/23 16:32
23D0396-04	LDW23-SC1802	Solid	04/12/23 15:40	04/12/23 16:32

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	07-Jun-2023 15:12

Case Narrative

Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Work Order: 23D0396

Sample receipt

Samples as listed on the preceding page were received 12-Apr-2023 16:32 under ARI work order 23D0396. For details regarding sample receipt, please refer to the Cooler Receipt Form. Samples were frozen on receipt to preserve holding times.

Semivolatiles - EPA Method SW8270E

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

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

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits, with low level response for naphthalene "J"-flagged in the results, and response for benzyl alcohol just over the reporting limit, reported in the full scan due to results in the SIM analysis over the calibration range of the instrument. The blank was rerun to initiate a second sequence and benzyl alcohol was note noted. Associated benzyl alcohol results have been "B"-flagged. As results for the blank and associated samples were under the regulatory limit, the issue is noted and no further action taken for this sample set.

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

The batch BLD0607 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent differences (RPD) outside of advisory control limits are flagged on the summary sheet, reported under work order 23D0394.

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

Semivolatiles - EPA Method SW8270E-SIM

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

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

The blank spike and blank spike duplicate (BS/LCS and BSD/LCSD) spike recoveries for 2,4-dimethyl phenol were outside of control limits. The relative percent differences (RPD) were within control limits. As the MS/MSD and SRM had recoveries low but within limits, outliers are flagged and no further action taken.

The batch BLD0607 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent differences (RPD)

Anchor QEA, LLC	Project: AOC5 MR Phase 1	
1201 3rd Ave, Suite 2600	Project Number: 210075-01.02	**Reported:**
Seattle WA, 98101	Project Manager: Ali Judkins	07-Jun-2023 15:12

Case Narrative

were within advisory control limits, reported under work order 23D0394.

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

Results for benzyl alcohol were reported from the full-scan analysis, due to results above the calibrated range of the instrument.

Pesticides - EPA Method SW8081B (Hexachlorobenzene)

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

Initial and continuing calibrations were within method requirements.

Internal standard areas were within limits.

The surrogate percent recoveries were within control limits.

The method blank(s) were clean at the reporting limits, with low level response "J"-flagged.

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

The batch BLD0606 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent difference (RPD) were within advisory control limits.

PCB Aroclors - EPA Method SW8082A

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

Initial and continuing calibrations were within method requirements.

Hexabromobiphenyl failed low for samples on both columns for initial analyses due to matrix interference, and extracts were rerun at dilution to bring internal standards into control.

The surrogate percent recoveries were within control limits.

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

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

The batch BLD0608 matrix spike duplicate (MSD) percent recovery and relative percent differences (RPD) was high of advisory control limits and flagged on the summary sheet, reported under work order 23D0394.

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

The analyst noted identification of aroclors were made using the best possible fit, as there were miscellaneous interfering peaks throughout the runs inflating results and obscuring patterns.

Total Metals - EPA Method 6020B

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

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Seattle WA, 98101	Project Manager: Ali Judkins	07-Jun-2023 15:12

Case Narrative

SLE0209-CAL4 showed indium-1 slightly noisy, but %R and analytes were noted by the analyst to be okay. SLE0209- IFA showed chromium-53 high.

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

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

The batch BLD0687 duplicate (DUP) relative percent difference (RPD) were within advisory control limits, reported under work order 23D0394.

The batch BLD0687 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent differences (RPD) were within advisory control limits, reported under work order 23D0394.

Total Mercury - EPA Method 7471B

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

Initial and continuing calibrations were within method requirements.

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

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

The batch BLD0688 duplicate (DUP) relative percent difference (RPD) were within advisory control limits, reported under work order 23D0394.

The batch BLD0688 matrix spike/matrix spike duplicate (MS/MSD) percent recoveries and relative percent differences (RPD) were within advisory control limits, reported under work order 23D0394.

Wet Chemistry (Total Organic Carbon and Total Solids)

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

Initial and continuing calibrations were within method requirements.

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

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

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

The batch BLE0415 matrix spike (MS) percent recoveries and the duplicate (DUP) relative percent difference (RPD) were run on a non-project sample and had results within advisory control limits.

QUALIFIERS AND NOTES

Qualifier	Definition
U	This analyte is not detected above the reporting limit (RL) or if noted, not detected above the limit of detection (LOD).
Q	Indicates a detected analyte with an initial or continuing calibration that does not meet established acceptance criteria (<20% RSD, <20% drift or minimum RRF)
P1	The reported value is greater than 40% difference between the concentrations determined on two GC columns where applicable.
L	Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to +/- RL instead of 20% RPD
J	Estimated concentration value detected below the reporting limit.
HC	The natural concentration of the spiked analyte is so much greater than the concentration spiked that an accurate determination of spike recovery is not possible
H	Hold time violation - Hold time was exceeded.
E	The analyte concentration exceeds the upper limit of the calibration range of the instrument established by the initial calibration (ICAL)
D1	Surrogate was not detected due to sample extract dilution
D	The reported value is from a dilution
B	This analyte was detected in the method blank.
*	Flagged value is not within established control limits.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference

LDW23-SS1801

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-01 A	SDG:	23D0396
Sampled:	04/12/23 09:56	Prepared:	04/24/23 16:38	File ID:	NT1705262323.D
% Solids:	43.01	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/27/23 02:25
Batch:	BLD0607	Sequence:	SLE0434	Initial/Final:	23.25 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GE00065
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	17.8	J	4.4	20.0
100-51-6	Benzyl Alcohol	1	46.0	B	16.3	20.0
106-44-5	4-Methylphenol	1	23.9		7.4	20.0
91-20-3	Naphthalene	1	33.3		4.2	20.0
91-57-6	2-Methylnaphthalene	1	19.3	J	4.5	20.0
208-96-8	Acenaphthylene	1	15.8	J	6.2	20.0
132-64-9	Dibenzofuran	1	25.5		14.1	20.0
86-73-7	Fluorene	1	24.5		14.6	20.0
85-01-8	Phenanthrene	1	126		8.7	20.0
120-12-7	Anthracene	1	42.6		7.2	20.0
206-44-0	Fluoranthene	1	202		6.1	20.0
129-00-0	Pyrene	1	207		5.7	20.0
85-68-7	Butylbenzylphthalate	1	17.8	J	9.4	20.0
56-55-3	Benzo(a)anthracene	1	136		6.0	20.0
218-01-9	Chrysene	1	211		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	192		5.5	50.0
	Benzofluoranthenes, Total	1	456		10.0	40.0
50-32-8	Benzo(a)pyrene	1	121		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	36.5	Q	14.7	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	37.3	Q	13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	750.01	545	72.6	27 - 120	
Phenol-d5	750.01	543	72.3	29 - 120	
2-Chlorophenol-d4	750.01	573	76.5	31 - 120	
1,2-Dichlorobenzene-d4	500.01	358	71.6	32 - 120	
Nitrobenzene-d5	500.01	388	77.6	30 - 120	
2-Fluorobiphenyl	500.01	438	87.5	35 - 120	
2,4,6-Tribromophenol	750.01	583	77.7	24 - 134	

Analytical Resources, LLC
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LDW23-SS1801

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-01 A	SDG:	23D0396
Sampled:	04/12/23 09:56	Prepared:	04/24/23 16:38	File ID:	NT1705262323.D
% Solids:	43.01	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/27/23 02:25
Batch:	BLD0607	Sequence:	SLE0434	Initial/Final:	23.25 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GE00065
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl-d14	500.01	331	66.1	37 - 120	

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262323.D

Date : 27-MAY-2023 02:25

Client ID:

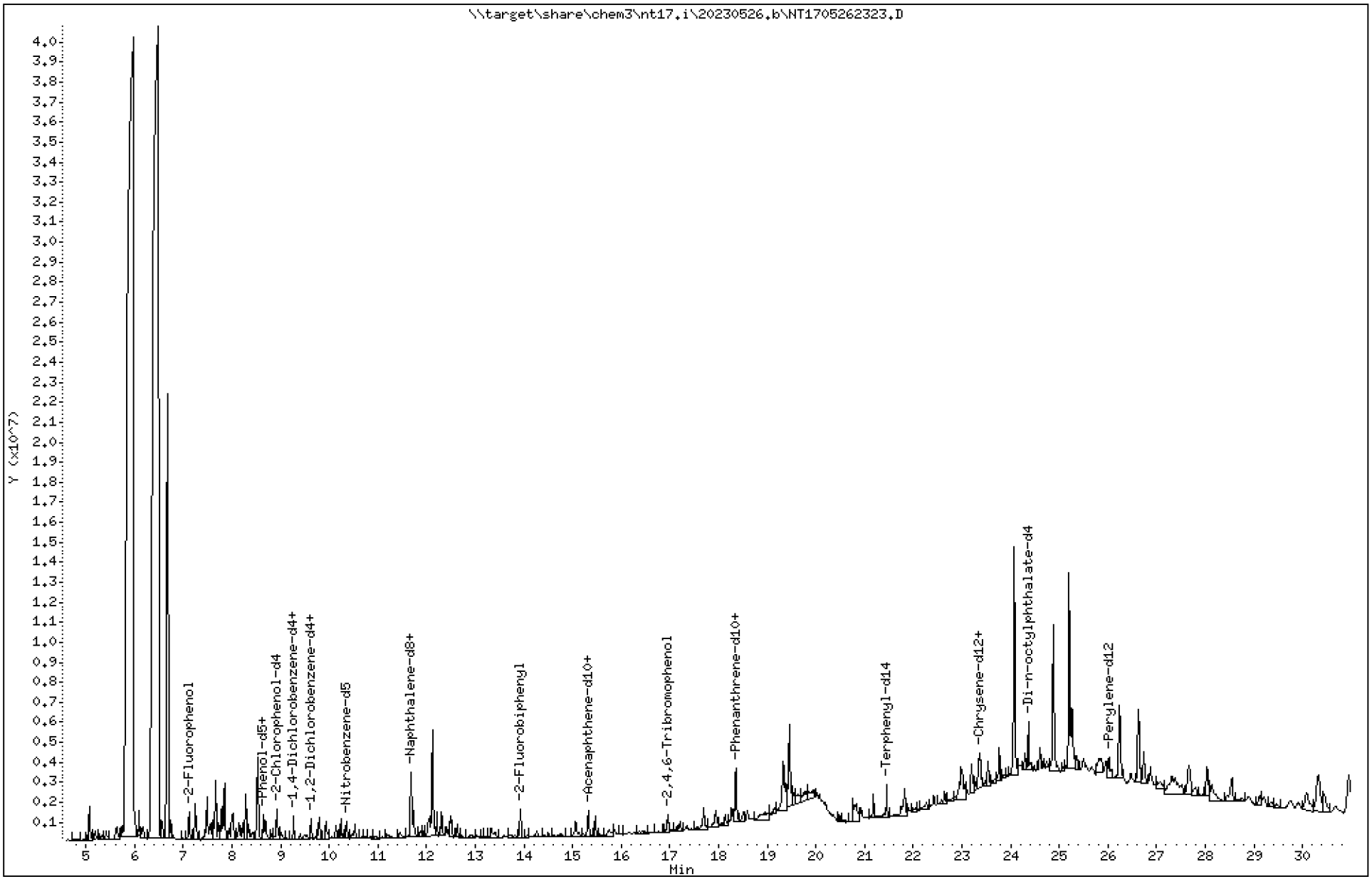
Sample Info: 23D0396-01

Column phase: ZB-5msi

Instrument: nt17.i

Operator: VTS

Column diameter: 0.25



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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

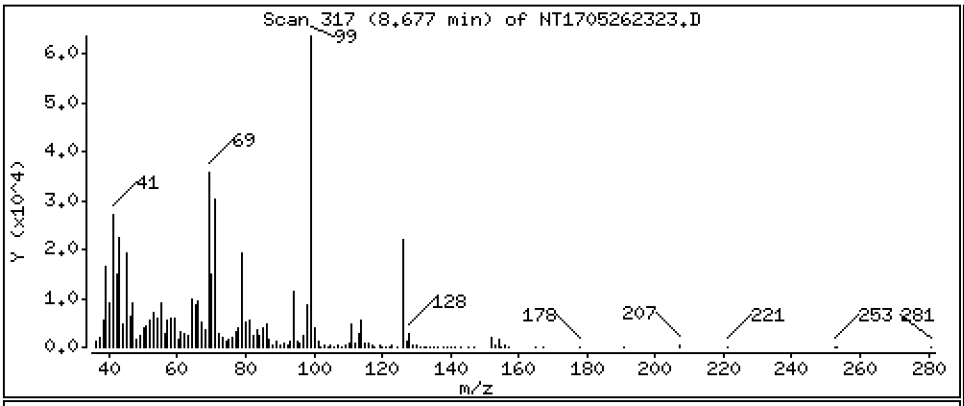
Operator: VTS

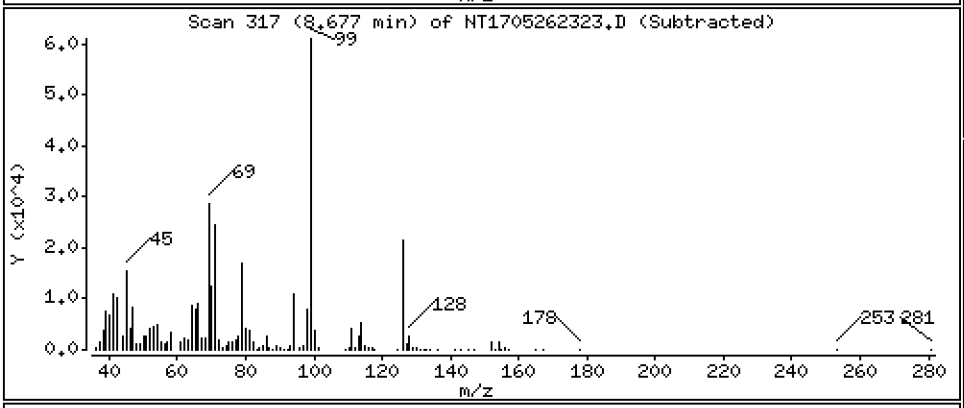
Column phase: ZB-5msi

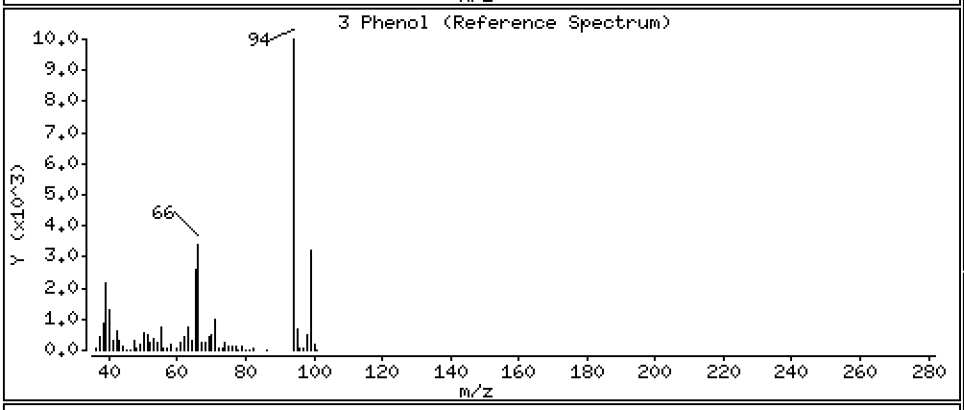
Column diameter: 0.25

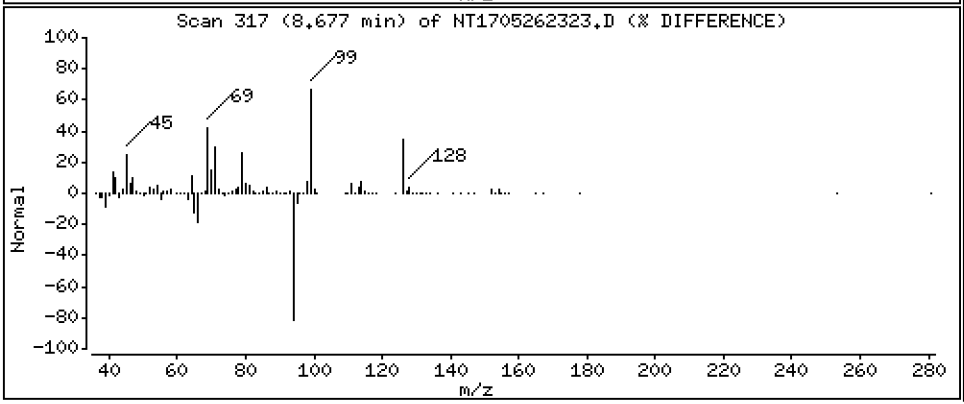
3 Phenol

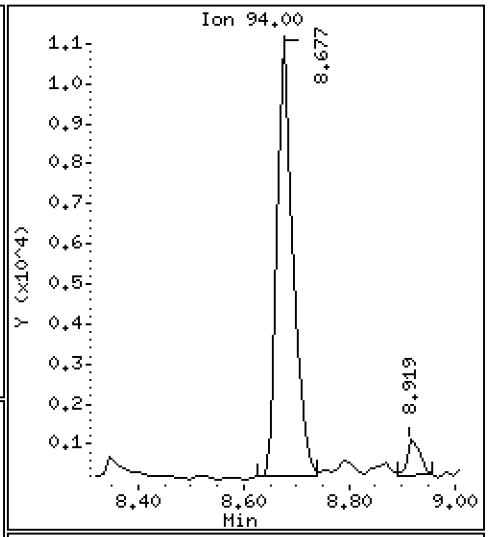
Concentration: 0.1777 ug/mL

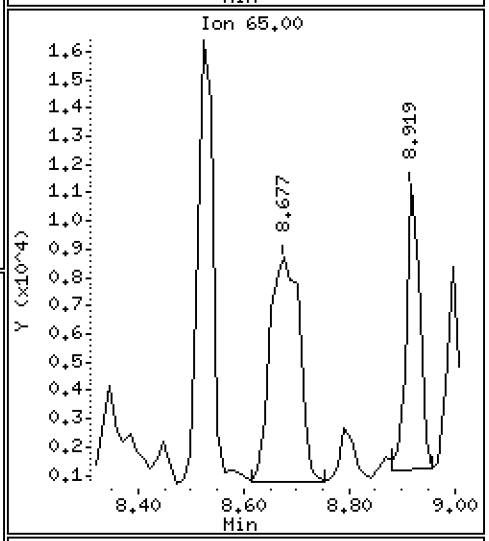


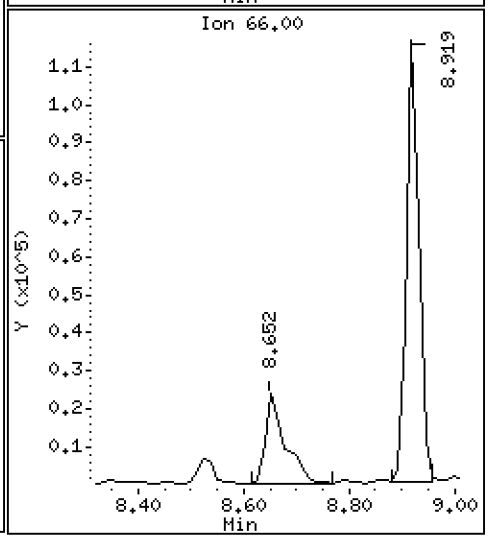












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262323.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

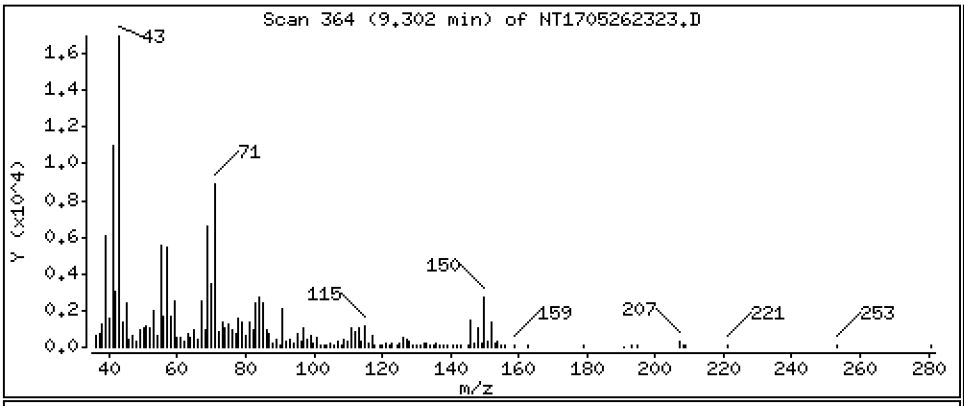
Operator: VTS

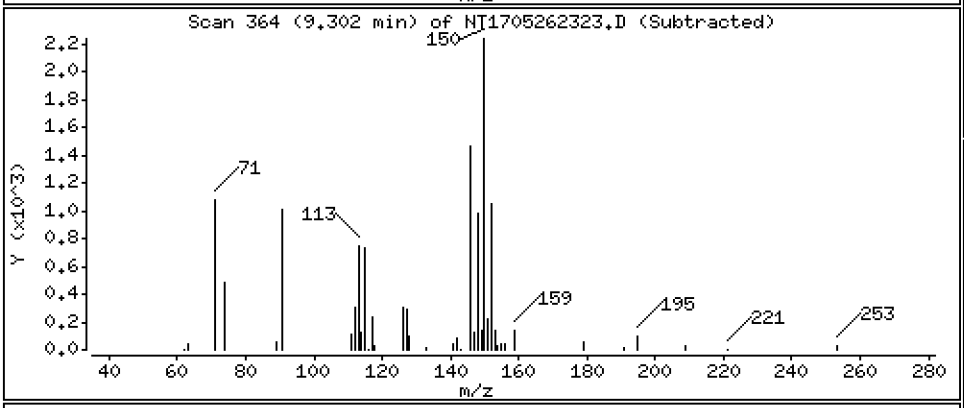
Column phase: ZB-5msi

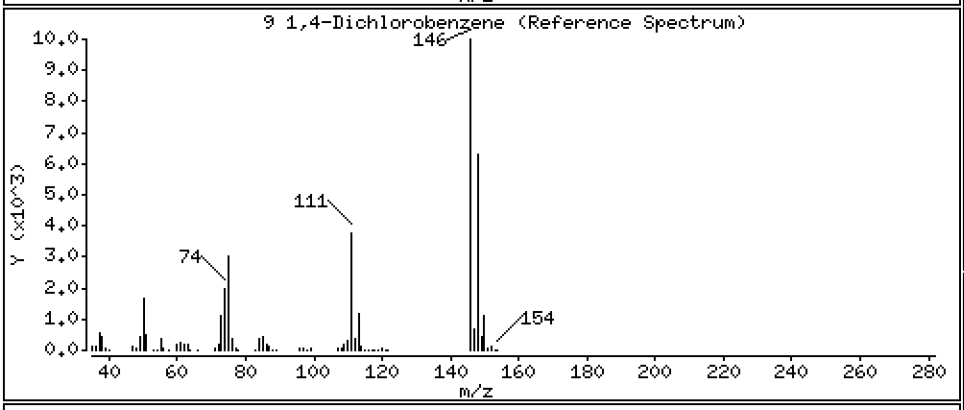
Column diameter: 0.25

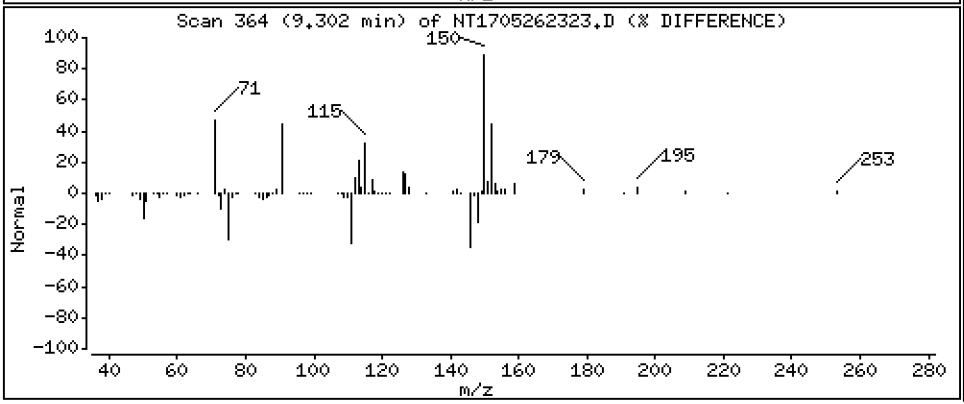
9 1,4-Dichlorobenzene

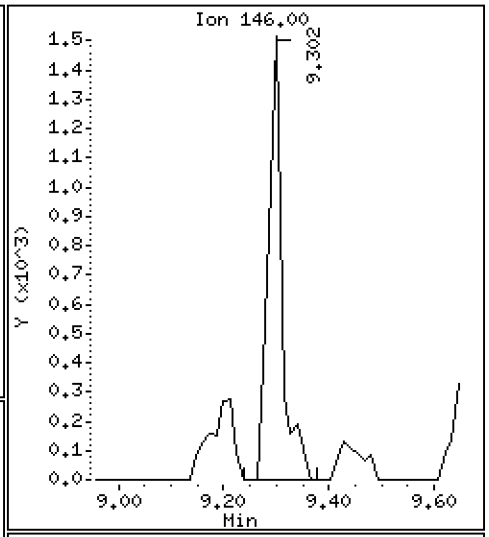
Concentration: 0.02453 ug/mL

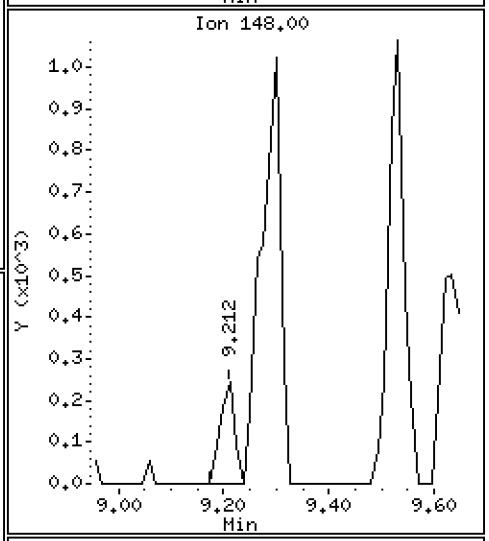


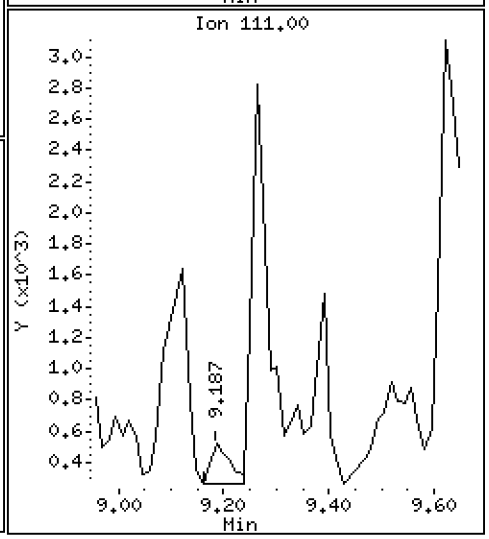












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262323.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

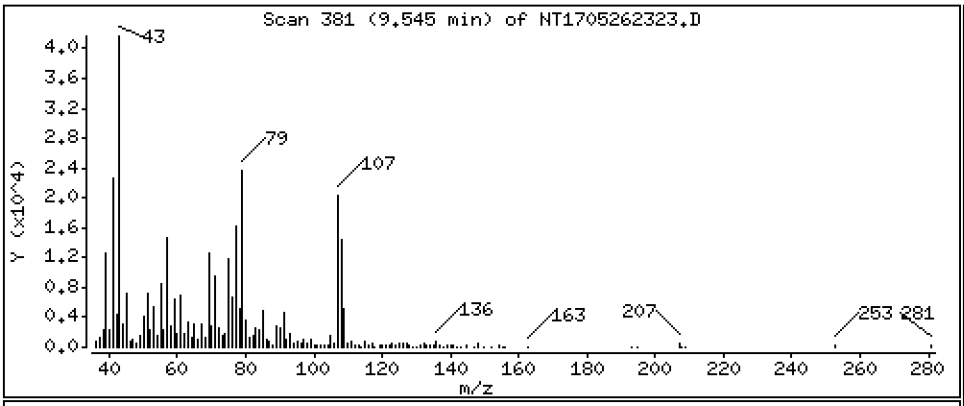
Operator: VTS

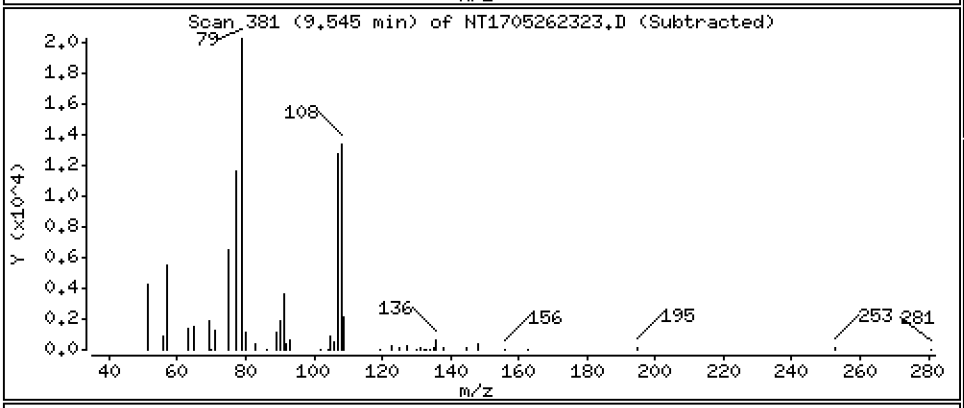
Column phase: ZB-5msi

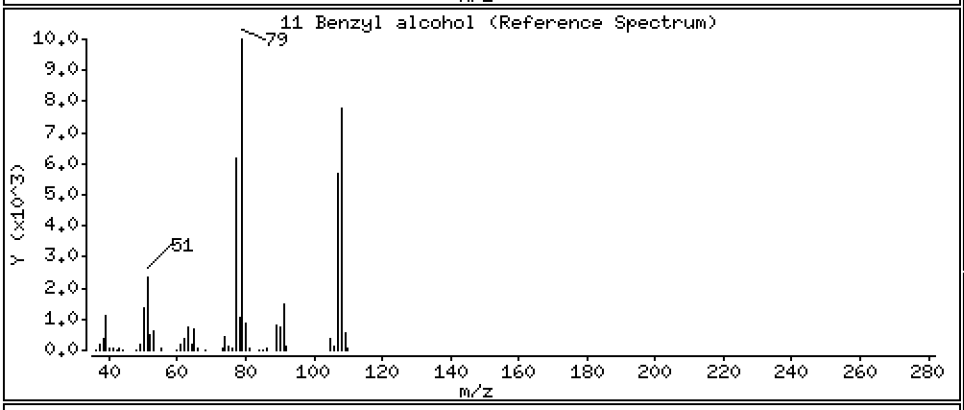
Column diameter: 0.25

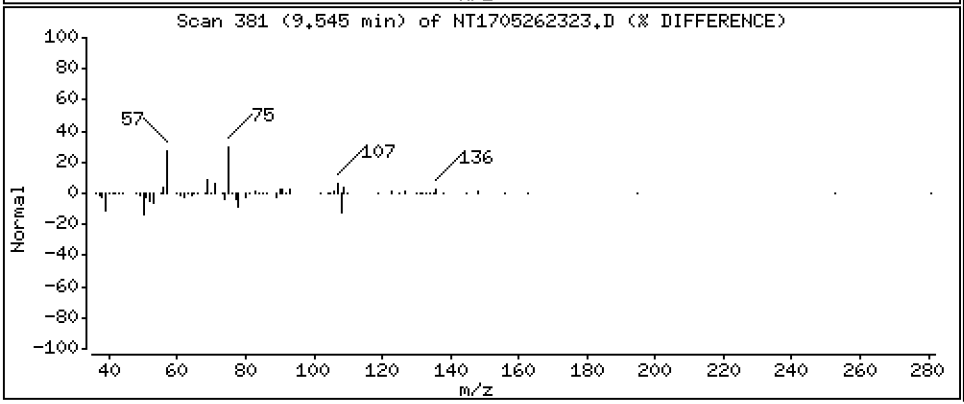
11 Benzyl alcohol

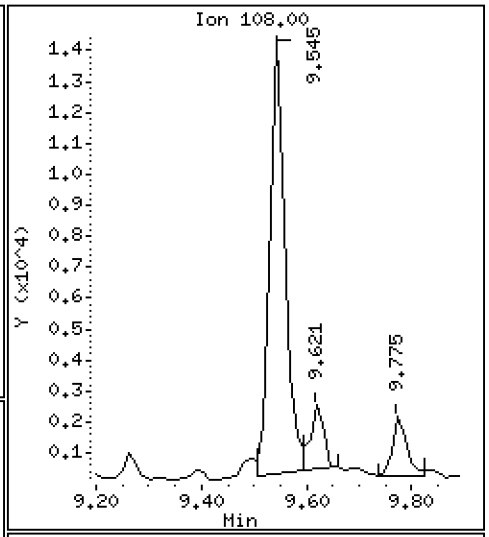
Concentration: 0.4602 ug/mL

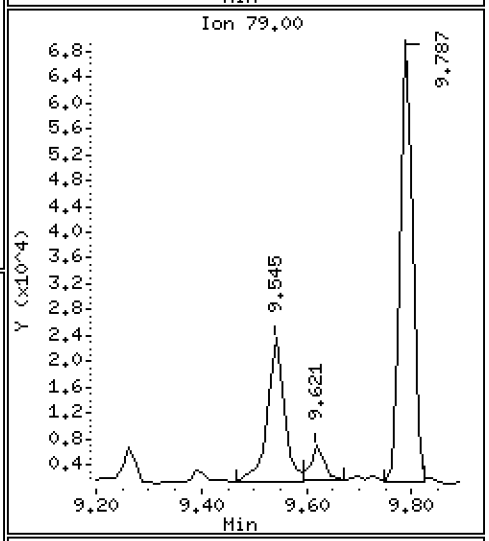


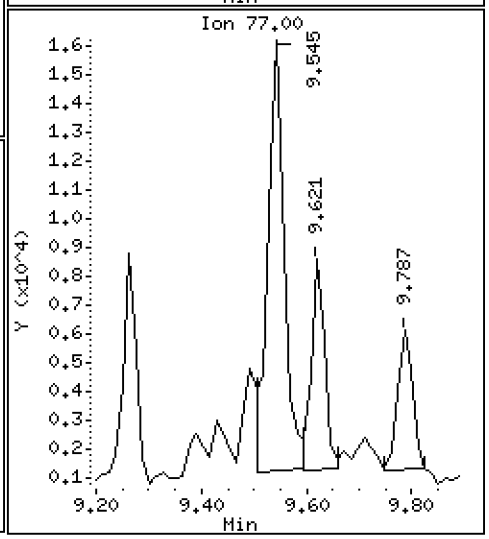












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262323.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

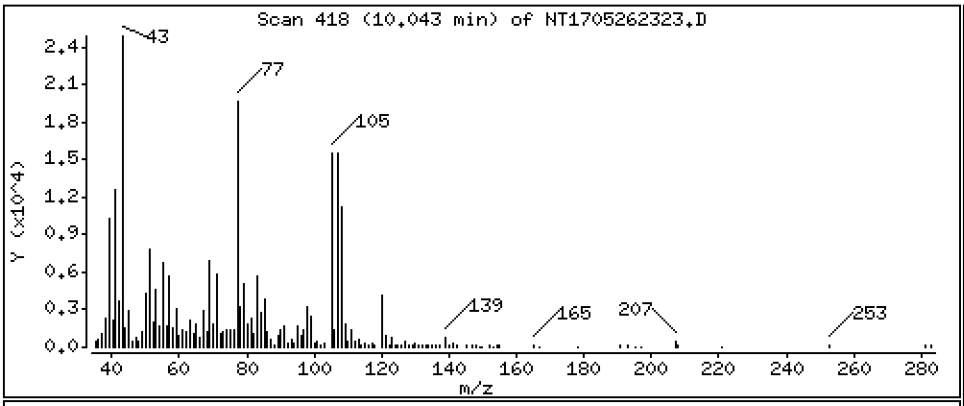
Operator: VTS

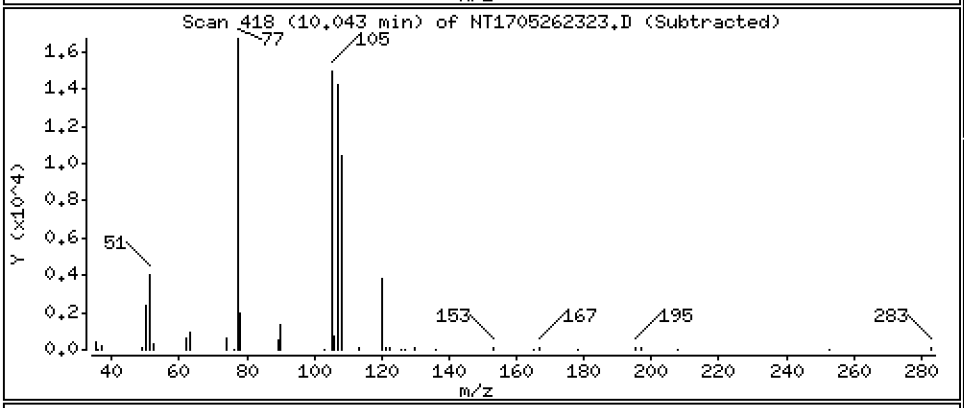
Column phase: ZB-5msi

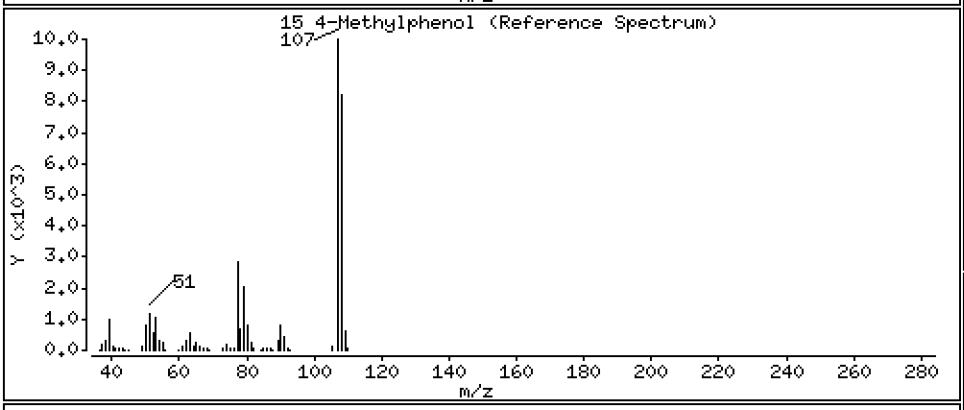
Column diameter: 0.25

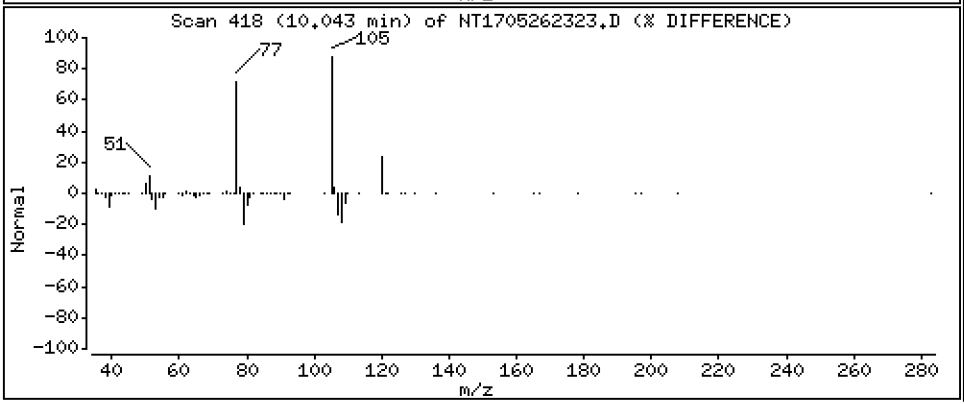
15 4-Methylphenol

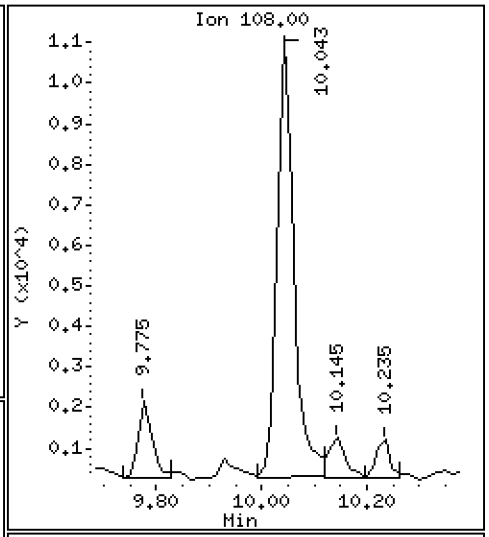
Concentration: 0.2392 ug/mL

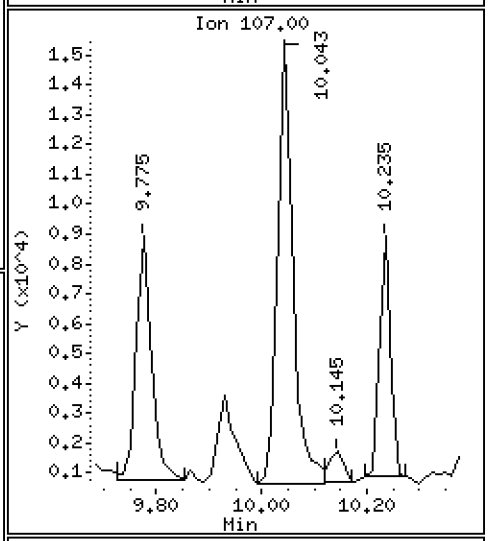


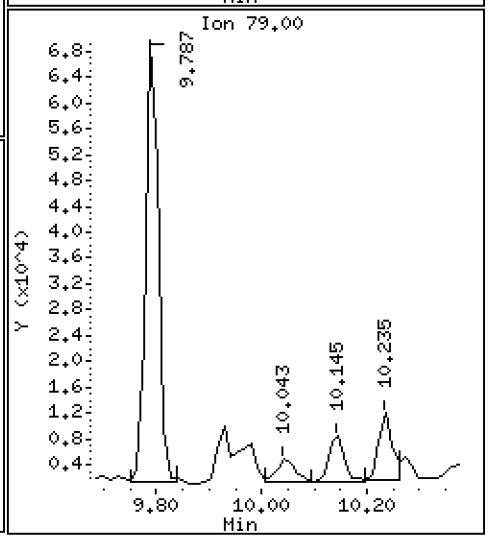












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

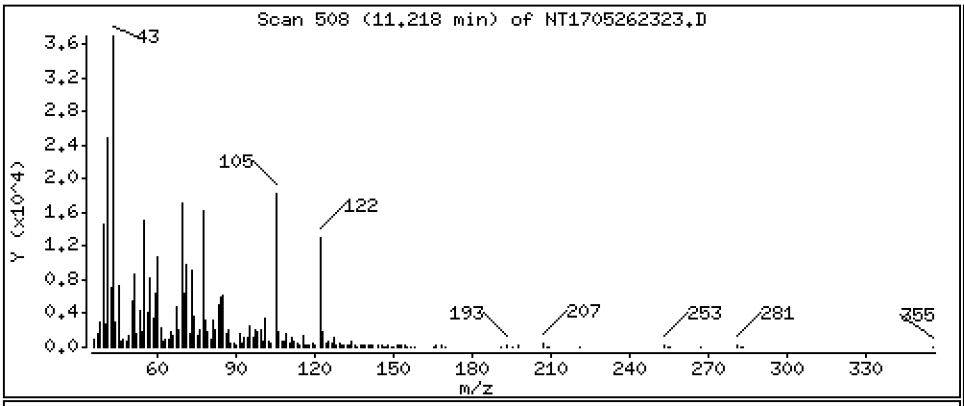
Operator: VTS

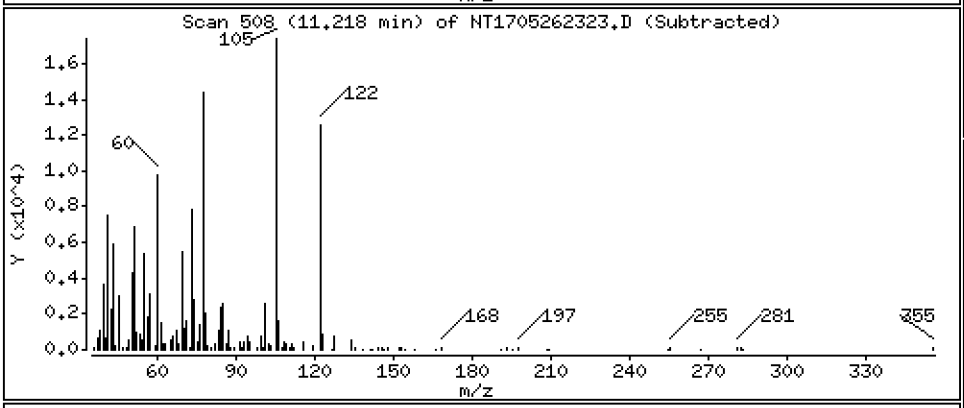
Column phase: ZB-5msi

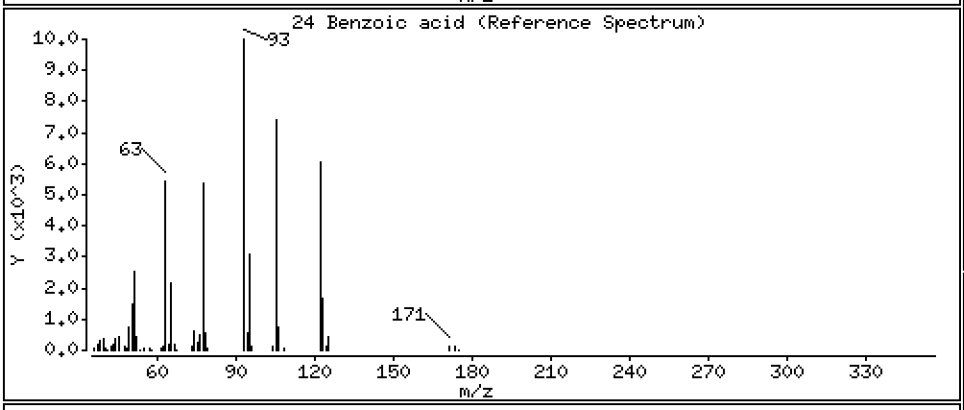
Column diameter: 0.25

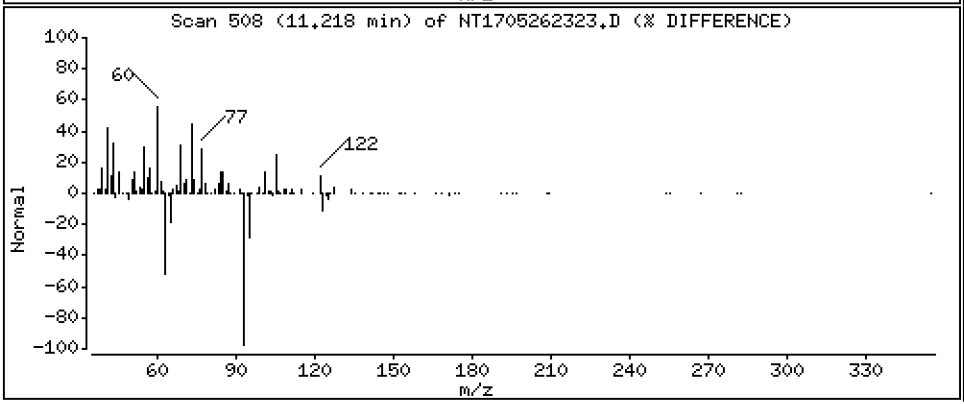
24 Benzoic acid

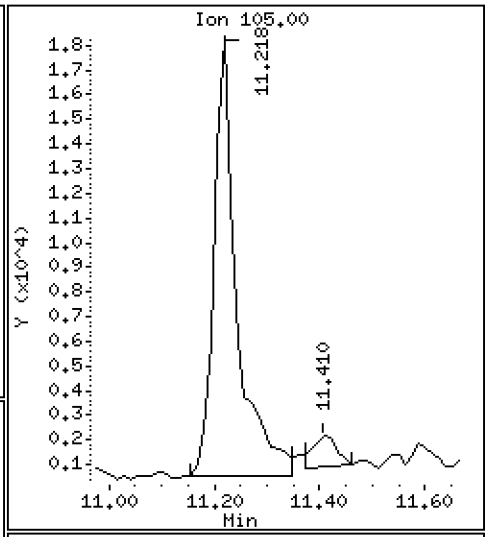
Concentration: 0.7413 ug/mL

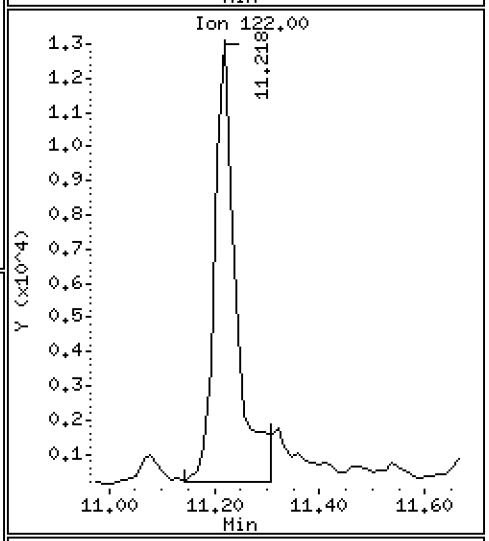


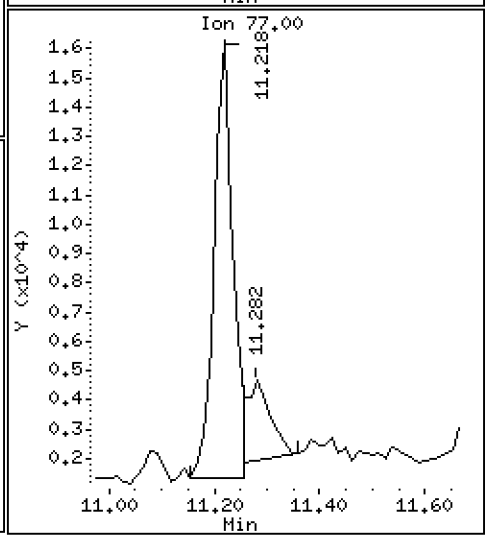












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

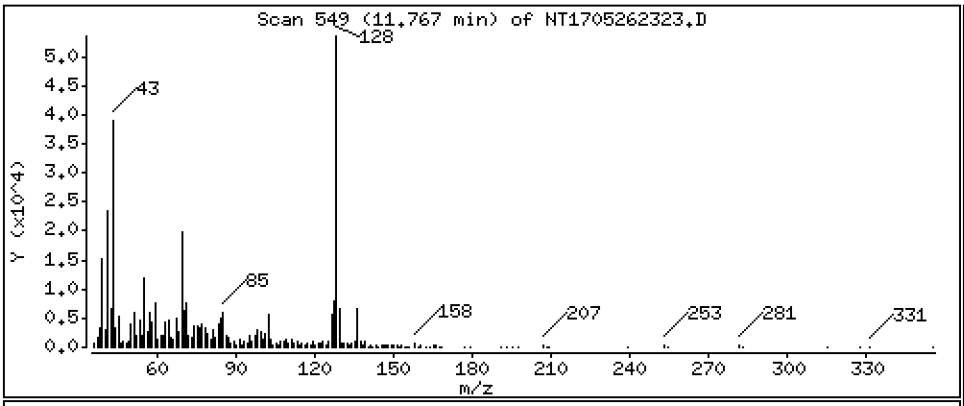
Operator: VTS

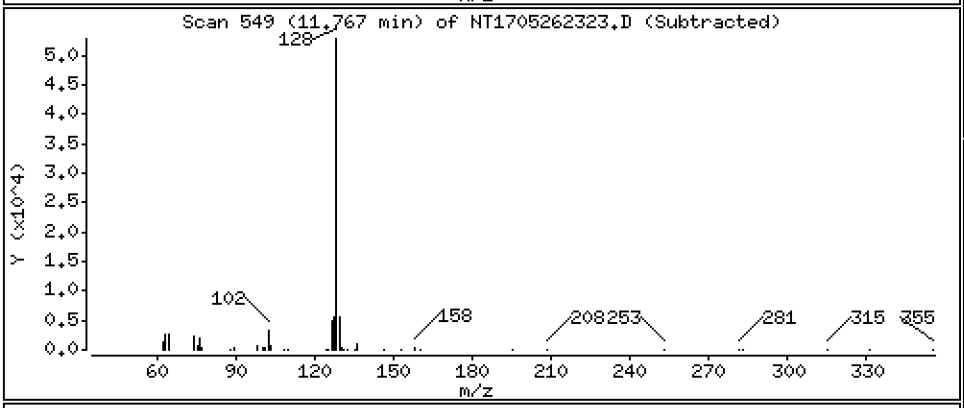
Column phase: ZB-5msi

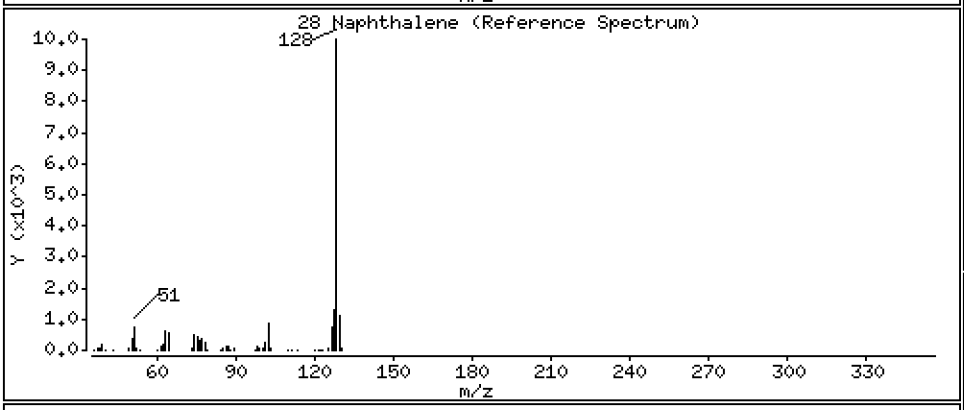
Column diameter: 0.25

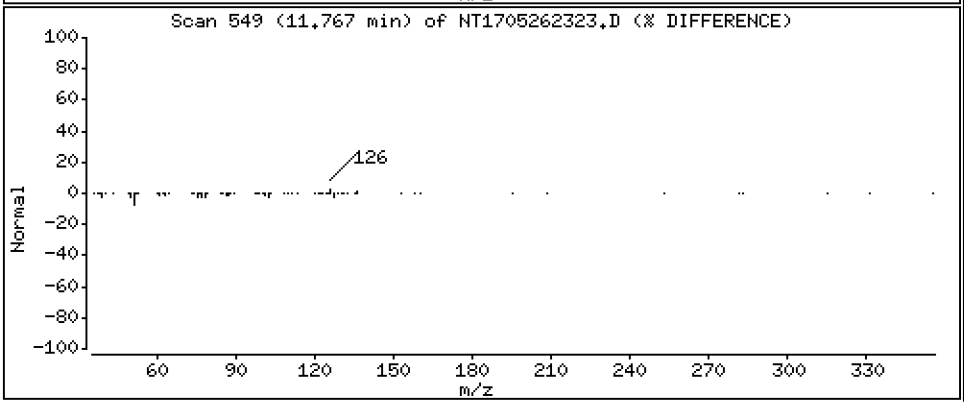
28 Naphthalene

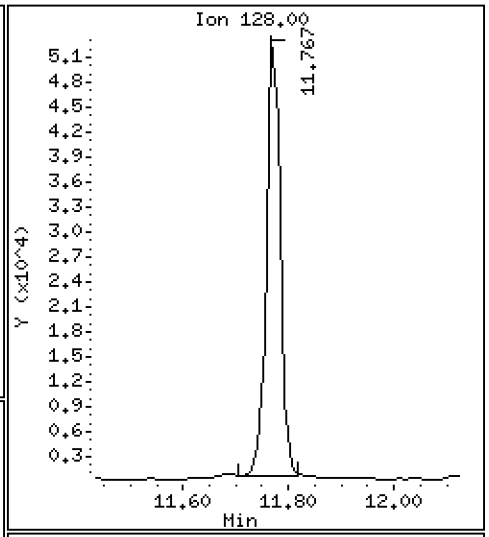
Concentration: 0.3335 ug/mL

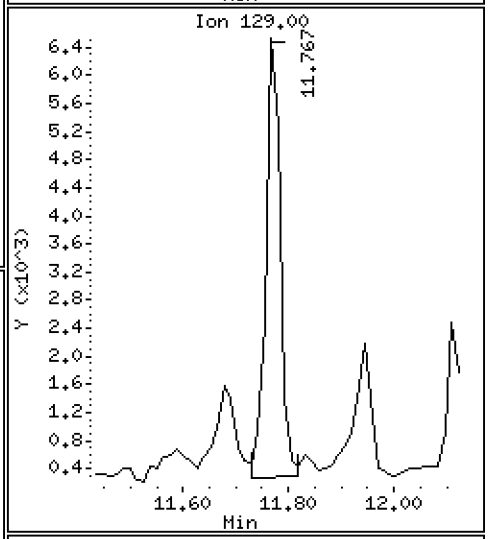


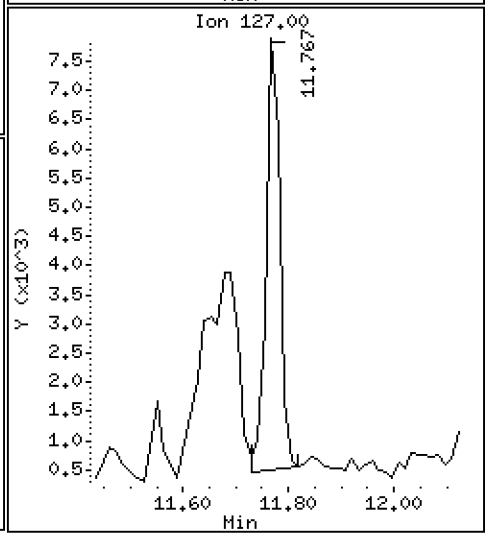












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

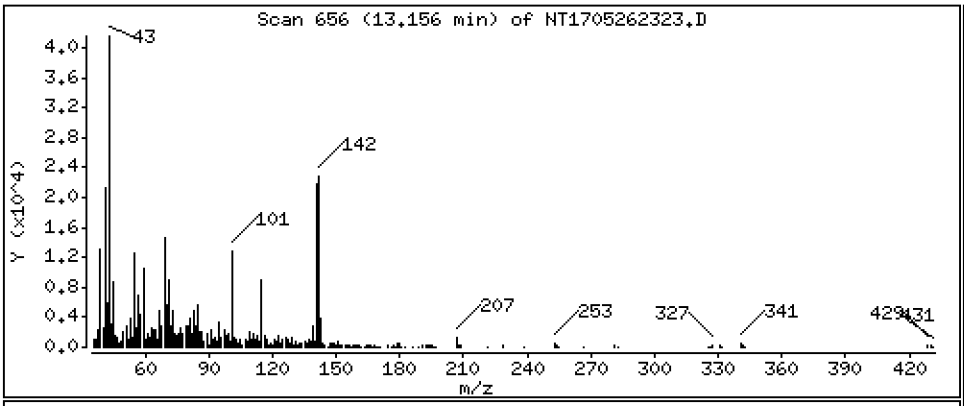
Operator: VTS

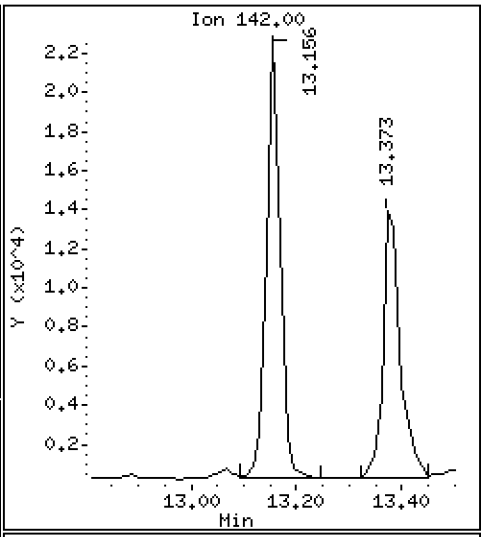
Column phase: ZB-5msi

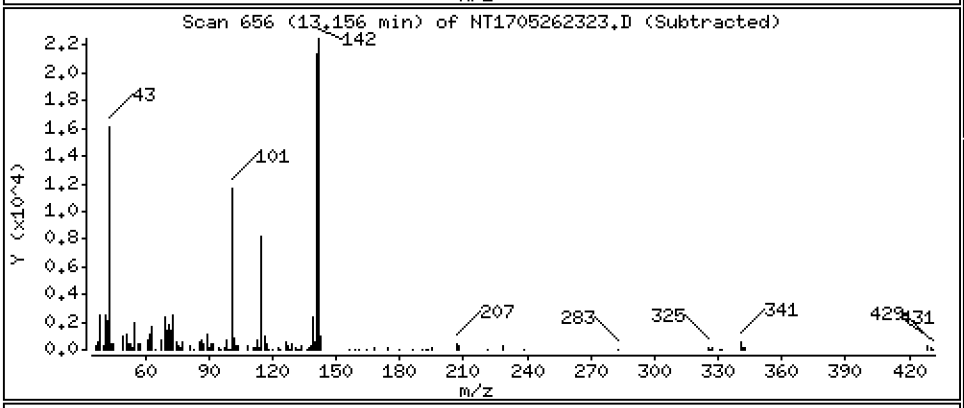
Column diameter: 0.25

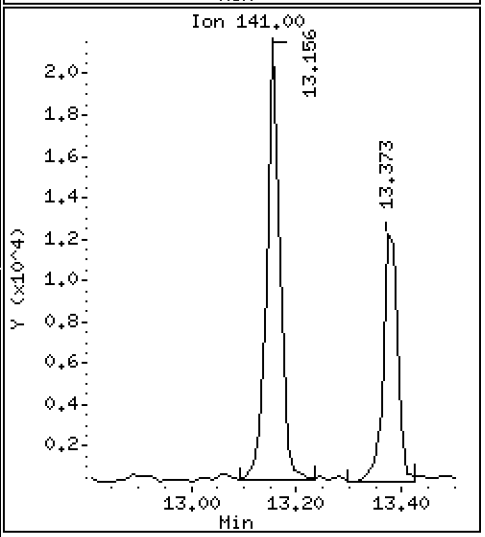
32 2-Methylnaphthalene

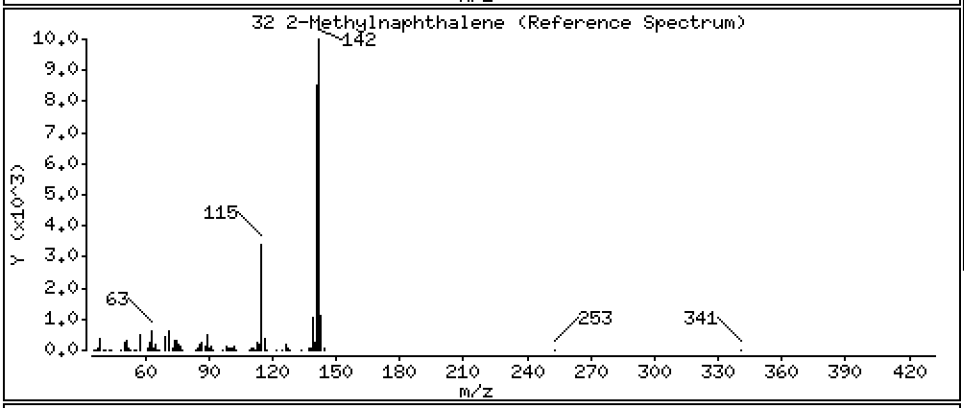
Concentration: 0.1932 ug/mL

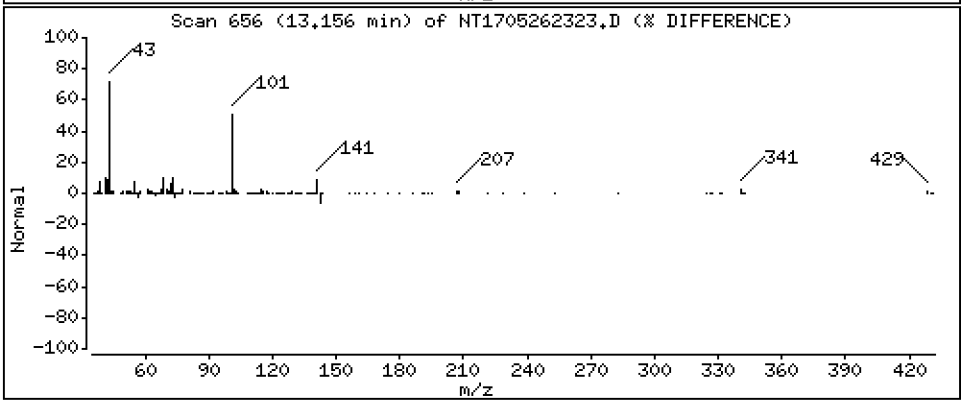












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

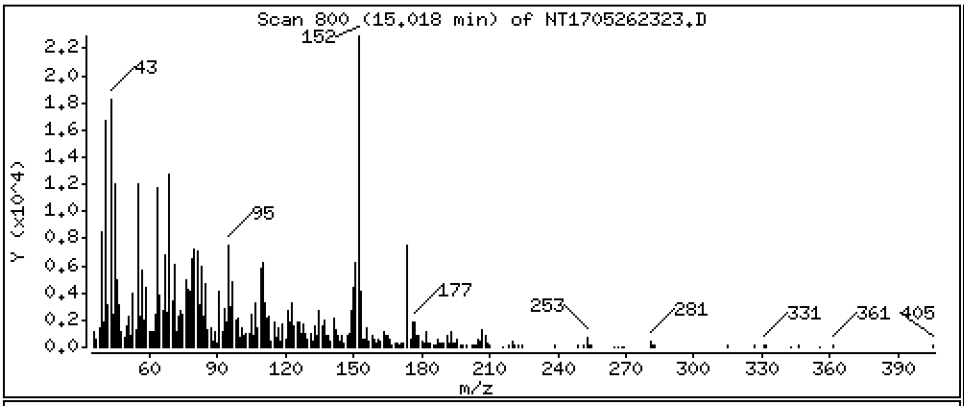
Operator: VTS

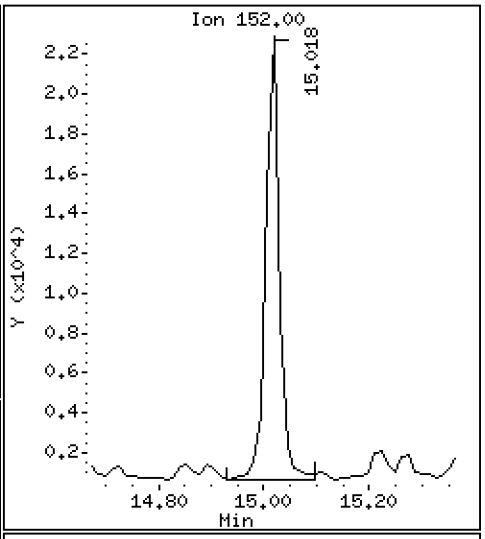
Column phase: ZB-5msi

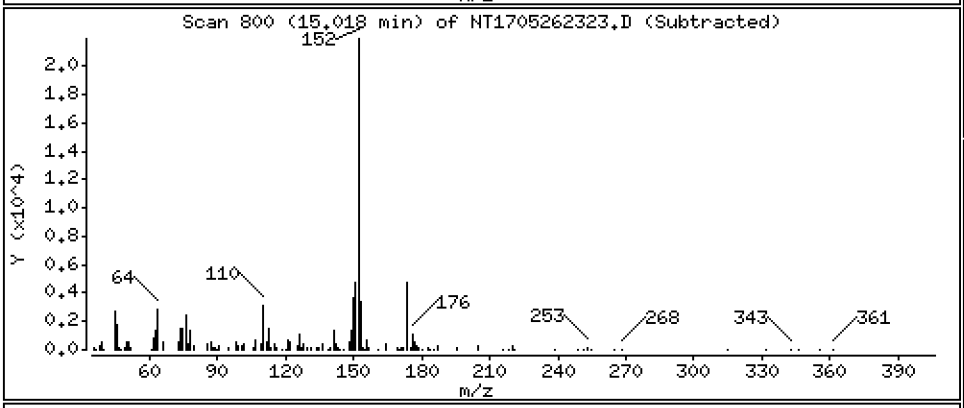
Column diameter: 0.25

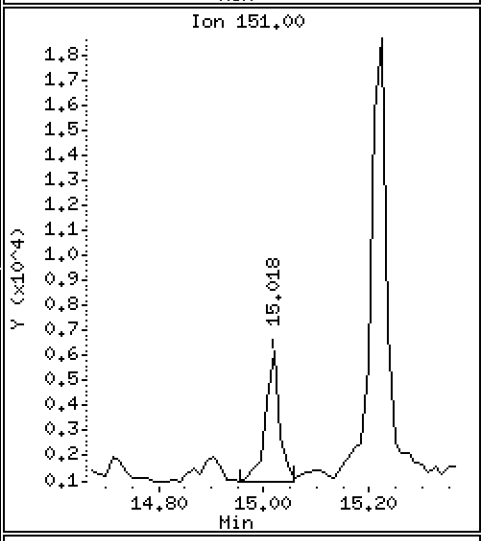
40 Acenaphthylene

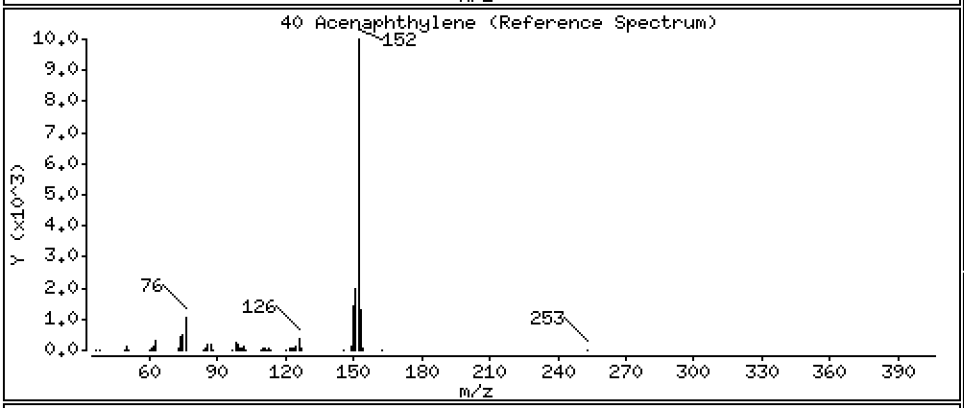
Concentration: 0.1575 ug/mL

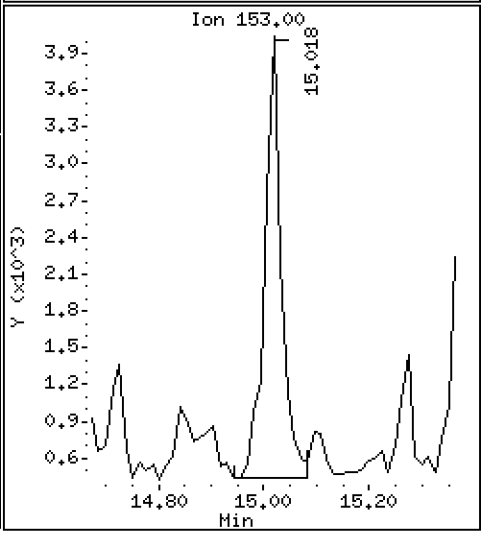


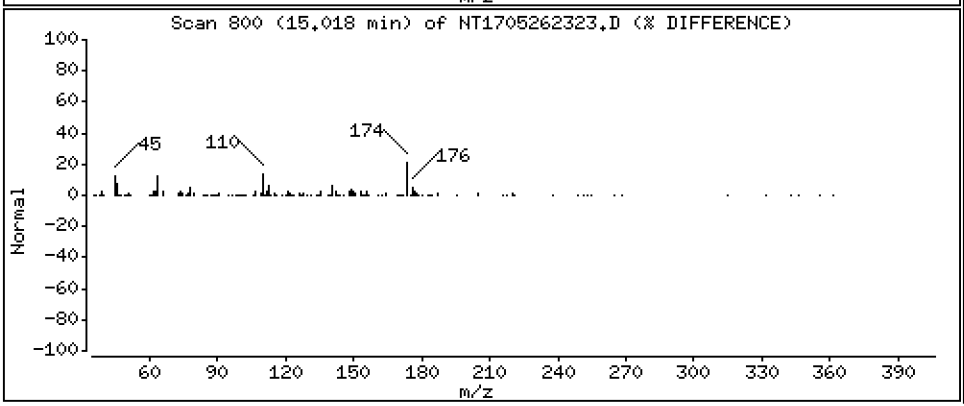












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

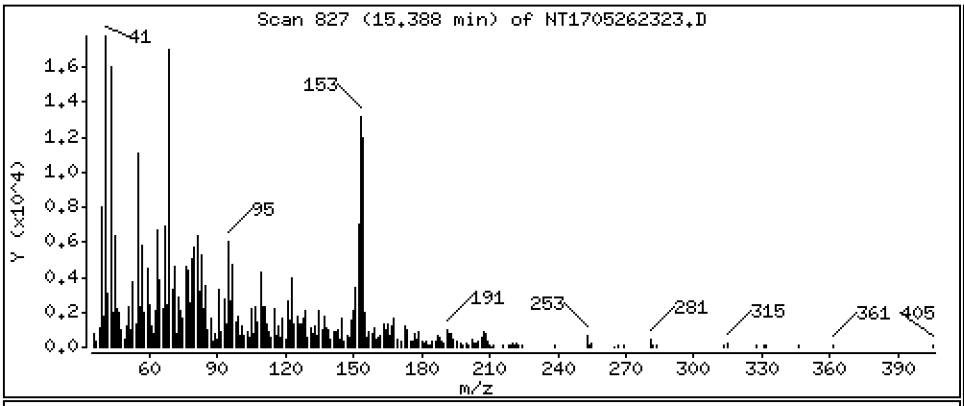
Operator: VTS

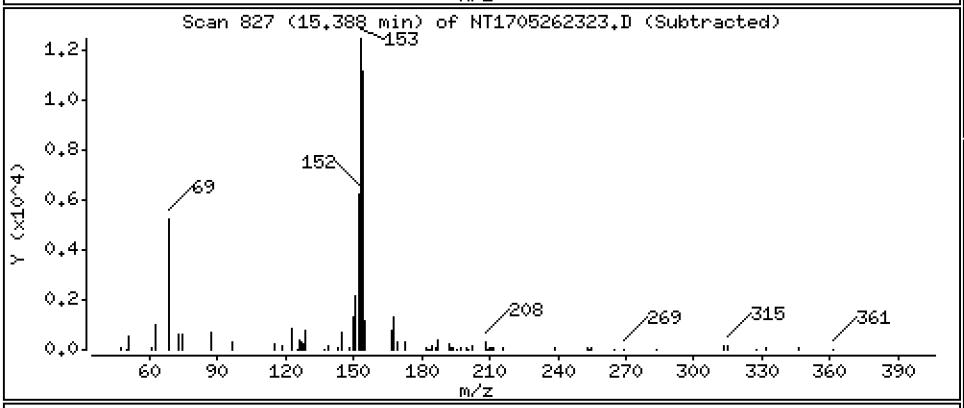
Column phase: ZB-5msi

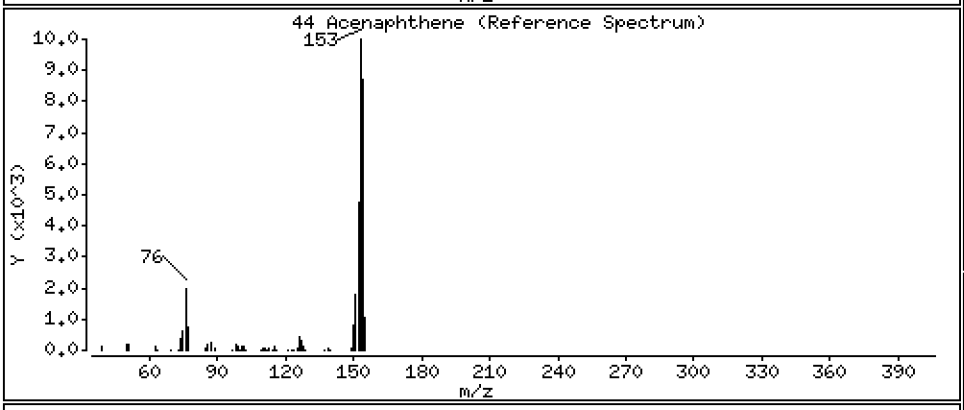
Column diameter: 0.25

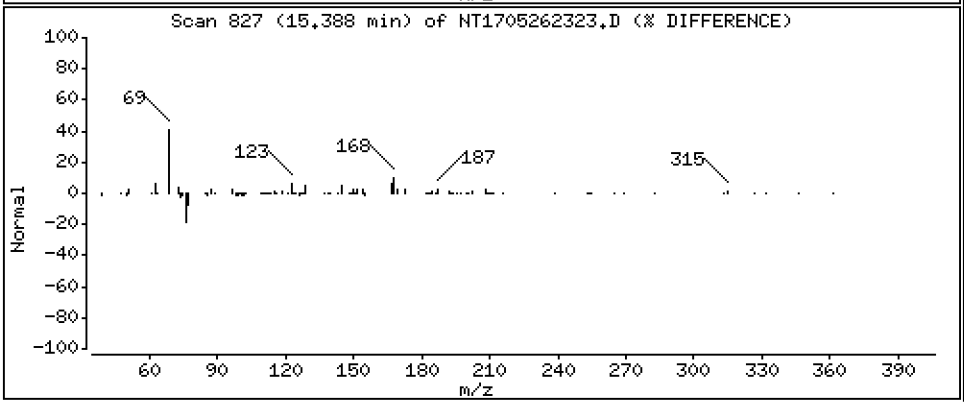
44 Acenaphthene

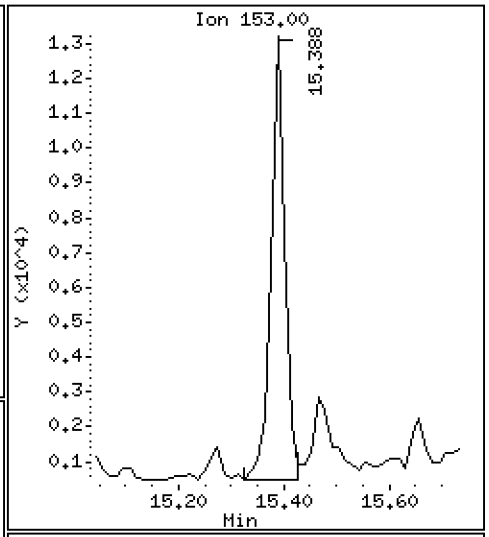
Concentration: 0.1458 ug/mL

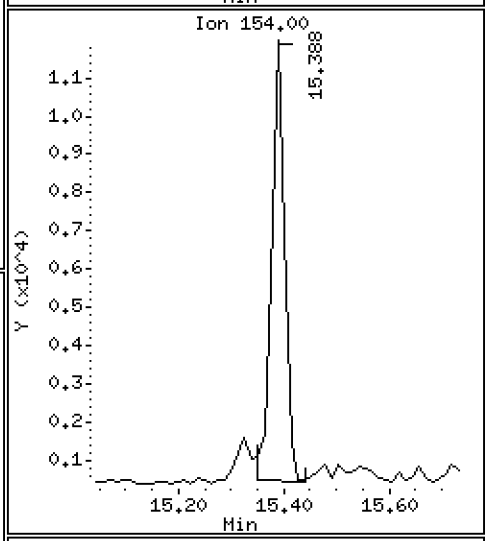


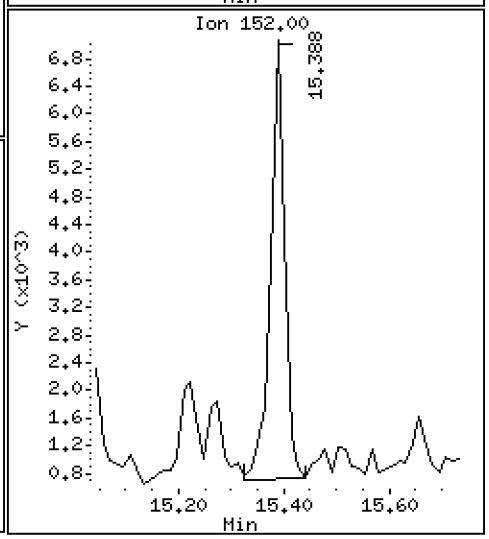












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

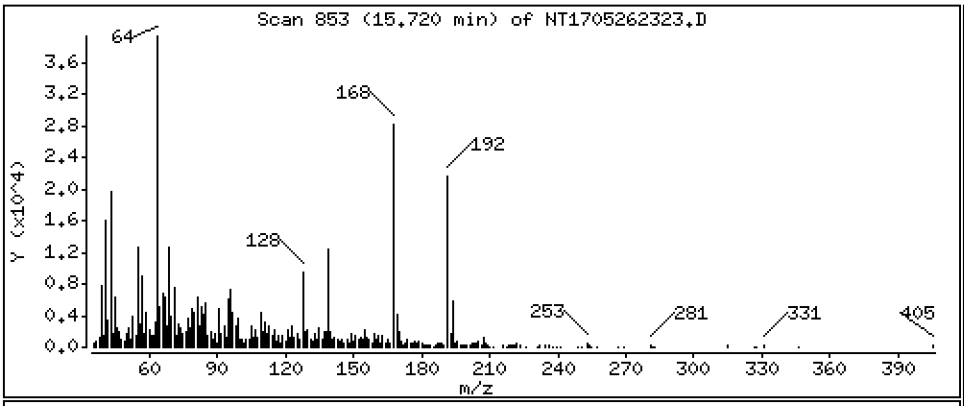
Operator: VTS

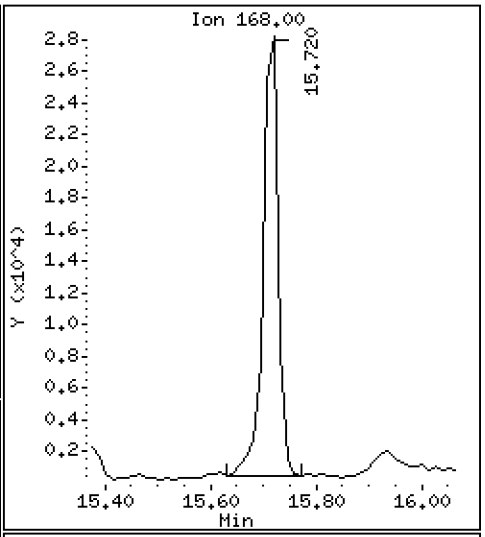
Column phase: ZB-5msi

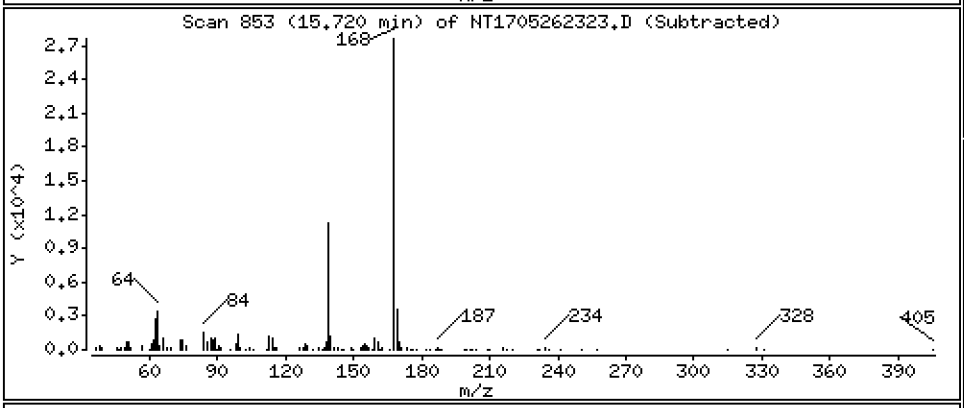
Column diameter: 0.25

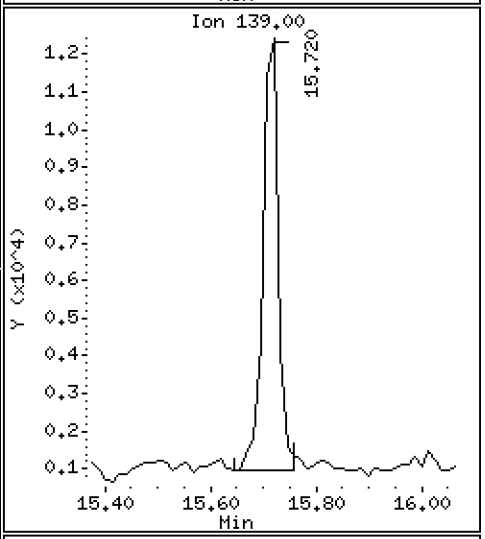
46 Dibenzofuran

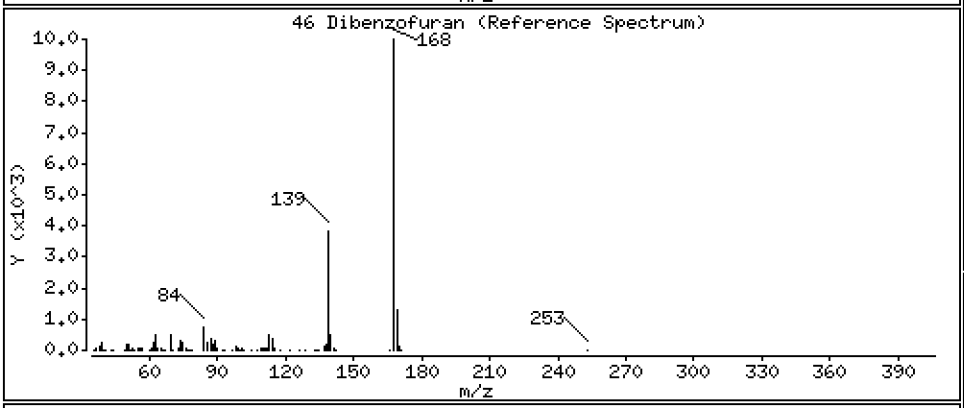
Concentration: 0.2553 ug/mL

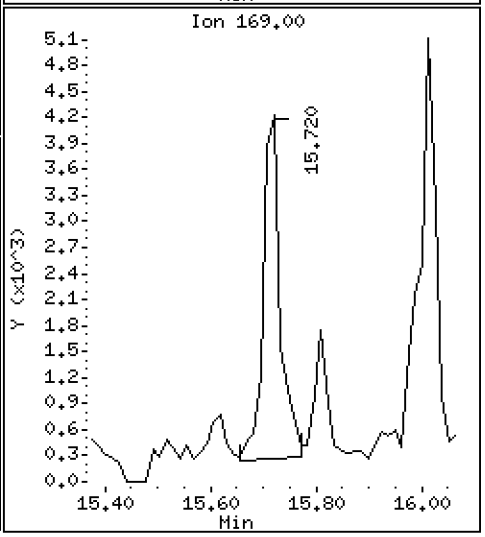


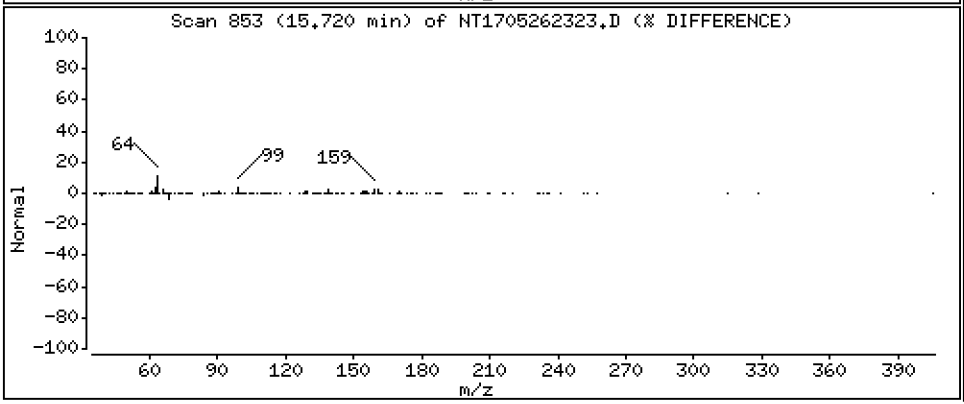












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

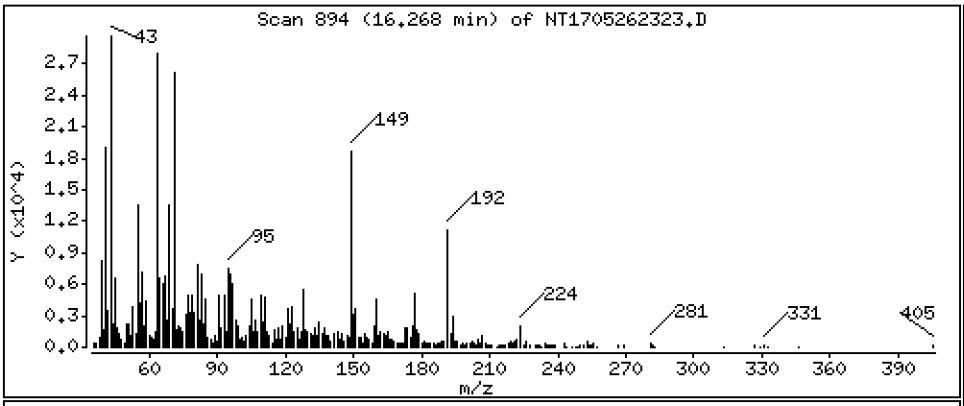
Operator: VTS

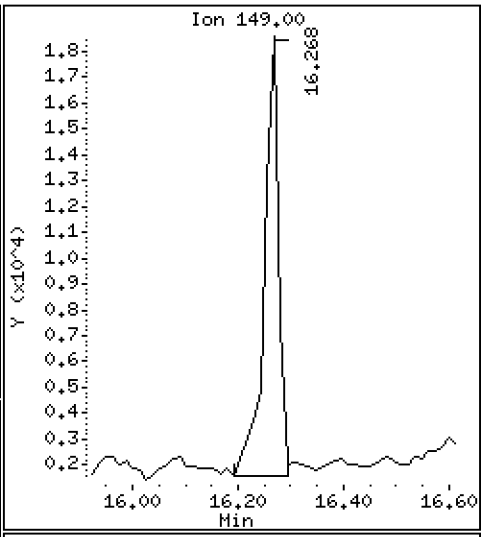
Column phase: ZB-5msi

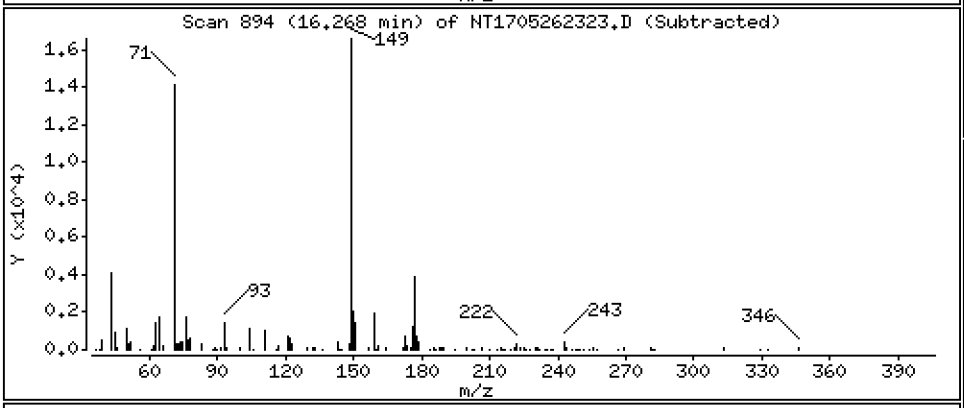
Column diameter: 0.25

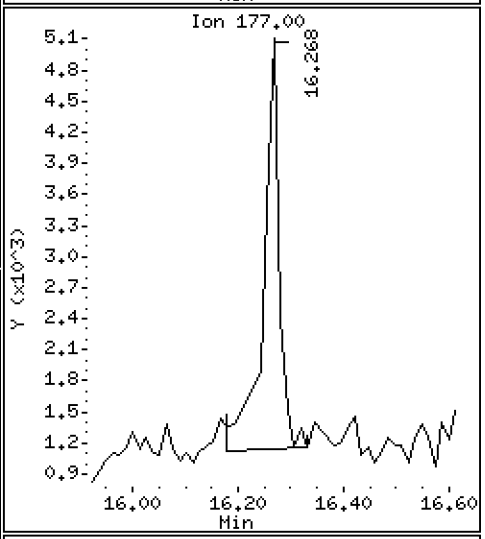
50 Diethylphthalate

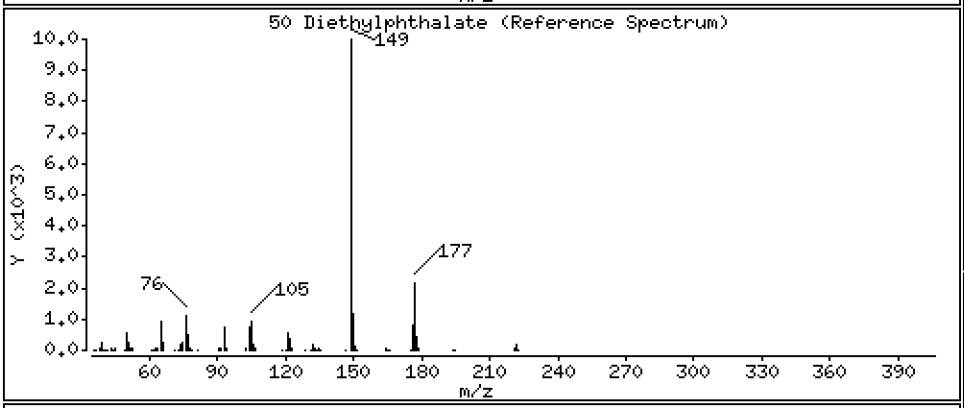
Concentration: 0.2433 ug/mL

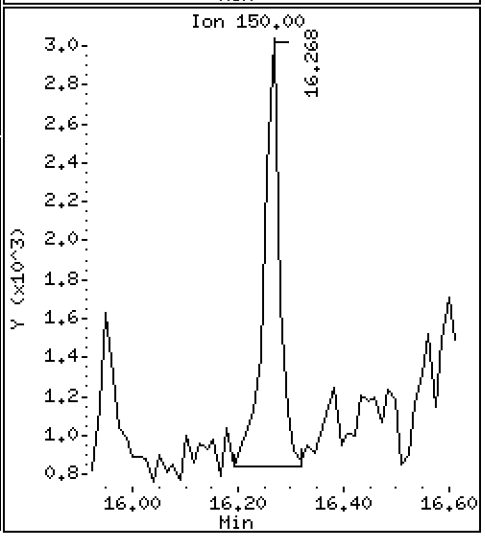


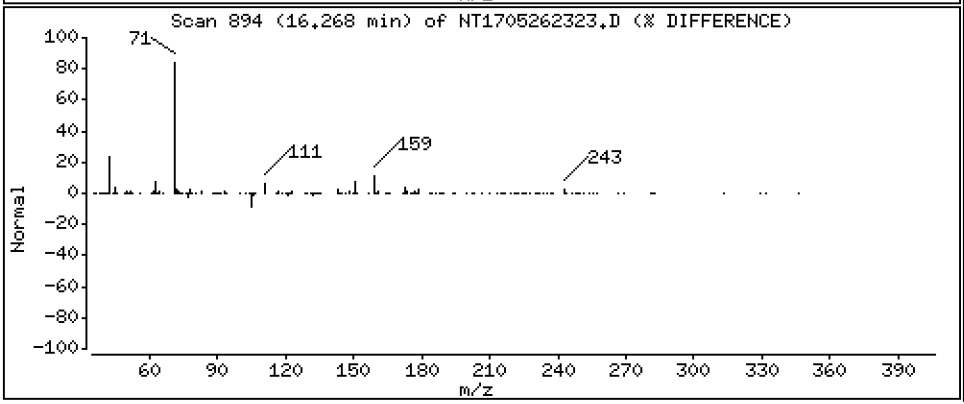












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

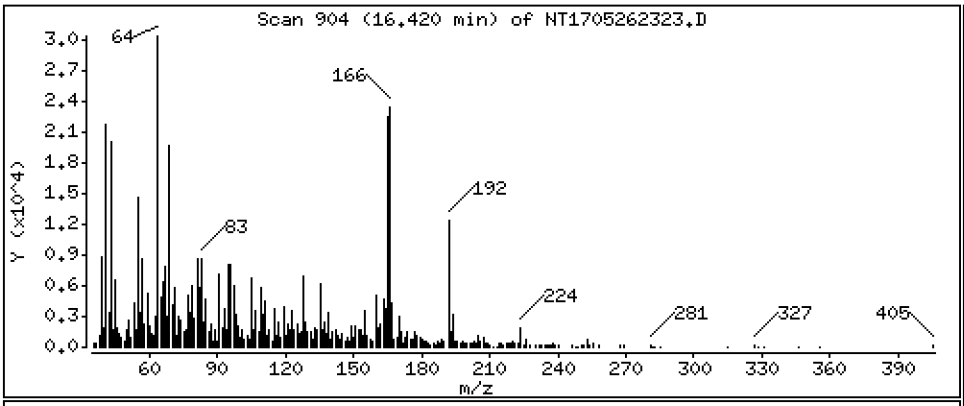
Operator: VTS

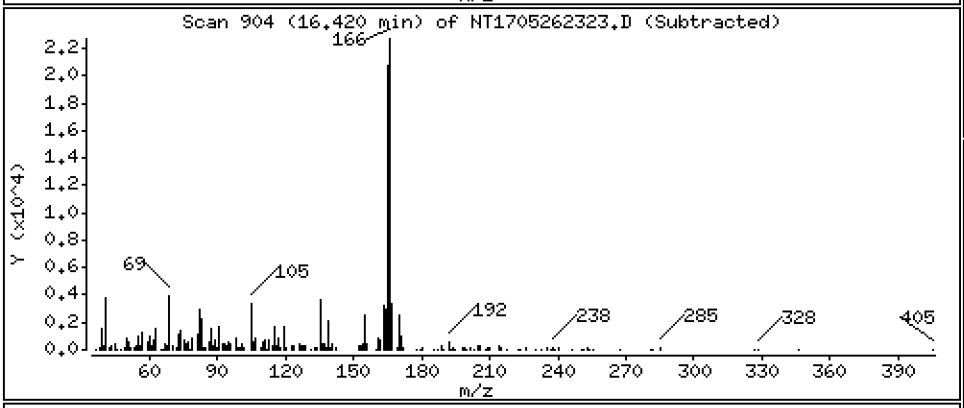
Column phase: ZB-5msi

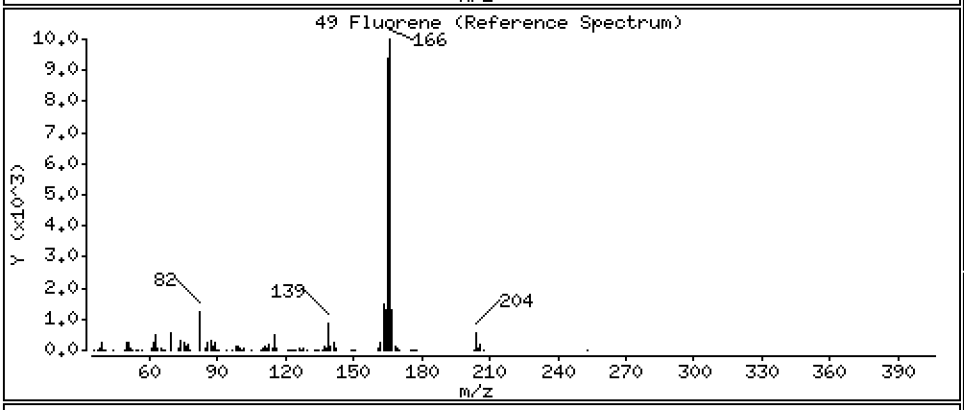
Column diameter: 0.25

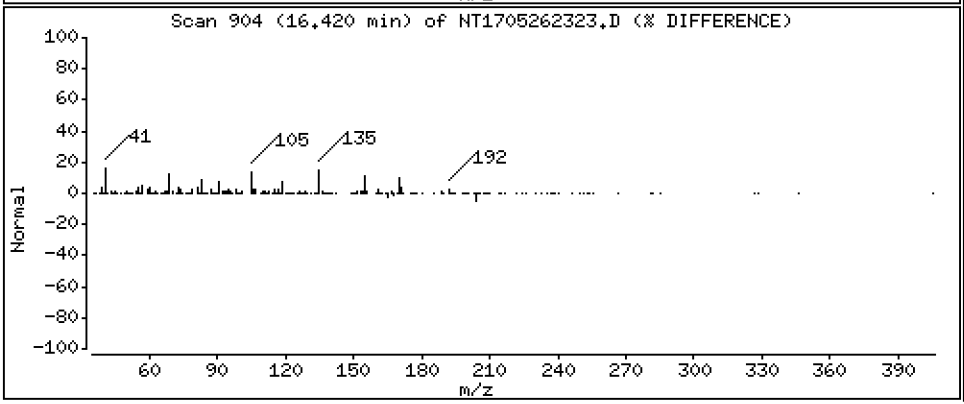
49 Fluorene

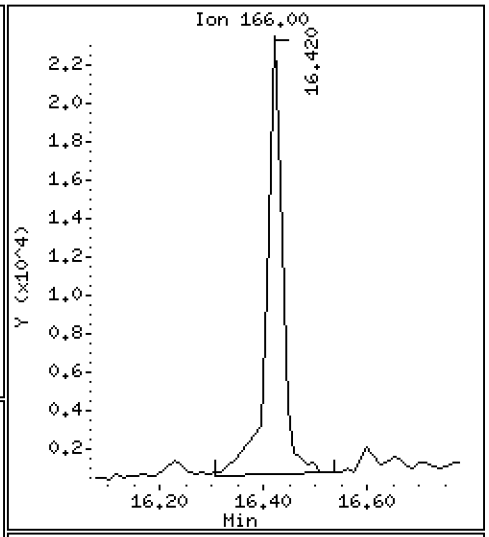
Concentration: 0.2448 ug/mL

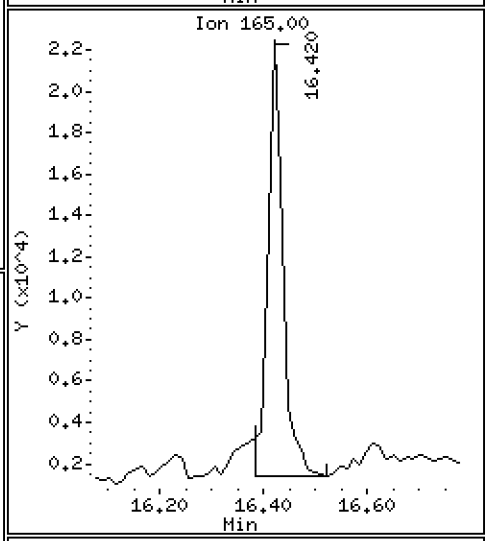


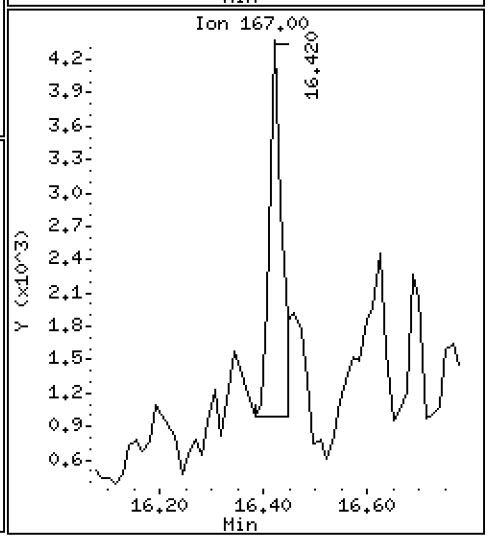












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

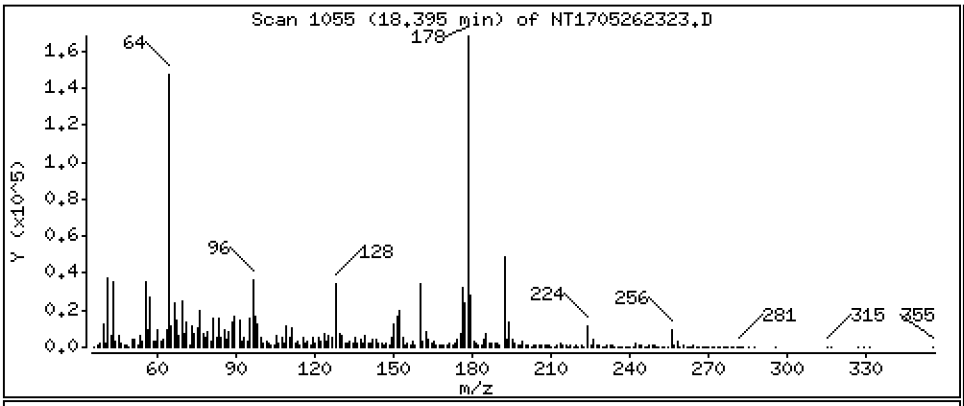
Operator: VTS

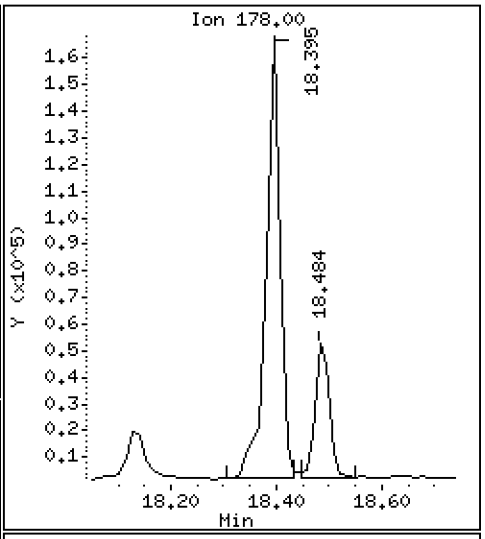
Column phase: ZB-5msi

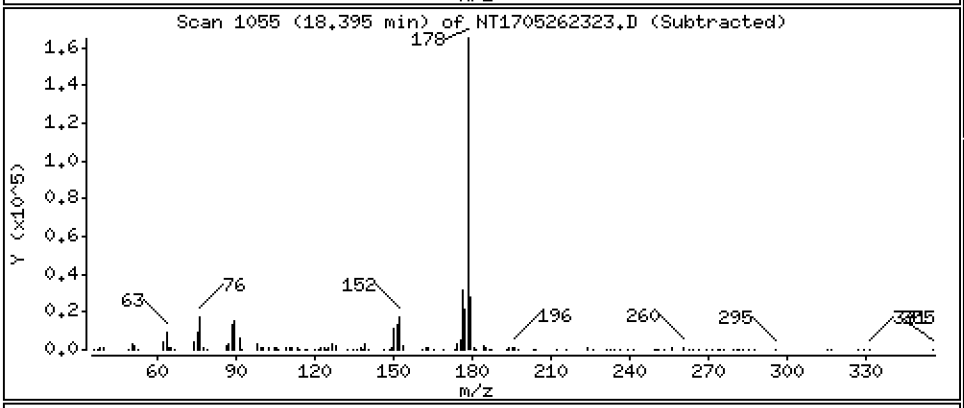
Column diameter: 0.25

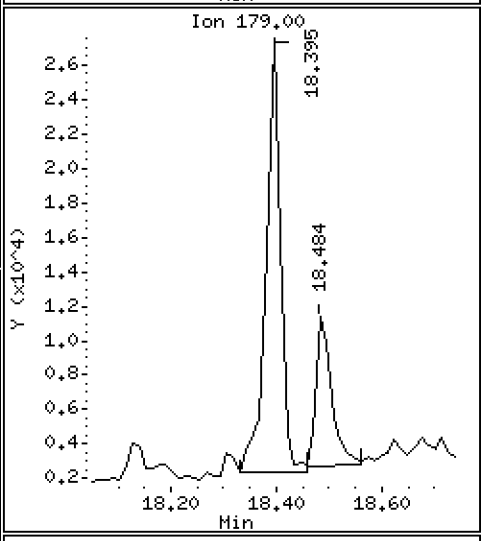
60 Phenanthrene

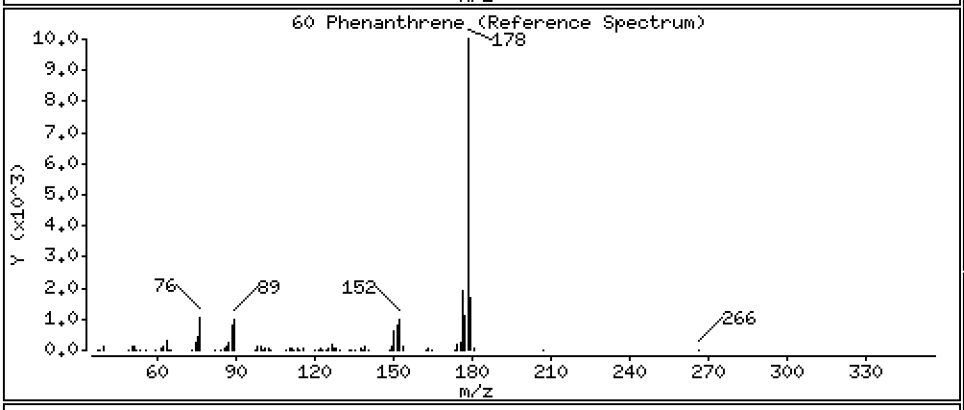
Concentration: 1.258 ug/mL

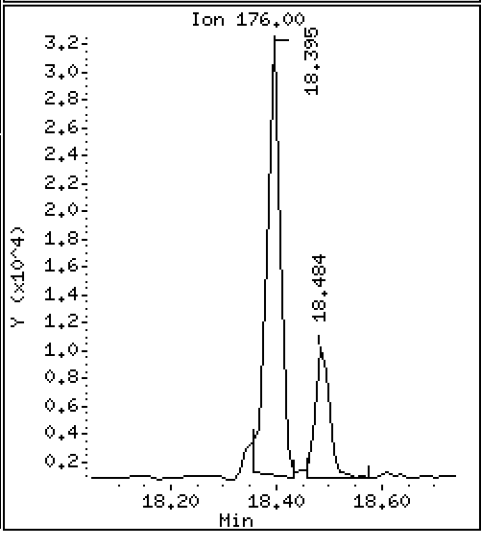


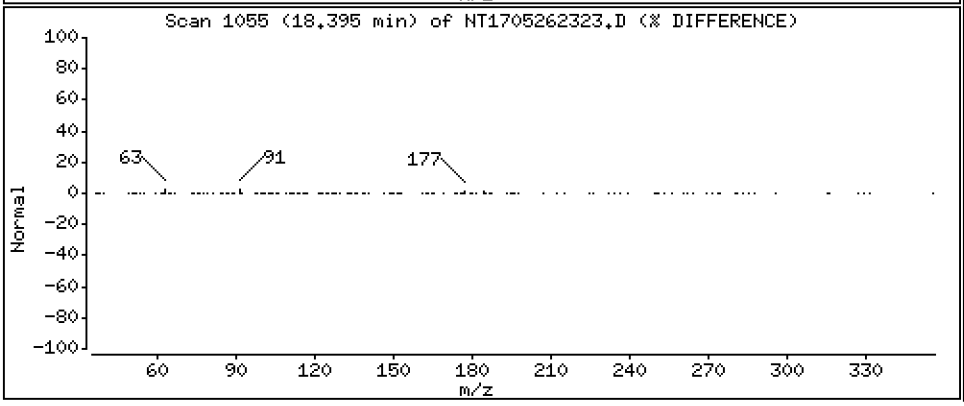












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

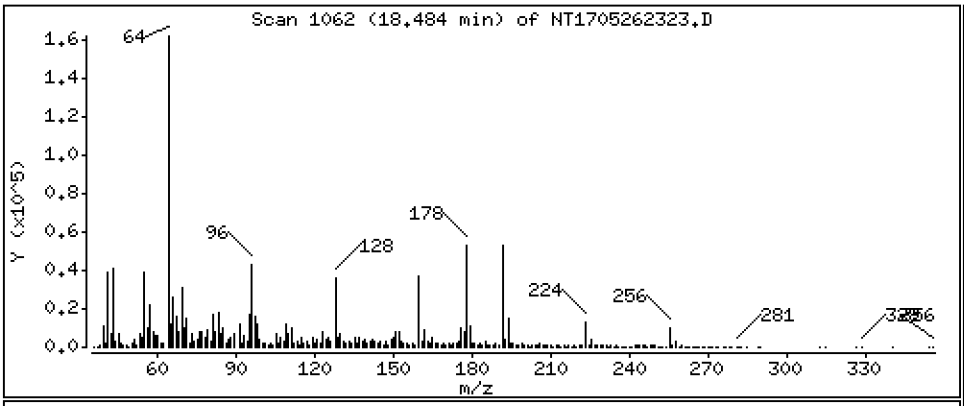
Operator: VTS

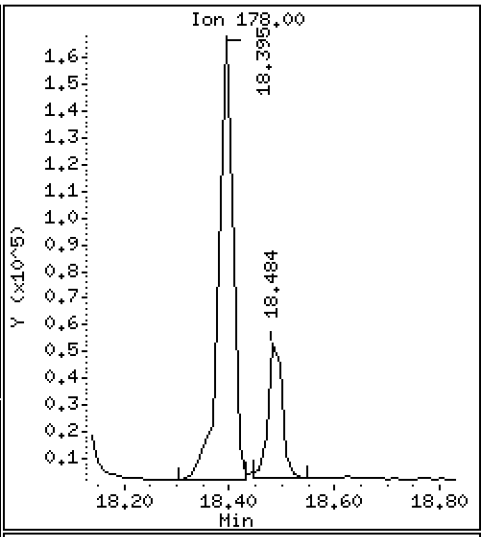
Column phase: ZB-5msi

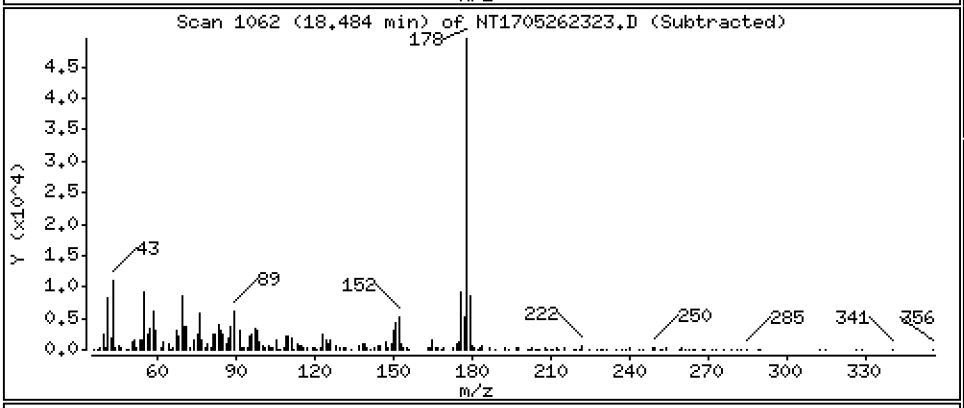
Column diameter: 0.25

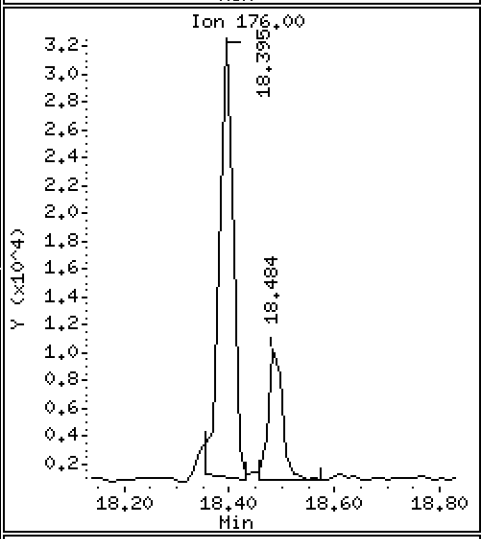
61 Anthracene

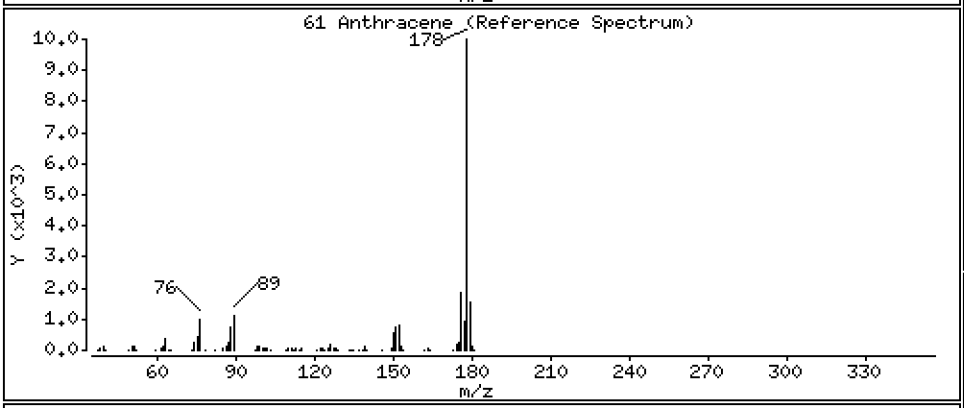
Concentration: 0.4257 ug/mL

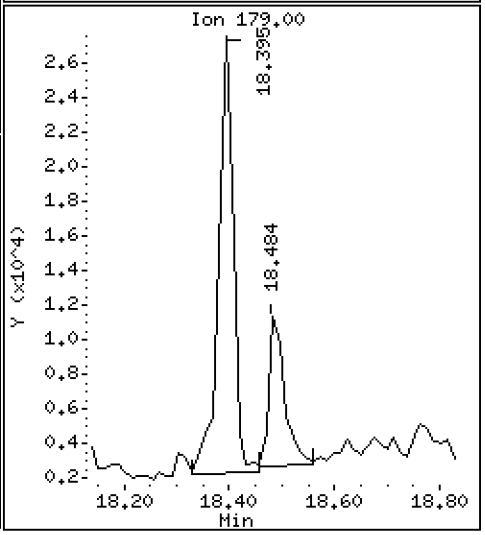


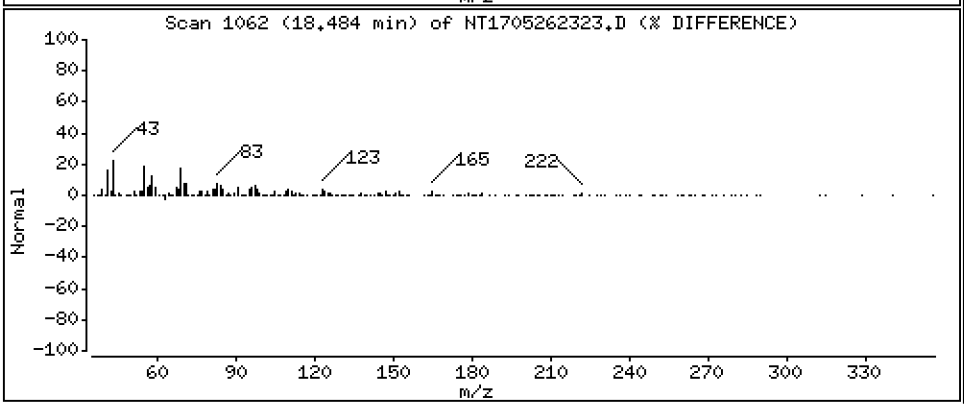












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

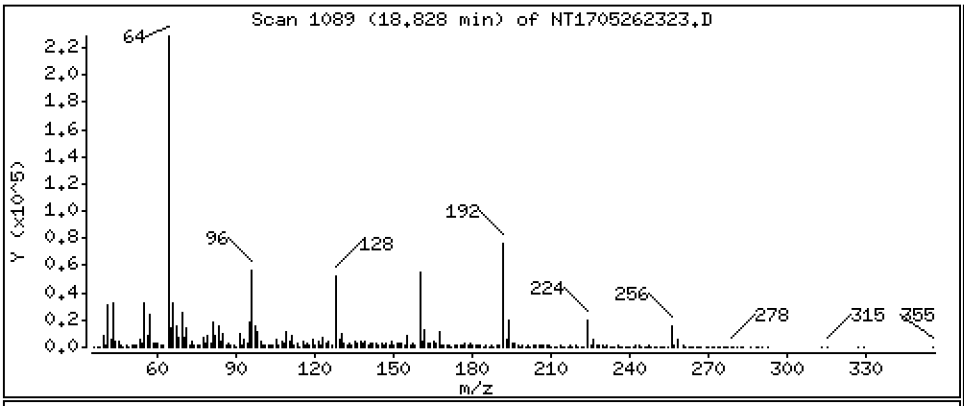
Operator: VTS

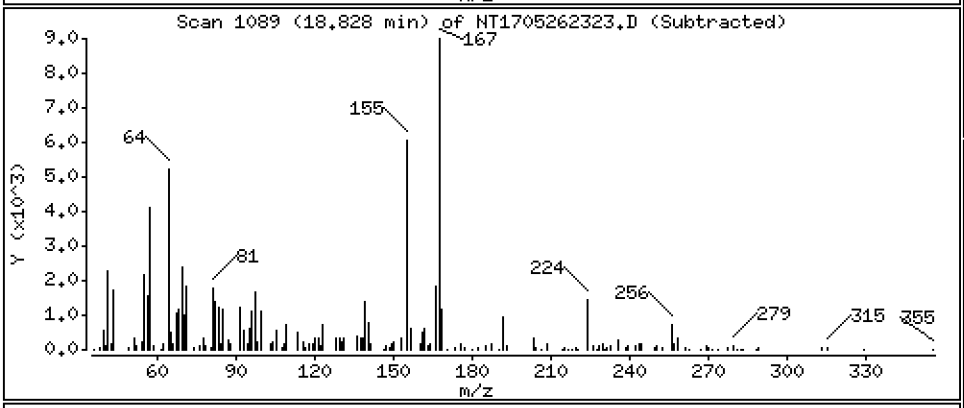
Column phase: ZB-5msi

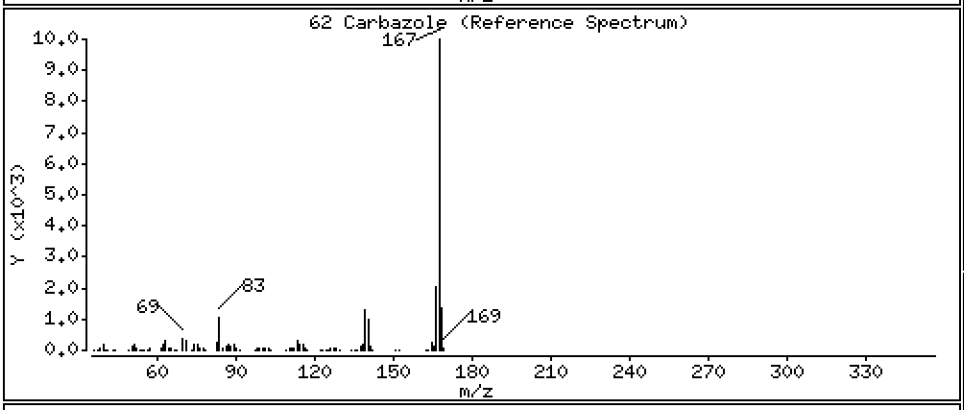
Column diameter: 0.25

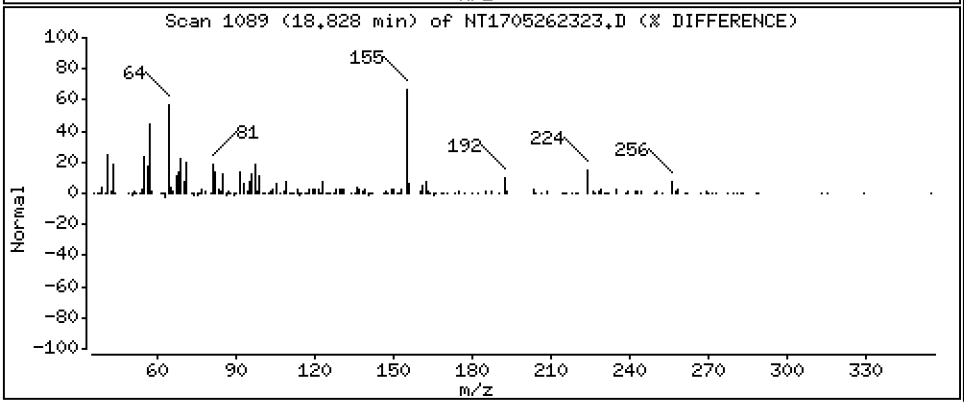
62 Carbazole

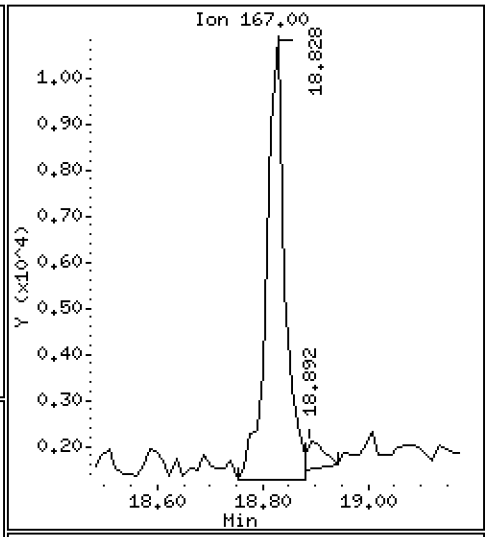
Concentration: 0.1682 ug/mL

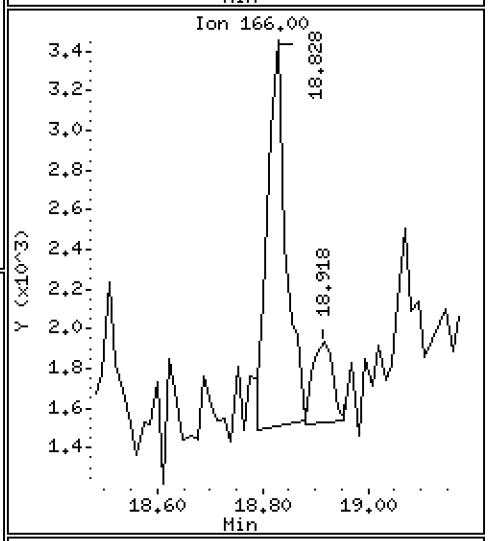


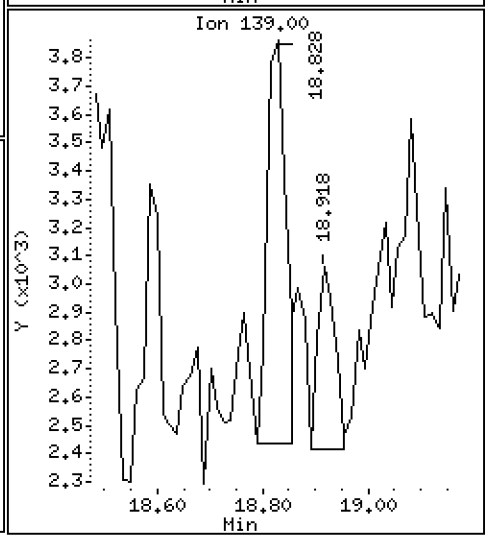












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

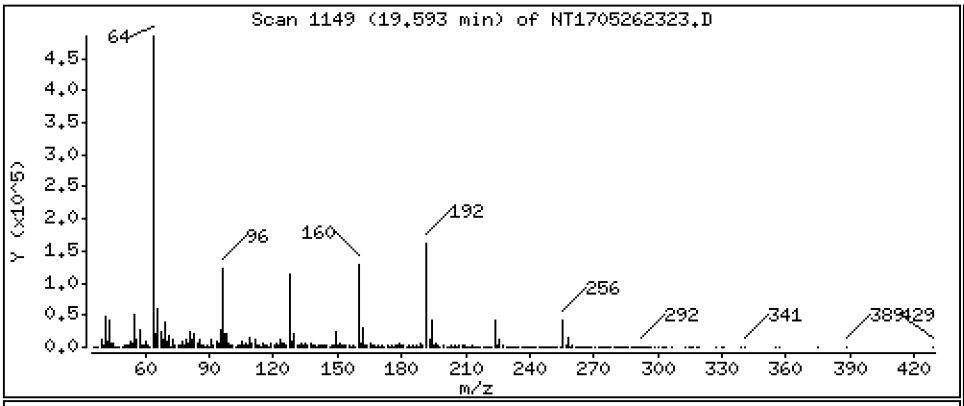
Operator: VTS

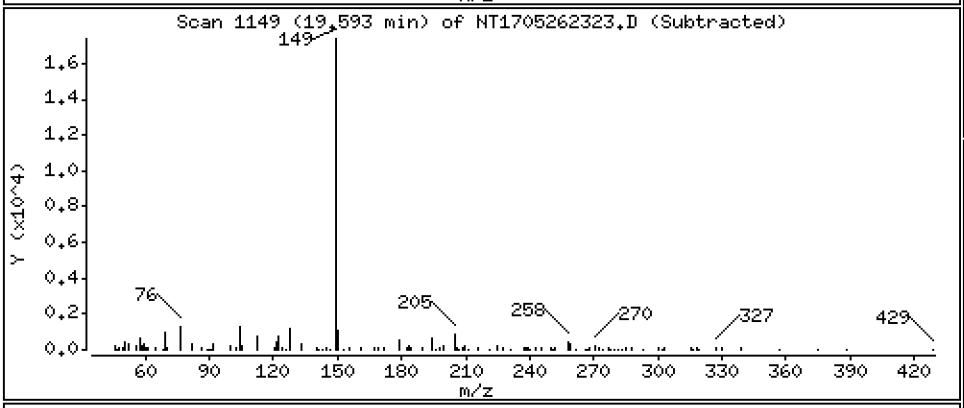
Column phase: ZB-5msi

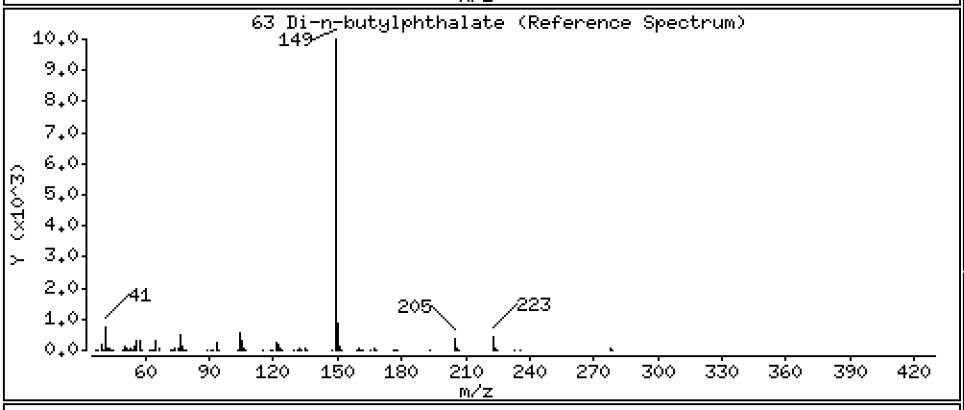
Column diameter: 0.25

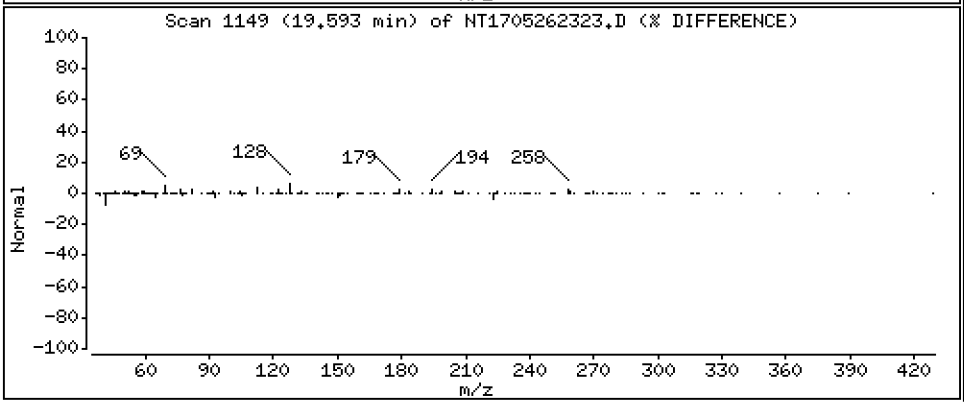
63 Di-n-butylphthalate

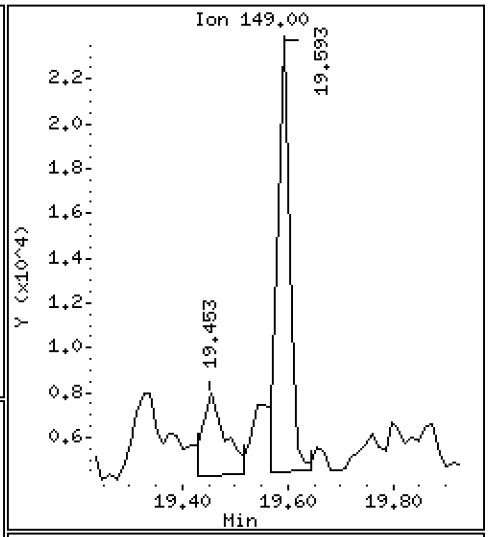
Concentration: 0.1198 ug/mL

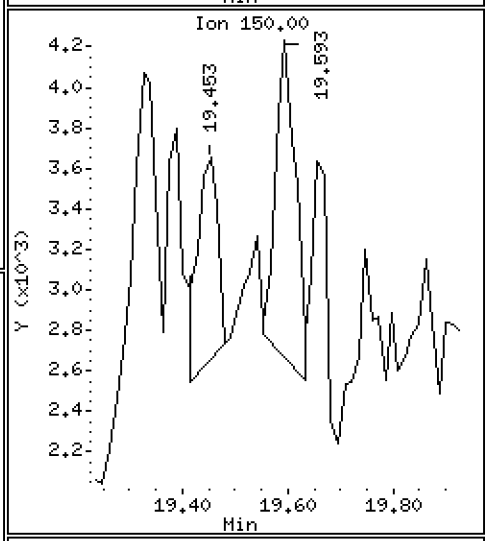


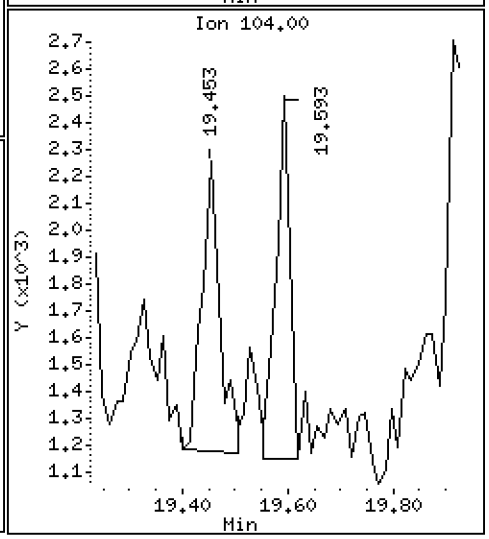












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

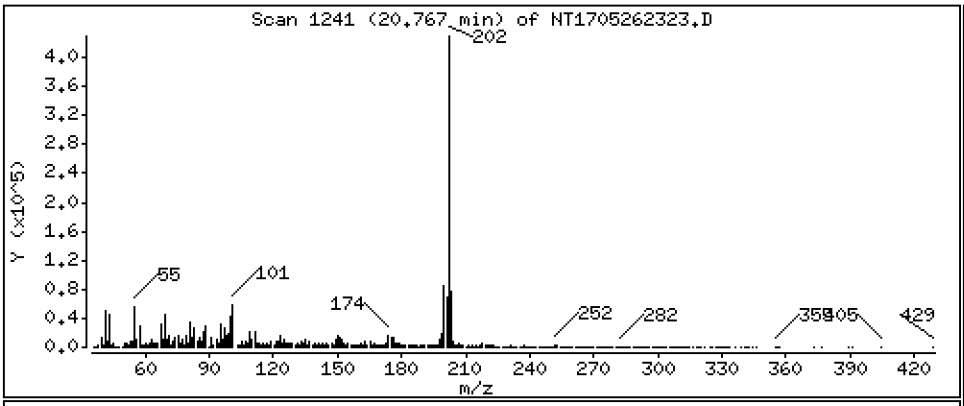
Operator: VTS

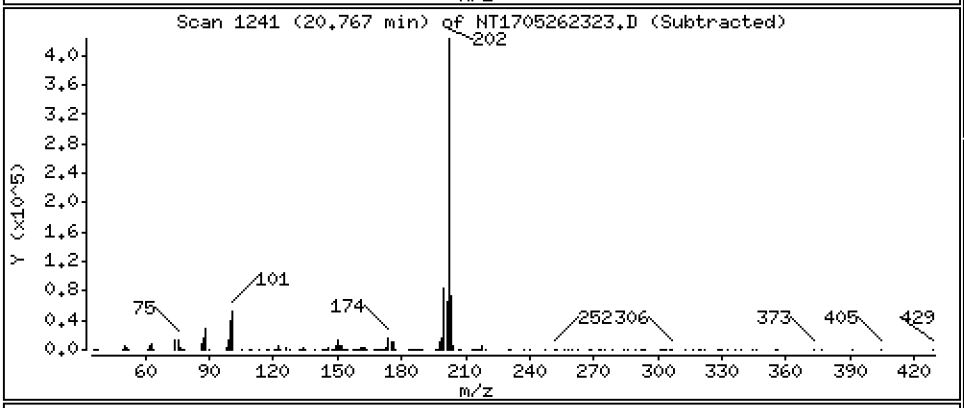
Column phase: ZB-5msi

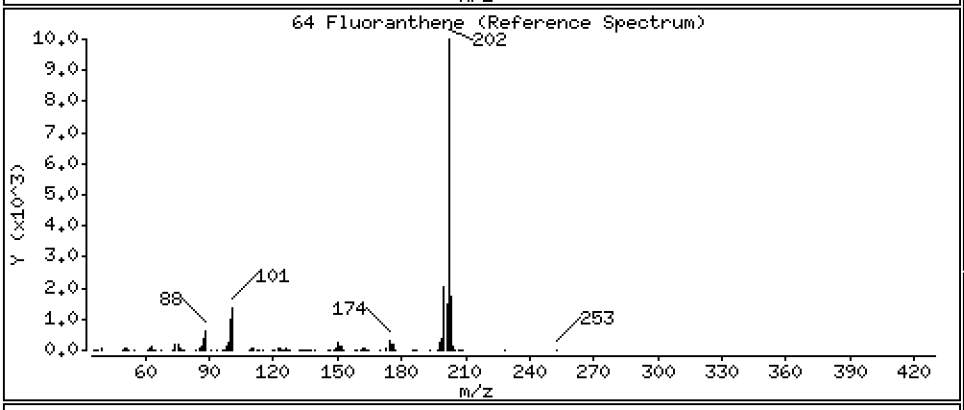
Column diameter: 0.25

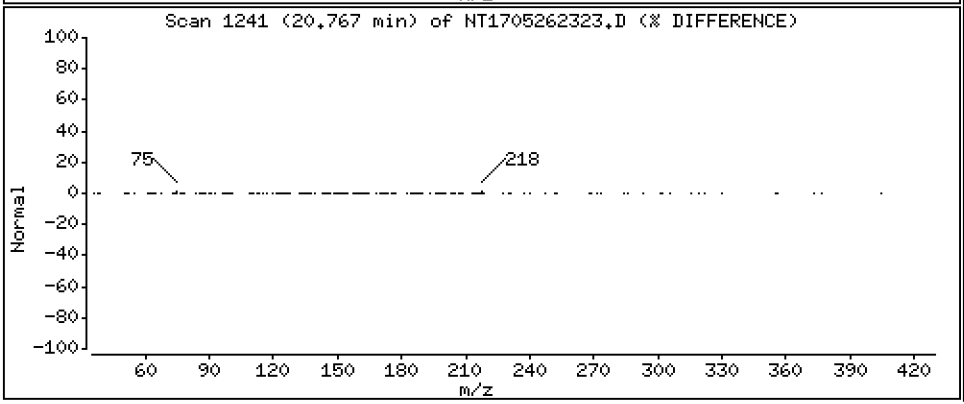
64 Fluoranthene

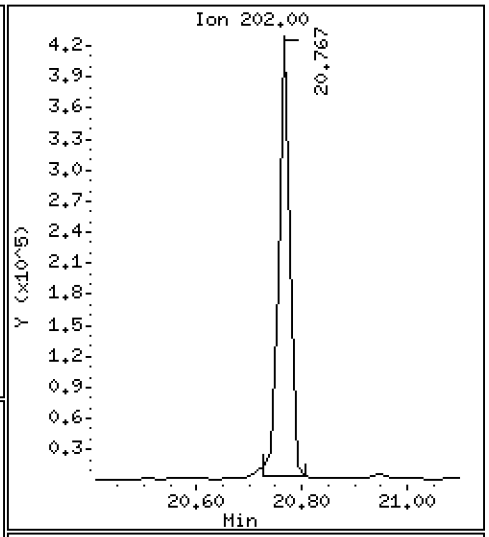
Concentration: 2.024 ug/mL

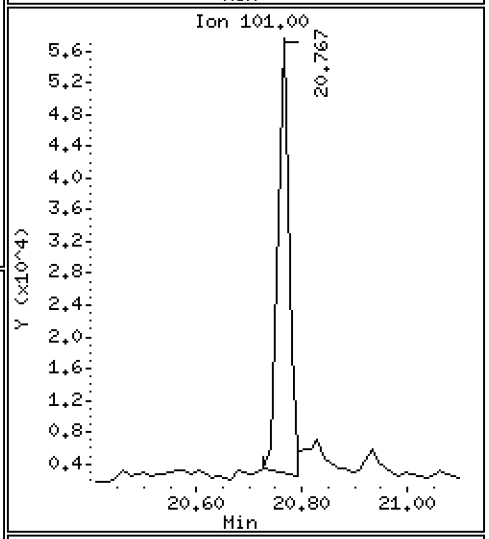


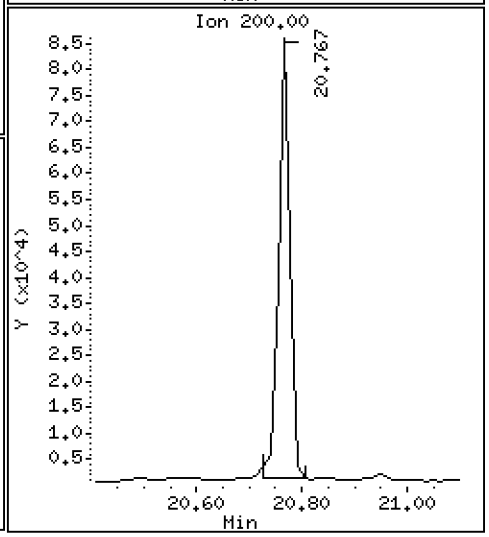












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262323.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

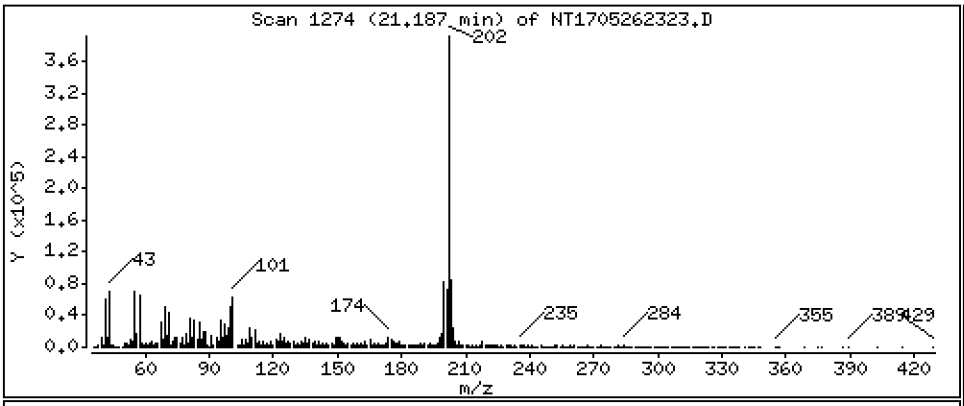
Operator: VTS

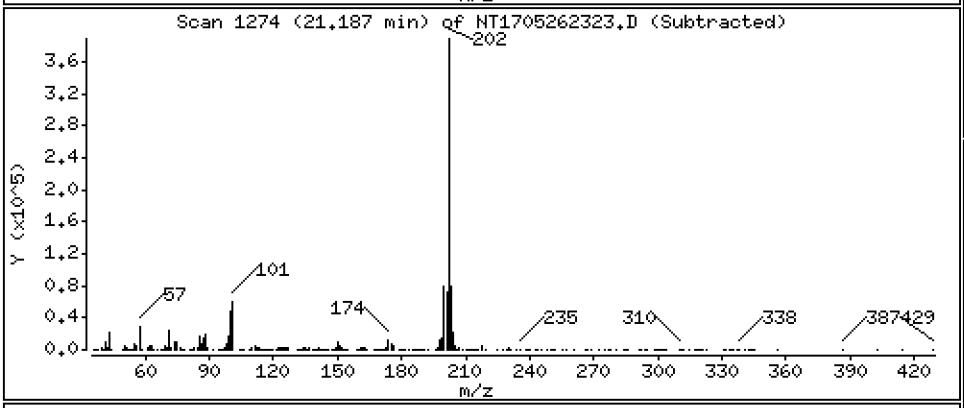
Column phase: ZB-5msi

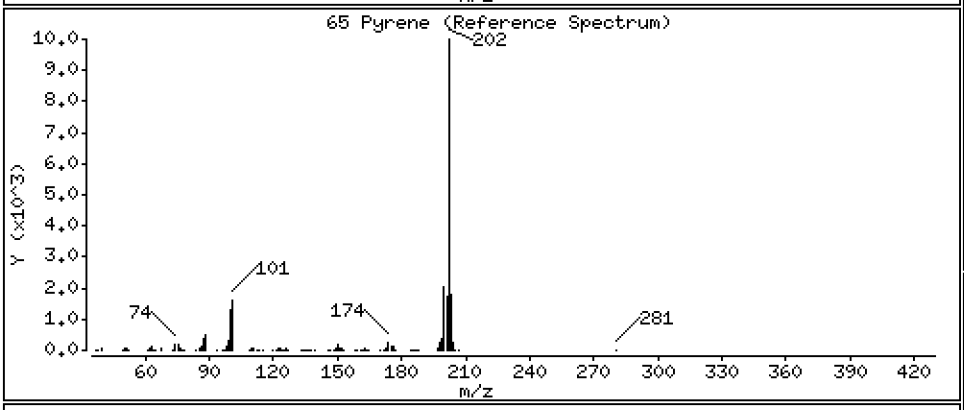
Column diameter: 0.25

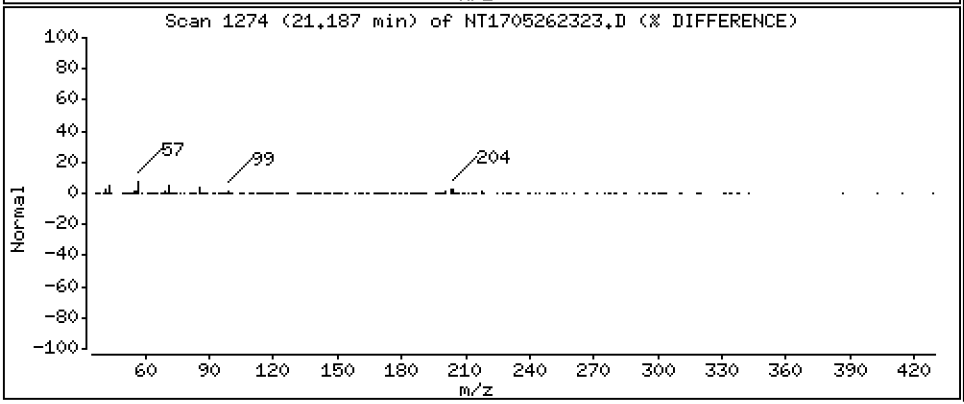
65 Pyrene

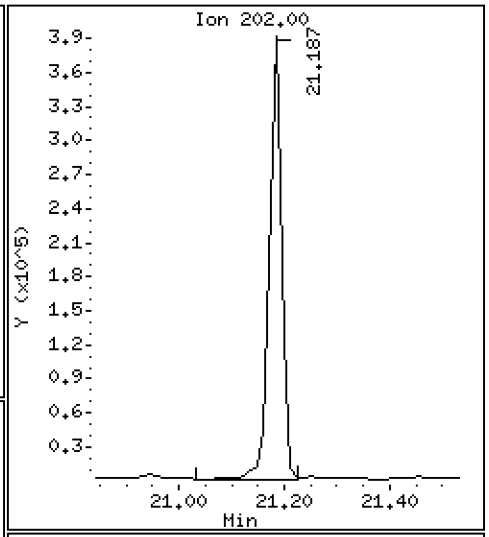
Concentration: 2.066 ug/mL

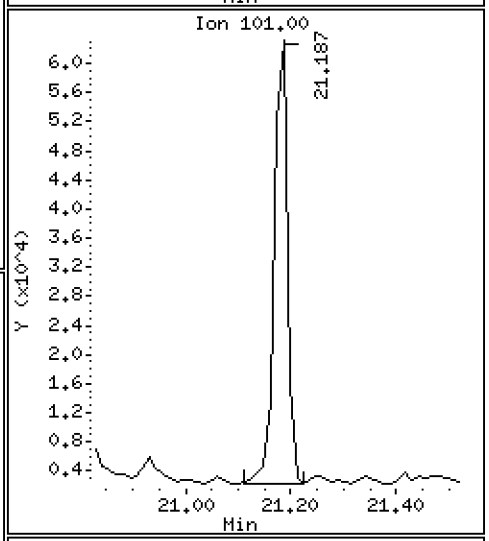


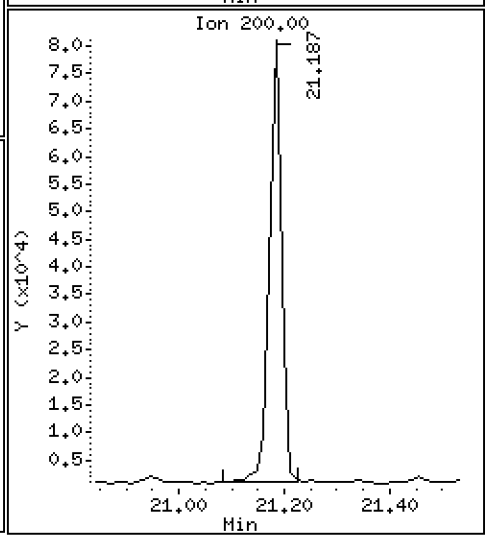












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

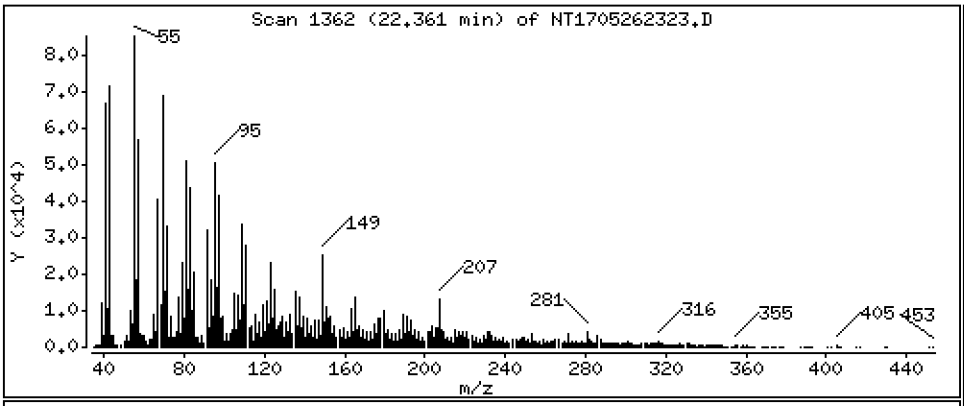
Operator: VTS

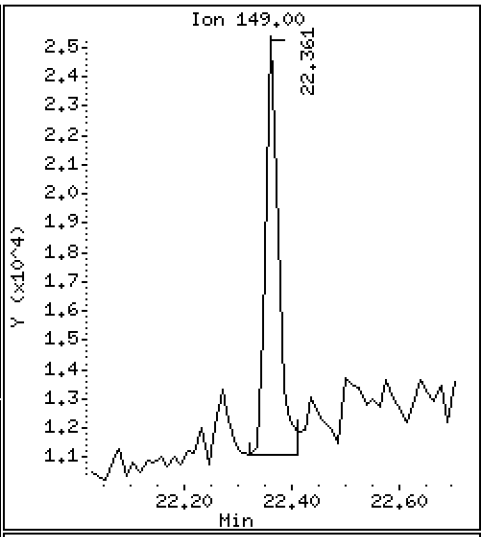
Column phase: ZB-5msi

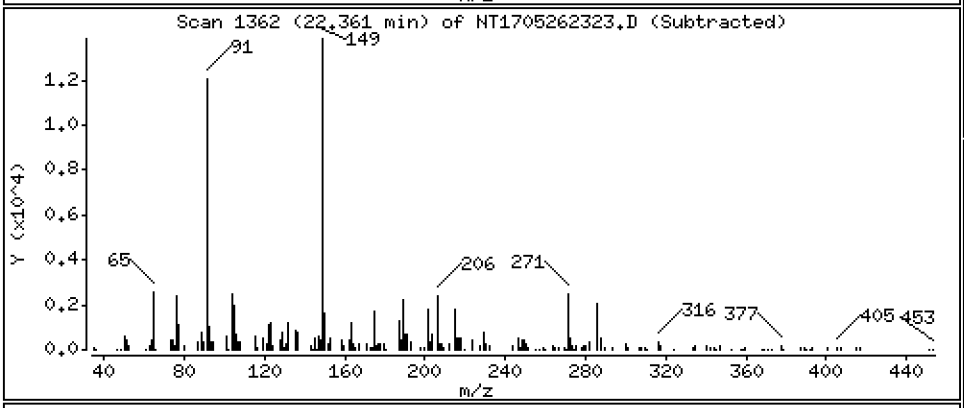
Column diameter: 0.25

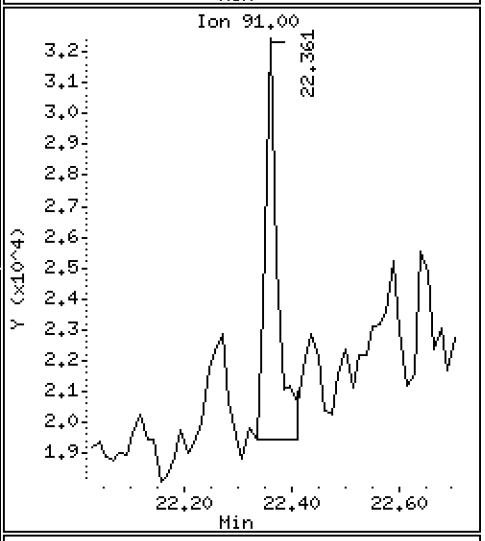
67 Butylbenzylphthalate

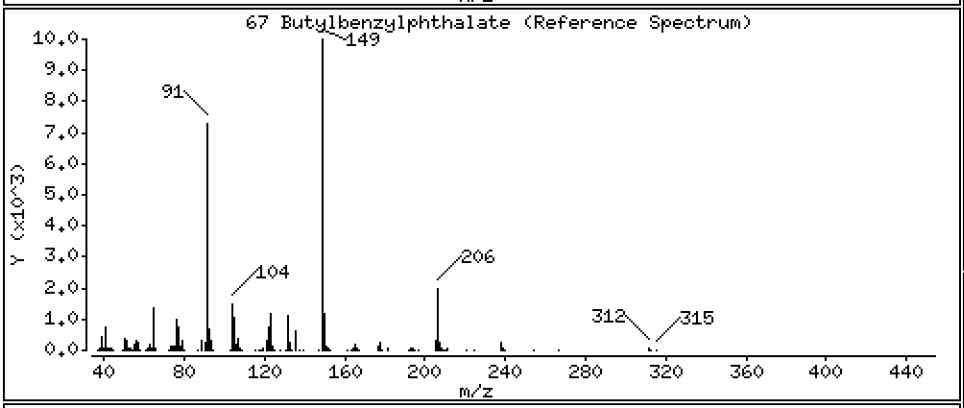
Concentration: 0.1780 ug/mL

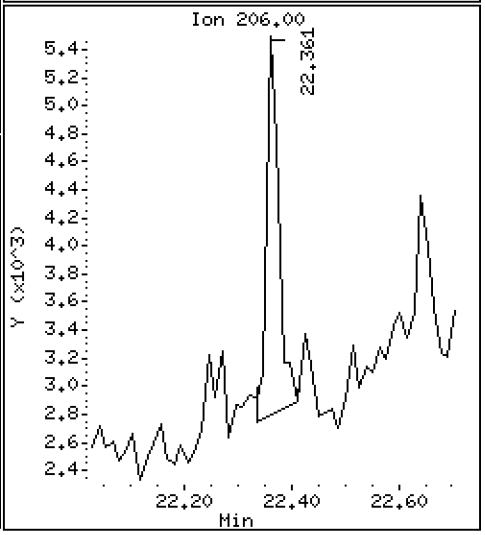


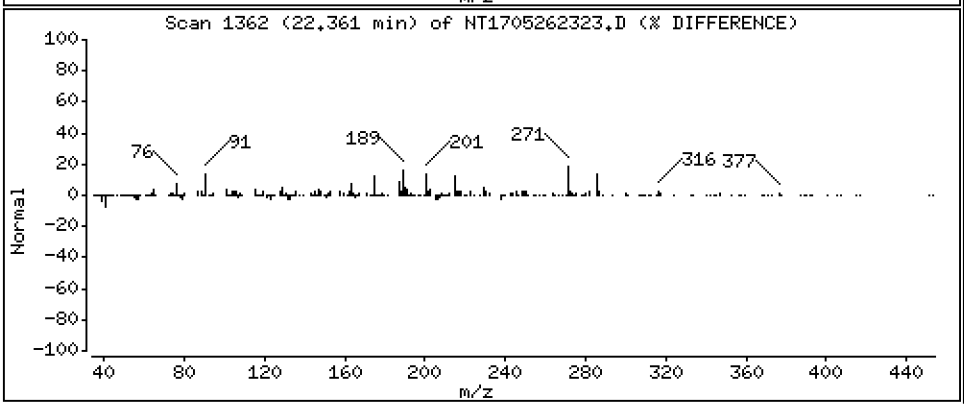












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

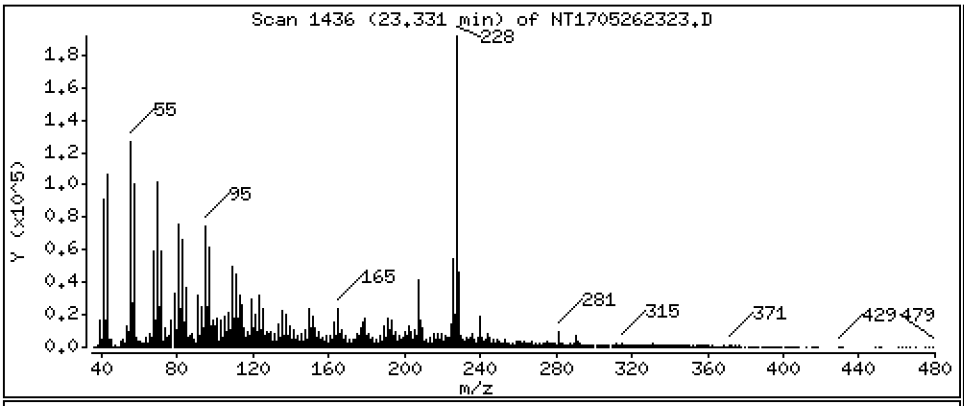
Operator: VTS

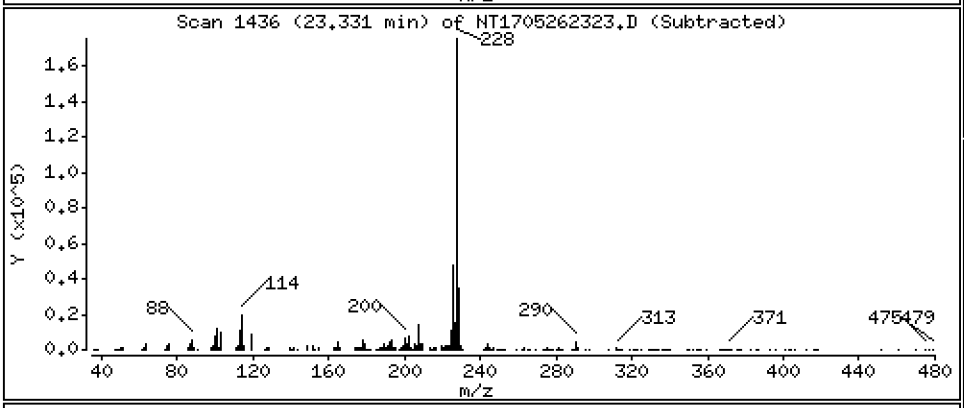
Column phase: ZB-5msi

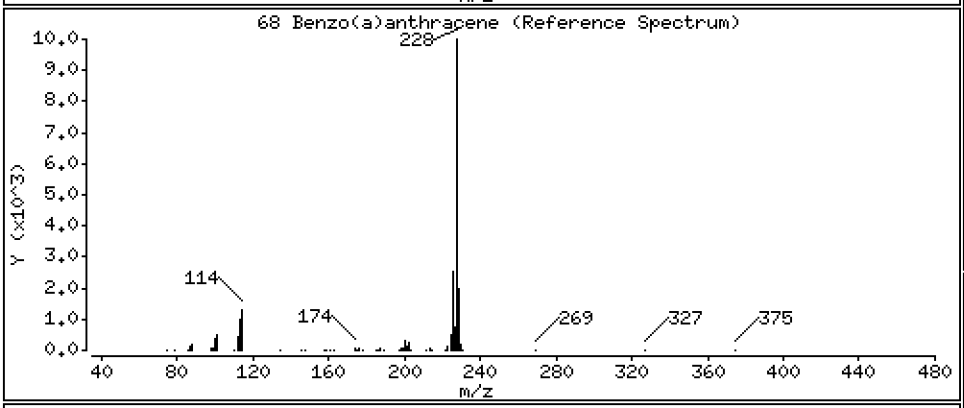
Column diameter: 0.25

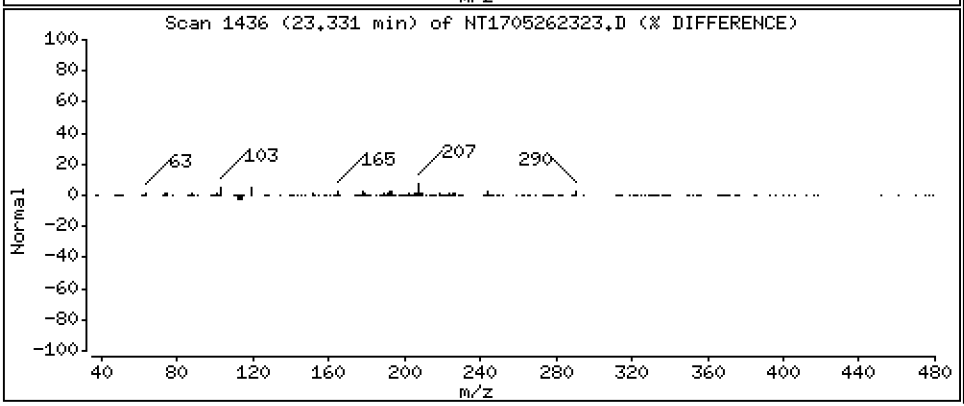
68 Benzo(a)anthracene

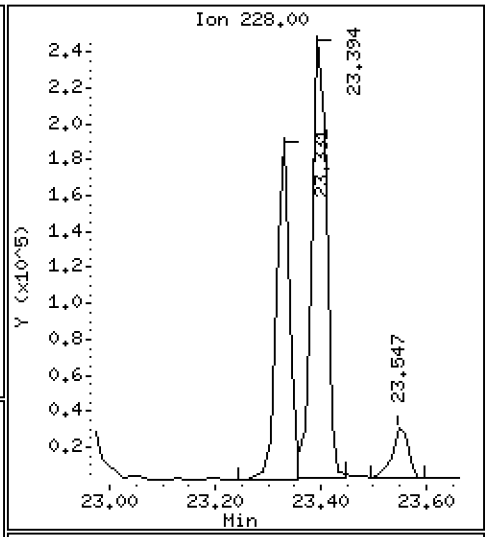
Concentration: 1.359 ug/mL

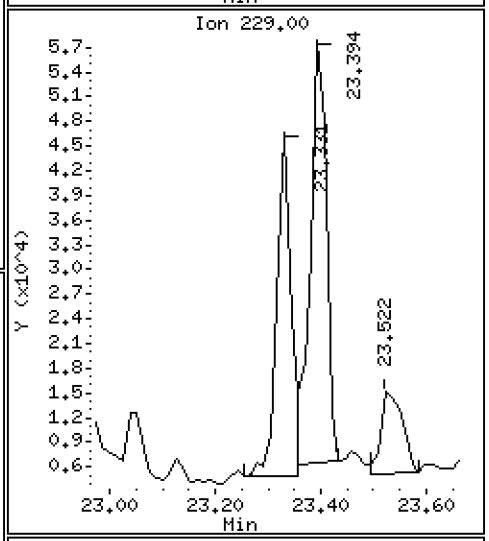


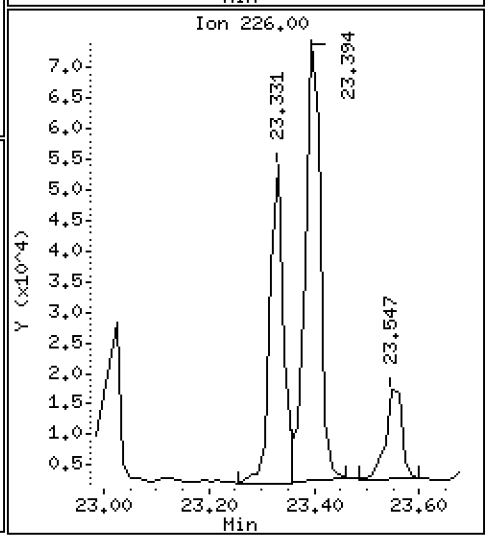












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

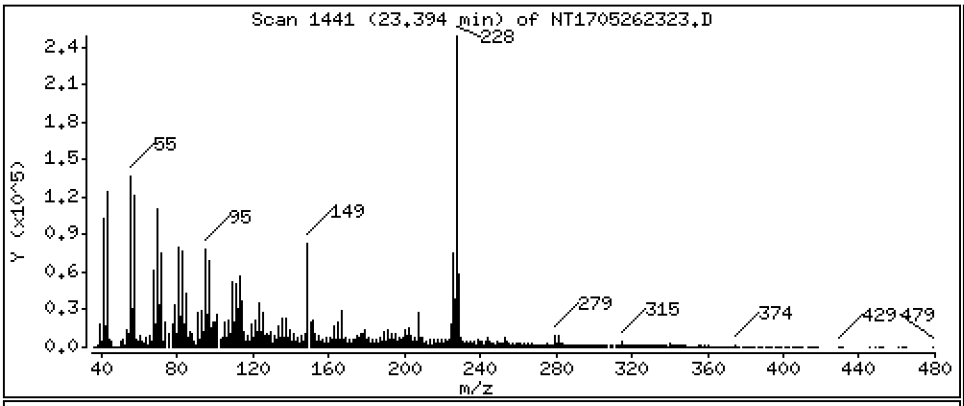
Operator: VTS

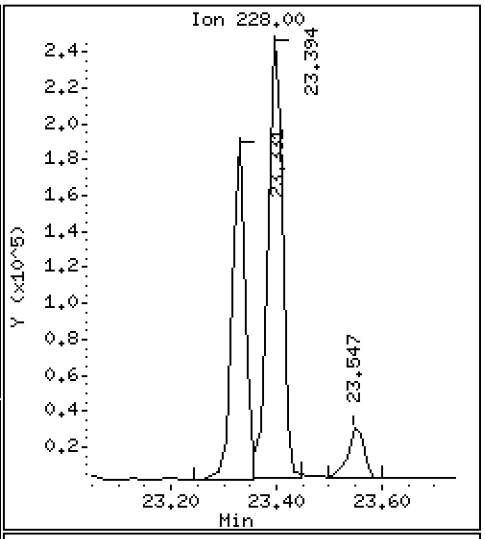
Column phase: ZB-5msi

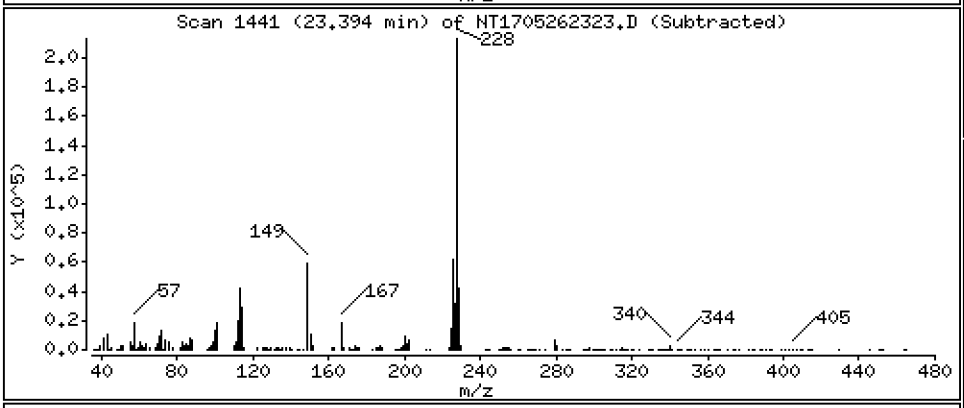
Column diameter: 0.25

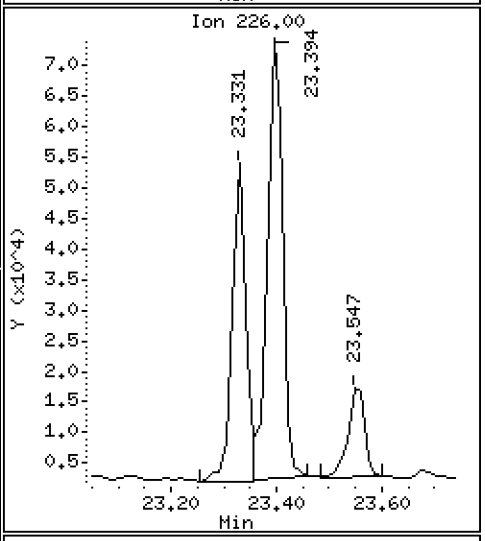
71 Chrysene

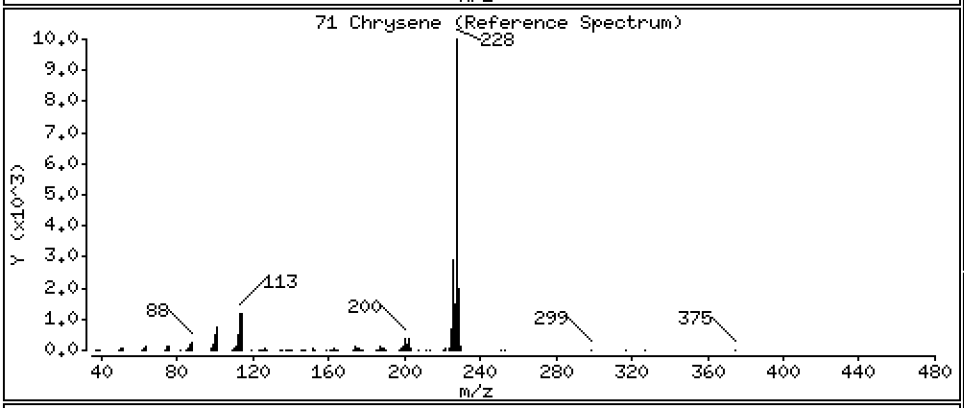
Concentration: 2.108 ug/mL

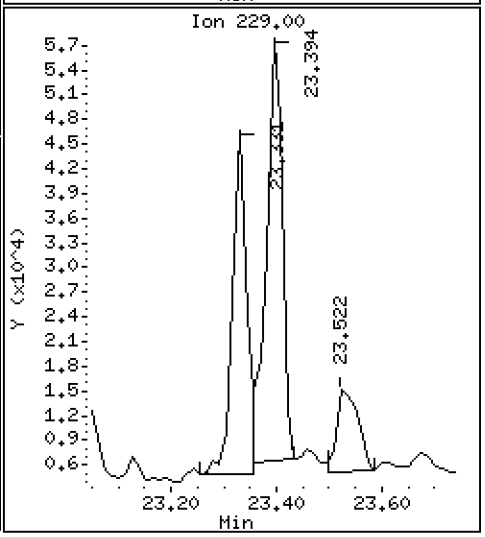


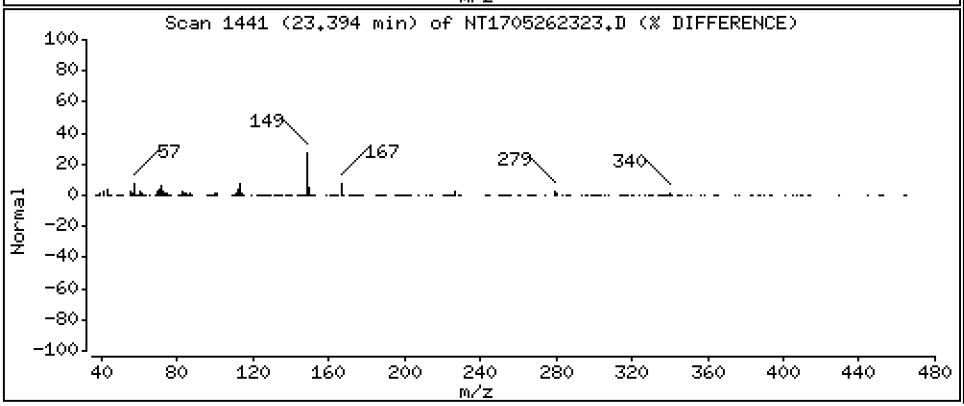












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

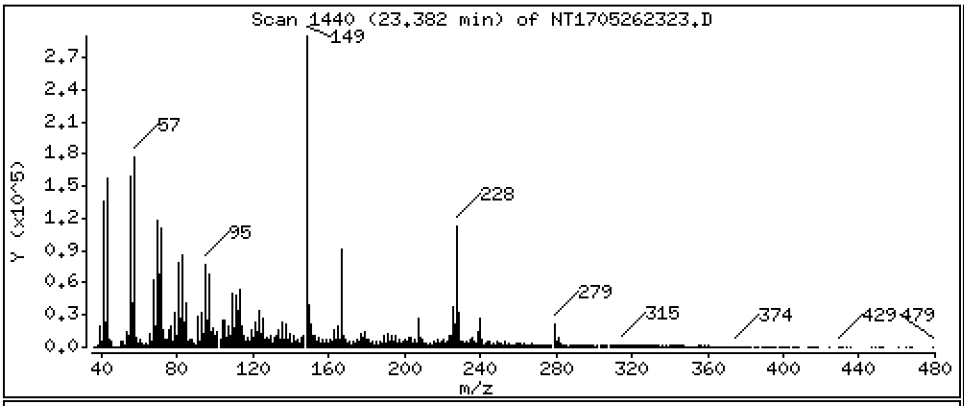
Operator: VTS

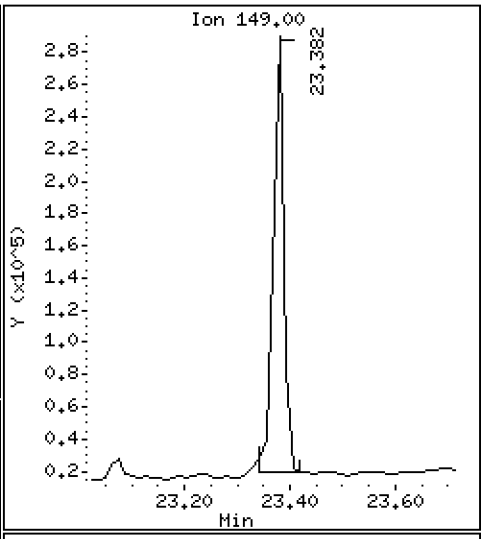
Column phase: ZB-5msi

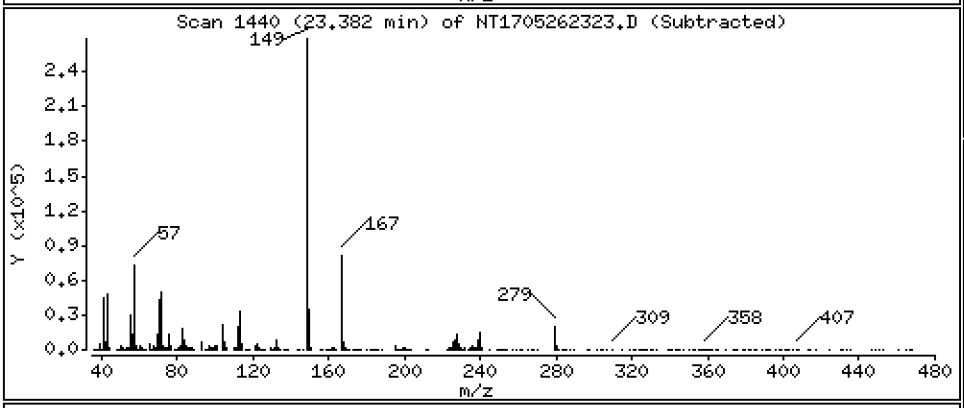
Column diameter: 0.25

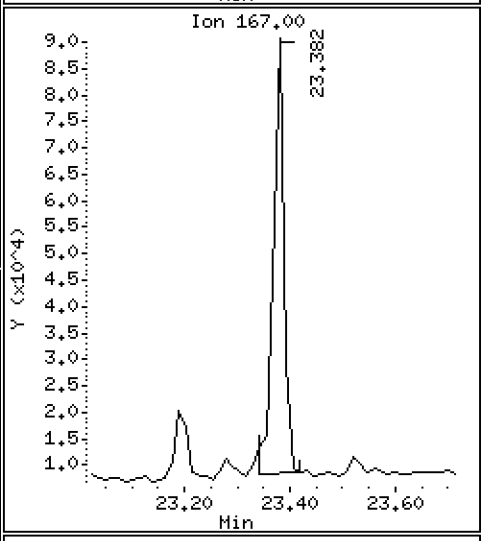
72 bis(2-Ethylhexyl)phthalate

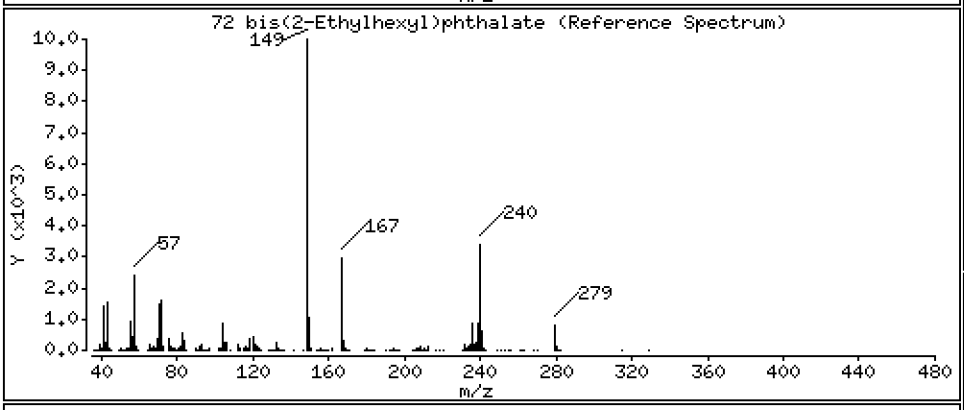
Concentration: 1.923 ug/mL

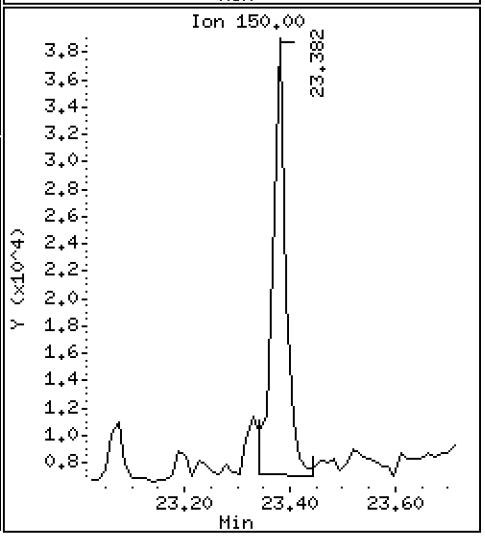


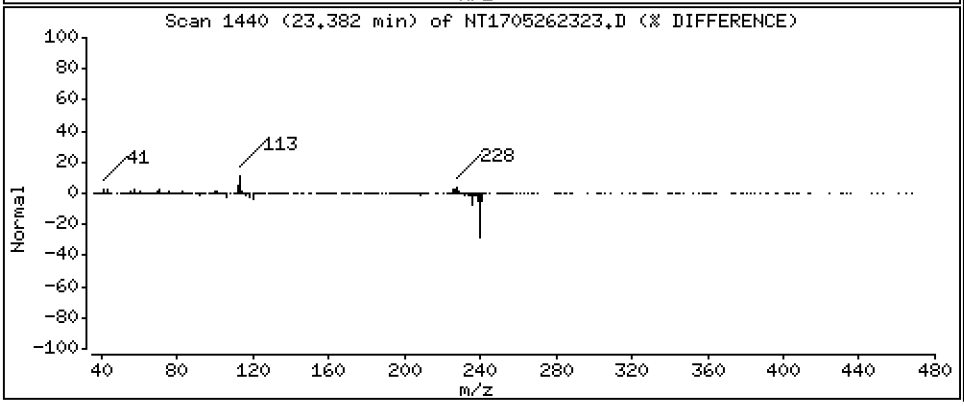












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

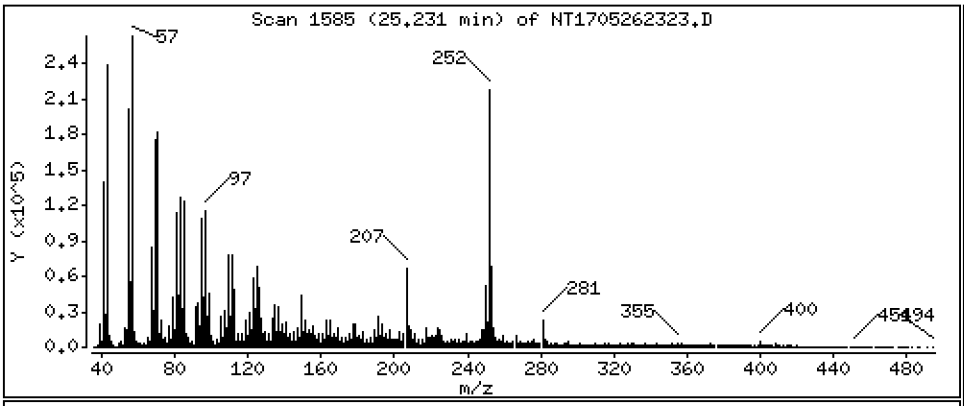
Operator: VTS

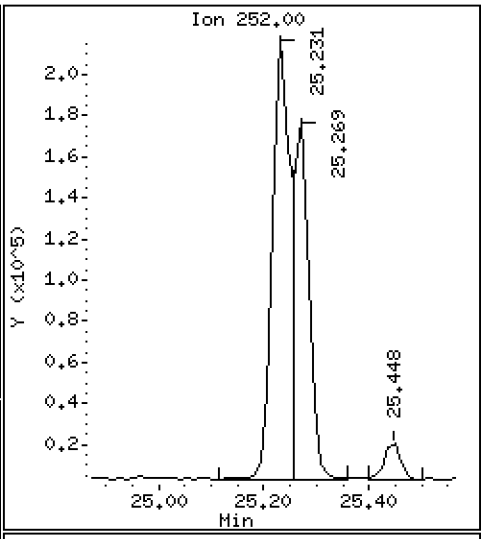
Column phase: ZB-5msi

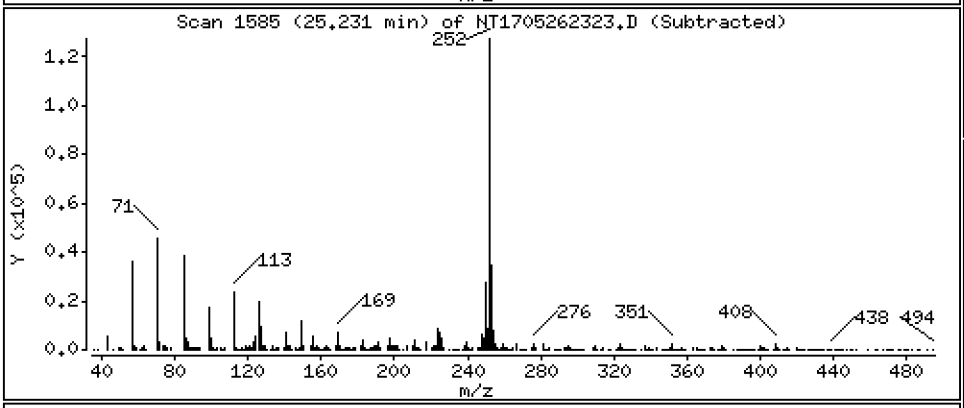
Column diameter: 0.25

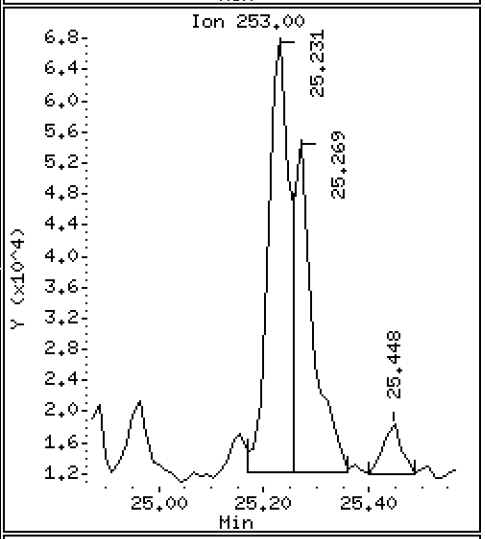
74 Benzo(b)fluoranthene

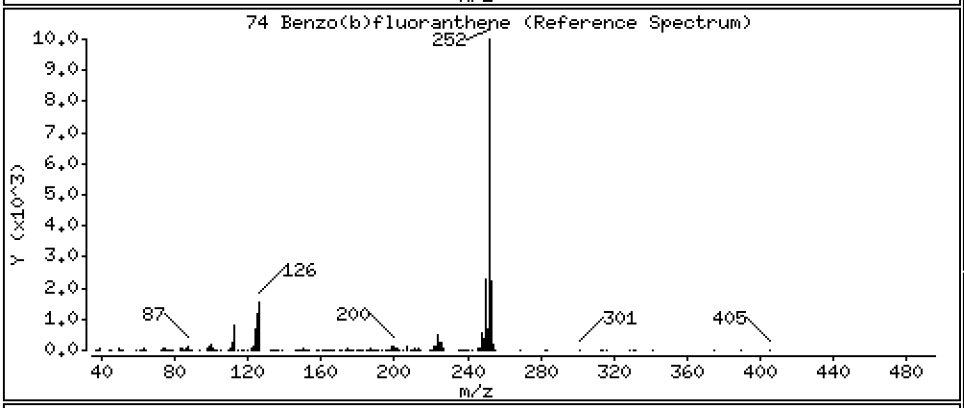
Concentration: 2.791 ug/mL

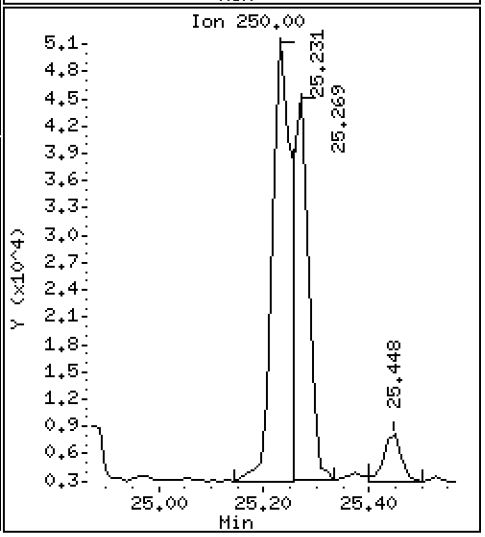


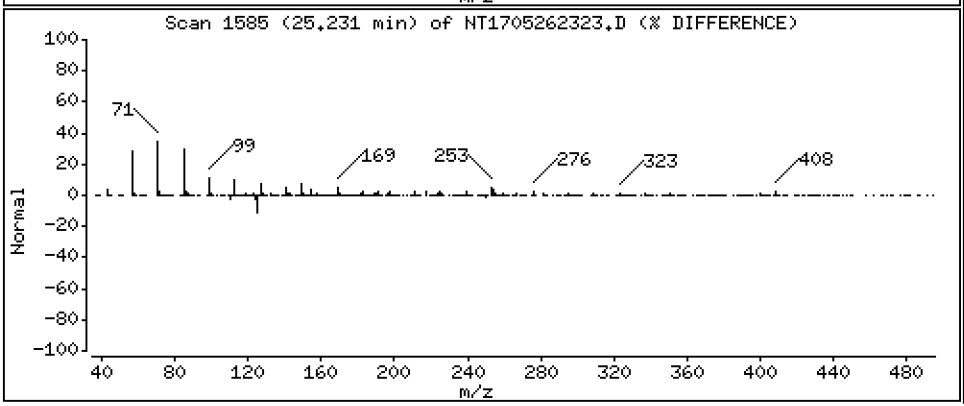












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

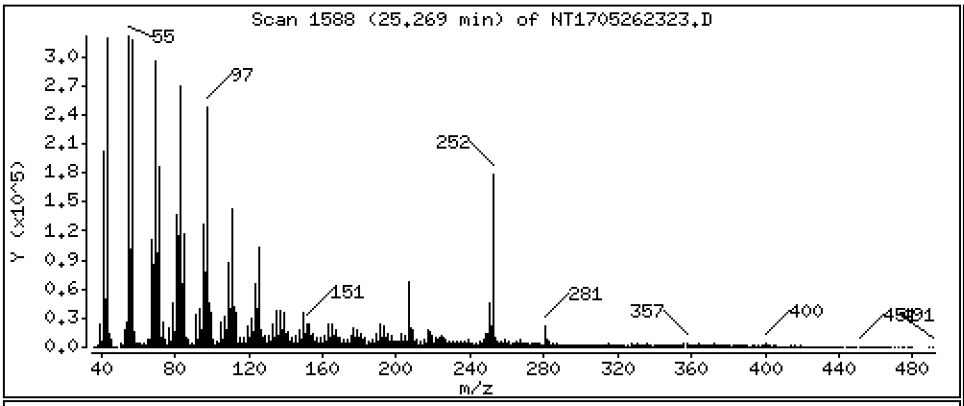
Operator: VTS

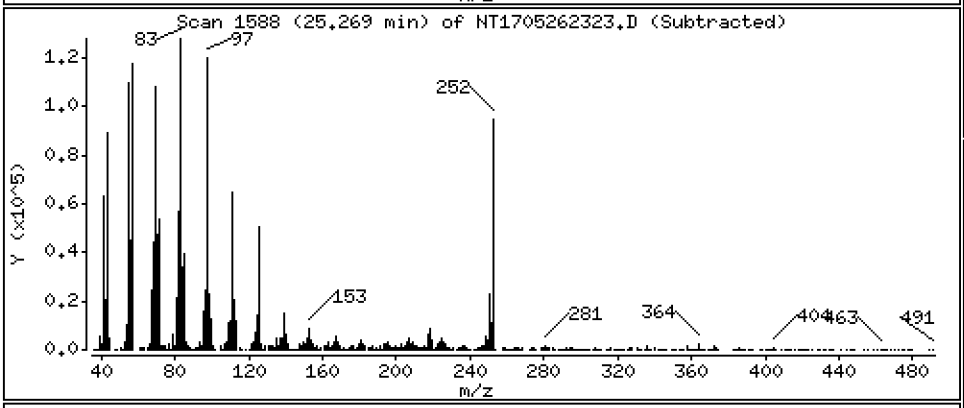
Column phase: ZB-5msi

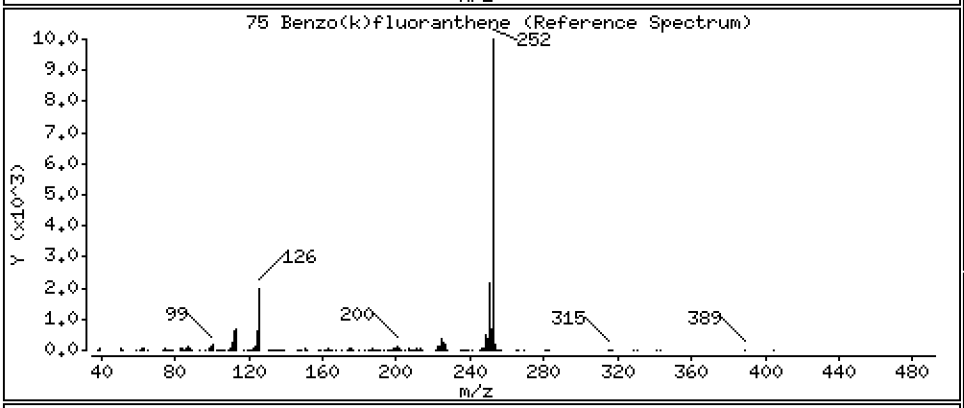
Column diameter: 0.25

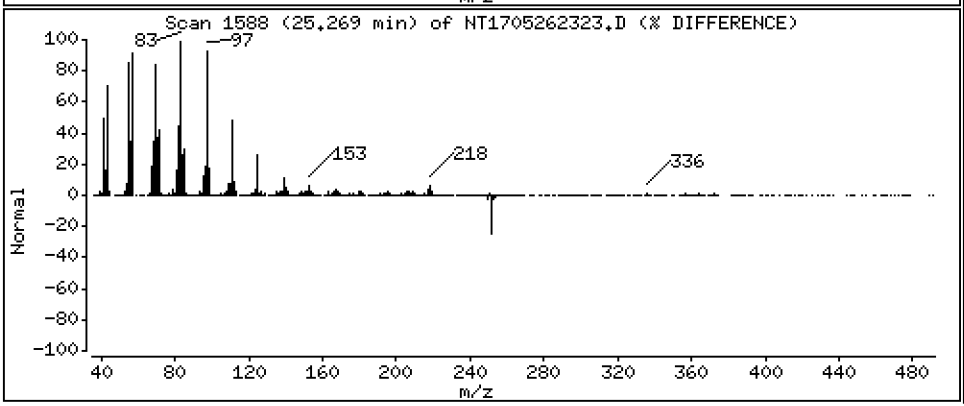
75 Benzo(k)fluoranthene

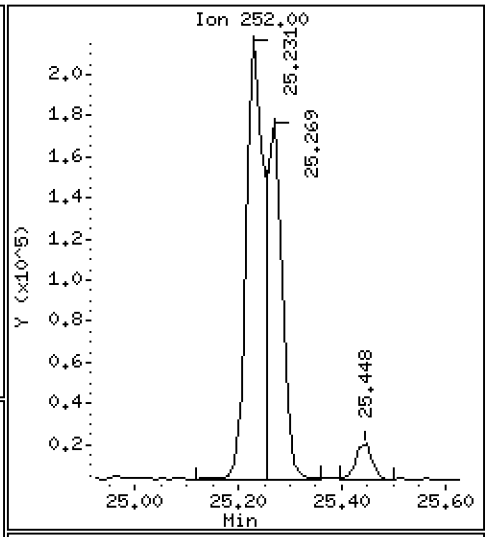
Concentration: 1.970 ug/mL

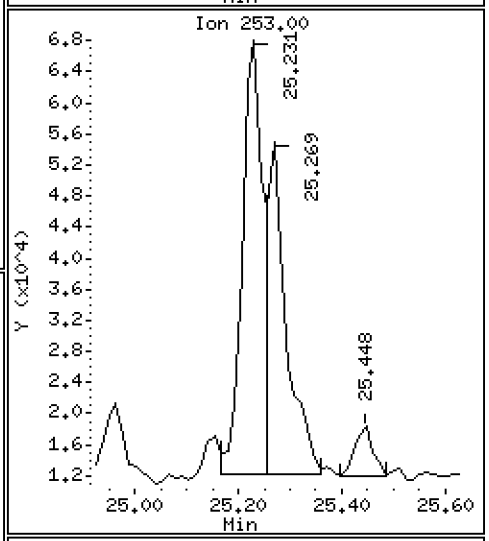


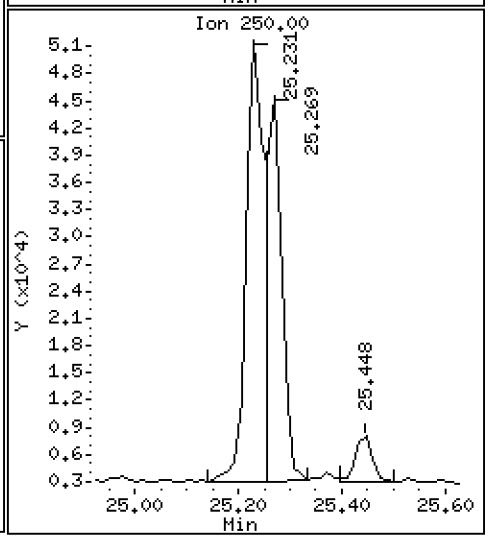












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262323.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

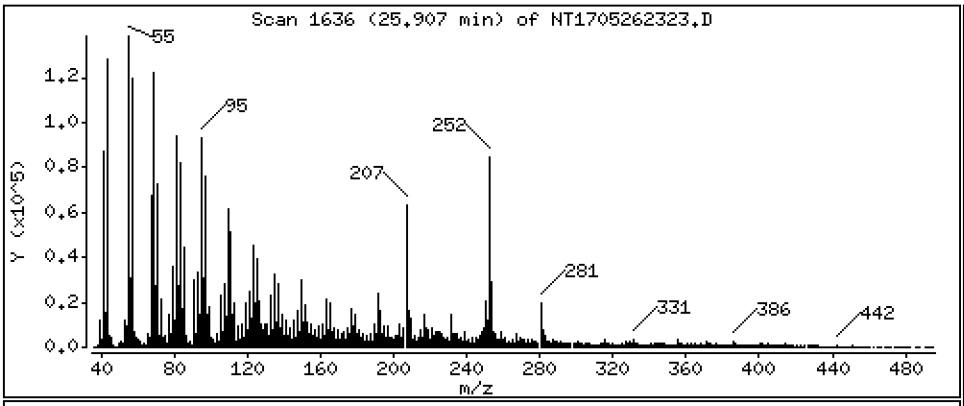
Operator: VTS

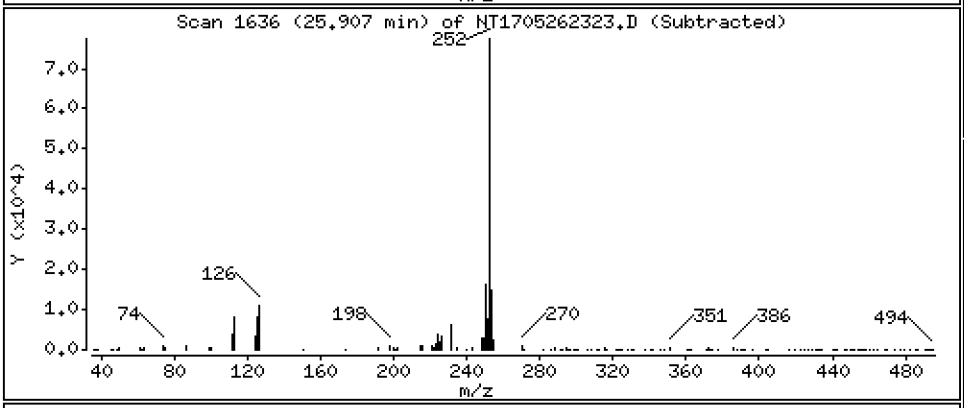
Column phase: ZB-5msi

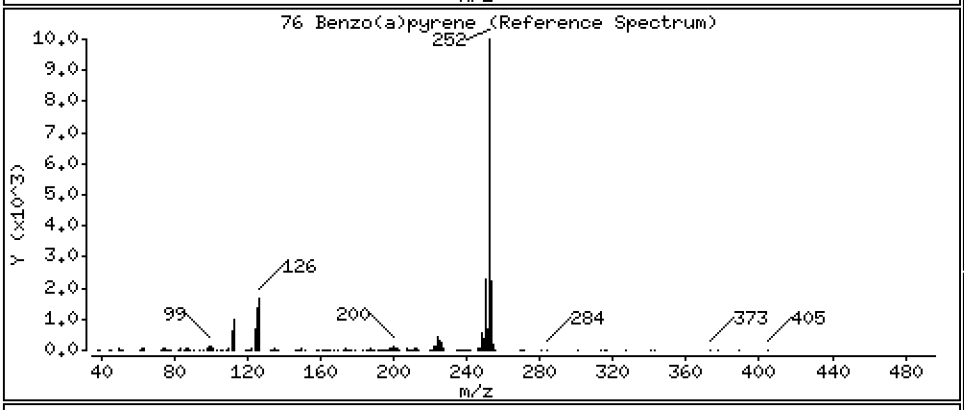
Column diameter: 0.25

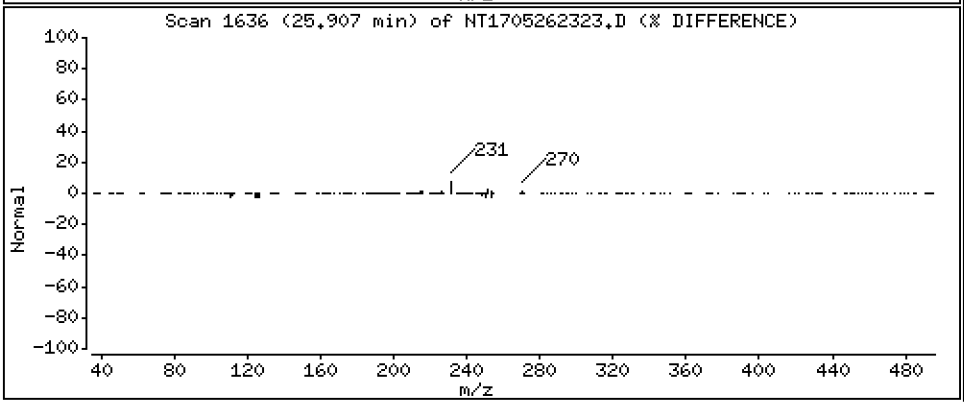
76 Benzo(a)pyrene

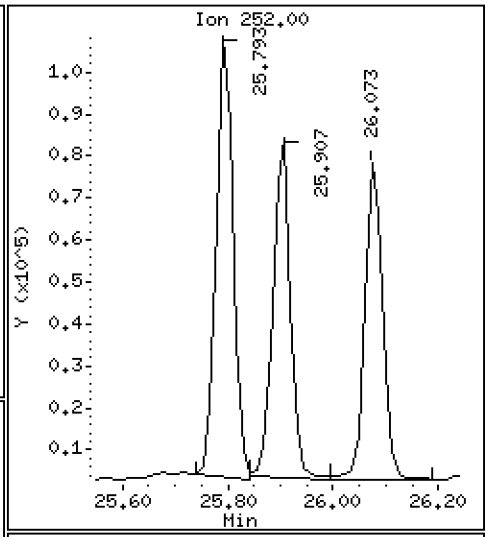
Concentration: 1.214 ug/mL

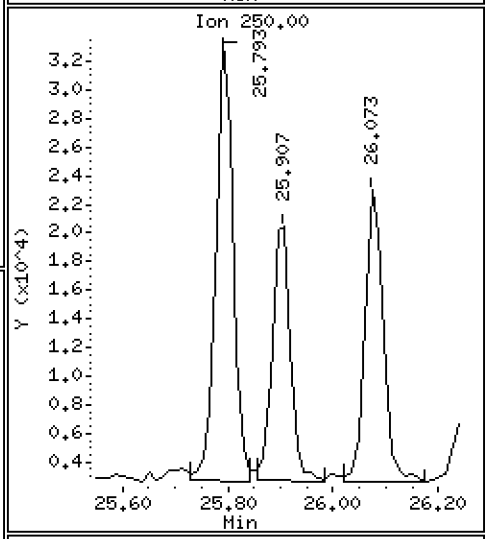


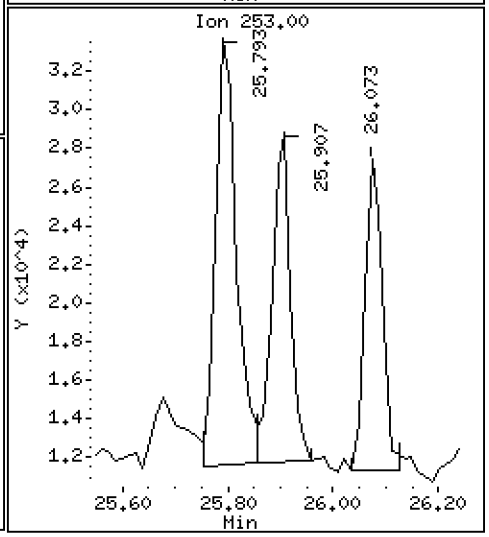












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

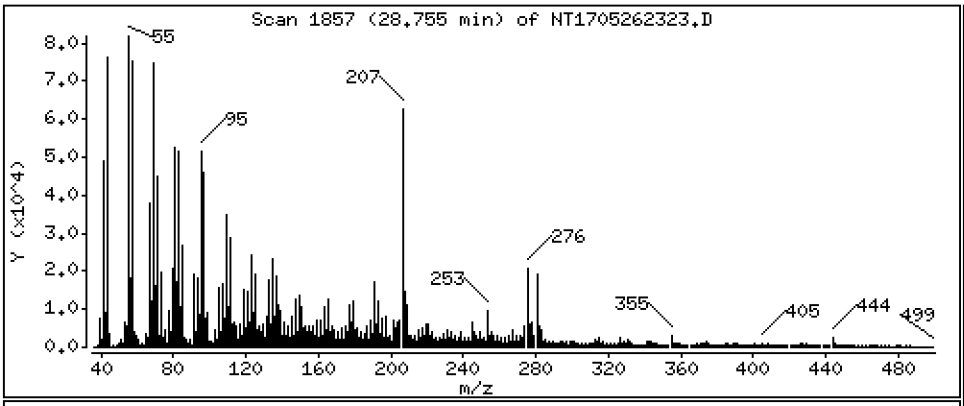
Operator: VTS

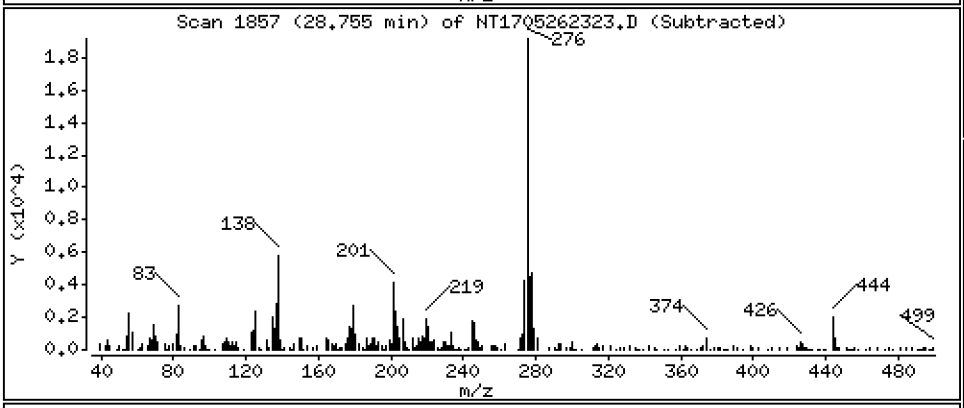
Column phase: ZB-5msi

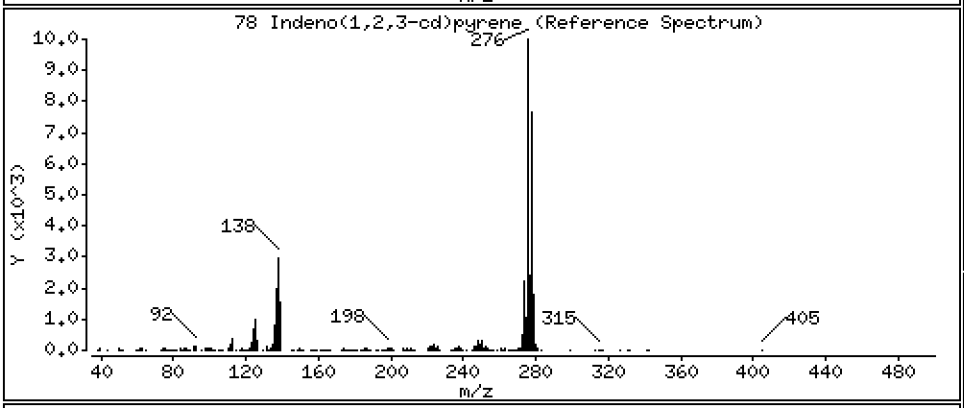
Column diameter: 0.25

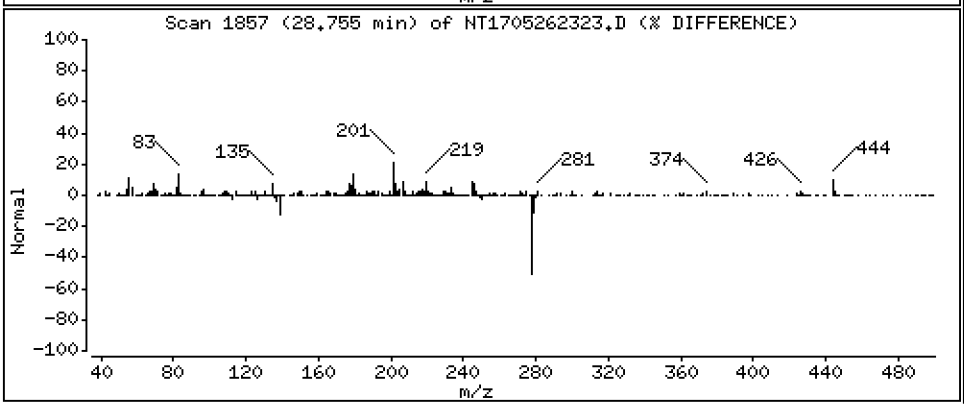
78 Indeno(1,2,3-cd)pyrene

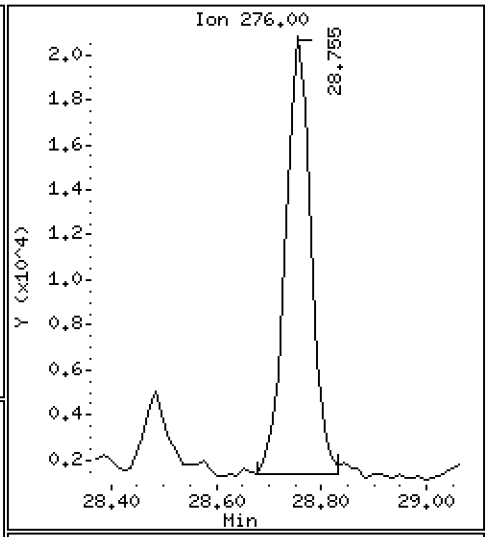
Concentration: 0.3647 ug/mL

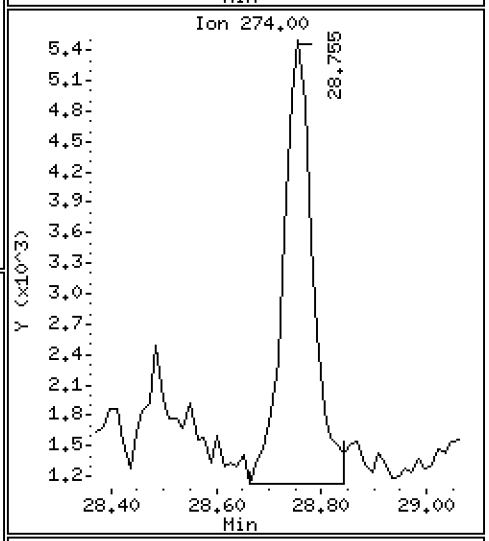


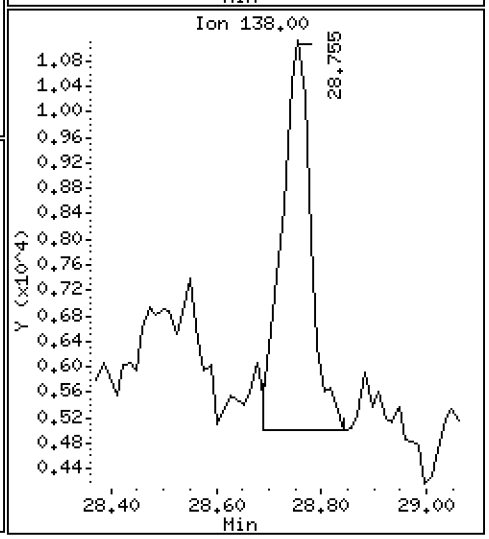












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

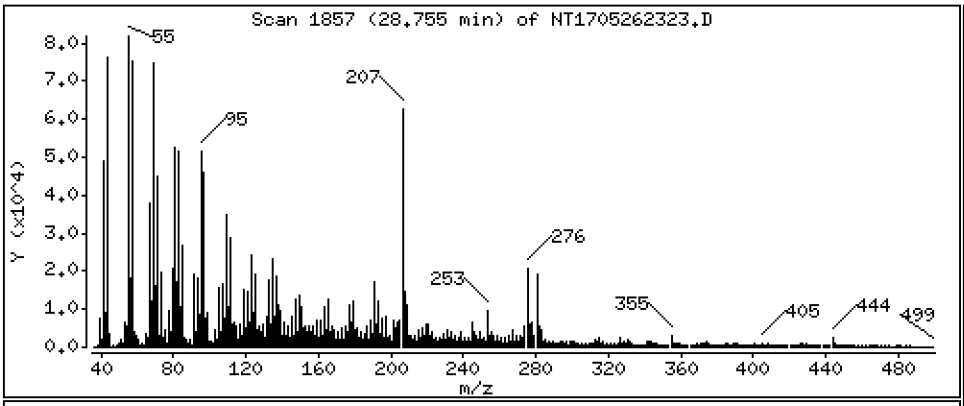
Operator: VTS

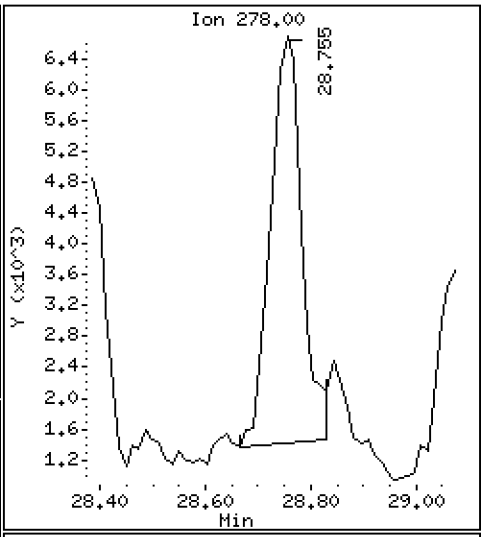
Column phase: ZB-5msi

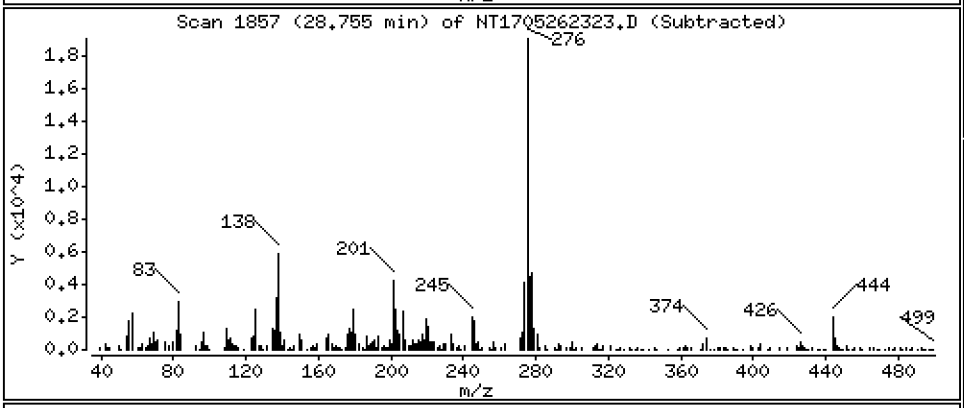
Column diameter: 0.25

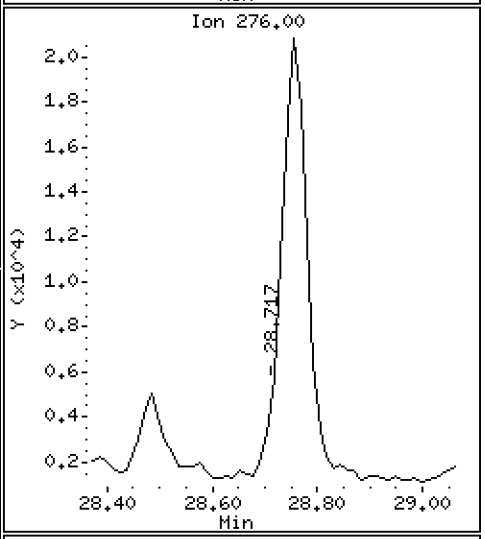
79 Dibenzo(a,h)anthracene

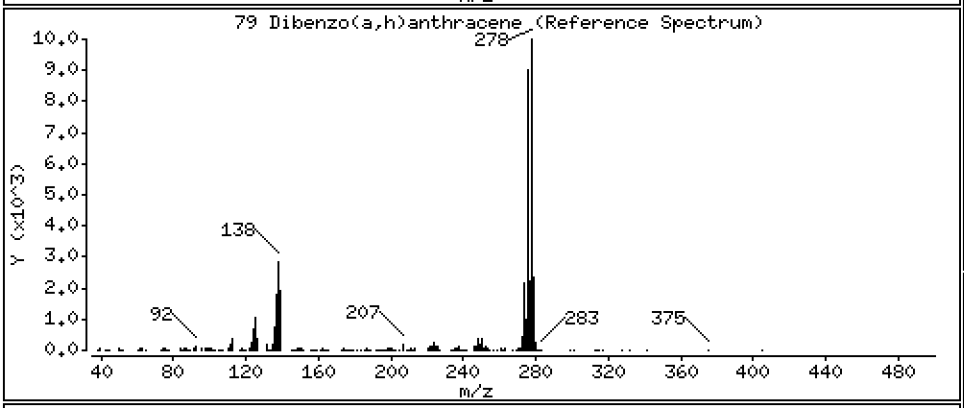
Concentration: 0.1441 ug/mL

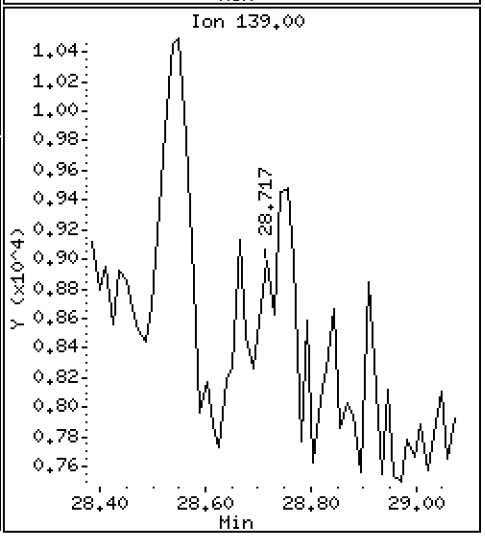


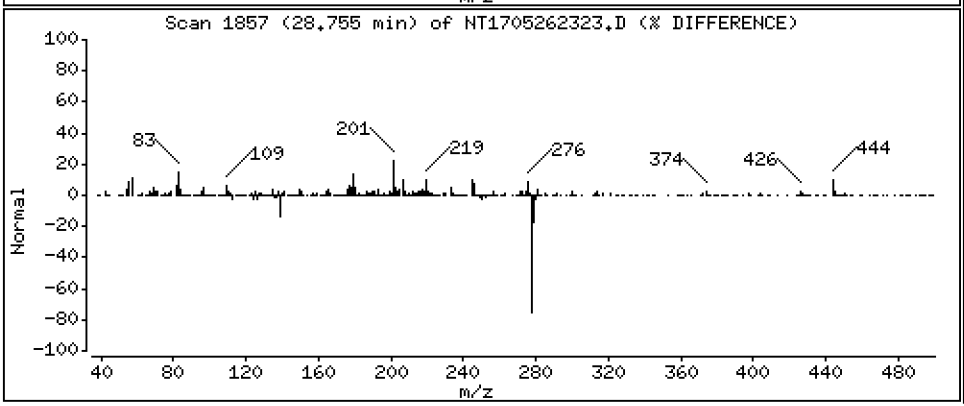












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

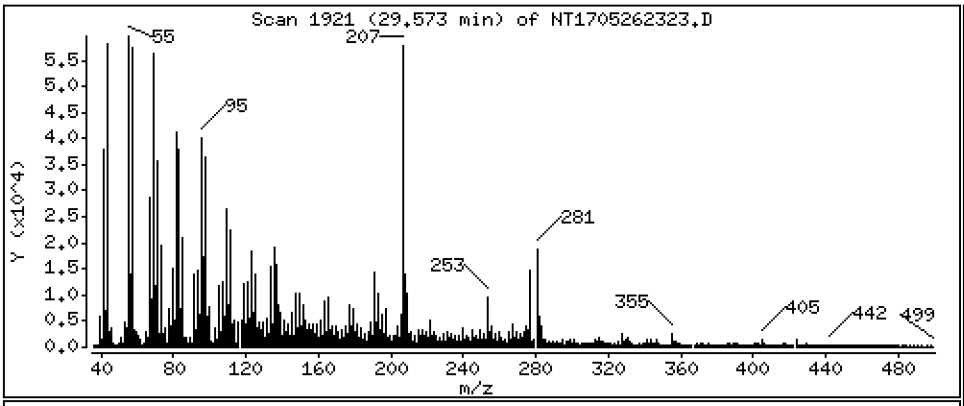
Operator: VTS

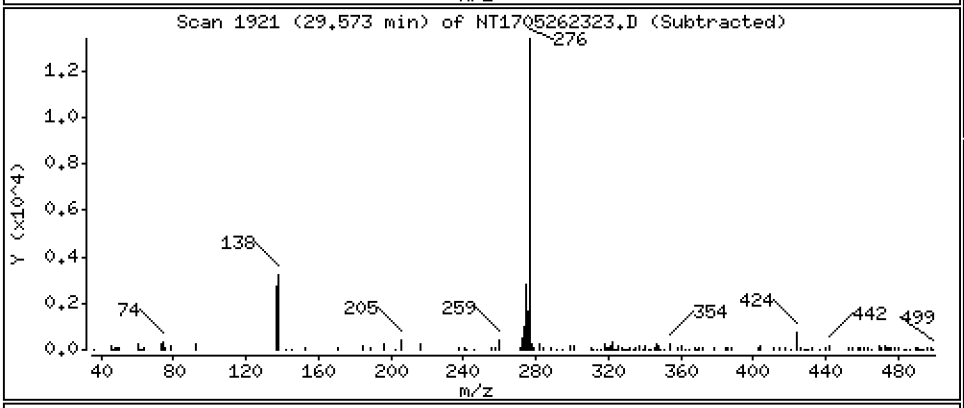
Column phase: ZB-5msi

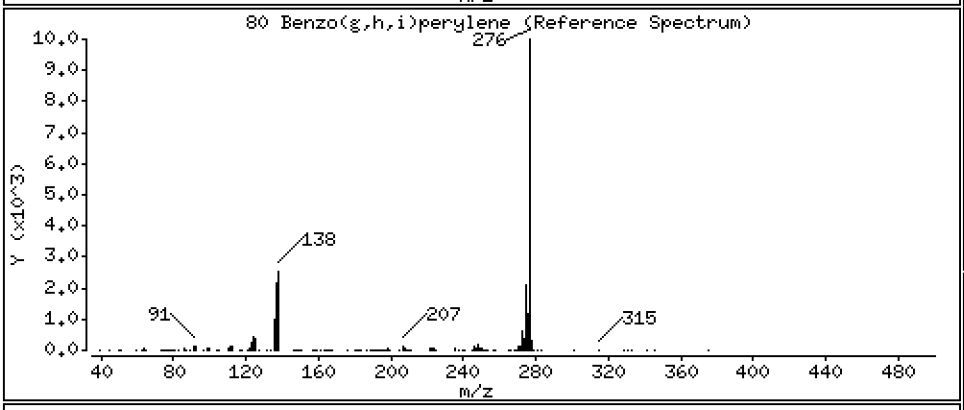
Column diameter: 0.25

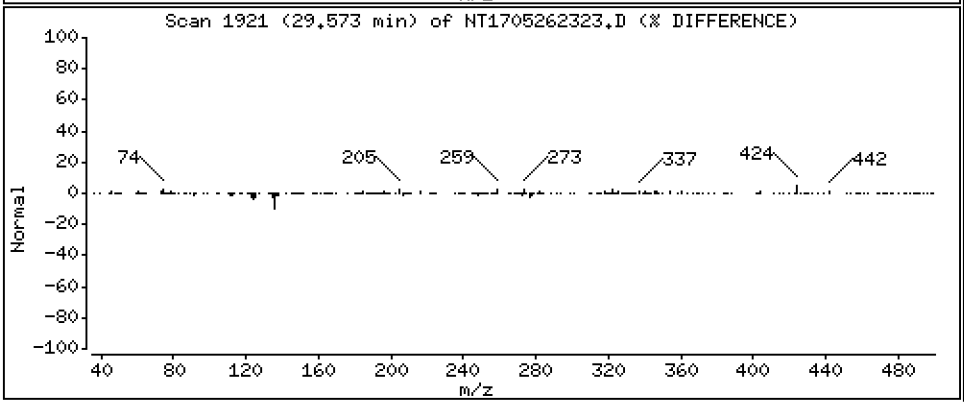
80 Benzo(g,h,i)perylene

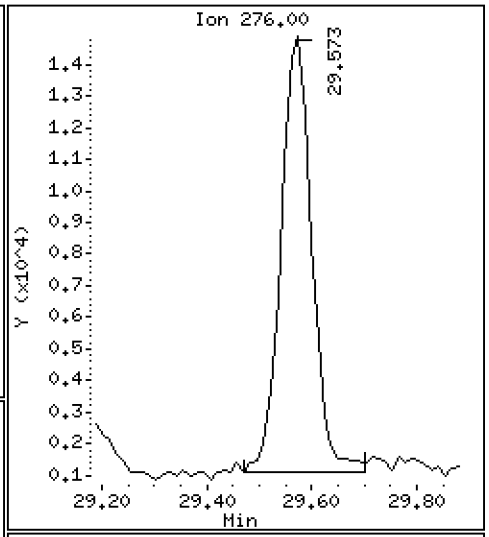
Concentration: 0.3733 ug/mL

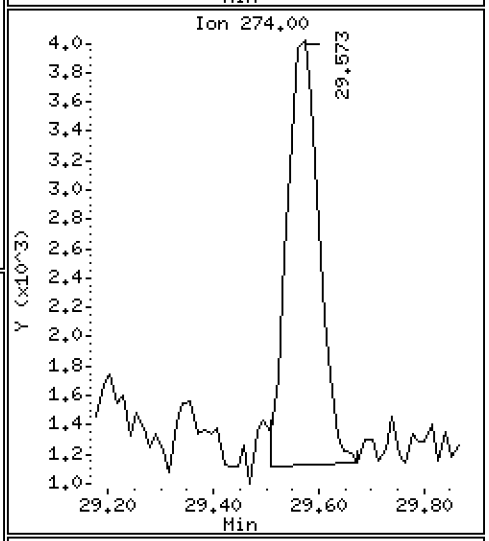


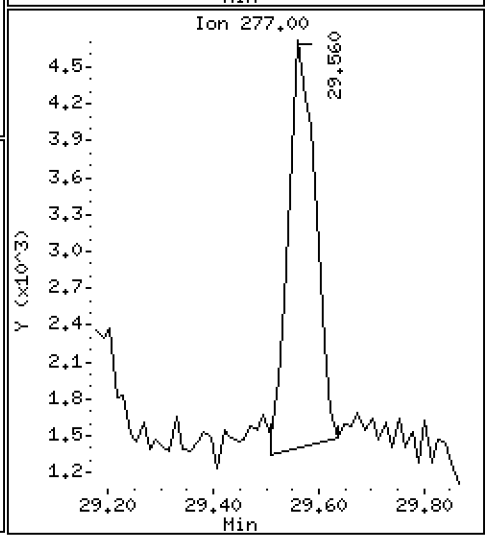












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

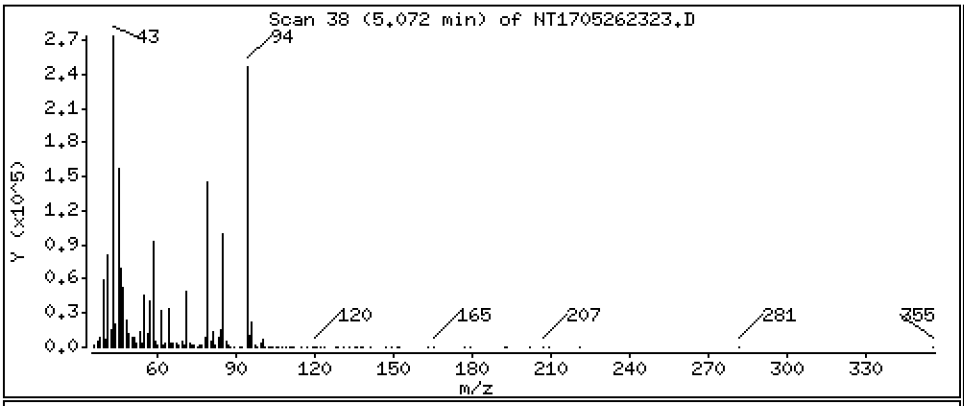
Operator: VTS

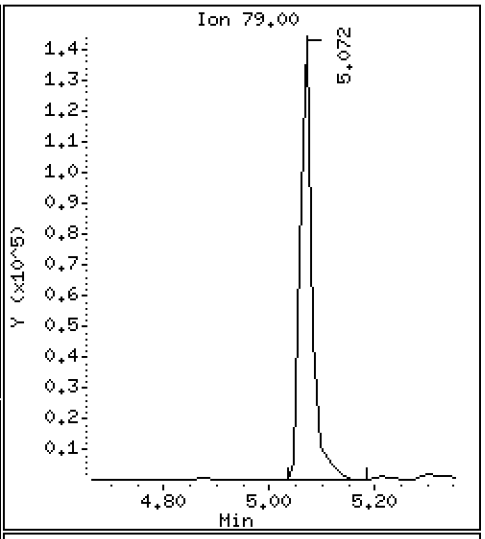
Column phase: ZB-5msi

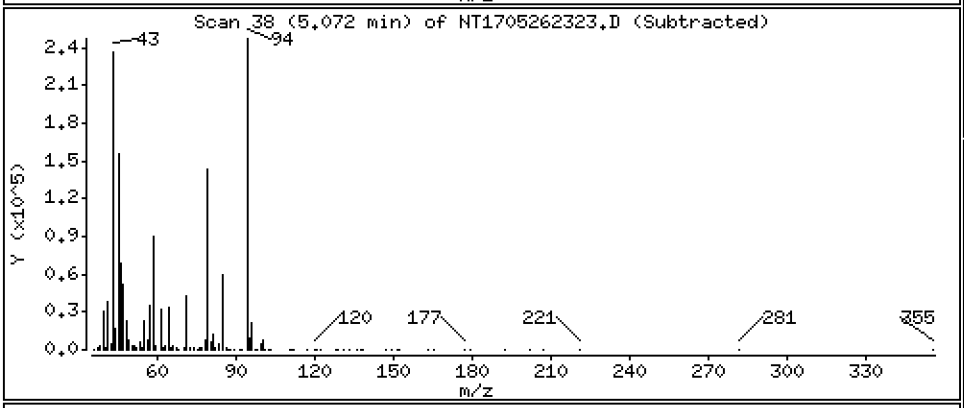
Column diameter: 0.25

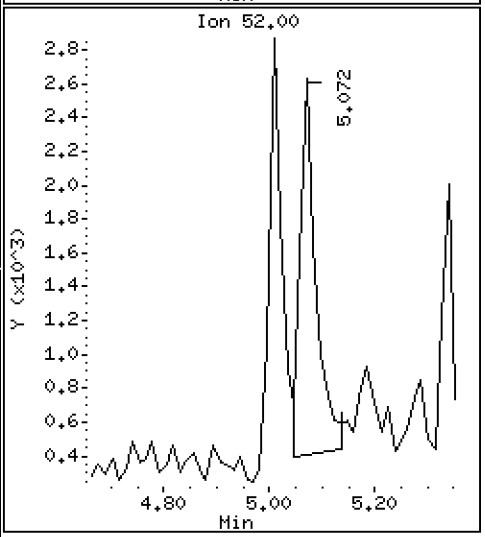
103 Pyridine

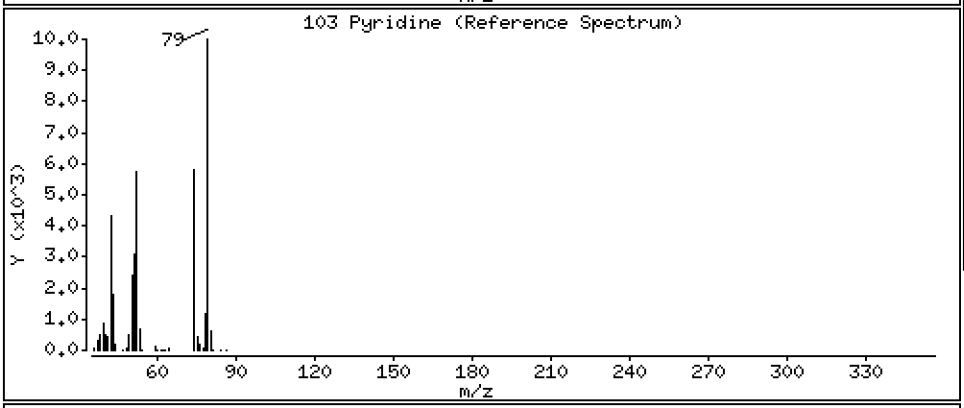
Concentration: 2.191 ug/mL

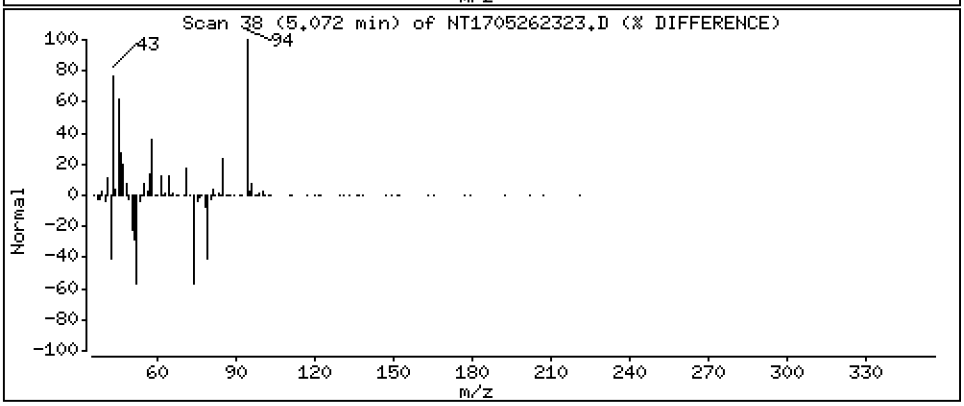












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

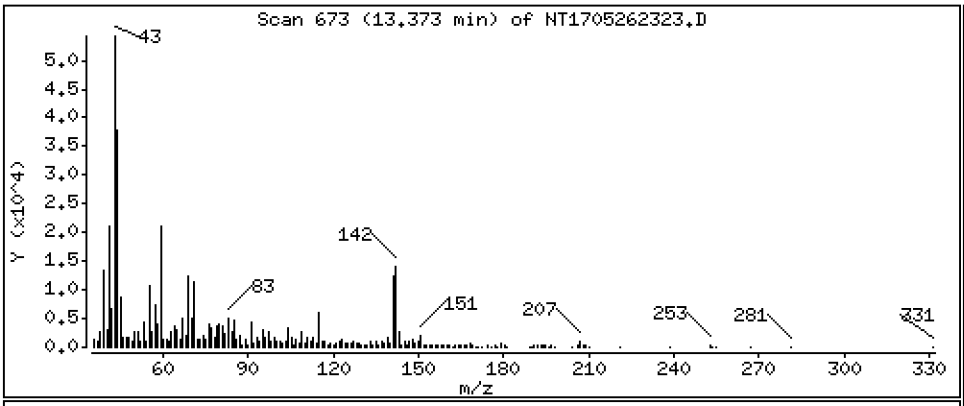
Operator: VTS

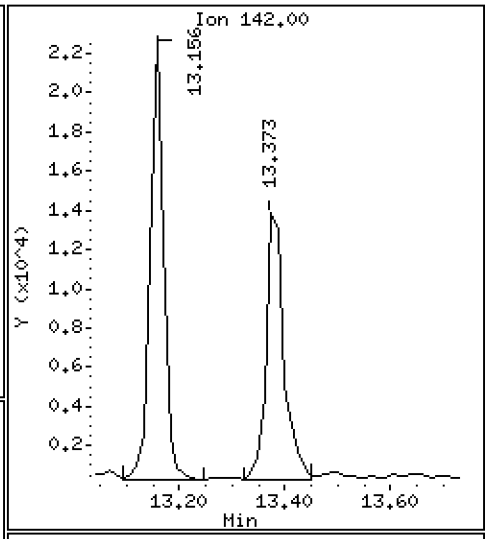
Column phase: ZB-5msi

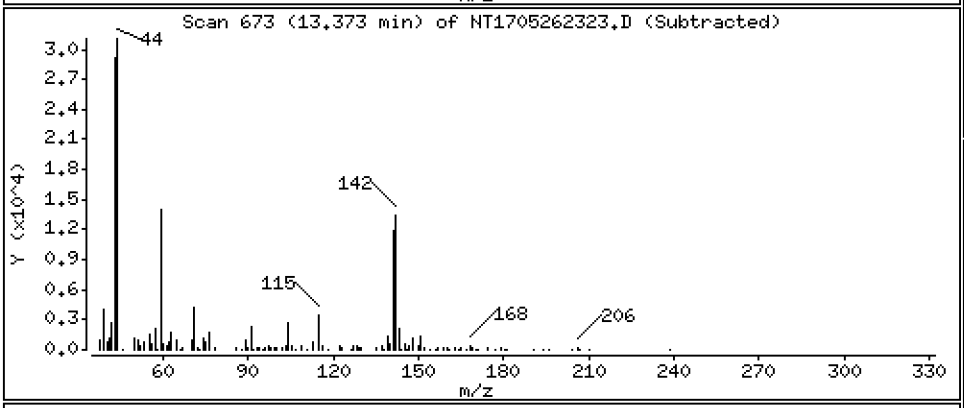
Column diameter: 0.25

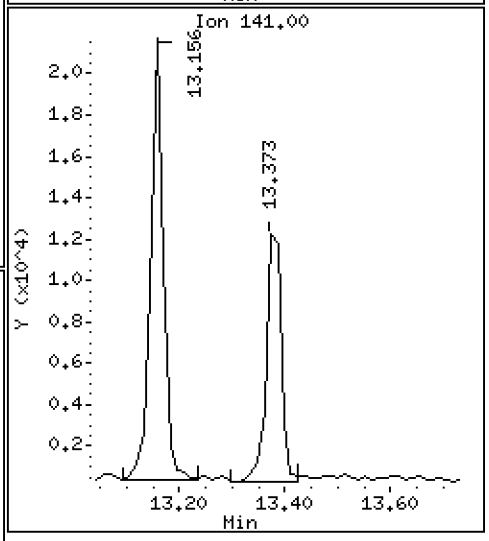
105 1-methylnaphthalene

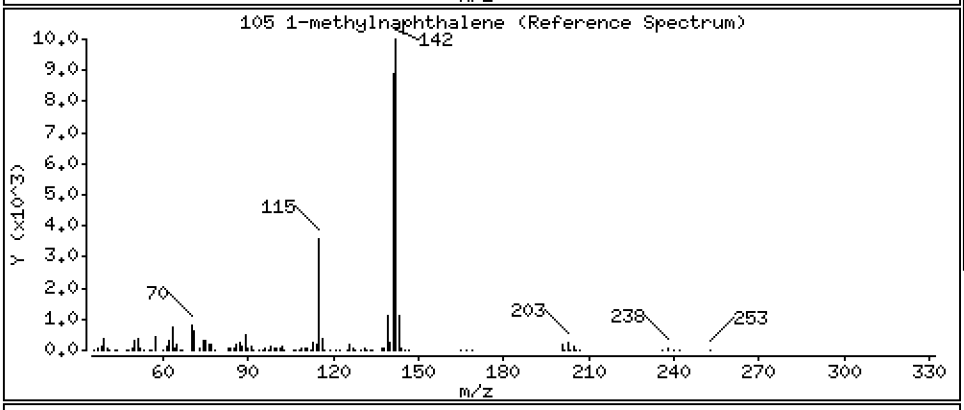
Concentration: 0.1682 ug/mL

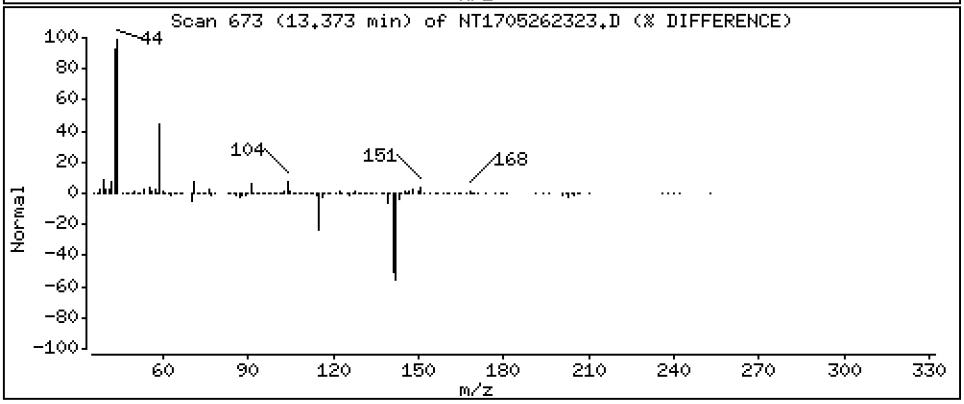












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262323.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

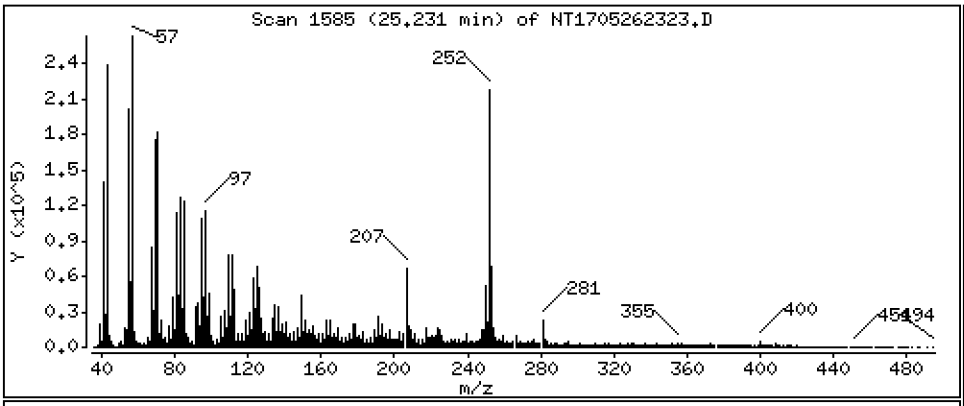
Operator: VTS

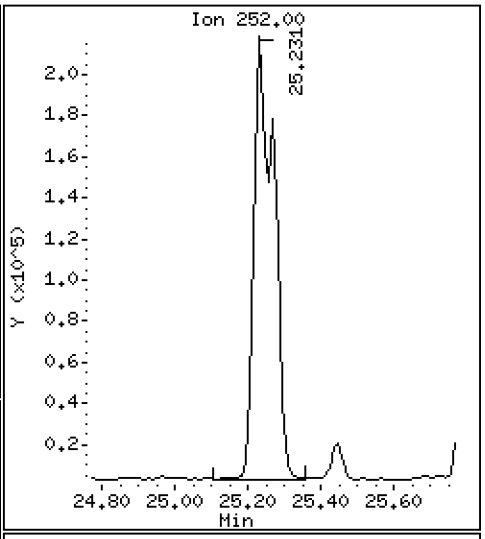
Column phase: ZB-5msi

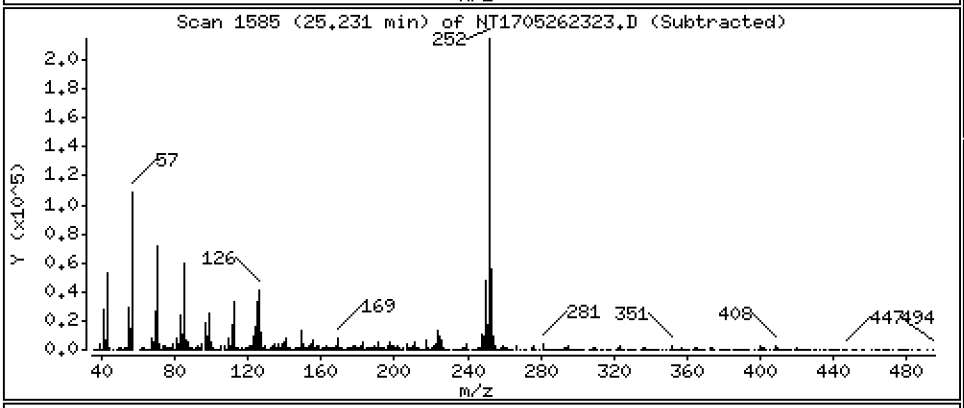
Column diameter: 0.25

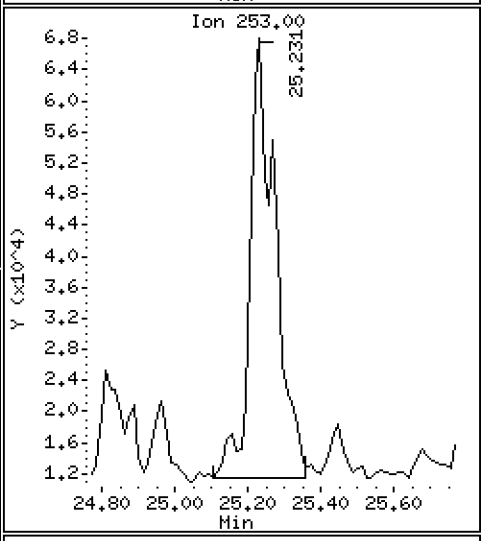
187 Total Benzofluoranthenes

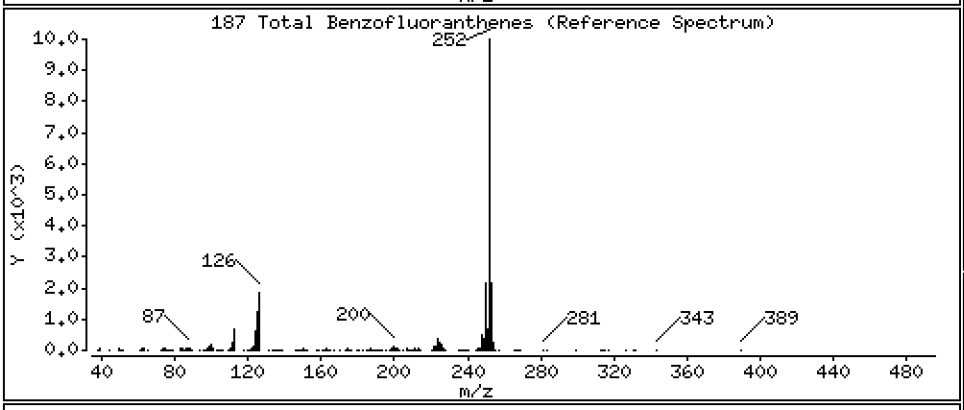
Concentration: 4.561 ug/mL

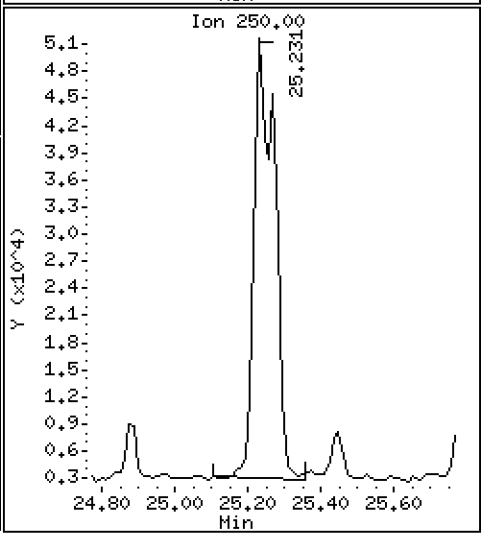


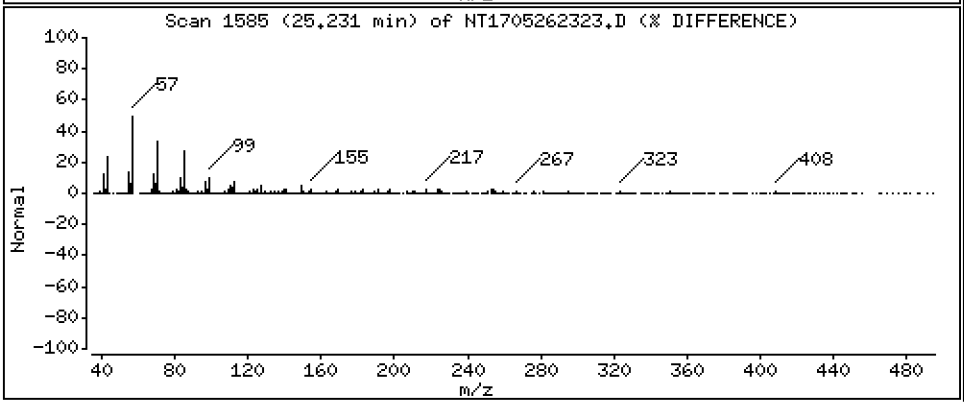












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262323.D
Lab Smp Id: 23D0396-01
Inj Date : 27-MAY-2023 02:25
Operator : VTS Inst ID: nt17.i
Smp Info : 23D0396-01
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 13:34 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.122	7.071	(0.769)	525046	5.44732	5.447
$	2 Phenol-d5	99	8.651	8.639	(0.934)	692068	5.42565	5.426
	3 Phenol	94	8.677	8.664	(0.937)	24005	0.17768	0.1777
$	5 2-Chlorophenol-d4	132	8.919	8.919	(0.963)	585904	5.73452	5.735
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	294445	4.00000	
	9 1,4-Dichlorobenzene	146	9.301	9.301	(1.004)	2793	0.02453	0.02453(M)
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	257024	3.57903	3.579
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.544	9.544	(1.030)	28949	0.46022	0.4602
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	10.042	10.030	(1.084)	24188	0.23925	0.2392
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	464640	3.87758	3.878
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	11.218	11.320	(0.956)	53338	0.74132	0.7413
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1052858	4.00000	
	28 Naphthalene	128	11.766	11.779	(1.003)	96556	0.33349	0.3335
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	40057	0.19323	0.1932
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	862517	4.37709	4.377
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	15.018	15.018	(0.980)	39984	0.15750	0.1575
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	500193	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.388	15.388	(1.004)	23130	0.14576	0.1458
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.719	15.719	(1.026)	56537	0.25526	0.2553
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	16.267	16.267	(1.062)	40843	0.24334	0.2433
	49	Fluorene	166	16.420	16.420	(1.072)	51553	0.24483	0.2448
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.967	16.967	(1.107)	127227	5.83123	5.831
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	820099	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	301014	1.25793	1.258
	61	Anthracene	178	18.484	18.484	(1.008)	95636	0.42570	0.4257
	62	Carbazole	167	18.828	18.828	(1.026)	22872	0.16817	0.1682
	63	Di-n-butylphthalate	149	19.593	19.580	(1.068)	32501	0.11981	0.1198
	64	Fluoranthene	202	20.766	20.753	(0.889)	622665	2.02360	2.024
	65	Pyrene	202	21.187	21.187	(0.907)	644339	2.06568	2.066
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	733272	3.30687	3.307
	67	Butylbenzylphthalate	149	22.360	22.361	(0.957)	24852	0.17801	0.1780
	68	Benzo(a)anthracene	228	23.330	23.317	(0.999)	329178	1.35899	1.359
*	69	Chrysene-d12	240	23.356	23.356	(1.000)	657803	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	23.394	23.394	(1.002)	480502	2.10813	2.108
	72	bis(2-Ethylhexyl)phthalate	149	23.381	23.368	(0.960)	404836	1.92288	1.923
*	134	Di-n-octylphthalate-d4	153	24.363	24.363	(1.000)	1455169	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	25.231	25.218	(0.970)	558651	2.79147	2.791
	75	Benzo(k)fluoranthene	252	25.269	25.269	(0.971)	372543	1.97033	1.970
	76	Benzo(a)pyrene	252	25.907	25.894	(0.996)	191377	1.21395	1.214
*	77	Perylene-d12	264	26.022	26.009	(1.000)	504765	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.754	28.716	(1.105)	66695	0.36473	0.3647
	79	Dibenzo(a,h)anthracene	278	28.754	28.729	(1.105)	22117	0.14411	0.1441(M)
	80	Benzo(g,h,i)perylene	276	29.573	29.534	(1.136)	56348	0.37334	0.3733
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	5.071	5.008	(0.547)	223479	2.19142	2.191
	105	1-methylnaphthalene	142	13.373	13.385	(1.140)	32343	0.16817	0.1682
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.231	25.269	(0.970)	819428	4.56130	4.561
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262323.D
Lab Smp Id: 23D0396-01
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 23:55
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	327251	163626	654502	294445	-10.02
27 Naphthalene-d8	1151610	575805	2303220	1052858	-8.58
42 Acenaphthene-d10	581592	290796	1163184	500193	-14.00
59 Phenanthrene-d10	918371	459186	1836742	820099	-10.70
69 Chrysene-d12	690072	345036	1380144	657803	-4.68
134 Di-n-octylphthala	1461689	730845	2923378	1455169	-0.45
77 Perylene-d12	568726	284363	1137452	504765	-11.25

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	-0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	-0.00
69 Chrysene-d12	23.36	22.86	23.86	23.36	-0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	-0.00
77 Perylene-d12	26.01	25.51	26.51	26.02	0.05

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

REVIEW SUMMARY FOR FILE - NT1705262323.D

Lab ID: 23D0396-01
nt17.i, ABN.m, 27-MAY-2023 02:25

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.956	0.965	-0.0087	Benzoic acid
0.547	0.541	0.0069	Pyridine
0.769	0.763	0.0055	2-Fluorophenol

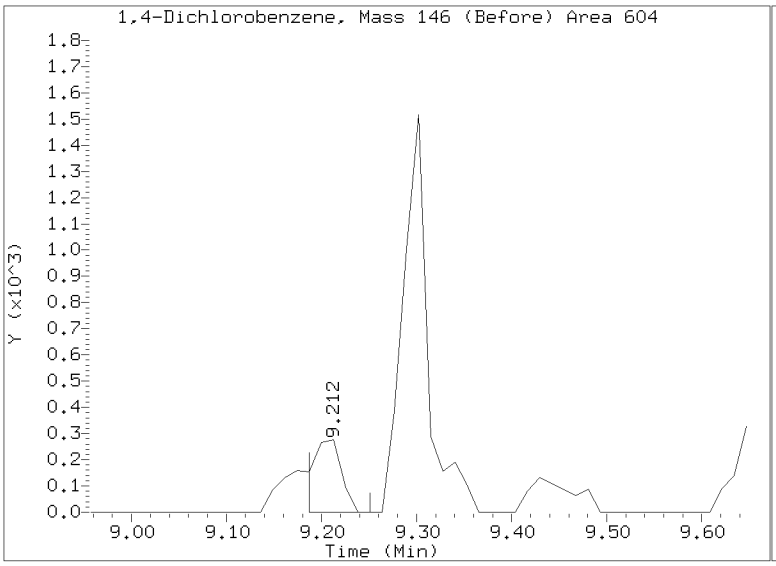
RRT check based on Ccal File: NT1705262319.D

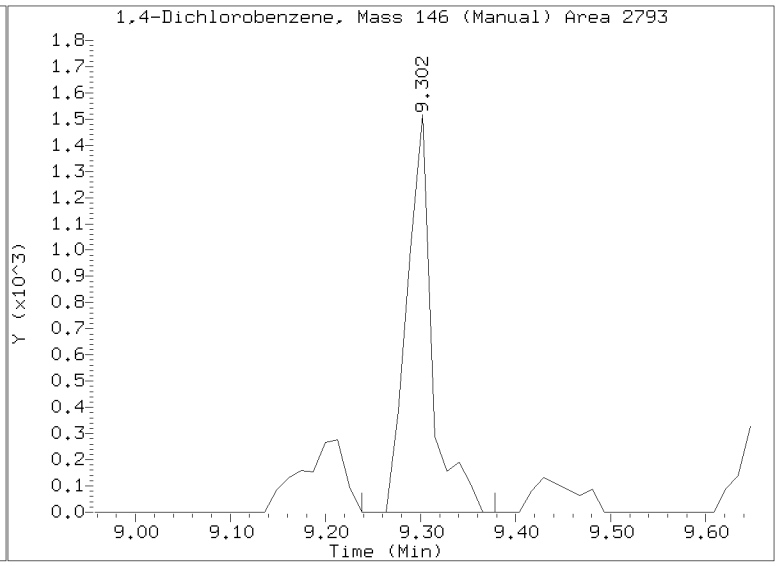
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

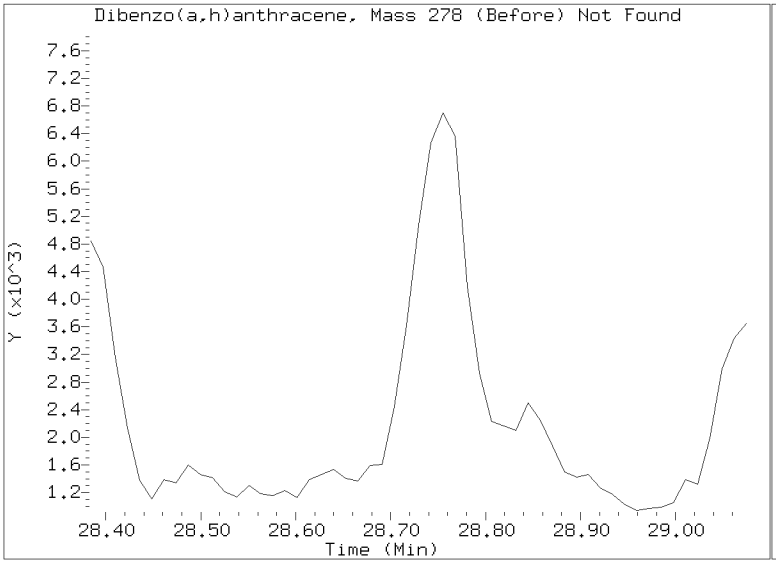
* Only compounds listed in the work order have been verified by the analyst *

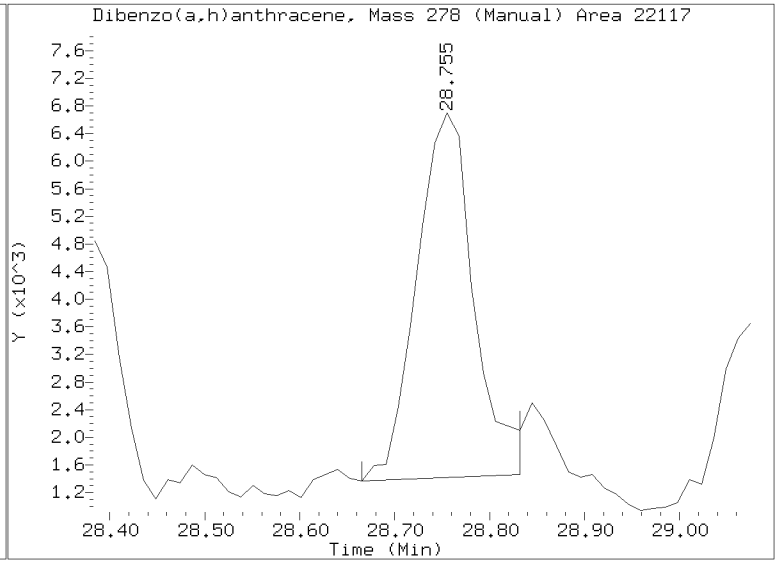
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230526.b/NT1705262323.D
Injection Date: 27-MAY-2023 02:25
Lab ID:23D0396-01 Client ID:
Report Date: 05/27/2023 13:34









LDW23-SS1802

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

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

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-03 A	SDG:	23D0396
Sampled:	04/12/23 15:03	Prepared:	04/24/23 16:38	File ID:	NT1705262324.D
% Solids:	43.88	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/27/23 03:02
Batch:	BLD0607	Sequence:	SLE0434	Initial/Final:	22.79 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GE00065
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
108-95-2	Phenol	1	15.8	J	4.4	20.0
100-51-6	Benzyl Alcohol	1	36.8	B	16.3	20.0
106-44-5	4-Methylphenol	1	16.5	J	7.4	20.0
91-20-3	Naphthalene	1	17.2	J	4.2	20.0
91-57-6	2-Methylnaphthalene	1	18.0	J	4.5	20.0
208-96-8	Acenaphthylene	1	13.7	J	6.2	20.0
132-64-9	Dibenzofuran	1	30.9		14.1	20.0
86-73-7	Fluorene	1	37.9		14.6	20.0
85-01-8	Phenanthrene	1	139		8.7	20.0
120-12-7	Anthracene	1	65.5		7.2	20.0
206-44-0	Fluoranthene	1	297		6.1	20.0
129-00-0	Pyrene	1	262		5.7	20.0
85-68-7	Butylbenzylphthalate	1	13.5	J	9.4	20.0
56-55-3	Benzo(a)anthracene	1	182		6.0	20.0
218-01-9	Chrysene	1	290		6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	155		5.5	50.0
	Benzofluoranthenes, Total	1	527		10.0	40.0
50-32-8	Benzo(a)pyrene	1	133		4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	37.9	Q	14.6	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	36.1	Q	13.6	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.98	519	69.2	27 - 120	
Phenol-d5	749.98	531	70.8	29 - 120	
2-Chlorophenol-d4	749.98	549	73.2	31 - 120	
1,2-Dichlorobenzene-d4	499.99	329	65.8	32 - 120	
Nitrobenzene-d5	499.99	375	74.9	30 - 120	
2-Fluorobiphenyl	499.99	413	82.6	35 - 120	
2,4,6-Tribromophenol	749.98	572	76.2	24 - 134	

Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1802

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E

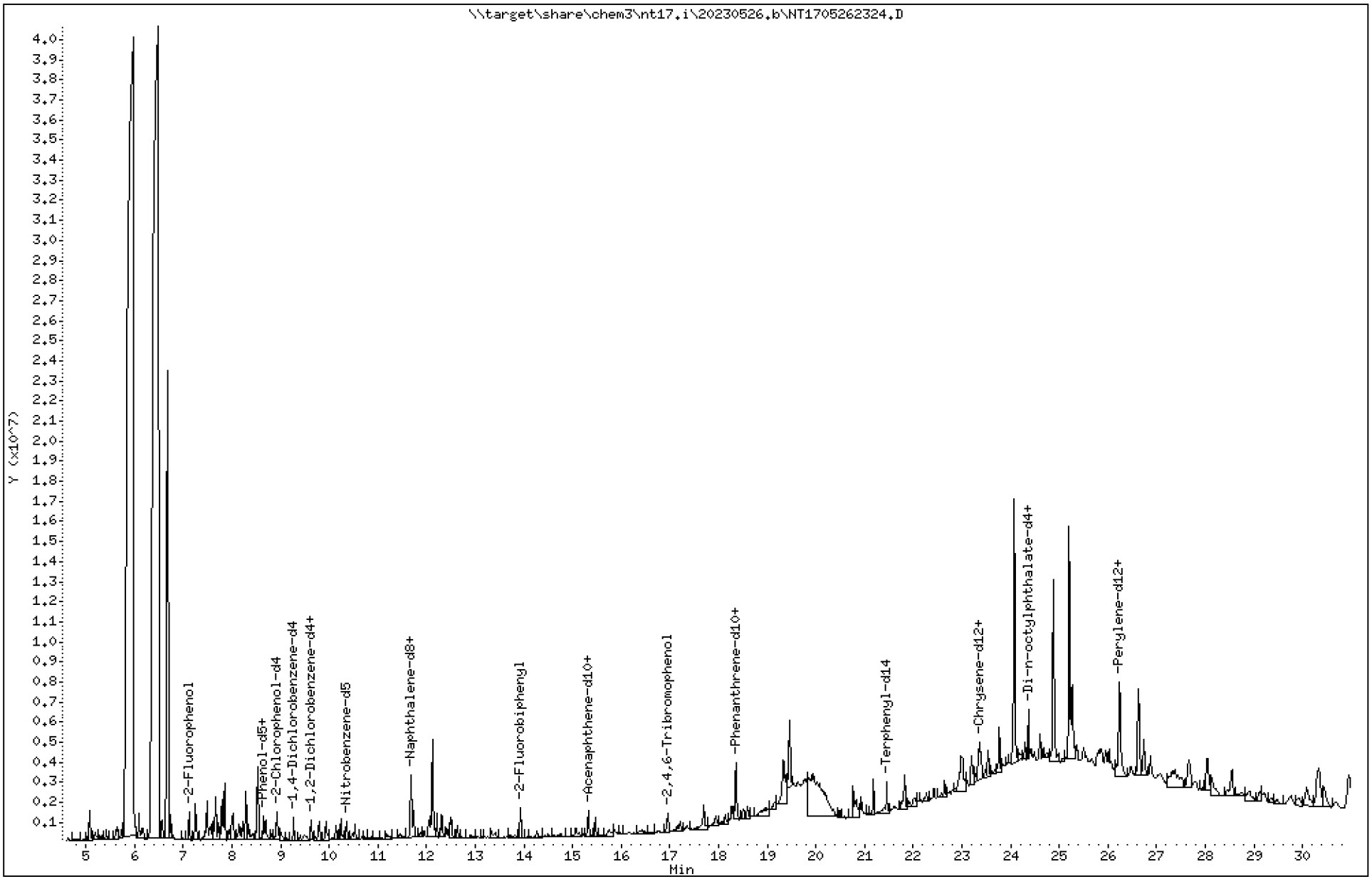
Semivolatiles (20ug/kg - 0.2ug/L SepF)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-03 A	SDG:	23D0396
Sampled:	04/12/23 15:03	Prepared:	04/24/23 16:38	File ID:	NT1705262324.D
% Solids:	43.88	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/27/23 03:02
Batch:	BLD0607	Sequence:	SLE0434	Initial/Final:	22.79 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GE00065
Cleanups:	GPC				

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
p-Terphenyl-d14	499.99	319	63.8	37 - 120	

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262324.D
Date : 27-MAY-2023 03:02
Client ID:
Sample Info: 23D0396-03

Instrument: nt17.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262324.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

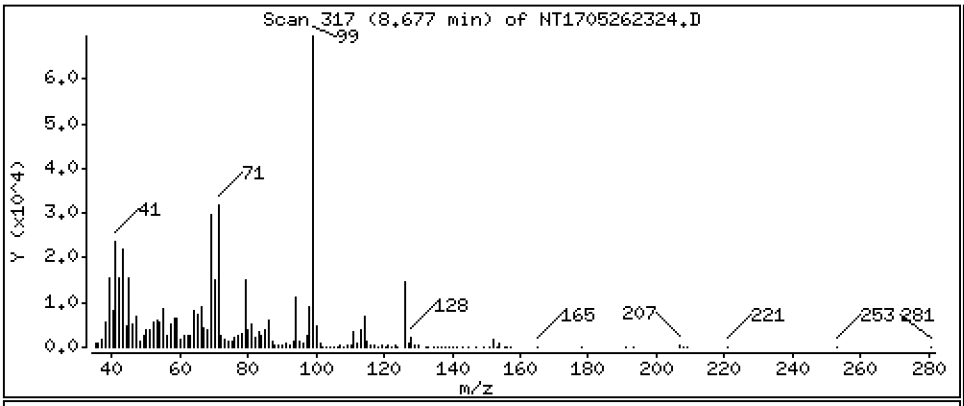
Operator: VTS

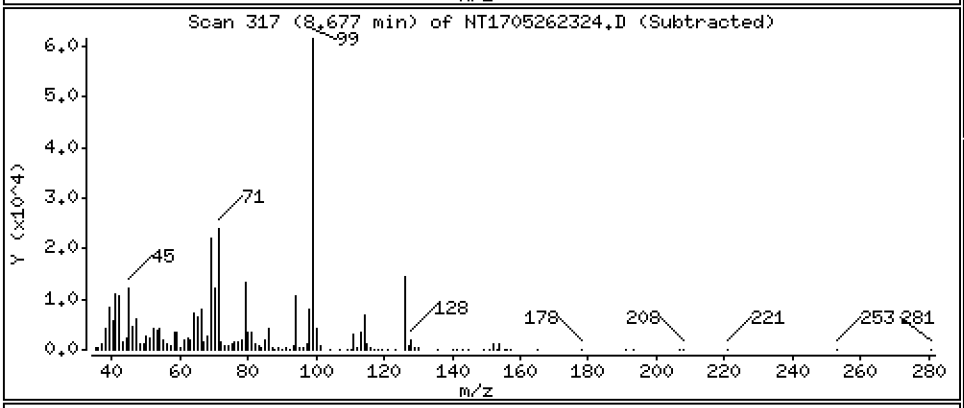
Column phase: ZB-5msi

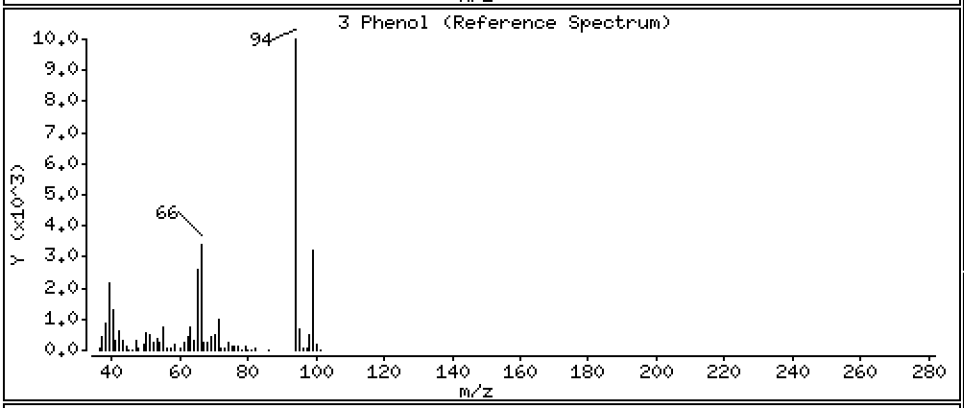
Column diameter: 0.25

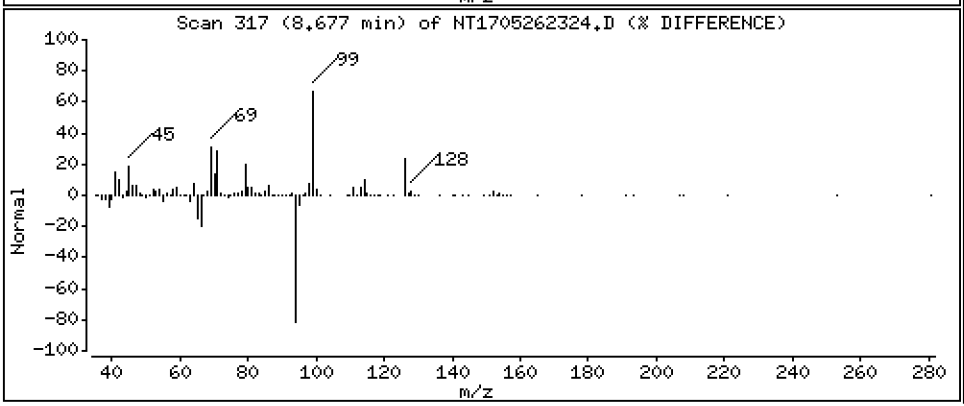
3 Phenol

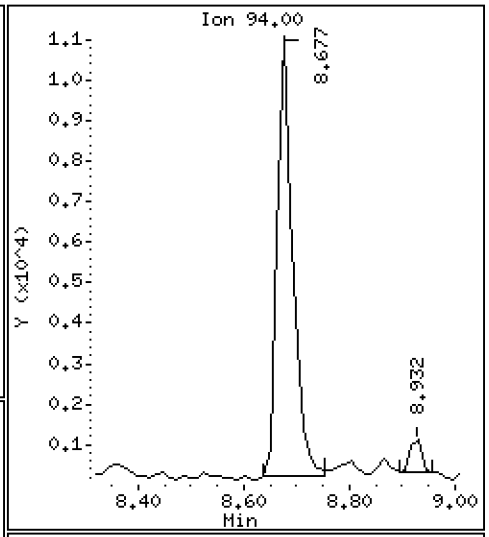
Concentration: 0.1582 ug/mL

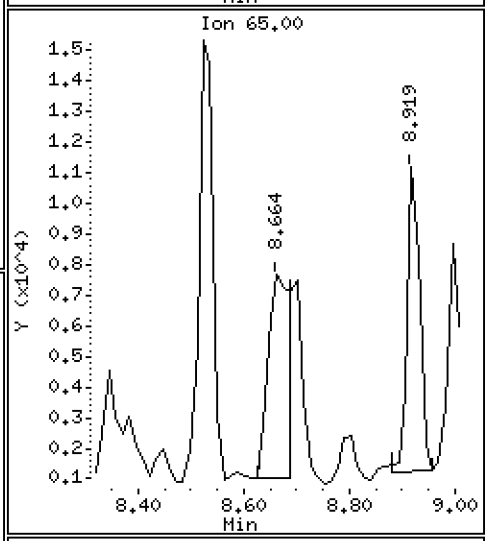


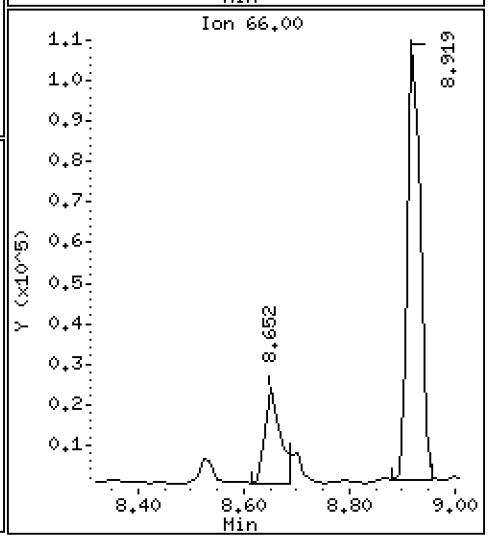












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

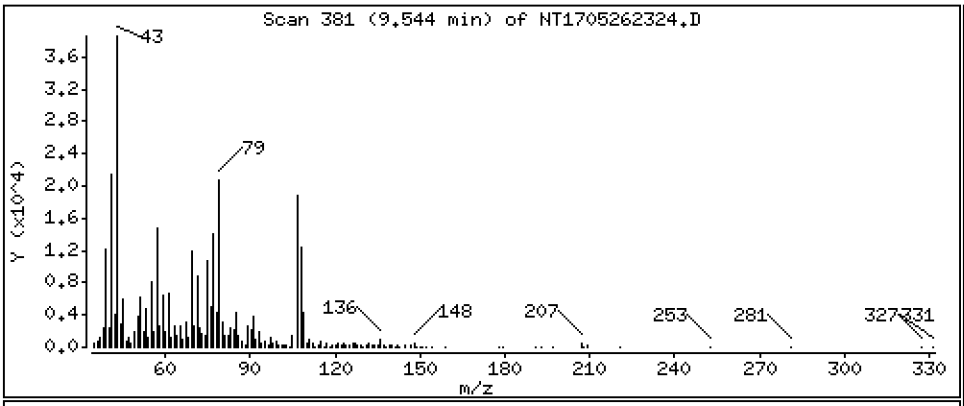
Operator: VTS

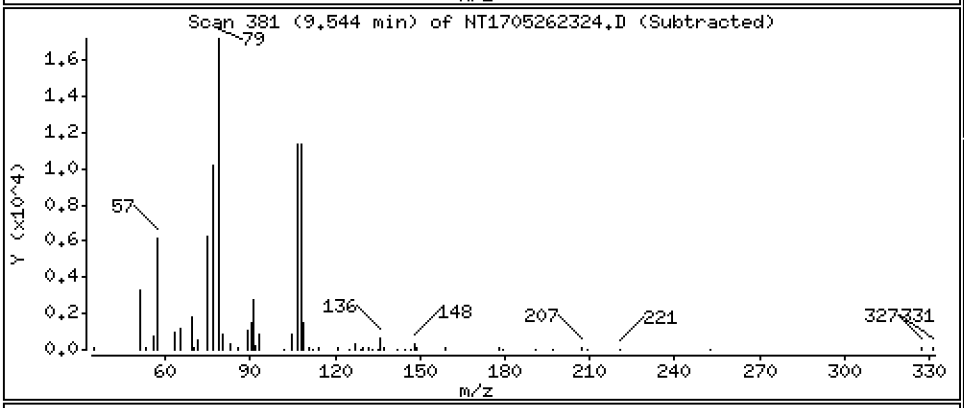
Column phase: ZB-5msi

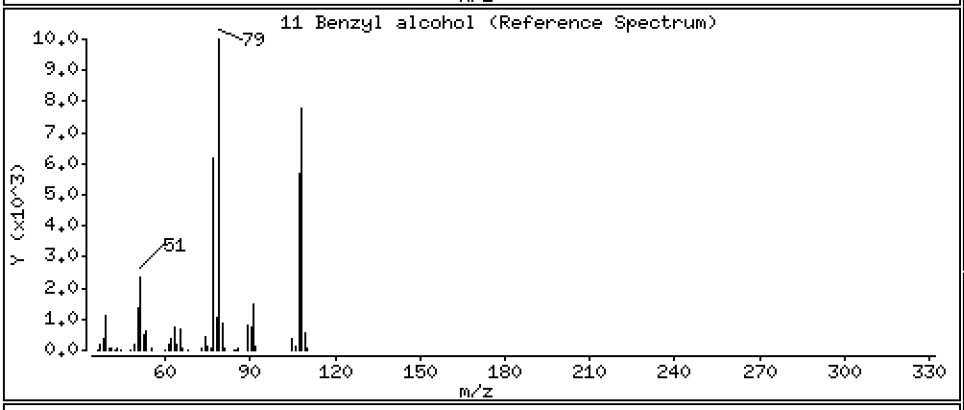
Column diameter: 0.25

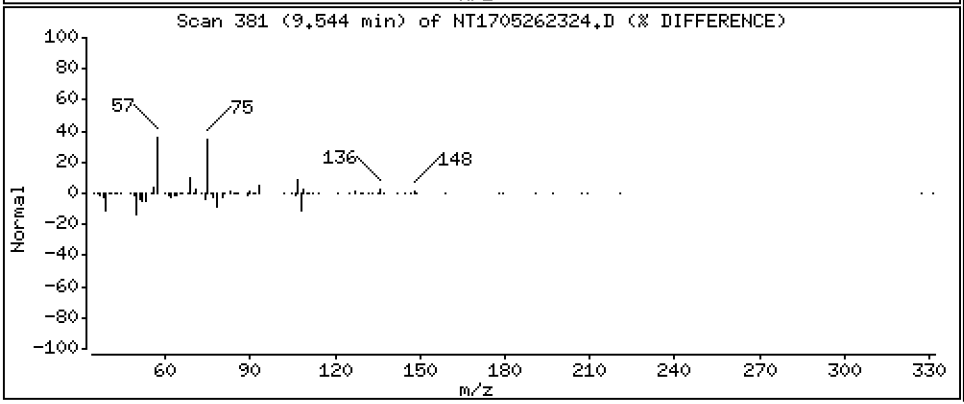
11 Benzyl alcohol

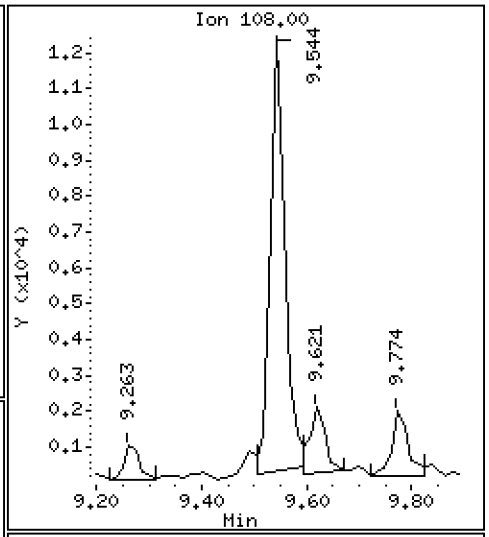
Concentration: 0.3677 ug/mL

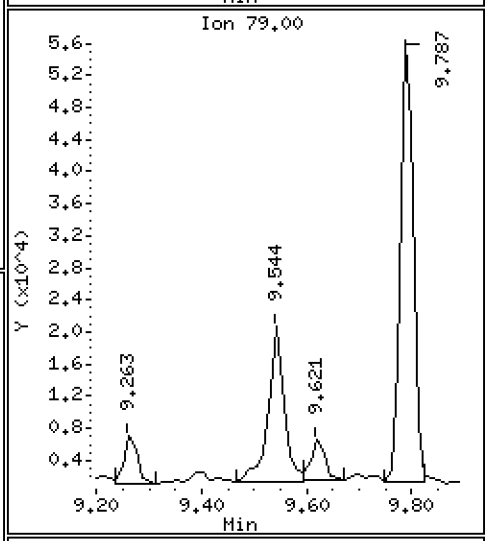


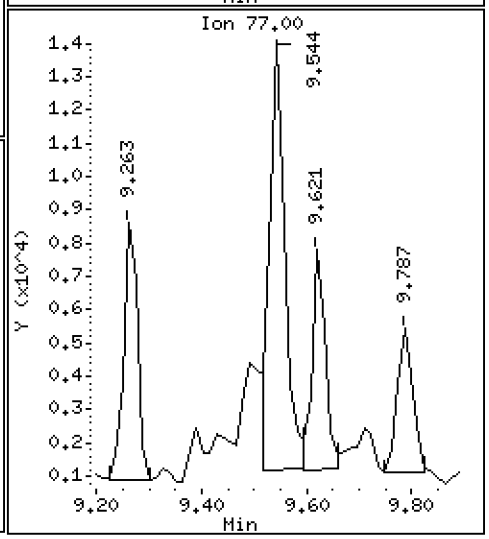












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

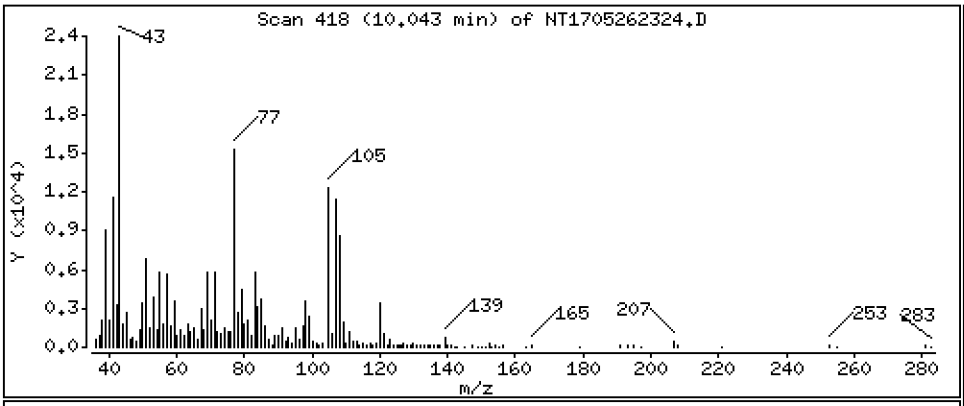
Operator: VTS

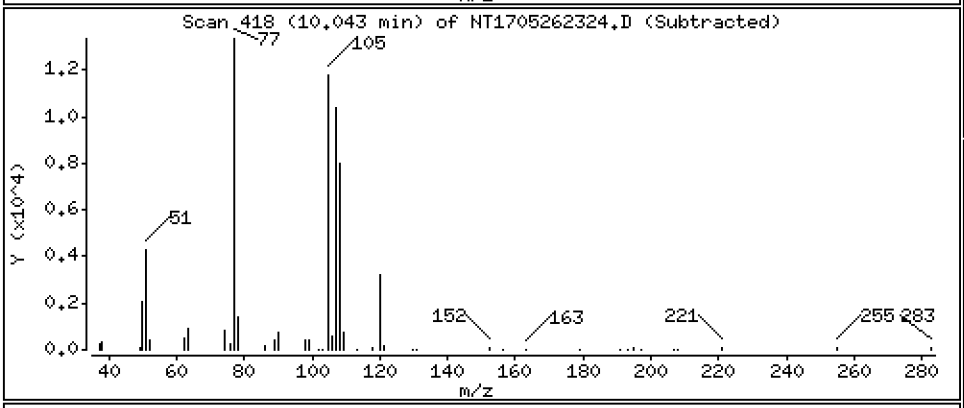
Column phase: ZB-5msi

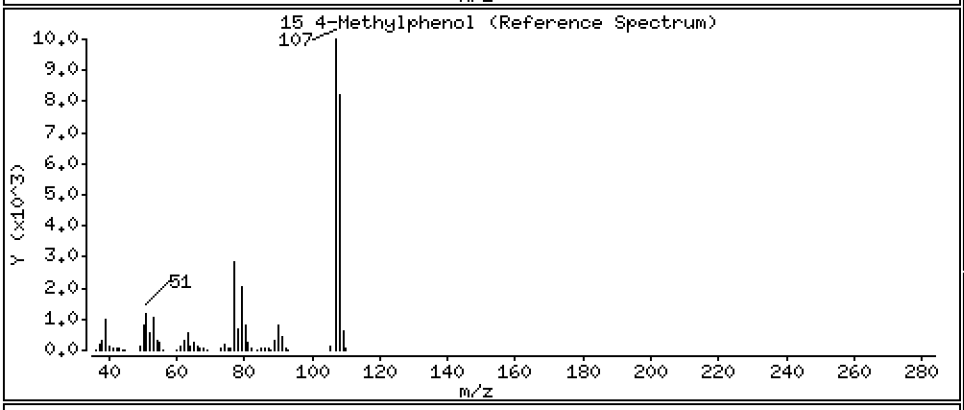
Column diameter: 0.25

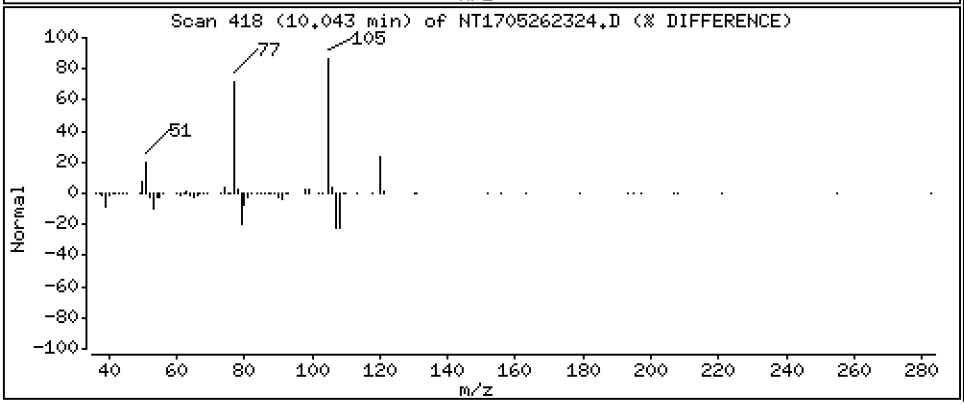
15 4-Methylphenol

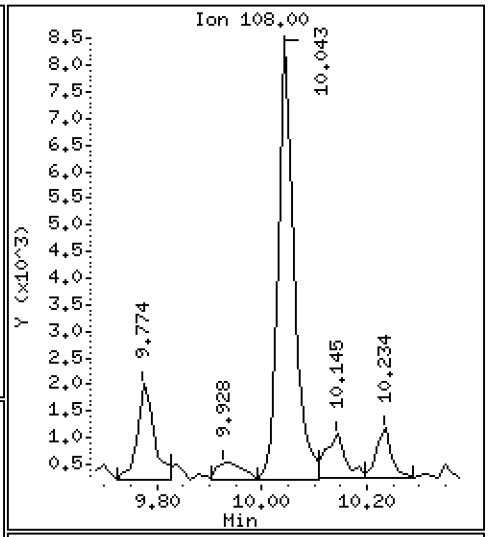
Concentration: 0.1650 ug/mL

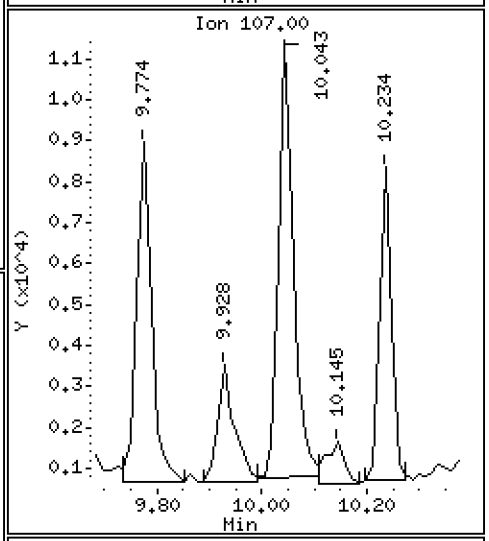


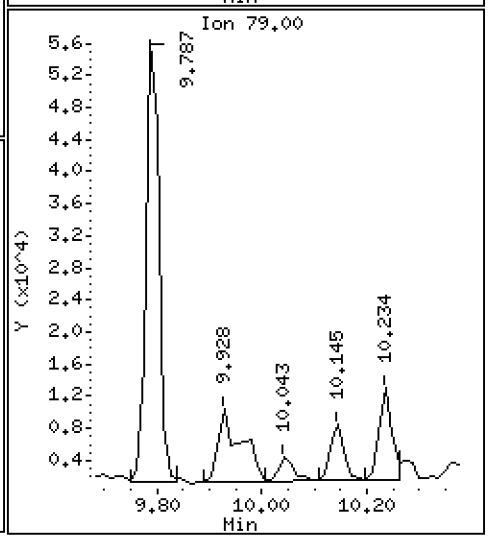












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

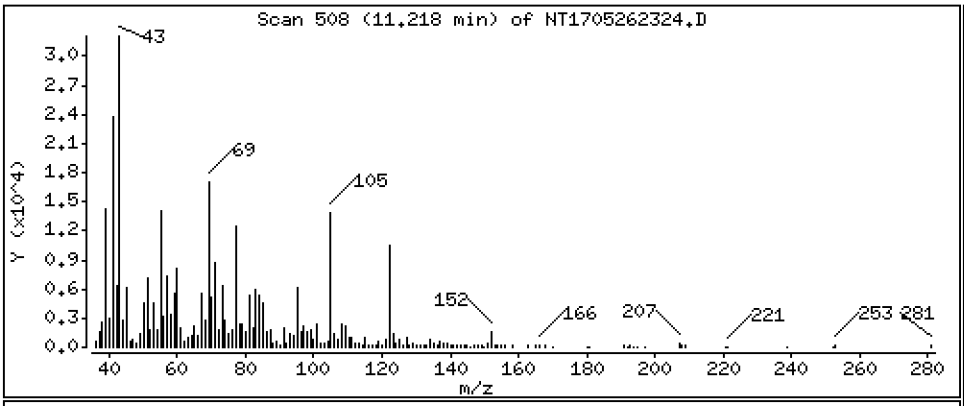
Operator: VTS

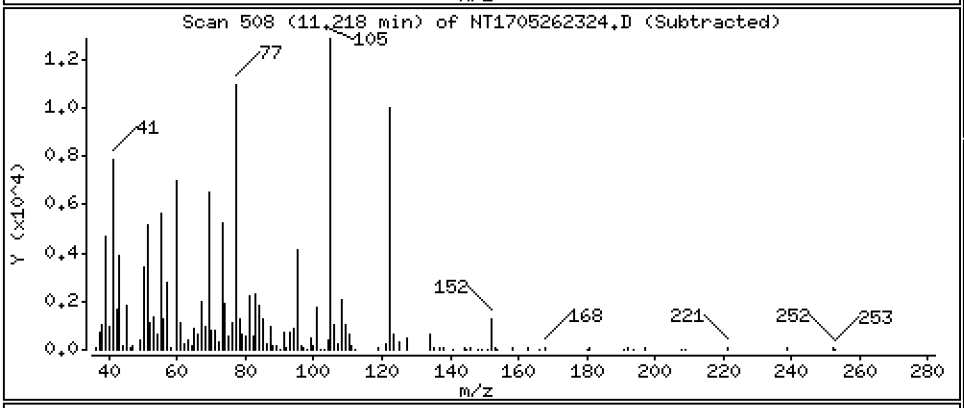
Column phase: ZB-5msi

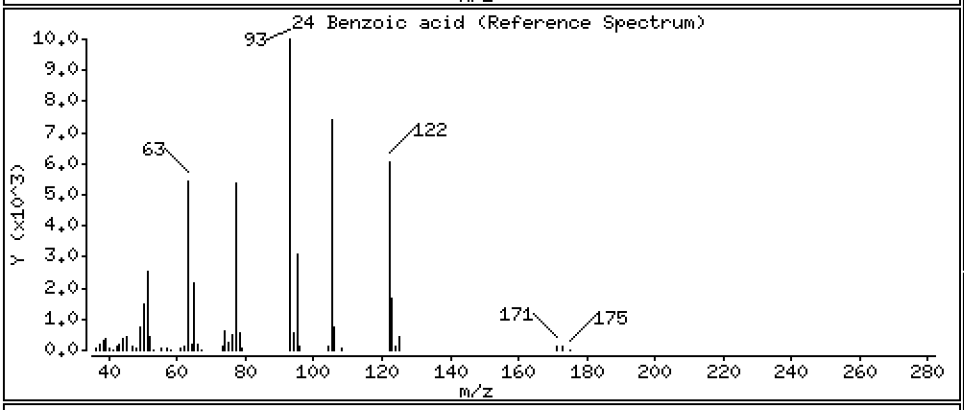
Column diameter: 0.25

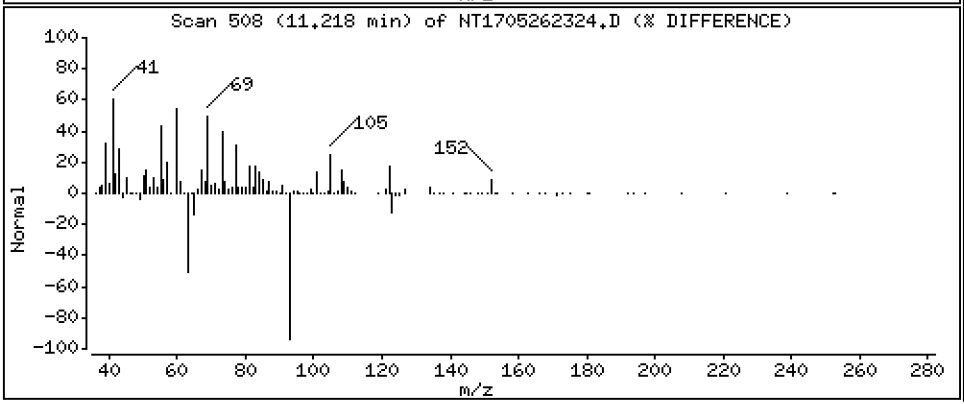
24 Benzoic acid

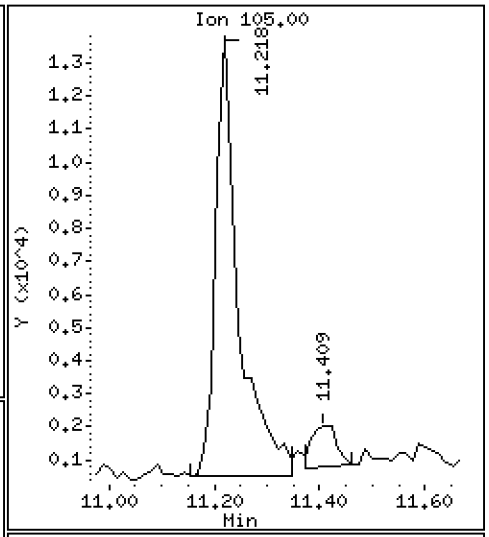
Concentration: 0.5527 ug/mL

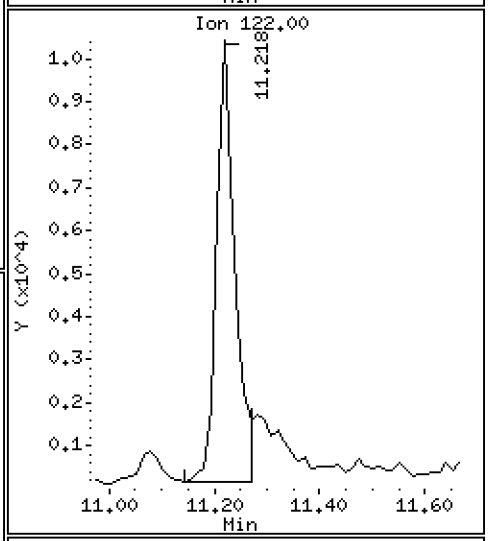


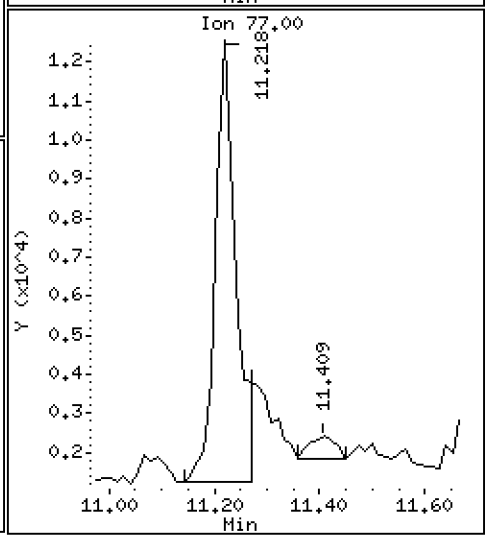












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

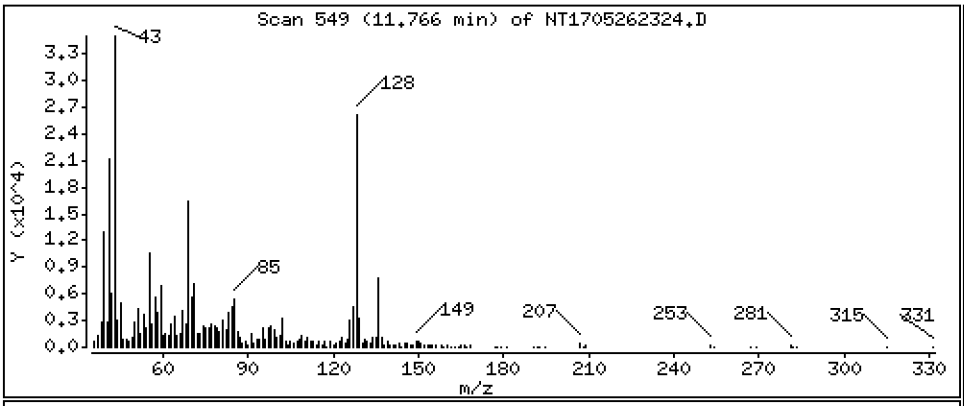
Operator: VTS

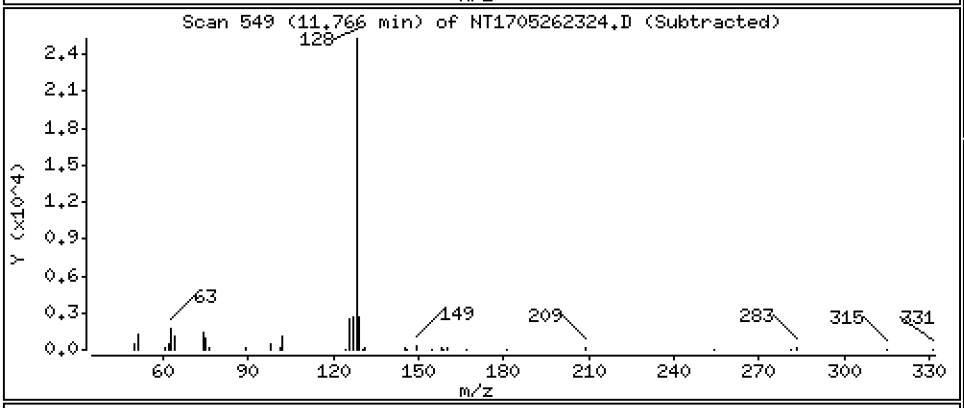
Column phase: ZB-5msi

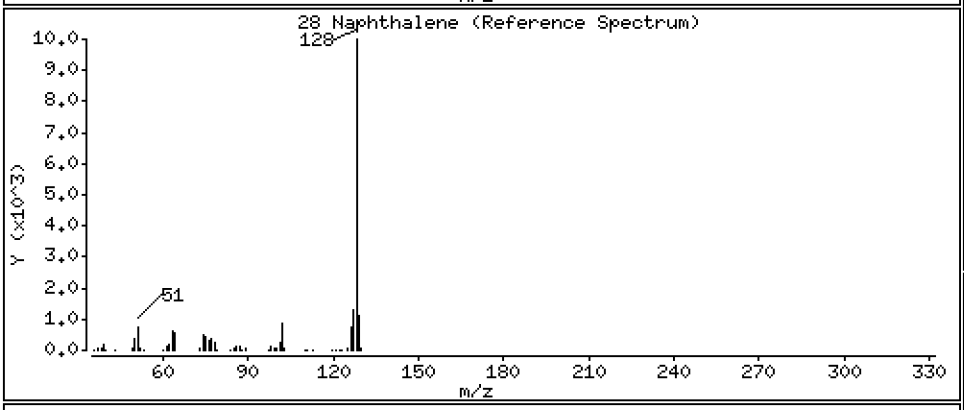
Column diameter: 0.25

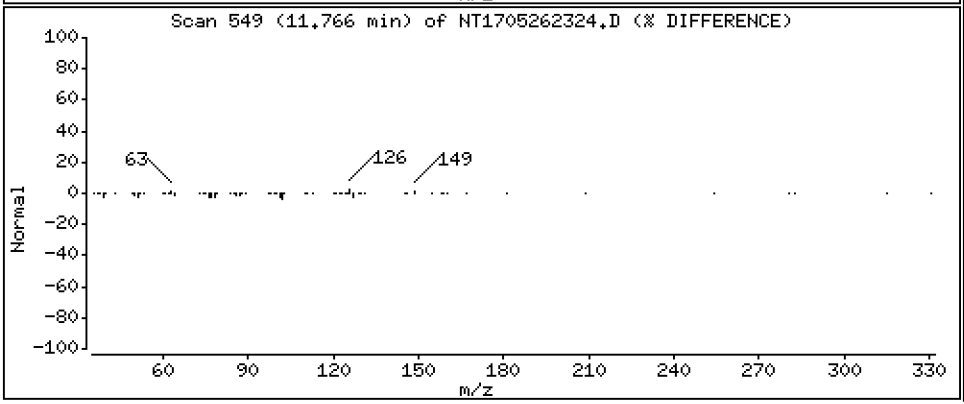
28 Naphthalene

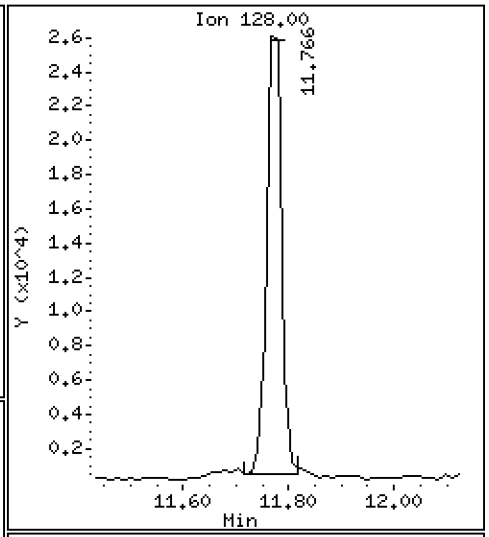
Concentration: 0.1717 ug/mL

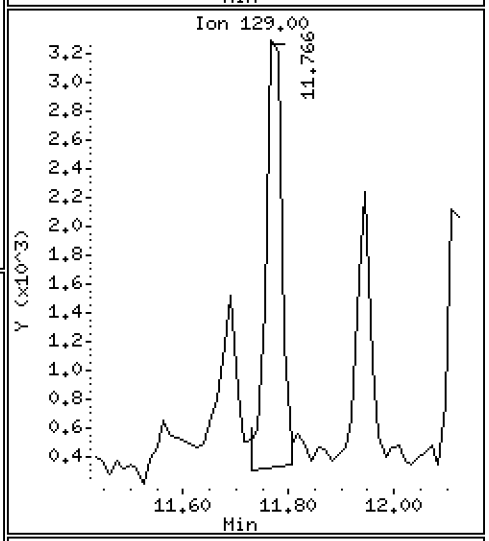


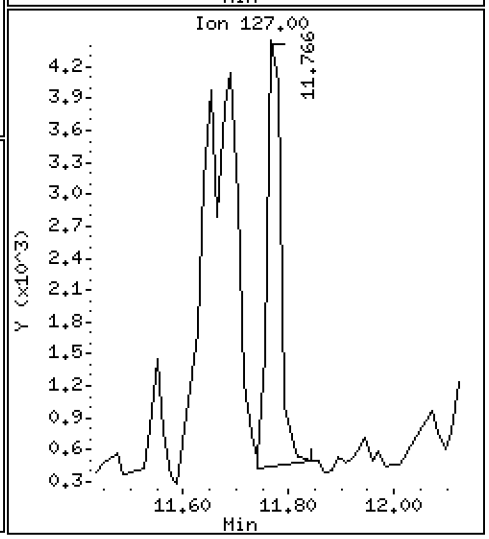












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

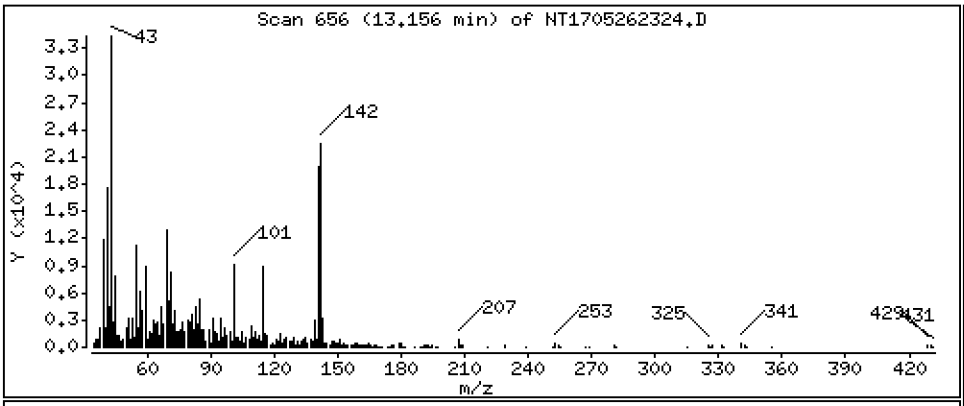
Operator: VTS

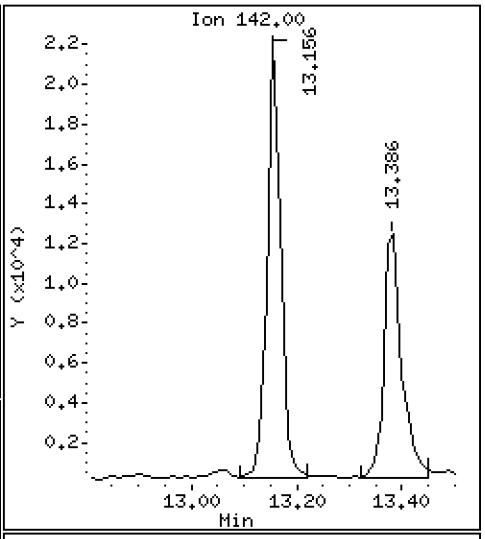
Column phase: ZB-5msi

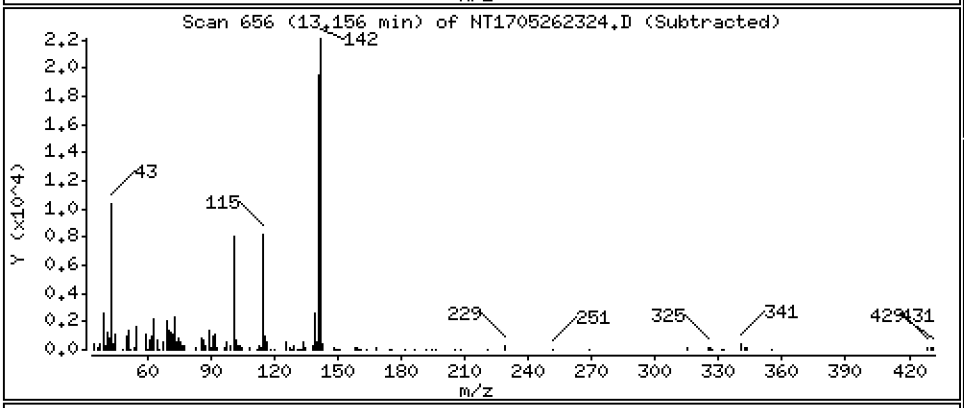
Column diameter: 0.25

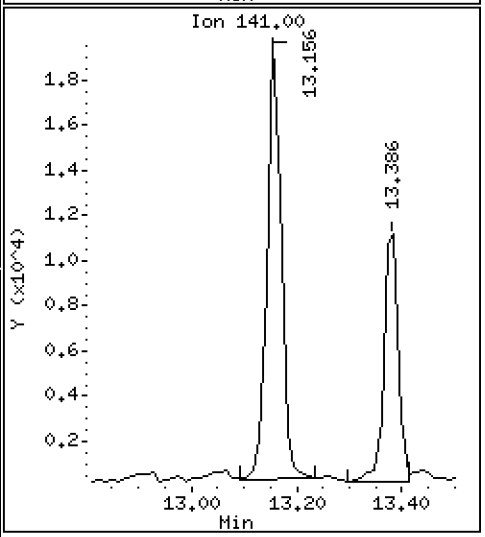
32 2-Methylnaphthalene

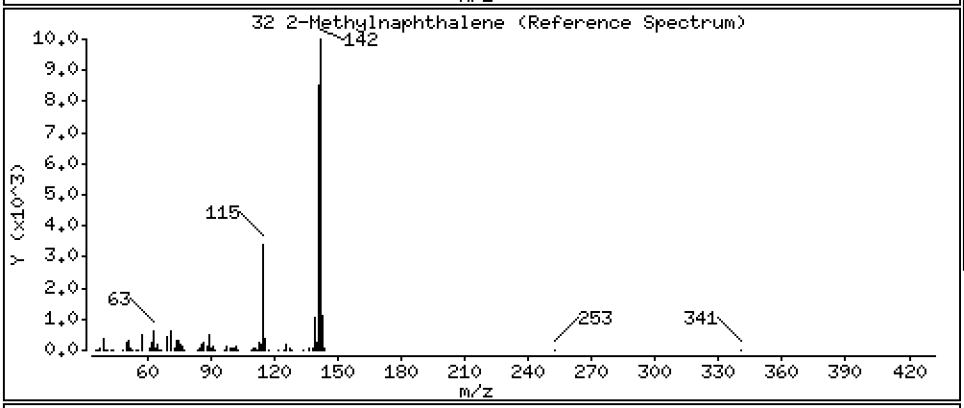
Concentration: 0.1800 ug/mL

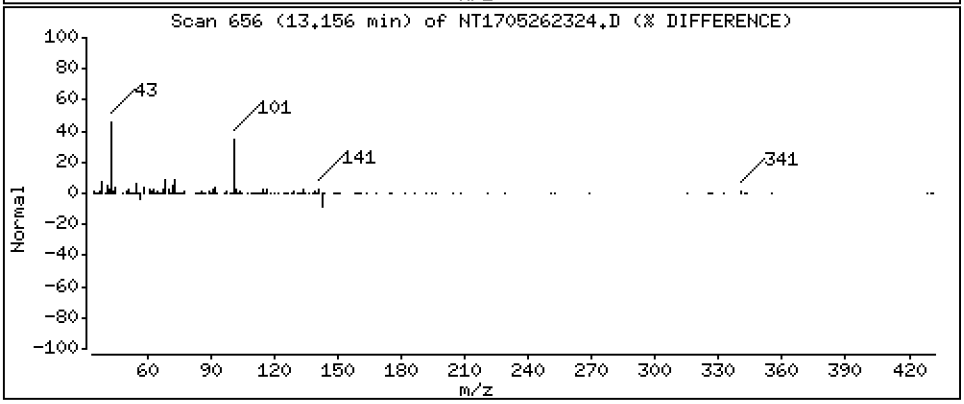












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

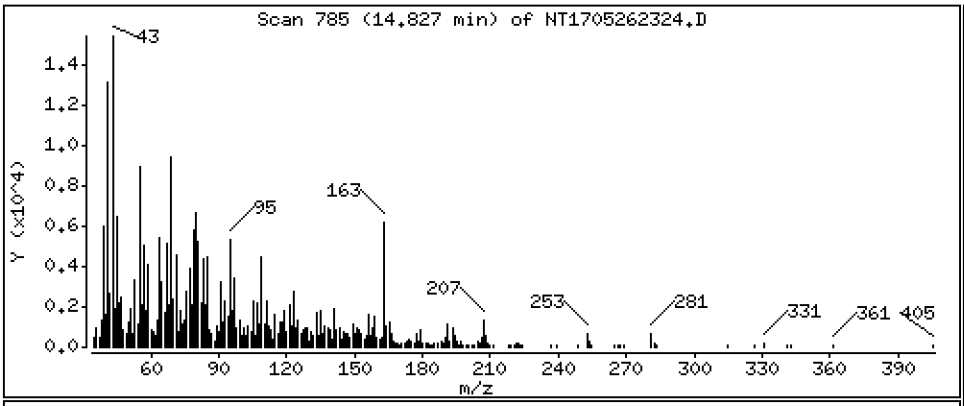
Operator: VTS

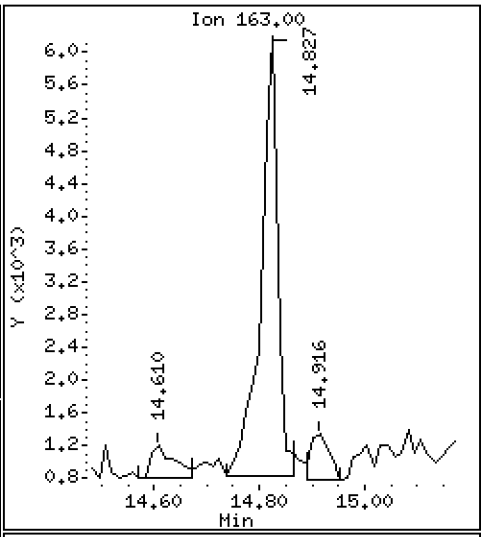
Column phase: ZB-5msi

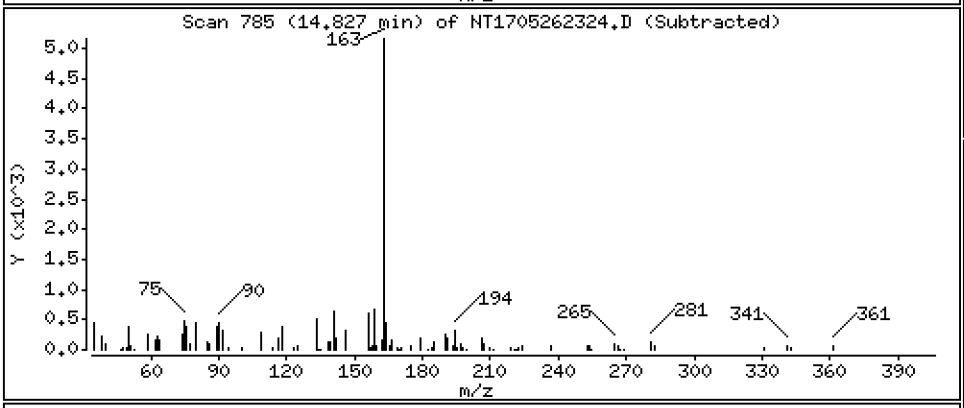
Column diameter: 0.25

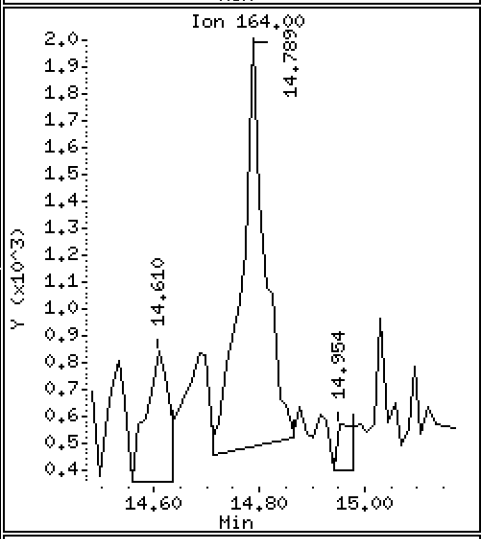
39 Dimethylphthalate

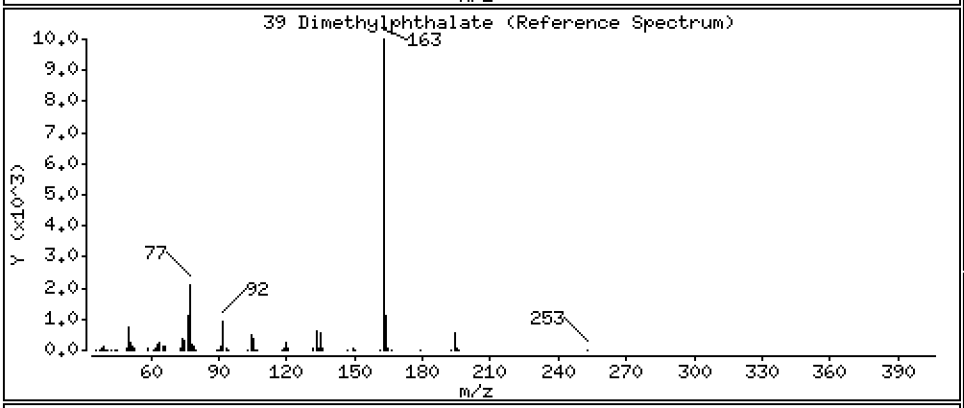
Concentration: 0.06638 ug/mL

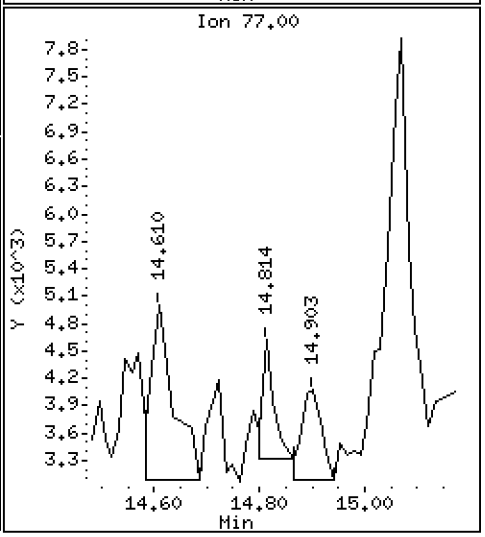


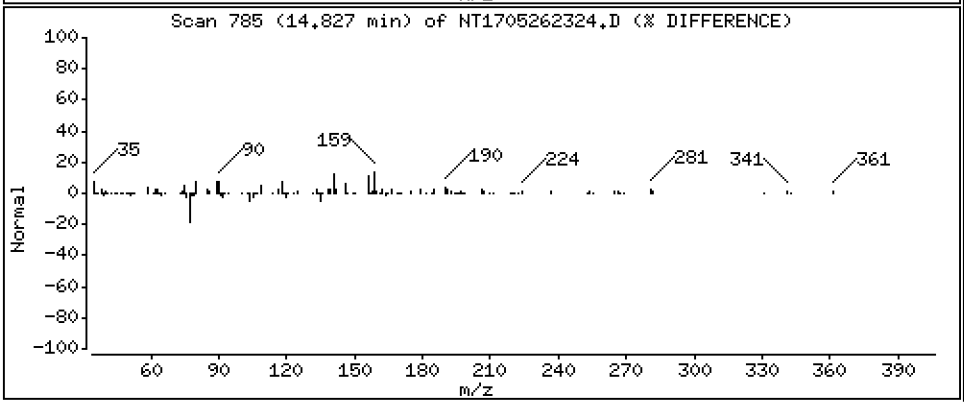












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

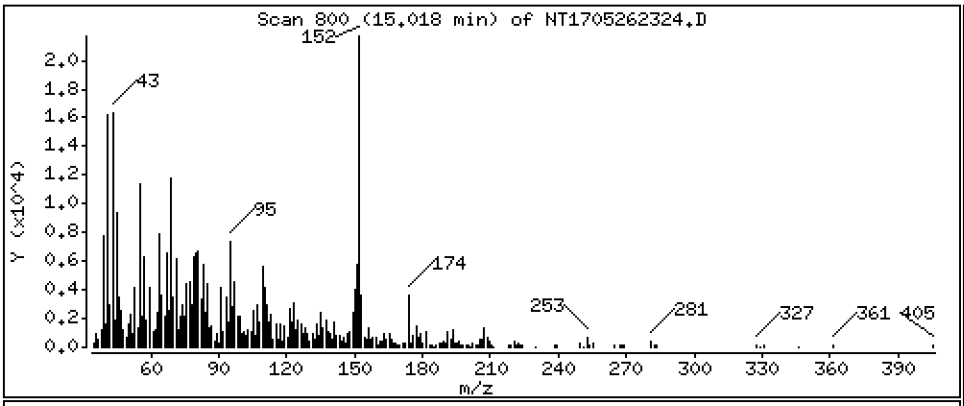
Operator: VTS

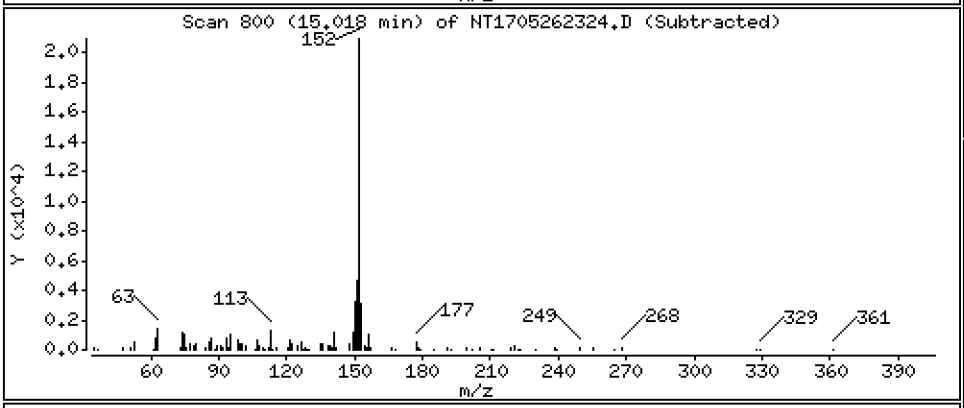
Column phase: ZB-5msi

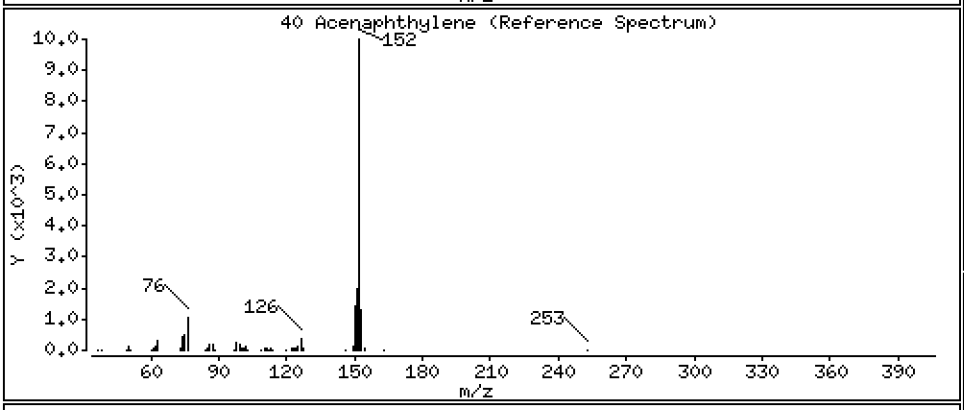
Column diameter: 0.25

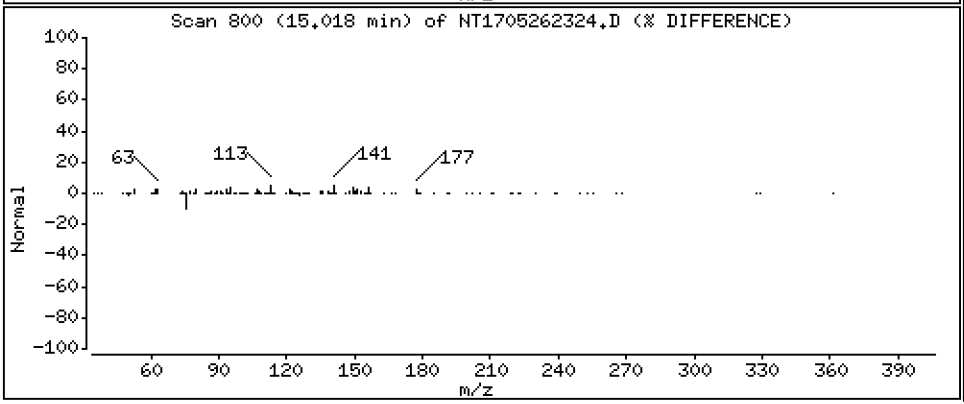
40 Acenaphthylene

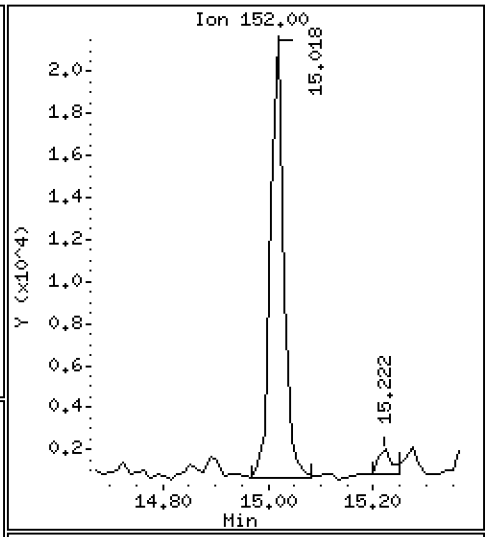
Concentration: 0.1371 ug/mL

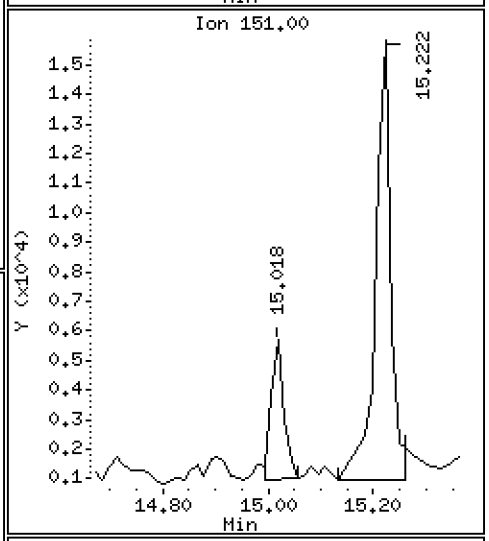


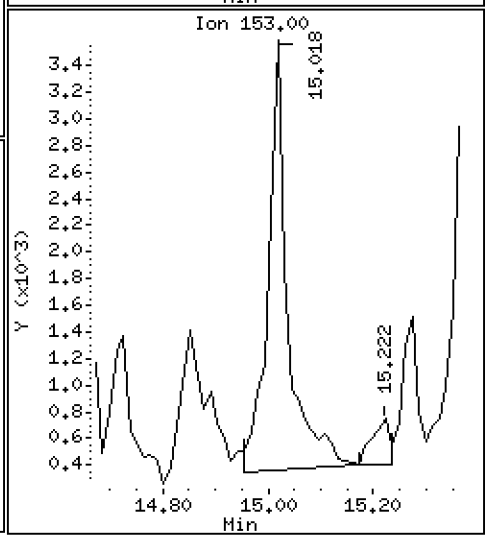












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

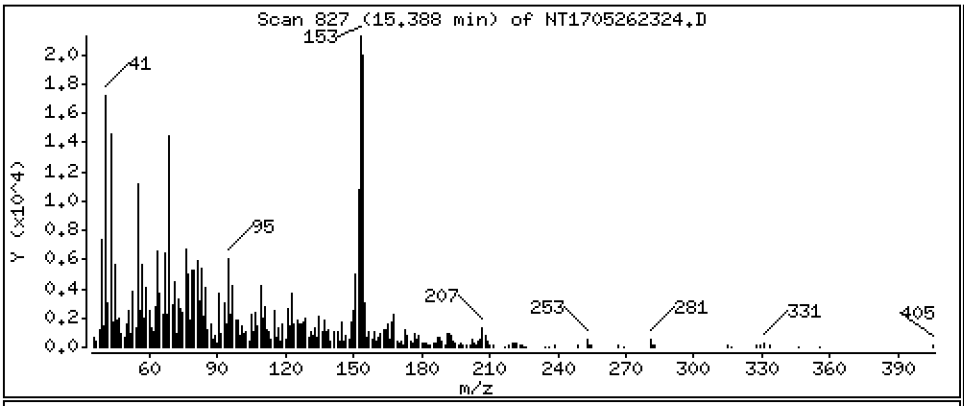
Operator: VTS

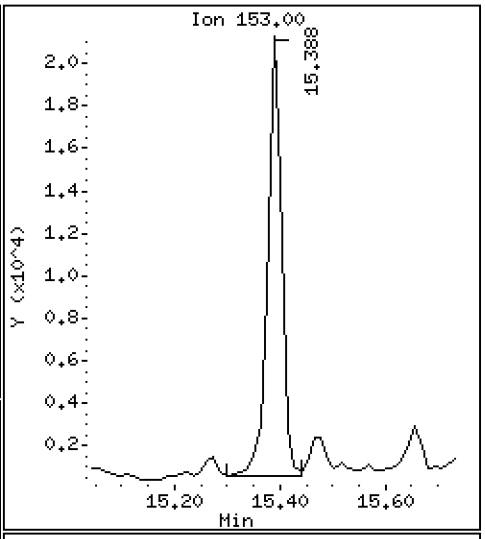
Column phase: ZB-5msi

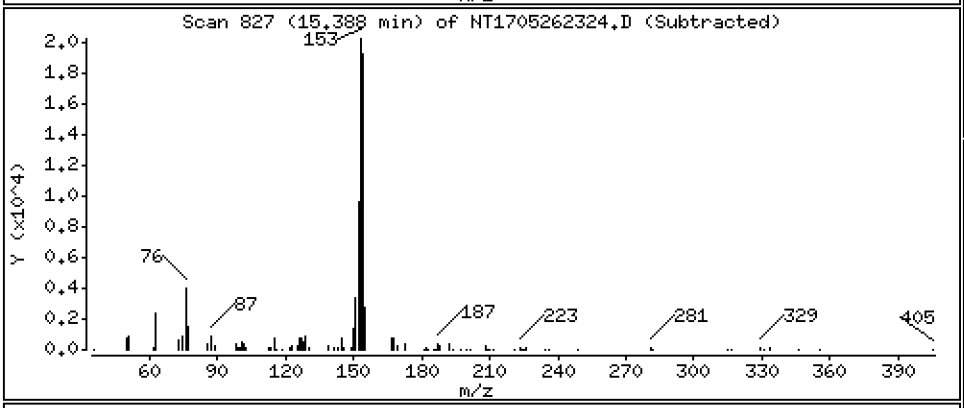
Column diameter: 0.25

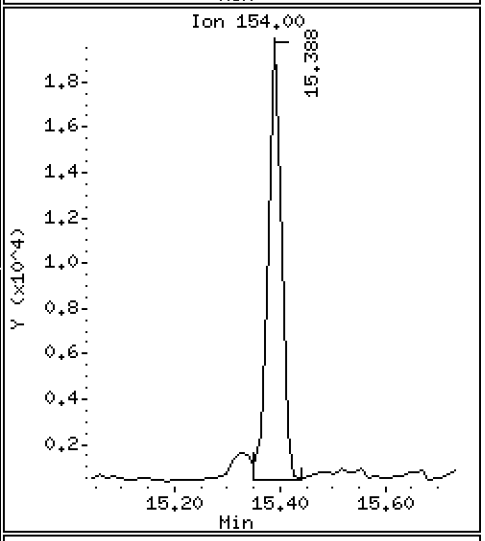
44 Acenaphthene

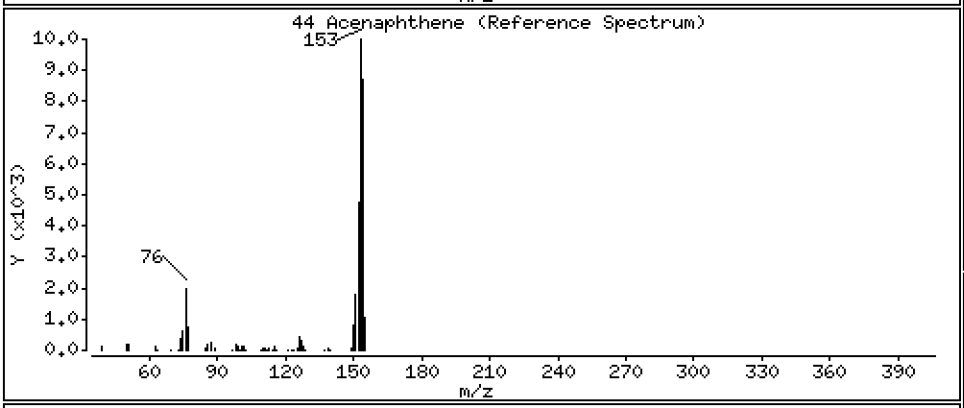
Concentration: 0.2293 ug/mL

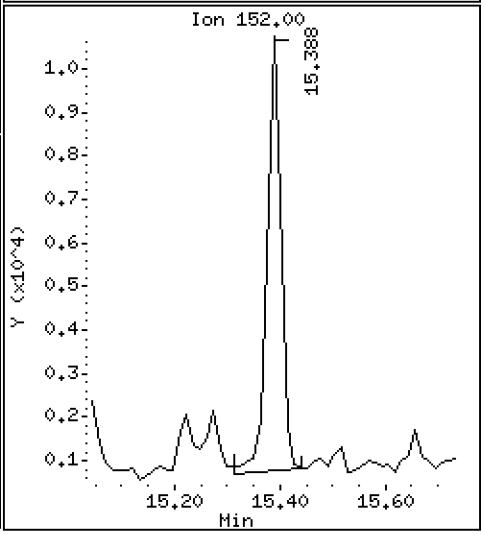


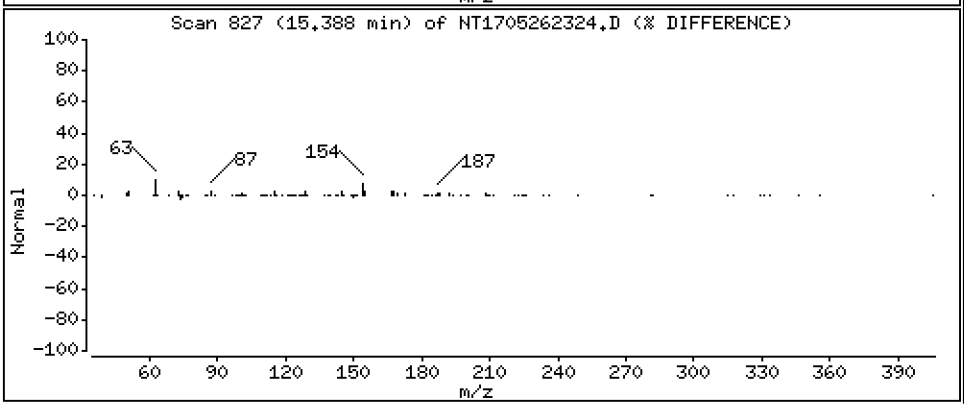












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

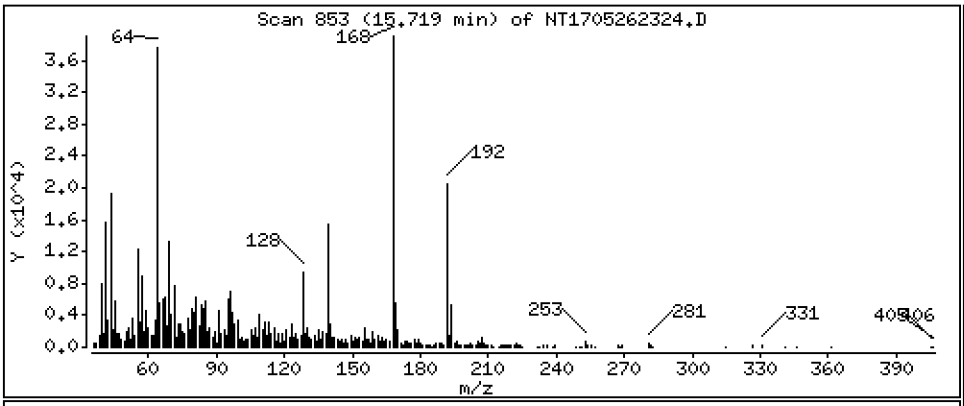
Operator: VTS

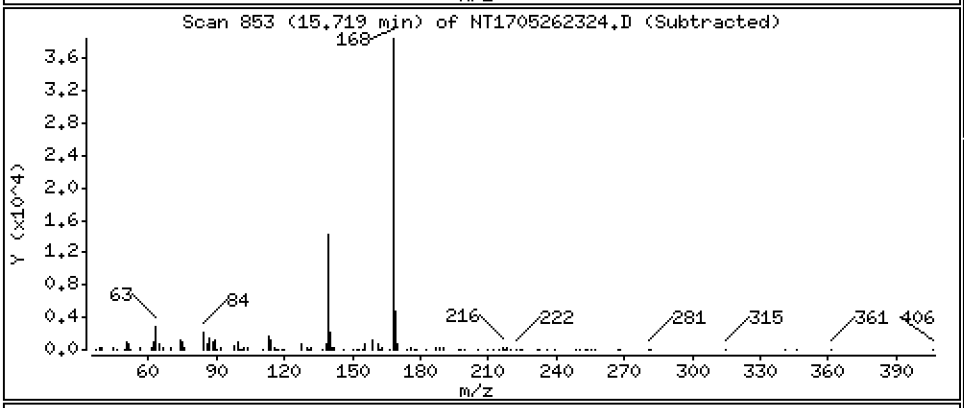
Column phase: ZB-5msi

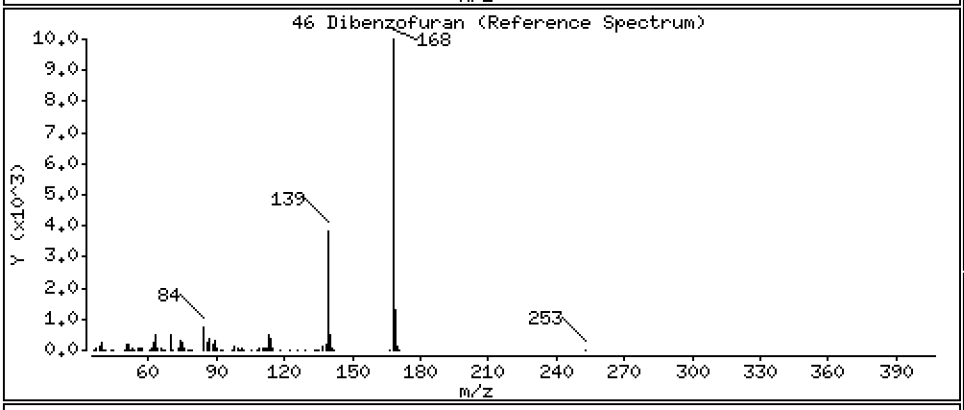
Column diameter: 0.25

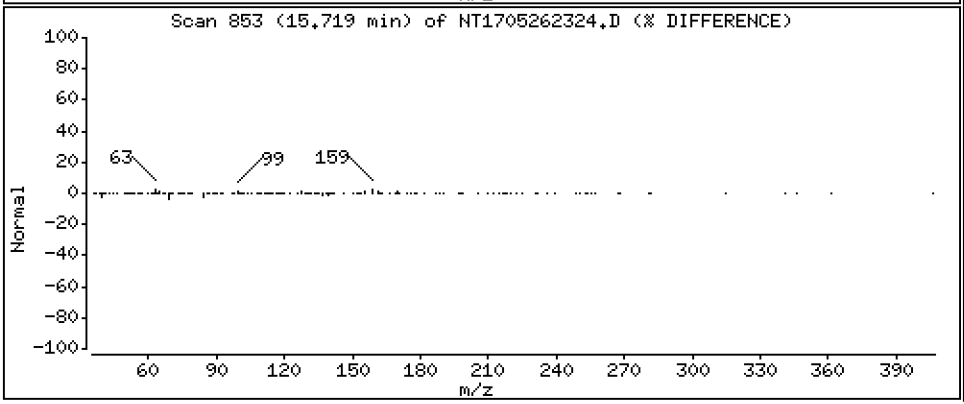
46 Dibenzofuran

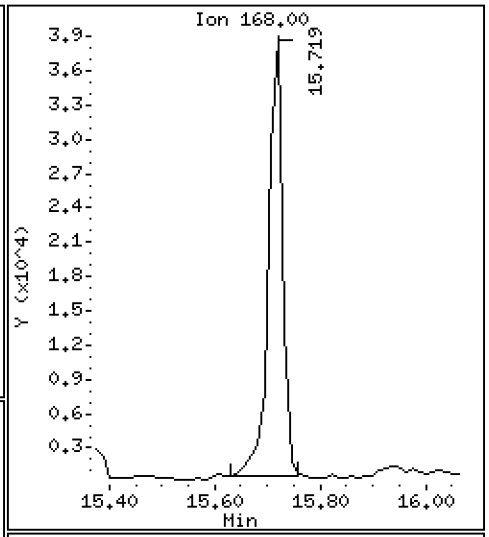
Concentration: 0.3089 ug/mL

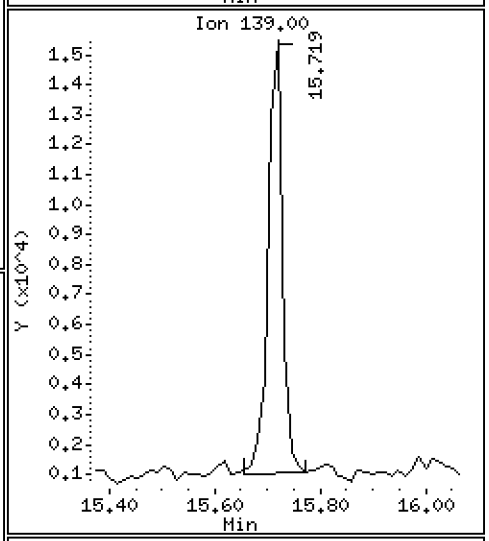


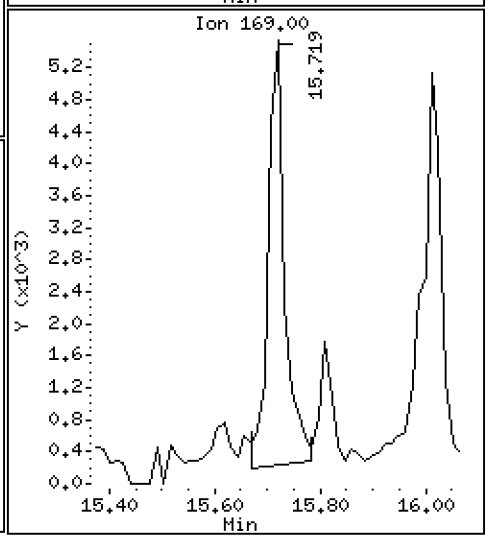












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

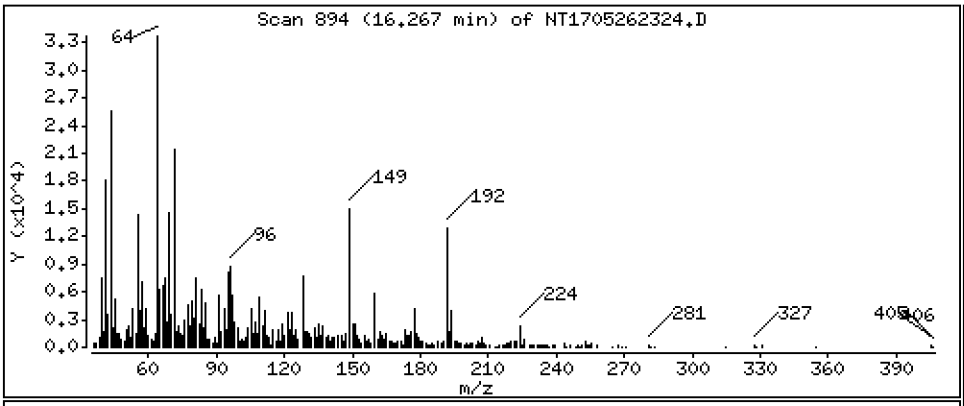
Operator: VTS

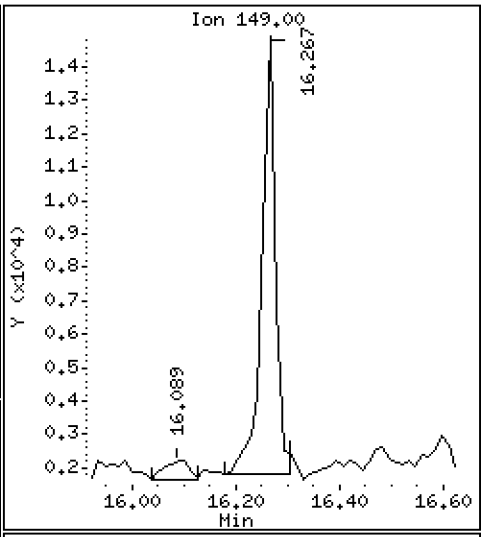
Column phase: ZB-5msi

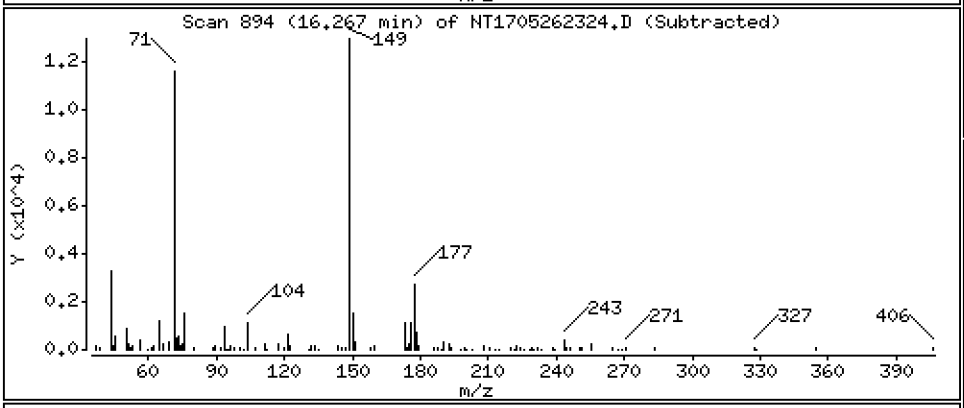
Column diameter: 0.25

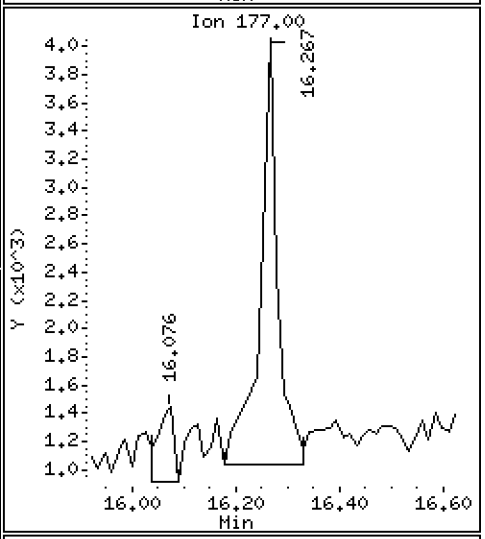
50 Diethylphthalate

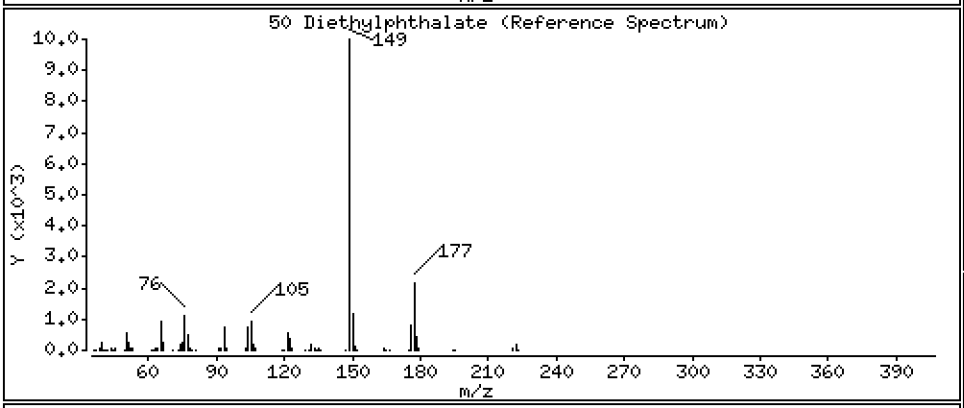
Concentration: 0.1645 ug/mL

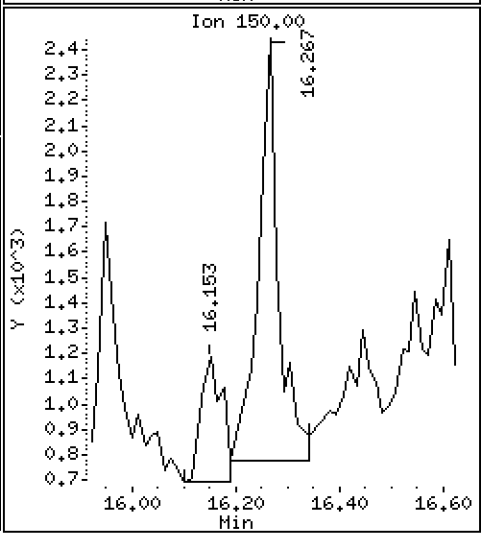


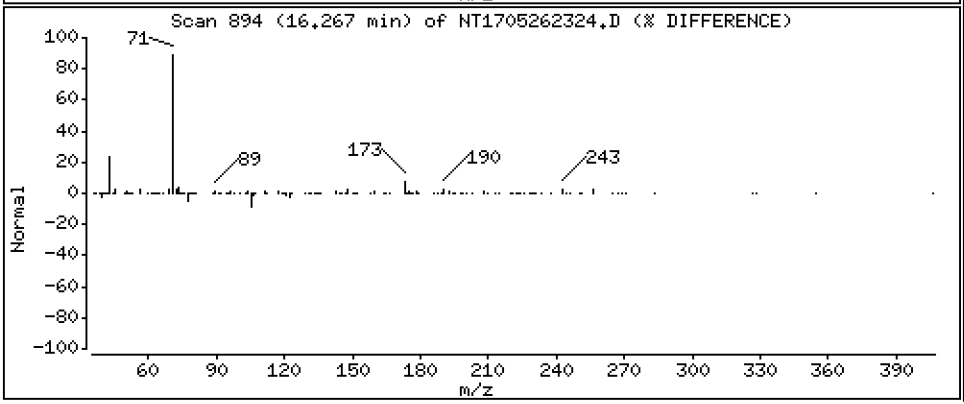












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

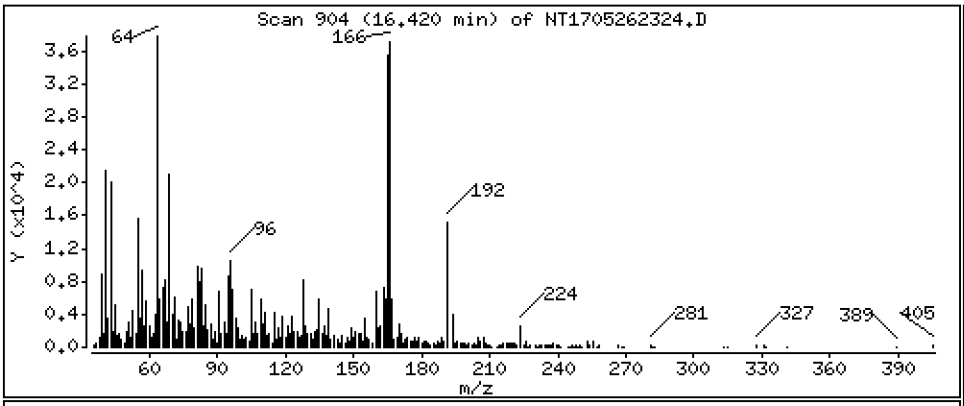
Operator: VTS

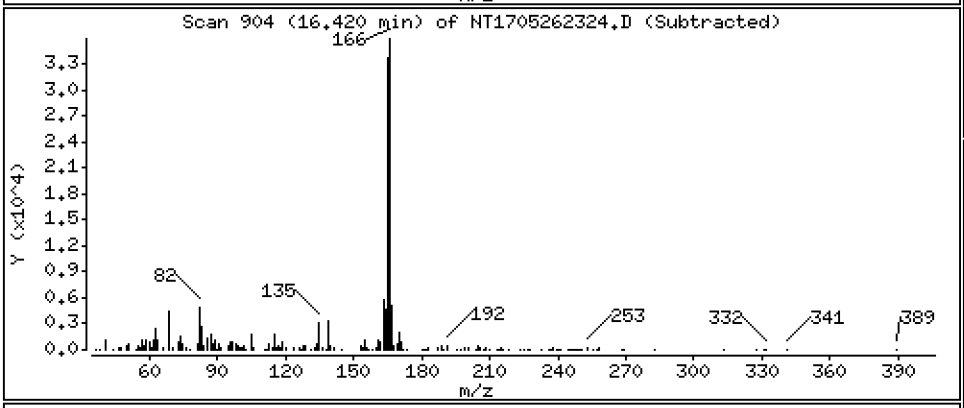
Column phase: ZB-5msi

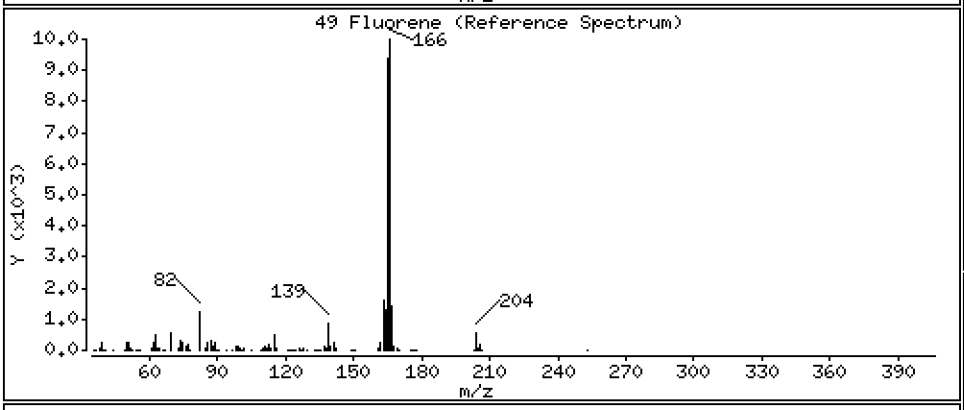
Column diameter: 0.25

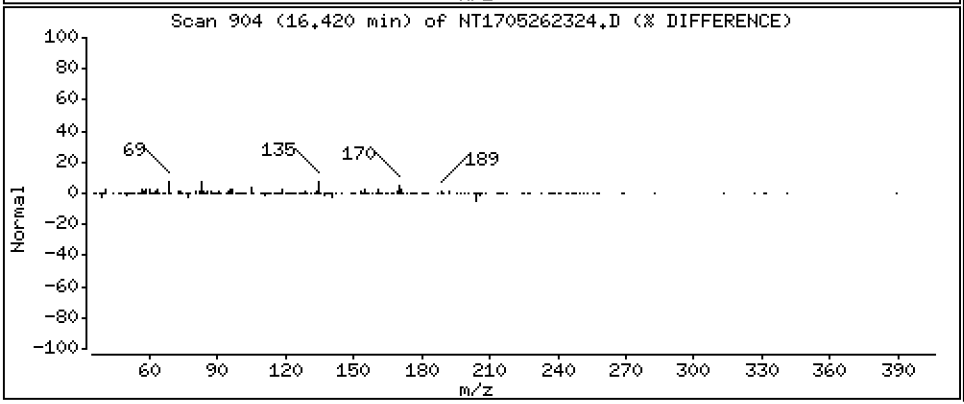
49 Fluorene

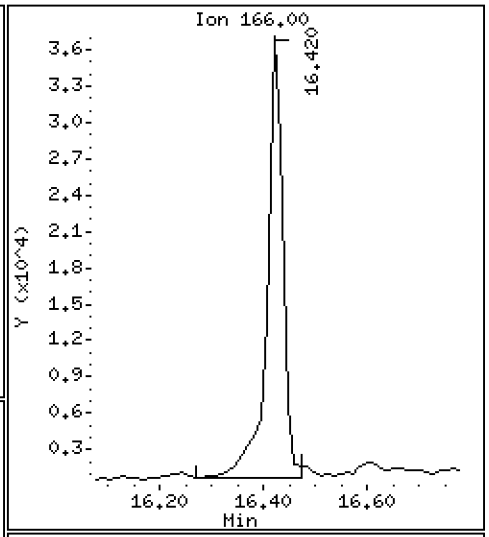
Concentration: 0.3790 ug/mL

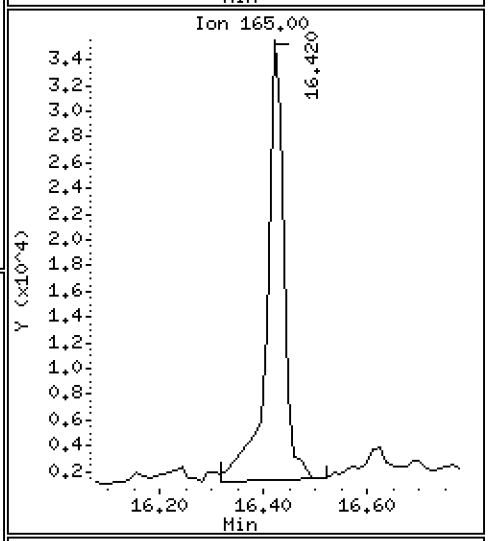


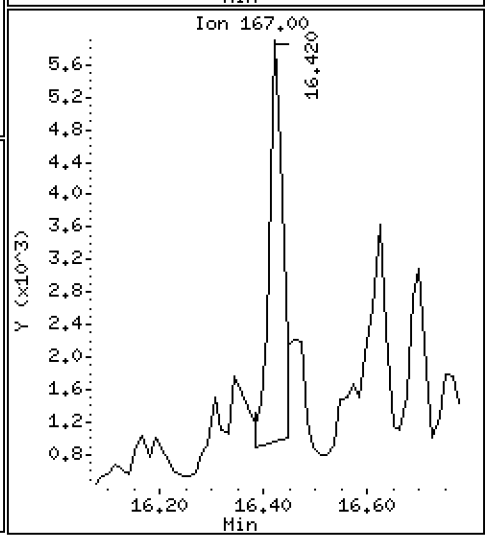












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

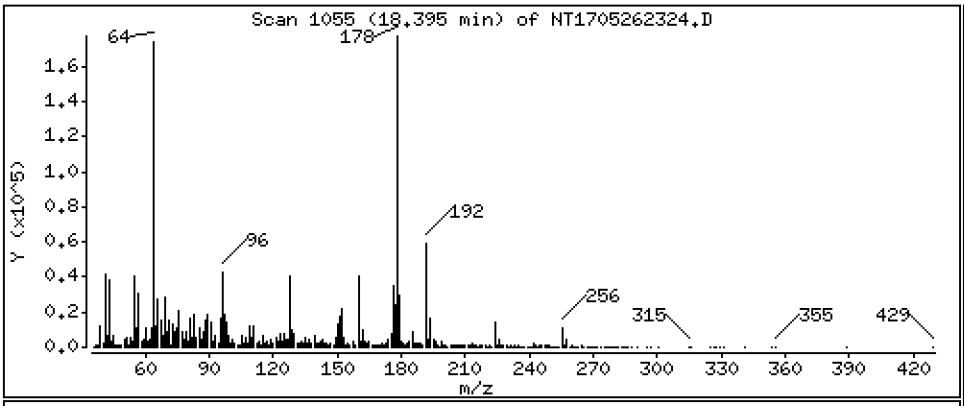
Operator: VTS

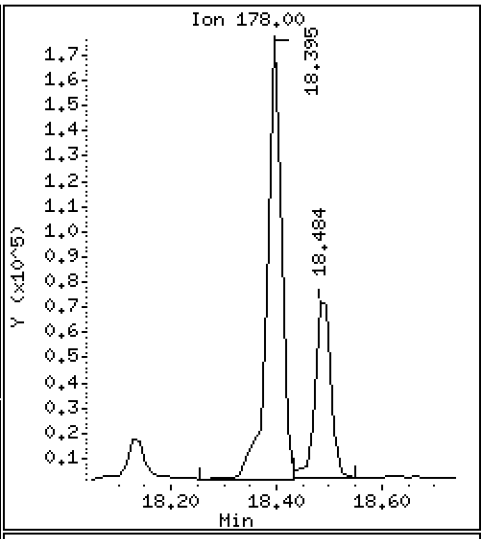
Column phase: ZB-5msi

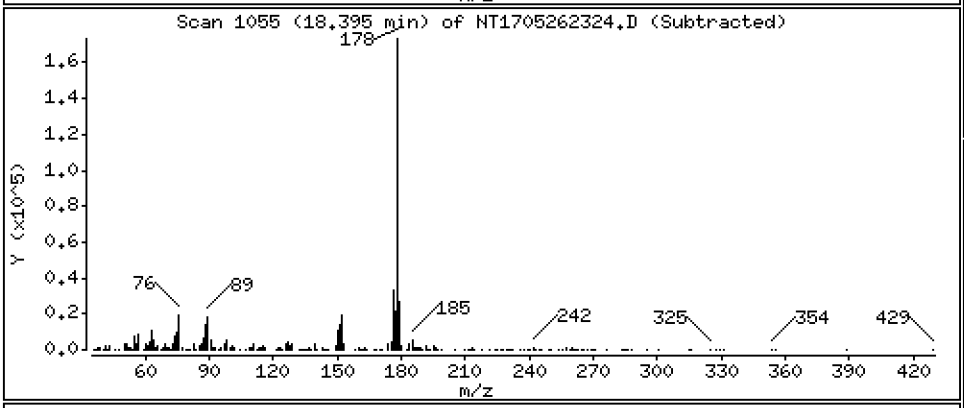
Column diameter: 0.25

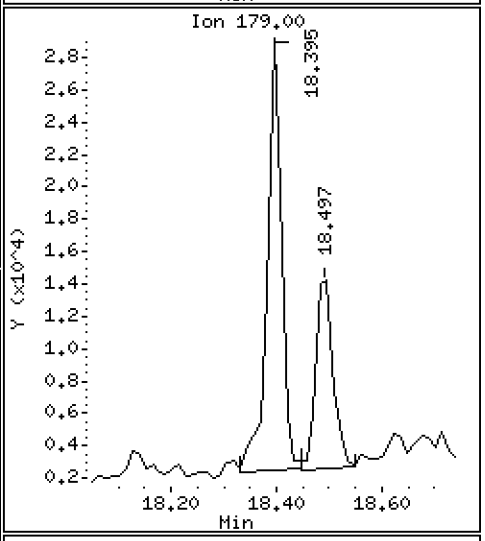
60 Phenanthrene

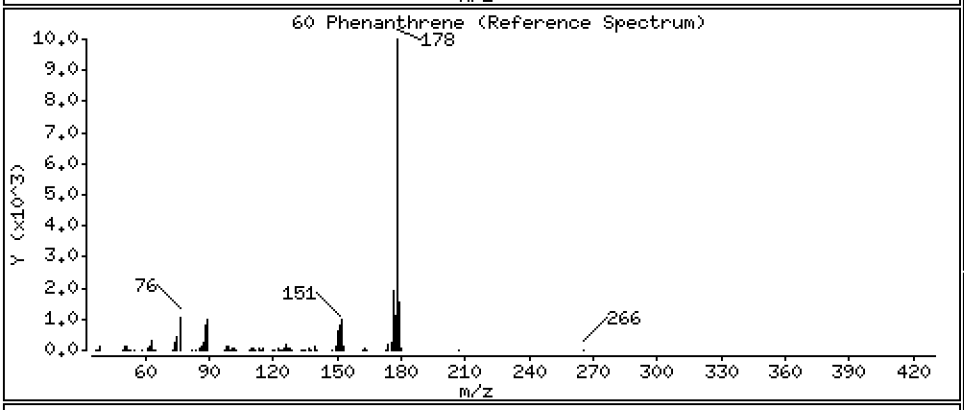
Concentration: 1.386 ug/mL

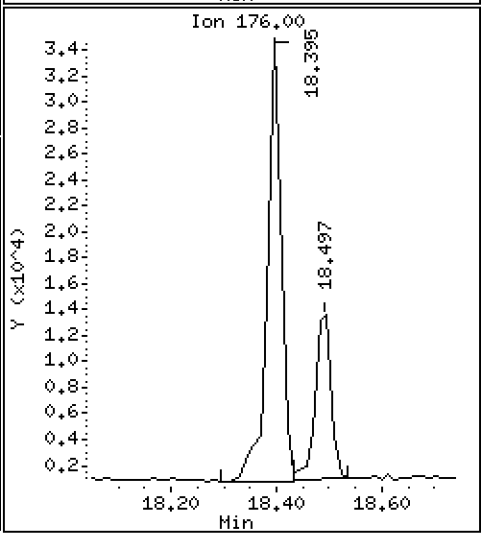


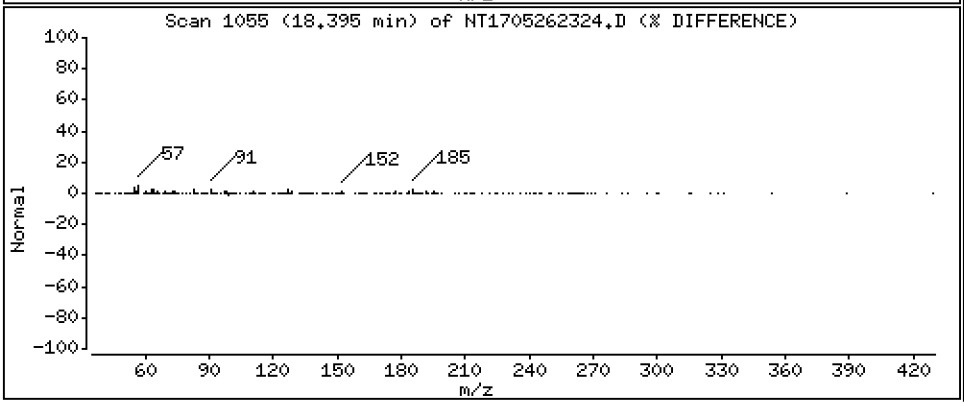












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

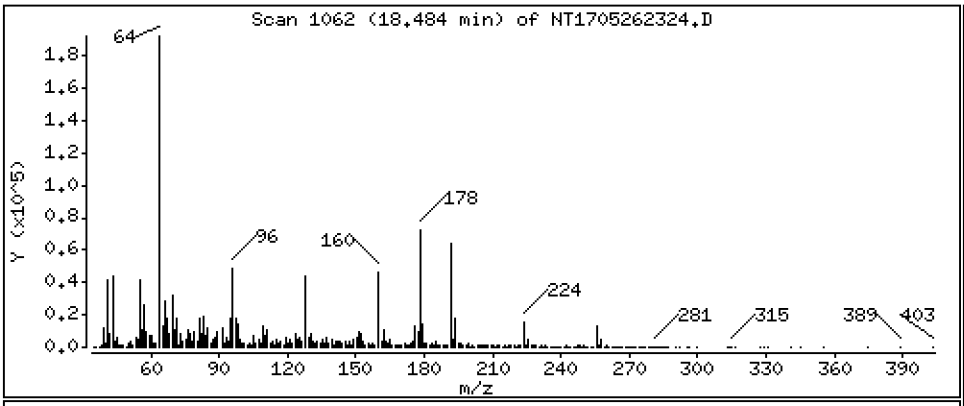
Operator: VTS

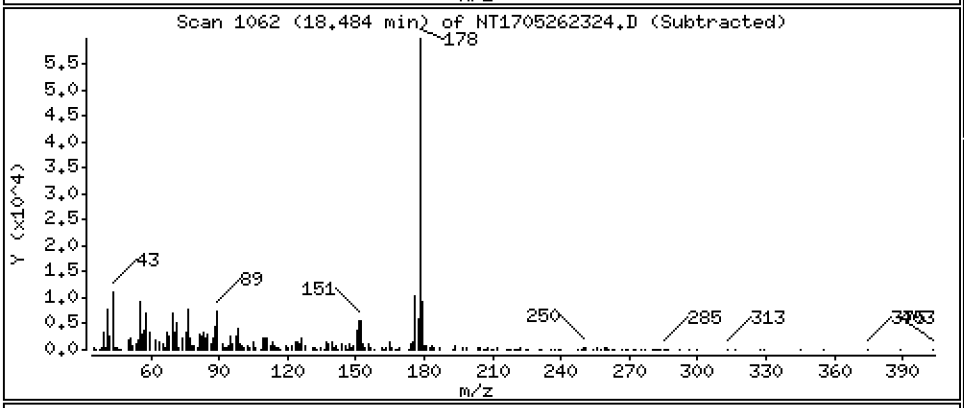
Column phase: ZB-5msi

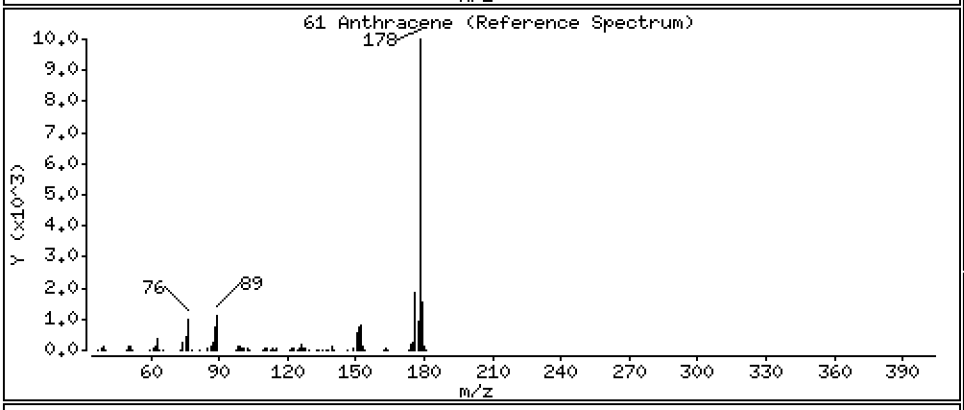
Column diameter: 0.25

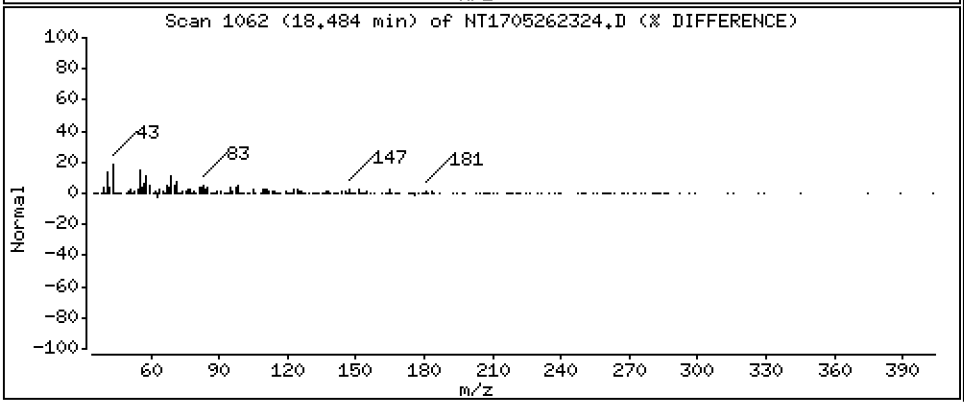
61 Anthracene

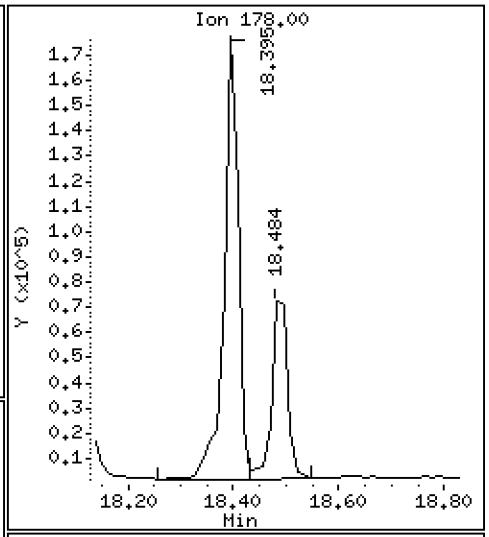
Concentration: 0.6551 ug/mL

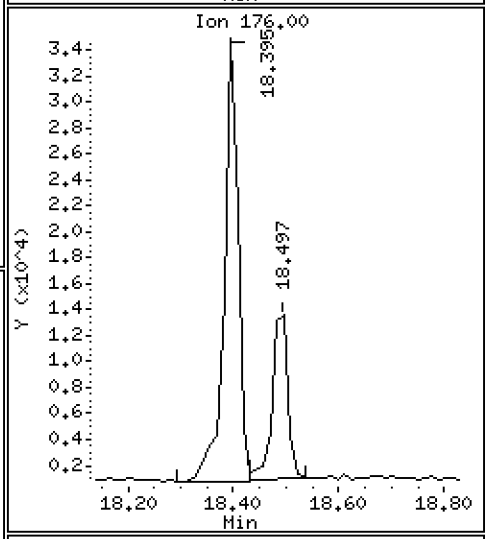


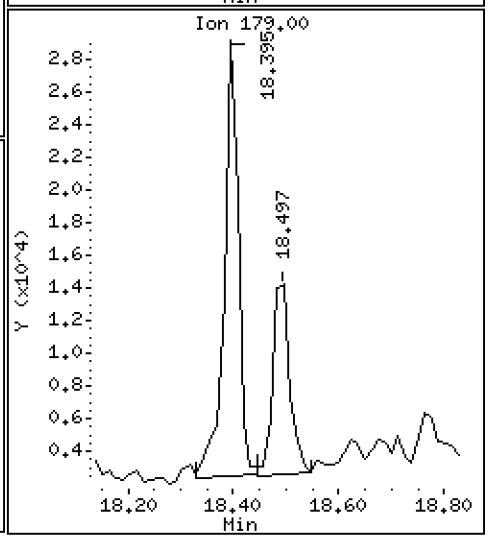












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

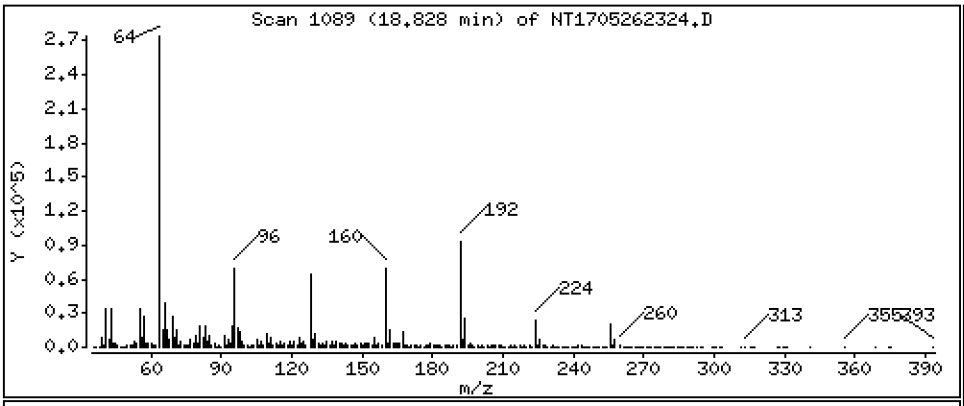
Operator: VTS

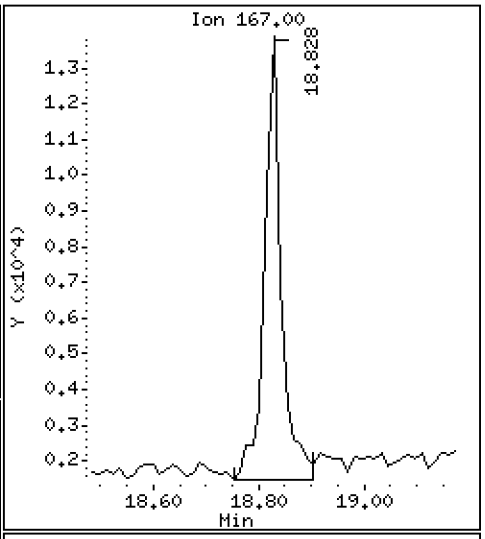
Column phase: ZB-5msi

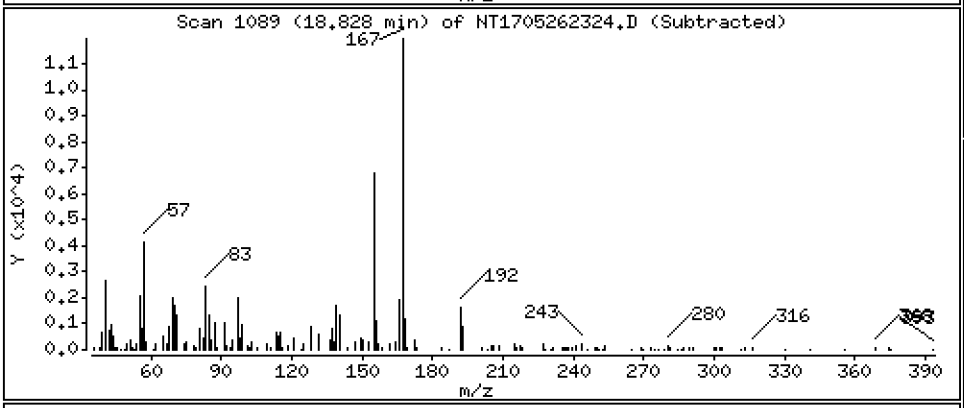
Column diameter: 0.25

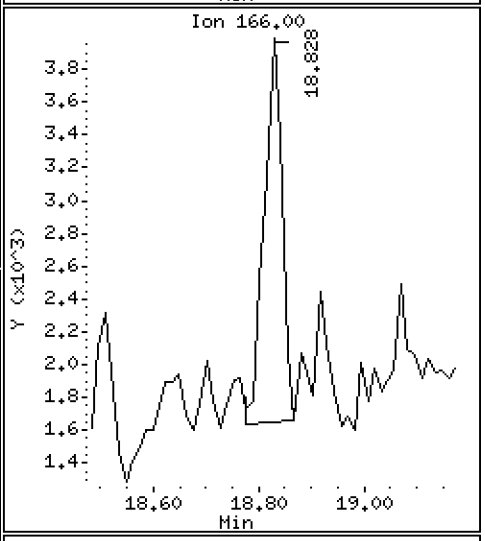
62 Carbazole

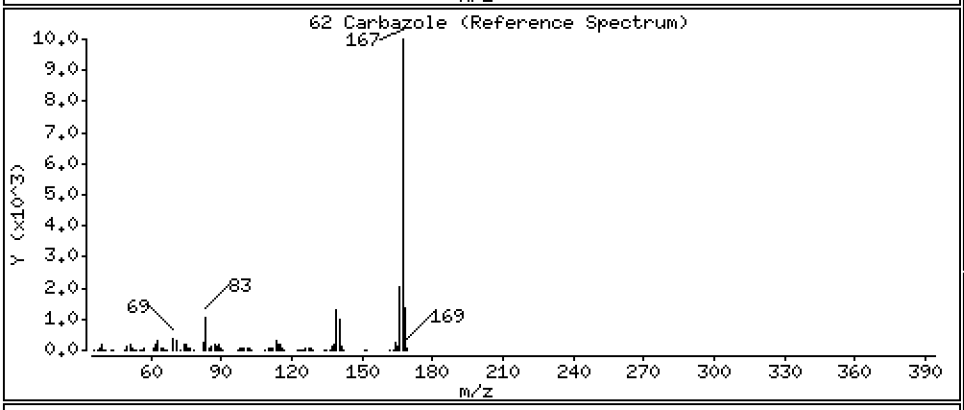
Concentration: 0.1969 ug/mL

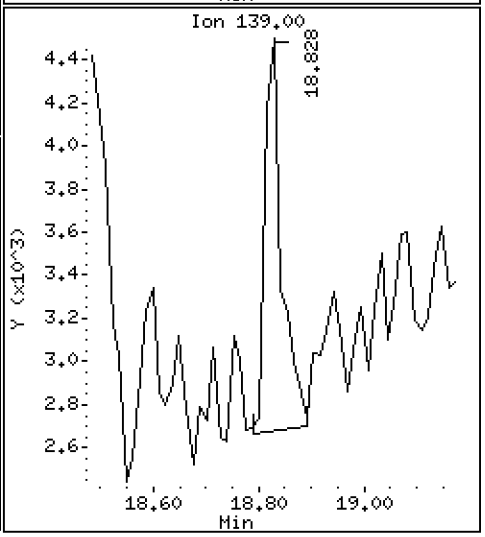


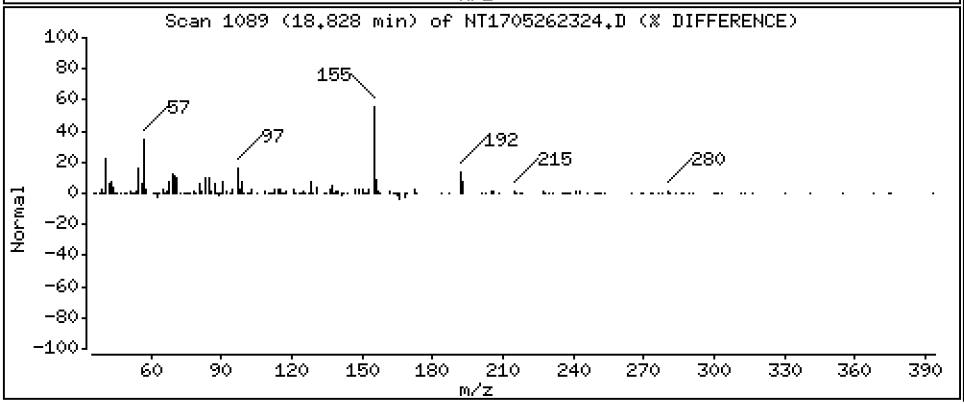












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262324.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

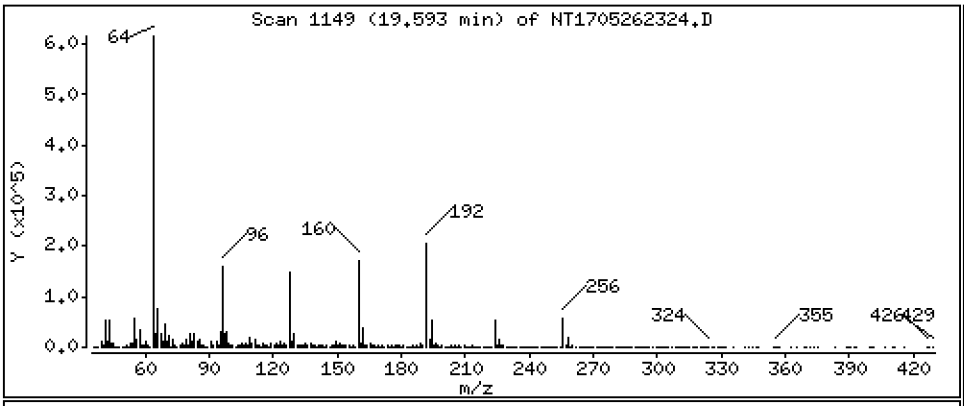
Operator: VTS

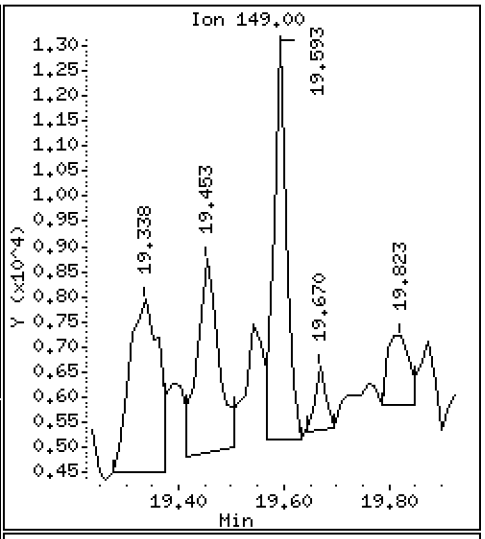
Column phase: ZB-5msi

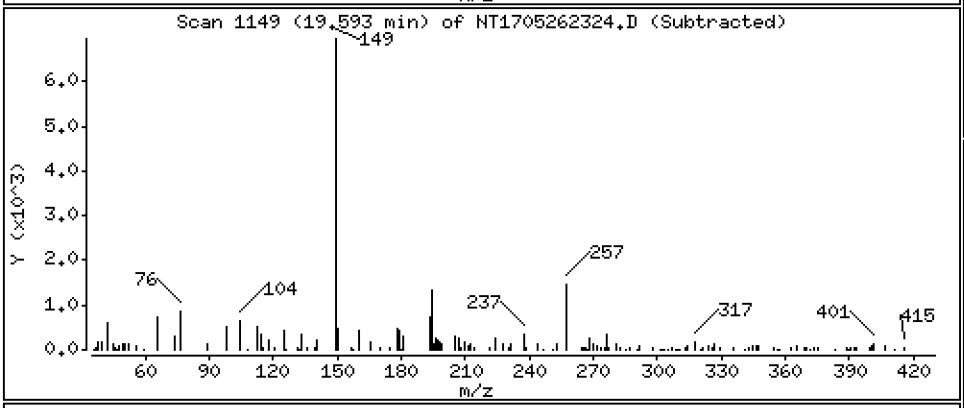
Column diameter: 0.25

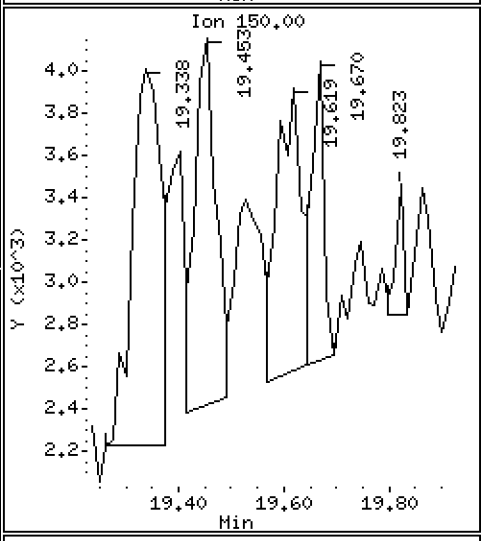
63 Di-n-butylphthalate

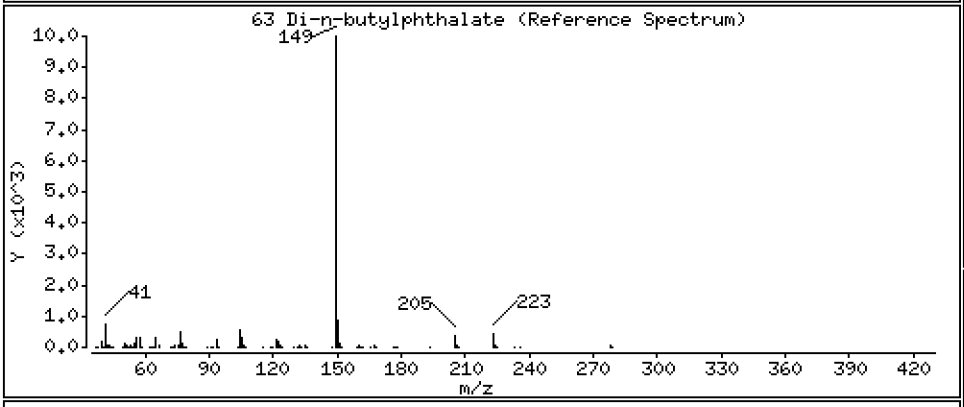
Concentration: 0.04993 ug/mL

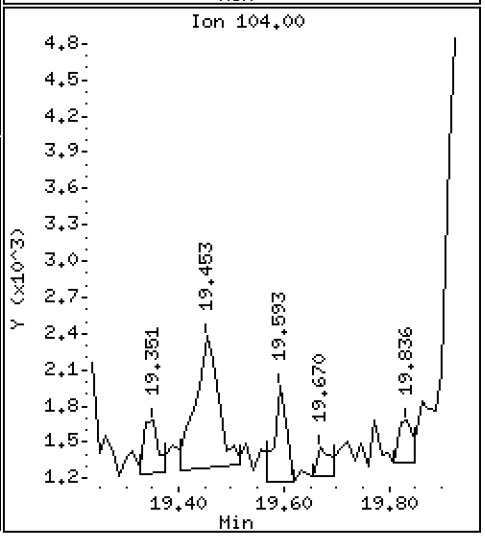


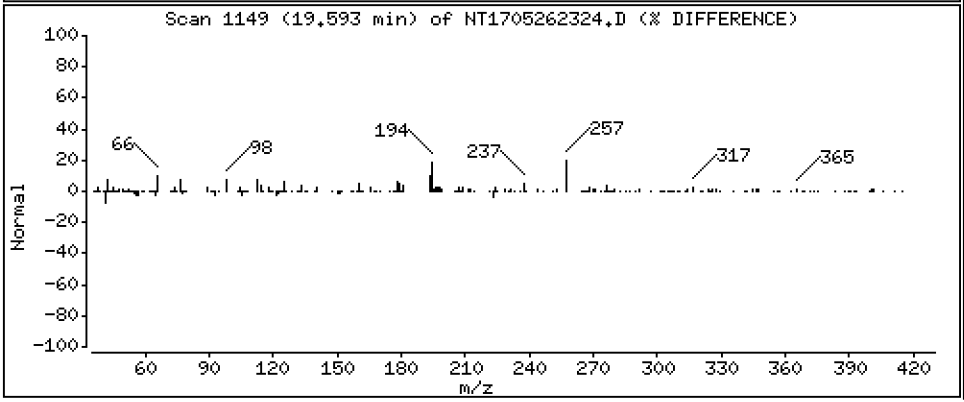












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

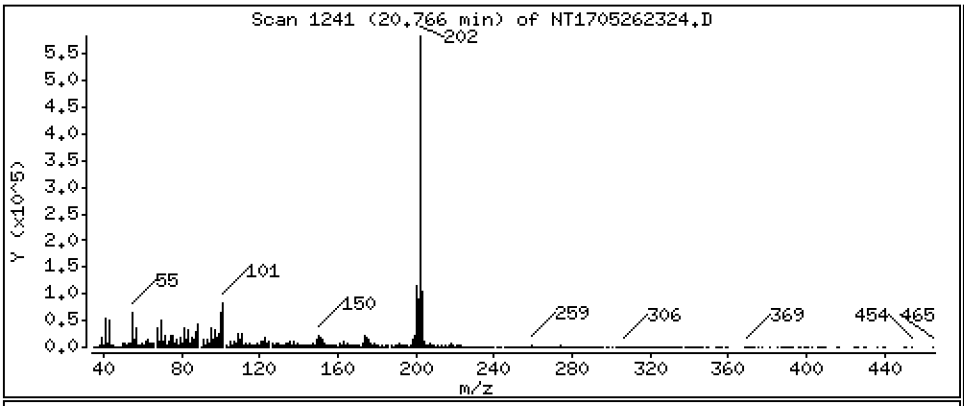
Operator: VTS

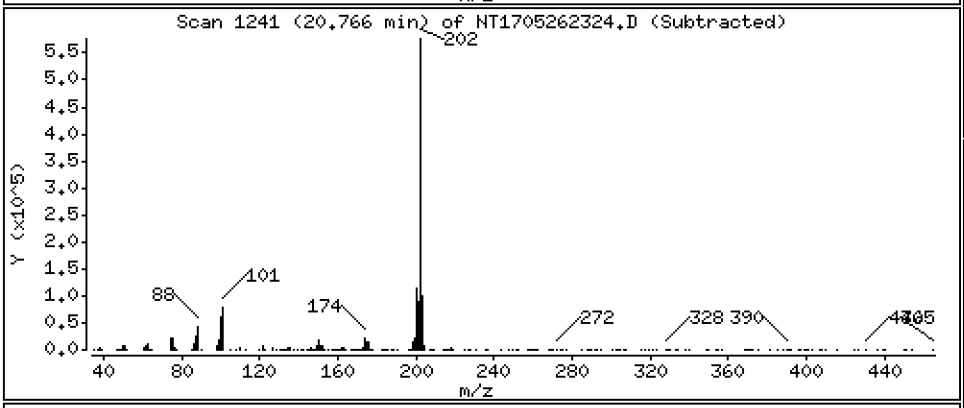
Column phase: ZB-5msi

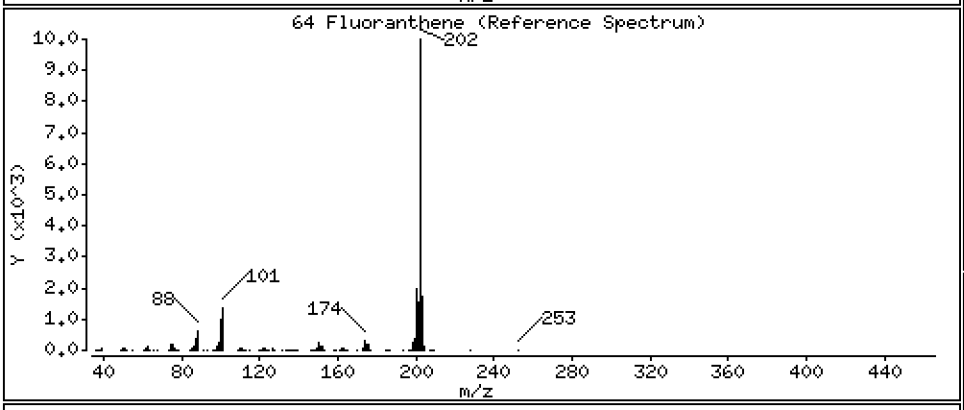
Column diameter: 0.25

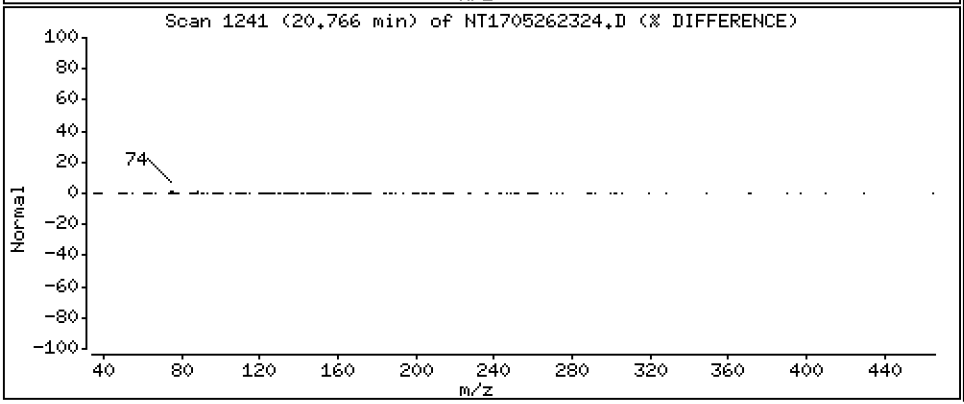
64 Fluoranthene

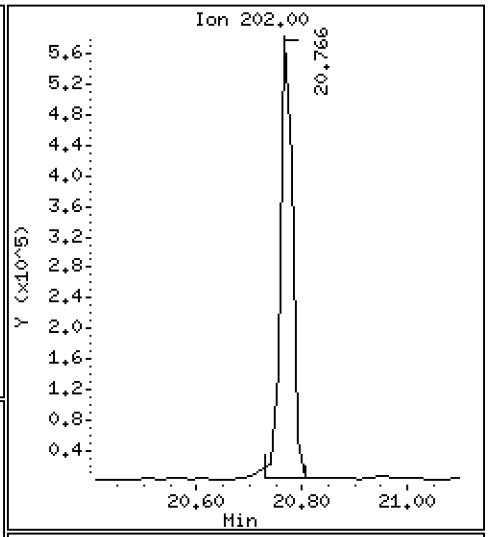
Concentration: 2.972 ug/mL

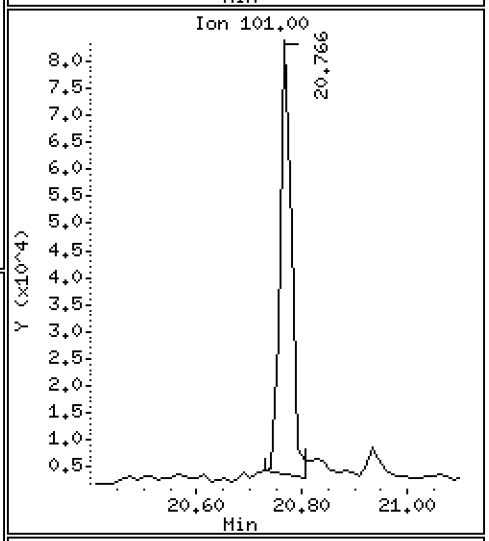


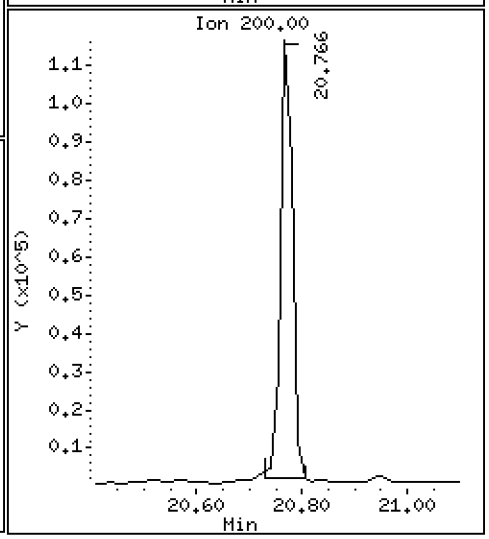












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

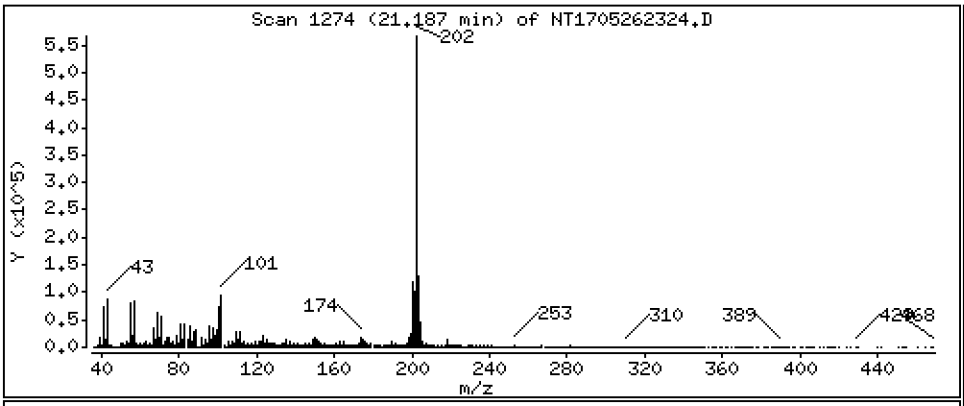
Operator: VTS

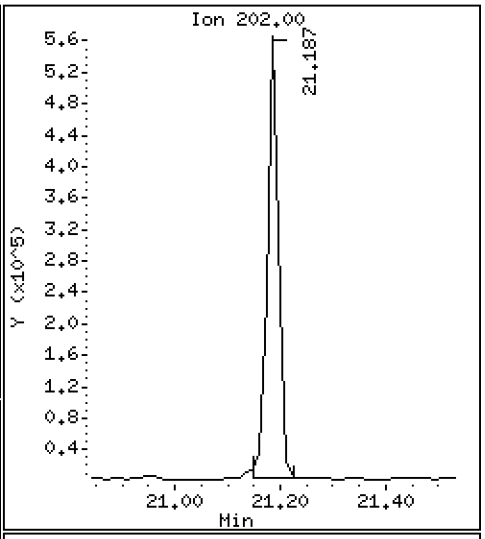
Column phase: ZB-5msi

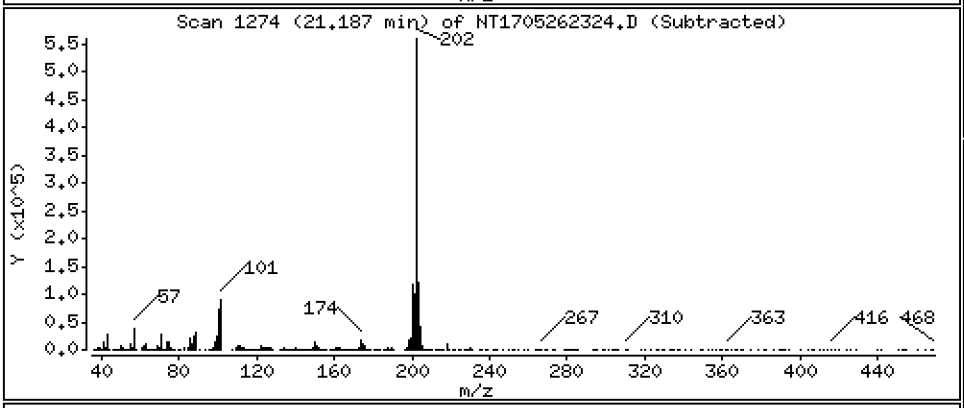
Column diameter: 0.25

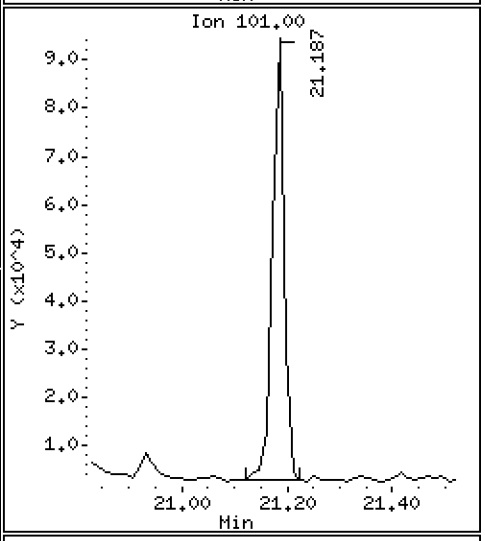
65 Pyrene

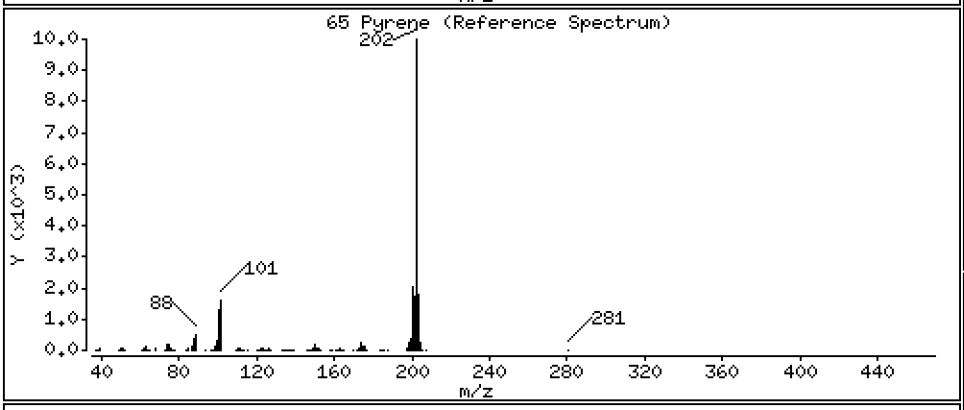
Concentration: 2.617 ug/mL

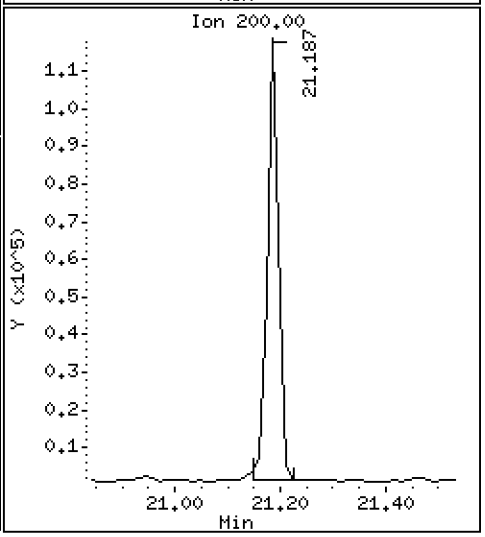


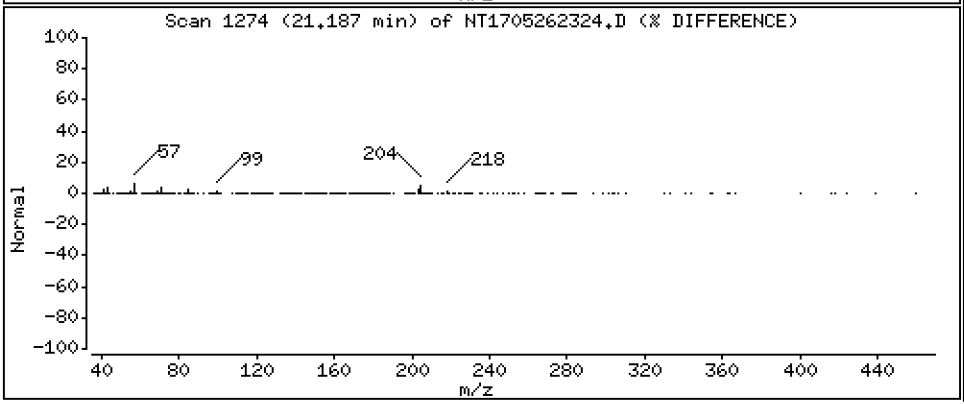












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

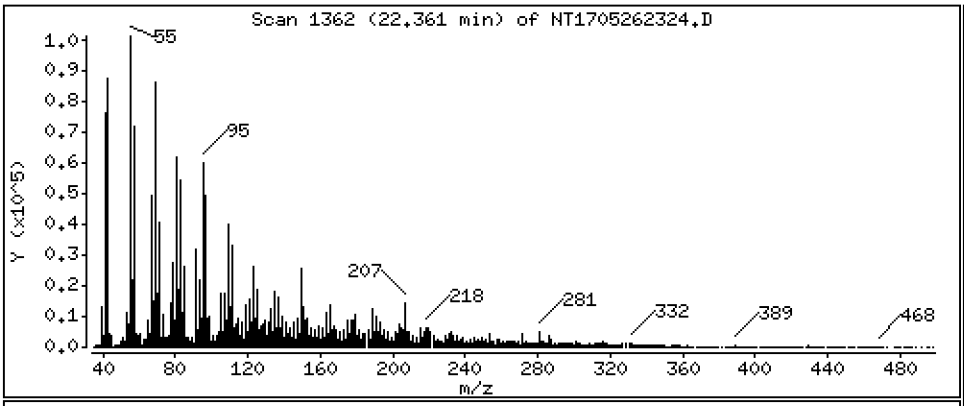
Operator: VTS

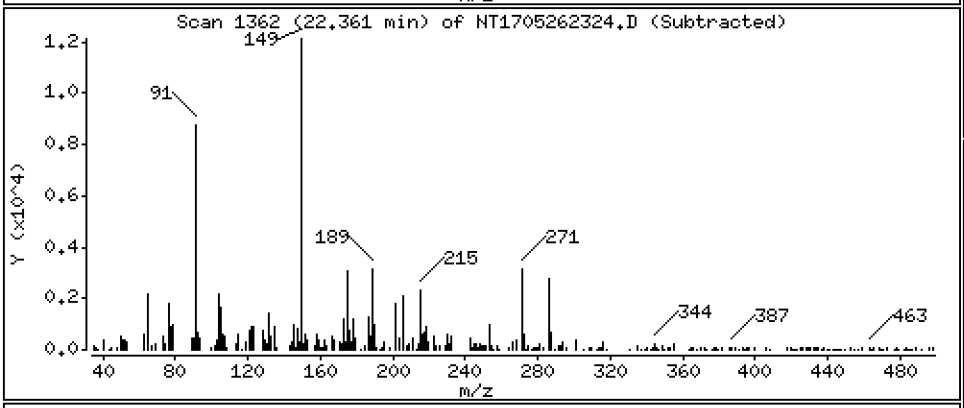
Column phase: ZB-5msi

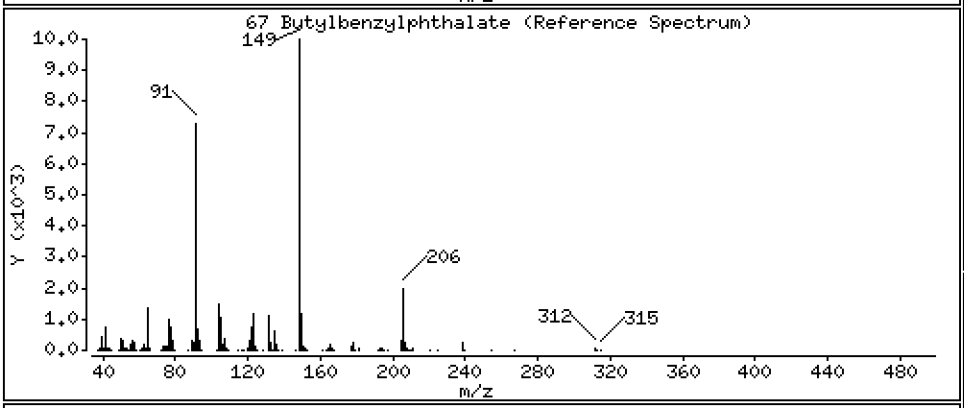
Column diameter: 0.25

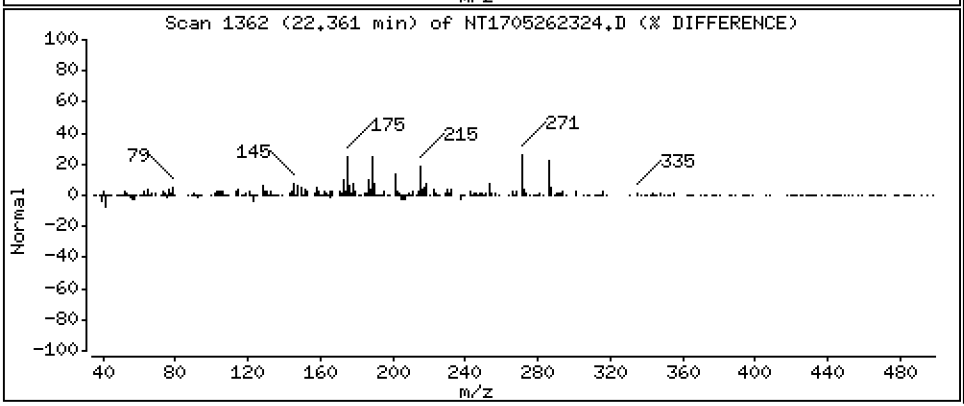
67 Butylbenzylphthalate

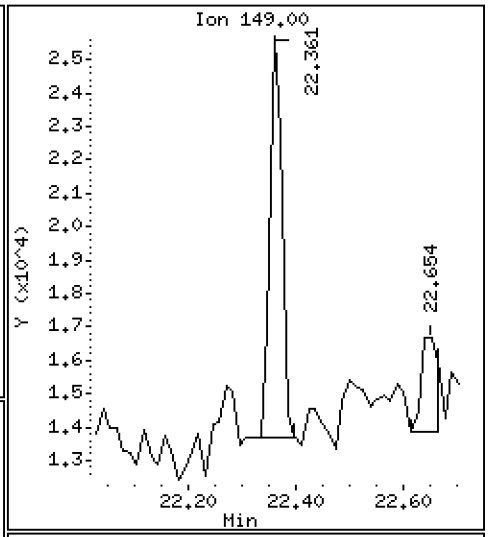
Concentration: 0.1353 ug/mL

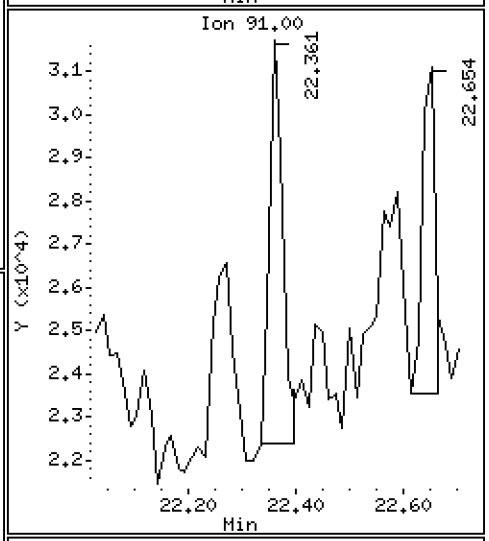


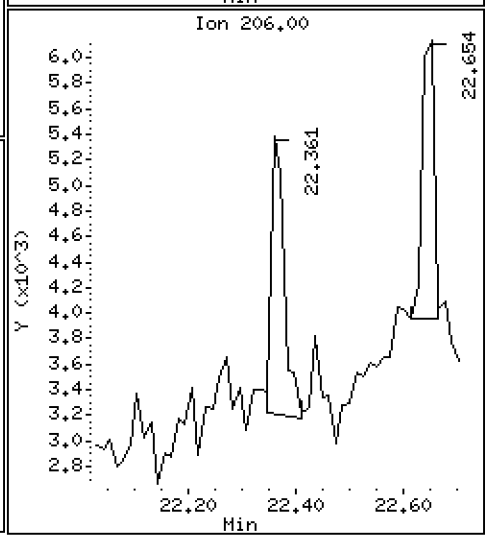












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

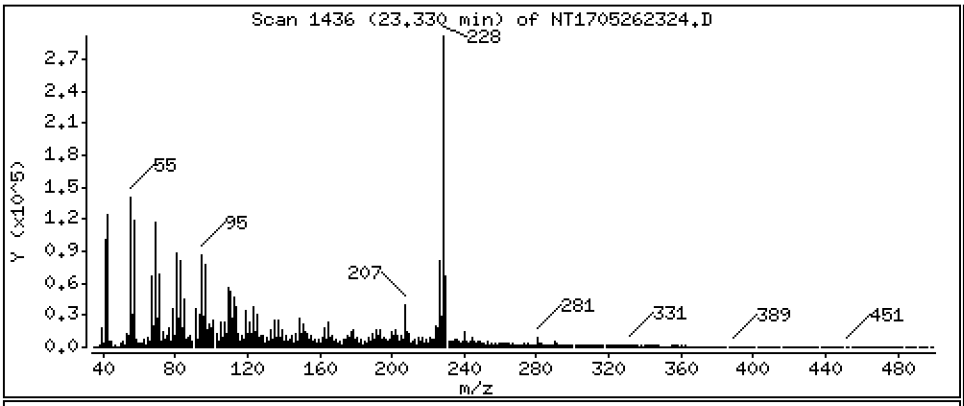
Operator: VTS

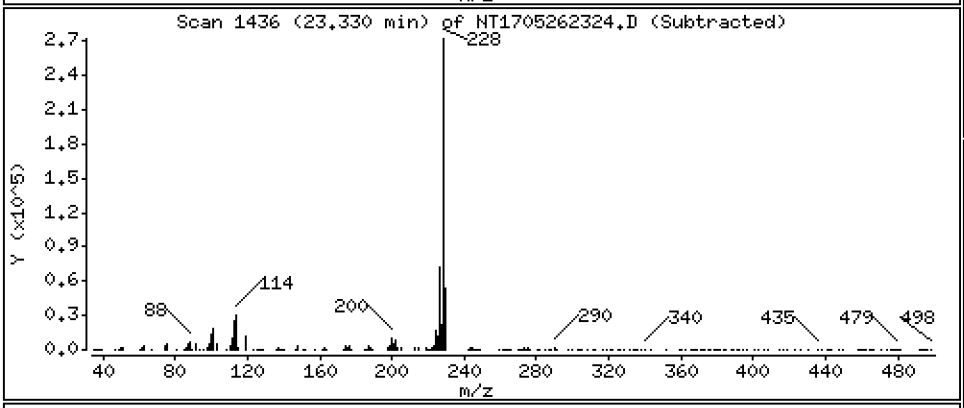
Column phase: ZB-5msi

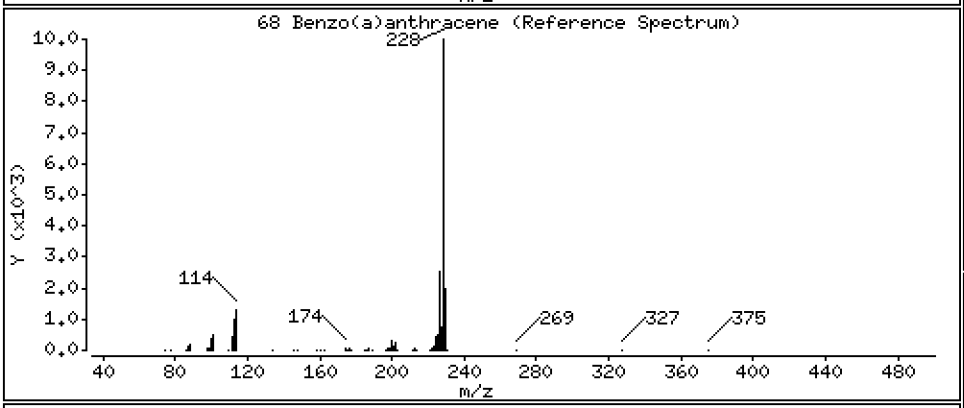
Column diameter: 0.25

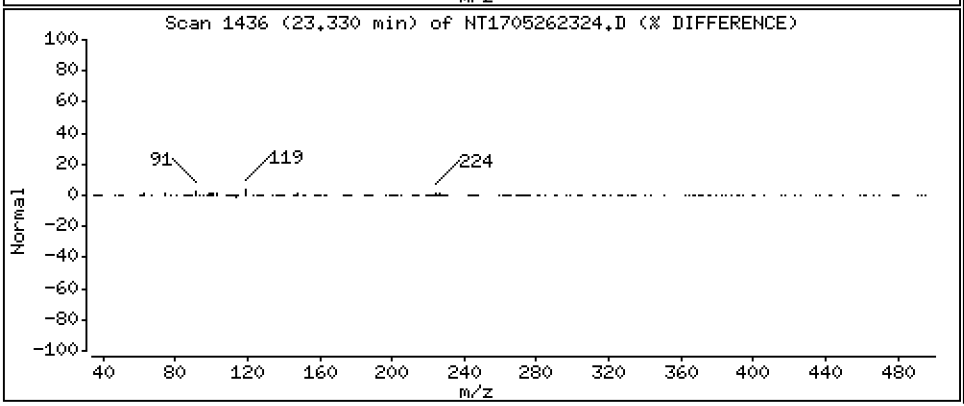
68 Benzo(a)anthracene

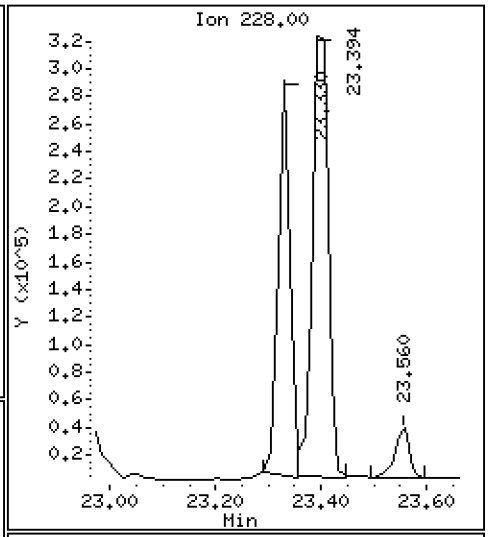
Concentration: 1.824 ug/mL

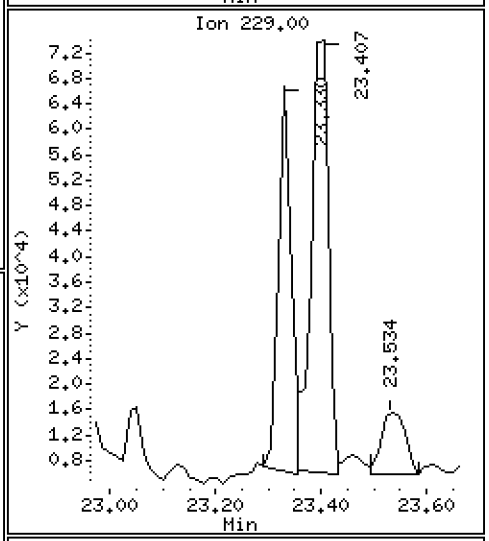


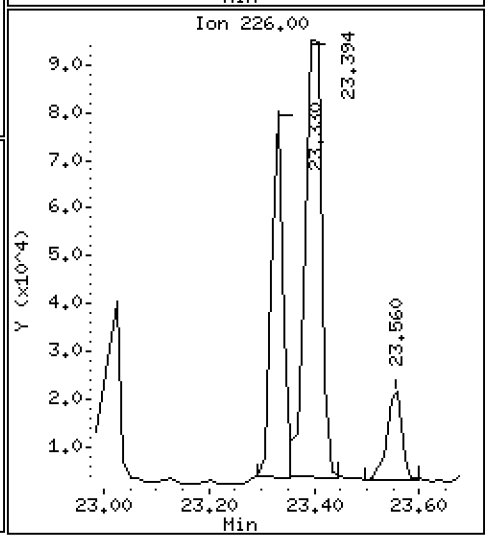












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

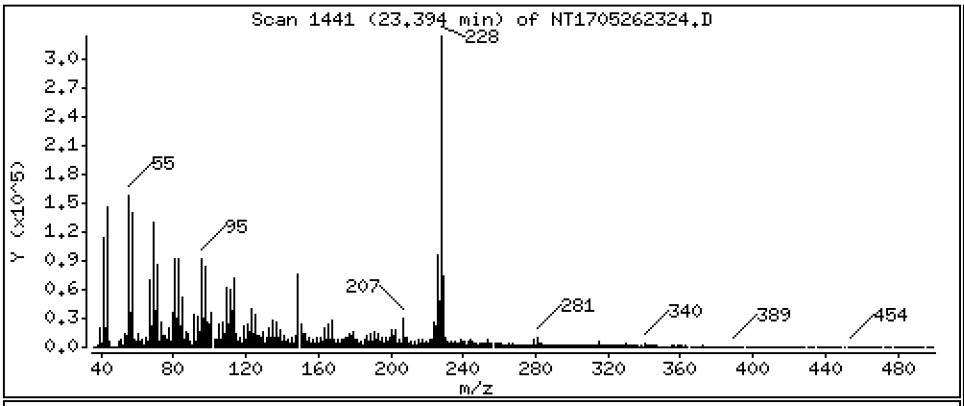
Operator: VTS

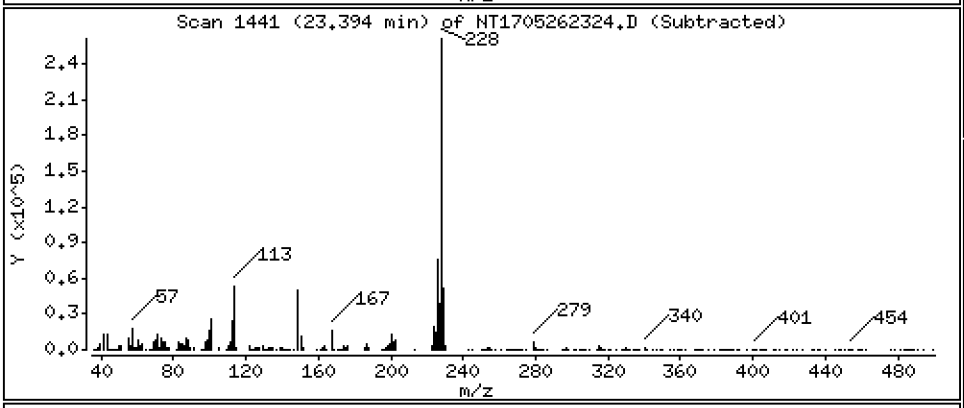
Column phase: ZB-5msi

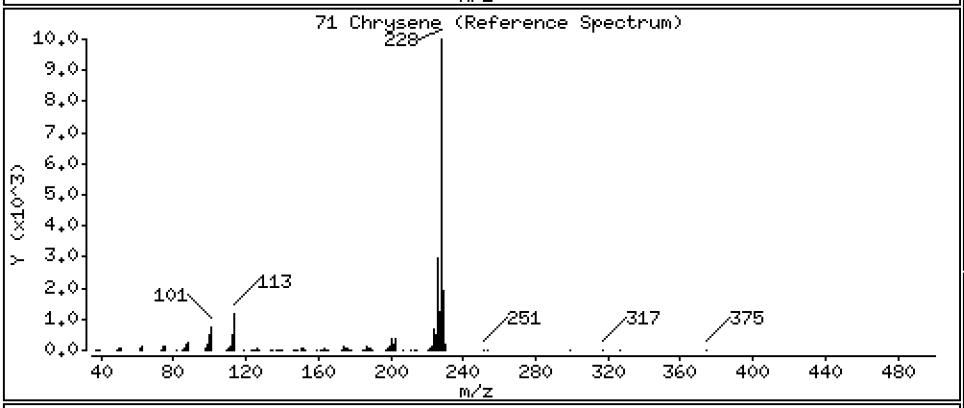
Column diameter: 0.25

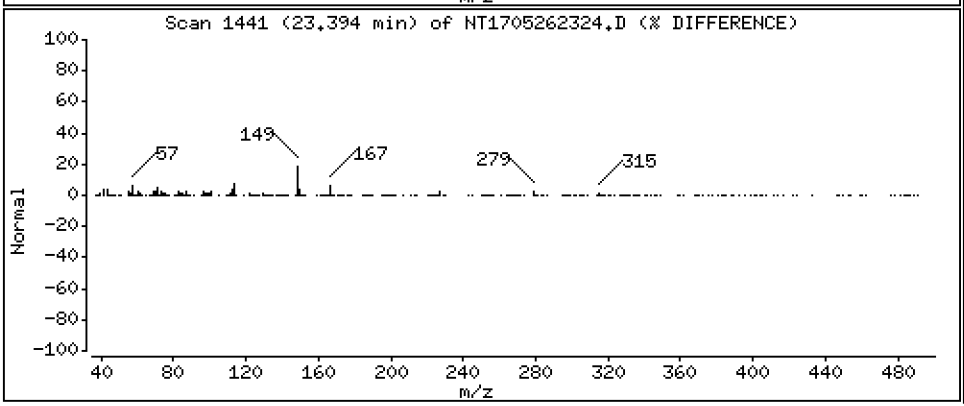
71 Chrysene

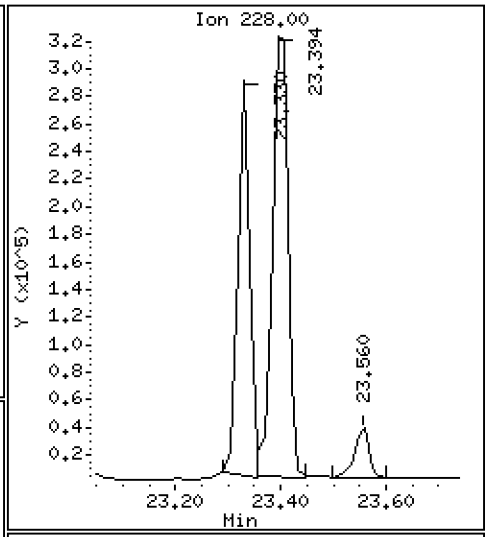
Concentration: 2.897 ug/mL

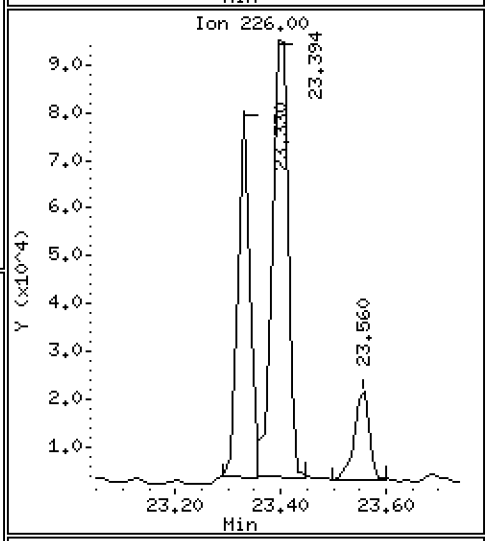


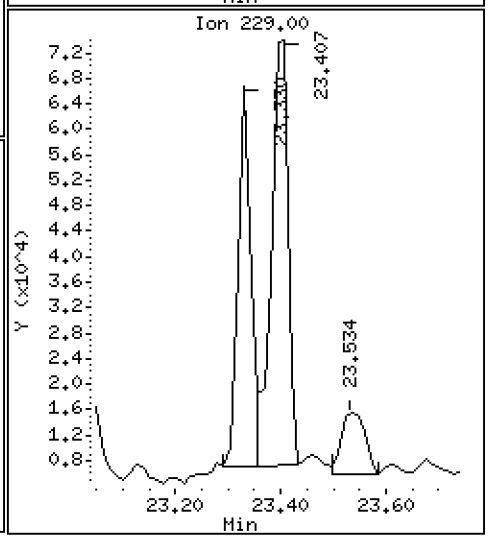












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

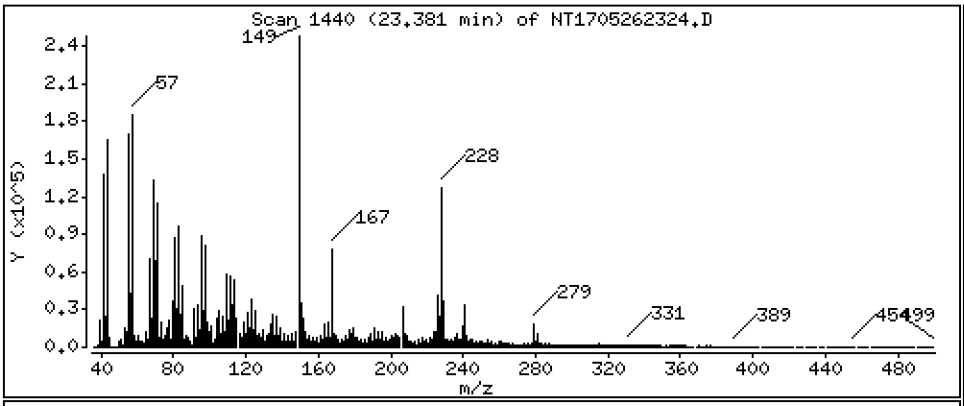
Operator: VTS

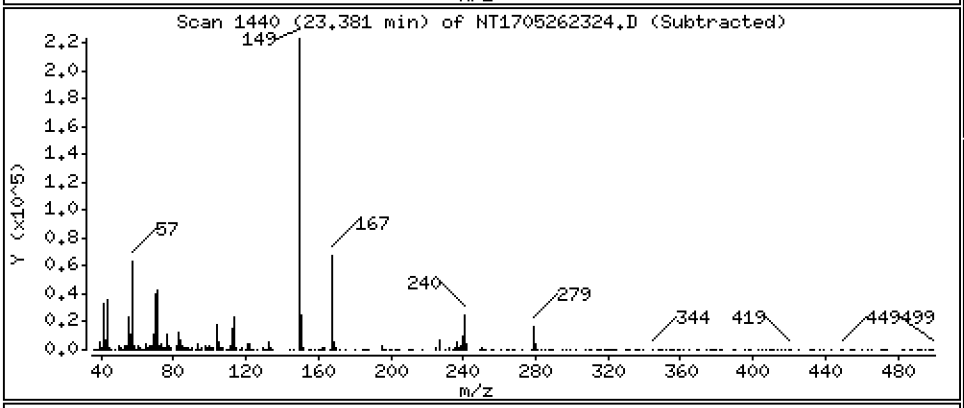
Column phase: ZB-5msi

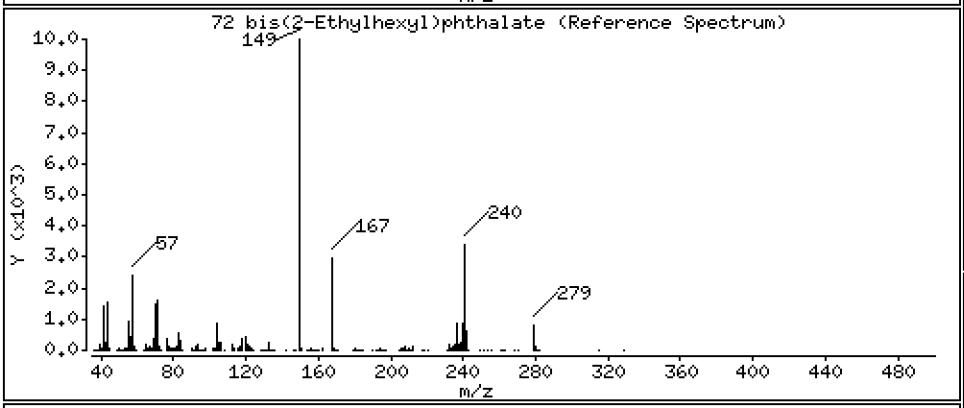
Column diameter: 0.25

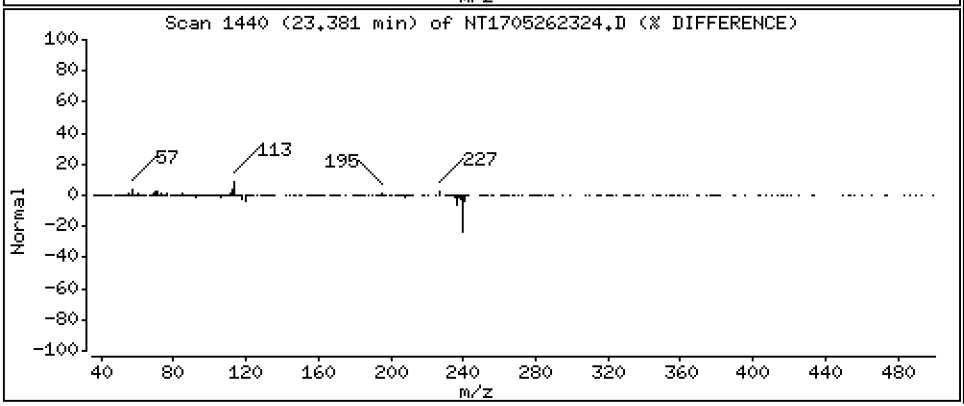
72 bis(2-Ethylhexyl)phthalate

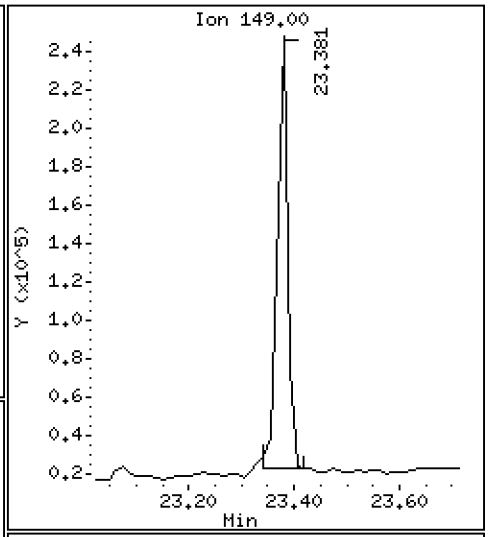
Concentration: 1.553 ug/mL

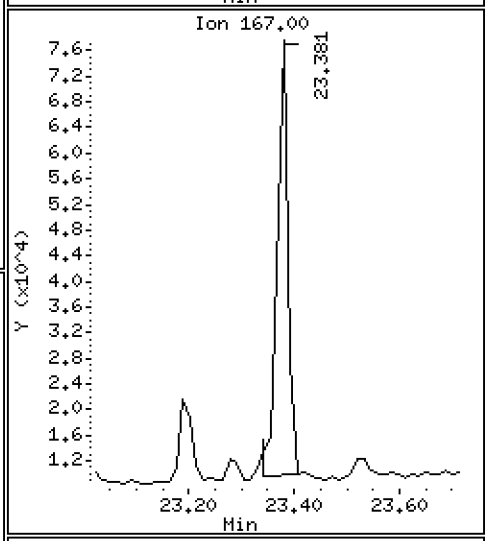


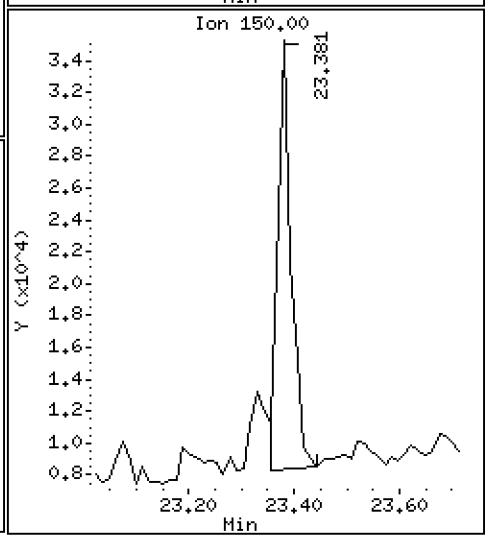












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

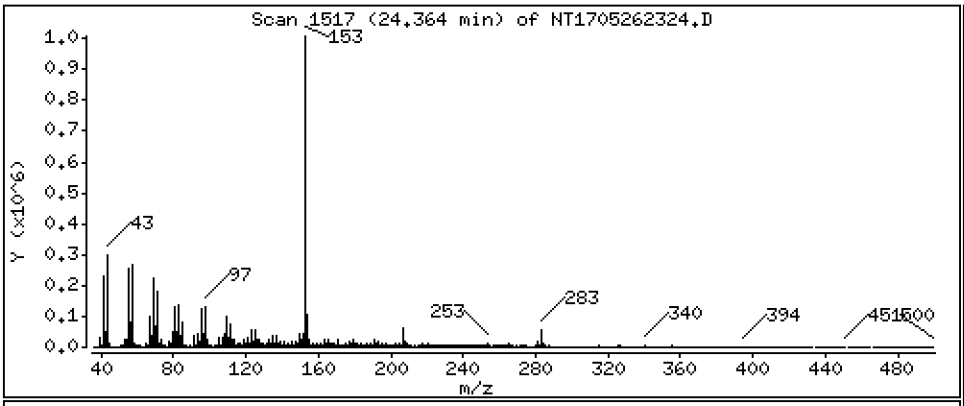
Operator: VTS

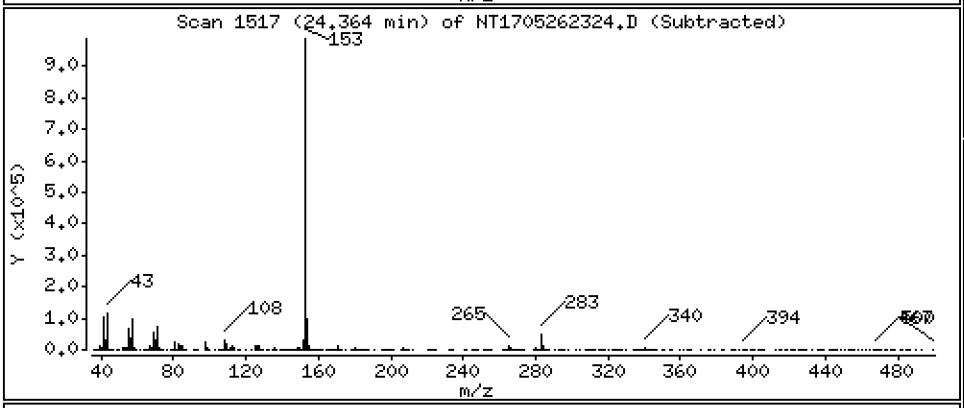
Column phase: ZB-5msi

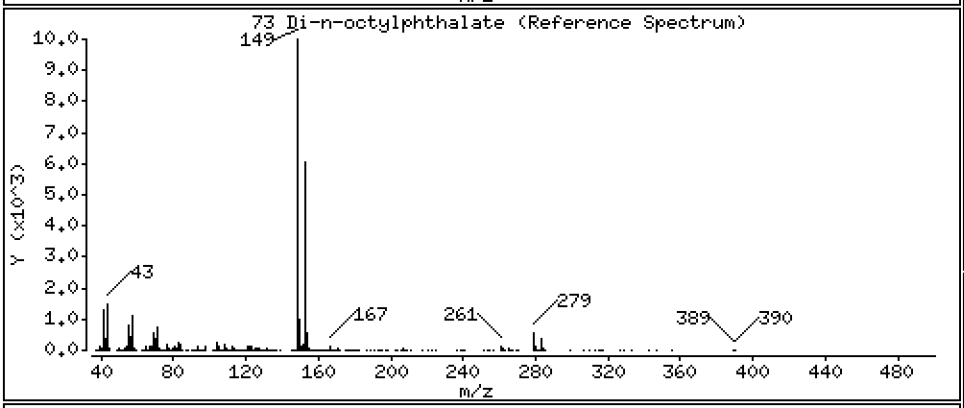
Column diameter: 0.25

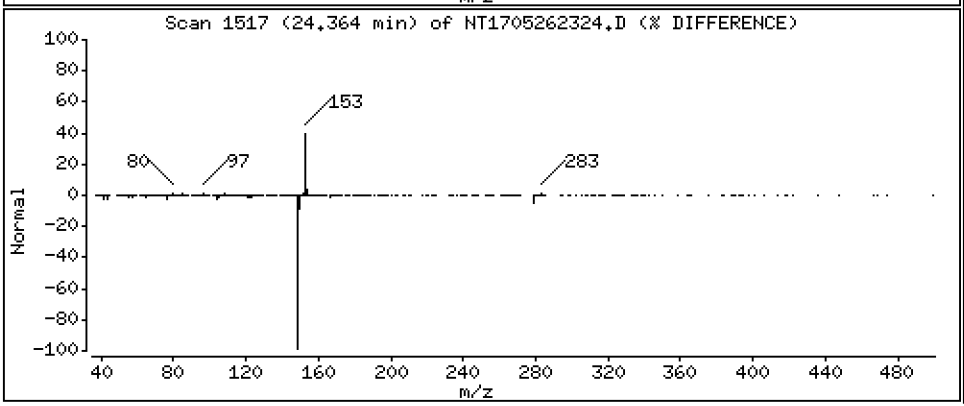
73 Di-n-octylphthalate

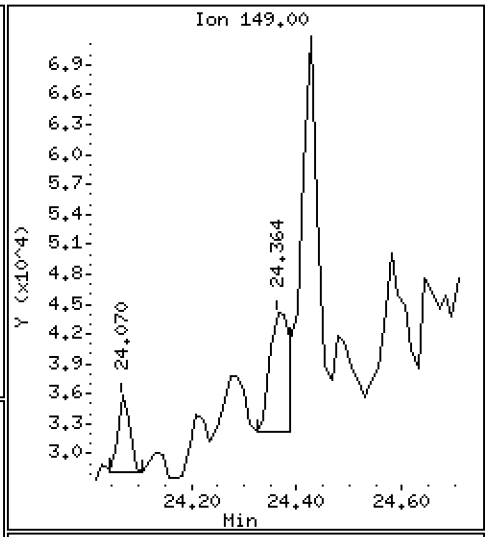
Concentration: 0.08650 ug/mL

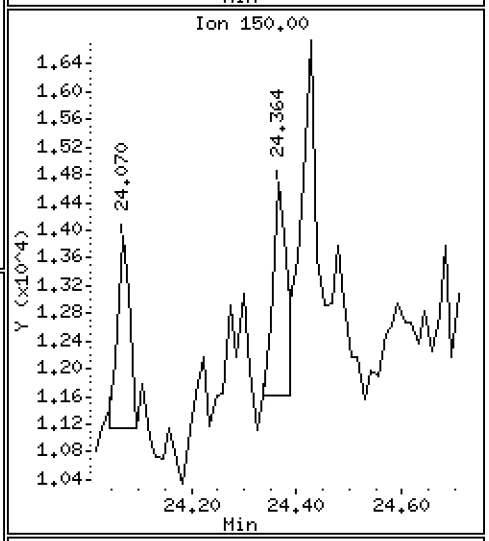


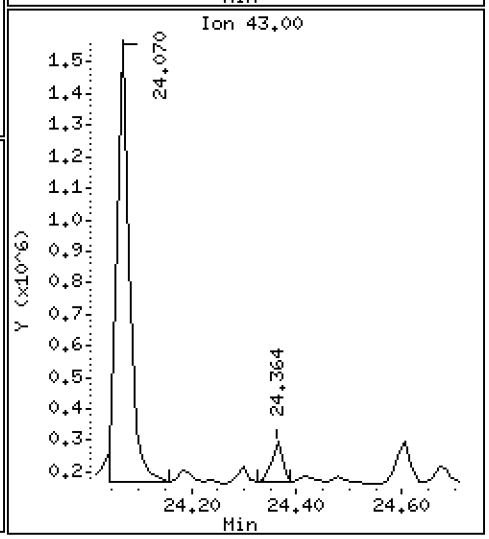












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

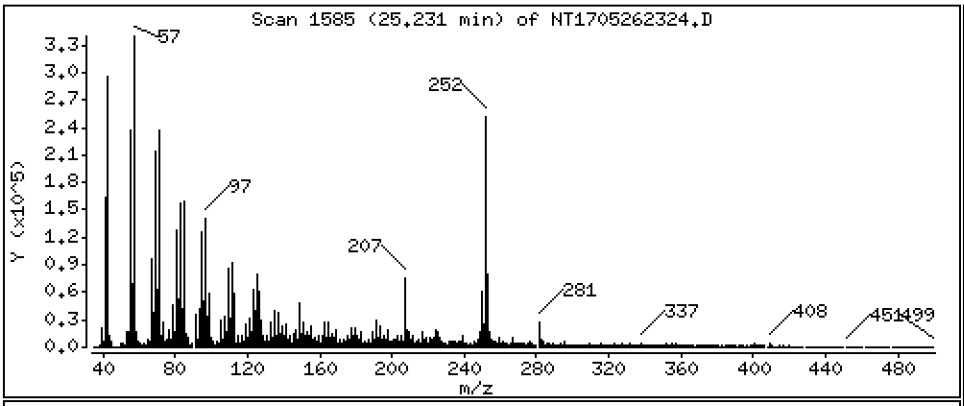
Operator: VTS

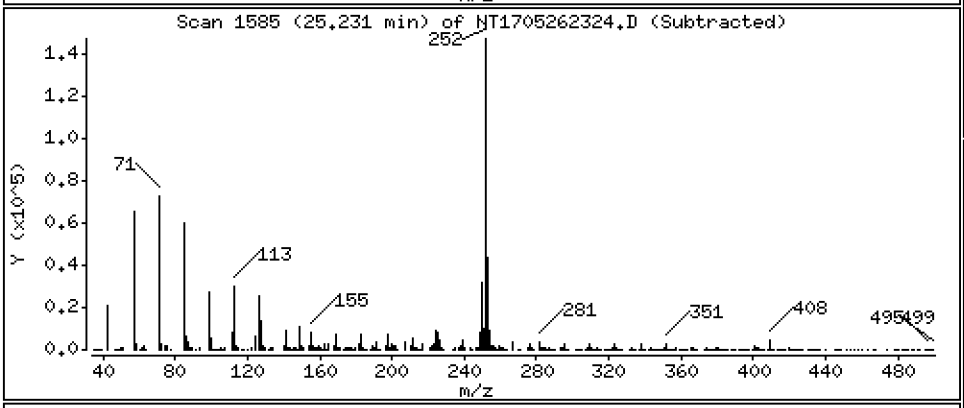
Column phase: ZB-5msi

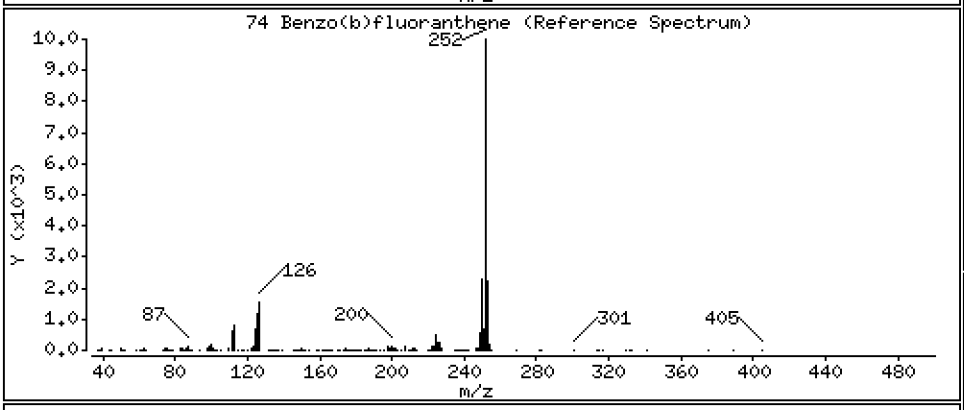
Column diameter: 0.25

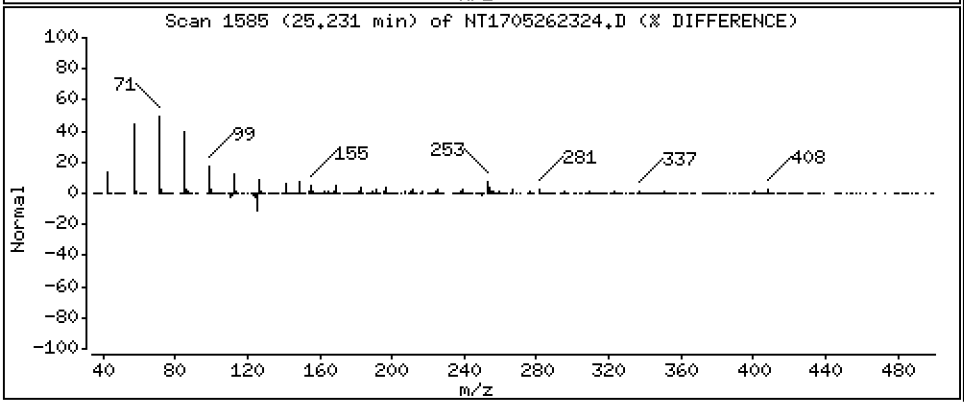
74 Benzo(b)fluoranthene

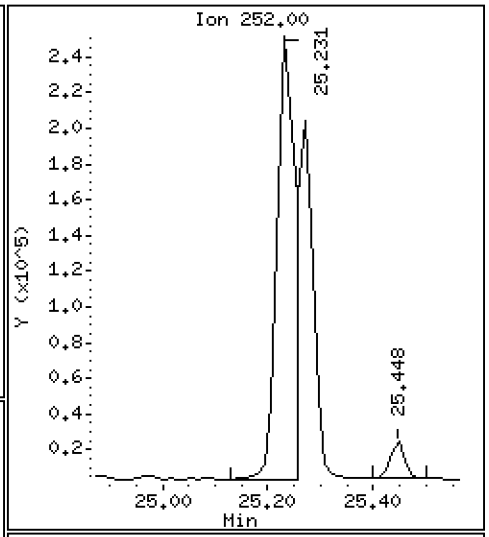
Concentration: 3.159 ug/mL

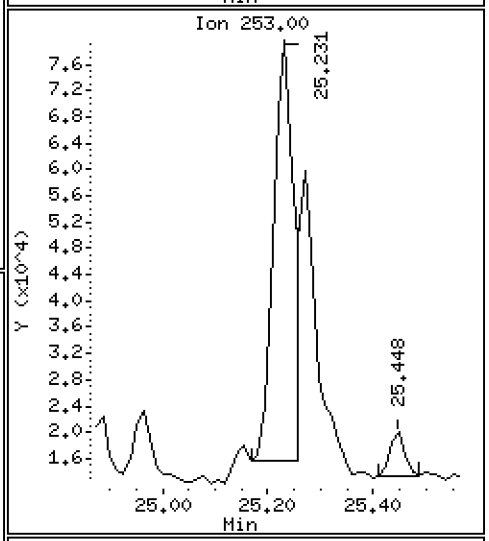


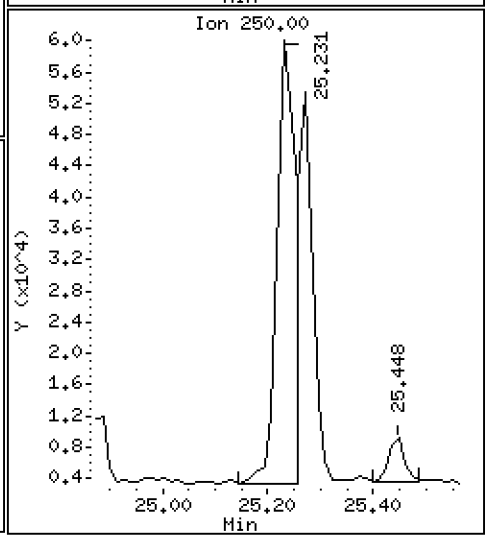












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

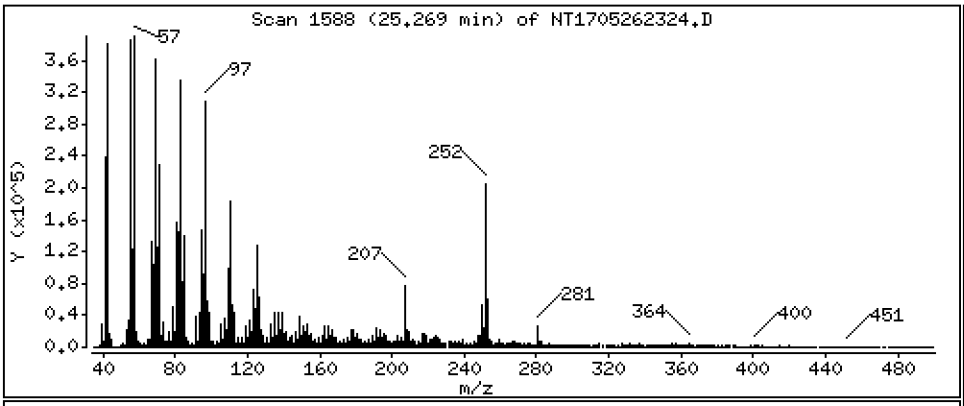
Operator: VTS

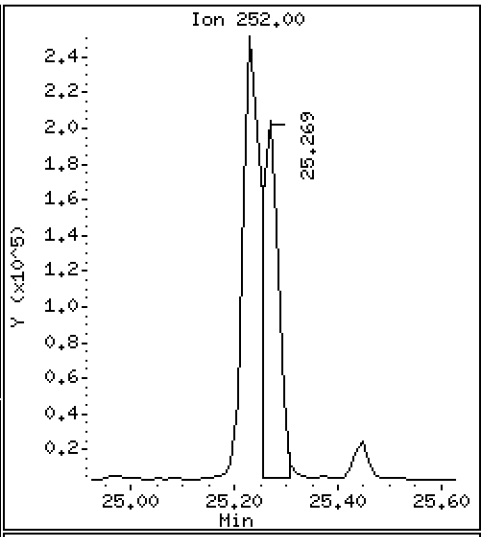
Column phase: ZB-5msi

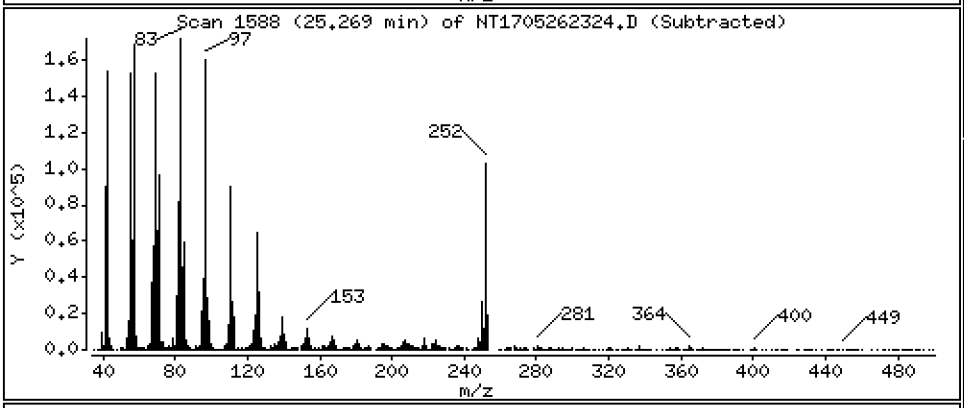
Column diameter: 0.25

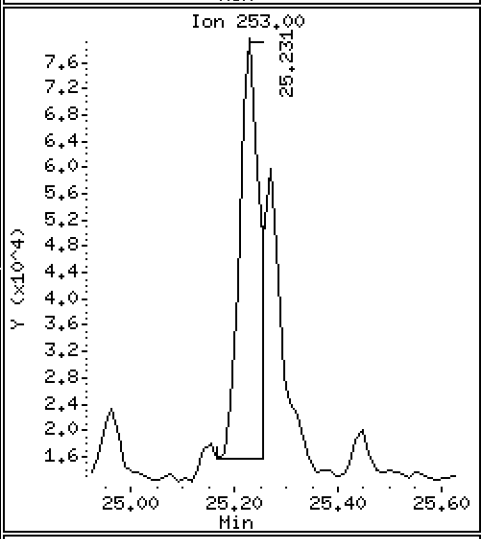
75 Benzo(k)fluoranthene

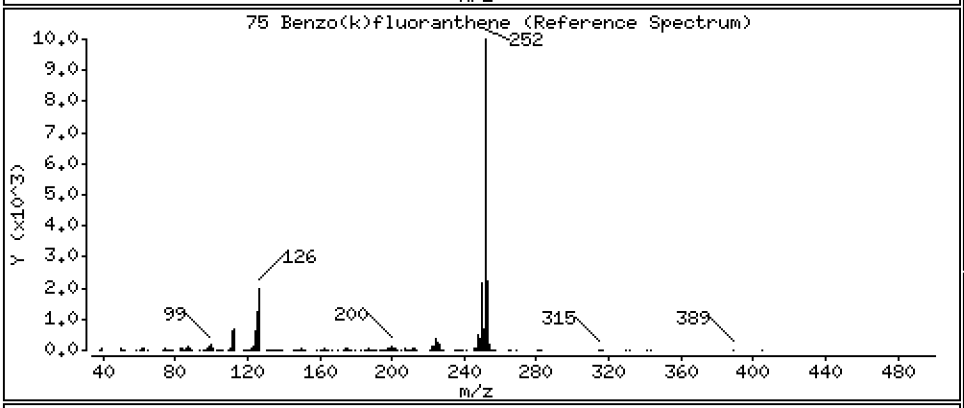
Concentration: 2.243 ug/mL

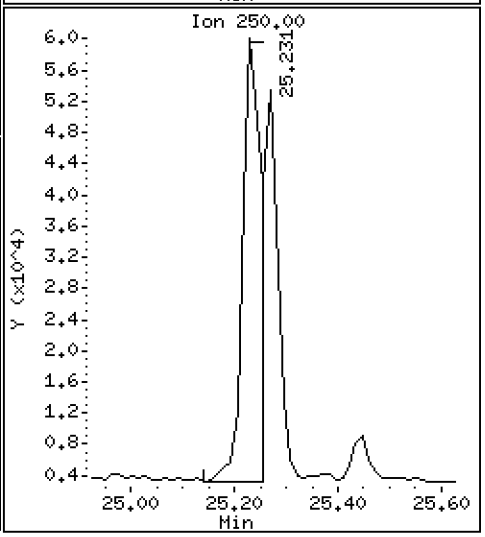


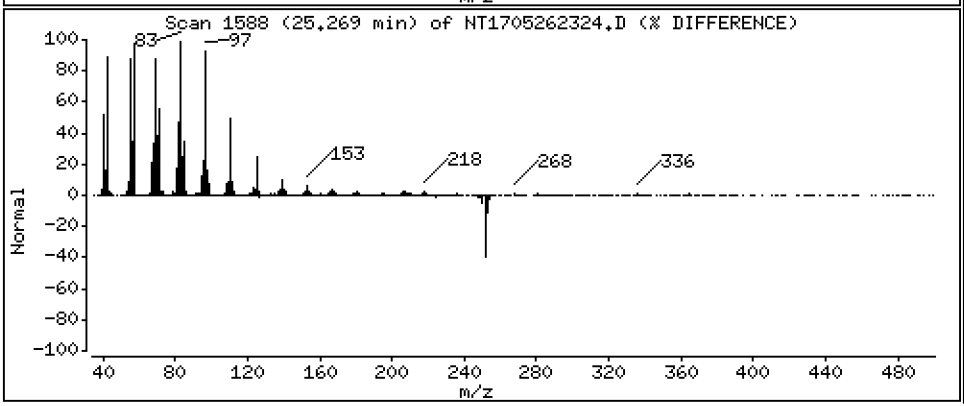












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

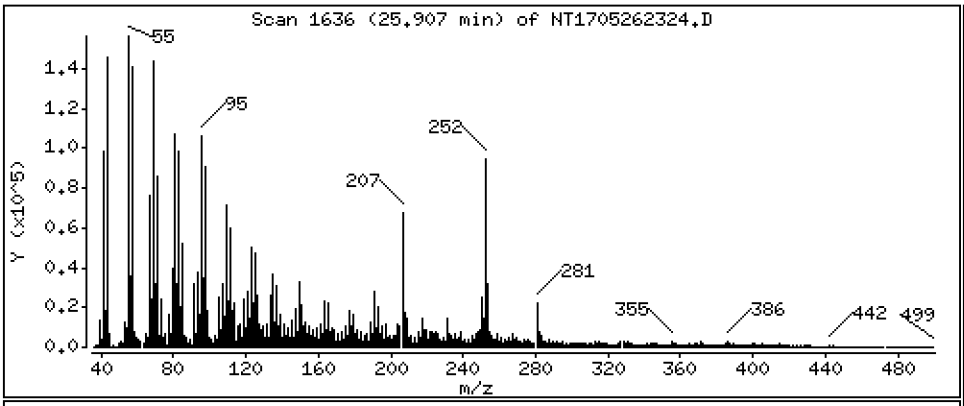
Operator: VTS

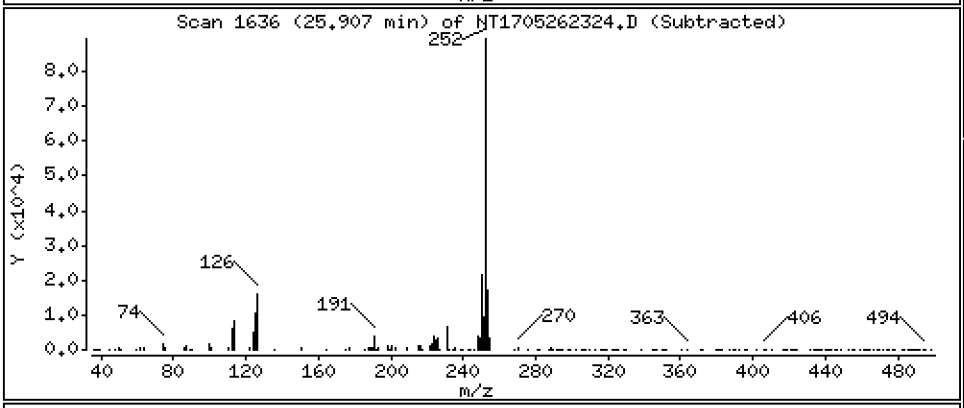
Column phase: ZB-5msi

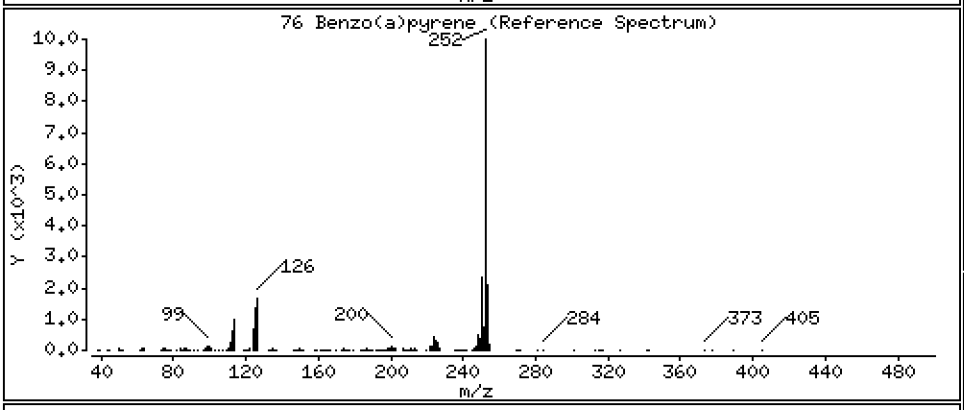
Column diameter: 0.25

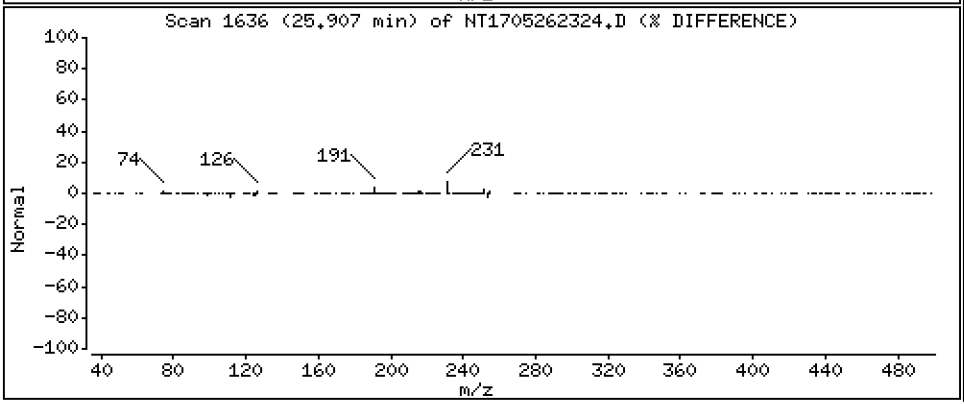
76 Benzo(a)pyrene

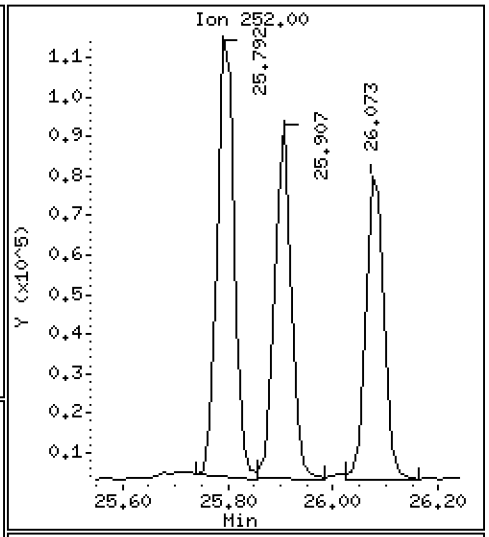
Concentration: 1.333 ug/mL

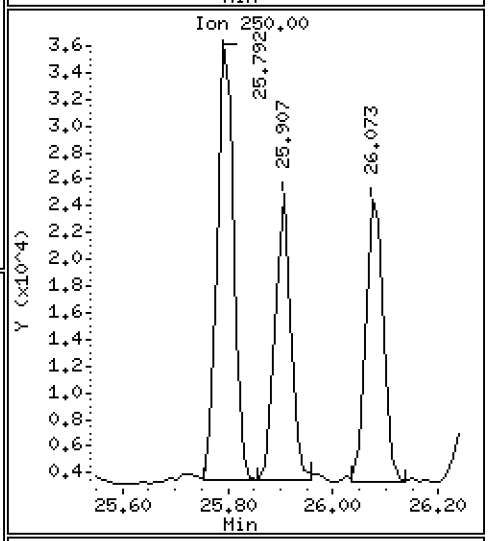


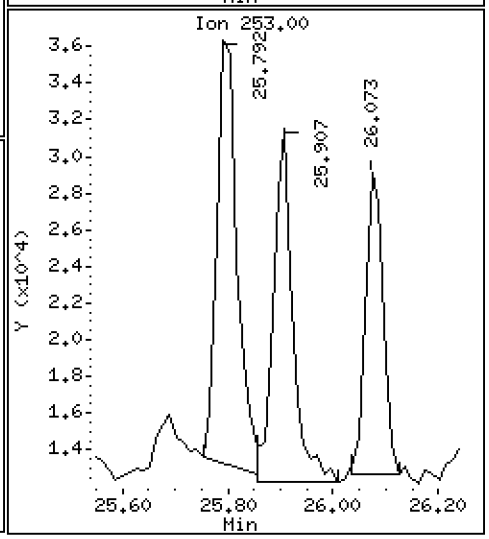












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

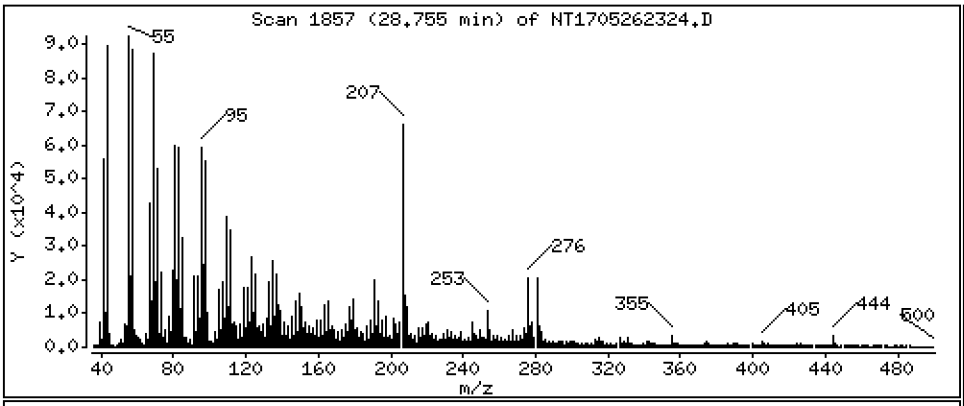
Operator: VTS

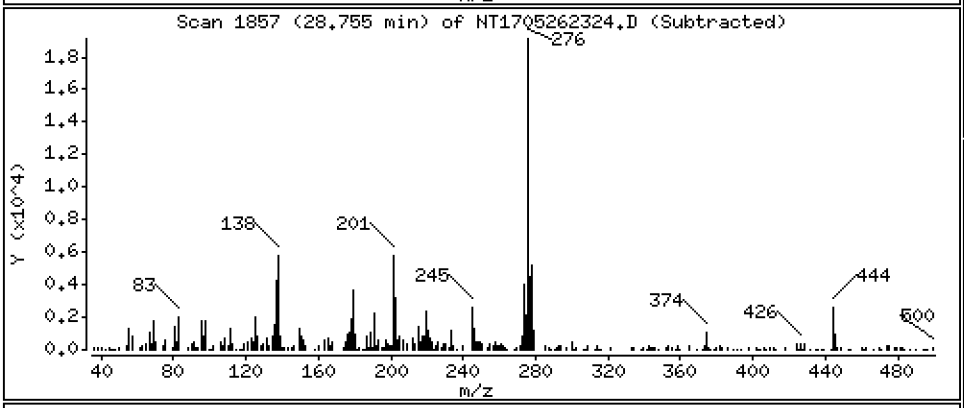
Column phase: ZB-5msi

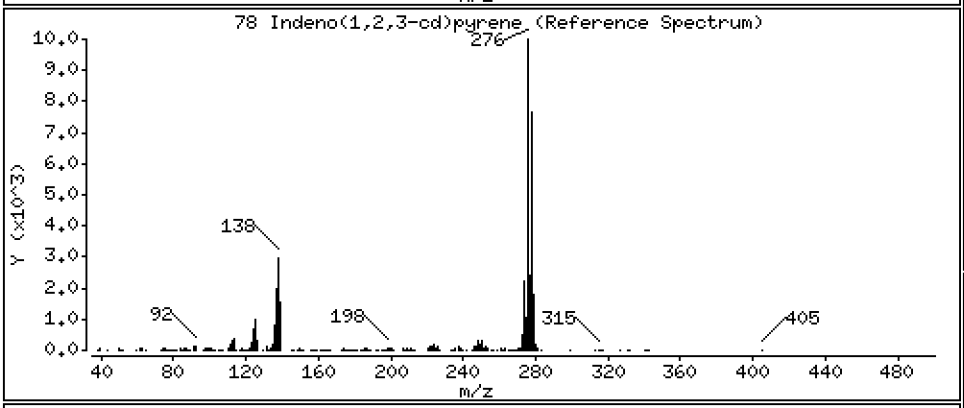
Column diameter: 0.25

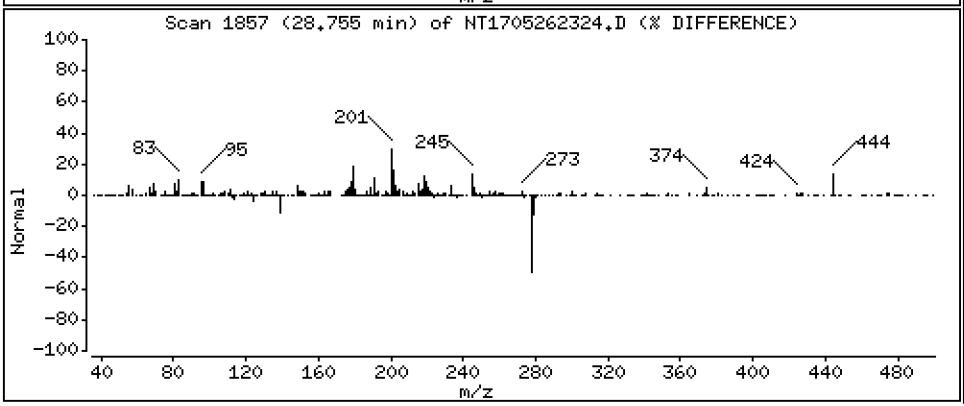
78 Indeno(1,2,3-cd)pyrene

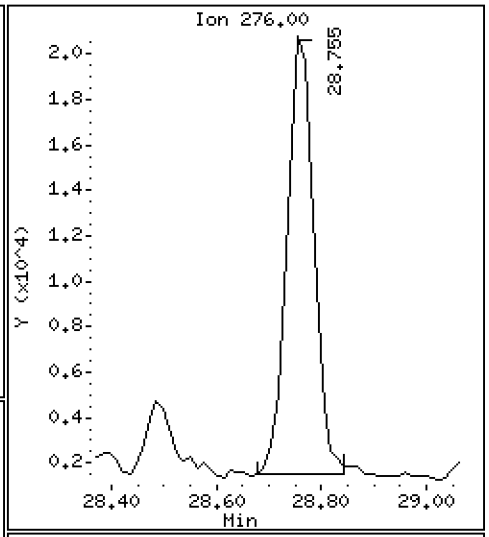
Concentration: 0.3790 ug/mL

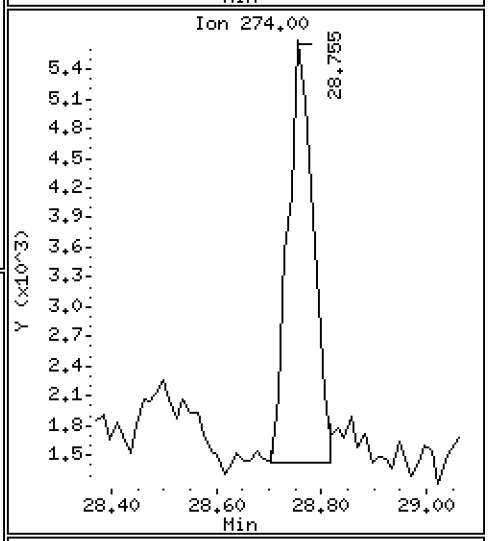


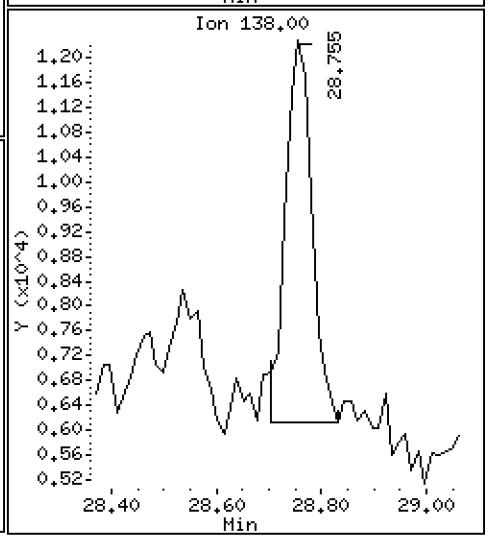












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

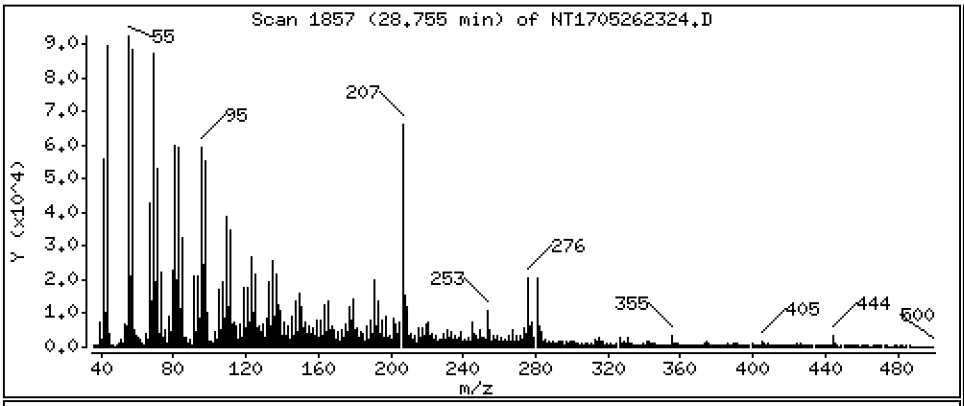
Operator: VTS

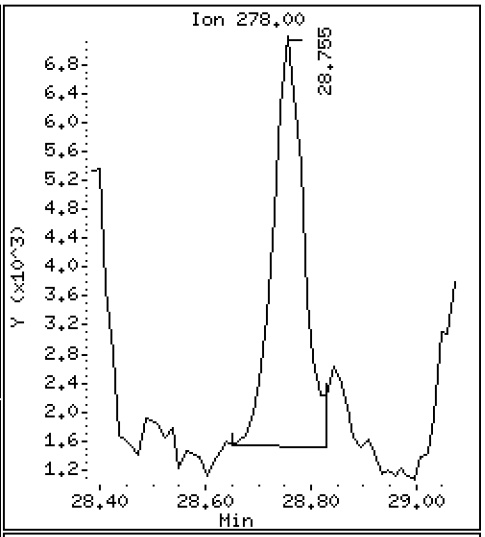
Column phase: ZB-5msi

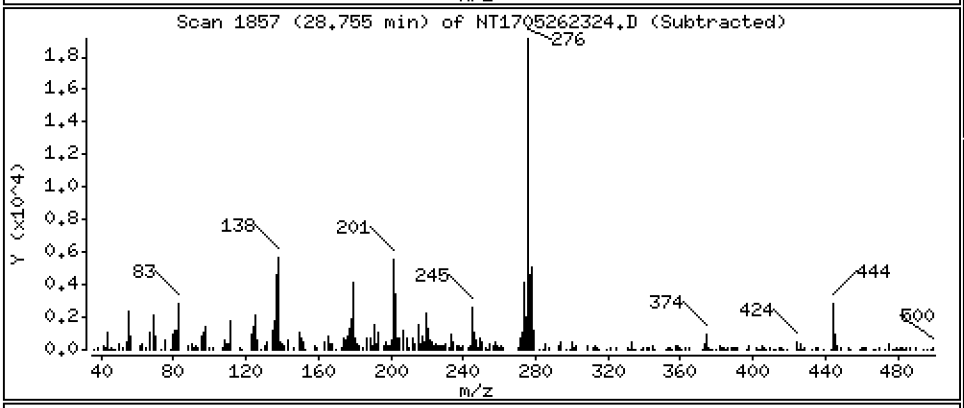
Column diameter: 0.25

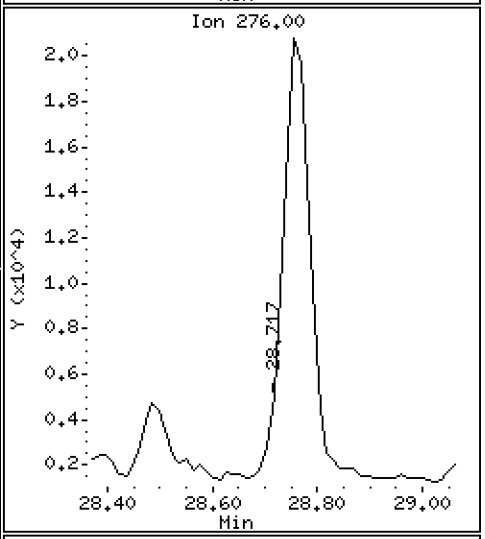
79 Dibenzo(a,h)anthracene

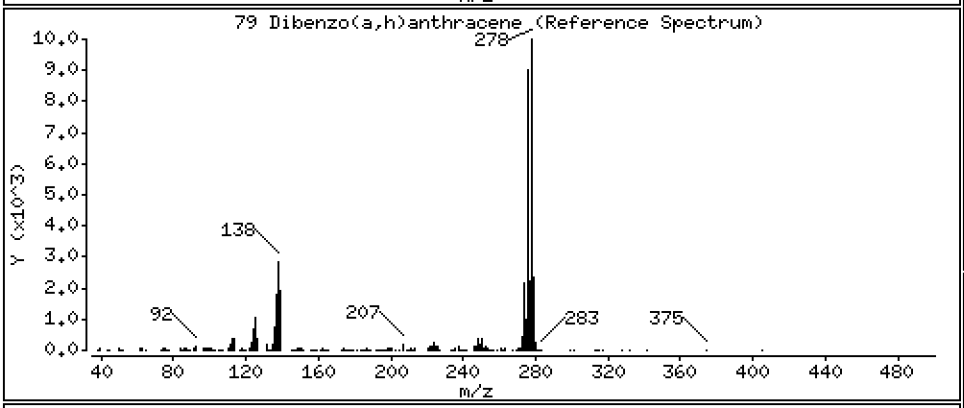
Concentration: 0.1524 ug/mL

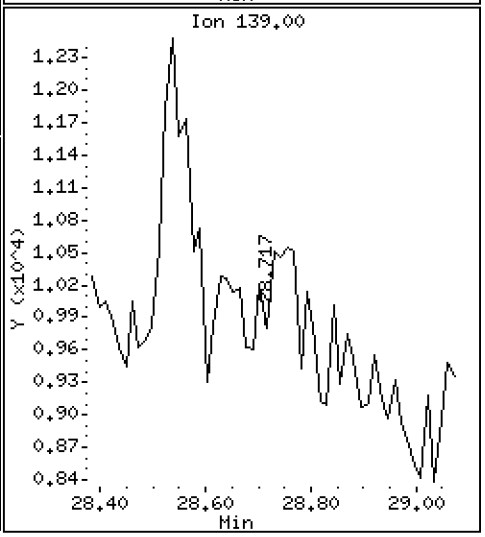


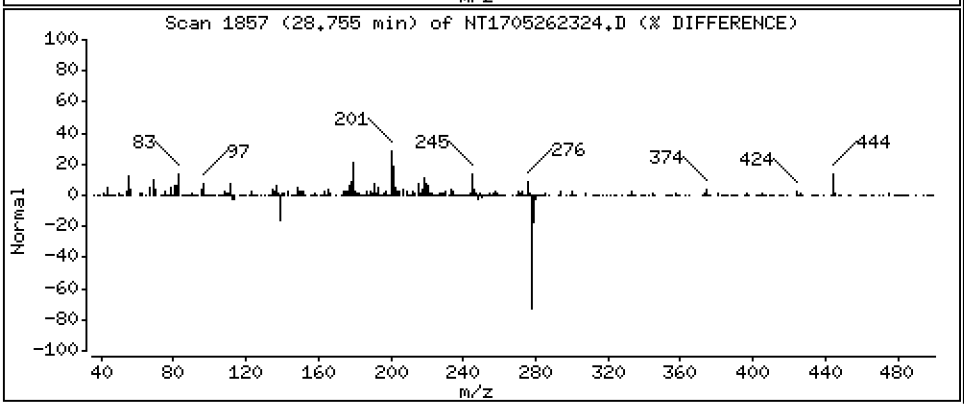












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

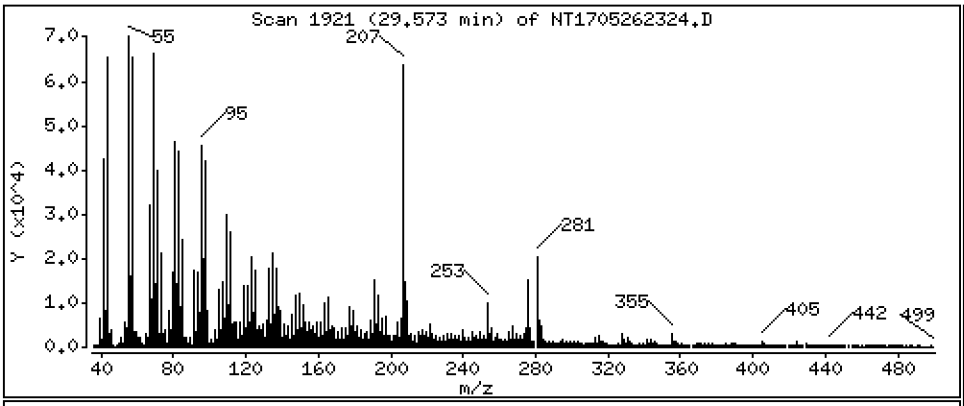
Operator: VTS

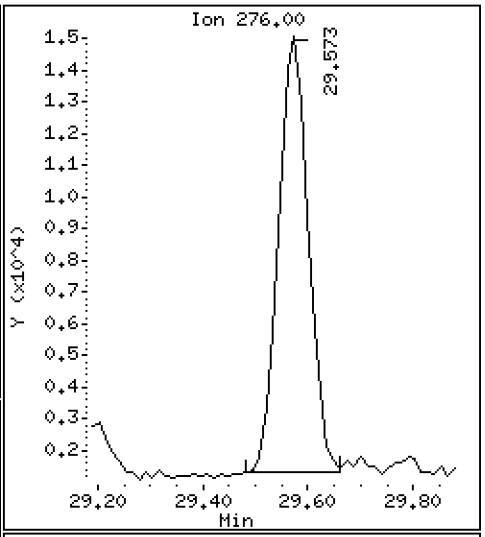
Column phase: ZB-5msi

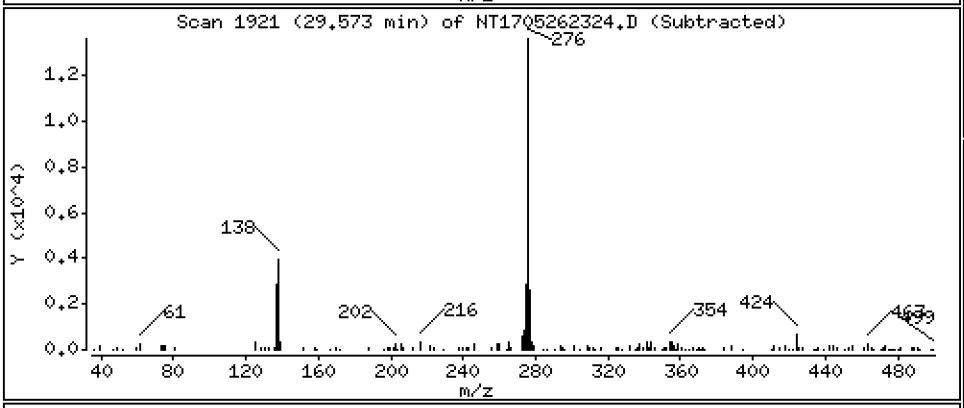
Column diameter: 0.25

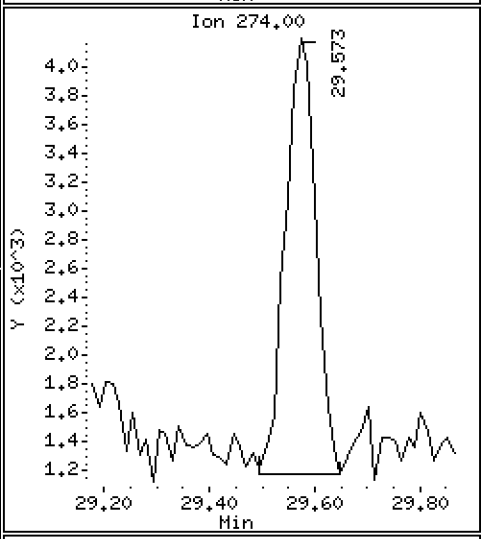
80 Benzo(g,h,i)perylene

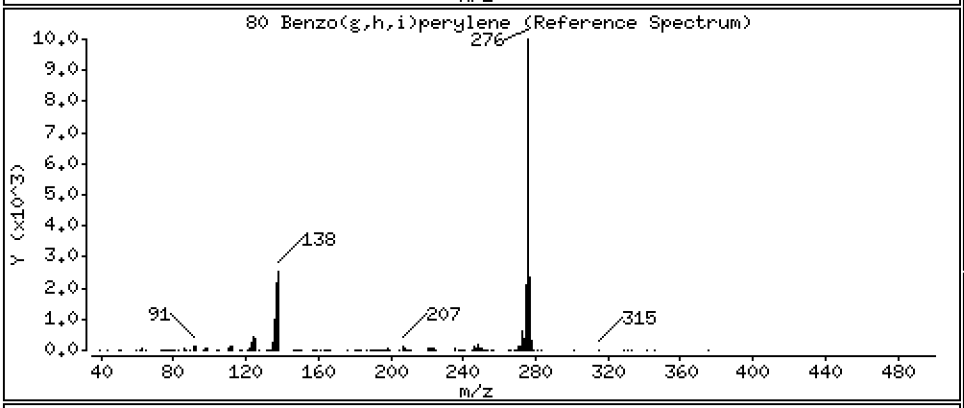
Concentration: 0.3613 ug/mL

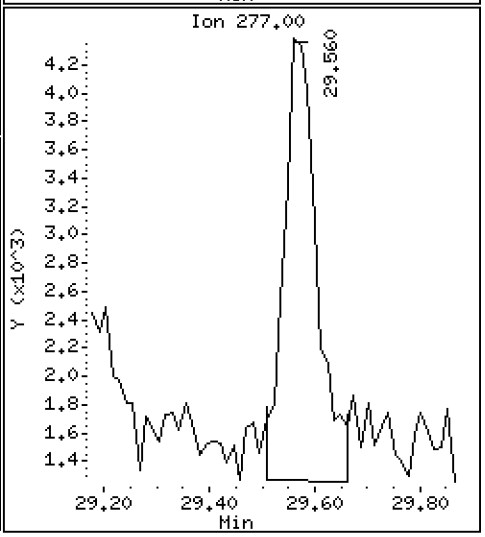


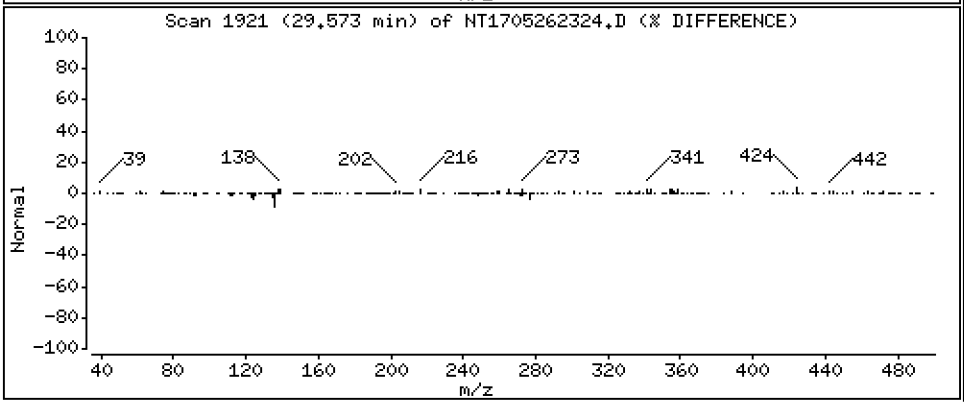












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

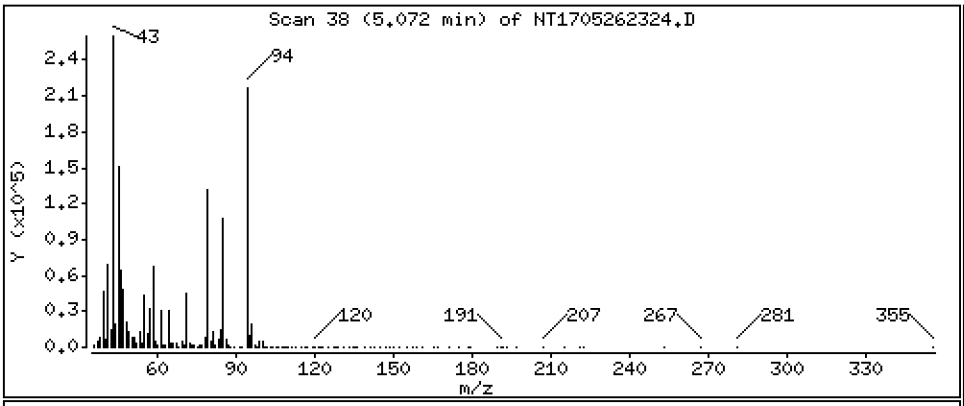
Operator: VTS

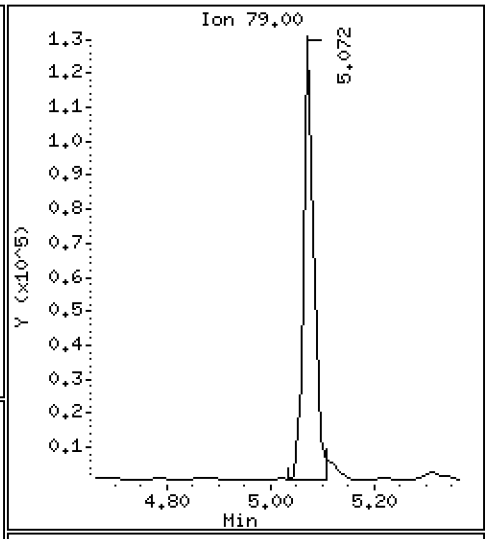
Column phase: ZB-5msi

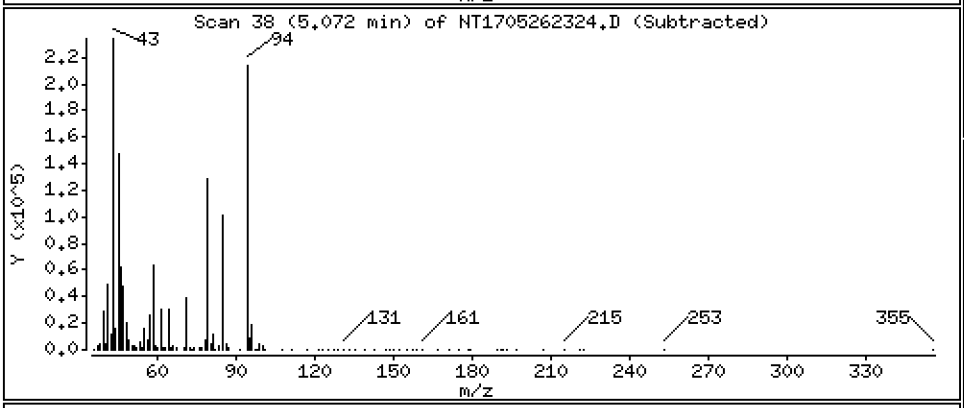
Column diameter: 0.25

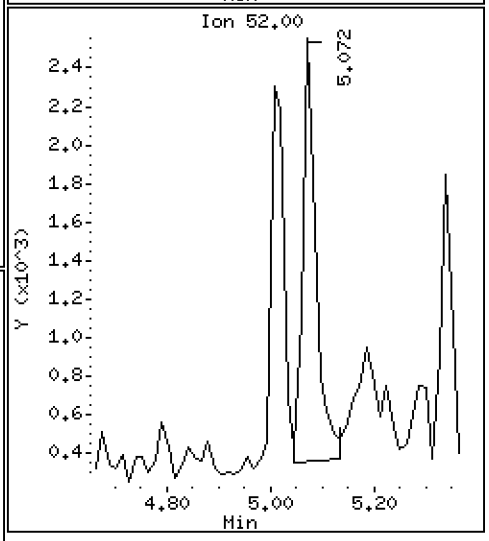
103 Pyridine

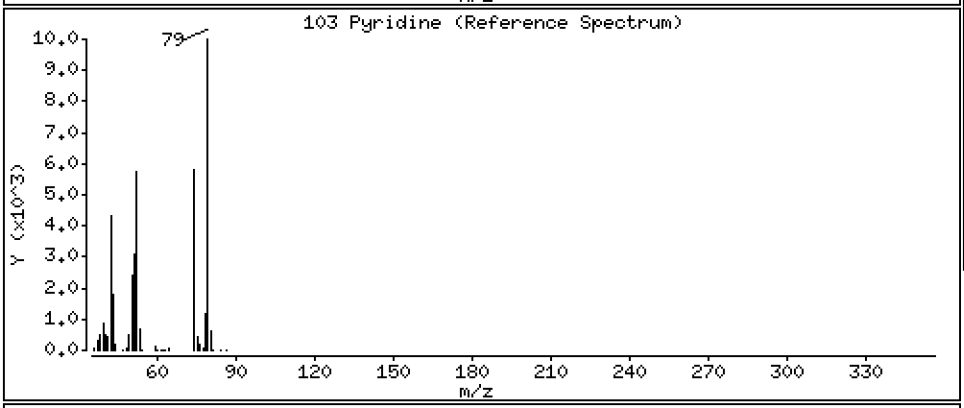
Concentration: 1.793 ug/mL

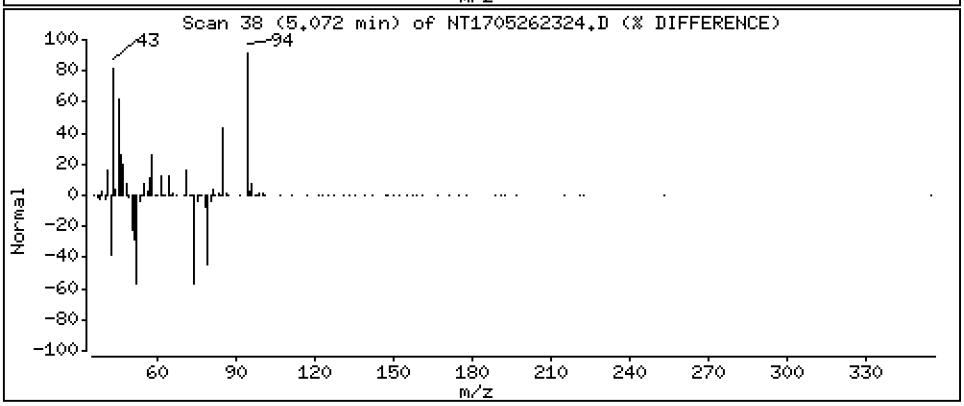












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

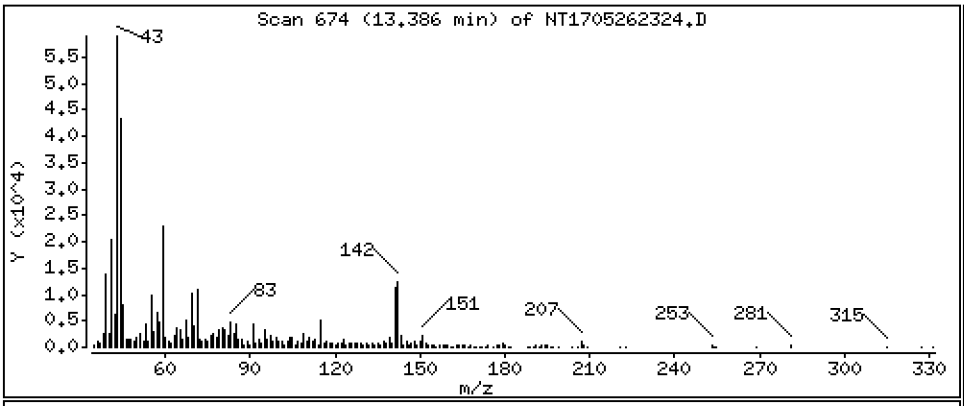
Operator: VTS

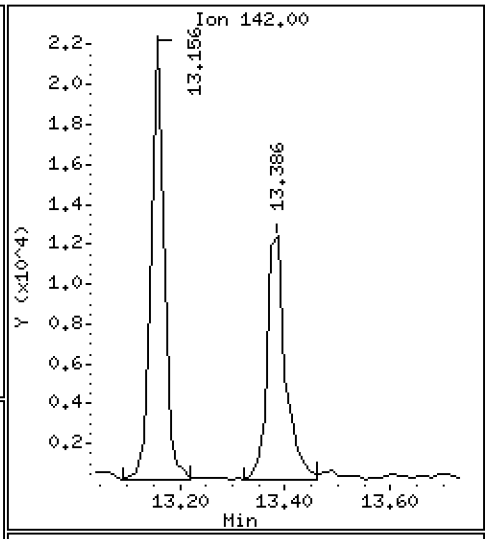
Column phase: ZB-5msi

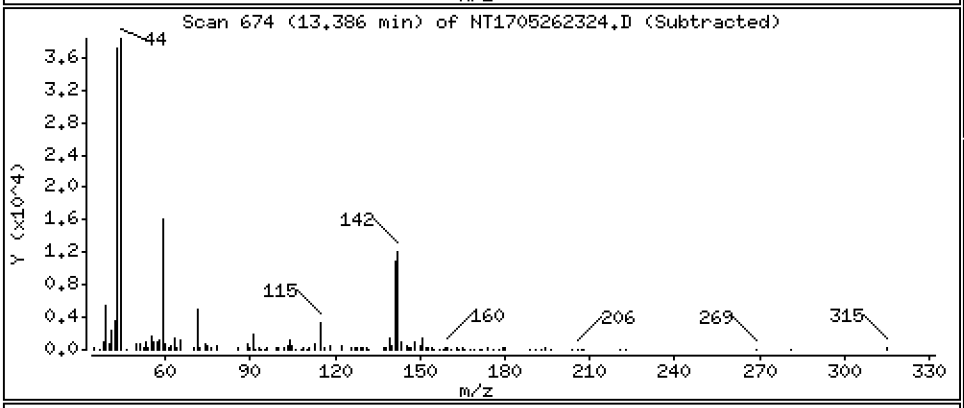
Column diameter: 0.25

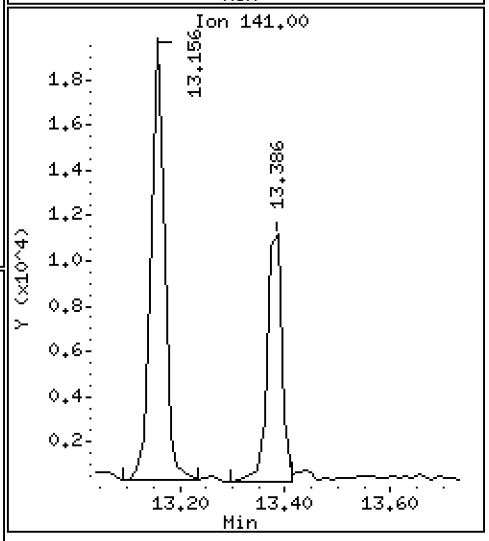
105 1-methylnaphthalene

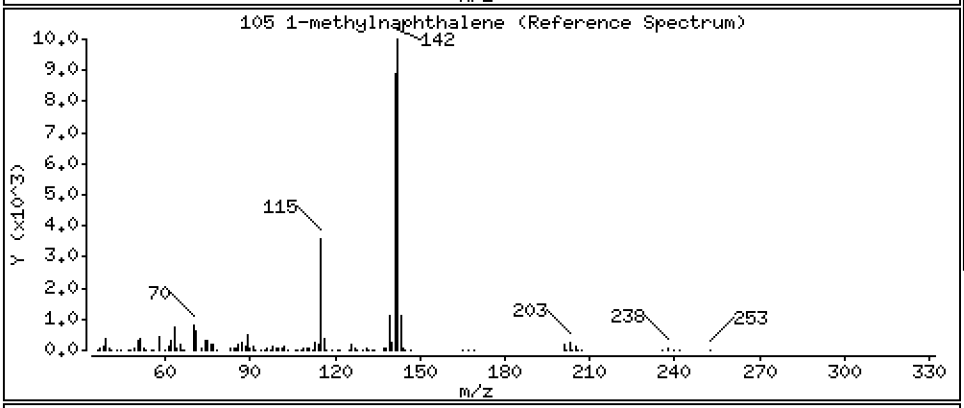
Concentration: 0.1515 ug/mL

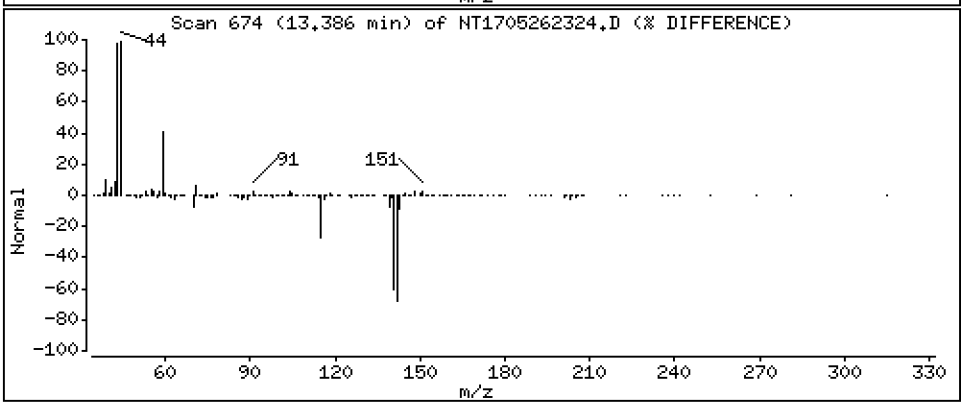












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262324.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

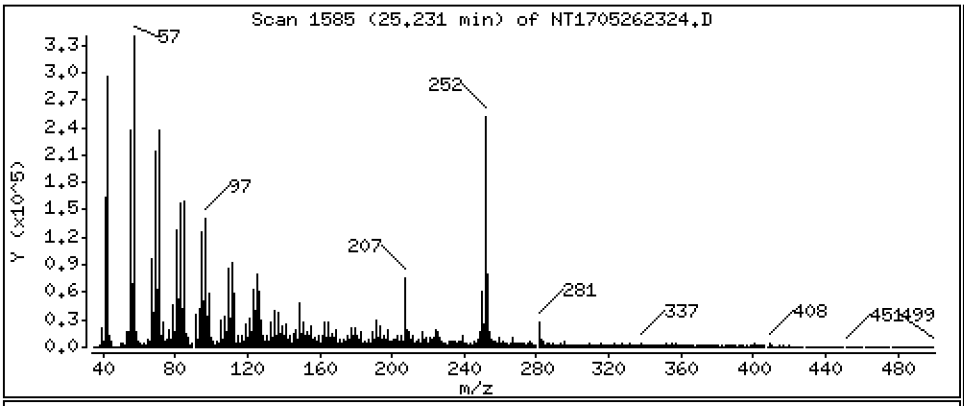
Operator: VTS

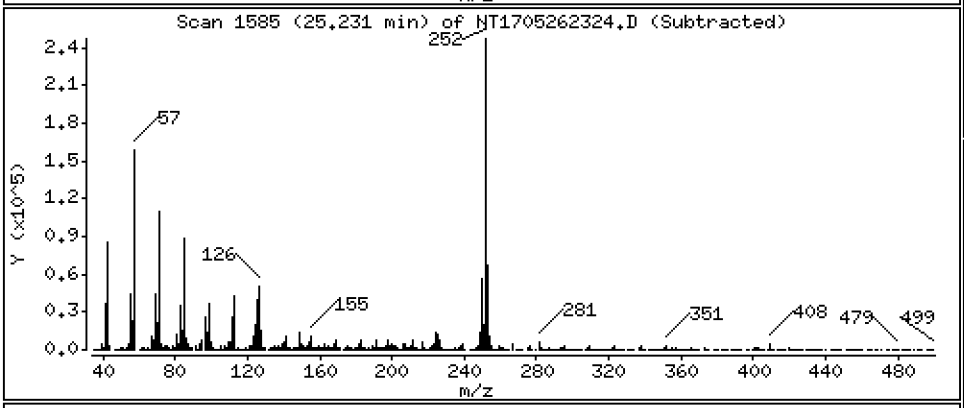
Column phase: ZB-5msi

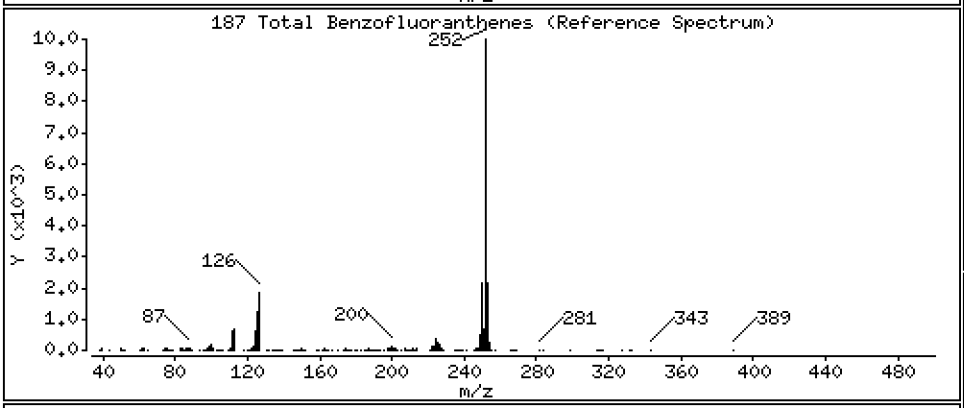
Column diameter: 0.25

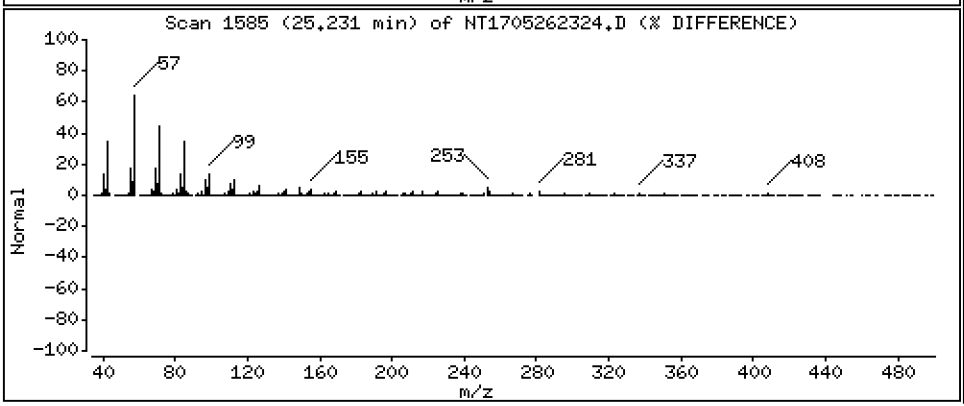
187 Total Benzofluoranthenes

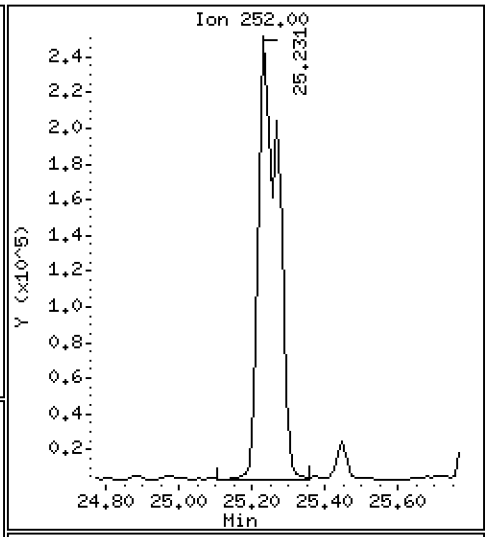
Concentration: 5.271 ug/mL

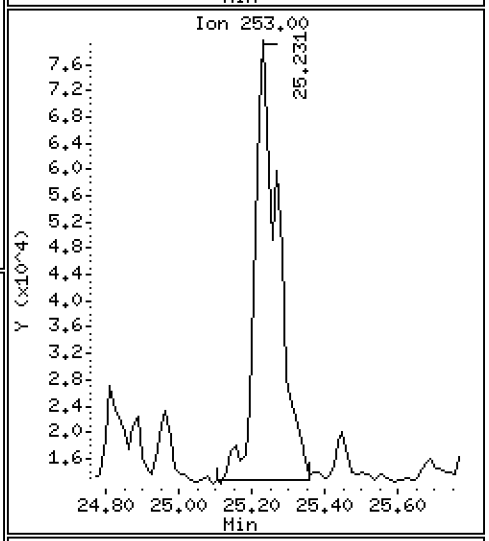


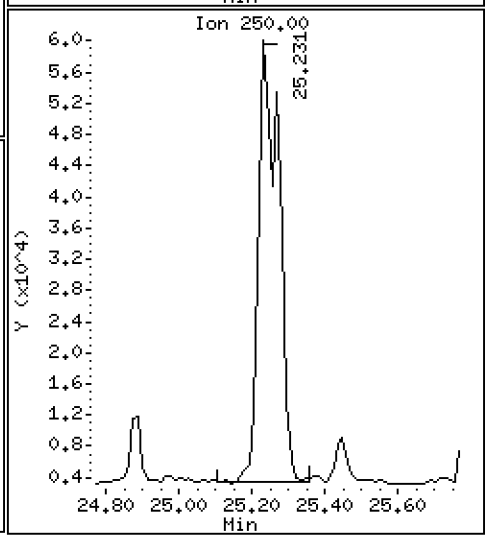












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262324.D
Lab Smp Id: 23D0396-03
Inj Date : 27-MAY-2023 03:02
Operator : VTS Inst ID: nt17.i
Smp Info : 23D0396-03
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 13:34 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.122	7.071	(0.769)	519946	5.18791	5.188
$	2 Phenol-d5	99	8.651	8.639	(0.934)	703863	5.30689	5.307
	3 Phenol	94	8.677	8.664	(0.937)	22225	0.15820	0.1582
$	5 2-Chlorophenol-d4	132	8.919	8.919	(0.963)	582898	5.48670	5.487
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	Compound Not Detected.					
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	306165	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	245517	3.28793	3.288
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.544	9.544	(1.030)	24047	0.36766	0.3677
	14 2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
	13 2-Methylphenol	108	Compound Not Detected.					
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	10.042	10.030	(1.084)	17346	0.16500	0.1650
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	462355	3.74574	3.746
	19 Nitrobenzene	77	Compound Not Detected.					
	20 Isophorone	82	Compound Not Detected.					
	21 2-Nitrophenol	139	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	11.217	11.320	(0.956)	40967	0.55274	0.5527
	25 2,4-Dichlorophenol	162	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1084556	4.00000	
	28 Naphthalene	128	11.766	11.779	(1.003)	51208	0.17169	0.1717
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	31 4-Chloro-3-methylphenol	107	Compound Not Detected.					
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	38446	0.18003	0.1800
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	859382	4.12769	4.128
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	14.826	14.827	(0.968)	12071	0.06638	0.06638
	40	Acenaphthylene	152	15.018	15.018	(0.980)	36777	0.13711	0.1371
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	528488	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.387	15.388	(1.004)	38452	0.22934	0.2293
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.719	15.719	(1.026)	72279	0.30887	0.3089
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	16.267	16.267	(1.062)	29173	0.16451	0.1645
	49	Fluorene	166	16.420	16.420	(1.072)	84327	0.37903	0.3790
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.967	16.967	(1.107)	131792	5.71705	5.717
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.356	18.343	(1.000)	828842	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.002)	335178	1.38593	1.386
	61	Anthracene	178	18.483	18.484	(1.007)	148732	0.65505	0.6551
	62	Carbazole	167	18.828	18.828	(1.026)	27077	0.19693	0.1969
	63	Di-n-butylphthalate	149	19.593	19.580	(1.067)	13688	0.04993	0.04993
	64	Fluoranthene	202	20.766	20.753	(0.889)	929966	2.97197	2.972
	65	Pyrene	202	21.187	21.187	(0.907)	830169	2.61711	2.617
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	718799	3.18762	3.188
	67	Butylbenzylphthalate	149	22.360	22.361	(0.957)	19214	0.13534	0.1353
	68	Benzo(a)anthracene	228	23.330	23.317	(0.999)	449330	1.82414	1.824
*	69	Chrysene-d12	240	23.355	23.356	(1.000)	668942	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	23.394	23.394	(1.002)	671434	2.89676	2.897
	72	bis(2-Ethylhexyl)phthalate	149	23.381	23.368	(0.960)	331419	1.55286	1.553
*	134	Di-n-octylphthalate-d4	153	24.363	24.363	(1.000)	1475136	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.363	(1.000)	32342	0.08650	0.08650
	74	Benzo(b)fluoranthene	252	25.231	25.218	(0.970)	625935	3.15897	3.159
	75	Benzo(k)fluoranthene	252	25.269	25.269	(0.971)	419928	2.24316	2.243(M)
	76	Benzo(a)pyrene	252	25.907	25.894	(0.996)	208084	1.33313	1.333
*	77	Perylene-d12	264	26.022	26.009	(1.000)	499764	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.754	28.716	(1.105)	68615	0.37899	0.3790
	79	Dibenzo(a,h)anthracene	278	28.754	28.729	(1.105)	23161	0.15243	0.1524(M)
	80	Benzo(g,h,i)perylene	276	29.572	29.534	(1.136)	53997	0.36134	0.3613
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	5.071	5.008	(0.547)	190151	1.79323	1.793
	105	1-methylnaphthalene	142	13.385	13.385	(1.141)	30006	0.15146	0.1515
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.231	25.269	(0.970)	937617	5.27143	5.271
120 2,3,4,6-Tetrachlorophenol	232	Compound Not Detected.					

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262324.D
Lab Smp Id: 23D0396-03
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 23:55
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	327251	163626	654502	306165	-6.44
27 Naphthalene-d8	1151610	575805	2303220	1084556	-5.82
42 Acenaphthene-d10	581592	290796	1163184	528488	-9.13
59 Phenanthrene-d10	918371	459186	1836742	828842	-9.75
69 Chrysene-d12	690072	345036	1380144	668942	-3.06
134 Di-n-octylphthala	1461689	730845	2923378	1475136	0.92
77 Perylene-d12	568726	284363	1137452	499764	-12.13

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	-0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.36	0.07
69 Chrysene-d12	23.36	22.86	23.86	23.36	-0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	-0.00
77 Perylene-d12	26.01	25.51	26.51	26.02	0.05

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

REVIEW SUMMARY FOR FILE - NT1705262324.D

Lab ID: 23D0396-03
nt17.i, ABN.m, 27-MAY-2023 03:02

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.956	0.965	-0.0087	Benzoic acid
0.547	0.541	0.0069	Pyridine
0.769	0.763	0.0055	2-Fluorophenol

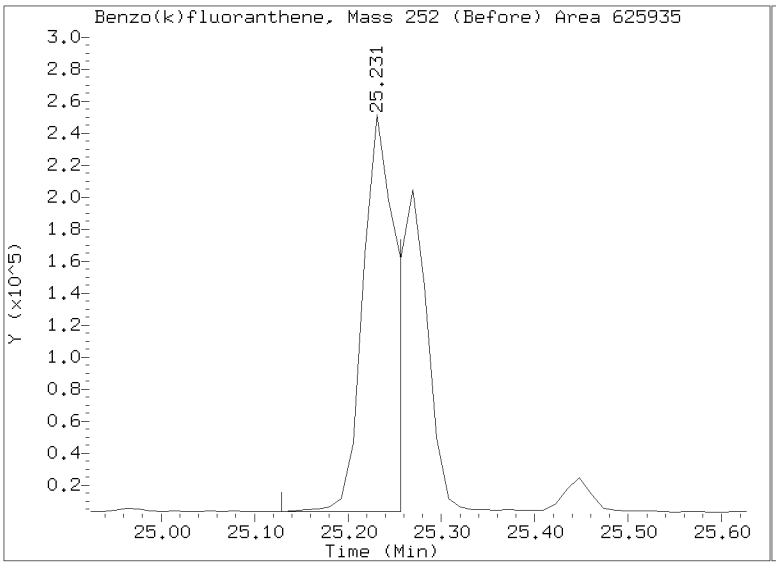
RRT check based on Ccal File: NT1705262319.D

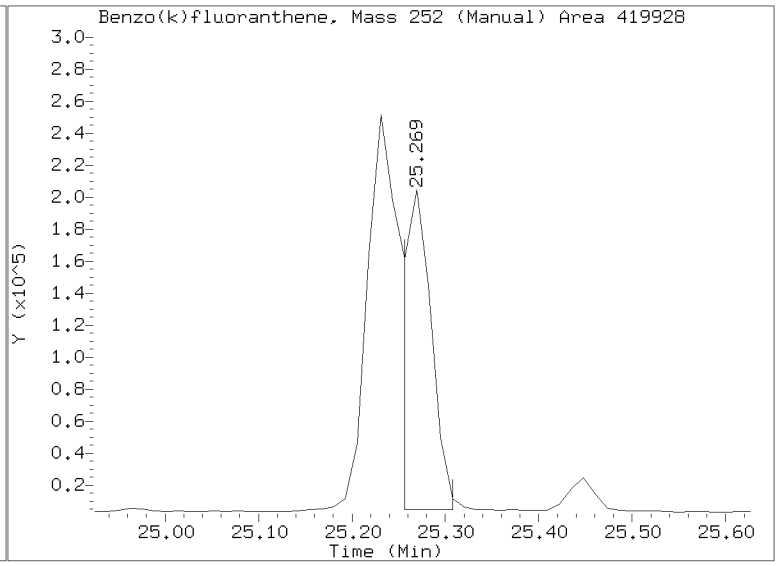
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

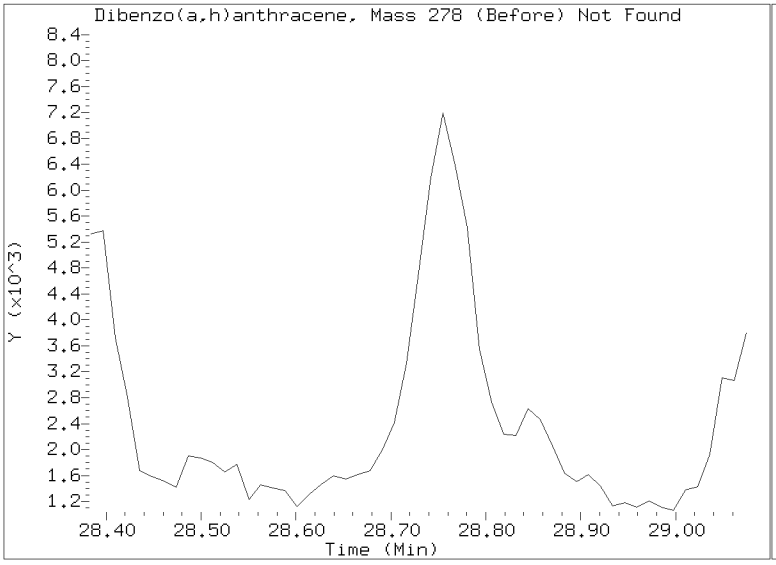
* Only compounds listed in the work order have been verified by the analyst *

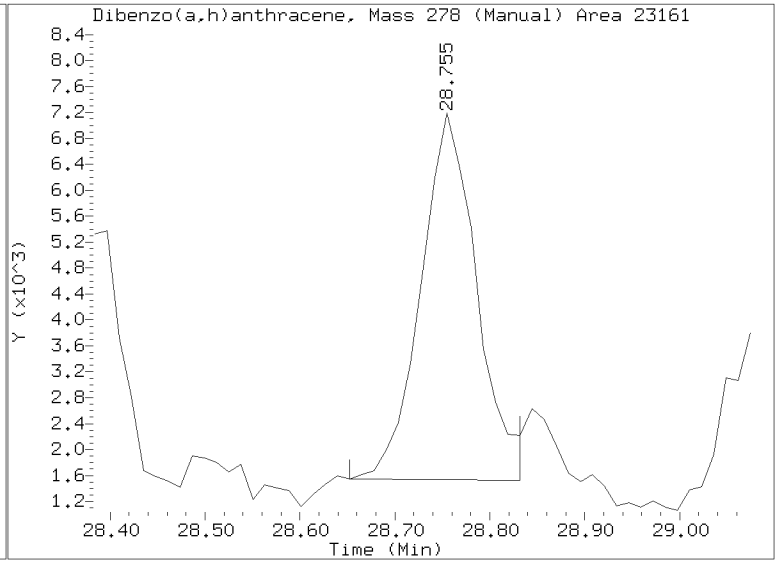
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230526.b/NT1705262324.D
Injection Date: 27-MAY-2023 03:02
Lab ID:23D0396-03 Client ID:
Report Date: 05/27/2023 13:35









PREPARATION BATCH SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23D0396

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

Batch: BLD0607 Batch Matrix: Solid Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	NT1705262323.D	04/24/23 16:38	
LDW23-SS1802	23D0396-03	NT1705262324.D	04/24/23 16:38	
Blank	BLD0607-BLK1	NT1705262306.D	04/24/23 16:38	
Blank	BLD0607-BLK3	NT1705262327.D	04/24/23 16:38	full scan rerun
LCS	BLD0607-BS1	NT1705262307.D	04/24/23 16:38	
LCS Dup	BLD0607-BSD1	NT1705262308.D	04/24/23 16:38	
Reference	BLD0607-SRM1	NT1705262311.D	04/24/23 16:38	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0607

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid **Date Prepared:** 04/24/23 **Balance ID:** B14646261 4 **Set Up By:** CTD 4/24/23

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)
23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23D0394-01 A	46.4	(21.57) 21.57	(1:1)	1mL	1 ____	0.5 ____	
23D0394-02 A	76.2	(13.13) 13.23	(1:1)	1mL	1 ____	0.5 ____	
23D0394-04 A	76.8	(13.03) 13.06	(1:1)	1mL	1 ____	0.5 ____	
23D0394-06 A	90.3	(11.07) 11.08	(1:1)	1mL	1 ____	0.5 ____	
23D0394-08 A	78.3	(12.77) 12.78	(1:1)	1mL	1 ____	0.5 ____	
23D0394-11 A	77.4	(12.92) 12.97	(1:1)	1mL	1 ____	0.5 ____	
23D0394-12 A	80.4	(12.44) 12.46	(1:1)	1mL	1 ____	0.5 ____	
23D0396-01 A	43.0	(23.25) 23.25	(1:1)	1mL	1 ____	0.5 ____	
23D0396-03 A	43.9	(22.79) 22.79	(1:1)	1mL	1 ____	0.5 ____	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLD0607-BLK1	100.0	(10.00) 10.00	(1:1)	1mL	1 ____	0.5 ____	Use 5g Neutral Sodium Sulfate for Blanks
BLD0607-BS1	100.0	(10.00) 10.00	(1:1)	1mL	1 ____	0.5 ____	Use 5g Neutral Sodium Sulfate for Blanks
BLD0607-BSD1	100.0	(10.00) 10.00	(1:1)	1mL	1 ____	0.5 ____	Use 5g Neutral Sodium Sulfate for Blanks
BLD0607-MS1	76.8	(13.03) 13.03	(1:1)	1mL	1 ____	0.5 ____	Use 23D0394-04
BLD0607-MSD1	76.8	(13.03) 13.03	(1:1)	1mL	1 ____	0.5 ____	Use 23D0394-04
BLD0607-SRM1	100.0	~~(10.00)~~ (1.00) 1.00 +1g DI WATER	(1:1)	1mL	1 ____	0.5 ____	Use K003477

04/24/23
Client ID Verified By Date

NRS 5/15/23
Preparation Reviewed By Date

04/24/23 16:38
Extraction Date and Time

Printed: 4/21/2023 12:03:42PM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0607

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)
23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

Prep Steps	Reagents Used	
Microwave GT 1 2 3 4/25/23 Analyst/Date	**Station/Reagent**	**Standard ID**
	Microwave **Analyst:** GT **Date:** 4/25/23	
	Anhydrous Sodium Sulfate	L0003875
	1:1 Methylene Chloride/Acetone	L004178
	Methylene Chloride	K004941
	Pre-Deactivated Glass Wool	L001924
Pre-GPC KD 100°C **Exchange to Hexane** **(add 10 mL to KD)** 0 2 4 5 6 LJ 5/3/23 Analyst/Date	**Pre GPC KD** **Analyst:** LJ **Date:** 5/3/23	
	~~Pre-Deactivated Glass Wool~~	
	~~Anhydrous Sodium Sulfate~~ SH 5/11/23	
TurboVap **Pre GPC** SH 1 2 3 4 5 5/11/23 Analyst/Date	Methylene Chloride	L004175
	Hexane	L003500
	GPC Filter Prep **Analyst:** MRS **Date:** 5/10/23	
Post GPC KD 80-85°C 0 2 4 5 6 CR 5/24/23 Analyst/Date	Methylene Chloride	L004175
	GPC Filter	L001799
	GPC **Analyst:** SH **Date:** 5/11/23	
TurboVap 1 2 3 4 5 MRS 5/25/23 Analyst/Date	Methylene Chloride	K004941
	GPC Calibration File	CLB0132~GPC2
	Post GPC KD **Analyst:** CR **Date:** 5/24/23	
Water Wash MRS 5/15/23 Analyst/Date	Methylene Chloride	K004941
	Vialing **Analyst:** MRS **Date:** 5/25/23	
	Methylene Chloride	K004941

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150µg/mL	A L001153 Exp Date: 8/1/2023	50µL	GT	
Full List Spike (Freezer) 100µg/mL	7 L001812 (V) Exp L041781 Date: 8/4/2023	50µL	GT	
Base Spike 200µg/mL	56 L001812 (V) Exp L041778 Date: 8/24/2023	50µL	GT	
Acid Spike 100/200µg/mL	38 L001812 (V) Exp L041779 Date: 8/24/2023	50µL	GT	

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0607

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

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

Incorporated
Analytical Chemists and
Consultants

Organic Extractions Laboratory
Analyst Notes

Extraction Parameter: SVOA Extraction Batch: BL0607

Total Solids Batch: BLD0431 Work Order(s): 23D0394

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 01-13	CR 4/18/23
[X] Standing Water Decanted (Not shared)= 01-05, 07-13	CR 4/18/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 01-13	CR 4/18/23
[ ] Other (Details)=	
Aqueous:	
[-] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[ ] Other Notes/Comments= (Note problems, concerns, corrective actions).	
[X] Share Samples Y / (N)	CR 4/18/23
[X] Multiple Jars Y / (N)	CR 4/18/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

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Organic Extractions Laboratory
Analyst Notes

Extraction Parameter: GVOA Extraction Batch BLD0697

Total Solids Batch: BLD0432 Work Order(s): 23D0396

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-04	CR 4/18/23
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-04	CR 4/18/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y (N)	CR 4/18/23
☒ Multiple Jars Y (N)	CR 4/18/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0214	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLD0607-BSD1	NT1705262308.D	05/25/2023	
Blank	BLD0607-BLK1	NT1705262306.D	05/25/2023	
Reference	BLD0607-SRM1	NT1705262311.D	05/25/2023	
LCS	BLD0607-BS1	NT1705262307.D	05/25/2023	
LDW23-SS1802	23D0396-03	NT1705262324.D	05/25/2023	
LDW23-SS1801	23D0396-01	NT1705262323.D	05/25/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLE0214

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLC0092-GPC1** **Printed: 5/25/2023 3:38:04PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23D0394-01	A	LDW23-SS1098	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-01	A	LDW23-SS1098	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-02	A	LDW23-SS1071	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-02	A	LDW23-SS1071	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-04	A	LDW23-SS1078	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-04	A	LDW23-SS1078	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-06	A	LDW23-SS1807	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-06	A	LDW23-SS1807	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-08	A	LDW23-SS1055	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-08	A	LDW23-SS1055	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-11	A	LDW23-SS1034	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-11	A	LDW23-SS1034	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-12	A	LDW23-SS1806	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-12	A	LDW23-SS1806	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0396-01	A	LDW23-SS1801	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0396-01	A	LDW23-SS1801	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0396-03	A	LDW23-SS1802	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0396-03	A	LDW23-SS1802	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
BLD0607-BLK1	-	Blank	-	1	1	-	5/25/2023	NRB	
BLD0607-BLK2	-	Blank	-	1	1	-	5/25/2023	NRB	
BLD0607-BS1	-	LCS	-	1	1	-	5/25/2023	NRB	
BLD0607-BS2	-	LCS	-	1	1	-	5/25/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLE0214

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLC0092-GPC1** **Printed: 5/25/2023 3:38:04PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLD0607-BSD1	-	LCS Dup	-	1	1	-	5/25/2023	NRB	
BLD0607-BSD2	-	LCS Dup	-	1	1	-	5/25/2023	NRB	
BLD0607-MS1	-	Matrix Spike	-	1	1	-	5/25/2023	NRB	
BLD0607-MS2	-	Matrix Spike	-	1	1	-	5/25/2023	NRB	
BLD0607-MSD1	-	Matrix Spike Dup	-	1	1	-	5/25/2023	NRB	
BLD0607-MSD2	-	Matrix Spike Dup	-	1	1	-	5/25/2023	NRB	
BLD0607-SRM1	-	Reference	-	1	1	-	5/25/2023	NRB	
BLD0607-SRM2	-	Reference	-	1	1	-	5/25/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLD0607-BLK1	File ID:	NT1705262306.D
Sampled:	N/A	Prepared:	04/24/23 16:38	Analyzed:	05/26/23 15:47
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLD0607	Sequence:	SLE0434	Calibration:	GE00065
Instrument:	NT17	Column:	ZB-5MS	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
108-95-2	Phenol	1	20.0	U	4.4	20.0
100-51-6	Benzyl Alcohol	1	24.8		16.3	20.0
106-44-5	4-Methylphenol	1	20.0	U	7.4	20.0
91-20-3	Naphthalene	1	13.7	J	4.2	20.0
91-57-6	2-Methylnaphthalene	1	20.0	U	4.5	20.0
208-96-8	Acenaphthylene	1	20.0	U	6.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
85-01-8	Phenanthrene	1	20.0	U	8.7	20.0
120-12-7	Anthracene	1	20.0	U	7.2	20.0
206-44-0	Fluoranthene	1	20.0	U	6.1	20.0
129-00-0	Pyrene	1	20.0	U	5.7	20.0
85-68-7	Butylbenzylphthalate	1	20.0	U	9.4	20.0
56-55-3	Benzo(a)anthracene	1	20.0	U	6.0	20.0
218-01-9	Chrysene	1	20.0	U	6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	50.0	U	5.5	50.0
	Benzofluoranthenes, Total	1	40.0	U	10.0	40.0
50-32-8	Benzo(a)pyrene	1	20.0	U	4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	20.0	U	14.7	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	20.0	U	13.6	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	495	66.0	27 - 120	
Phenol-d5	750.00	531	70.9	29 - 120	
2-Chlorophenol-d4	750.00	558	74.4	31 - 120	
1,2-Dichlorobenzene-d4	500.00	393	78.5	32 - 120	
Nitrobenzene-d5	500.00	409	81.8	30 - 120	
2-Fluorobiphenyl	500.00	407	81.4	35 - 120	
2,4,6-Tribromophenol	750.00	365	48.7	24 - 134	
p-Terphenyl-d14	500.00	459	91.8	37 - 120	

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262306.D

Date : 26-MAY-2023 15:47

Client ID:

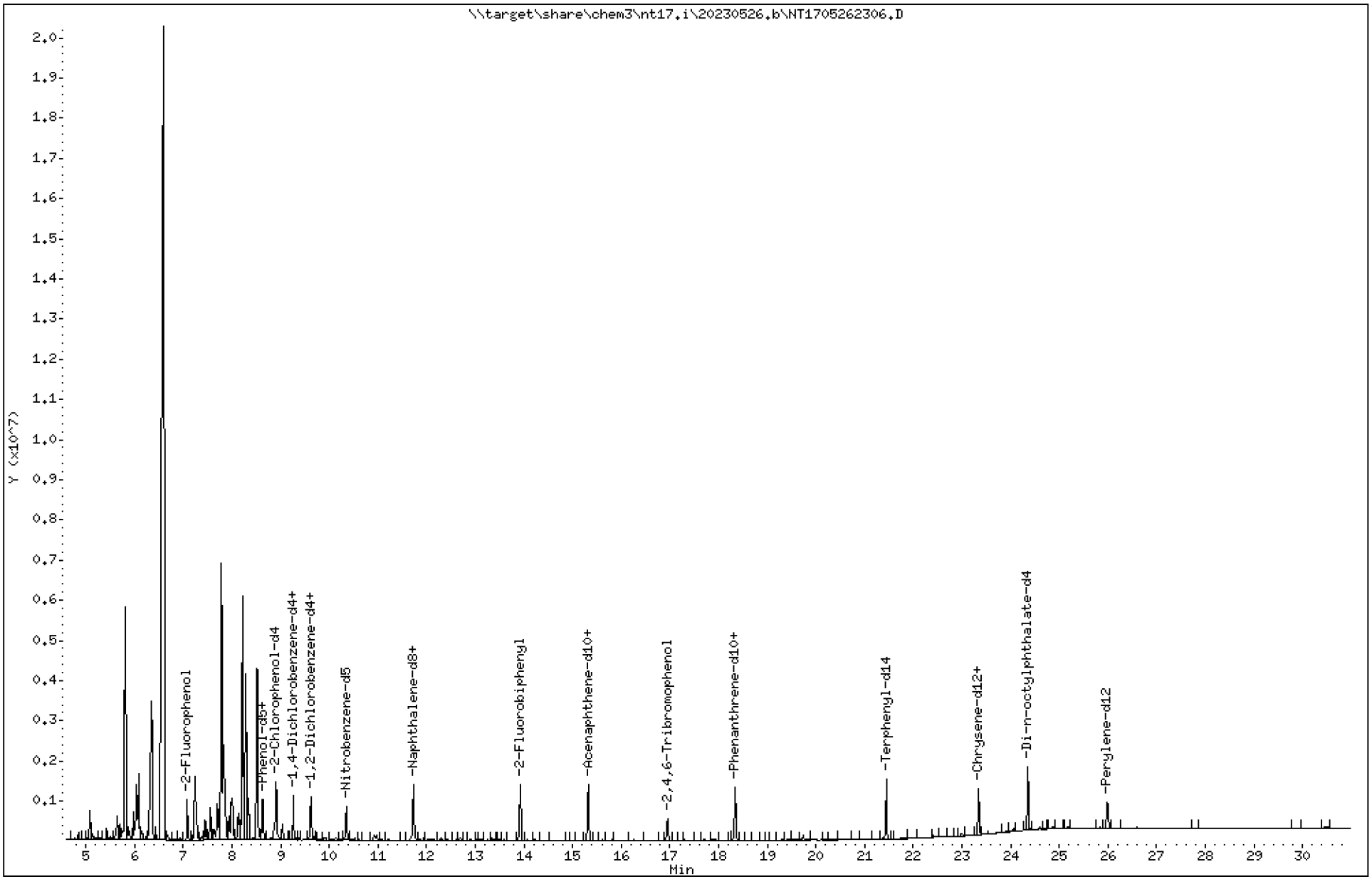
Instrument: nt17.i

Sample Info: BLD0607-BLK1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

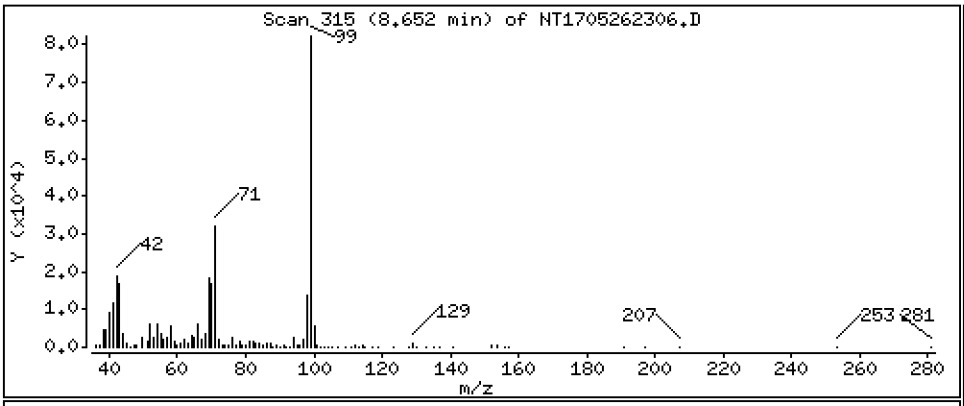
Operator: VTS

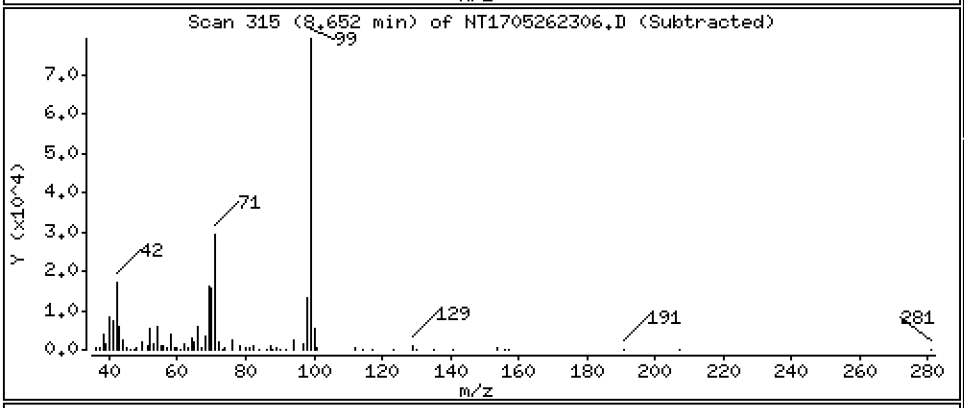
Column phase: ZB-5msi

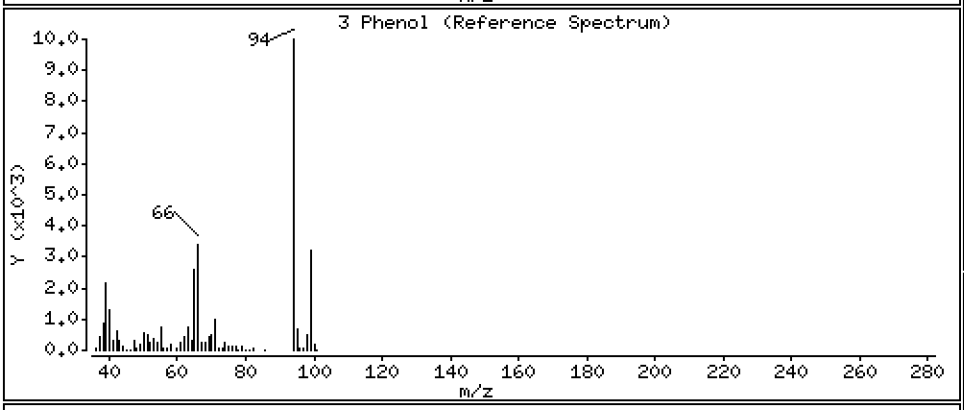
Column diameter: 0.25

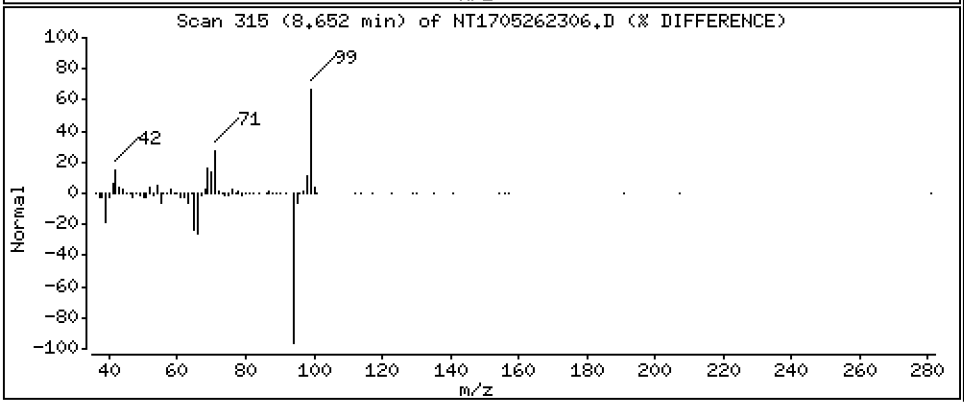
3 Phenol

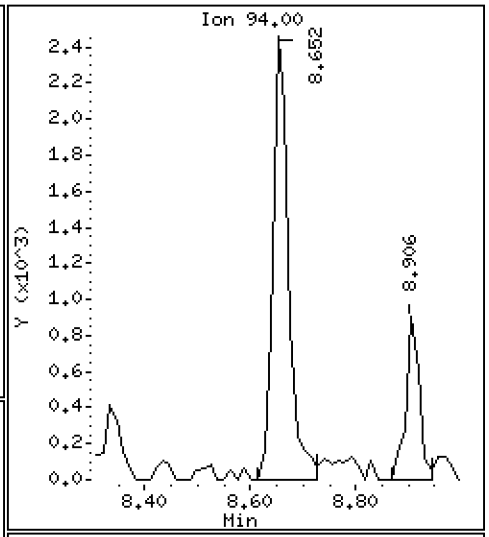
Concentration: 0.04309 ug/mL

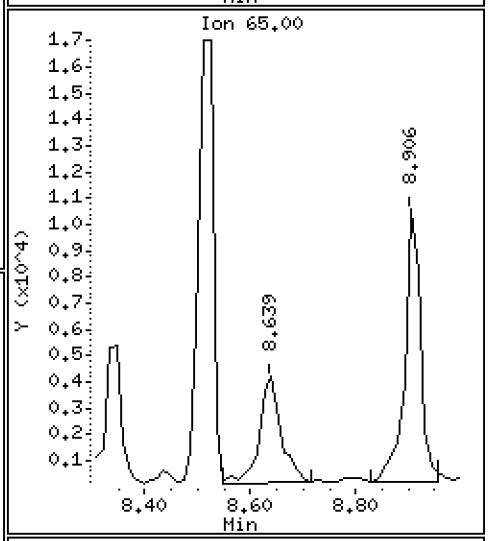


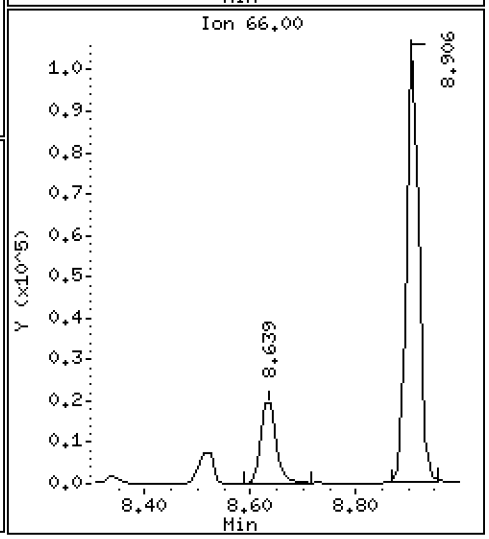












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

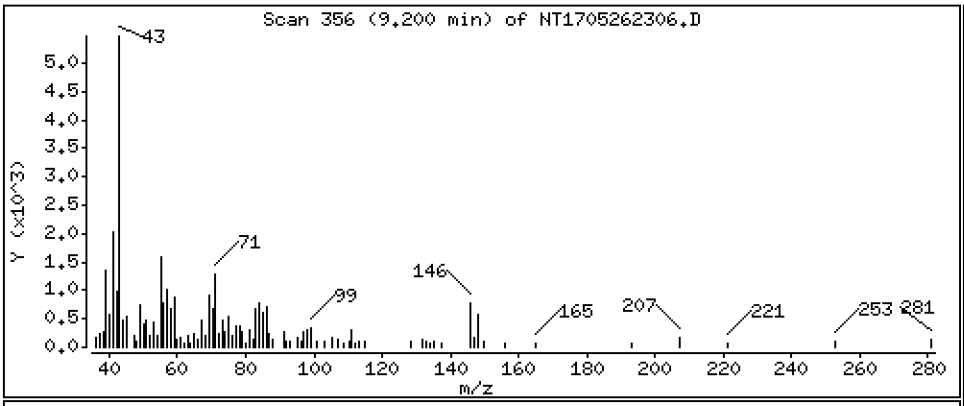
Operator: VTS

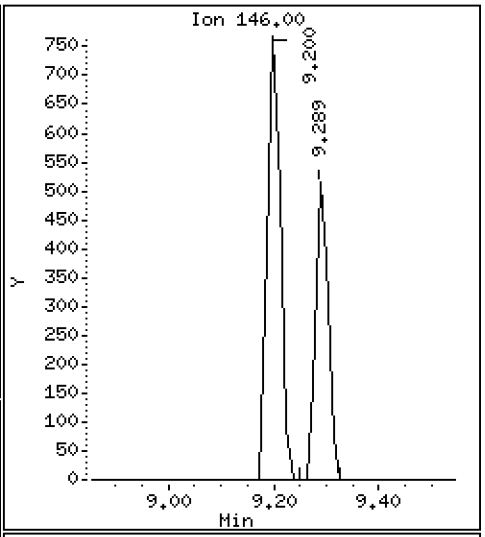
Column phase: ZB-5msi

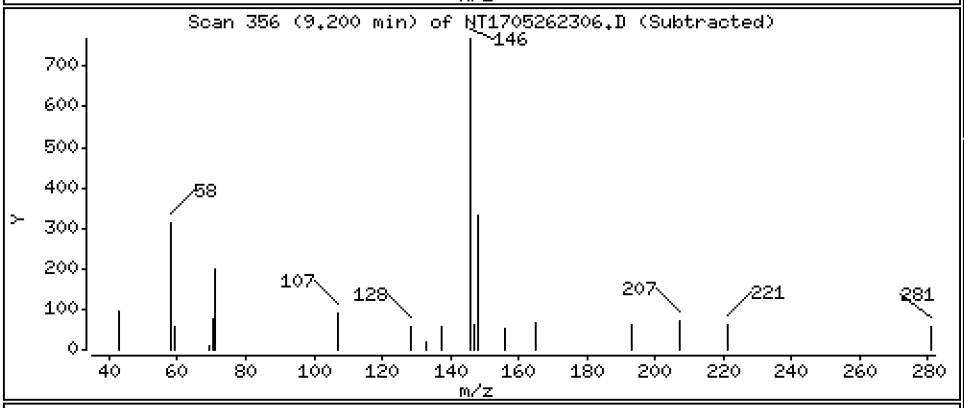
Column diameter: 0.25

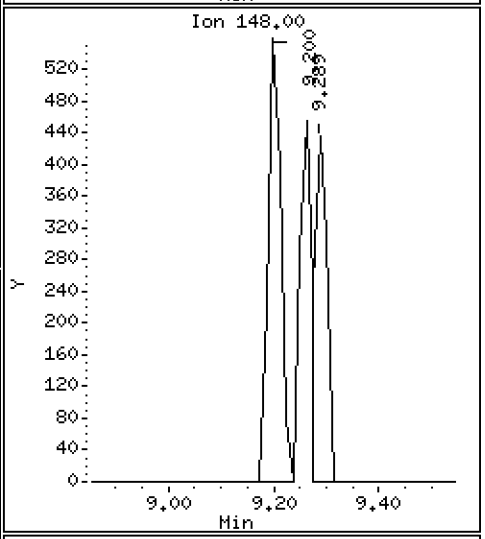
7 1,3-Dichlorobenzene

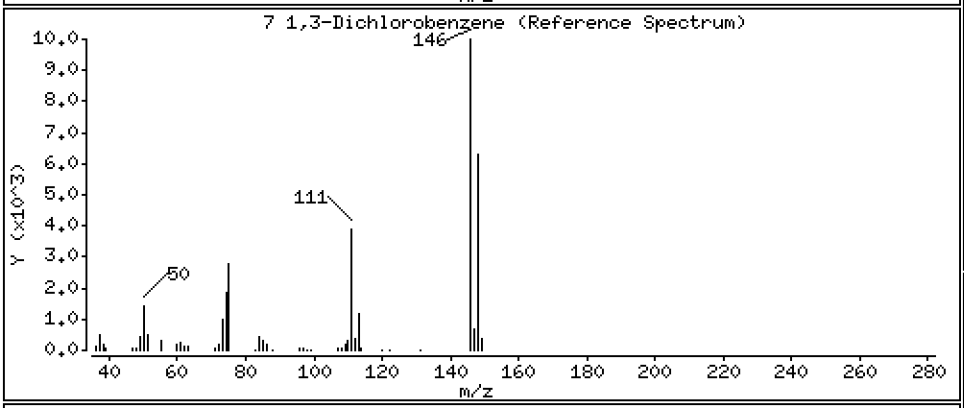
Concentration: 0.01288 ug/mL

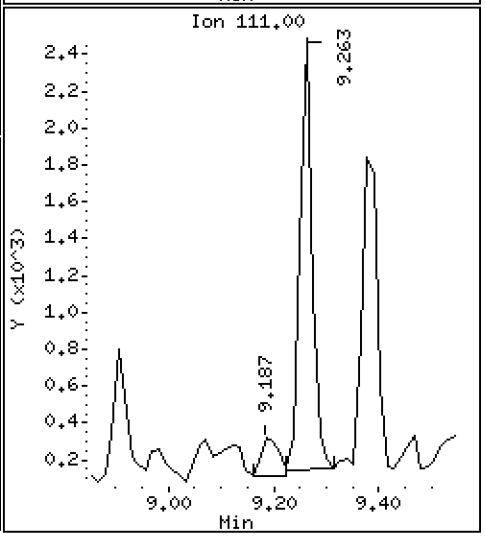


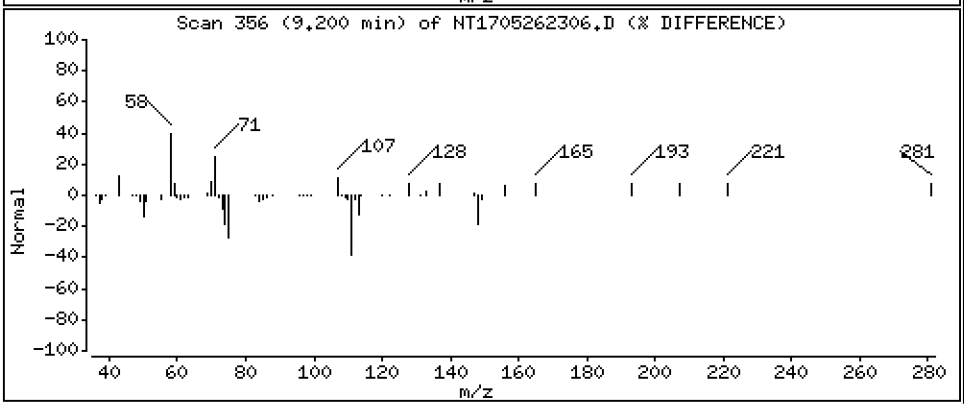












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

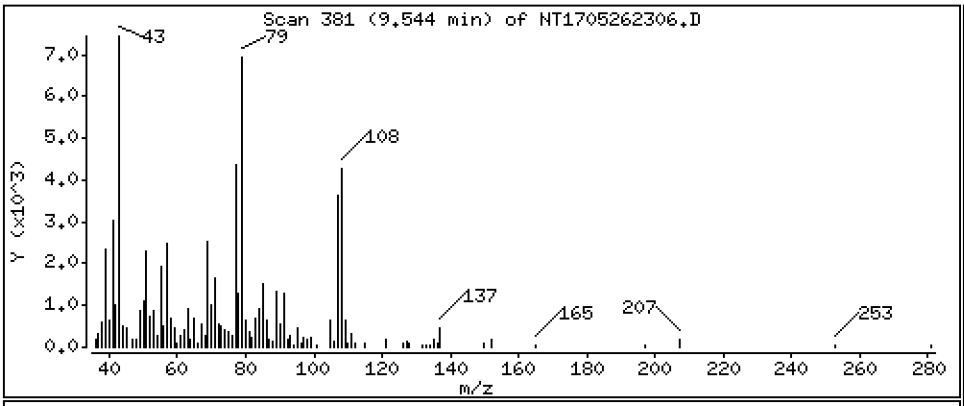
Operator: VTS

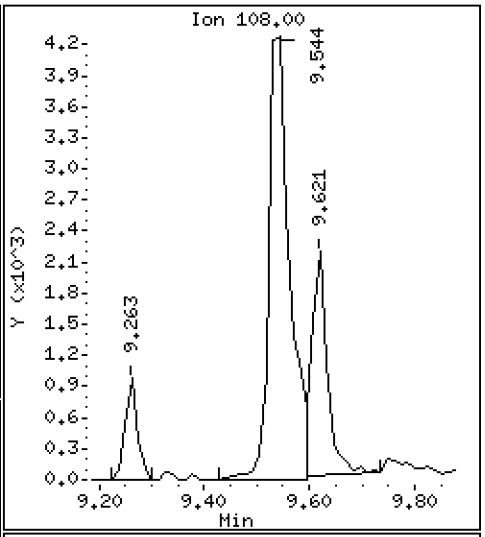
Column phase: ZB-5msi

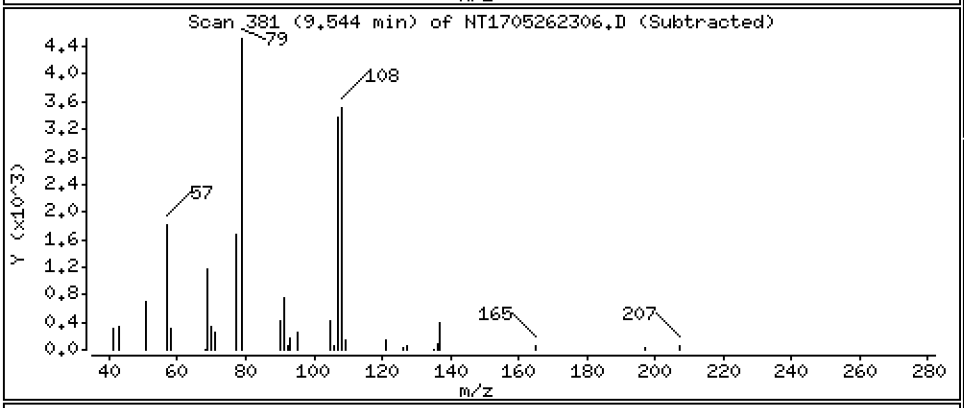
Column diameter: 0.25

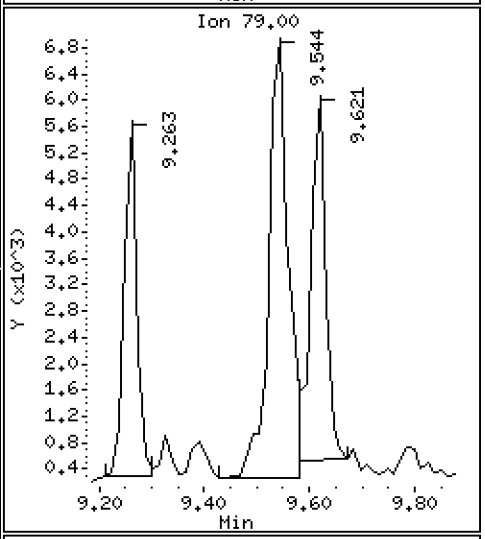
11 Benzyl alcohol

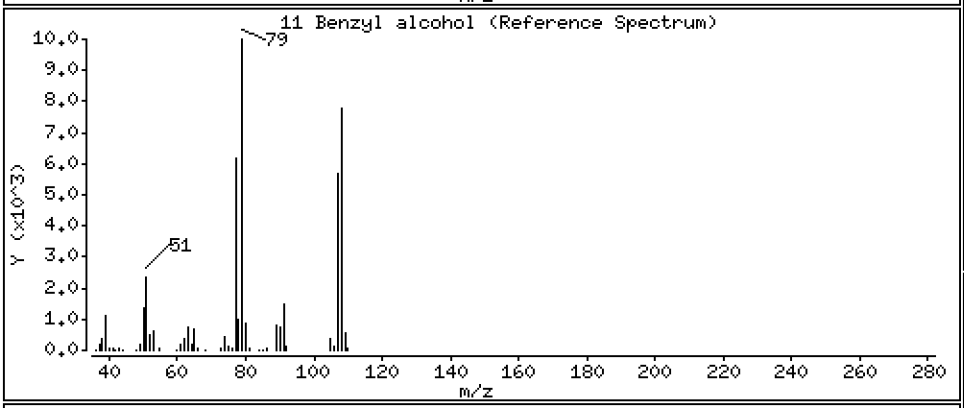
Concentration: 0.2480 ug/mL

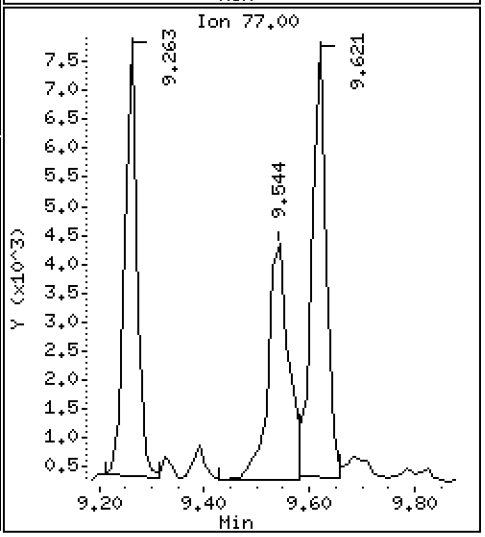


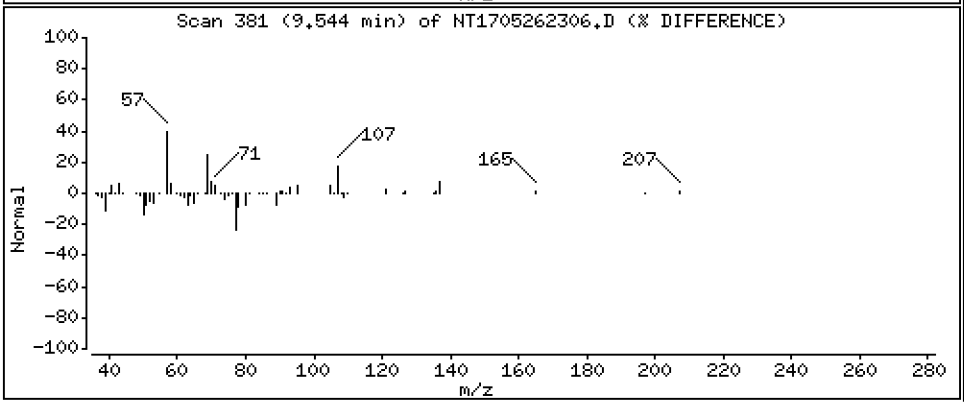












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

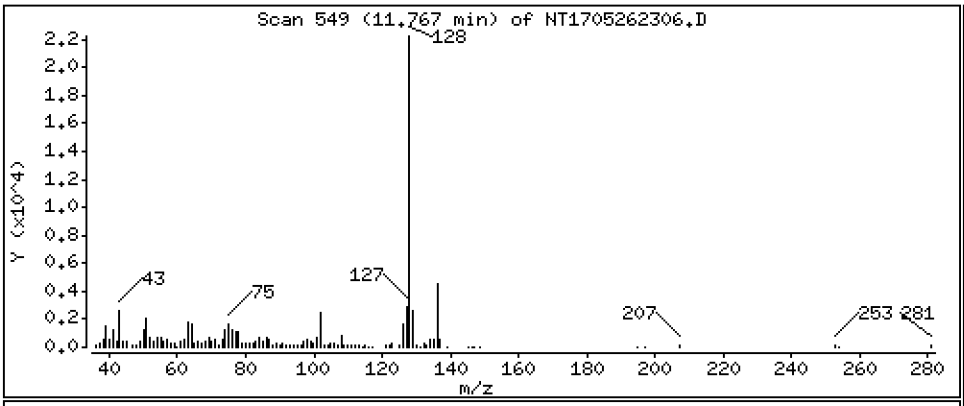
Operator: VTS

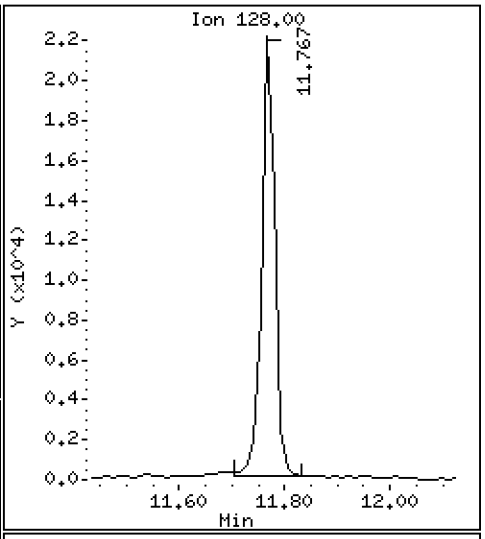
Column phase: ZB-5msi

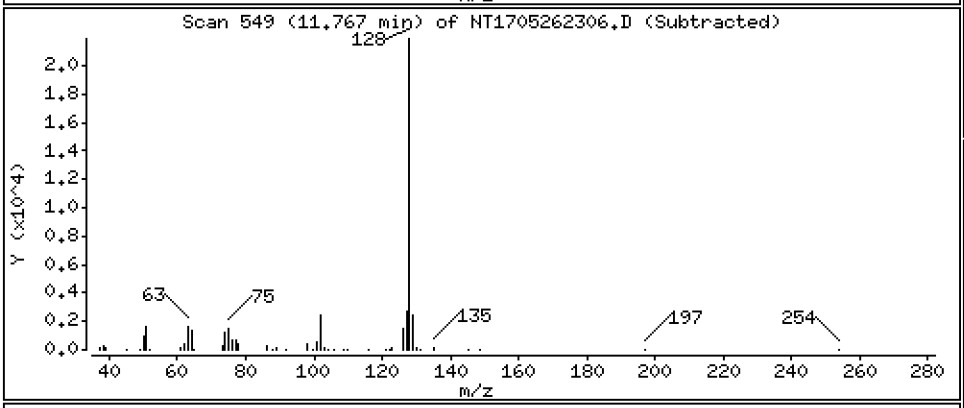
Column diameter: 0.25

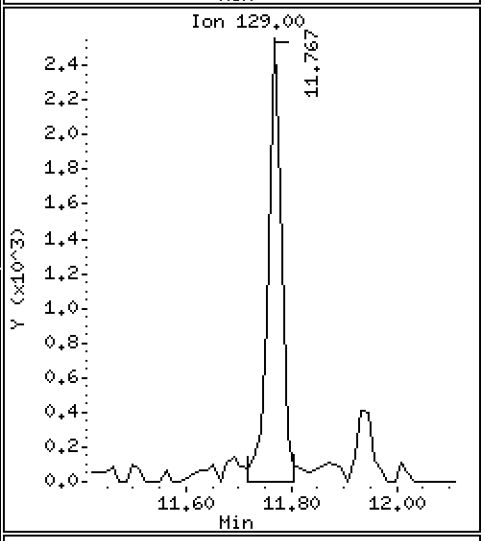
28 Naphthalene

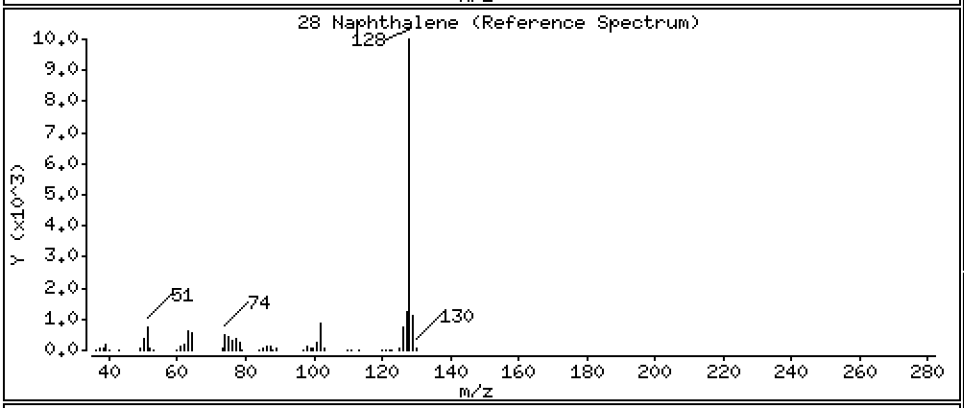
Concentration: 0.1369 ug/mL

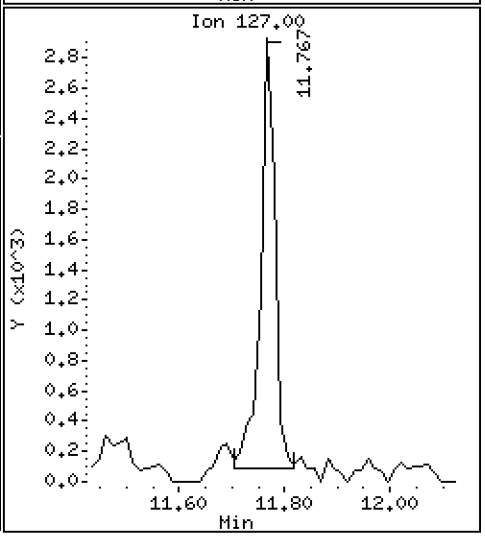


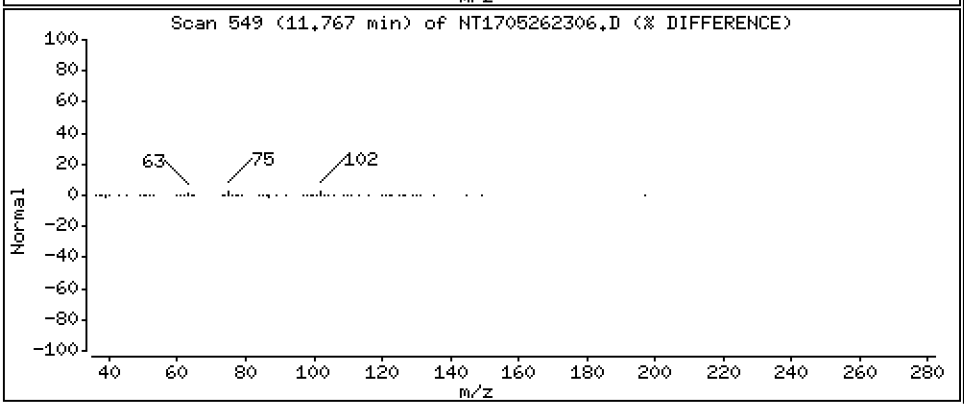












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

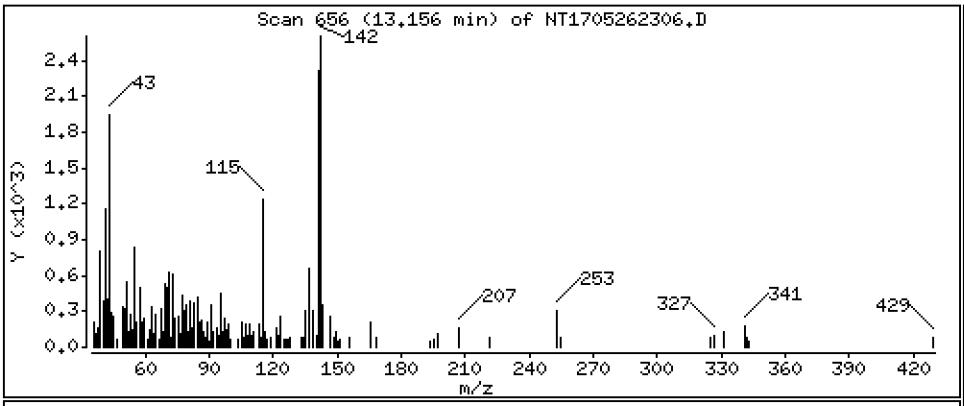
Operator: VTS

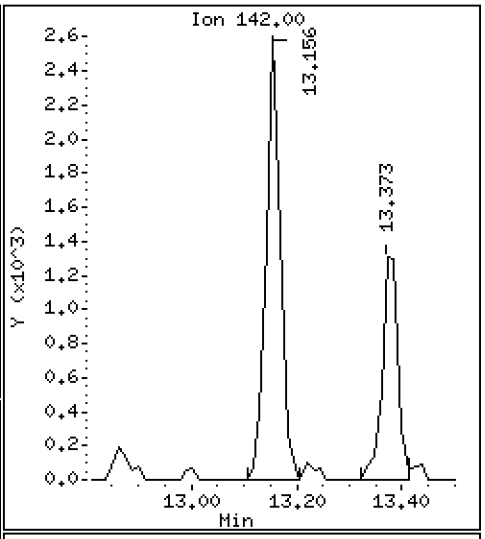
Column phase: ZB-5msi

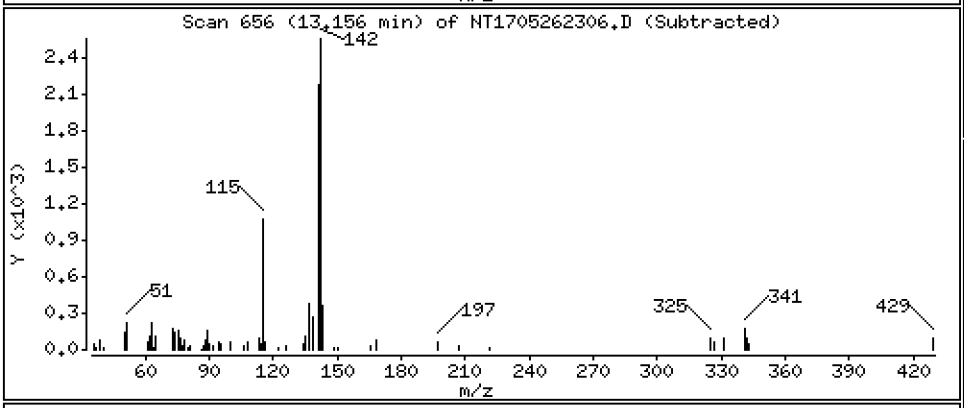
Column diameter: 0.25

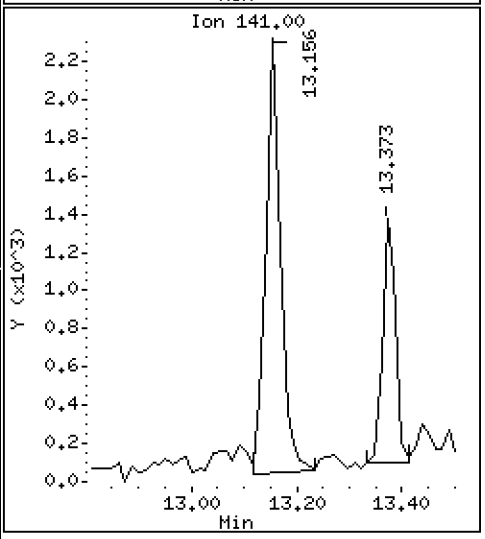
32 2-Methylnaphthalene

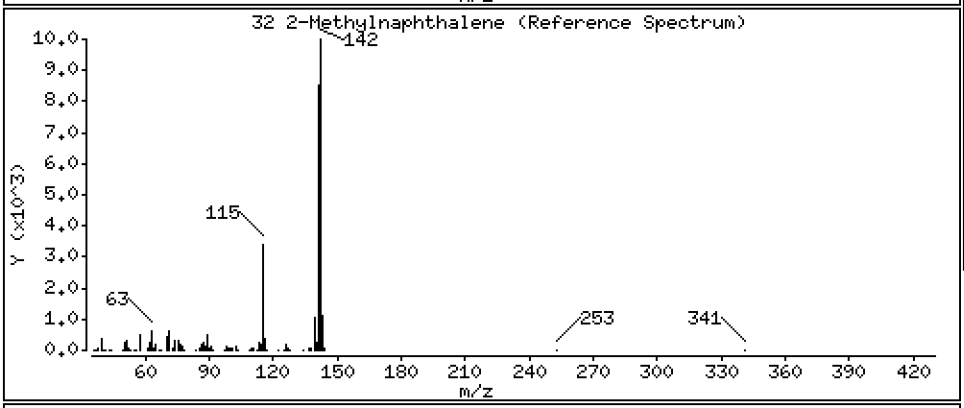
Concentration: 0.02394 ug/mL

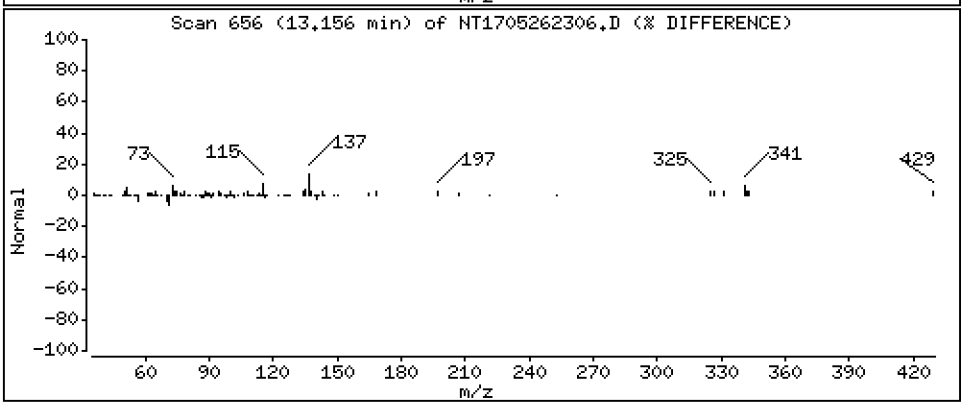












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

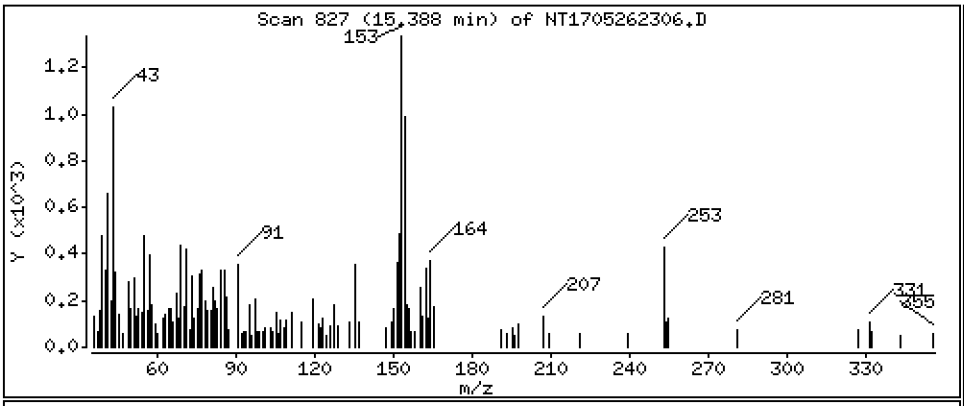
Operator: VTS

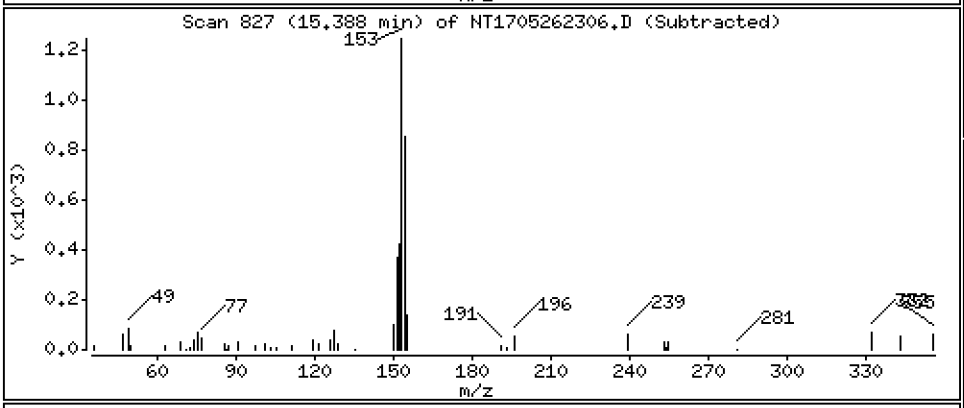
Column phase: ZB-5msi

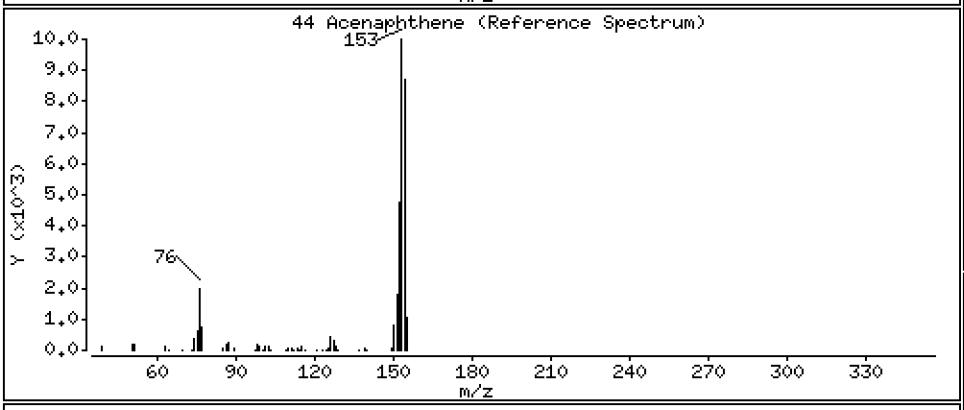
Column diameter: 0.25

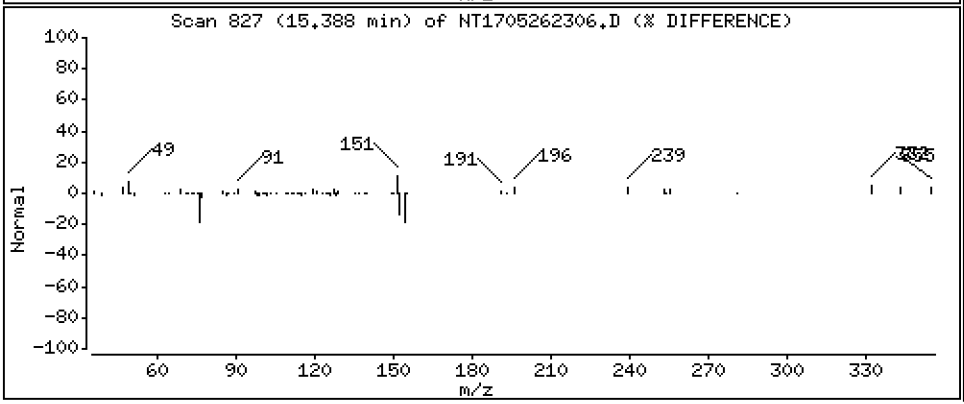
44 Acenaphthene

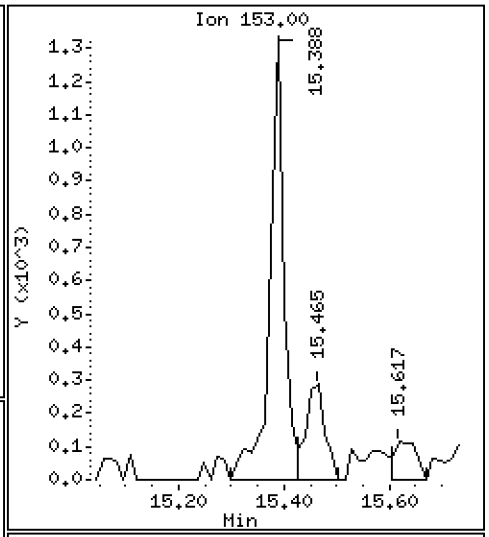
Concentration: 0.01498 ug/mL

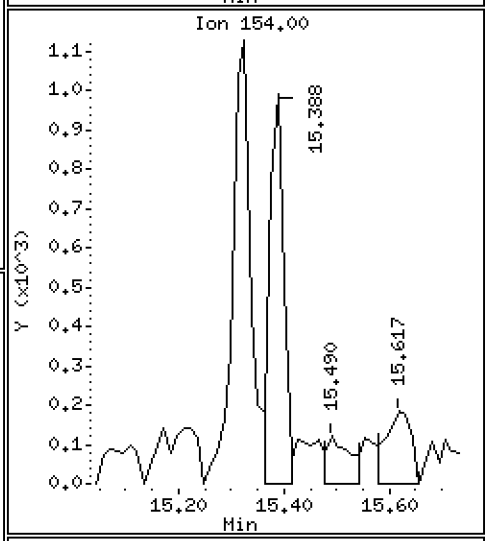


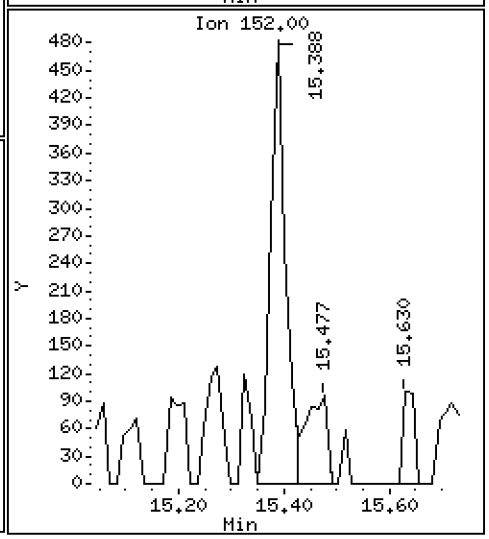












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

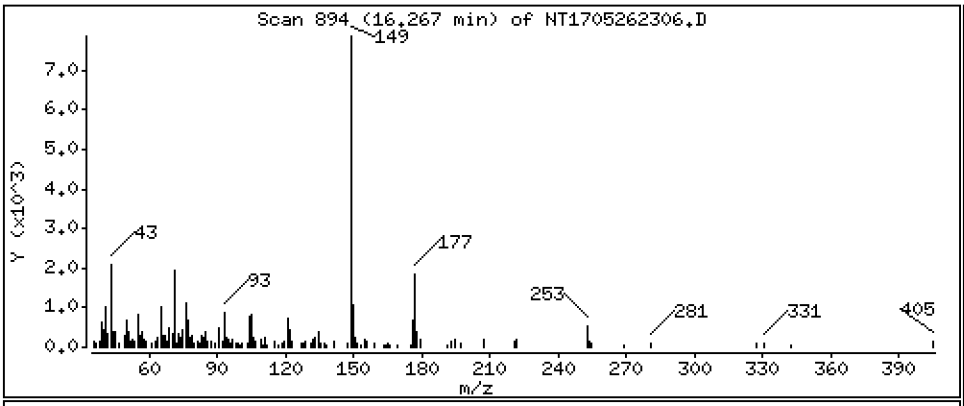
Operator: VTS

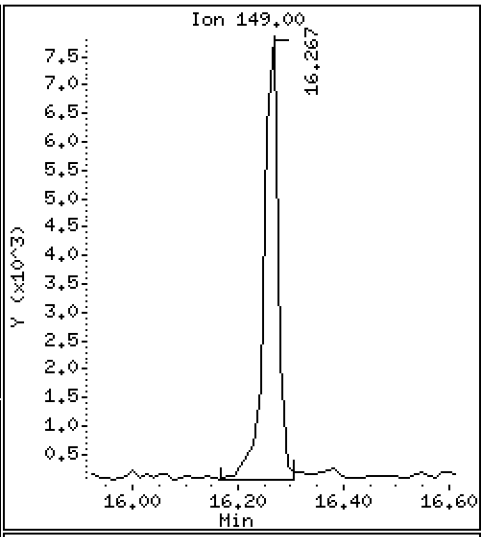
Column phase: ZB-5msi

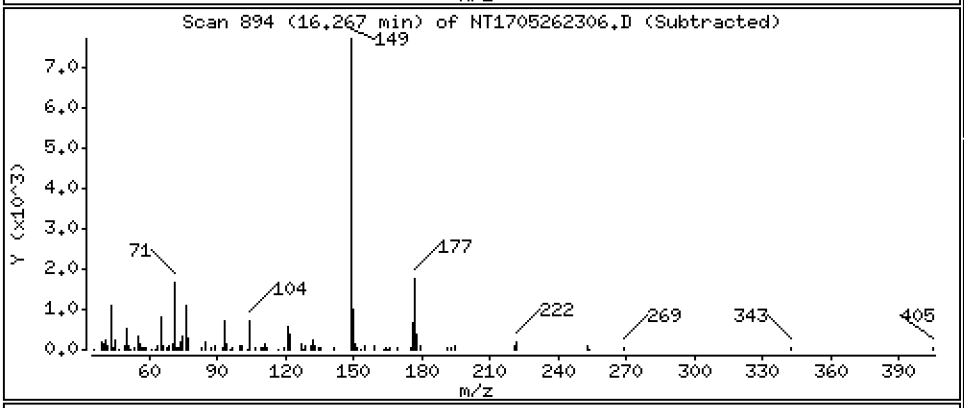
Column diameter: 0.25

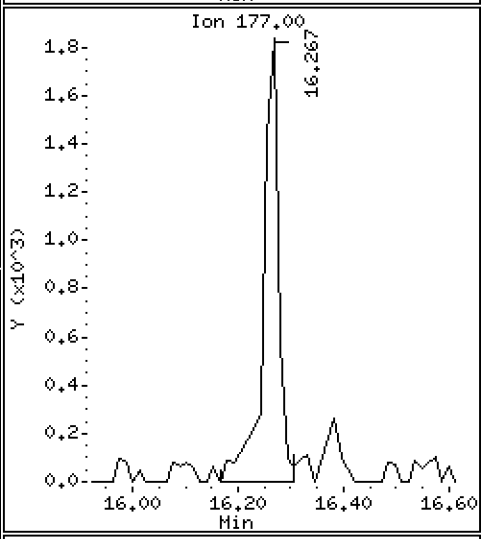
50 Diethylphthalate

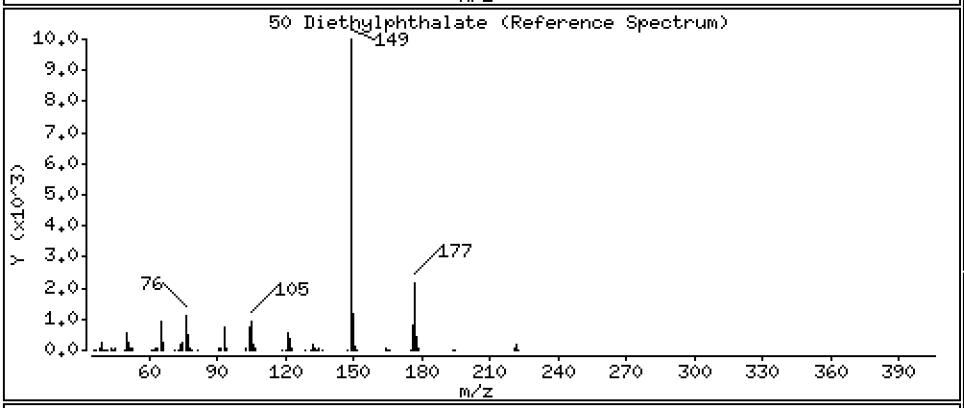
Concentration: 0.09808 ug/mL

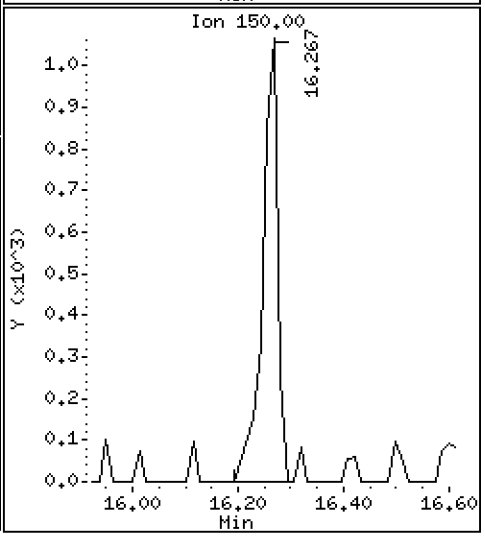


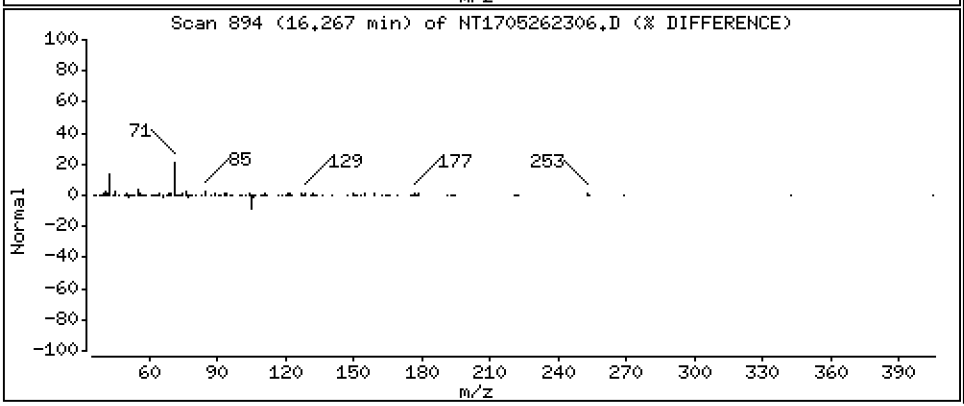












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

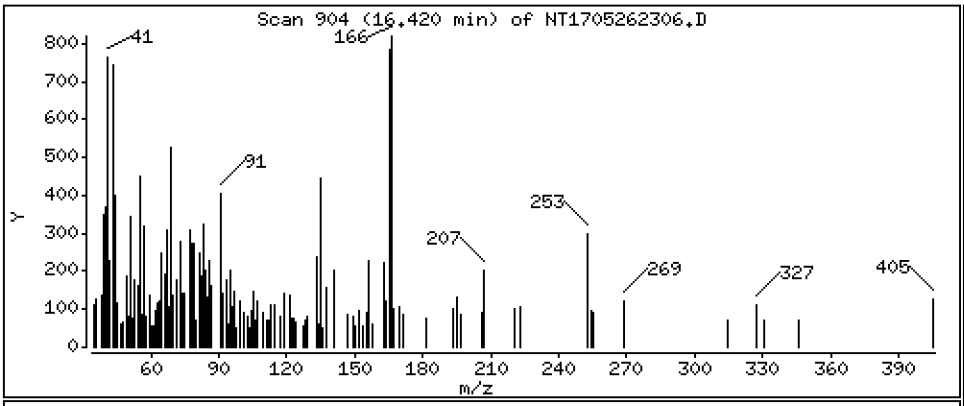
Operator: VTS

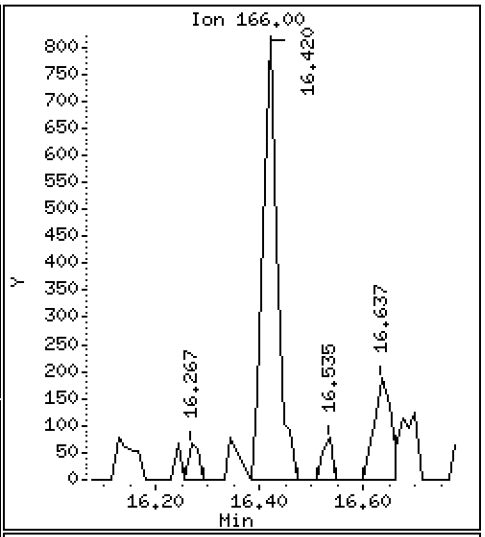
Column phase: ZB-5msi

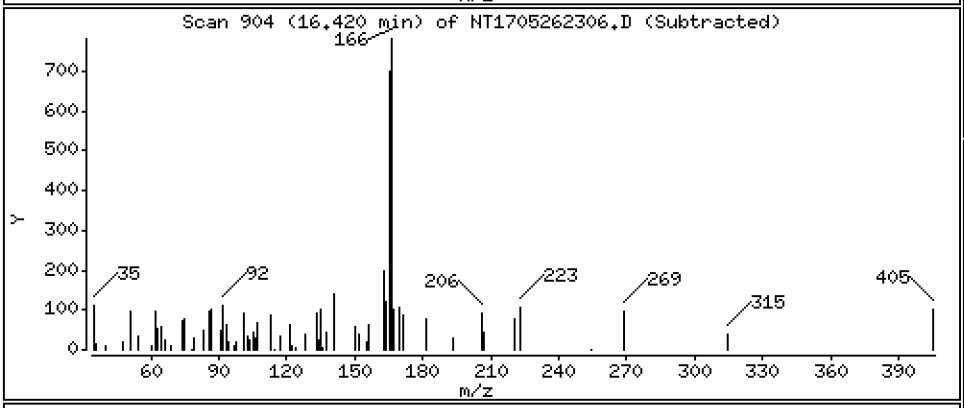
Column diameter: 0.25

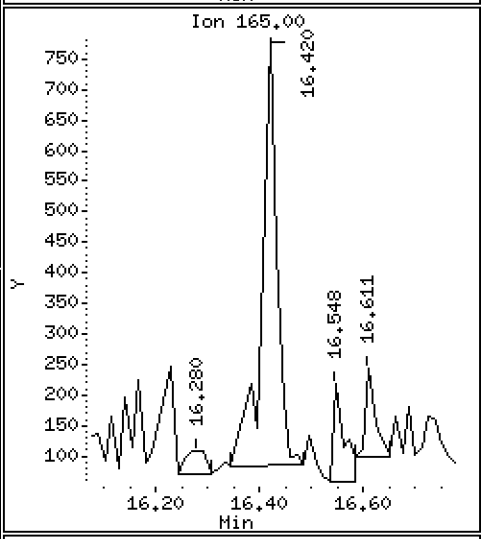
49 Fluorene

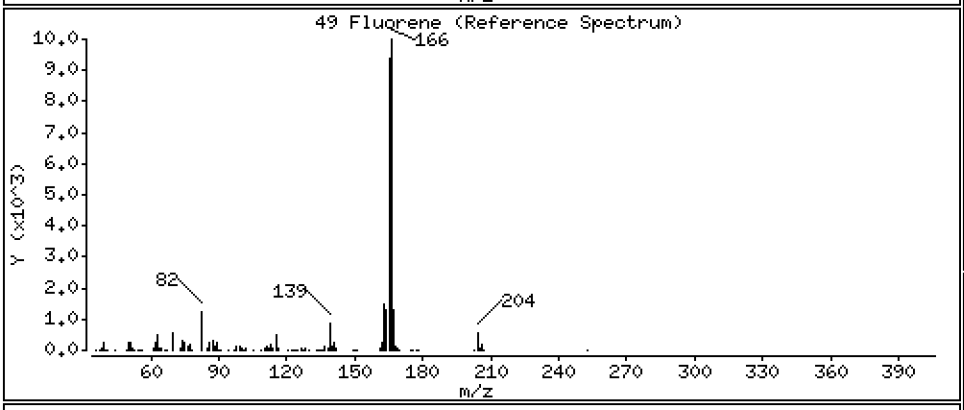
Concentration: 0.007011 ug/mL

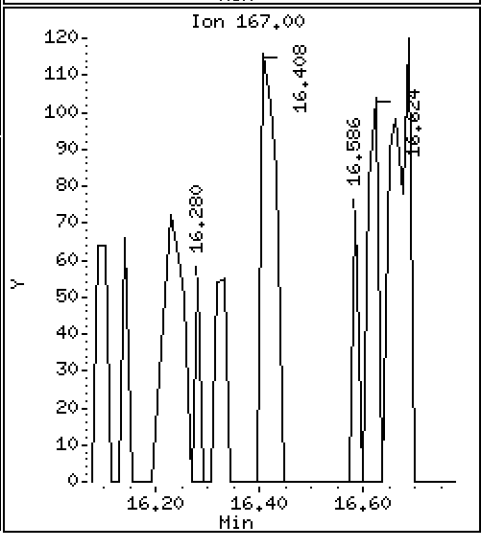


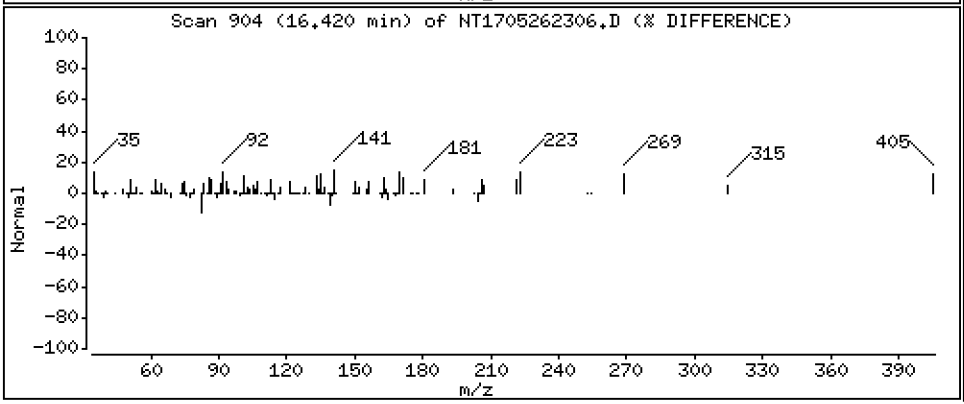












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262306.D

Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

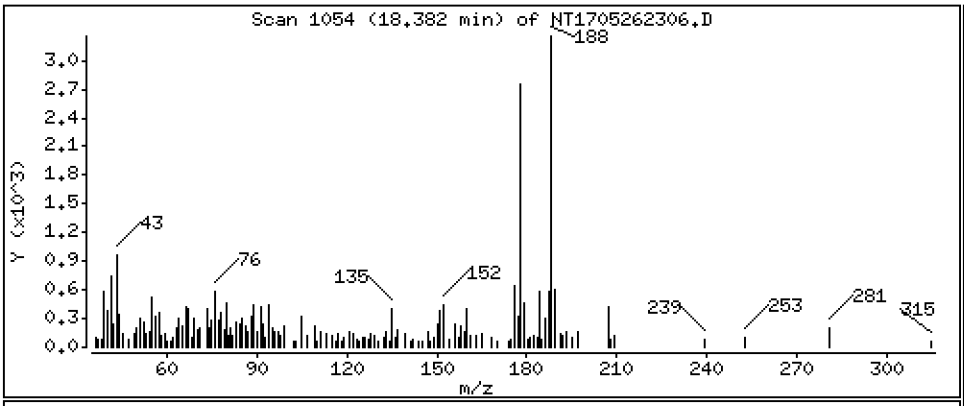
Operator: VTS

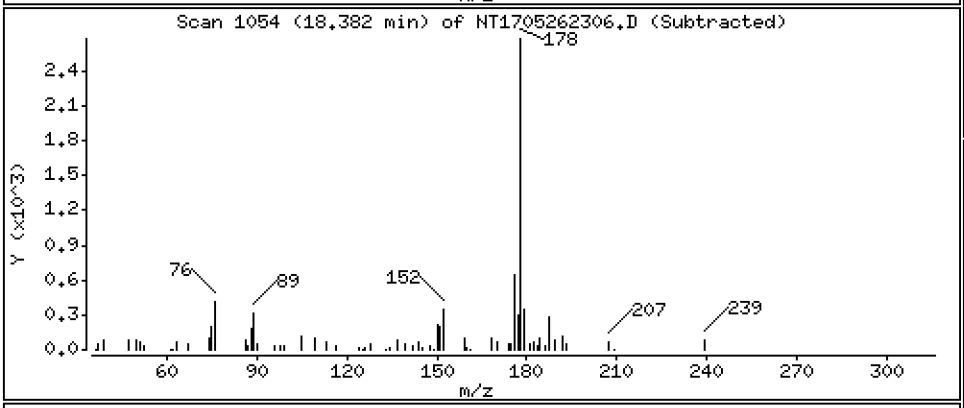
Column phase: ZB-5msi

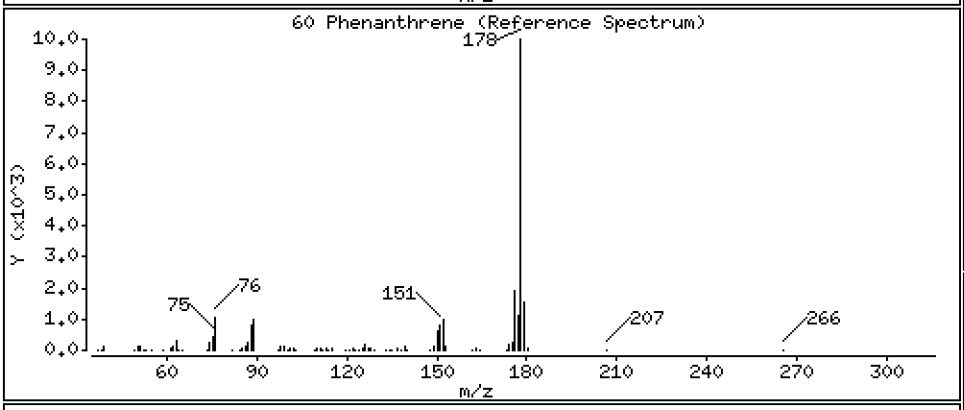
Column diameter: 0.25

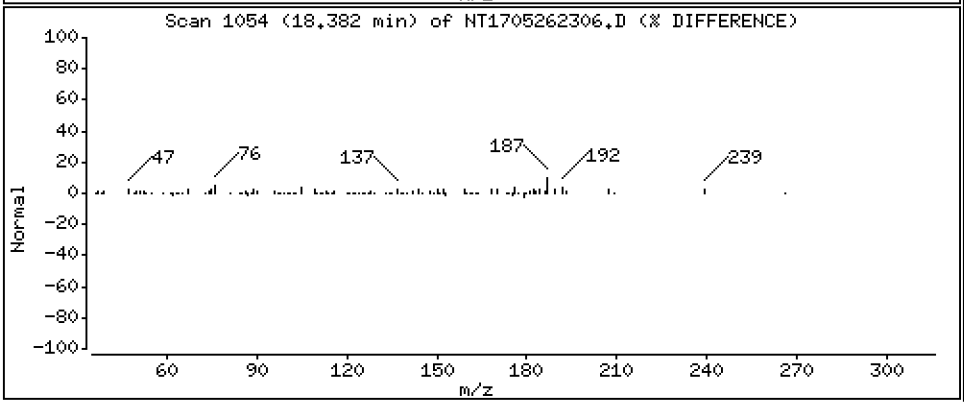
60 Phenanthrene

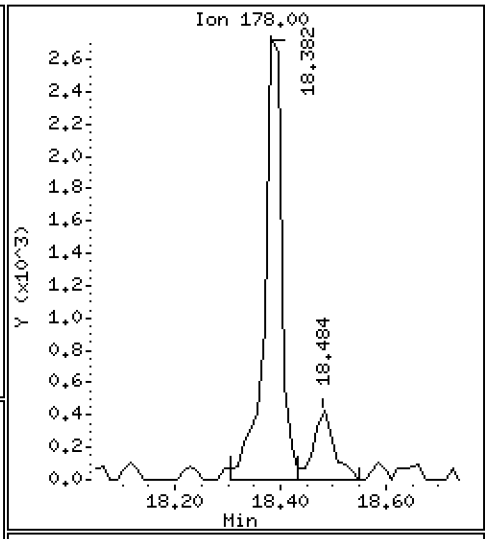
Concentration: 0.02493 ug/mL

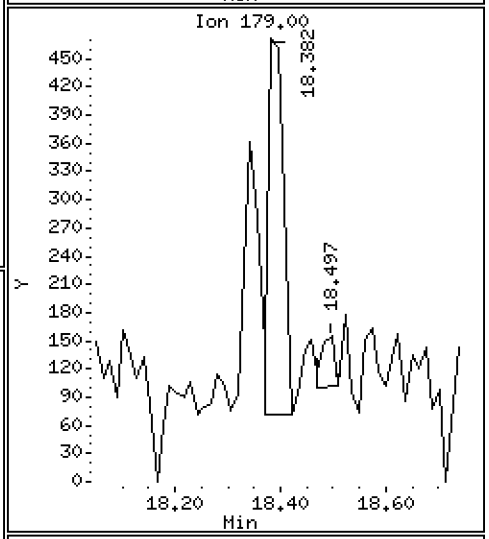


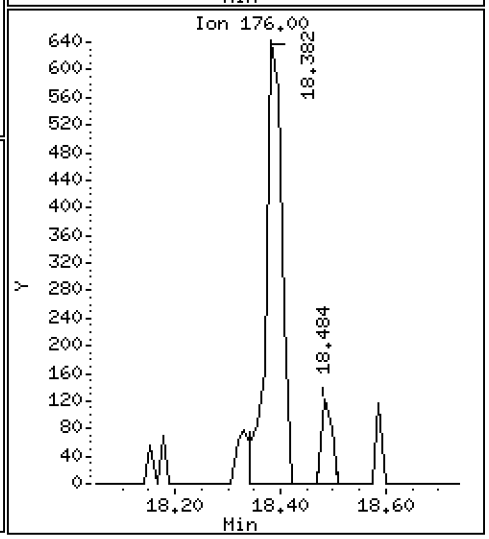












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

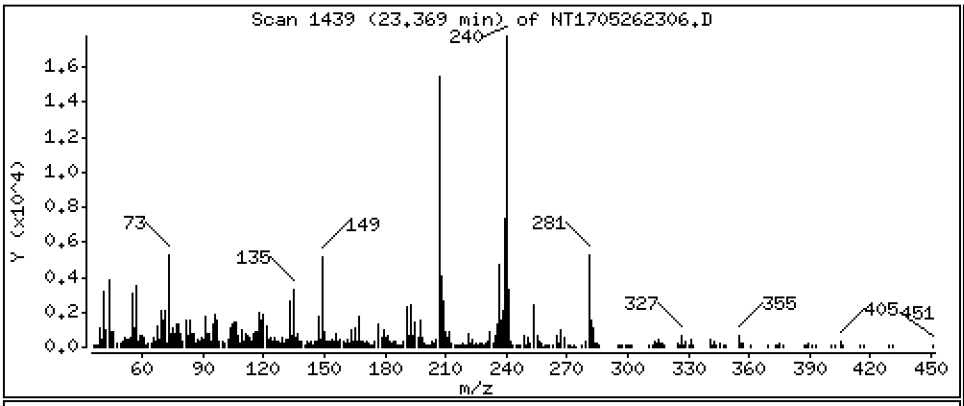
Operator: VTS

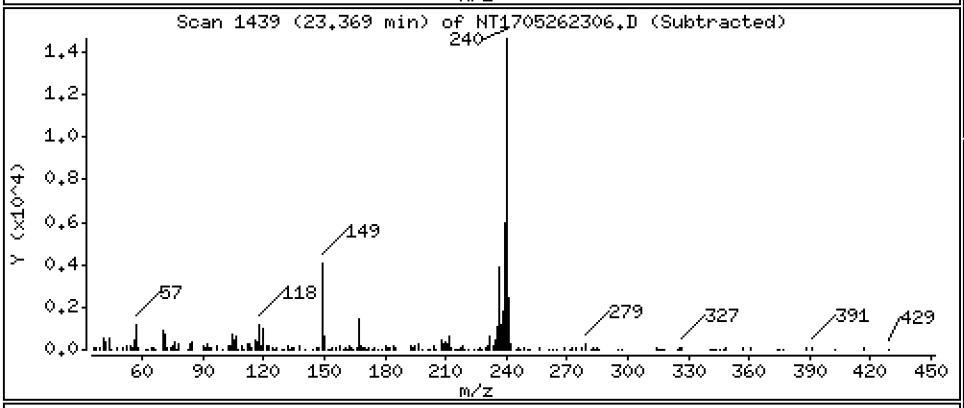
Column phase: ZB-5msi

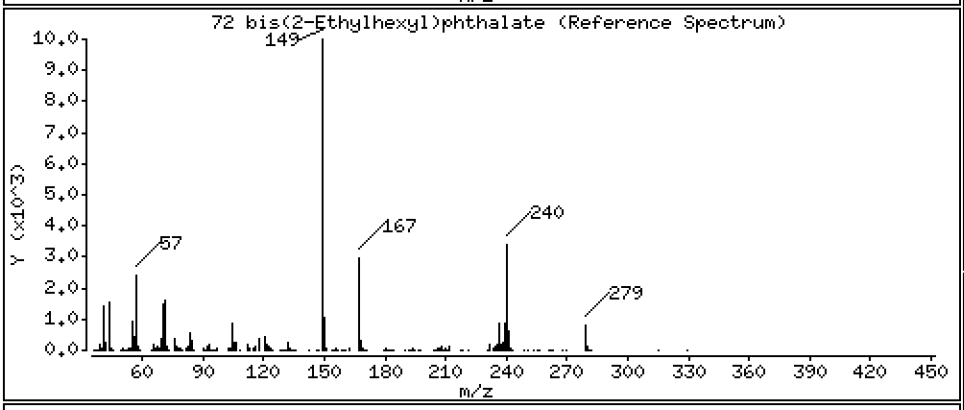
Column diameter: 0.25

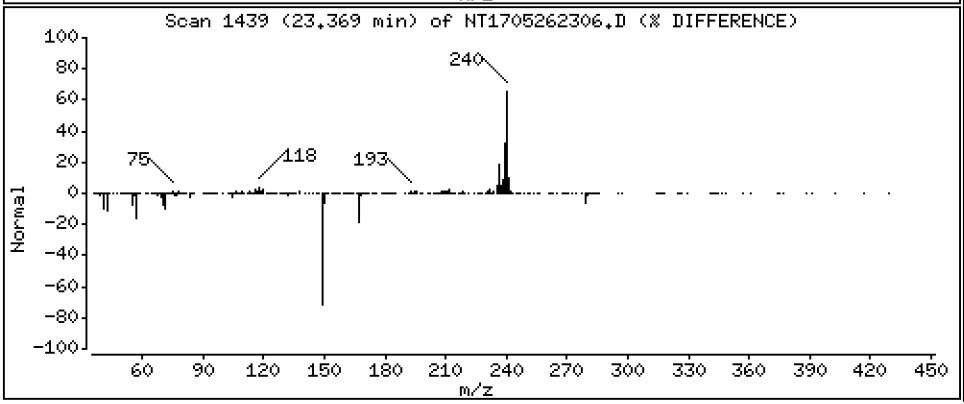
72 bis(2-Ethylhexyl)phthalate

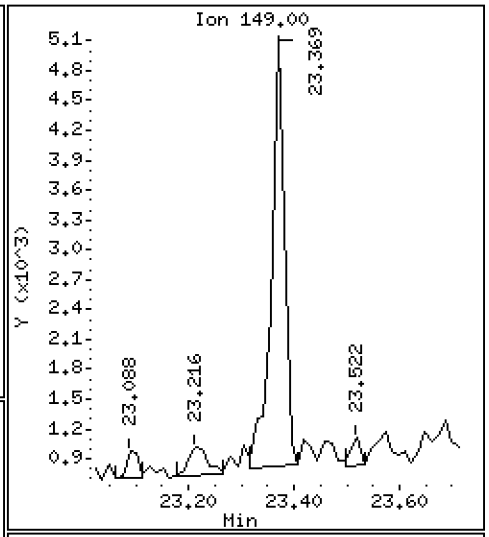
Concentration: 0.04352 ug/mL

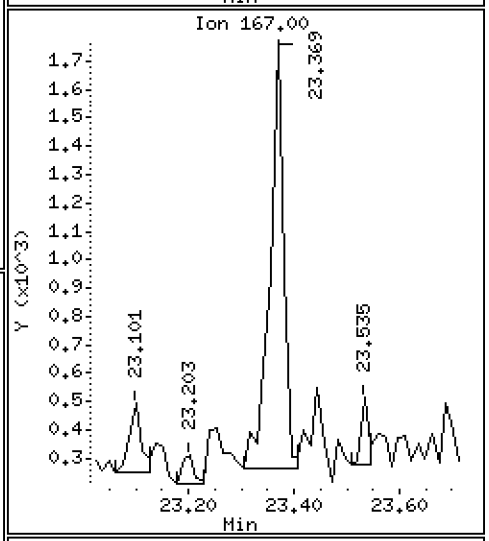


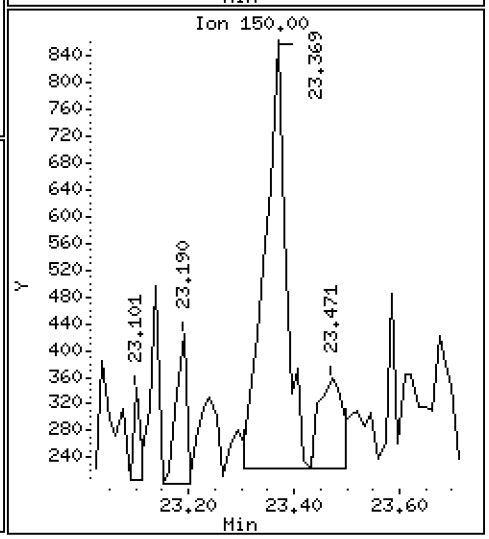












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK1

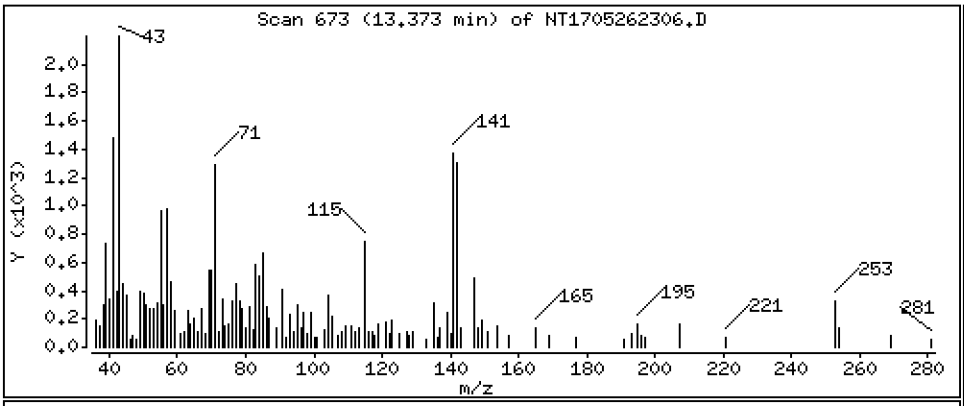
Operator: VTS

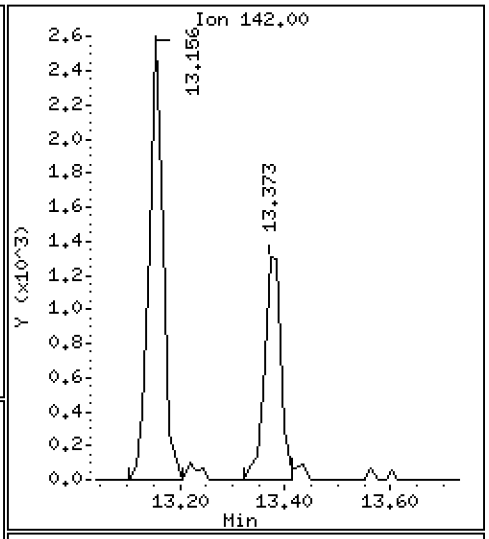
Column phase: ZB-5msi

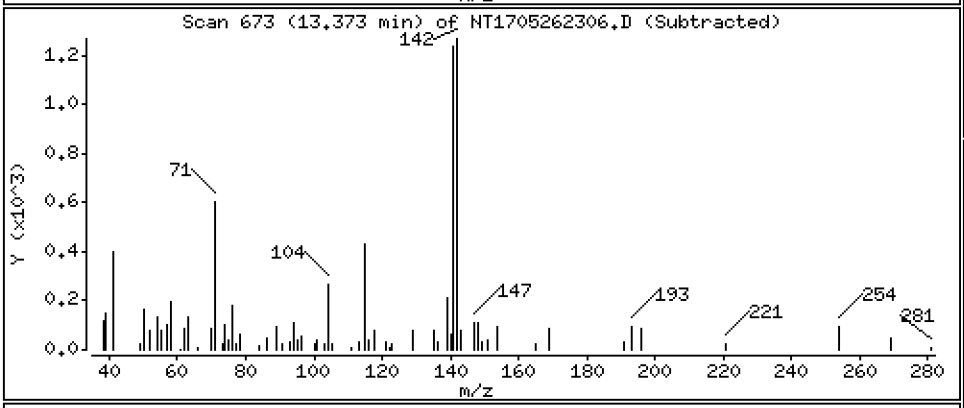
Column diameter: 0.25

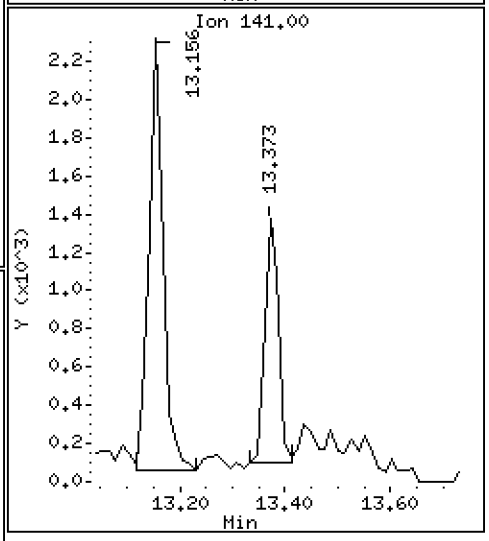
105 1-methylnaphthalene

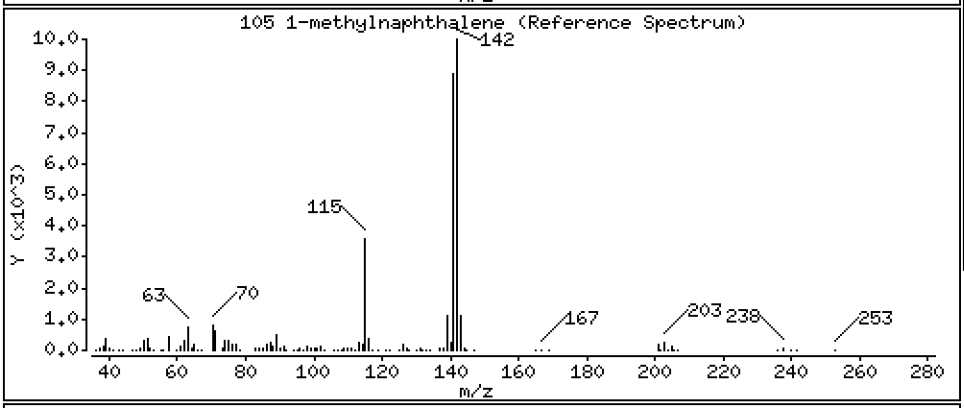
Concentration: 0.01512 ug/mL

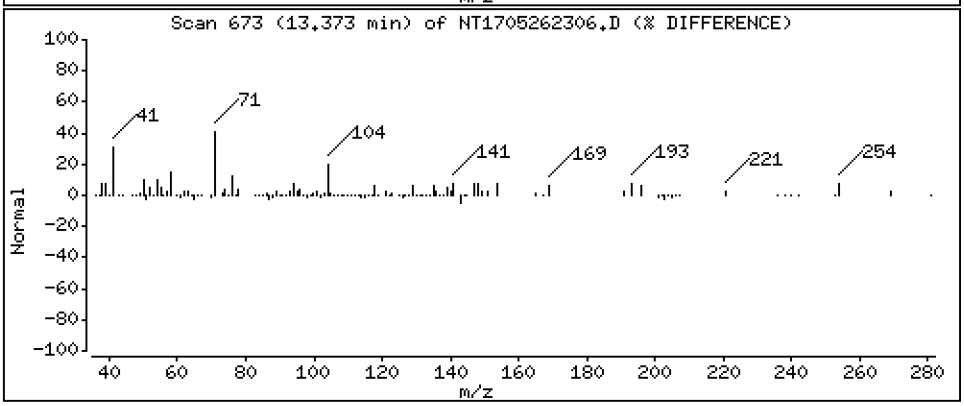












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262306.D
Lab Smp Id: BLD0607-BLK1
Inj Date : 26-MAY-2023 15:47
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-BLK1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 12:20 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	7.084	7.071	(0.765)	436603	4.94765	4.948
$ 2	Phenol-d5	99	8.638	8.638	(0.933)	620579	5.31406	5.314
3	Phenol	94	8.651	8.651	(0.934)	5330	0.04309	0.04309
$ 5	2-Chlorophenol-d4	132	8.906	8.906	(0.961)	522251	5.58311	5.583
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	1347	0.01288	0.01288
* 8	1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	269574	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	258146	3.92630	3.926
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	9.544	9.531	(1.030)	14280	0.24796	0.2480
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					
$ 18	Nitrobenzene-d5	82	10.349	10.349	(0.882)	474661	4.08912	4.089
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.728	11.728	(1.000)	1019925	4.00000	
28	Naphthalene	128	11.766	11.779	(1.003)	38400	0.13691	0.1369
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	13.156	13.156	(1.122)	4808	0.02394	0.02394
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	861303	4.06847	4.068
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	Compound Not Detected.					
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	537378	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	15.388	15.388	(1.004)	2554	0.01498	0.01498
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	Compound Not Detected.					
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	16.267	16.267	(1.062)	17685	0.09808	0.09808
	49	Fluorene	166	16.420	16.420	(1.072)	1586	0.00701	0.007011
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.954	16.954	(1.106)	85530	3.64886	3.649
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	871516	4.00000	
	60	Phenanthrene	178	18.381	18.394	(1.002)	6340	0.02493	0.02493
	61	Anthracene	178	Compound Not Detected.					
	62	Carbazole	167	Compound Not Detected.					
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	Compound Not Detected.					
	65	Pyrene	202	Compound Not Detected.					
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	866630	4.58825	4.588
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	Compound Not Detected.					
*	69	Chrysene-d12	240	23.343	23.355	(1.000)	560318	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	Compound Not Detected.					
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	7286	0.04352	0.04352
*	134	Di-n-octylphthalate-d4	153	24.350	24.363	(1.000)	1157035	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	Compound Not Detected.					
	75	Benzo(k)fluoranthene	252	Compound Not Detected.					
	76	Benzo(a)pyrene	252	Compound Not Detected.					
*	77	Perylene-d12	264	25.996	25.996	(1.000)	499749	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	13.373	13.385	(1.140)	2817	0.01512	0.01512
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262306.D
Lab Smp Id: BLD0607-BLK1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:16
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	303517	151759	607034	269574	-11.18
27 Naphthalene-d8	1140476	570238	2280952	1019925	-10.57
42 Acenaphthene-d10	622461	311231	1244922	537378	-13.67
59 Phenanthrene-d10	1074054	537027	2148108	871516	-18.86
69 Chrysene-d12	723807	361904	1447614	560318	-22.59
134 Di-n-octylphthala	1524055	762028	3048110	1157035	-24.08
77 Perylene-d12	666992	333496	1333984	499749	-25.07

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	-0.00
69 Chrysene-d12	23.36	22.86	23.86	23.34	-0.05
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.05
77 Perylene-d12	26.00	25.50	26.50	26.00	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262306.D

Lab ID: BLD0607-BLK1
nt17.i, ABN.m, 26-MAY-2023 15:47

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1705262302.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Form I

METHOD BLANK DATA SHEET

EPA 8270E

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLD0607-BLK3	File ID:	NT1705262327.D
Sampled:	N/A	Prepared:	04/24/23 16:38	Analyzed:	05/27/23 04:54
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLD0607	Sequence:	SLE0434	Calibration:	GE00065
Instrument:	NT17	Column:	ZB-5MS		

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
108-95-2	Phenol	1	20.0	U	4.4	20.0
100-51-6	Benzyl Alcohol	1	20.0	U	16.3	20.0
106-44-5	4-Methylphenol	1	20.0	U	7.4	20.0
91-20-3	Naphthalene	1	17.1	J	4.2	20.0
91-57-6	2-Methylnaphthalene	1	20.0	U	4.5	20.0
208-96-8	Acenaphthylene	1	20.0	U	6.2	20.0
132-64-9	Dibenzofuran	1	20.0	U	14.1	20.0
86-73-7	Fluorene	1	20.0	U	14.6	20.0
85-01-8	Phenanthrene	1	20.0	U	8.7	20.0
120-12-7	Anthracene	1	20.0	U	7.2	20.0
206-44-0	Fluoranthene	1	20.0	U	6.1	20.0
129-00-0	Pyrene	1	20.0	U	5.7	20.0
85-68-7	Butylbenzylphthalate	1	20.0	U	9.4	20.0
56-55-3	Benzo(a)anthracene	1	20.0	U	6.0	20.0
218-01-9	Chrysene	1	20.0	U	6.1	20.0
117-81-7	bis(2-Ethylhexyl)phthalate	1	50.0	U	5.5	50.0
	Benzofluoranthenes, Total	1	40.0	U	10.0	40.0
50-32-8	Benzo(a)pyrene	1	20.0	U	4.2	20.0
193-39-5	Indeno(1,2,3-cd)pyrene	1	20.0	U	14.7	20.0
53-70-3	Dibenzo(a,h)anthracene	1	20.0	U	17.2	20.0
191-24-2	Benzo(g,h,i)perylene	1	20.0	U	13.6	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	490	65.4	27 - 120	
Phenol-d5	750.00	512	68.2	29 - 120	
2-Chlorophenol-d4	750.00	538	71.7	31 - 120	
1,2-Dichlorobenzene-d4	500.00	387	77.3	32 - 120	
Nitrobenzene-d5	500.00	425	85.0	30 - 120	
2-Fluorobiphenyl	500.00	418	83.6	35 - 120	
2,4,6-Tribromophenol	750.00	364	48.5	24 - 134	
p-Terphenyl-d14	500.00	382	76.5	37 - 120	

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262327.D

Date : 27-MAY-2023 04:54

Client ID:

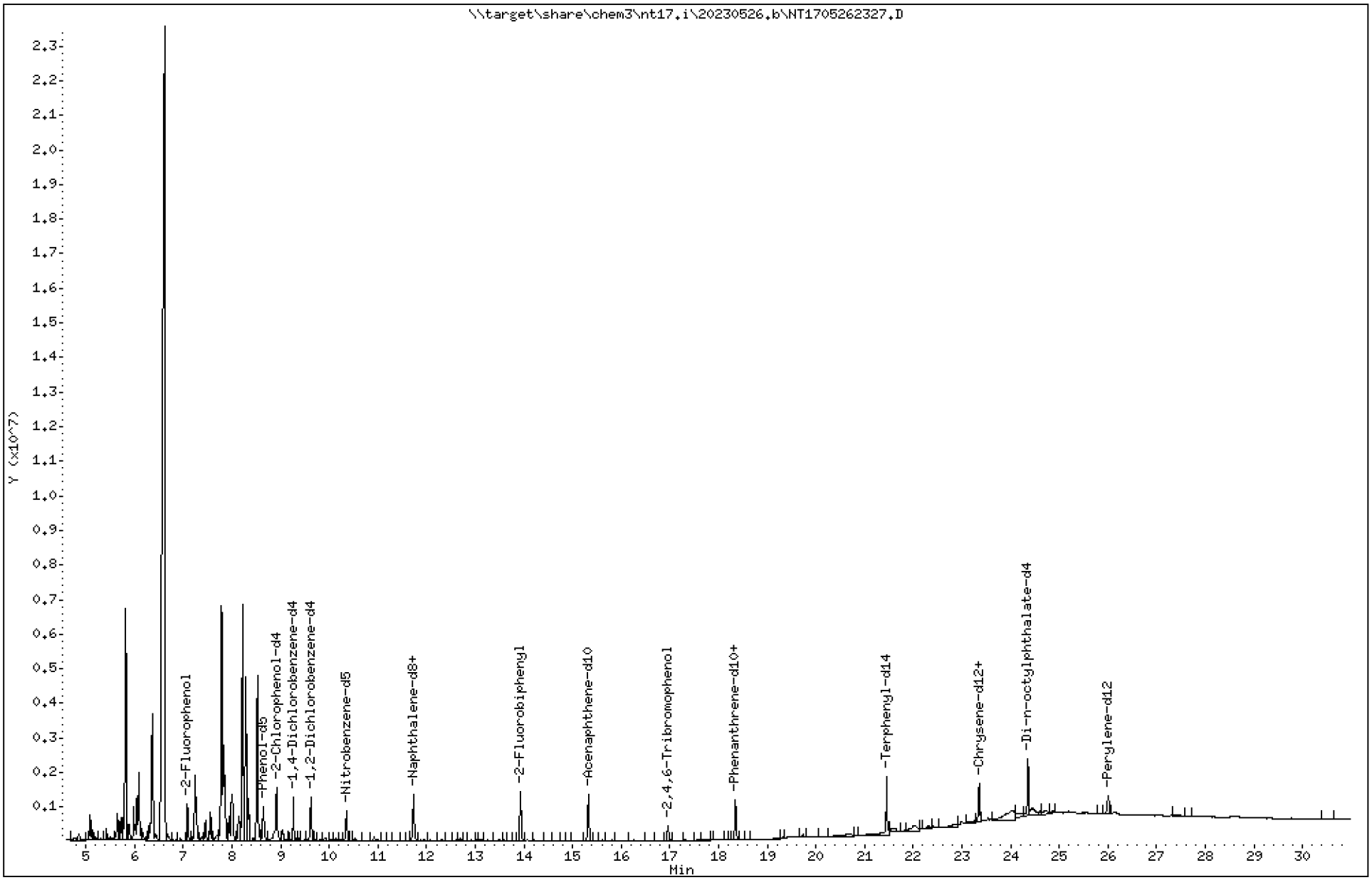
Instrument: nt17.i

Sample Info: BLD0607-BLK2

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

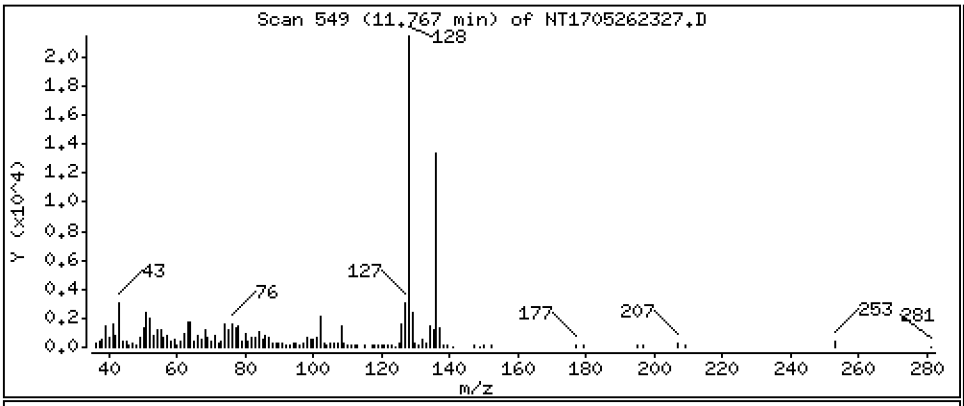
Operator: VTS

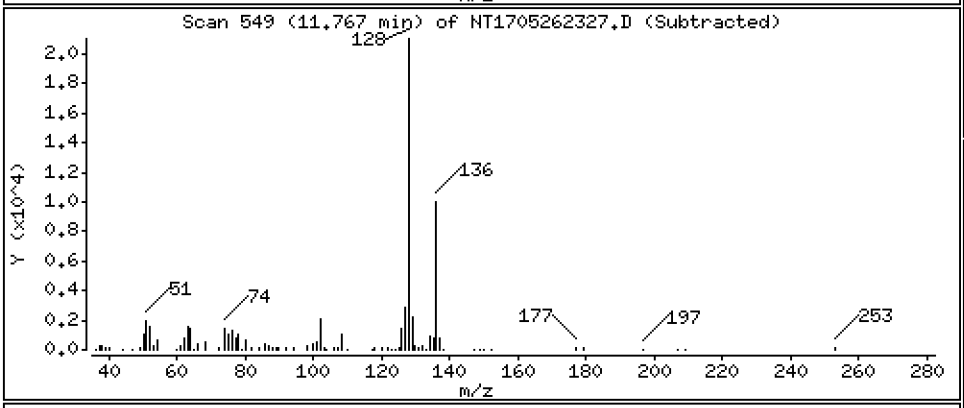
Column phase: ZB-5msi

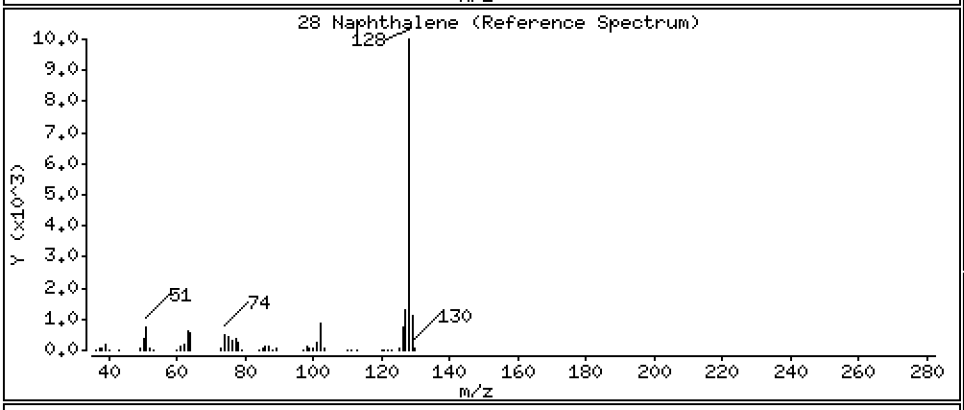
Column diameter: 0.25

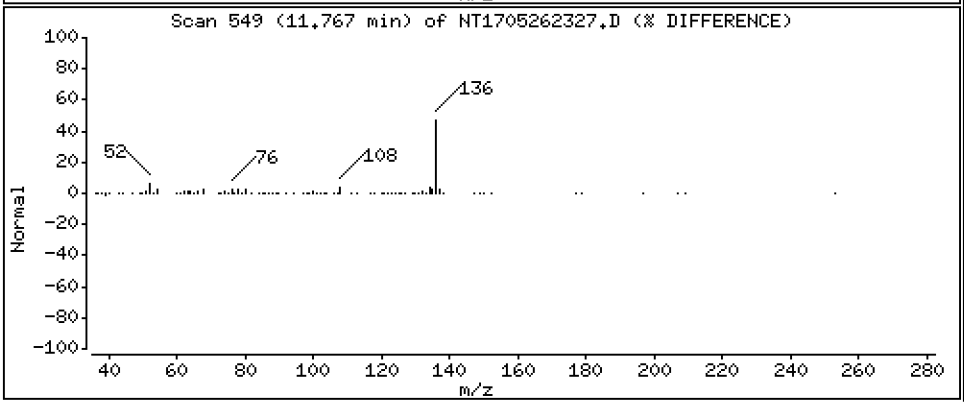
28 Naphthalene

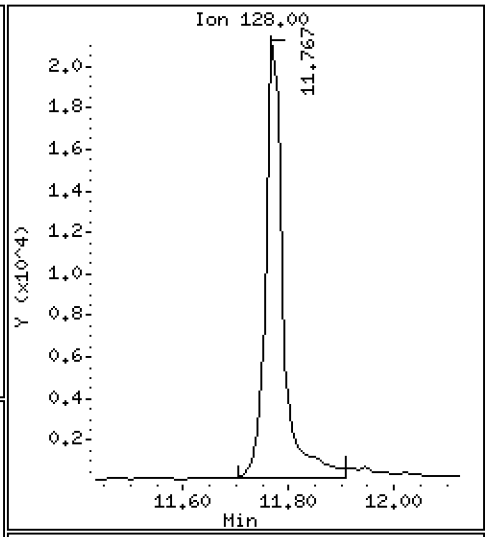
Concentration: 0.1709 ug/mL

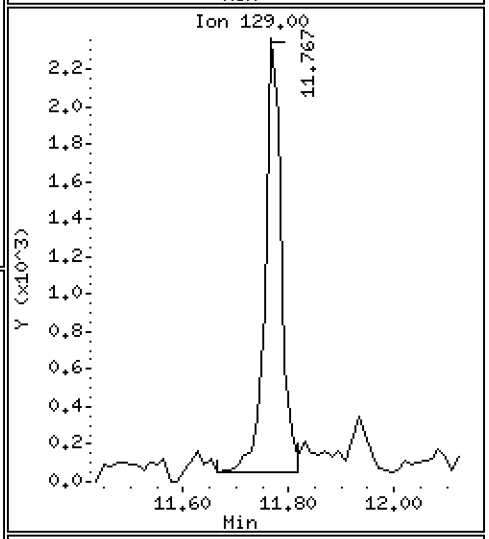


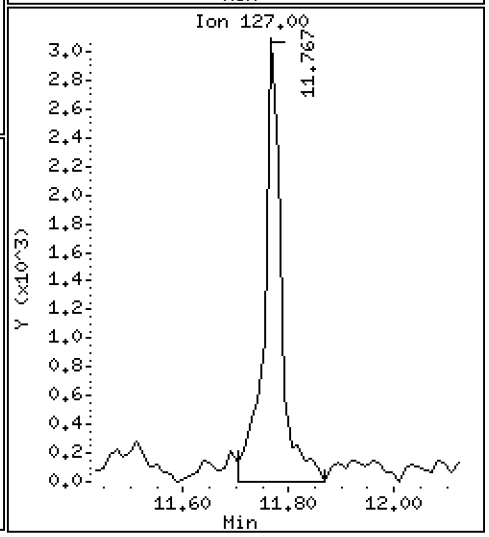












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262327.D

Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

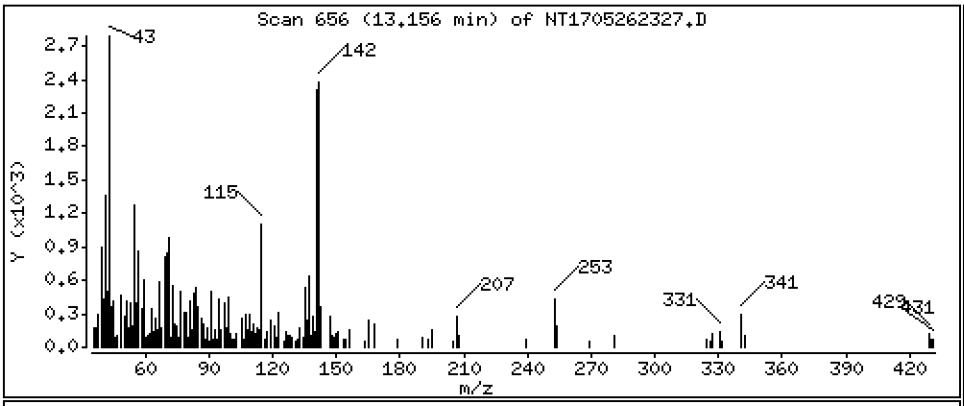
Operator: VTS

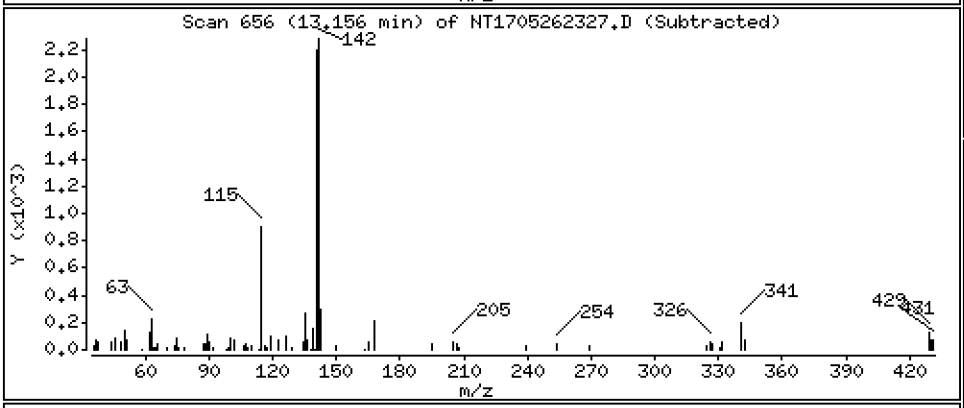
Column phase: ZB-5msi

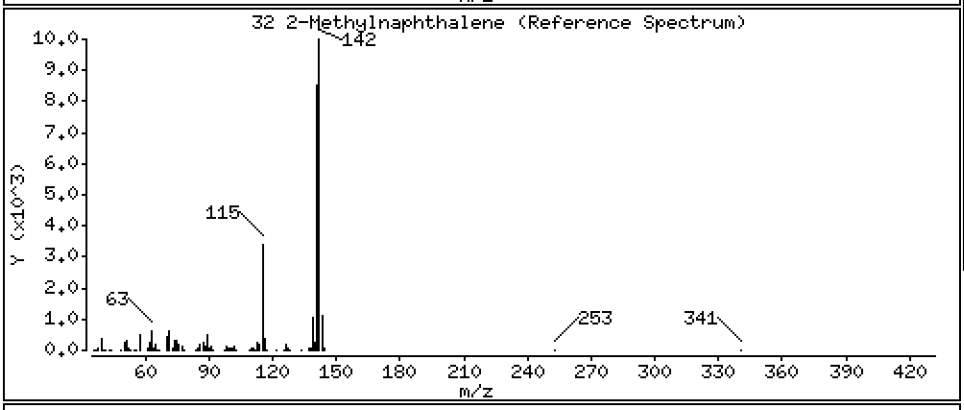
Column diameter: 0.25

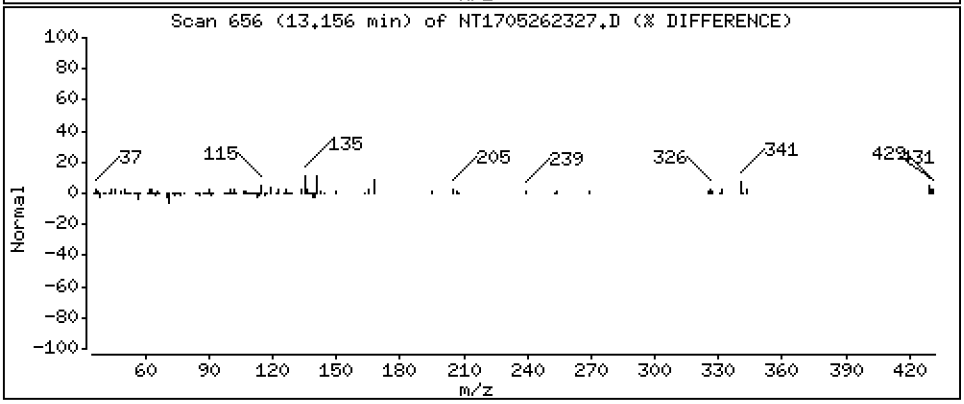
32 2-Methylnaphthalene

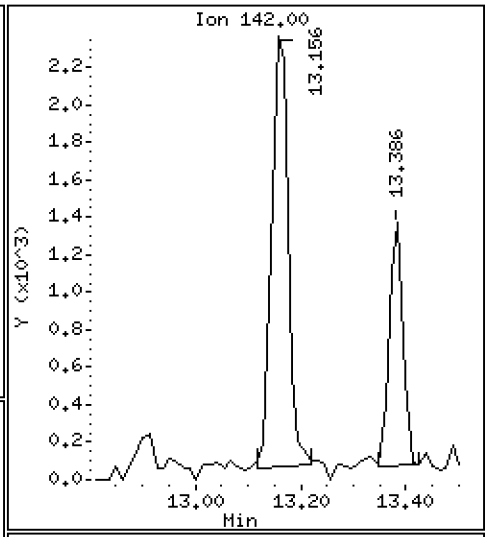
Concentration: 0.02405 ug/mL

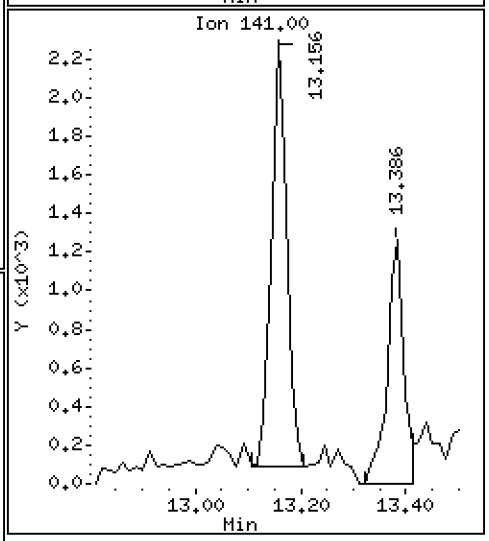












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262327.D

Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

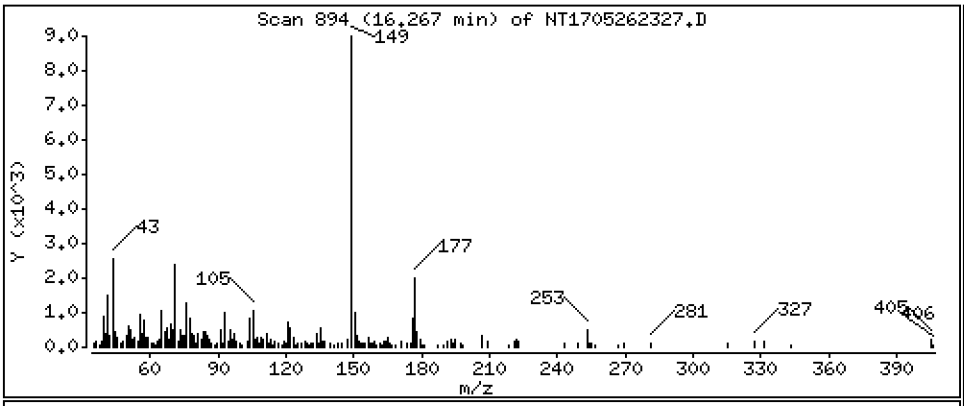
Operator: VTS

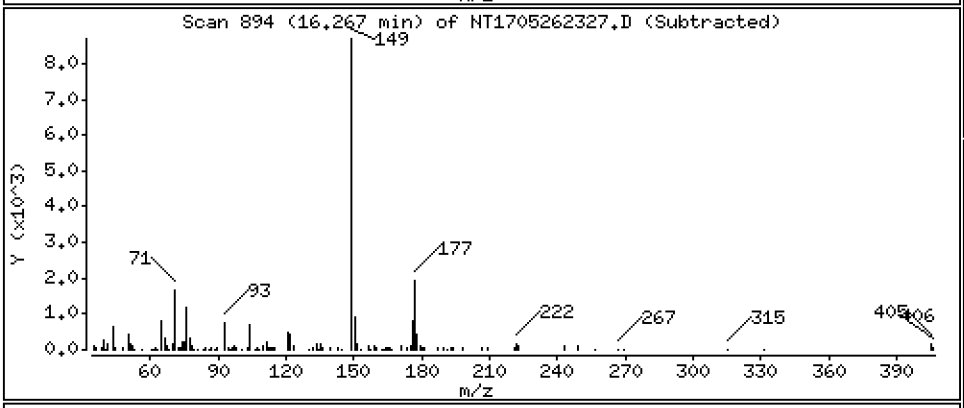
Column phase: ZB-5msi

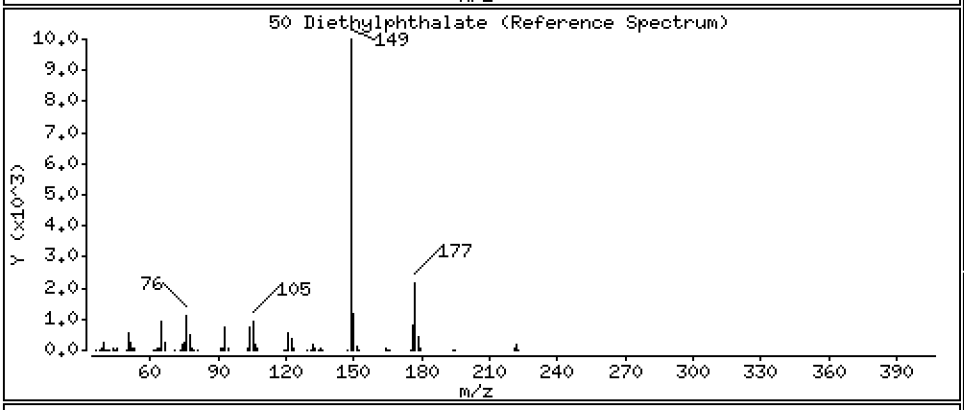
Column diameter: 0.25

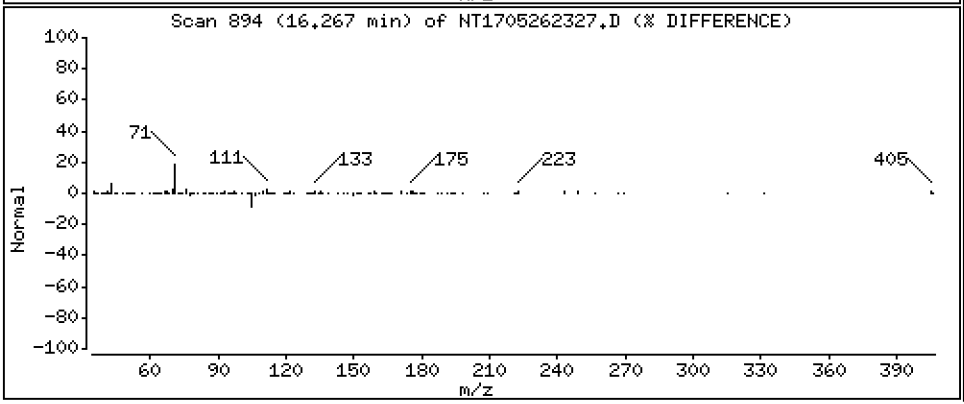
50 Diethylphthalate

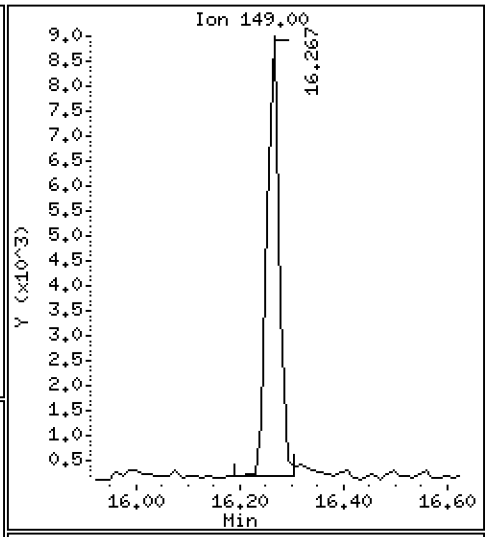
Concentration: 0.1074 ug/mL

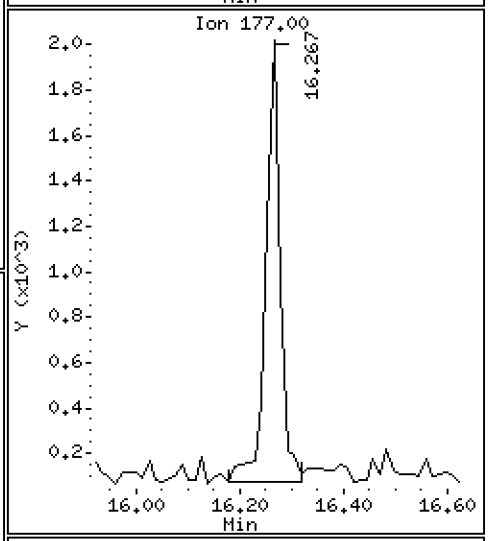


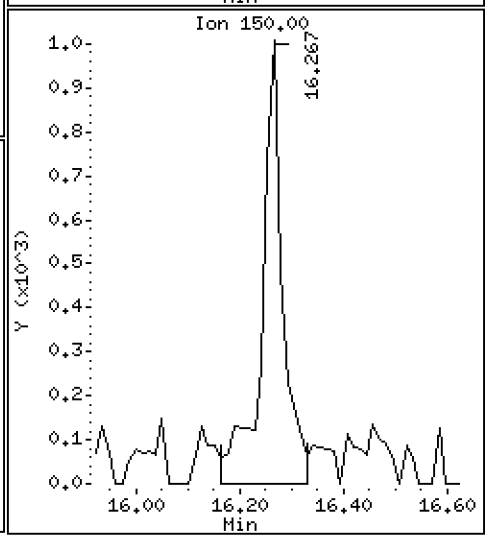












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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

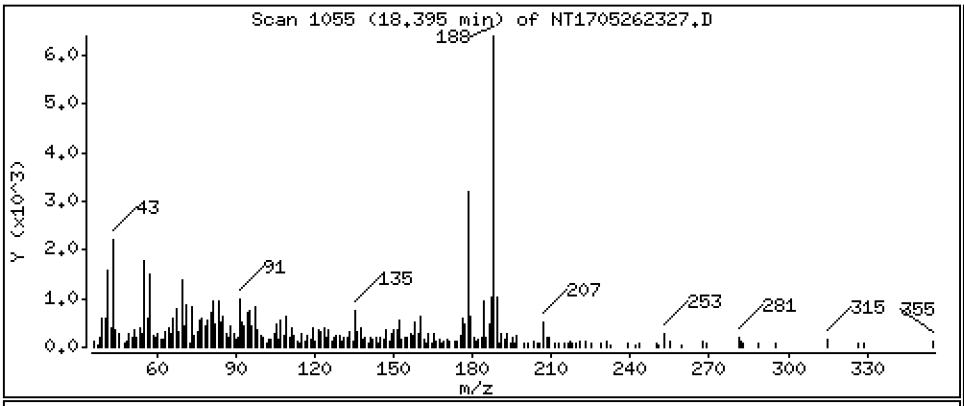
Operator: VTS

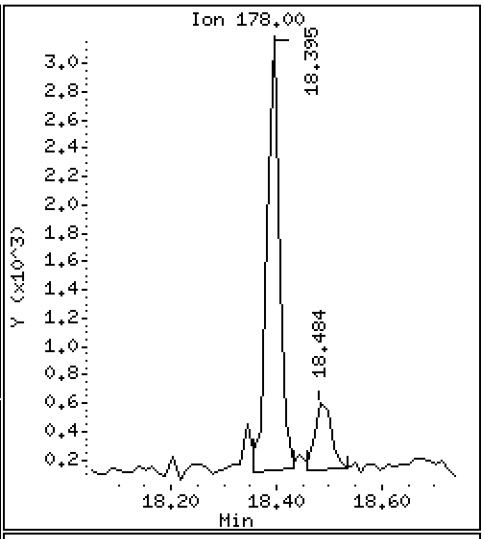
Column phase: ZB-5msi

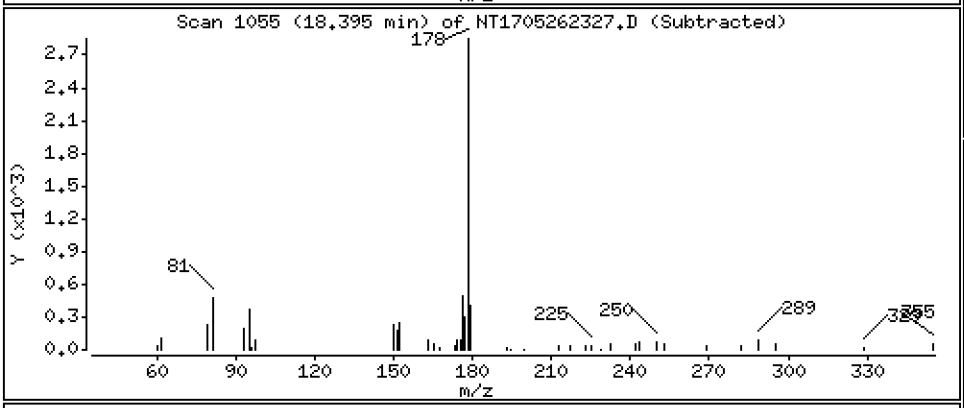
Column diameter: 0.25

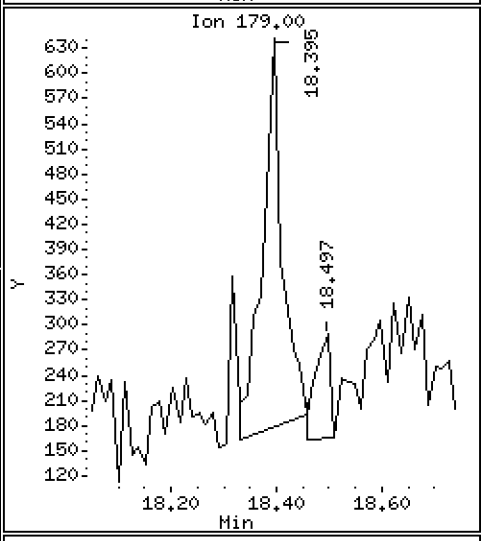
60 Phenanthrene

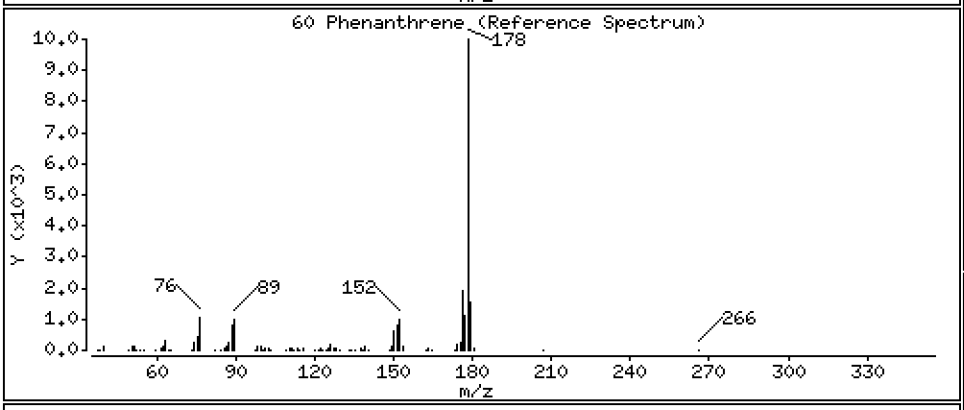
Concentration: 0.02293 ug/mL

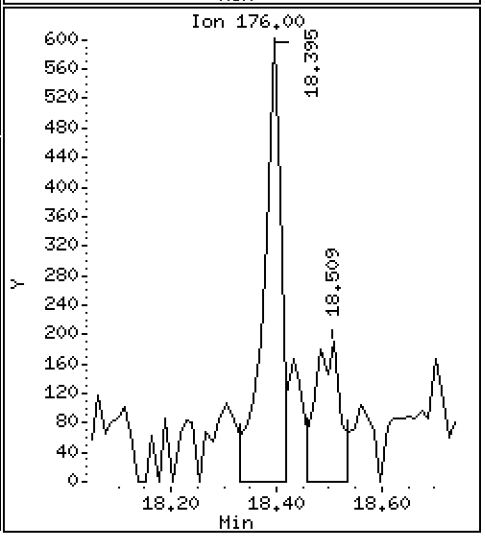


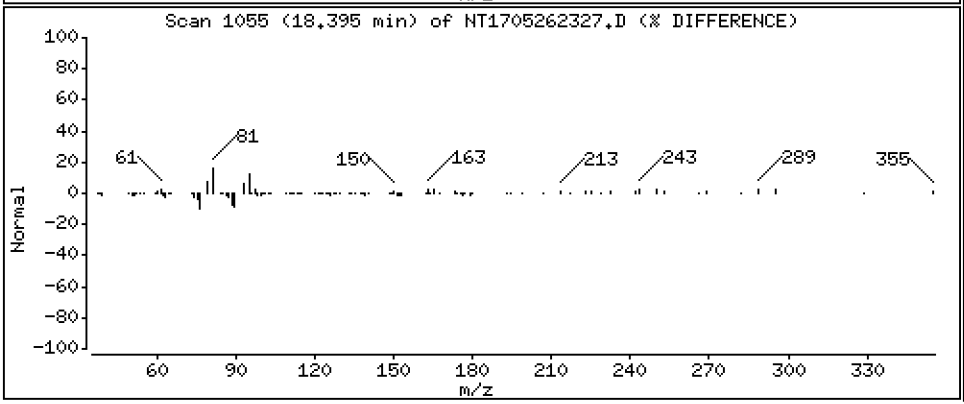












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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

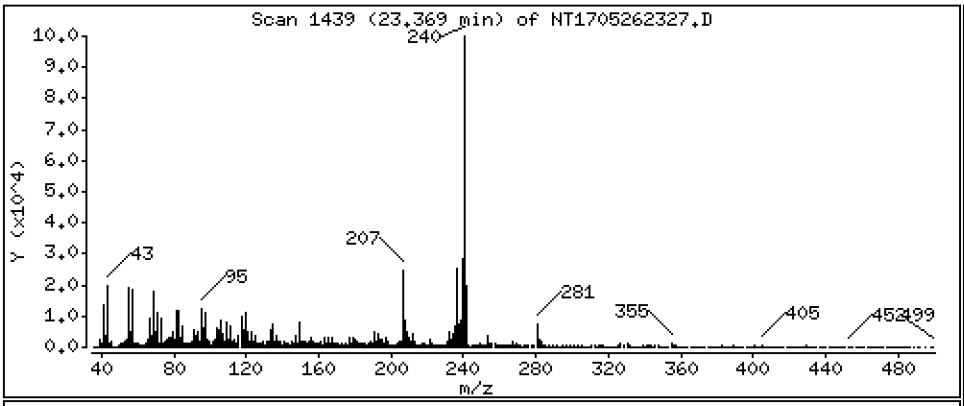
Operator: VTS

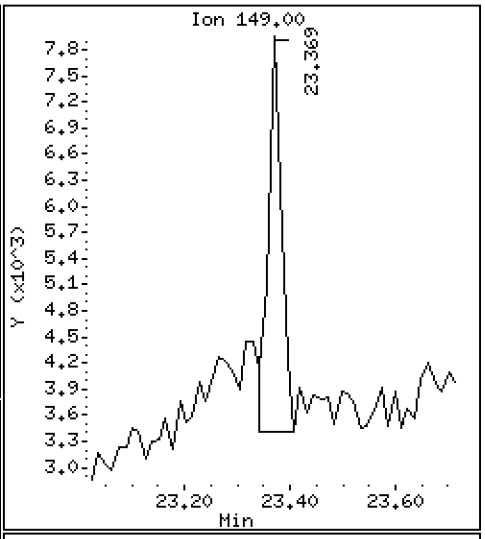
Column phase: ZB-5msi

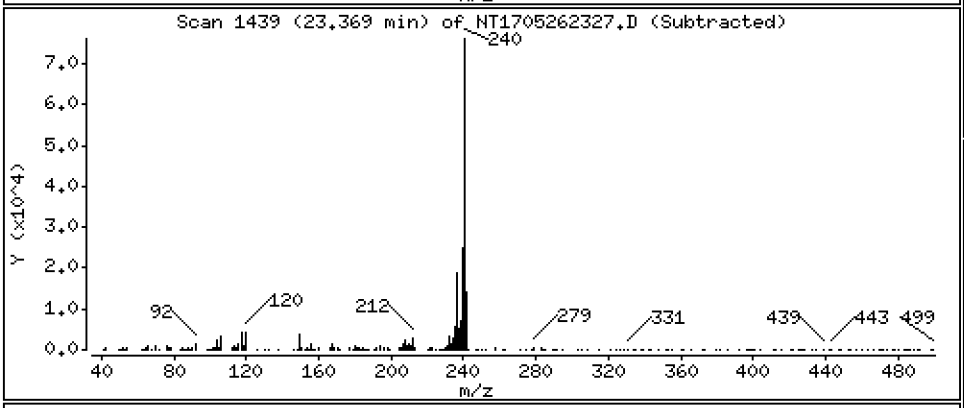
Column diameter: 0.25

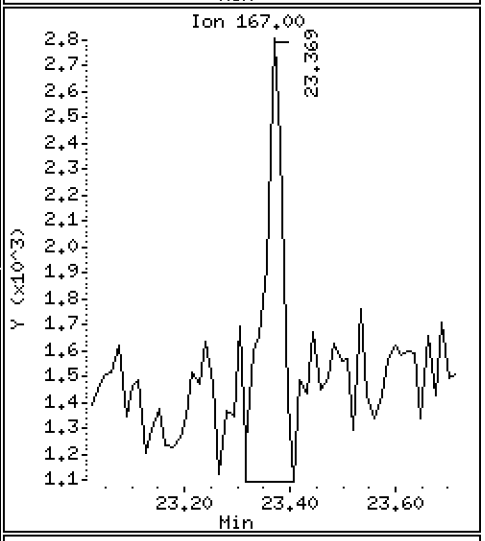
72 bis(2-Ethylhexyl)phthalate

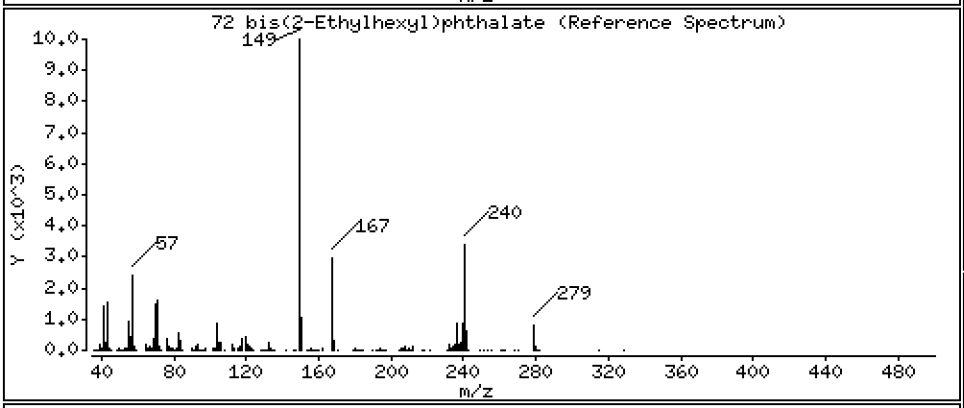
Concentration: 0.04751 ug/mL

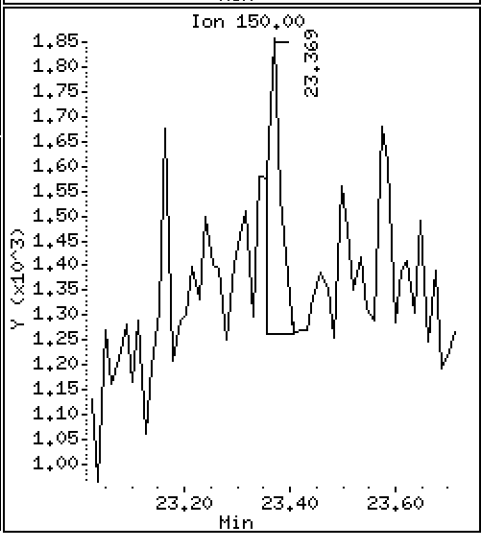


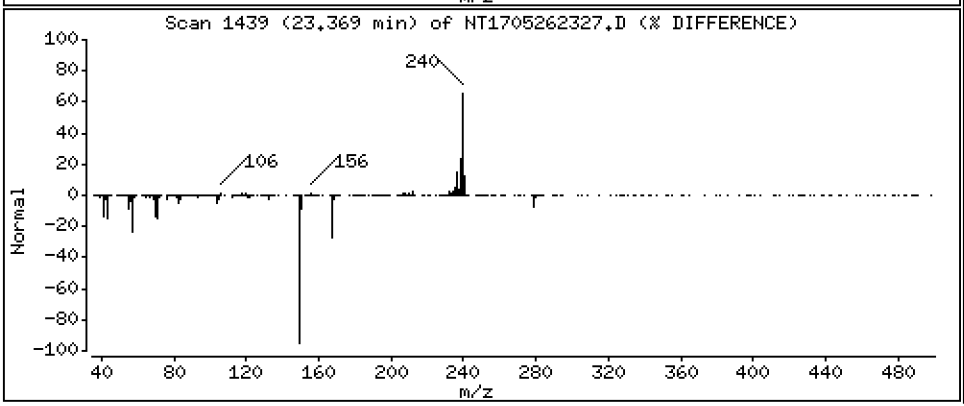












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262327.D
Lab Smp Id: BLD0607-BLK2
Inj Date : 27-MAY-2023 04:54
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-BLK2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 13:35 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	7.084	7.071	(0.765)	495032	4.90126	4.901
$ 2	Phenol-d5	99	8.638	8.639	(0.933)	684012	5.11747	5.117
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	8.919	8.906	(0.963)	575674	5.37694	5.377
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	308543	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	290967	3.86656	3.867
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					
$ 18	Nitrobenzene-d5	82	10.349	10.349	(0.882)	509171	4.25052	4.251
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.728	11.728	(1.000)	1052532	4.00000	
28	Naphthalene	128	11.766	11.779	(1.003)	49462	0.17089	0.1709
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	13.156	13.156	(1.122)	4984	0.02405	0.02405
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	855282	4.18060	4.181
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	Compound Not Detected.					
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	519310	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	Compound Not Detected.					
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	Compound Not Detected.					
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	16.267	16.267	(1.062)	18717	0.10741	0.1074
	49	Fluorene	166	Compound Not Detected.					
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	16.967	16.967	(1.107)	82367	3.63618	3.636
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	793037	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	5306	0.02293	0.02293
	61	Anthracene	178	Compound Not Detected.					
	62	Carbazole	167	Compound Not Detected.					
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	Compound Not Detected.					
	65	Pyrene	202	Compound Not Detected.					
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	772407	3.82354	3.824
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	Compound Not Detected.					
*	69	Chrysene-d12	240	23.355	23.356	(1.000)	599277	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	Compound Not Detected.					
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	8114	0.04751	0.04751
*	134	Di-n-octylphthalate-d4	153	24.350	24.351	(1.000)	1180466	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	Compound Not Detected.					
	75	Benzo(k)fluoranthene	252	Compound Not Detected.					
	76	Benzo(a)pyrene	252	Compound Not Detected.					
*	77	Perylene-d12	264	26.009	26.009	(1.000)	437418	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	Compound Not Detected.					
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	Compound Not Detected.					
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262327.D
Lab Smp Id: BLD0607-BLK2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 27-MAY-2023
Calibration Time: 05:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	317699	158850	635398	308543	-2.88
27 Naphthalene-d8	1109251	554626	2218502	1052532	-5.11
42 Acenaphthene-d10	572542	286271	1145084	519310	-9.30
59 Phenanthrene-d10	911027	455514	1822054	793037	-12.95
69 Chrysene-d12	675891	337946	1351782	599277	-11.34
134 Di-n-octylphthala	1331493	665747	2662986	1180466	-11.34
77 Perylene-d12	494128	247064	988256	437418	-11.48

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	-0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	-0.00
69 Chrysene-d12	23.36	22.86	23.86	23.36	-0.00
134 Di-n-octylphthala	24.35	23.85	24.85	24.35	-0.00
77 Perylene-d12	26.01	25.51	26.51	26.01	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262327.D

Lab ID: BLD0607-BLK2
nt17.i, ABN.m, 27-MAY-2023 04:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1705262328.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/26/23 16:25
Batch:	BLD0607	Laboratory ID:	BLD0607-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Phenol	500	367		73.4	34 - 120
Benzyl Alcohol	500	403	B	80.5	19 - 120
4-Methylphenol	500	308		61.6	29 - 120
Naphthalene	500	392		78.3	43 - 120
2-Methylnaphthalene	500	383		76.6	43 - 120
Acenaphthylene	500	346		69.2	42 - 120
Dibenzofuran	500	409		81.7	43 - 120
Fluorene	500	448		89.5	45 - 120
Phenanthrene	500	414		82.9	49 - 120
Anthracene	500	293		58.6	45 - 120
Fluoranthene	500	446		89.1	53 - 145
Pyrene	500	436		87.2	52 - 134
Butylbenzylphthalate	500	483		96.5	45 - 132
Benzo(a)anthracene	500	408		81.6	49 - 120
Chrysene	500	417		83.5	47 - 120
bis(2-Ethylhexyl)phthalate	500	472		94.4	34 - 130
Benzofluoranthenes, Total	1000	915		91.5	30 - 160
Benzo(a)pyrene	500	328		65.7	42 - 120
Indeno(1,2,3-cd)pyrene	500	467		93.4	42 - 163
Dibenzo(a,h)anthracene	500	471		94.2	30 - 133
Benzo(g,h,i)perylene	500	469		93.9	46 - 148

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenol	500	387		77.3	5.16	30	34 - 120
Benzyl Alcohol	500	451	B	90.1	11.2	30	19 - 120
4-Methylphenol	500	318		63.6	3.16	30	29 - 120
Naphthalene	500	394		78.8	0.559	30	43 - 120
2-Methylnaphthalene	500	380		76.1	0.729	30	43 - 120
Acenaphthylene	500	360		72.0	4.03	30	42 - 120
Dibenzofuran	500	415		83.0	1.48	30	43 - 120
Fluorene	500	453		90.6	1.26	30	45 - 120

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/26/23 17:02
Batch:	BLD0607	Laboratory ID:	BLD0607-BSD1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS Dup
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Phenanthrene	500	410		82.1	0.965	30	49 - 120
Anthracene	500	300		60.1	2.45	30	45 - 120
Fluoranthene	500	456		91.2	2.29	30	53 - 145
Pyrene	500	447		89.3	2.38	30	52 - 134
Butylbenzylphthalate	500	491		98.3	1.84	30	45 - 132
Benzo(a)anthracene	500	429		85.8	5.02	30	49 - 120
Chrysene	500	434		86.9	3.99	30	47 - 120
bis(2-Ethylhexyl)phthalate	500	472		94.5	0.152	30	34 - 130
Benzofluoranthenes, Total	1000	910		91.0	0.615	30	30 - 160
Benzo(a)pyrene	500	338		67.7	3.03	30	42 - 120
Indeno(1,2,3-cd)pyrene	500	458		91.6	1.87	30	42 - 163
Dibenzo(a,h)anthracene	500	456		91.3	3.13	30	30 - 133
Benzo(g,h,i)perylene	500	454		90.8	3.40	30	46 - 148

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D

Date : 26-MAY-2023 16:25

Client ID:

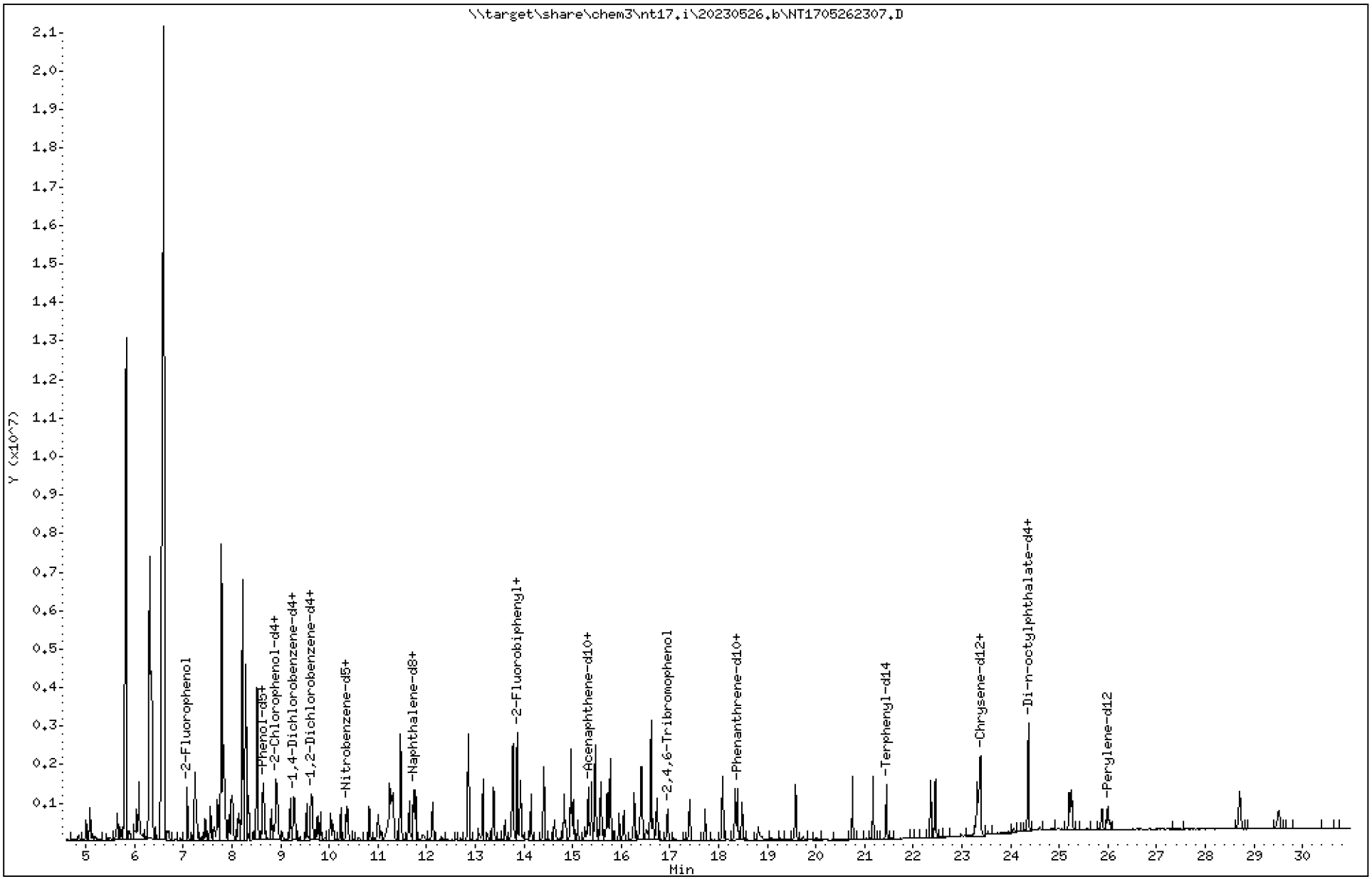
Sample Info: BLD0607-BS1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: VTS

Column diameter: 0.25



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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

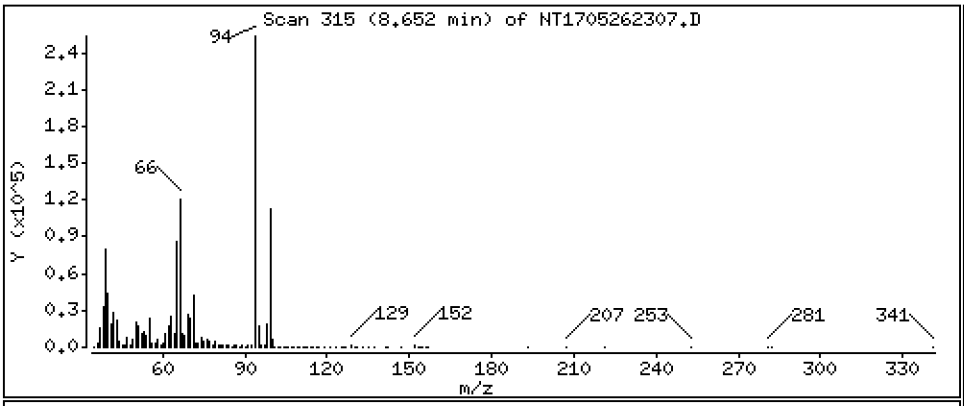
Operator: VTS

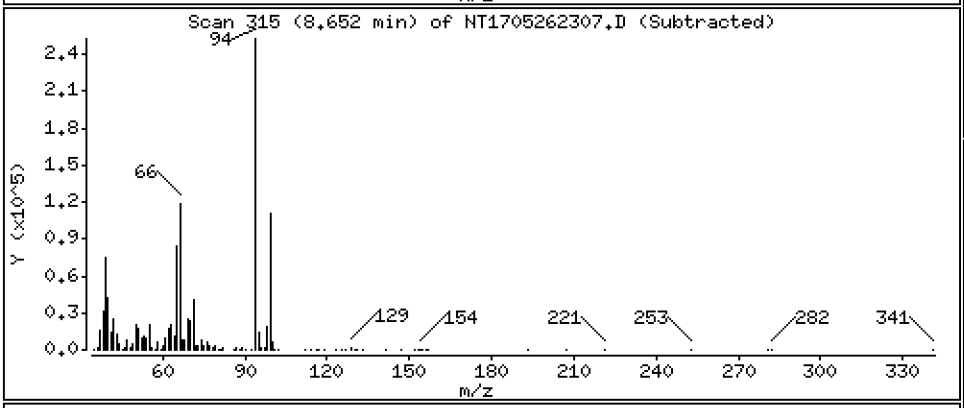
Column phase: ZB-5msi

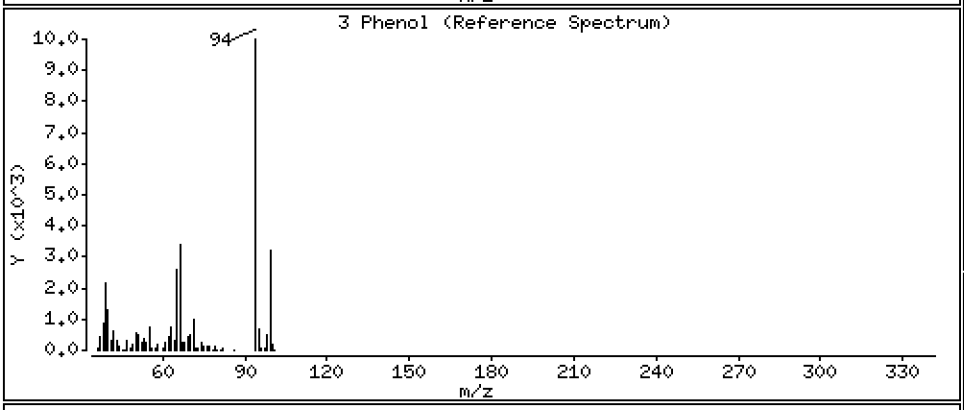
Column diameter: 0.25

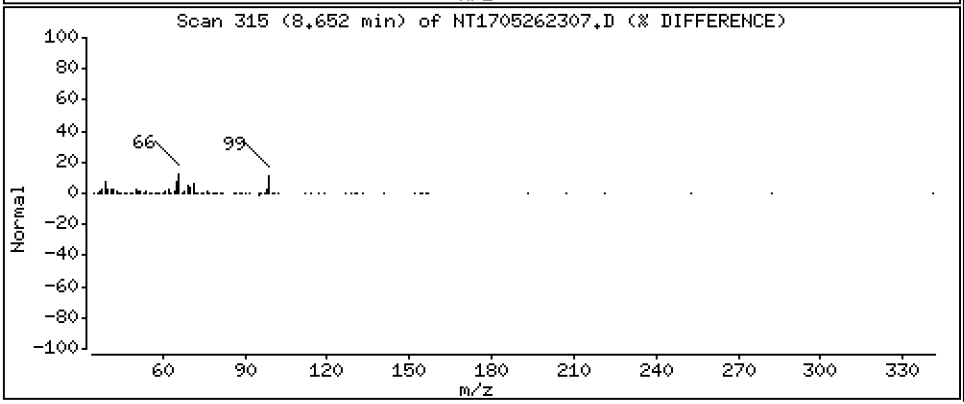
3 Phenol

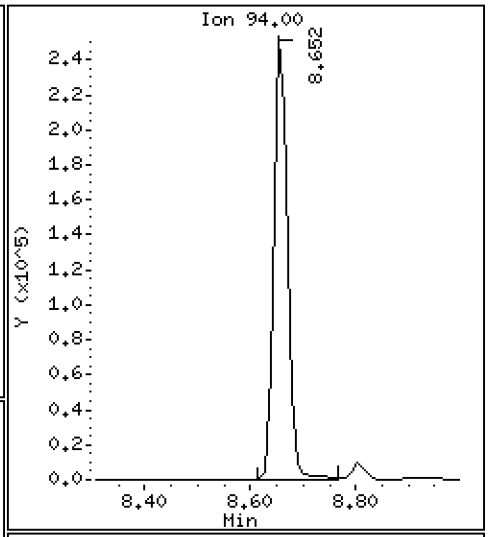
Concentration: 3.671 ug/mL

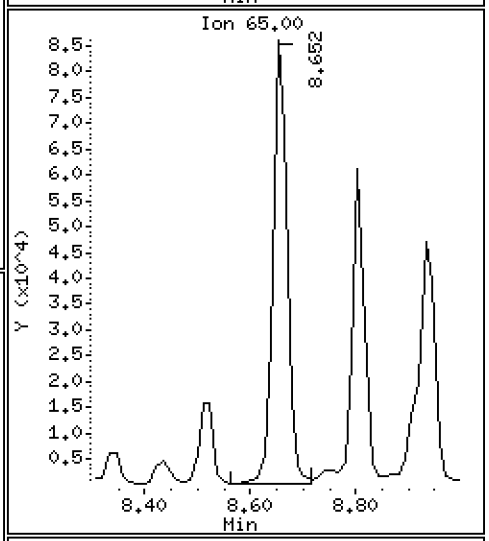


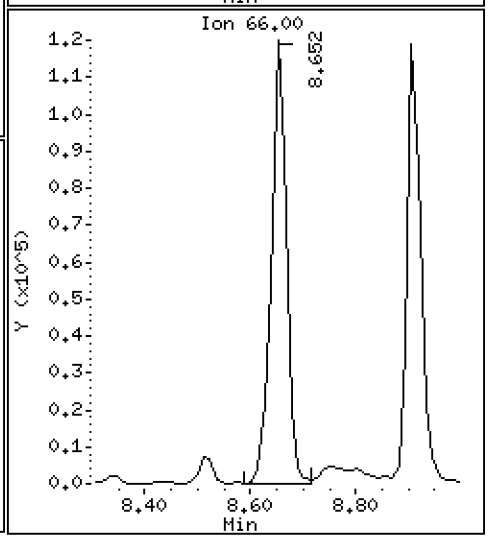












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

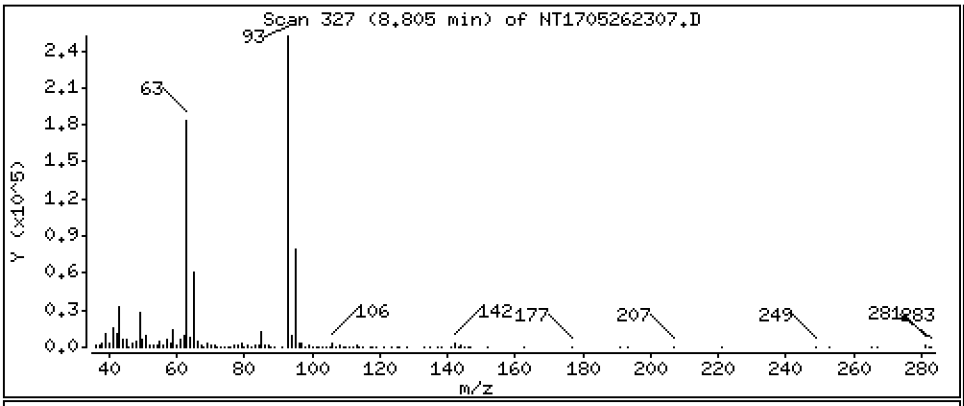
Operator: VTS

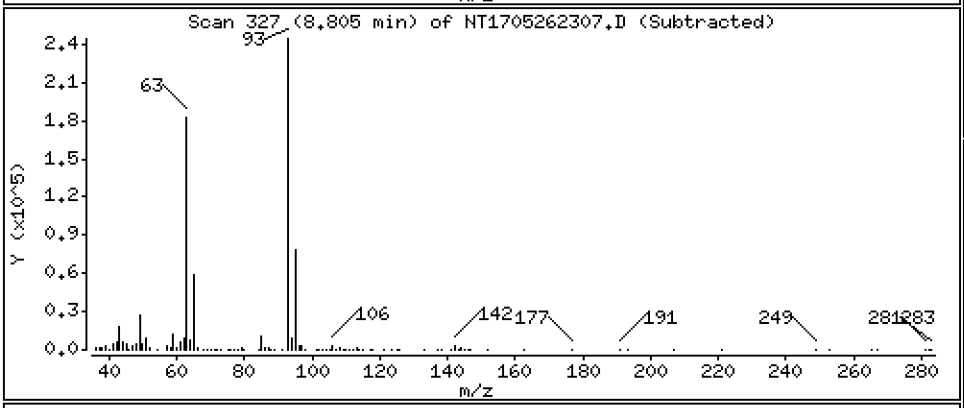
Column phase: ZB-5msi

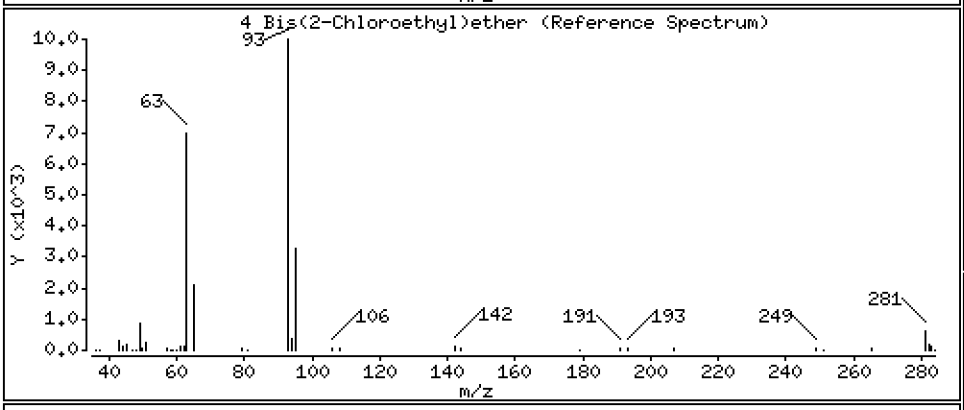
Column diameter: 0.25

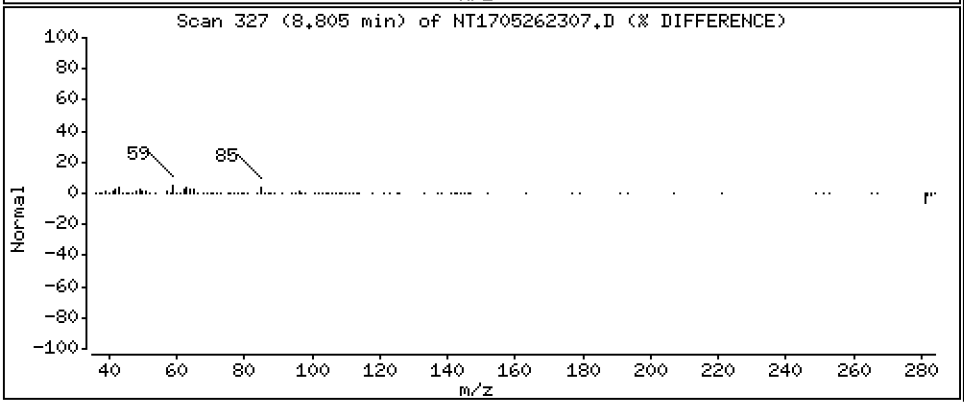
4 Bis(2-Chloroethyl)ether

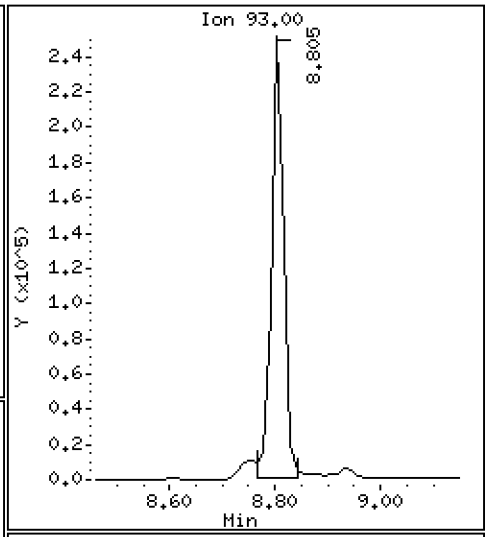
Concentration: 4.424 ug/mL

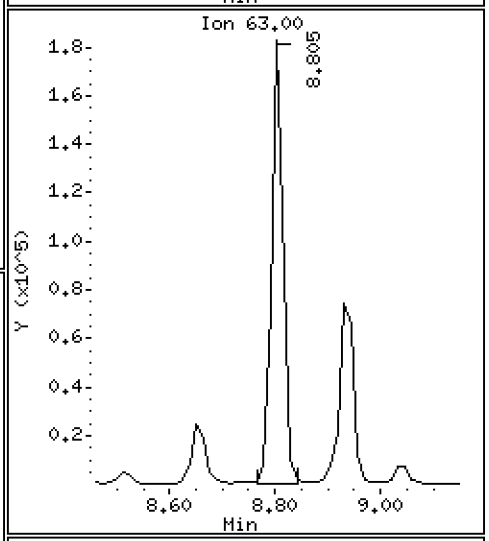


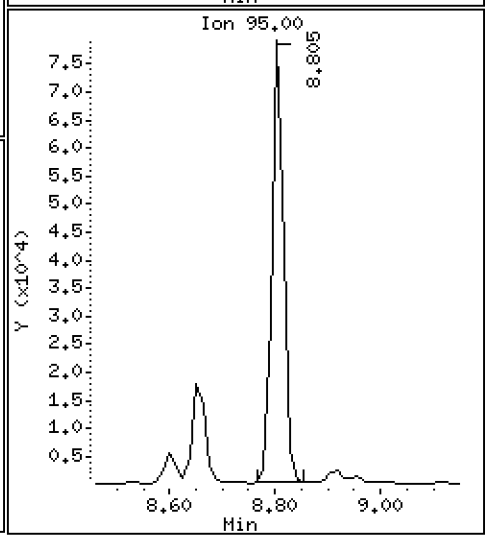












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

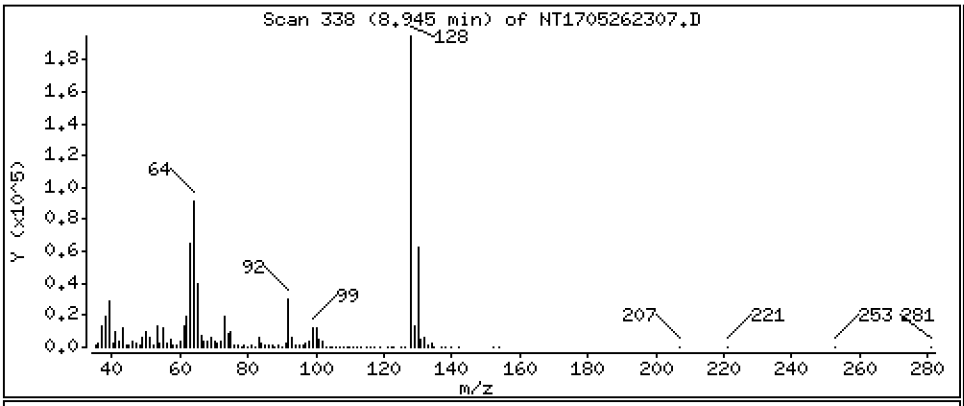
Operator: VTS

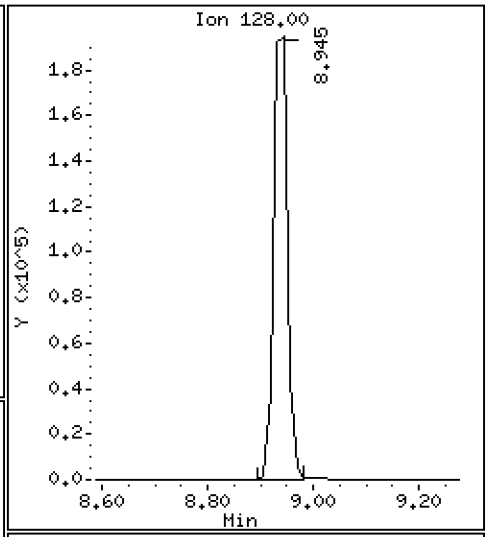
Column phase: ZB-5msi

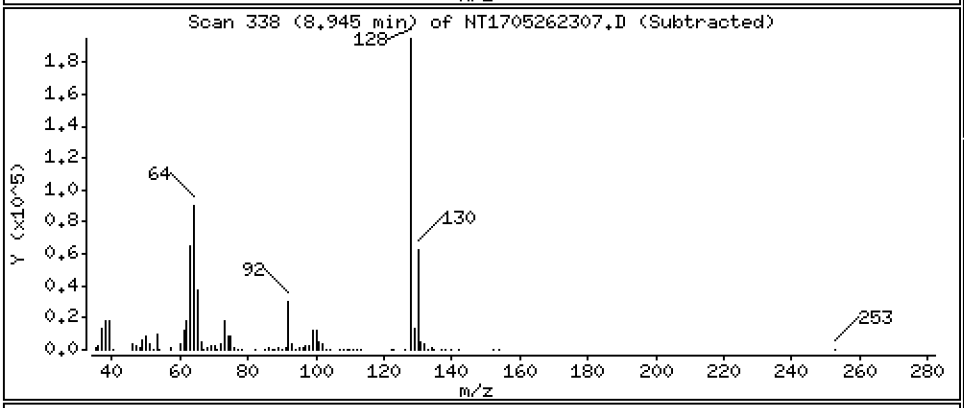
Column diameter: 0.25

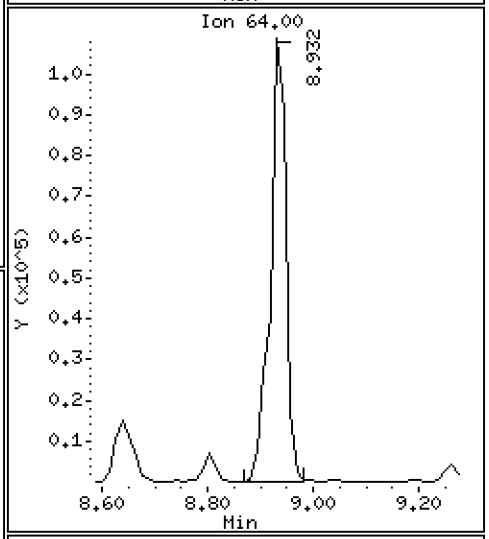
6 2-Chlorophenol

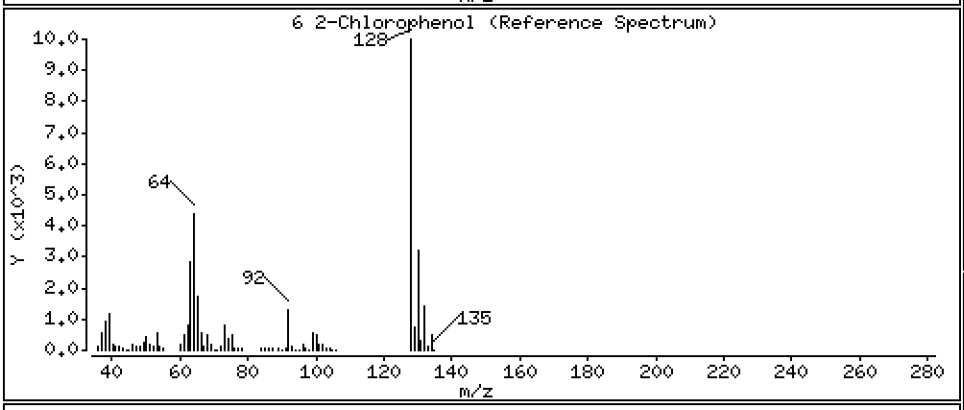
Concentration: 3.502 ug/mL

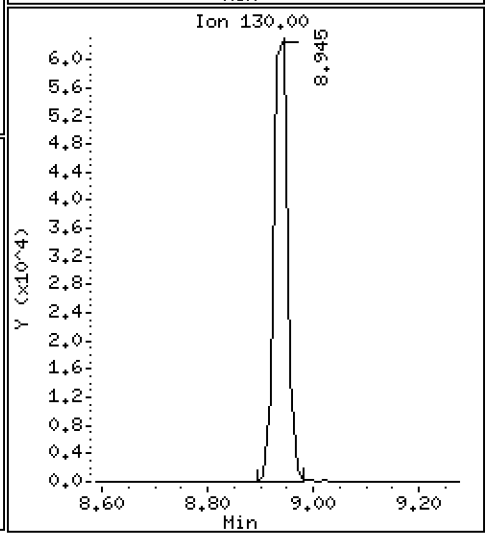


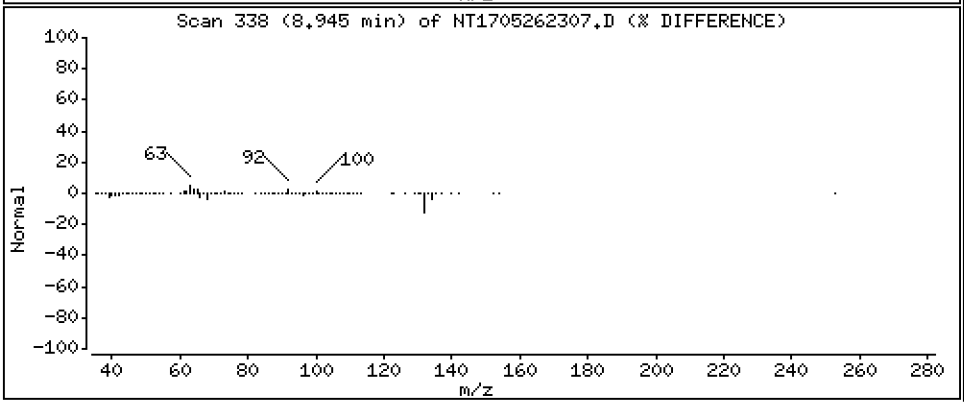












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

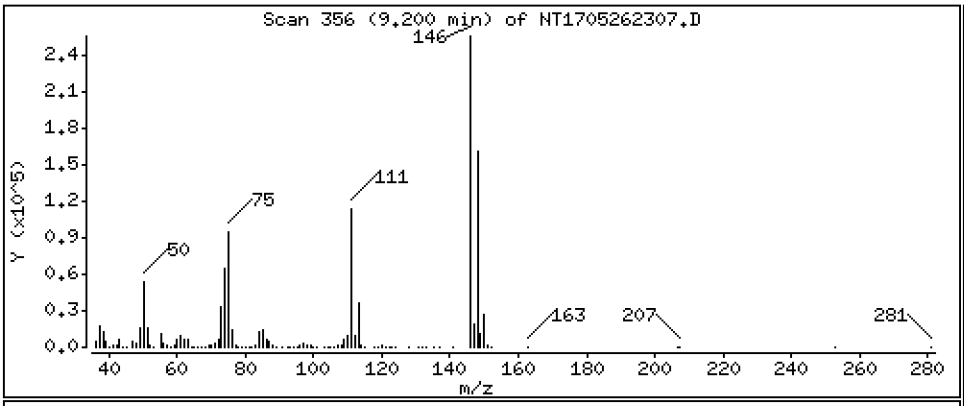
Operator: VTS

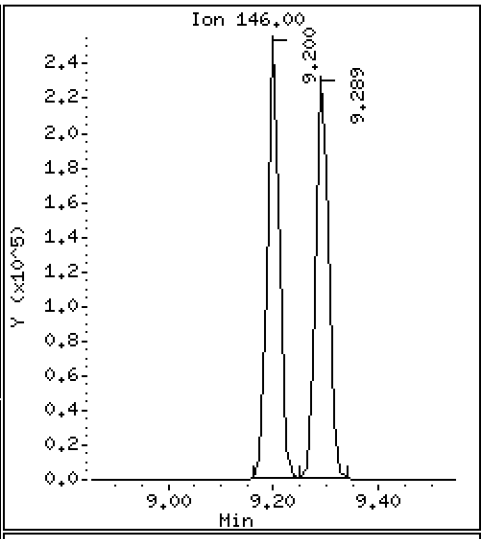
Column phase: ZB-5msi

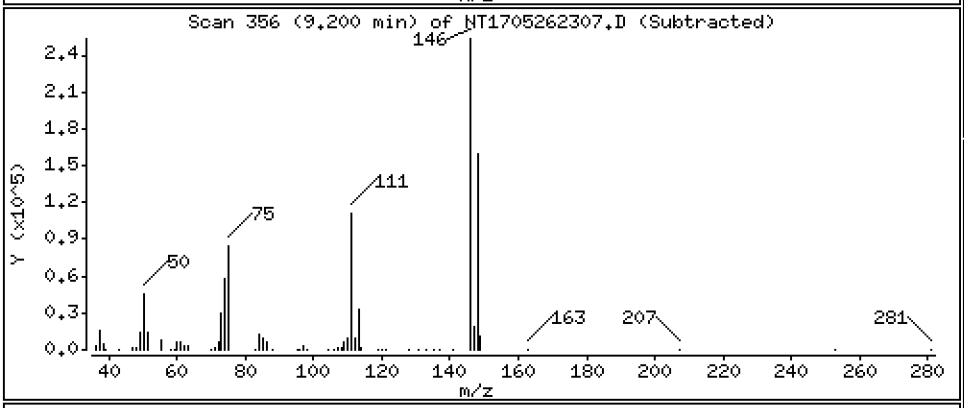
Column diameter: 0.25

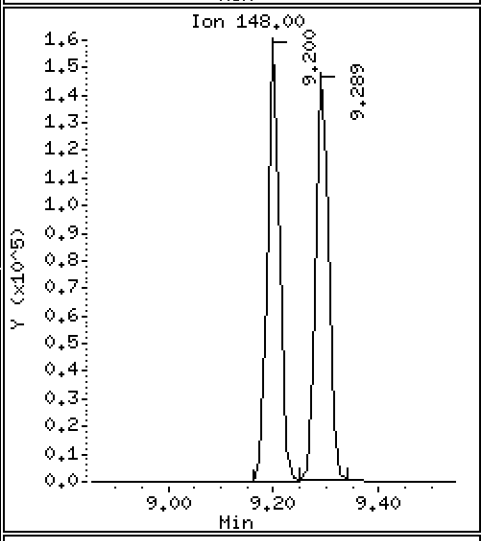
7 1,3-Dichlorobenzene

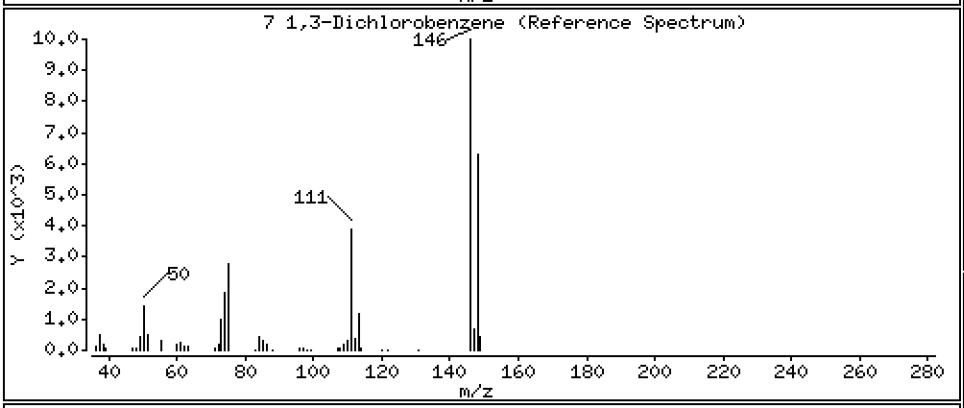
Concentration: 3.823 ug/mL

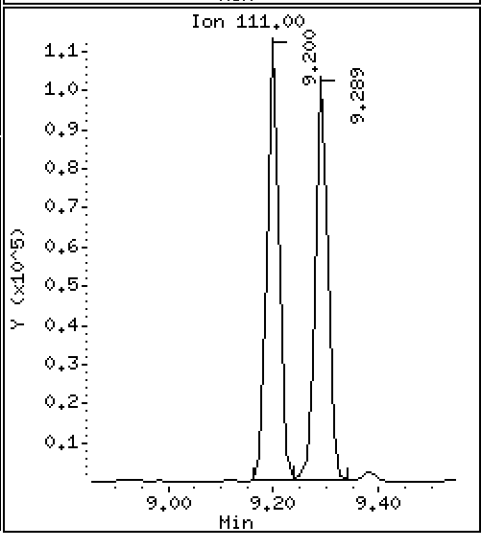


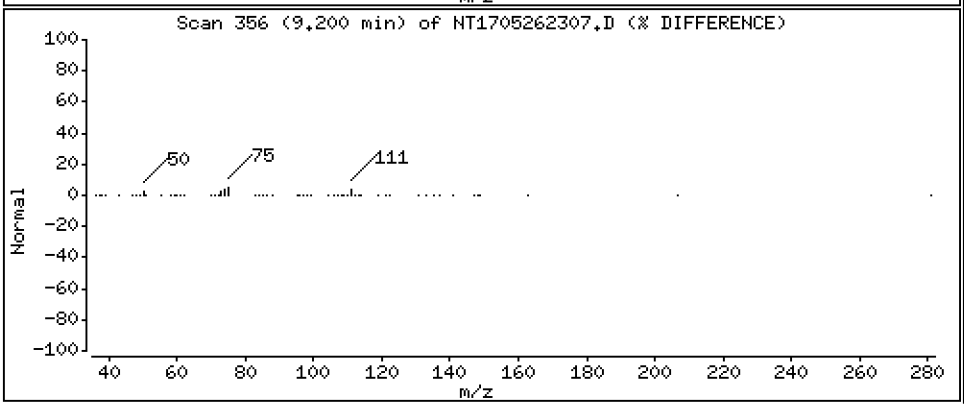












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

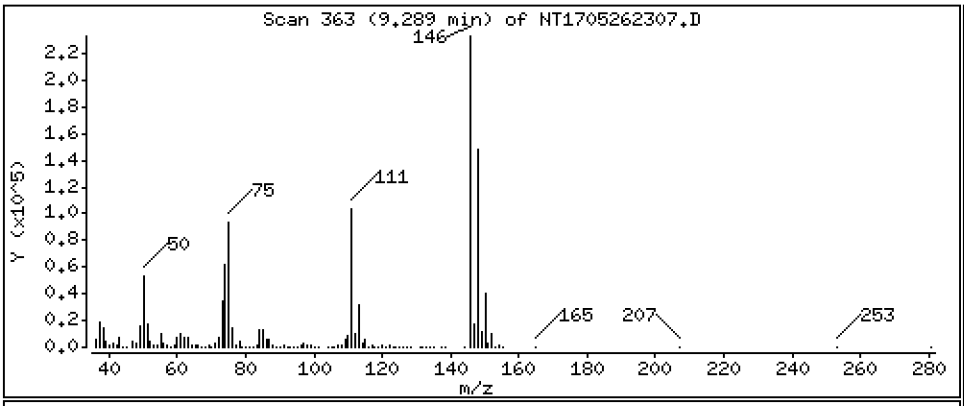
Operator: VTS

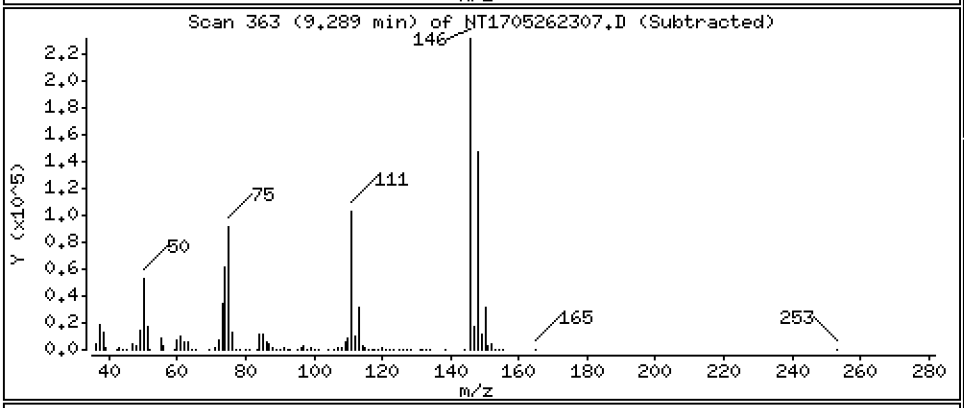
Column phase: ZB-5msi

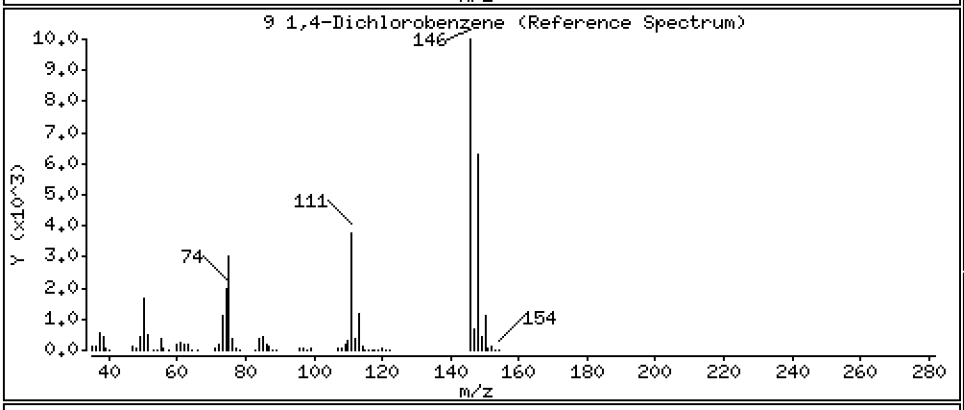
Column diameter: 0.25

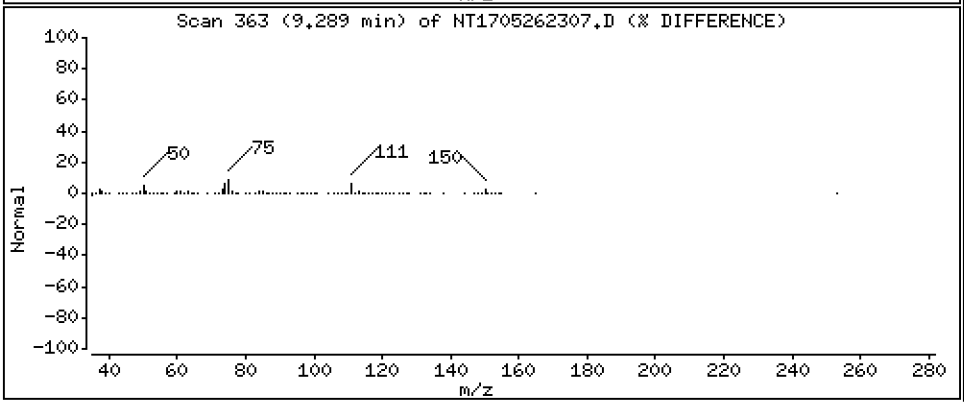
9 1,4-Dichlorobenzene

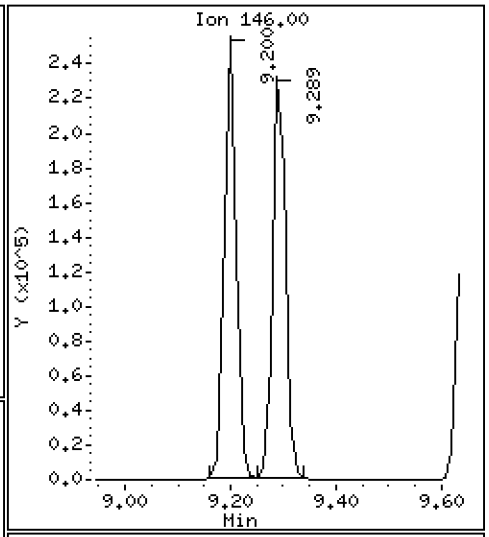
Concentration: 3.787 ug/mL

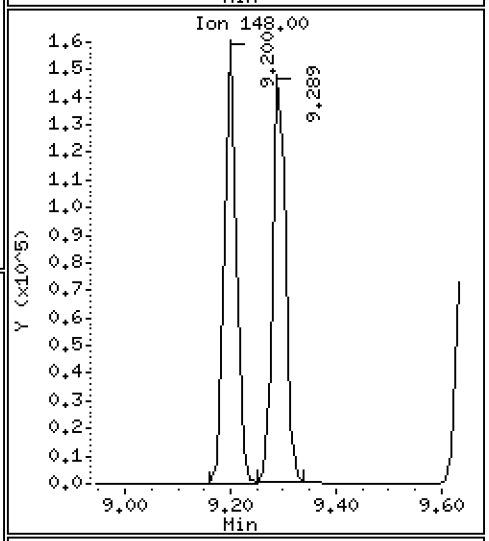


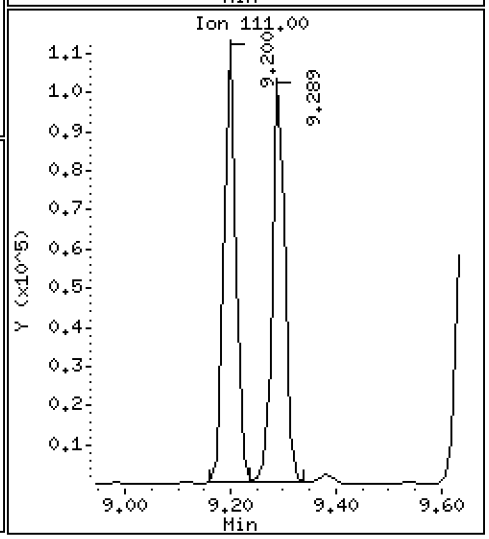












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

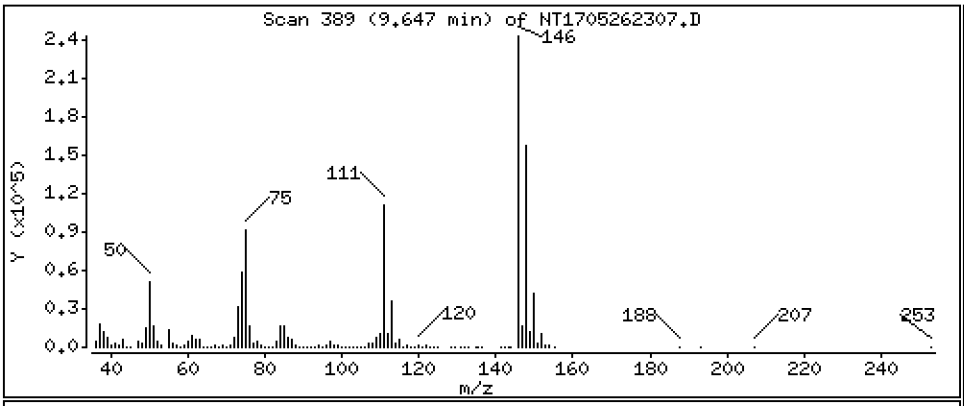
Operator: VTS

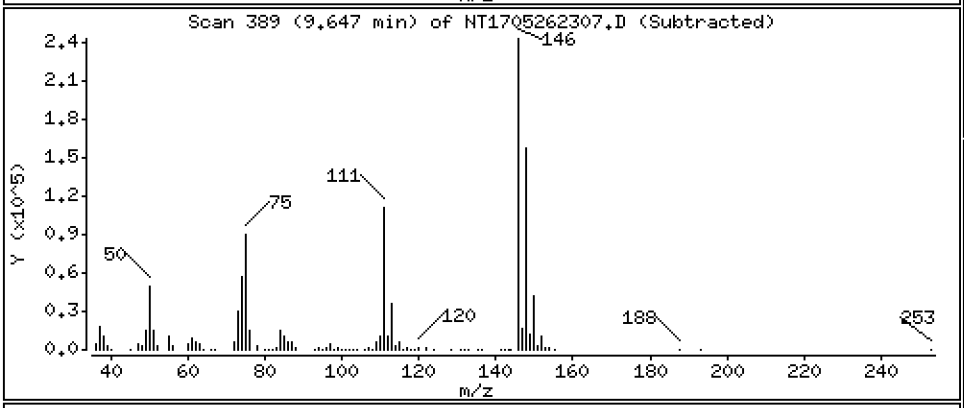
Column phase: ZB-5msi

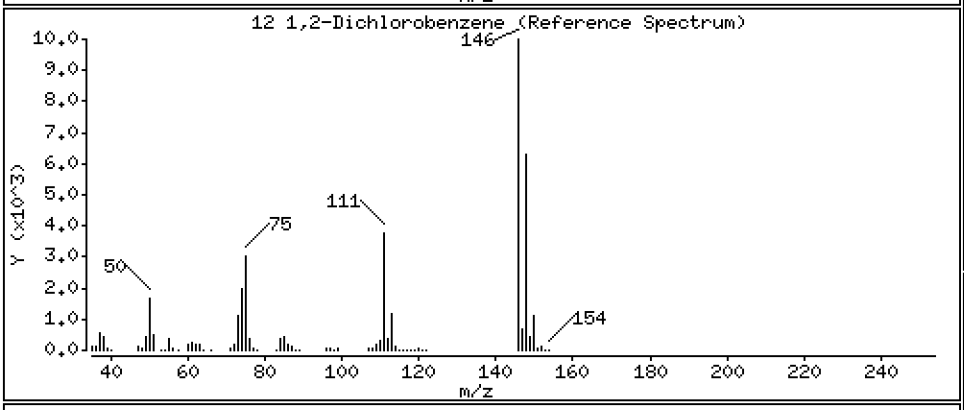
Column diameter: 0.25

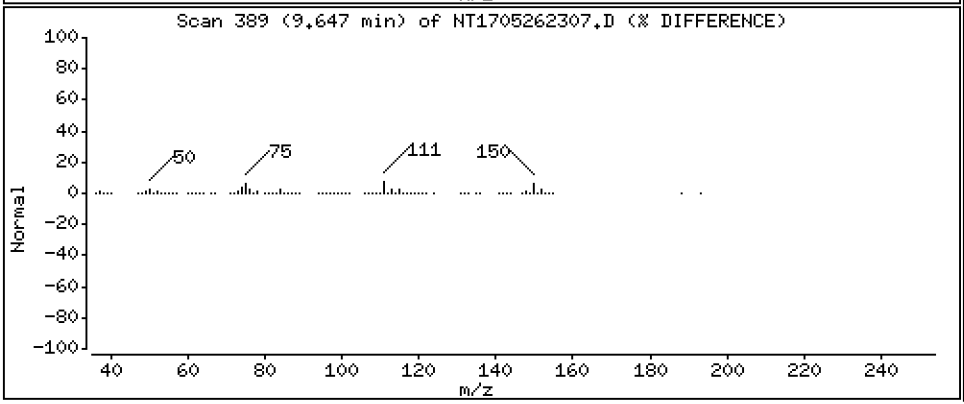
12 1,2-Dichlorobenzene

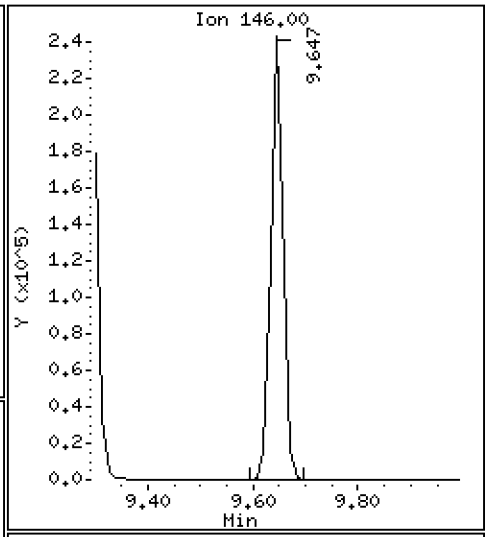
Concentration: 3.993 ug/mL

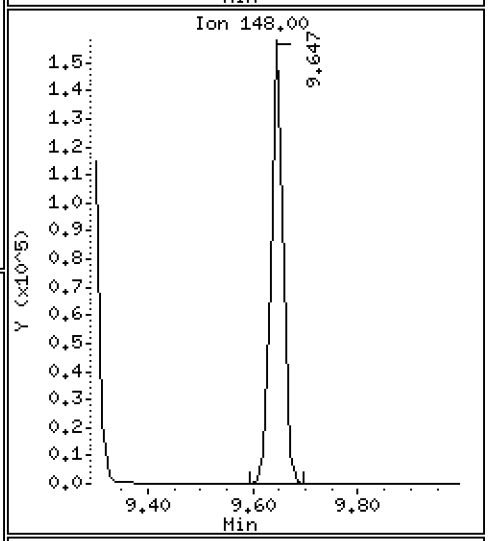


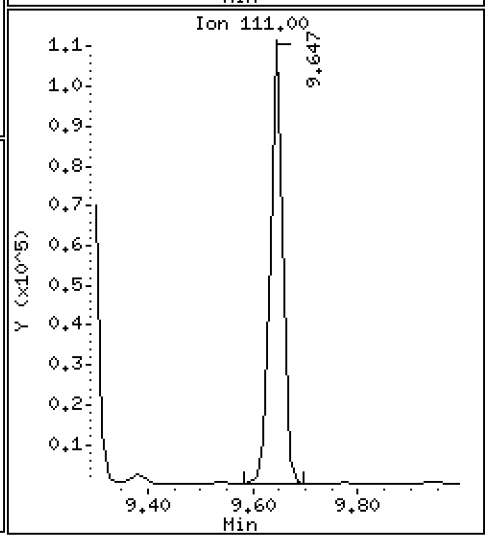












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

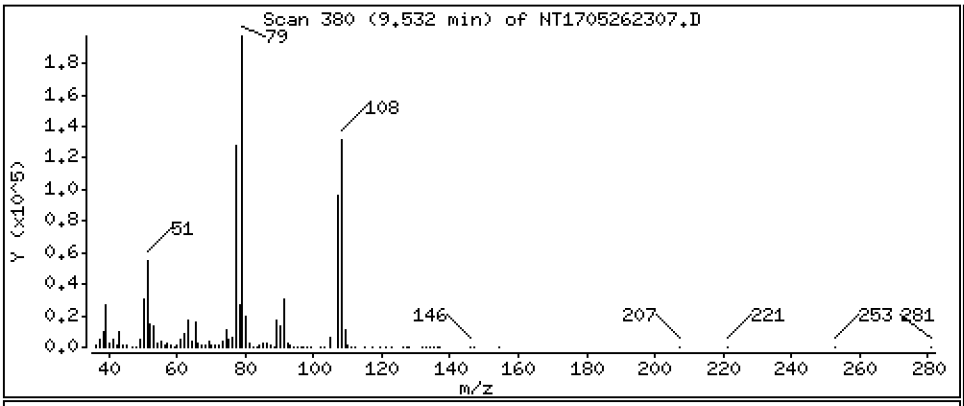
Operator: VTS

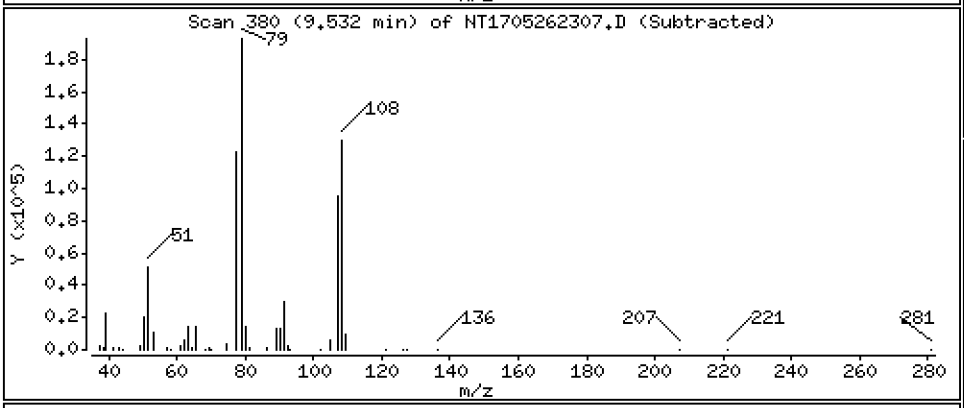
Column phase: ZB-5msi

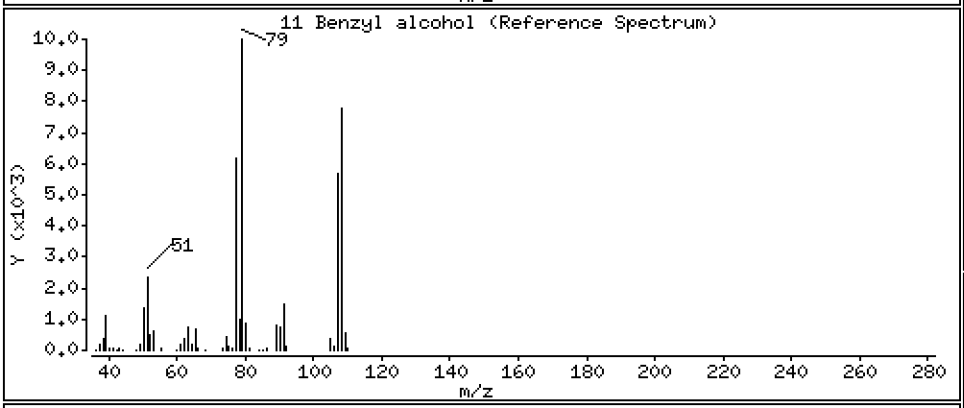
Column diameter: 0.25

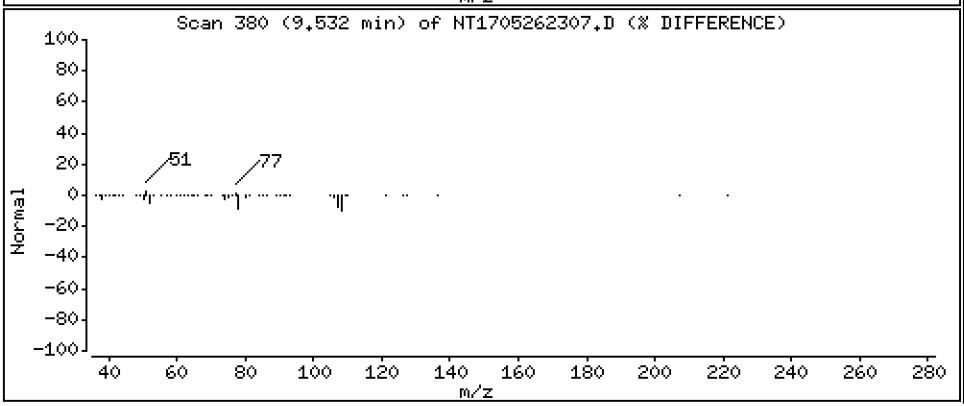
11 Benzyl alcohol

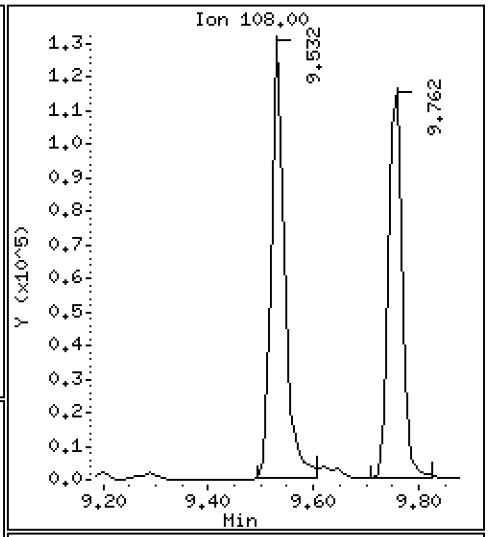
Concentration: 4.026 ug/mL

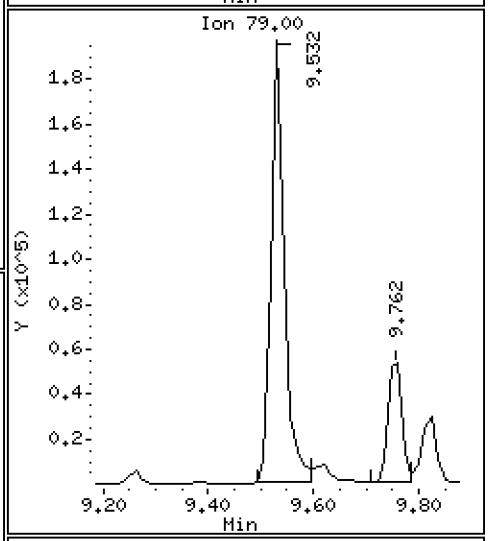


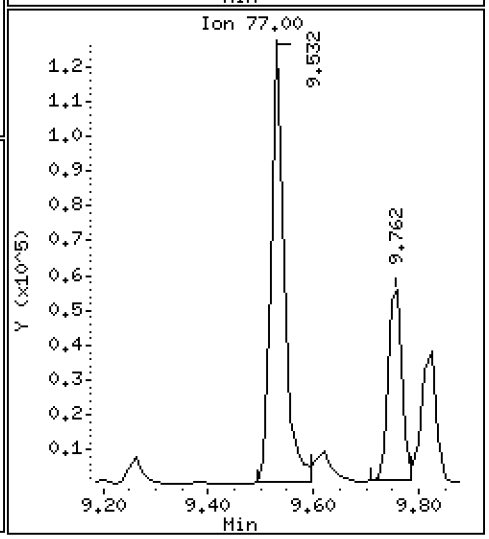












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

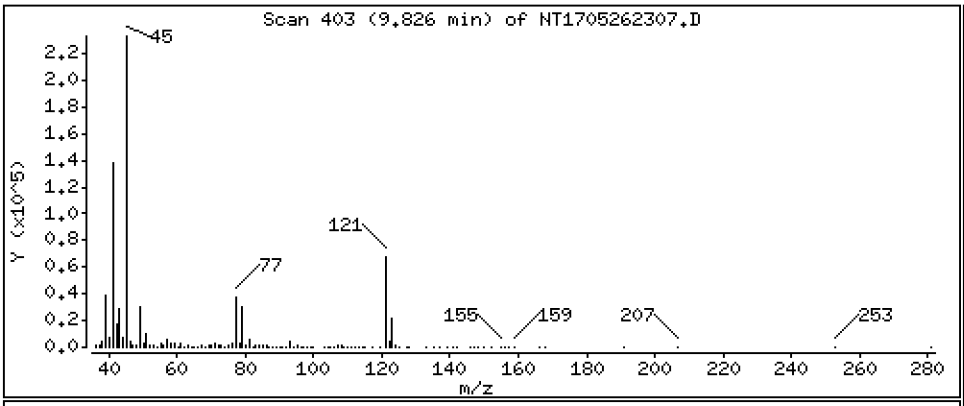
Operator: VTS

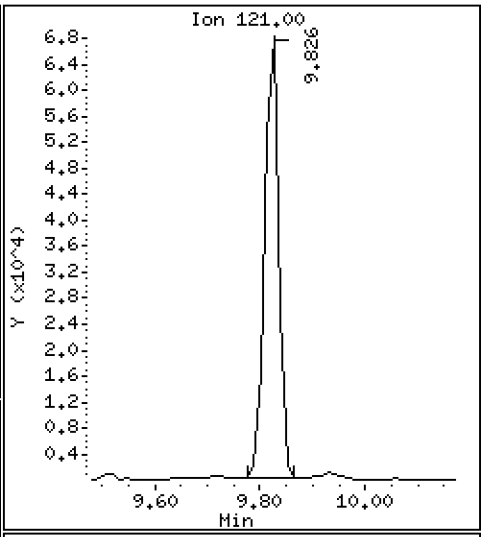
Column phase: ZB-5msi

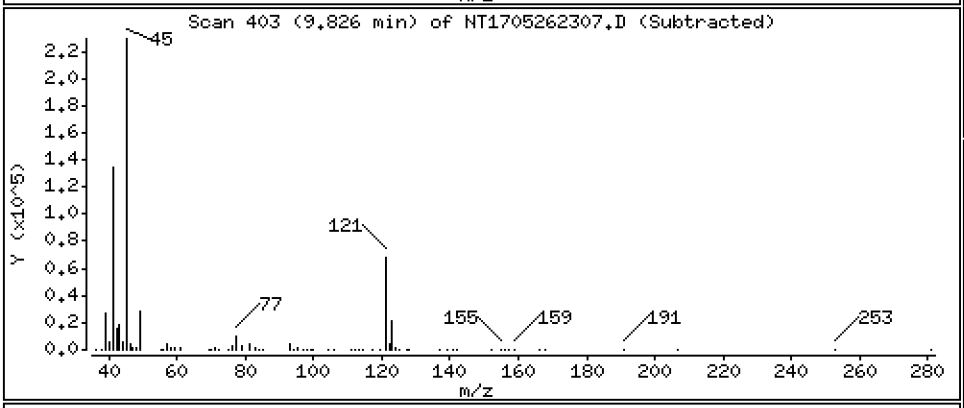
Column diameter: 0.25

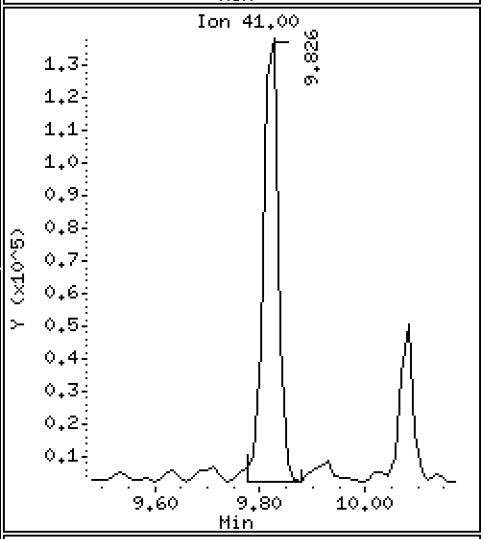
14 2,2'-oxybis(1-Chloropropane)

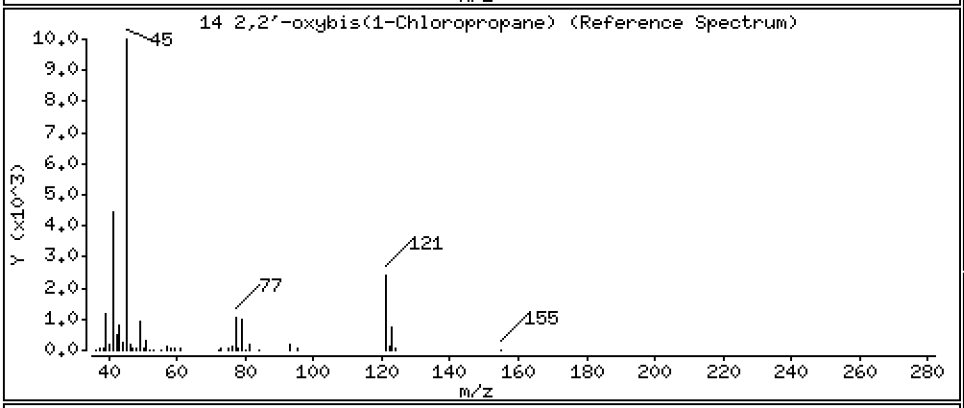
Concentration: 4.578 ug/mL

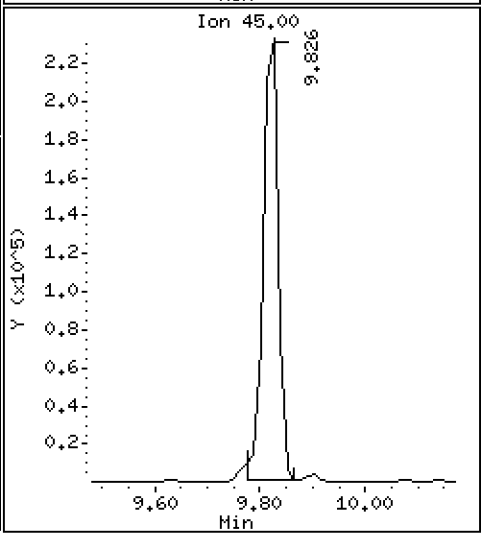


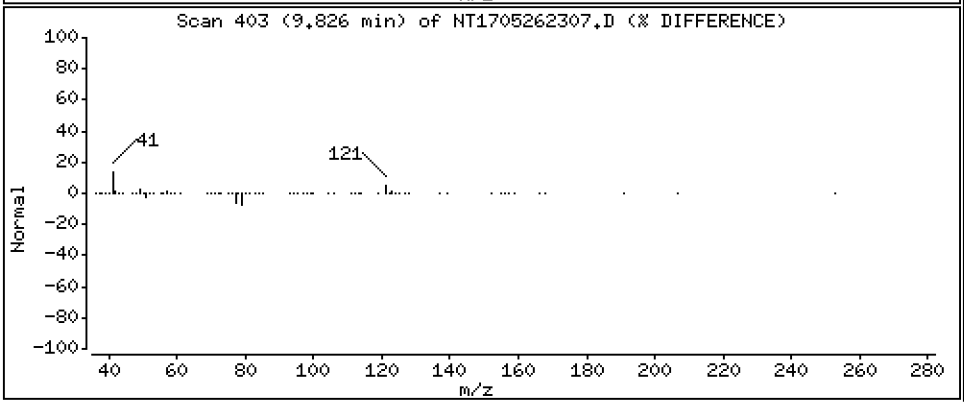












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

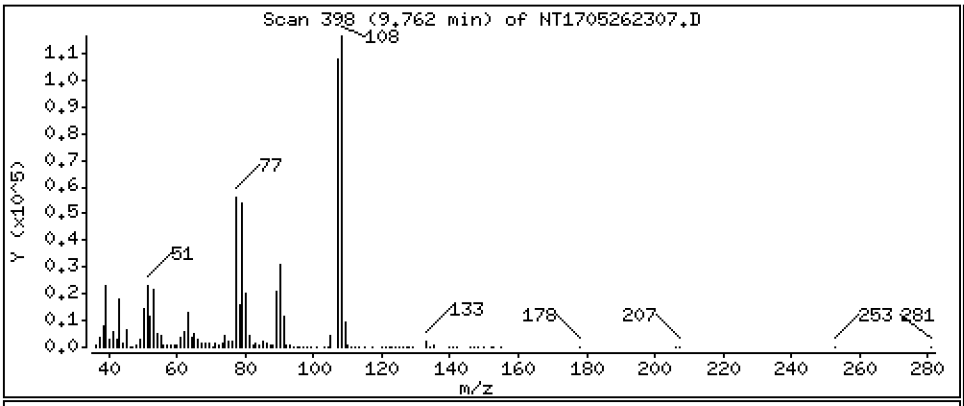
Operator: VTS

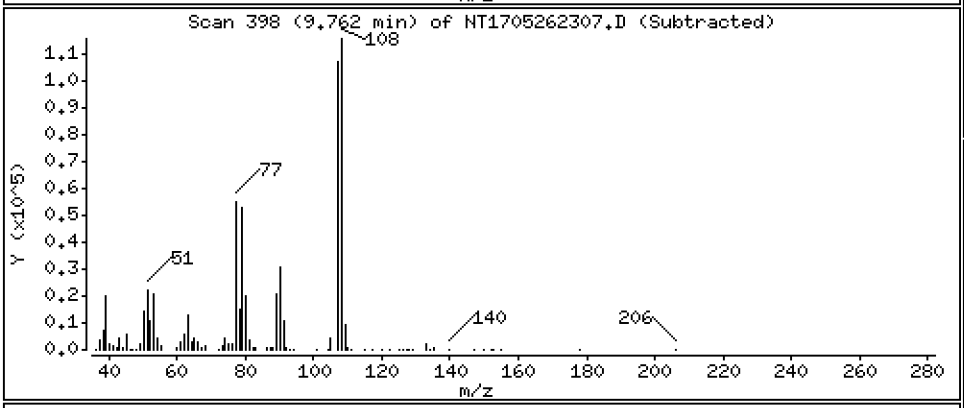
Column phase: ZB-5msi

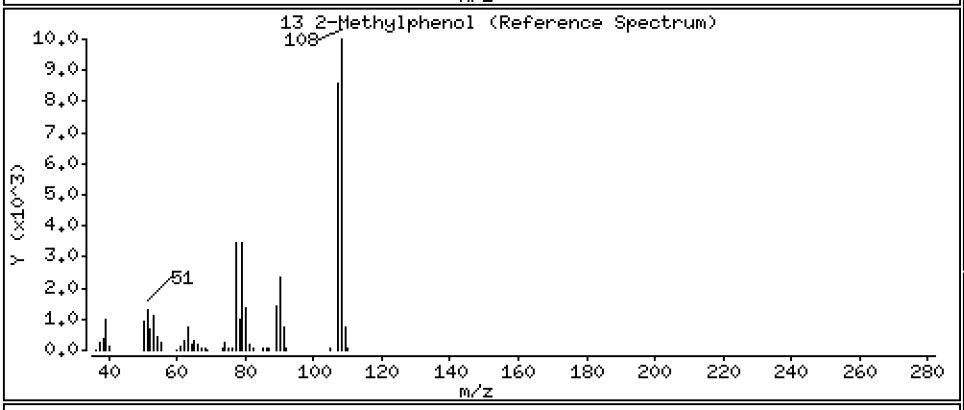
Column diameter: 0.25

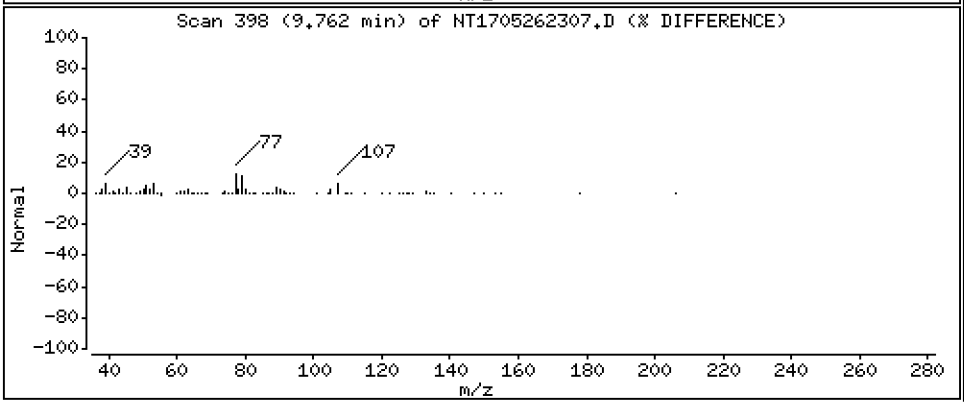
13 2-Methylphenol

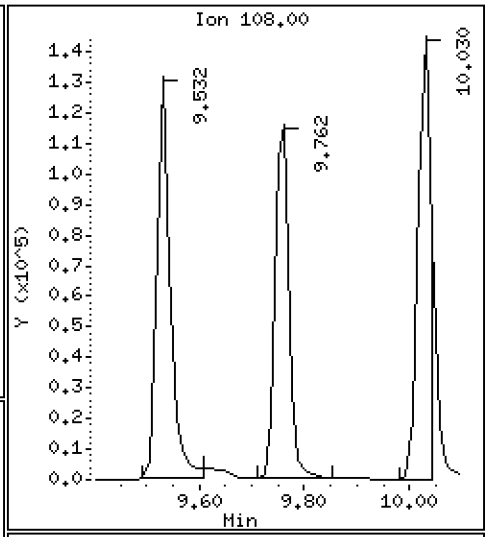
Concentration: 2.348 ug/mL

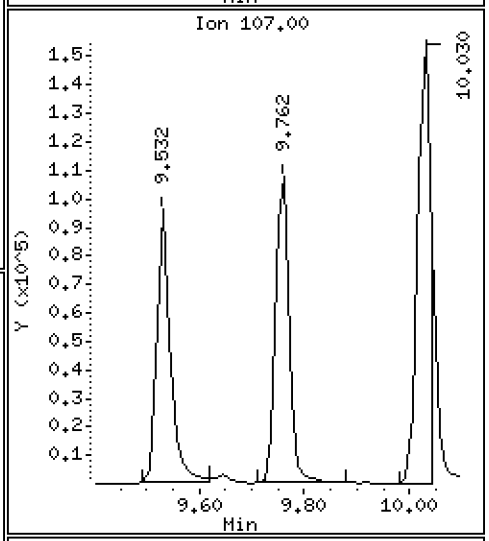


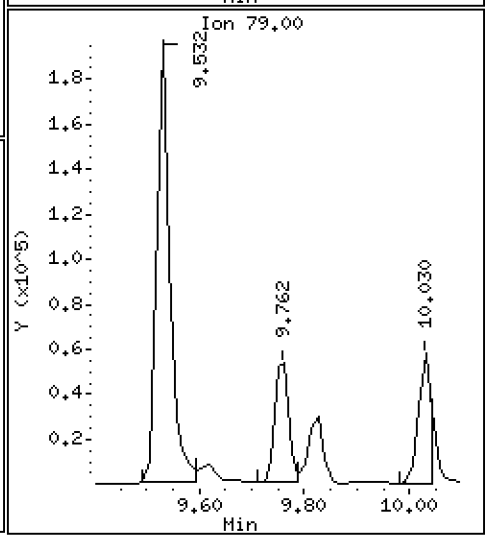












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

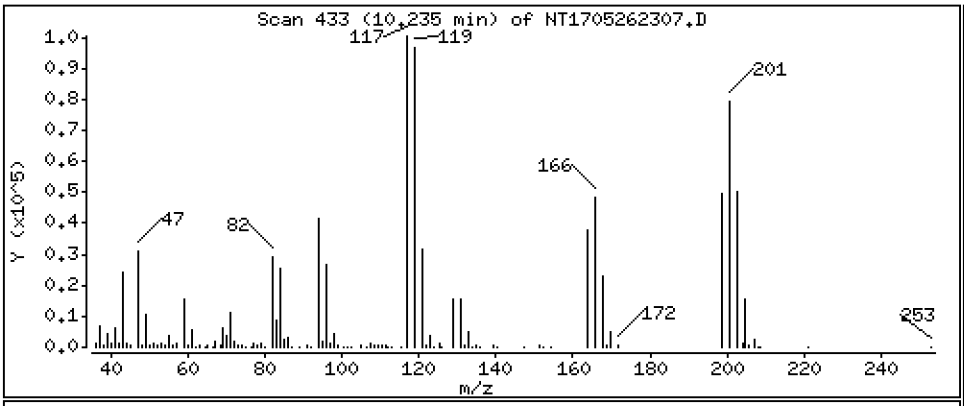
Operator: VTS

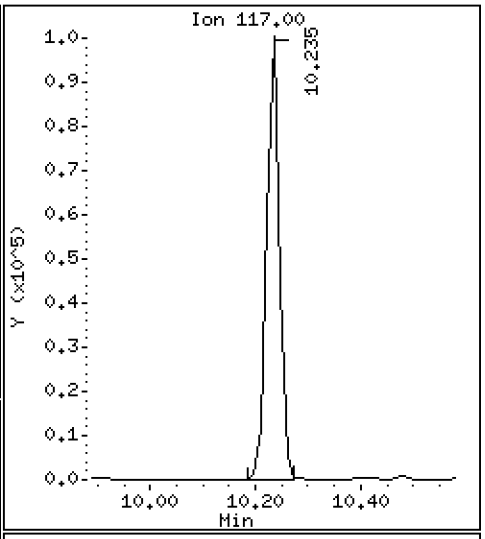
Column phase: ZB-5msi

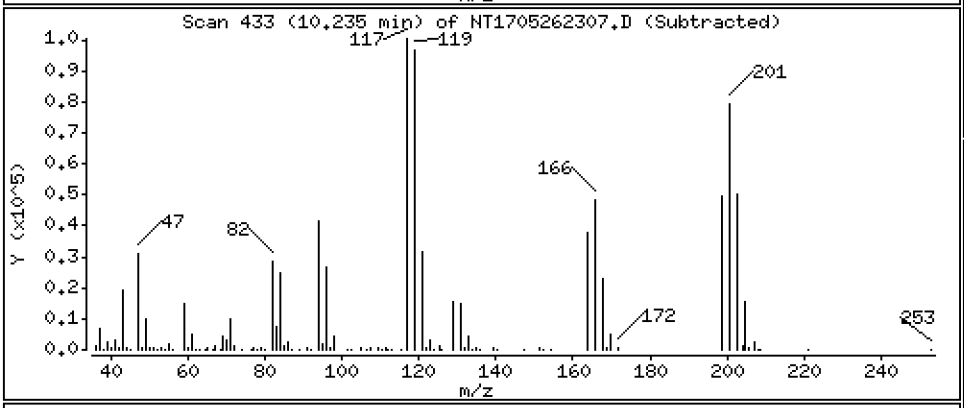
Column diameter: 0.25

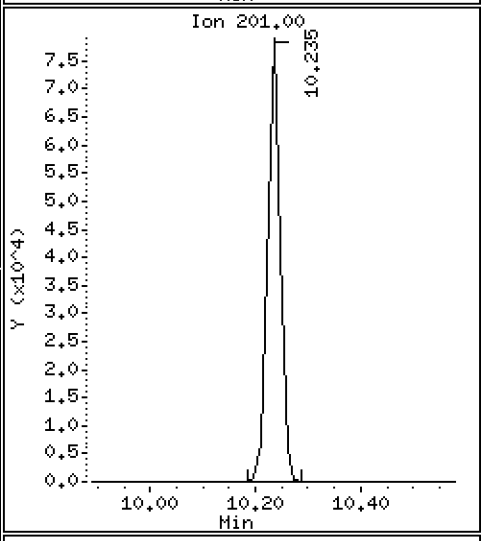
17 Hexachloroethane

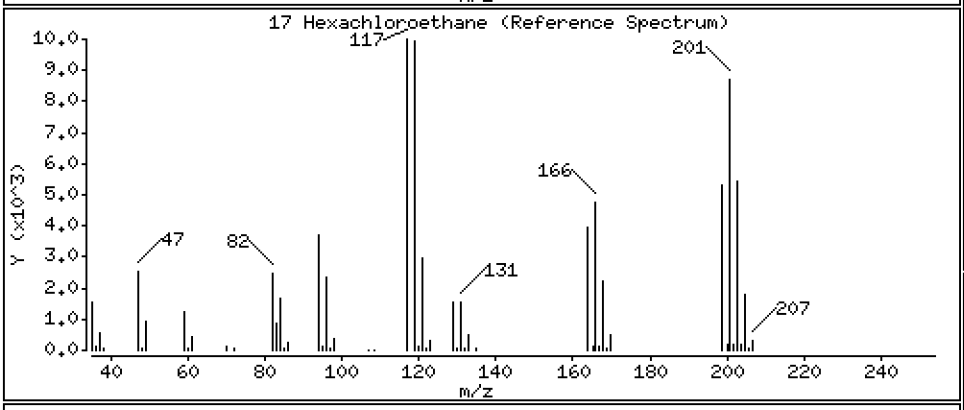
Concentration: 4.045 ug/mL

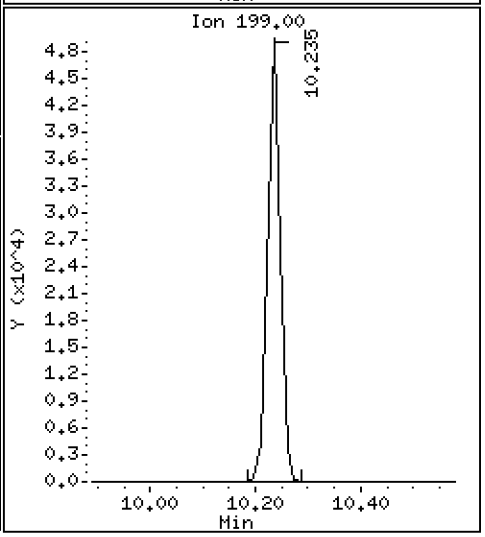


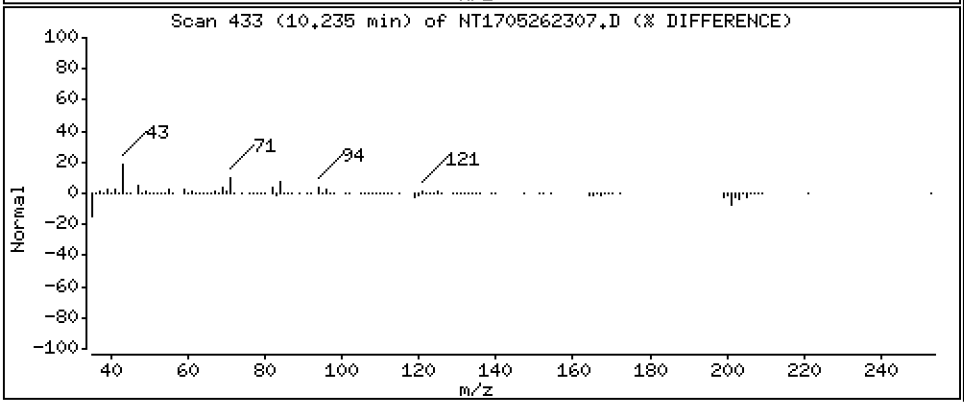












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

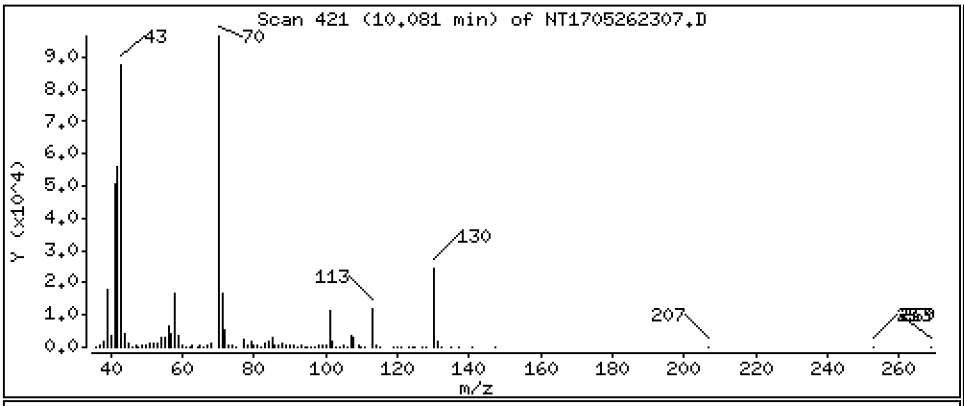
Operator: VTS

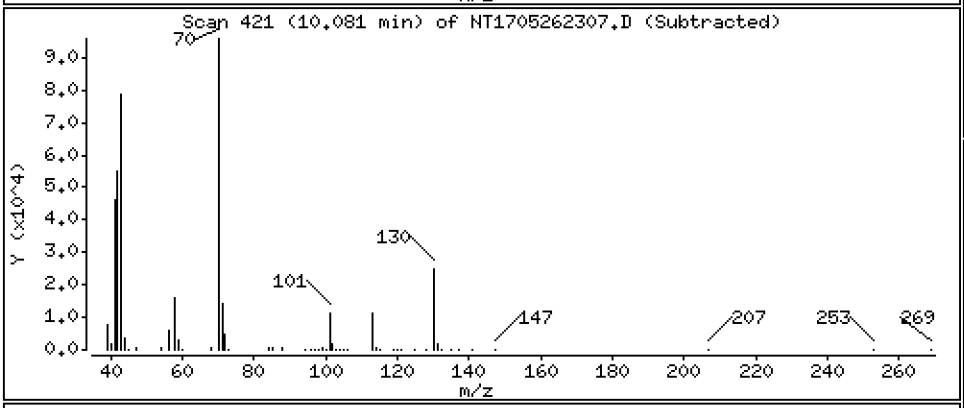
Column phase: ZB-5msi

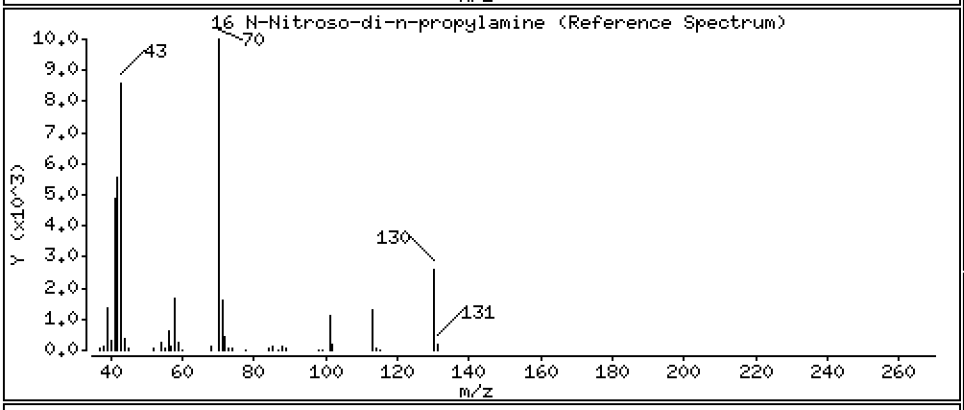
Column diameter: 0.25

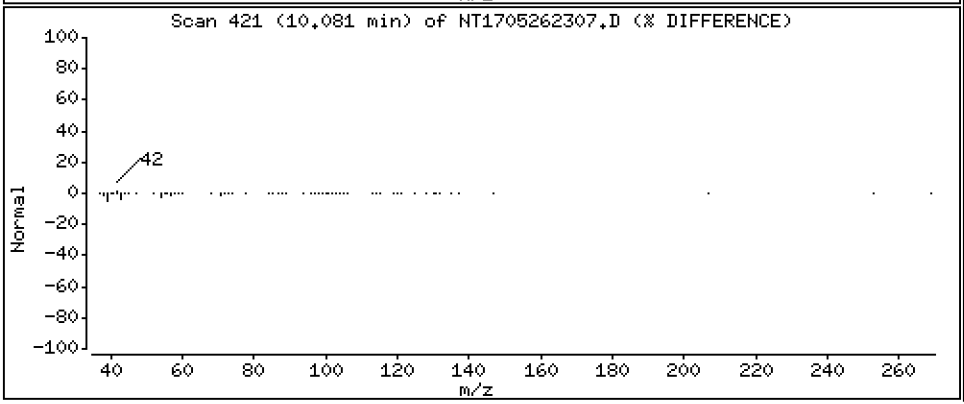
16 N-Nitroso-di-n-propylamine

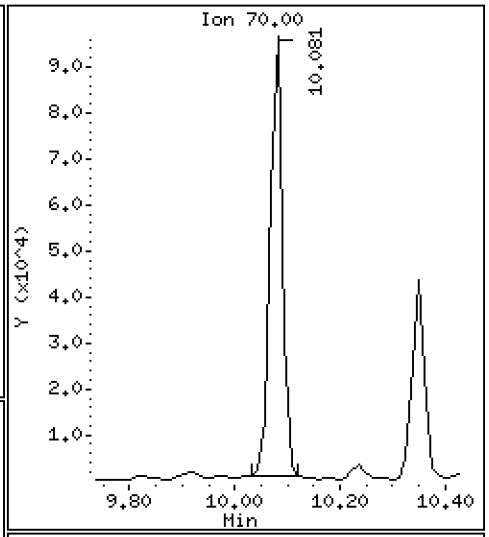
Concentration: 2.243 ug/mL

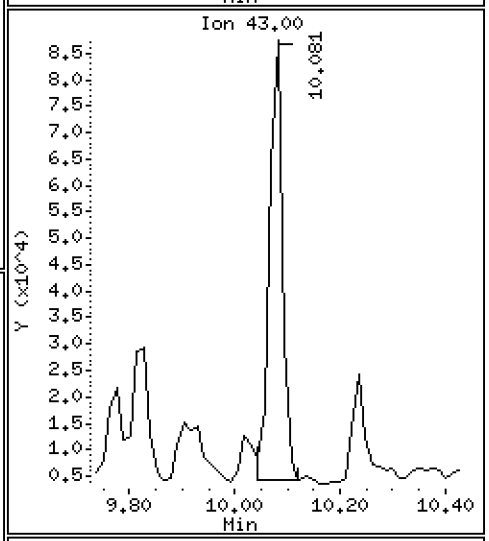


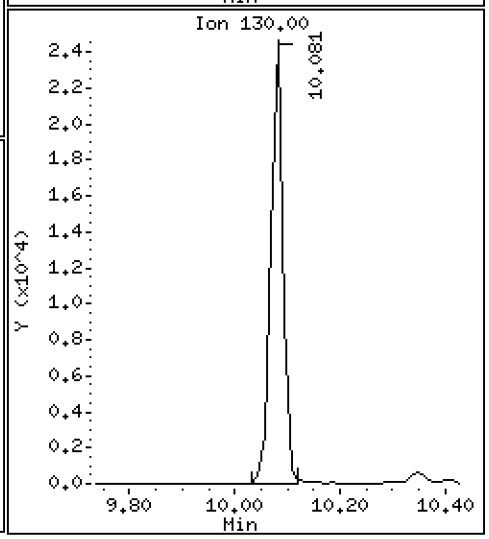












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

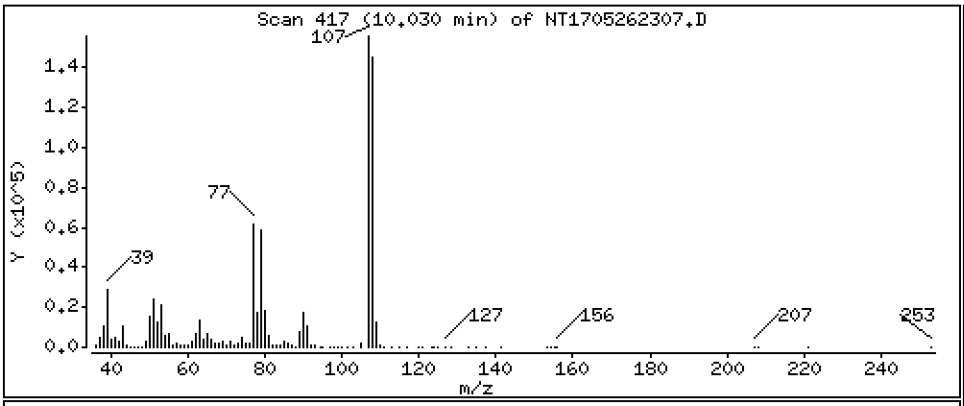
Operator: VTS

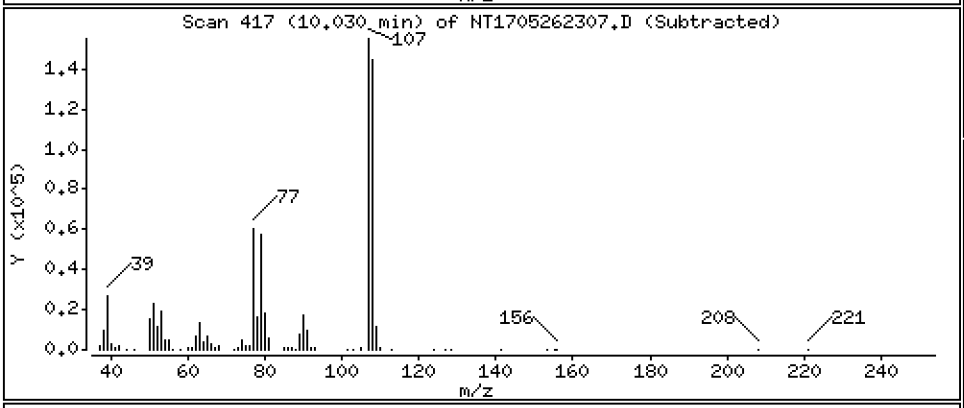
Column phase: ZB-5msi

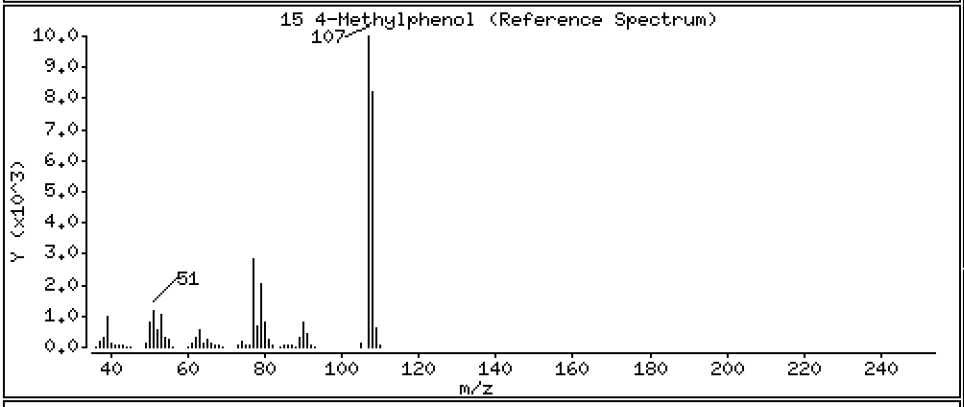
Column diameter: 0.25

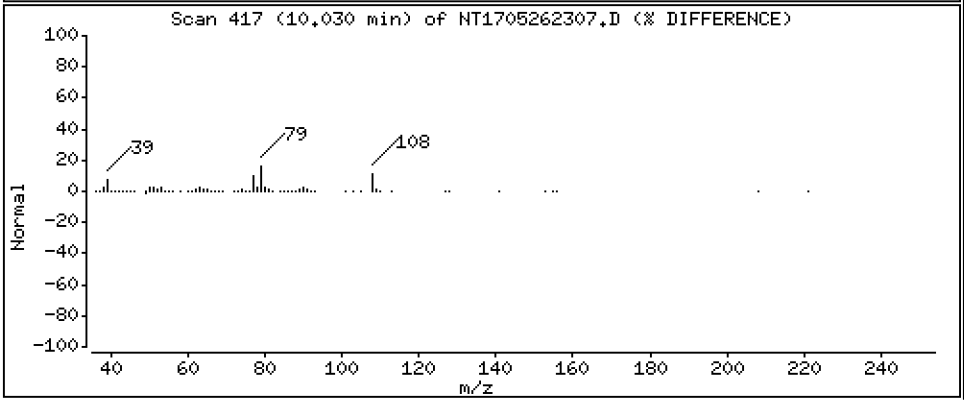
15 4-Methylphenol

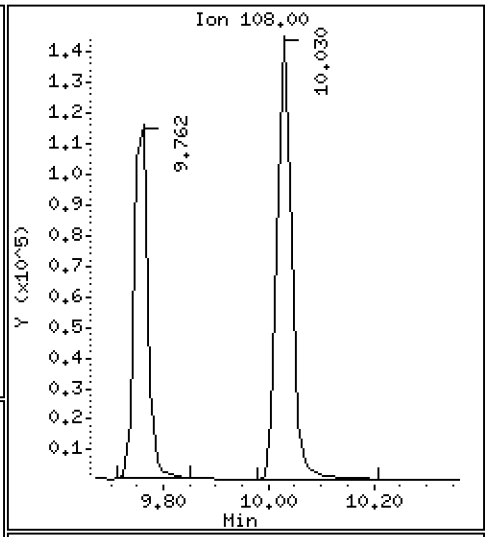
Concentration: 3.080 ug/mL

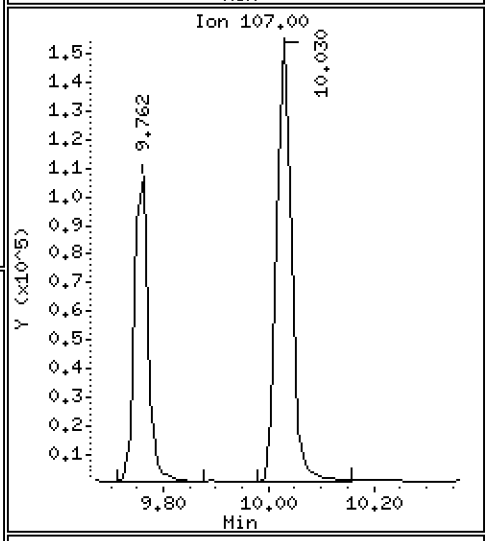


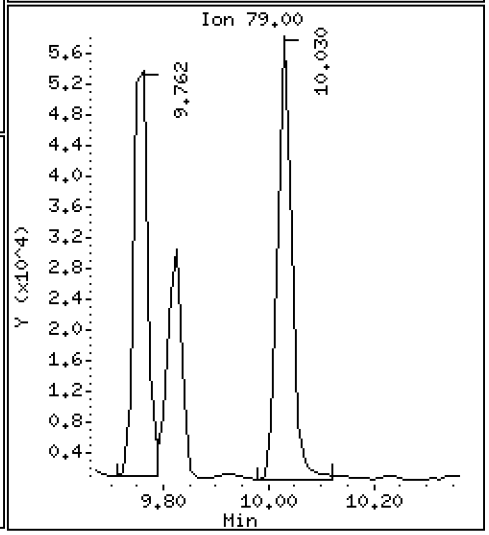












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

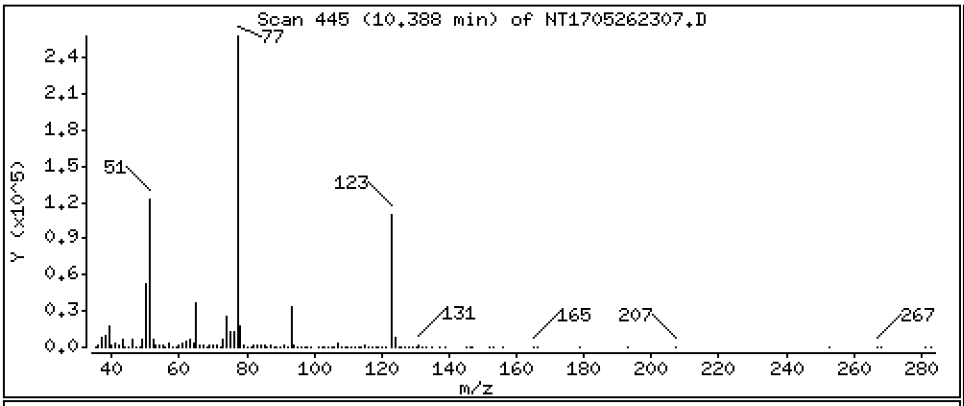
Operator: VTS

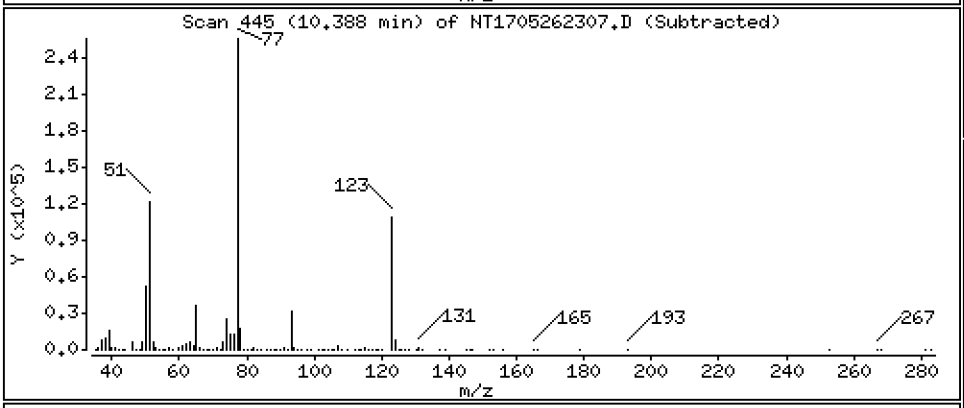
Column phase: ZB-5msi

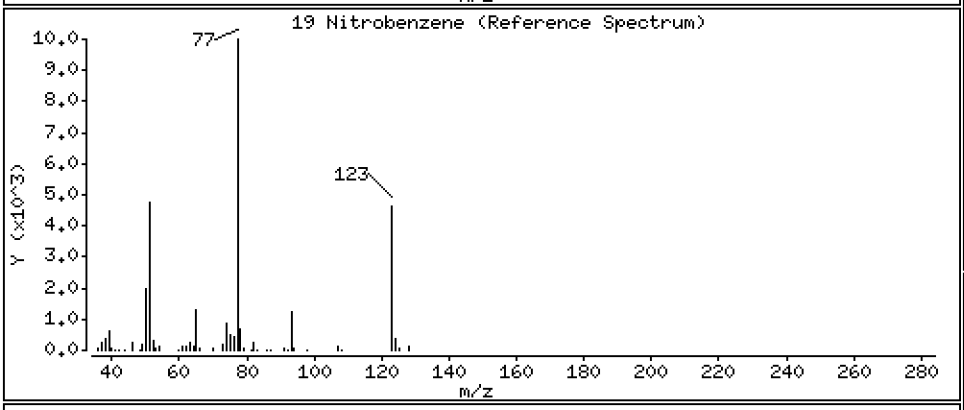
Column diameter: 0.25

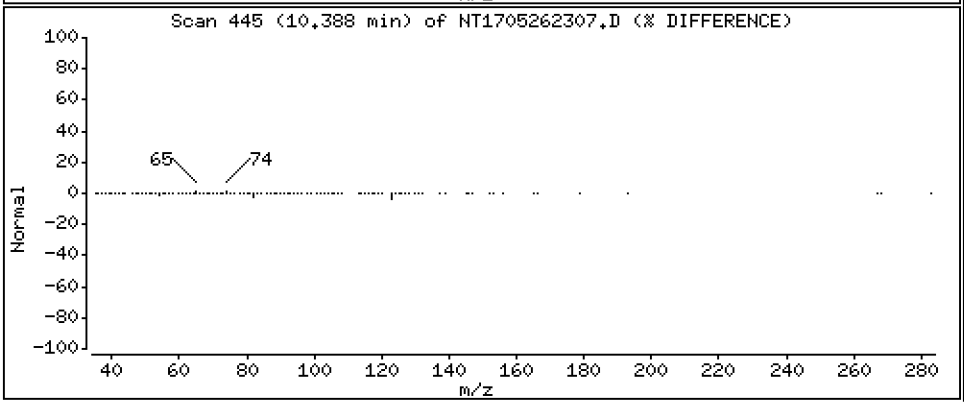
19 Nitrobenzene

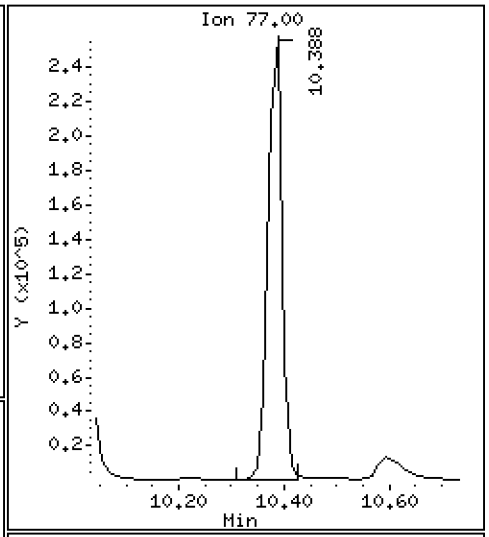
Concentration: 4.345 ug/mL

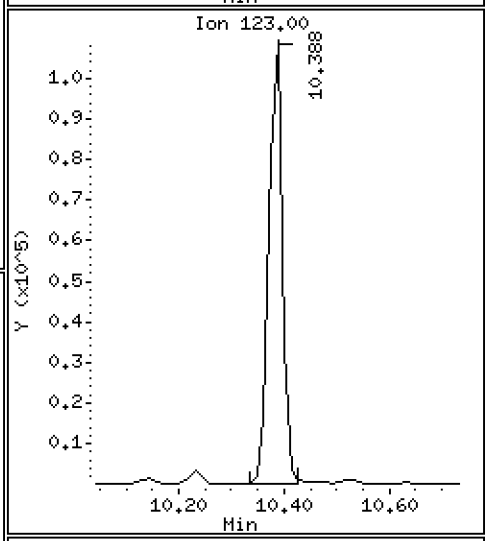


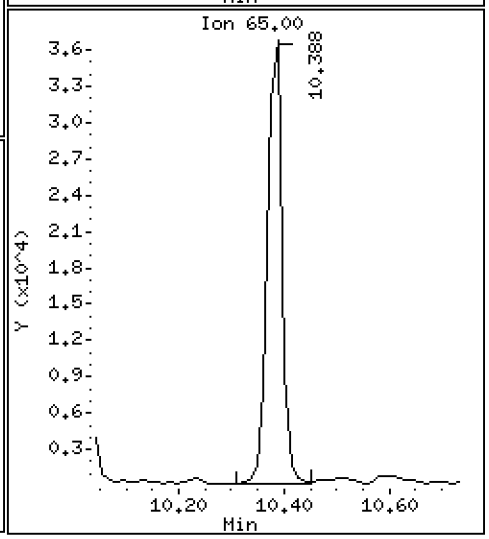












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

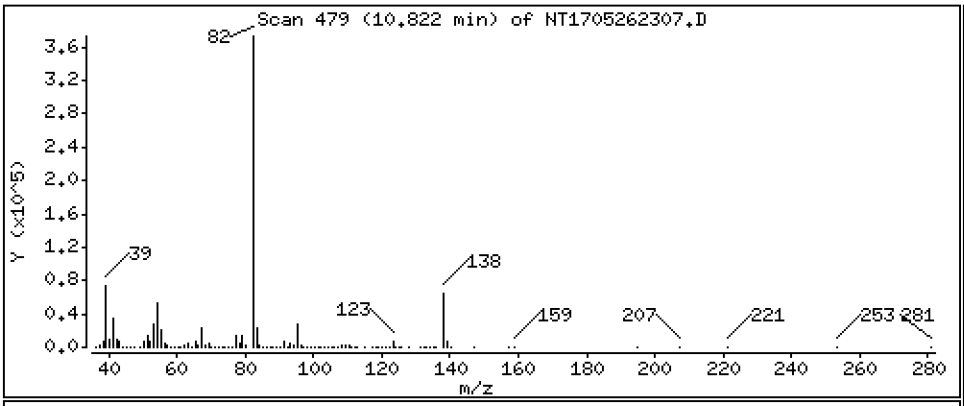
Operator: VTS

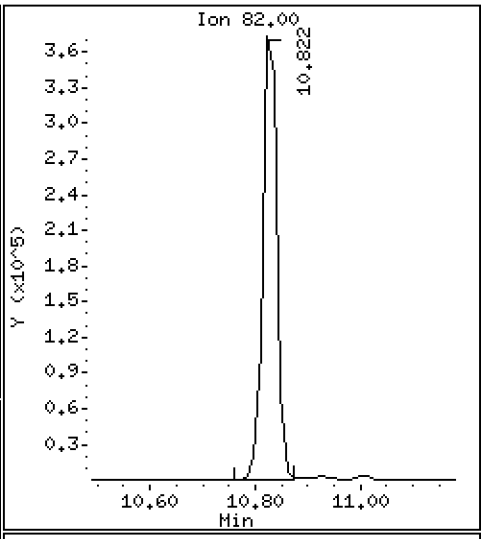
Column phase: ZB-5msi

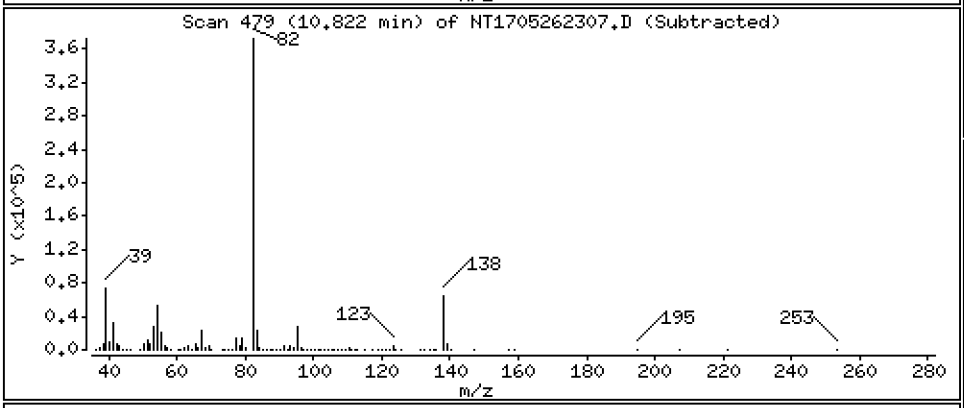
Column diameter: 0.25

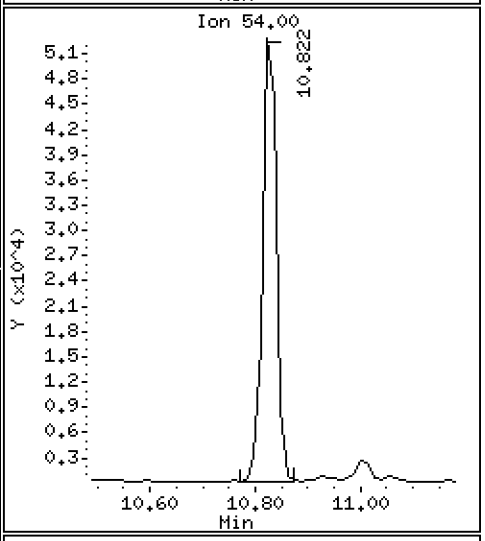
20 Isophorone

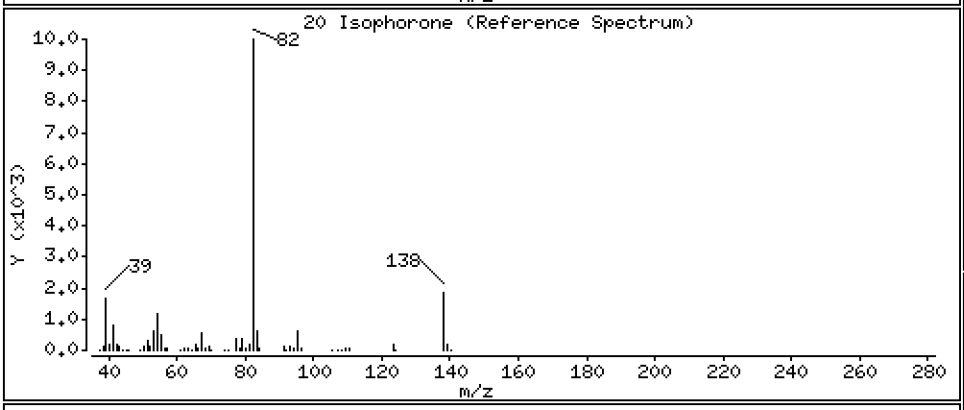
Concentration: 4.872 ug/mL

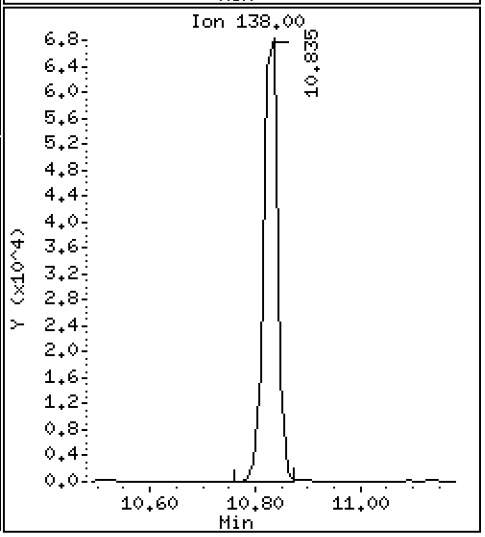


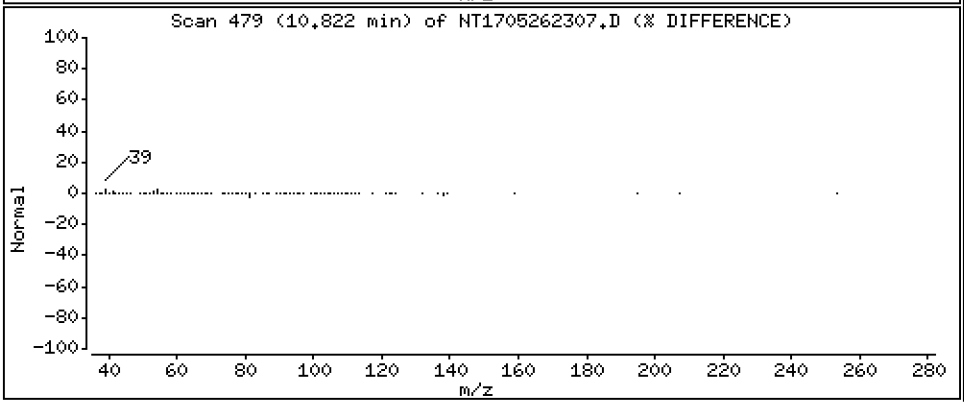












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

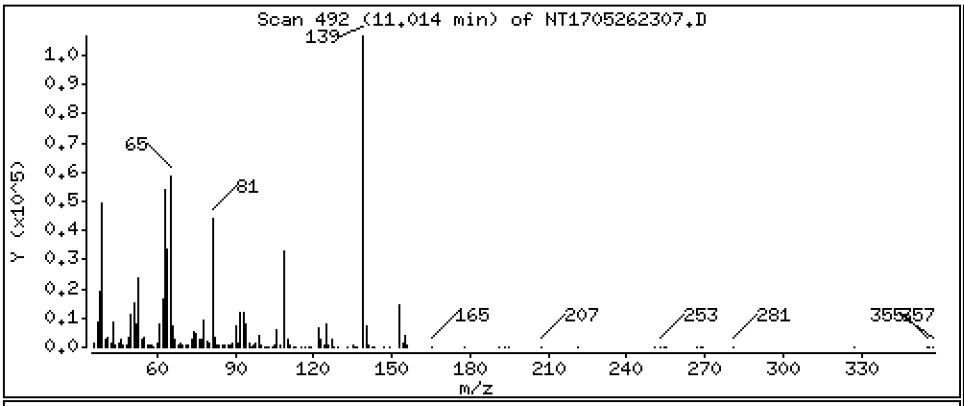
Operator: VTS

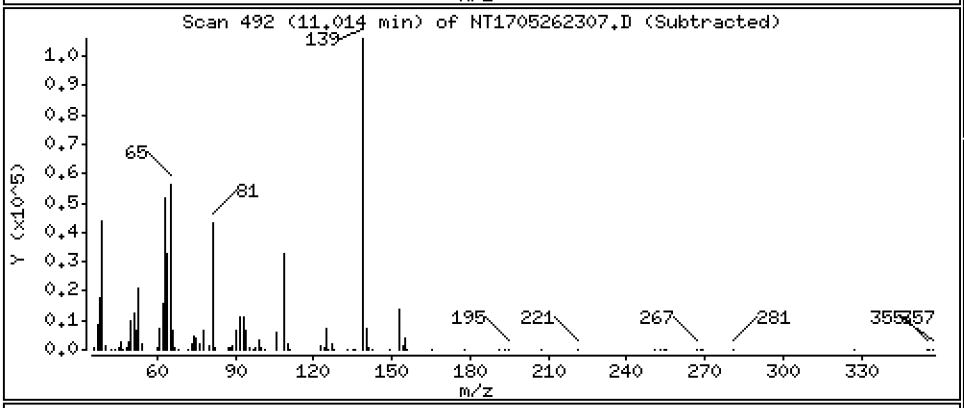
Column phase: ZB-5msi

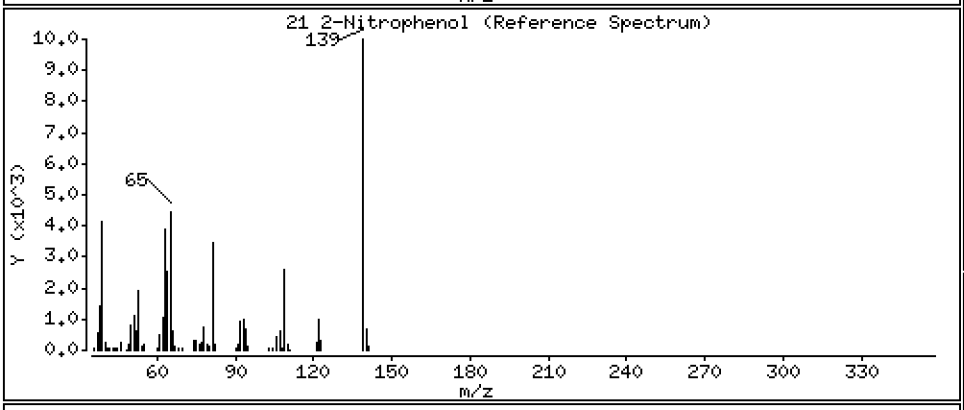
Column diameter: 0.25

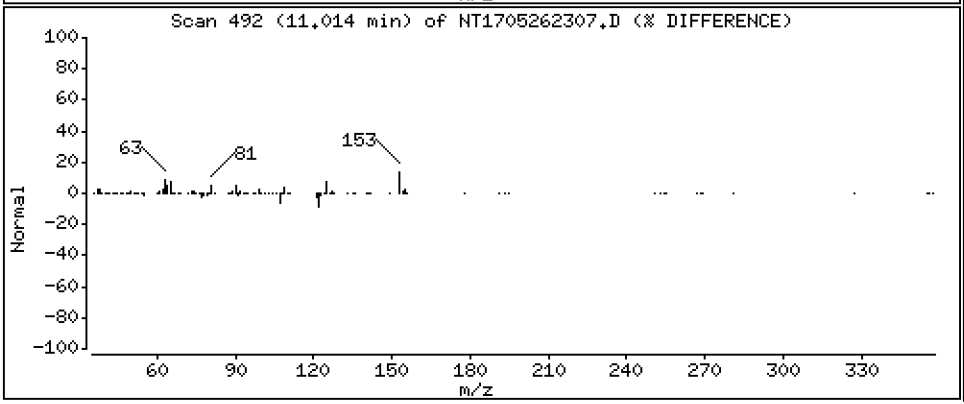
21 2-Nitrophenol

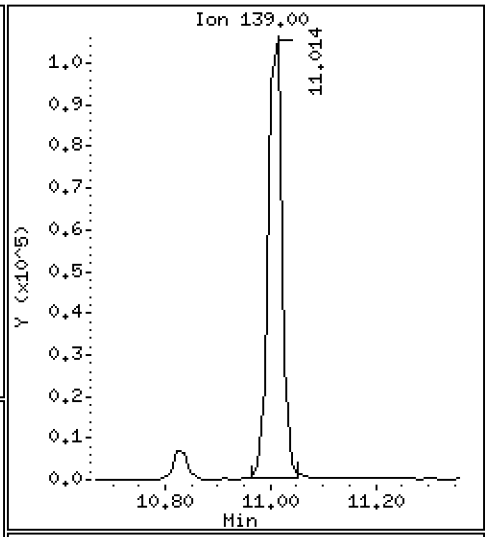
Concentration: 3.833 ug/mL

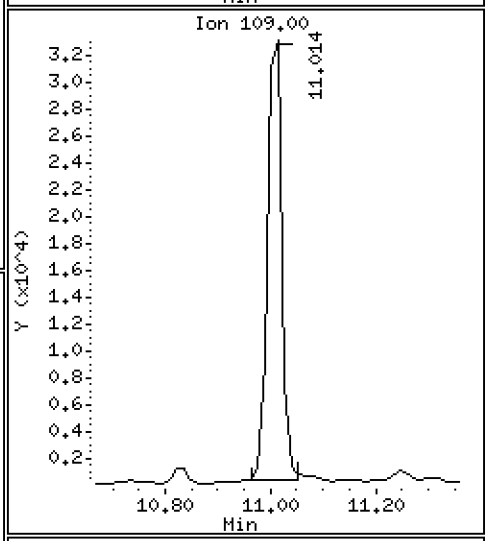


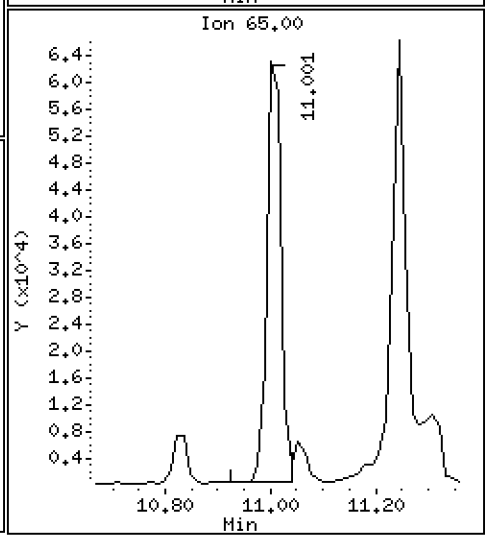












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

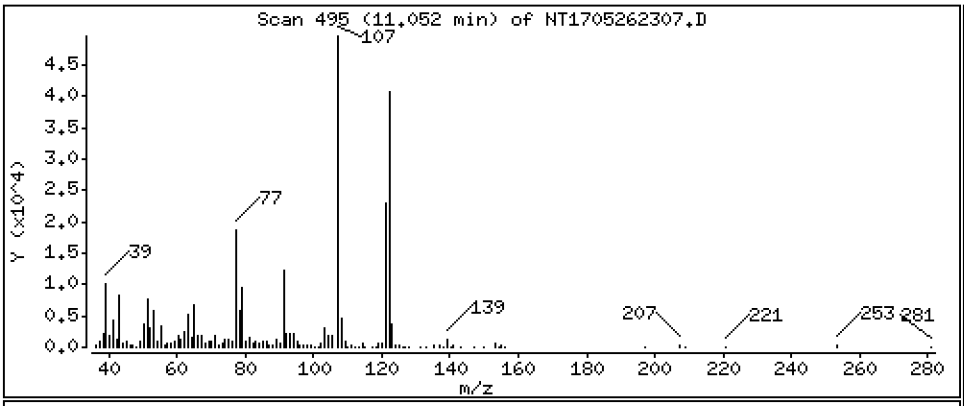
Operator: VTS

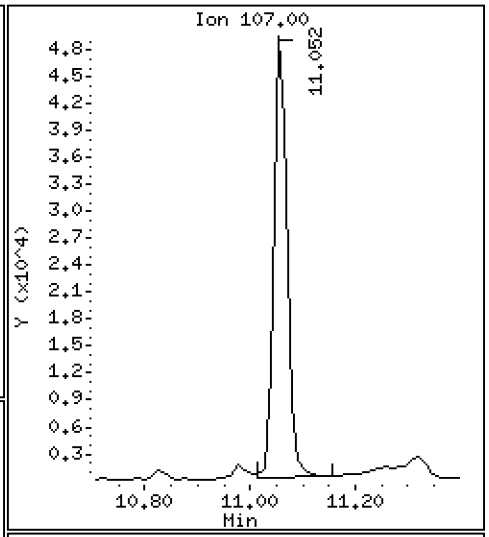
Column phase: ZB-5msi

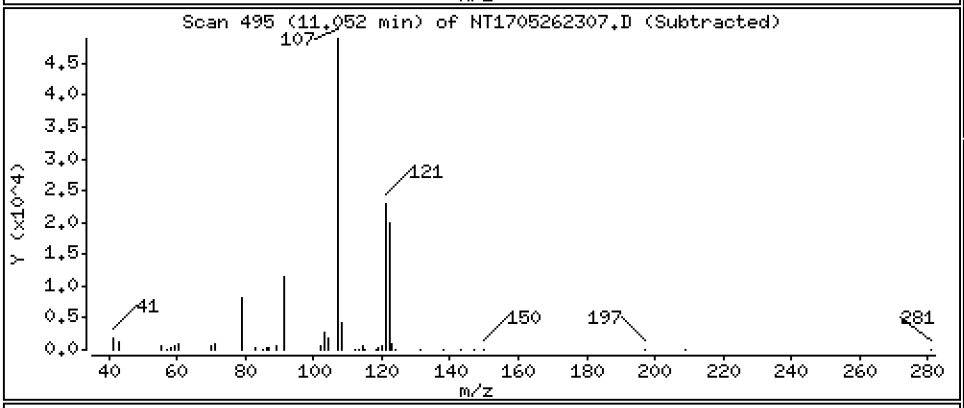
Column diameter: 0.25

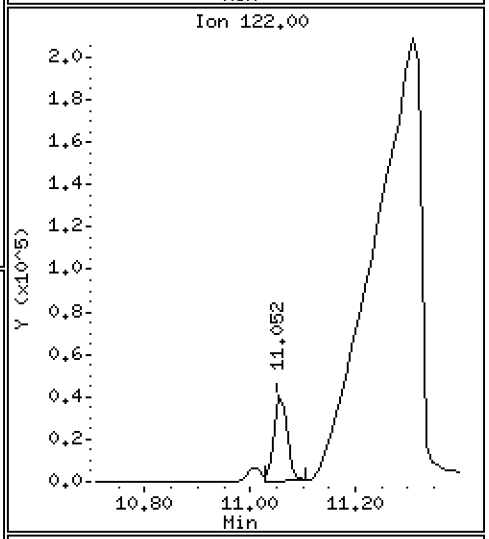
22 2,4-Dimethylphenol

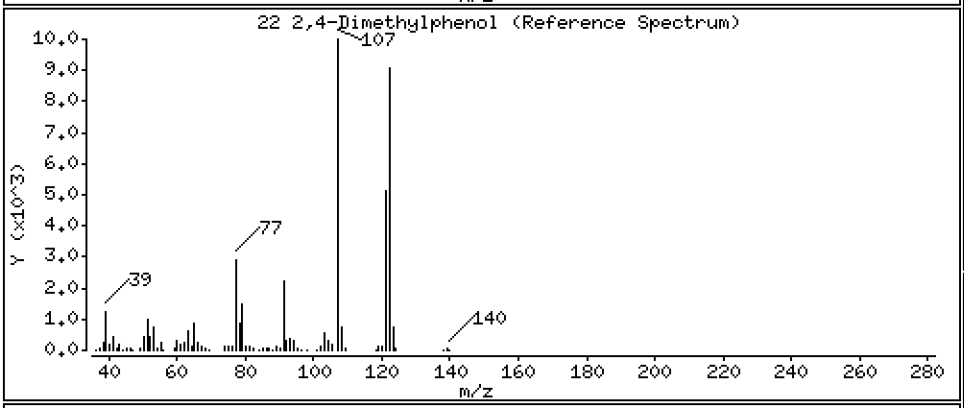
Concentration: 0.8717 ug/mL

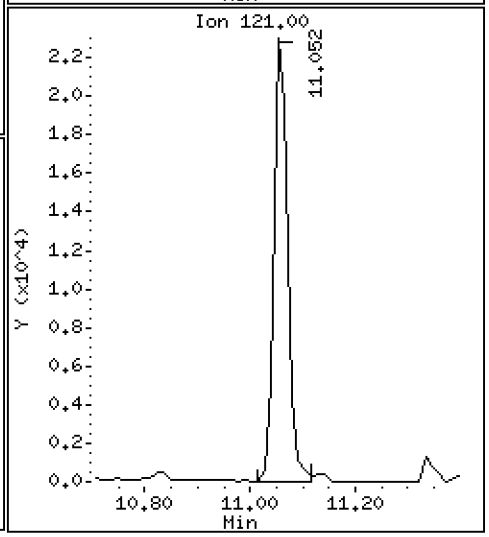


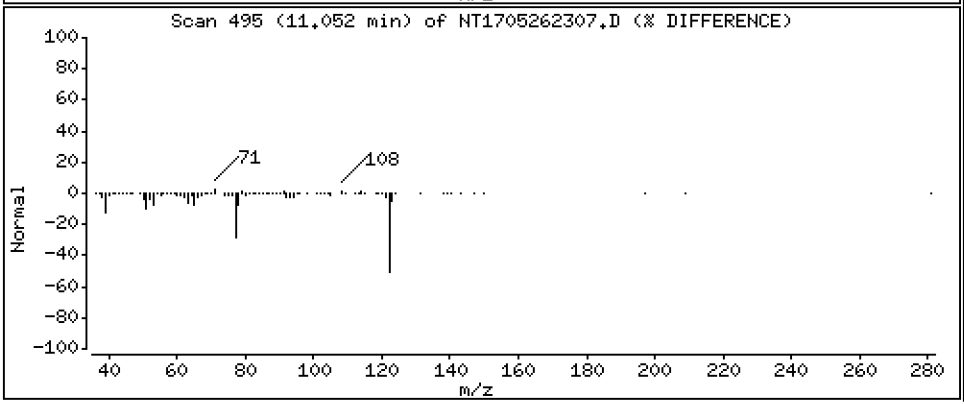












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

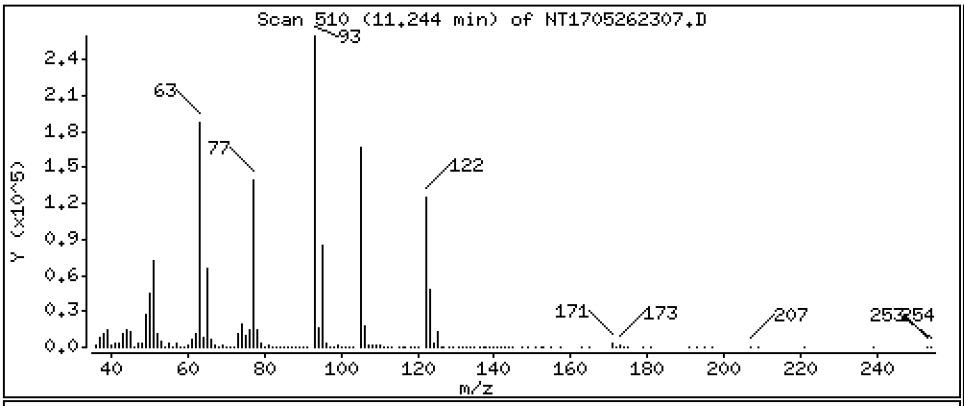
Operator: VTS

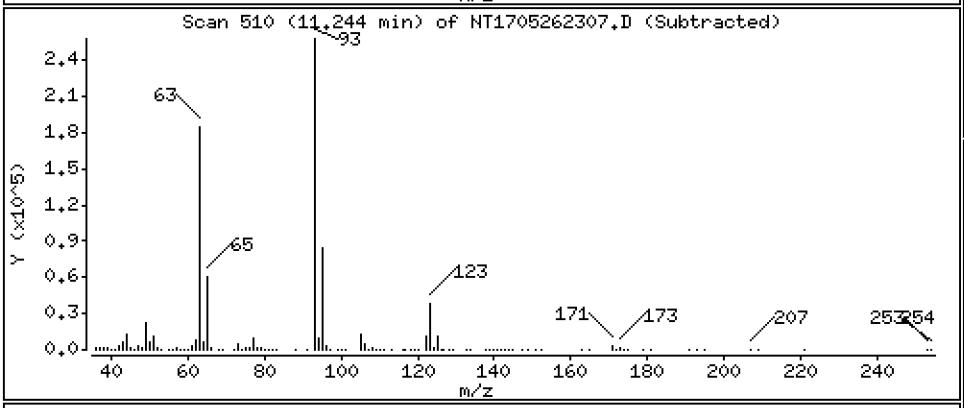
Column phase: ZB-5msi

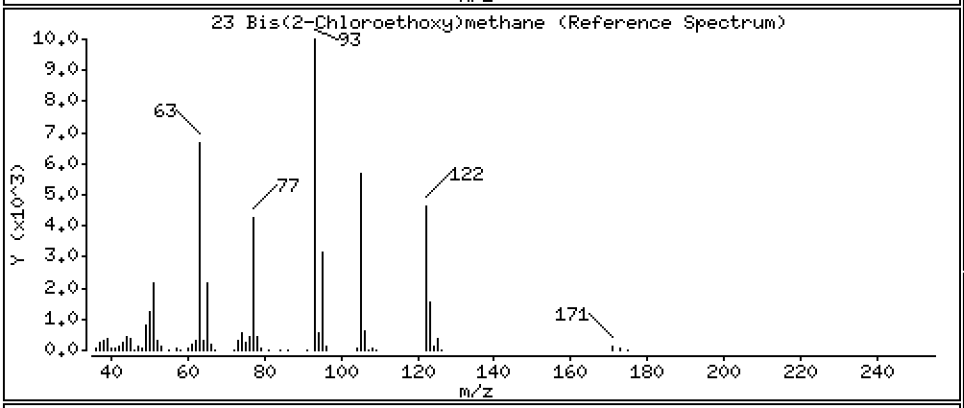
Column diameter: 0.25

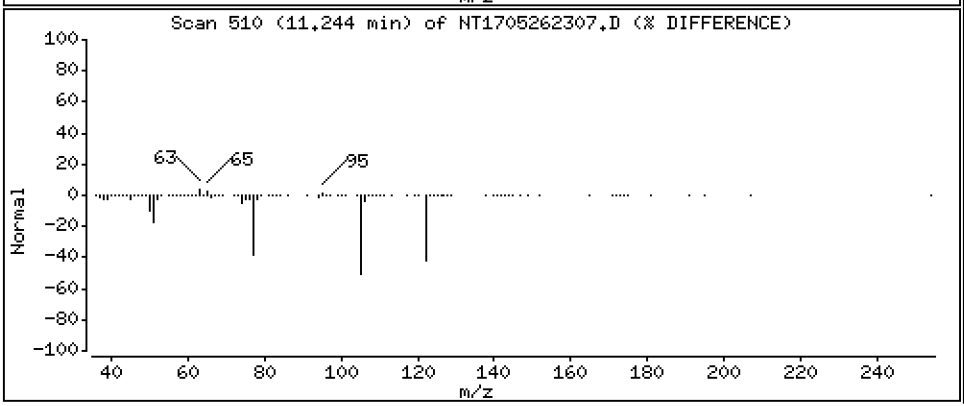
23 Bis(2-Chloroethoxy)methane

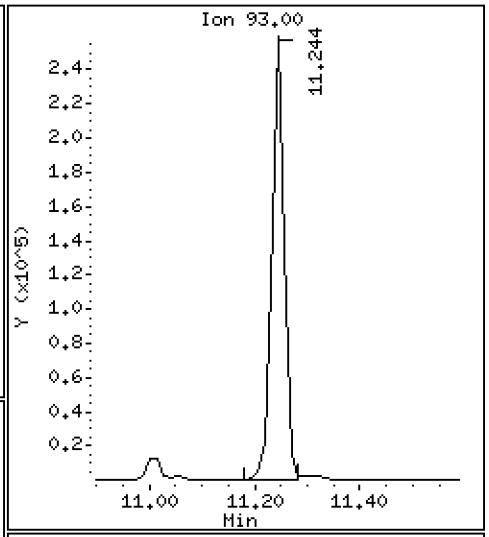
Concentration: 4.703 ug/mL

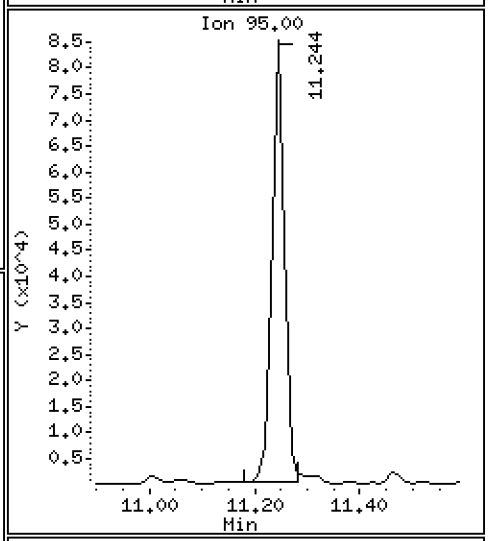


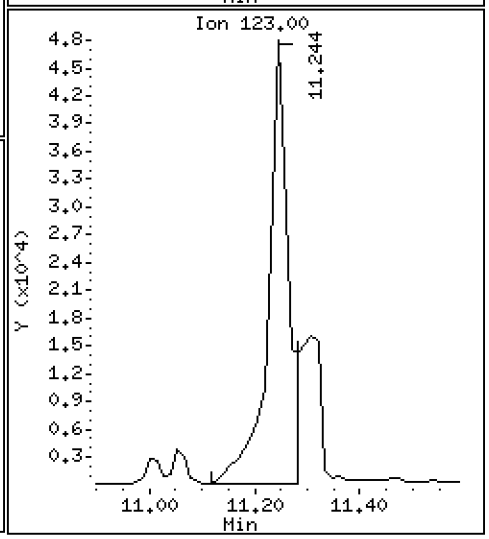












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

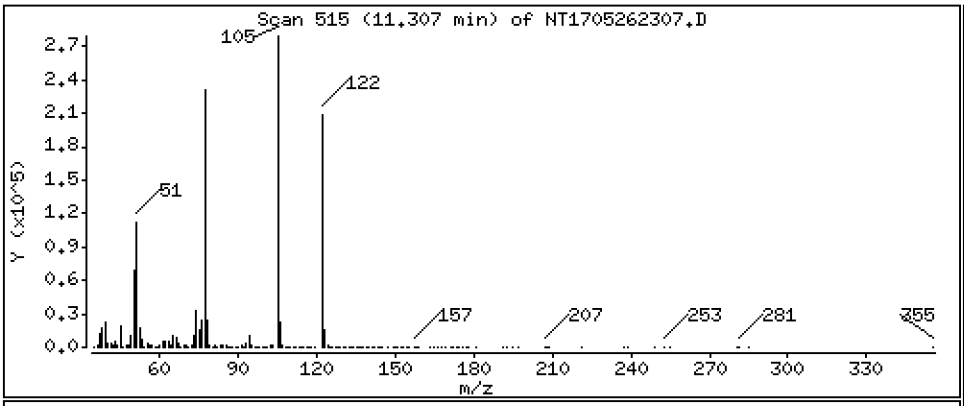
Operator: VTS

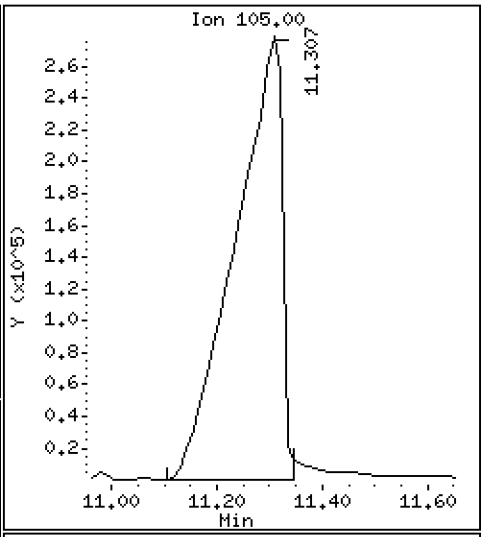
Column phase: ZB-5msi

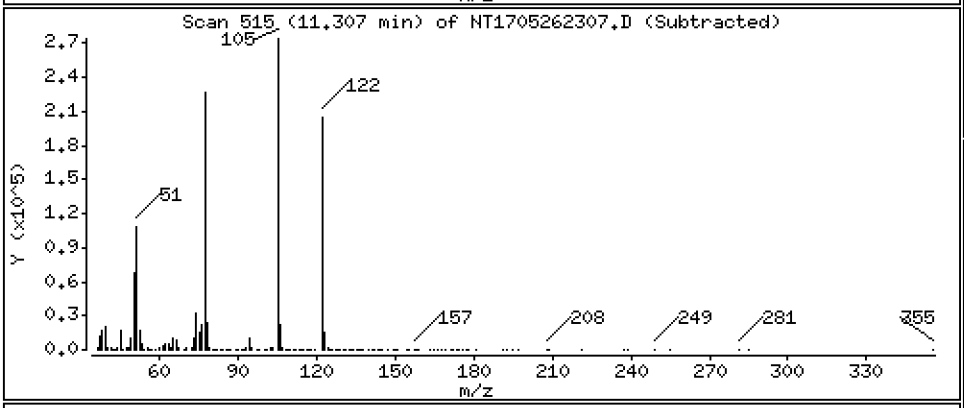
Column diameter: 0.25

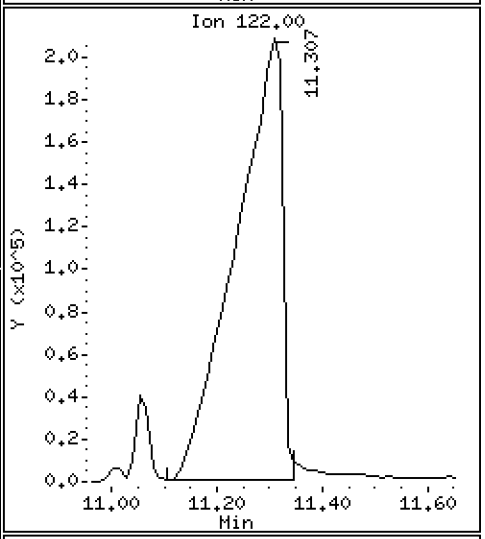
24 Benzoic acid

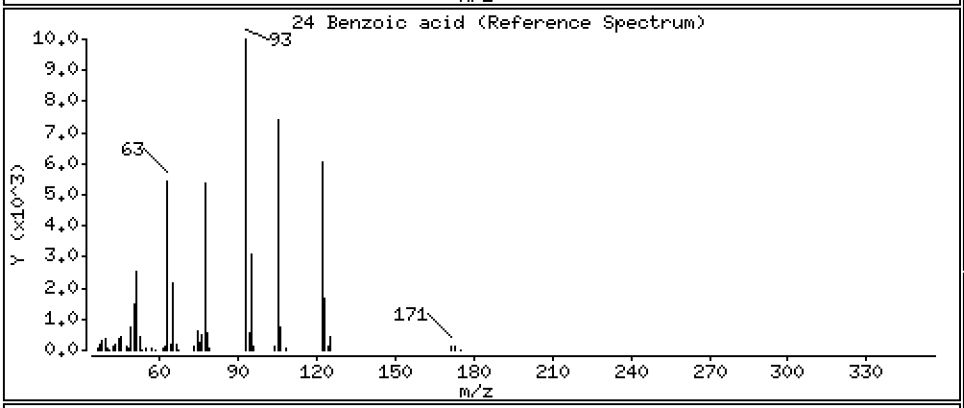
Concentration: 25.81 ug/mL

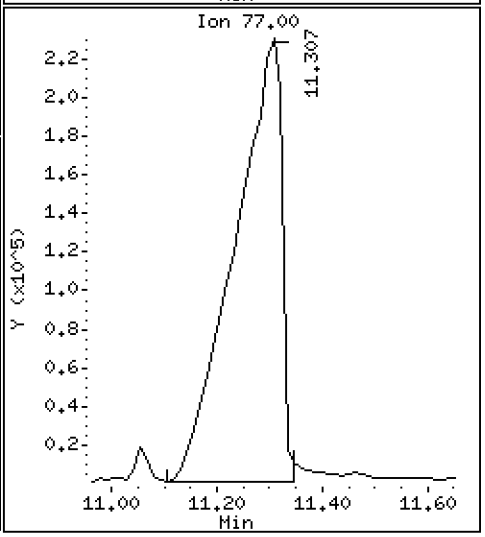


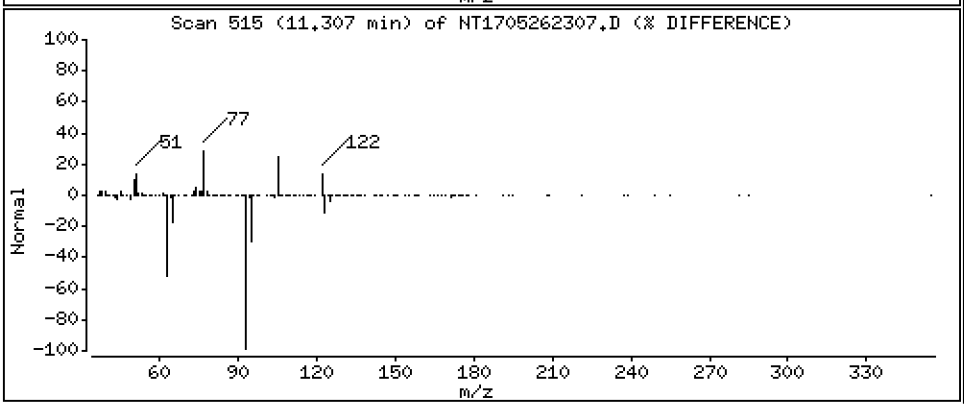












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

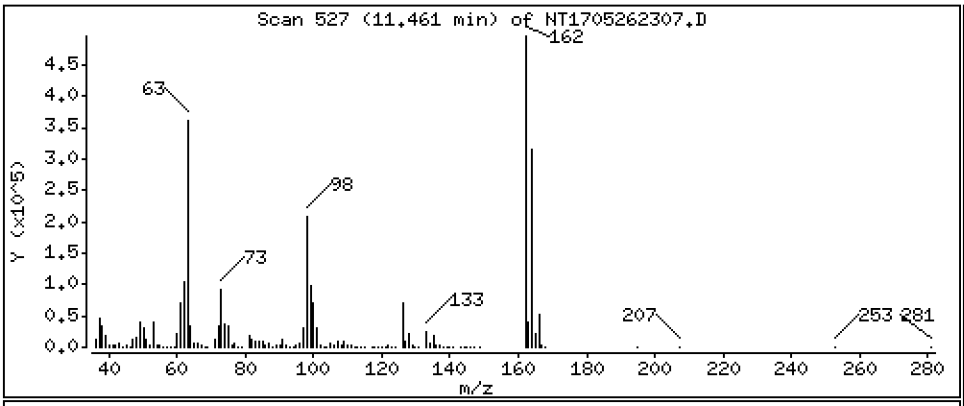
Operator: VTS

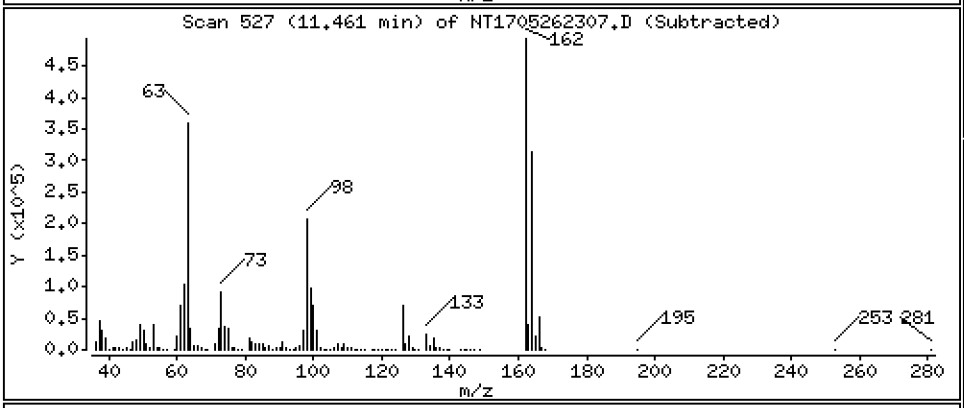
Column phase: ZB-5msi

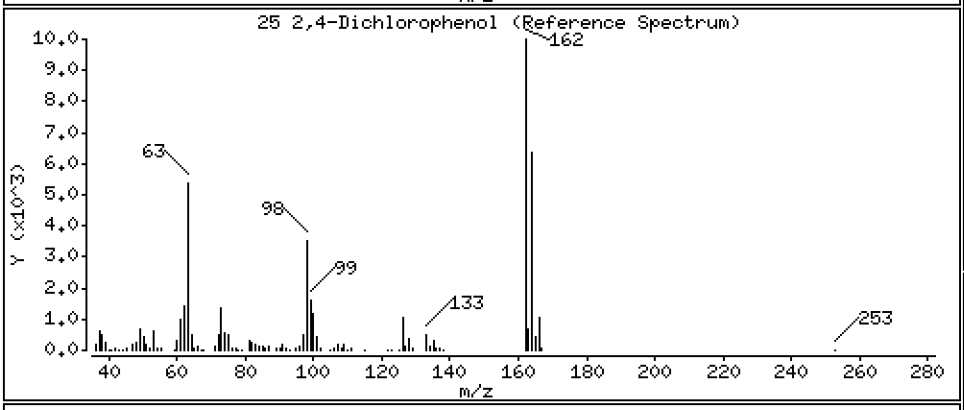
Column diameter: 0.25

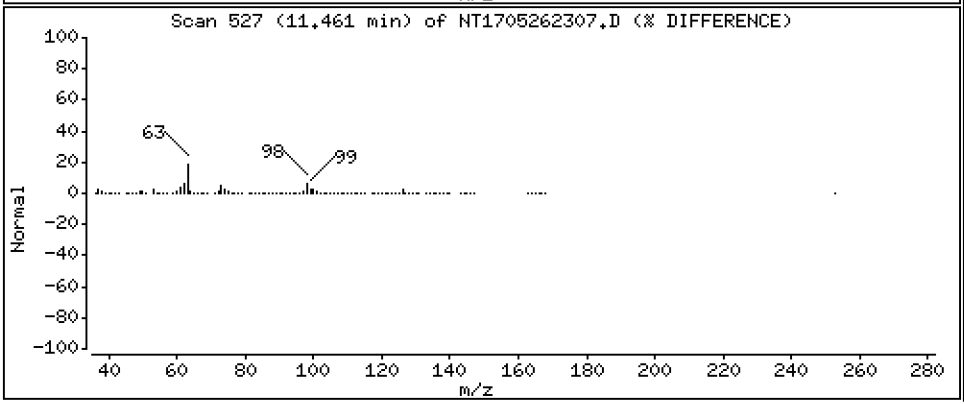
25 2,4-Dichlorophenol

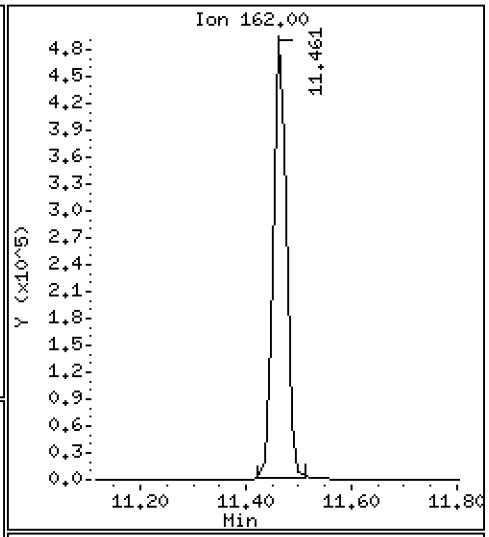
Concentration: 10.70 ug/mL

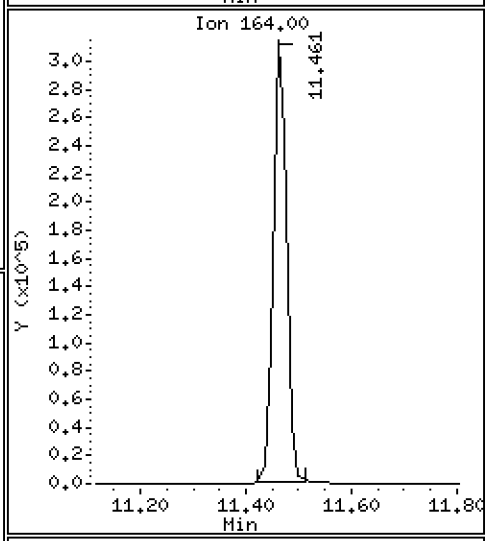


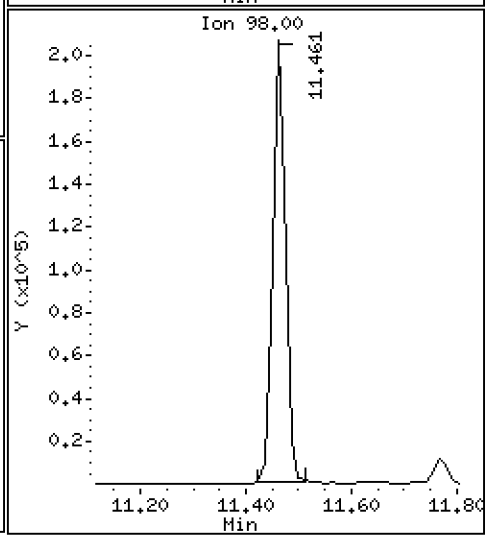












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

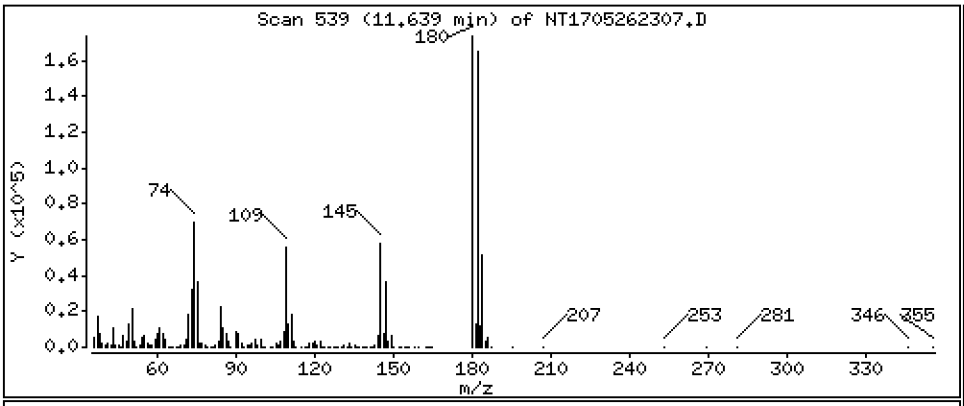
Operator: VTS

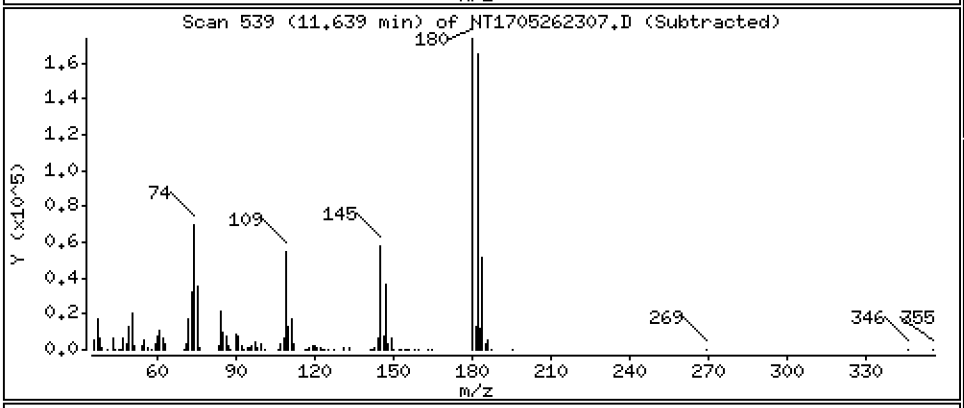
Column phase: ZB-5msi

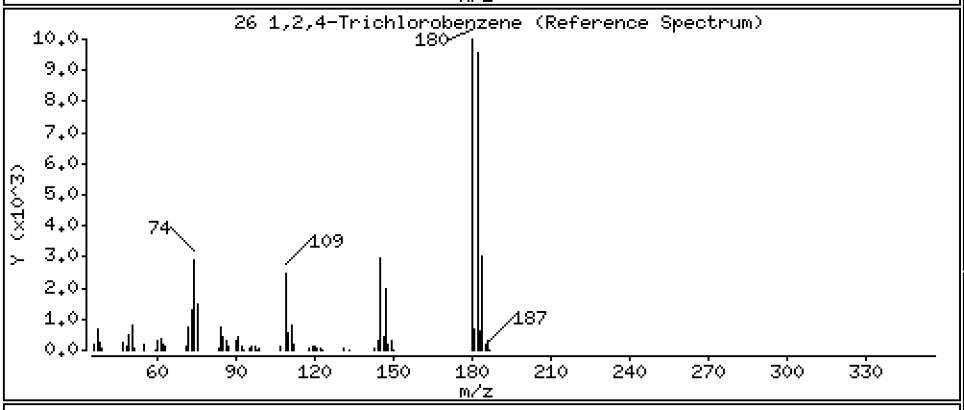
Column diameter: 0.25

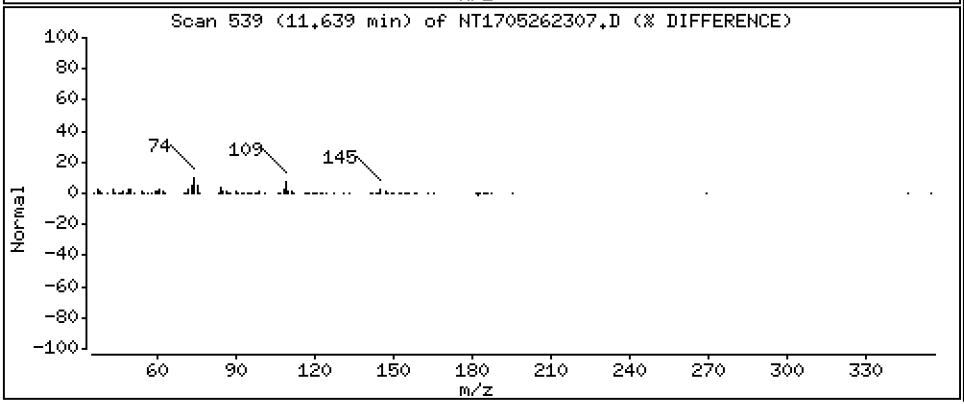
26 1,2,4-Trichlorobenzene

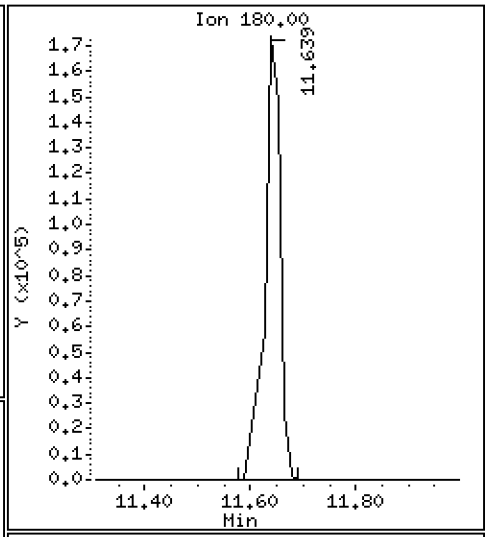
Concentration: 4.615 ug/mL

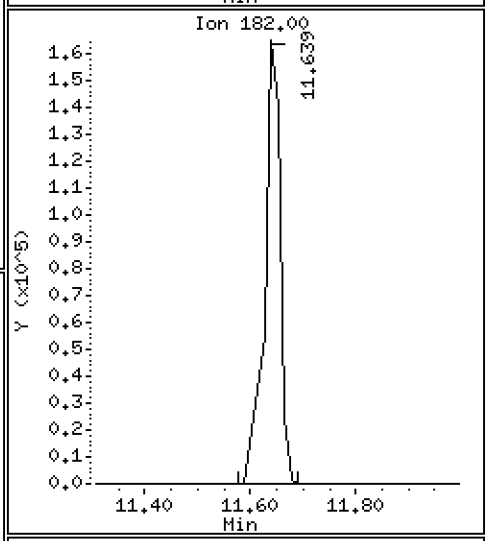


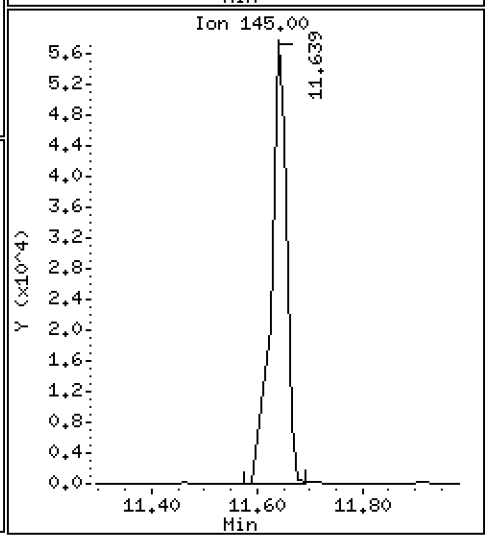












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

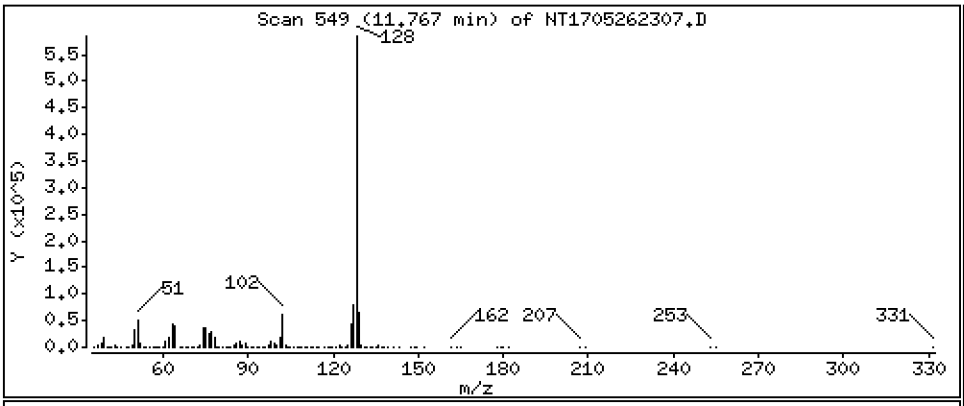
Operator: VTS

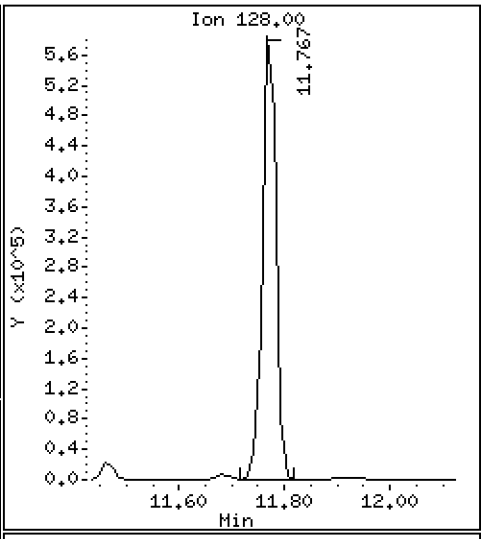
Column phase: ZB-5msi

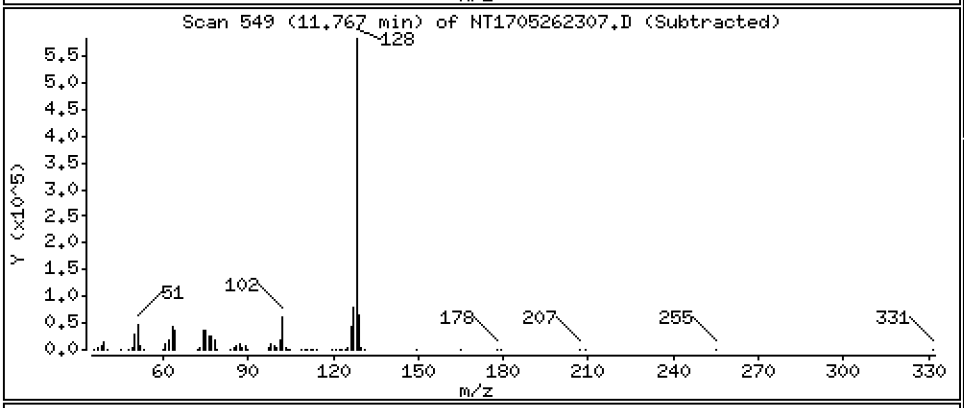
Column diameter: 0.25

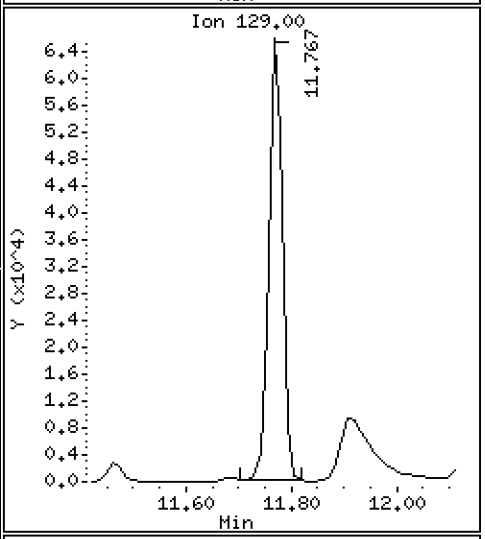
28 Naphthalene

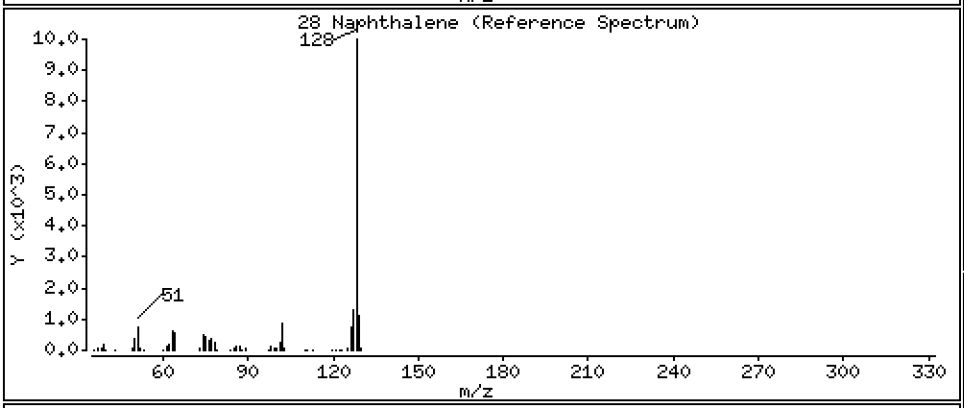
Concentration: 3.917 ug/mL

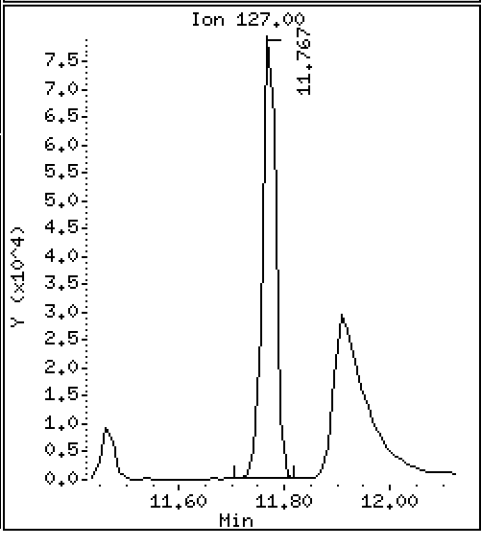


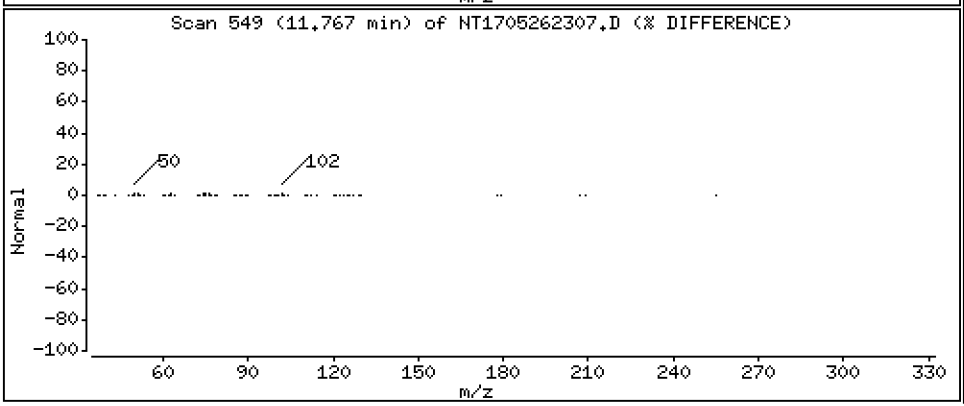












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

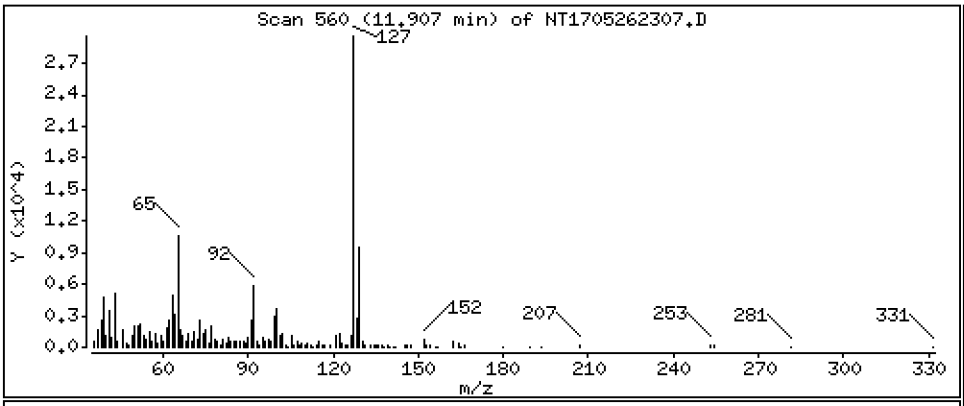
Operator: VTS

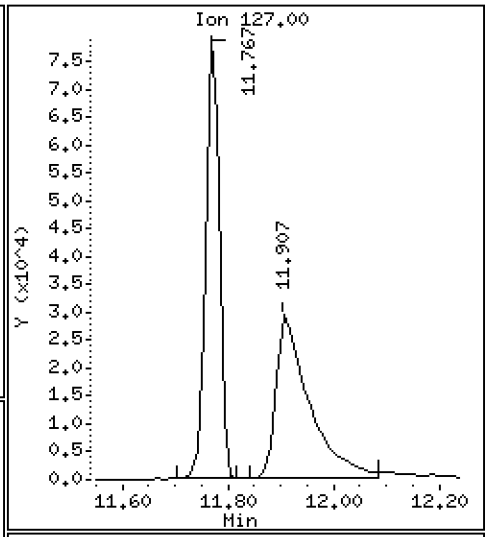
Column phase: ZB-5msi

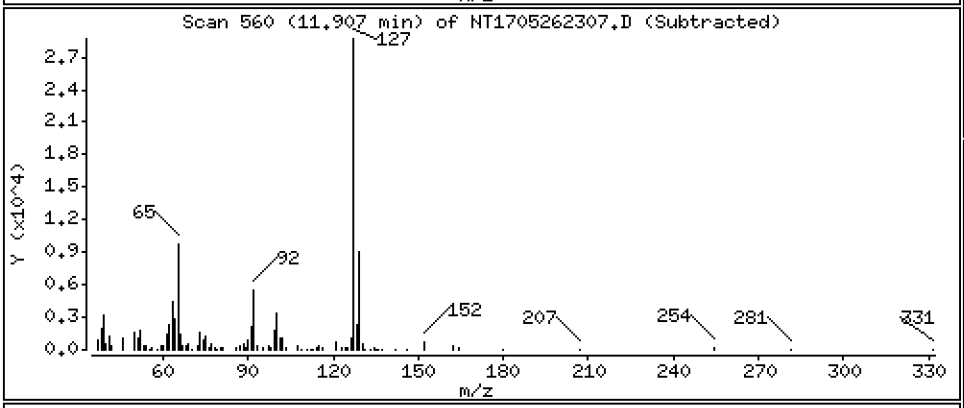
Column diameter: 0.25

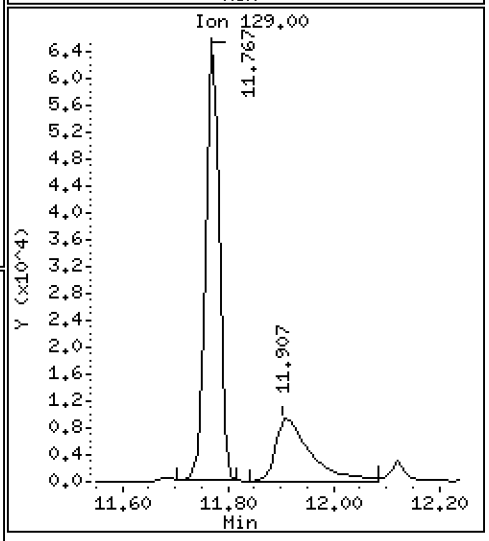
29 4-Chloroaniline

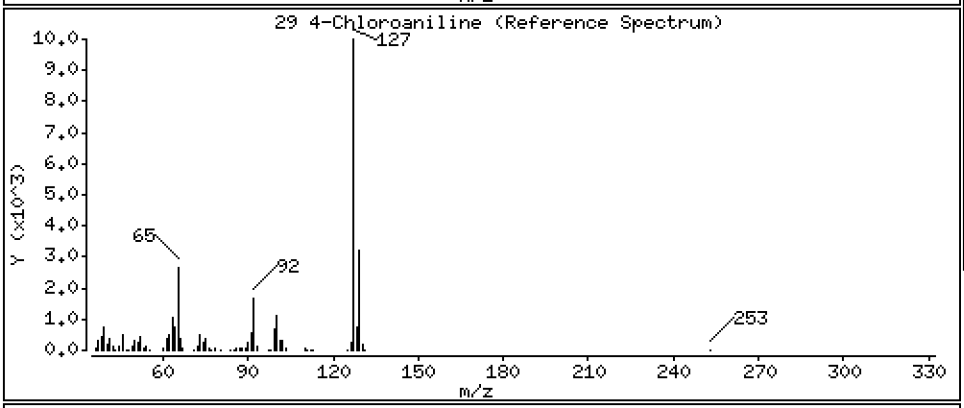
Concentration: 1.309 ug/mL

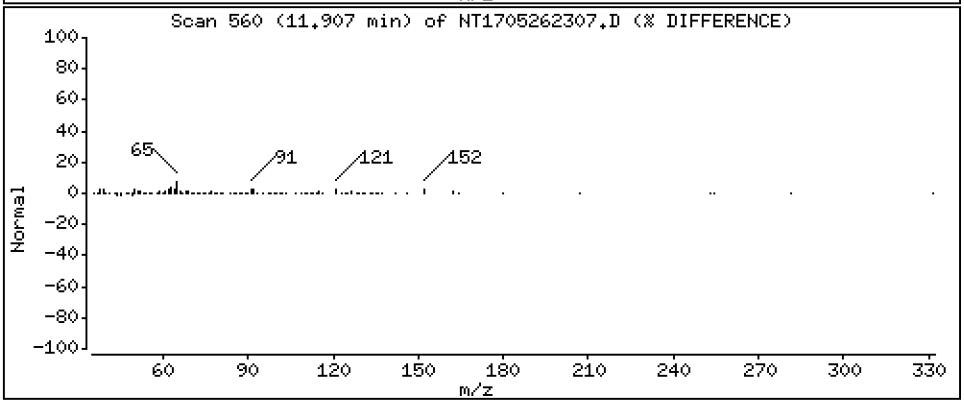












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

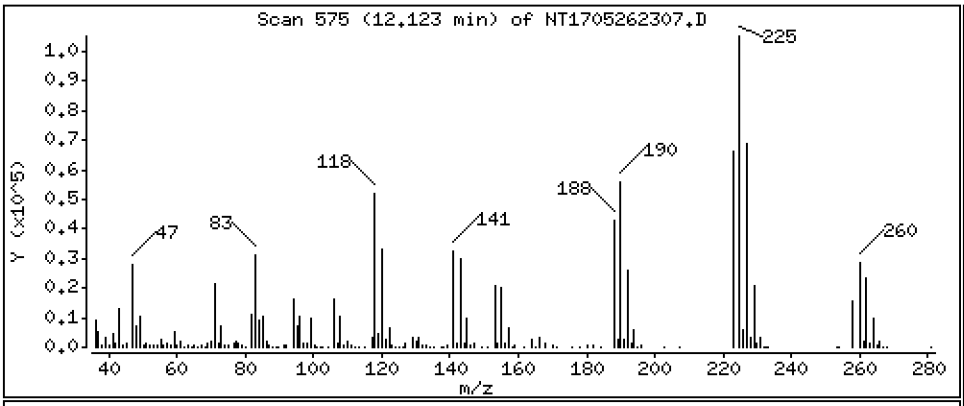
Operator: VTS

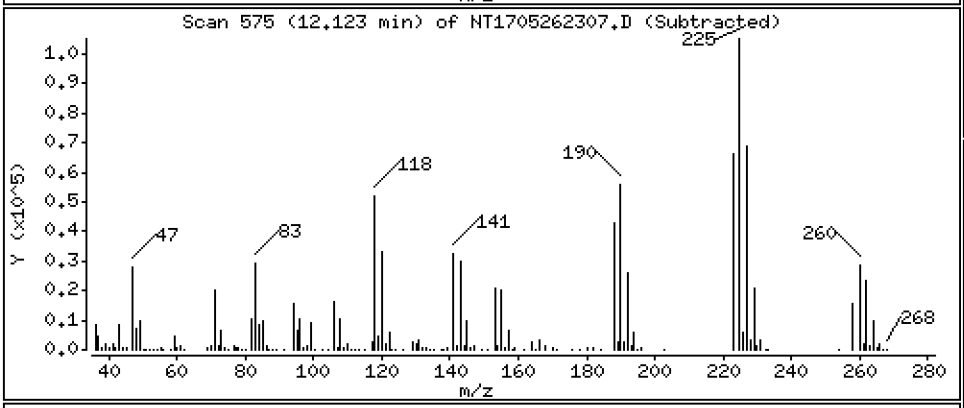
Column phase: ZB-5msi

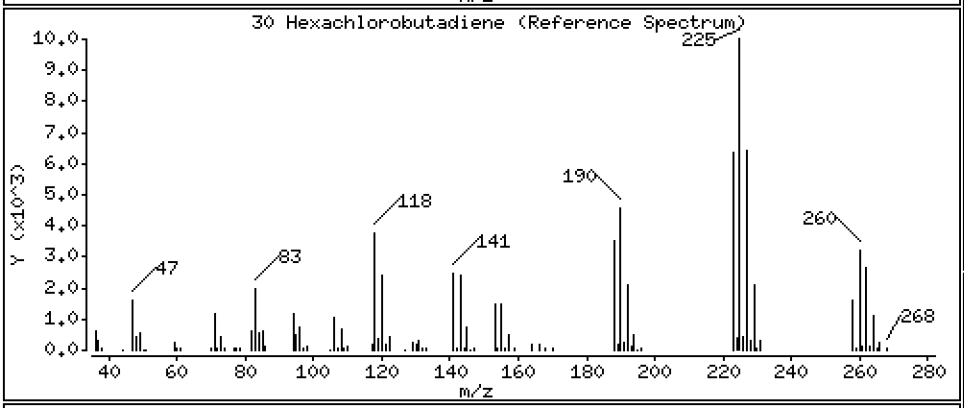
Column diameter: 0.25

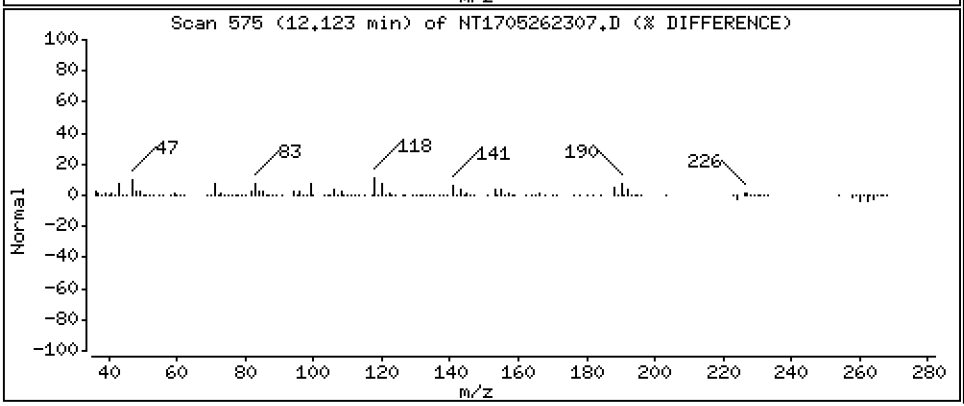
30 Hexachlorobutadiene

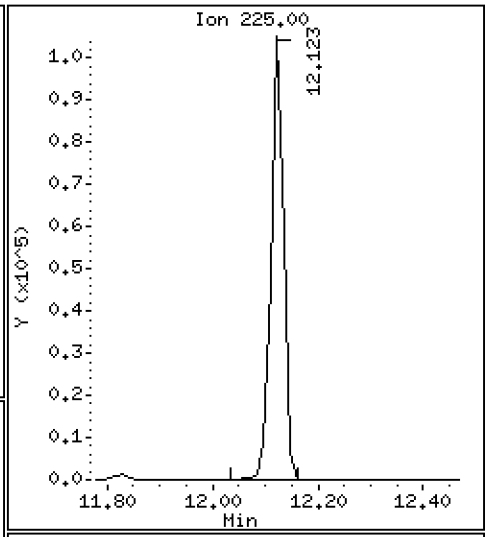
Concentration: 5.064 ug/mL

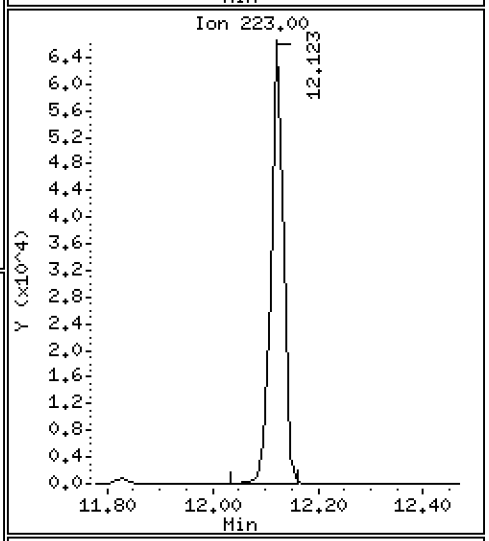


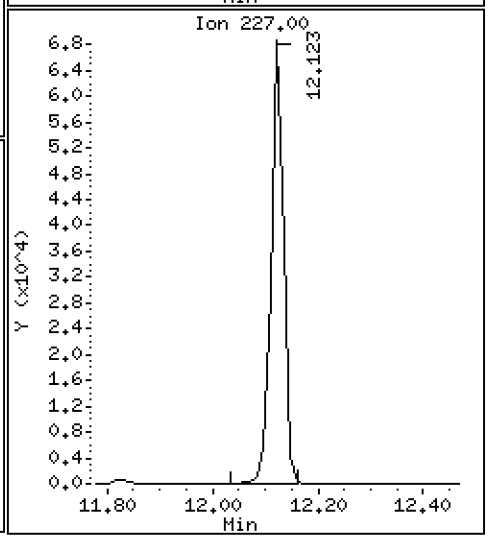












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

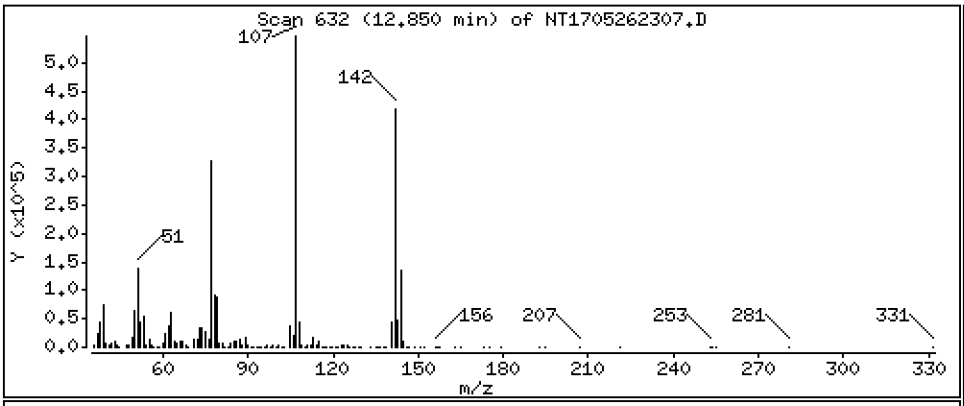
Operator: VTS

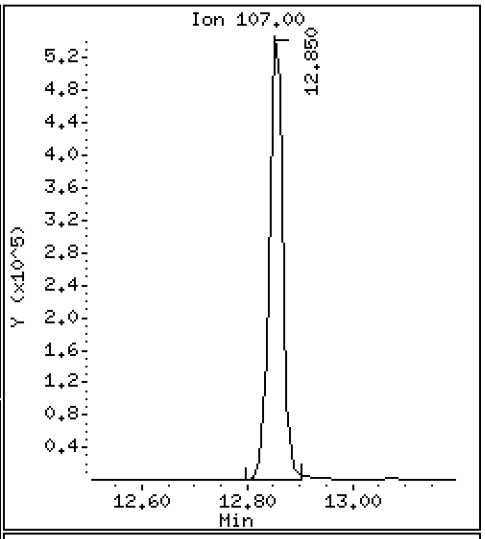
Column phase: ZB-5msi

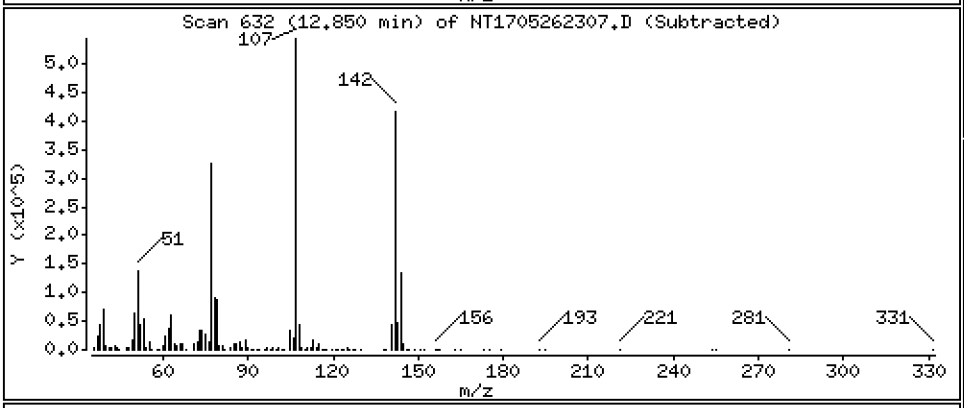
Column diameter: 0.25

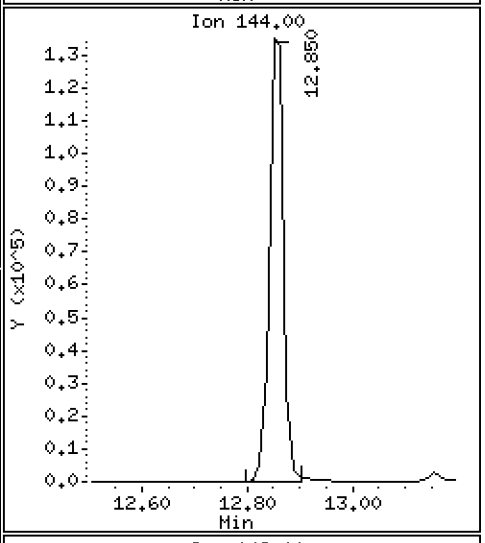
31 4-Chloro-3-methylphenol

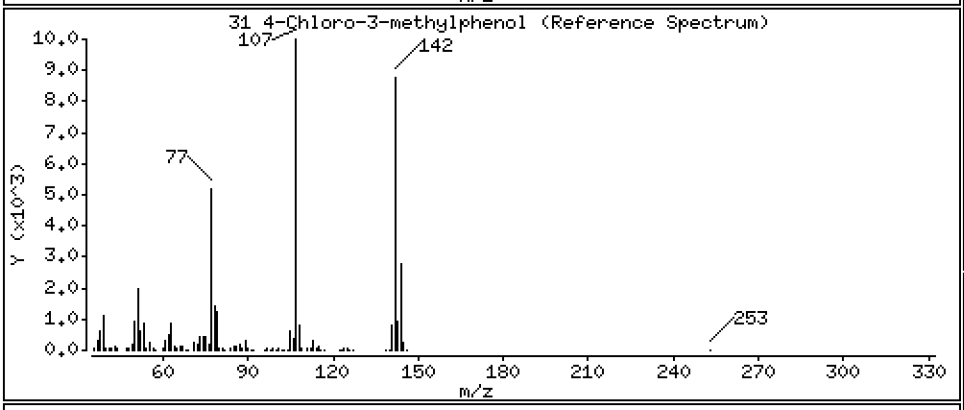
Concentration: 11.74 ug/mL

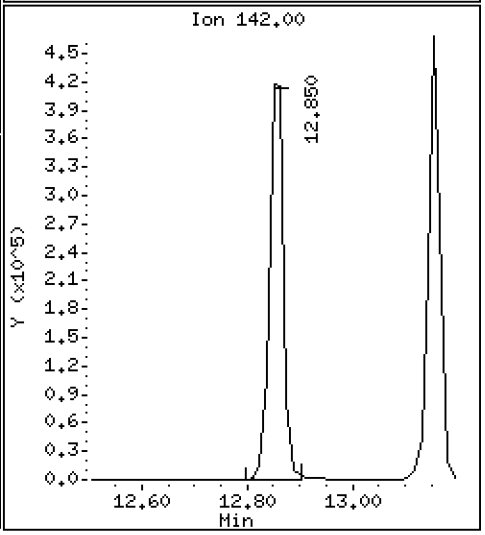


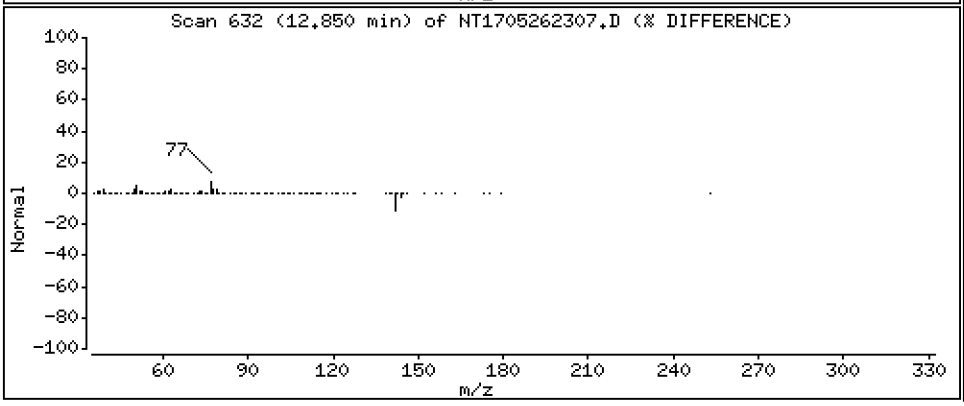












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

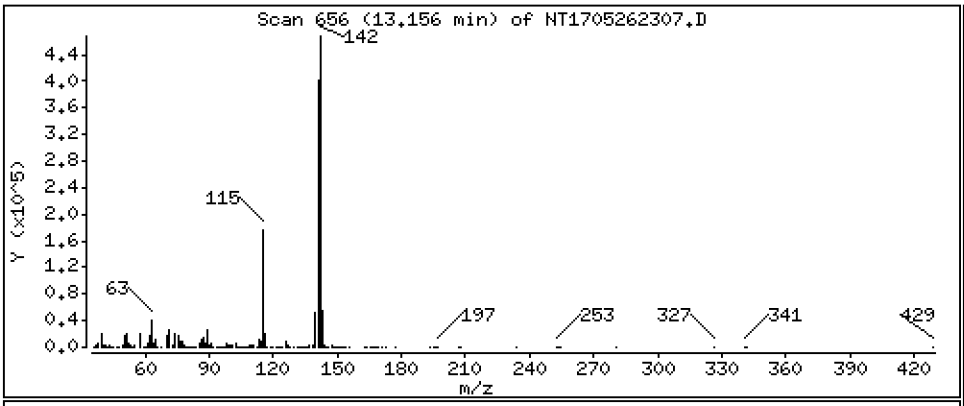
Operator: VTS

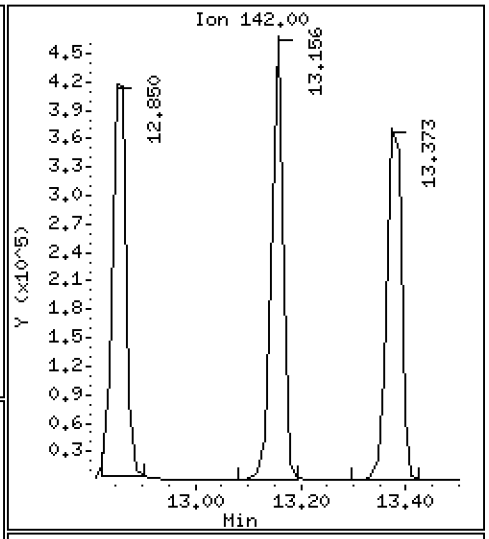
Column phase: ZB-5msi

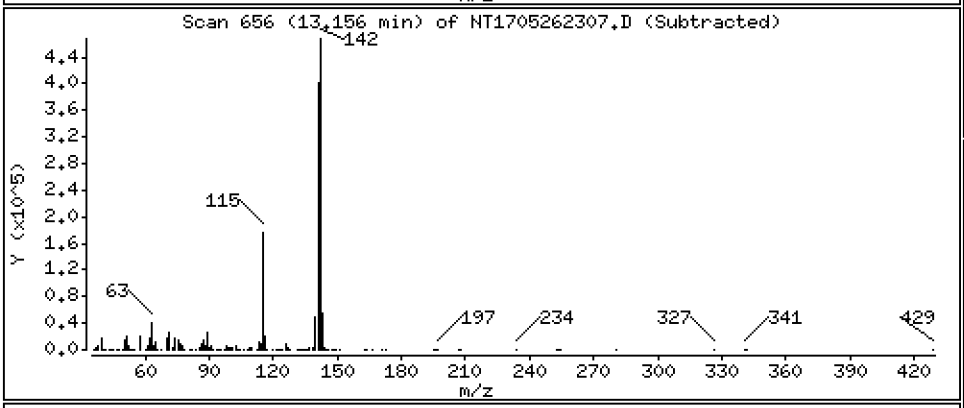
Column diameter: 0.25

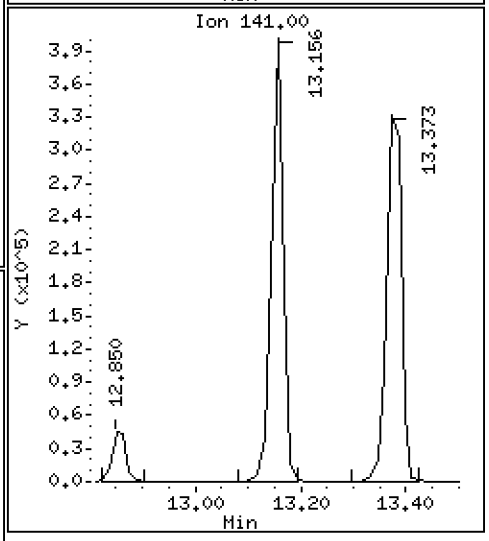
32 2-Methylnaphthalene

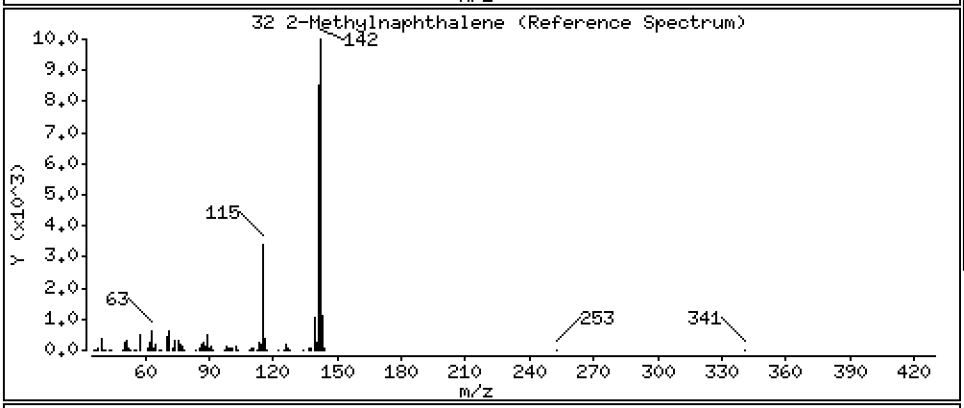
Concentration: 3.832 ug/mL

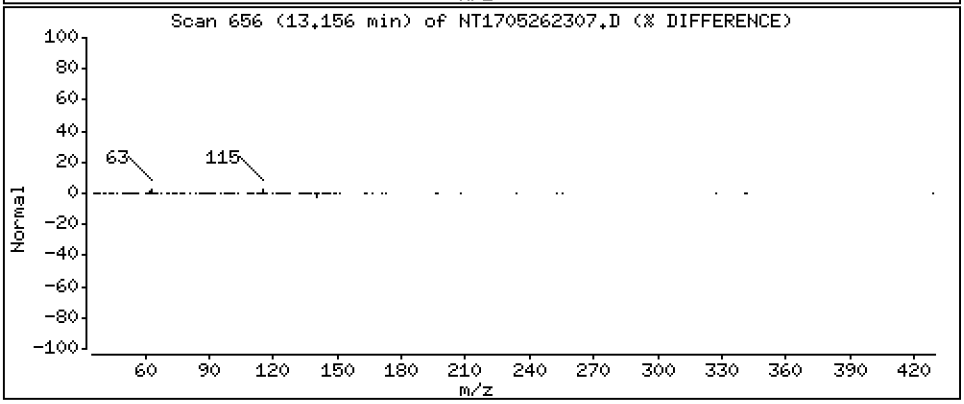












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

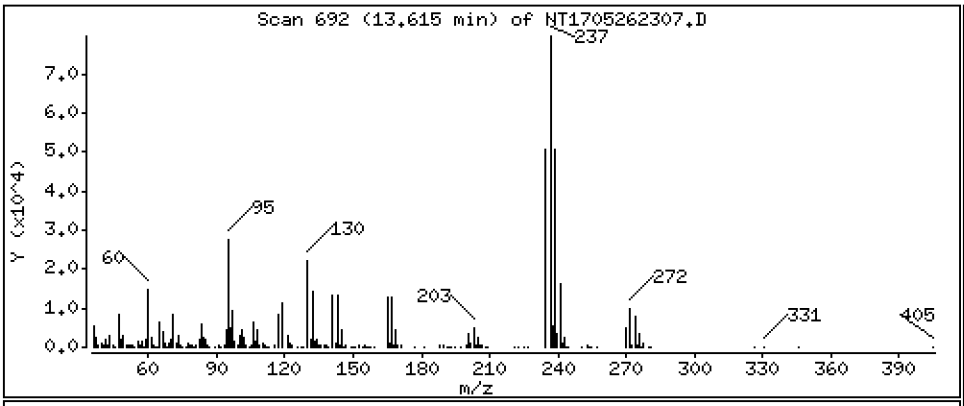
Operator: VTS

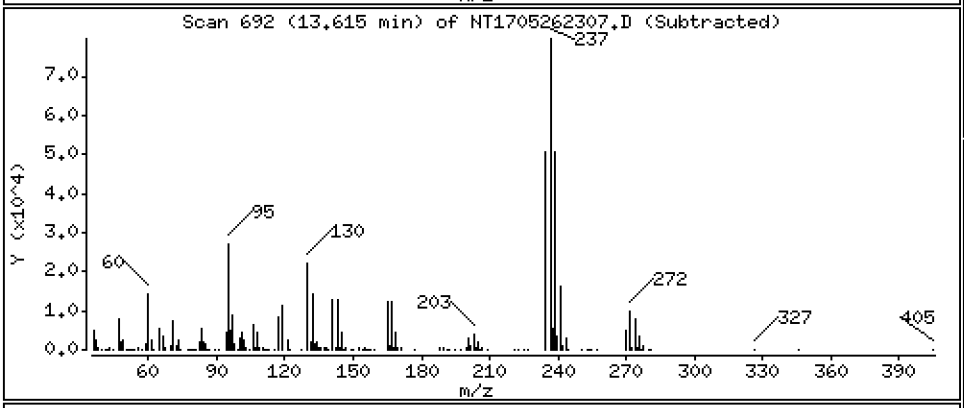
Column phase: ZB-5msi

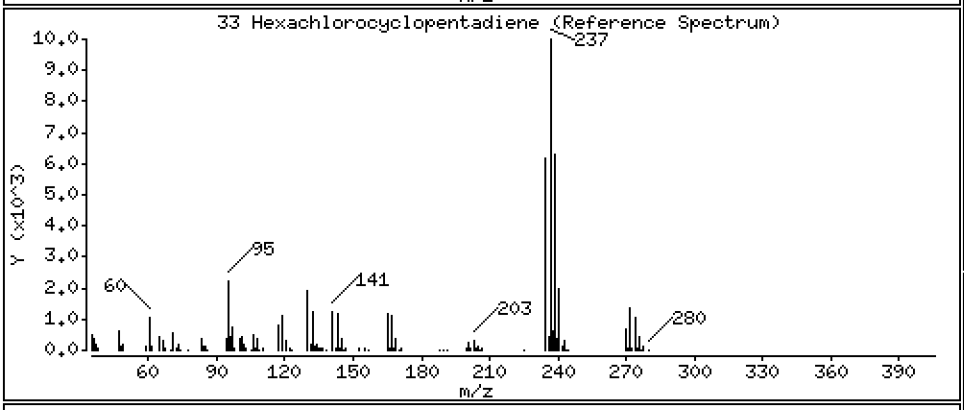
Column diameter: 0.25

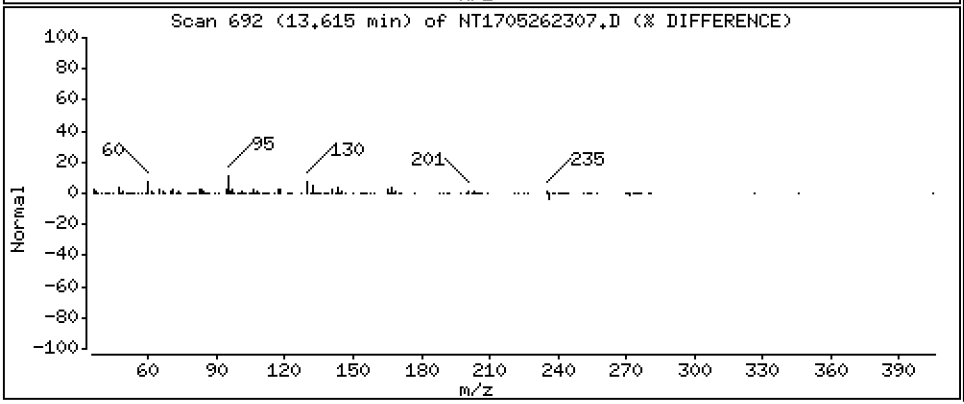
33 Hexachlorocyclopentadiene

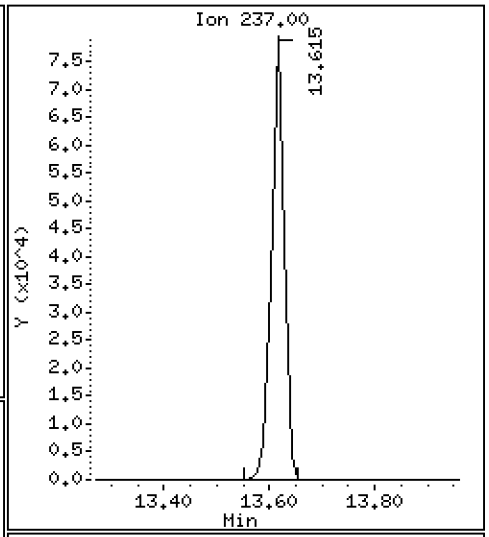
Concentration: 2.774 ug/mL

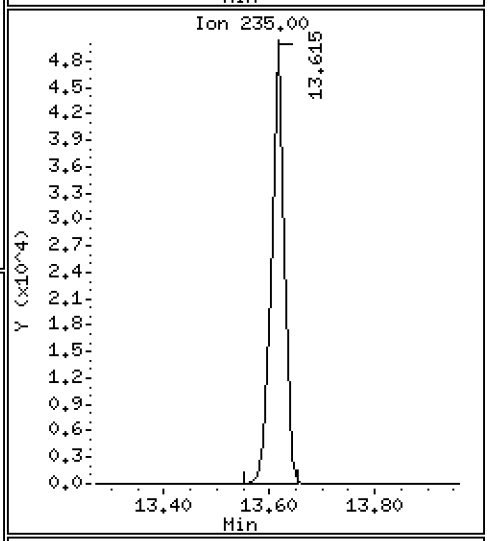


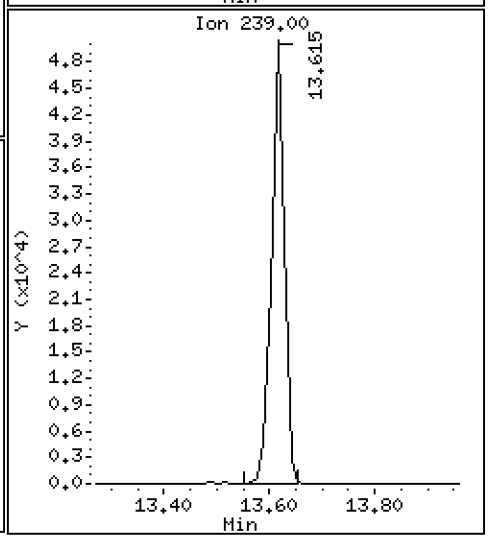












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

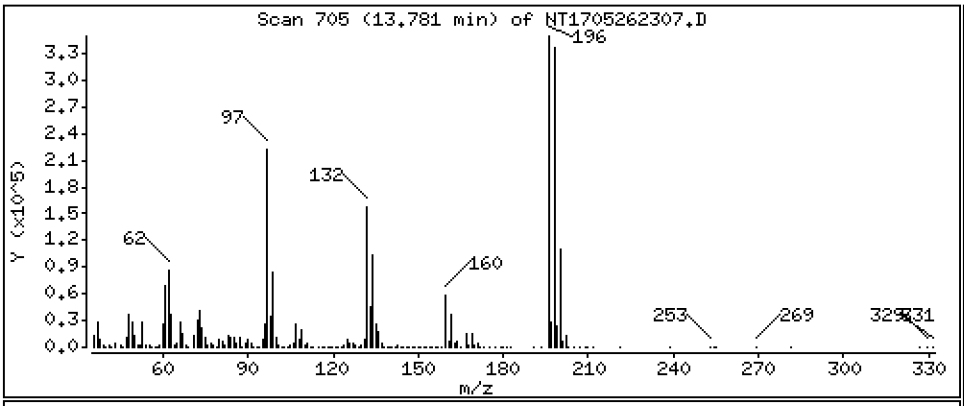
Operator: VTS

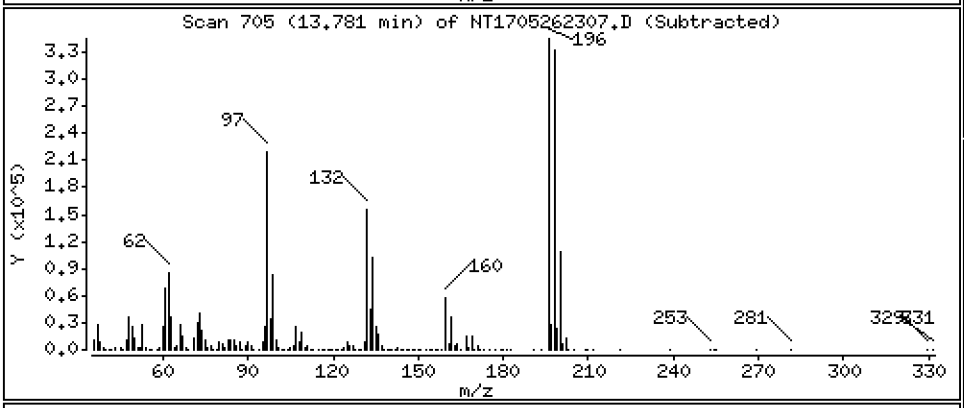
Column phase: ZB-5msi

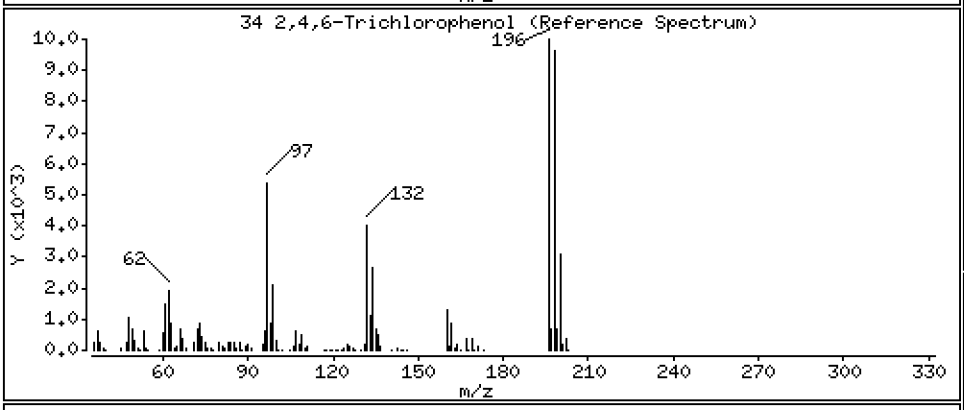
Column diameter: 0.25

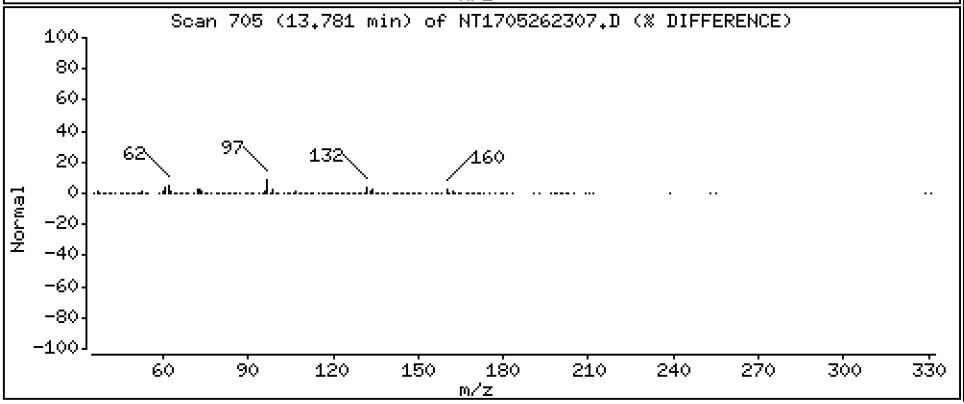
34 2,4,6-Trichlorophenol

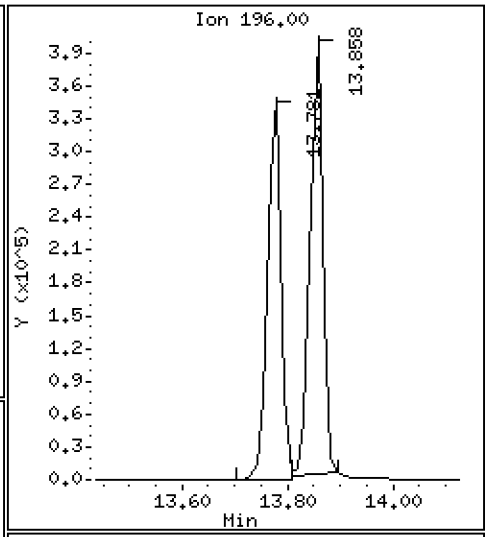
Concentration: 11.62 ug/mL

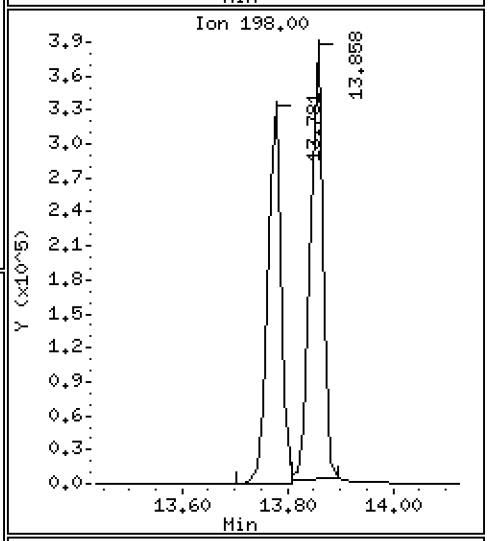


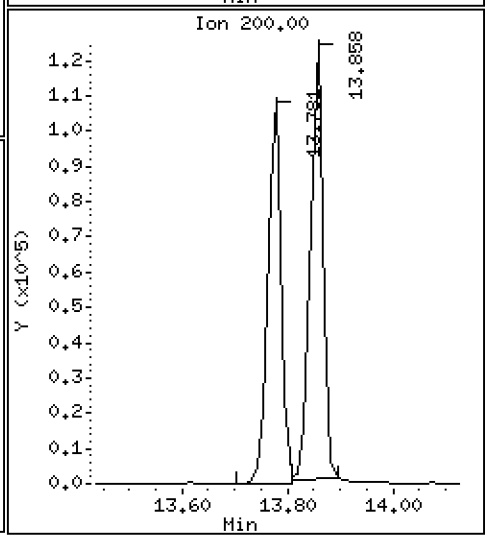












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

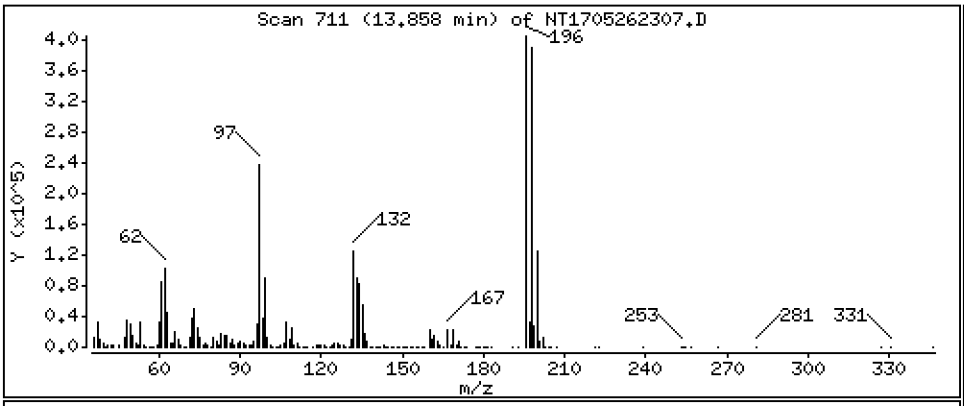
Operator: VTS

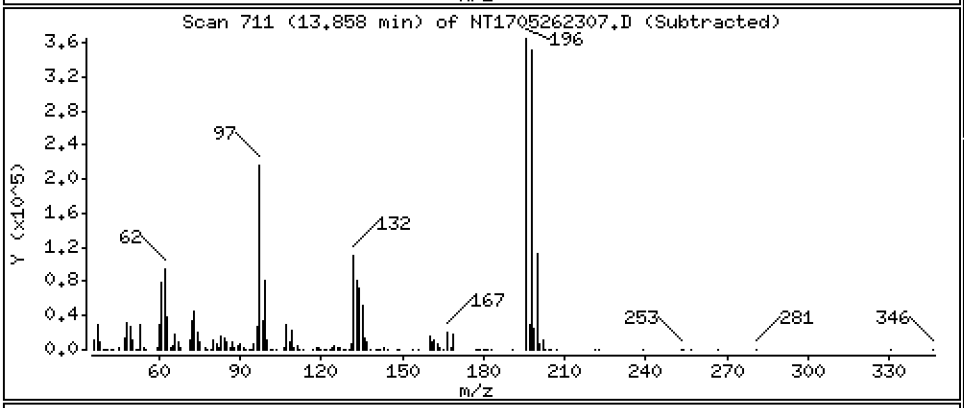
Column phase: ZB-5msi

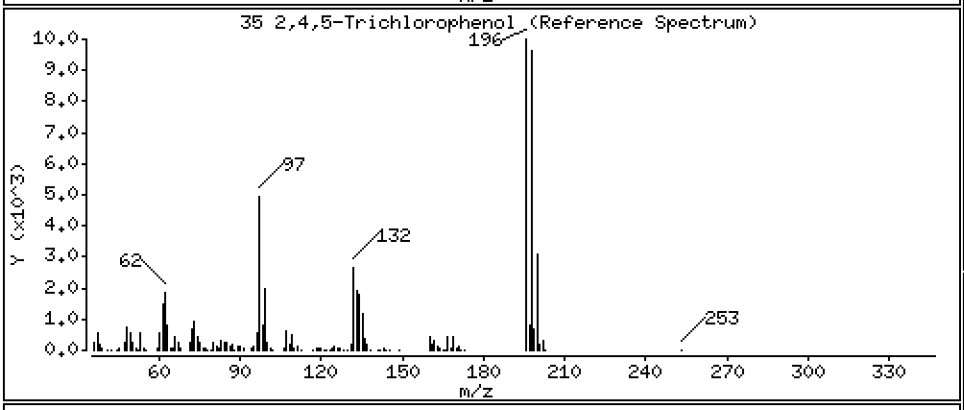
Column diameter: 0.25

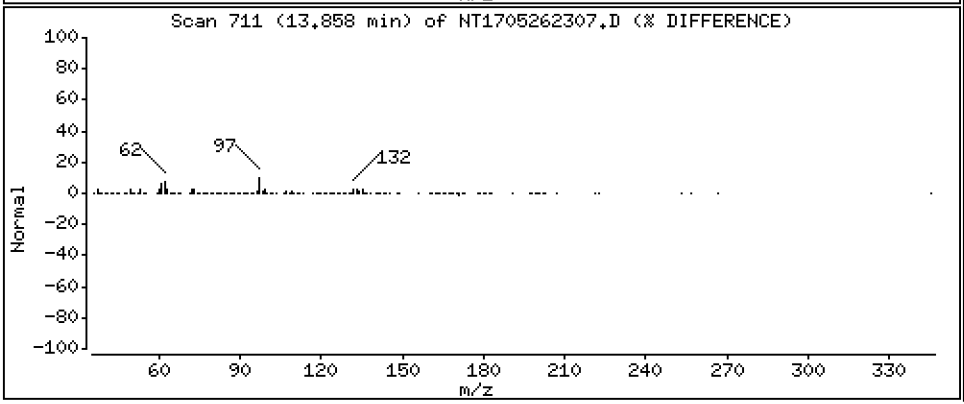
35 2,4,5-Trichlorophenol

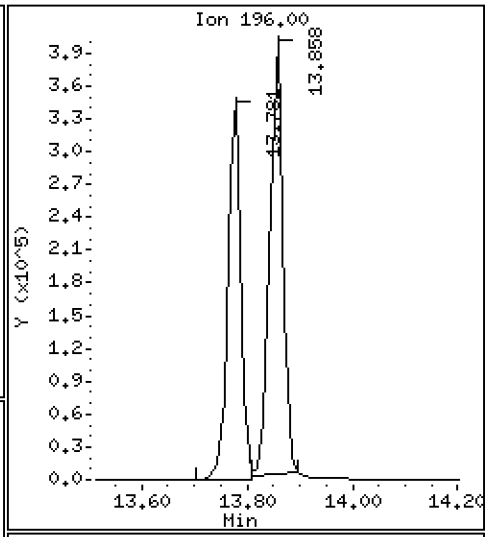
Concentration: 11.89 ug/mL

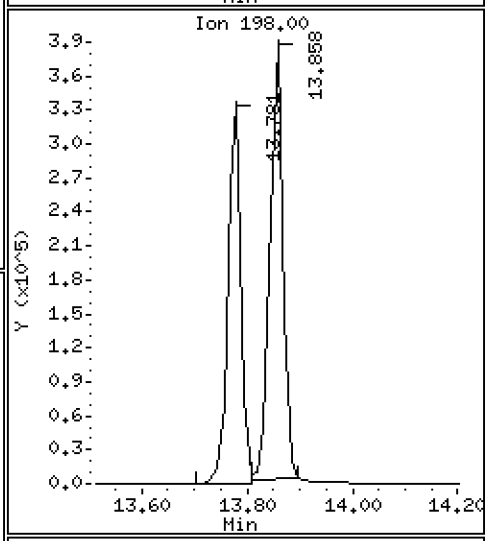


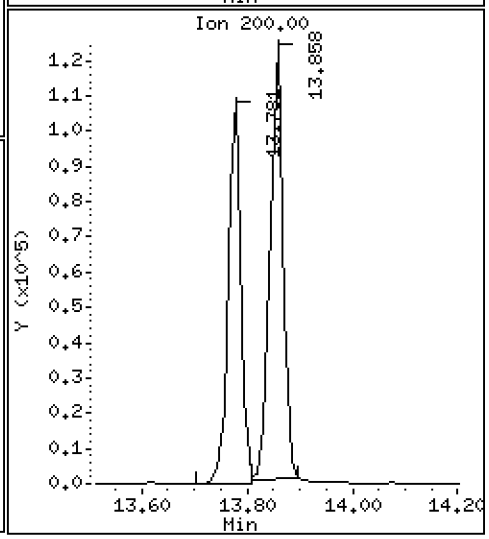












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

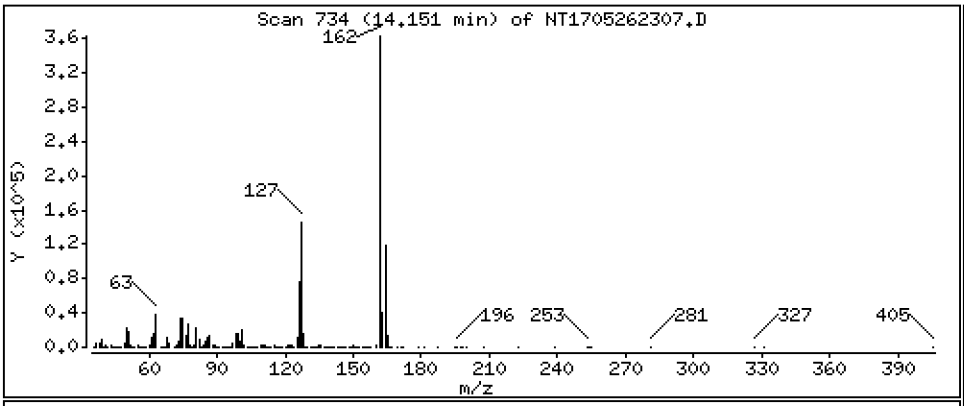
Operator: VTS

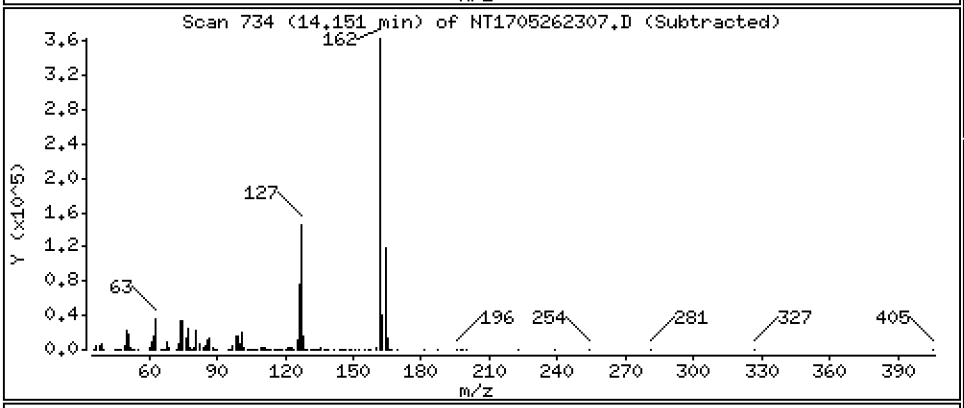
Column phase: ZB-5msi

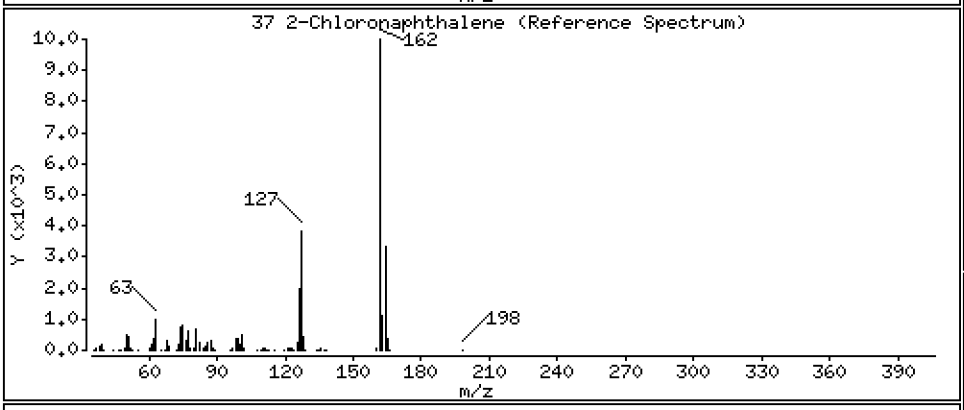
Column diameter: 0.25

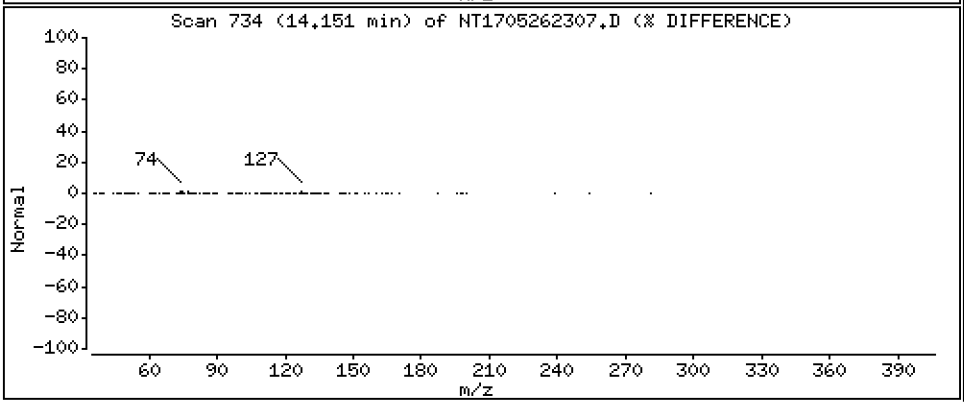
37 2-Chloronaphthalene

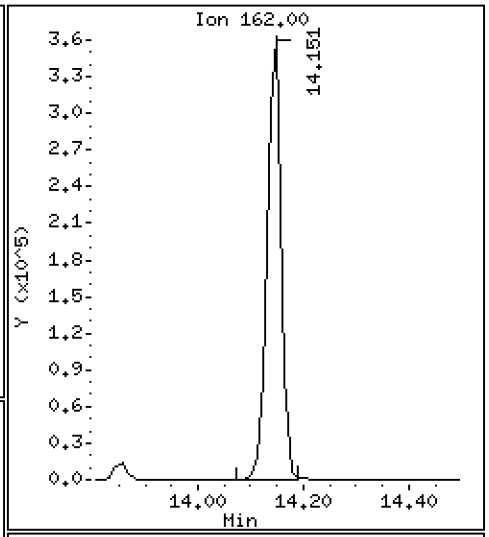
Concentration: 4.098 ug/mL

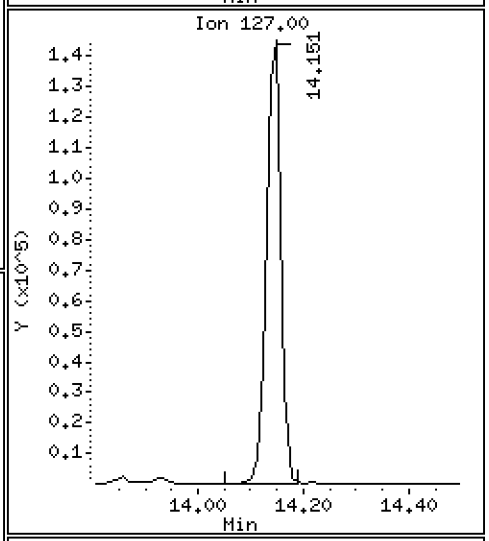


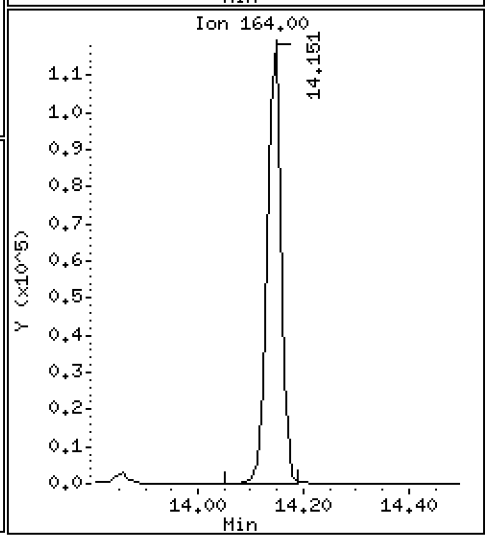












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

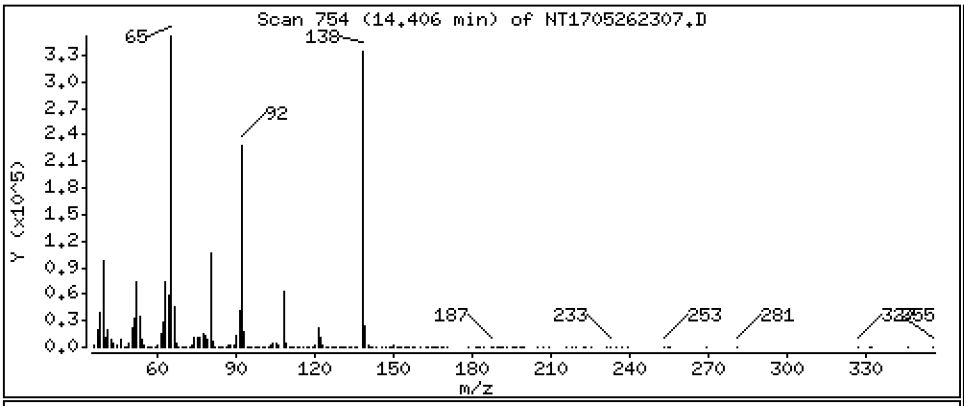
Operator: VTS

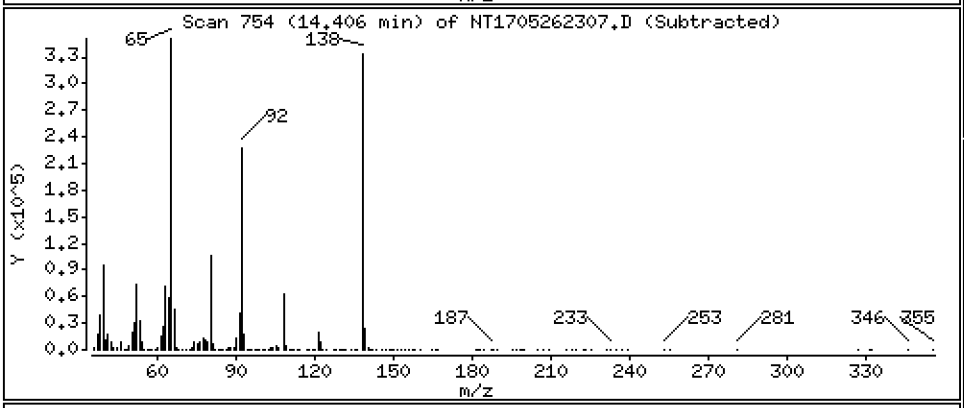
Column phase: ZB-5msi

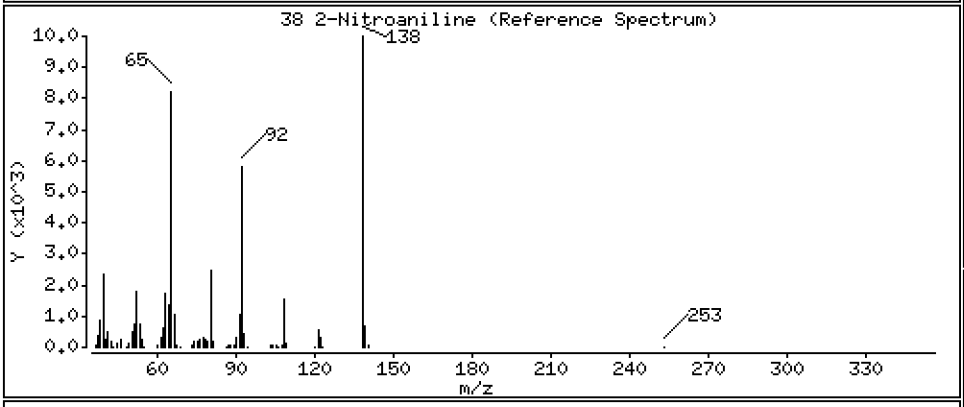
Column diameter: 0.25

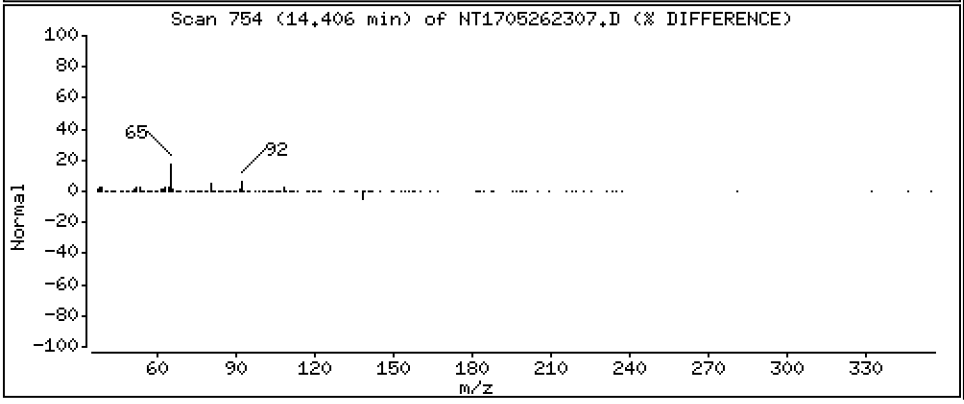
38 2-Nitroaniline

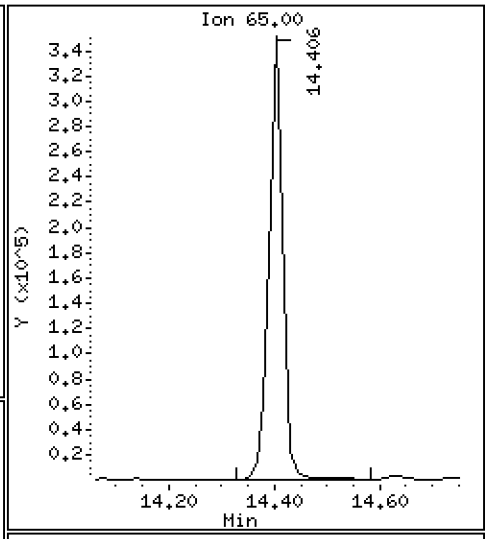
Concentration: 11.74 ug/mL

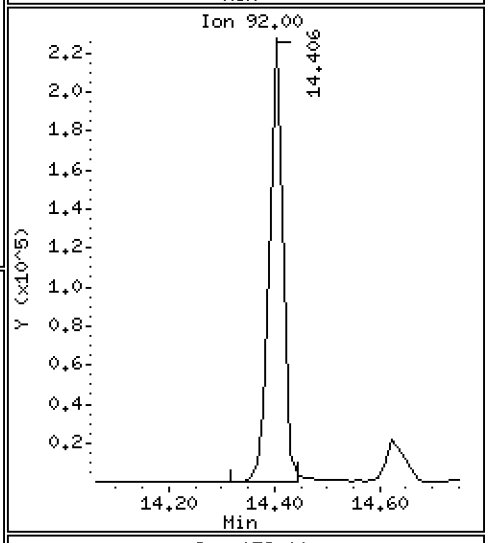


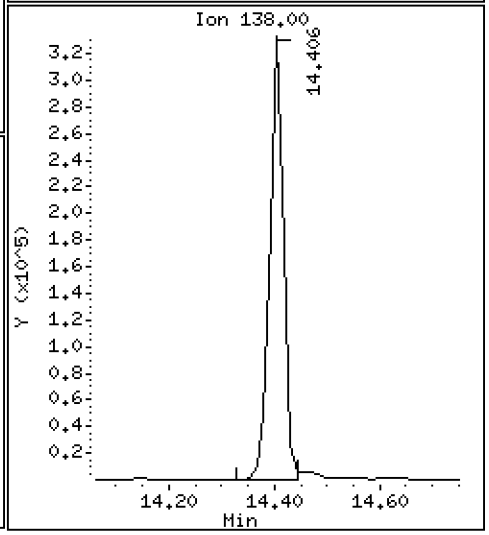












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

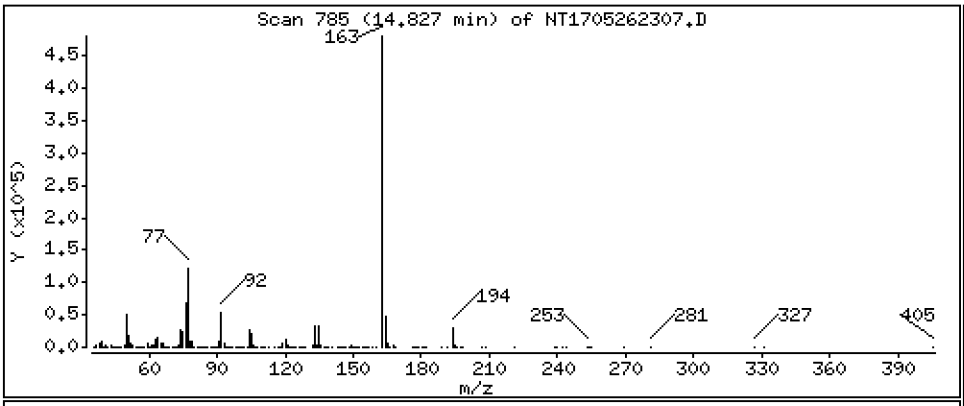
Operator: VTS

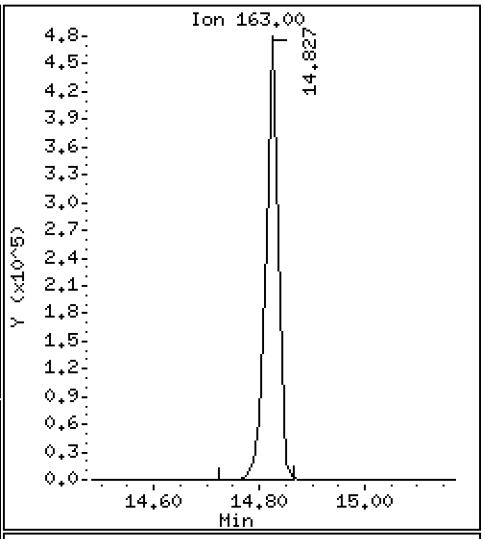
Column phase: ZB-5msi

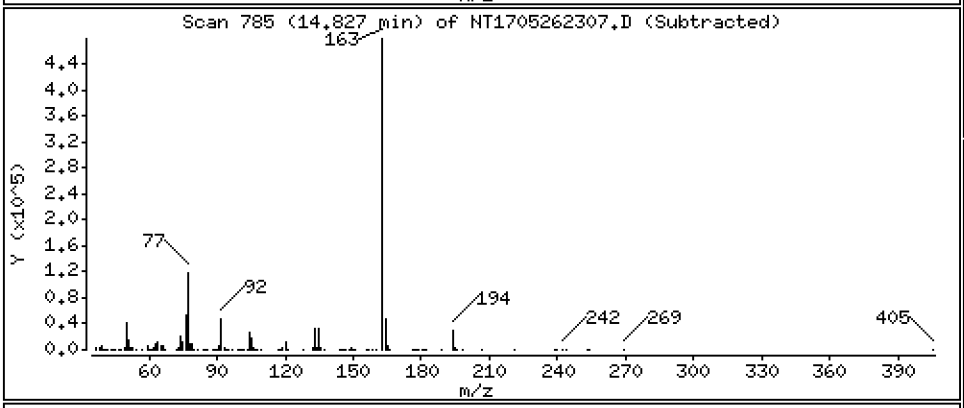
Column diameter: 0.25

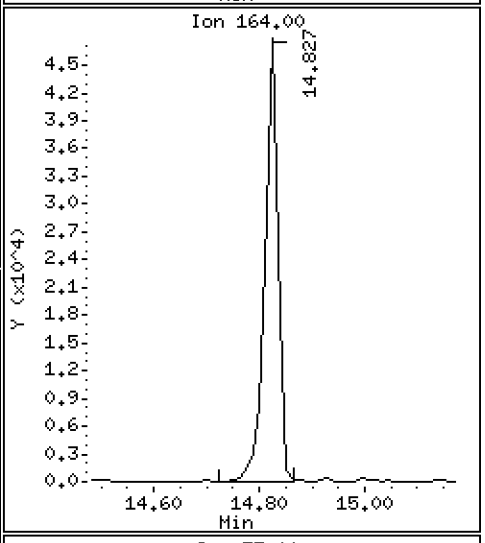
39 Dimethylphthalate

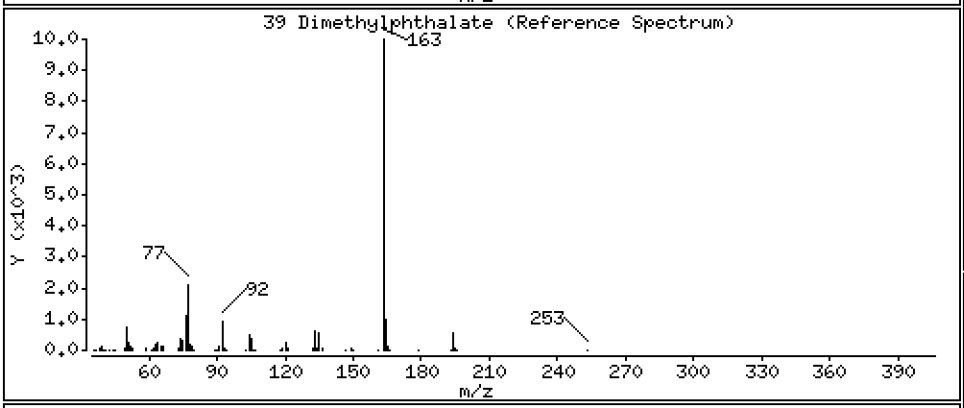
Concentration: 4.548 ug/mL

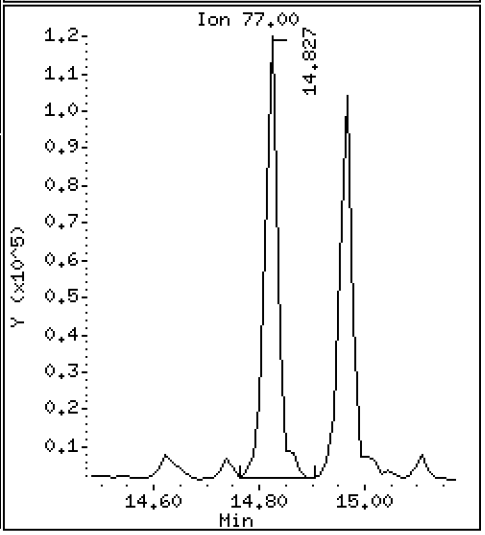


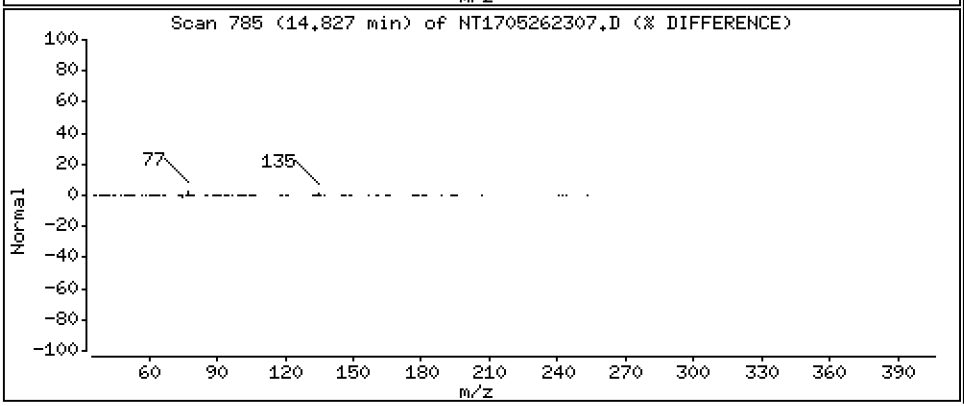












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

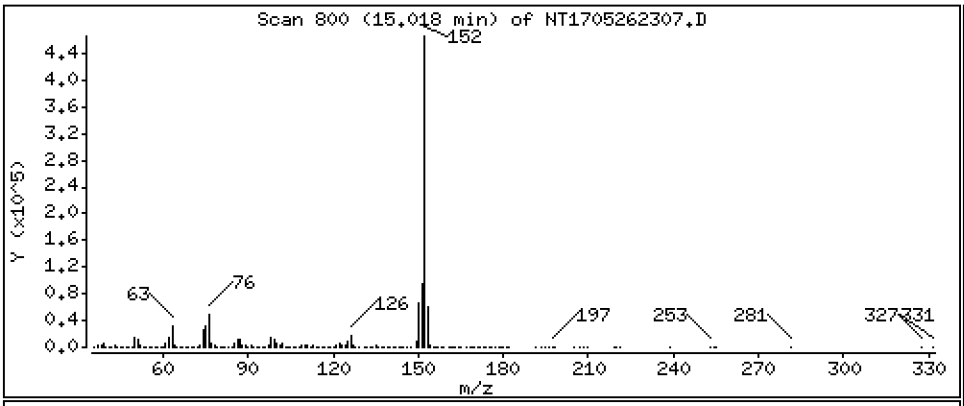
Operator: VTS

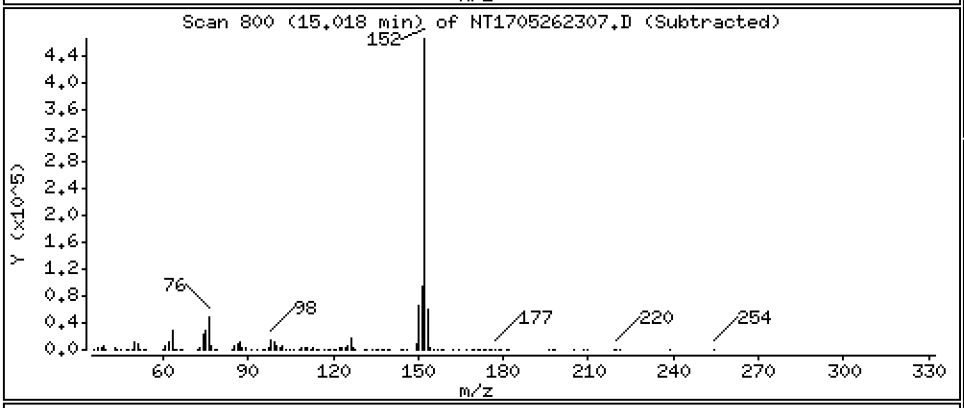
Column phase: ZB-5msi

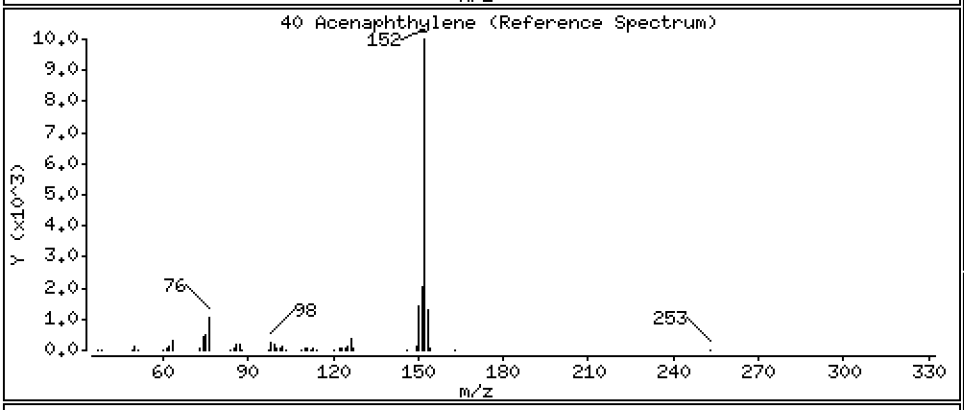
Column diameter: 0.25

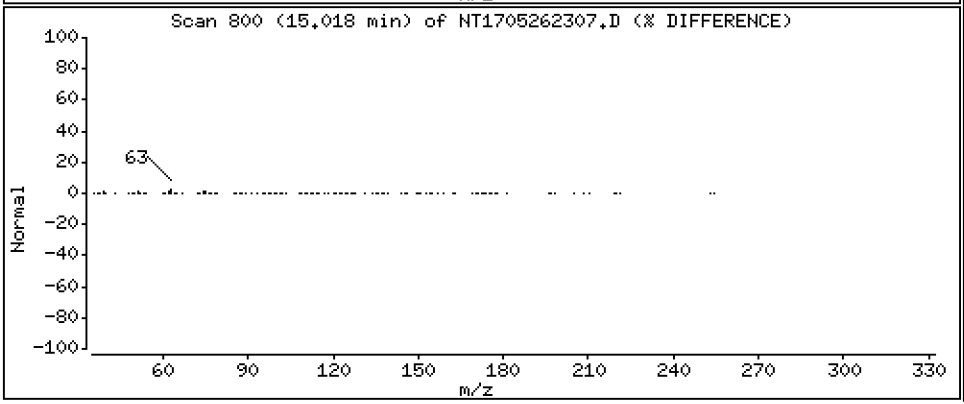
40 Acenaphthylene

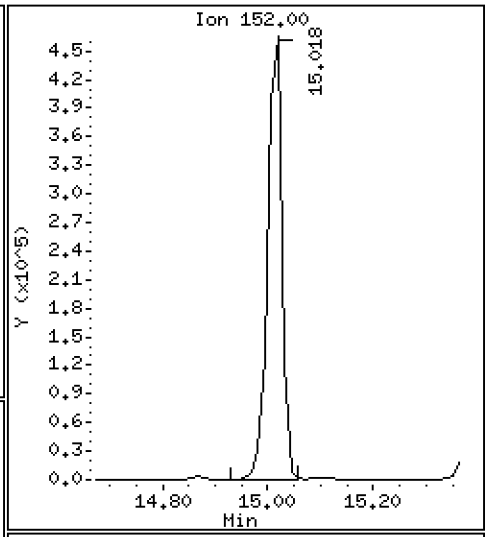
Concentration: 3.459 ug/mL

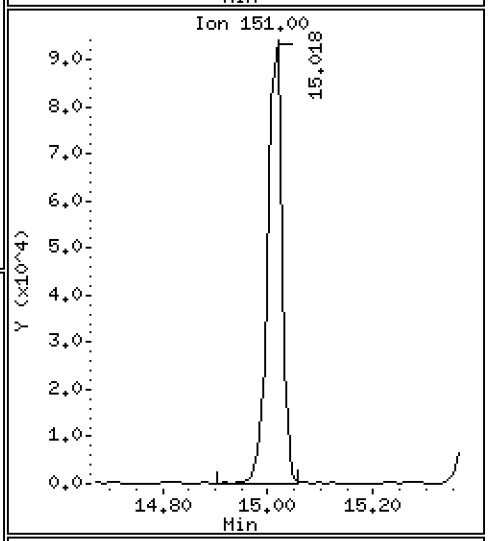


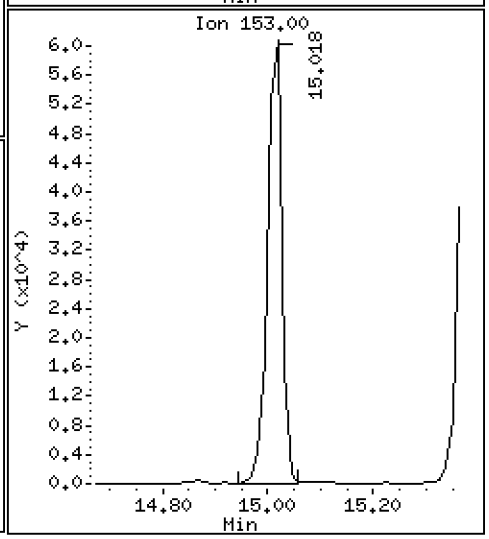












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

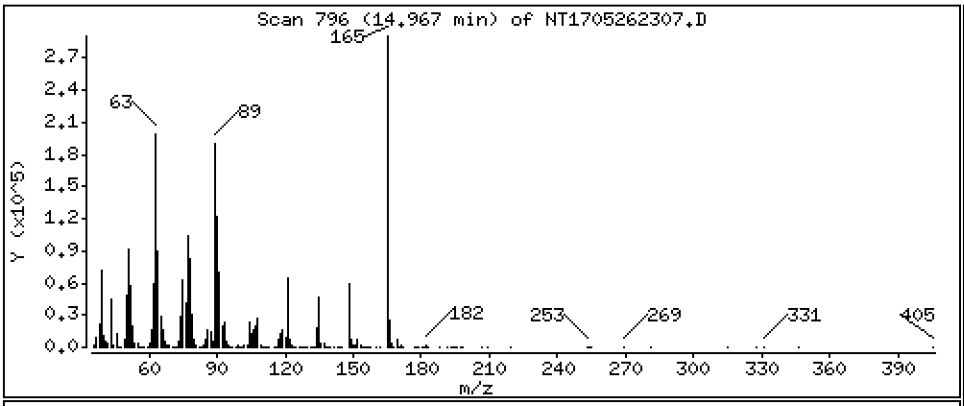
Operator: VTS

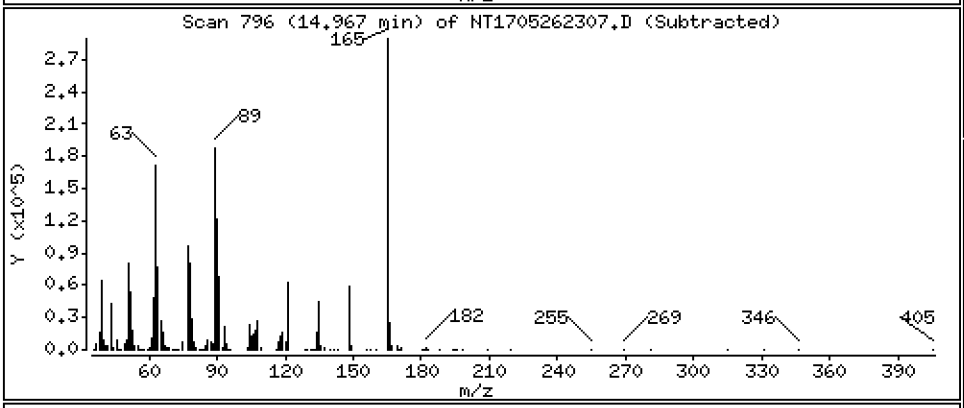
Column phase: ZB-5msi

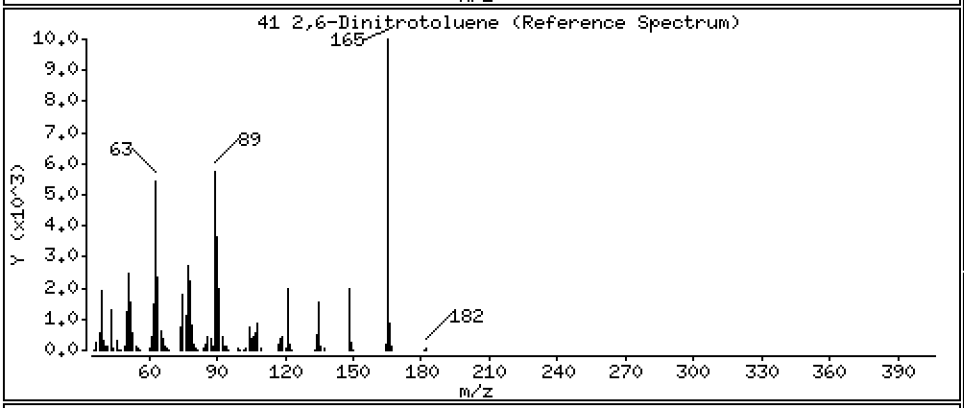
Column diameter: 0.25

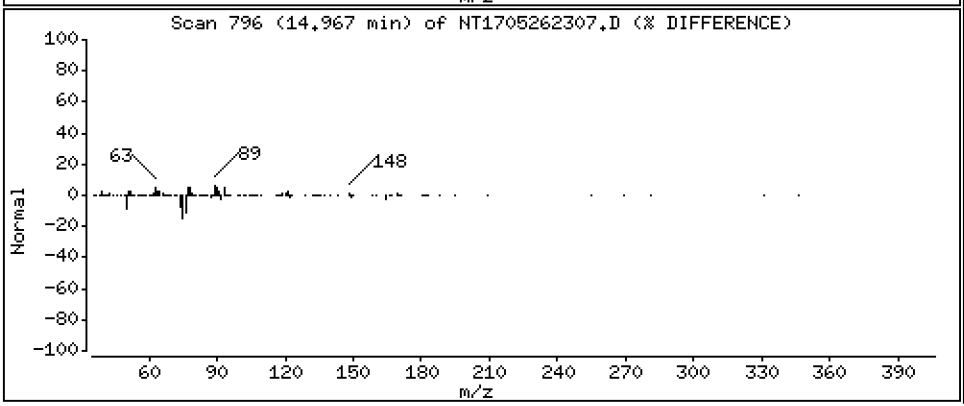
41 2,6-Dinitrotoluene

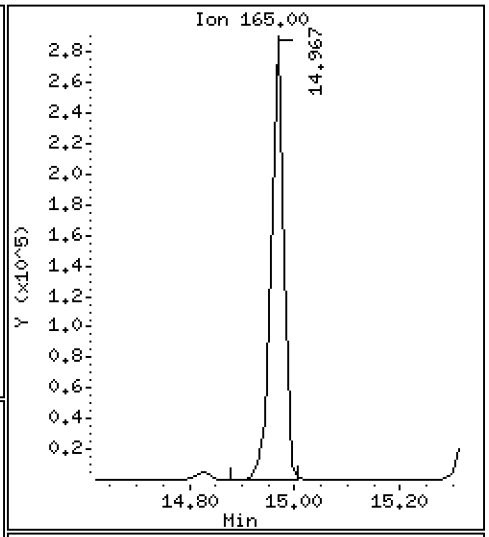
Concentration: 11.92 ug/mL

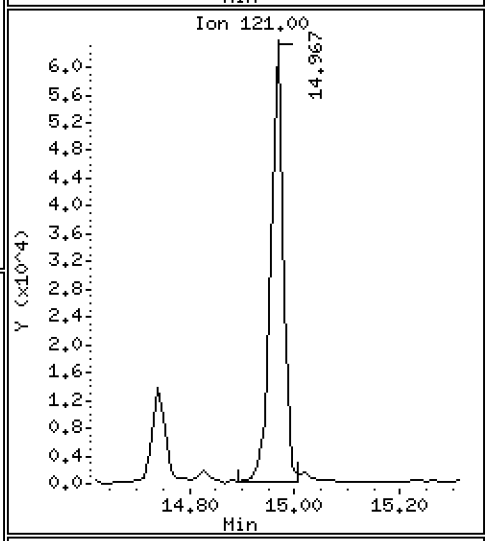


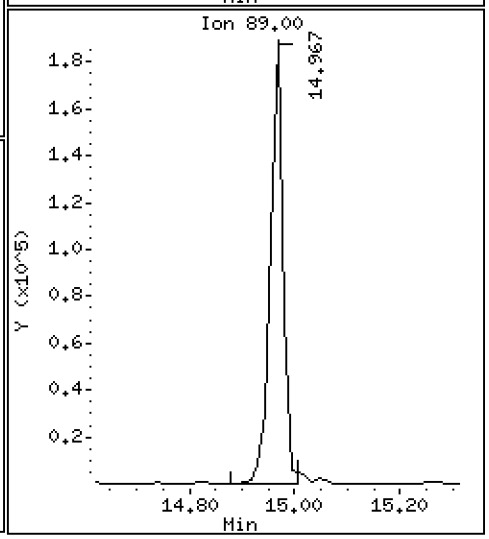












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

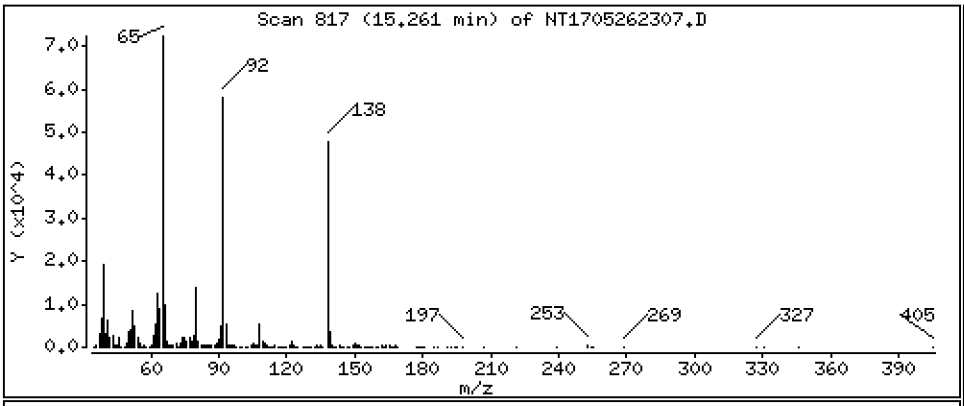
Operator: VTS

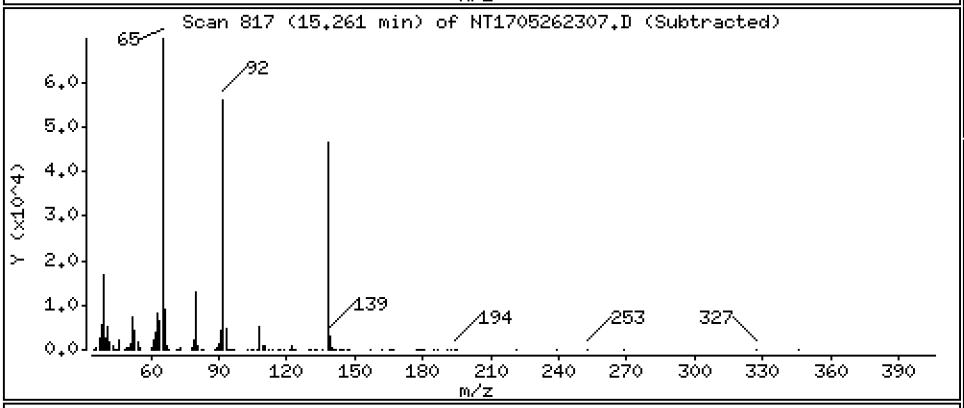
Column phase: ZB-5msi

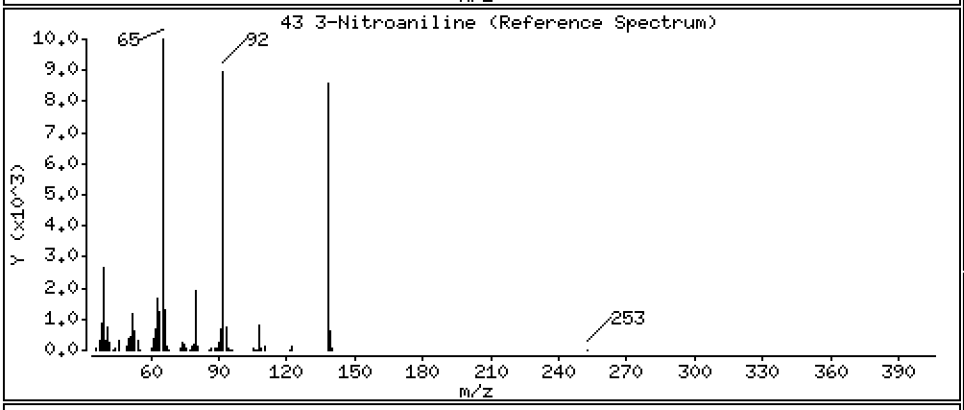
Column diameter: 0.25

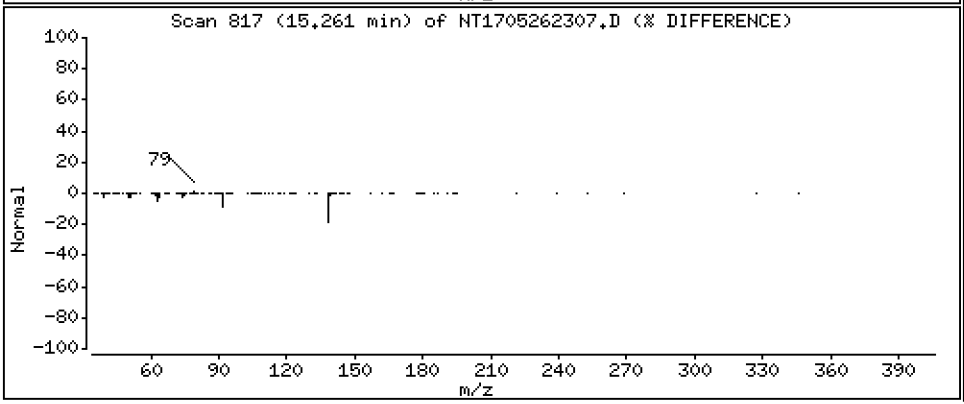
43 3-Nitroaniline

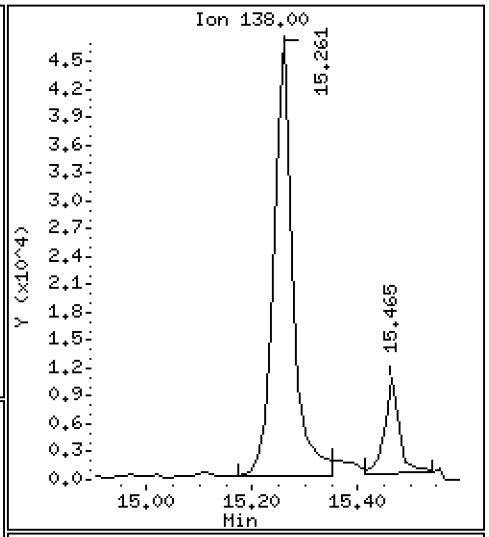
Concentration: 3.161 ug/mL

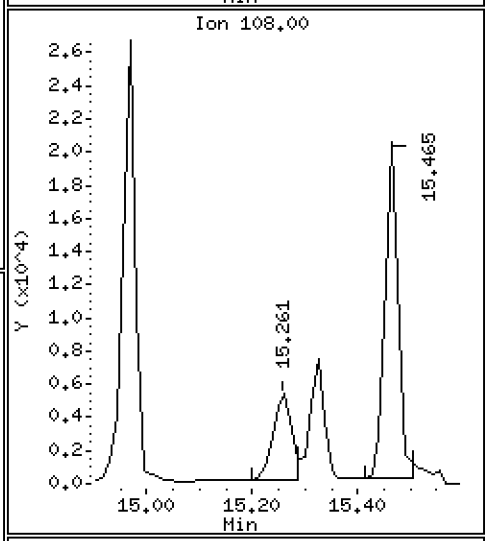


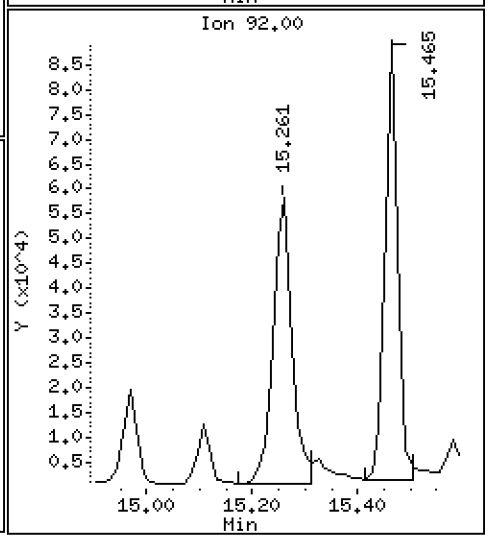












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

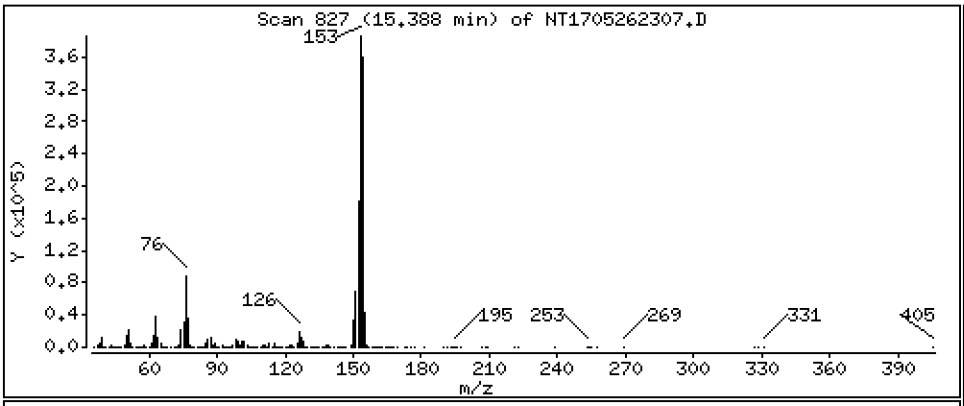
Operator: VTS

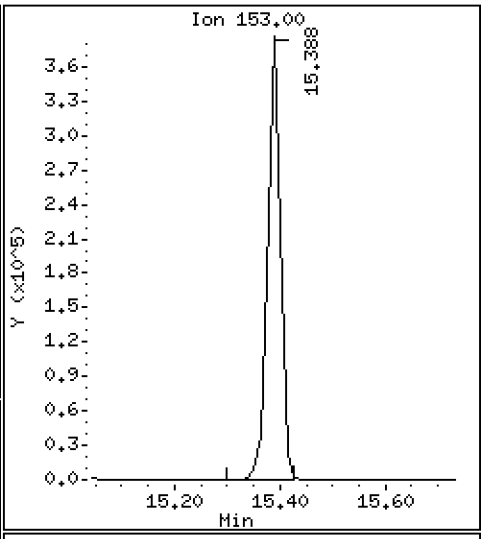
Column phase: ZB-5msi

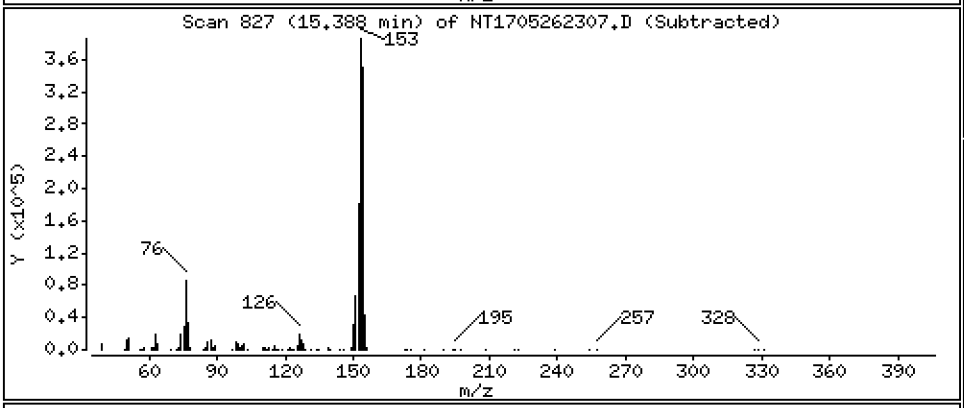
Column diameter: 0.25

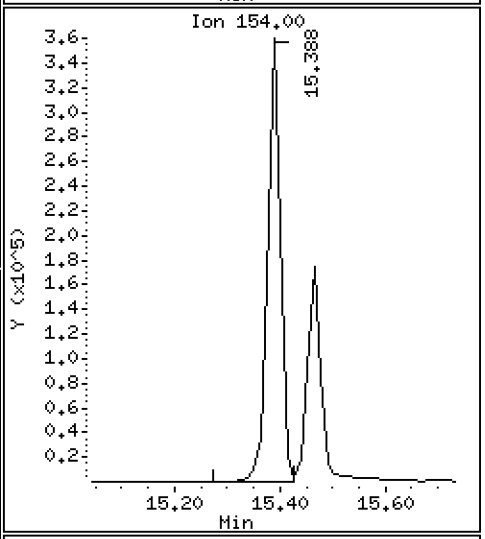
44 Acenaphthene

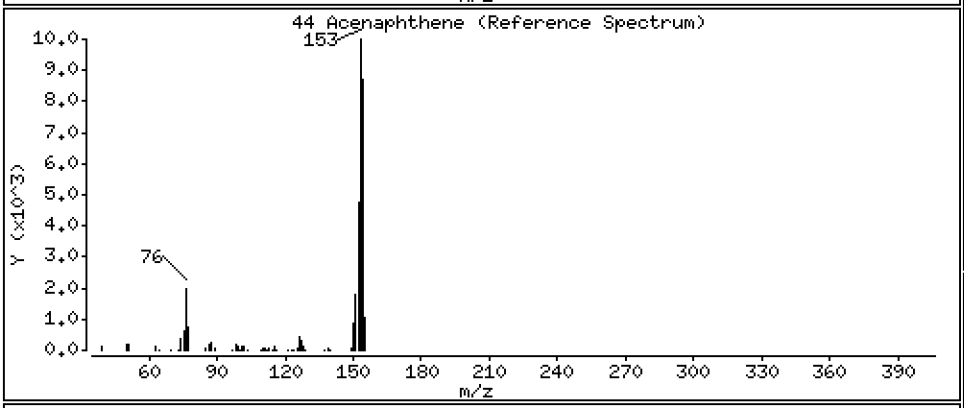
Concentration: 4.077 ug/mL

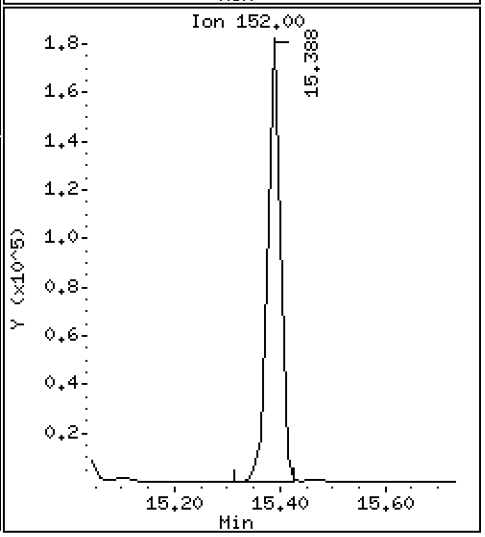


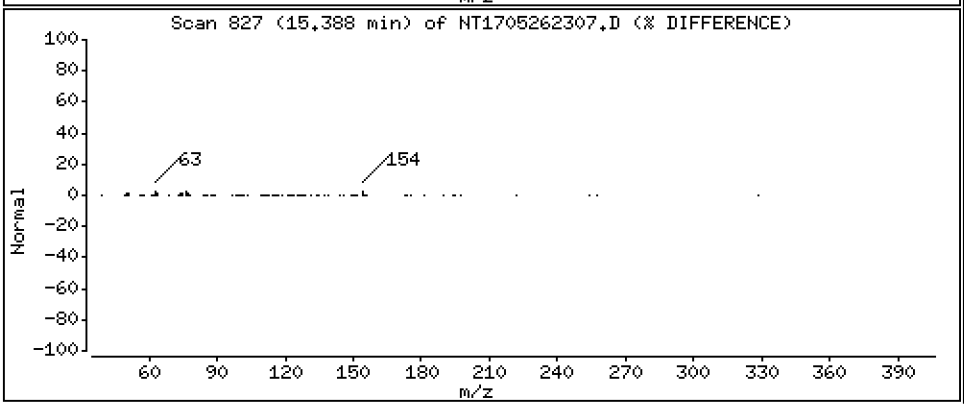












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

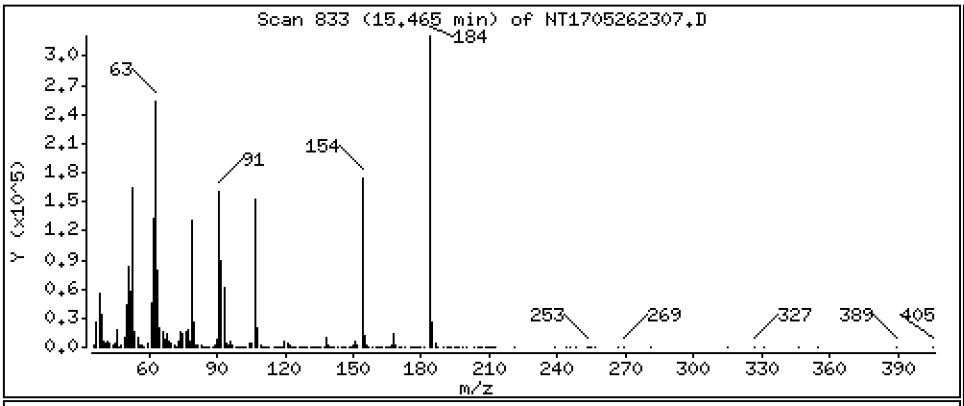
Operator: VTS

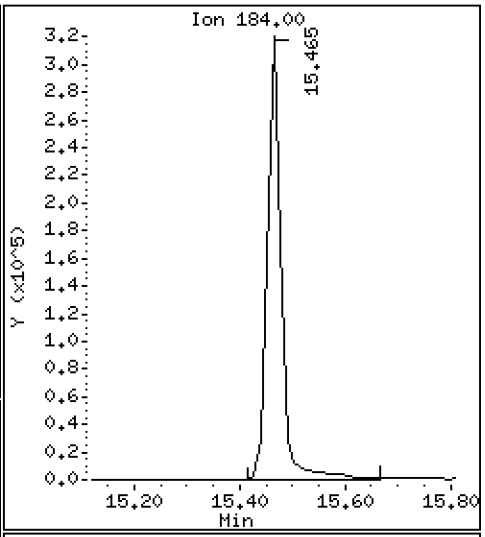
Column phase: ZB-5msi

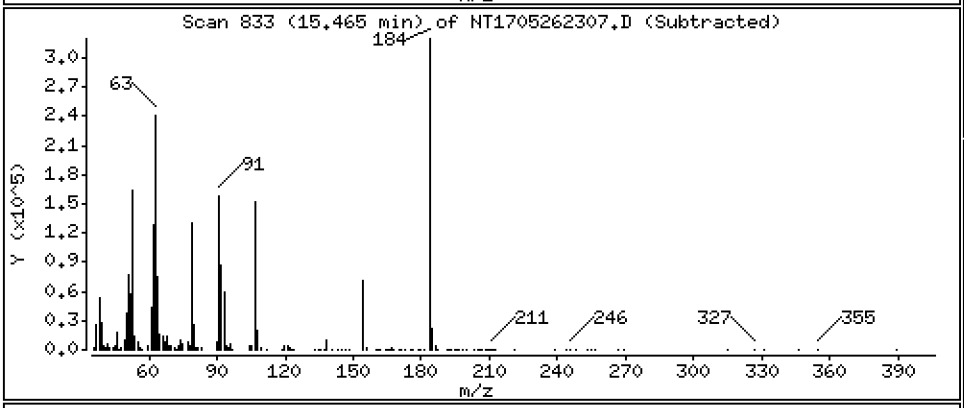
Column diameter: 0.25

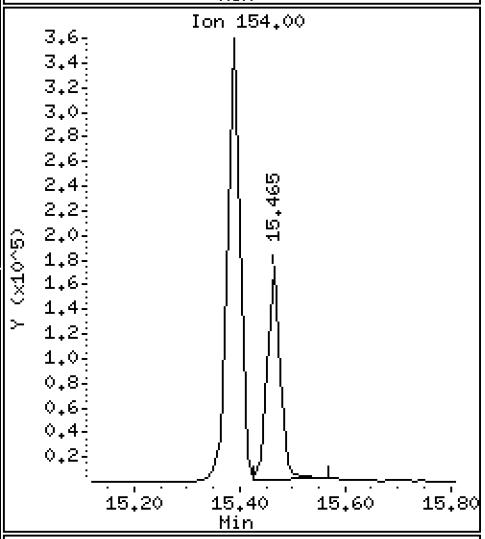
45 2,4-Dinitrophenol

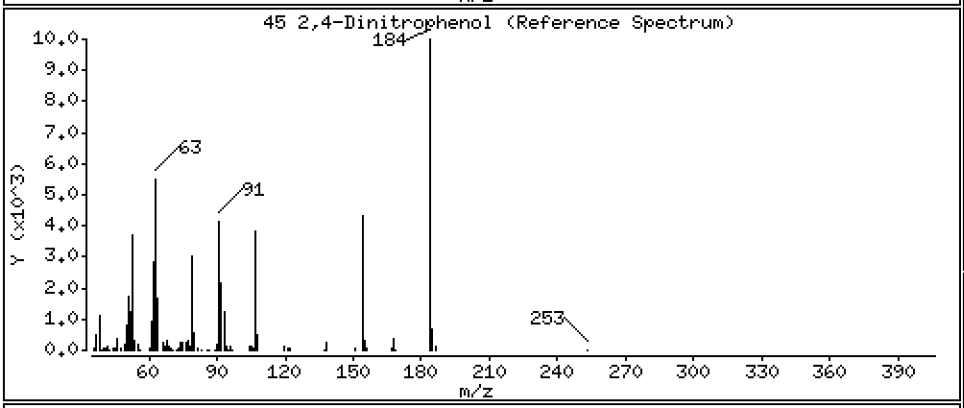
Concentration: 22.86 ug/mL

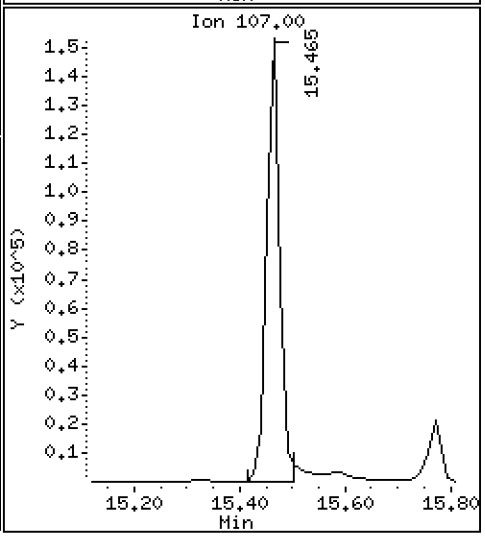


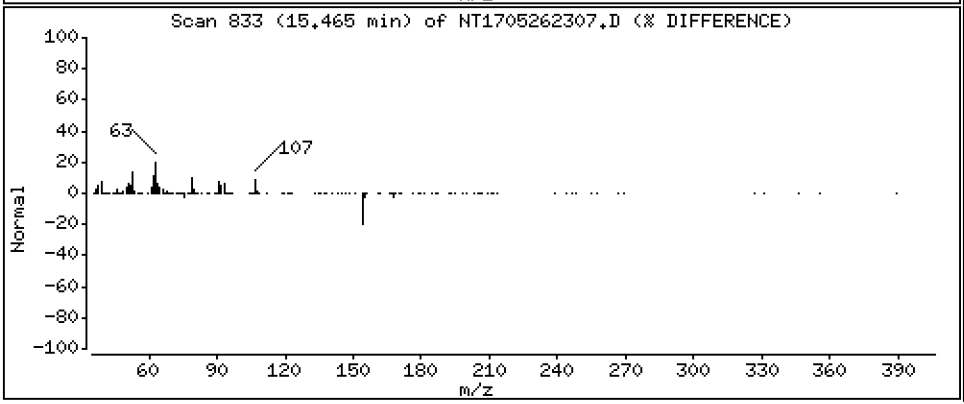












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

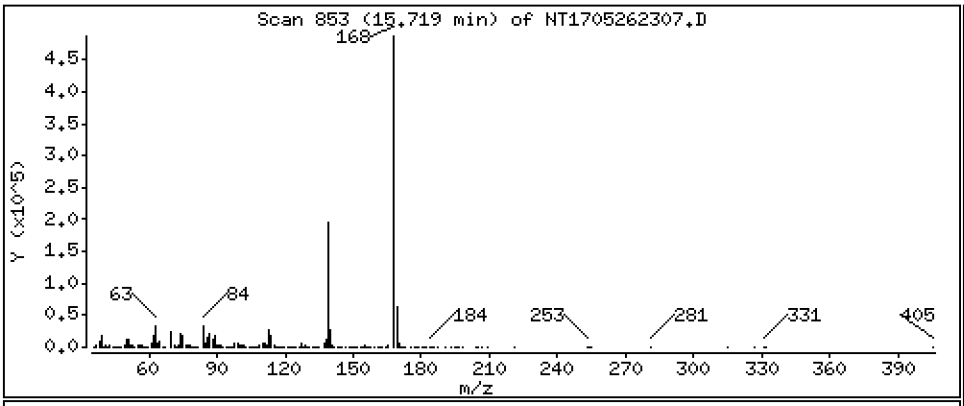
Operator: VTS

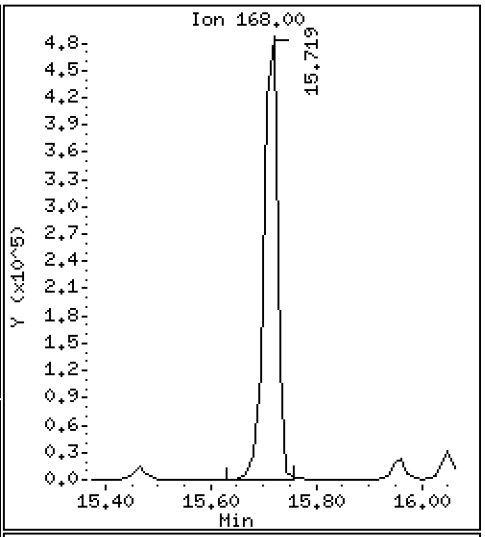
Column phase: ZB-5msi

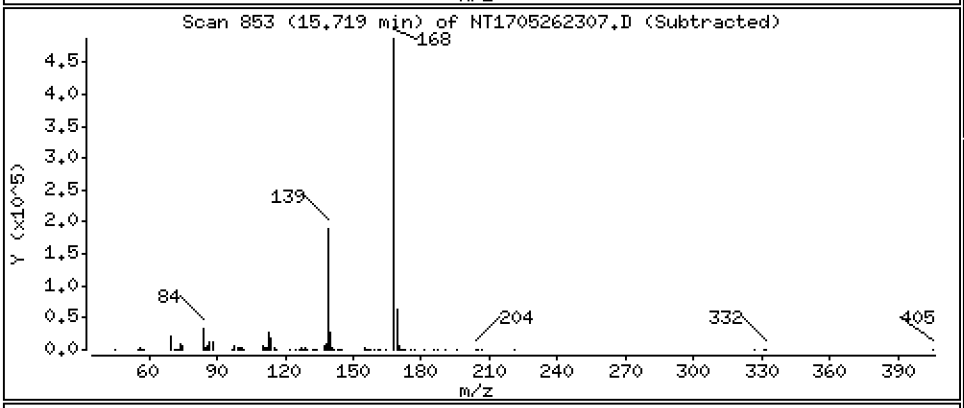
Column diameter: 0.25

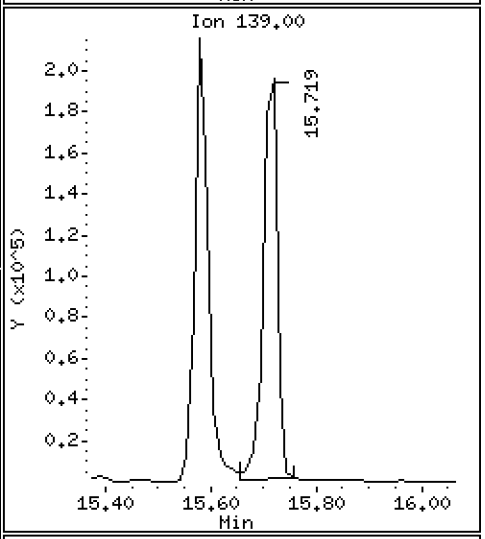
46 Dibenzofuran

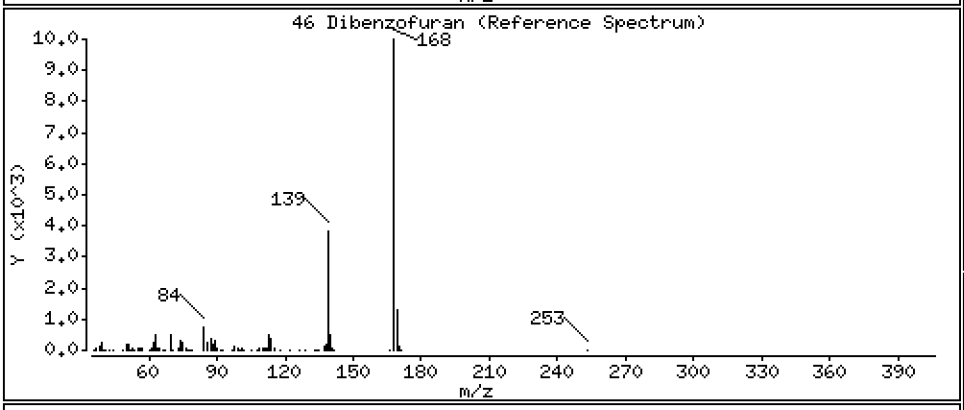
Concentration: 4.087 ug/mL

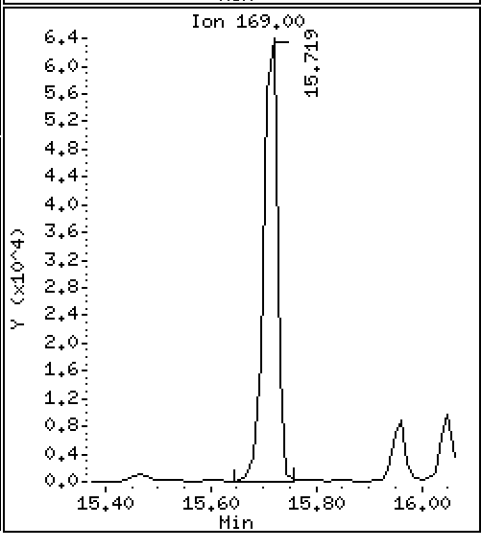


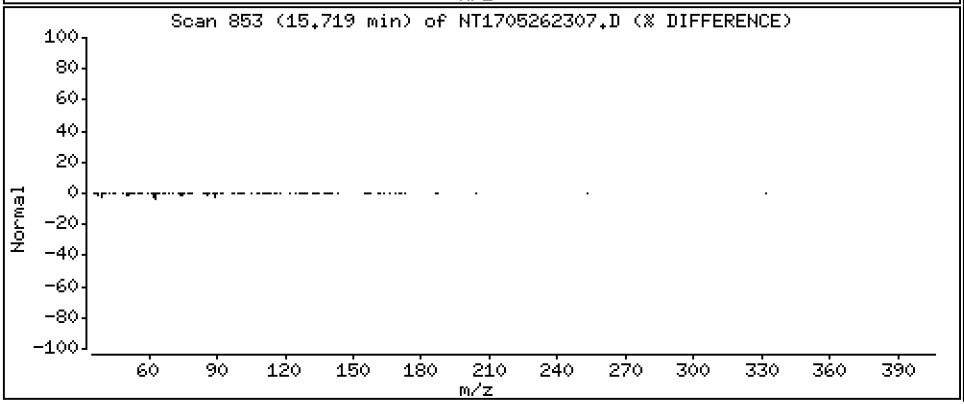












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

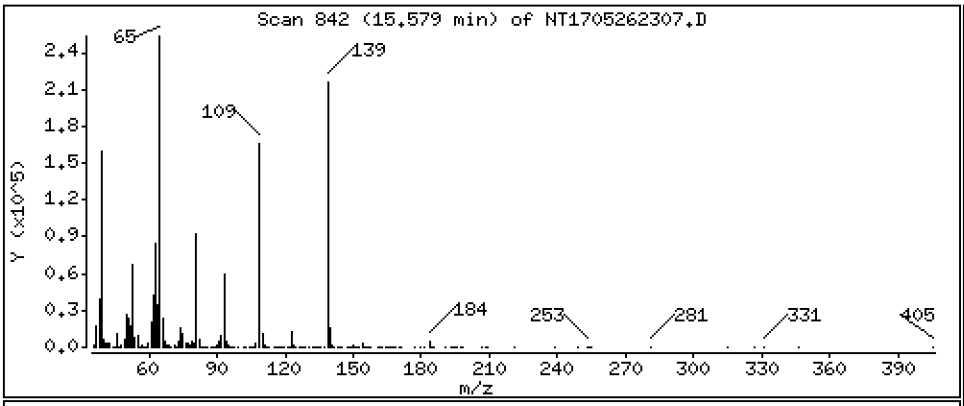
Operator: VTS

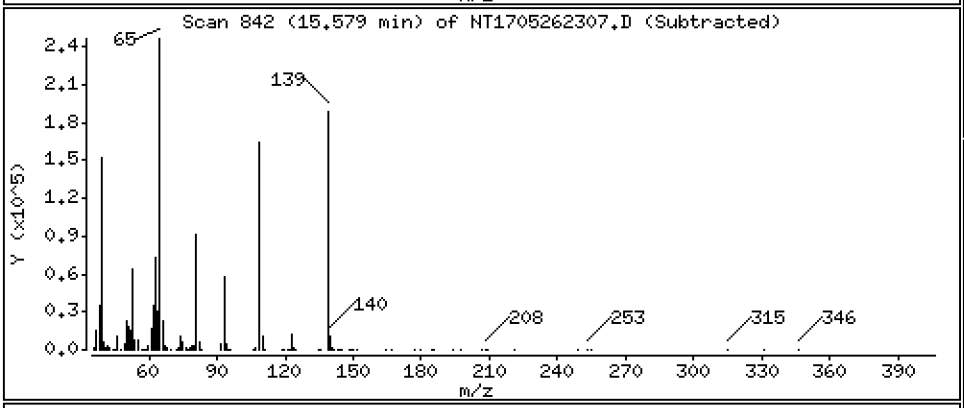
Column phase: ZB-5msi

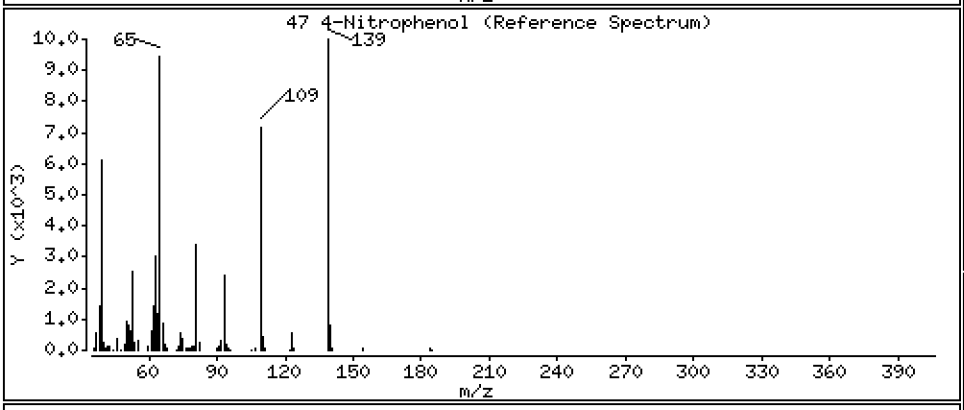
Column diameter: 0.25

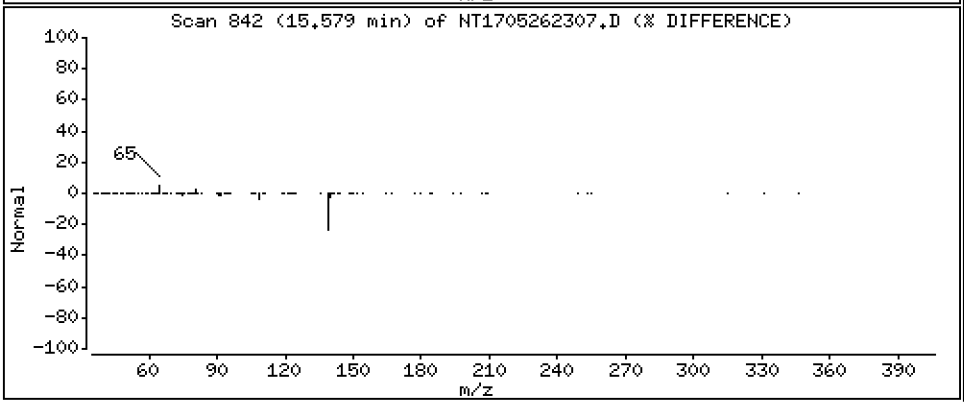
47 4-Nitrophenol

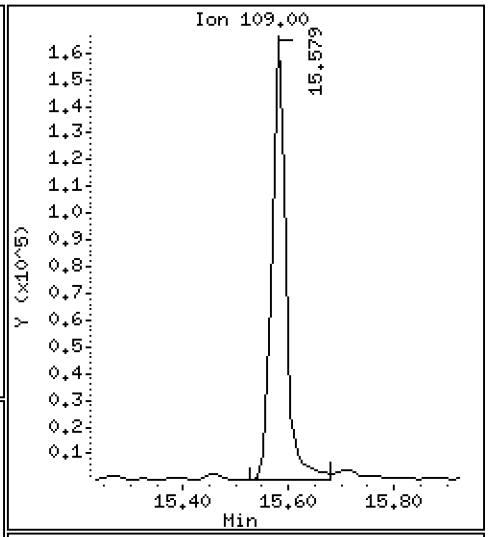
Concentration: 12.49 ug/mL

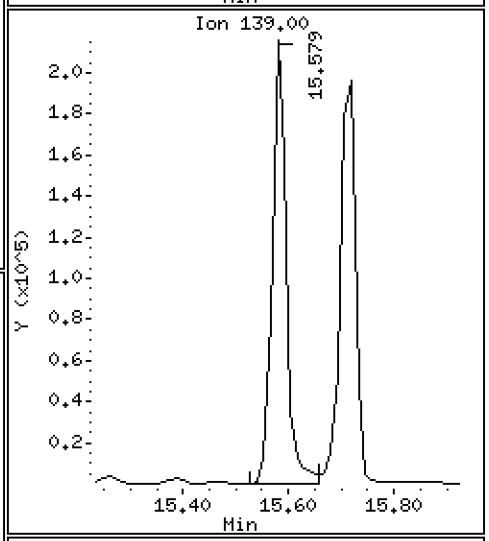


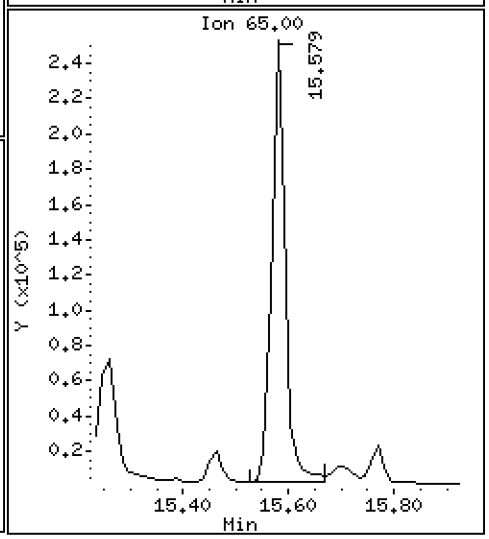












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

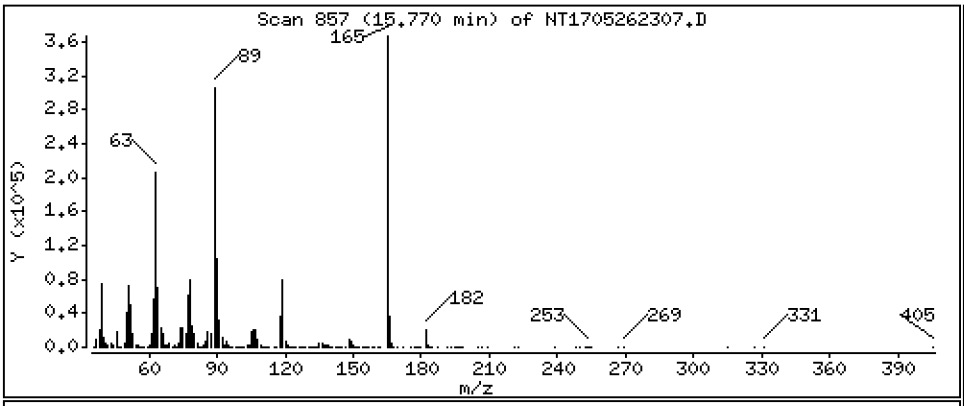
Operator: VTS

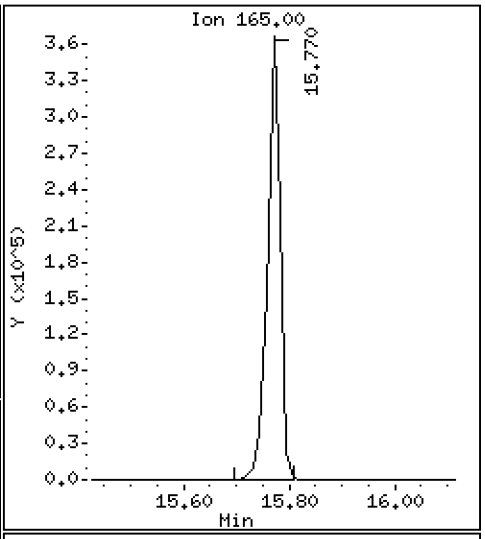
Column phase: ZB-5msi

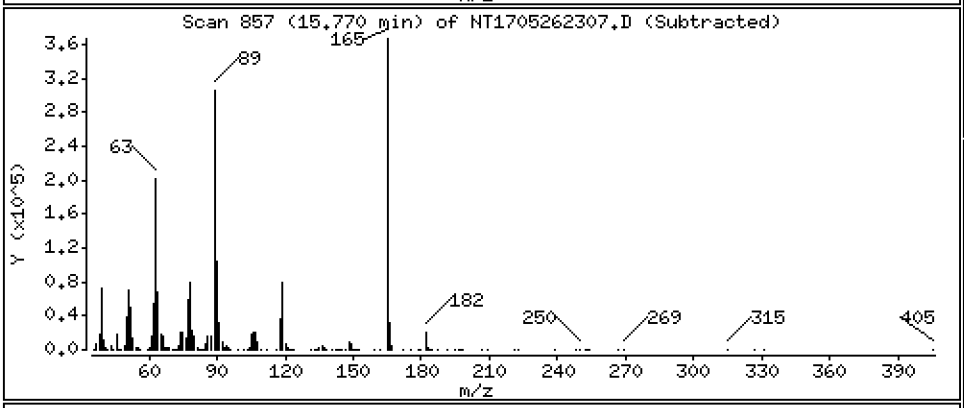
Column diameter: 0.25

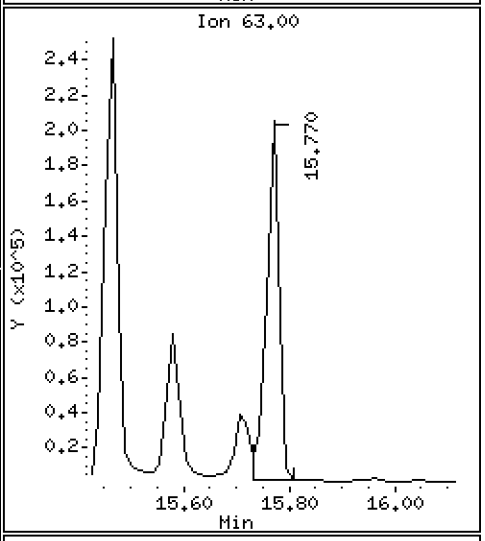
48 2,4-Dinitrotoluene

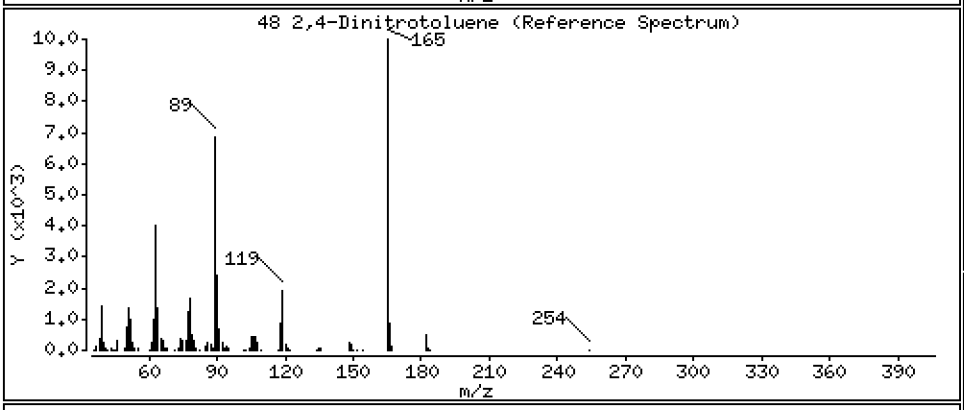
Concentration: 11.68 ug/mL

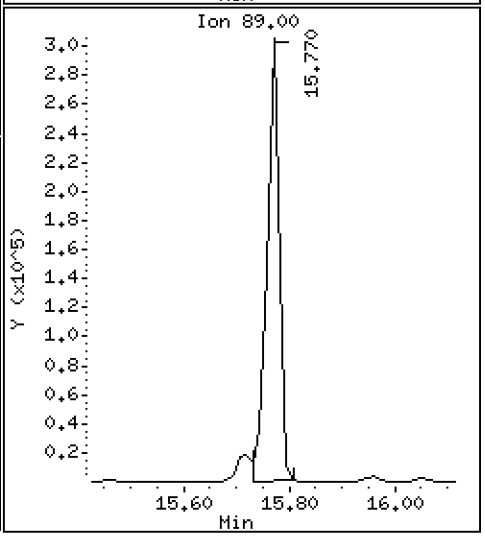


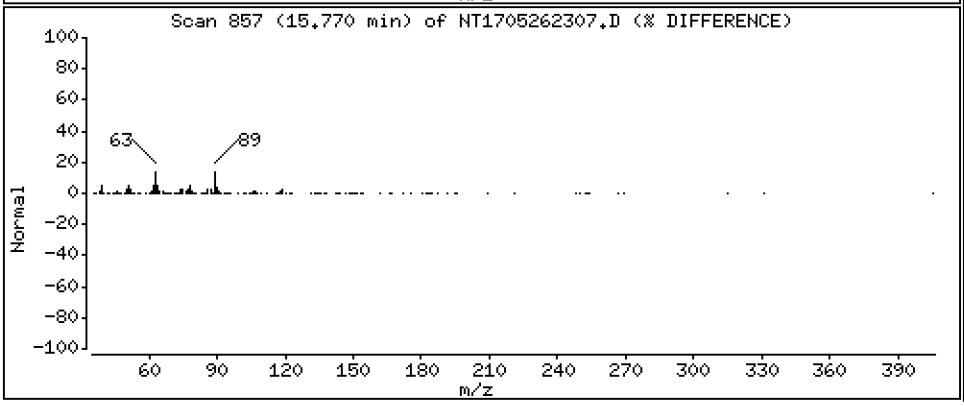












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

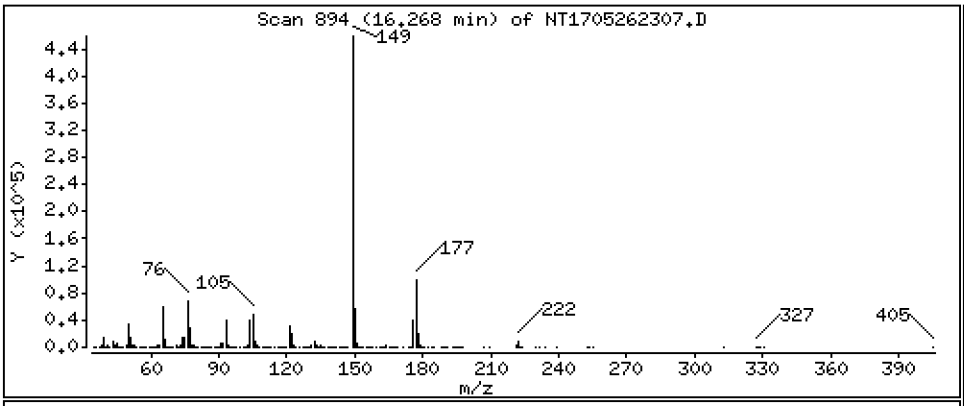
Operator: VTS

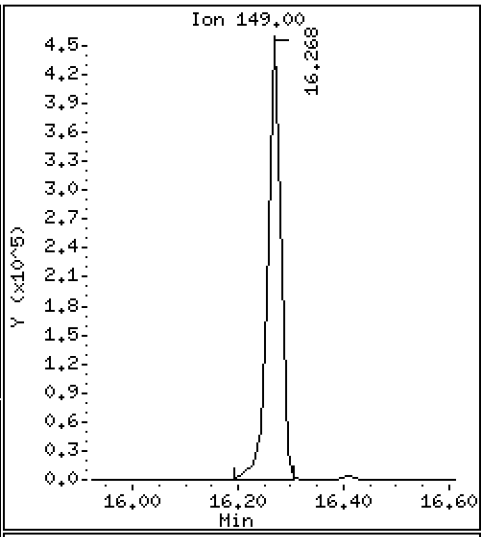
Column phase: ZB-5msi

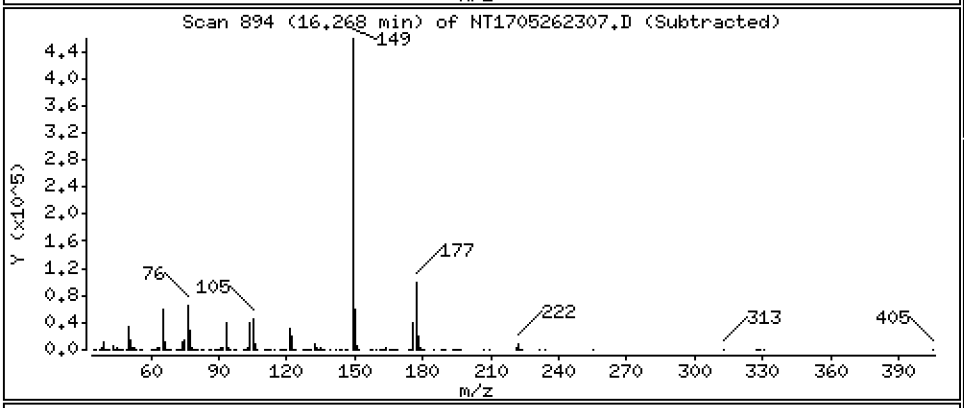
Column diameter: 0.25

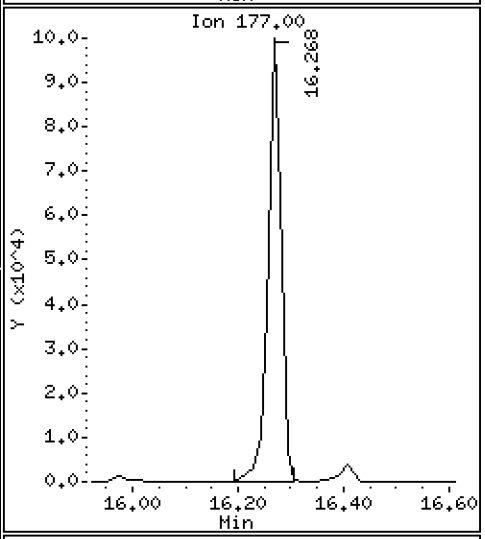
50 Diethylphthalate

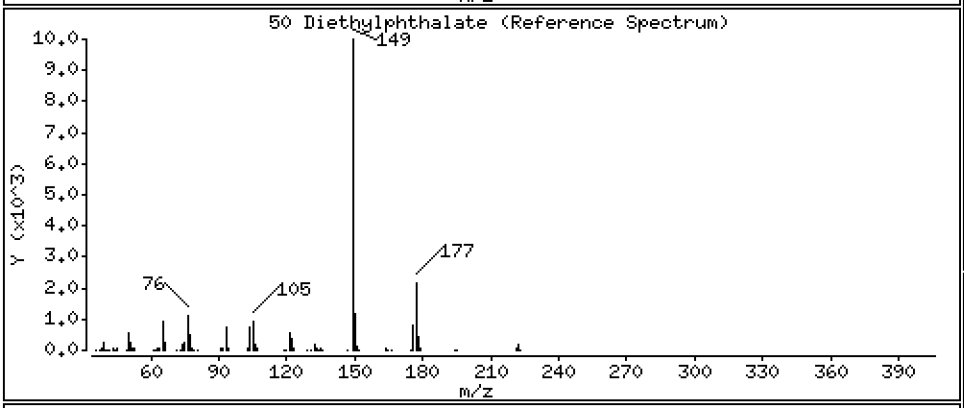
Concentration: 5.960 ug/mL

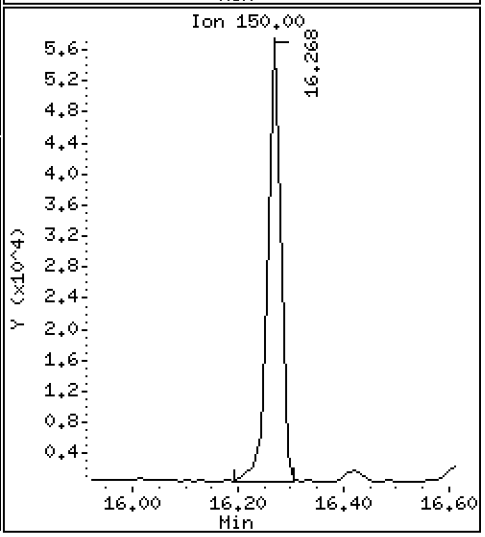


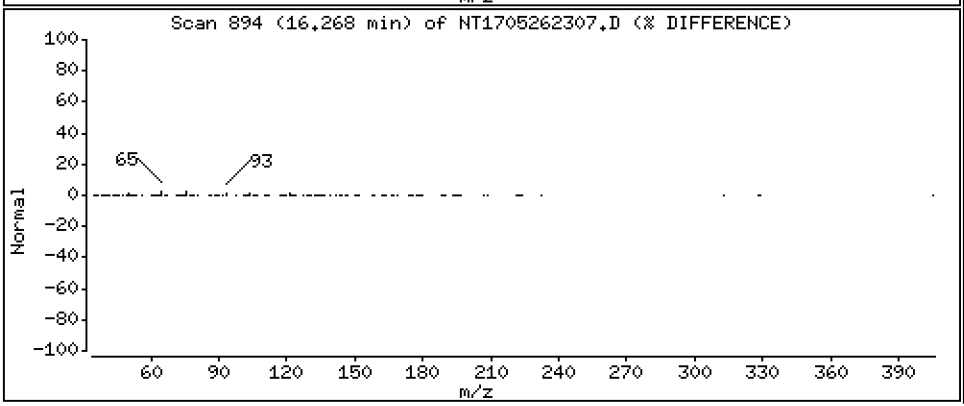












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

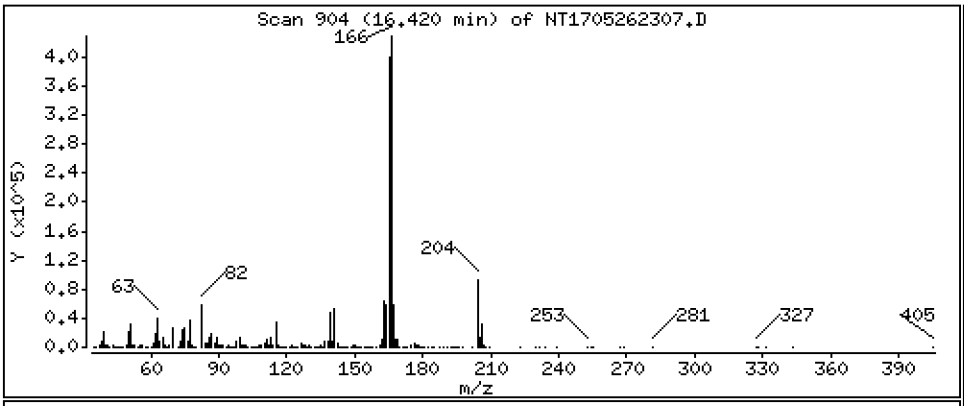
Operator: VTS

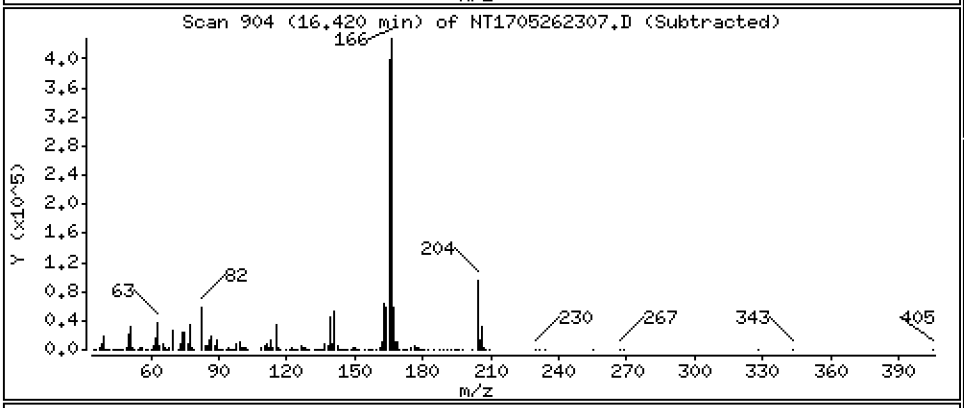
Column phase: ZB-5msi

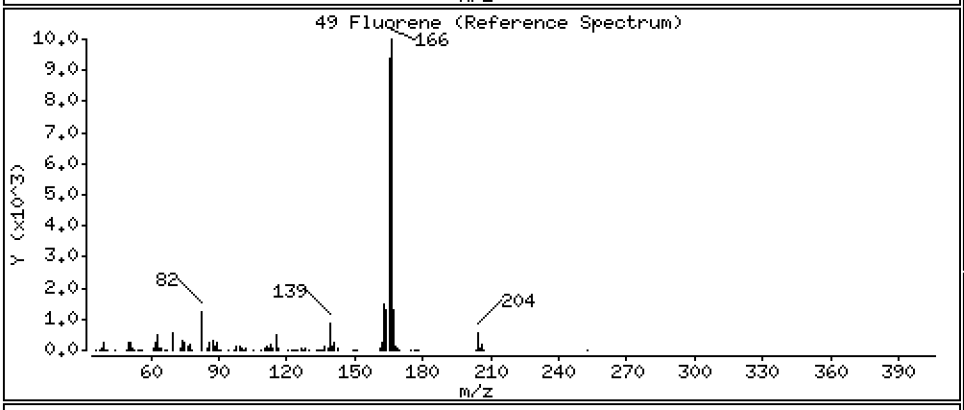
Column diameter: 0.25

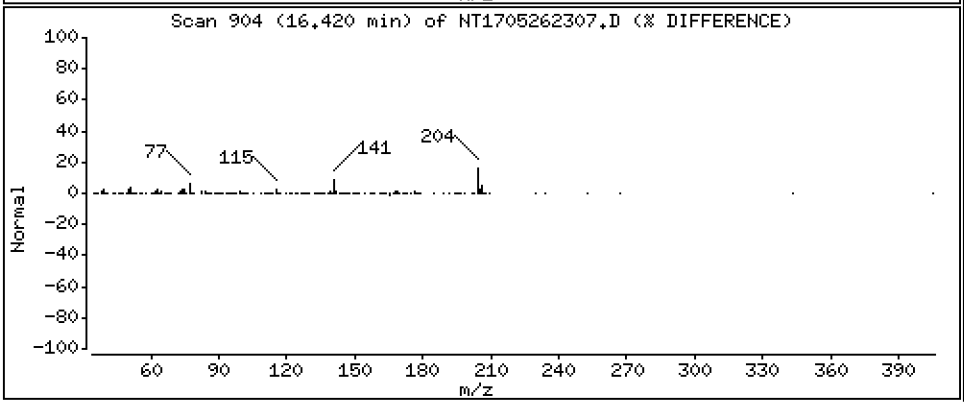
49 Fluorene

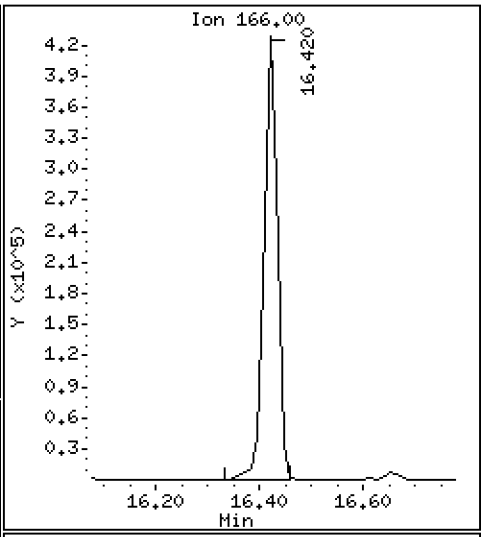
Concentration: 4.475 ug/mL

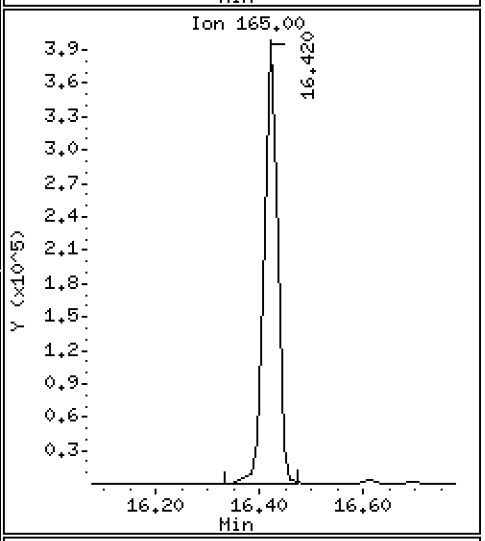


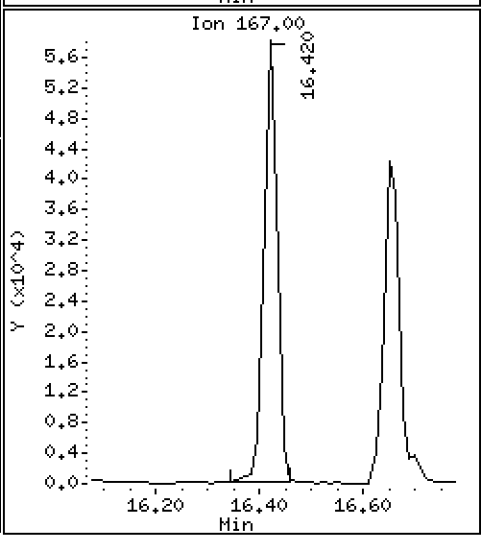












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

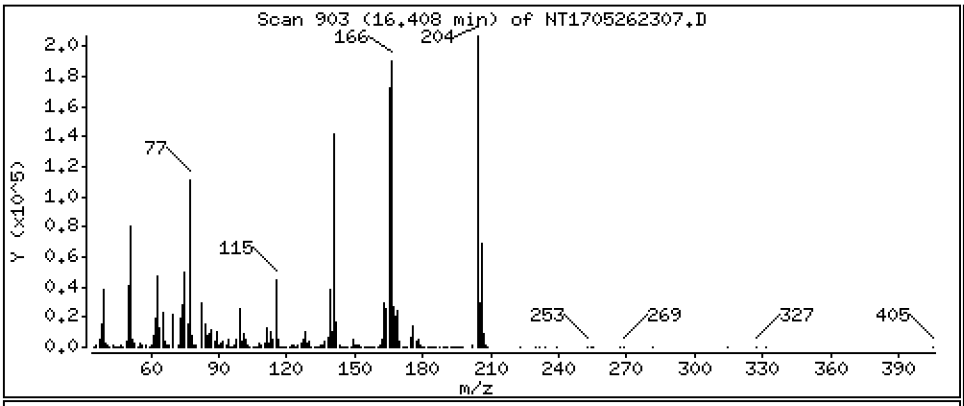
Operator: VTS

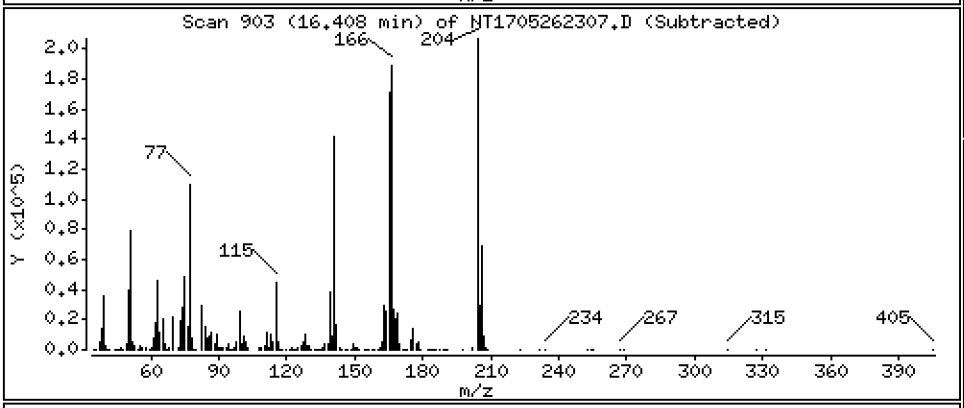
Column phase: ZB-5msi

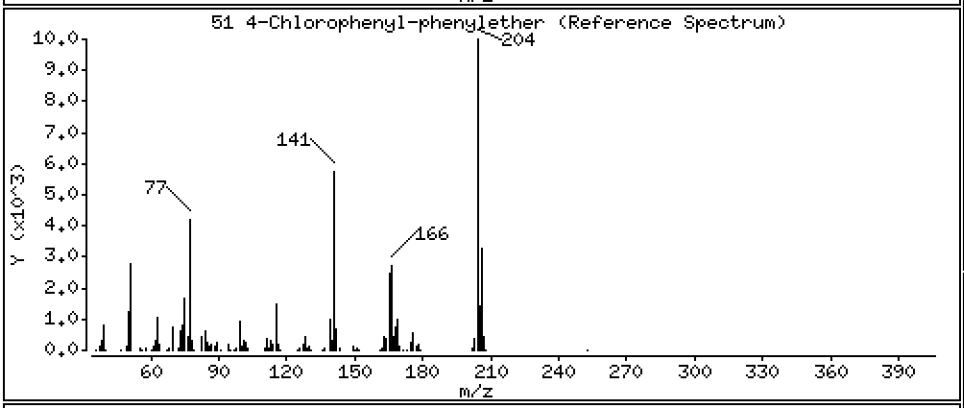
Column diameter: 0.25

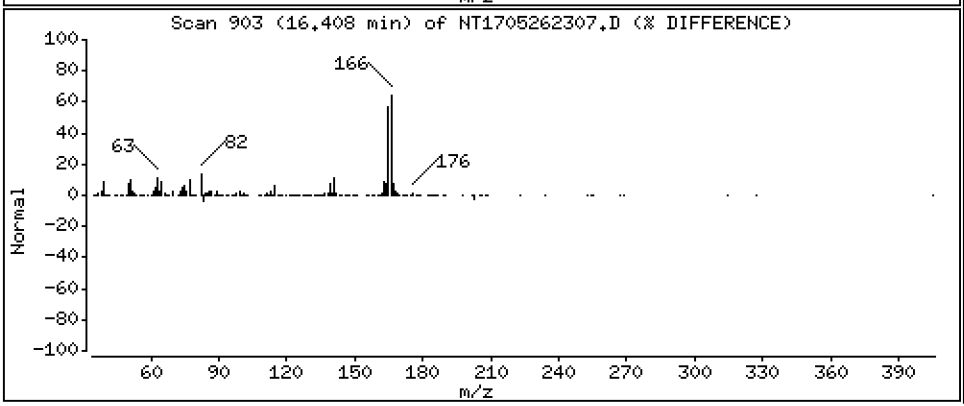
51 4-Chlorophenyl-phenylether

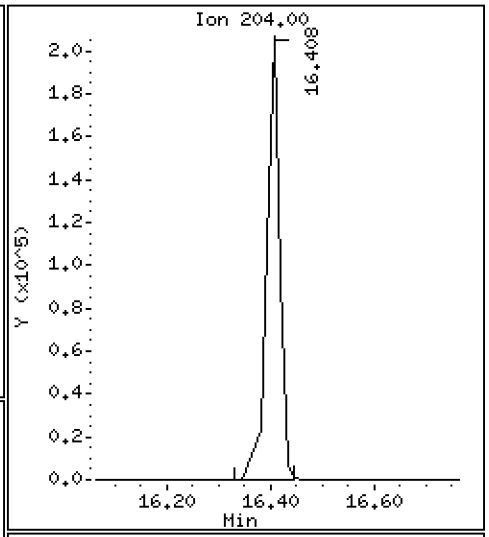
Concentration: 4.441 ug/mL

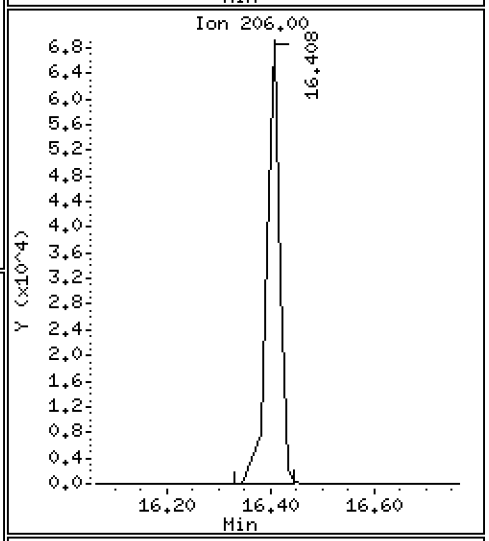


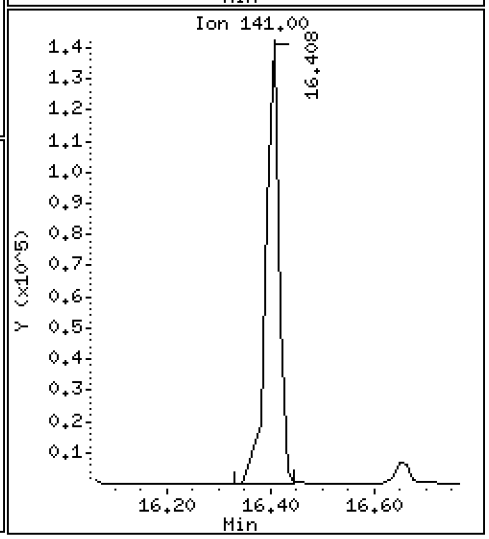












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

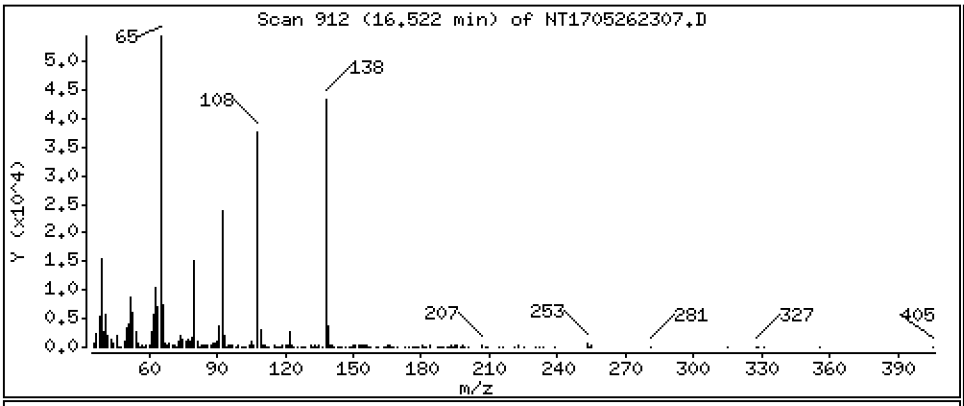
Operator: VTS

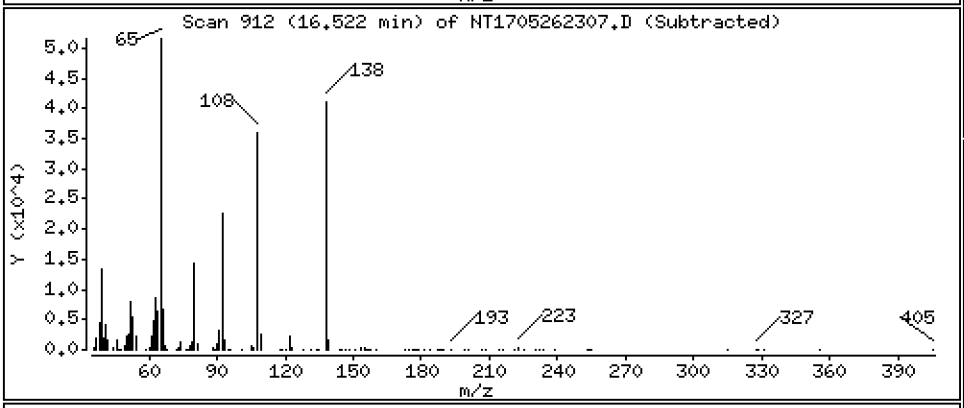
Column phase: ZB-5msi

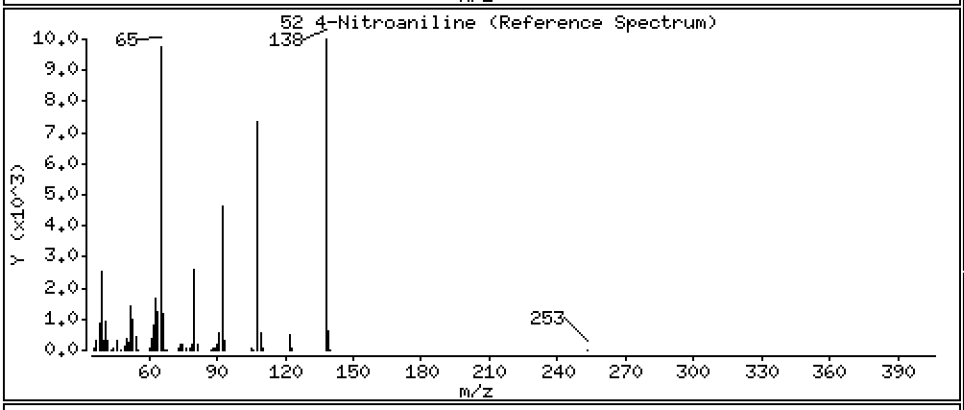
Column diameter: 0.25

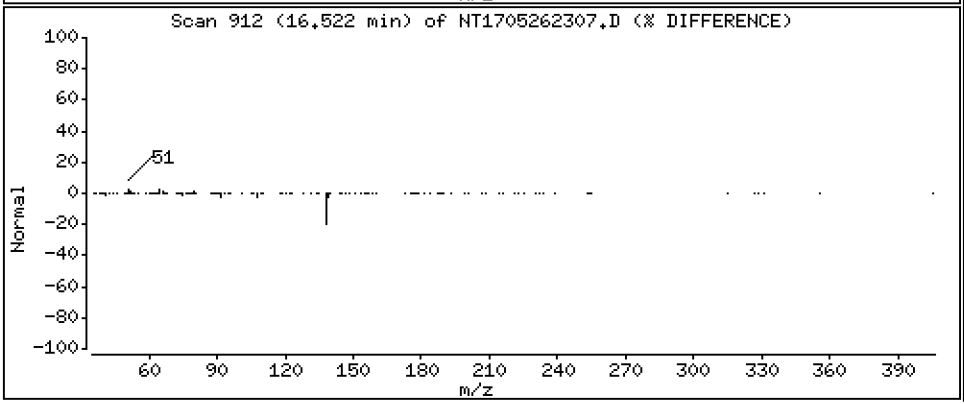
52 4-Nitroaniline

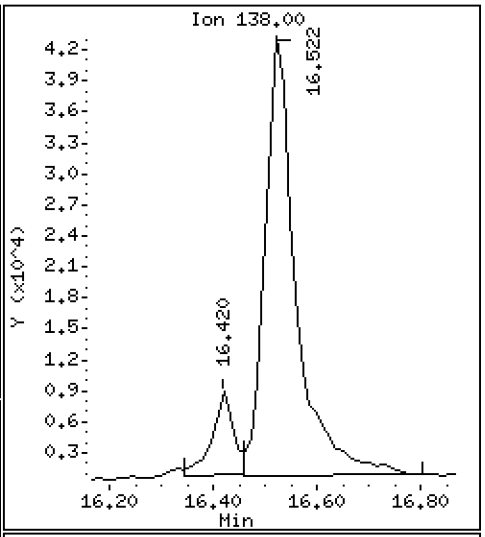
Concentration: 5.008 ug/mL

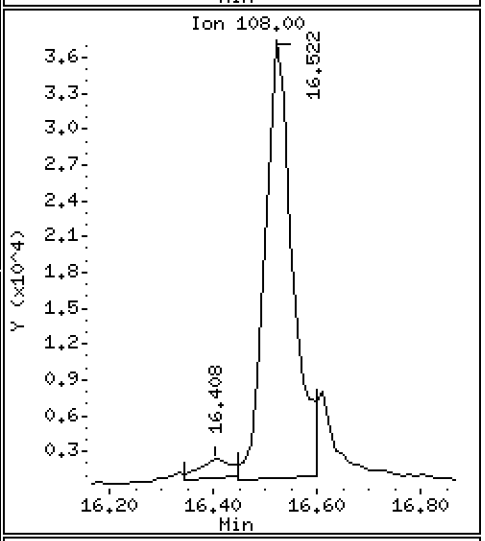


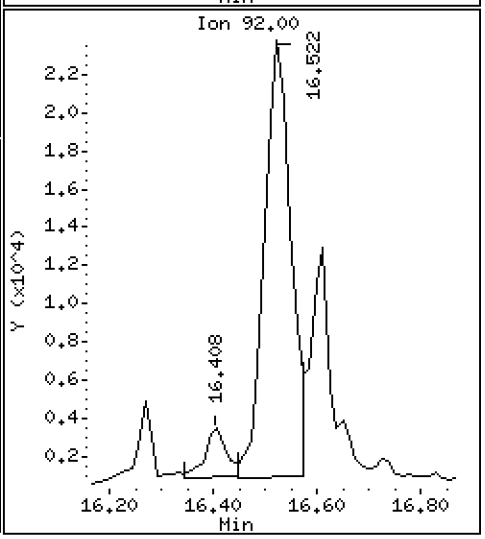












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

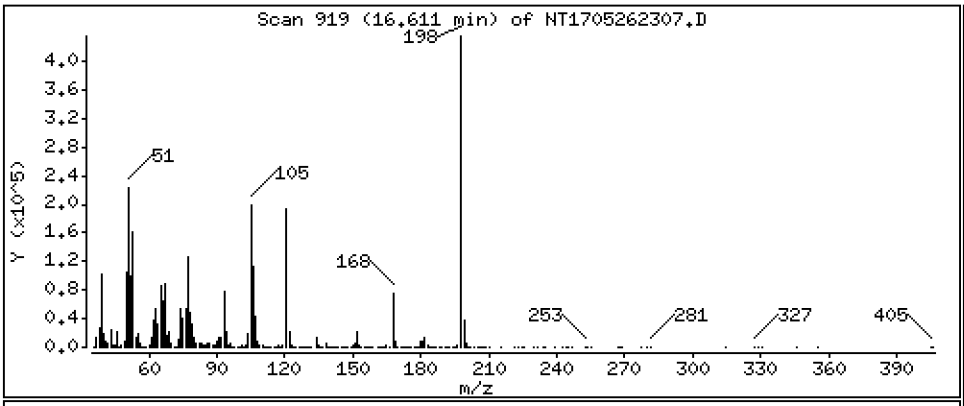
Operator: VTS

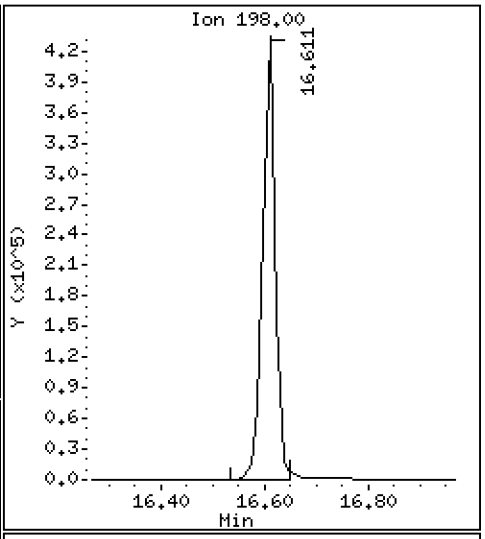
Column phase: ZB-5msi

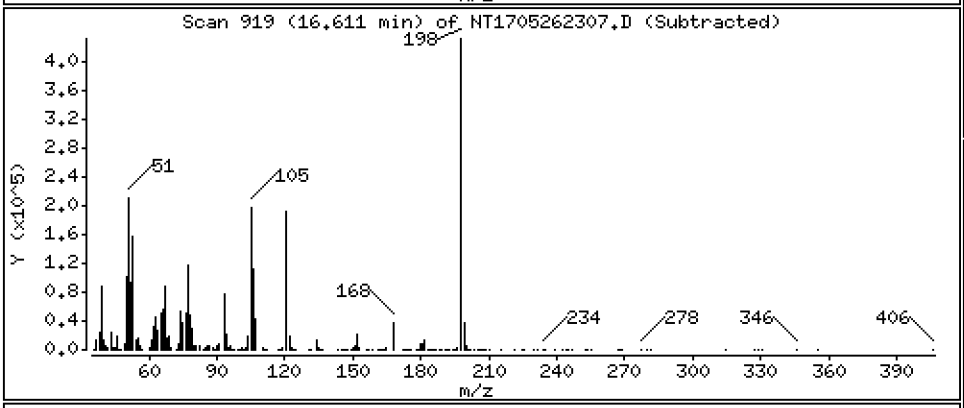
Column diameter: 0.25

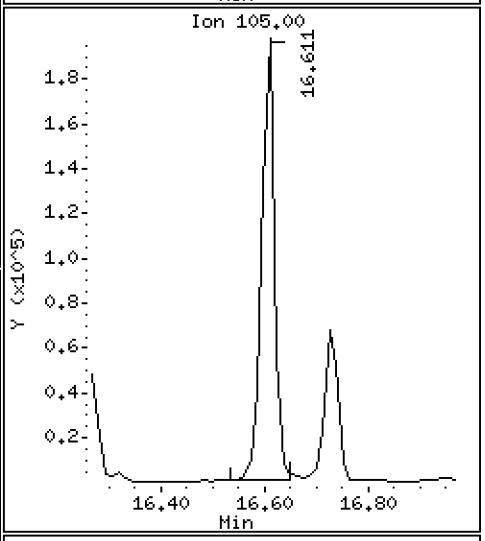
53 4,6-Dinitro-2-methylphenol

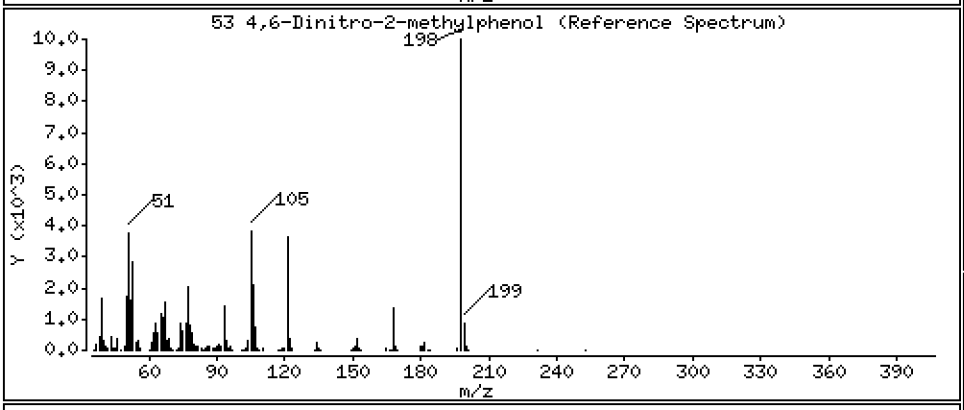
Concentration: 22.27 ug/mL

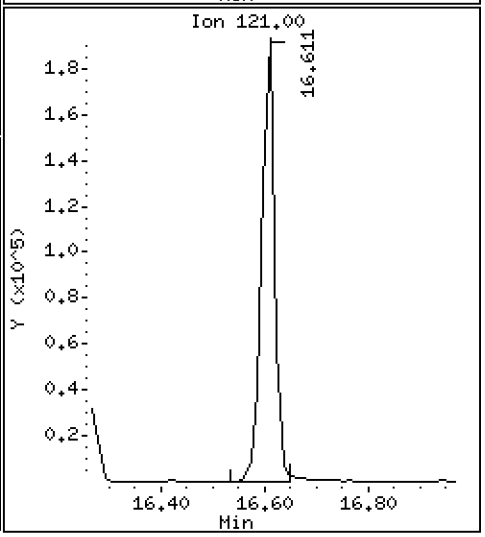


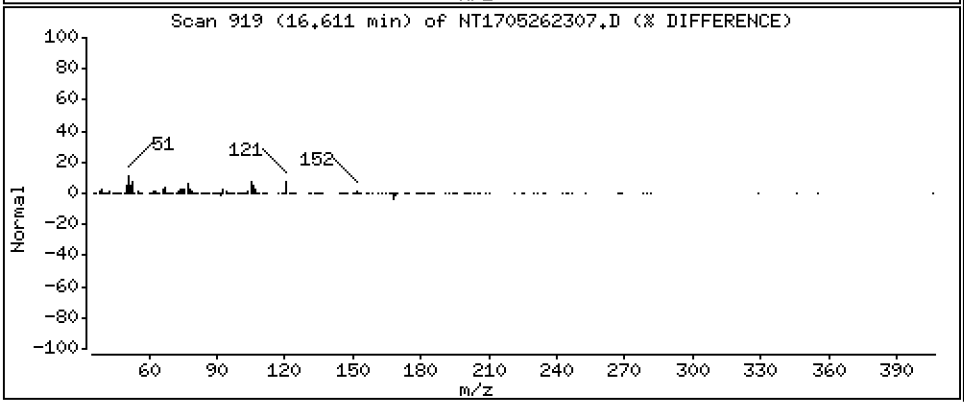












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

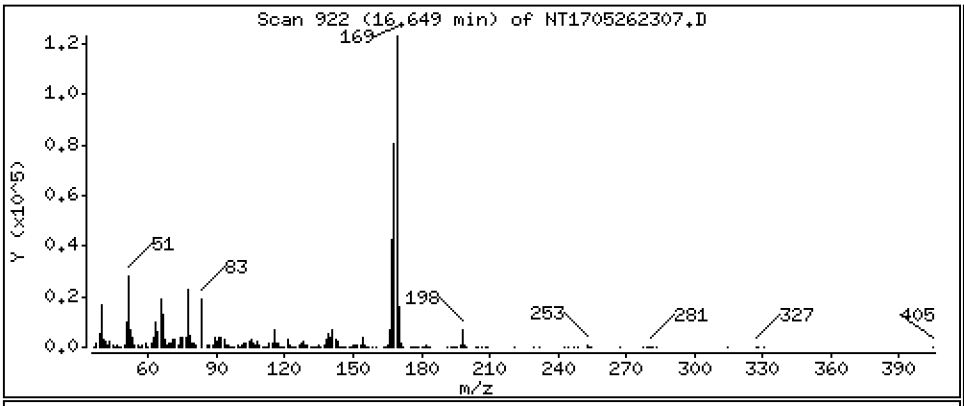
Operator: VTS

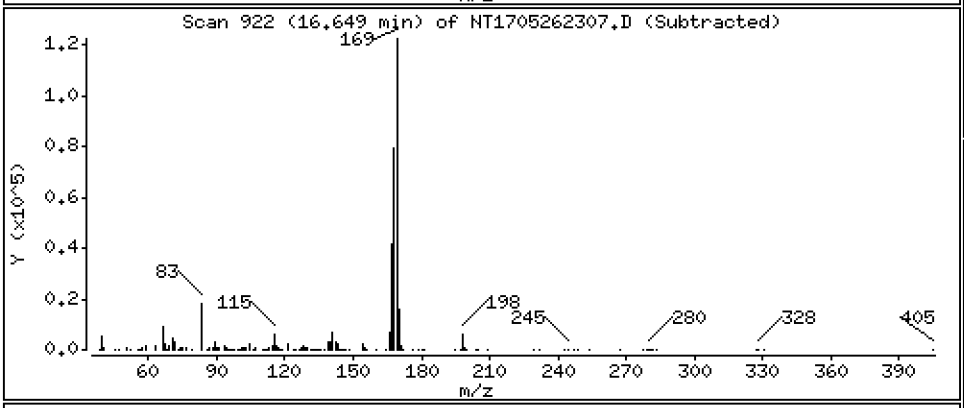
Column phase: ZB-5msi

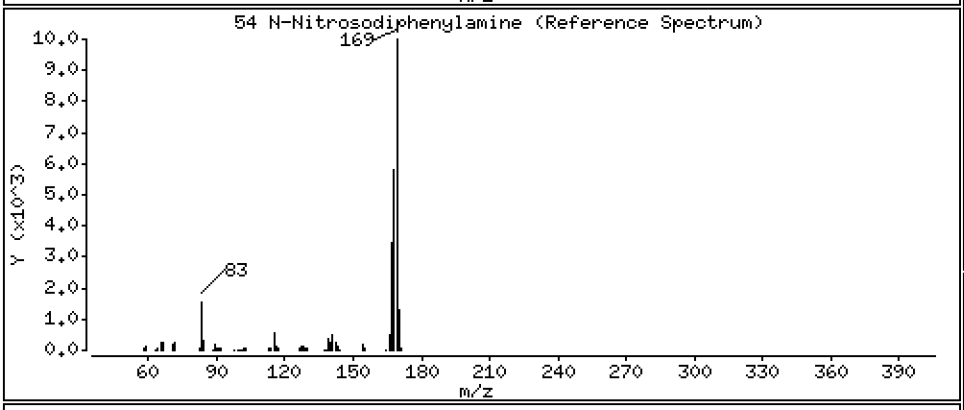
Column diameter: 0.25

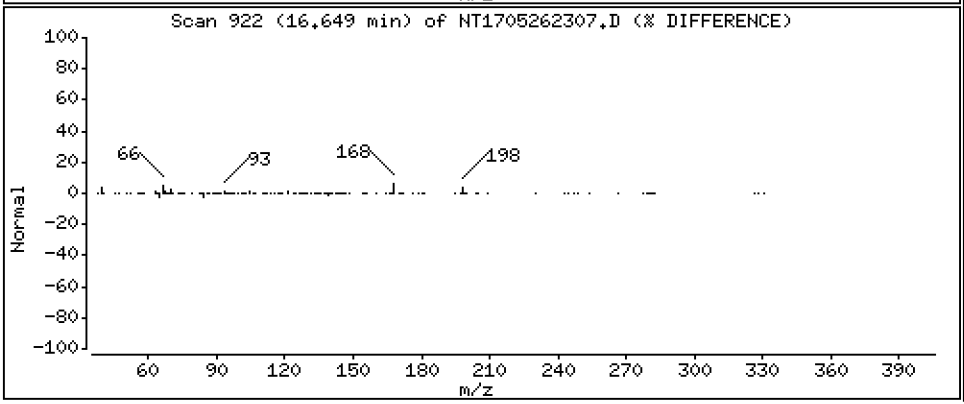
54 N-Nitrosodiphenylamine

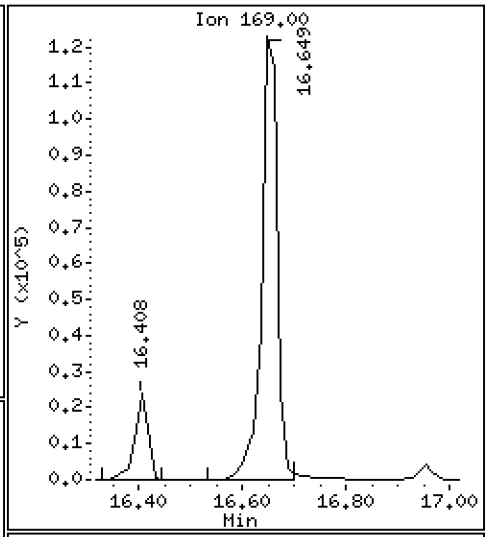
Concentration: 2.248 ug/mL

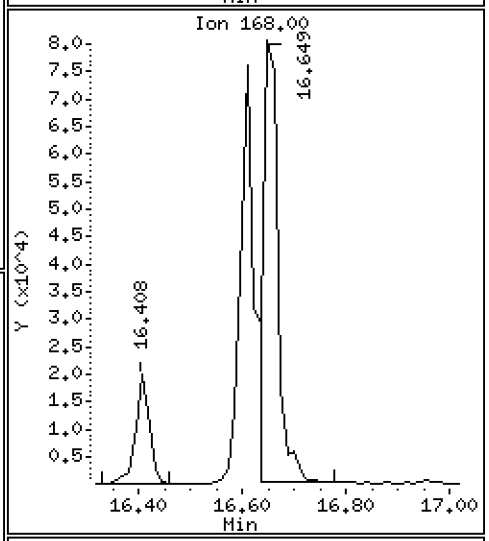


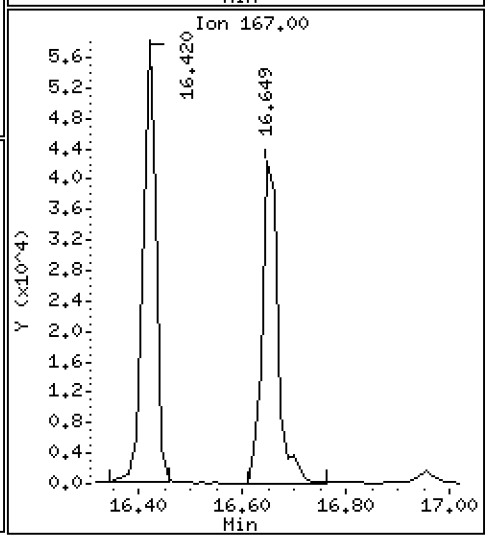












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

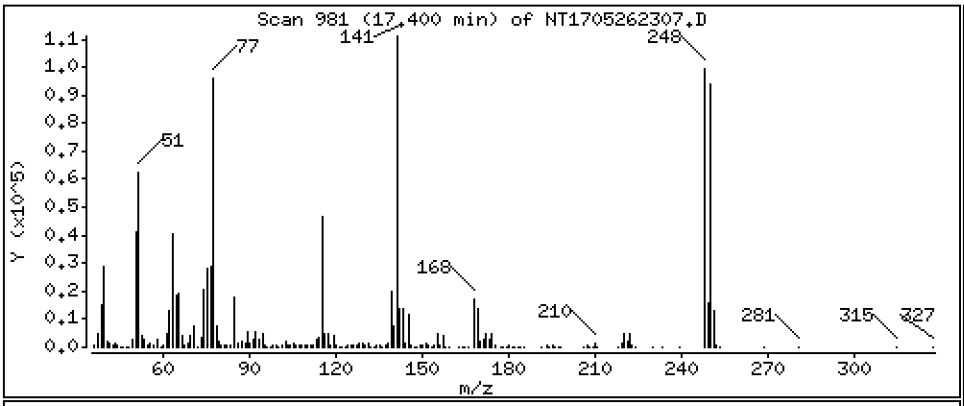
Operator: VTS

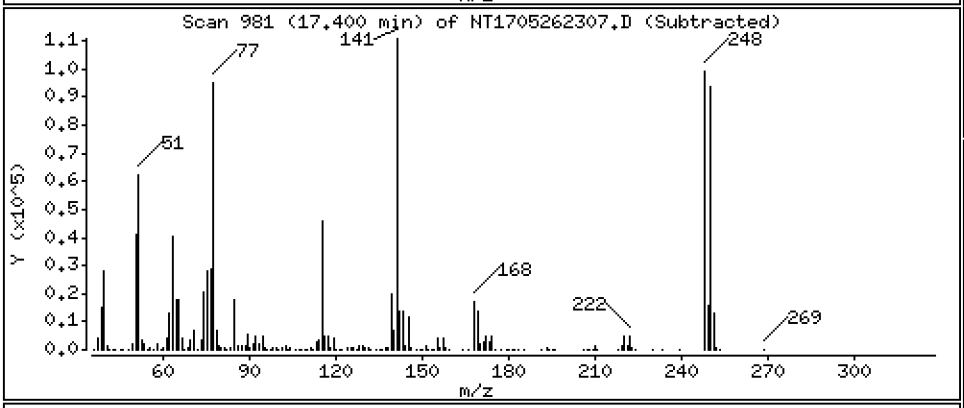
Column phase: ZB-5msi

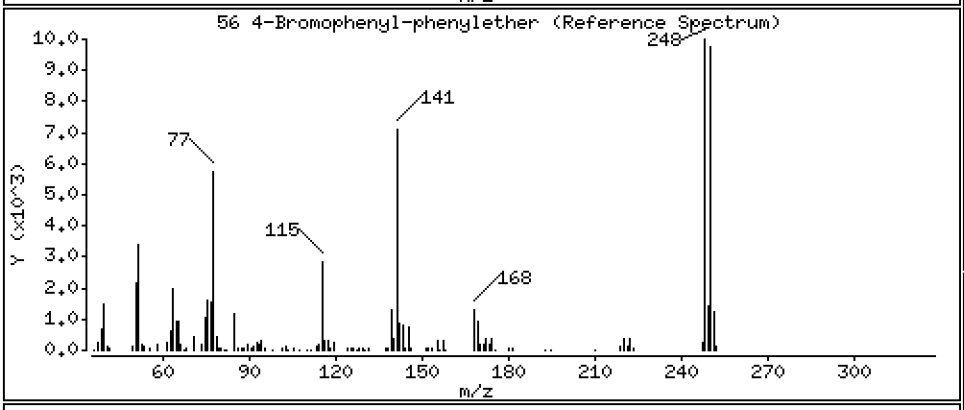
Column diameter: 0.25

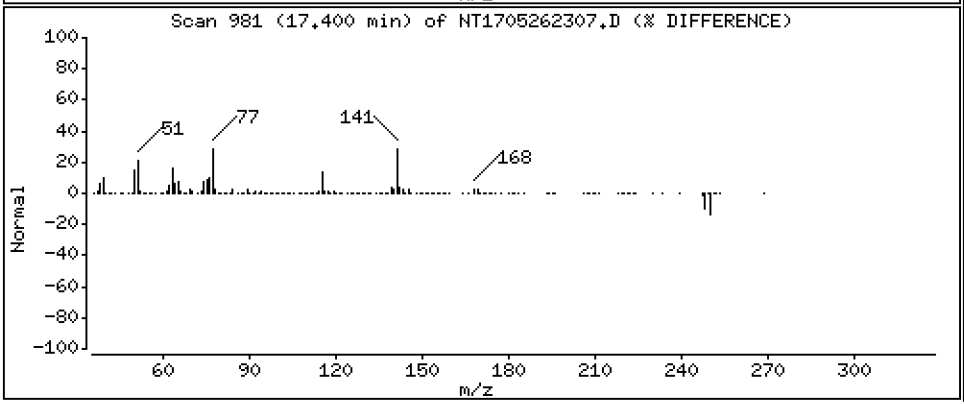
56 4-Bromophenyl-phenylether

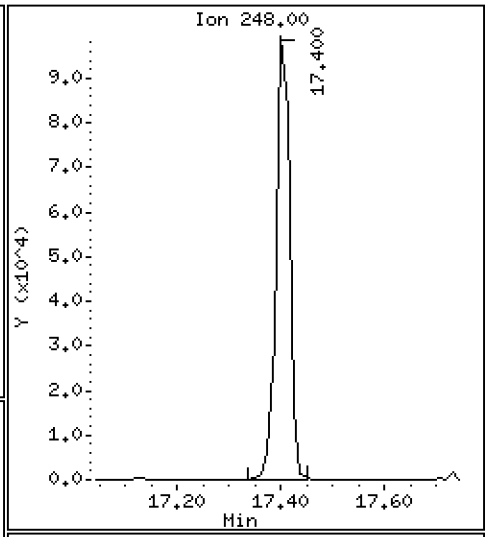
Concentration: 4.555 ug/mL

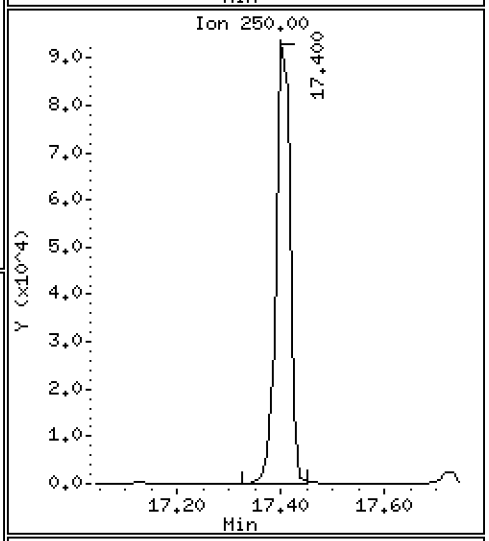


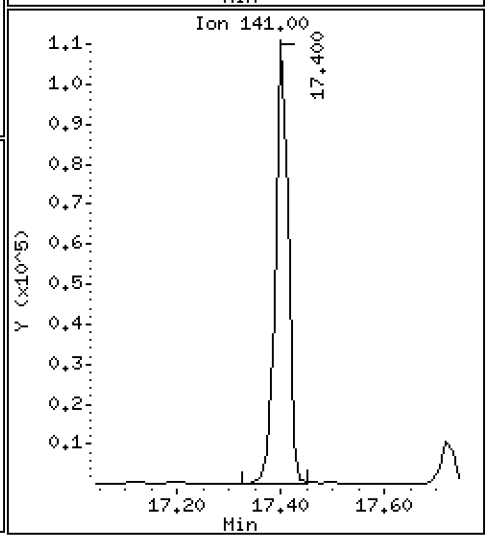












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

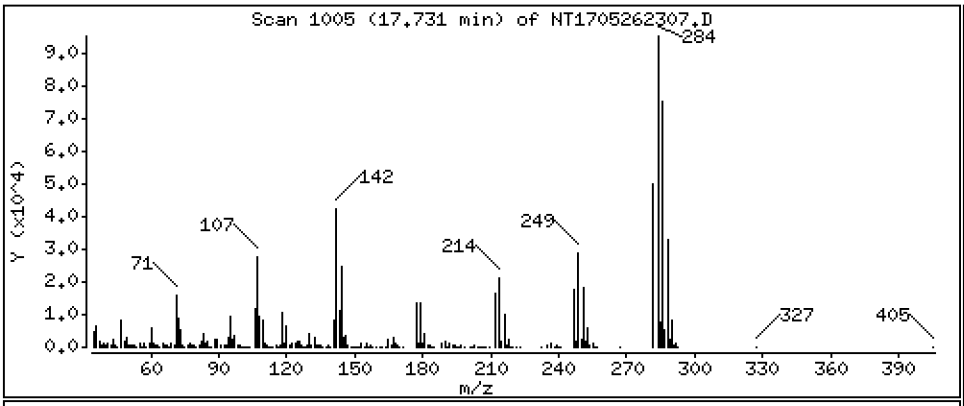
Operator: VTS

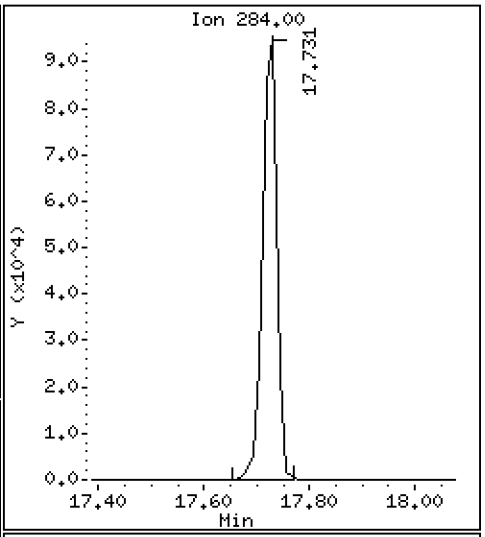
Column phase: ZB-5msi

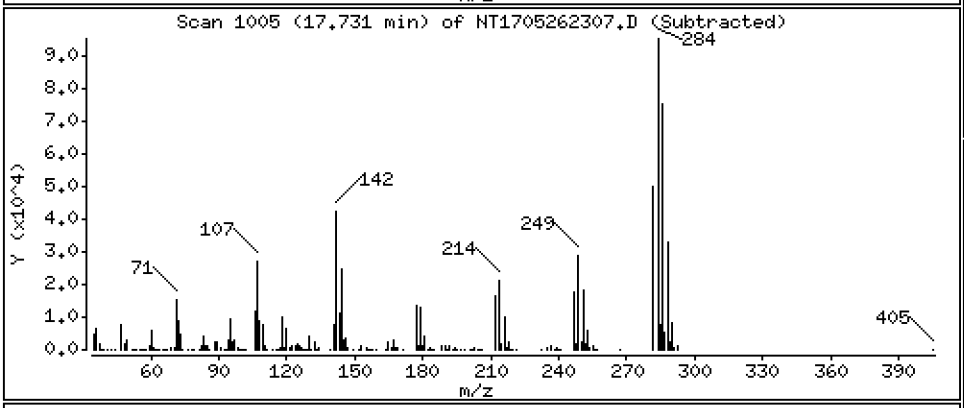
Column diameter: 0.25

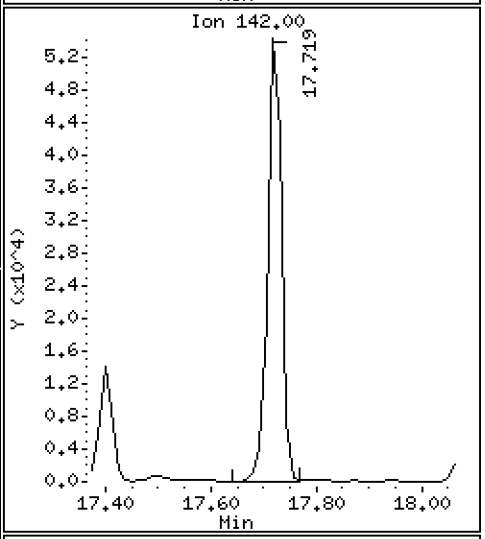
57 Hexachlorobenzene

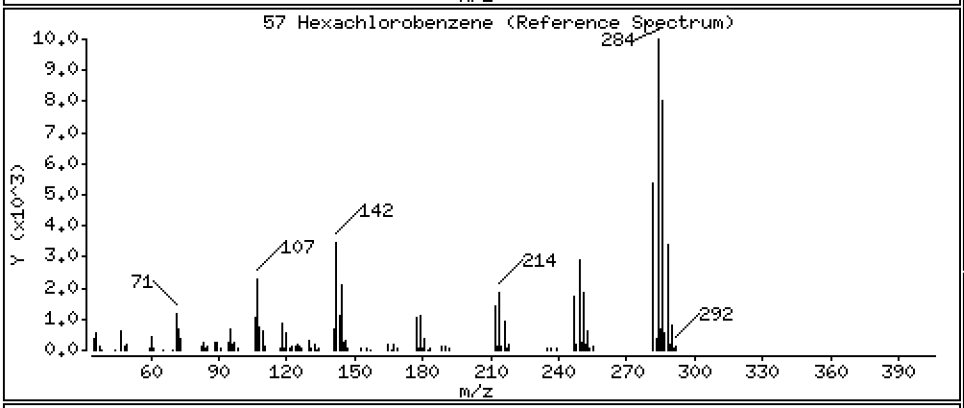
Concentration: 4.459 ug/mL

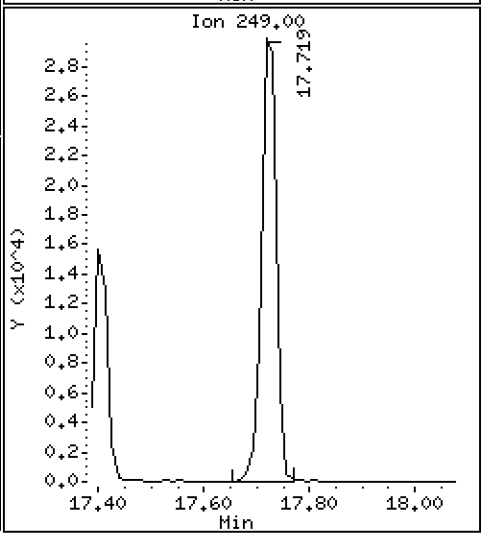


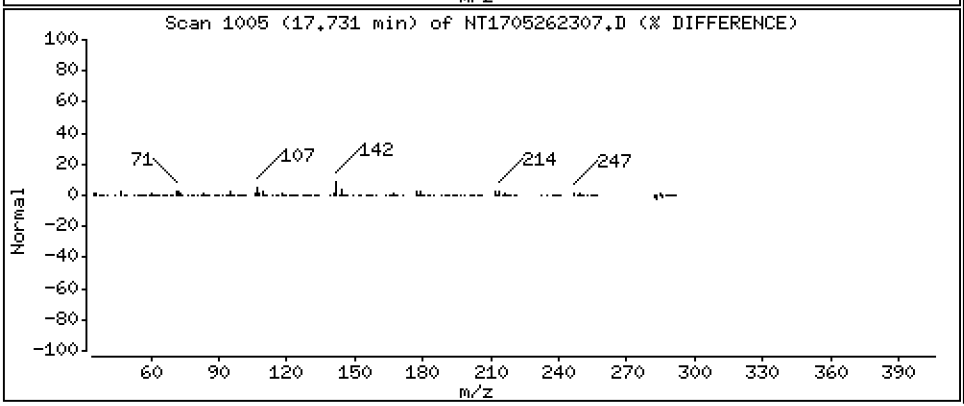












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

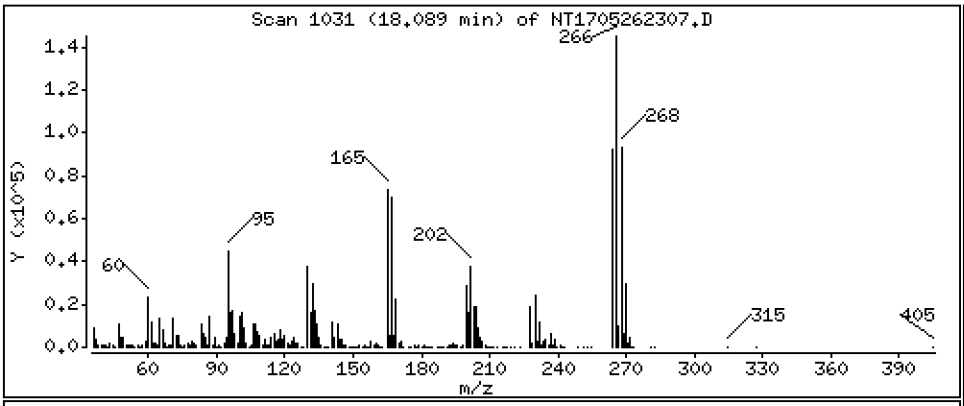
Operator: VTS

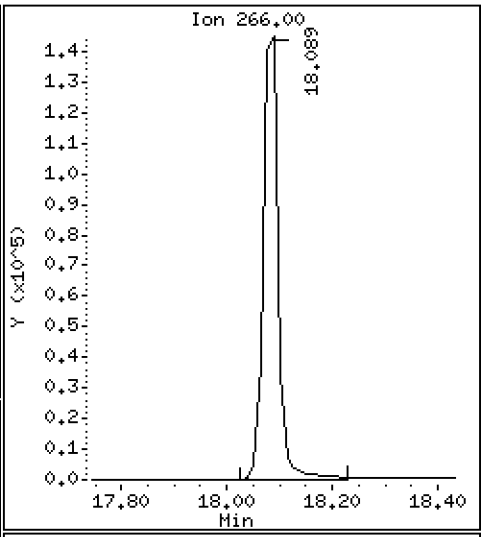
Column phase: ZB-5msi

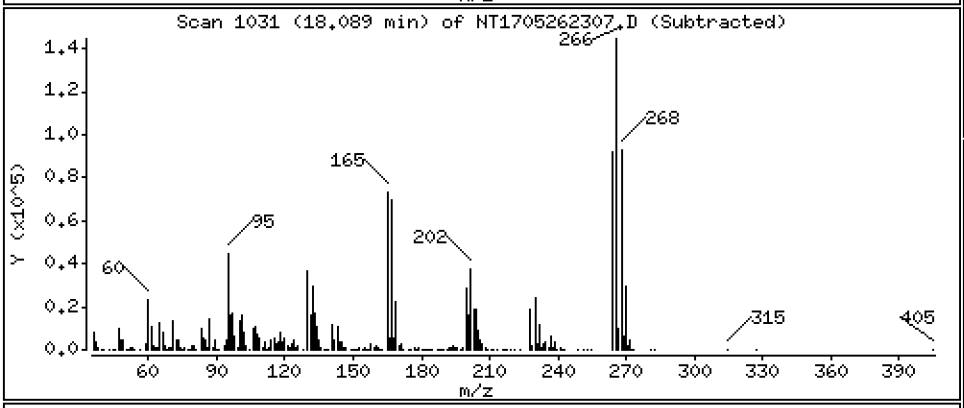
Column diameter: 0.25

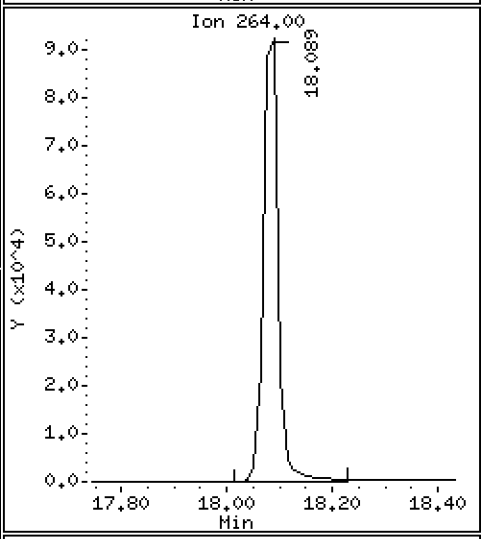
58 Pentachlorophenol

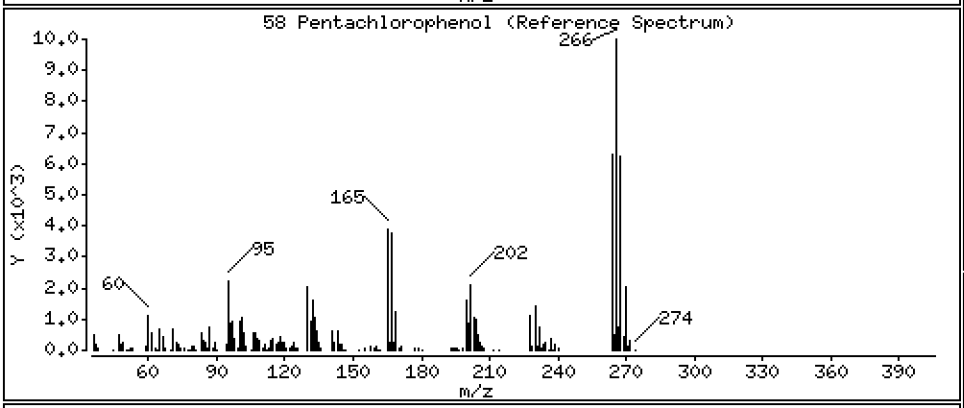
Concentration: 11.75 ug/mL

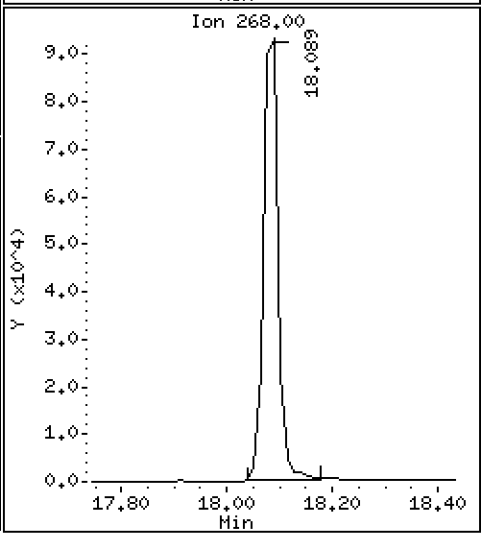


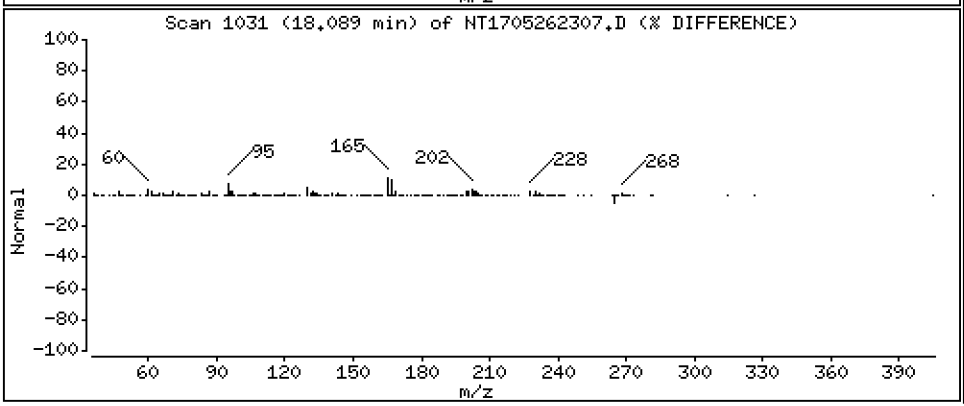












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

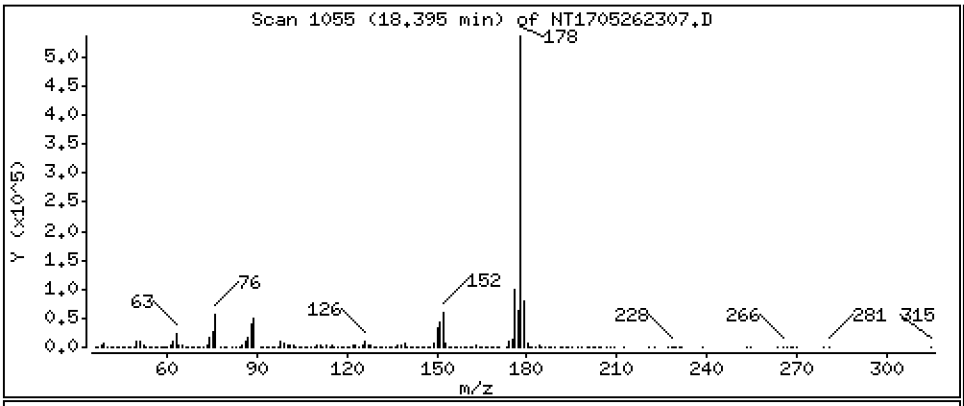
Operator: VTS

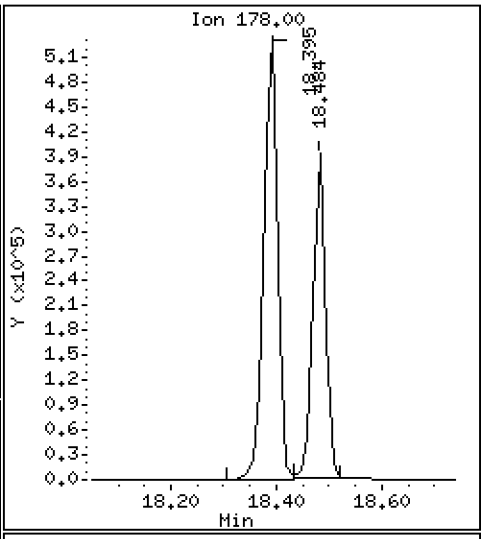
Column phase: ZB-5msi

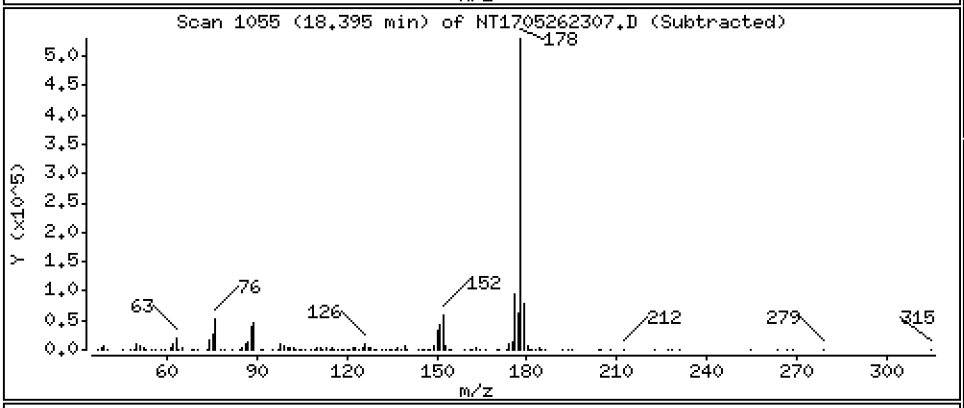
Column diameter: 0.25

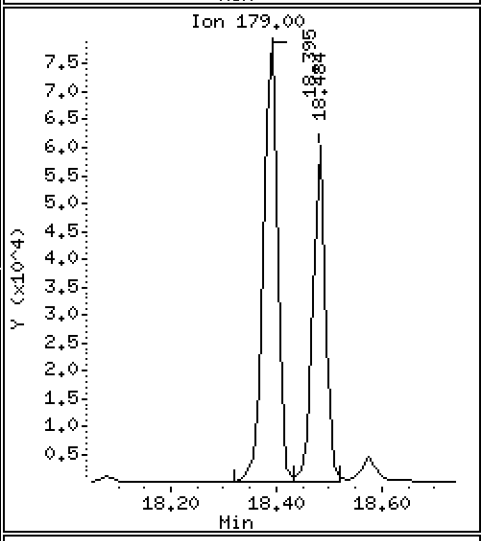
60 Phenanthrene

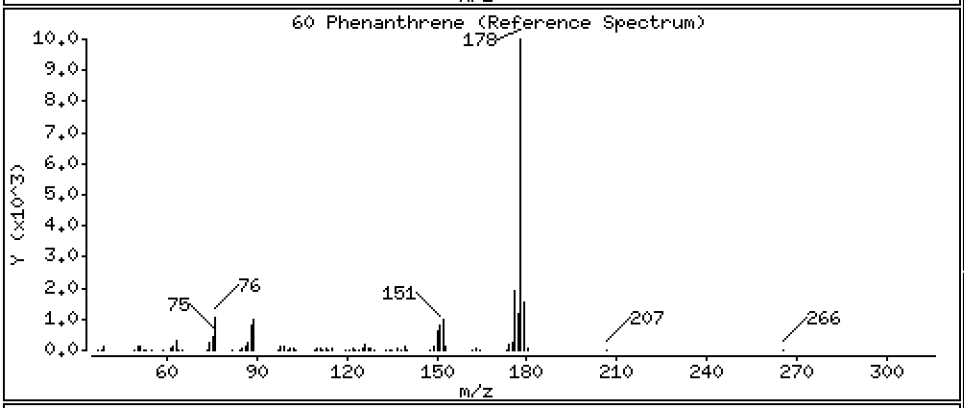
Concentration: 4.144 ug/mL

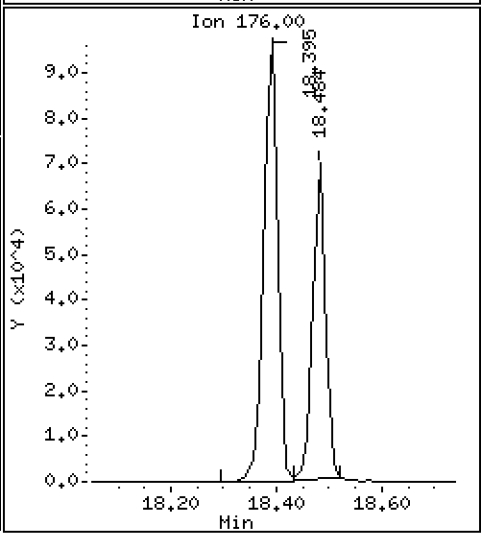


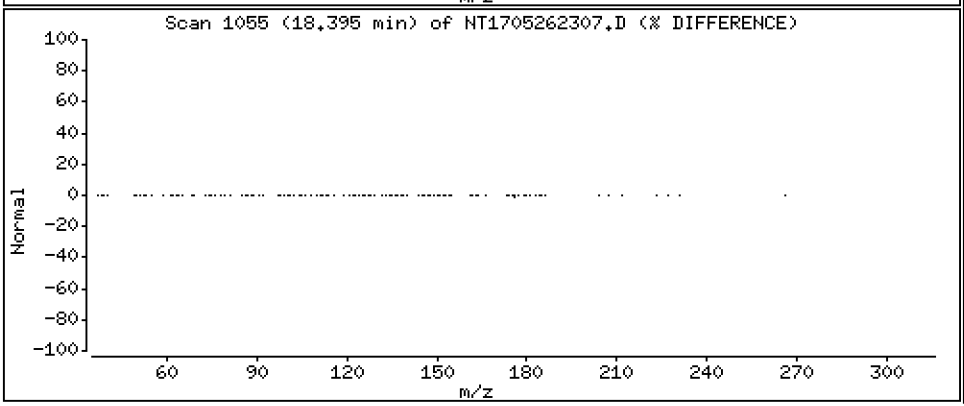












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

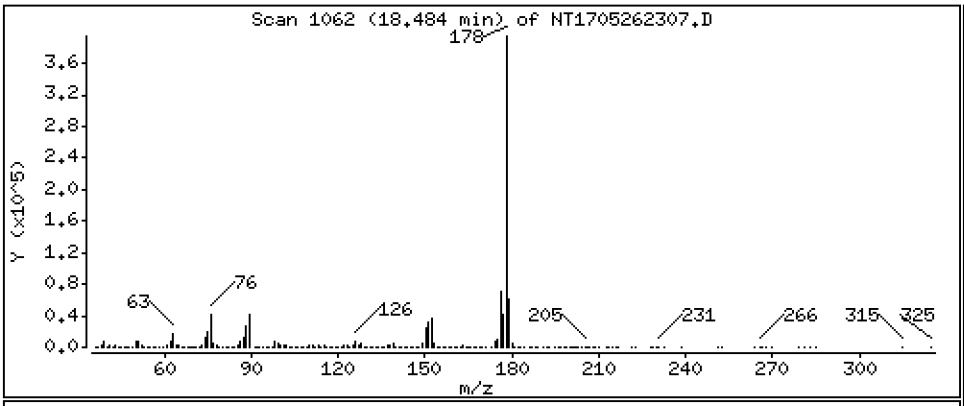
Operator: VTS

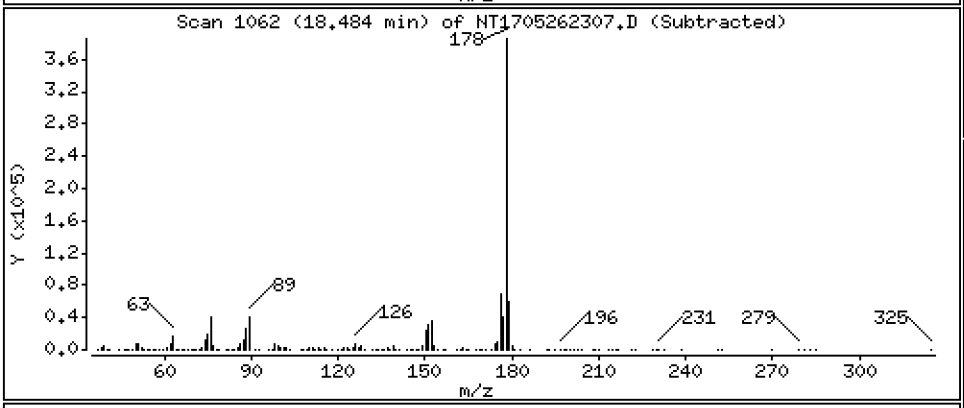
Column phase: ZB-5msi

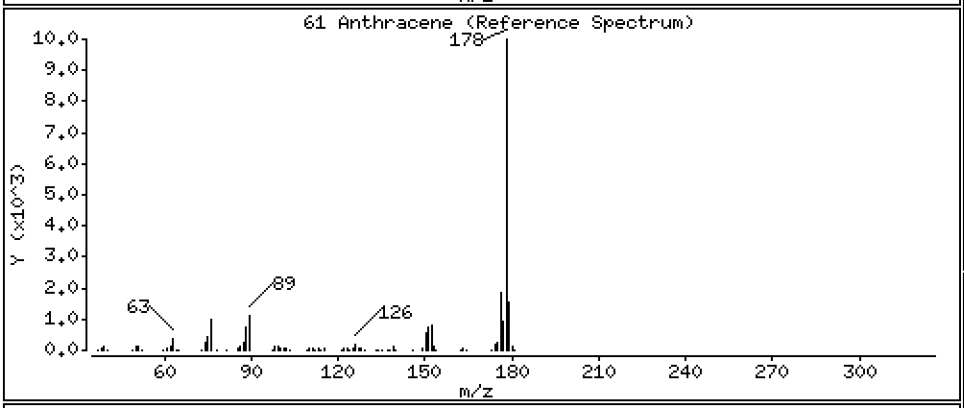
Column diameter: 0.25

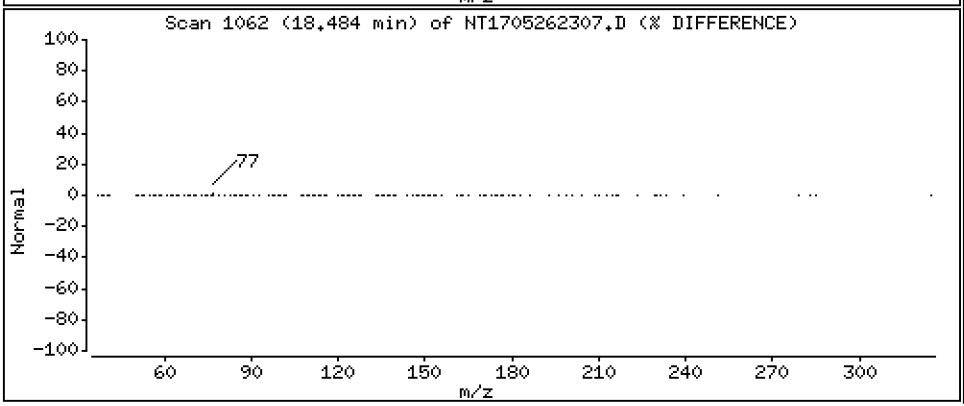
61 Anthracene

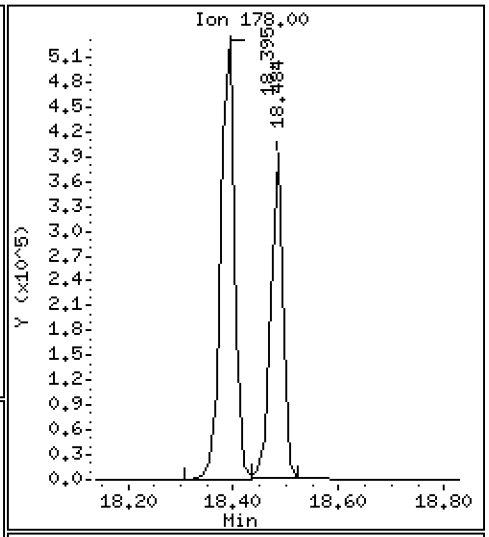
Concentration: 2.931 ug/mL

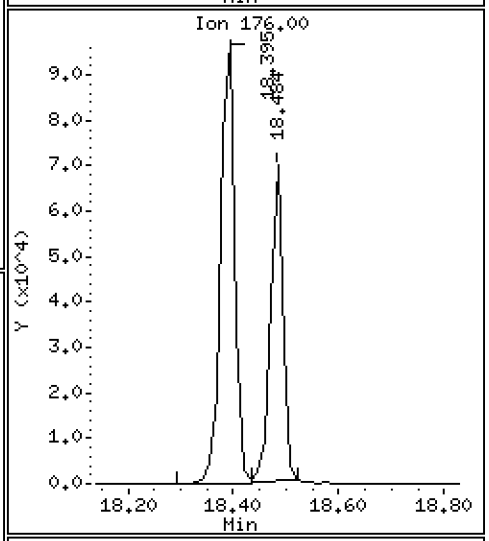


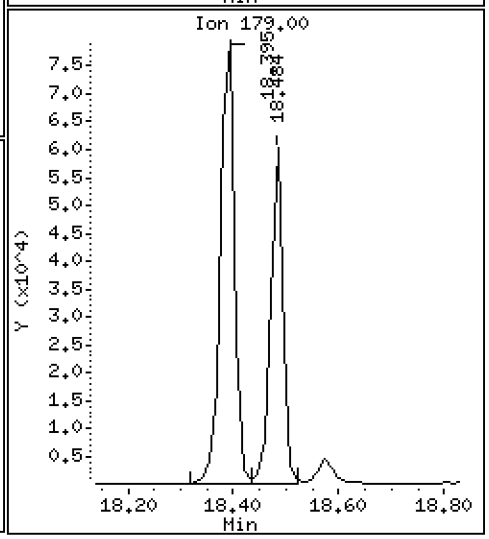












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

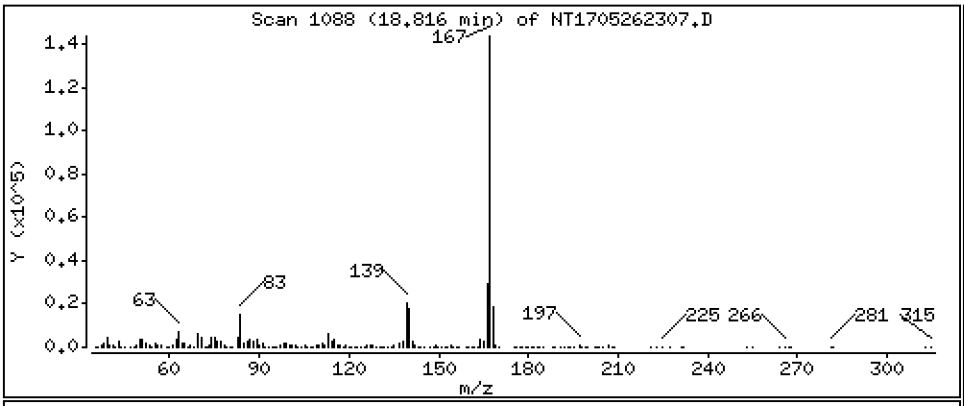
Operator: VTS

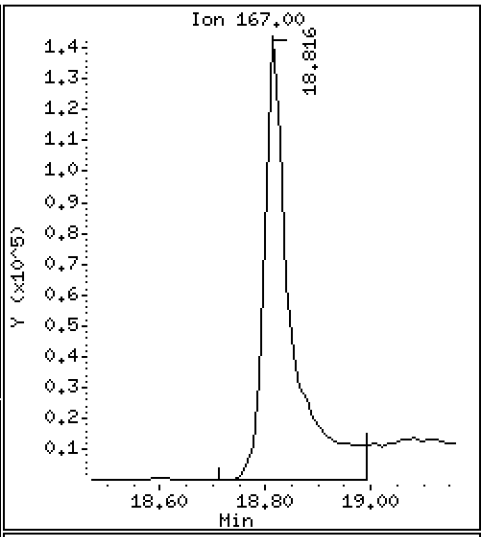
Column phase: ZB-5msi

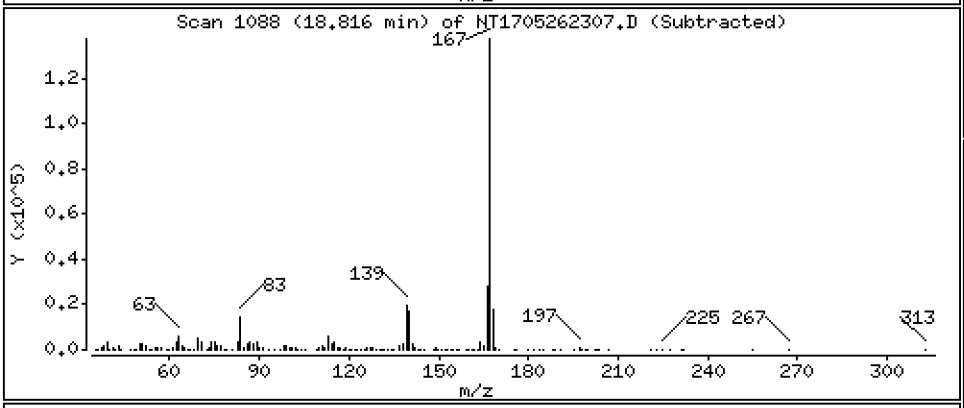
Column diameter: 0.25

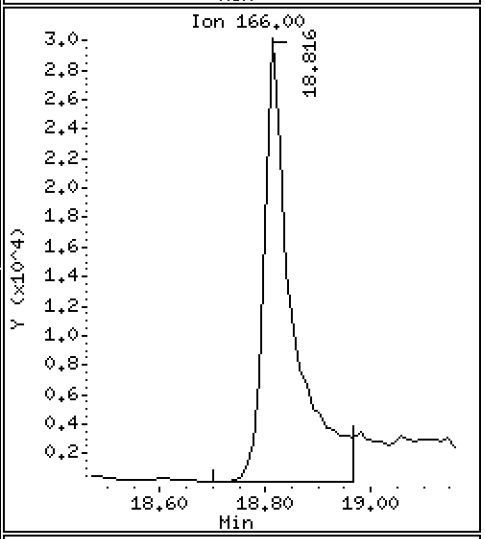
62 Carbazole

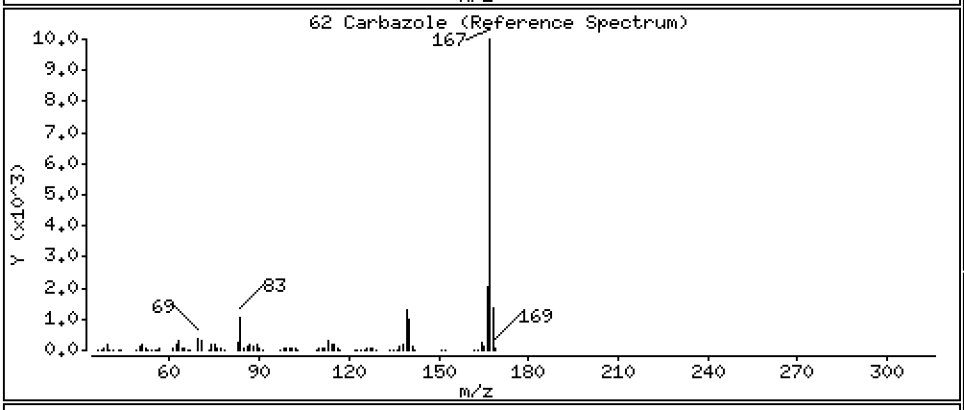
Concentration: 3.701 ug/mL

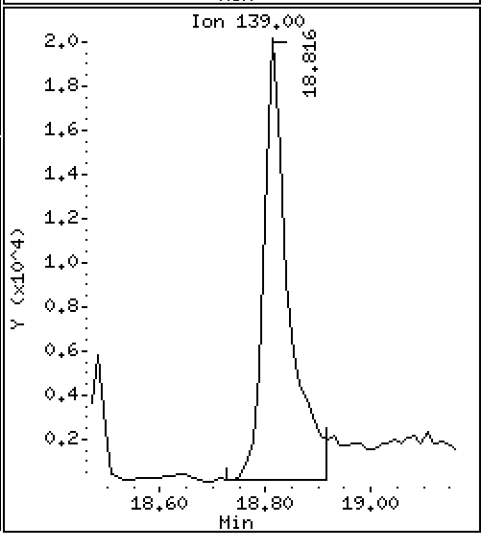


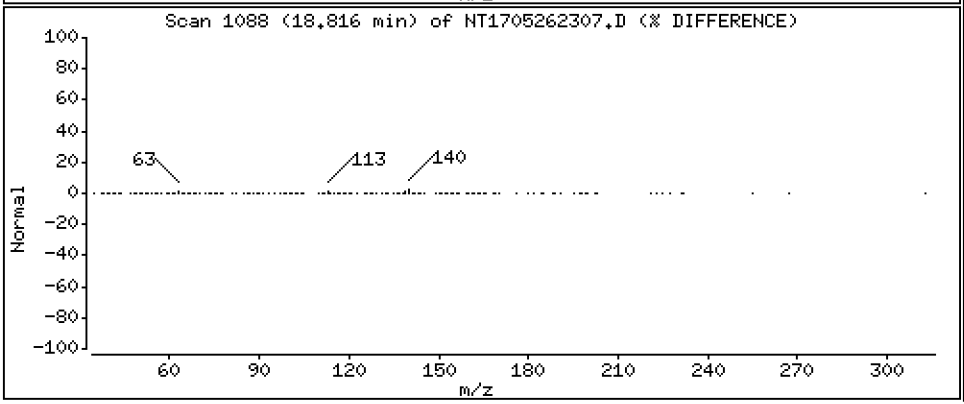












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

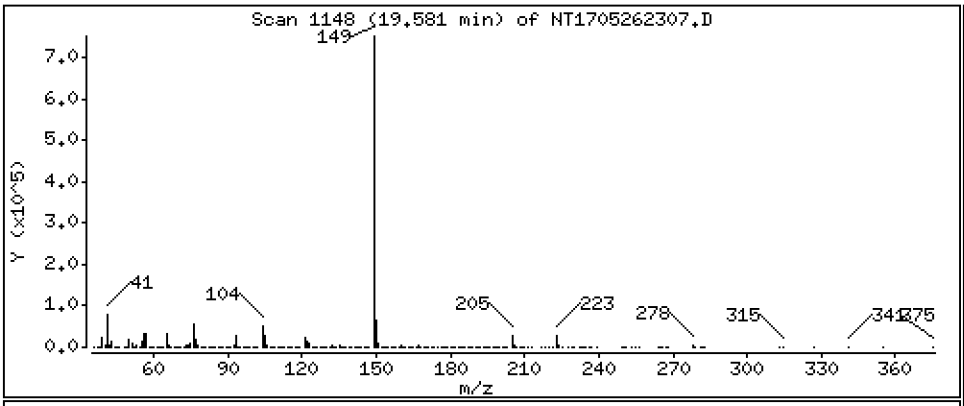
Operator: VTS

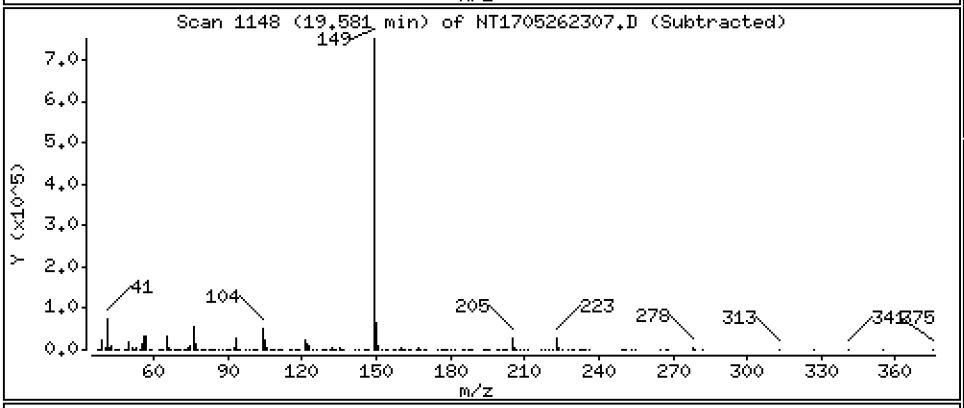
Column phase: ZB-5msi

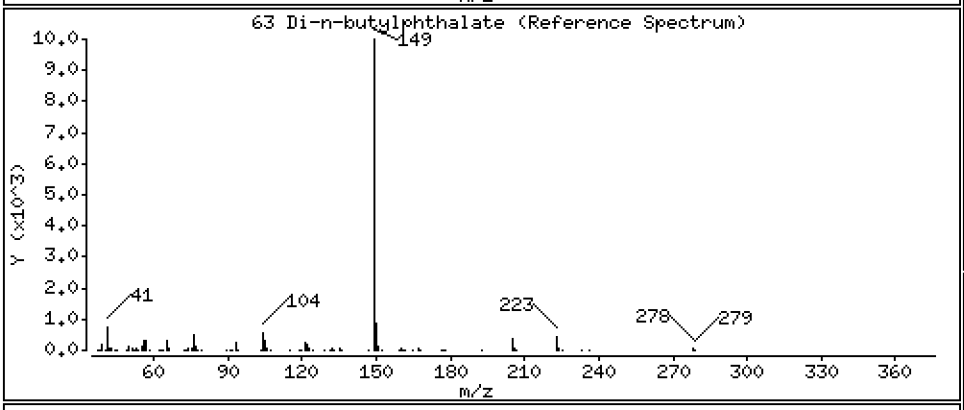
Column diameter: 0.25

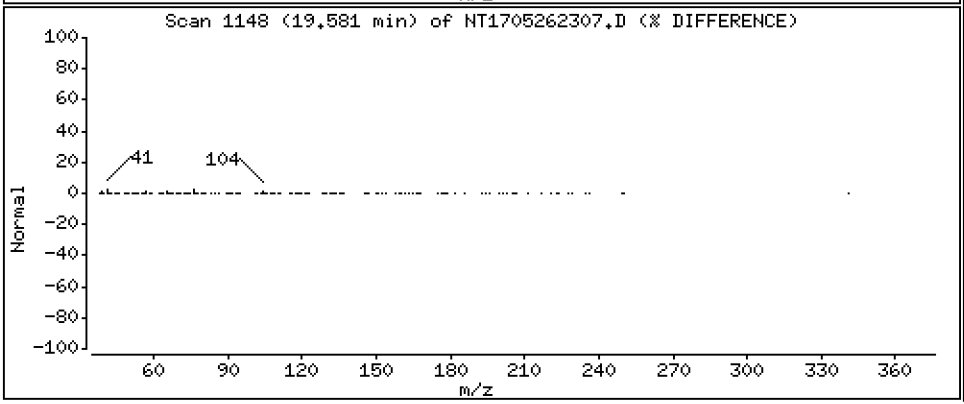
63 Di-n-butylphthalate

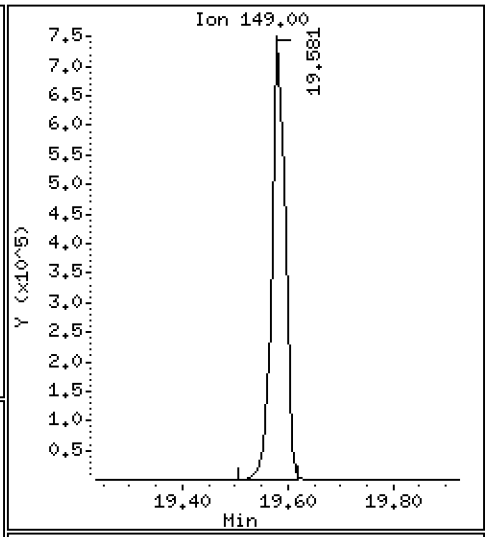
Concentration: 4.698 ug/mL

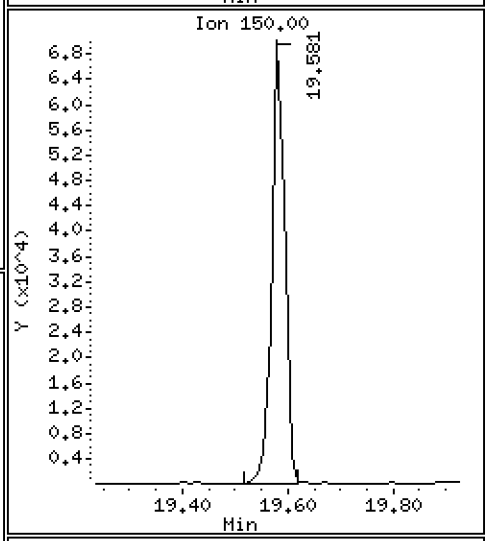


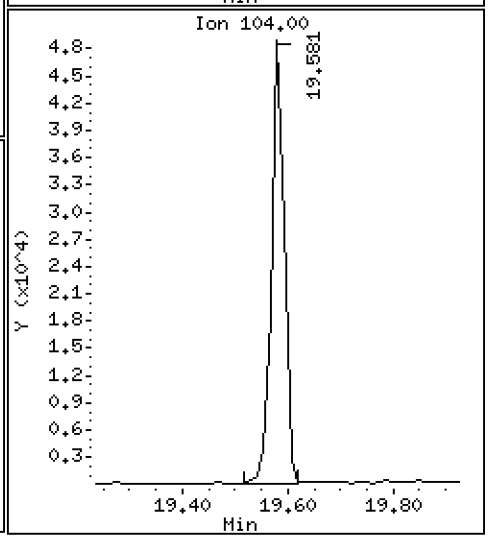












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

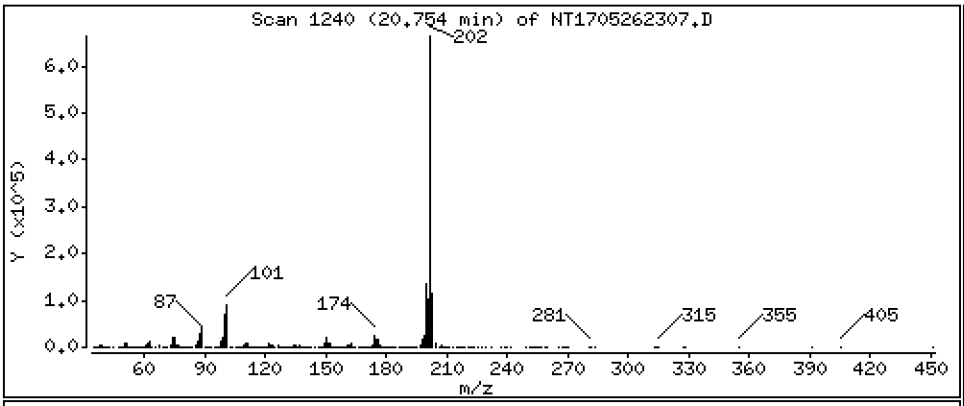
Operator: VTS

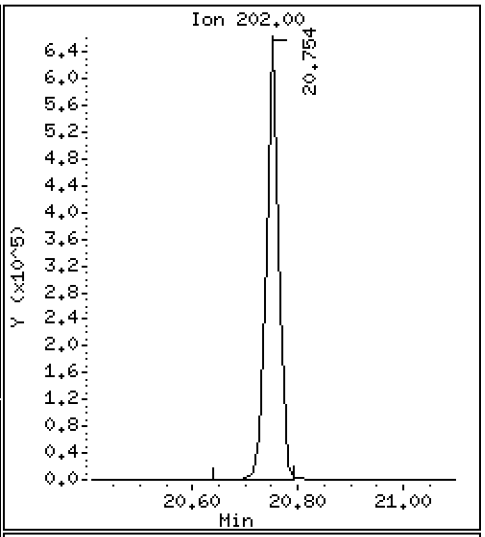
Column phase: ZB-5msi

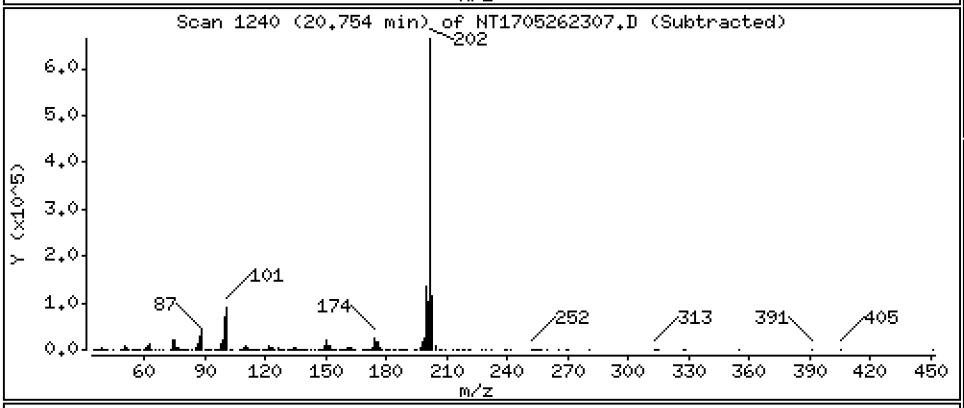
Column diameter: 0.25

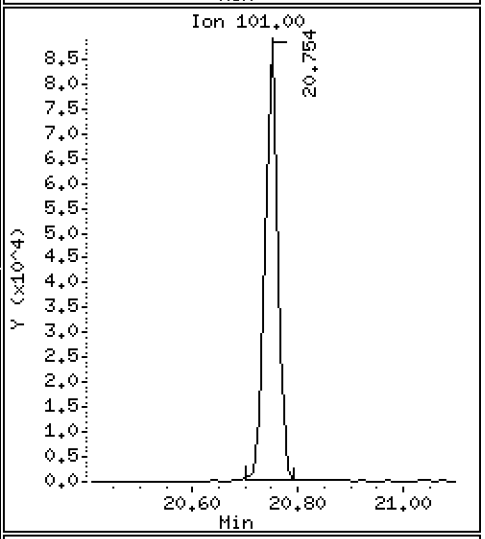
64 Fluoranthene

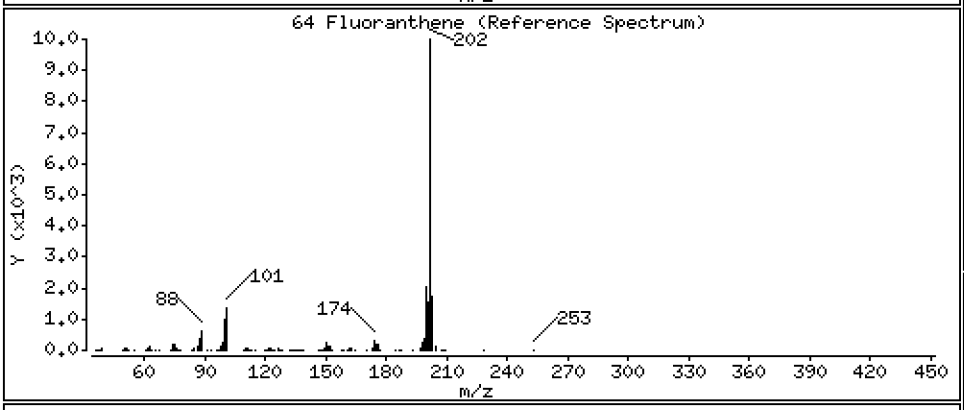
Concentration: 4.456 ug/mL

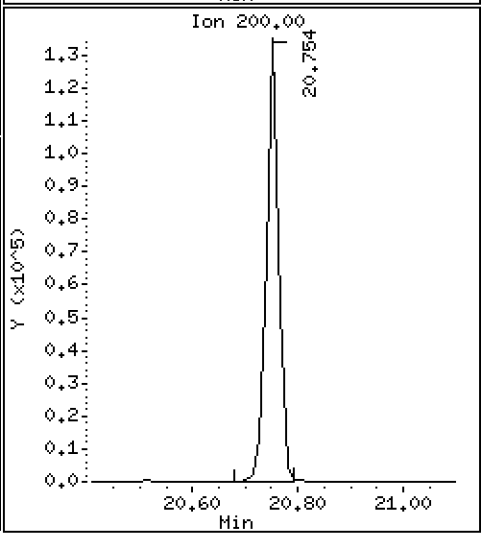


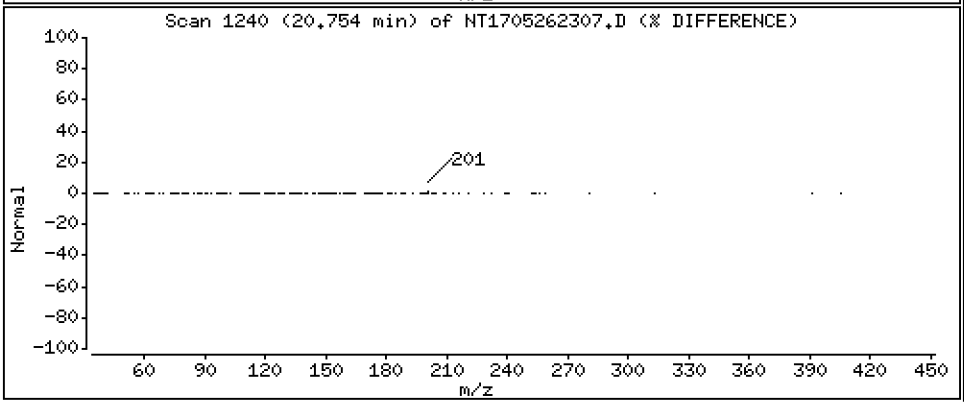












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

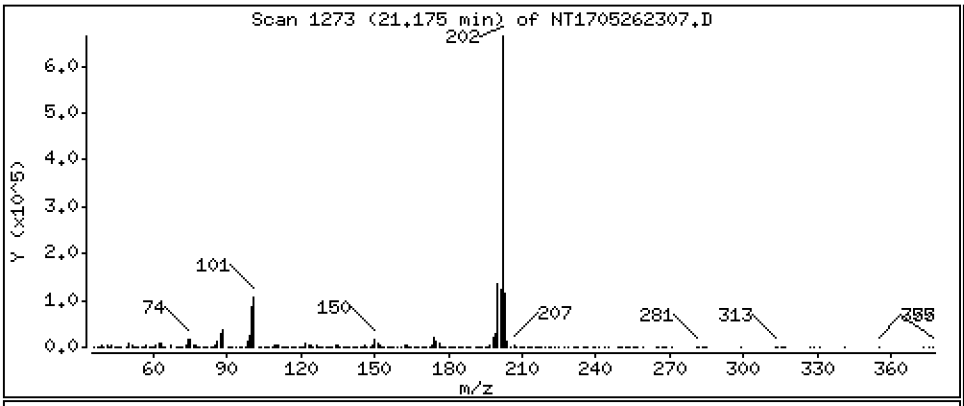
Operator: VTS

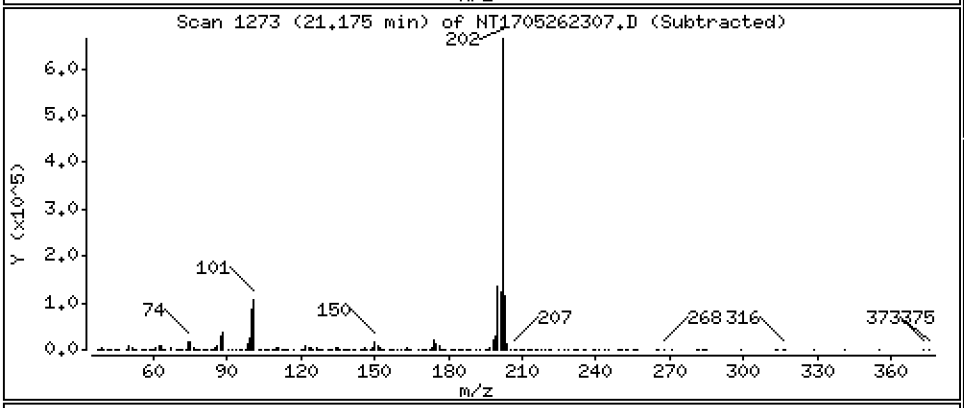
Column phase: ZB-5msi

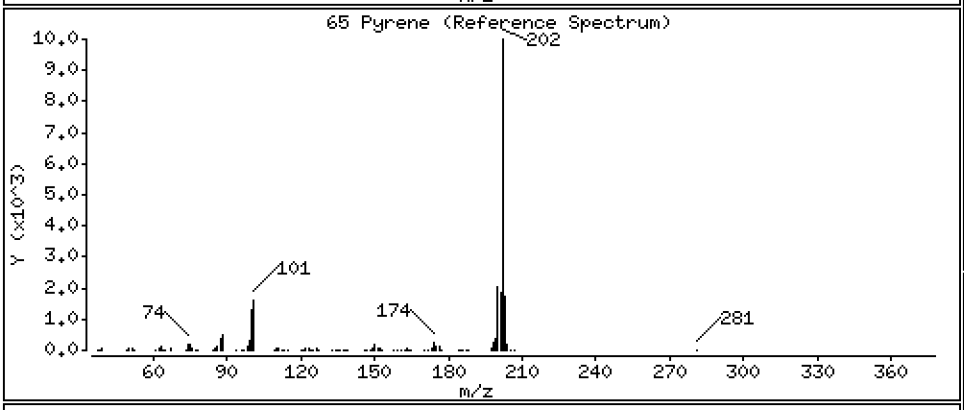
Column diameter: 0.25

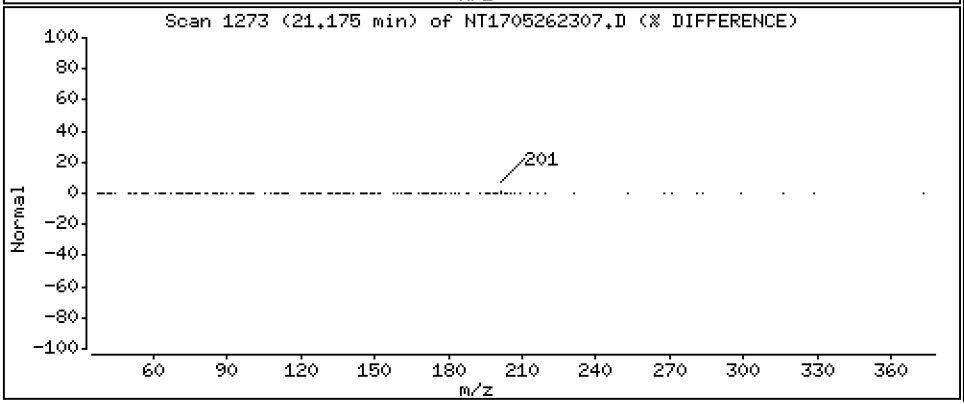
65 Pyrene

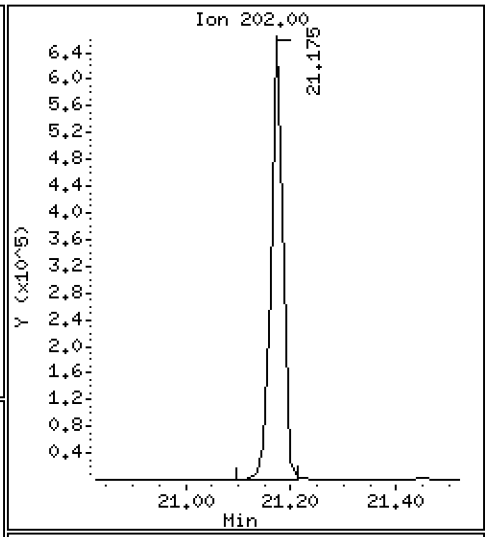
Concentration: 4.360 ug/mL

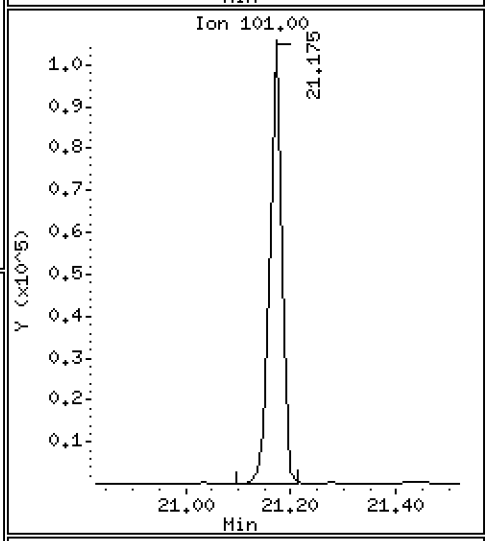


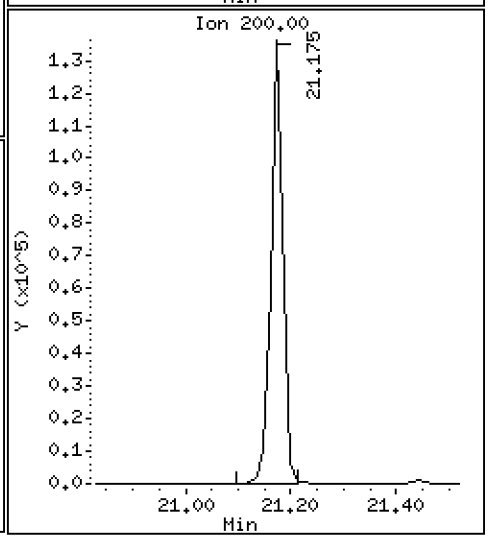












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

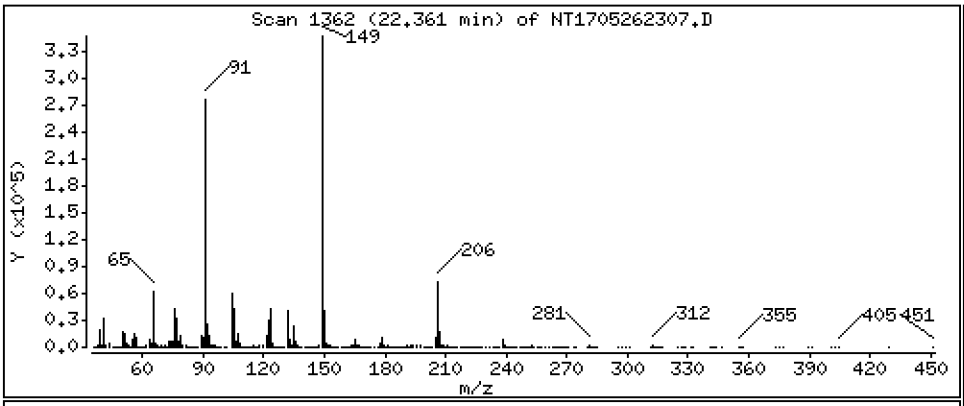
Operator: VTS

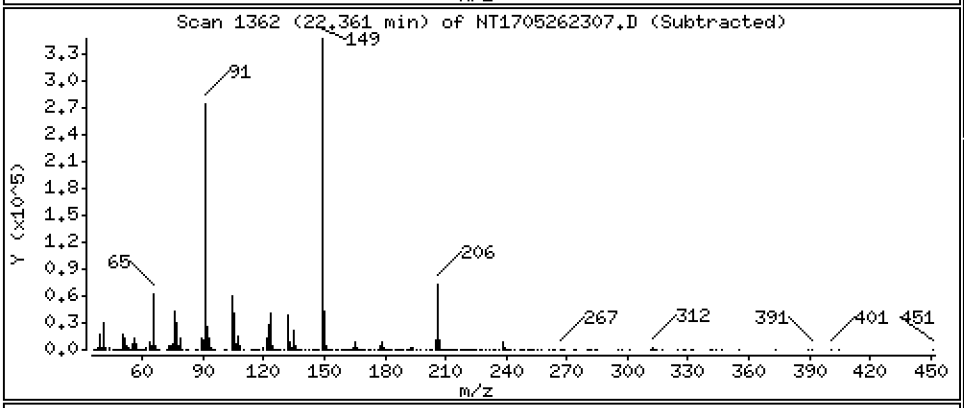
Column phase: ZB-5msi

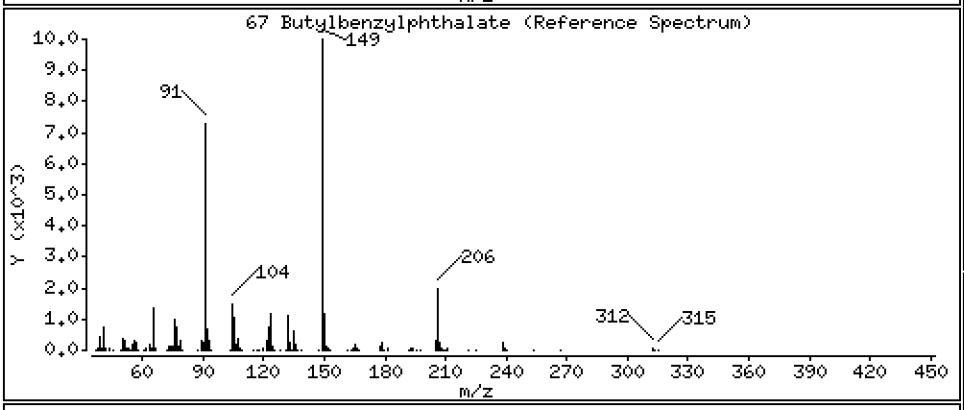
Column diameter: 0.25

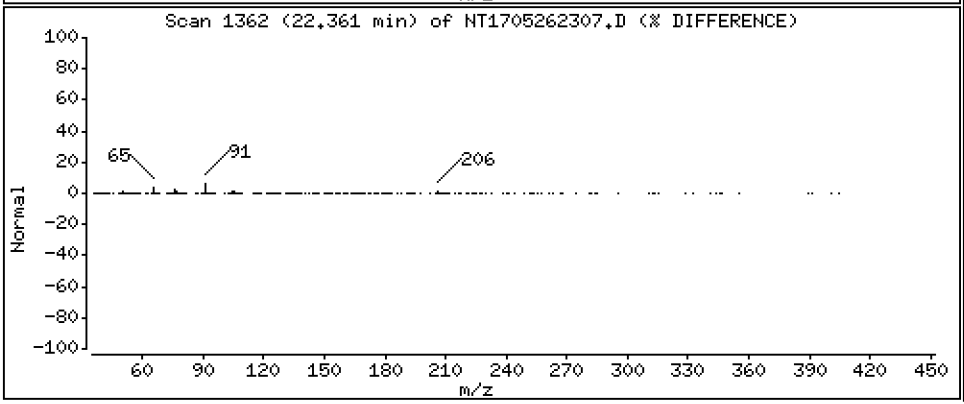
67 Butylbenzylphthalate

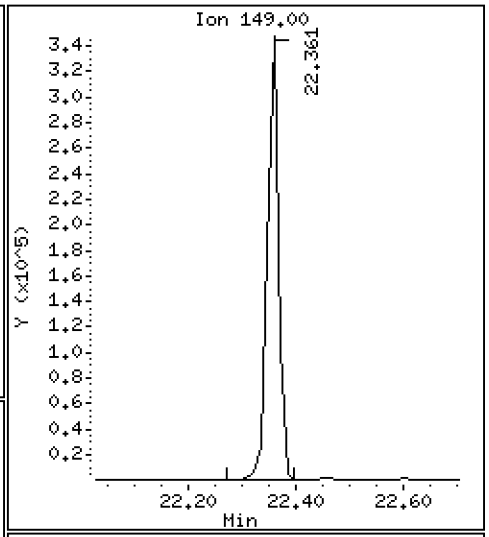
Concentration: 4.825 ug/mL

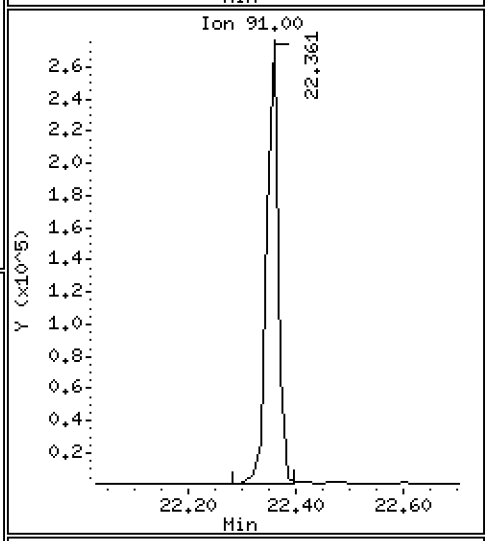


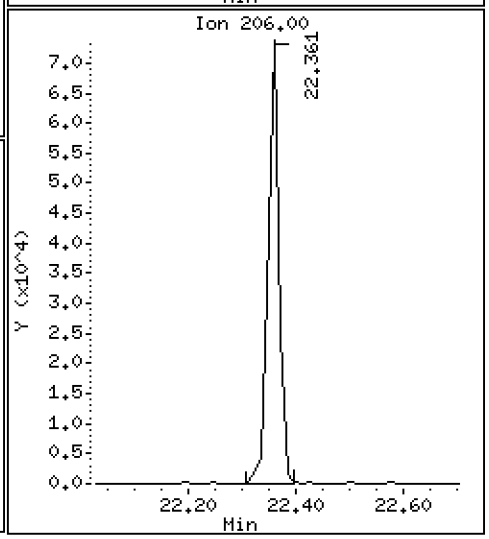












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

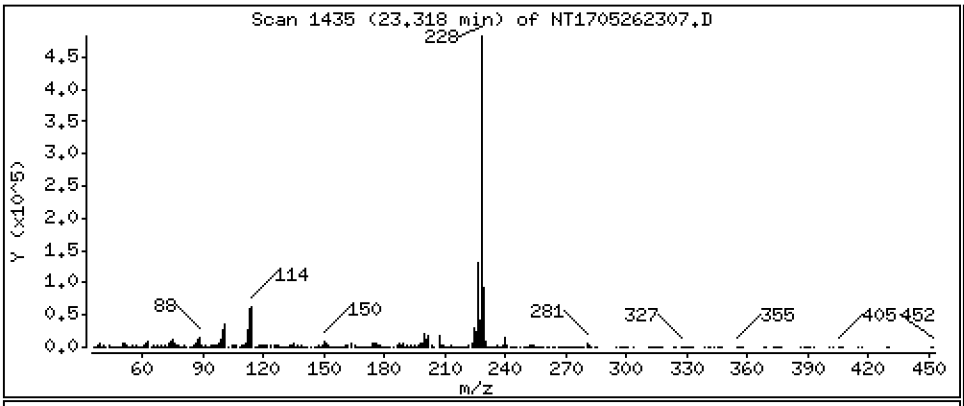
Operator: VTS

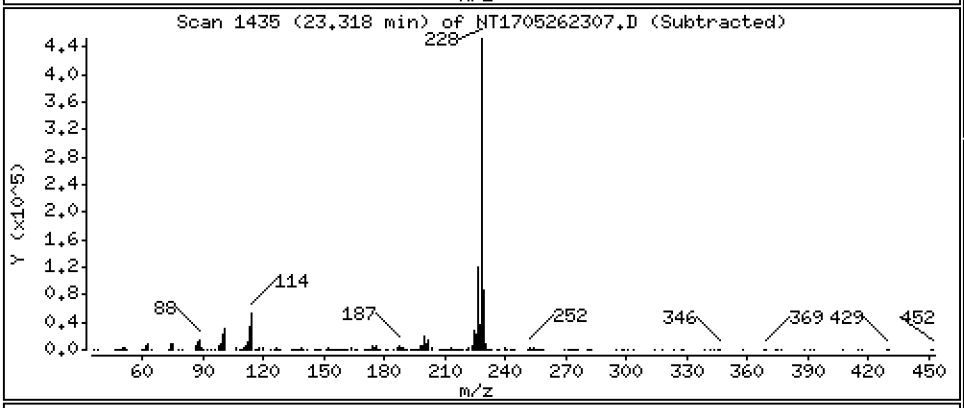
Column phase: ZB-5msi

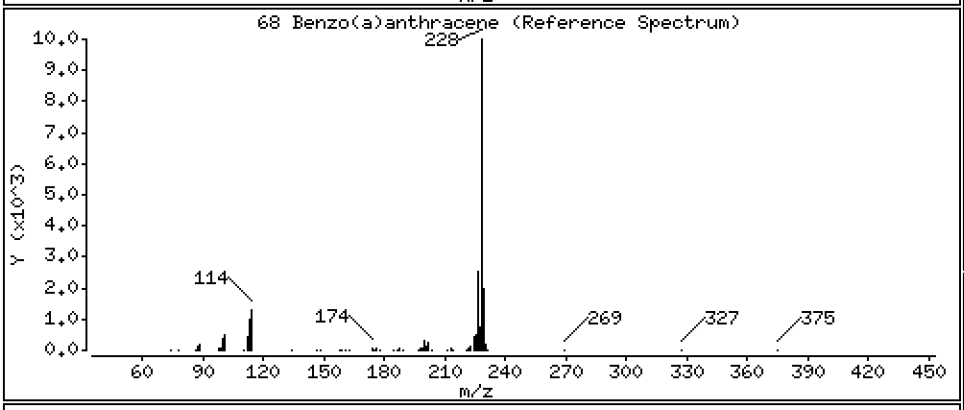
Column diameter: 0.25

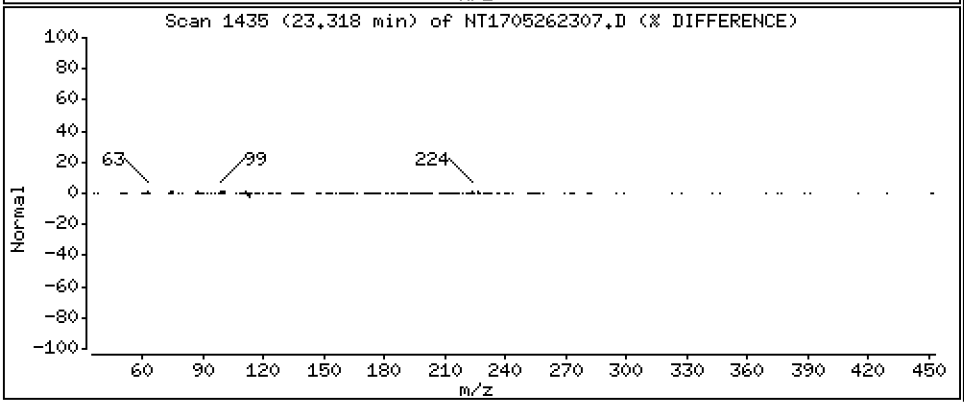
68 Benzo(a)anthracene

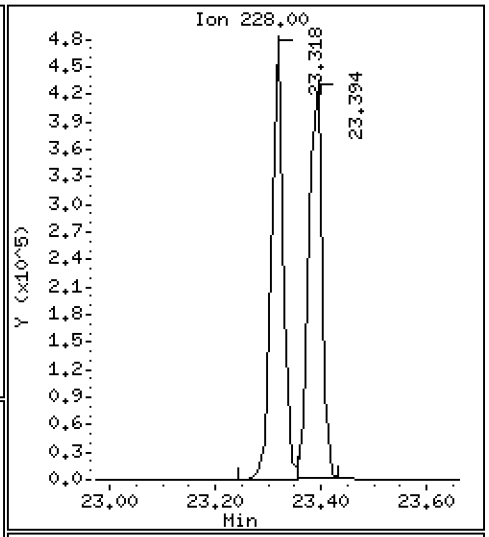
Concentration: 4.082 ug/mL

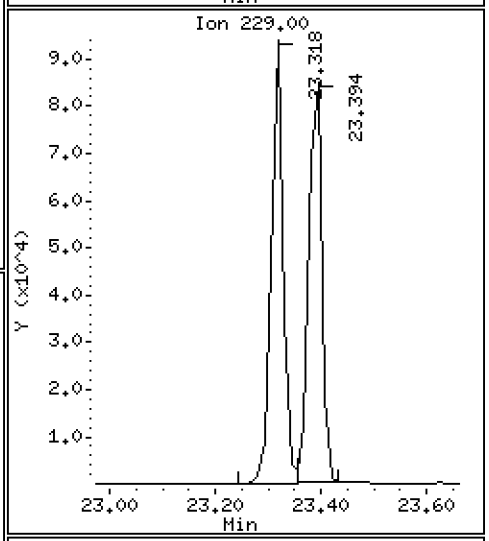


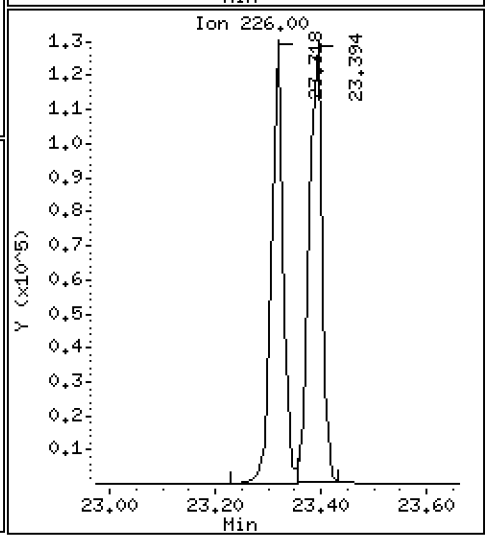












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

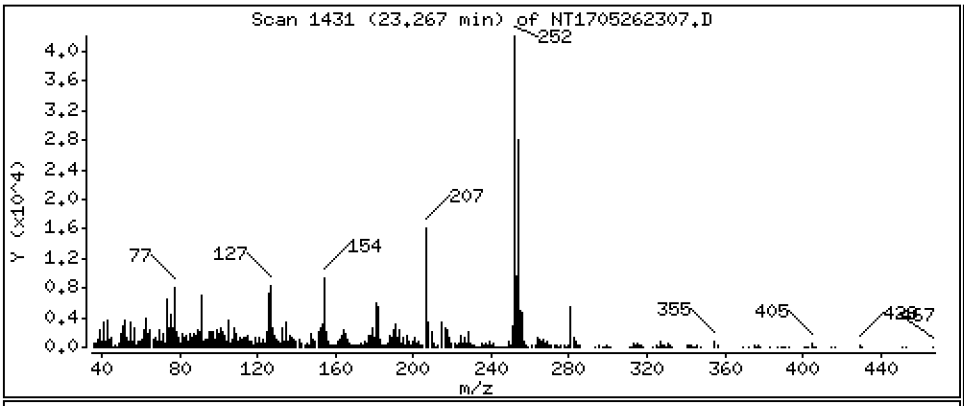
Operator: VTS

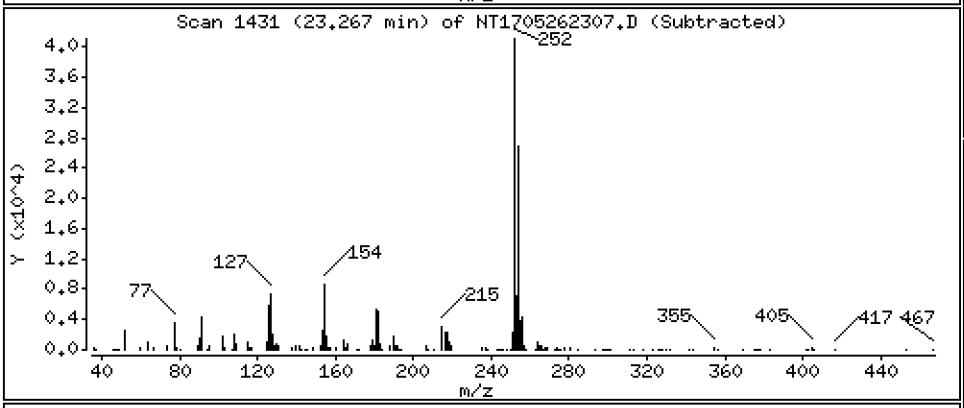
Column phase: ZB-5msi

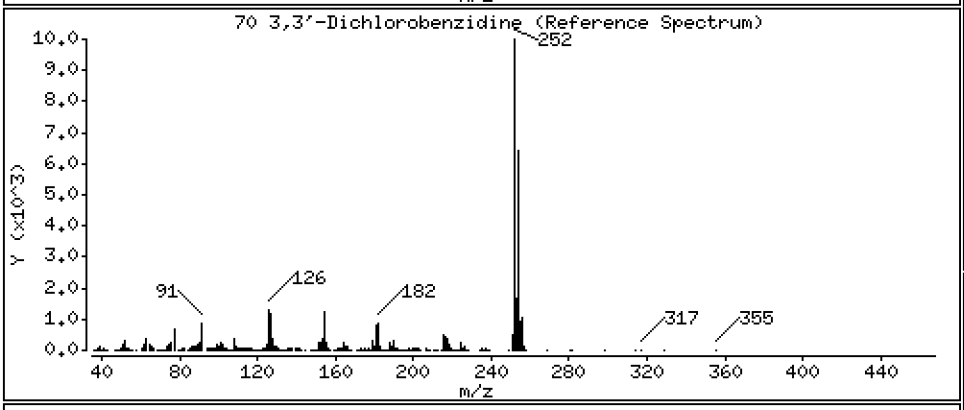
Column diameter: 0.25

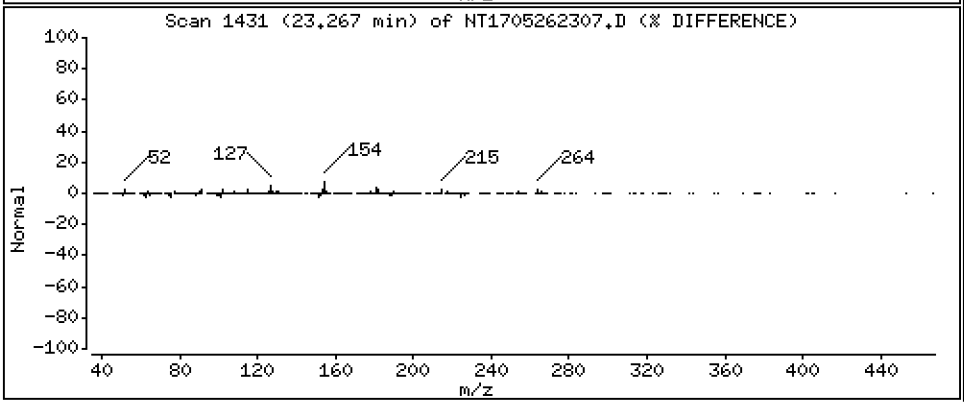
70 3,3'-Dichlorobenzidine

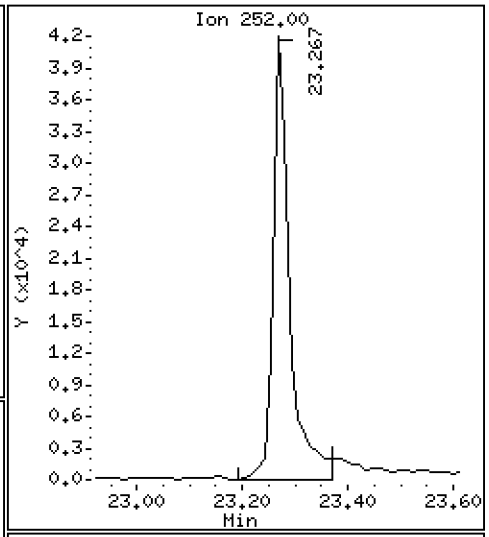
Concentration: 2.563 ug/mL

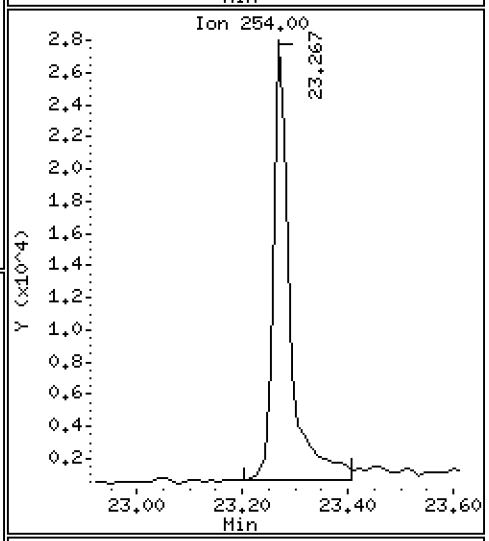


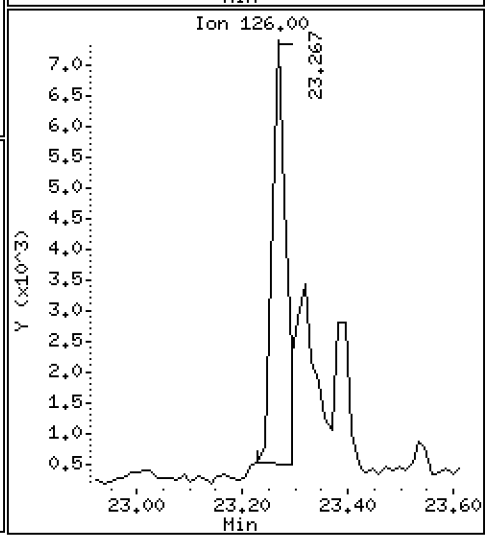












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

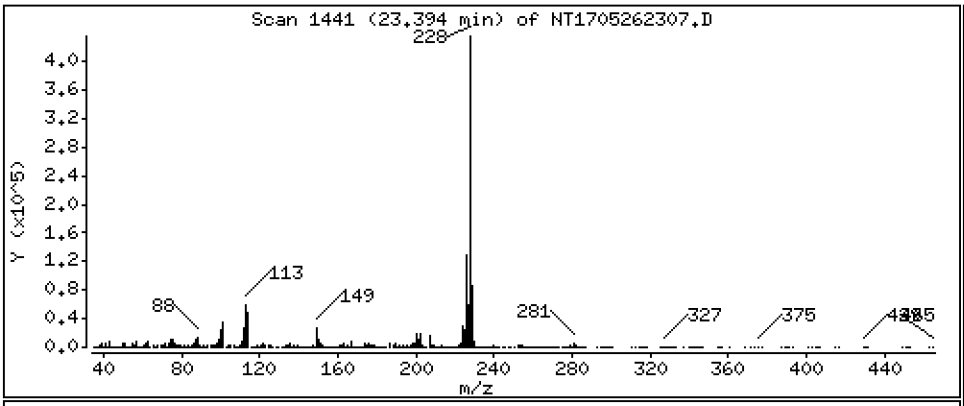
Operator: VTS

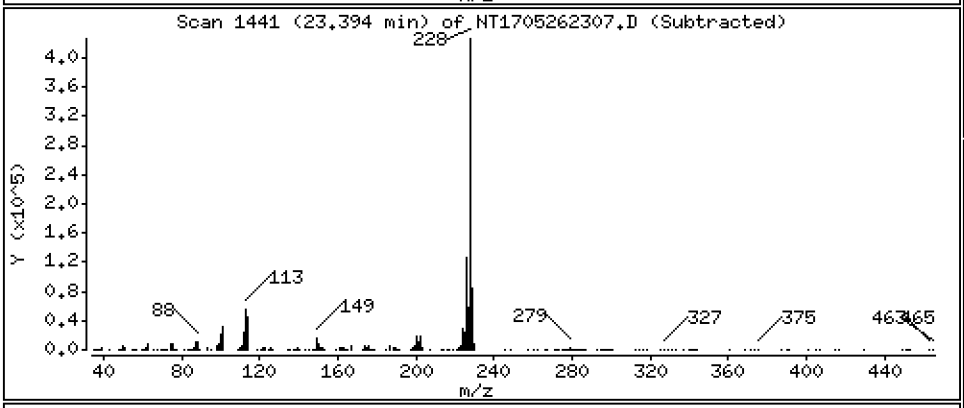
Column phase: ZB-5msi

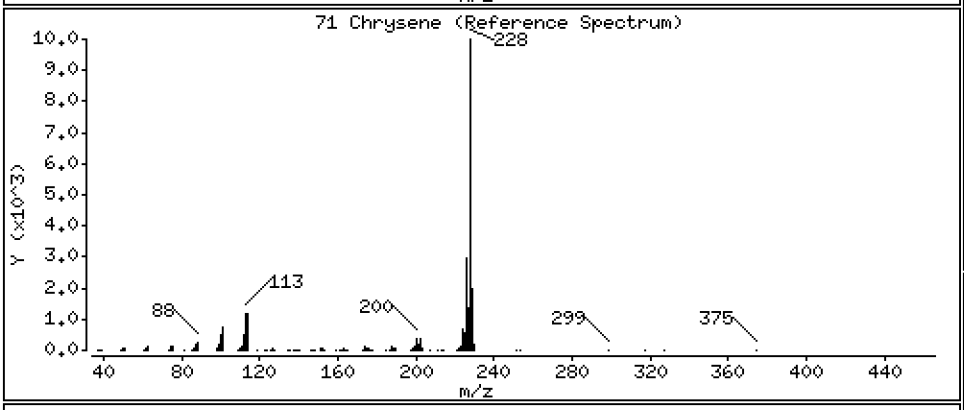
Column diameter: 0.25

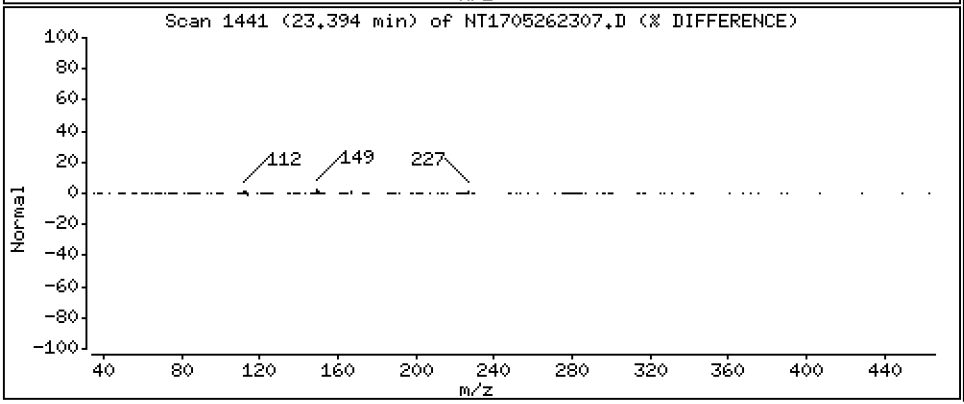
71 Chrysene

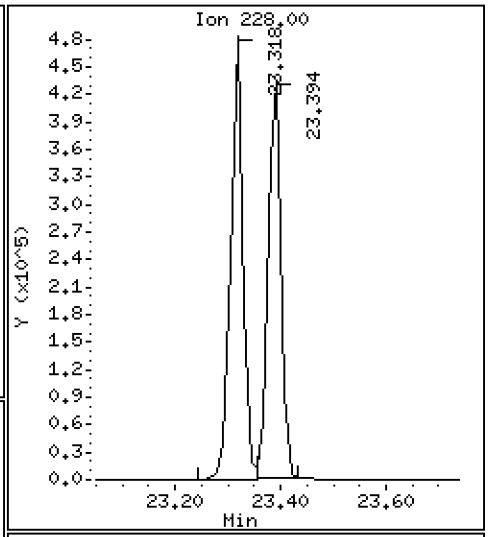
Concentration: 4.174 ug/mL

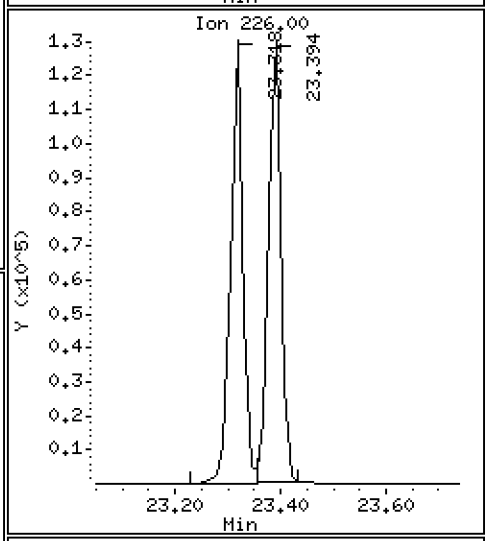


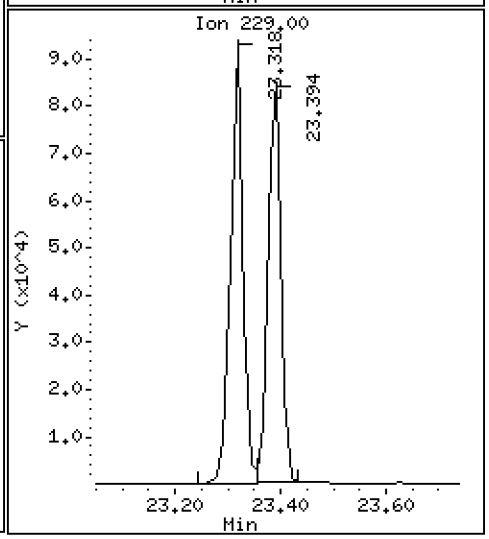












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

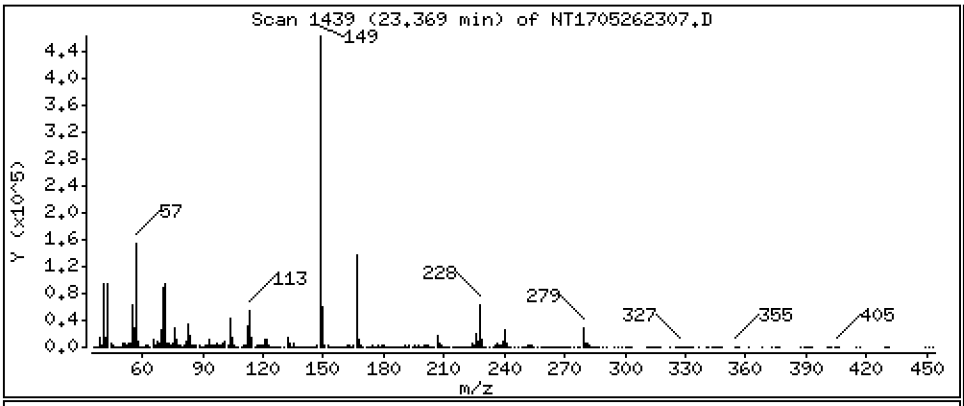
Operator: VTS

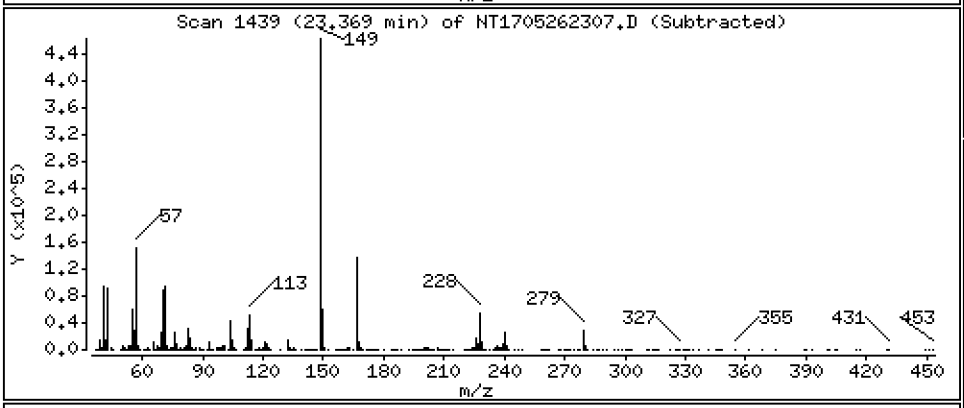
Column phase: ZB-5msi

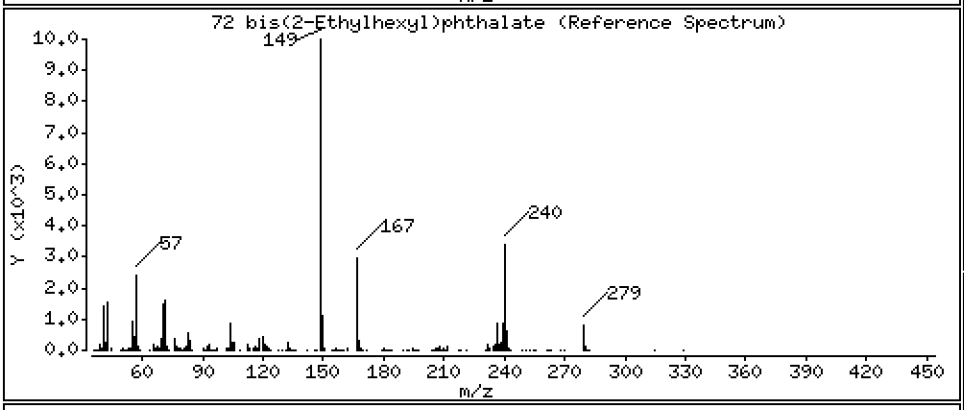
Column diameter: 0.25

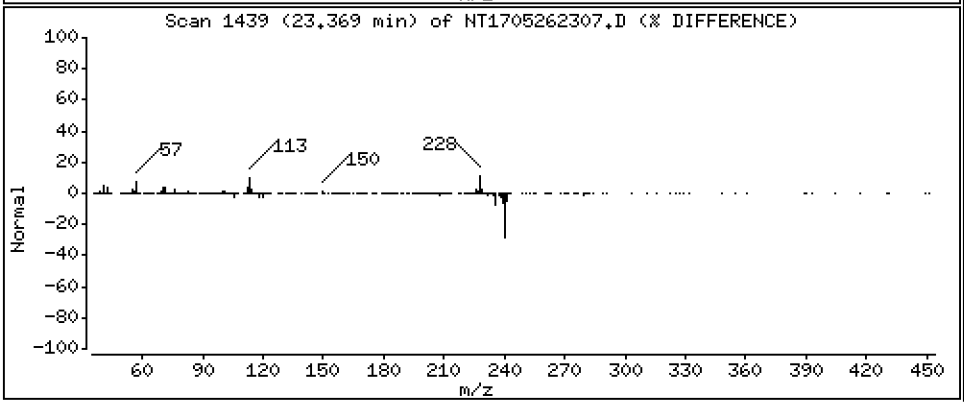
72 bis(2-Ethylhexyl)phthalate

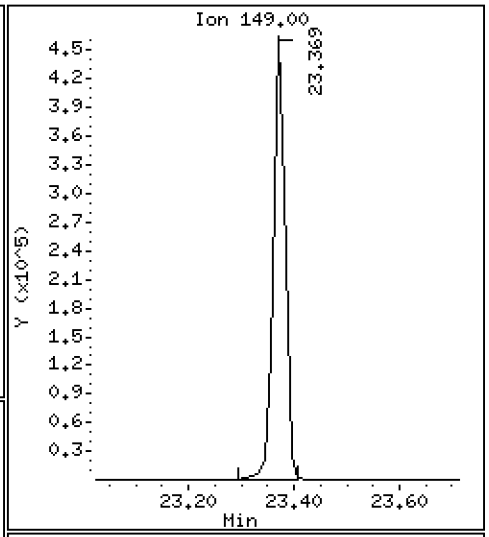
Concentration: 4.718 ug/mL

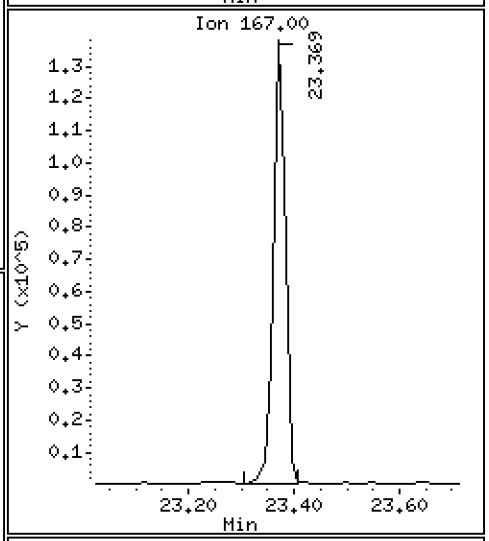


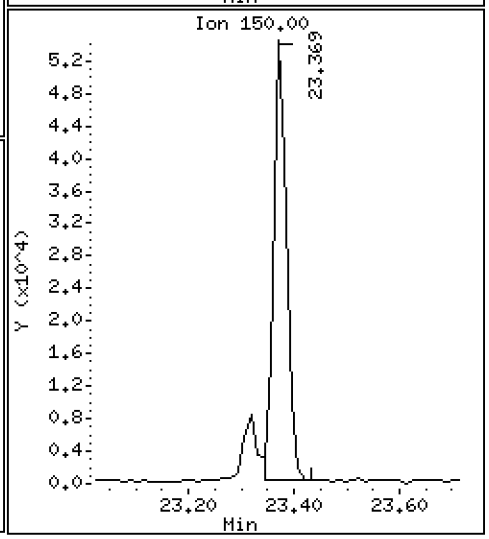












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

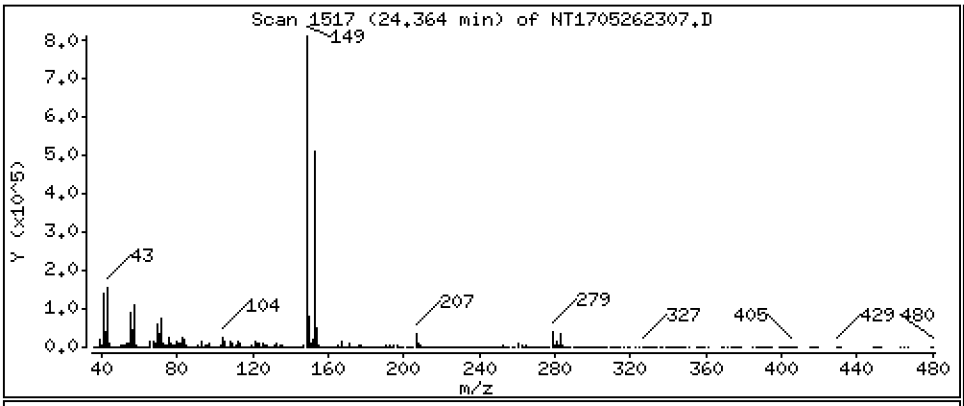
Operator: VTS

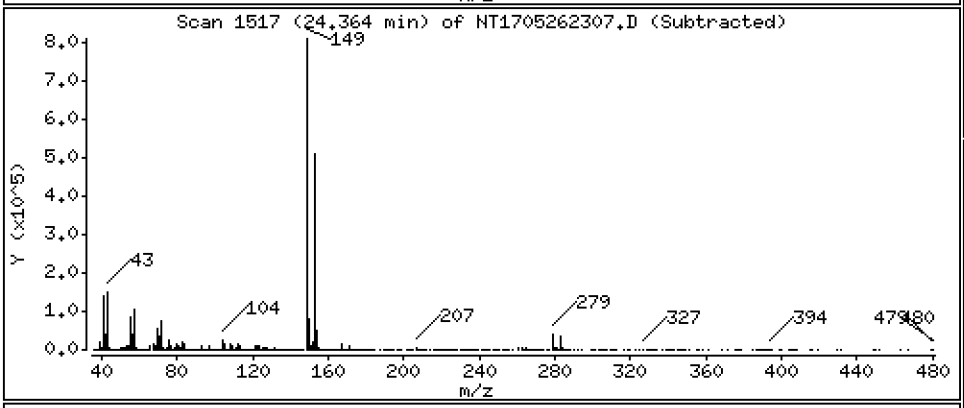
Column phase: ZB-5msi

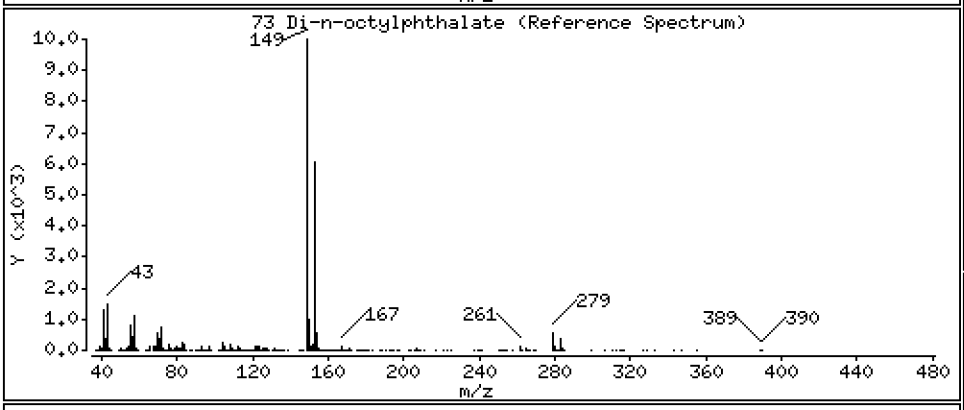
Column diameter: 0.25

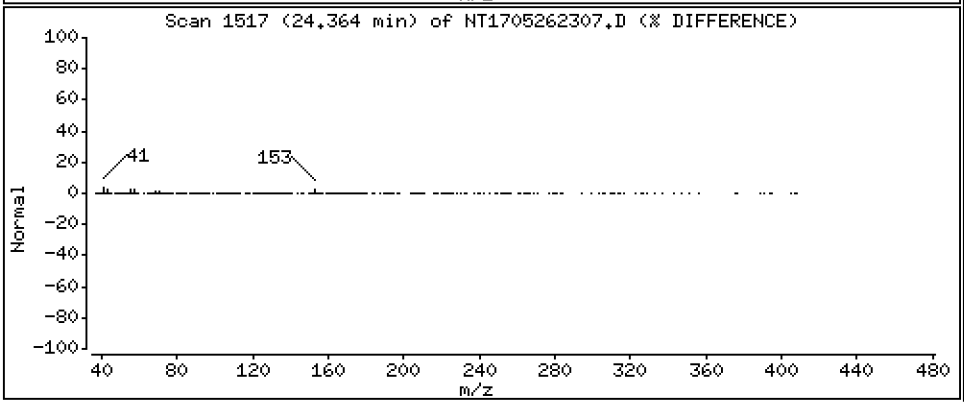
73 Di-n-octylphthalate

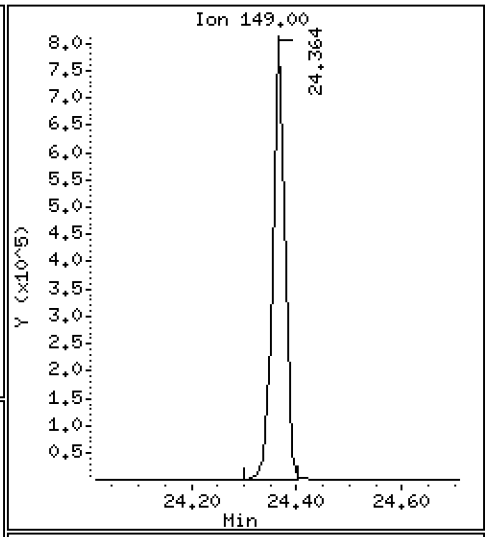
Concentration: 4.707 ug/mL

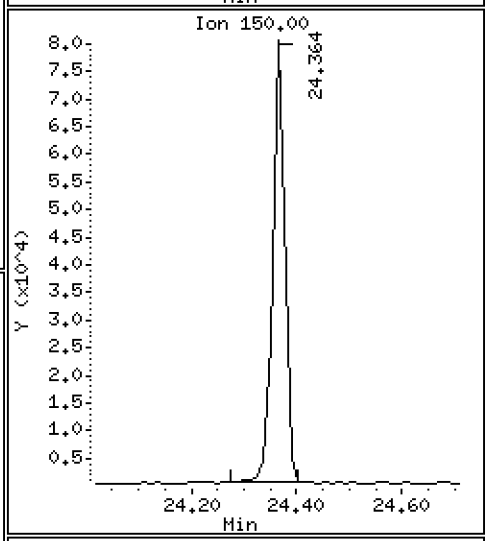


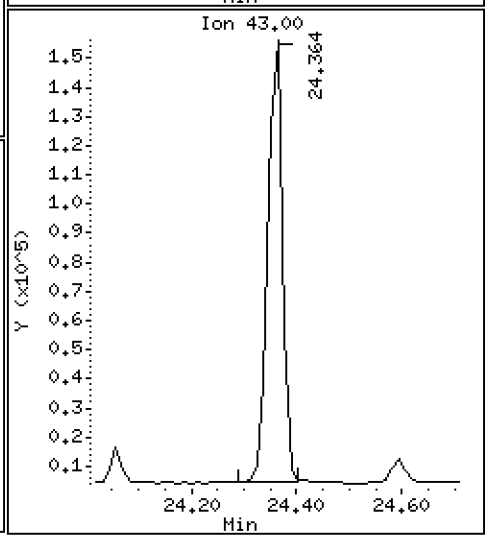












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

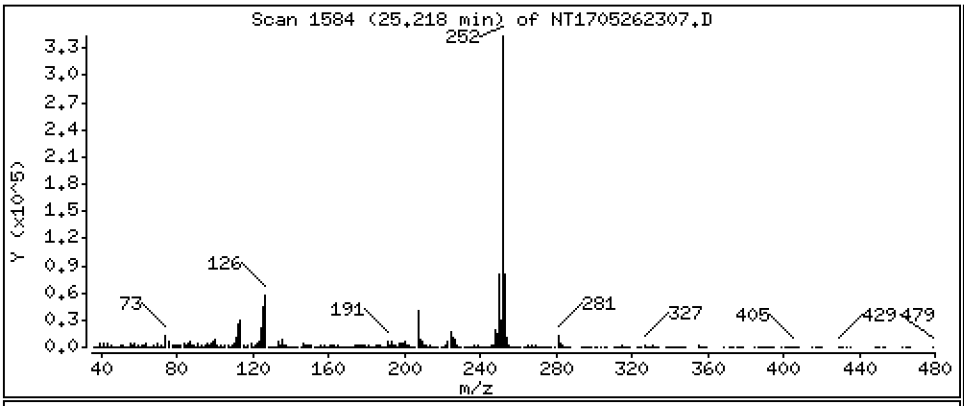
Operator: VTS

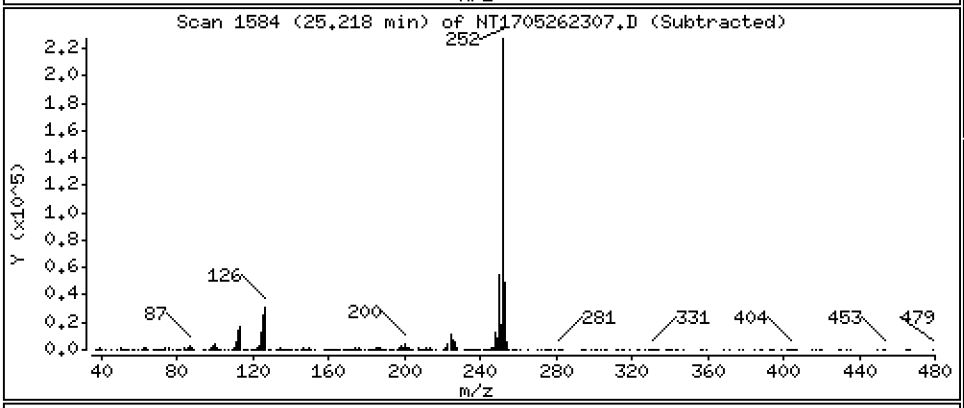
Column phase: ZB-5msi

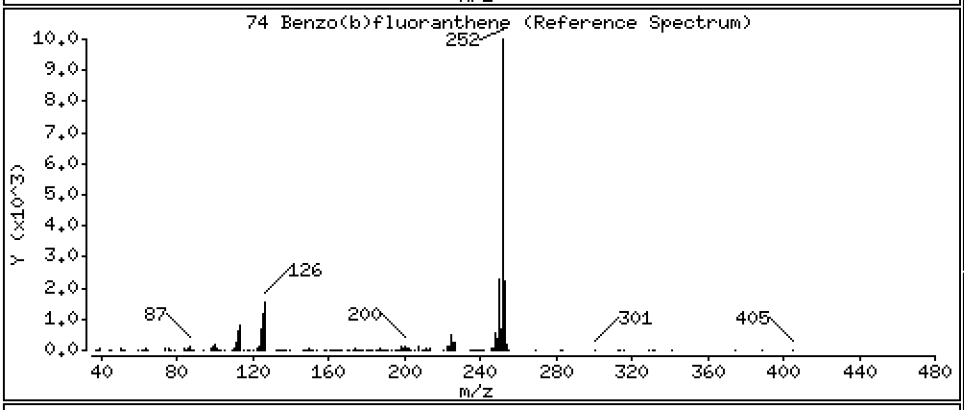
Column diameter: 0.25

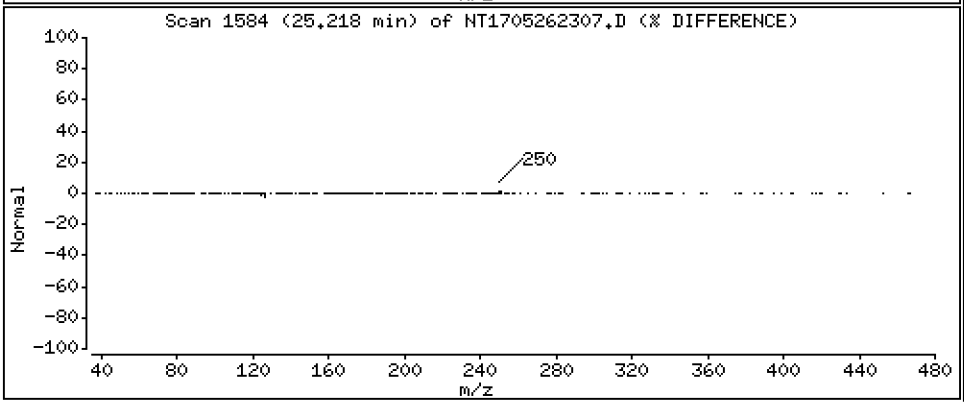
74 Benzo(b)fluoranthene

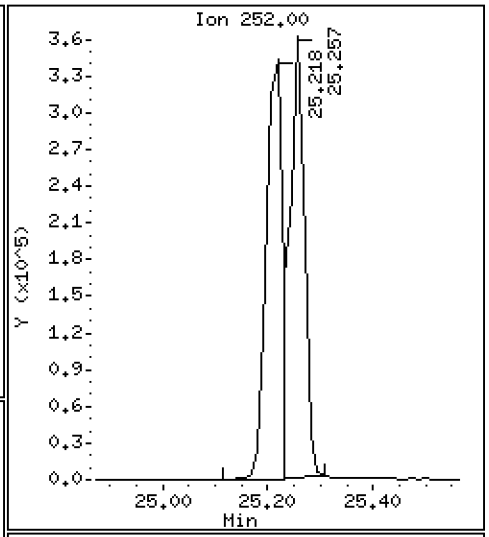
Concentration: 4.414 ug/mL

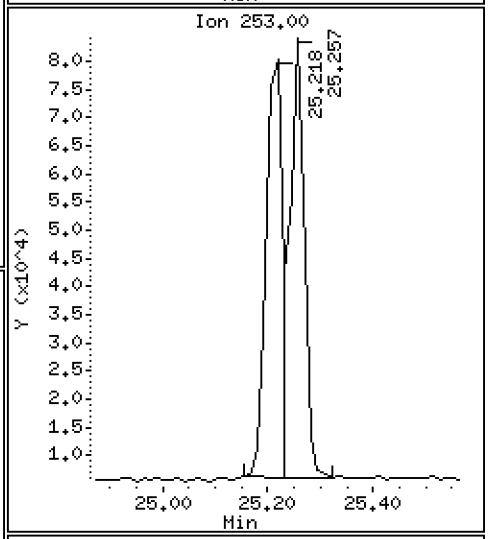


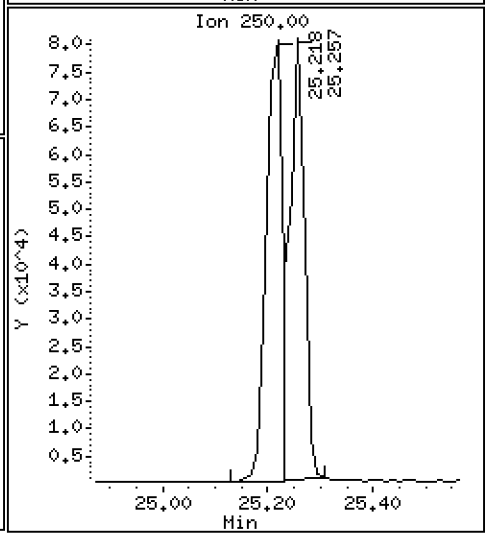












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

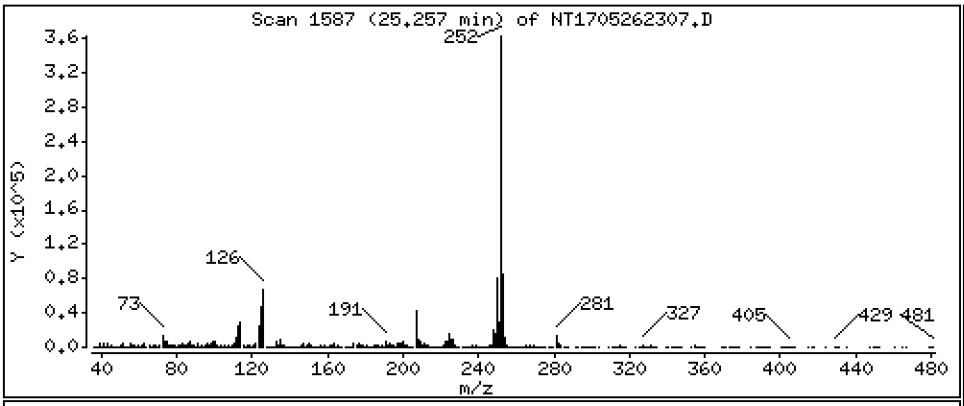
Operator: VTS

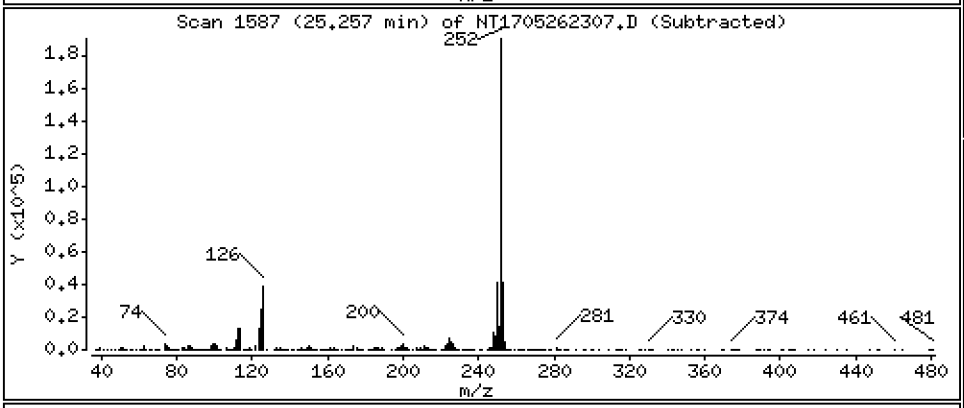
Column phase: ZB-5msi

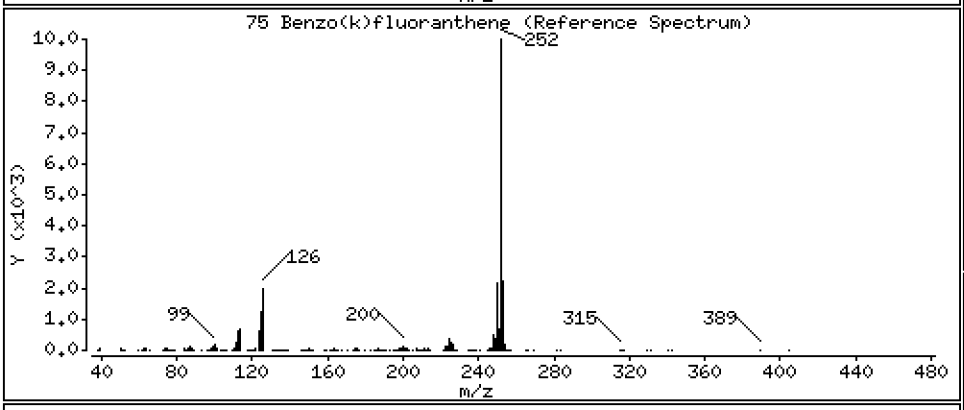
Column diameter: 0.25

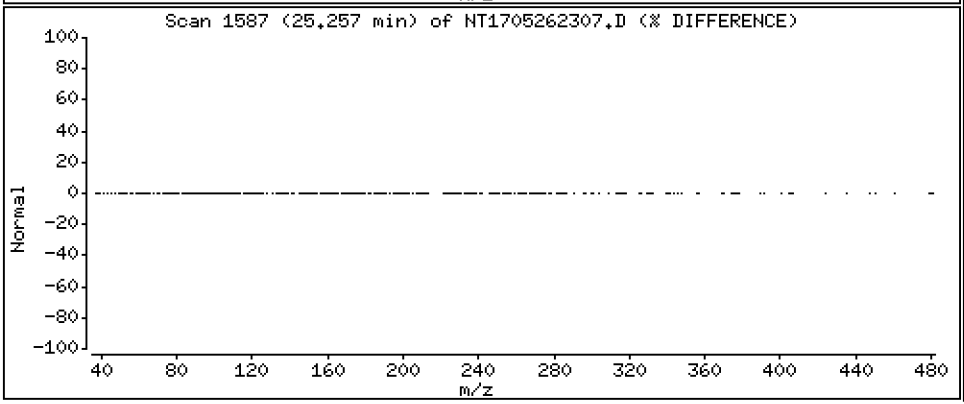
75 Benzo(k)fluoranthene

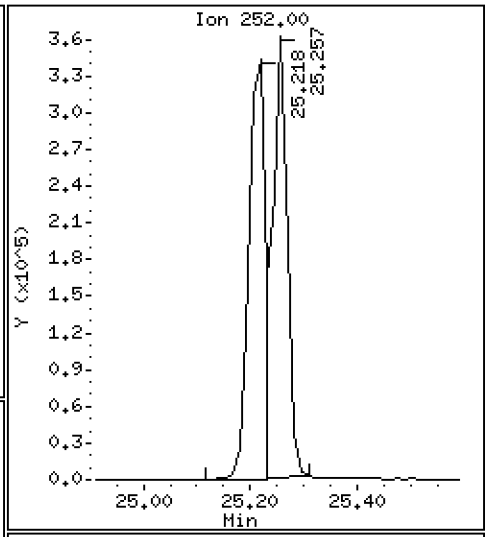
Concentration: 4.732 ug/mL

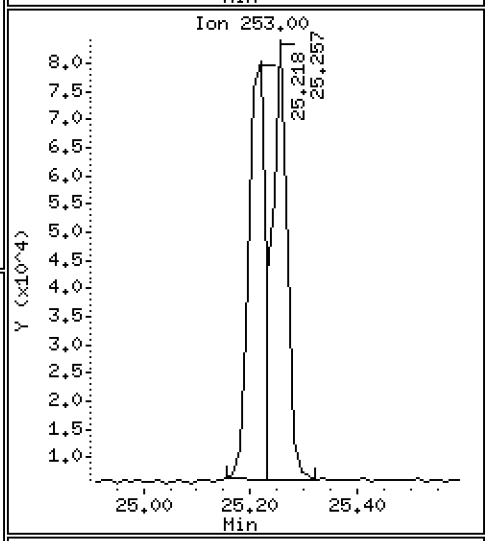


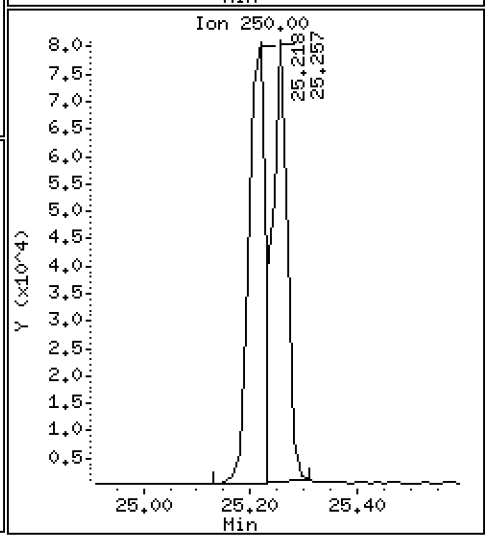












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

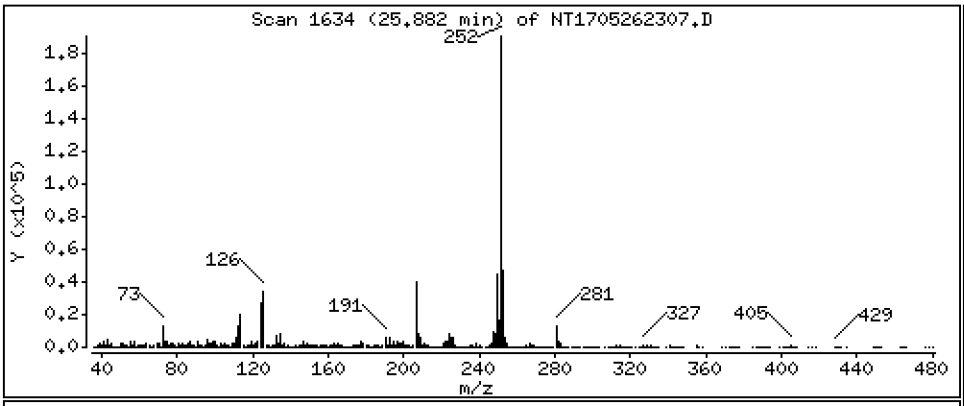
Operator: VTS

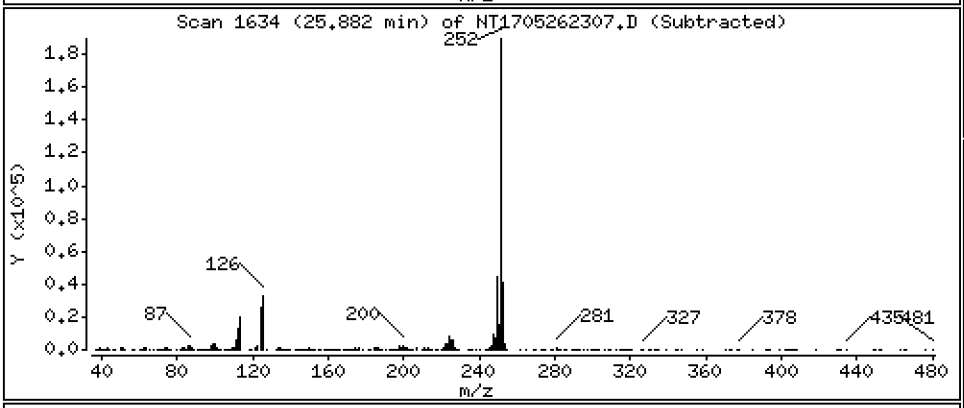
Column phase: ZB-5msi

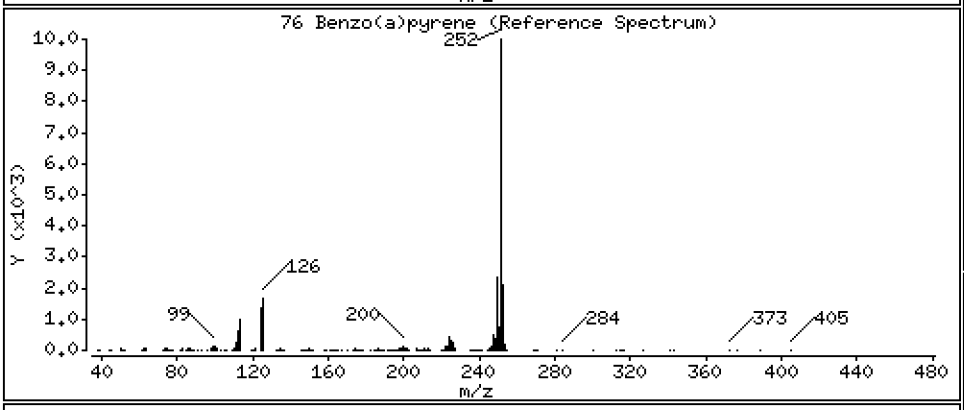
Column diameter: 0.25

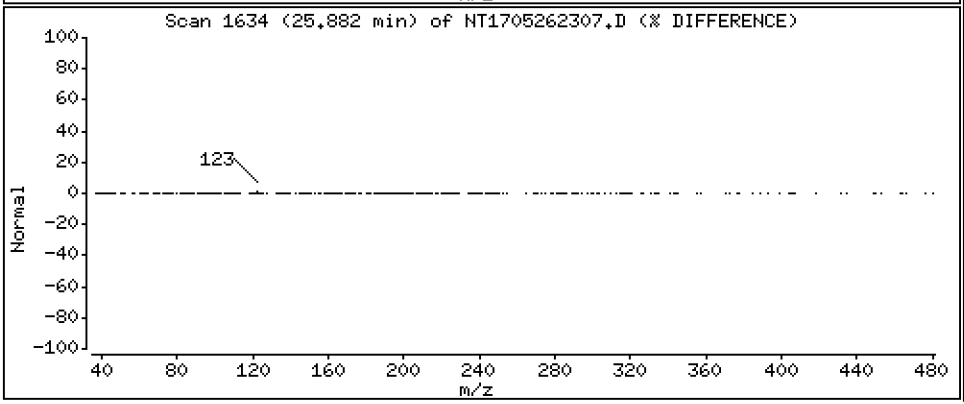
76 Benzo(a)pyrene

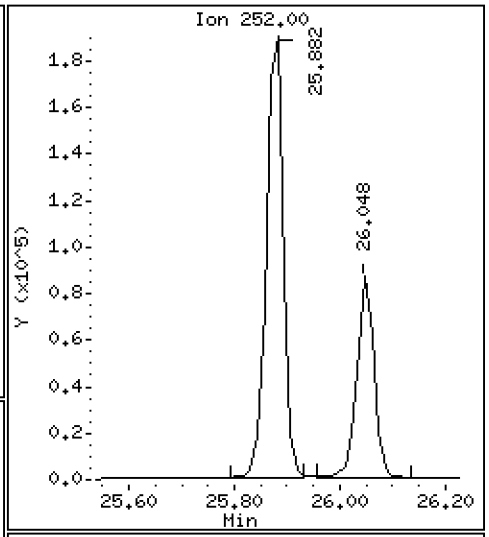
Concentration: 3.284 ug/mL

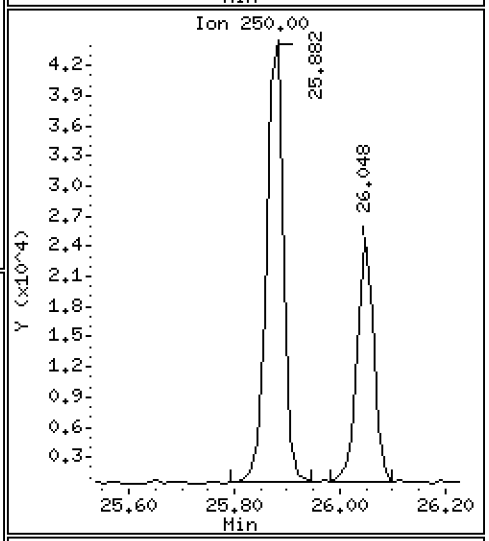


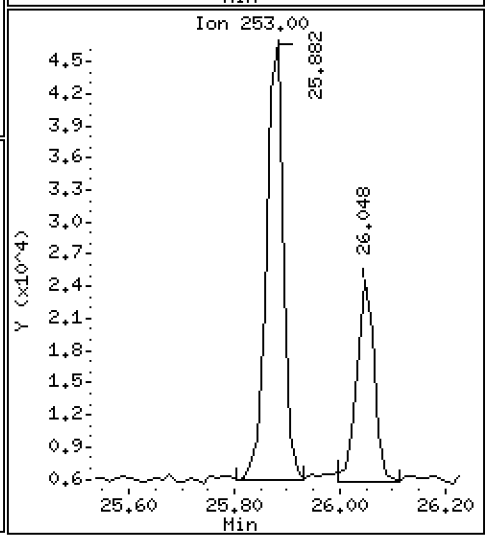












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

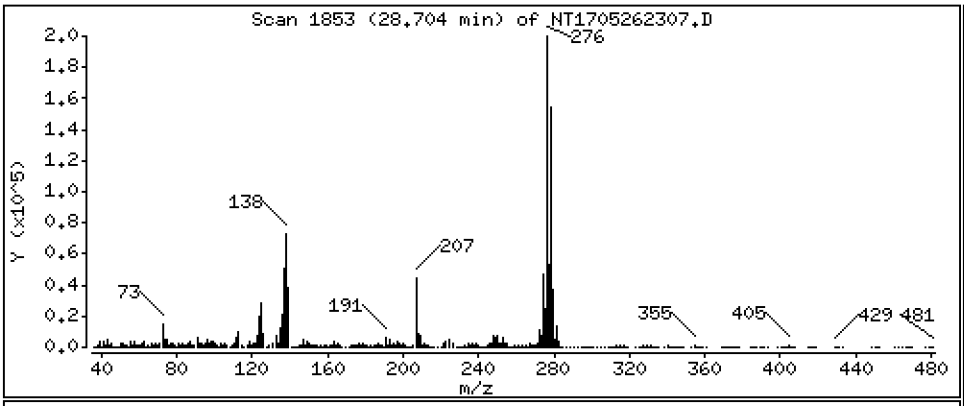
Operator: VTS

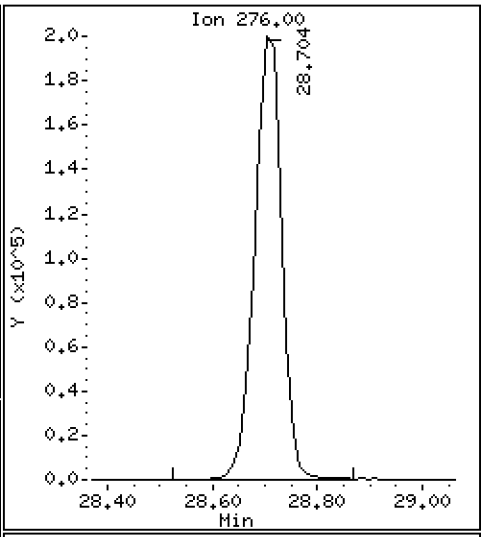
Column phase: ZB-5msi

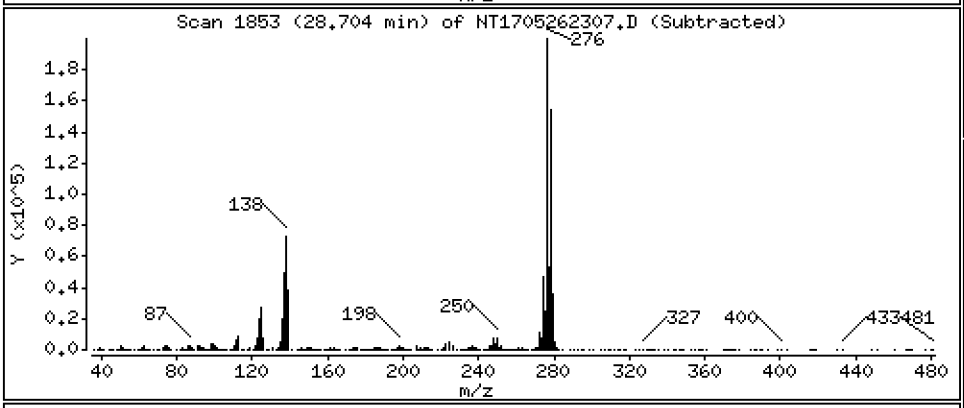
Column diameter: 0.25

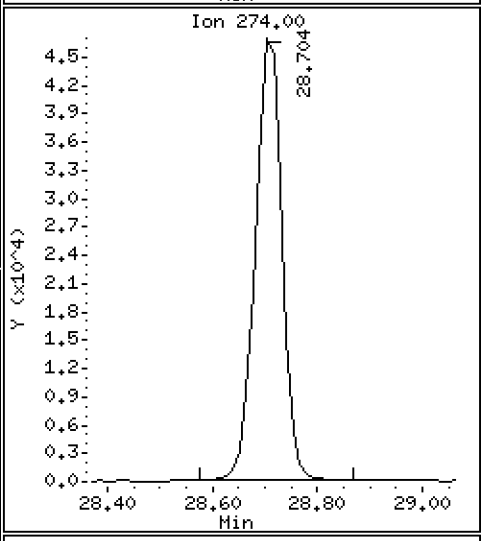
78 Indeno(1,2,3-cd)pyrene

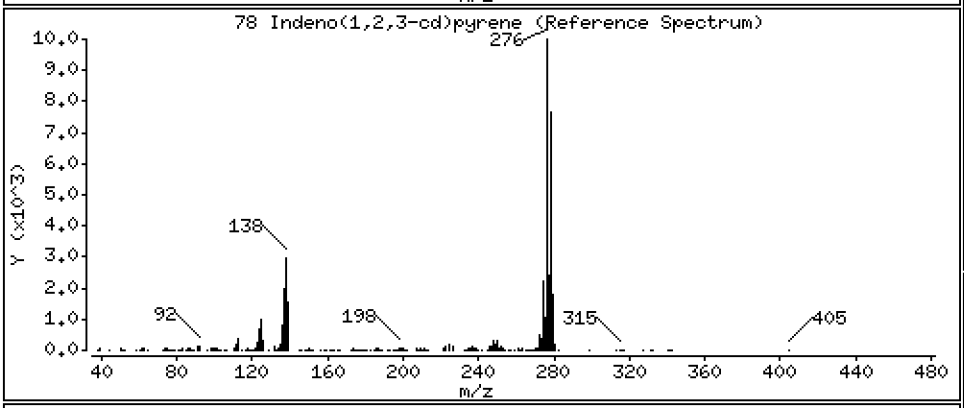
Concentration: 4.669 ug/mL

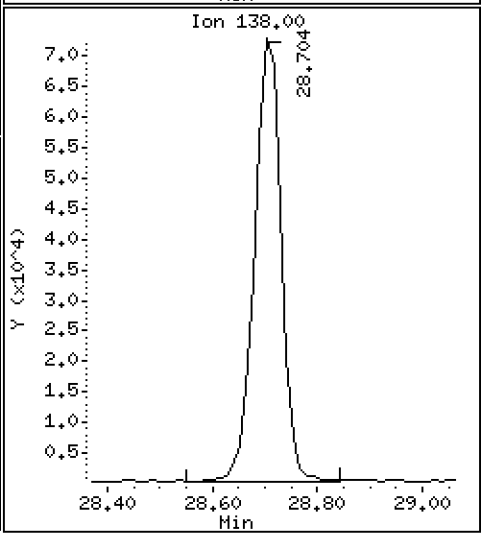


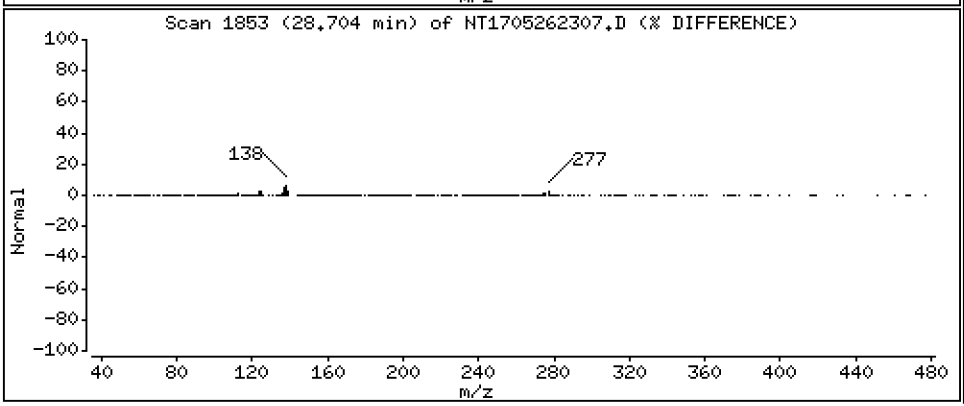












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

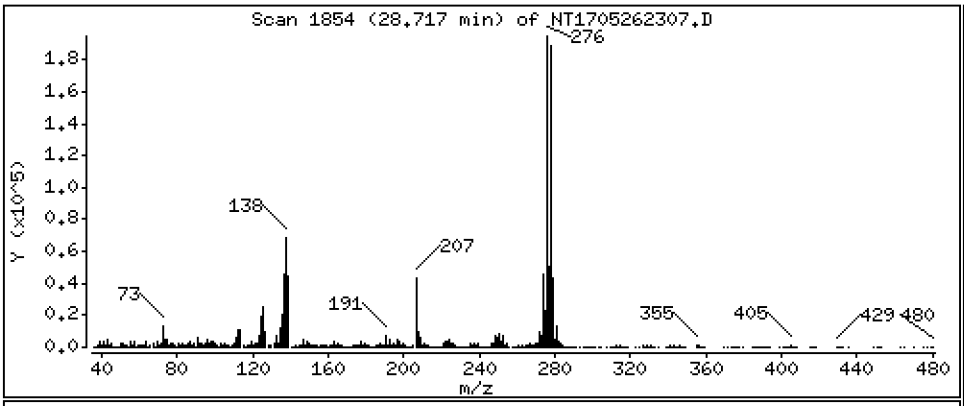
Operator: VTS

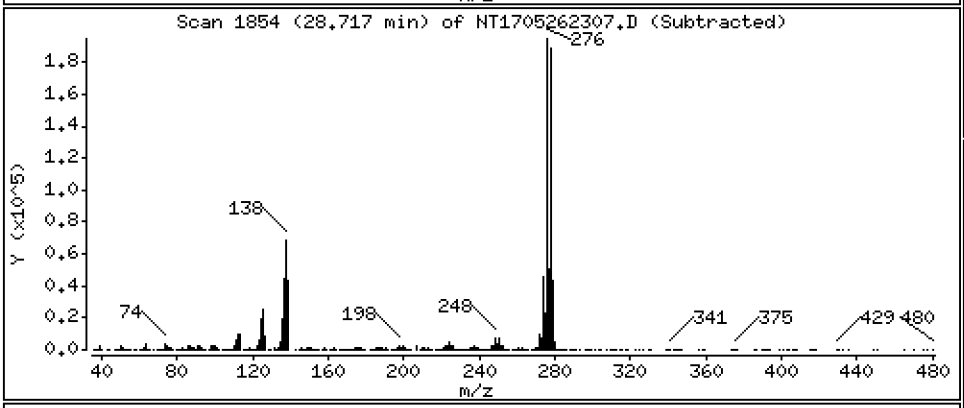
Column phase: ZB-5msi

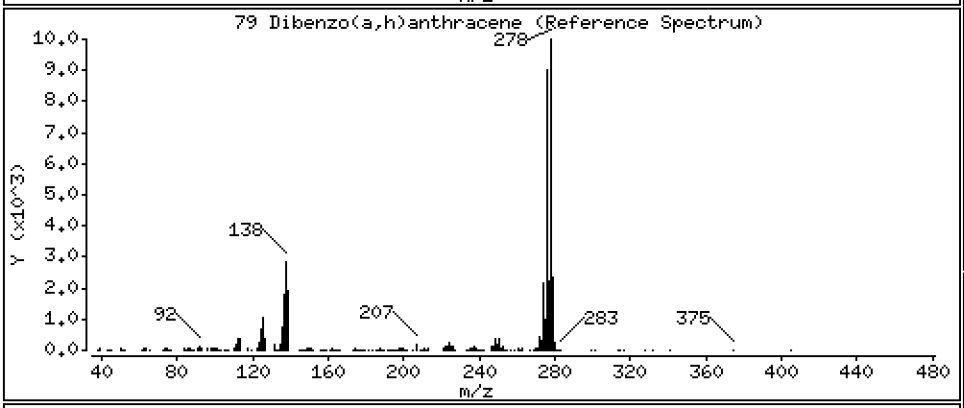
Column diameter: 0.25

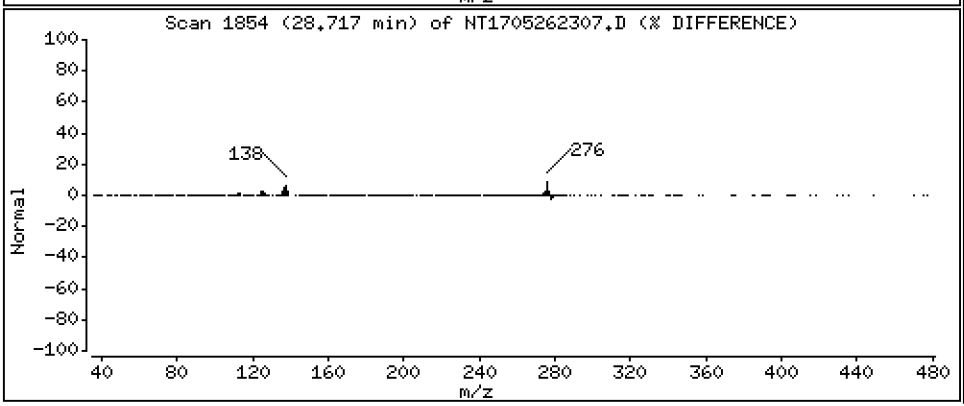
79 Dibenzo(a,h)anthracene

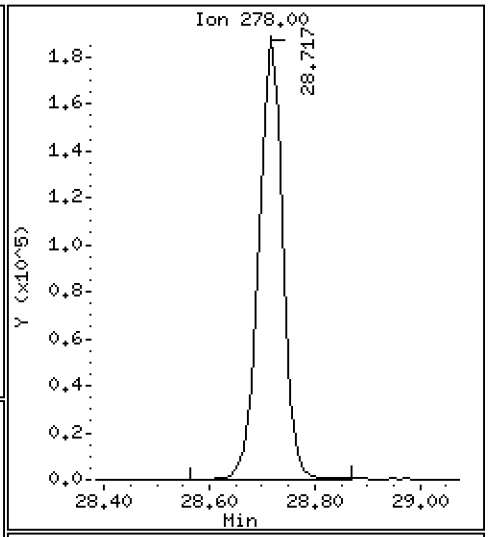
Concentration: 4.709 ug/mL

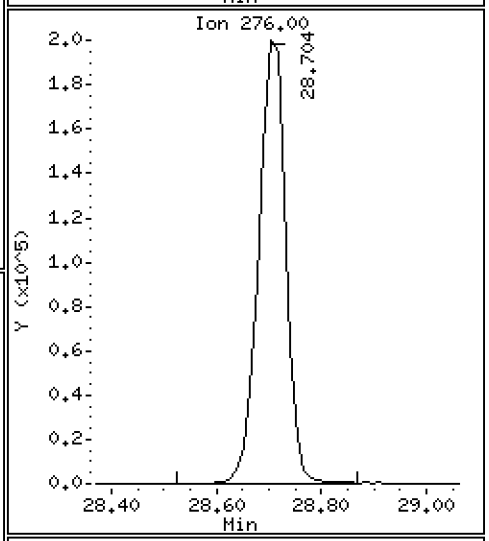


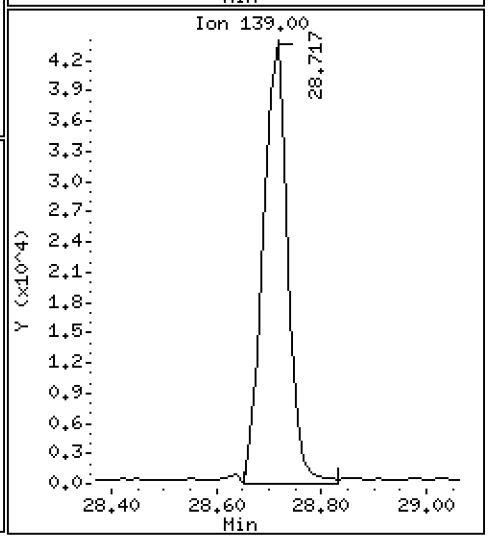












Date : 26-MAY-2023 16:25

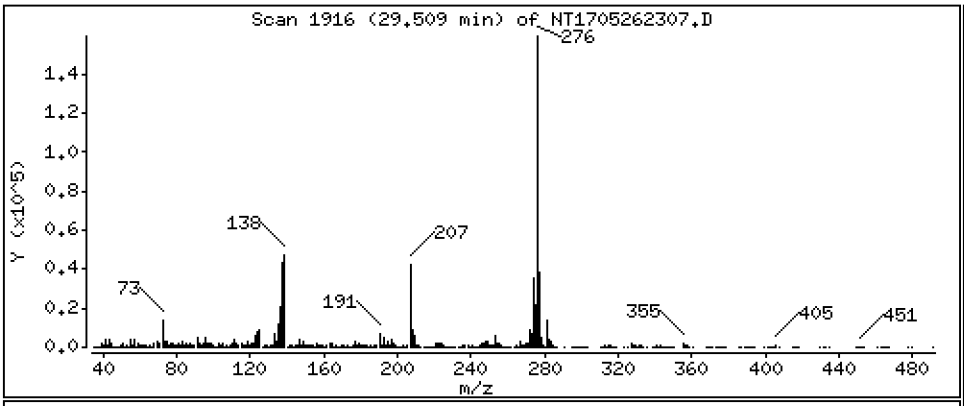
Client ID: Instrument: nt17.i

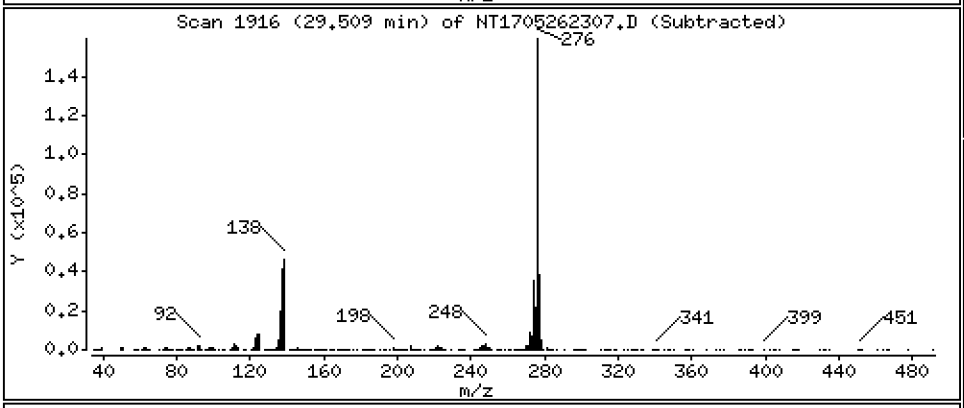
Sample Info: BLD0607-BS1

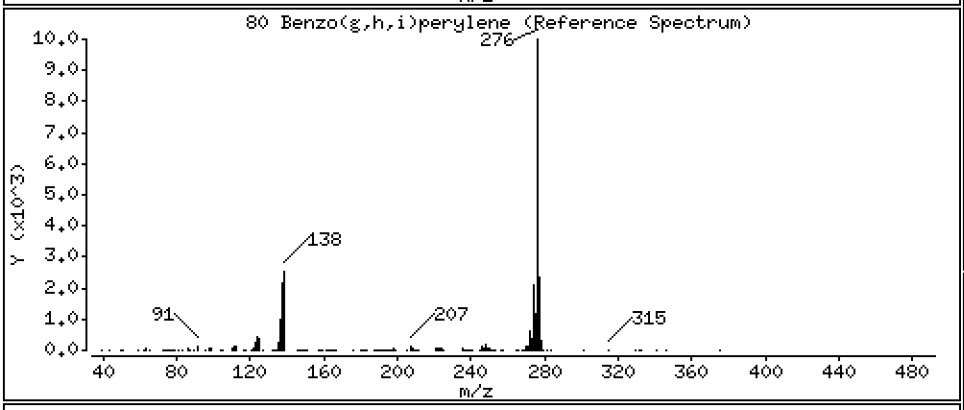
Operator: VTS

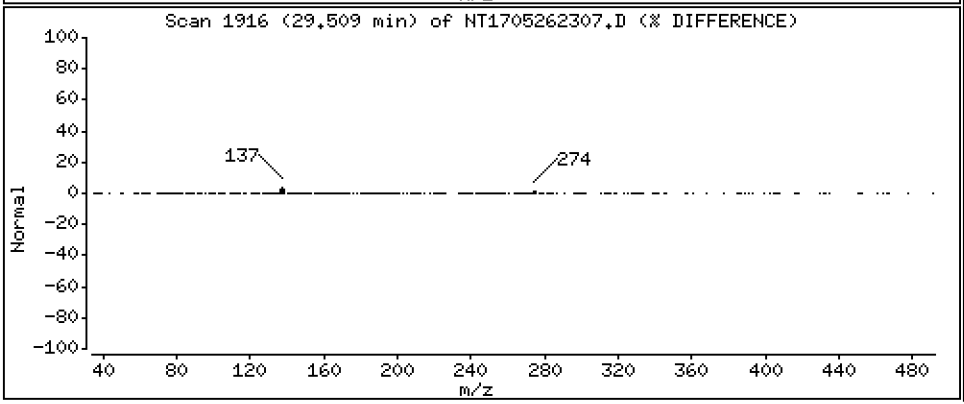
Column phase: ZB-5msi Column diameter: 0.25

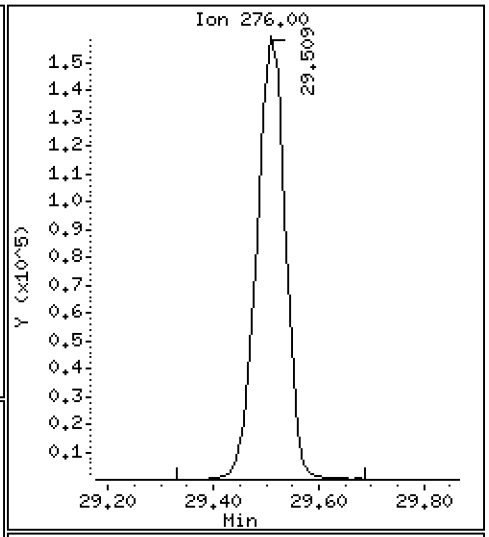
80 Benzo(g,h,i)perylene Concentration: 4.695 ug/mL

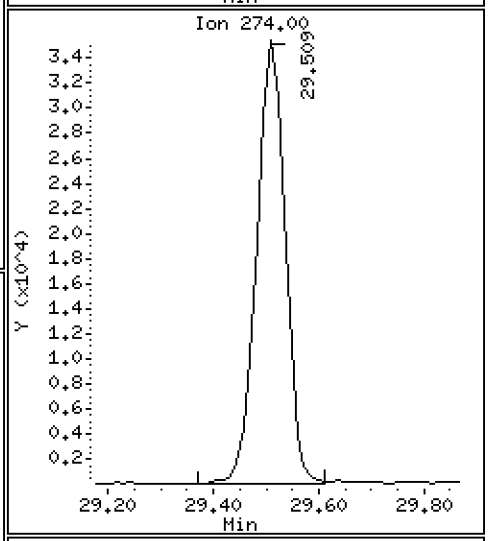


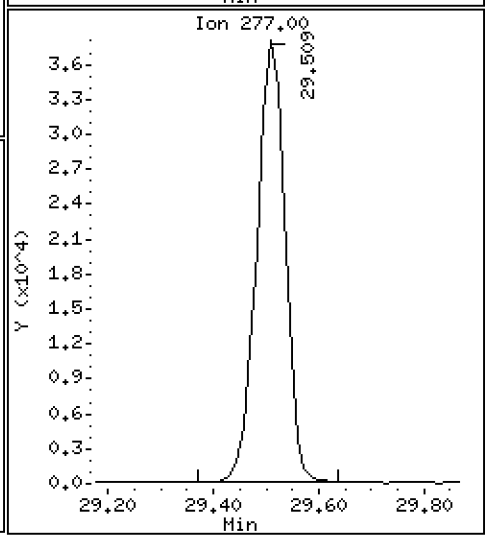












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

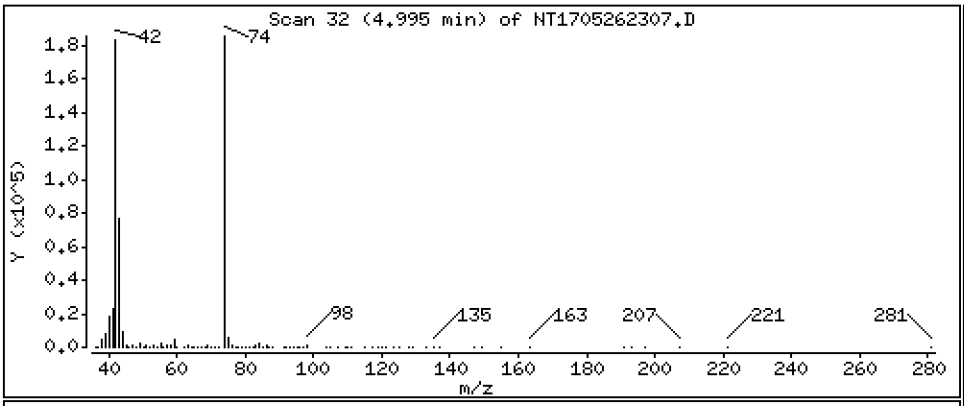
Operator: VTS

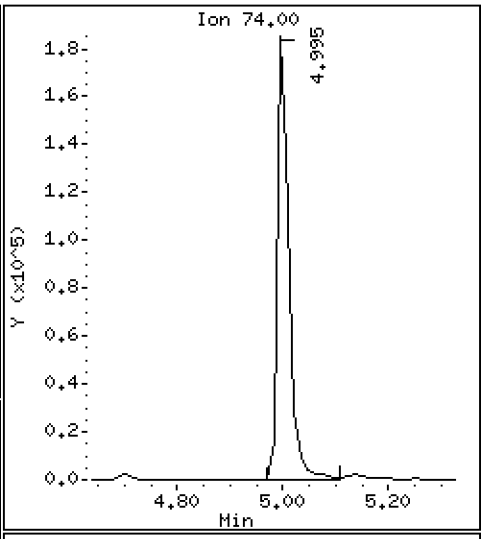
Column phase: ZB-5msi

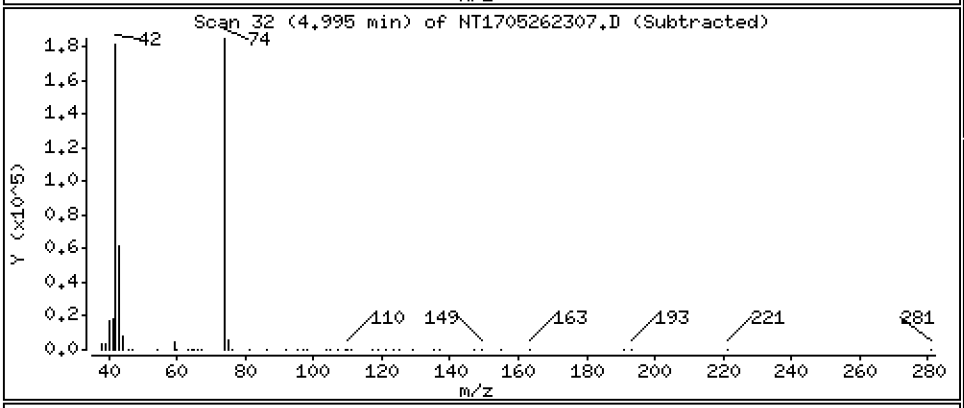
Column diameter: 0.25

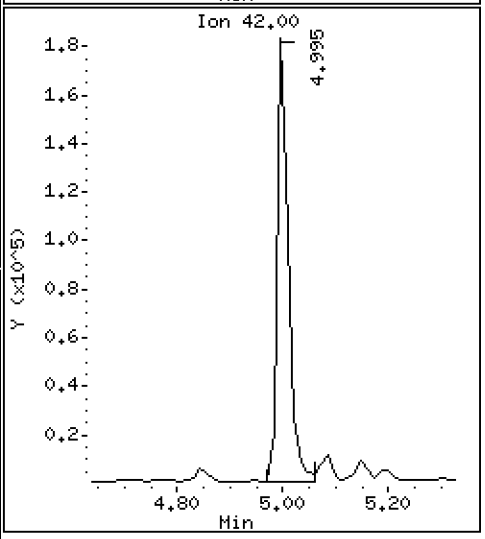
90 N-Nitrosodimethylamine

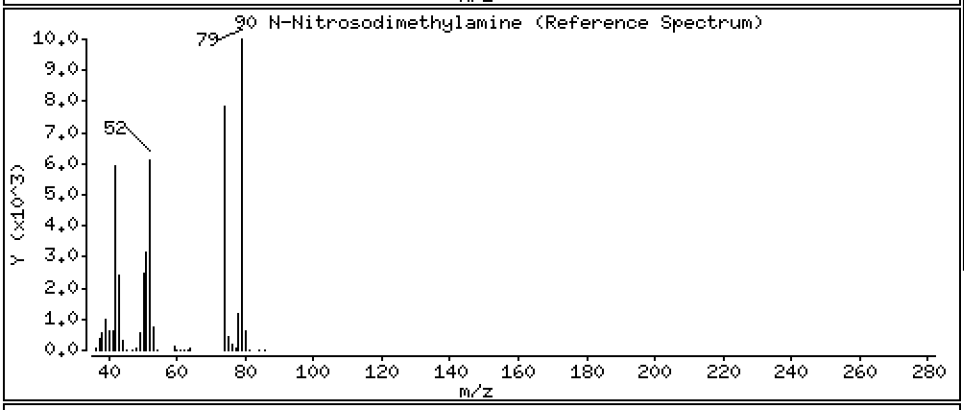
Concentration: 5.022 ug/mL

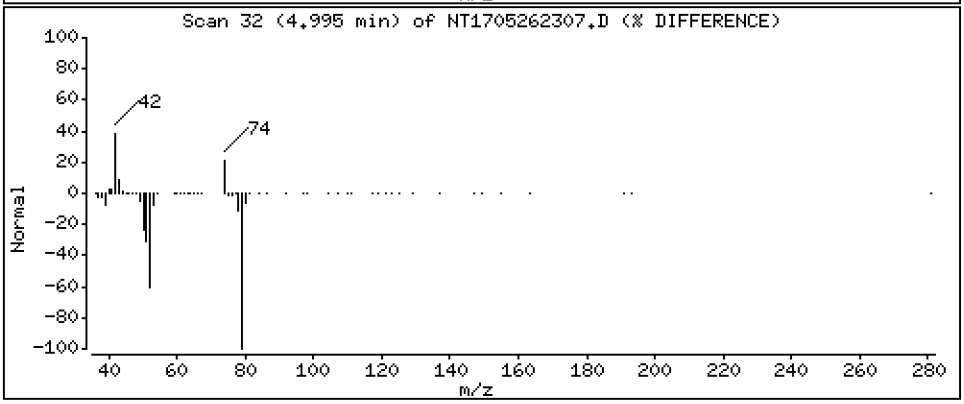












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

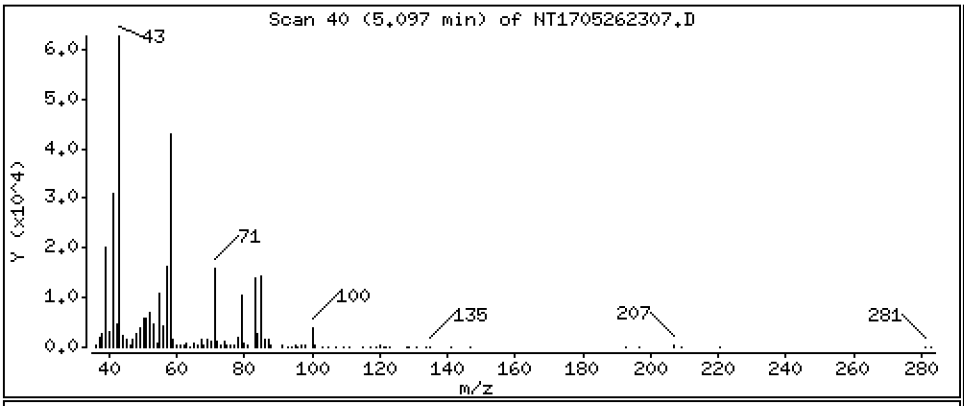
Operator: VTS

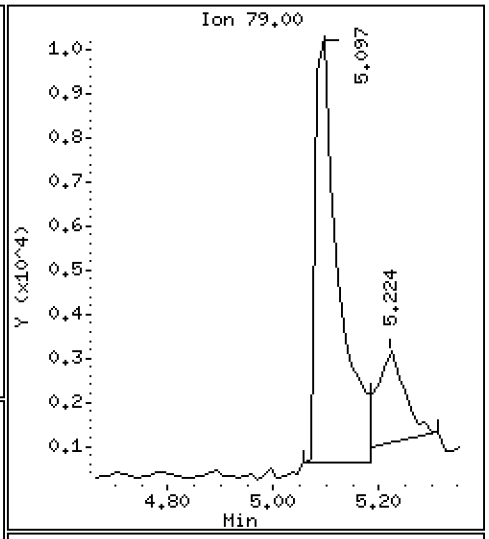
Column phase: ZB-5msi

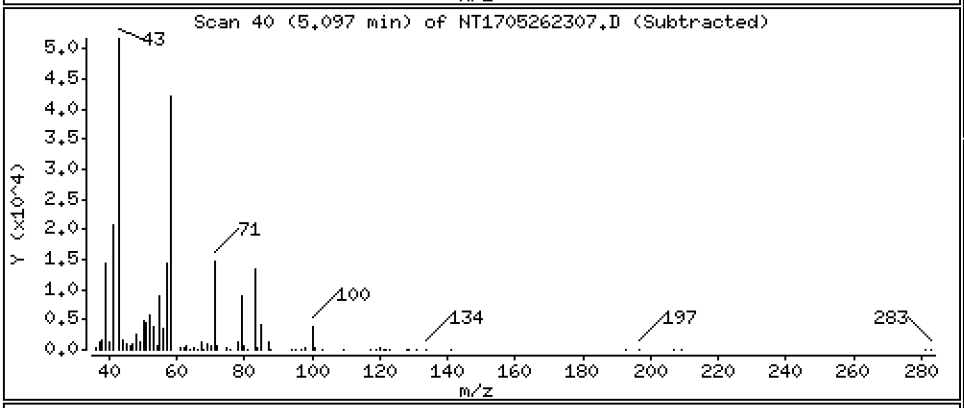
Column diameter: 0.25

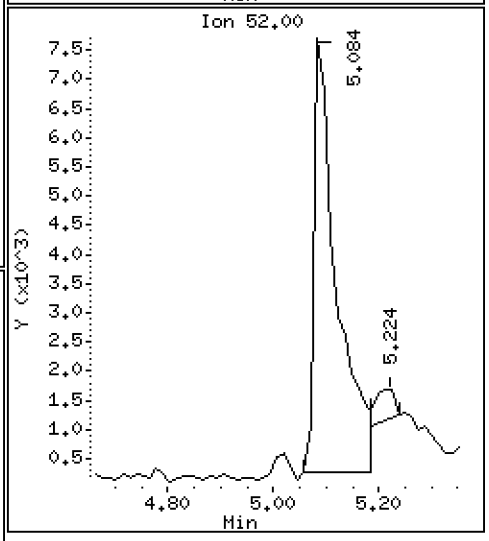
103 Pyridine

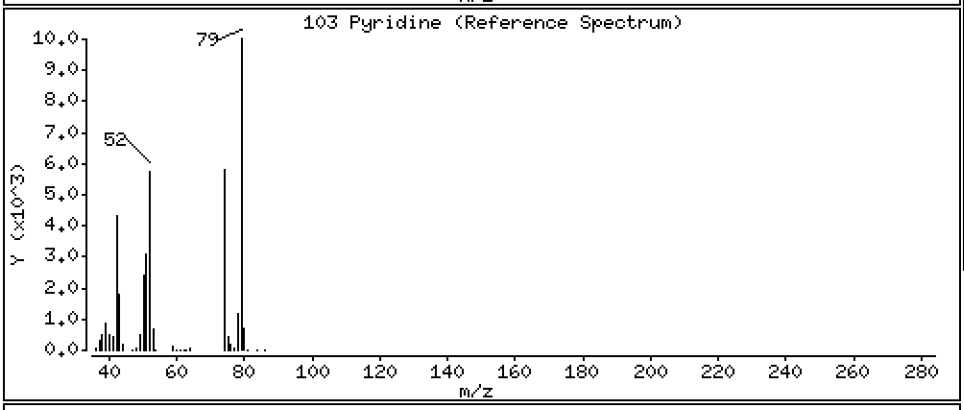
Concentration: 0.3212 ug/mL

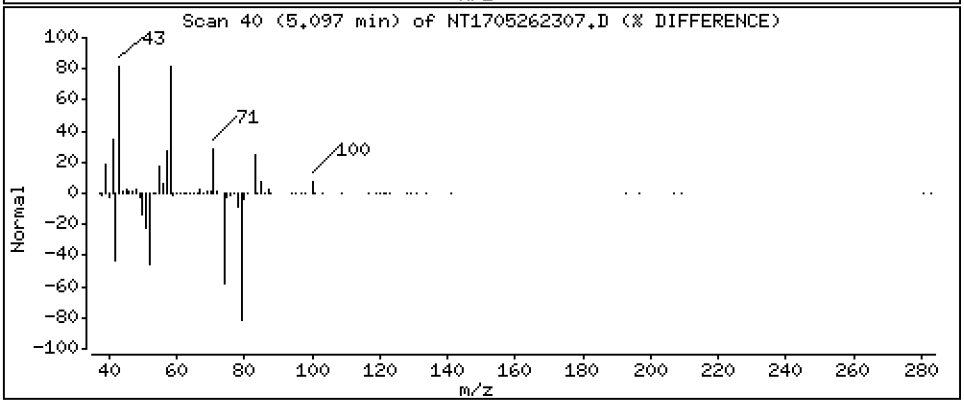












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

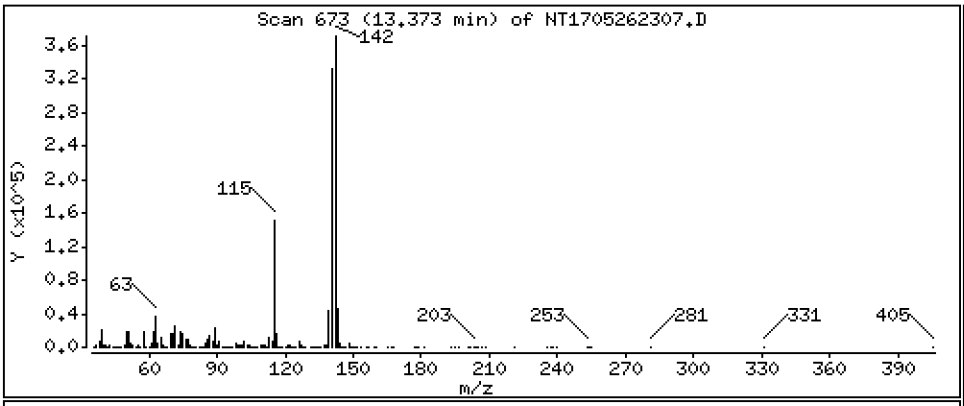
Operator: VTS

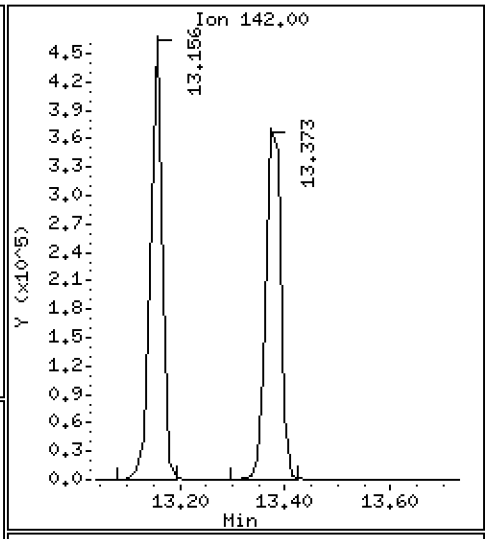
Column phase: ZB-5msi

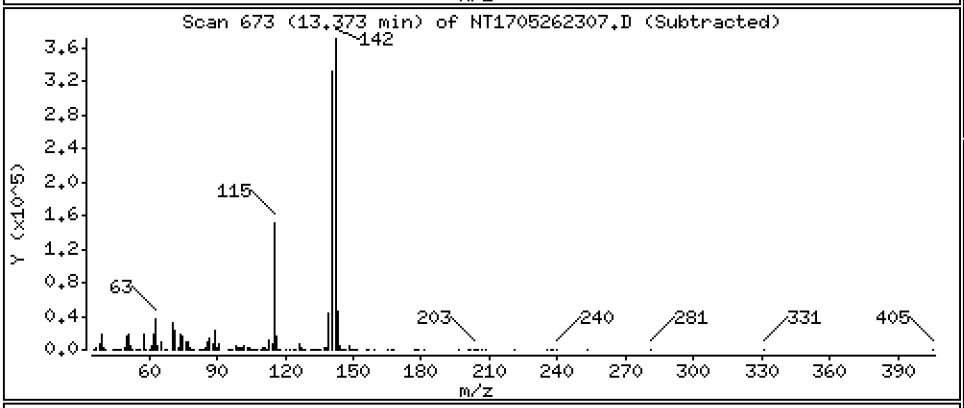
Column diameter: 0.25

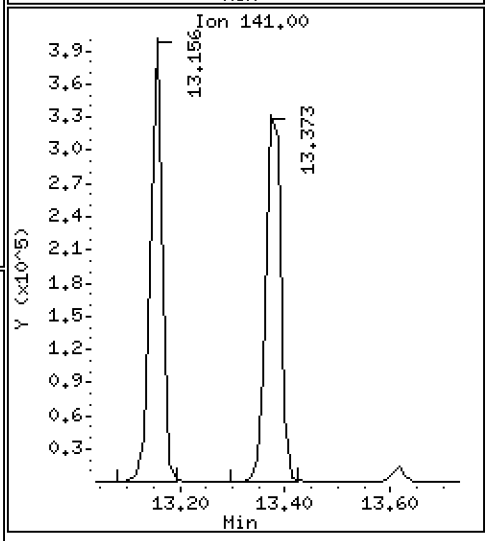
105 1-methylnaphthalene

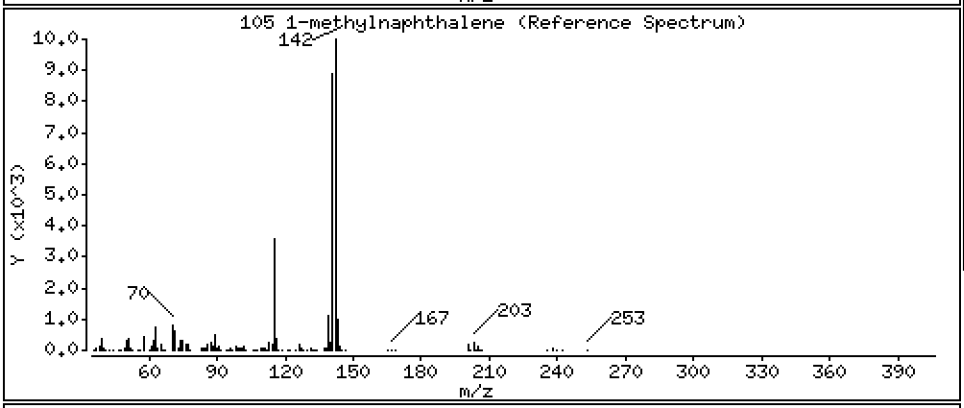
Concentration: 3.972 ug/mL

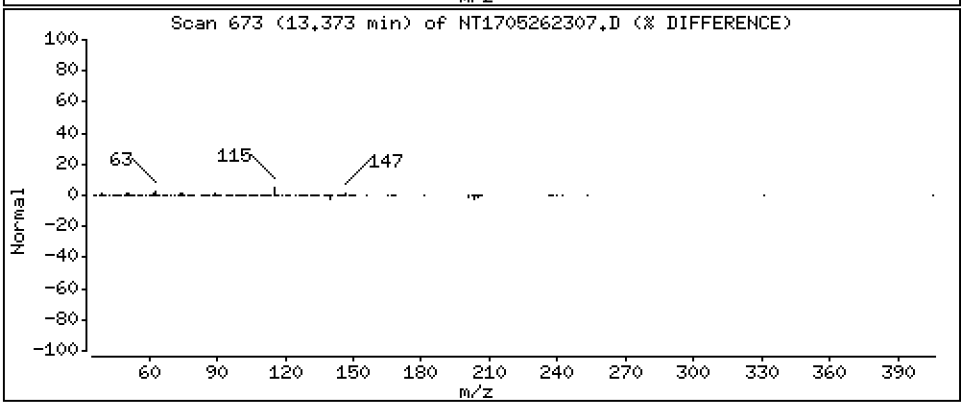












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

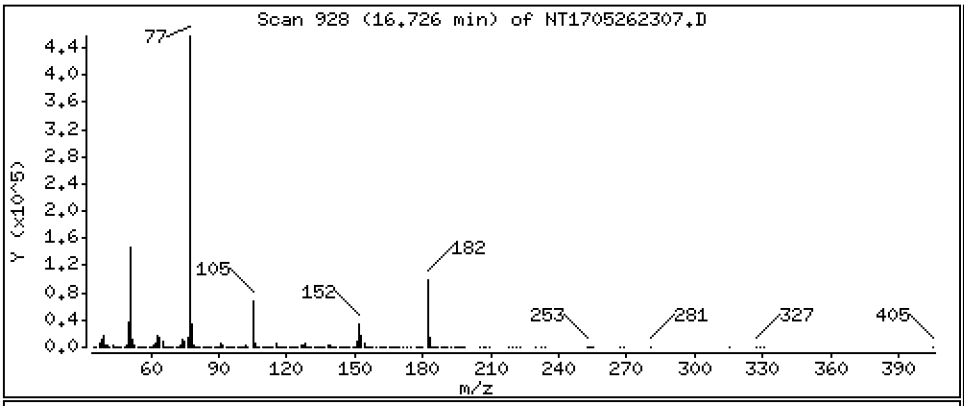
Operator: VTS

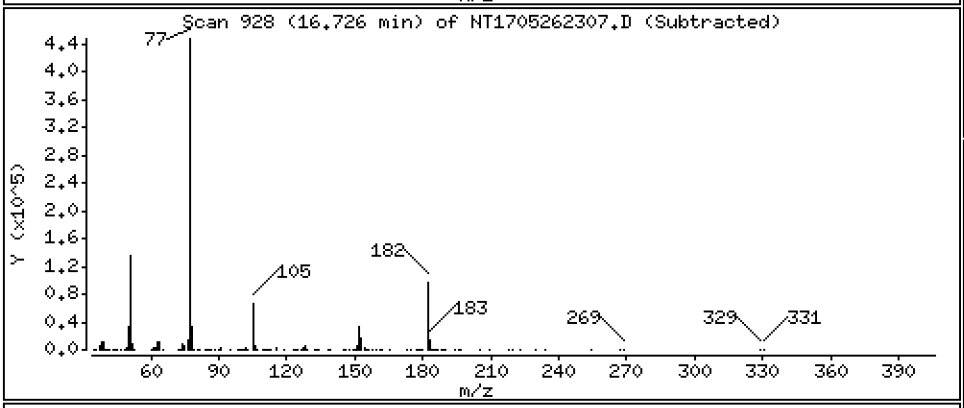
Column phase: ZB-5msi

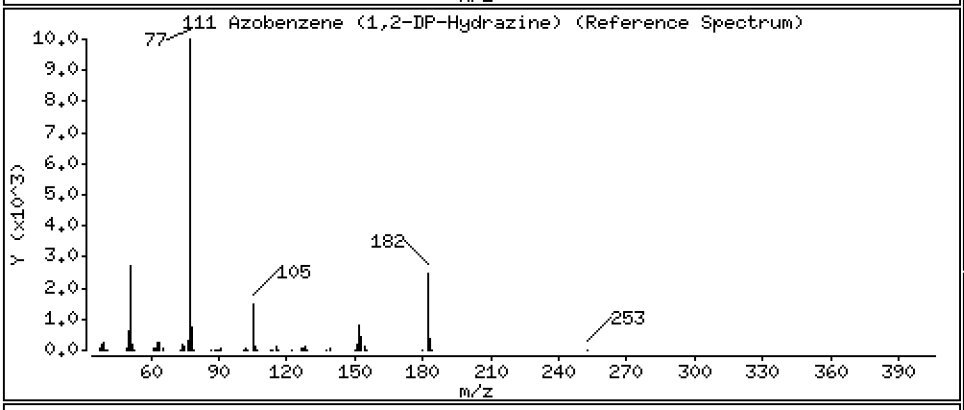
Column diameter: 0.25

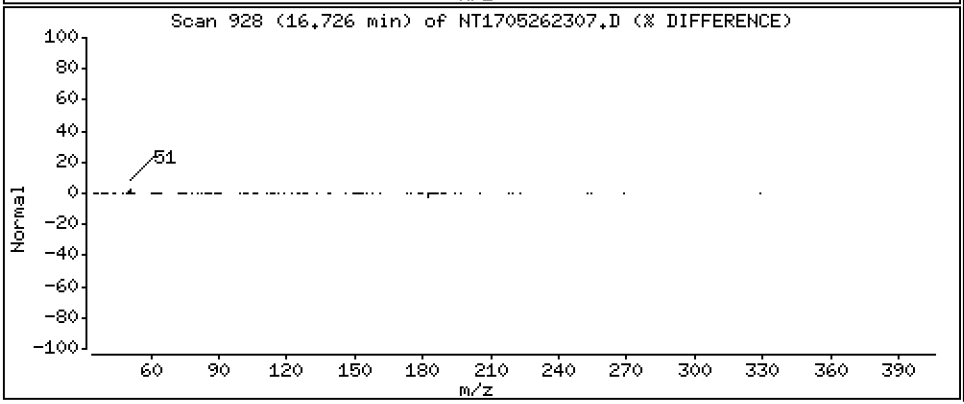
111 Azobenzene (1,2-DP-Hydrazine)

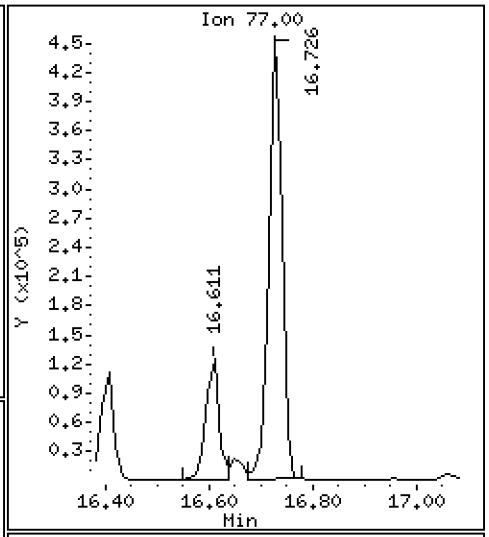
Concentration: 4.011 ug/mL

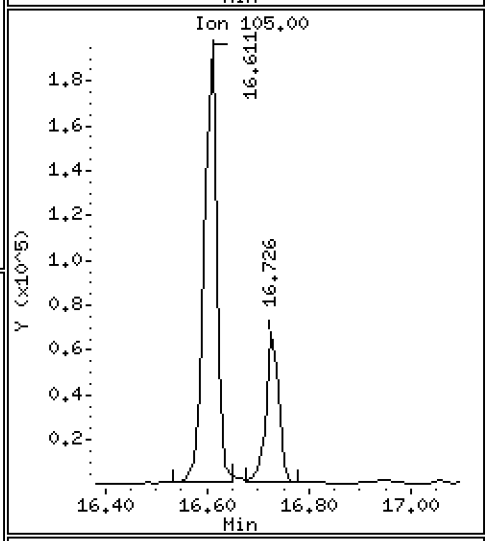


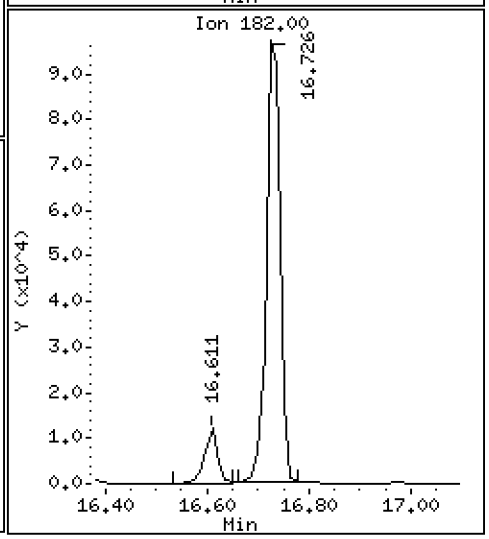












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

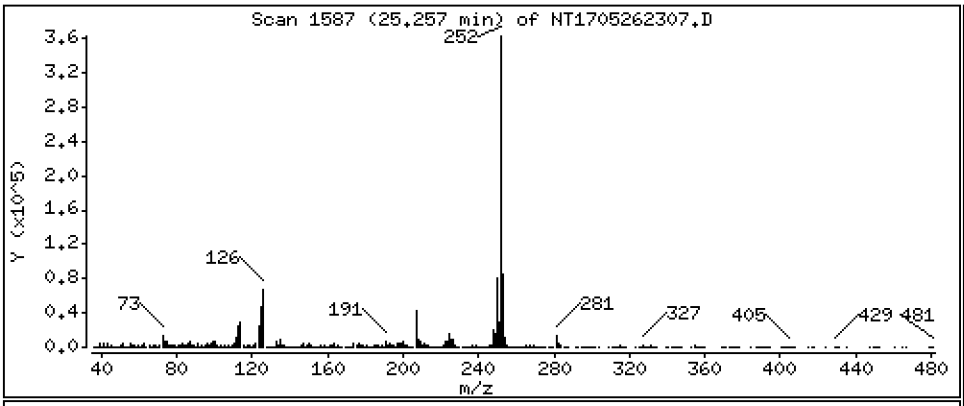
Operator: VTS

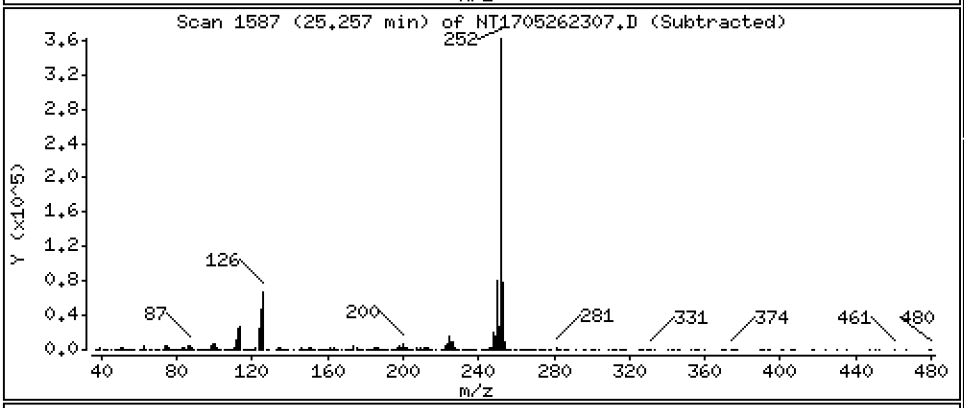
Column phase: ZB-5msi

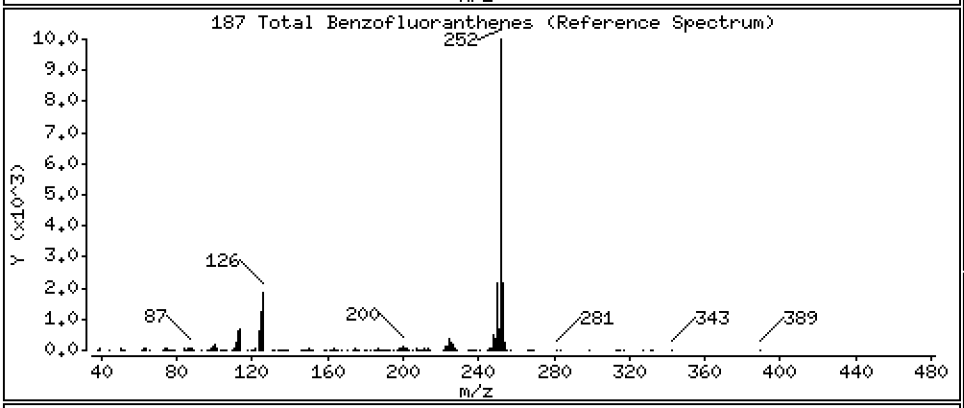
Column diameter: 0.25

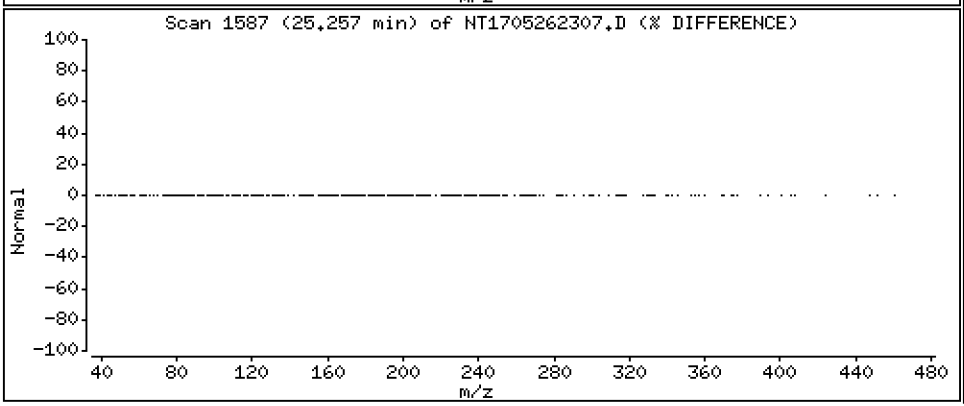
187 Total Benzofluoranthenes

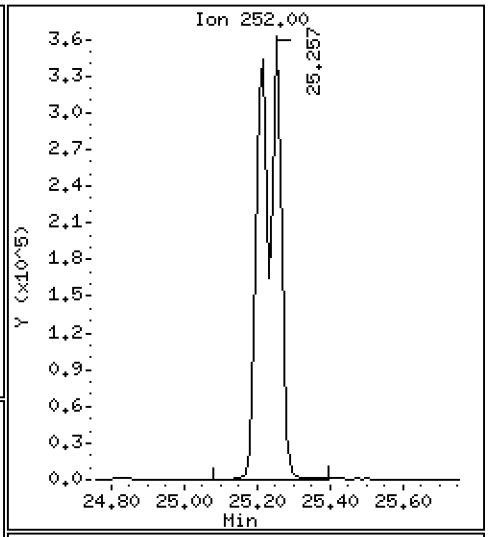
Concentration: 9.154 ug/mL

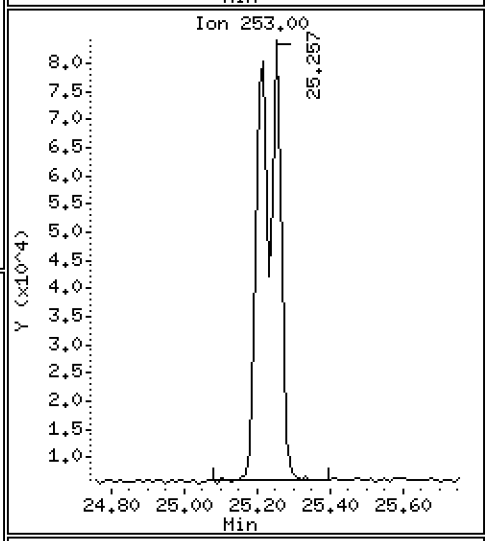


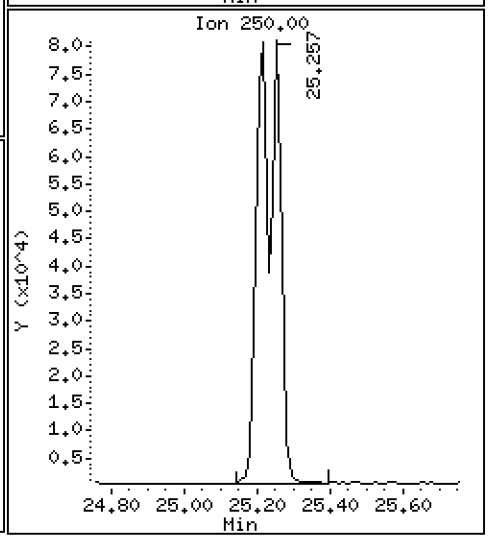












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS1

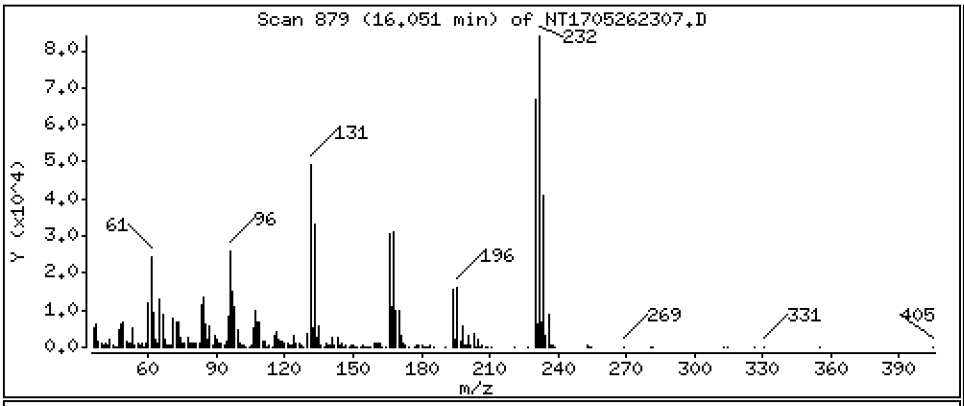
Operator: VTS

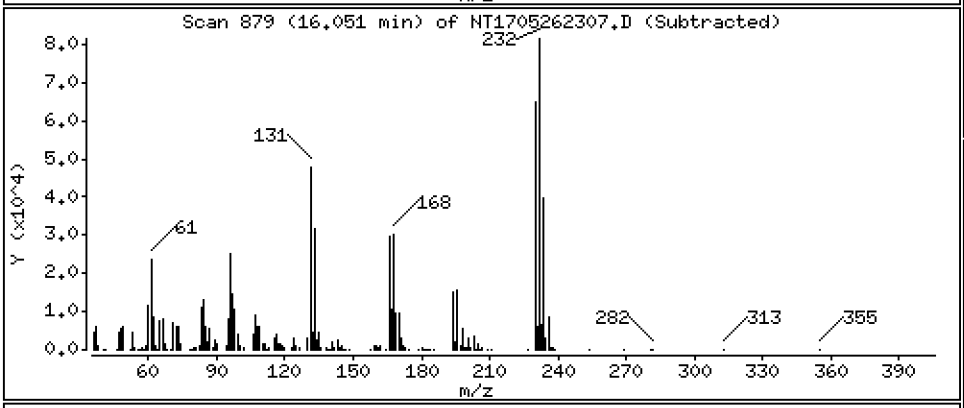
Column phase: ZB-5msi

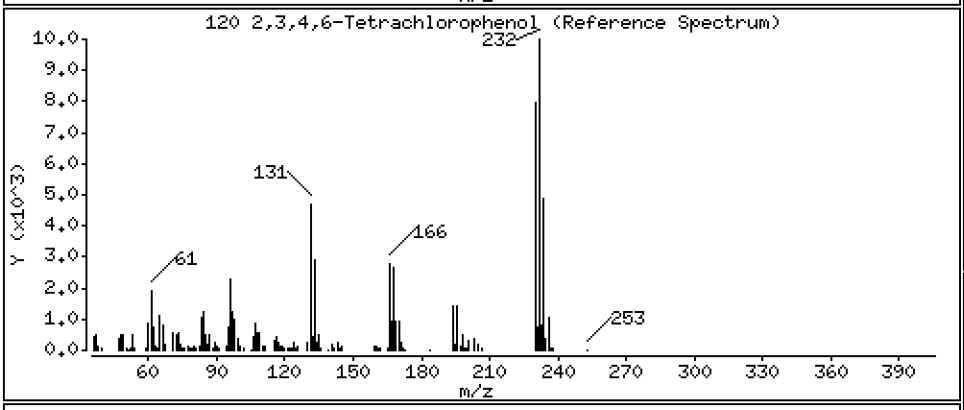
Column diameter: 0.25

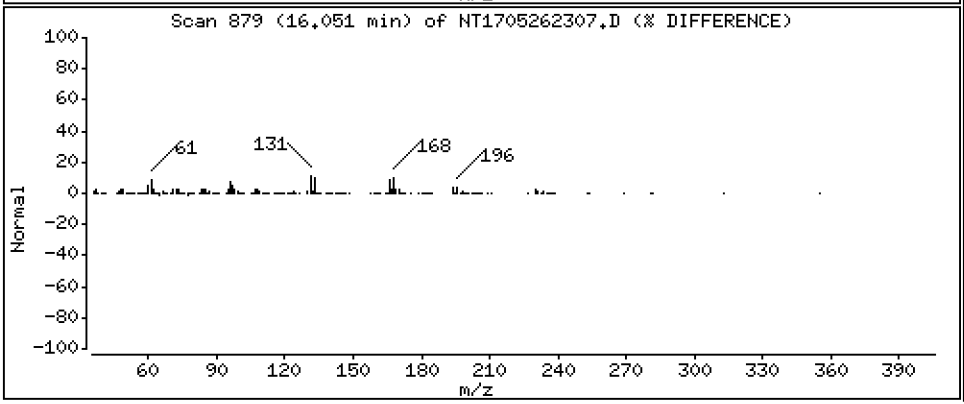
120 2,3,4,6-Tetrachlorophenol

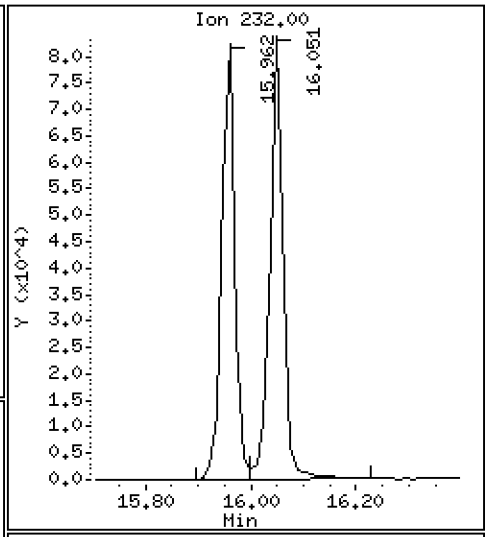
Concentration: 2.594 ug/mL

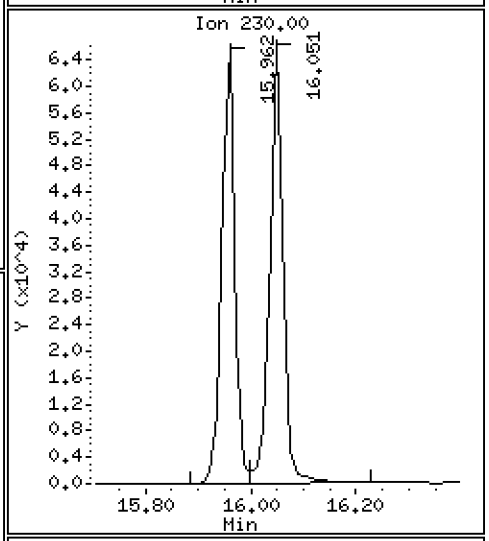


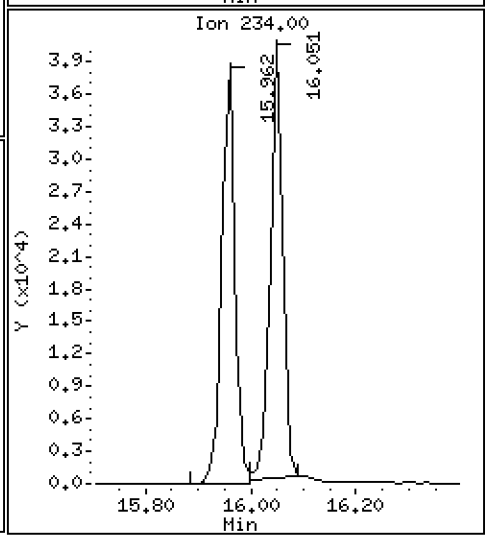












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262307.D
Lab Smp Id: BLD0607-BS1
Inj Date : 26-MAY-2023 16:25
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-BS1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 12:20 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.084	7.071	(0.765)	531735	6.00052	6.001
$	2 Phenol-d5	99	8.638	8.638	(0.933)	691245	5.89445	5.894
	3 Phenol	94	8.651	8.651	(0.934)	455941	3.67067	3.671
$	5 2-Chlorophenol-d4	132	8.906	8.906	(0.961)	589209	6.27260	6.273
	4 Bis(2-Chloroethyl)ether	93	8.804	8.804	(0.950)	400595	4.42402	4.424
	6 2-Chlorophenol	128	8.944	8.931	(0.966)	363273	3.50219	3.502
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	401329	3.82294	3.823
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	270705	4.00000	
	9 1,4-Dichlorobenzene	146	9.289	9.289	(1.003)	396480	3.78683	3.787
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	263675	3.99364	3.994
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	393023	3.99320	3.993
	11 Benzyl alcohol	108	9.531	9.531	(1.029)	232828	4.02603	4.026
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	127005	4.57811	4.578
	13 2-Methylphenol	108	9.761	9.748	(1.054)	214361	2.34818	2.348
	17 Hexachloroethane	117	10.234	10.234	(1.105)	169393	4.04454	4.045
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	156630	2.24260	2.243
	15 4-Methylphenol	108	10.030	10.017	(1.083)	286305	3.08023	3.080
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	481330	4.31798	4.318
	19 Nitrobenzene	77	10.387	10.387	(0.886)	462126	4.34527	4.345
	20 Isophorone	82	10.822	10.834	(0.923)	709285	4.87204	4.872
	21 2-Nitrophenol	139	11.013	11.013	(0.939)	196456	3.83347	3.833
	22 2,4-Dimethylphenol	107	11.052	11.051	(0.942)	86735	0.87170	0.8717
	23 Bis(2-Chloroethoxy)methane	93	11.243	11.243	(0.959)	419634	4.70313	4.703
	24 Benzoic acid	105	11.307	11.307	(0.964)	1727850	25.8148	25.81
	25 2,4-Dichlorophenol	162	11.460	11.460	(0.977)	855578	10.7007	10.70
	26 1,2,4-Trichlorobenzene	180	11.639	11.651	(0.992)	400763	4.61507	4.615
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	979437	4.00000	
	28 Naphthalene	128	11.766	11.779	(1.003)	1054889	3.91652	3.917
	29 4-Chloroaniline	127	11.906	11.893	(1.015)	138953	1.30878	1.309
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	217851	5.06445	5.064
	31 4-Chloro-3-methylphenol	107	12.850	12.850	(1.096)	1010972	11.7429	11.74
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	739041	3.83221	3.832
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	130250	2.77382	2.774

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
34	2,4,6-Trichlorophenol	196	13.781	13.781	(0.899)	613956	11.6202	11.62
35	2,4,5-Trichlorophenol	196	13.857	13.857	(0.904)	665043	11.8902	11.89
$ 36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	842705	4.23597	4.236
37	2-Chloronaphthalene	162	14.151	14.151	(0.923)	661401	4.09812	4.098
38	2-Nitroaniline	65	14.406	14.406	(0.940)	641479	11.7361	11.74
39	Dimethylphthalate	163	14.827	14.826	(0.968)	790286	4.54834	4.548
40	Acenaphthylene	152	15.018	15.018	(0.980)	886452	3.45874	3.459
41	2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	484891	11.9197	11.92
* 42	Acenaphthene-d10	164	15.324	15.324	(1.000)	504985	4.00000	
43	3-Nitroaniline	138	15.260	15.247	(0.996)	119086	3.16068	3.161
44	Acenaphthene	153	15.388	15.388	(1.004)	653097	4.07654	4.077
45	2,4-Dinitrophenol	184	15.464	15.464	(1.009)	585895	22.8572	22.86
46	Dibenzofuran	168	15.719	15.719	(1.026)	913793	4.08662	4.087
47	4-Nitrophenol	109	15.579	15.579	(1.017)	312561	12.4894	12.49
48	2,4-Dinitrotoluene	165	15.770	15.770	(1.029)	622155	11.6834	11.68
50	Diethylphthalate	149	16.267	16.267	(1.062)	1009881	5.95979	5.960
49	Fluorene	166	16.420	16.420	(1.072)	951378	4.47526	4.475
51	4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	434075	4.44135	4.441
52	4-Nitroaniline	138	16.522	16.509	(1.078)	178587	5.00765	5.008
53	4,6-Dinitro-2-methylphenol	198	16.611	16.611	(0.906)	723265	22.2683	22.27
54	N-Nitrosodiphenylamine	169	16.649	16.662	(0.908)	256286	2.24797	2.248
$ 55	2,4,6-Tribromophenol	330	16.954	16.954	(1.106)	122398	5.55666	5.557
56	4-Bromophenyl-phenylether	248	17.400	17.400	(0.949)	181963	4.55527	4.555
57	Hexachlorobenzene	284	17.731	17.731	(0.967)	181483	4.45870	4.459
58	Pentachlorophenol	266	18.088	18.088	(0.986)	293562	11.7547	11.75
* 59	Phenanthrene-d10	188	18.343	18.343	(1.000)	813869	4.00000	
60	Phenanthrene	178	18.394	18.394	(1.003)	984110	4.14406	4.144
61	Anthracene	178	18.484	18.483	(1.008)	653465	2.93097	2.931
62	Carbazole	167	18.815	18.815	(1.026)	520039	3.70116	3.701
63	Di-n-butylphthalate	149	19.580	19.580	(1.067)	1264831	4.69821	4.698
64	Fluoranthene	202	20.753	20.753	(0.889)	1047366	4.45627	4.456
65	Pyrene	202	21.174	21.174	(0.907)	1038798	4.35996	4.360
$ 66	Terphenyl-d14	244	21.455	21.455	(0.919)	970174	5.72800	5.728
67	Butylbenzylphthalate	149	22.360	22.360	(0.958)	514573	4.82547	4.825
68	Benzo(a)anthracene	228	23.317	23.317	(0.999)	755237	4.08197	4.082
* 69	Chrysene-d12	240	23.343	23.355	(1.000)	502451	4.00000	
70	3,3'-Dichlorobenzidine	252	23.266	23.266	(0.997)	92466	2.56344	2.563
71	Chrysene	228	23.394	23.394	(1.002)	726697	4.17405	4.174
72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	726283	4.71781	4.718
* 134	Di-n-octylphthalate-d4	153	24.350	24.363	(1.000)	1064023	4.00000	
73	Di-n-octylphthalate	149	24.363	24.363	(1.001)	1269555	4.70717	4.707
74	Benzo(b)fluoranthene	252	25.218	25.218	(0.970)	742841	4.41396	4.414
75	Benzo(k)fluoranthene	252	25.256	25.256	(0.972)	752360	4.73181	4.732
76	Benzo(a)pyrene	252	25.881	25.881	(0.996)	435338	3.28380	3.284
* 77	Perylene-d12	264	25.996	25.996	(1.000)	424472	4.00000	
78	Indeno(1,2,3-cd)pyrene	276	28.703	28.716	(1.104)	717950	4.66892	4.669
79	Dibenzo(a,h)anthracene	278	28.716	28.729	(1.105)	607780	4.70937	4.709
80	Benzo(g,h,i)perylene	276	29.509	29.521	(1.135)	595880	4.69483	4.695
90	N-Nitrosodimethylamine	74	4.995	4.982	(0.539)	296874	5.02241	5.022
91	Aniline	93	Compound Not Detected.					
93	Benzidine	184	Compound Not Detected.					
103	Pyridine	79	5.097	5.007	(0.550)	30113	0.32118	0.3212(H)
105	1-methylnaphthalene	142	13.373	13.385	(1.140)	710557	3.97164	3.972
111	Azobenzene (1,2-DP-Hydrazine)	77	16.725	16.725	(1.091)	793287	4.01058	4.011

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.256	25.256	(0.972)	1382840	9.15357	9.154
120 2,3,4,6-Tetrachlorophenol	232	16.050	16.050	(1.047)	163965	2.59372	2.594

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262307.D
Lab Smp Id: BLD0607-BS1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:16
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	303517	151759	607034	270705	-10.81
27 Naphthalene-d8	1140476	570238	2280952	979437	-14.12
42 Acenaphthene-d10	622461	311231	1244922	504985	-18.87
59 Phenanthrene-d10	1074054	537027	2148108	813869	-24.22
69 Chrysene-d12	723807	361904	1447614	502451	-30.58
134 Di-n-octylphthala	1524055	762028	3048110	1064023	-30.18
77 Perylene-d12	666992	333496	1333984	424472	-36.36

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	0.00
69 Chrysene-d12	23.36	22.86	23.86	23.34	-0.05
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.05
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262307.D

Lab ID: BLD0607-BS1
nt17.i, ABN.m, 26-MAY-2023 16:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.550	0.541	0.0096	Pyridine

RRT check based on Ccal File: NT1705262302.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

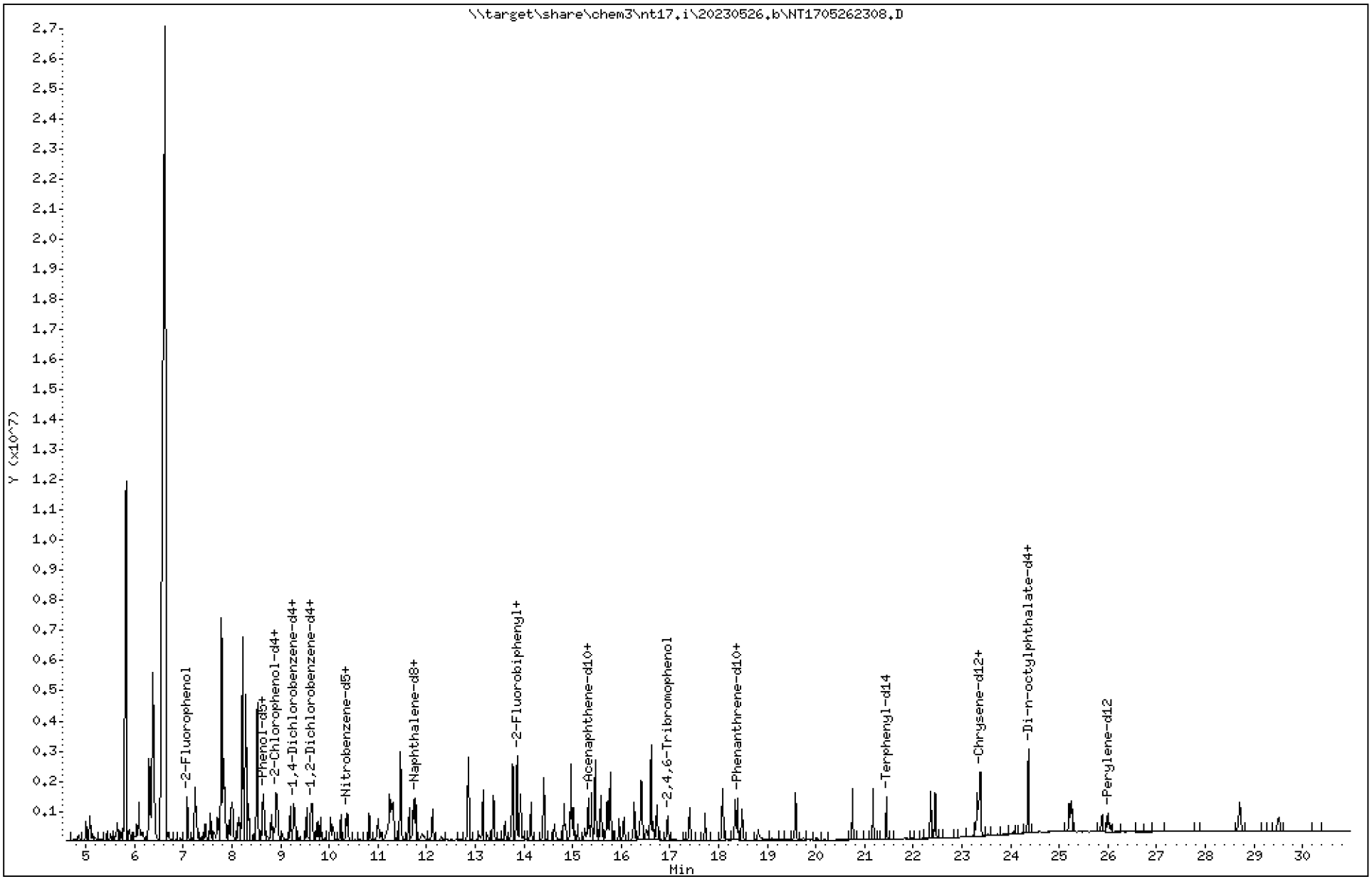
Sample Info: BLD0607-BSD1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: VTS

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

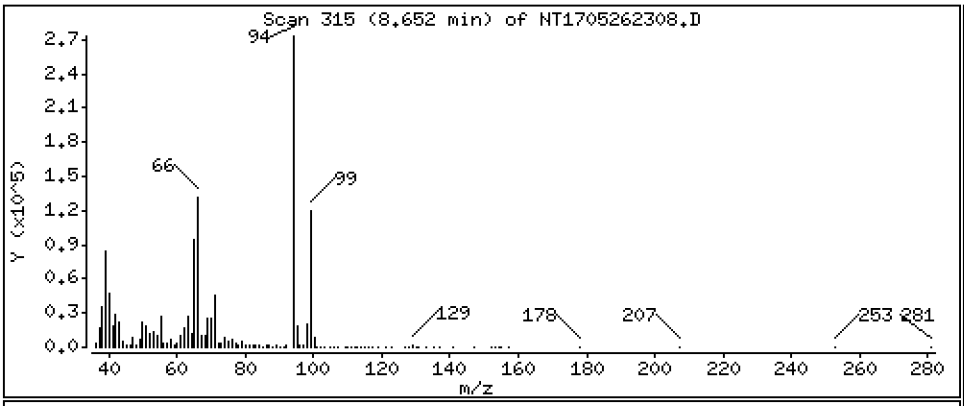
Operator: VTS

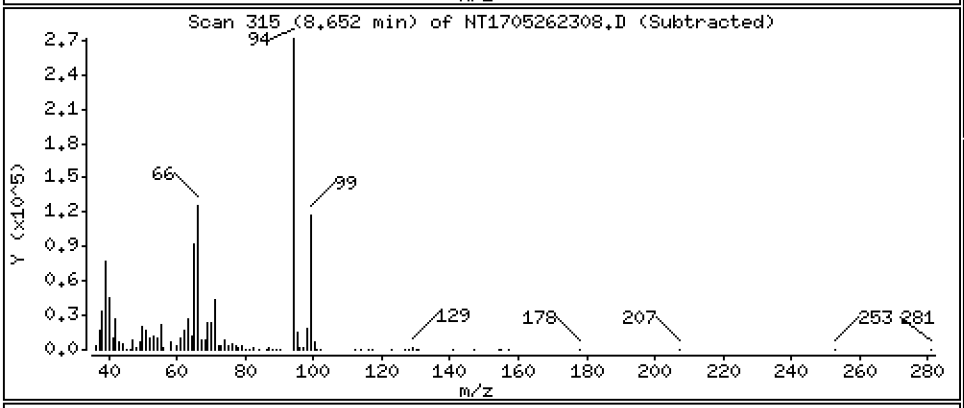
Column phase: ZB-5msi

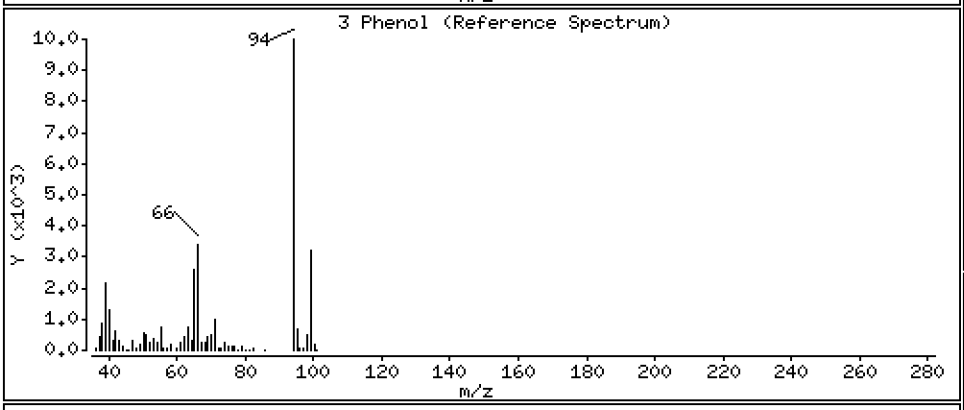
Column diameter: 0.25

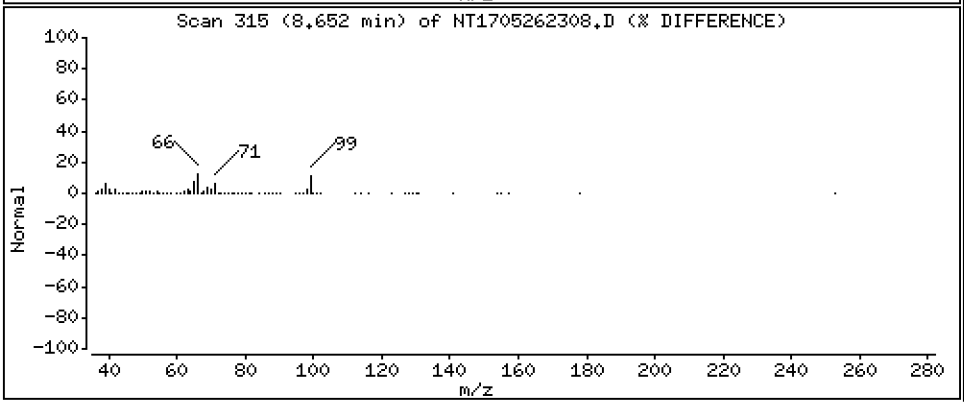
3 Phenol

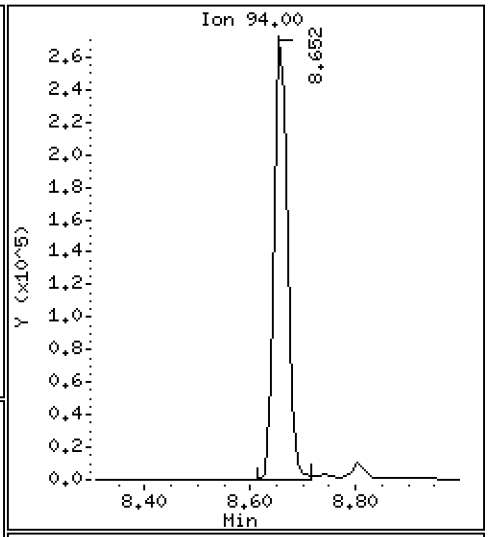
Concentration: 3.865 ug/mL

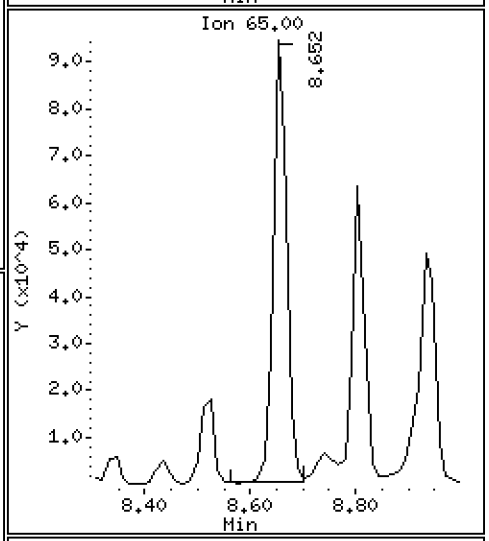


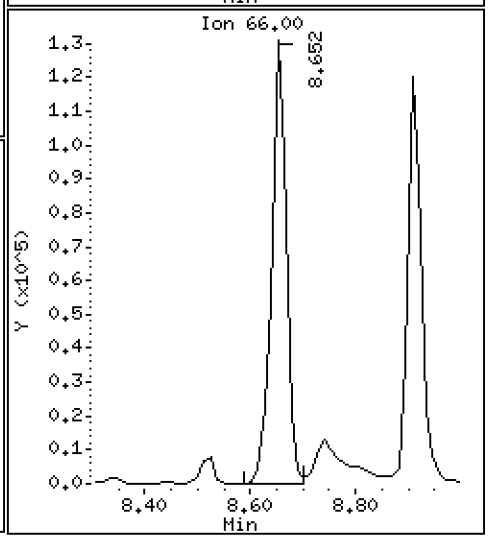












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

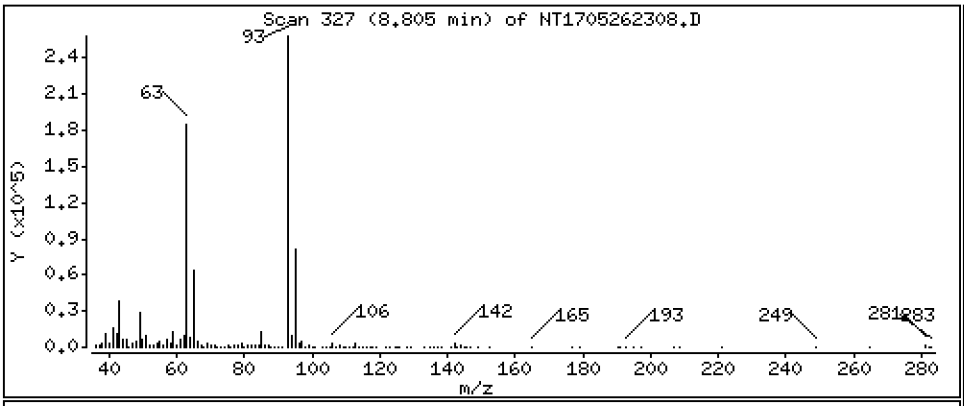
Operator: VTS

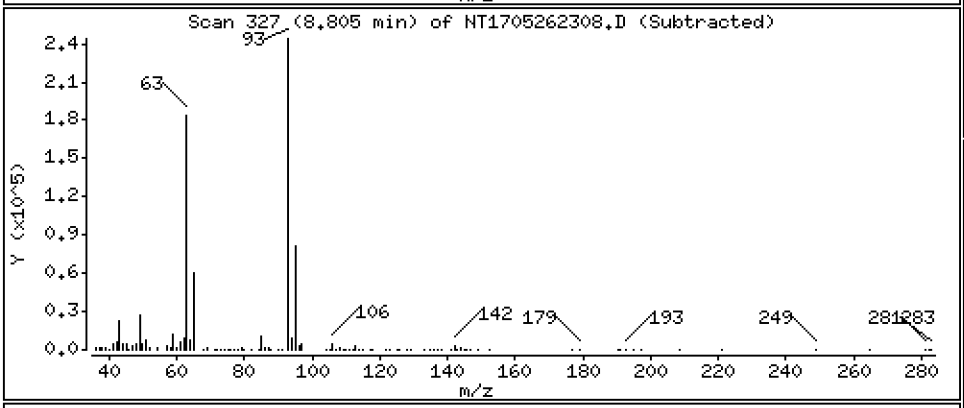
Column phase: ZB-5msi

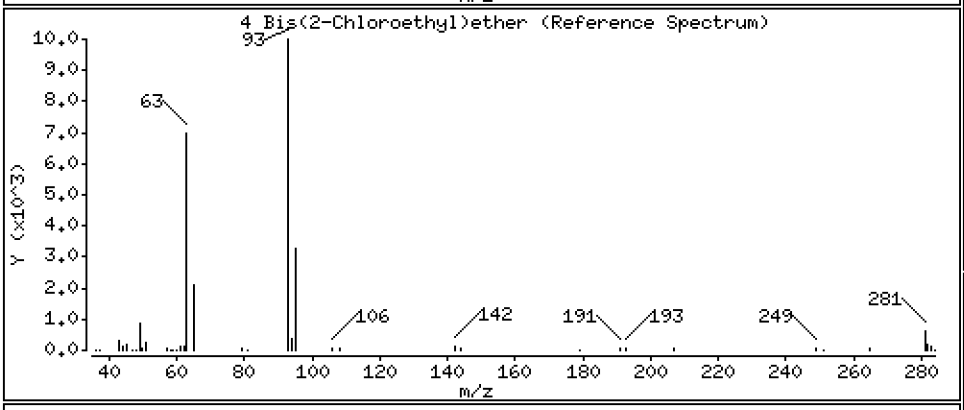
Column diameter: 0.25

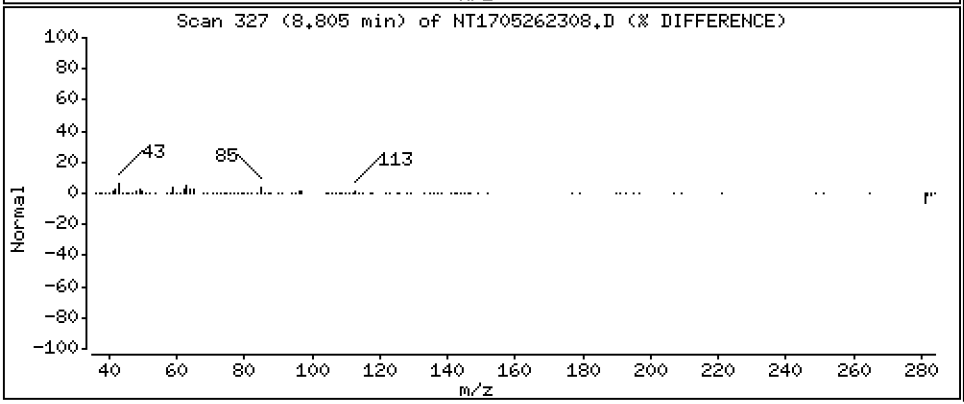
4 Bis(2-Chloroethyl)ether

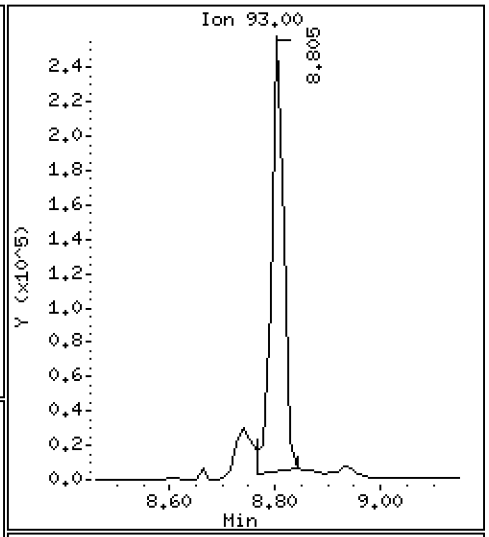
Concentration: 4.452 ug/mL

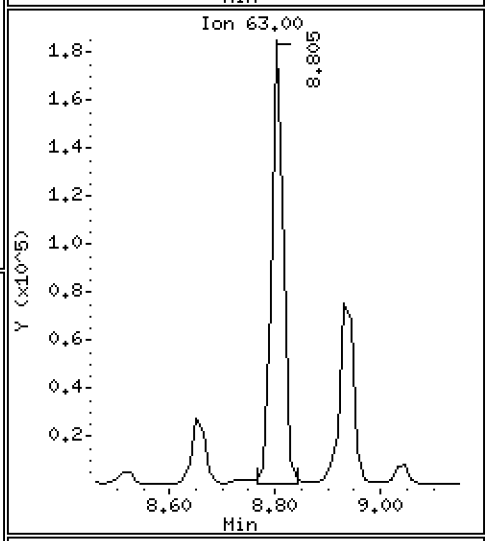


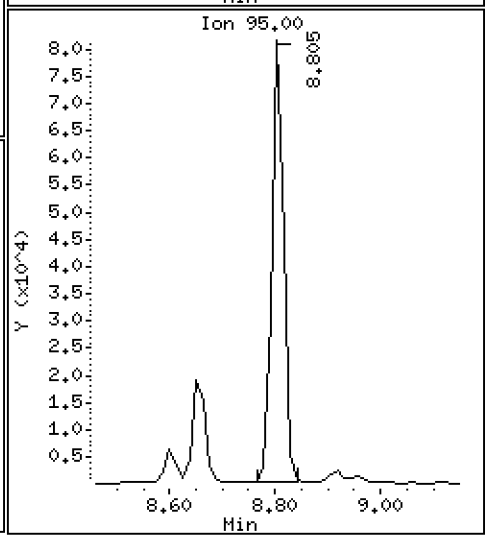












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

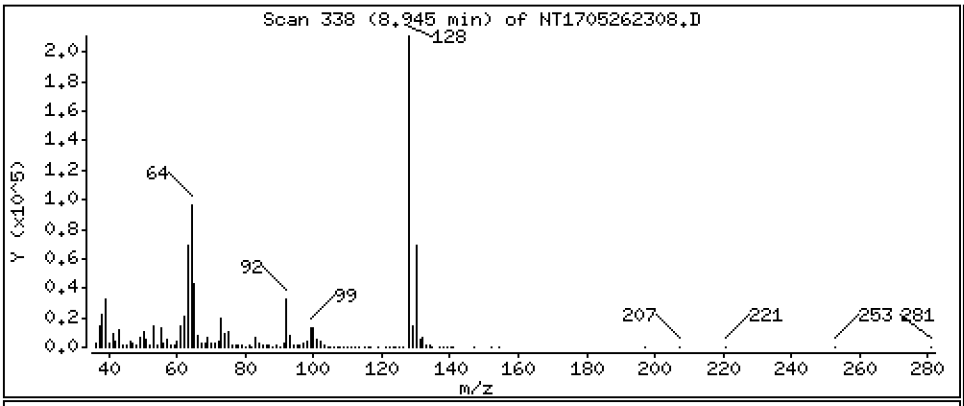
Operator: VTS

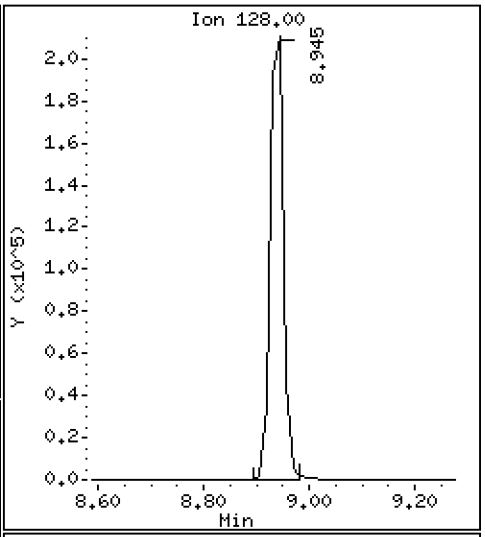
Column phase: ZB-5msi

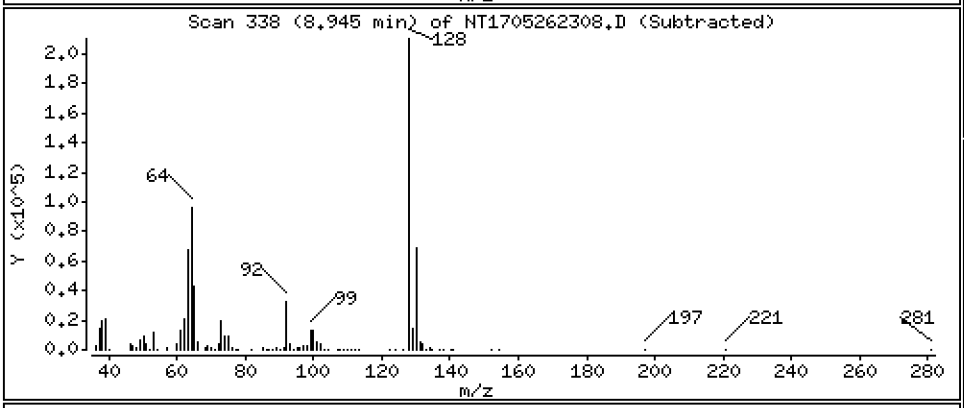
Column diameter: 0.25

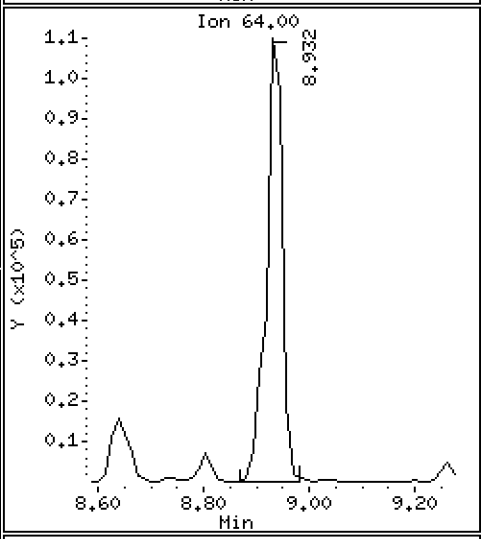
6 2-Chlorophenol

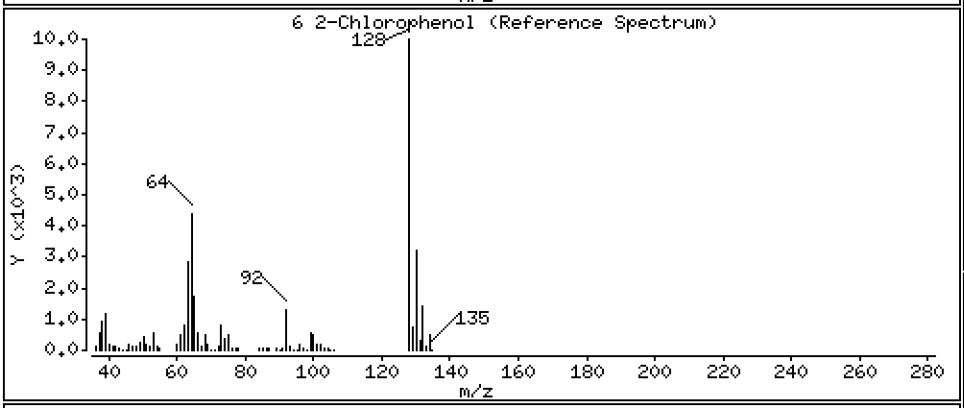
Concentration: 3.571 ug/mL

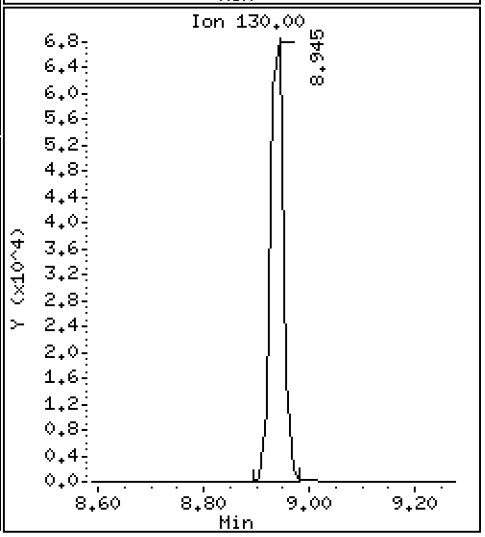


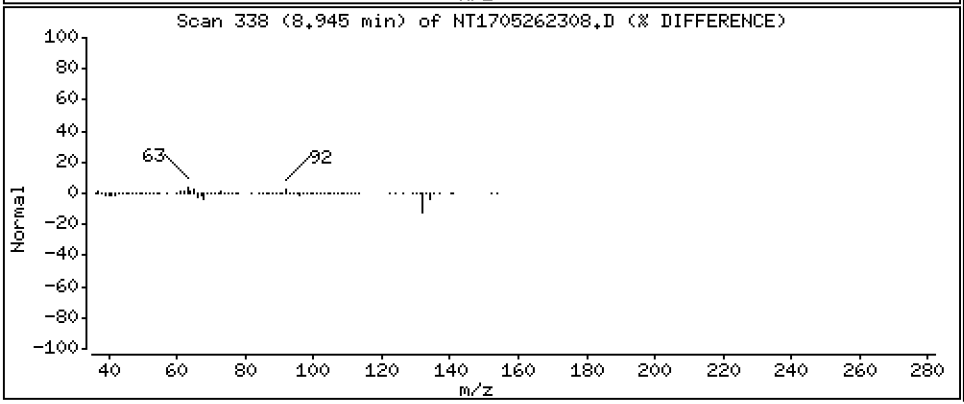












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

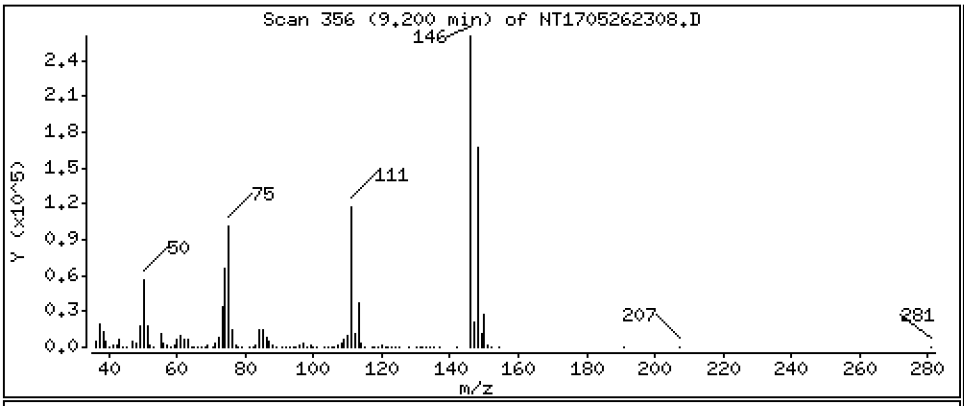
Operator: VTS

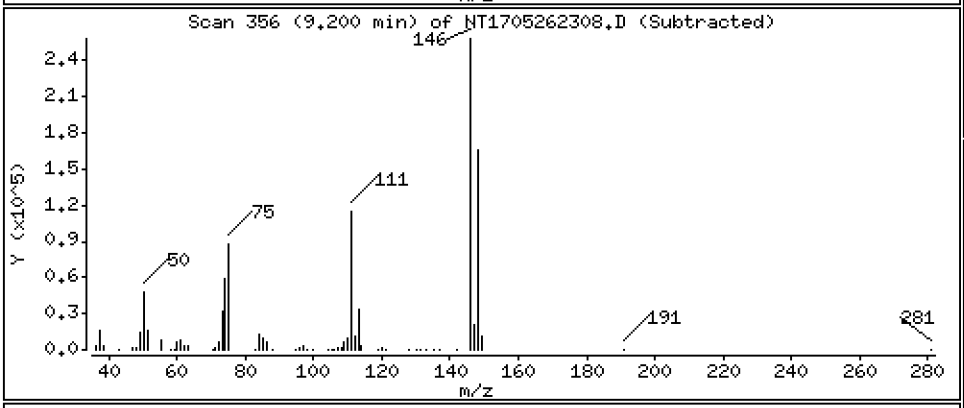
Column phase: ZB-5msi

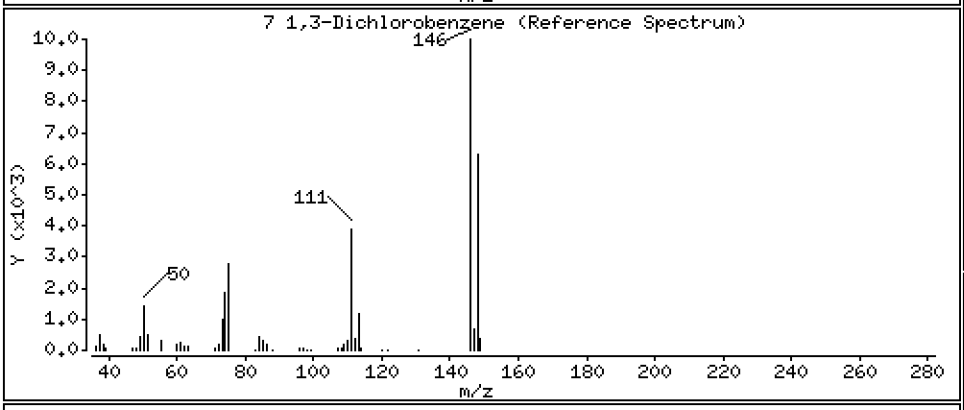
Column diameter: 0.25

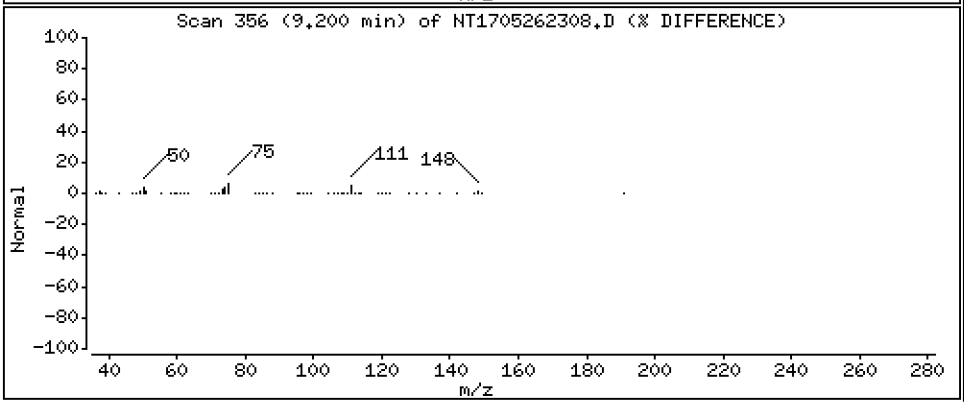
7 1,3-Dichlorobenzene

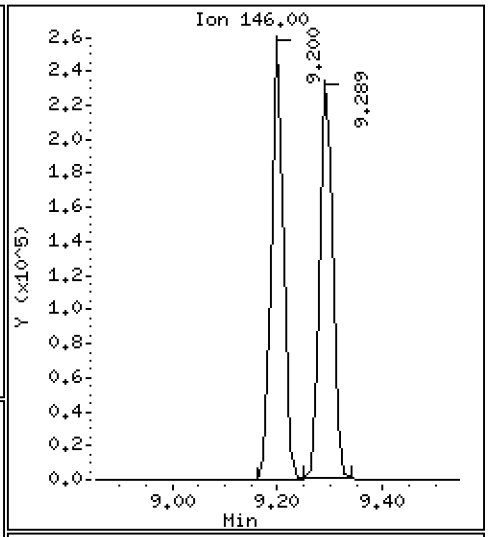
Concentration: 3.860 ug/mL

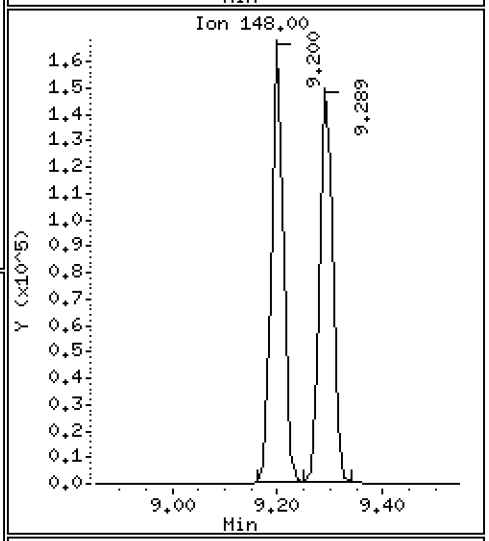


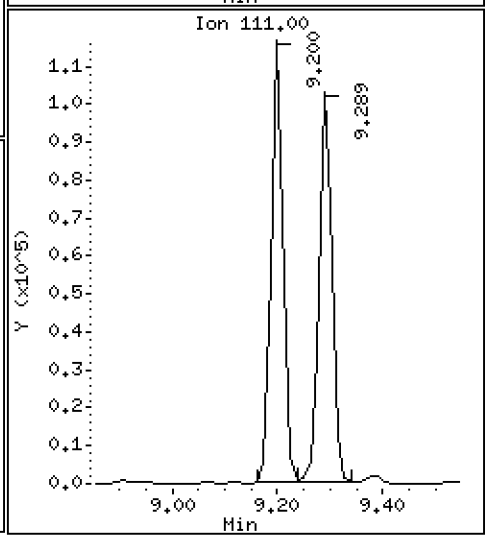












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

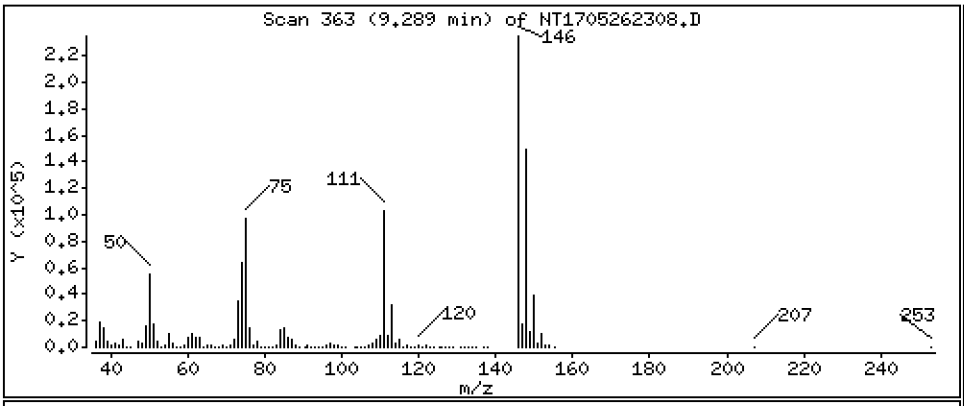
Operator: VTS

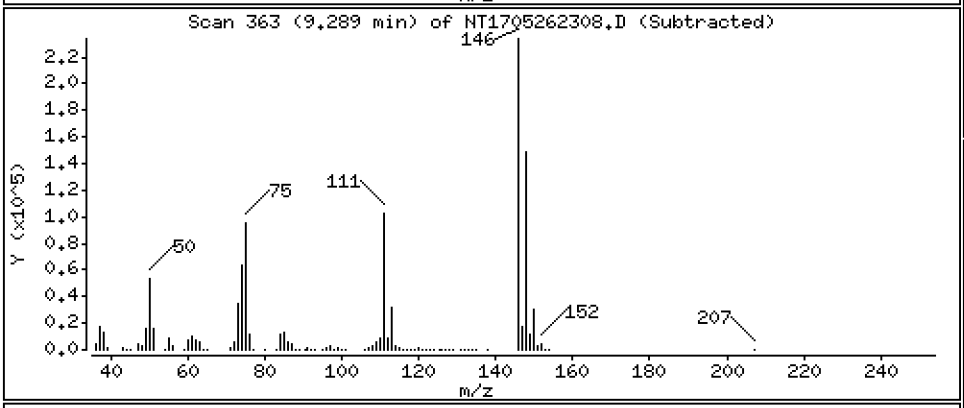
Column phase: ZB-5msi

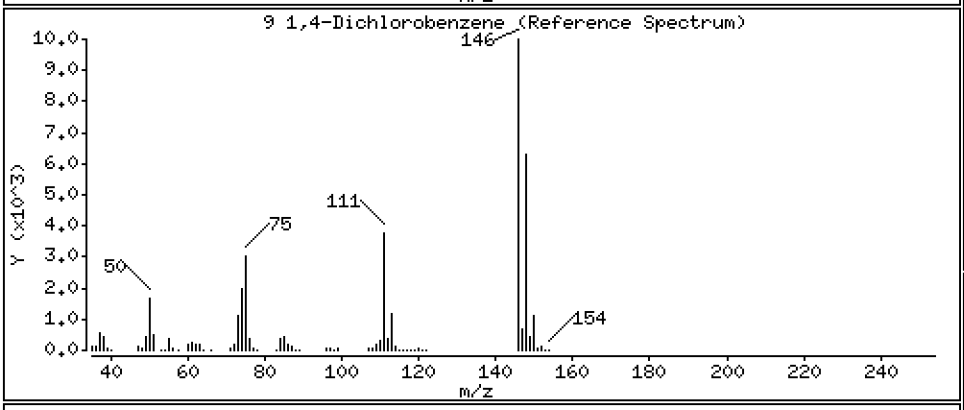
Column diameter: 0.25

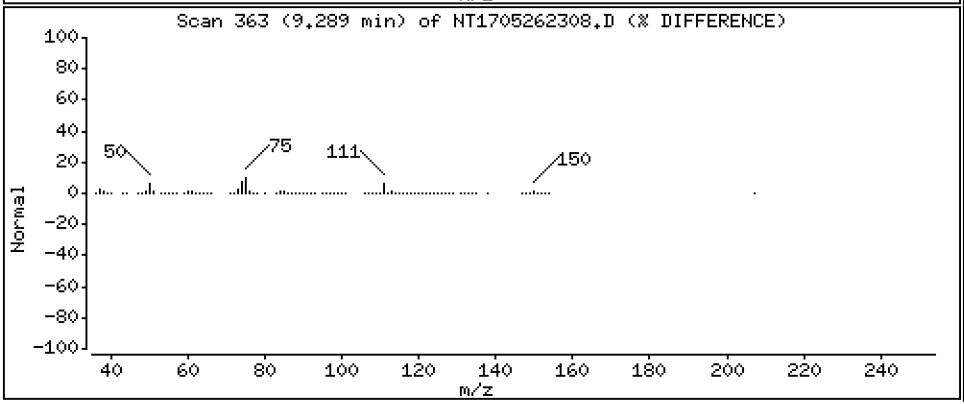
9 1,4-Dichlorobenzene

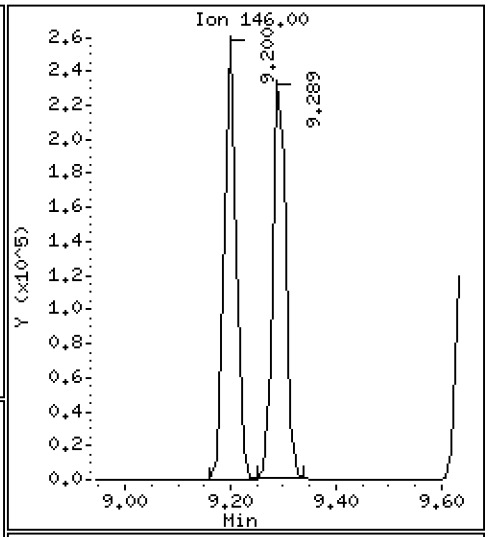
Concentration: 3.822 ug/mL

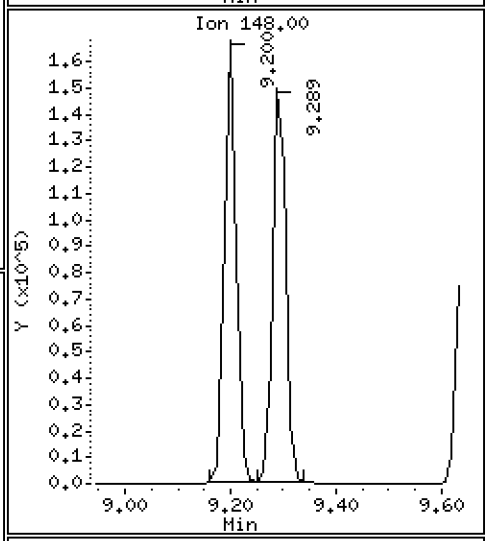


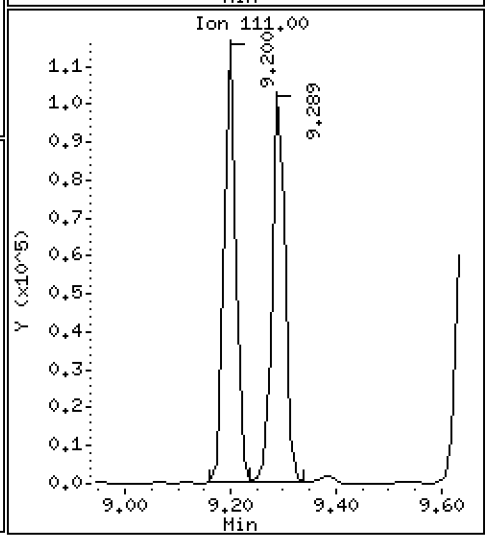












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

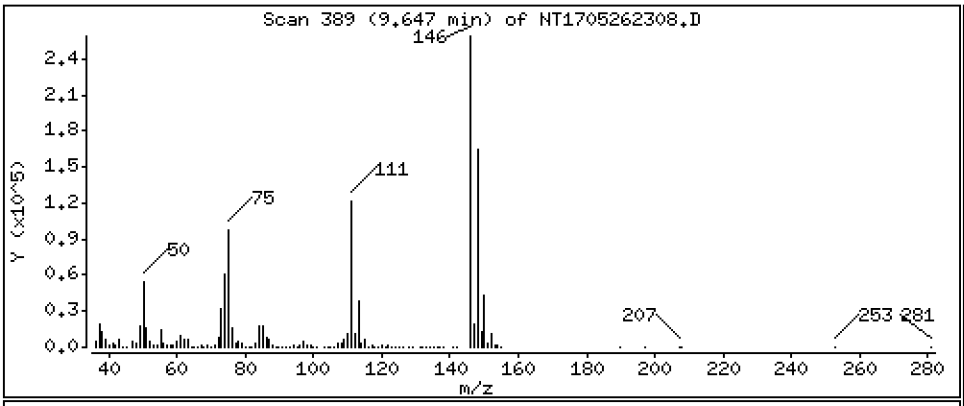
Operator: VTS

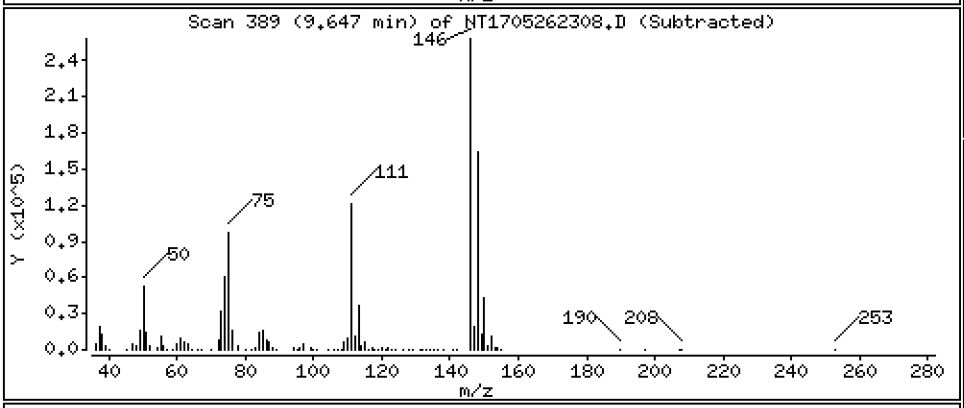
Column phase: ZB-5msi

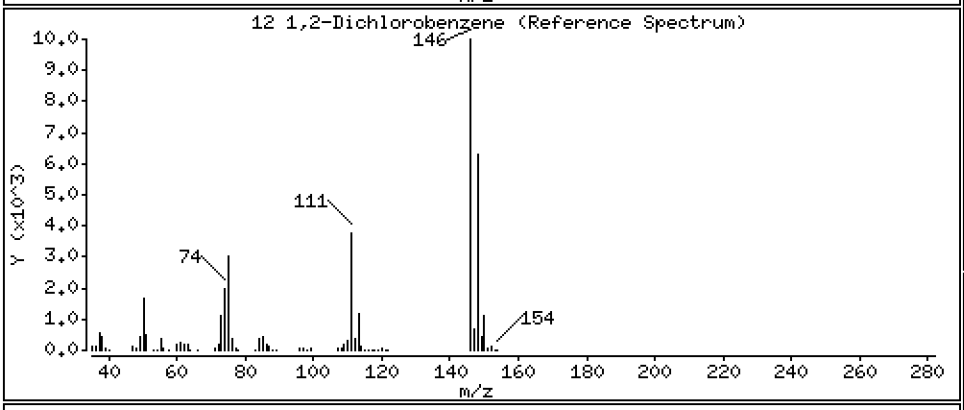
Column diameter: 0.25

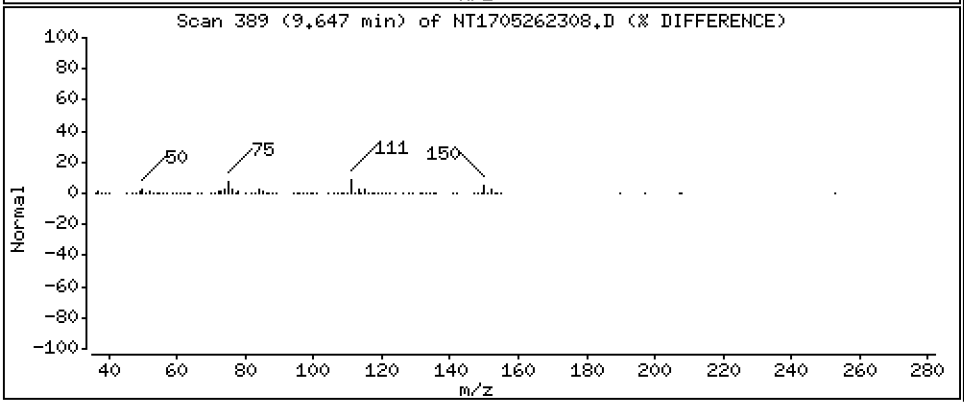
12 1,2-Dichlorobenzene

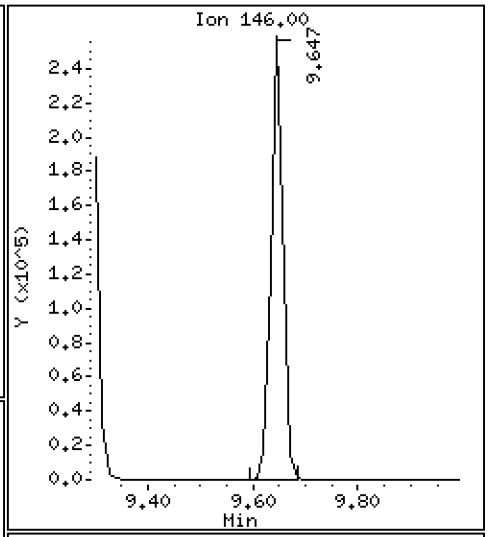
Concentration: 4.095 ug/mL

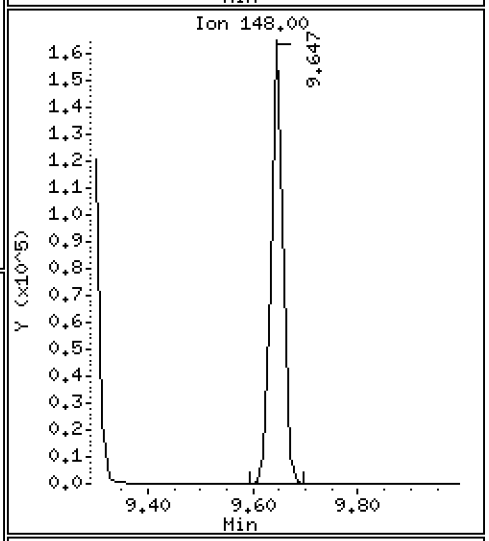


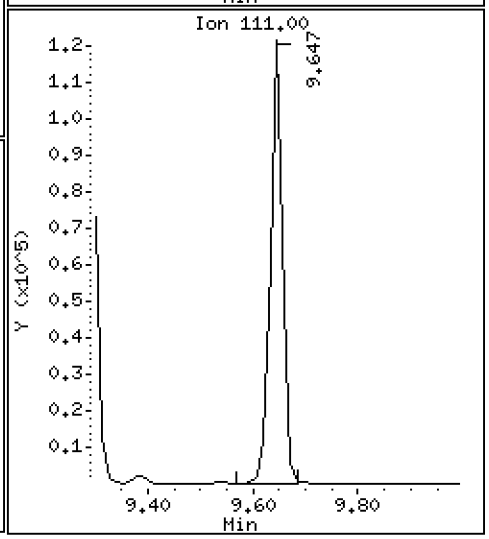












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

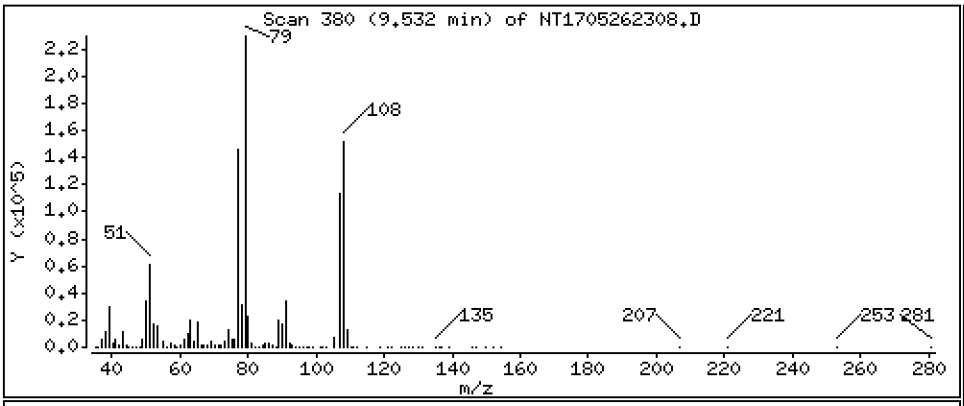
Operator: VTS

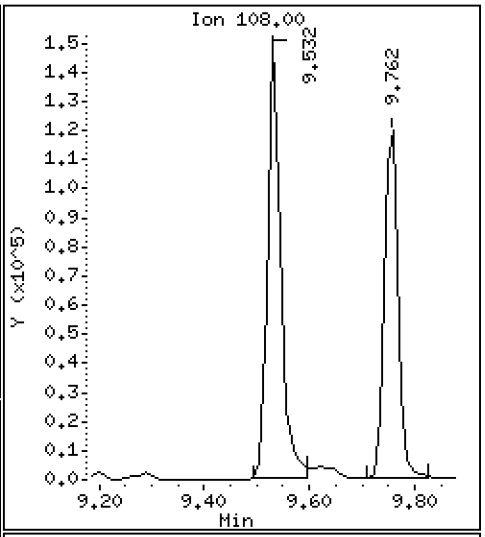
Column phase: ZB-5msi

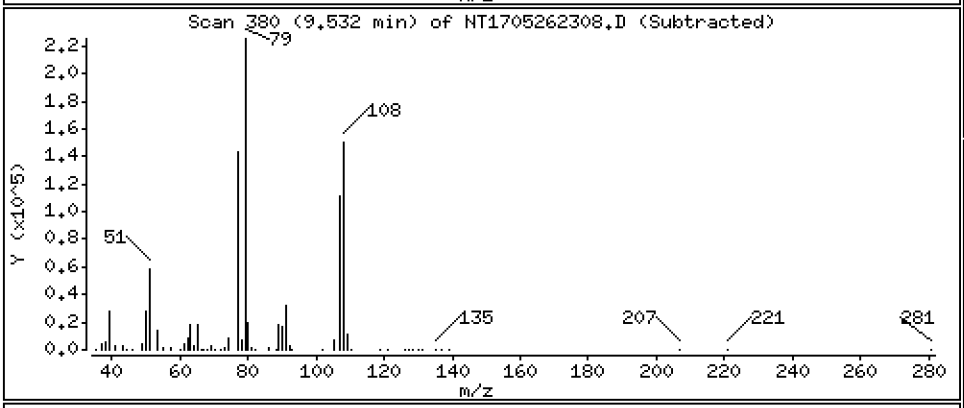
Column diameter: 0.25

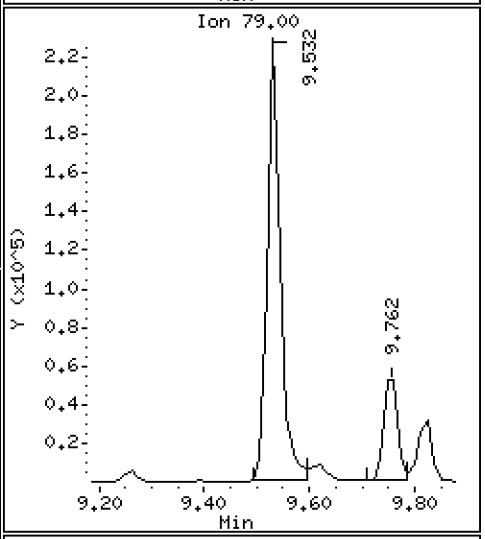
11 Benzyl alcohol

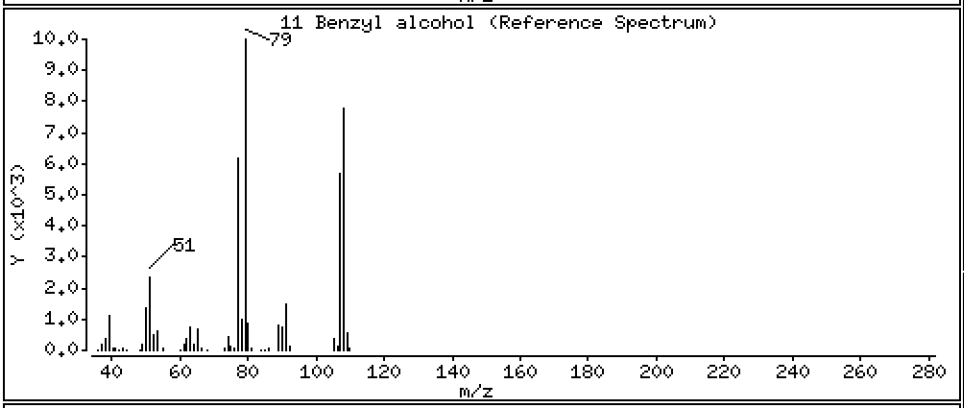
Concentration: 4.506 ug/mL

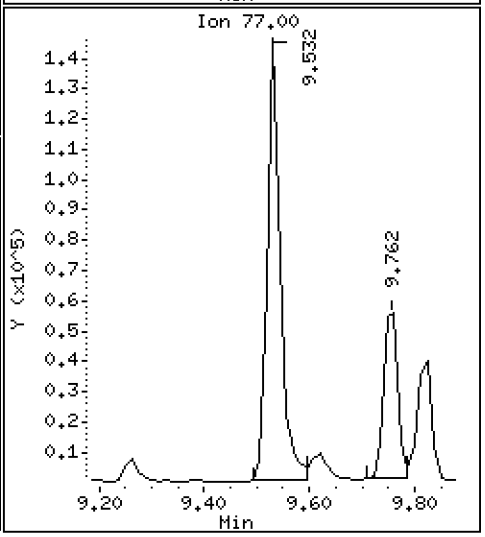


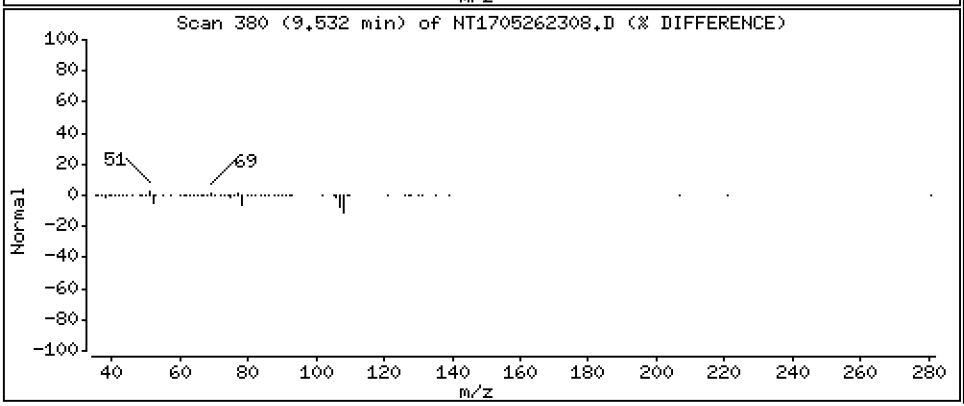












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

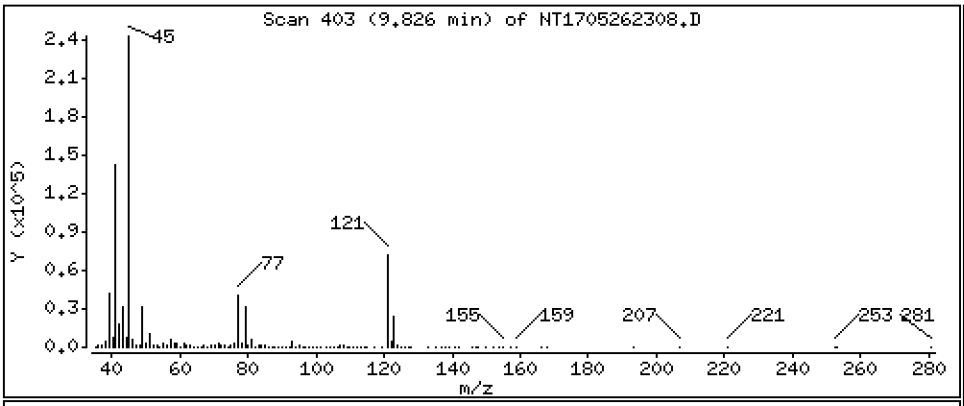
Operator: VTS

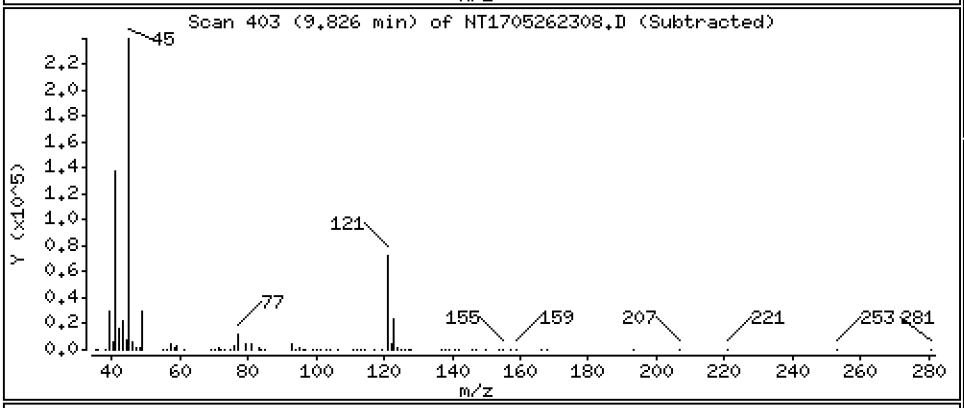
Column phase: ZB-5msi

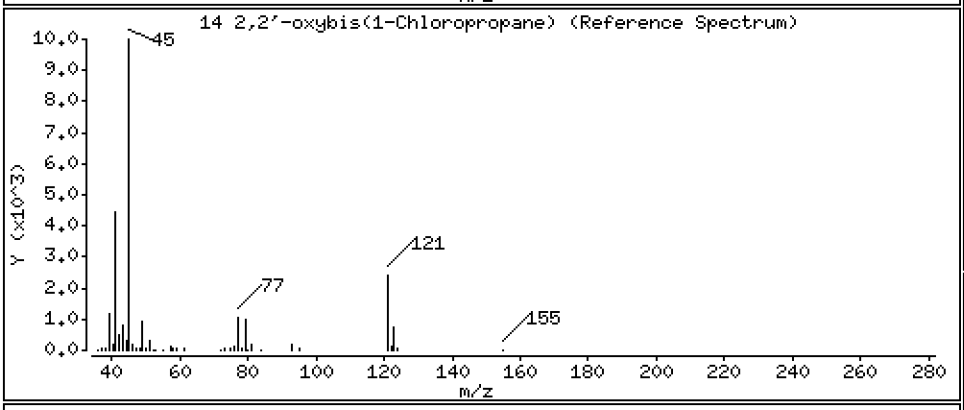
Column diameter: 0.25

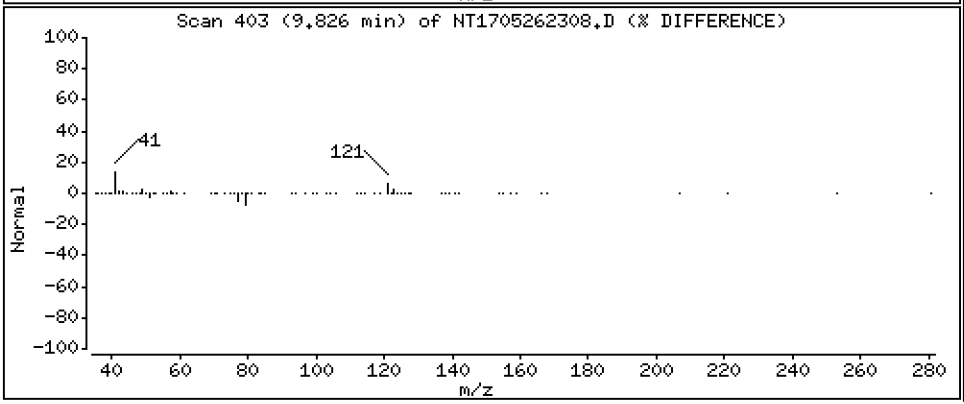
14 2,2'-oxybis(1-Chloropropane)

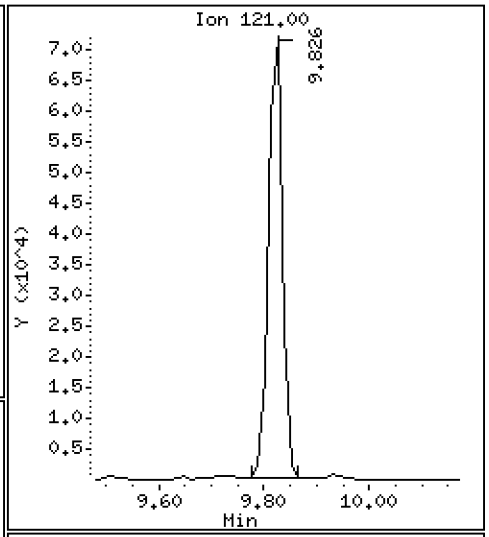
Concentration: 4.790 ug/mL

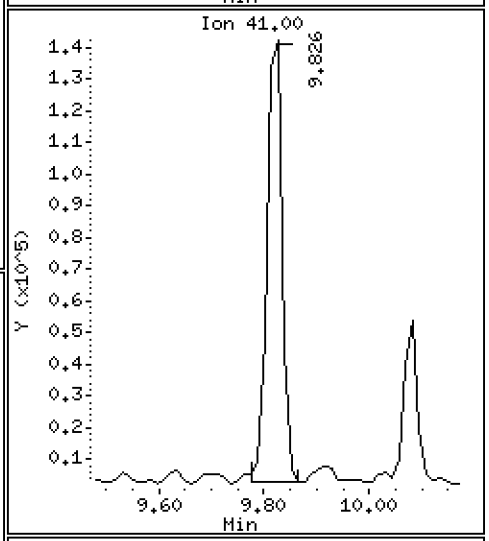


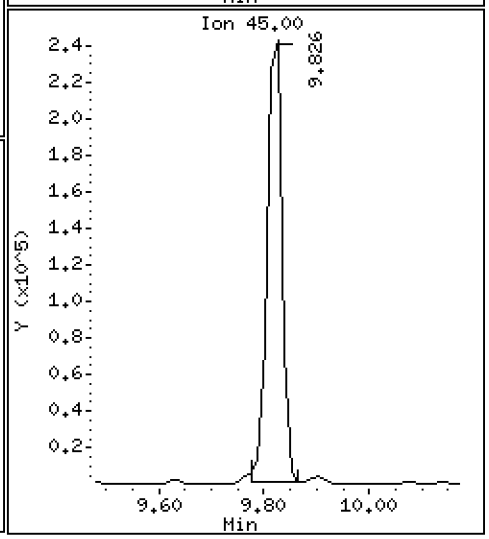












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

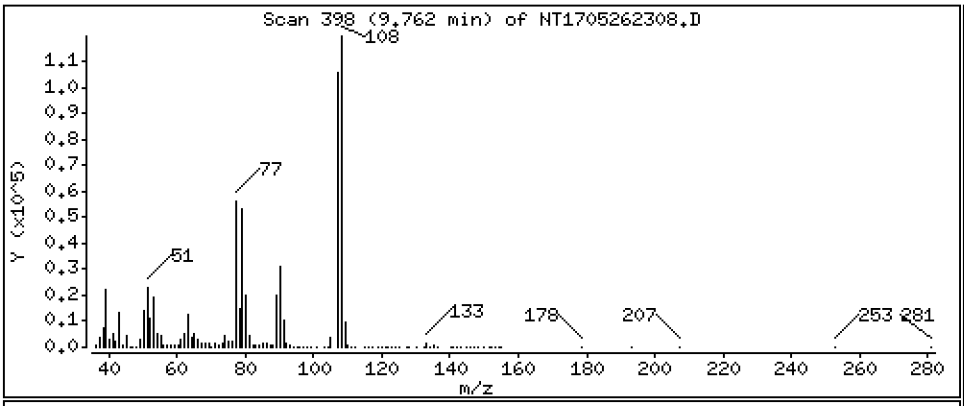
Operator: VTS

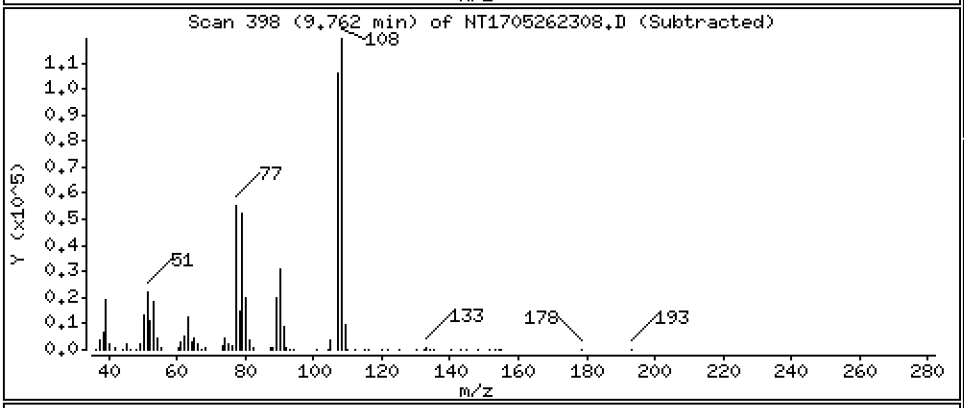
Column phase: ZB-5msi

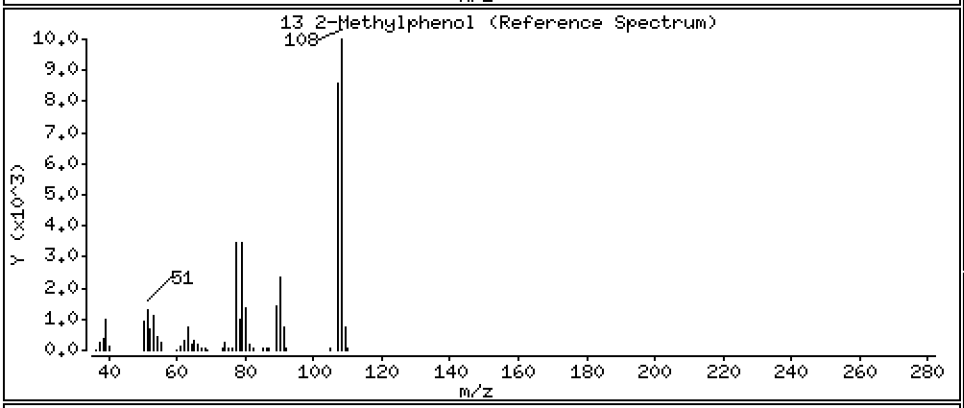
Column diameter: 0.25

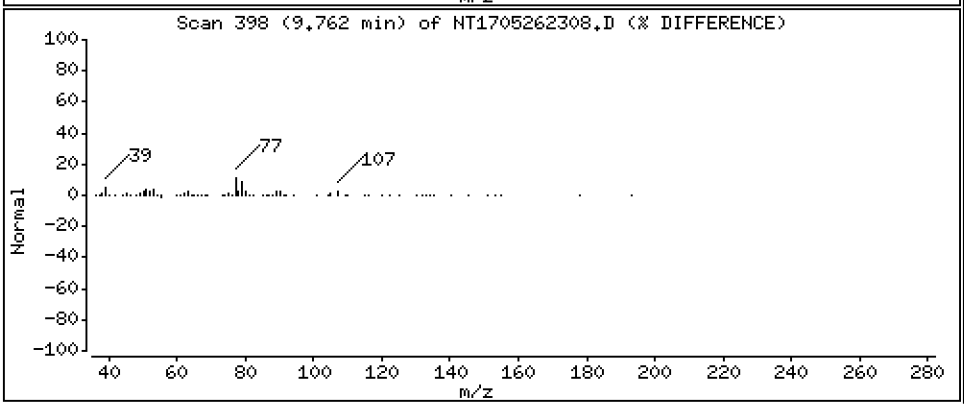
13 2-Methylphenol

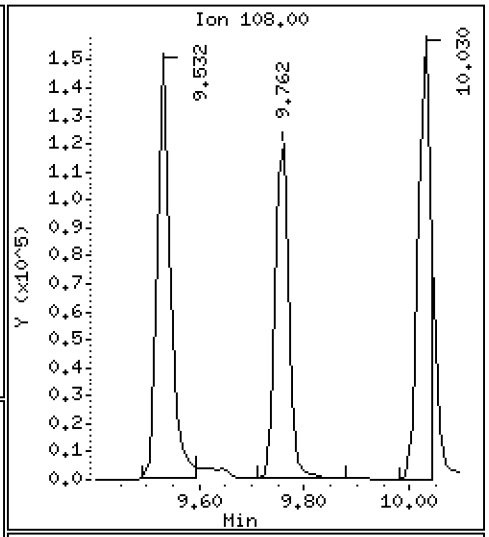
Concentration: 2.400 ug/mL

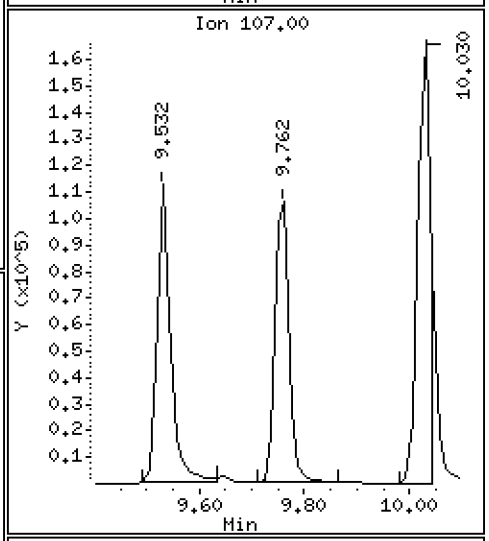


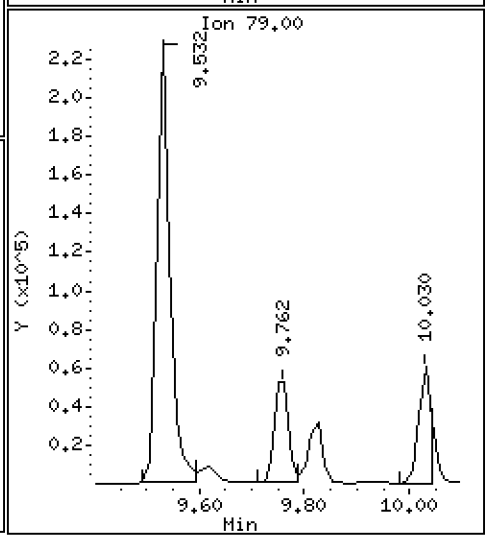












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

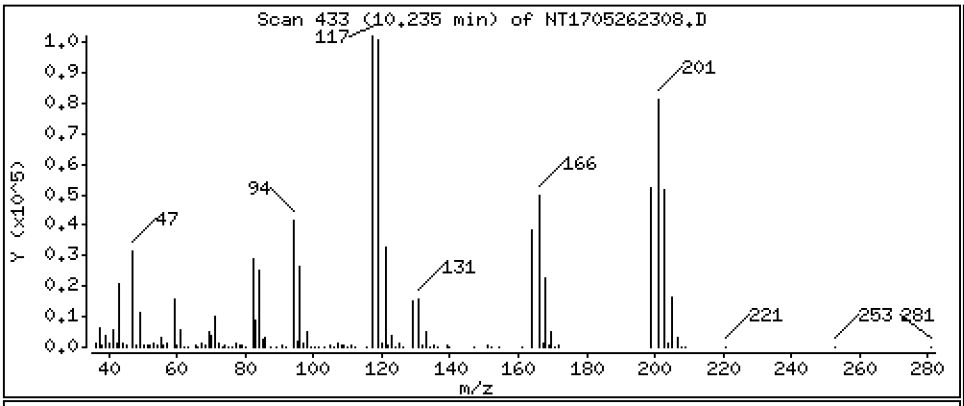
Operator: VTS

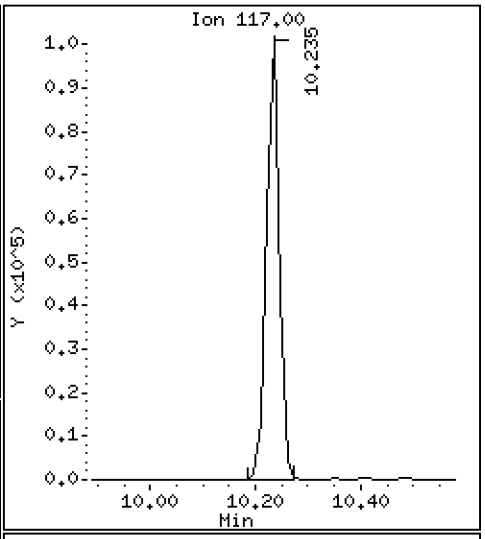
Column phase: ZB-5msi

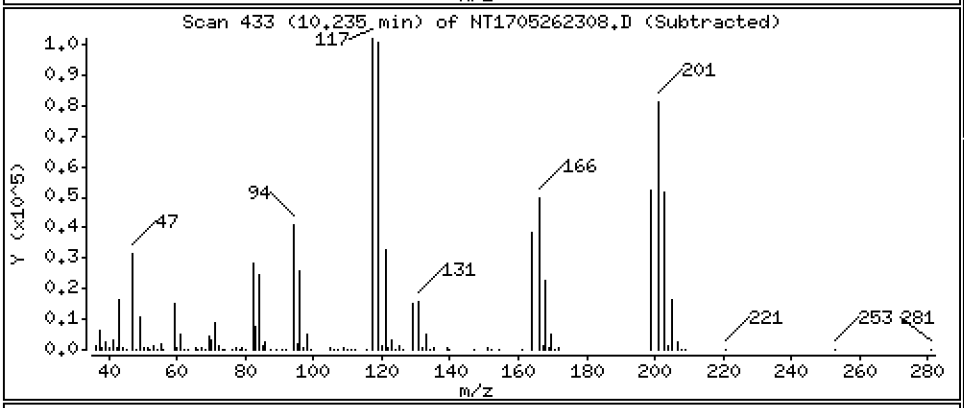
Column diameter: 0.25

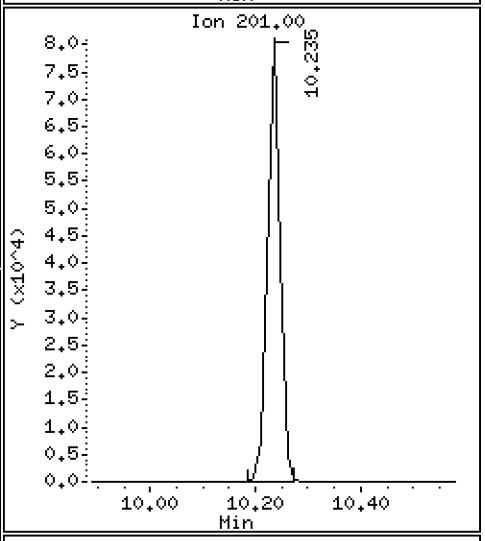
17 Hexachloroethane

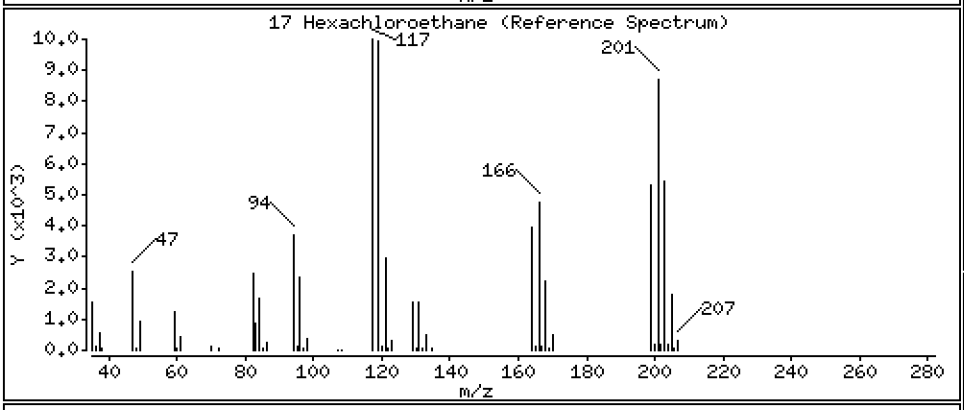
Concentration: 4.049 ug/mL

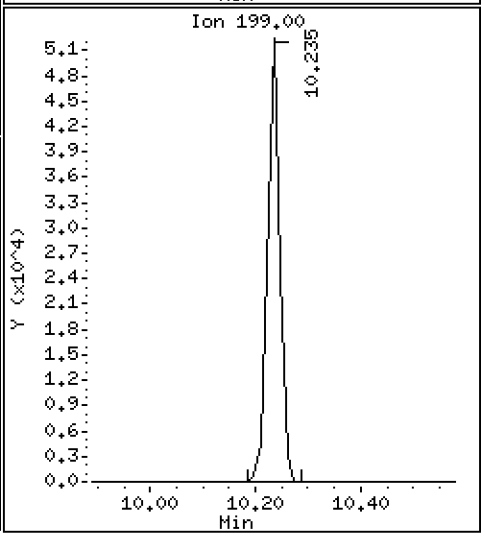


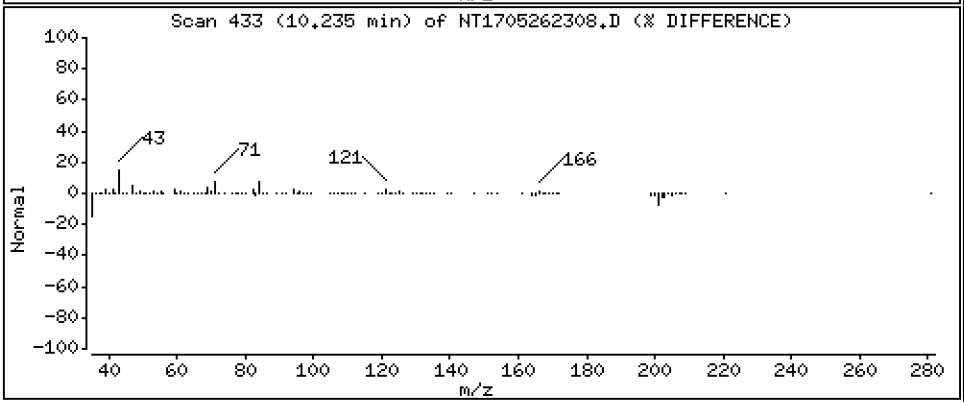












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

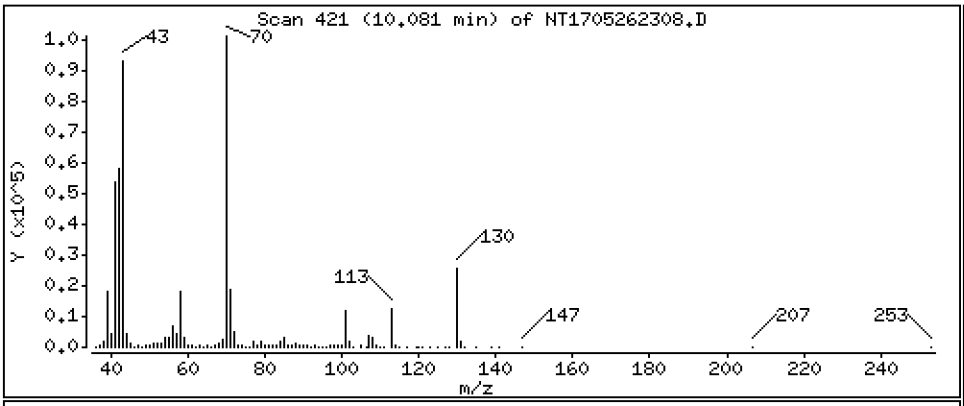
Operator: VTS

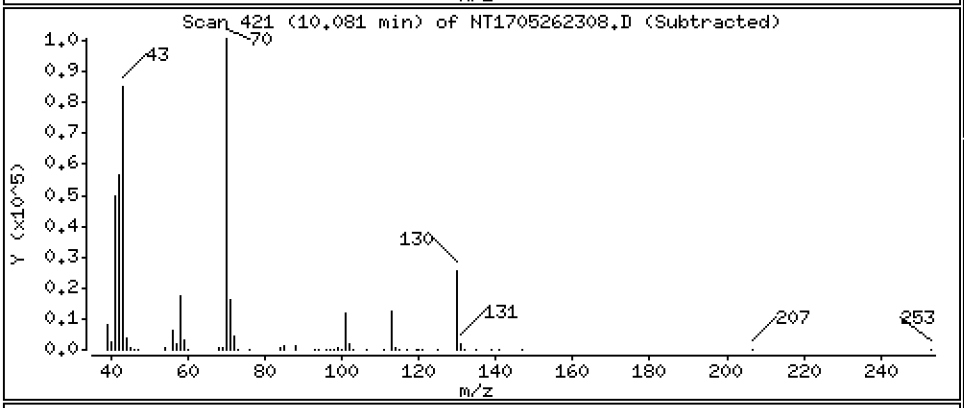
Column phase: ZB-5msi

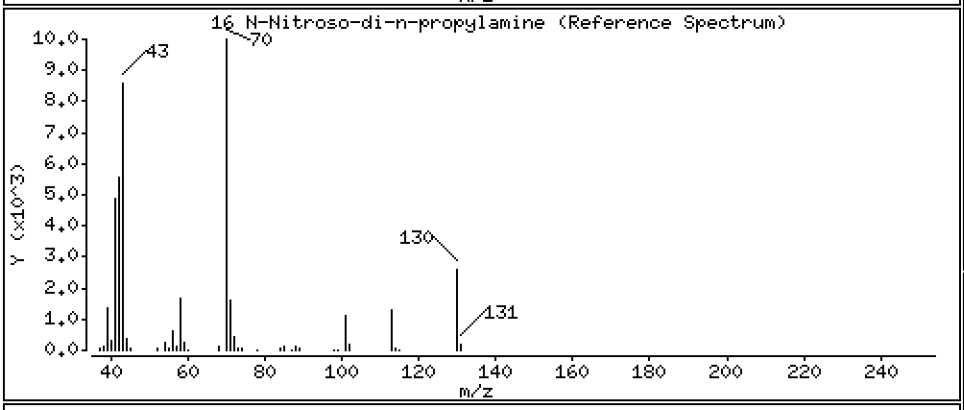
Column diameter: 0.25

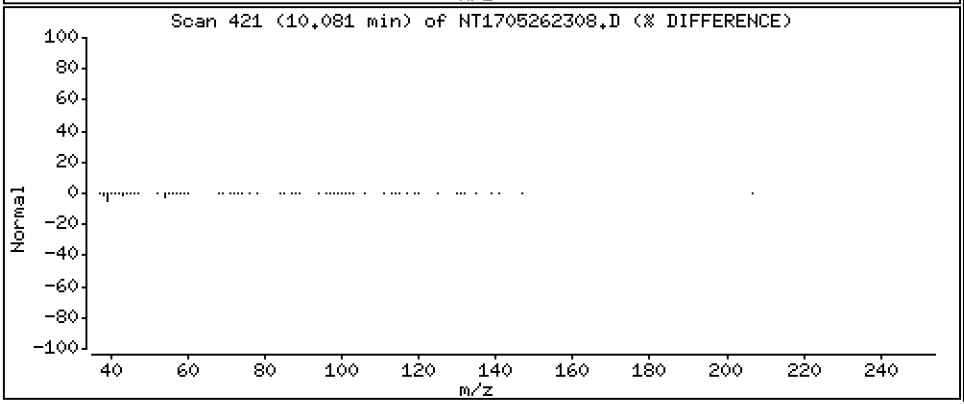
16 N-Nitroso-di-n-propylamine

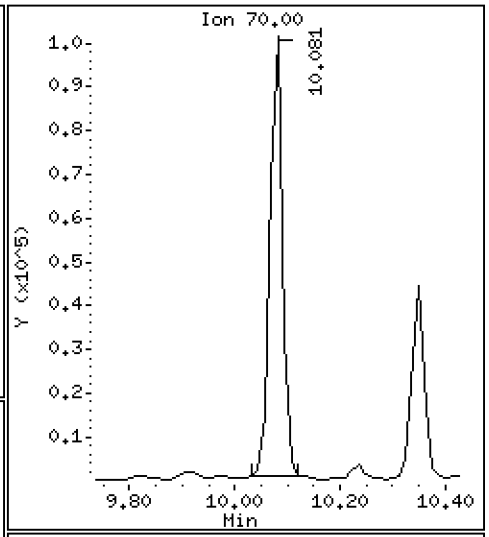
Concentration: 2.360 ug/mL

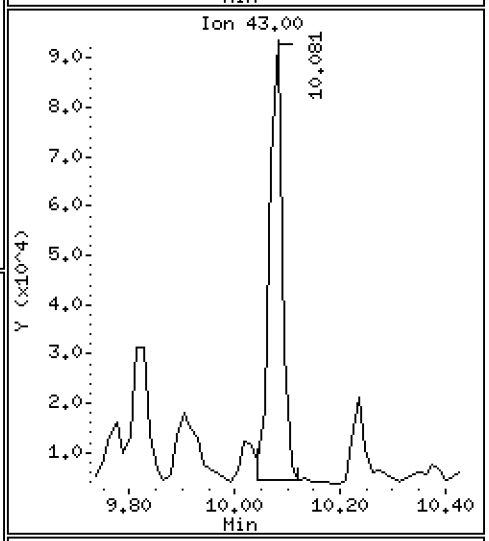


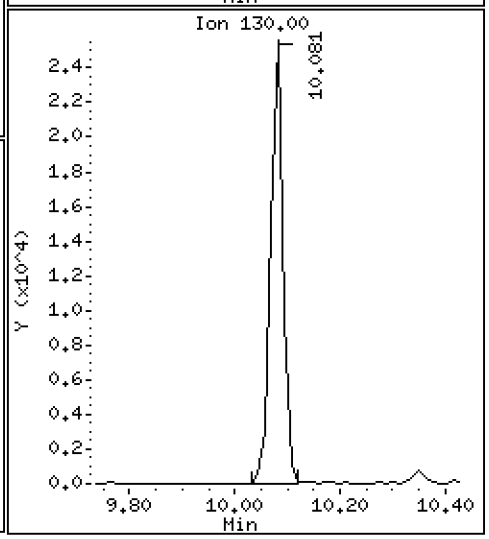












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

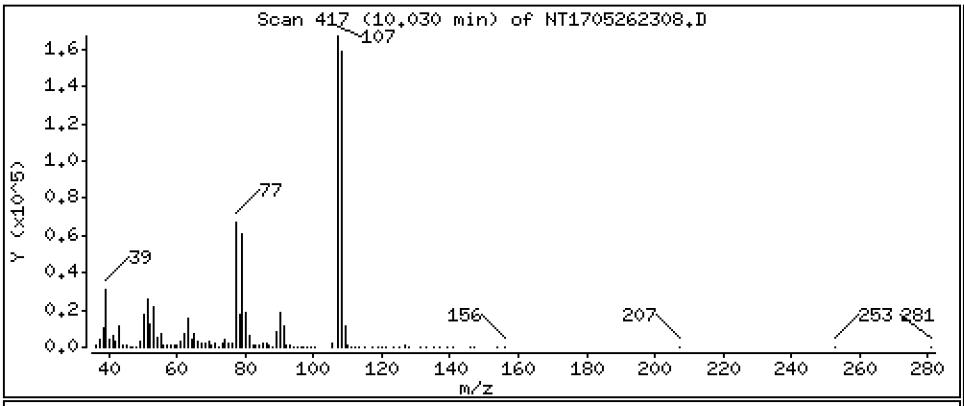
Operator: VTS

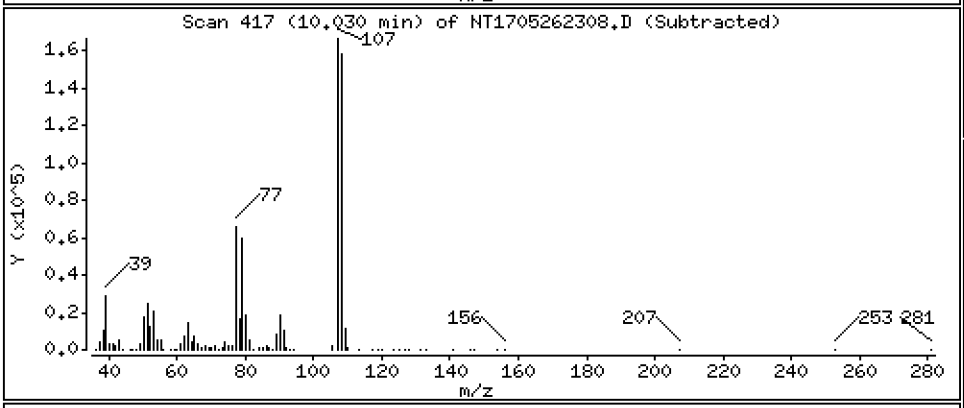
Column phase: ZB-5msi

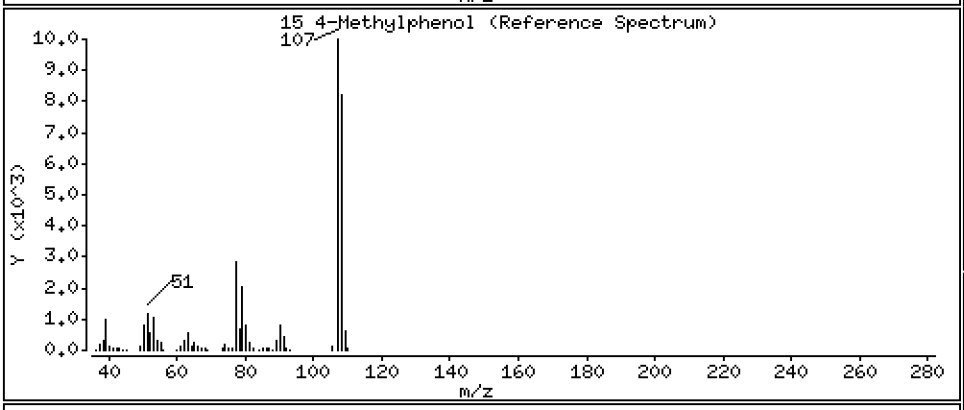
Column diameter: 0.25

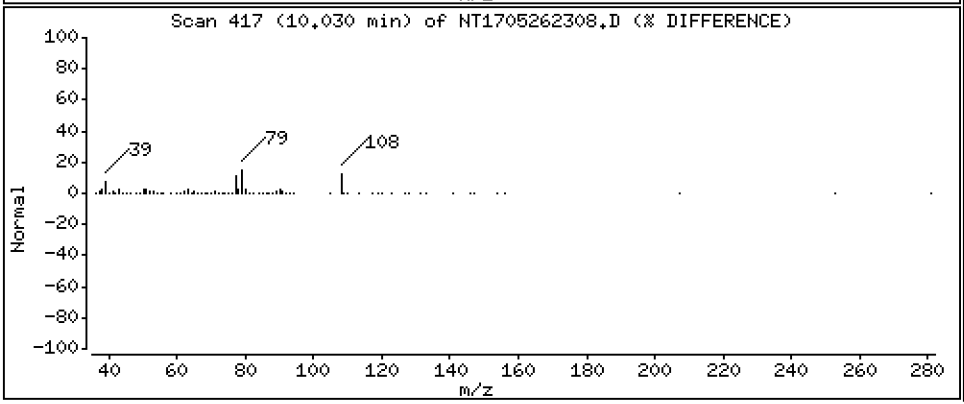
15 4-Methylphenol

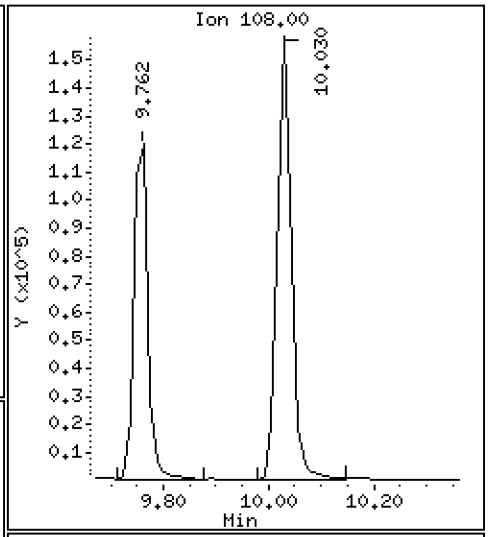
Concentration: 3.179 ug/mL

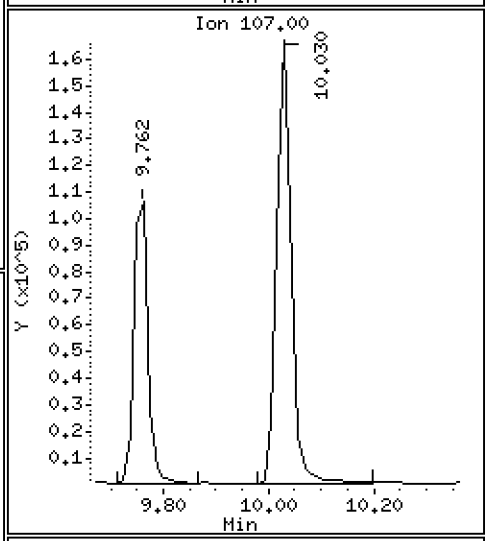


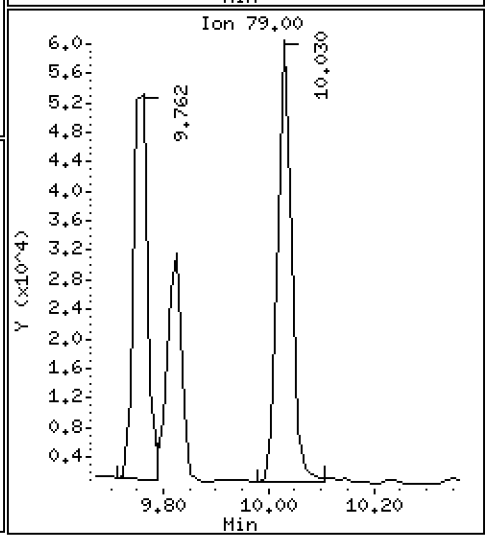












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

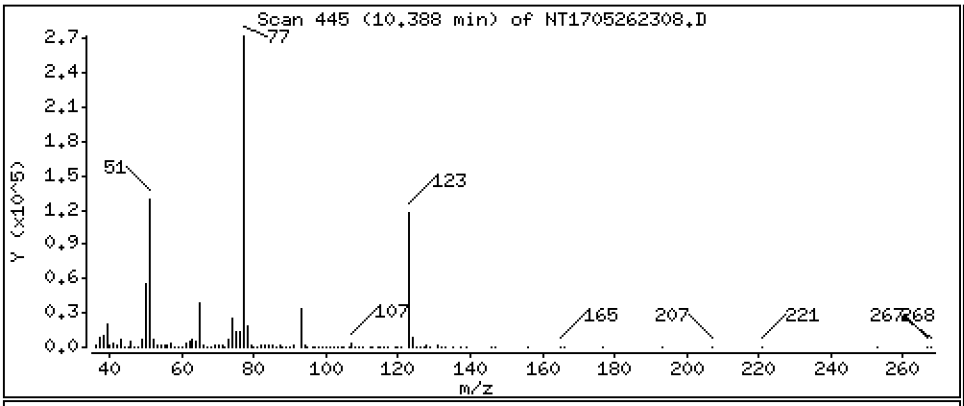
Operator: VTS

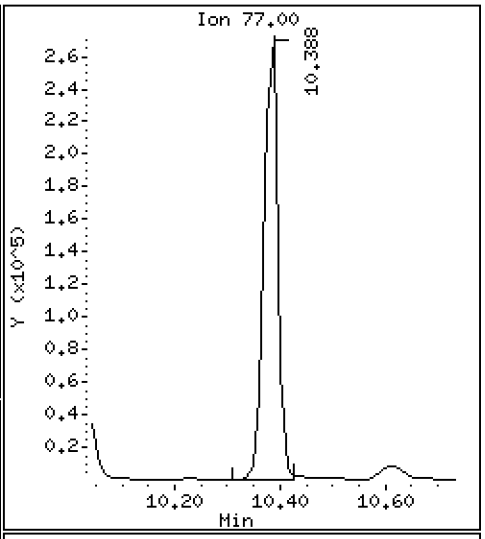
Column phase: ZB-5msi

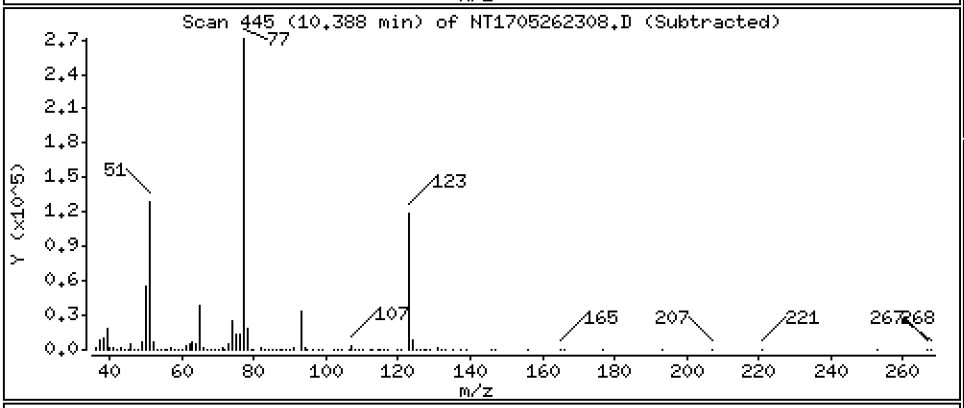
Column diameter: 0.25

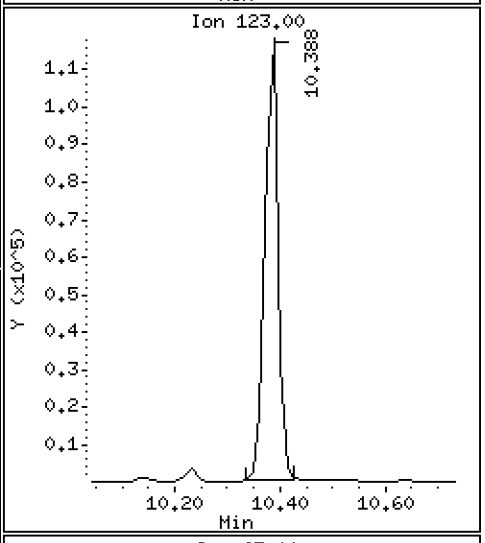
19 Nitrobenzene

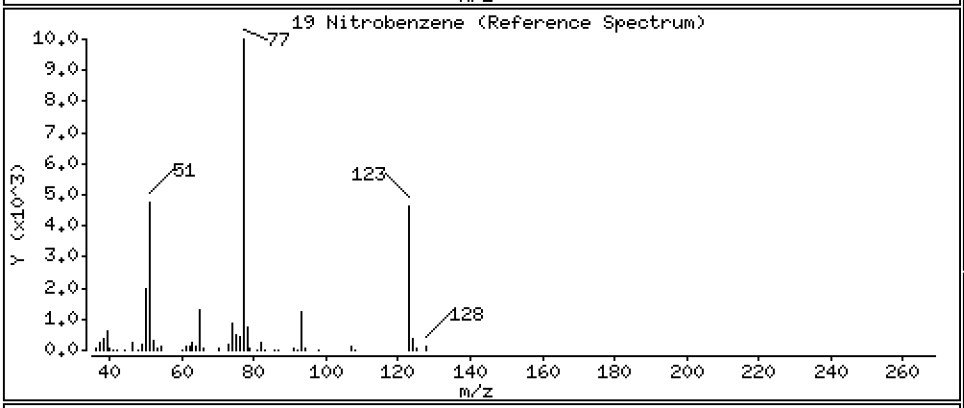
Concentration: 4.355 ug/mL

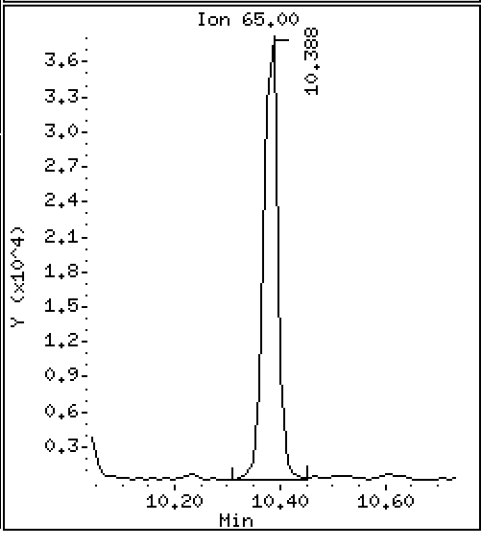


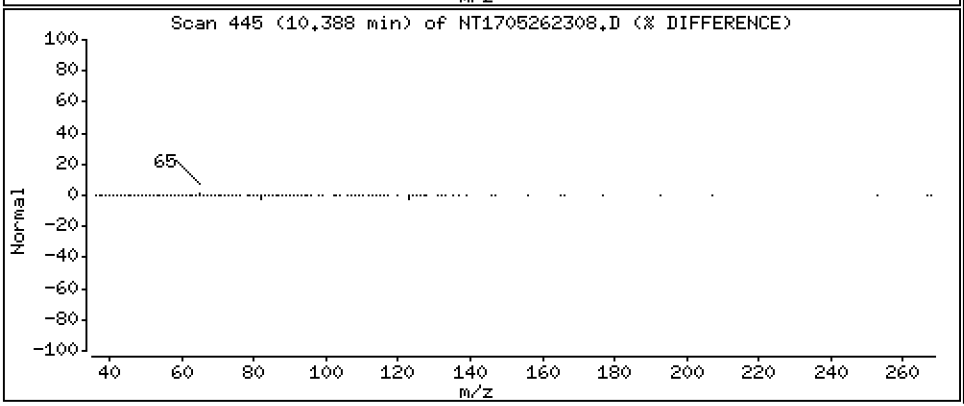












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

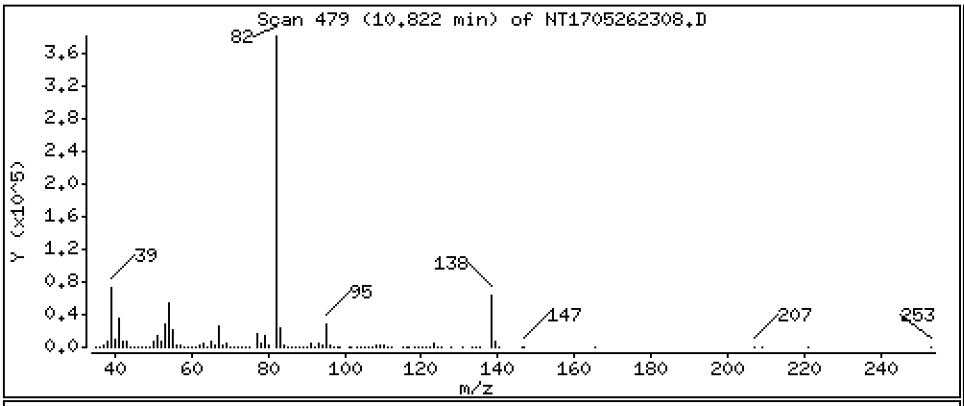
Operator: VTS

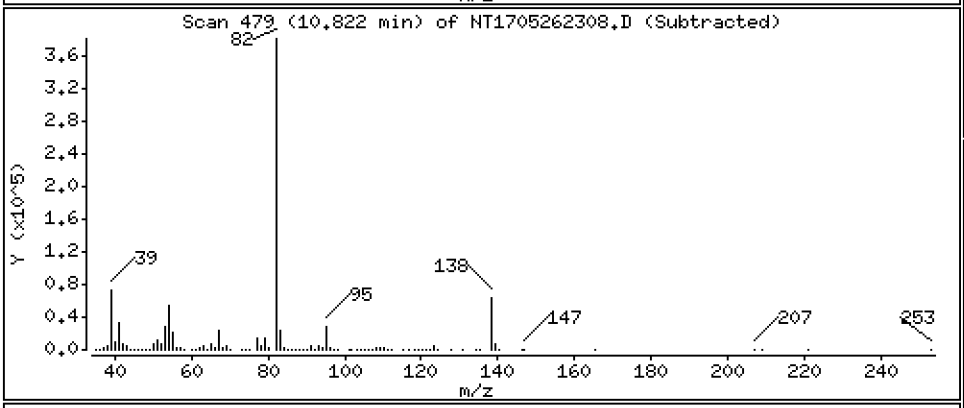
Column phase: ZB-5msi

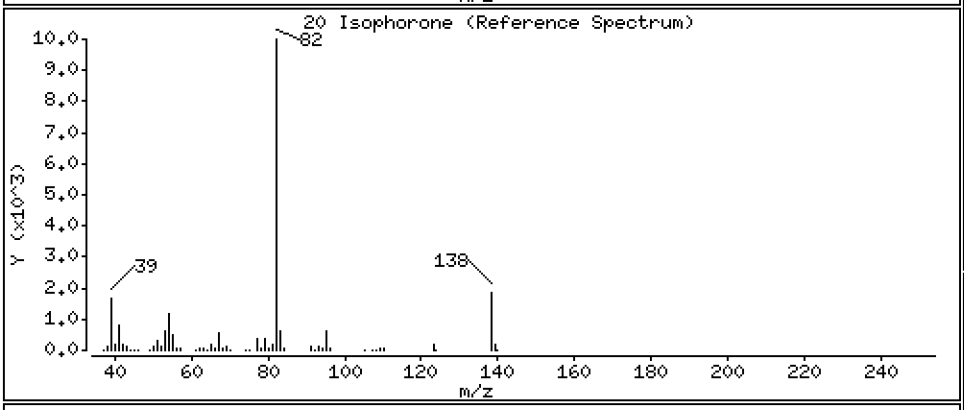
Column diameter: 0.25

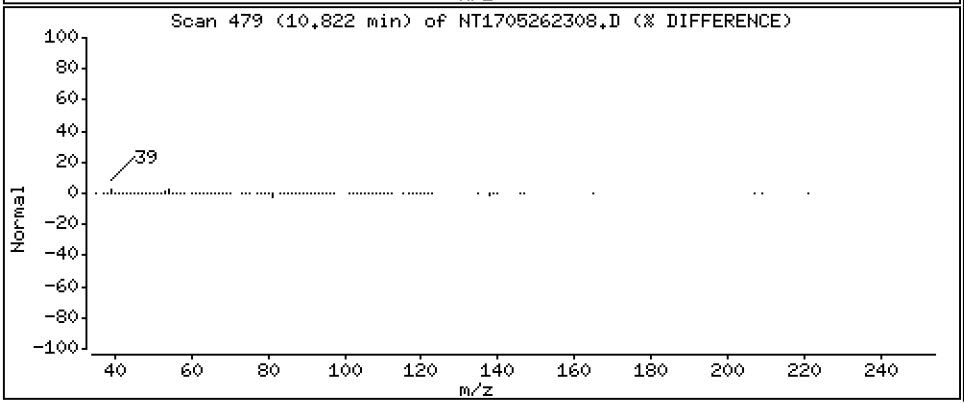
20 Isophorone

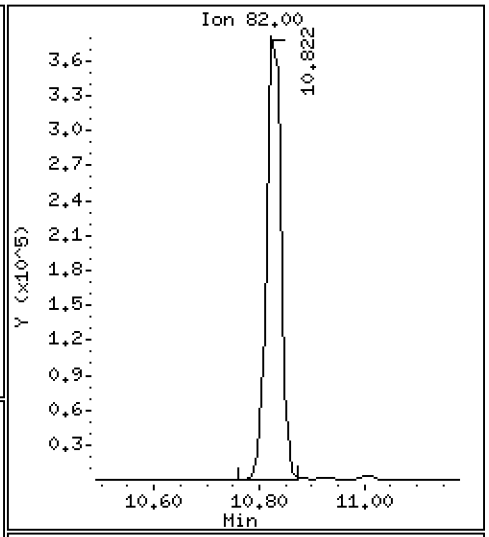
Concentration: 4.896 ug/mL

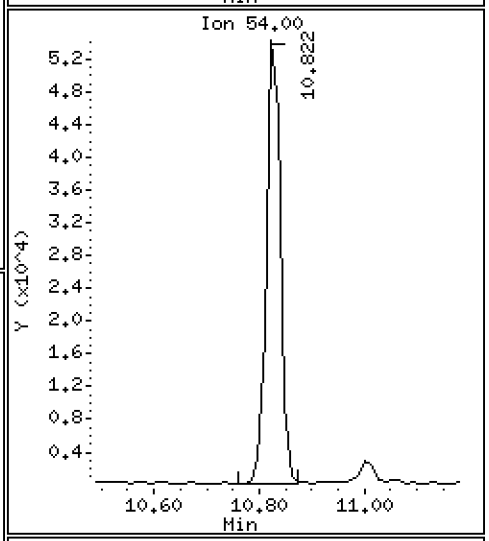


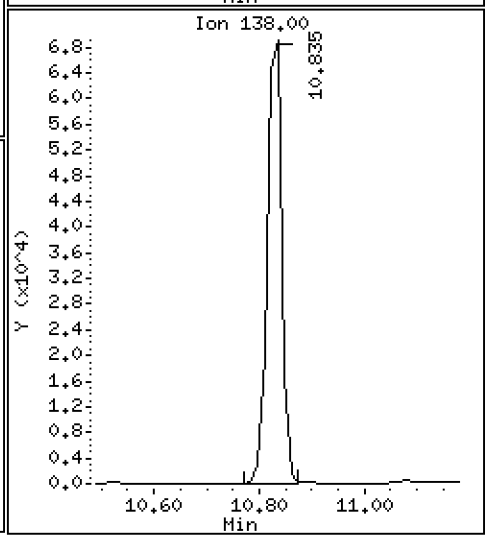












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

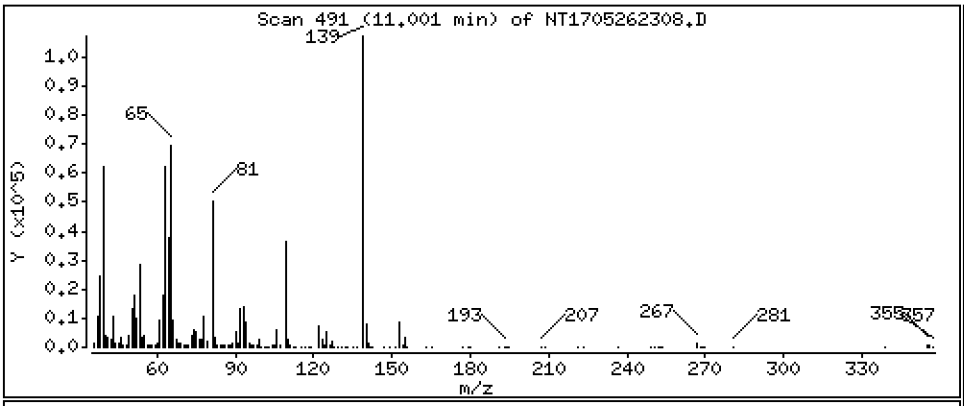
Operator: VTS

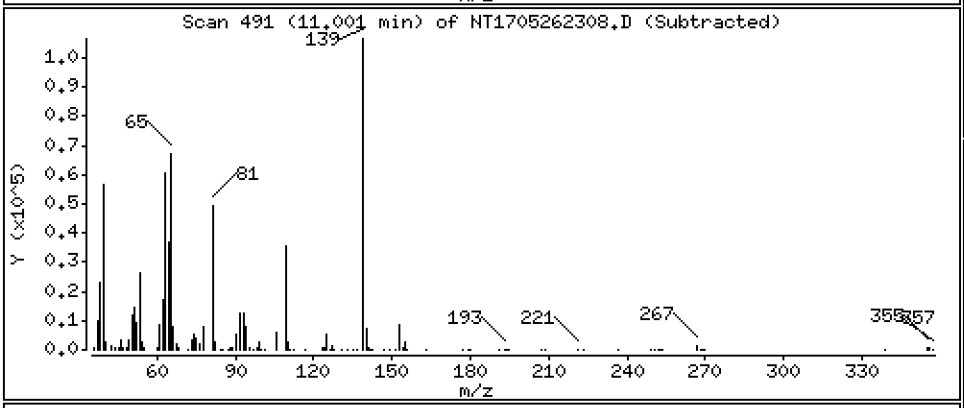
Column phase: ZB-5msi

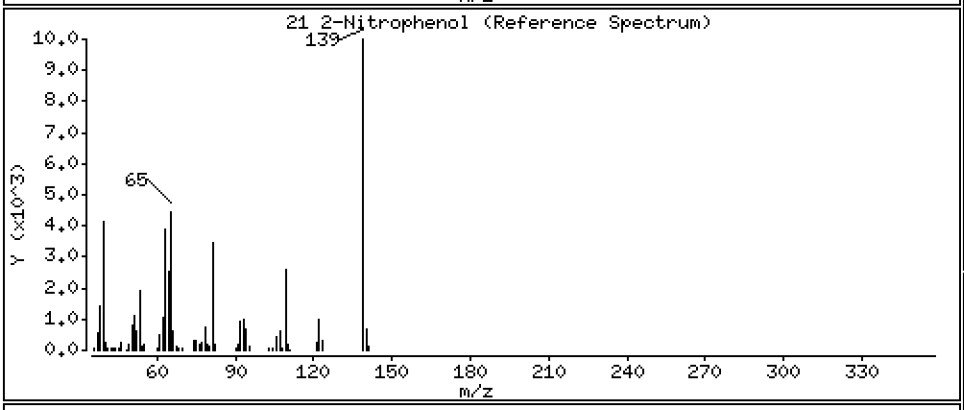
Column diameter: 0.25

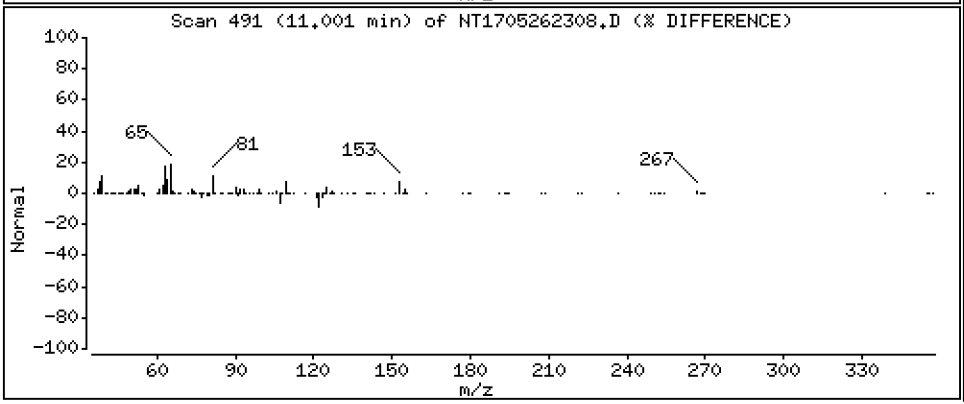
21 2-Nitrophenol

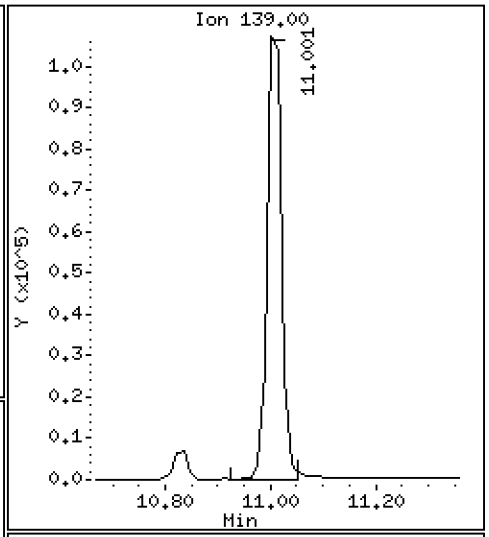
Concentration: 4.863 ug/mL

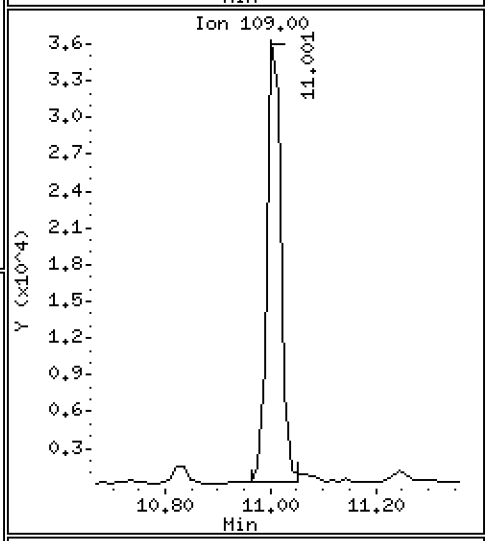


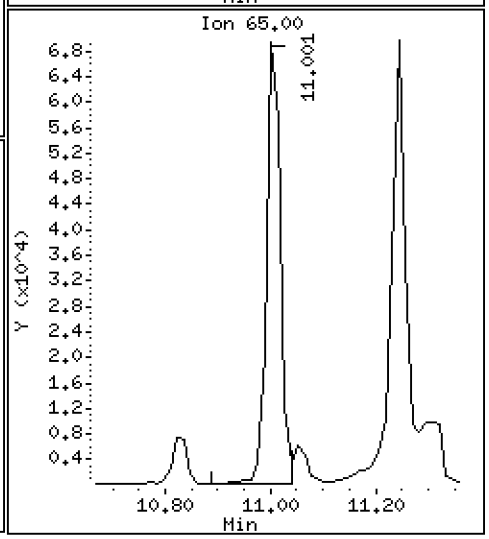












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

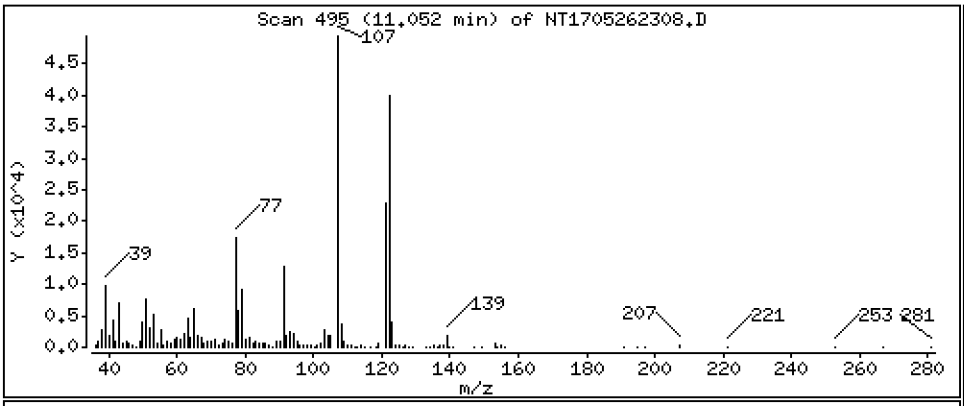
Operator: VTS

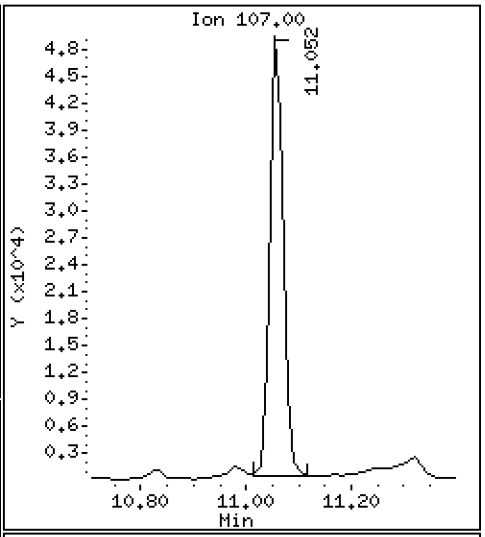
Column phase: ZB-5msi

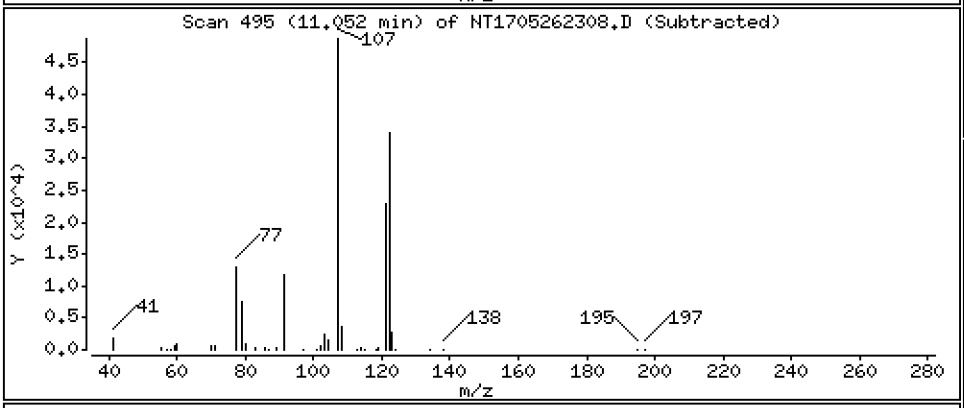
Column diameter: 0.25

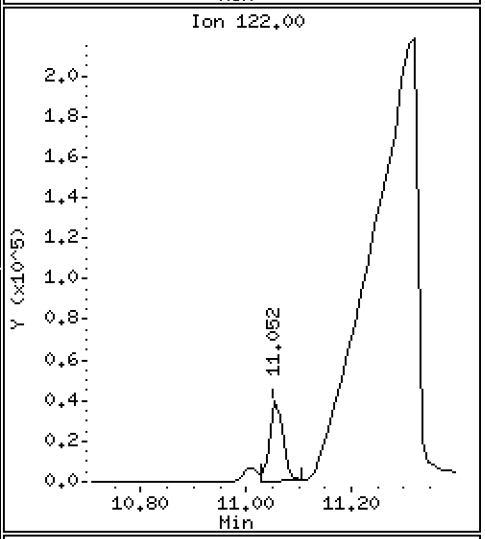
22 2,4-Dimethylphenol

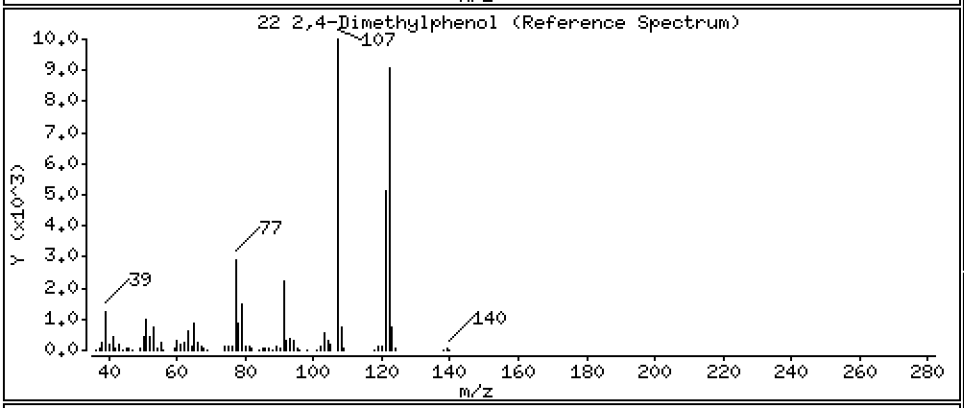
Concentration: 0.8378 ug/mL

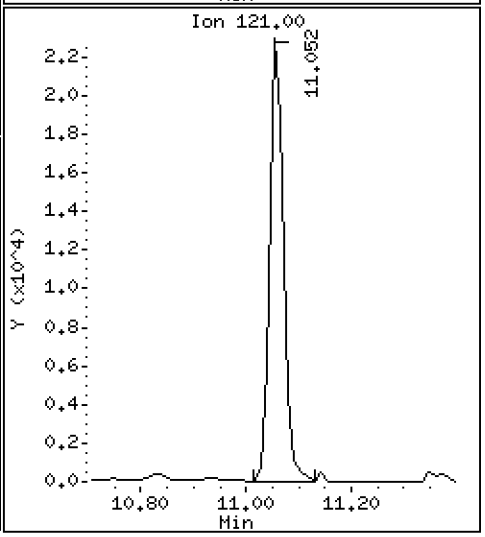


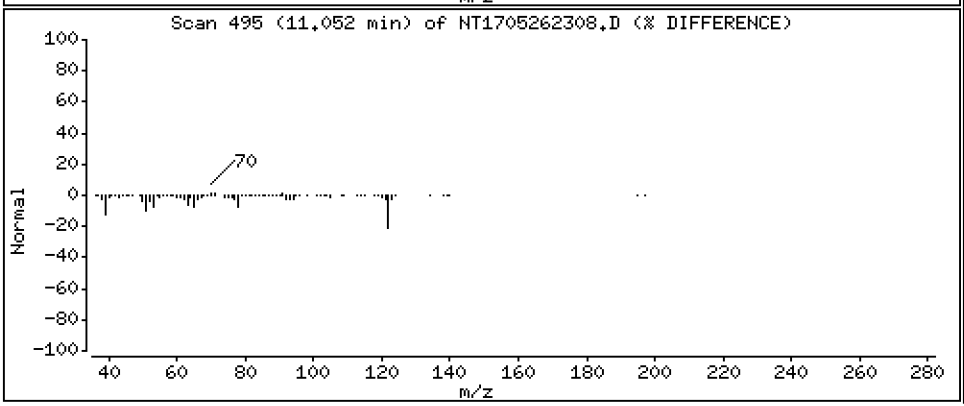












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

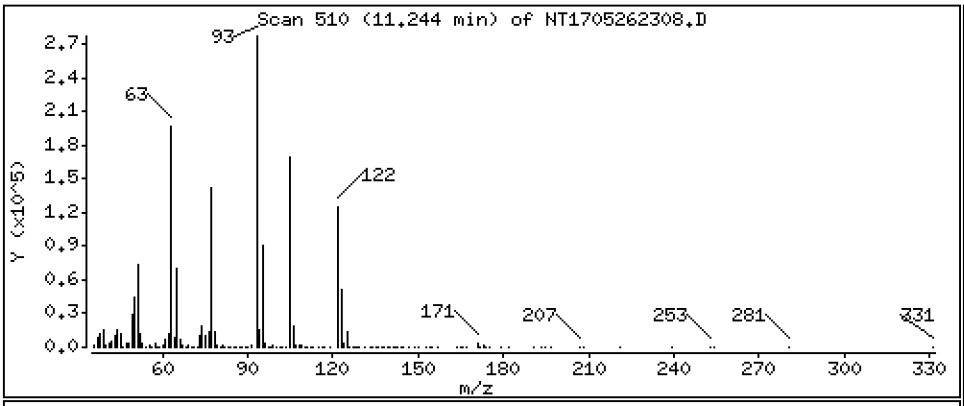
Operator: VTS

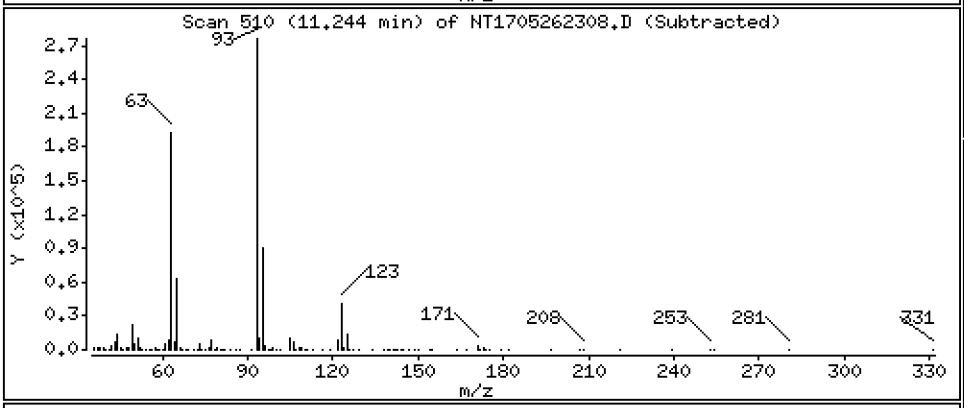
Column phase: ZB-5msi

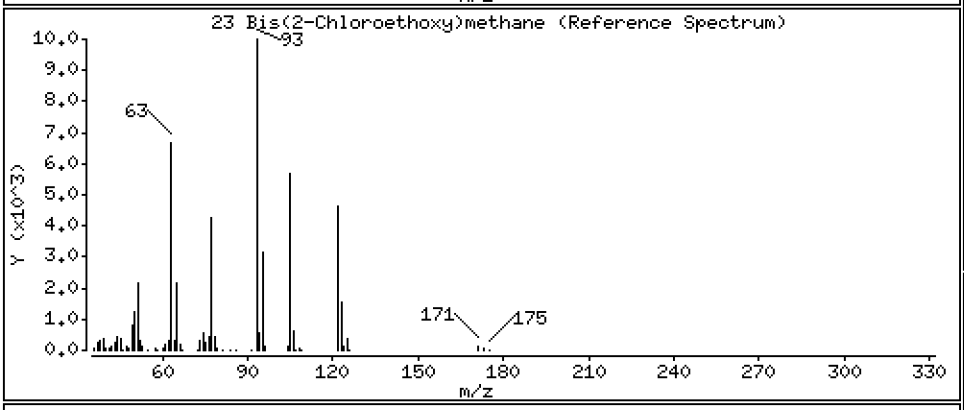
Column diameter: 0.25

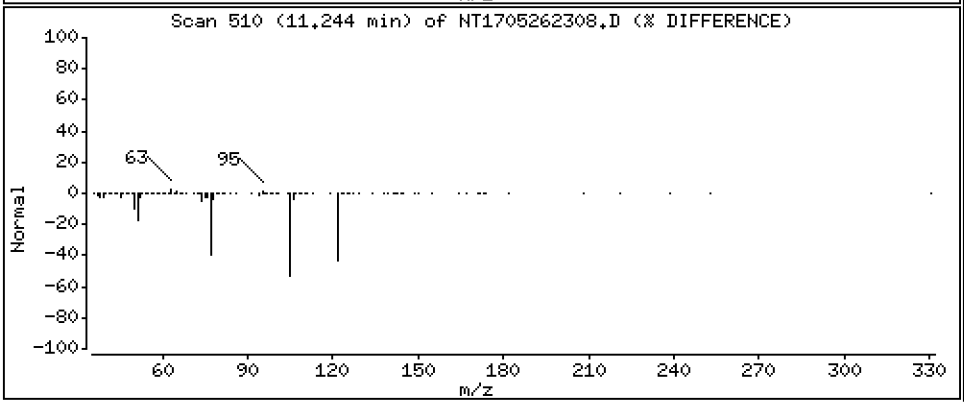
23 Bis(2-Chloroethoxy)methane

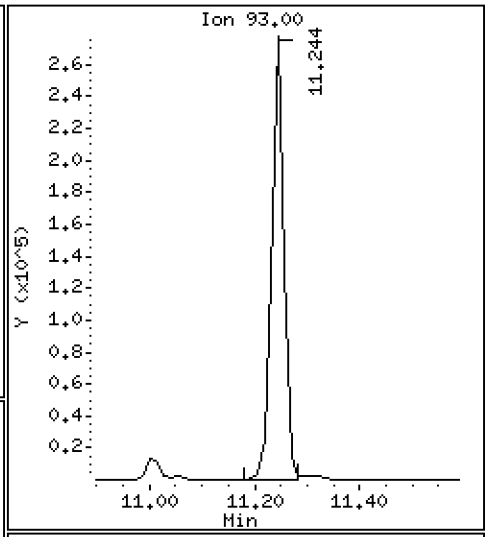
Concentration: 4.779 ug/mL

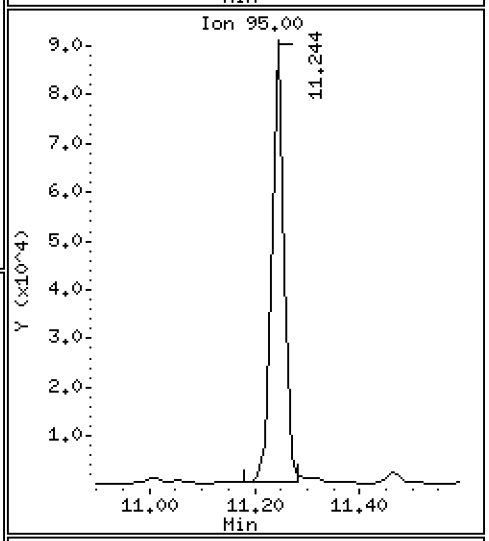


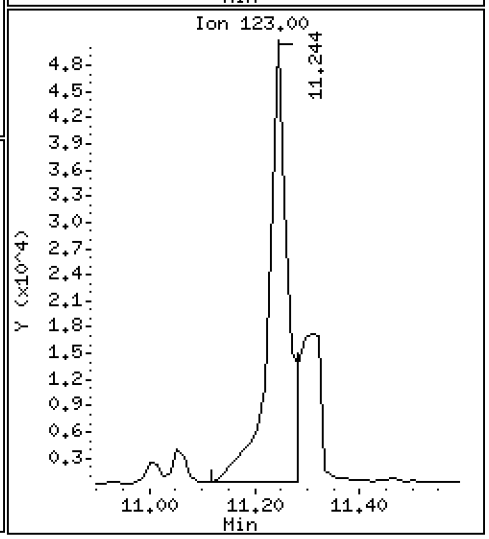












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

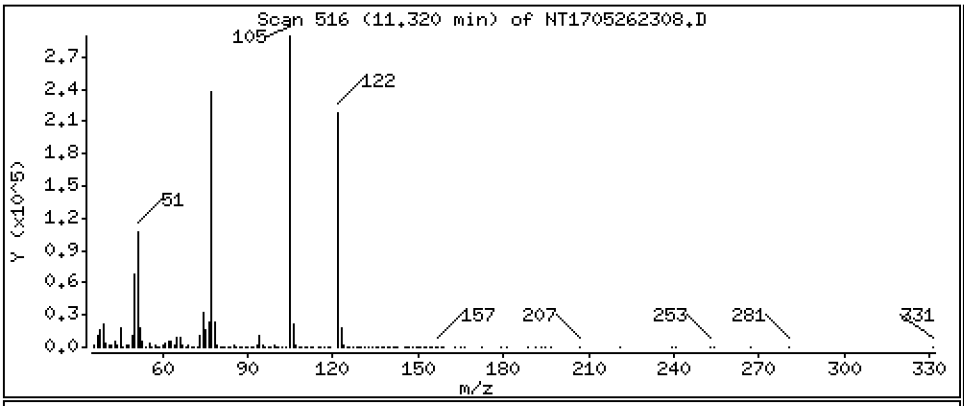
Operator: VTS

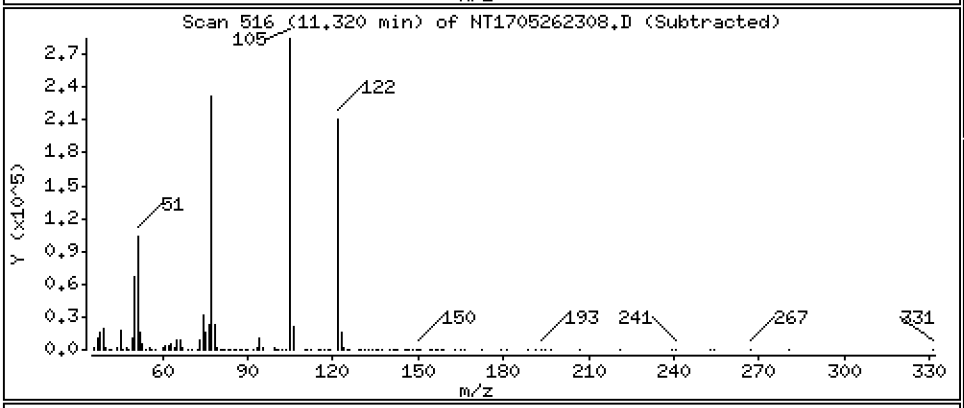
Column phase: ZB-5msi

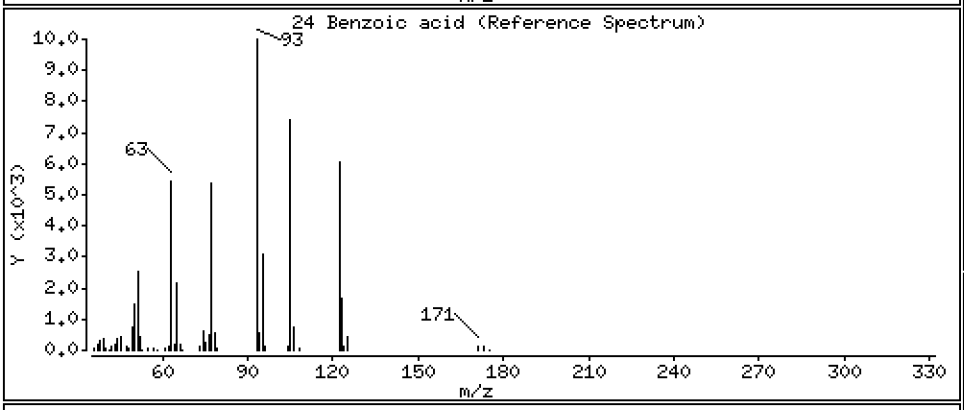
Column diameter: 0.25

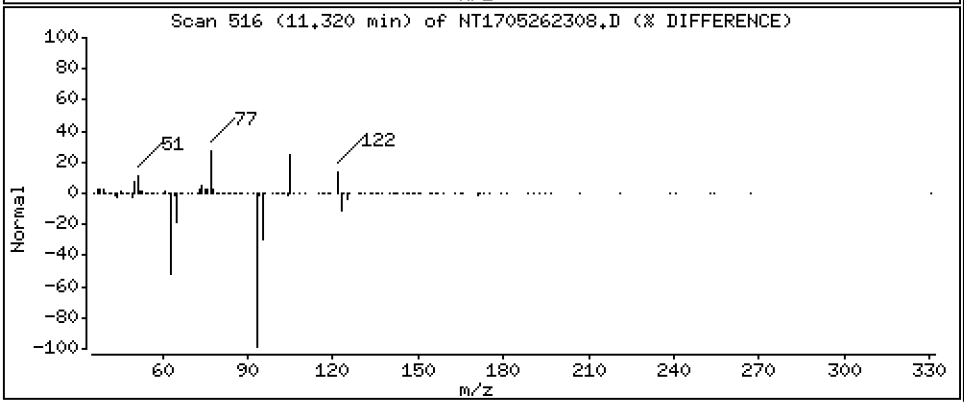
24 Benzoic acid

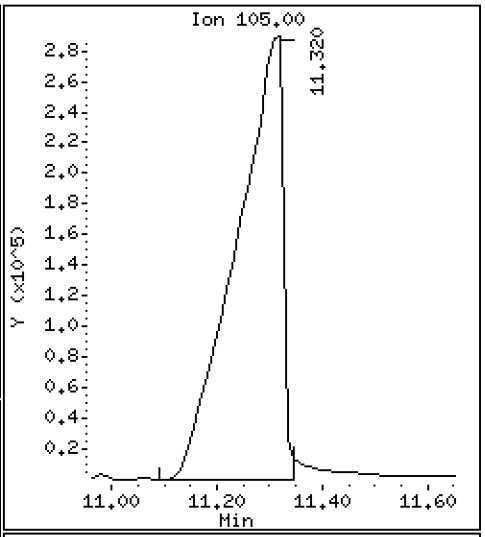
Concentration: 25.48 ug/mL

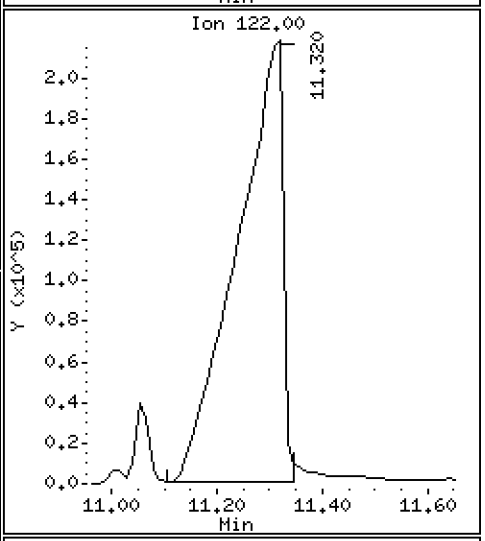


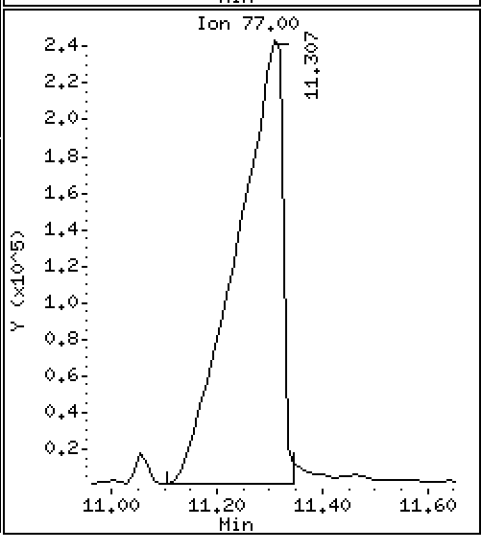












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

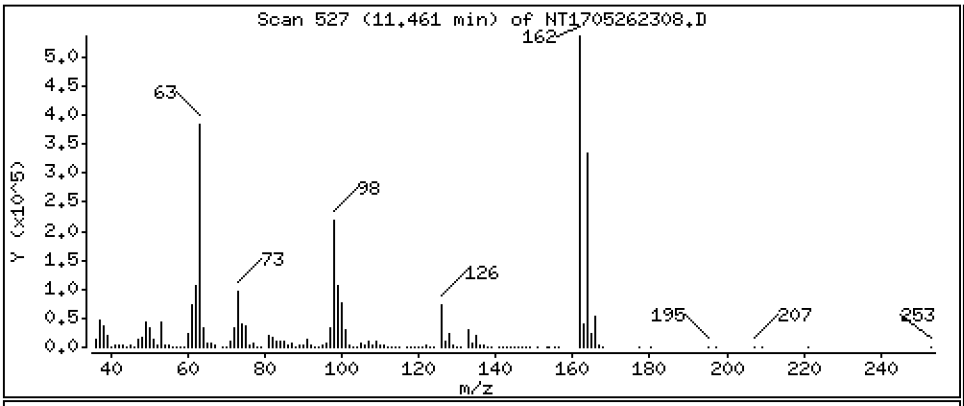
Operator: VTS

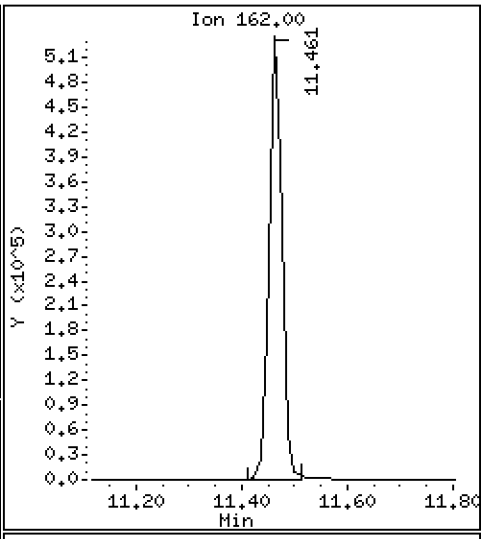
Column phase: ZB-5msi

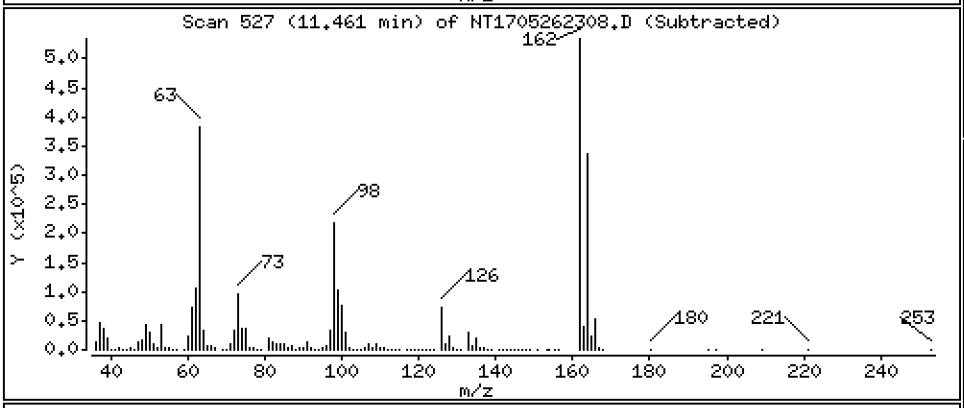
Column diameter: 0.25

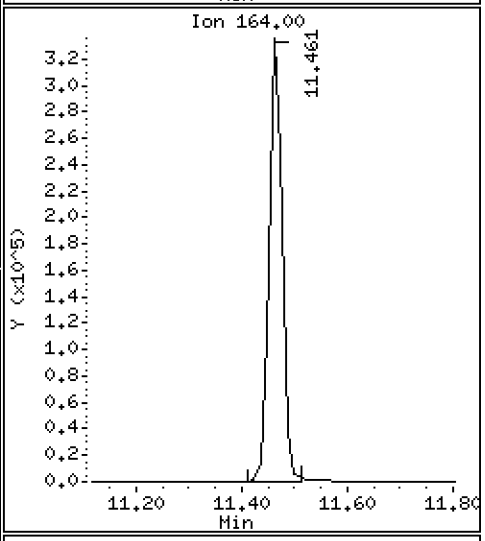
25 2,4-Dichlorophenol

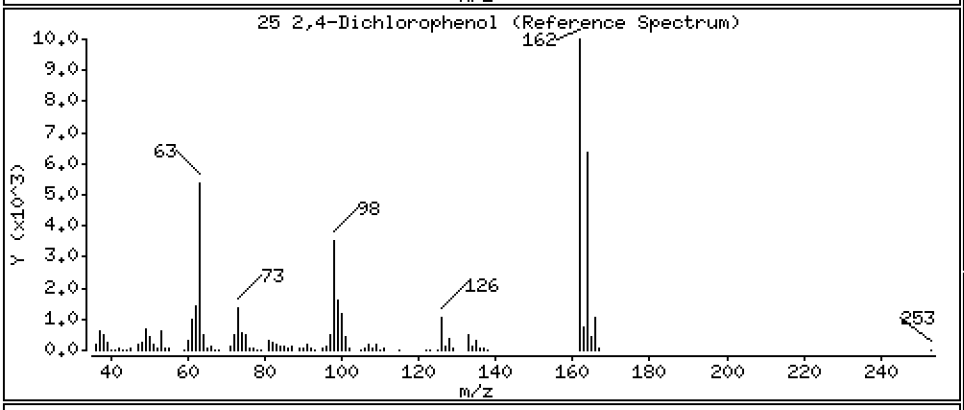
Concentration: 10.96 ug/mL

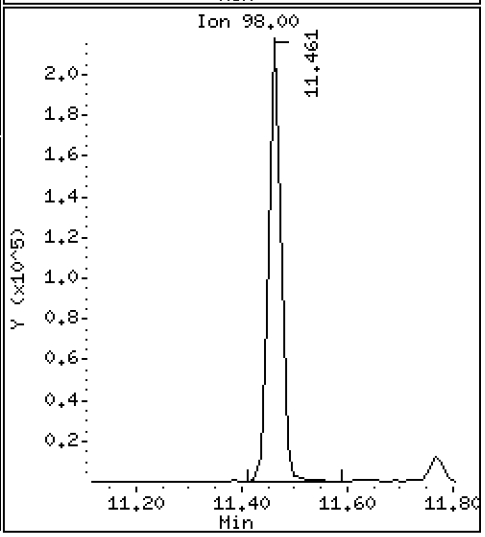


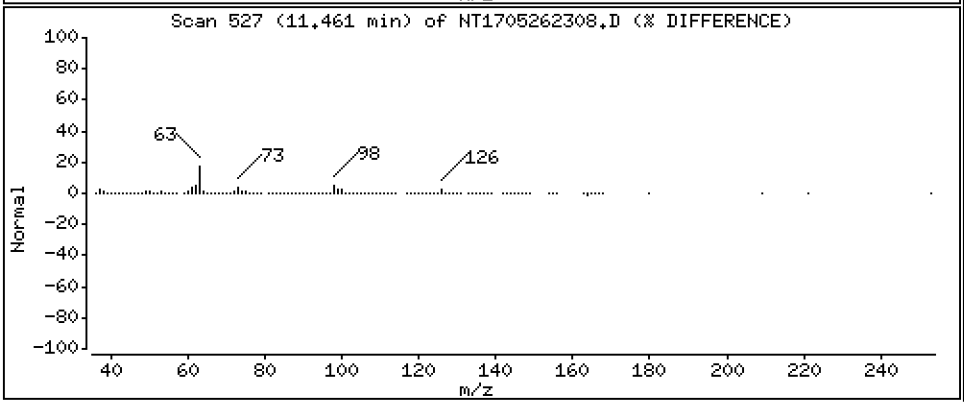












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

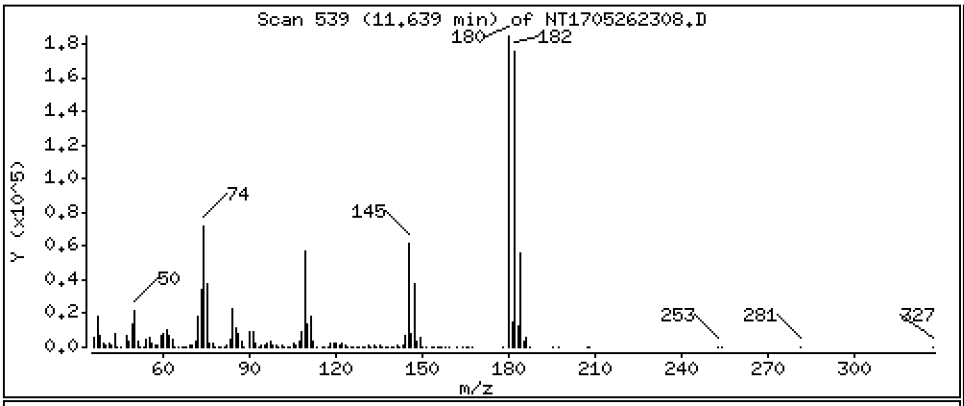
Operator: VTS

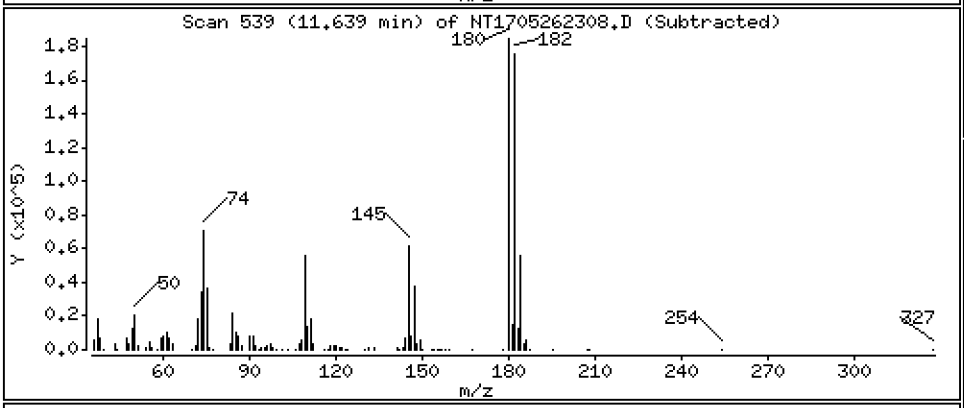
Column phase: ZB-5msi

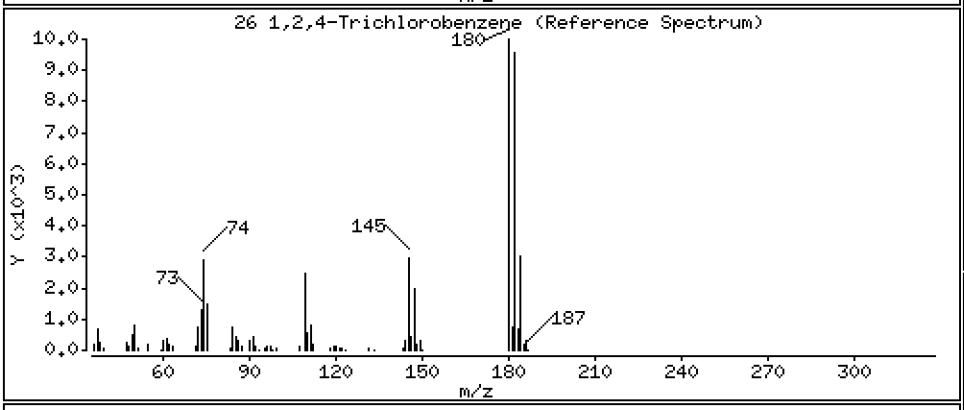
Column diameter: 0.25

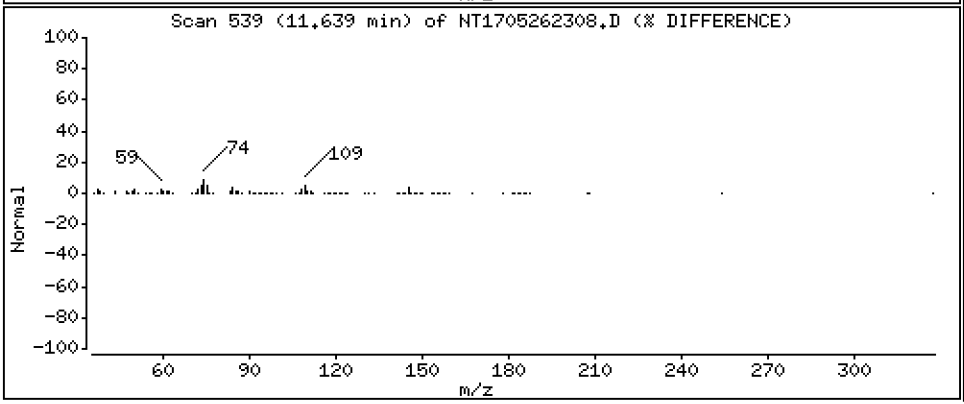
26 1,2,4-Trichlorobenzene

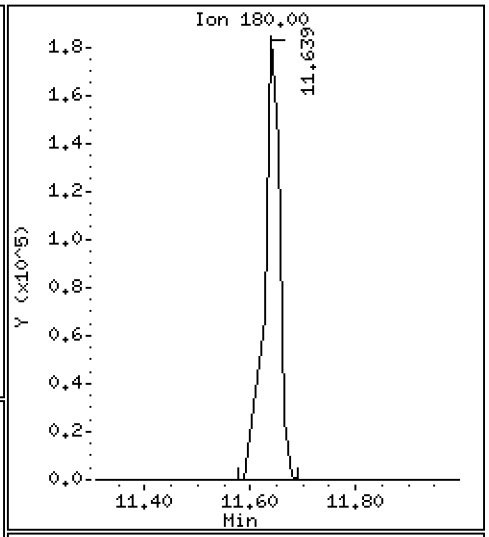
Concentration: 4.550 ug/mL

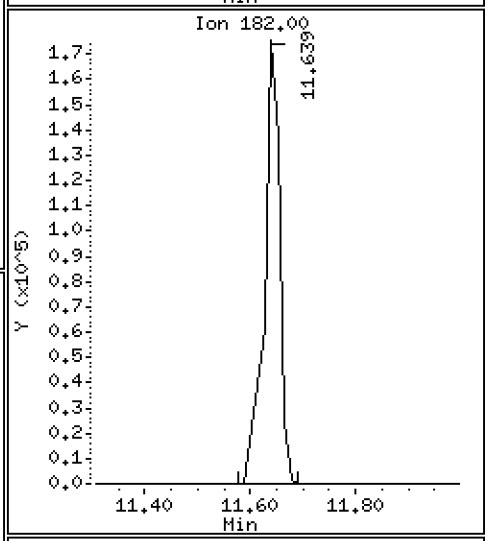


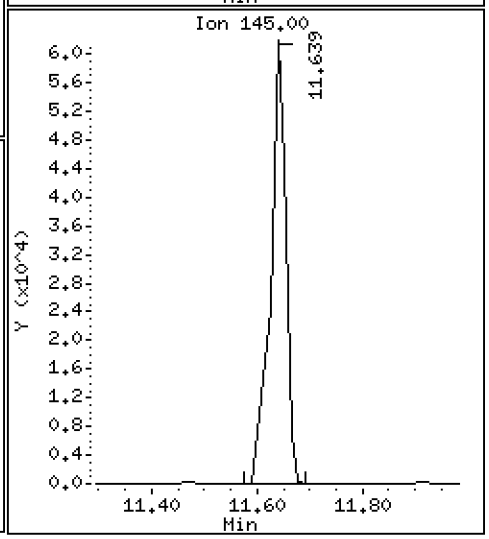












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

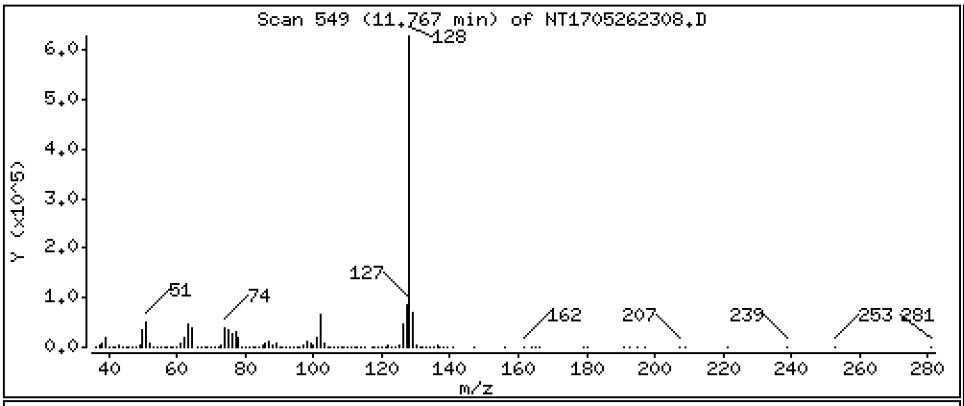
Operator: VTS

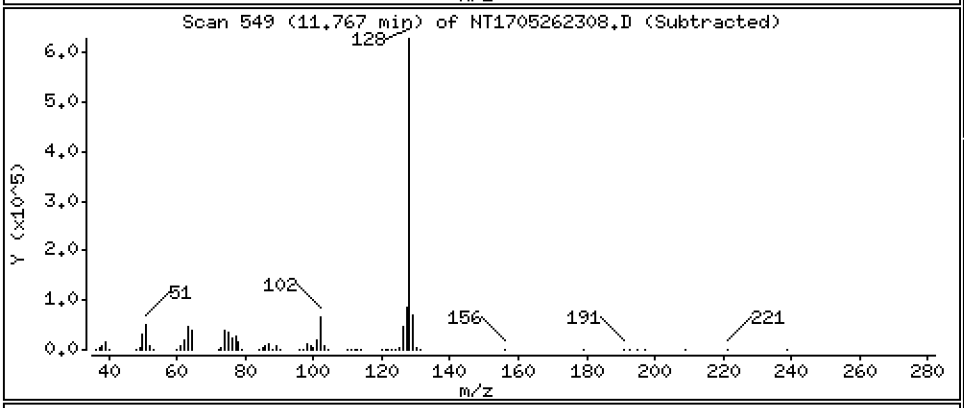
Column phase: ZB-5msi

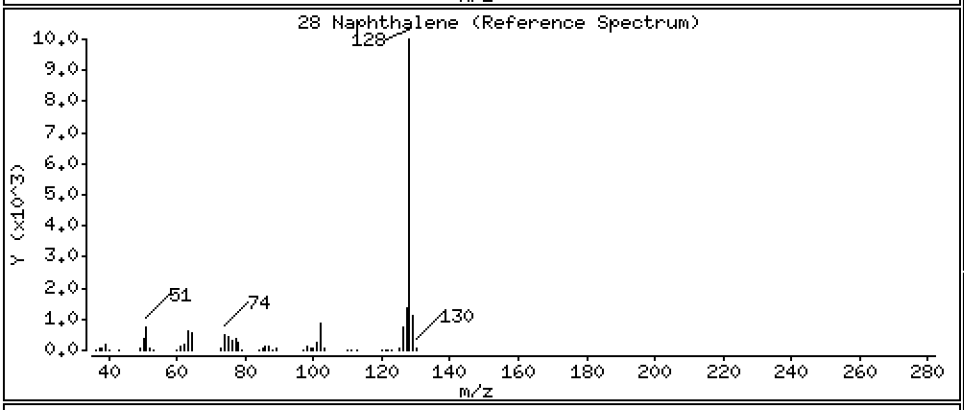
Column diameter: 0.25

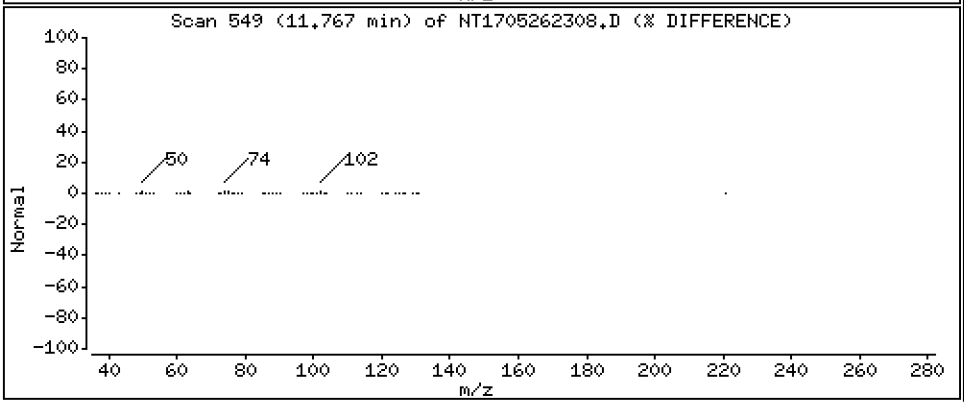
28 Naphthalene

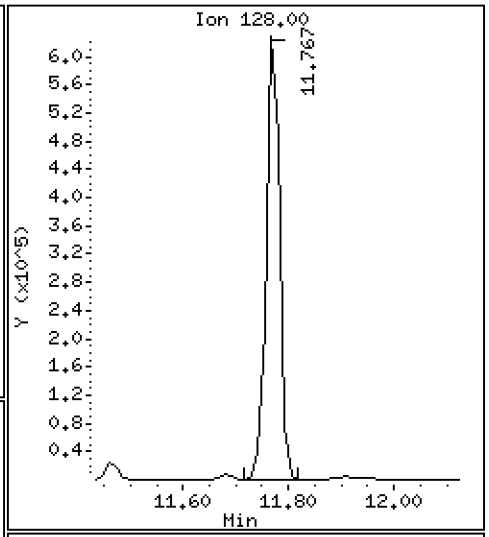
Concentration: 3.938 ug/mL

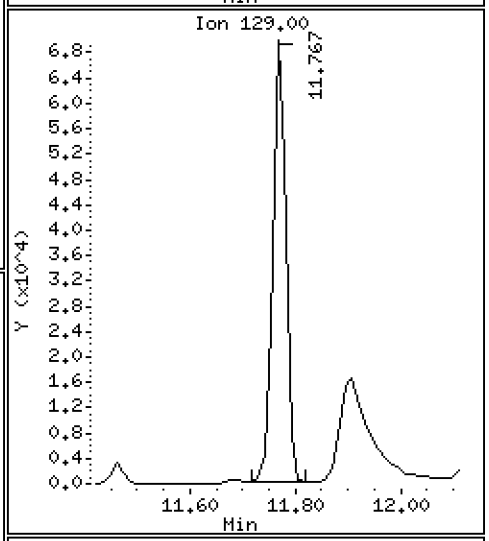


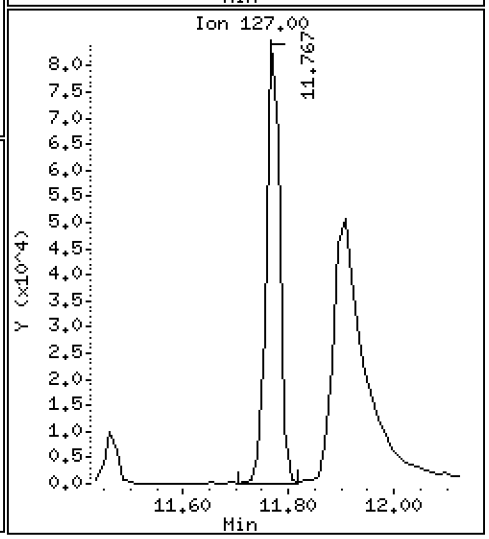












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

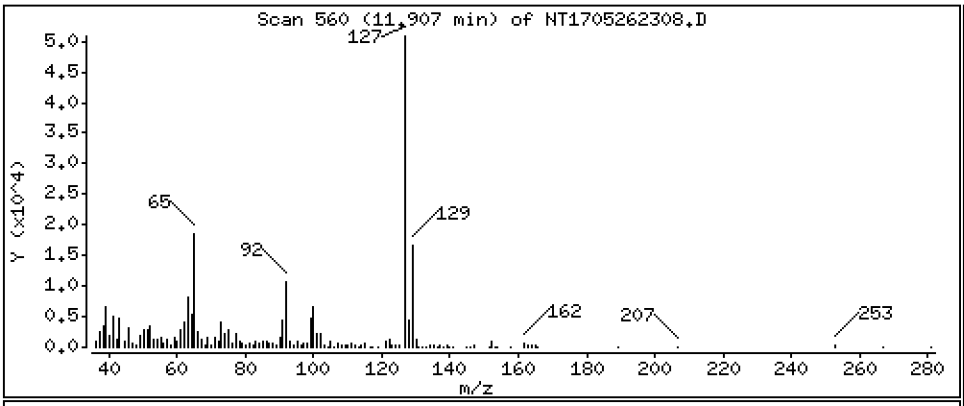
Operator: VTS

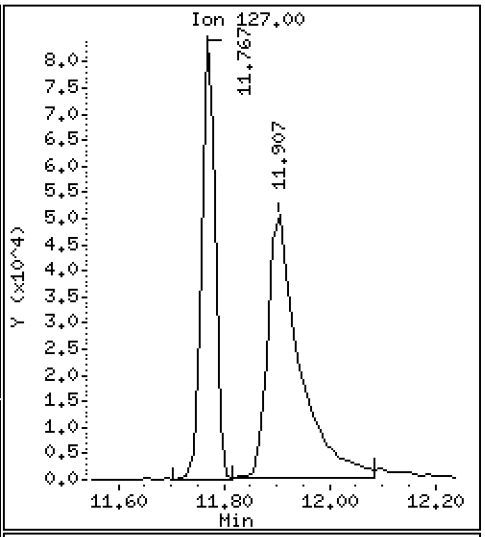
Column phase: ZB-5msi

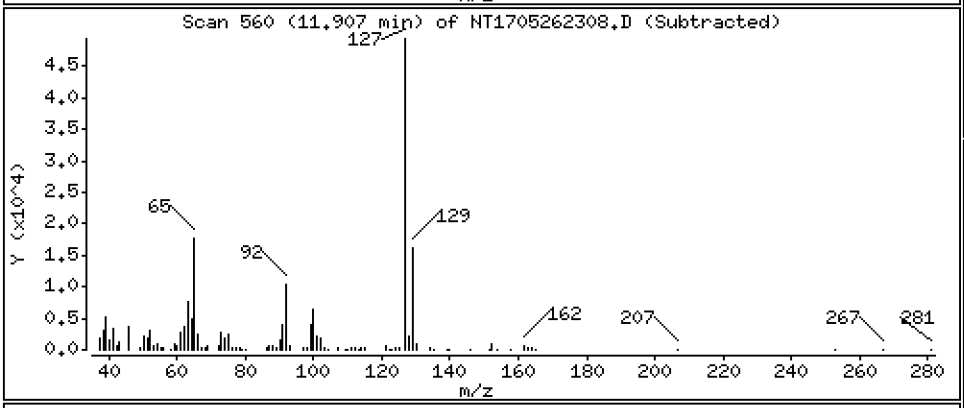
Column diameter: 0.25

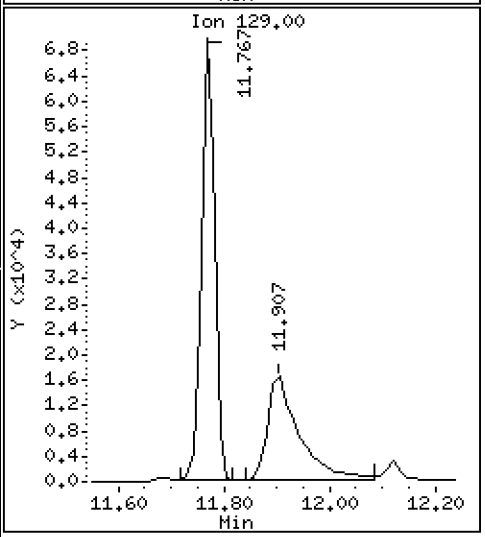
29 4-Chloroaniline

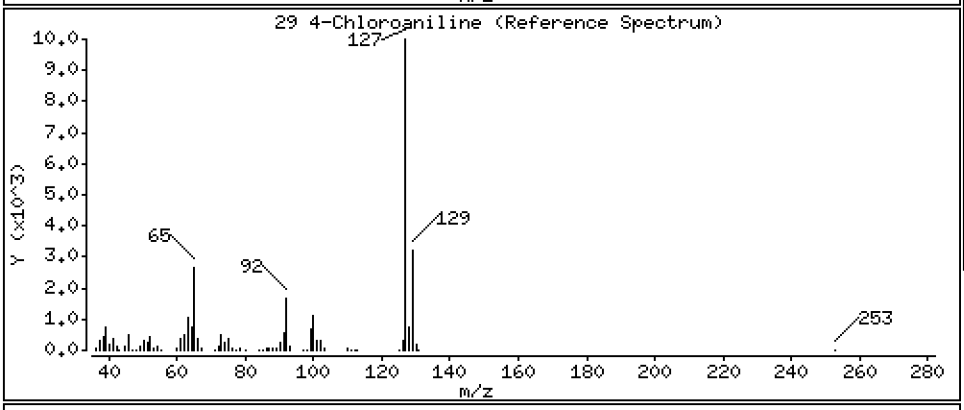
Concentration: 2.091 ug/mL

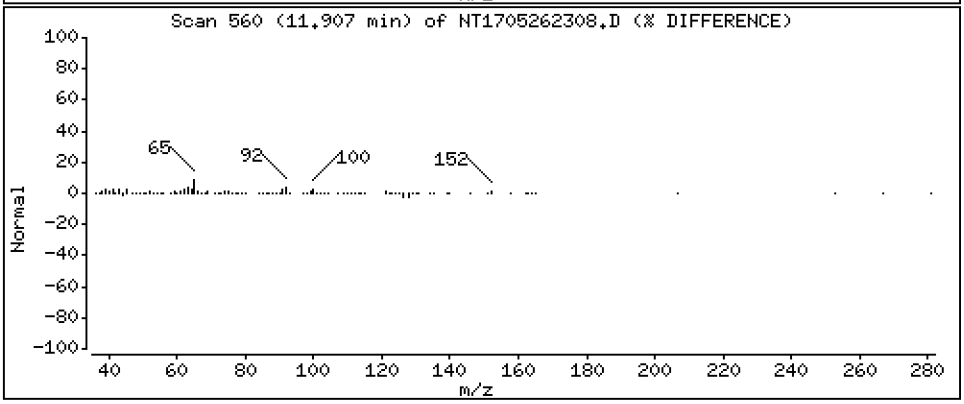












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

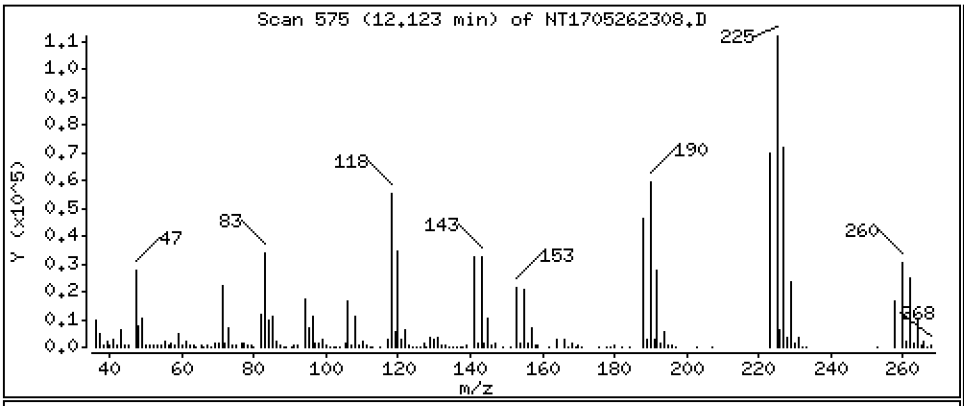
Operator: VTS

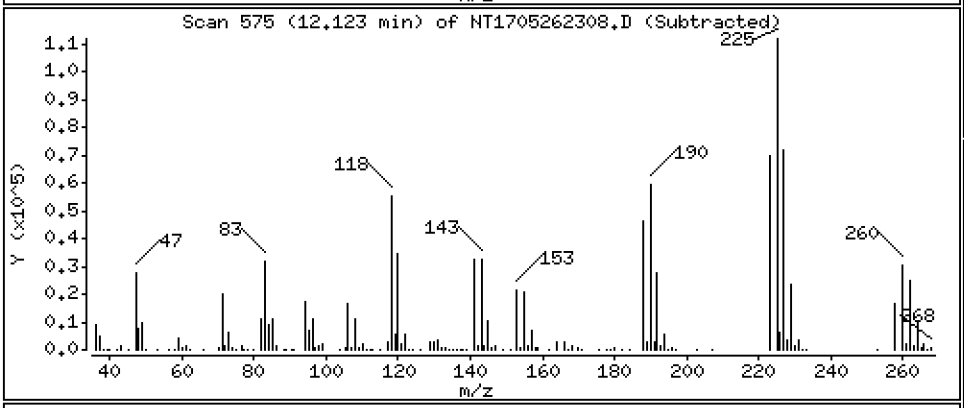
Column phase: ZB-5msi

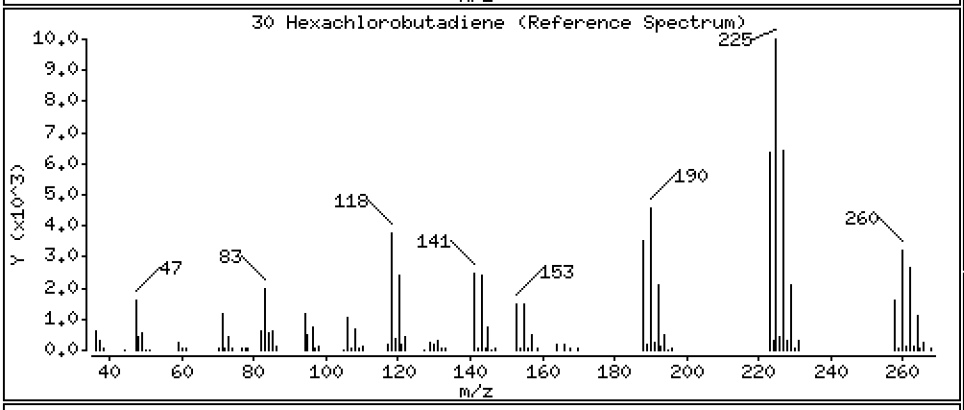
Column diameter: 0.25

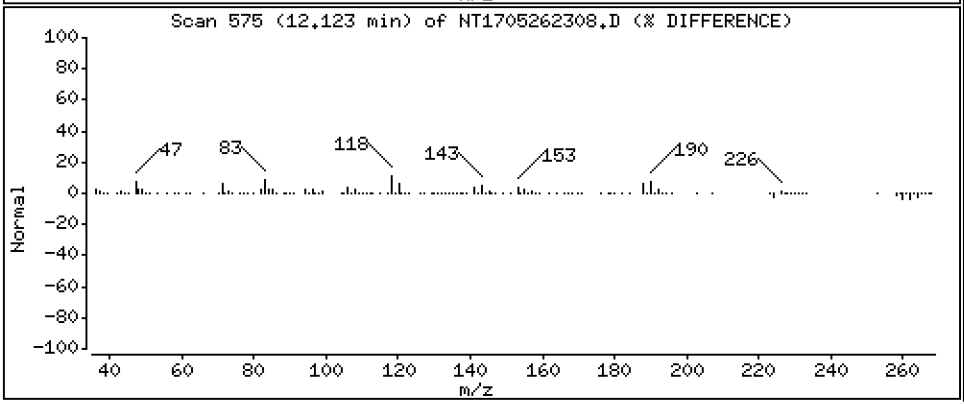
30 Hexachlorobutadiene

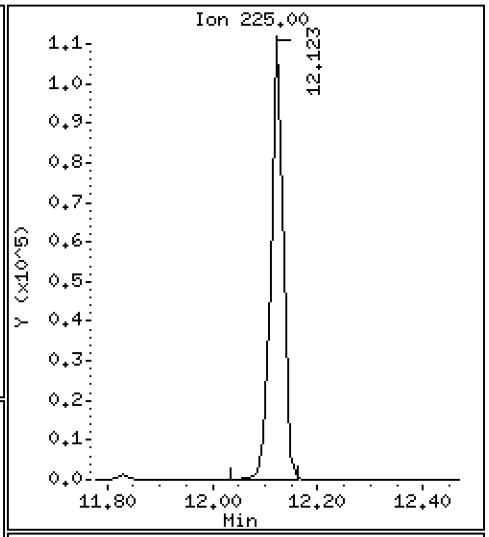
Concentration: 5.046 ug/mL

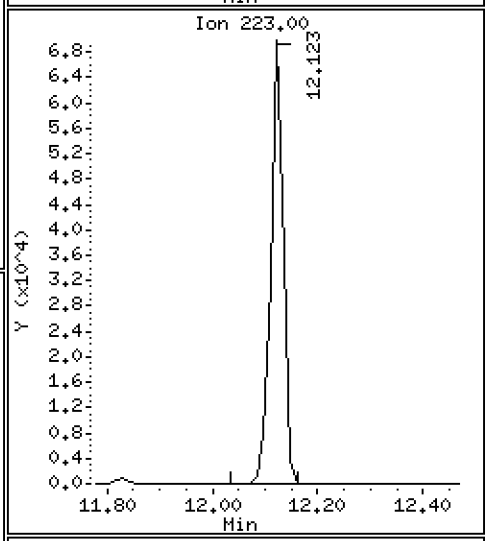


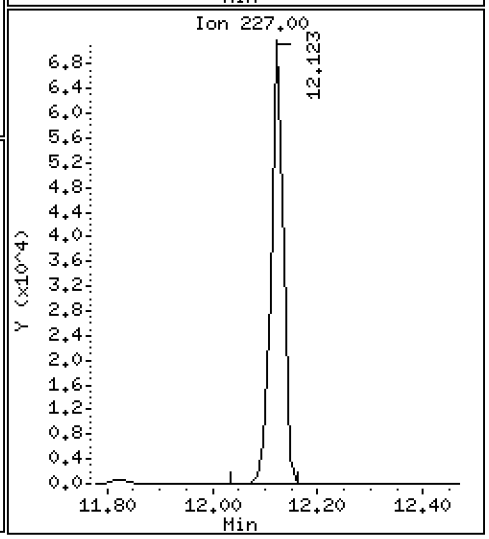












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

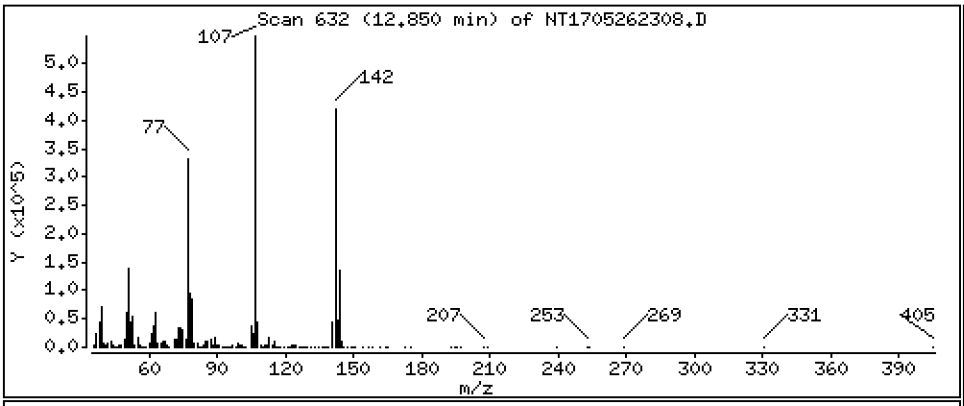
Operator: VTS

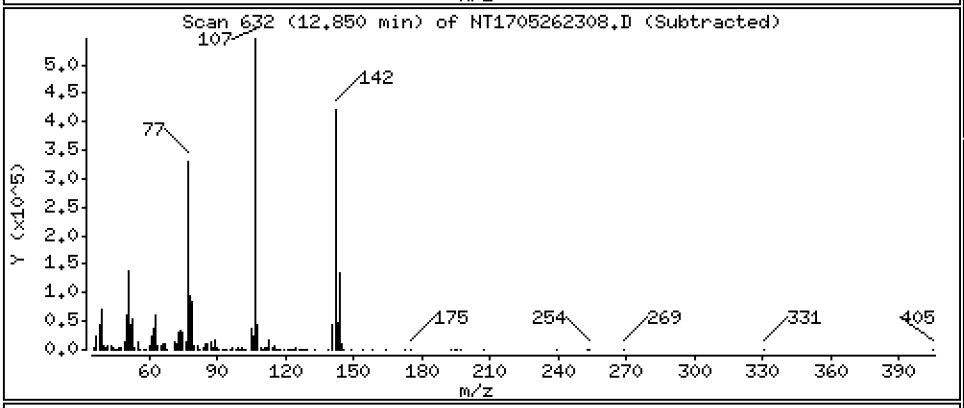
Column phase: ZB-5msi

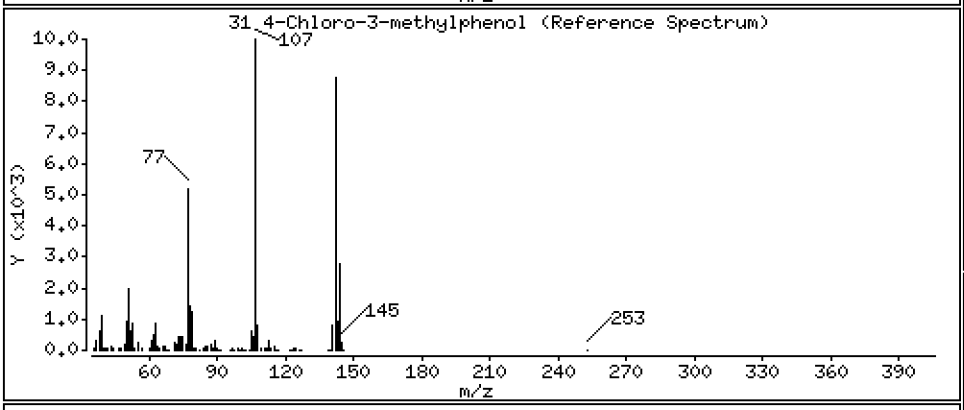
Column diameter: 0.25

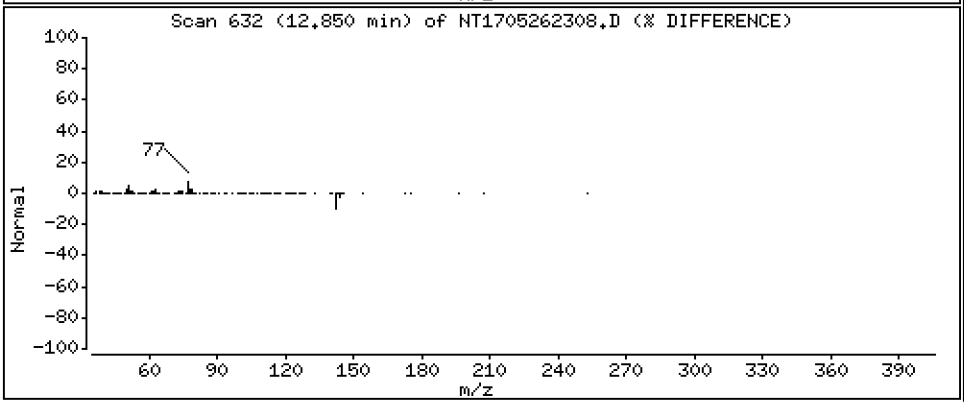
31 4-Chloro-3-methylphenol

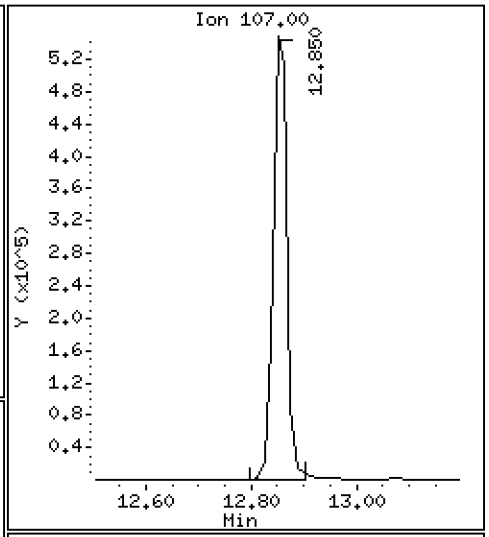
Concentration: 11.61 ug/mL

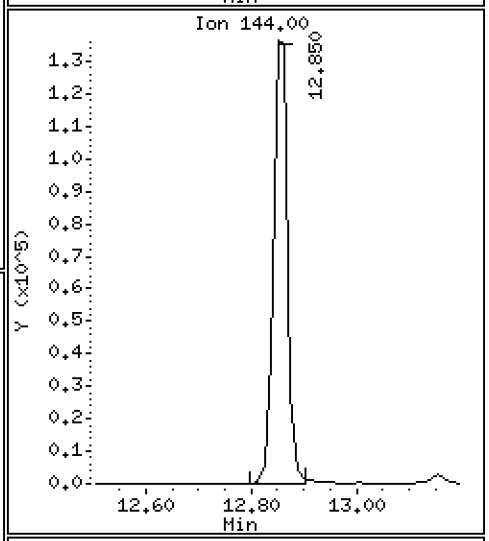


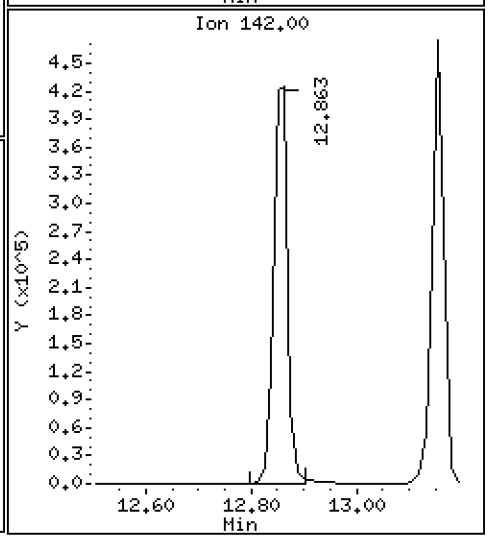












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

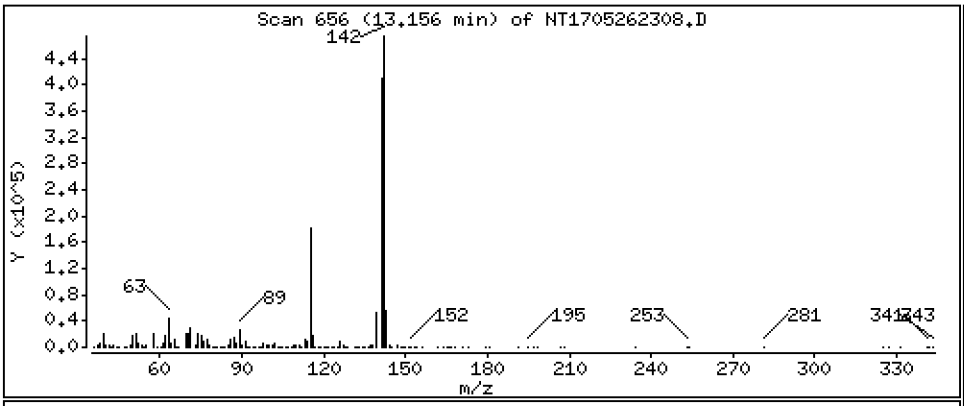
Operator: VTS

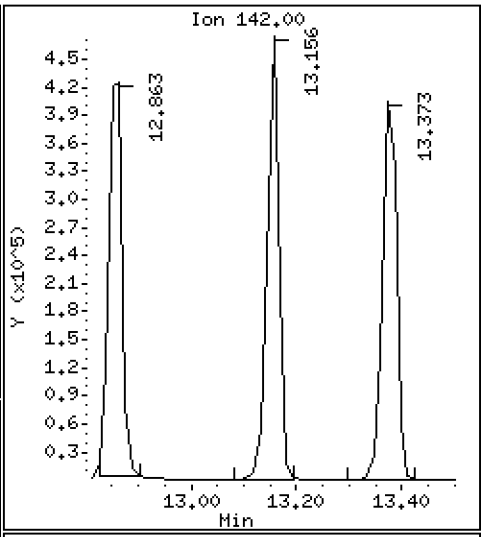
Column phase: ZB-5msi

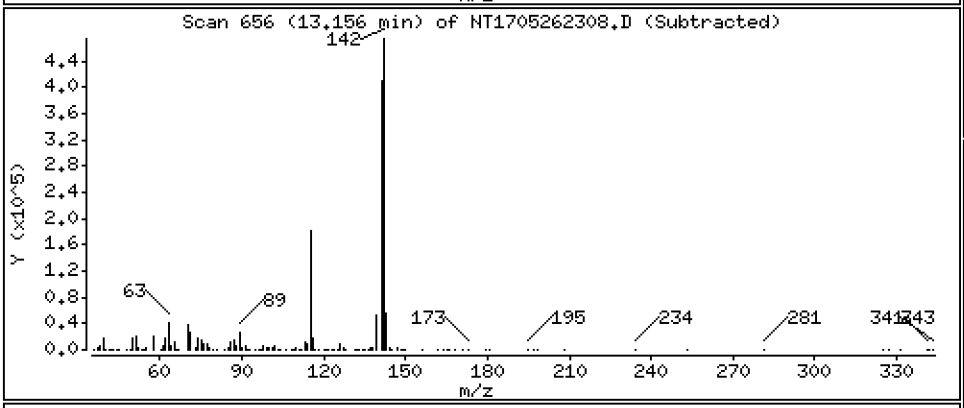
Column diameter: 0.25

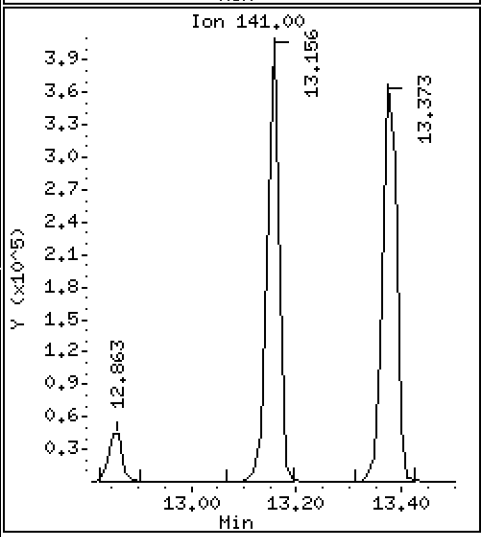
32 2-Methylnaphthalene

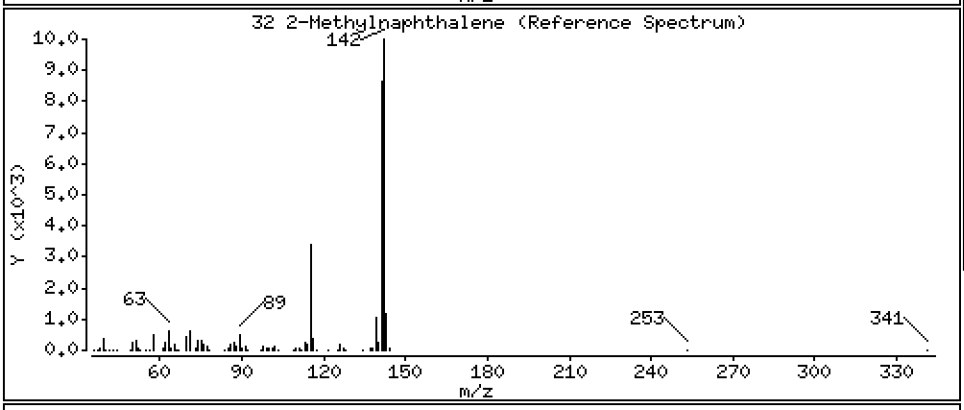
Concentration: 3.804 ug/mL

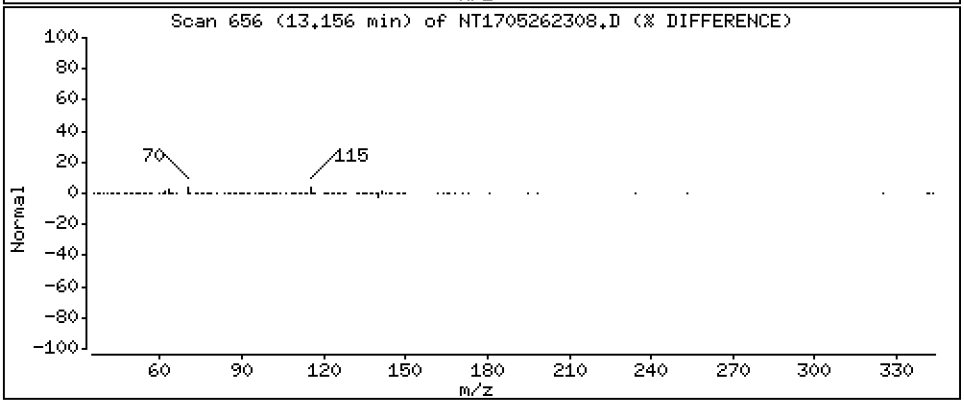












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

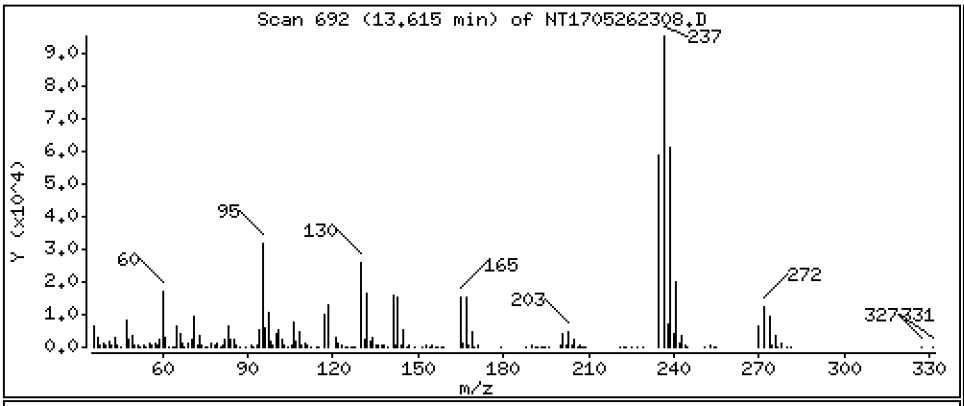
Operator: VTS

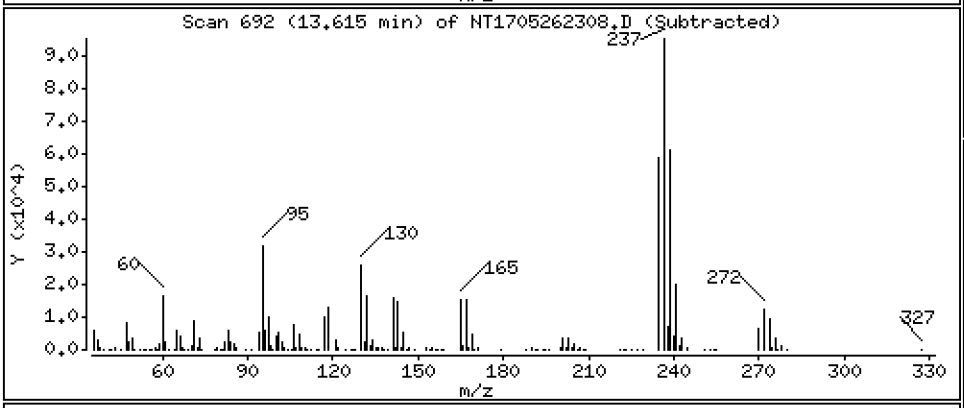
Column phase: ZB-5msi

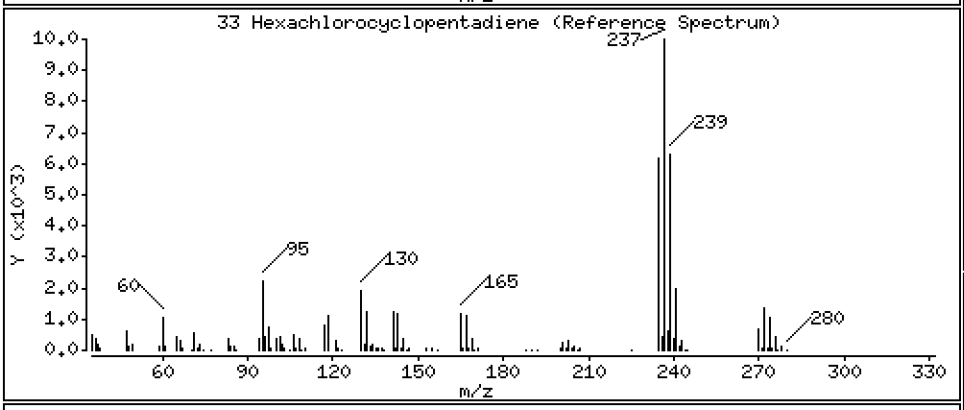
Column diameter: 0.25

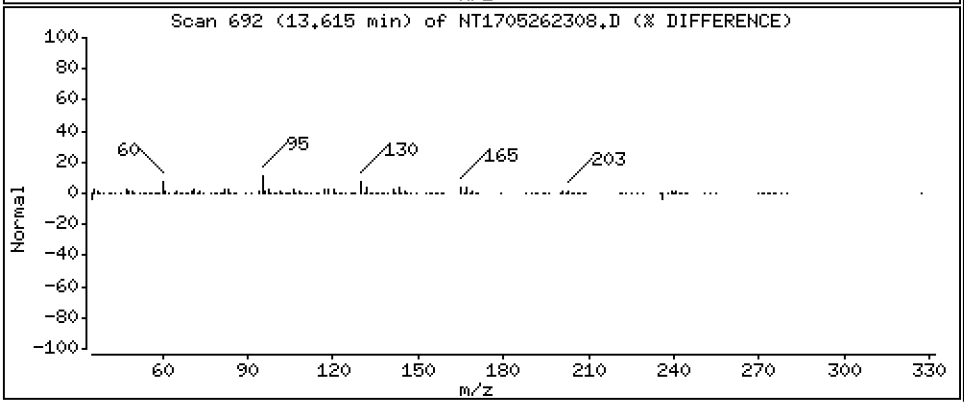
33 Hexachlorocyclopentadiene

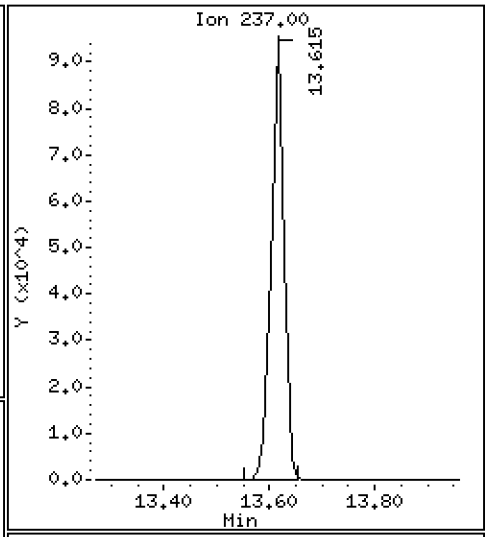
Concentration: 3.234 ug/mL

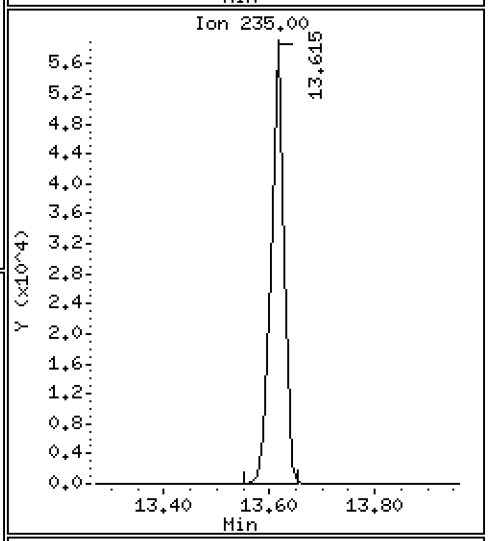


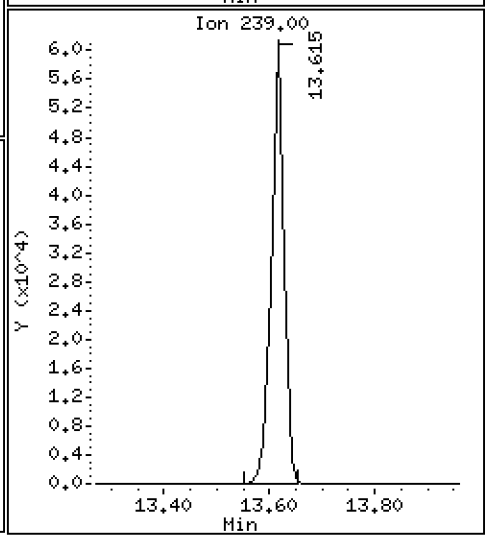












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

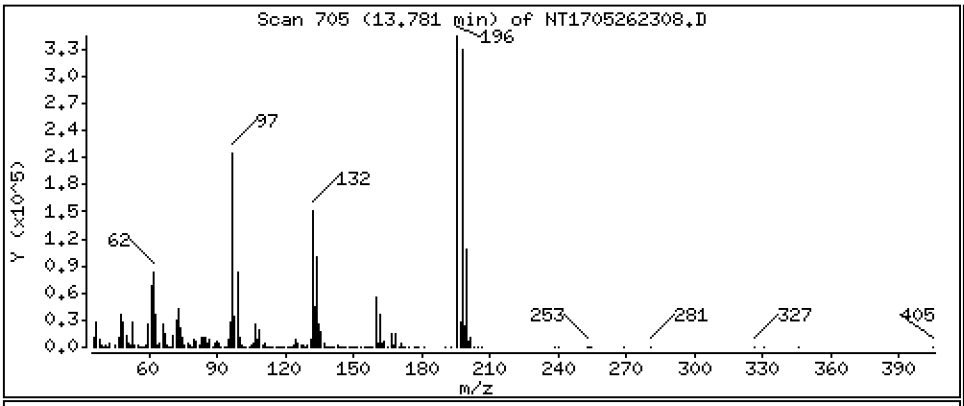
Operator: VTS

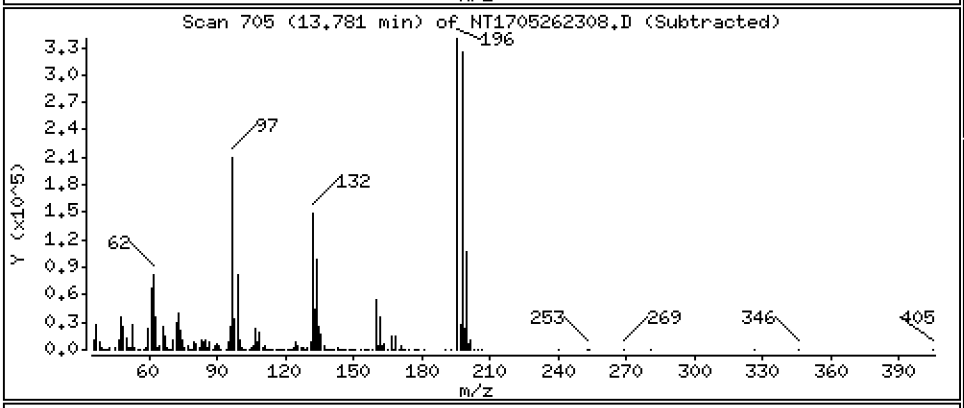
Column phase: ZB-5msi

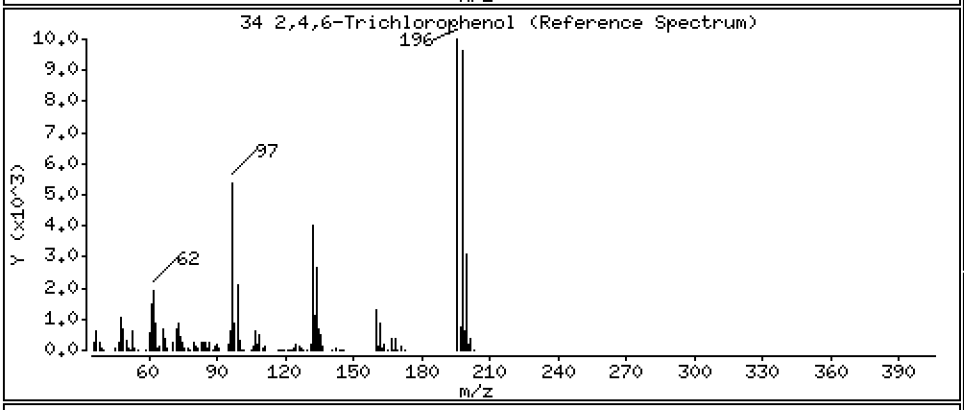
Column diameter: 0.25

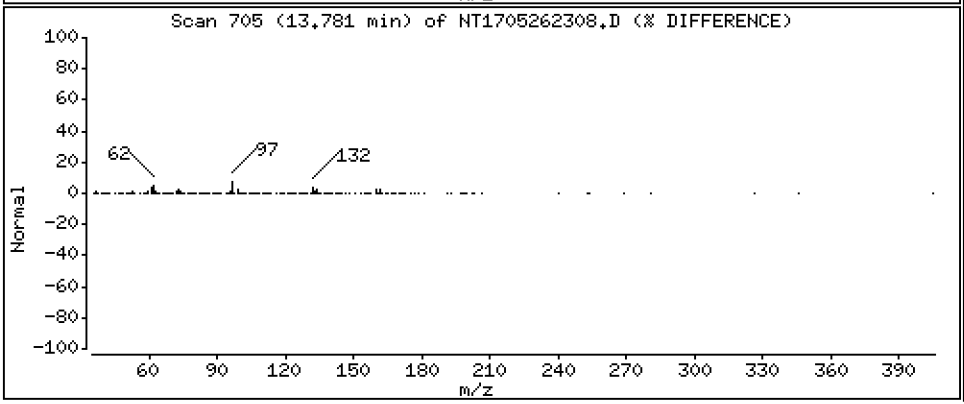
34 2,4,6-Trichlorophenol

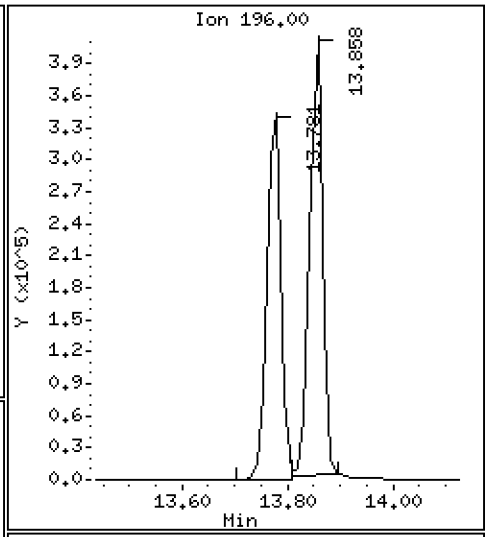
Concentration: 11.67 ug/mL

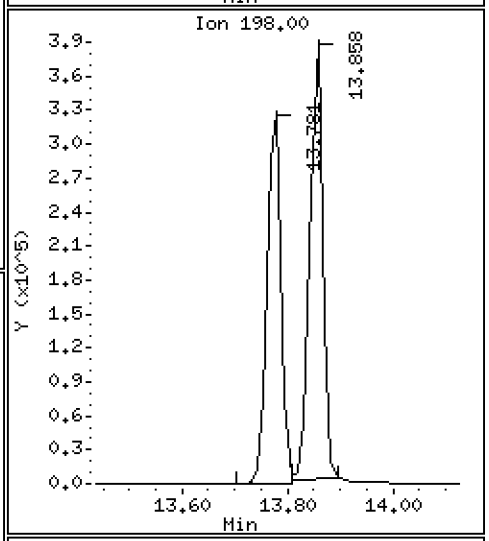


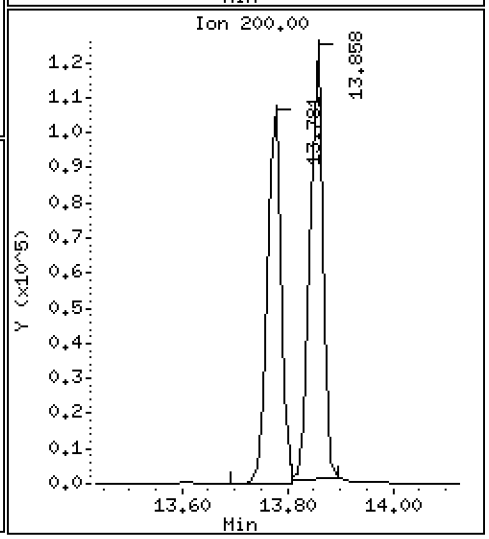












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

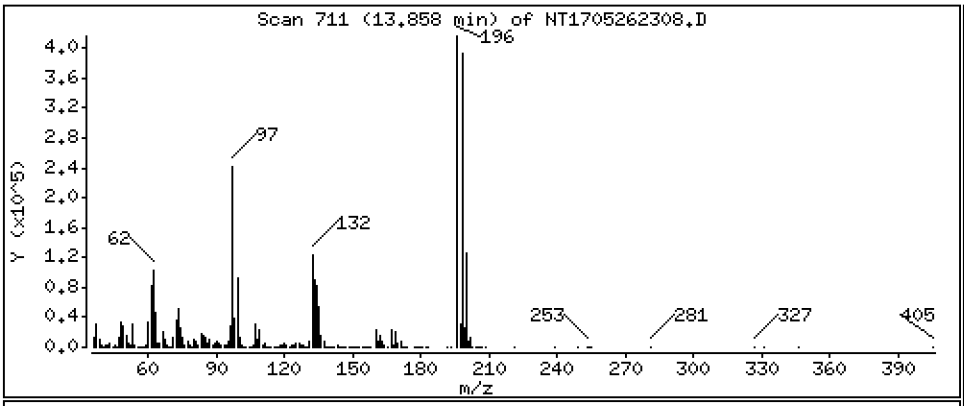
Operator: VTS

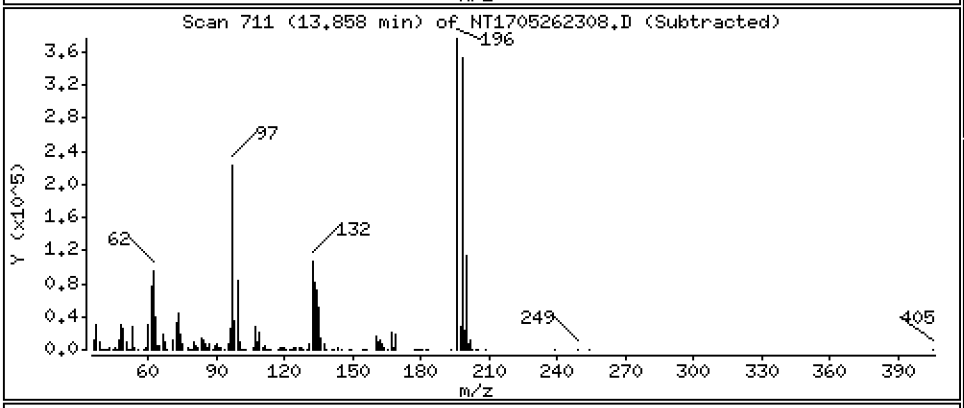
Column phase: ZB-5msi

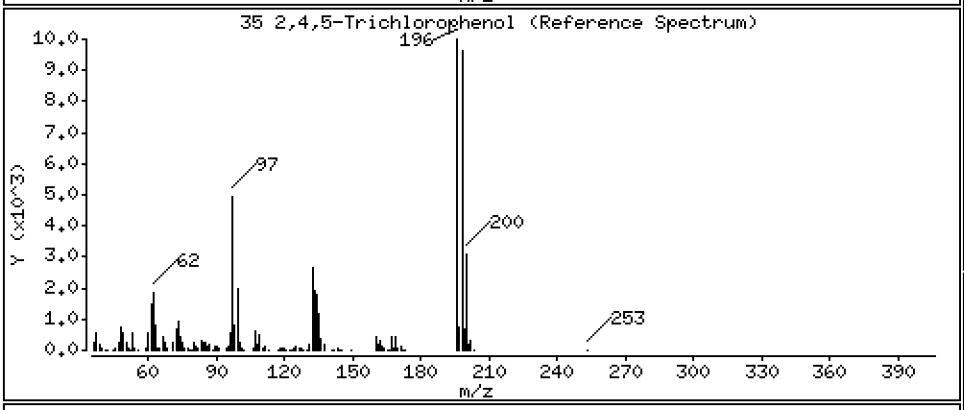
Column diameter: 0.25

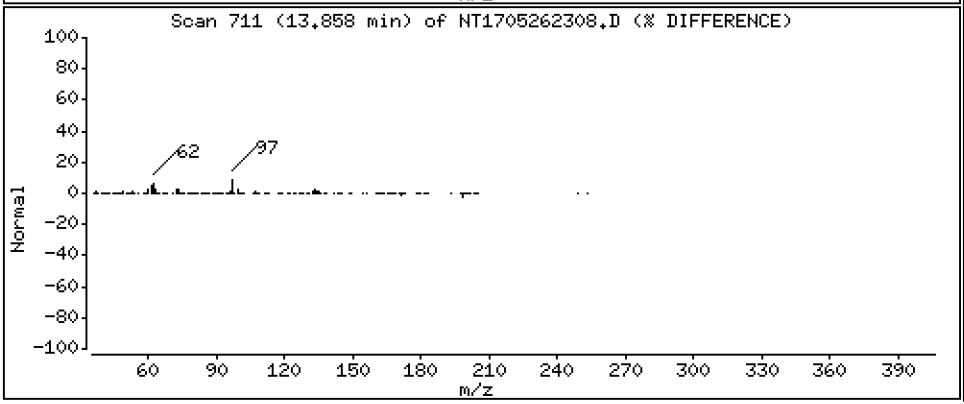
35 2,4,5-Trichlorophenol

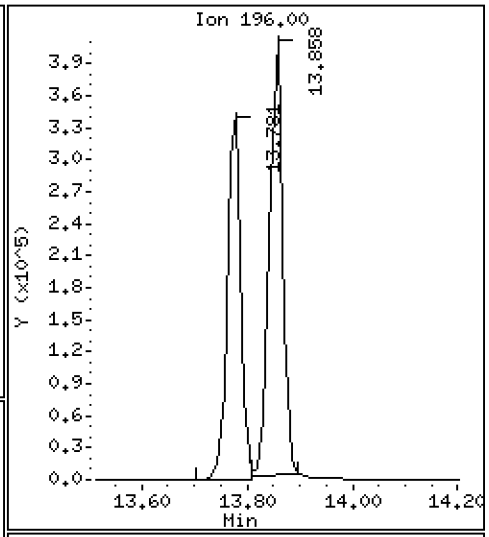
Concentration: 12.02 ug/mL

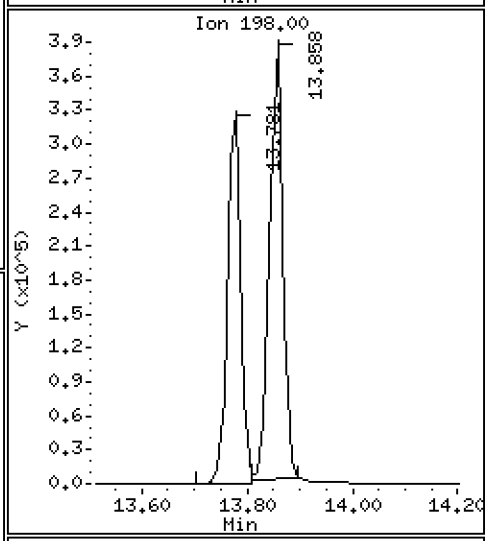


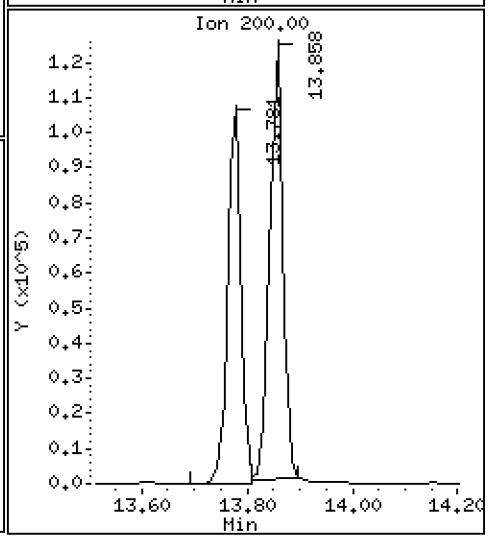












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

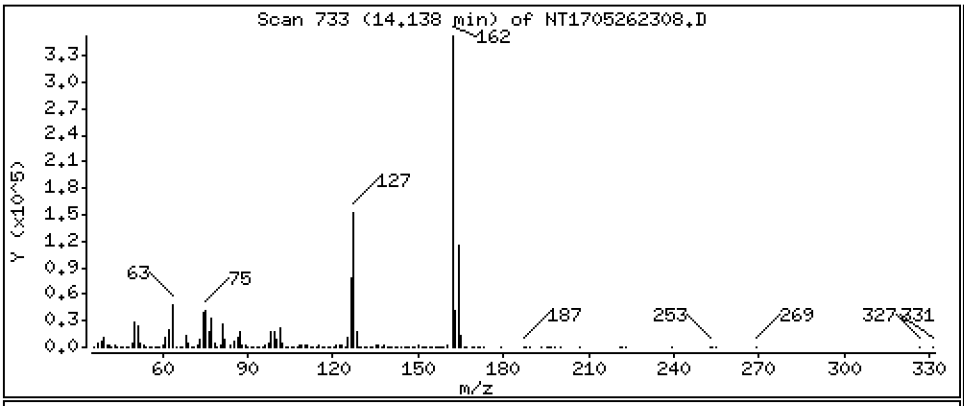
Operator: VTS

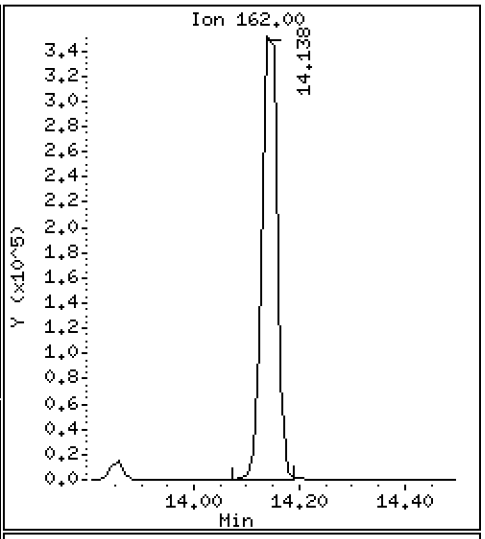
Column phase: ZB-5msi

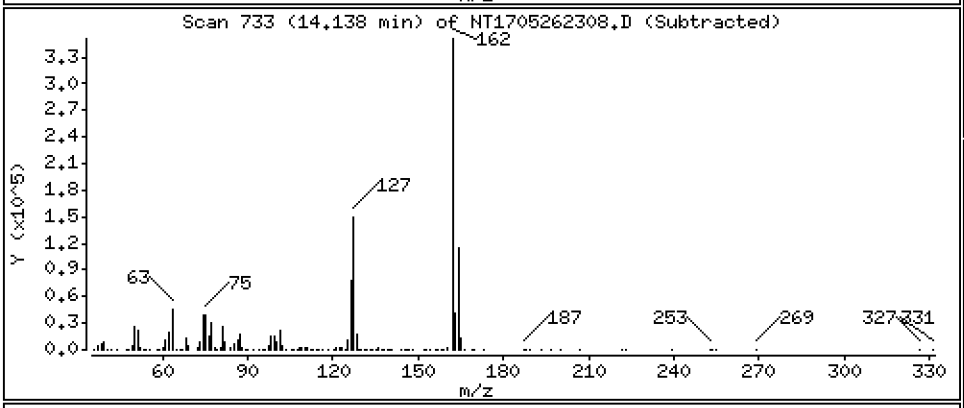
Column diameter: 0.25

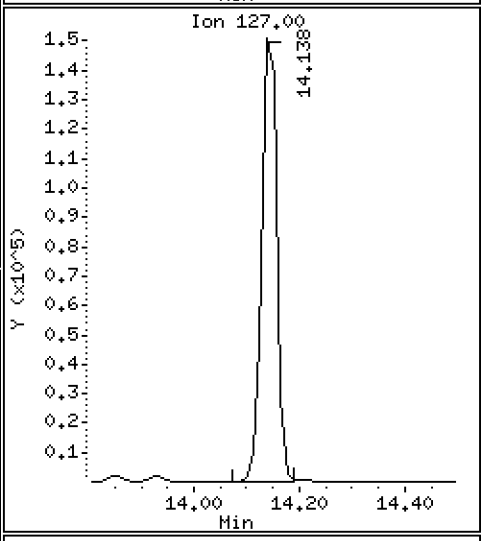
37 2-Chloronaphthalene

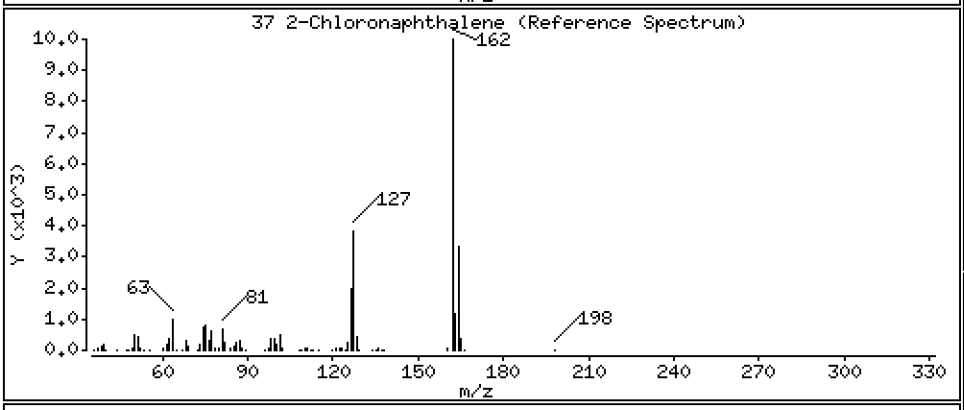
Concentration: 4.210 ug/mL

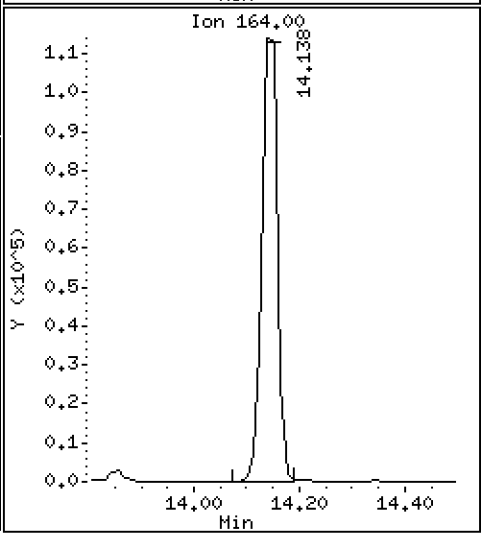


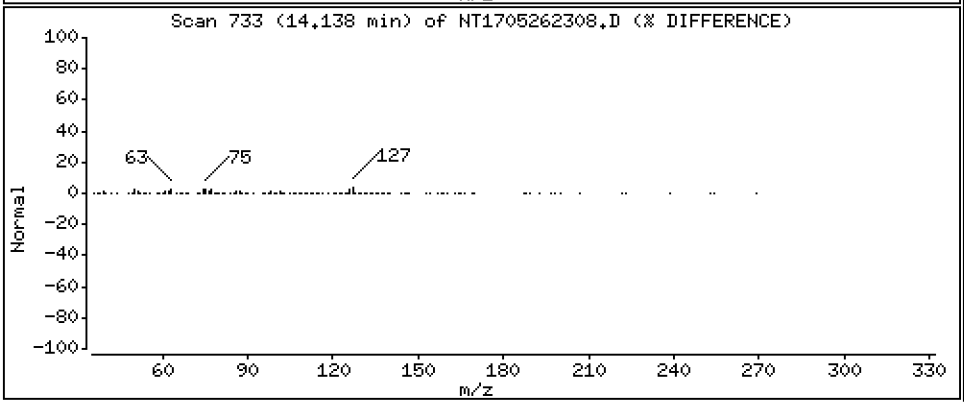












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

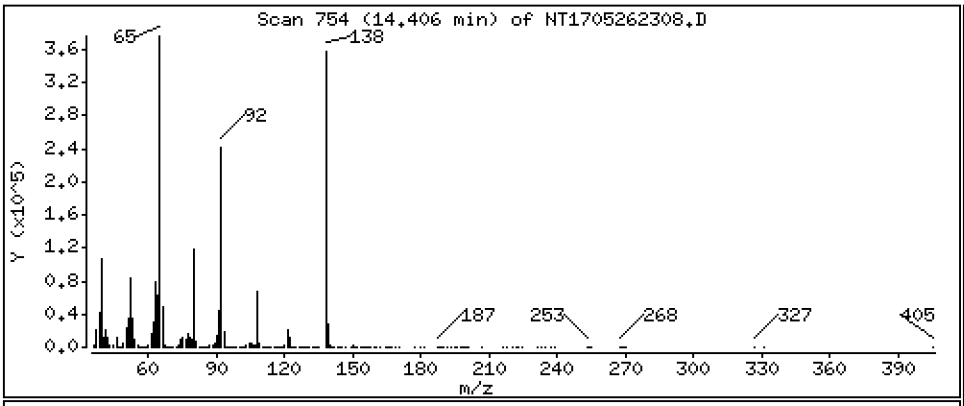
Operator: VTS

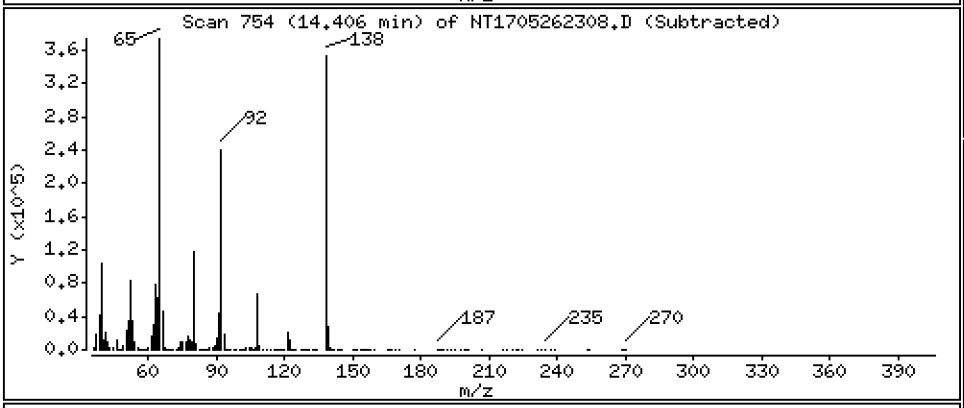
Column phase: ZB-5msi

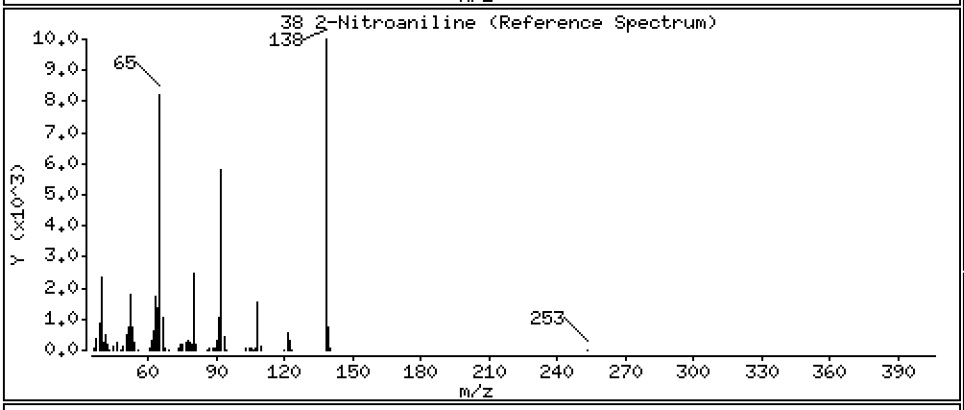
Column diameter: 0.25

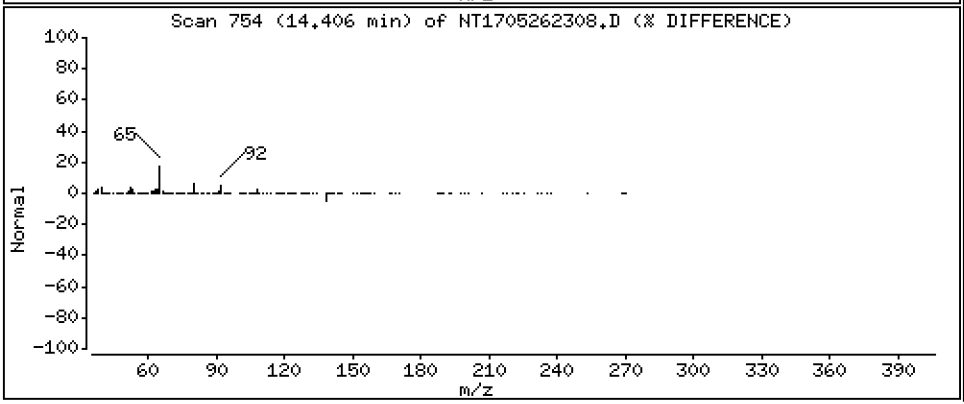
38 2-Nitroaniline

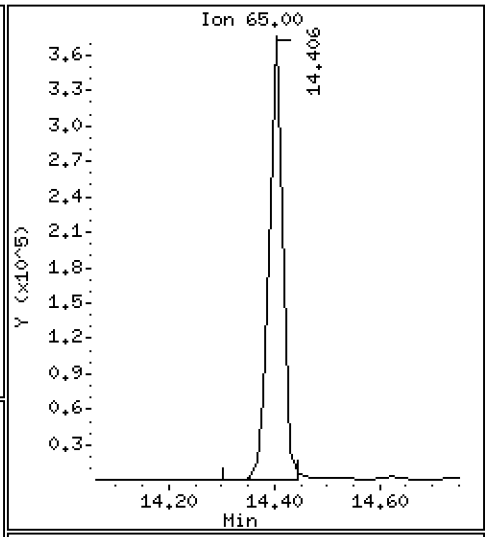
Concentration: 12.26 ug/mL

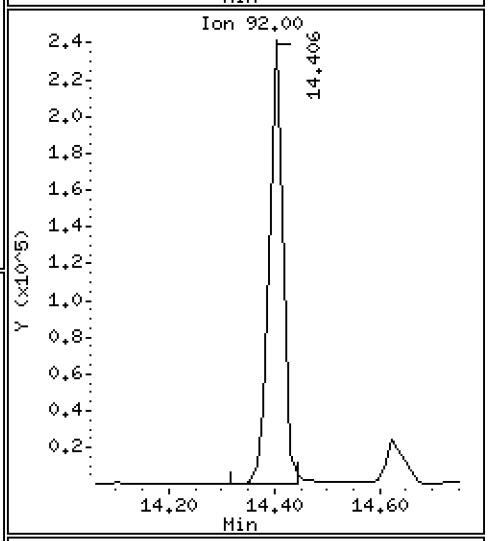


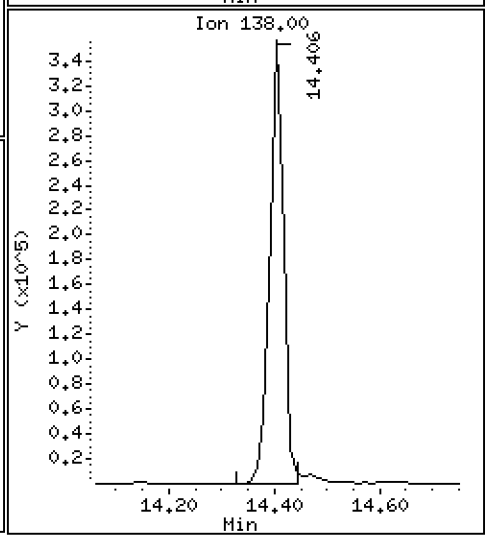












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

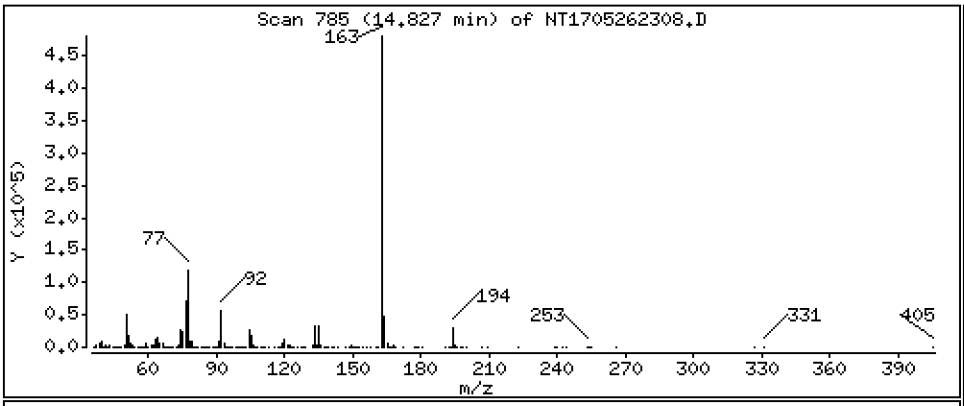
Operator: VTS

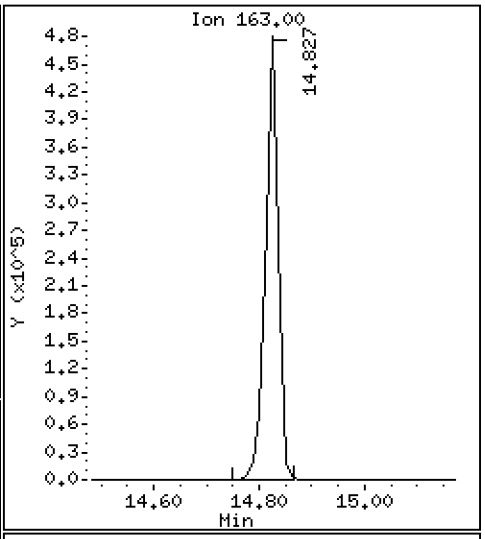
Column phase: ZB-5msi

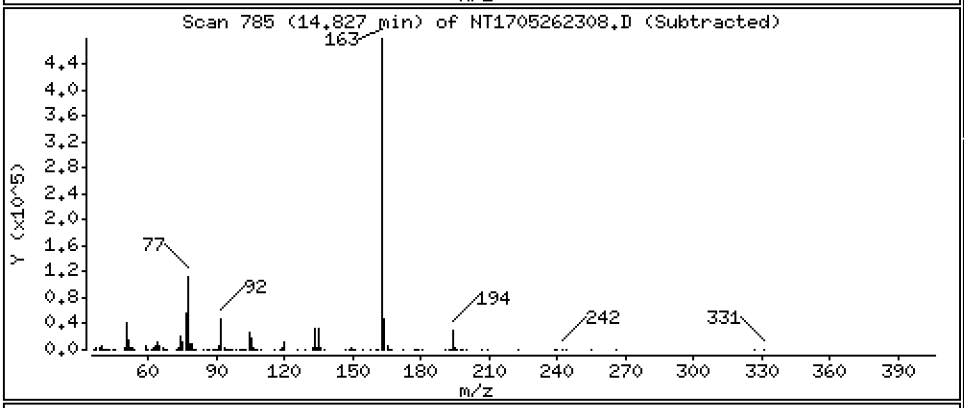
Column diameter: 0.25

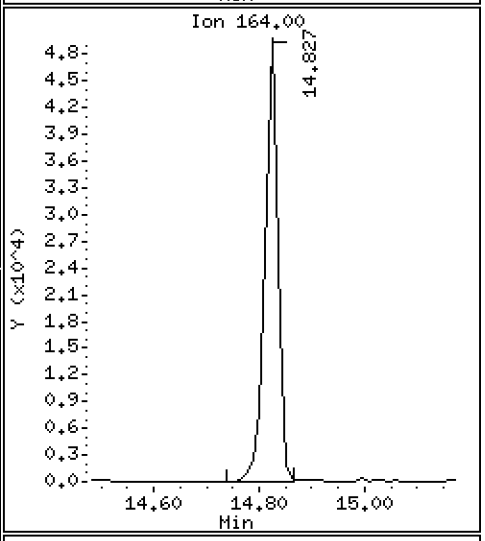
39 Dimethylphthalate

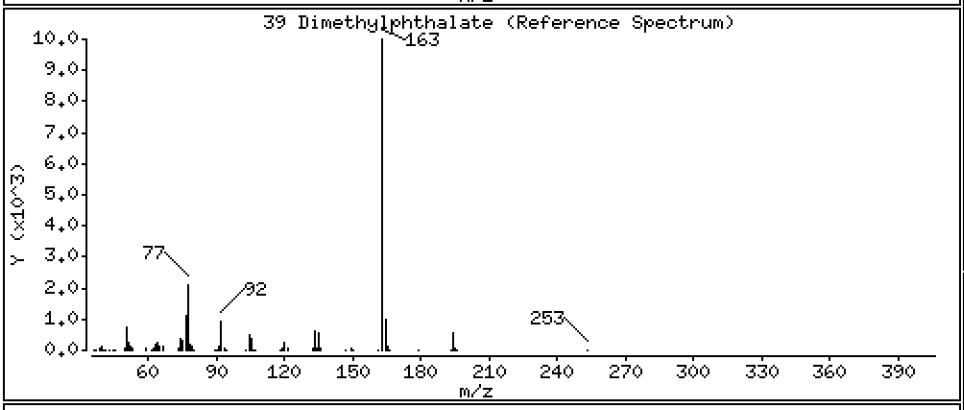
Concentration: 4.541 ug/mL

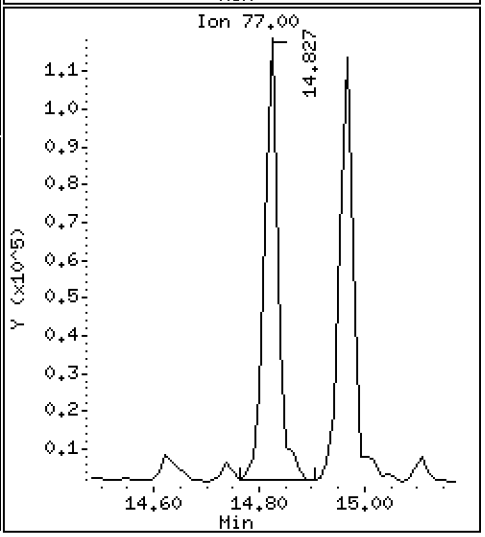


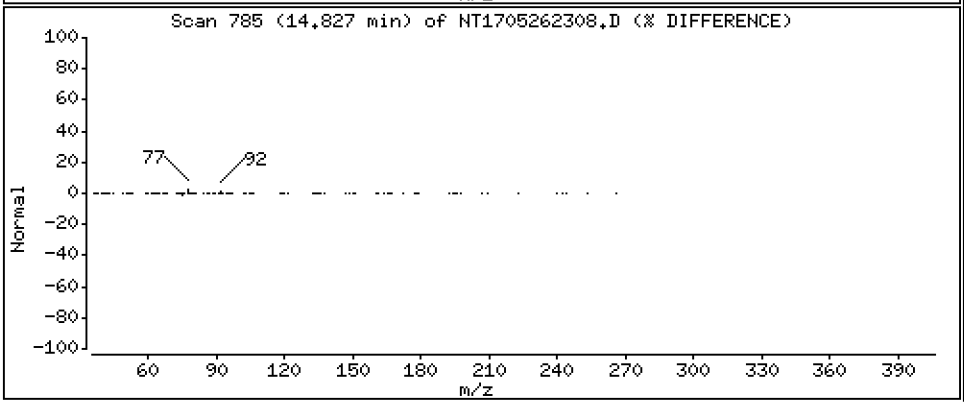












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

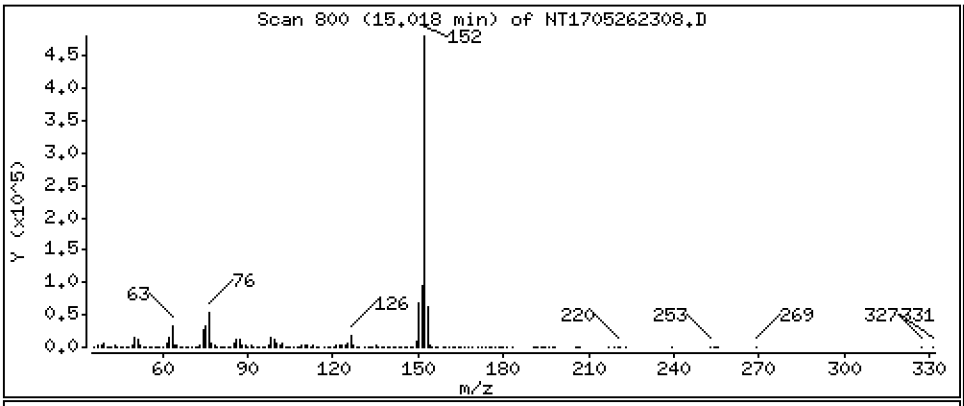
Operator: VTS

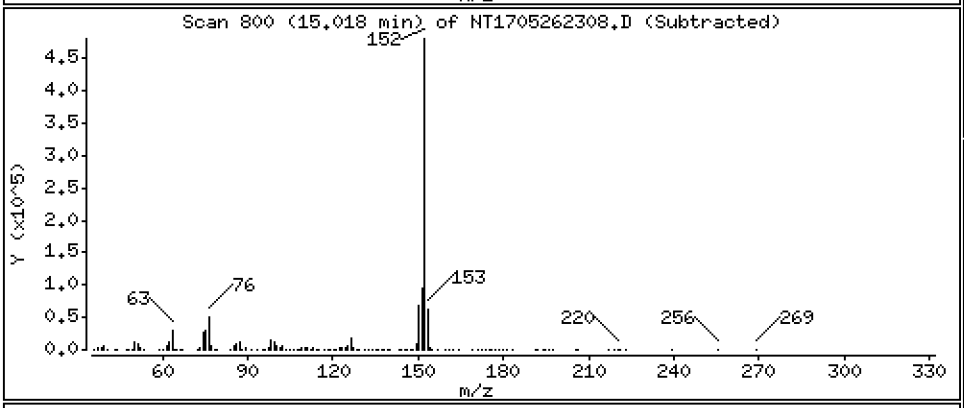
Column phase: ZB-5msi

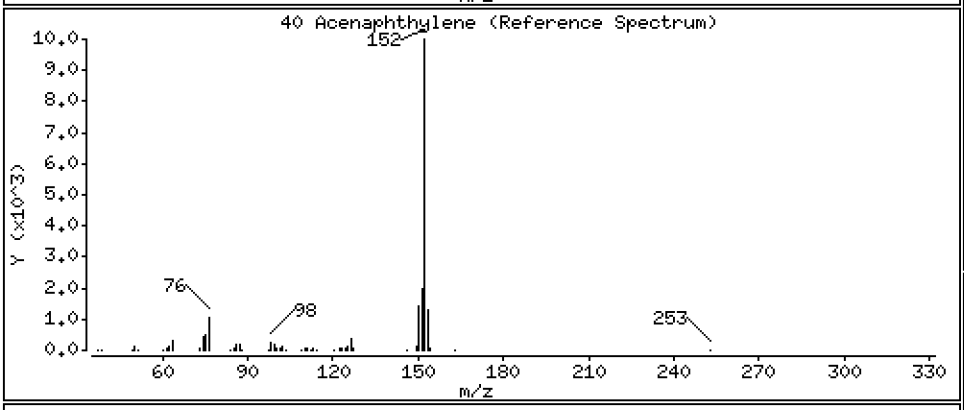
Column diameter: 0.25

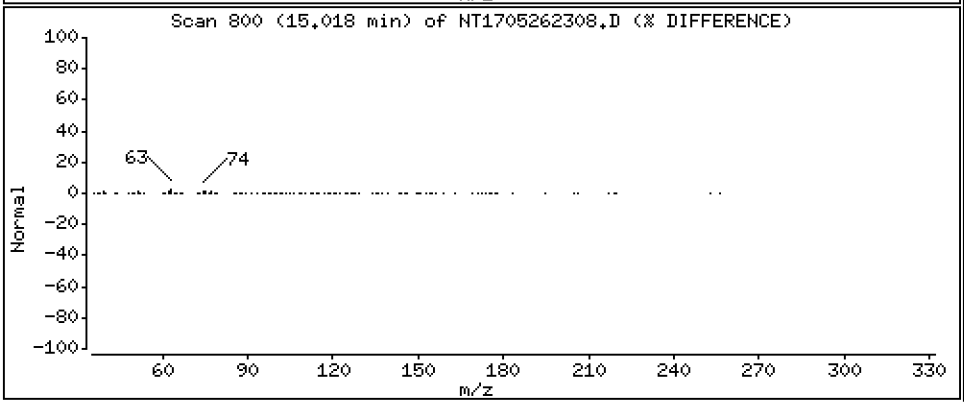
40 Acenaphthylene

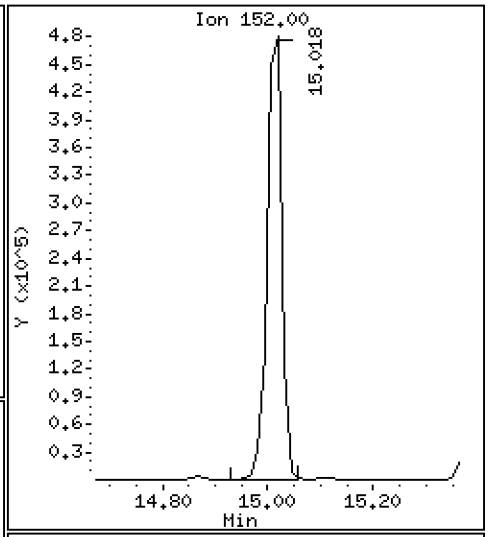
Concentration: 3.601 ug/mL

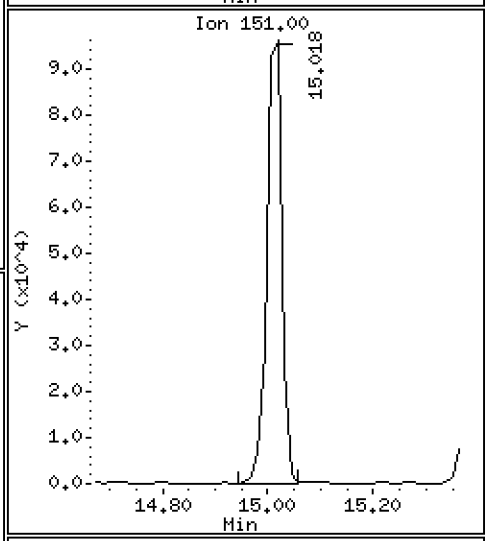


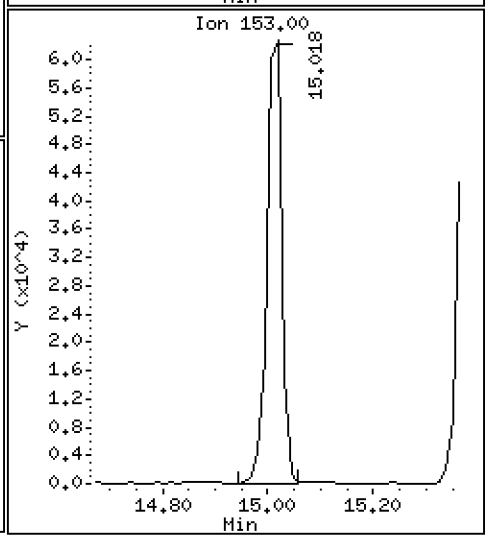












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

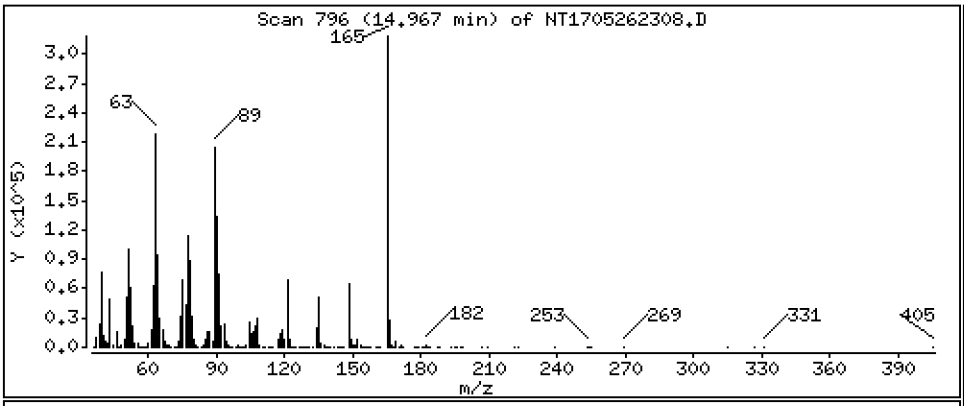
Operator: VTS

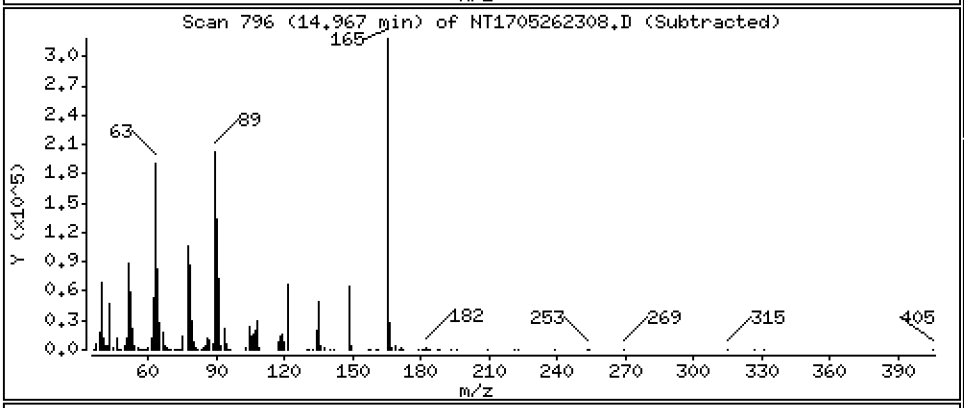
Column phase: ZB-5msi

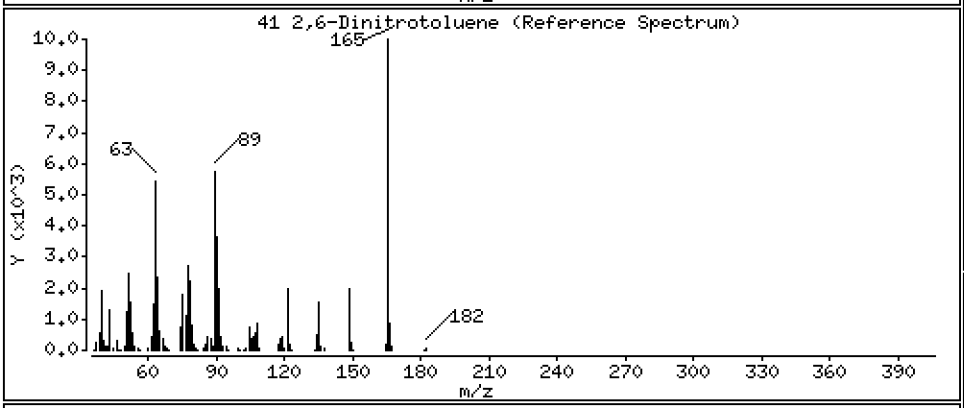
Column diameter: 0.25

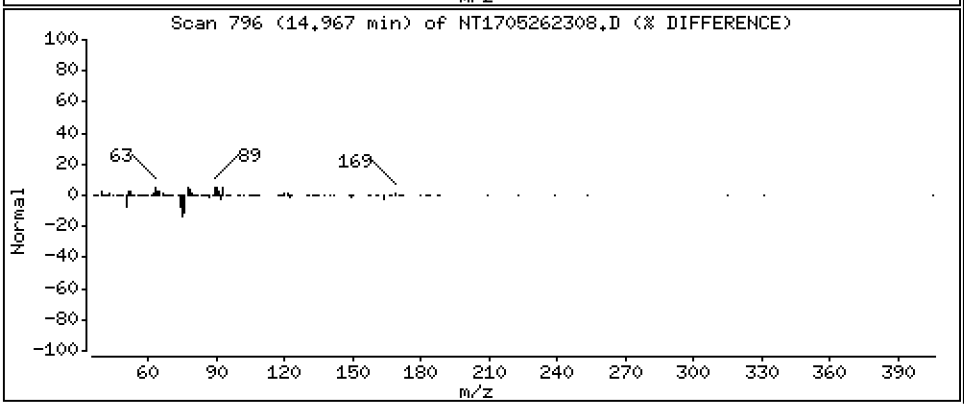
41 2,6-Dinitrotoluene

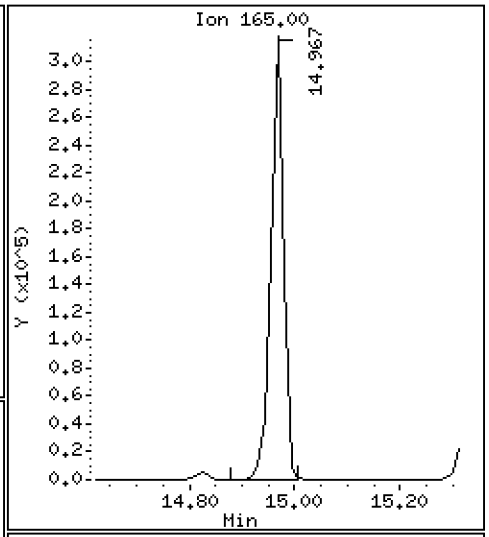
Concentration: 12.62 ug/mL

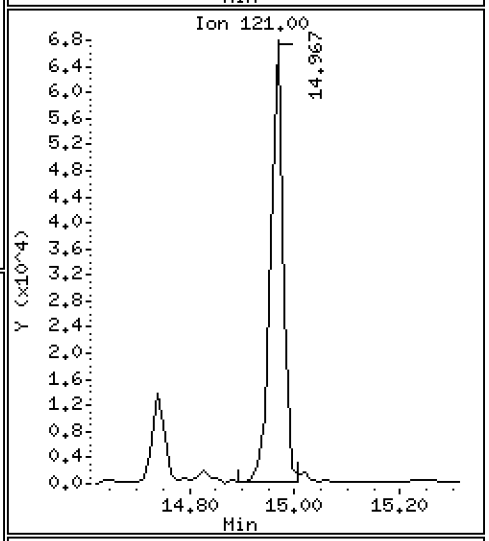


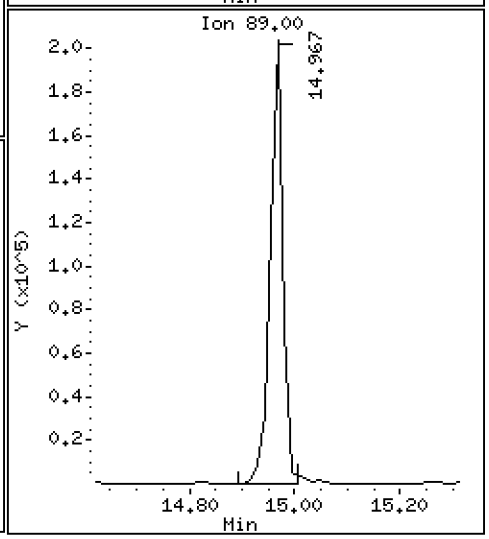












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

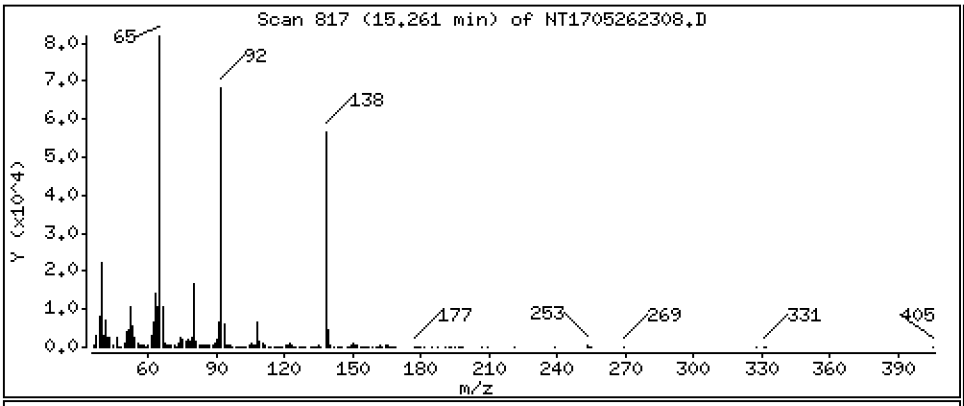
Operator: VTS

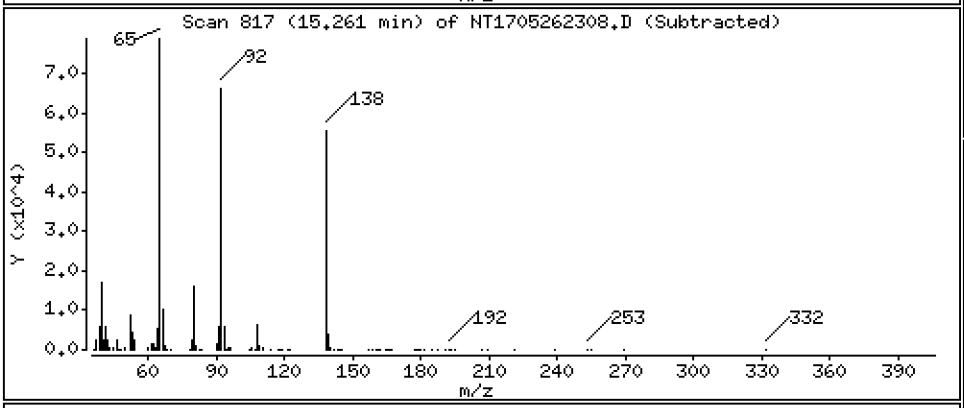
Column phase: ZB-5msi

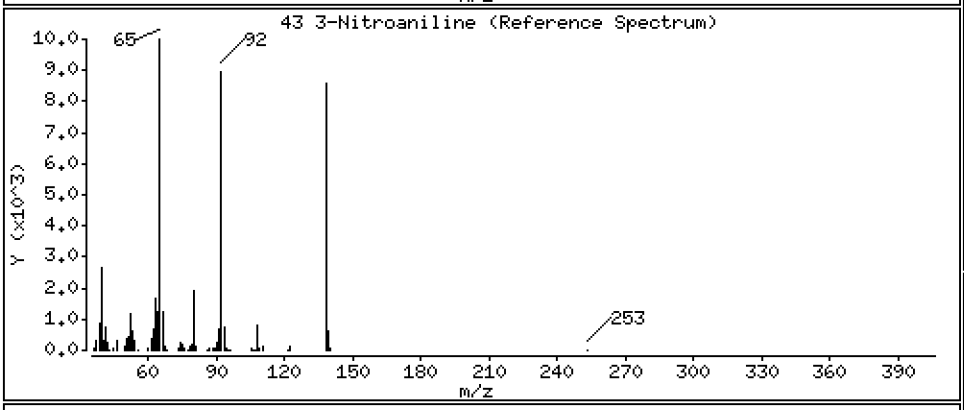
Column diameter: 0.25

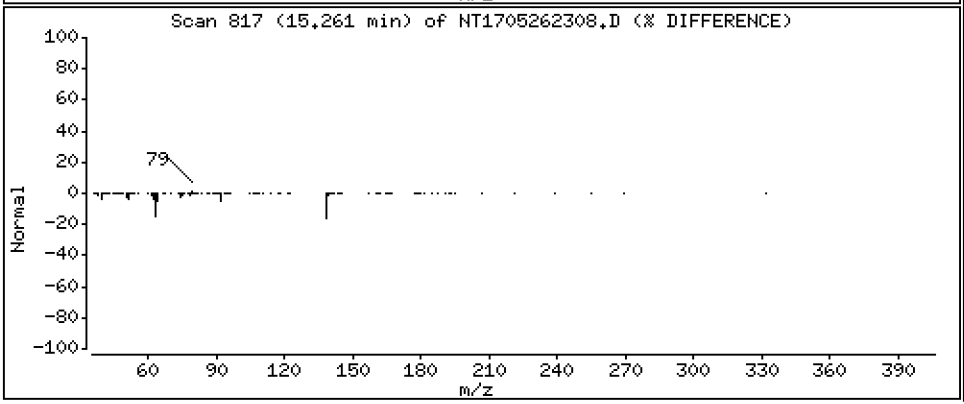
43 3-Nitroaniline

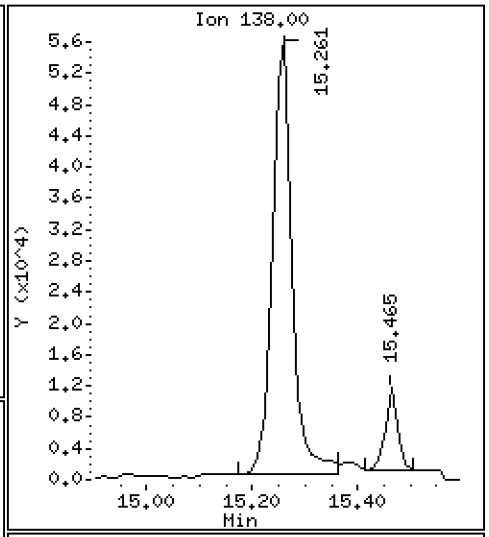
Concentration: 3.776 ug/mL

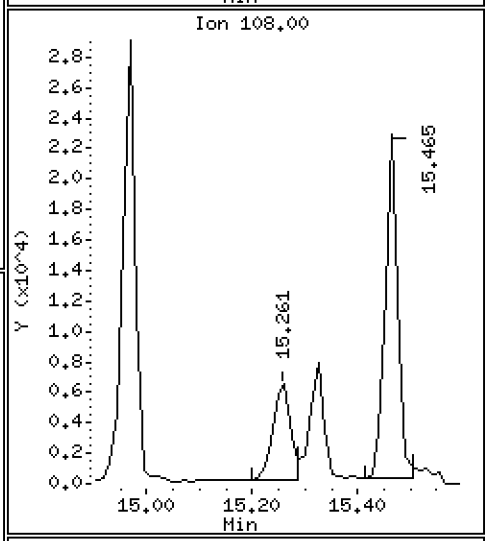


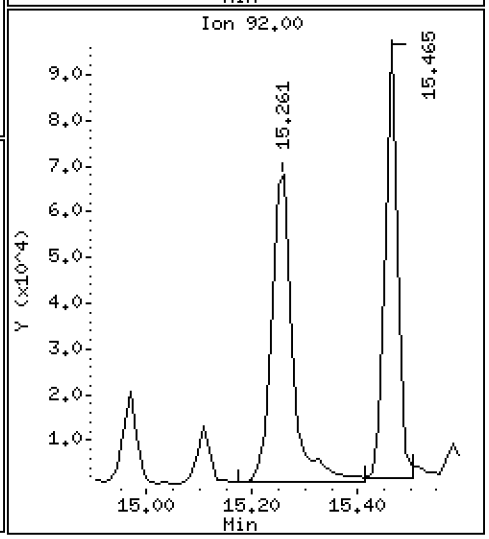












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

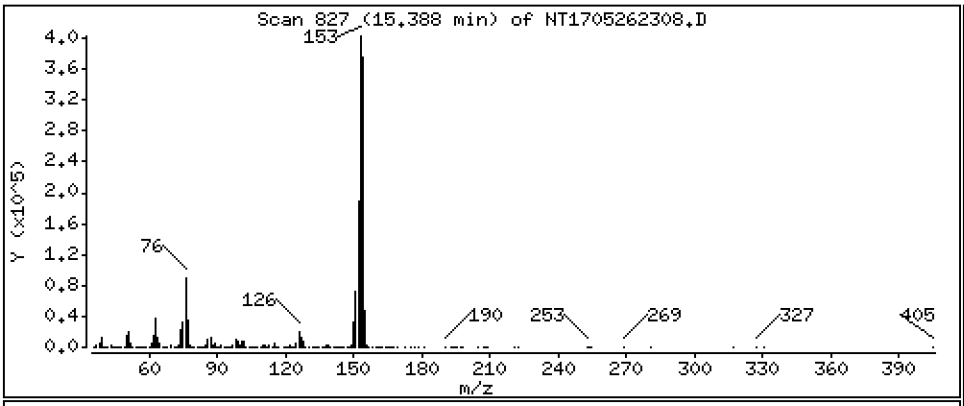
Operator: VTS

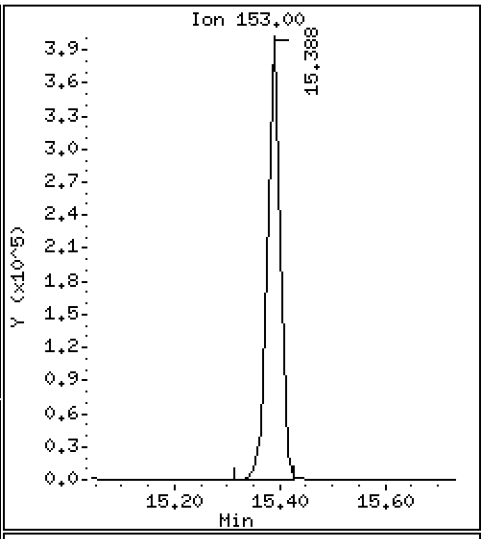
Column phase: ZB-5msi

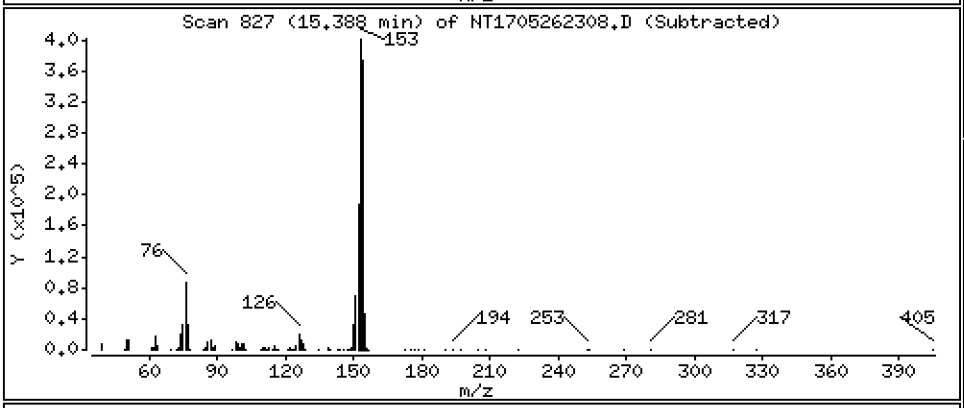
Column diameter: 0.25

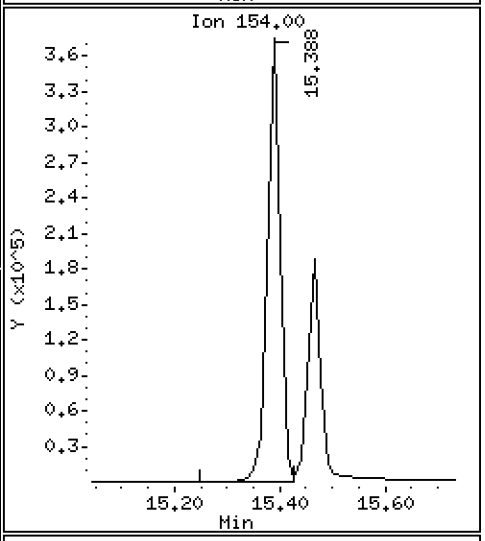
44 Acenaphthene

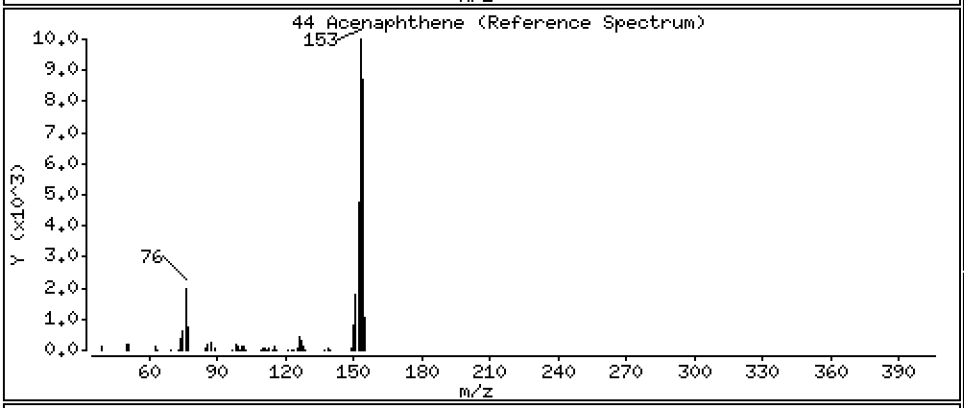
Concentration: 4.134 ug/mL

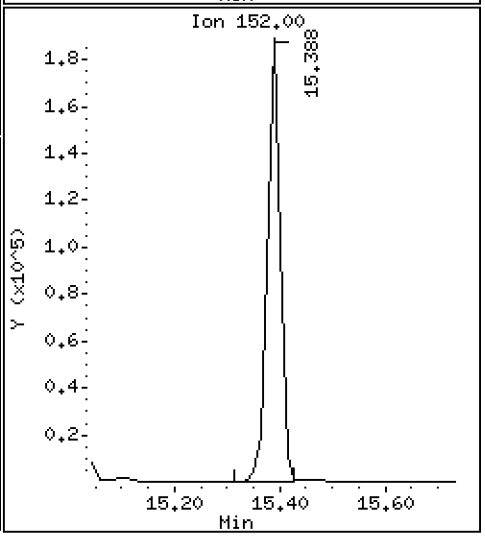


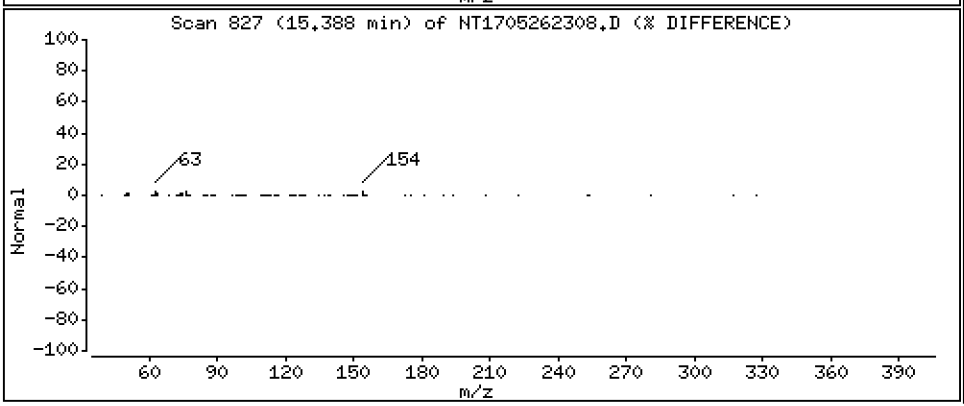












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

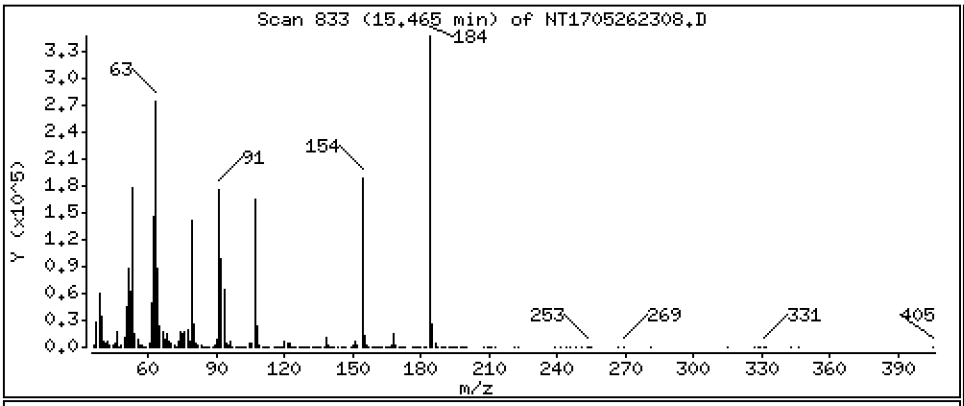
Operator: VTS

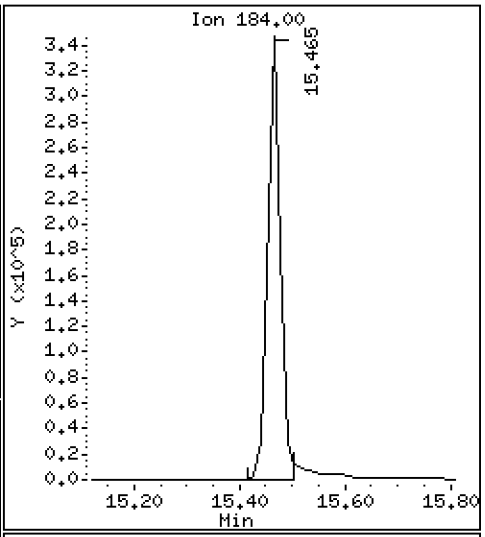
Column phase: ZB-5msi

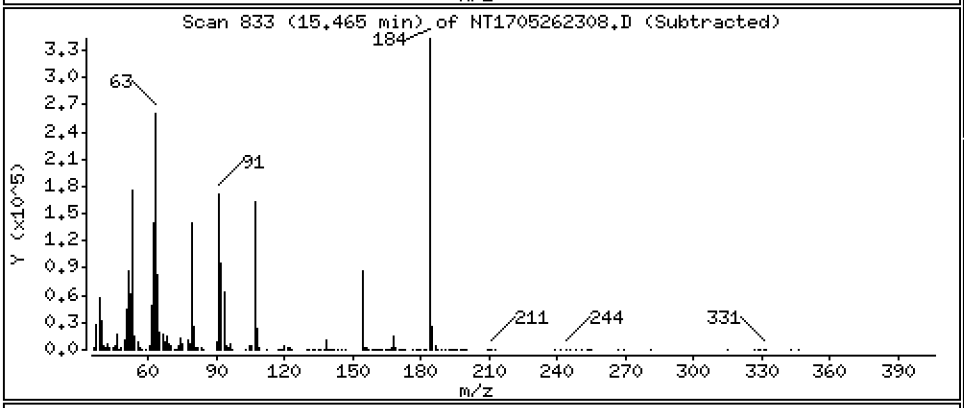
Column diameter: 0.25

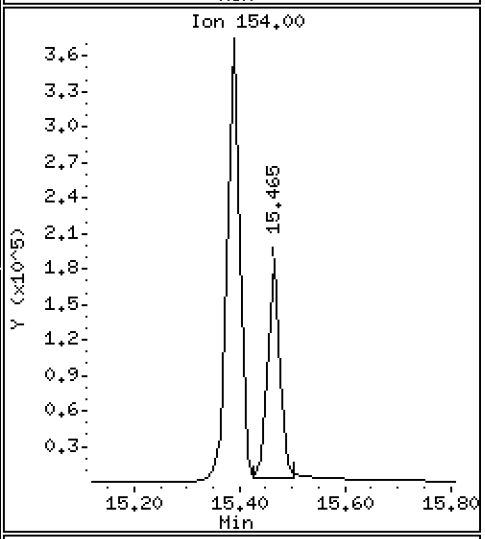
45 2,4-Dinitrophenol

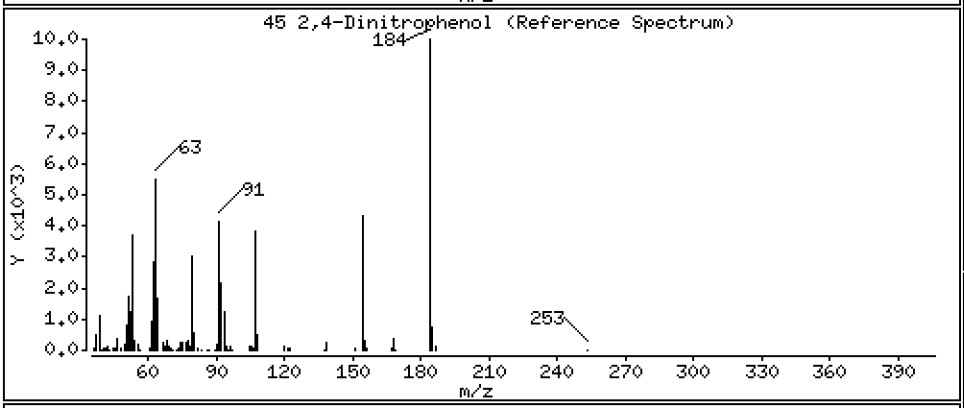
Concentration: 22.14 ug/mL

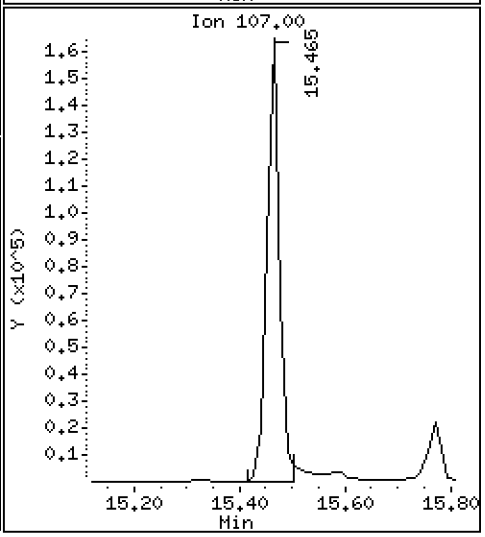


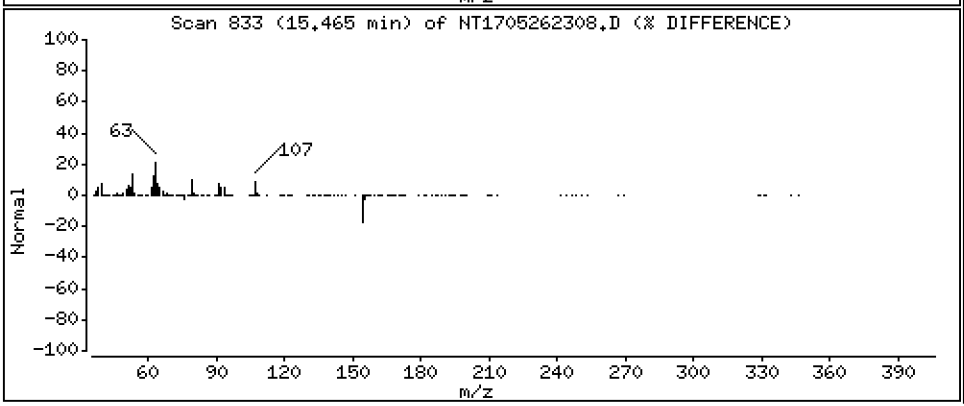












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

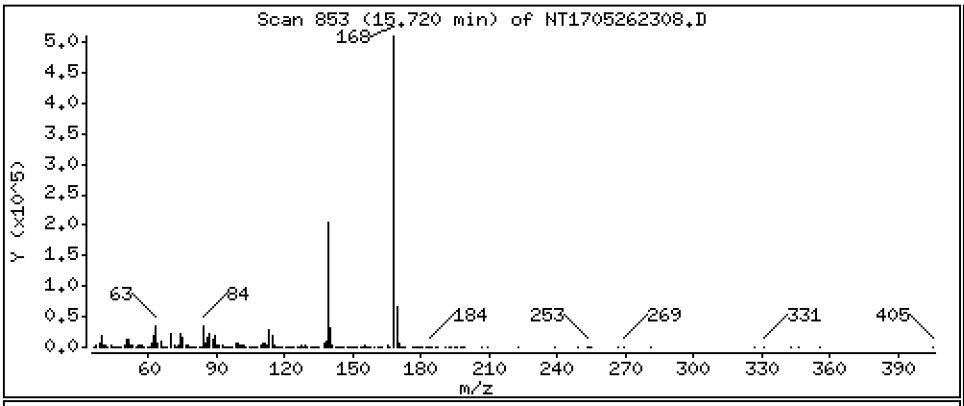
Operator: VTS

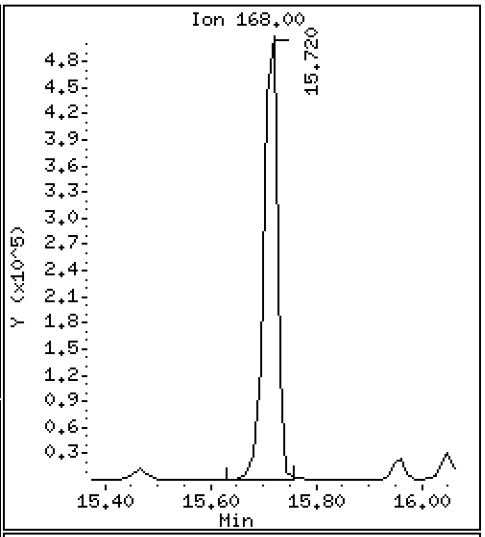
Column phase: ZB-5msi

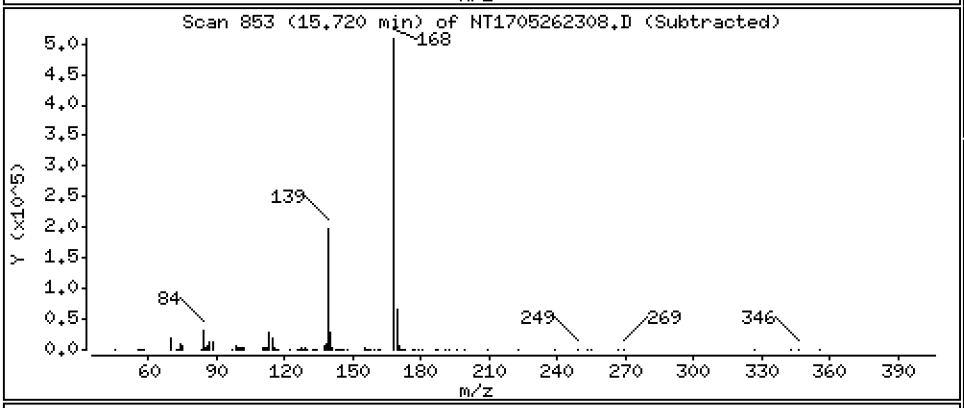
Column diameter: 0.25

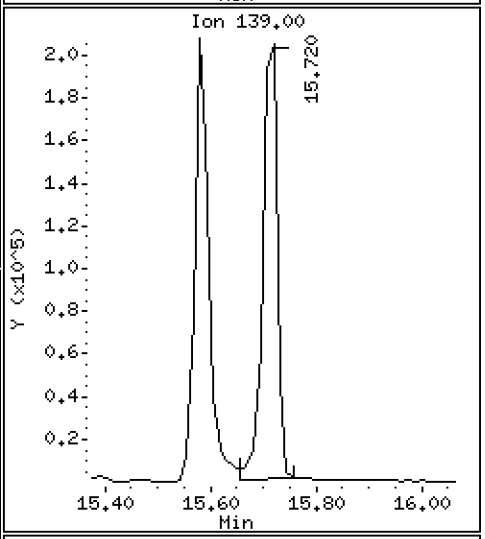
46 Dibenzofuran

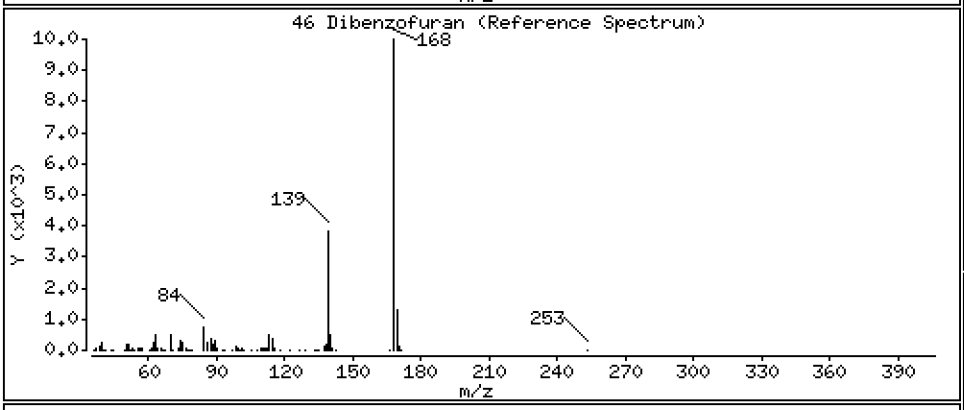
Concentration: 4.148 ug/mL

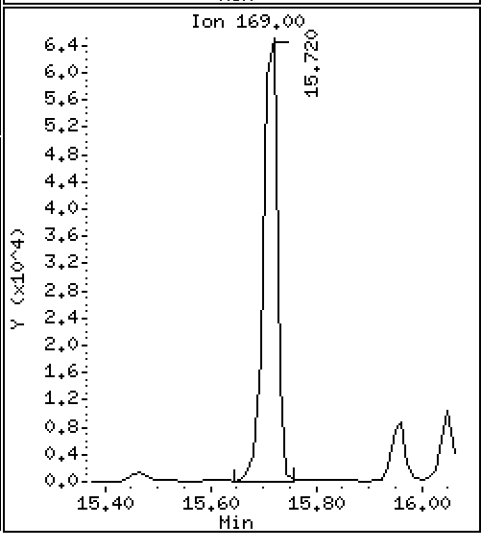


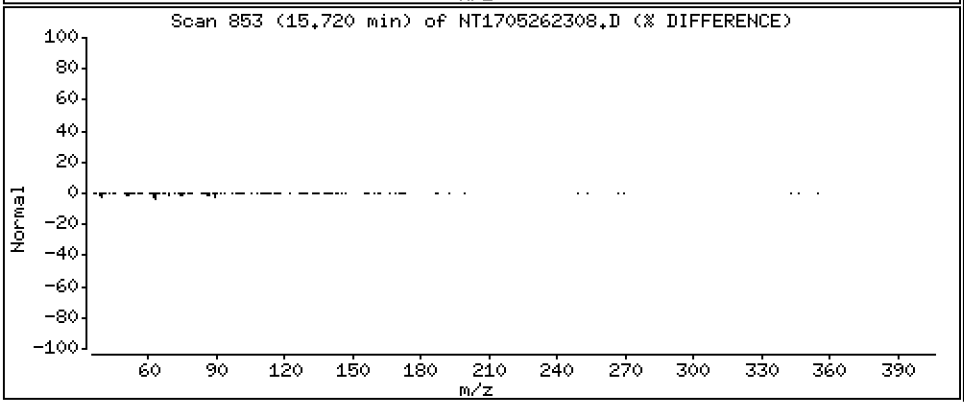












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

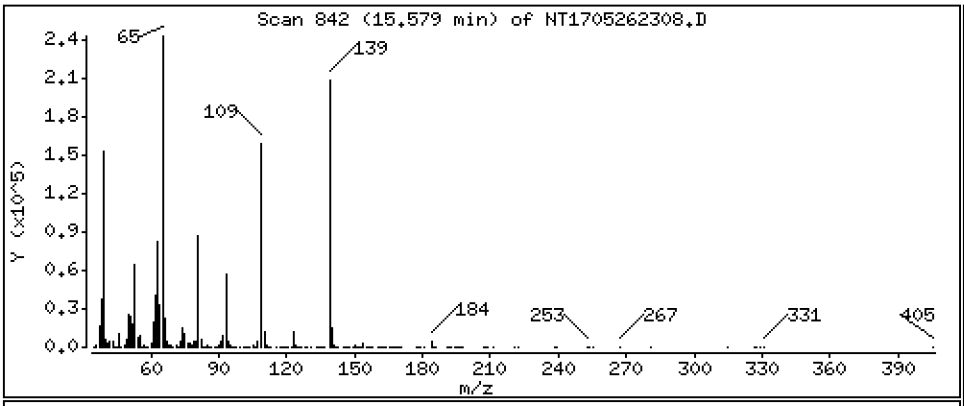
Operator: VTS

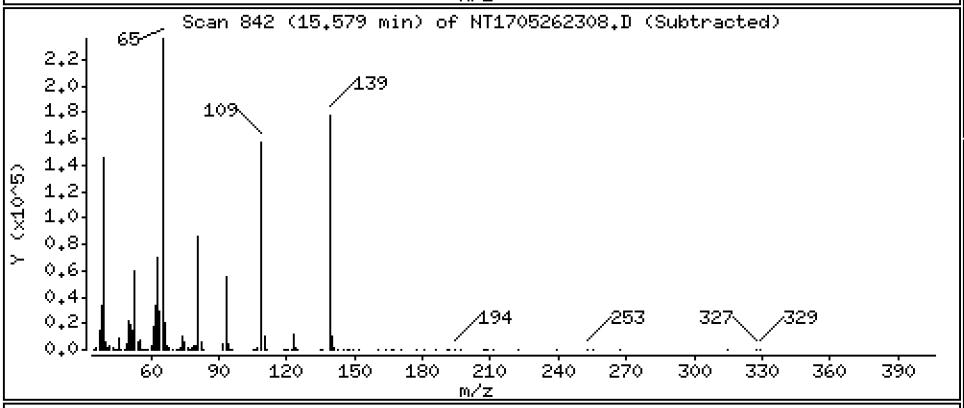
Column phase: ZB-5msi

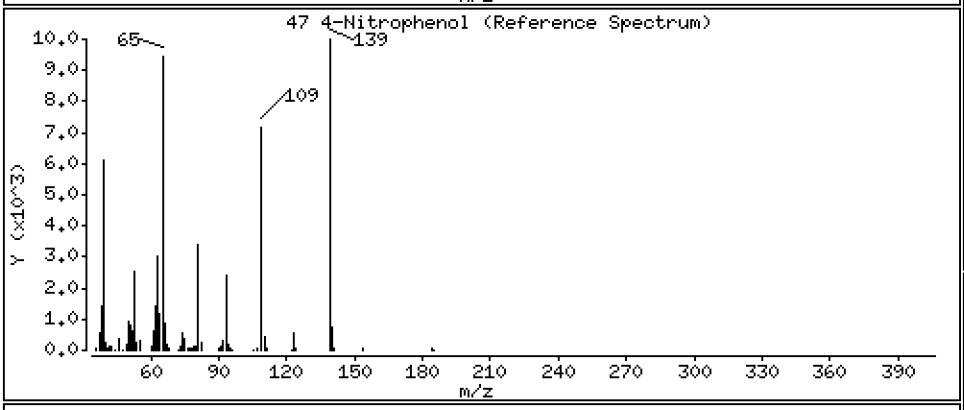
Column diameter: 0.25

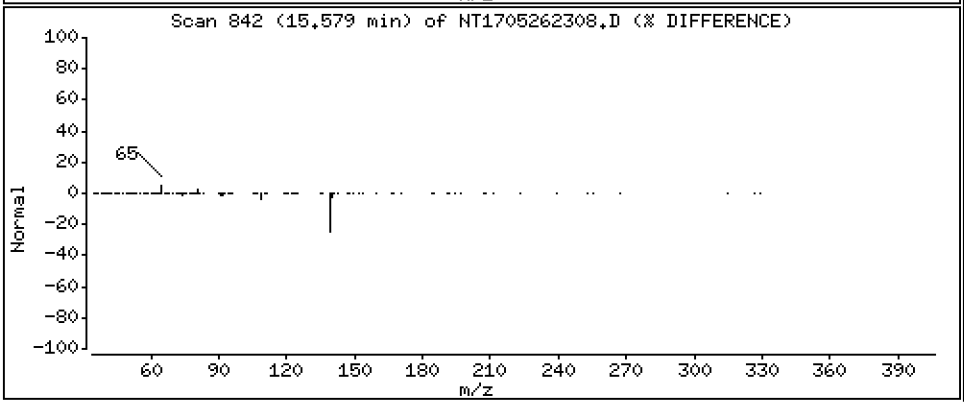
47 4-Nitrophenol

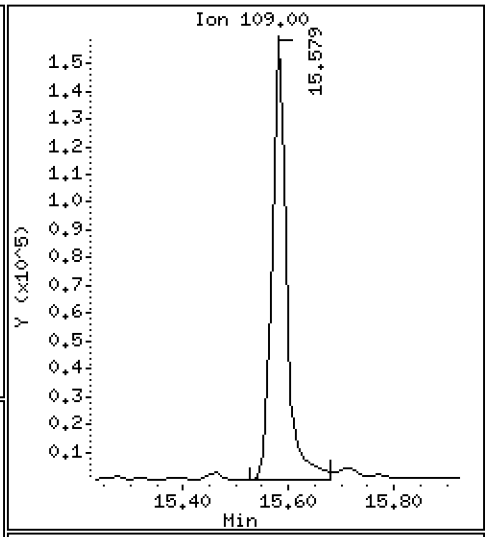
Concentration: 12.12 ug/mL

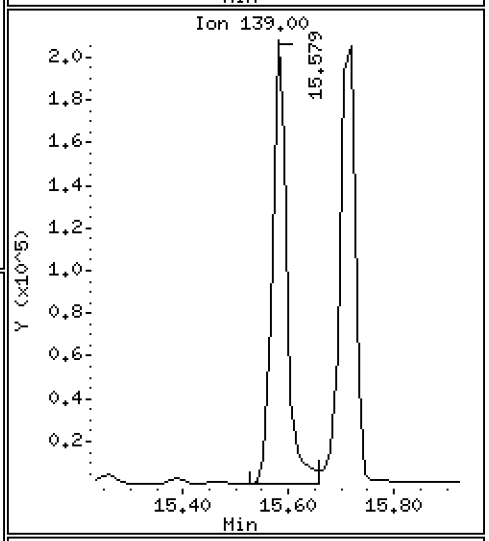


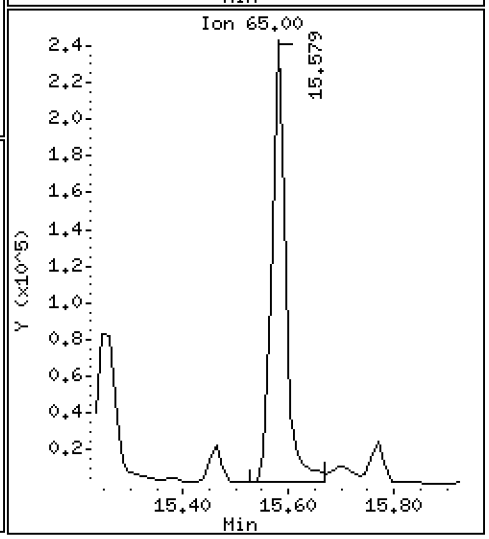












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

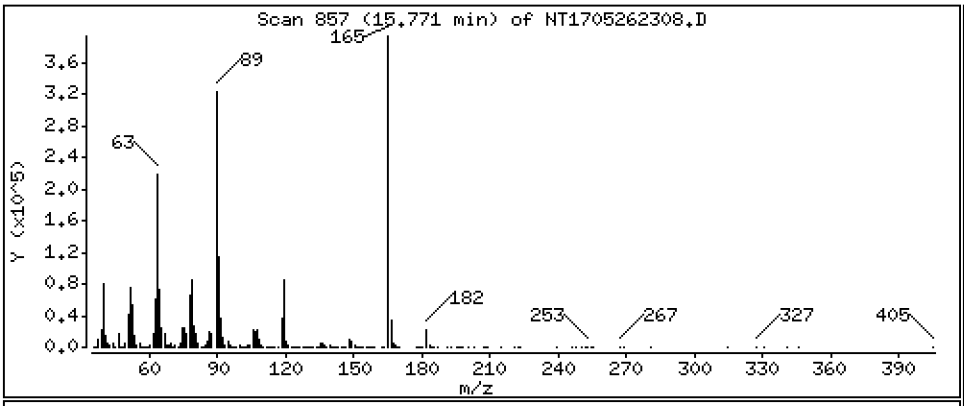
Operator: VTS

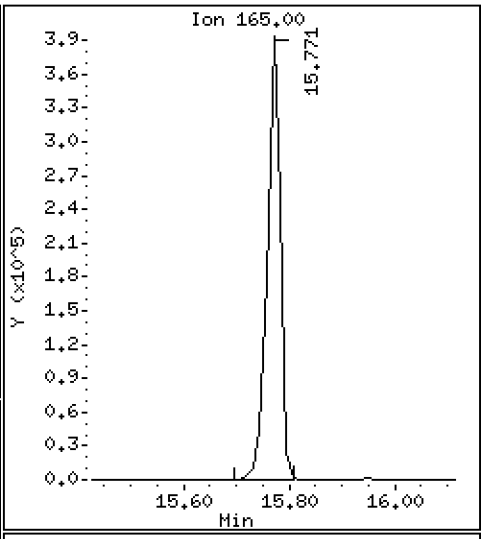
Column phase: ZB-5msi

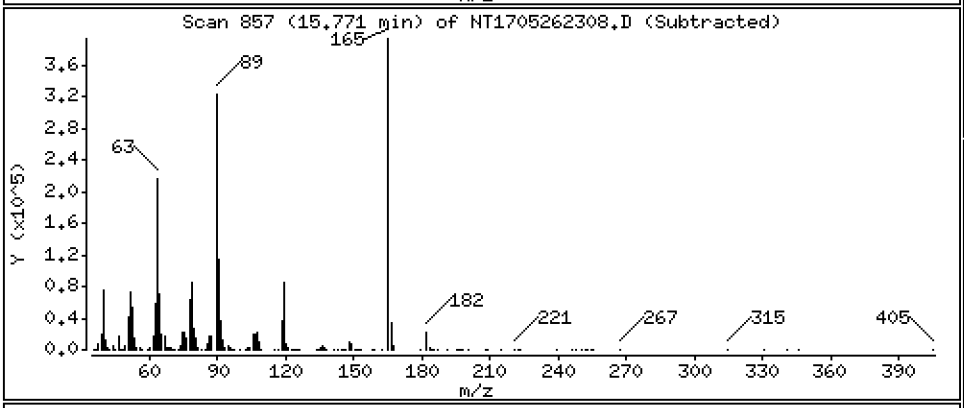
Column diameter: 0.25

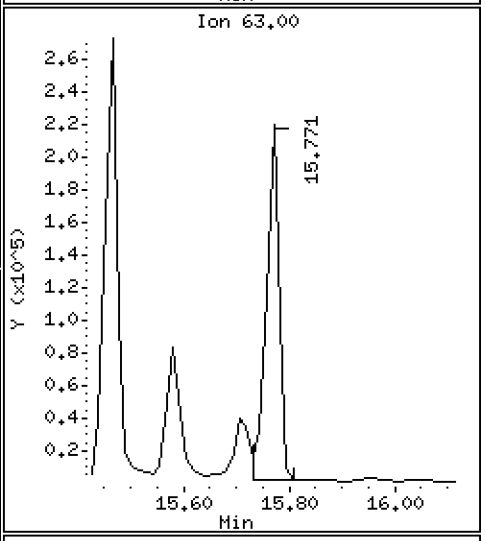
48 2,4-Dinitrotoluene

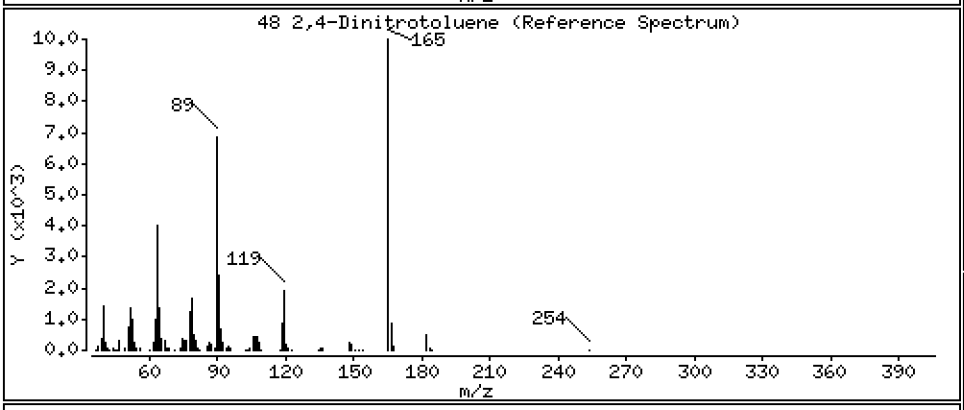
Concentration: 12.59 ug/mL

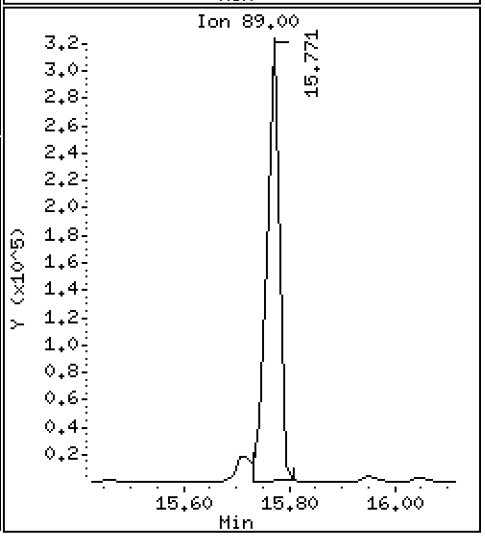


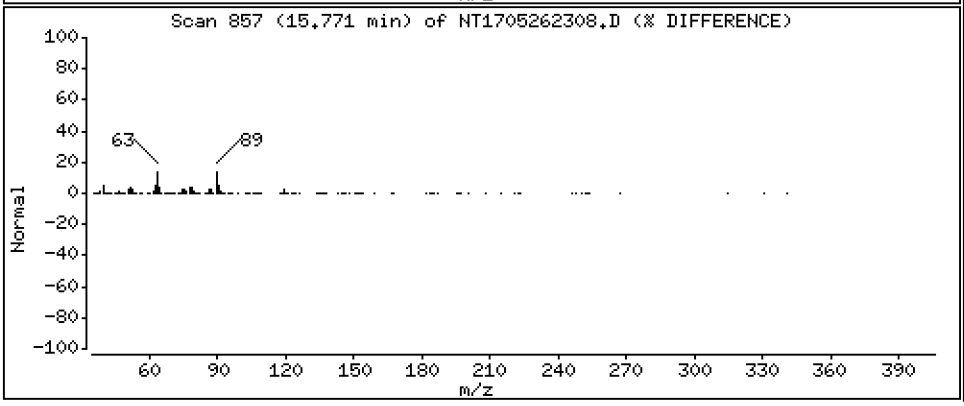












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

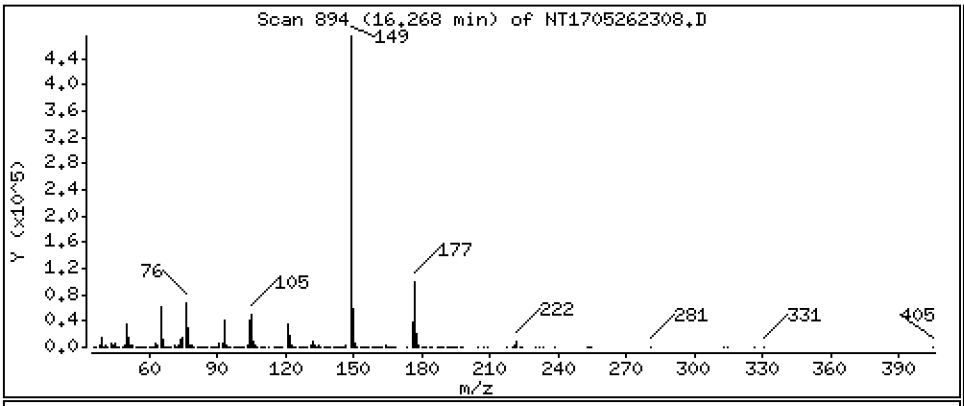
Operator: VTS

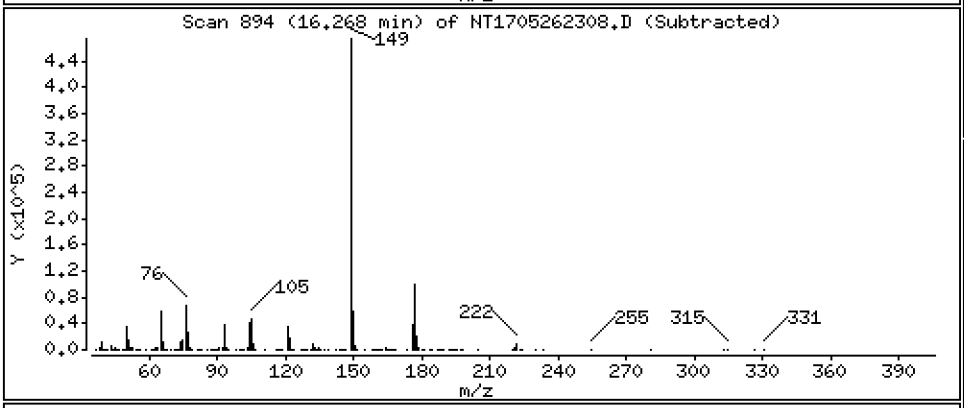
Column phase: ZB-5msi

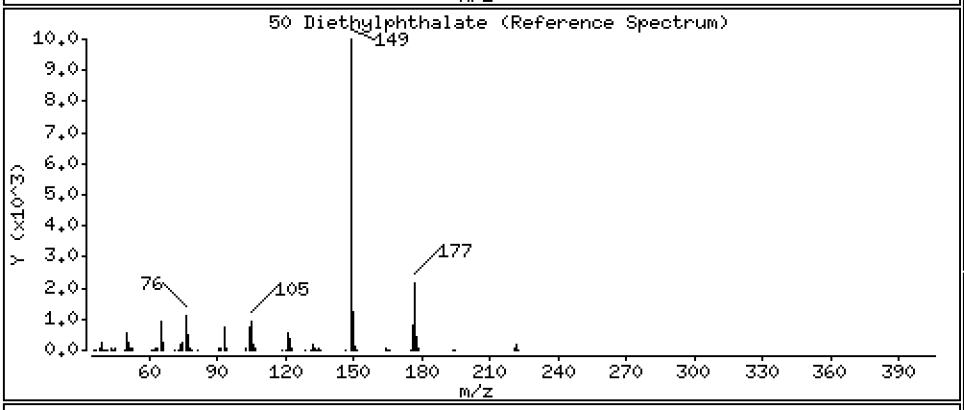
Column diameter: 0.25

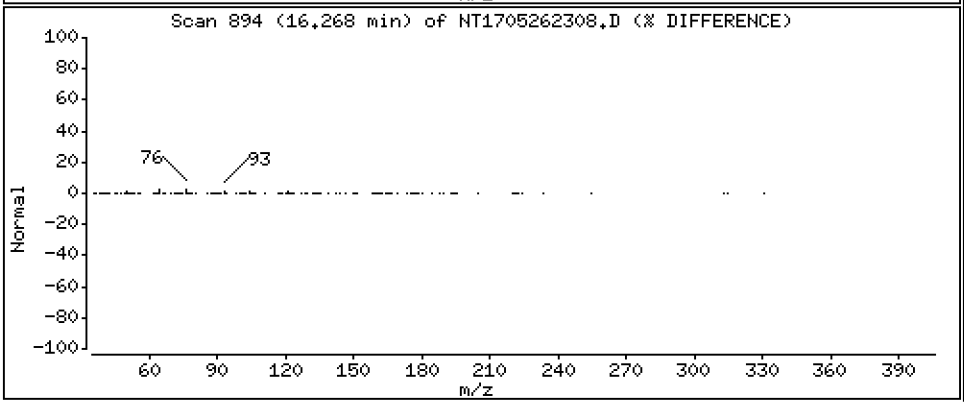
50 Diethylphthalate

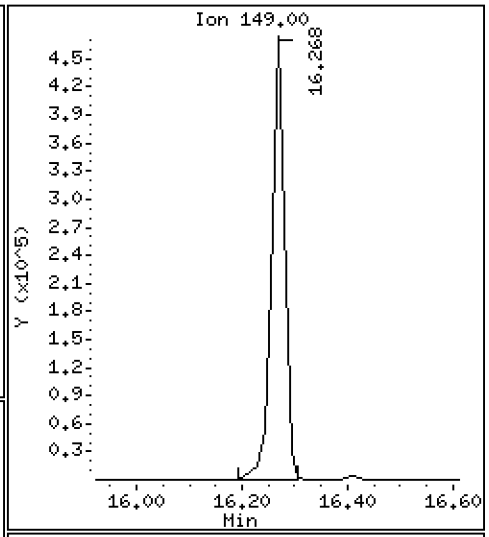
Concentration: 6.000 ug/mL

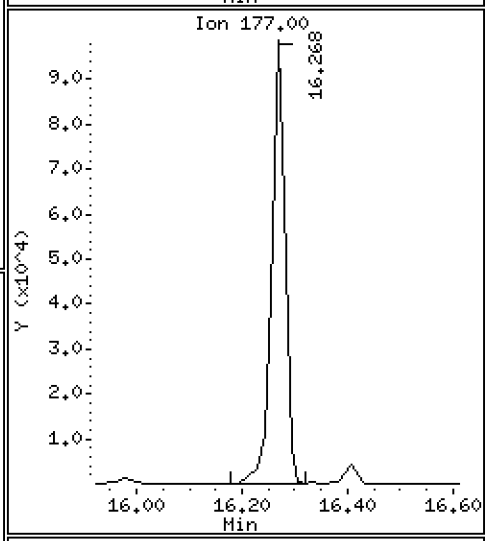


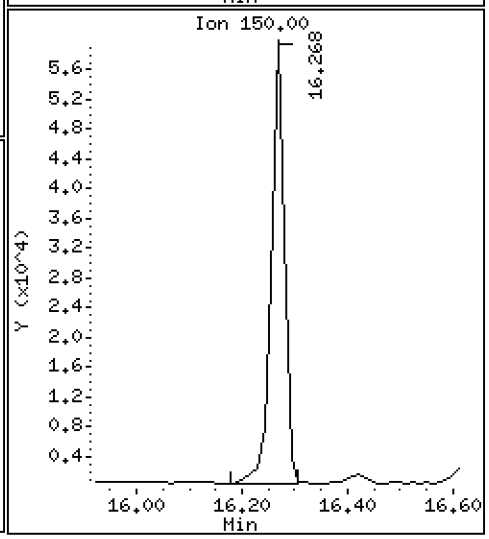












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

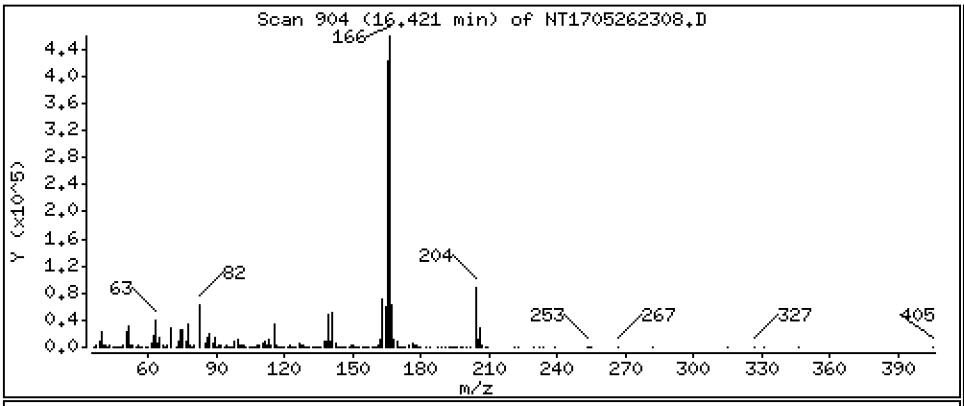
Operator: VTS

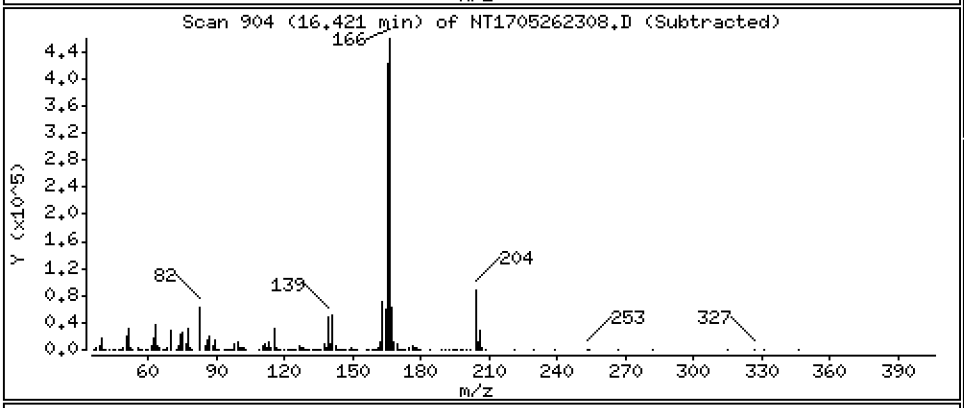
Column phase: ZB-5msi

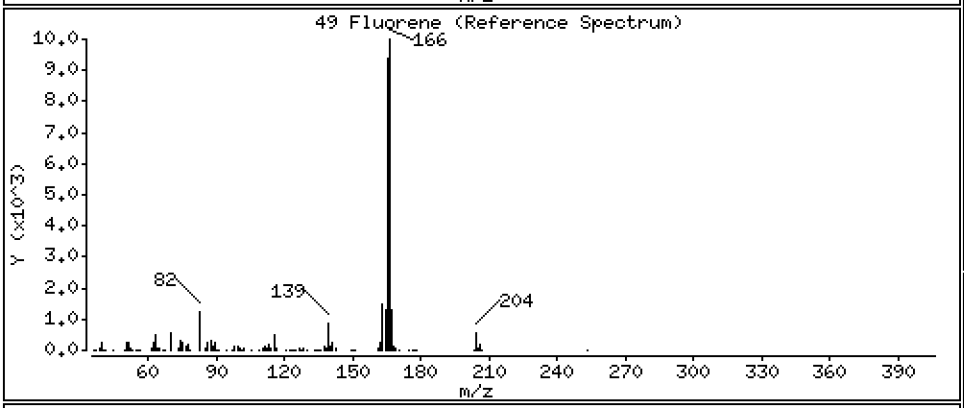
Column diameter: 0.25

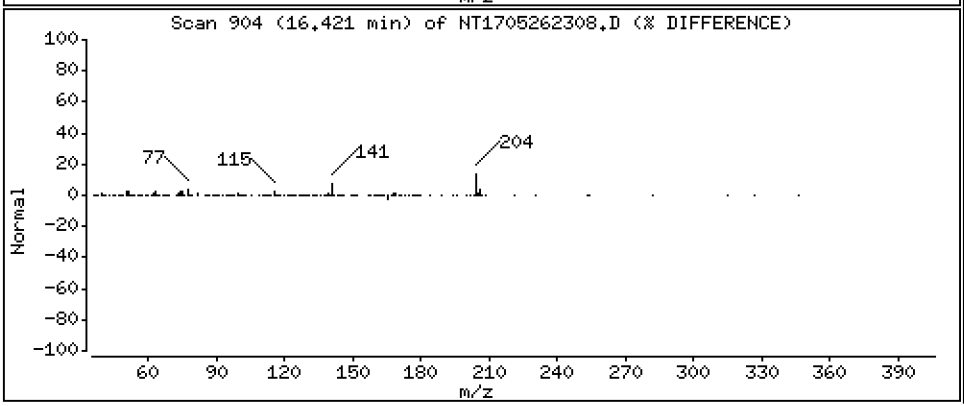
49 Fluorene

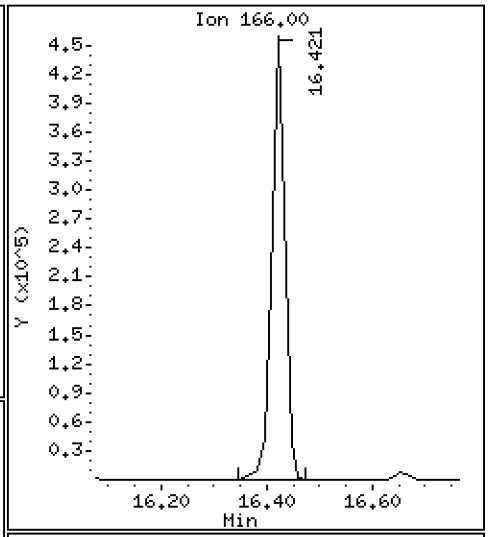
Concentration: 4.532 ug/mL

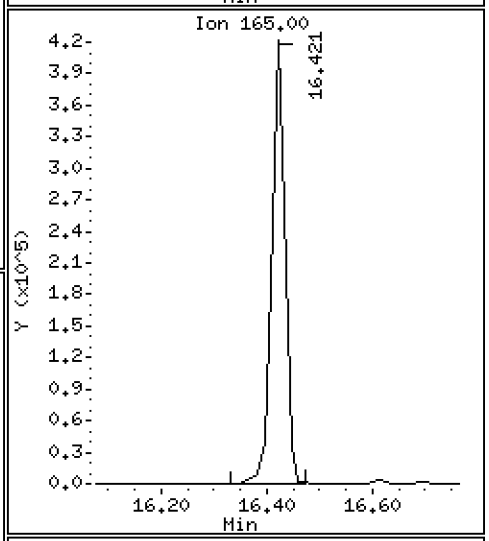


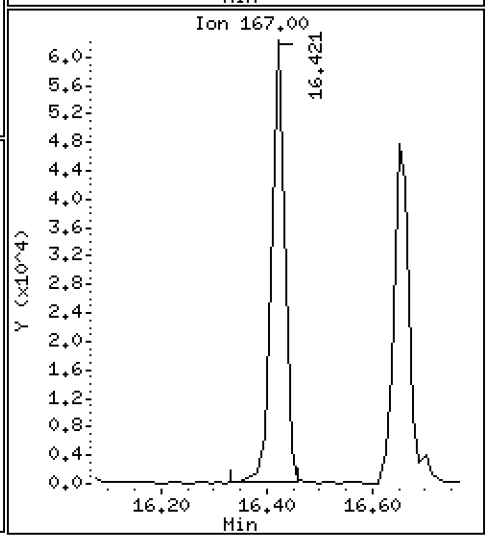












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

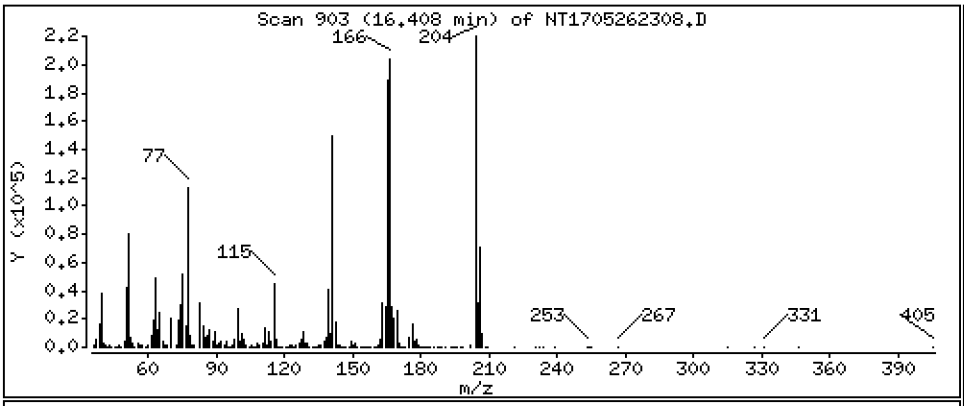
Operator: VTS

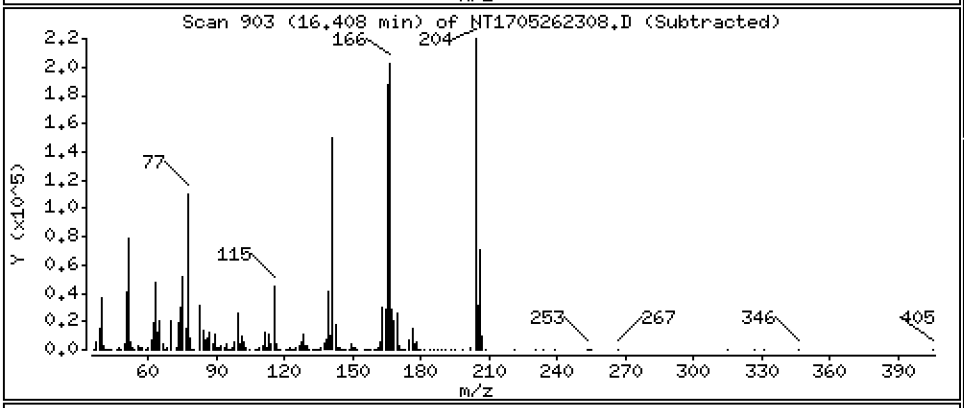
Column phase: ZB-5msi

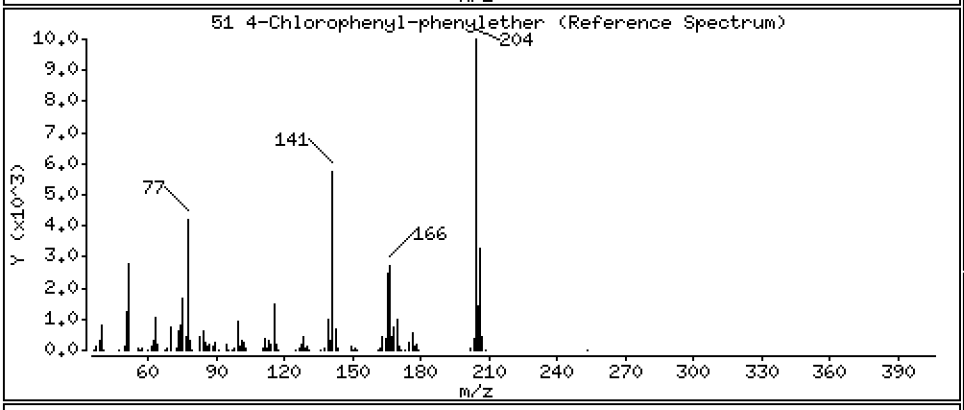
Column diameter: 0.25

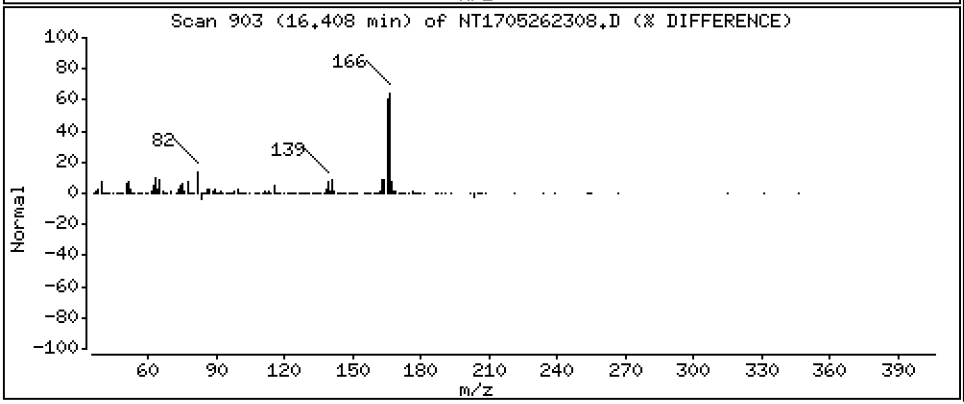
51 4-Chlorophenyl-phenylether

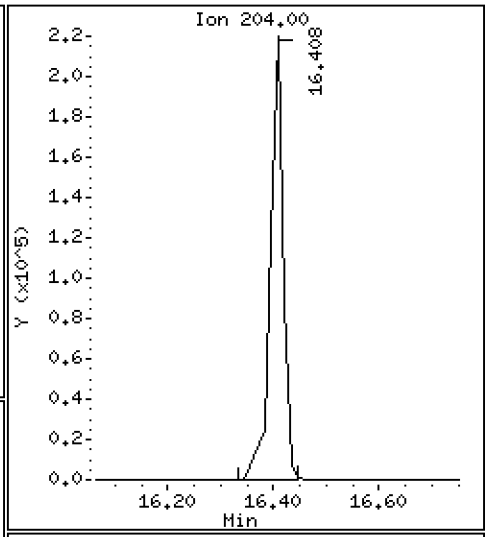
Concentration: 4.514 ug/mL

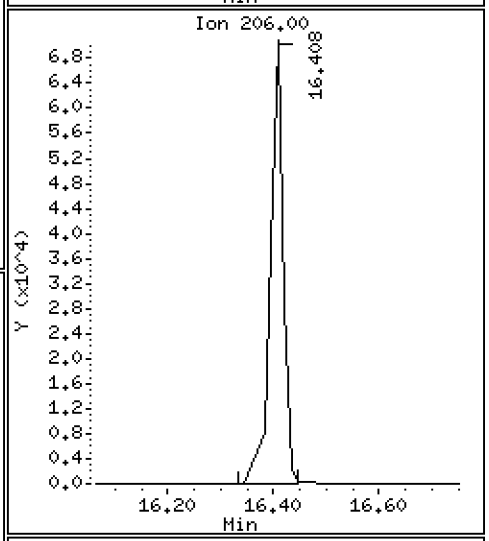


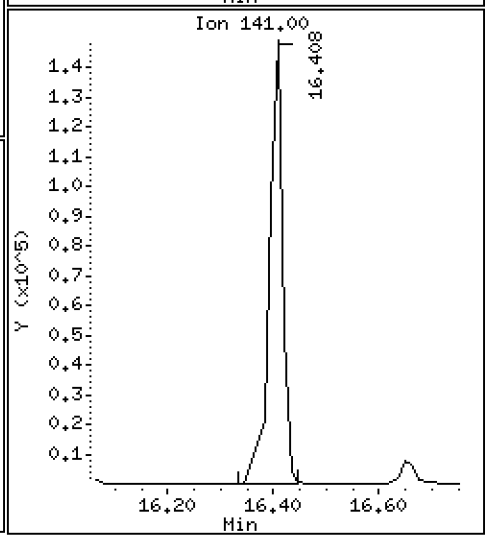












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

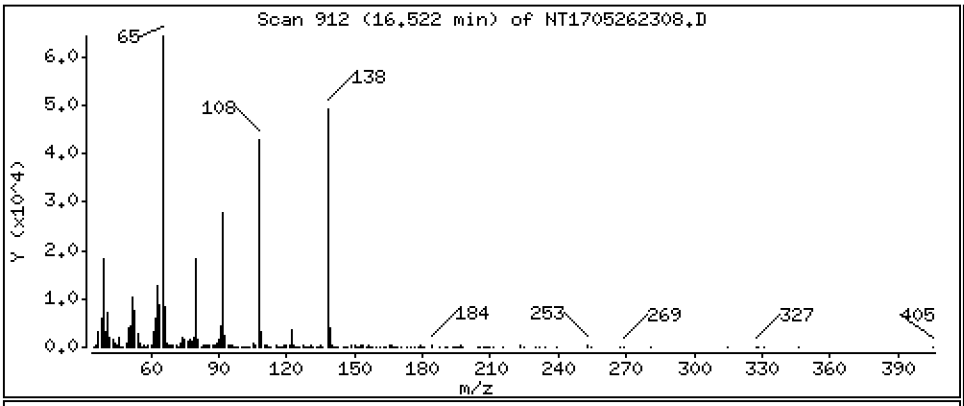
Operator: VTS

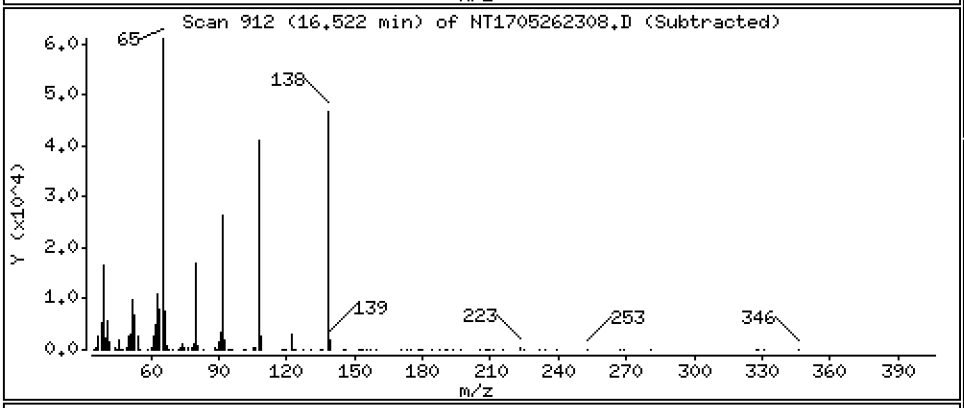
Column phase: ZB-5msi

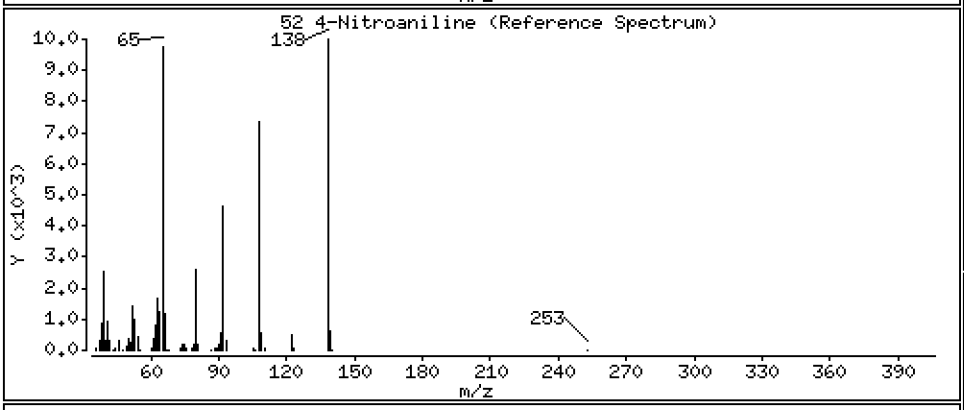
Column diameter: 0.25

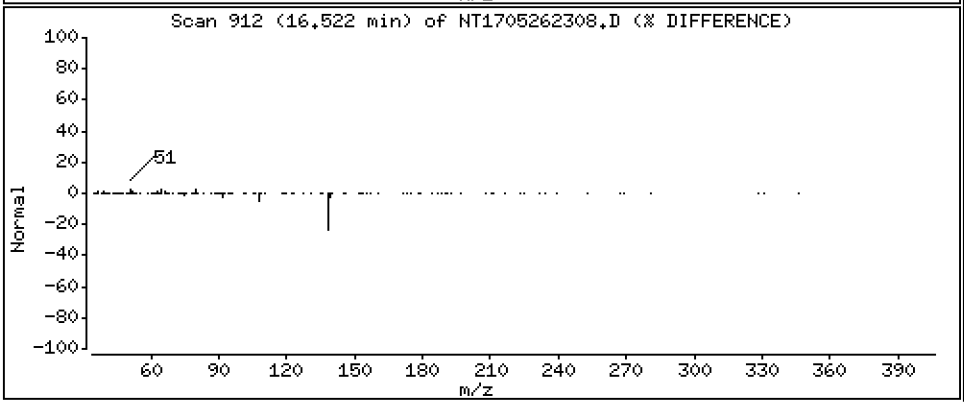
52 4-Nitroaniline

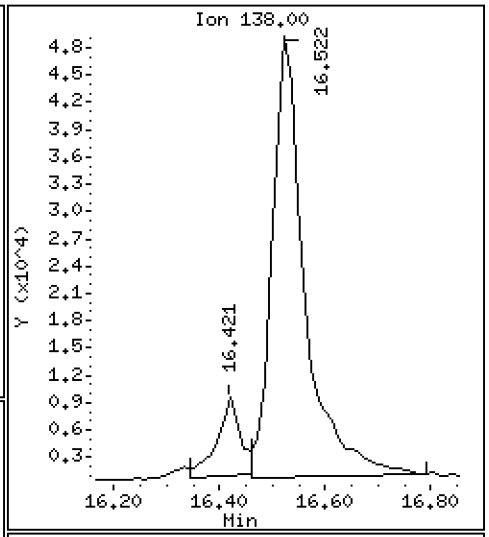
Concentration: 5.743 ug/mL

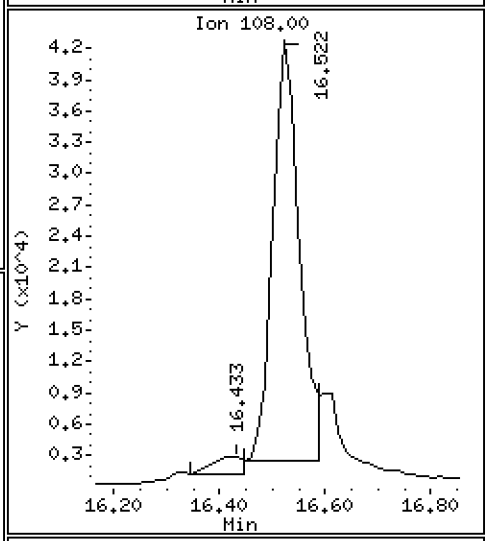


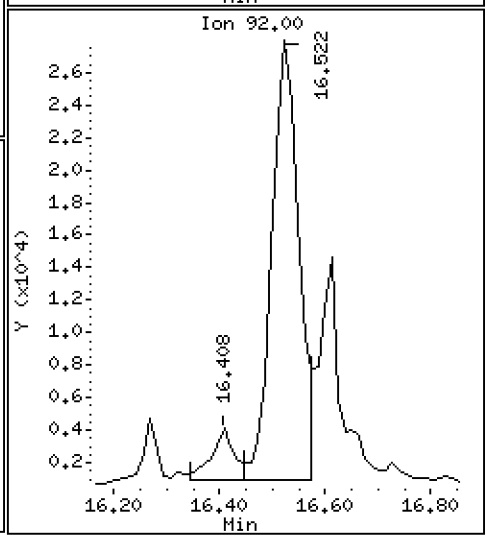












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

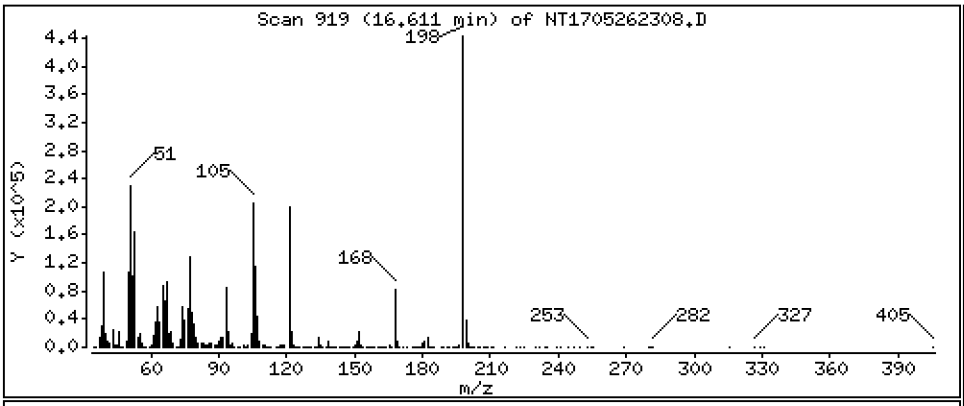
Operator: VTS

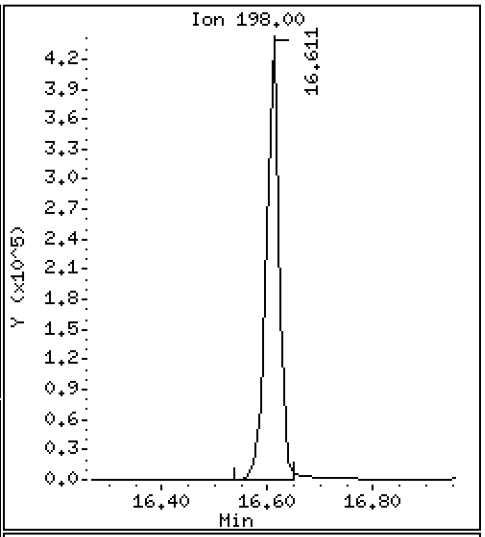
Column phase: ZB-5msi

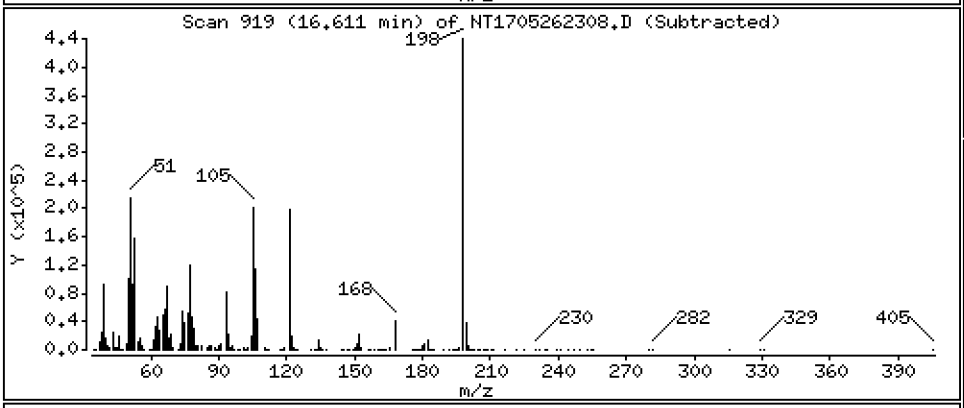
Column diameter: 0.25

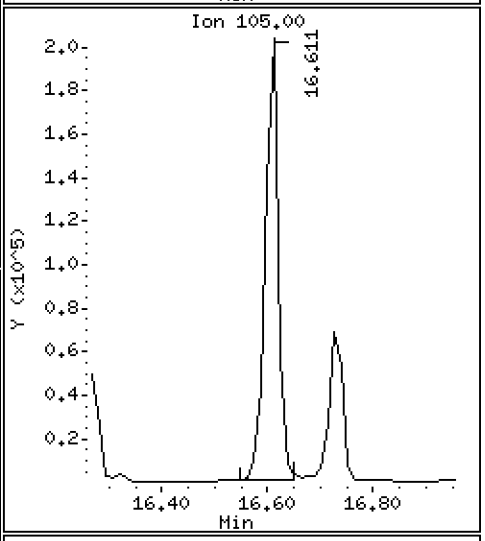
53 4,6-Dinitro-2-methylphenol

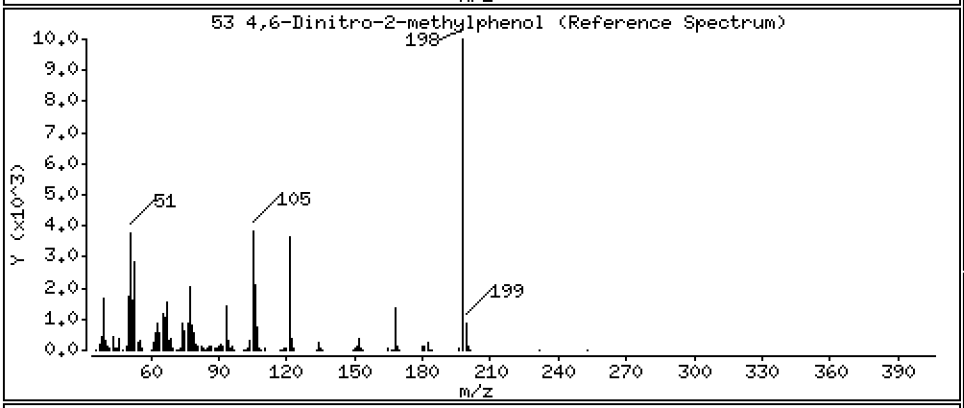
Concentration: 22.06 ug/mL

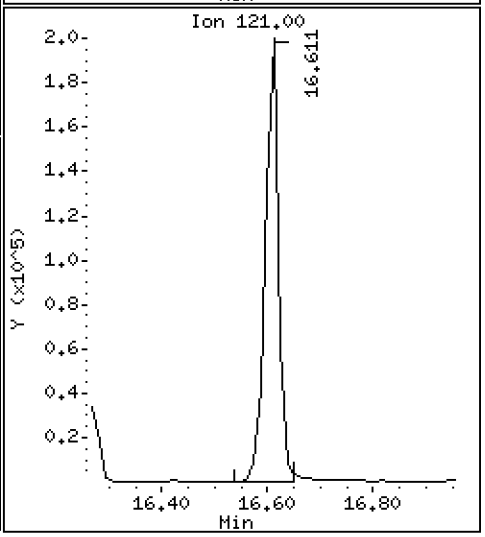


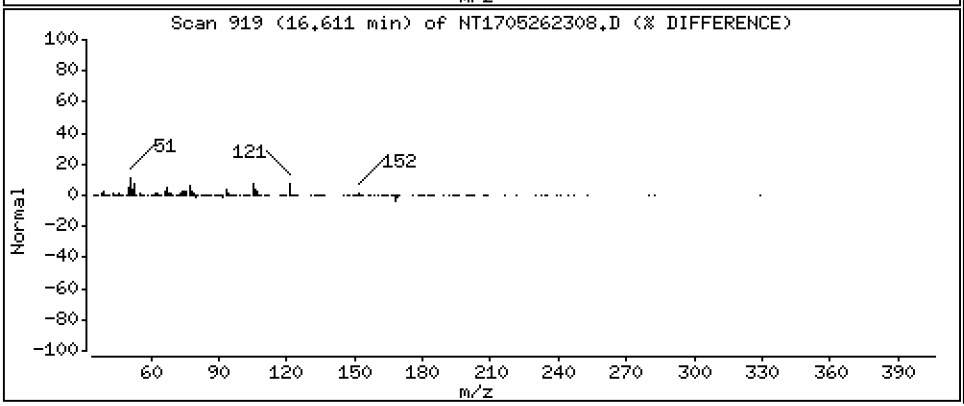












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

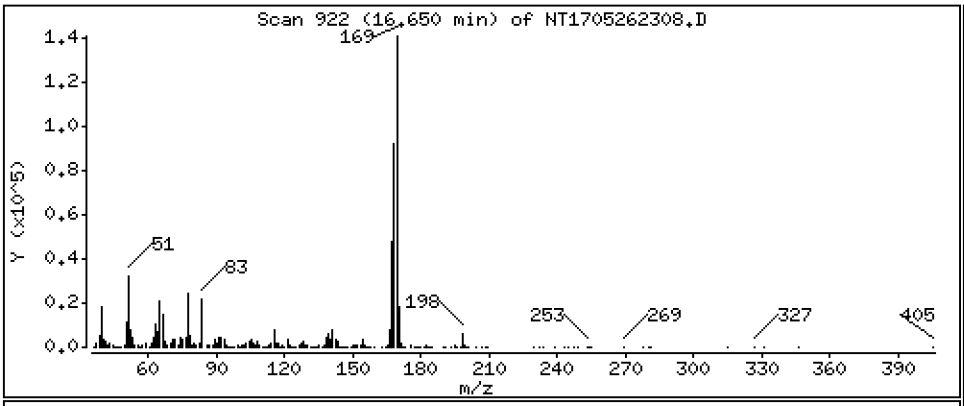
Operator: VTS

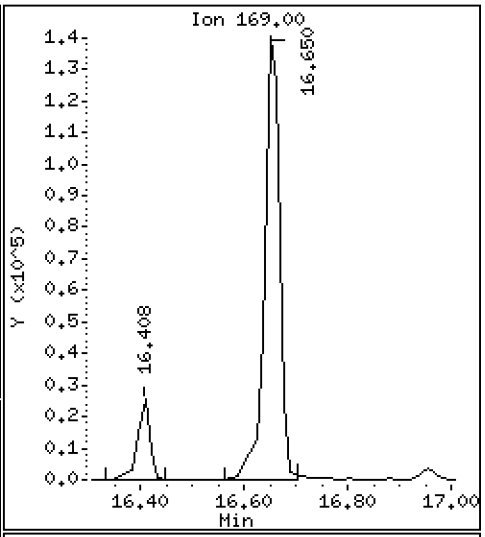
Column phase: ZB-5msi

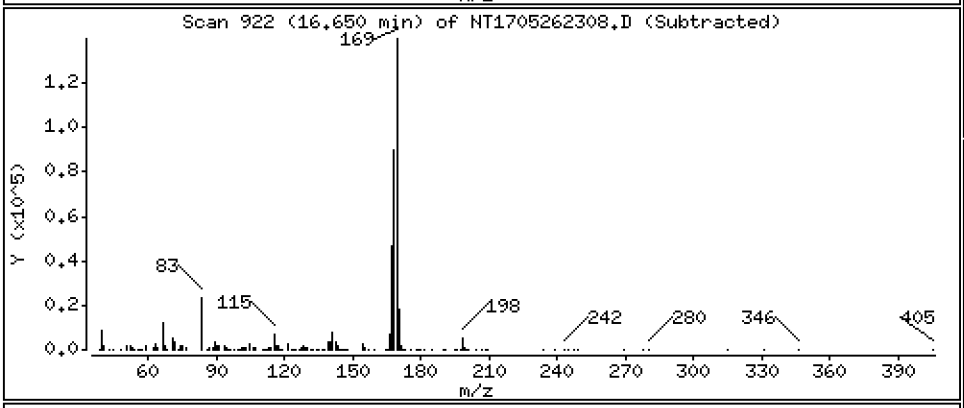
Column diameter: 0.25

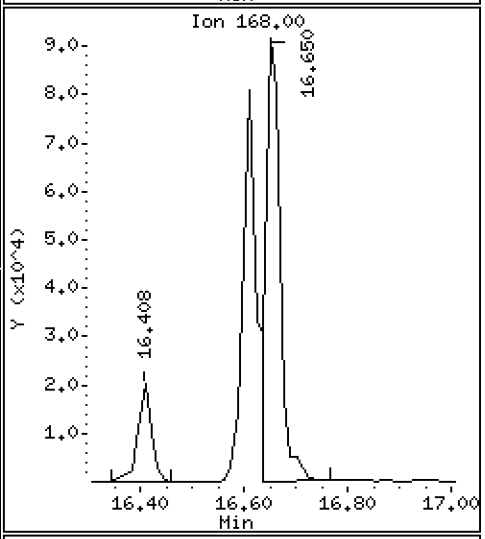
54 N-Nitrosodiphenylamine

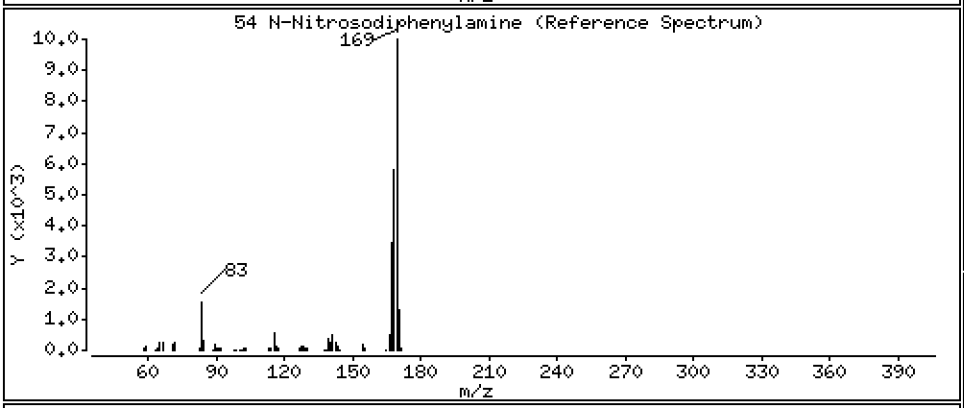
Concentration: 2.366 ug/mL

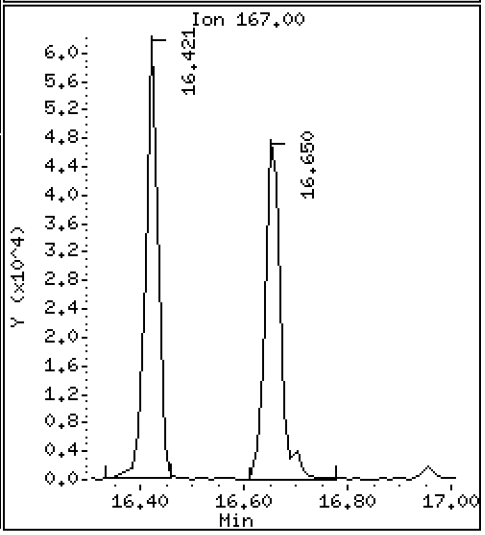


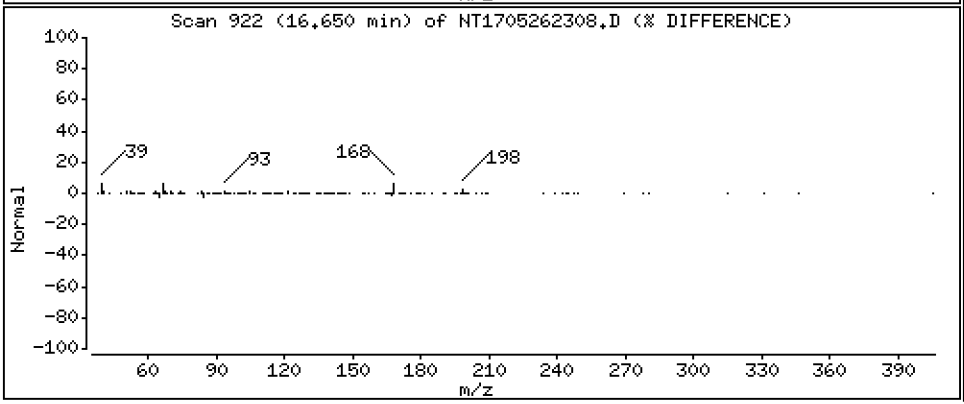












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

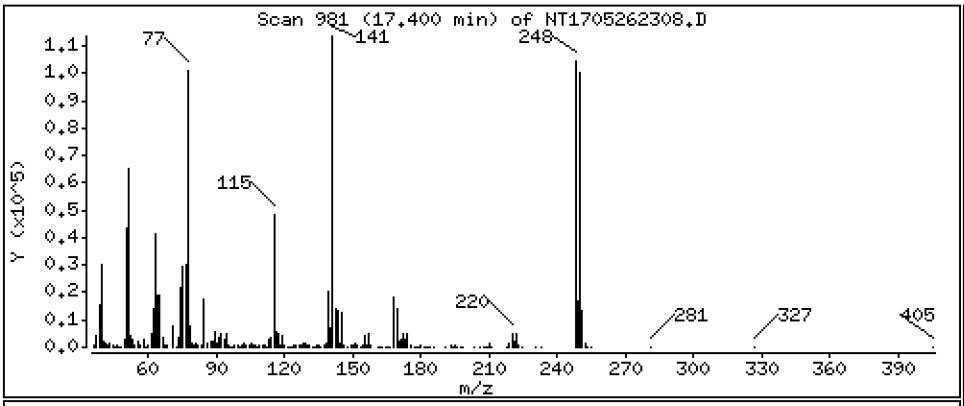
Operator: VTS

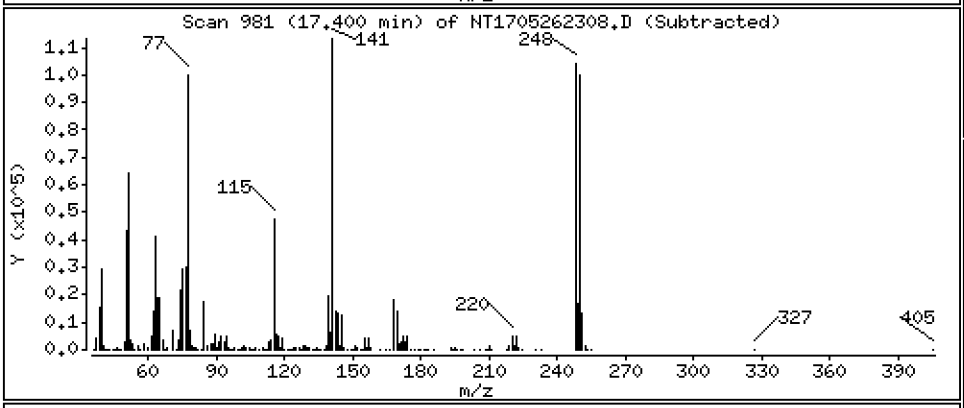
Column phase: ZB-5msi

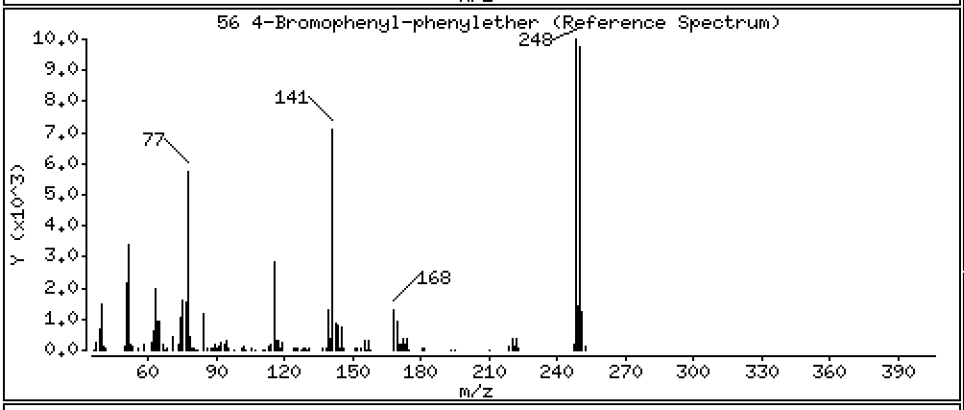
Column diameter: 0.25

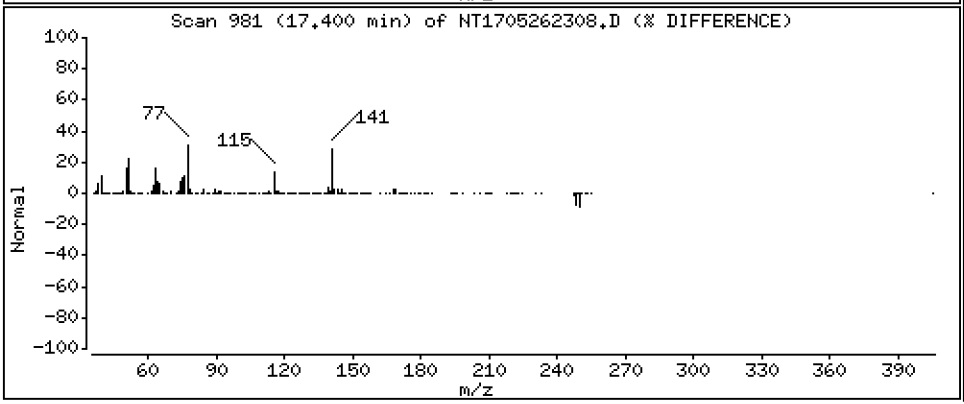
56 4-Bromophenyl-phenylether

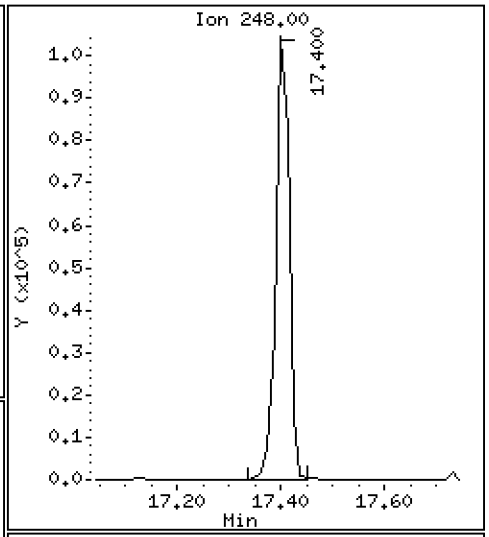
Concentration: 4.548 ug/mL

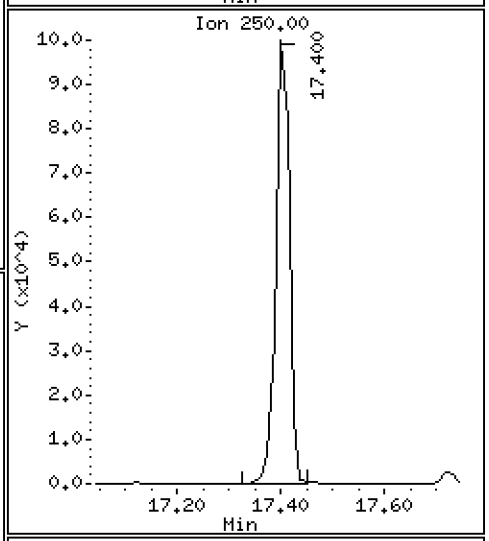


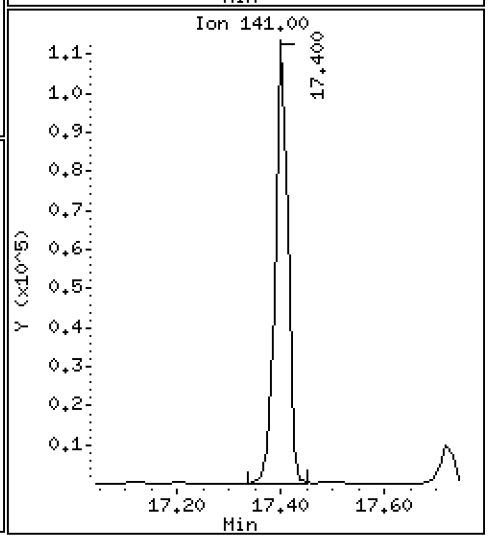












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

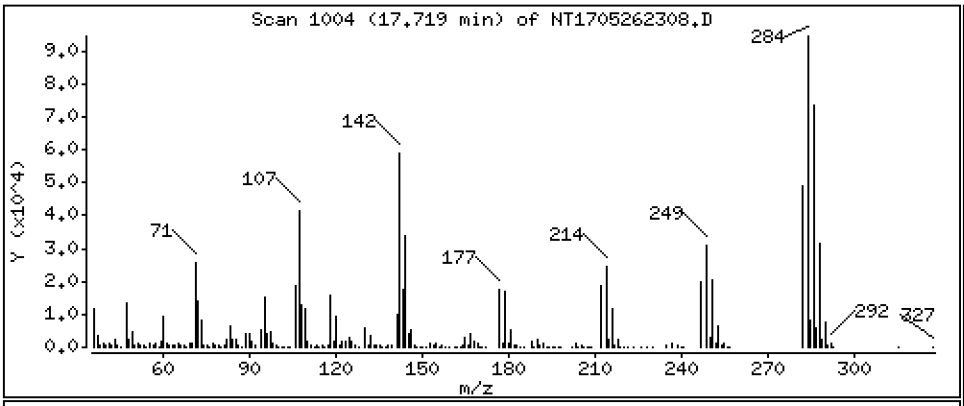
Operator: VTS

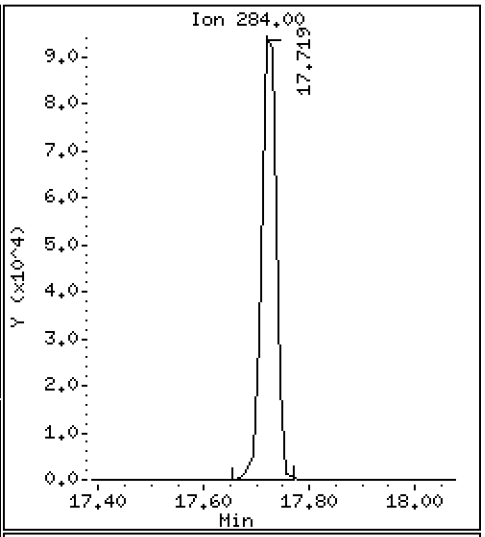
Column phase: ZB-5msi

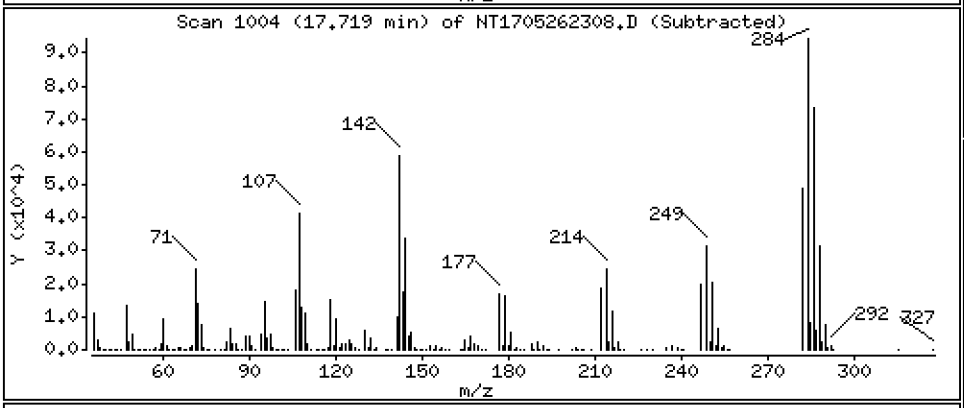
Column diameter: 0.25

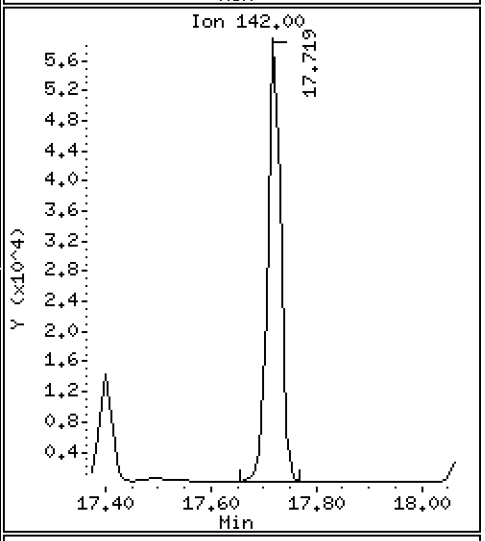
57 Hexachlorobenzene

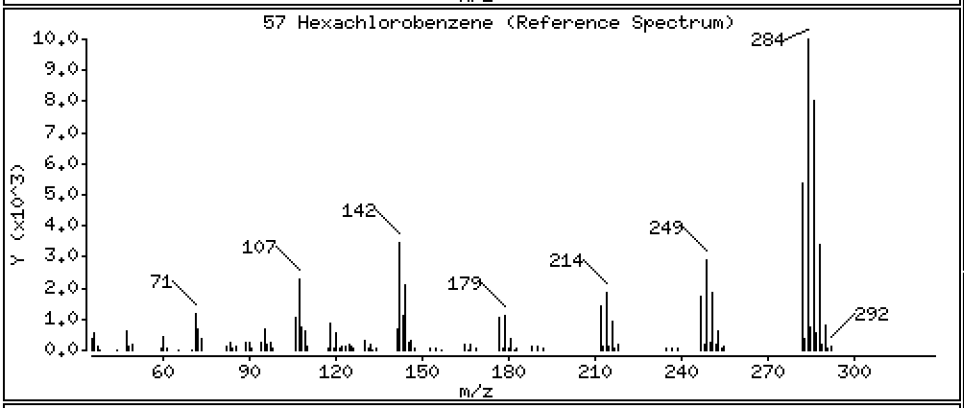
Concentration: 4.448 ug/mL

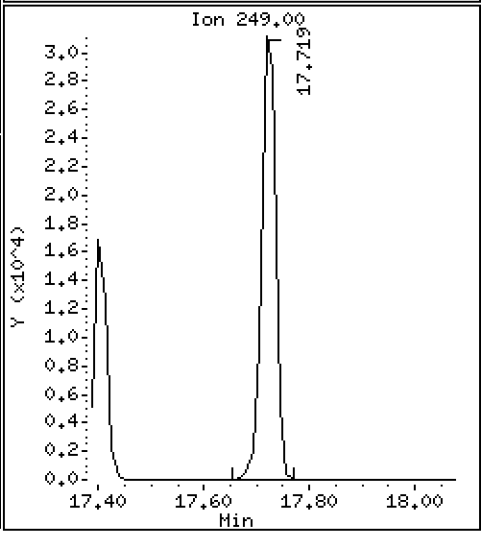


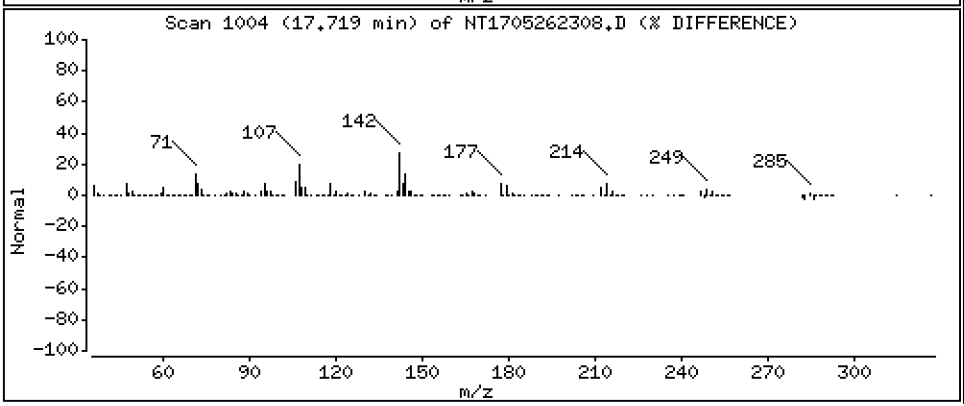












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

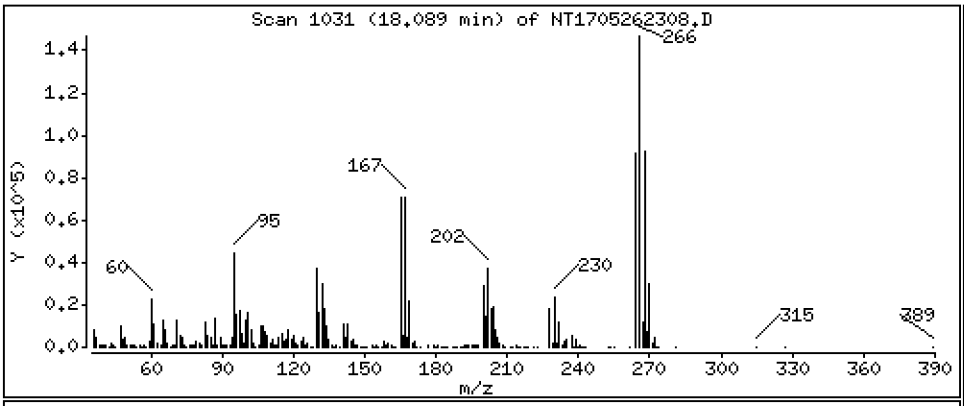
Operator: VTS

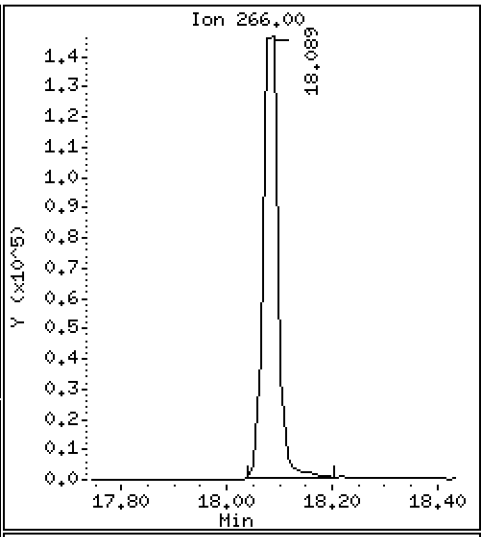
Column phase: ZB-5msi

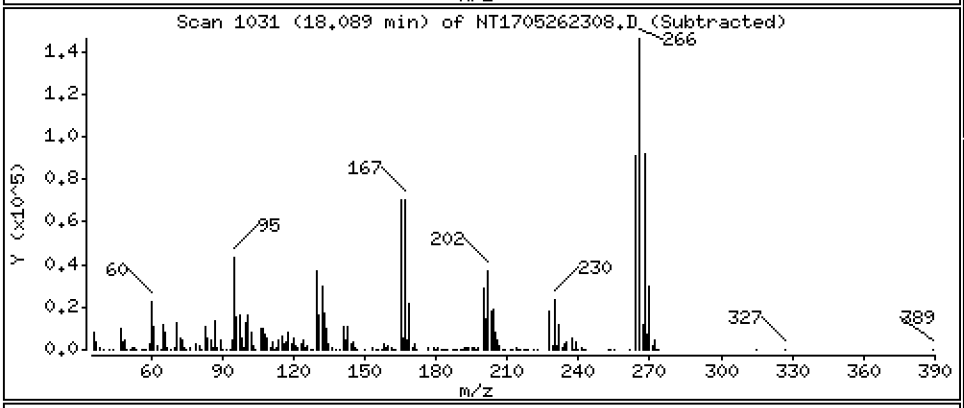
Column diameter: 0.25

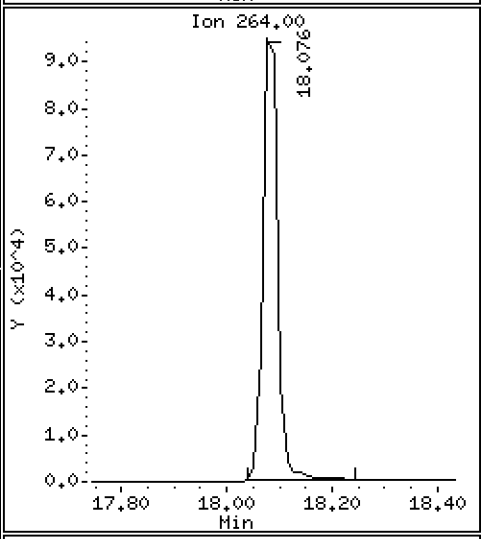
58 Pentachlorophenol

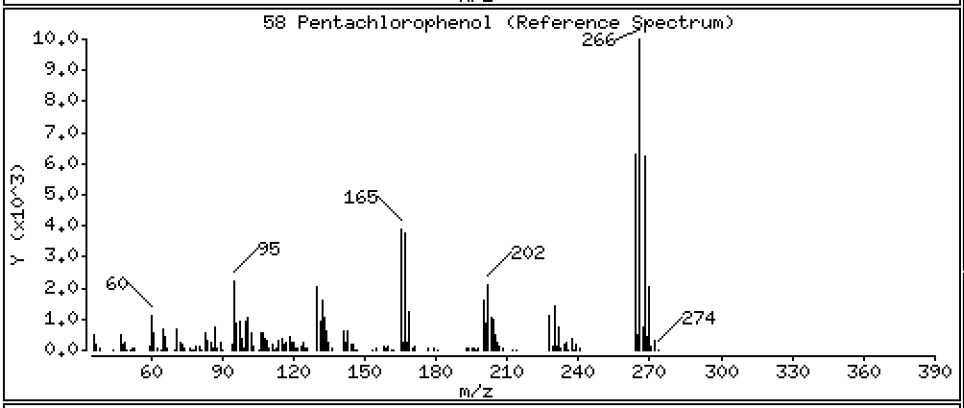
Concentration: 11.38 ug/mL

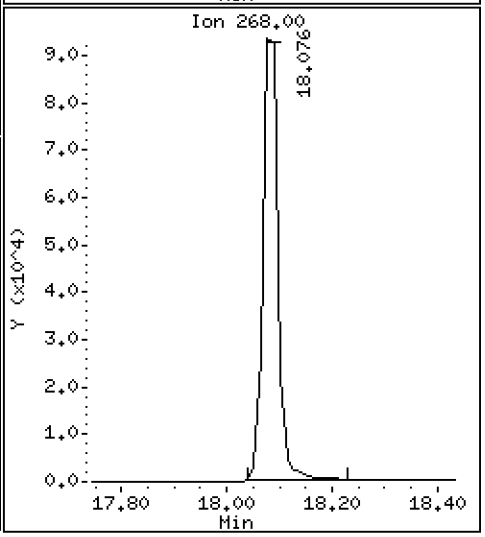


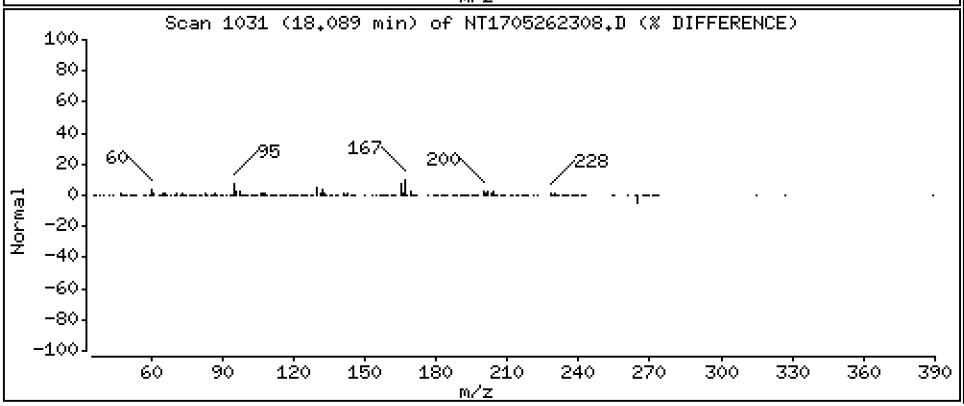












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

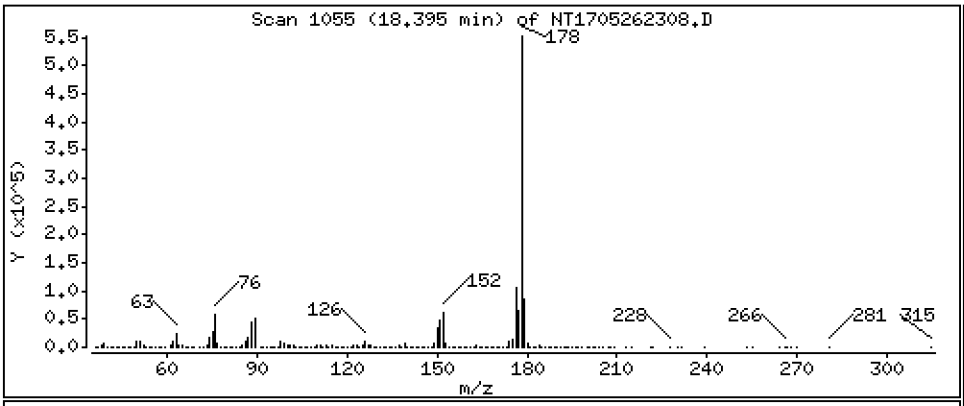
Operator: VTS

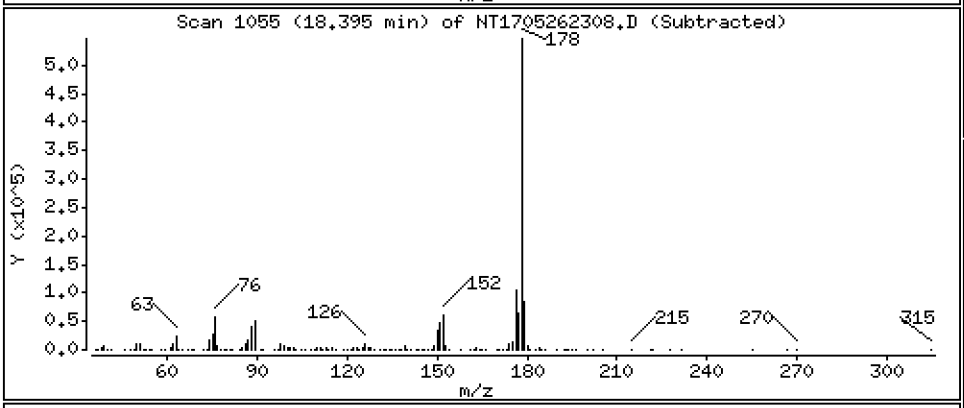
Column phase: ZB-5msi

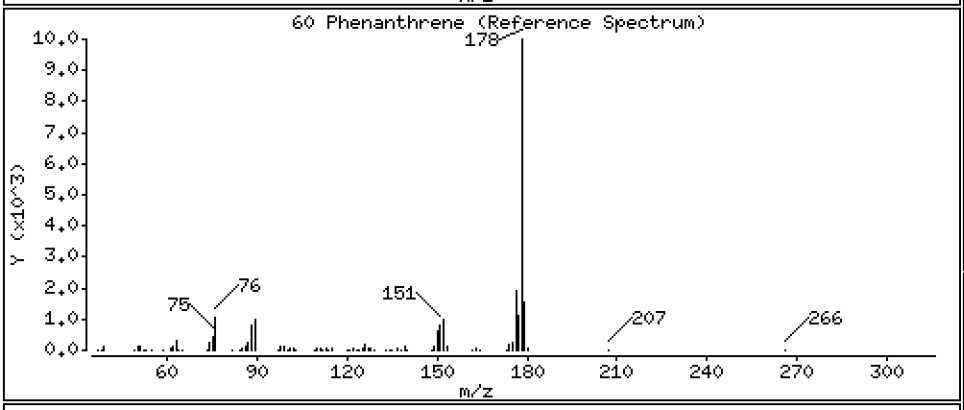
Column diameter: 0.25

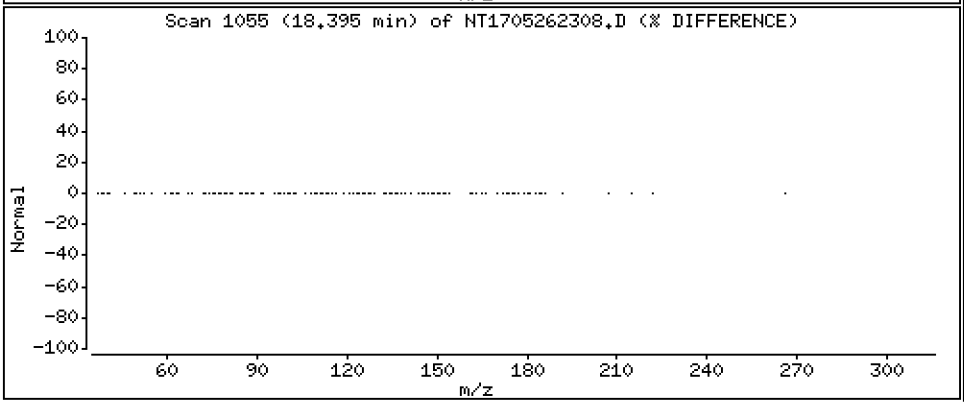
60 Phenanthrene

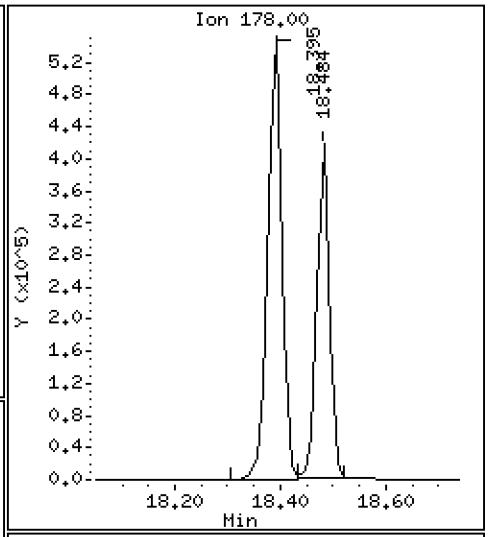
Concentration: 4.104 ug/mL

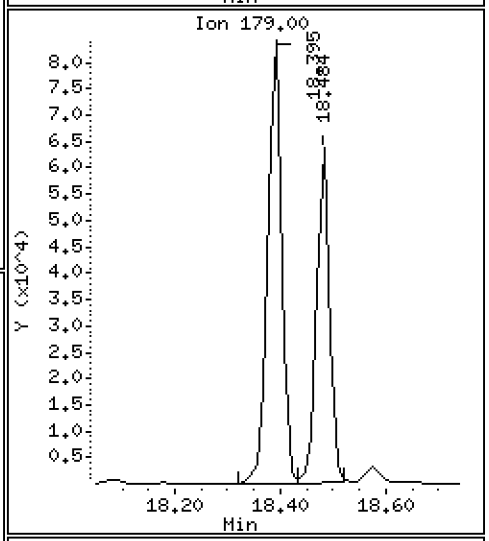


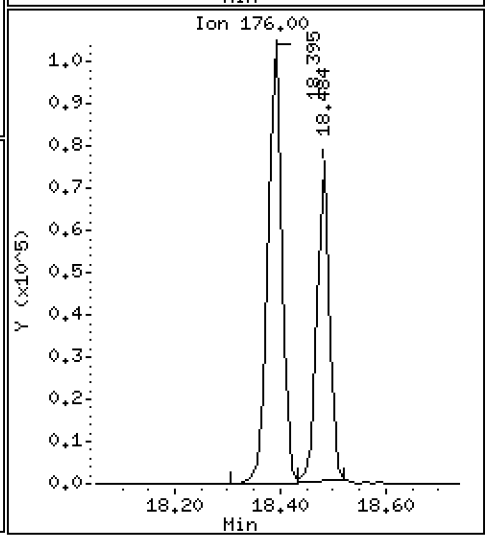












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

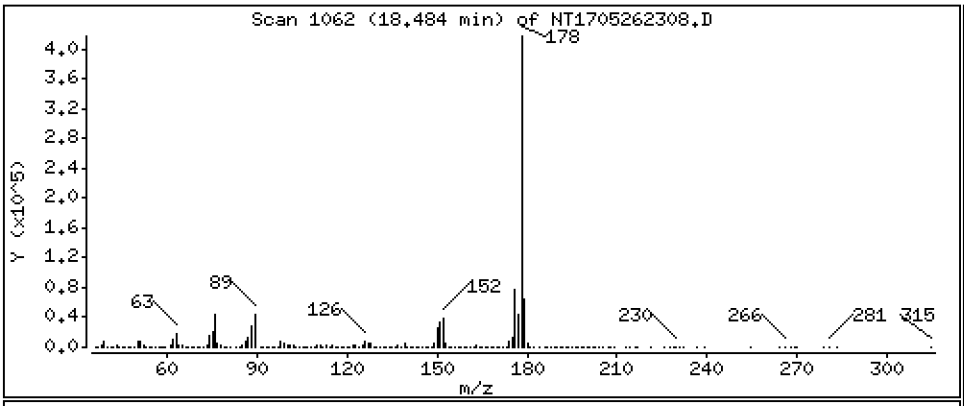
Operator: VTS

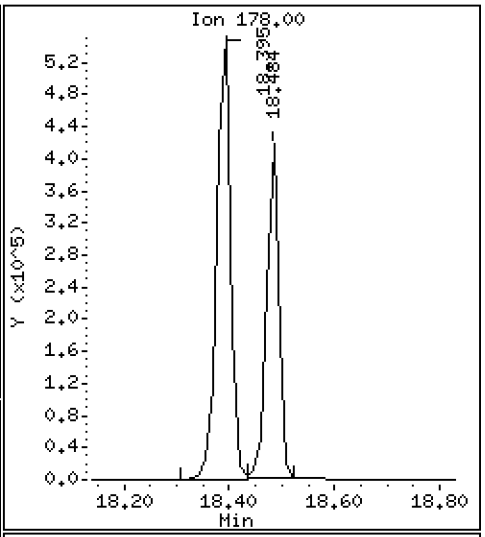
Column phase: ZB-5msi

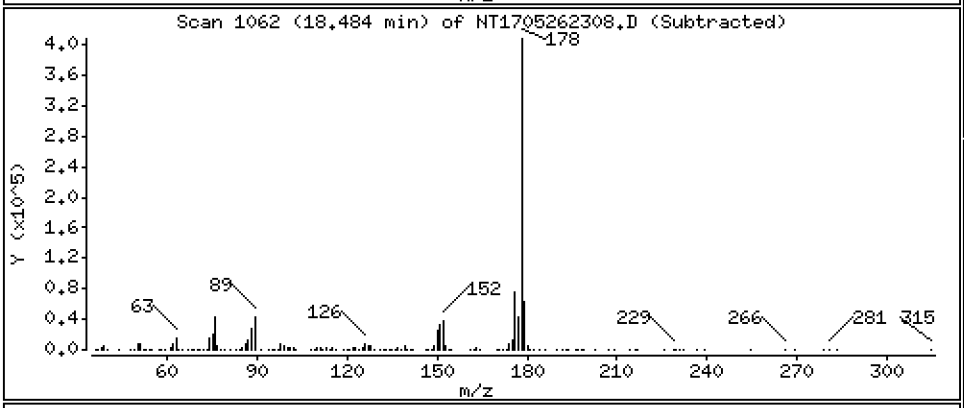
Column diameter: 0.25

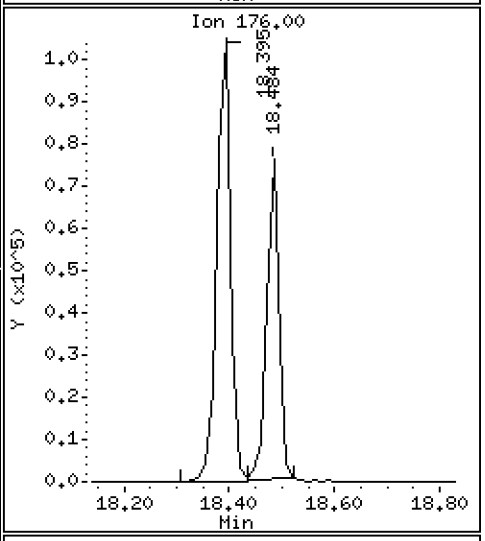
61 Anthracene

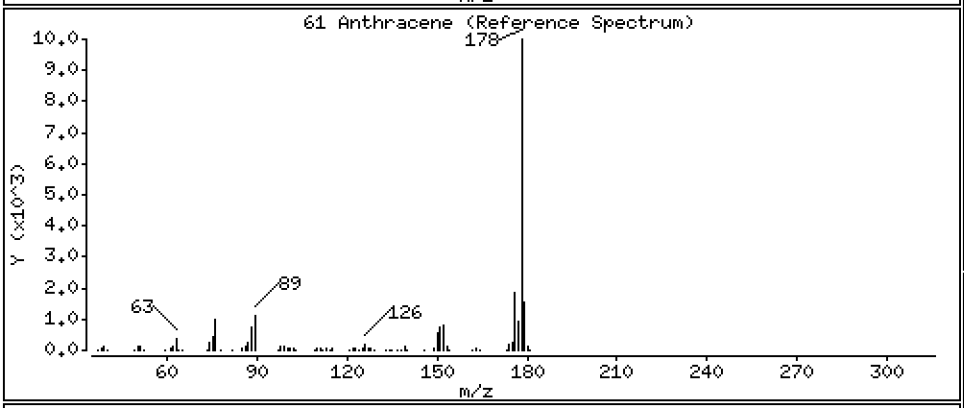
Concentration: 3.004 ug/mL

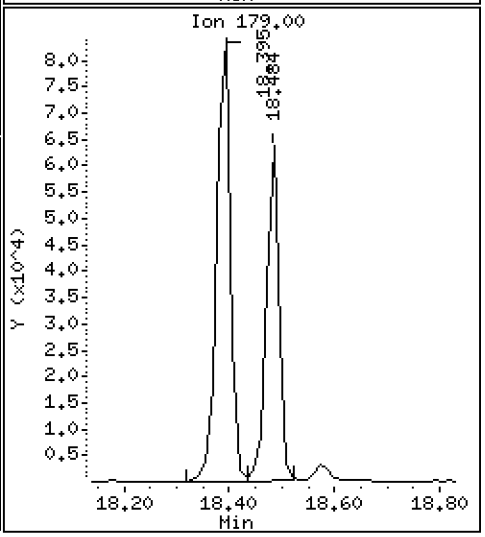


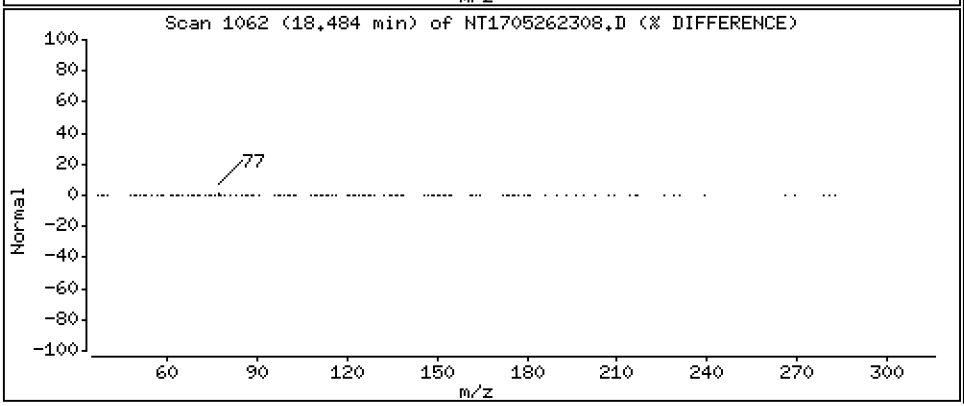












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

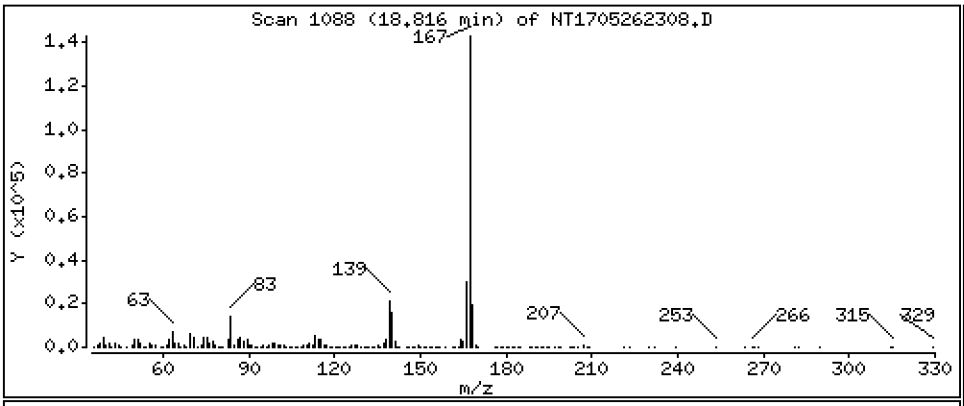
Operator: VTS

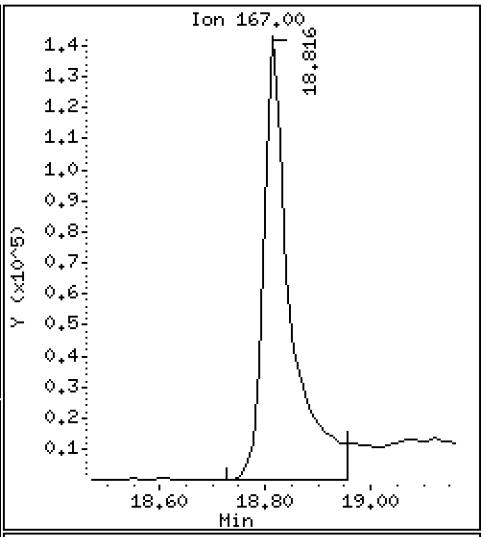
Column phase: ZB-5msi

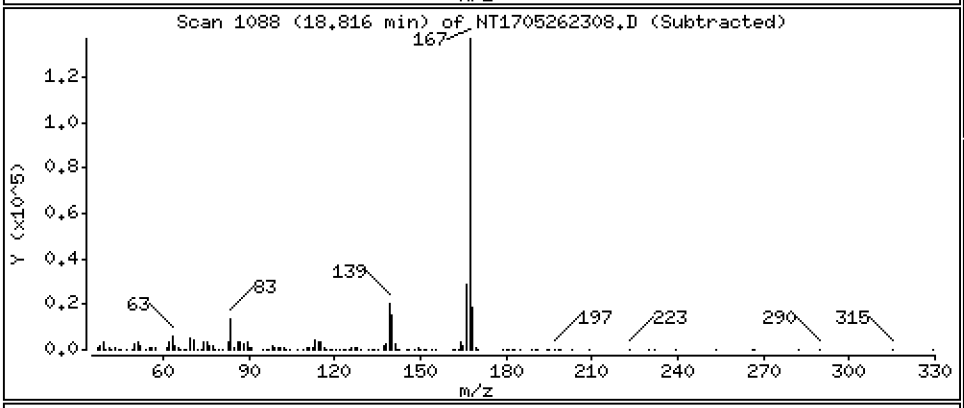
Column diameter: 0.25

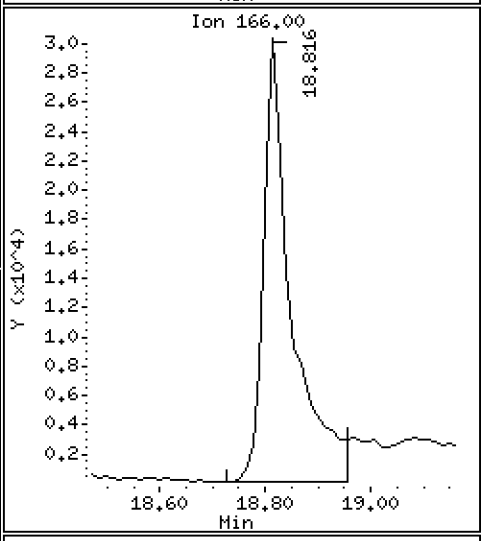
62 Carbazole

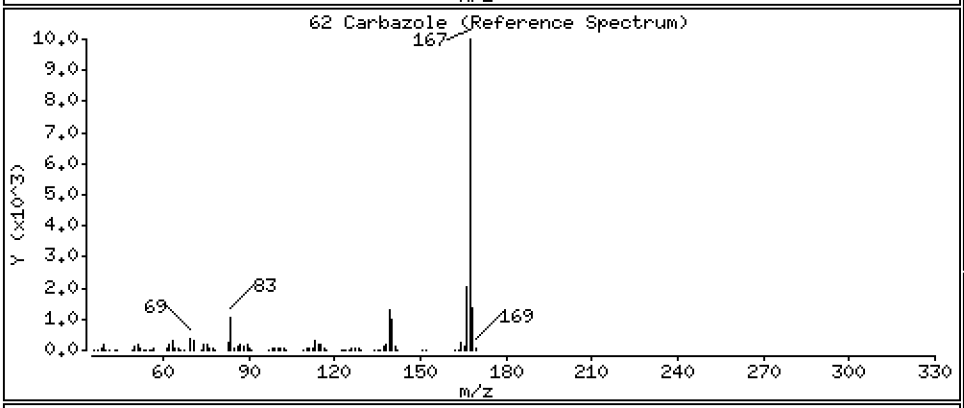
Concentration: 3.482 ug/mL

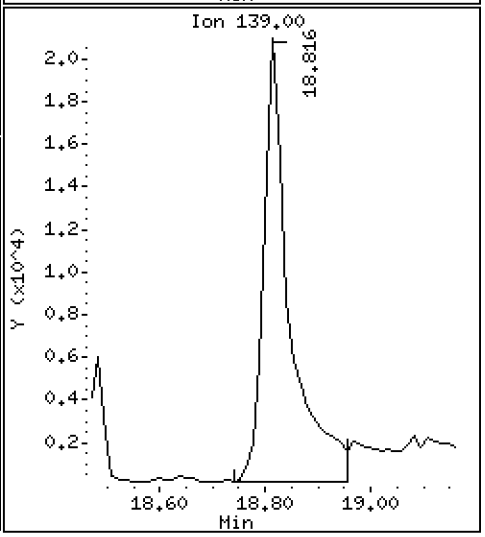


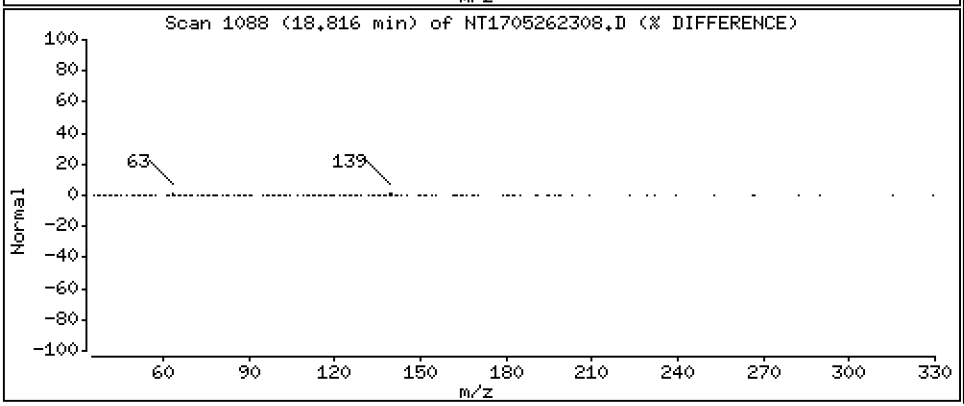












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

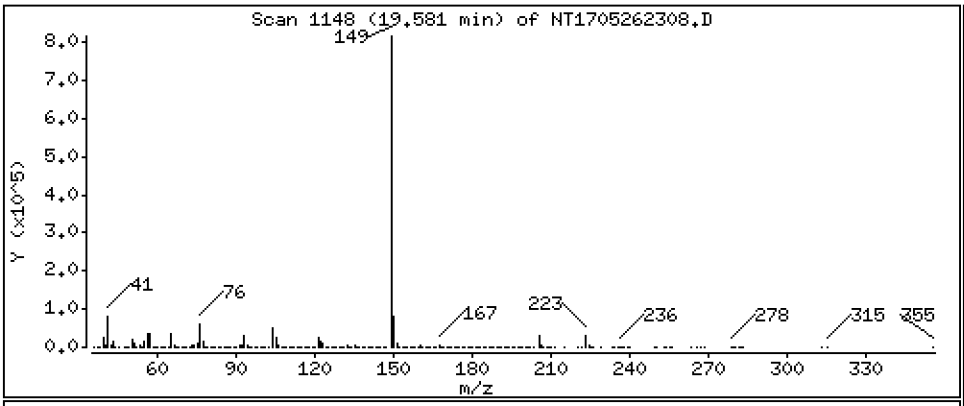
Operator: VTS

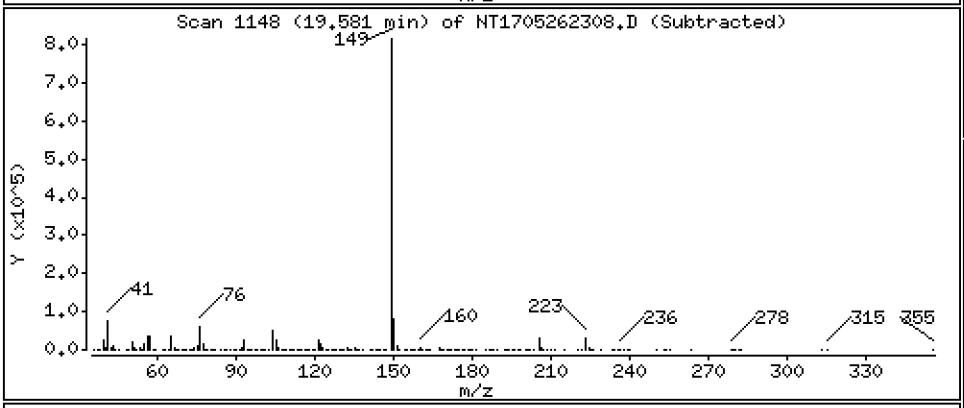
Column phase: ZB-5msi

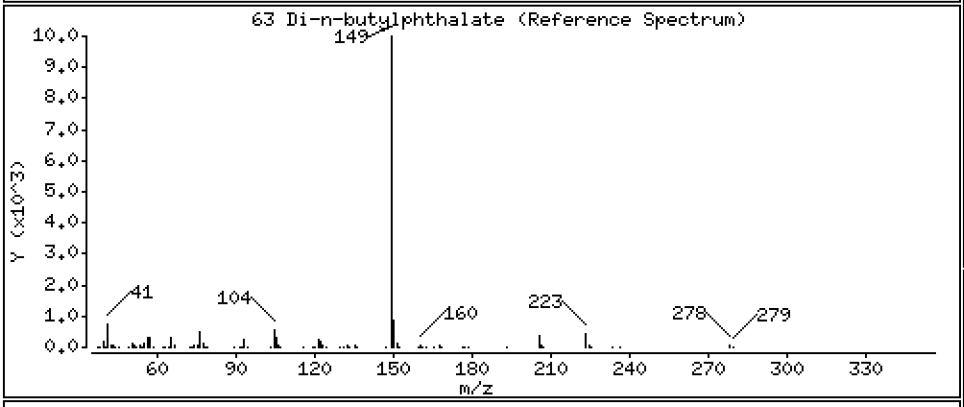
Column diameter: 0.25

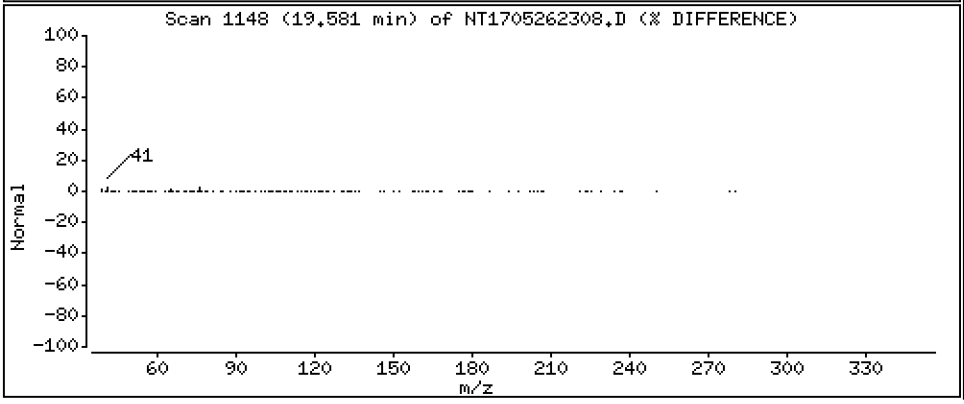
63 Di-n-butylphthalate

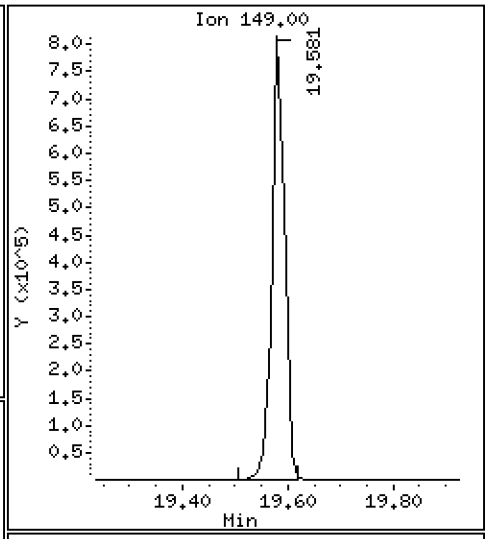
Concentration: 4.673 ug/mL

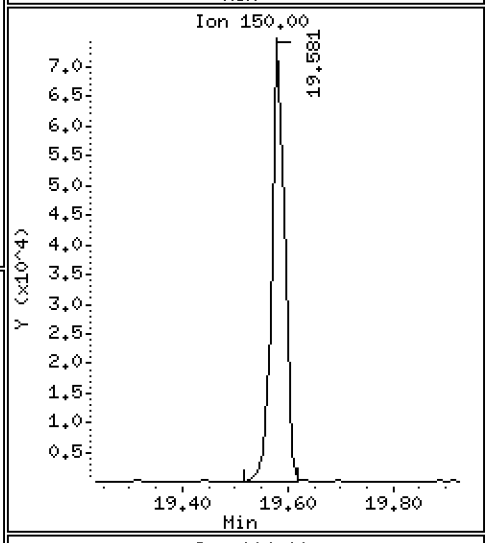


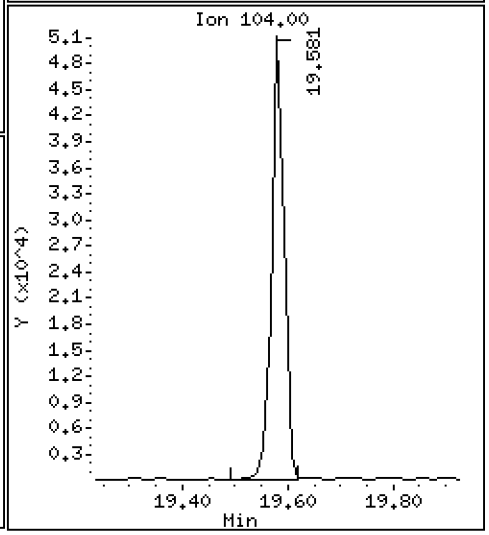












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

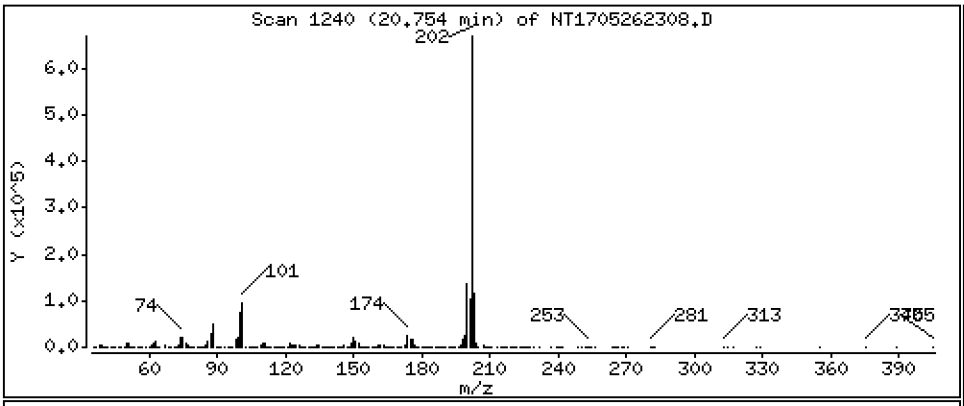
Operator: VTS

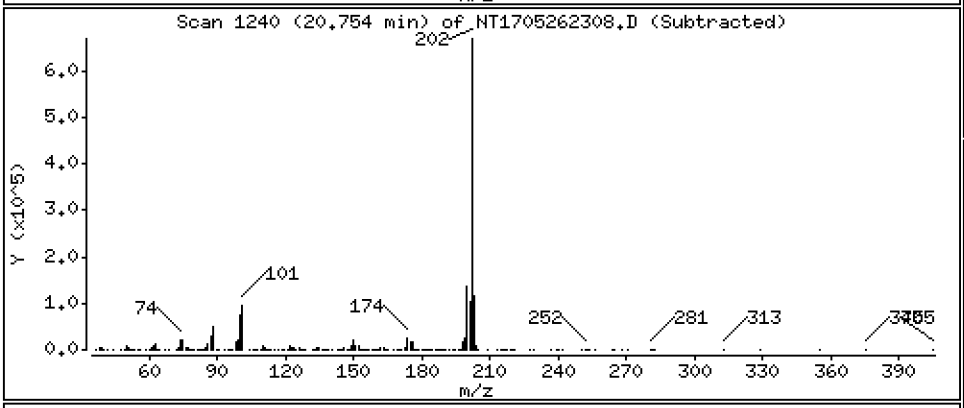
Column phase: ZB-5msi

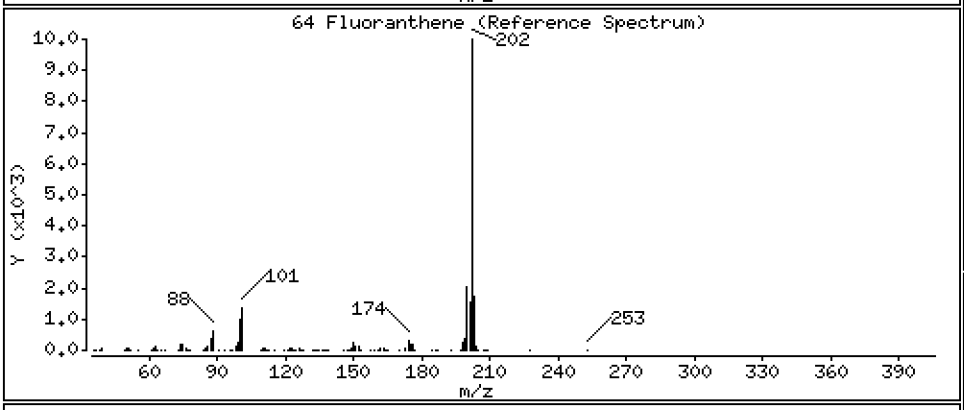
Column diameter: 0.25

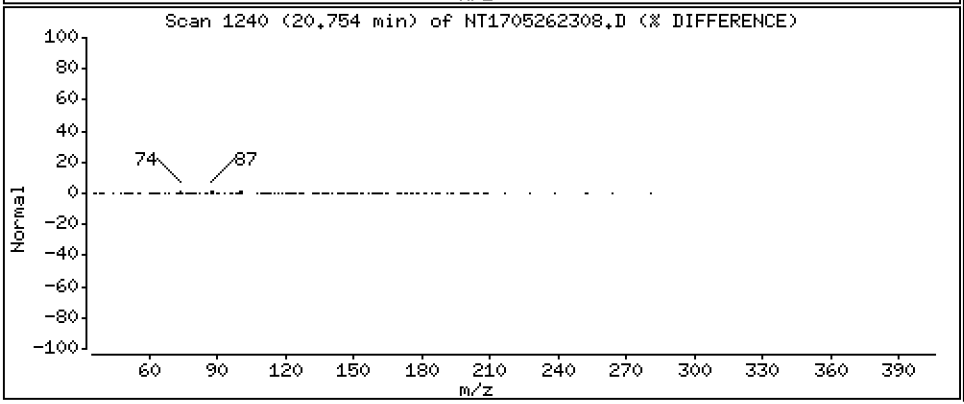
64 Fluoranthene

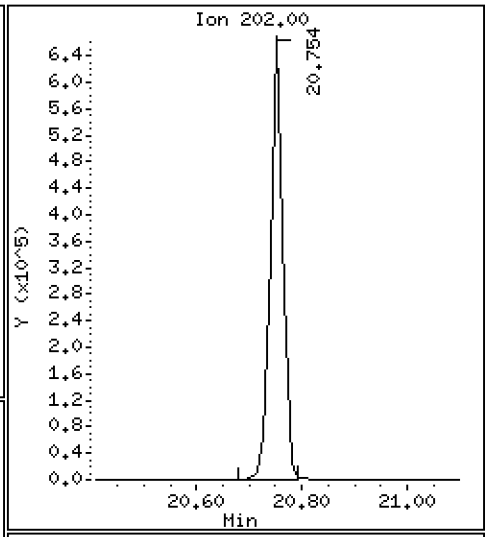
Concentration: 4.560 ug/mL

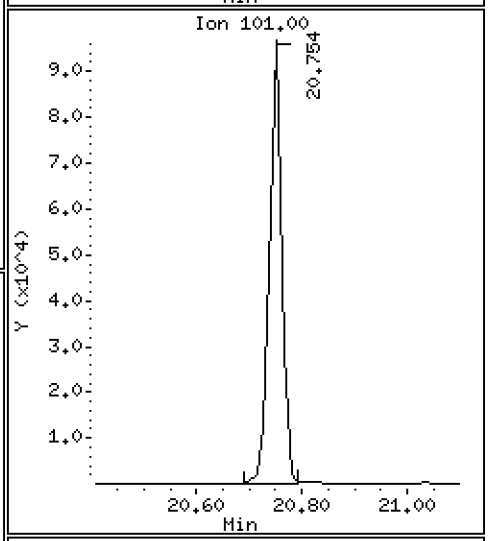


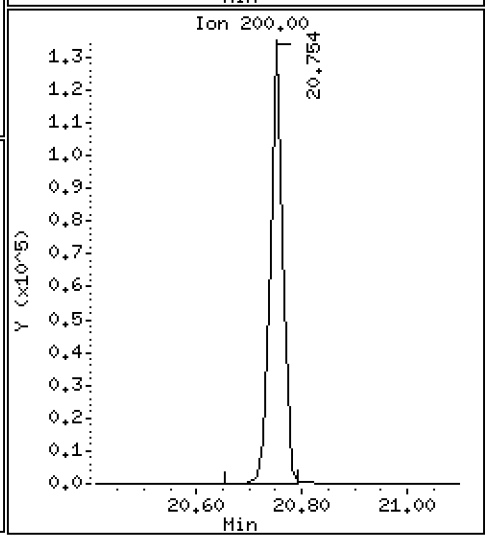












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

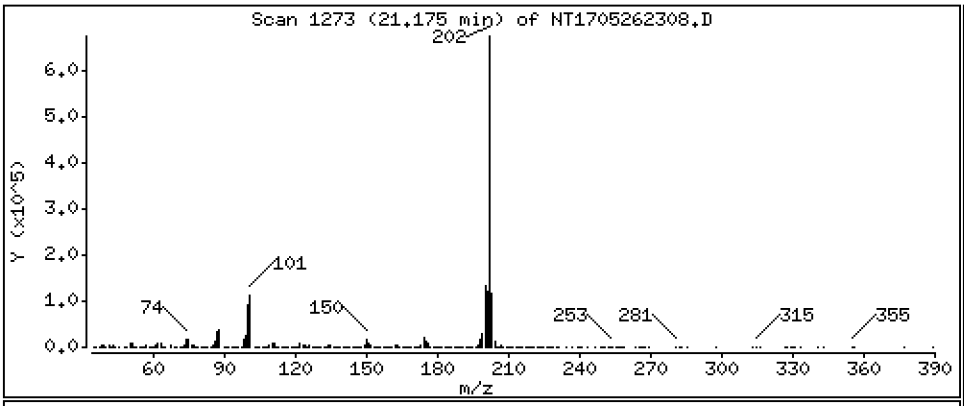
Operator: VTS

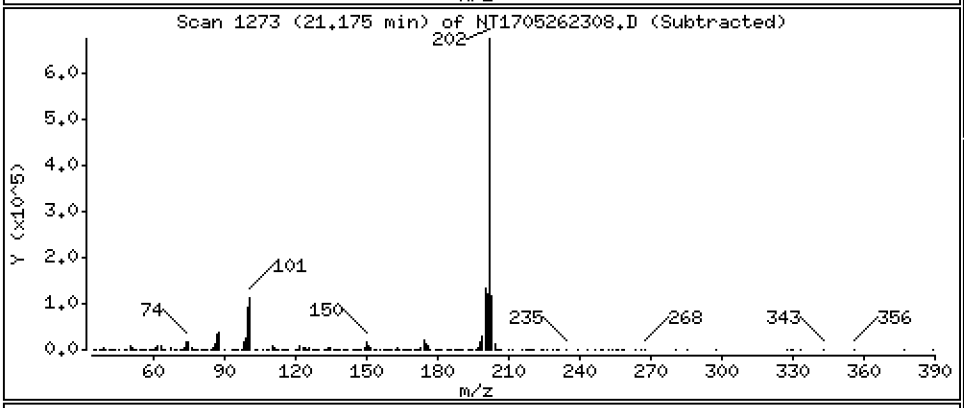
Column phase: ZB-5msi

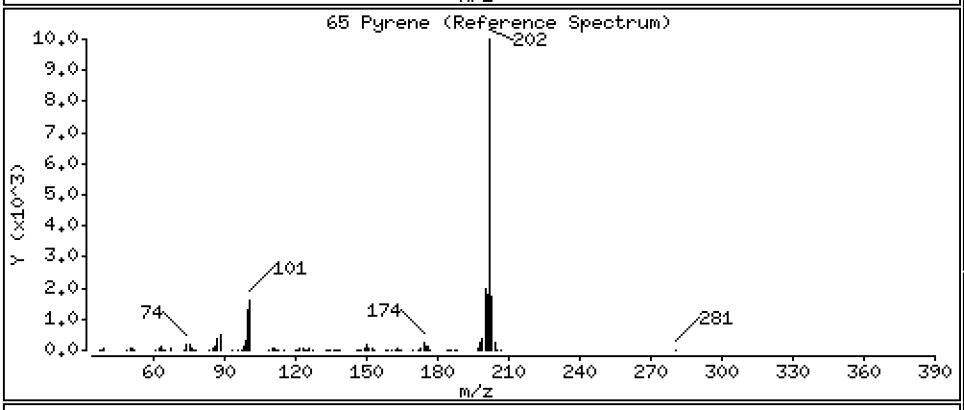
Column diameter: 0.25

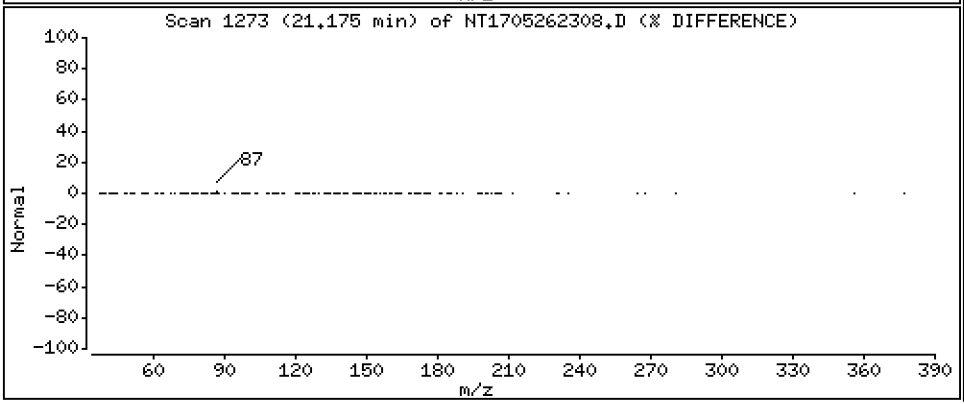
65 Pyrene

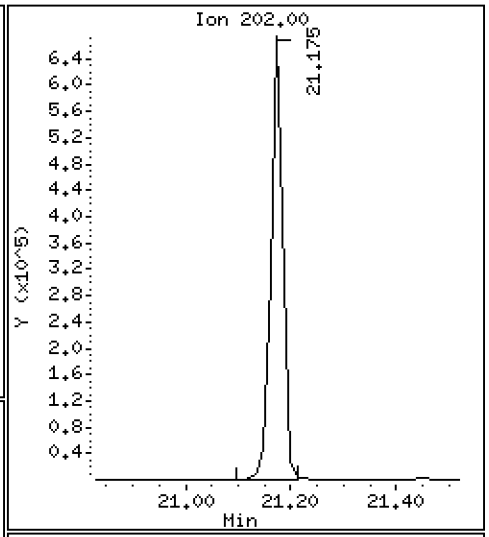
Concentration: 4.465 ug/mL

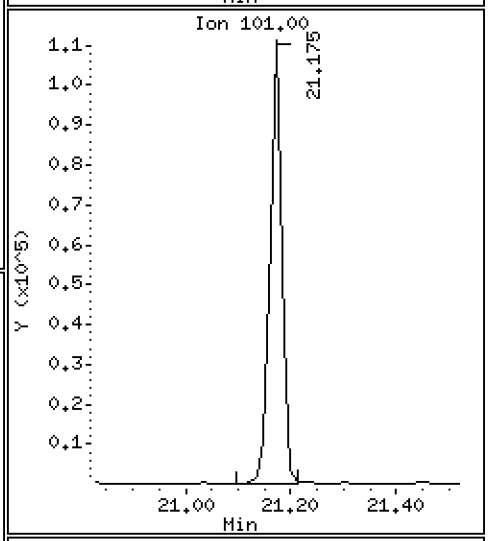


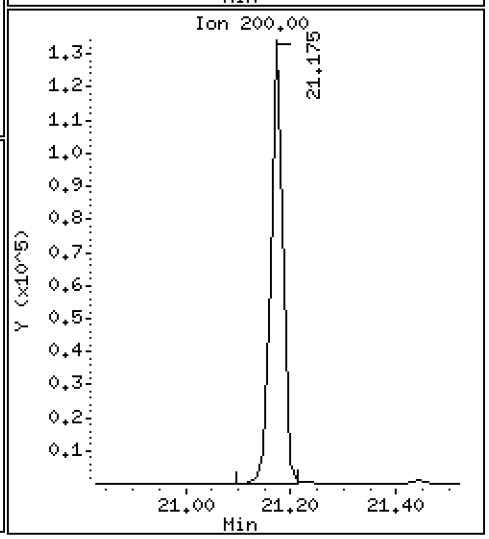












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

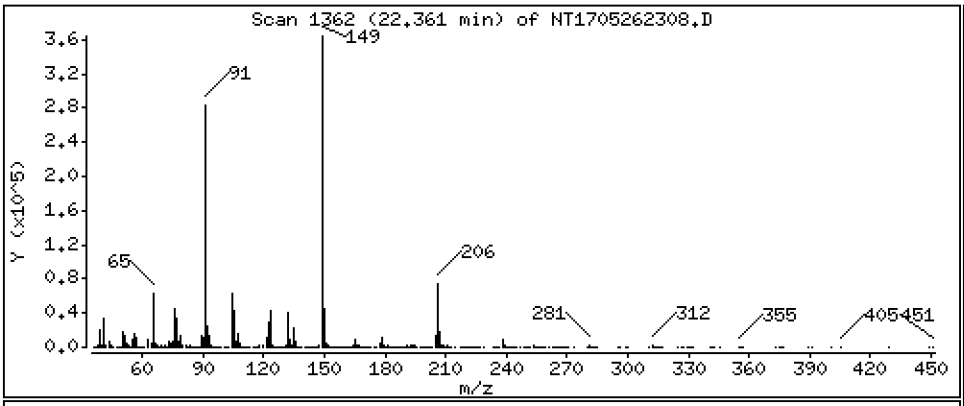
Operator: VTS

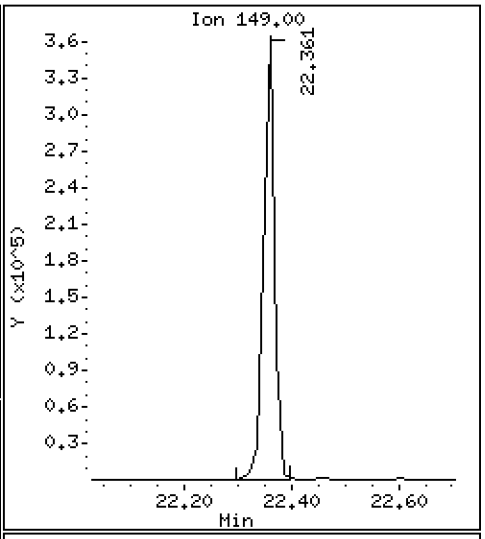
Column phase: ZB-5msi

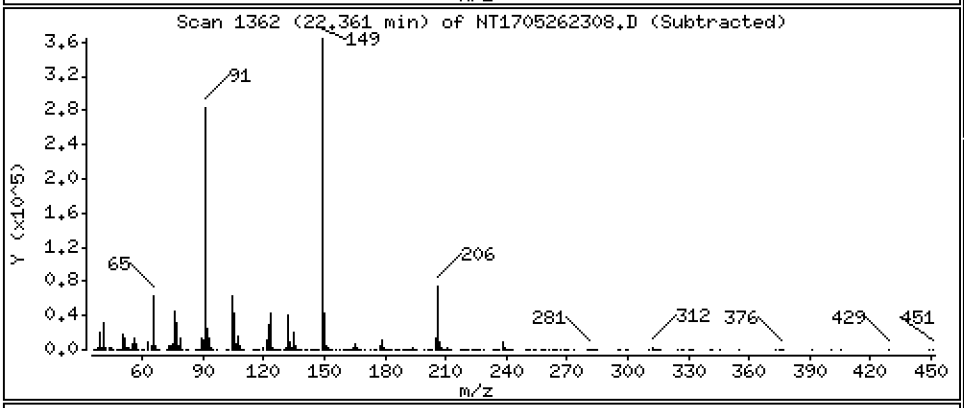
Column diameter: 0.25

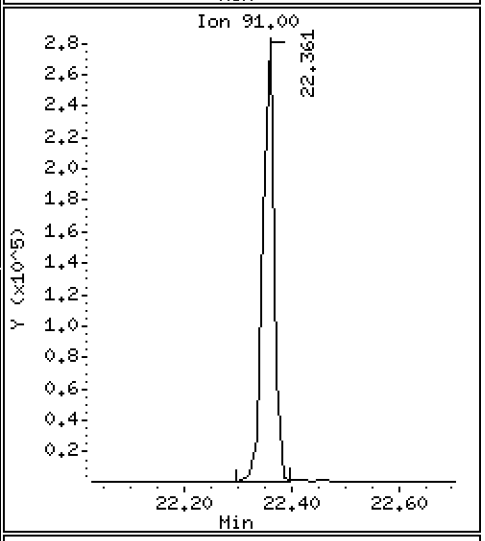
67 Butylbenzylphthalate

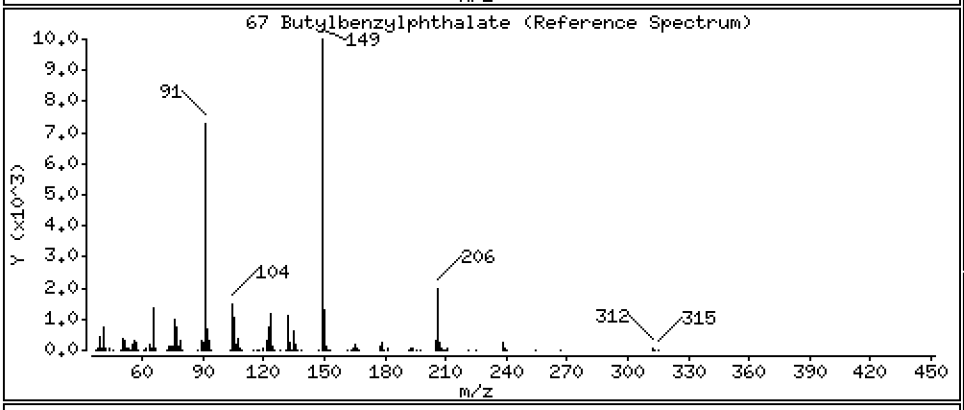
Concentration: 4.915 ug/mL

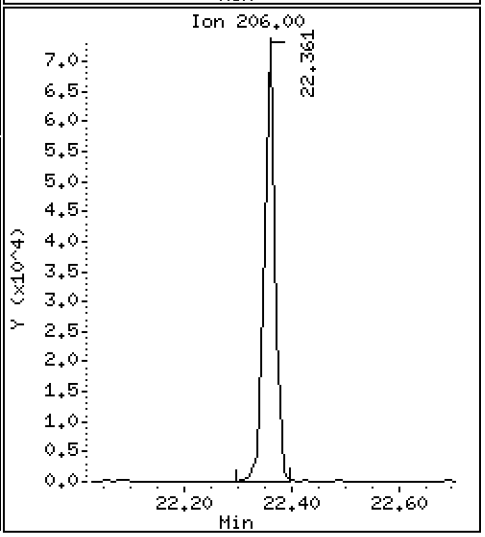


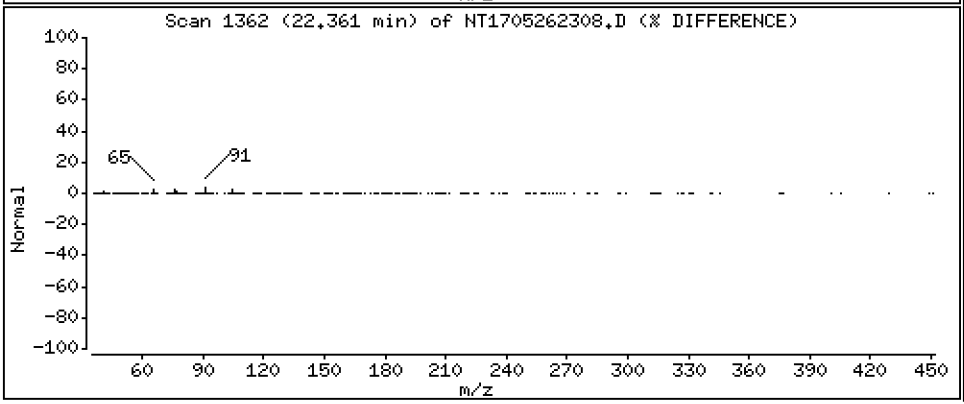












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

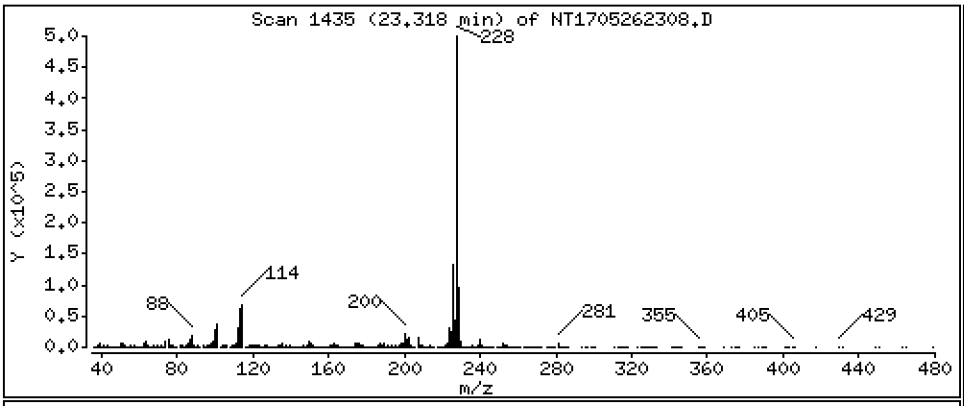
Operator: VTS

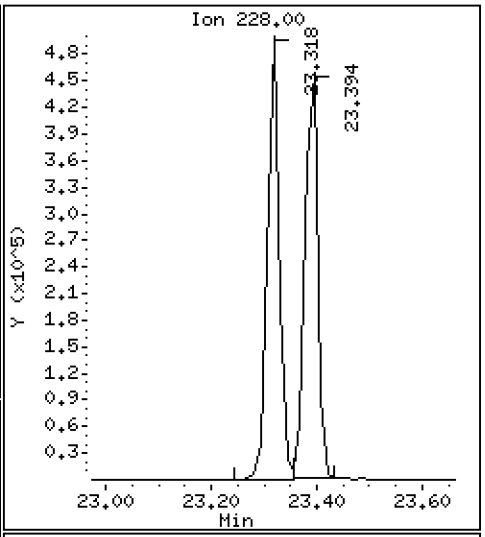
Column phase: ZB-5msi

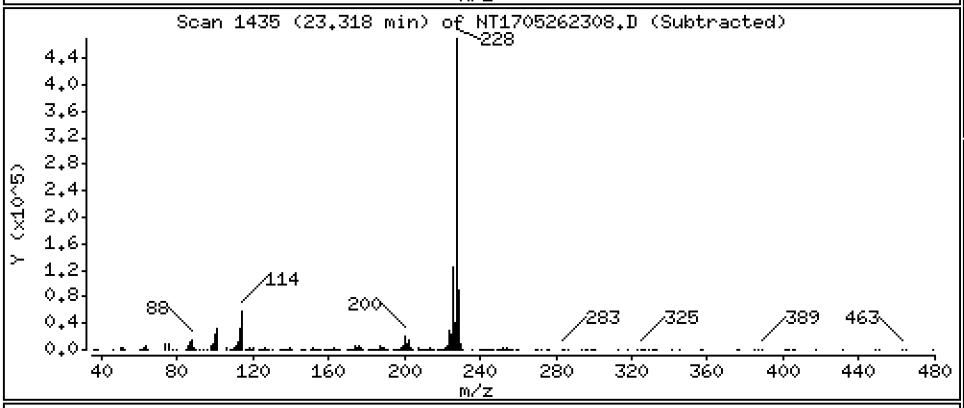
Column diameter: 0.25

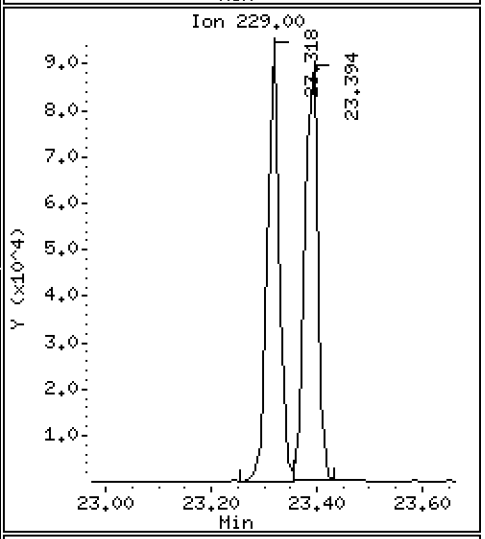
68 Benzo(a)anthracene

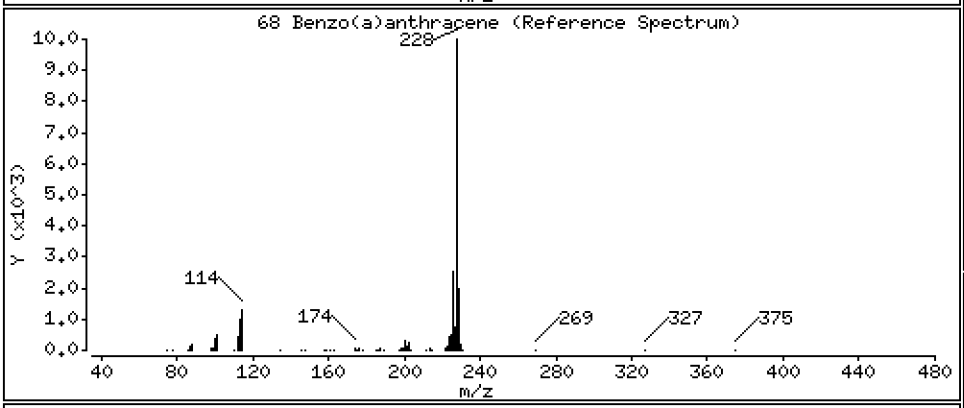
Concentration: 4.292 ug/mL

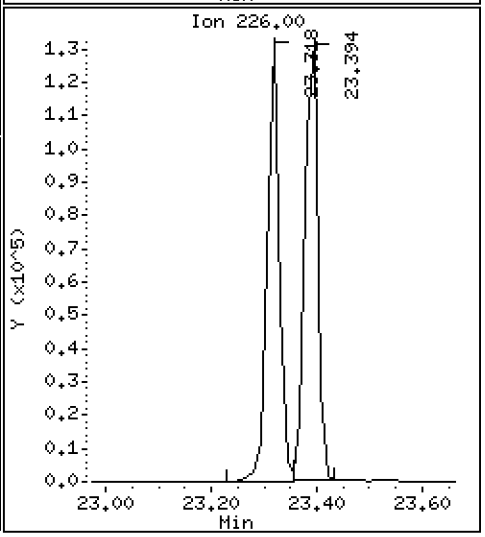


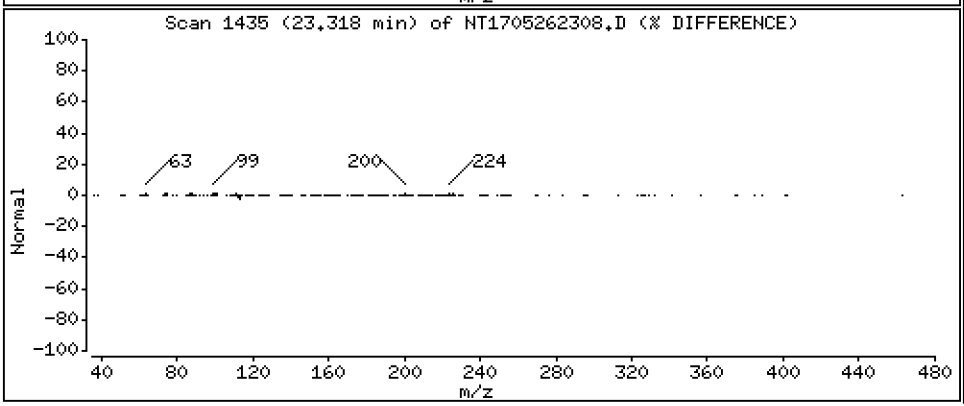












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

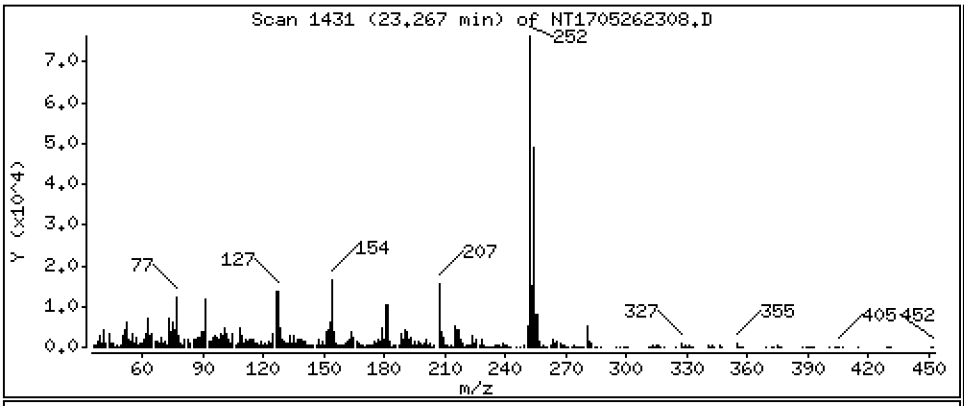
Operator: VTS

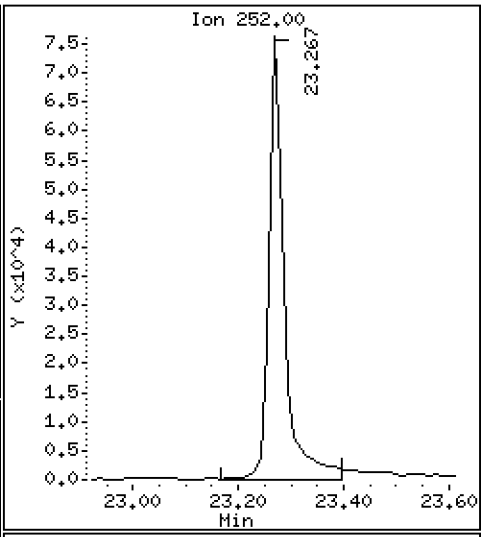
Column phase: ZB-5msi

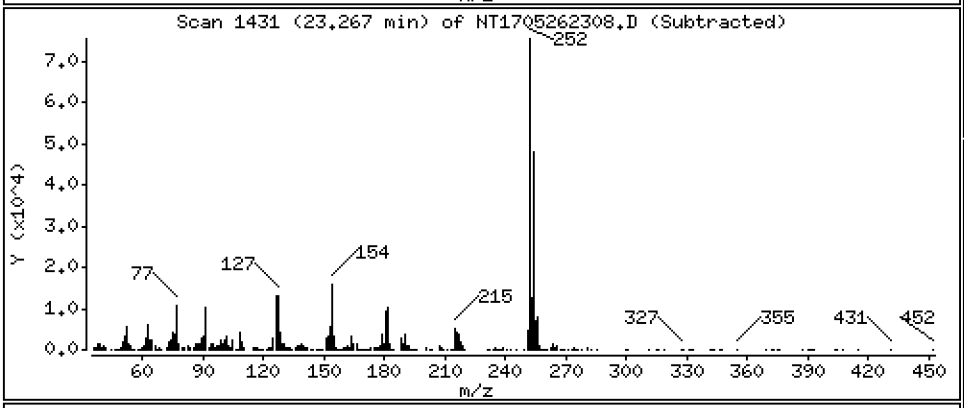
Column diameter: 0.25

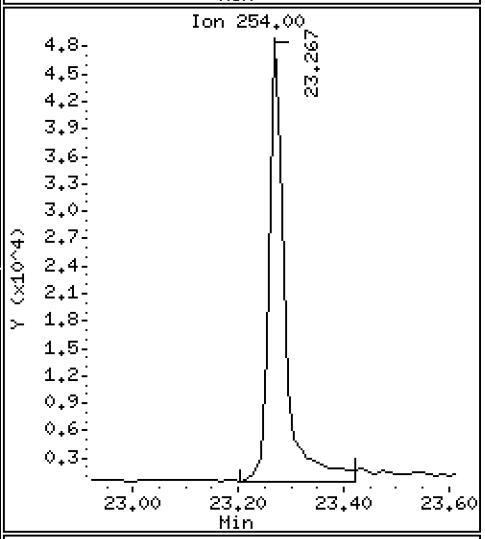
70 3,3'-Dichlorobenzidine

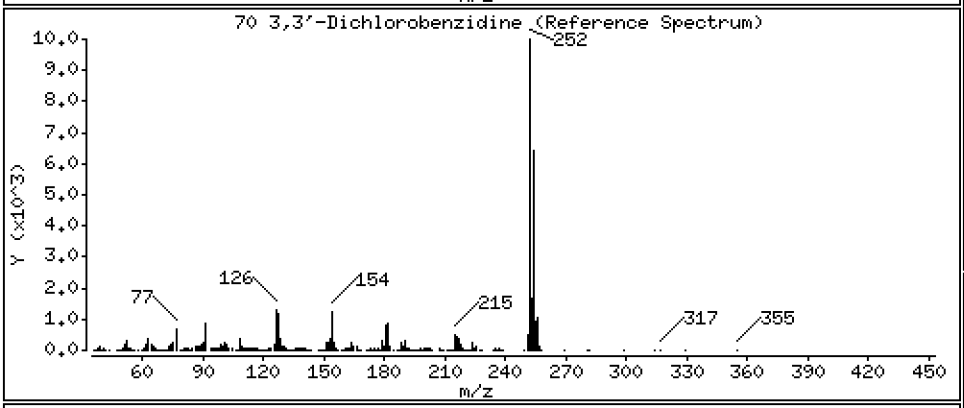
Concentration: 4.300 ug/mL

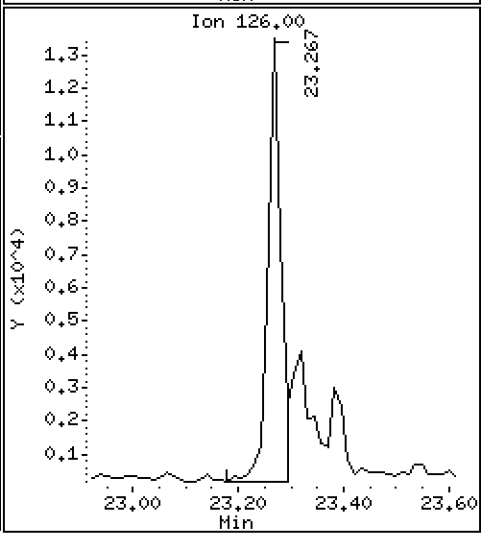


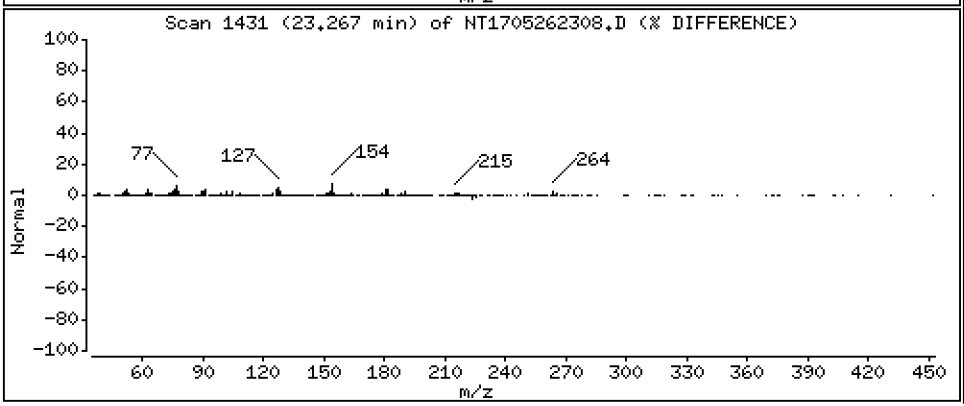












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

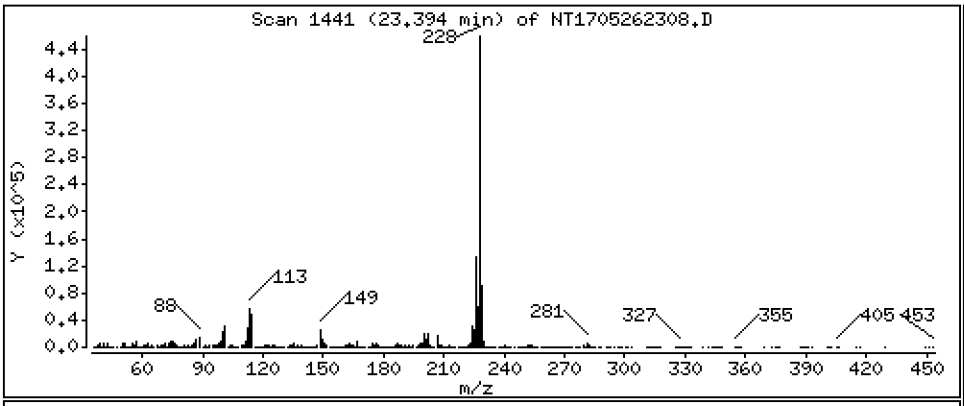
Operator: VTS

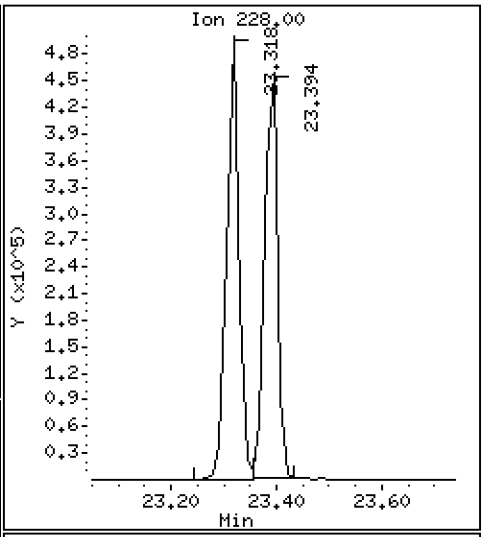
Column phase: ZB-5msi

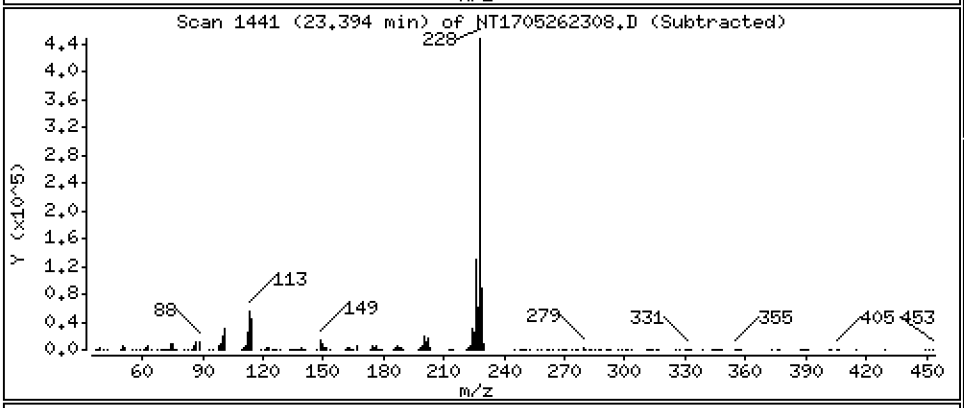
Column diameter: 0.25

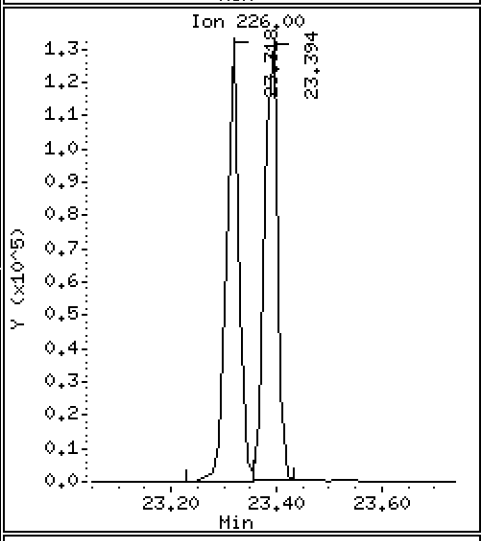
71 Chrysene

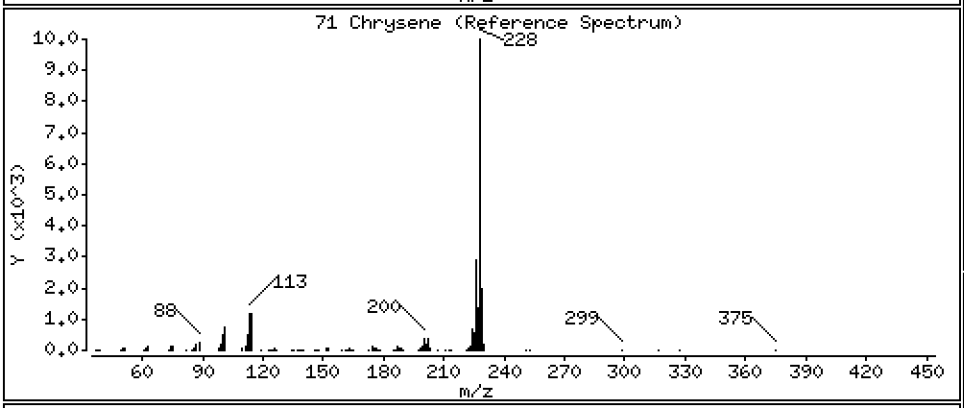
Concentration: 4.344 ug/mL

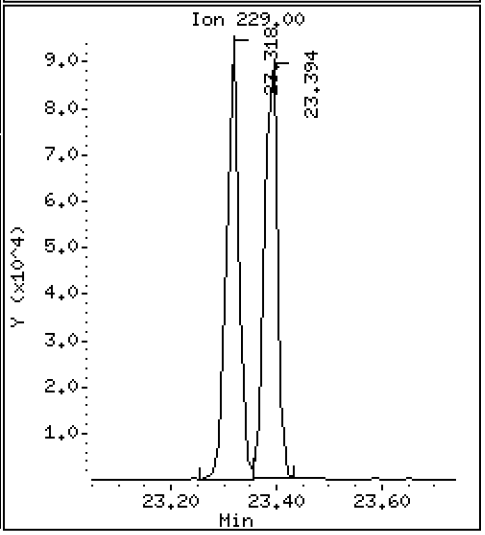


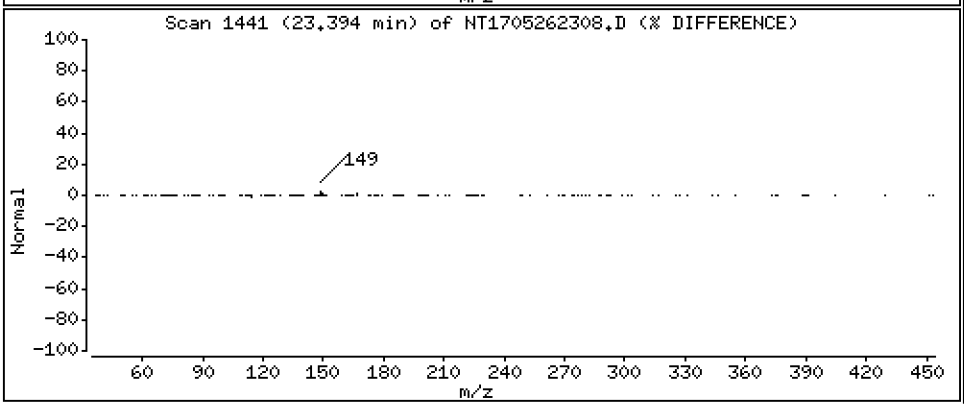












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

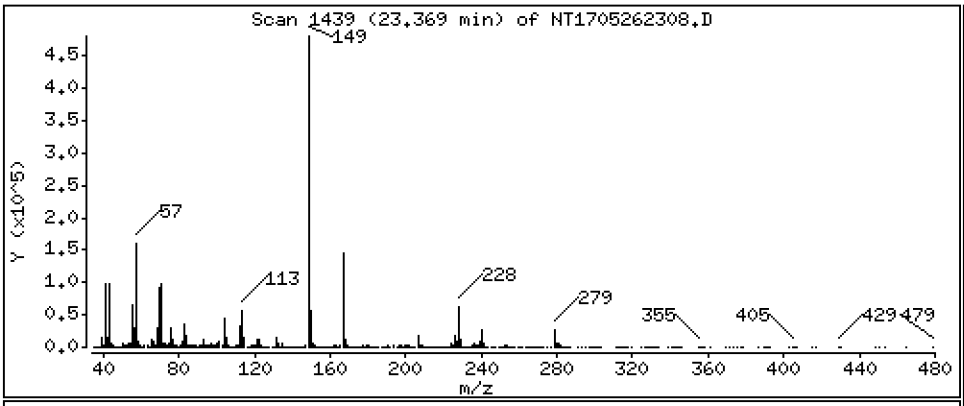
Operator: VTS

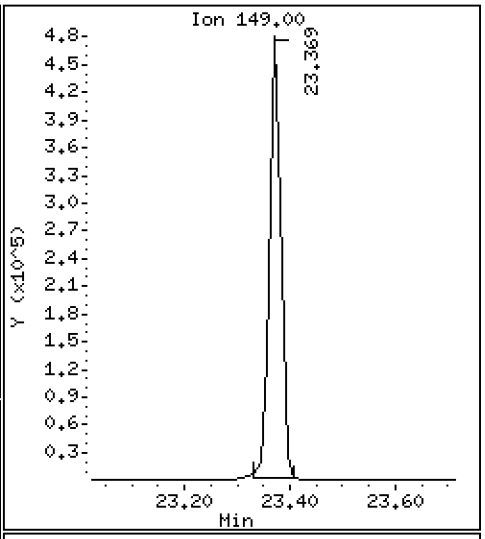
Column phase: ZB-5msi

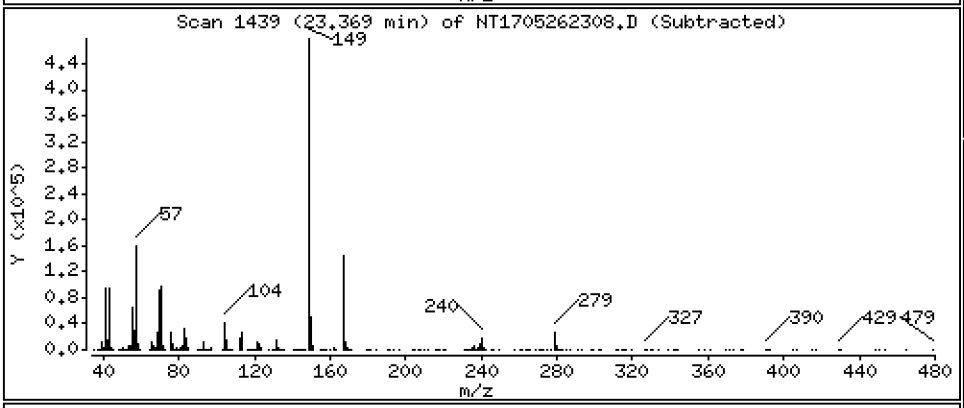
Column diameter: 0.25

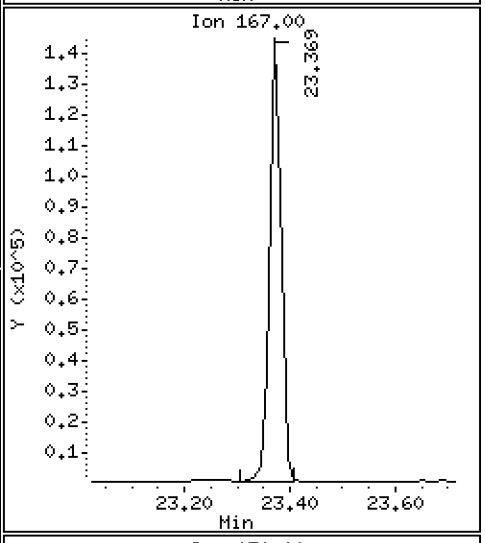
72 bis(2-Ethylhexyl)phthalate

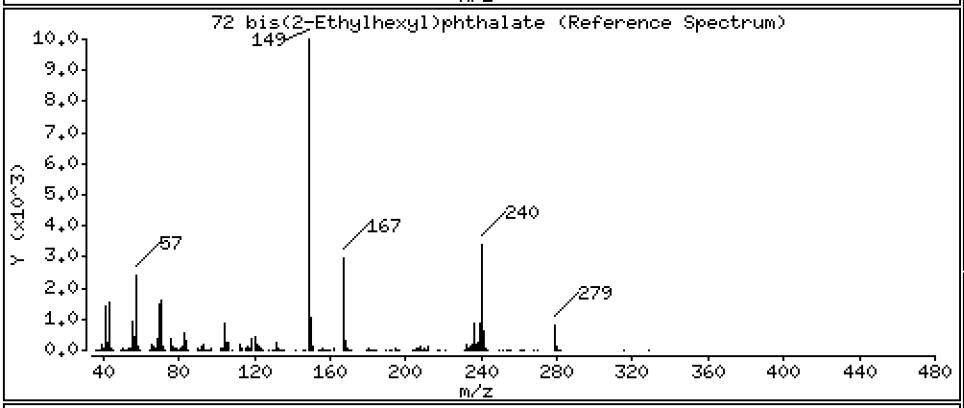
Concentration: 4.725 ug/mL

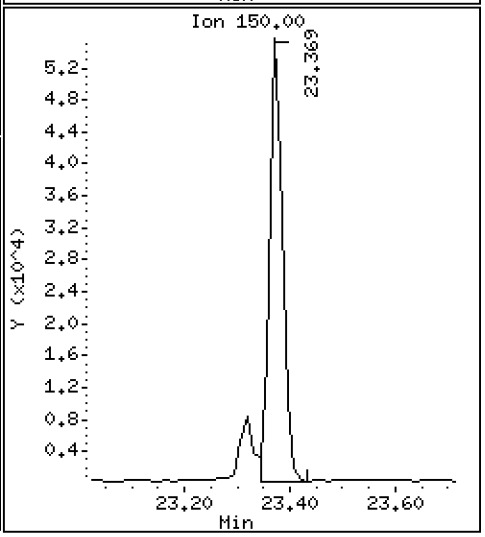


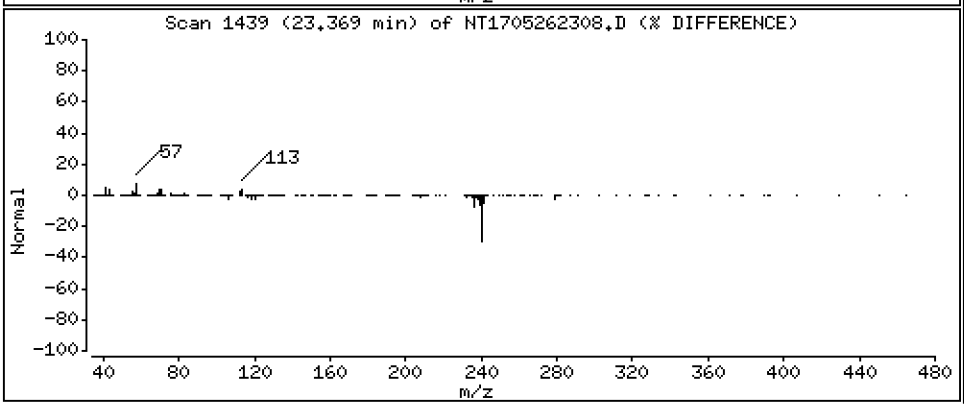












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

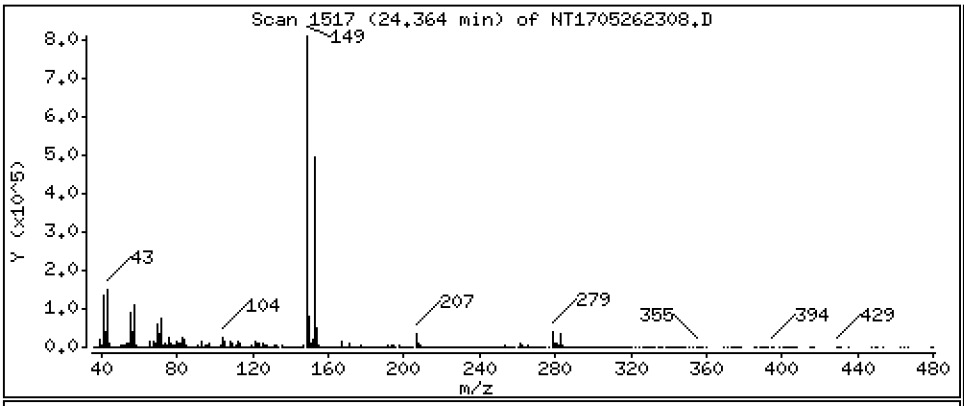
Operator: VTS

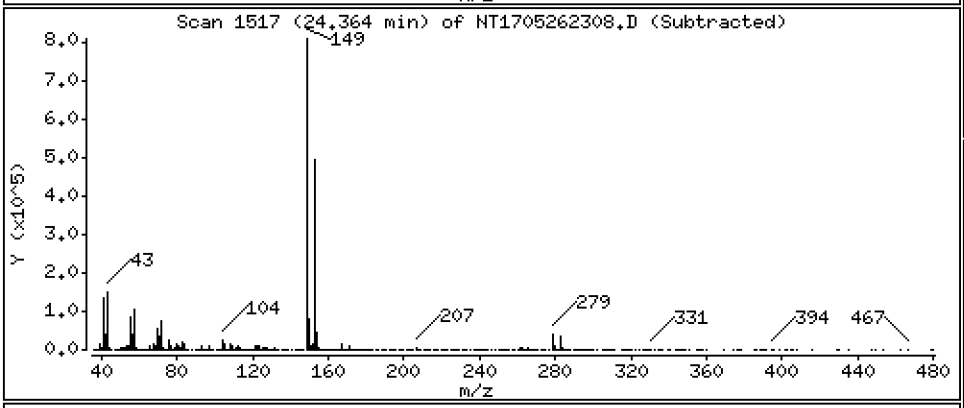
Column phase: ZB-5msi

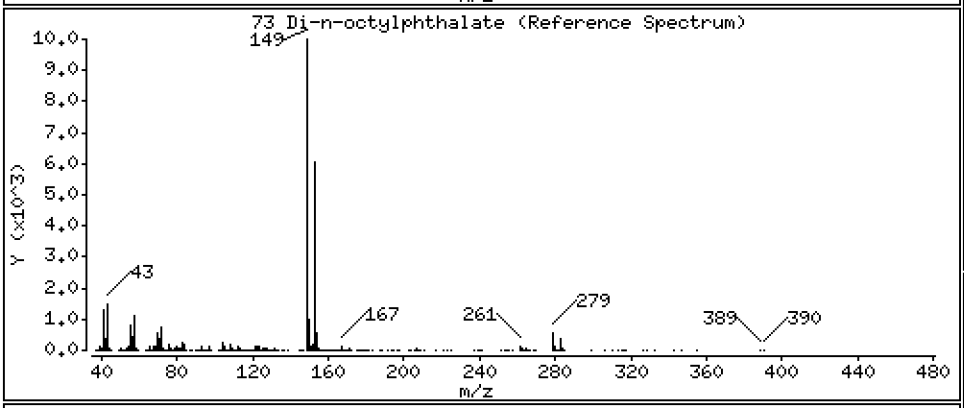
Column diameter: 0.25

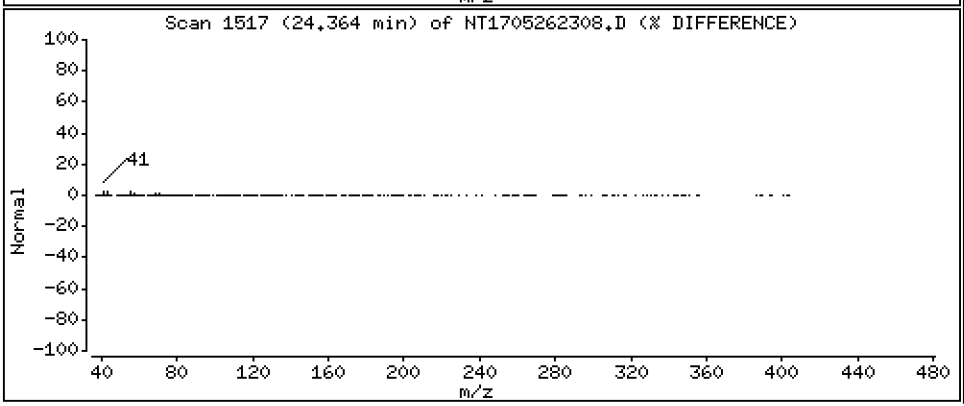
73 Di-n-octylphthalate

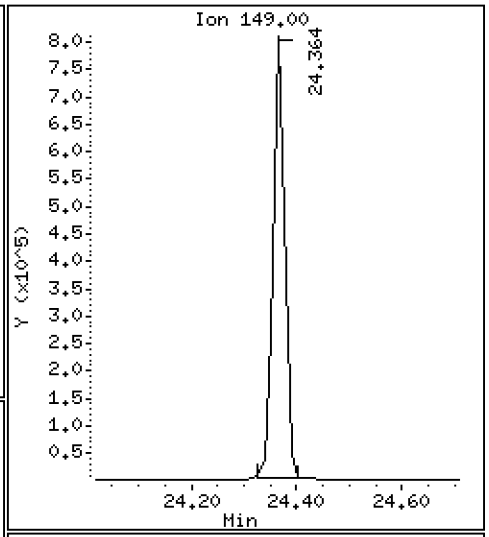
Concentration: 4.608 ug/mL

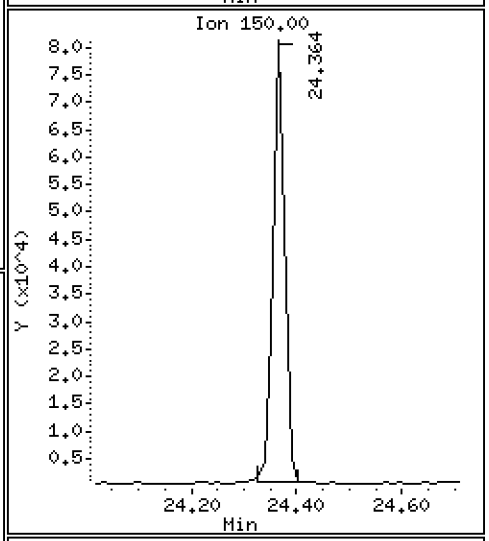


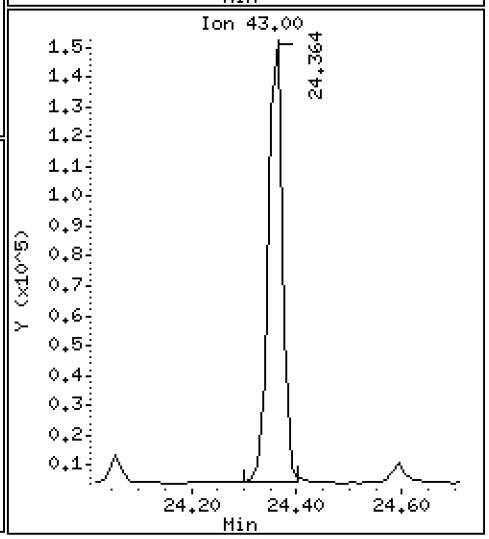












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

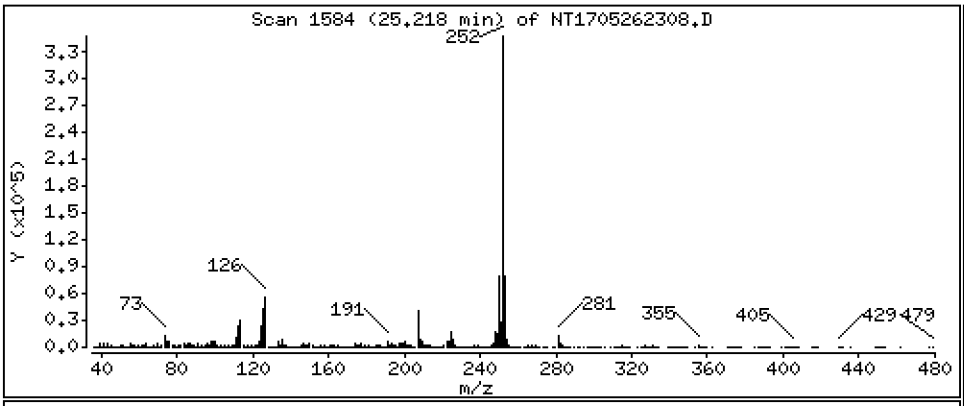
Operator: VTS

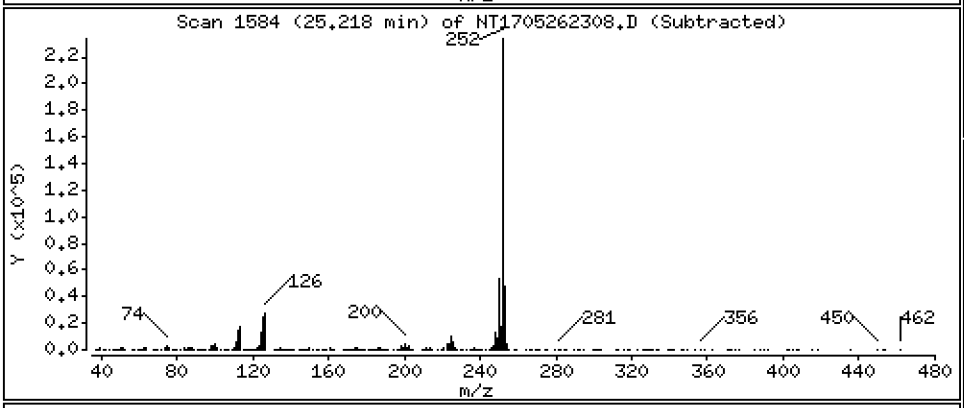
Column phase: ZB-5msi

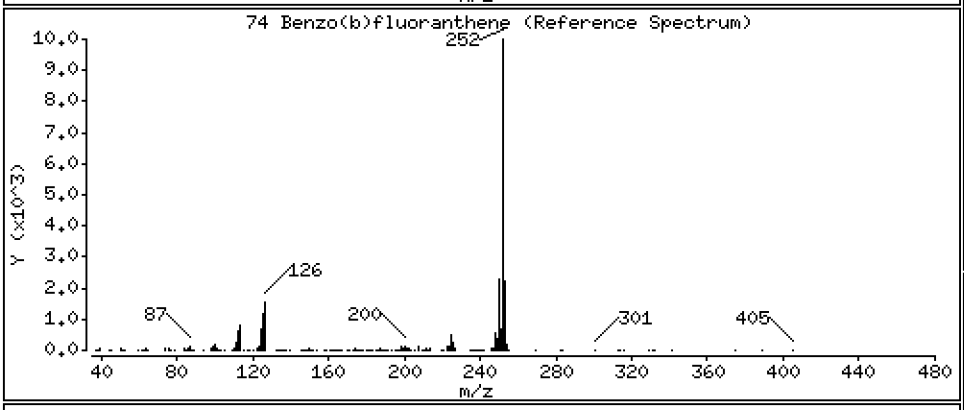
Column diameter: 0.25

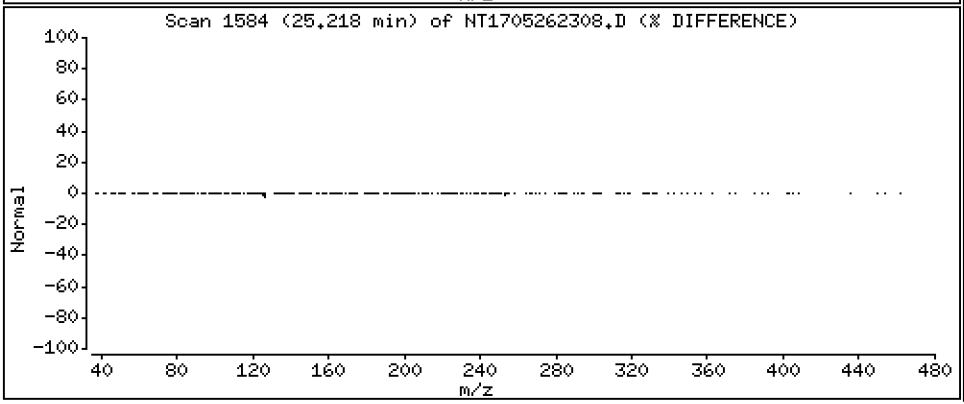
74 Benzo(b)fluoranthene

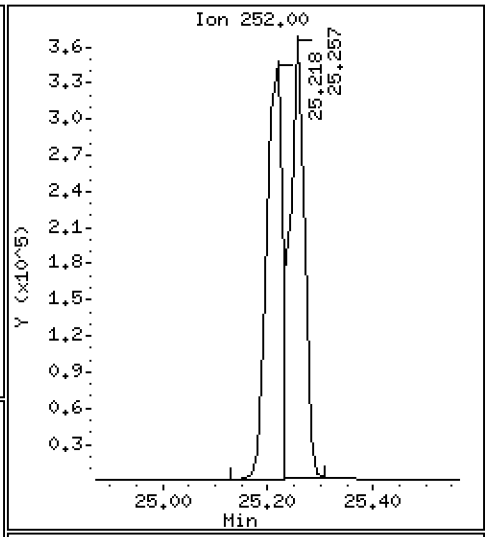
Concentration: 4.361 ug/mL

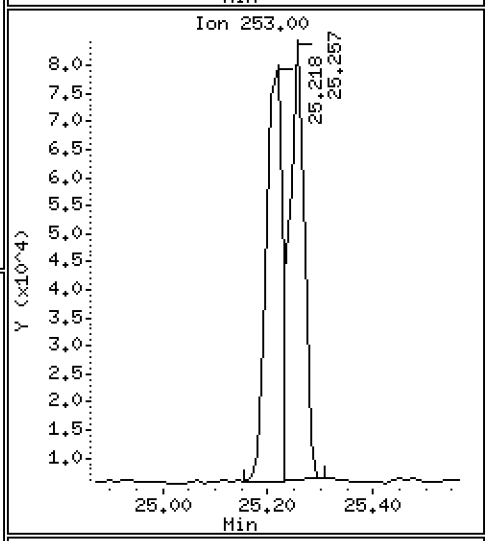


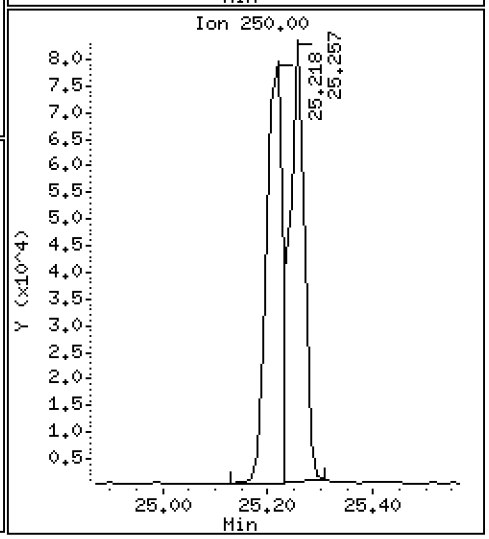












Date : 26-MAY-2023 17:02

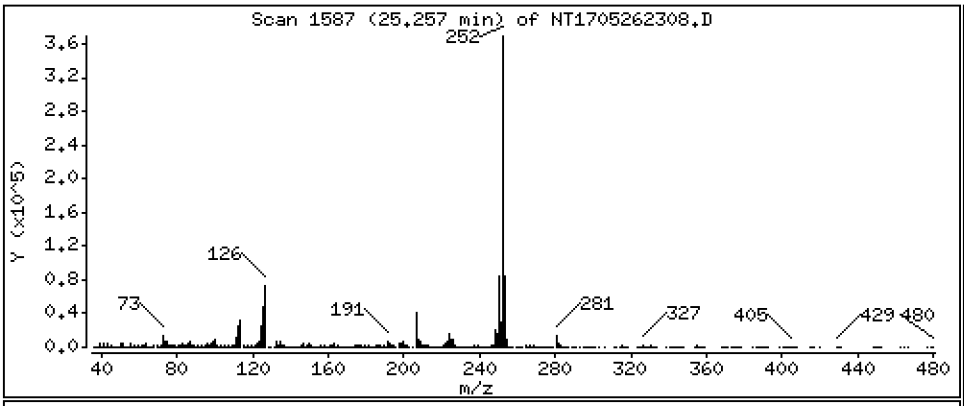
Client ID: Instrument: nt17.i

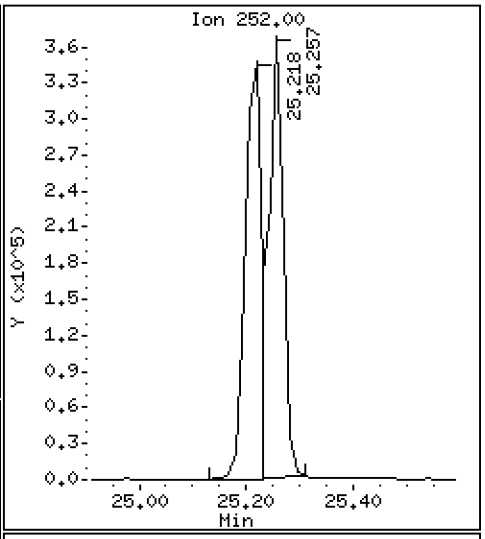
Sample Info: BLD0607-BSD1

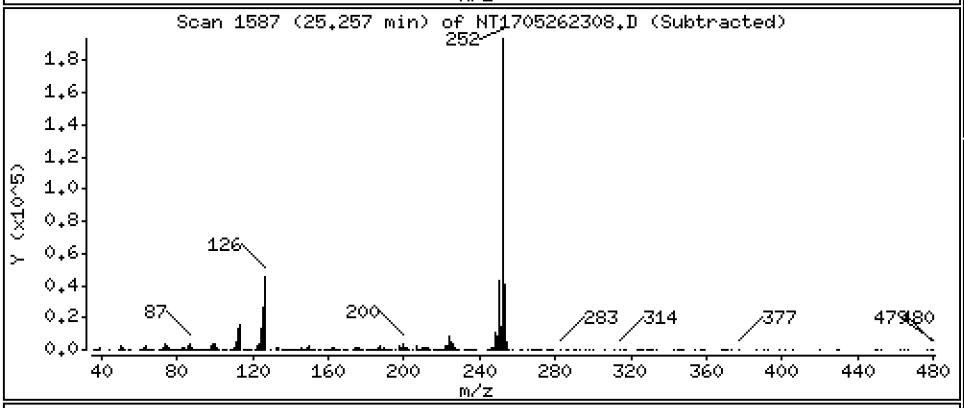
Operator: VTS

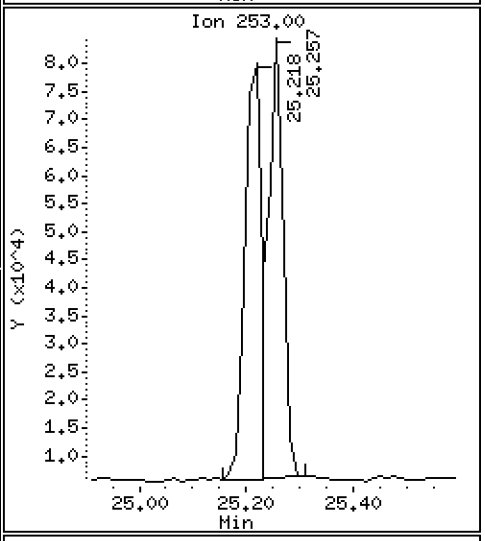
Column phase: ZB-5msi Column diameter: 0.25

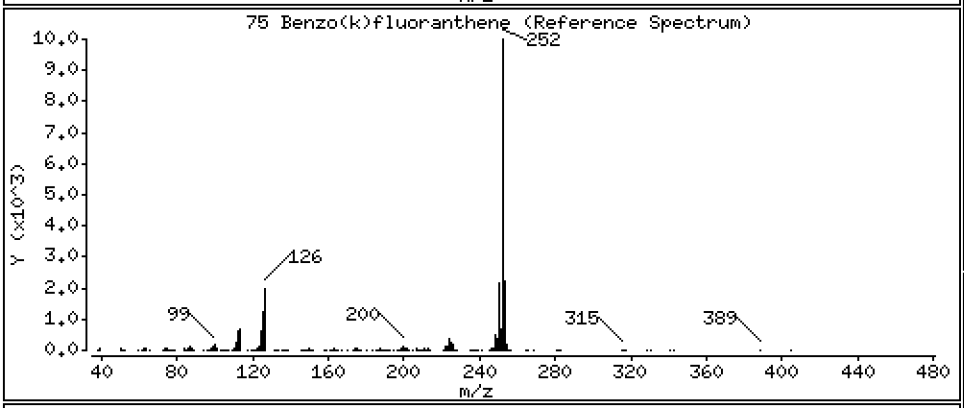
75 Benzo(k)fluoranthene Concentration: 4.755 ug/mL

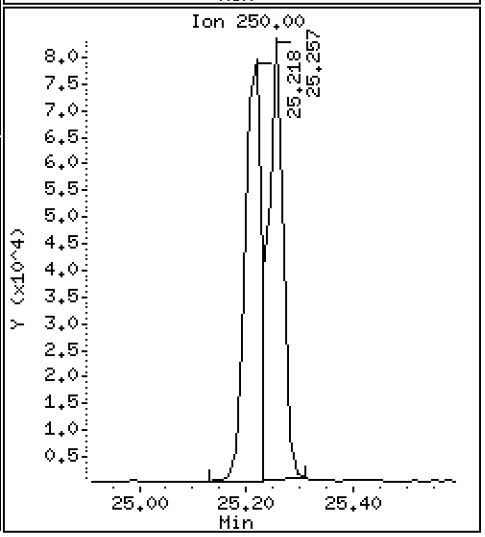


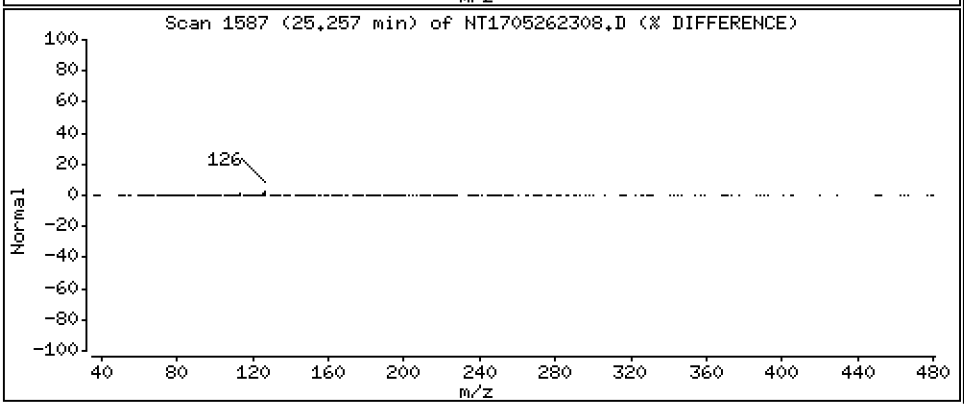












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

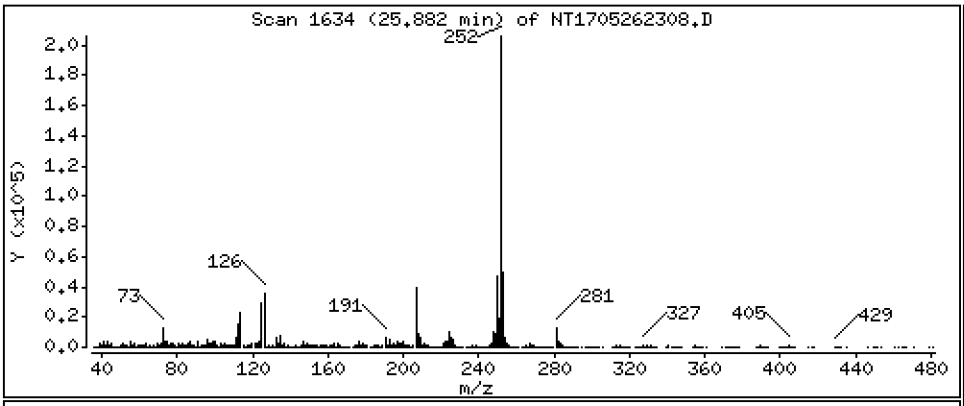
Operator: VTS

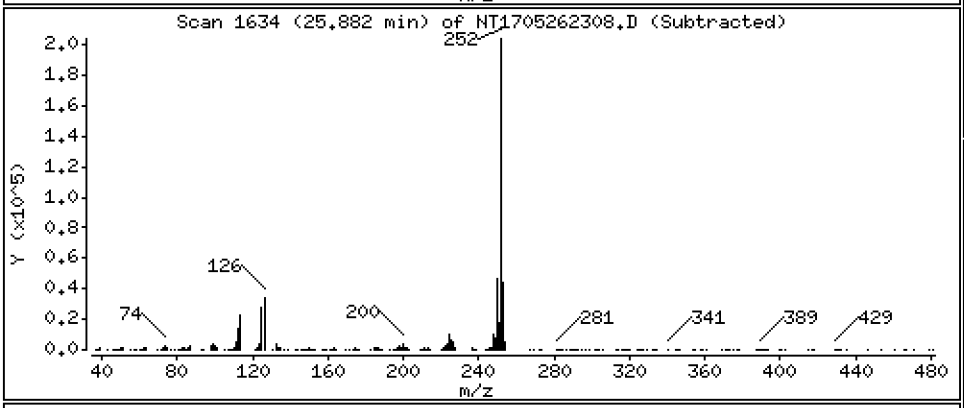
Column phase: ZB-5msi

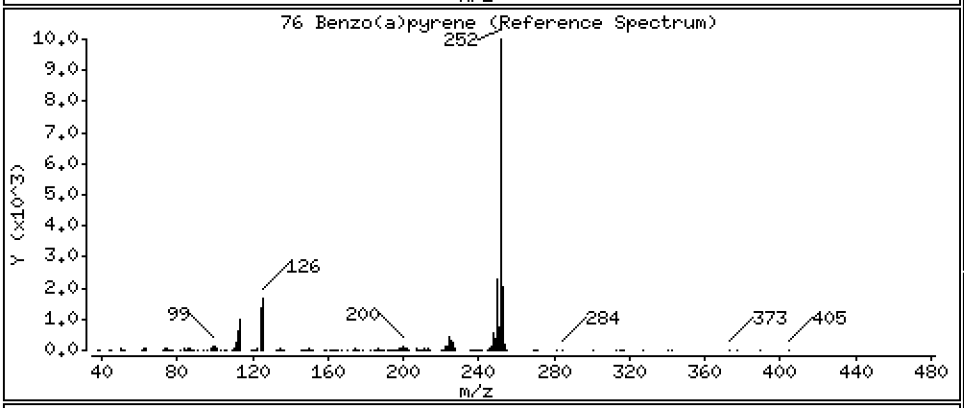
Column diameter: 0.25

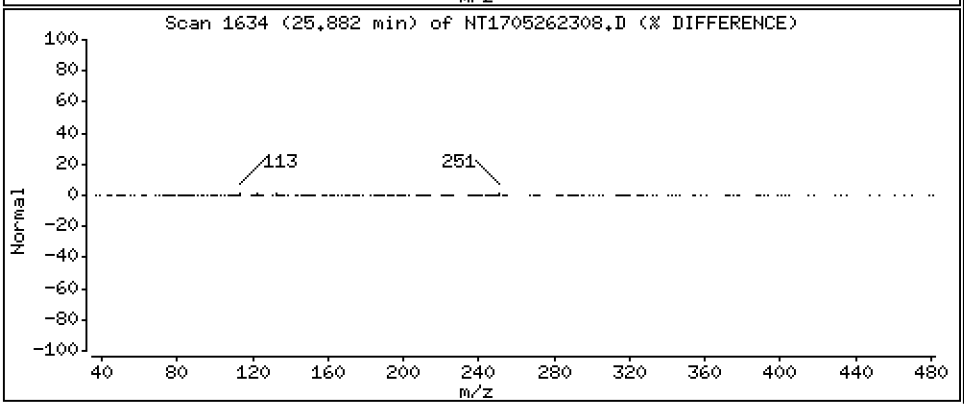
76 Benzo(a)pyrene

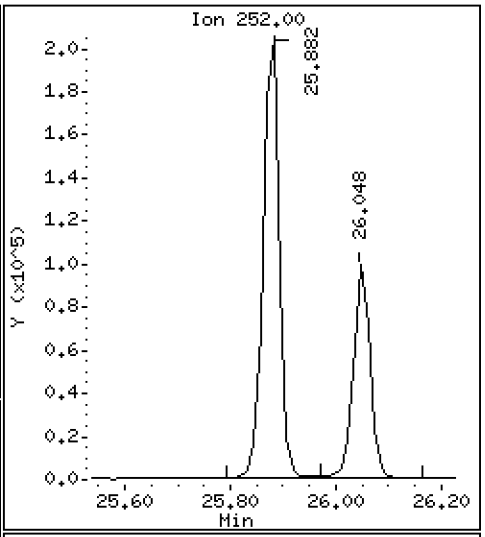
Concentration: 3.385 ug/mL

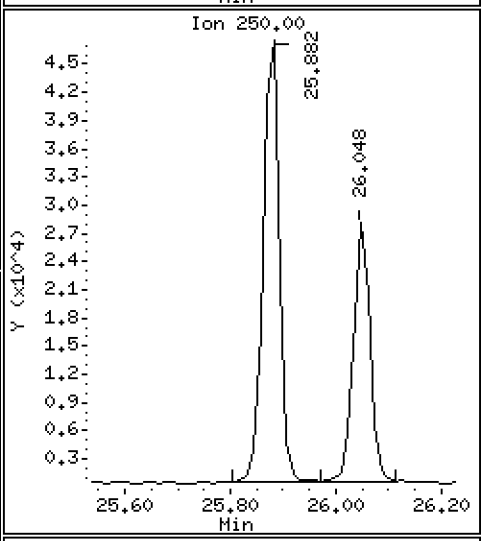


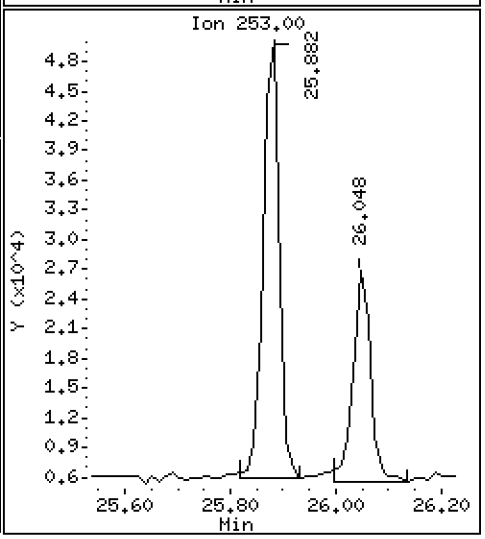












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

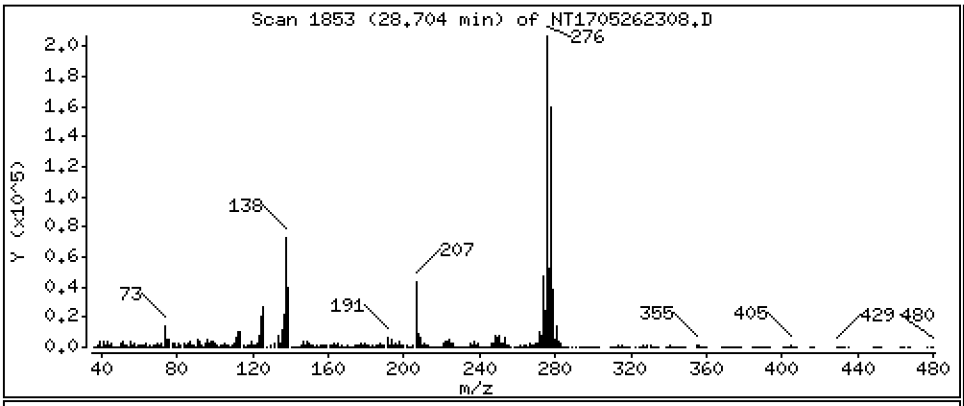
Operator: VTS

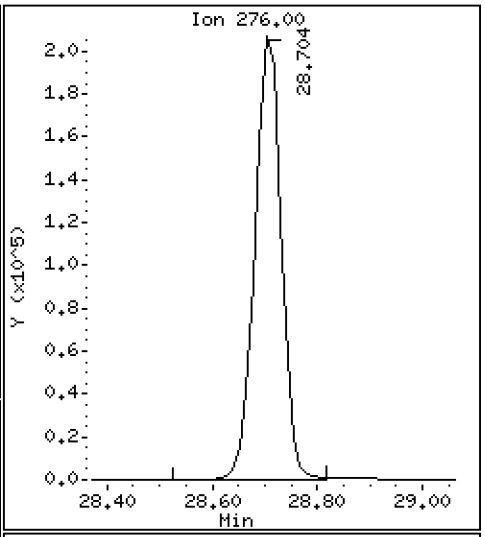
Column phase: ZB-5msi

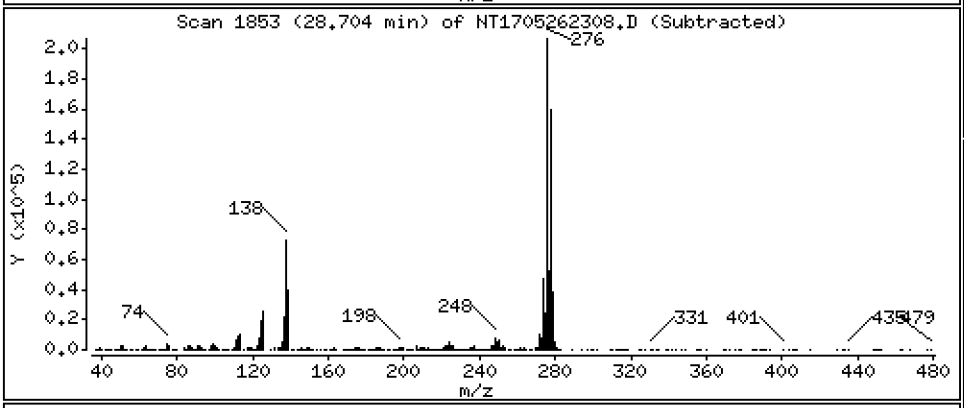
Column diameter: 0.25

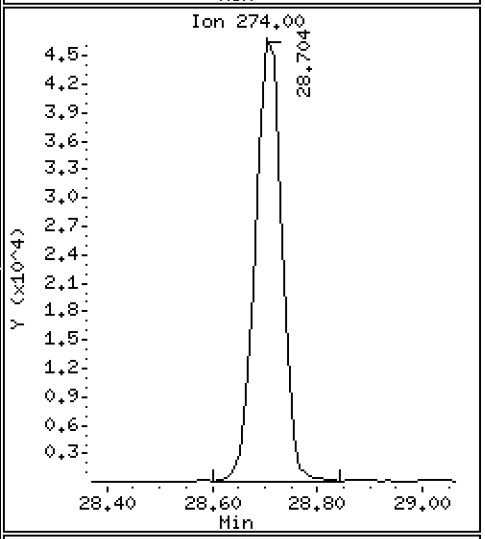
78 Indeno(1,2,3-cd)pyrene

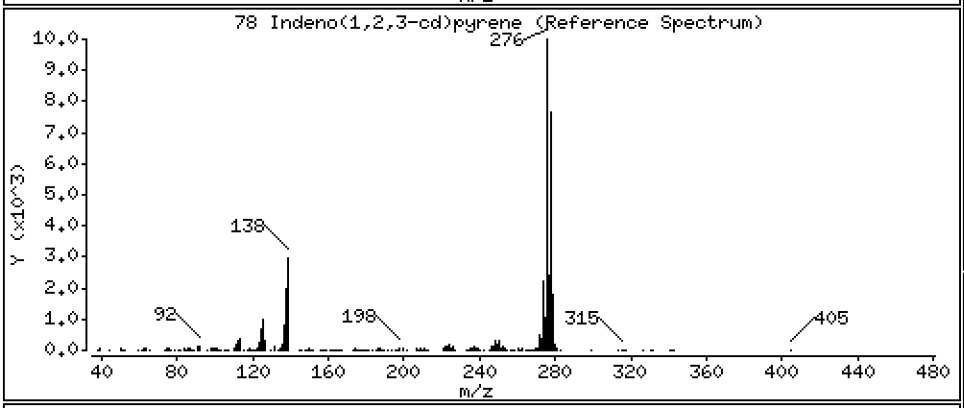
Concentration: 4.582 ug/mL

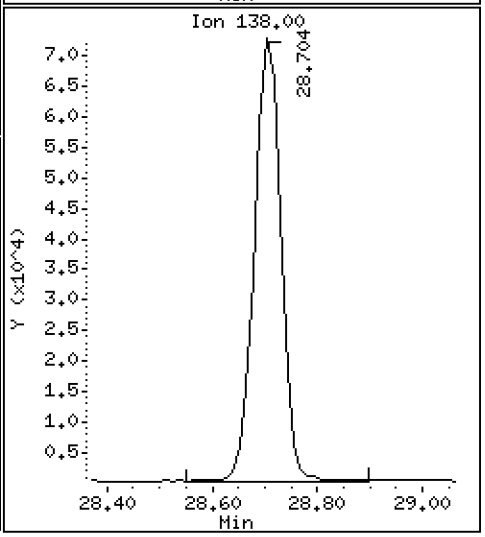


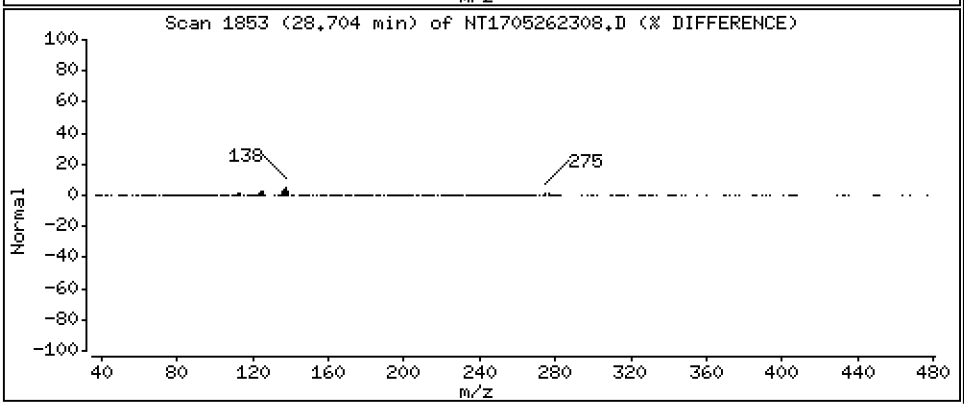












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

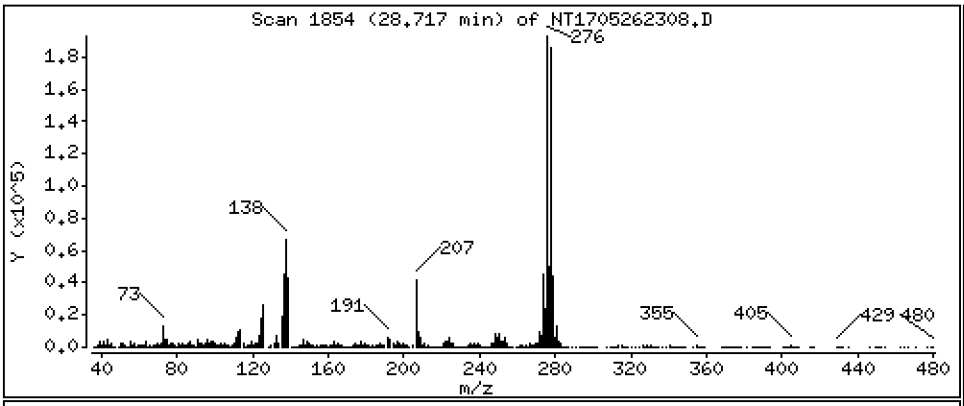
Operator: VTS

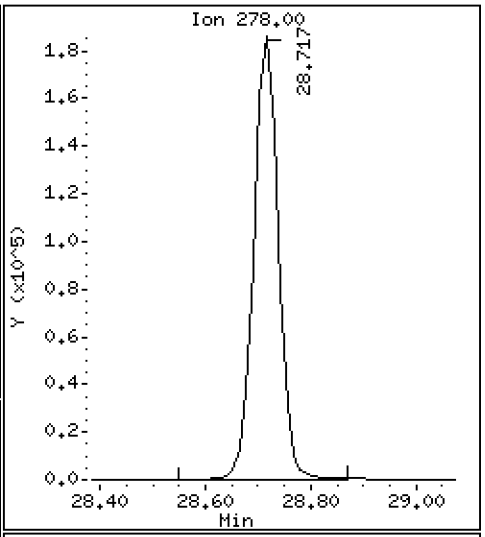
Column phase: ZB-5msi

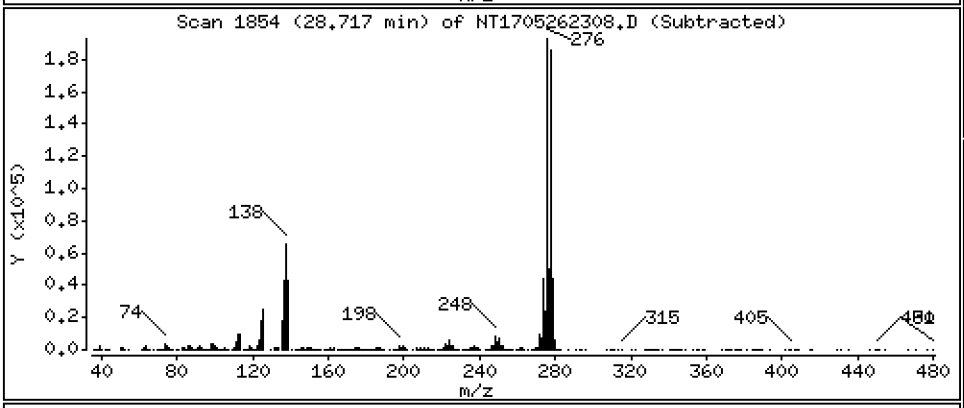
Column diameter: 0.25

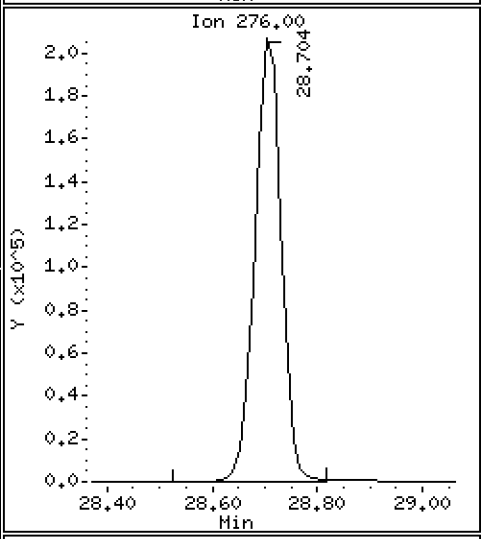
79 Dibenzo(a,h)anthracene

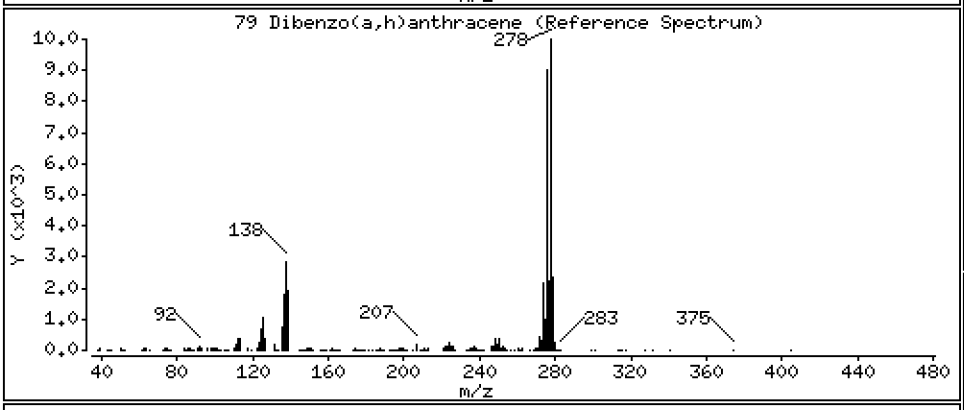
Concentration: 4.564 ug/mL

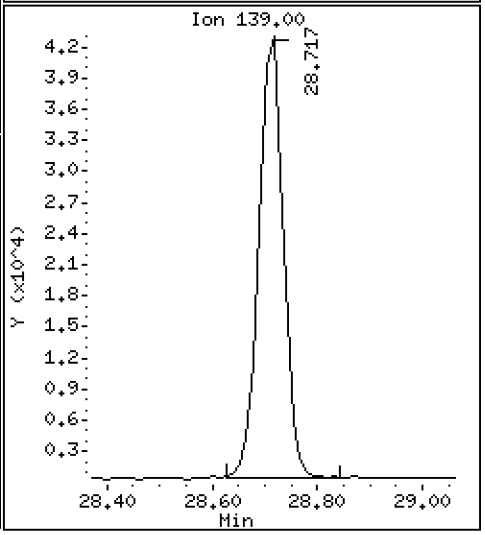


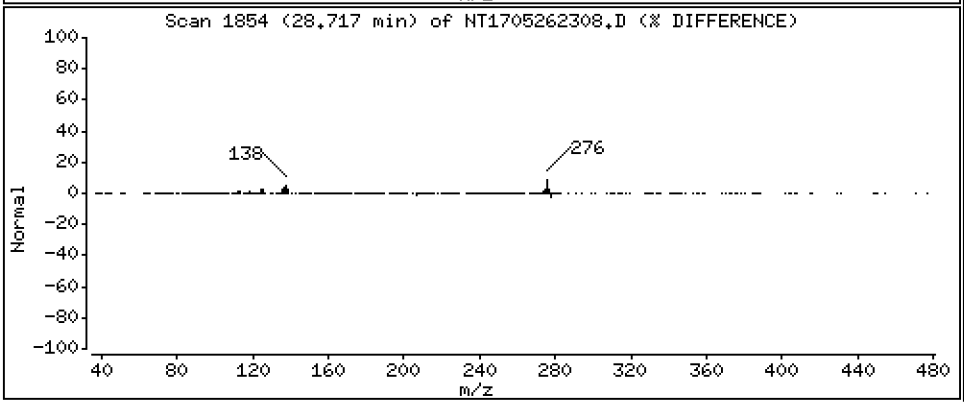












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

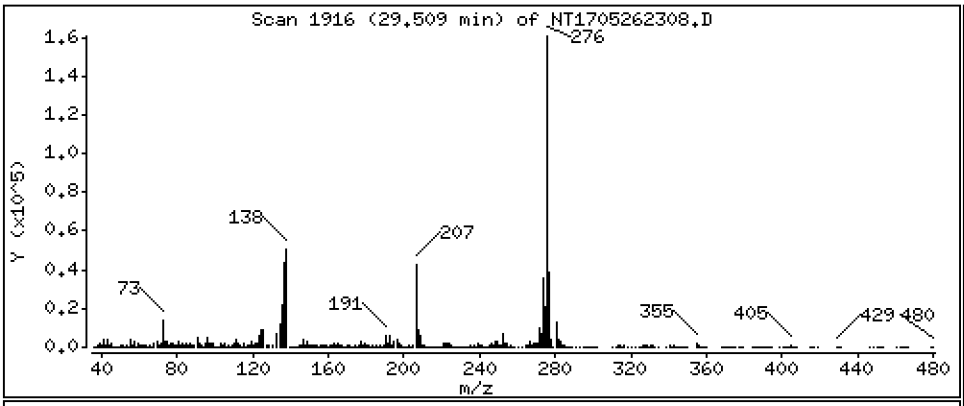
Operator: VTS

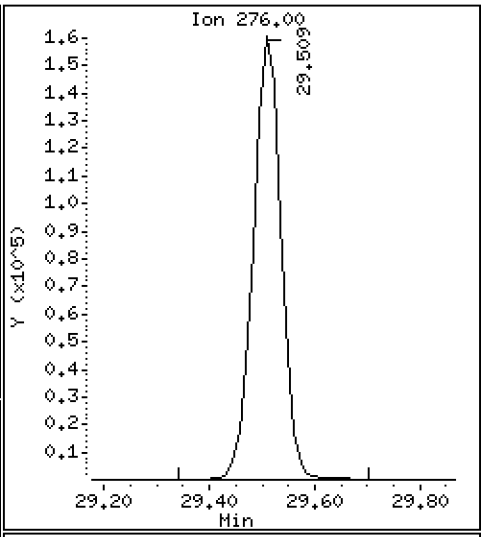
Column phase: ZB-5msi

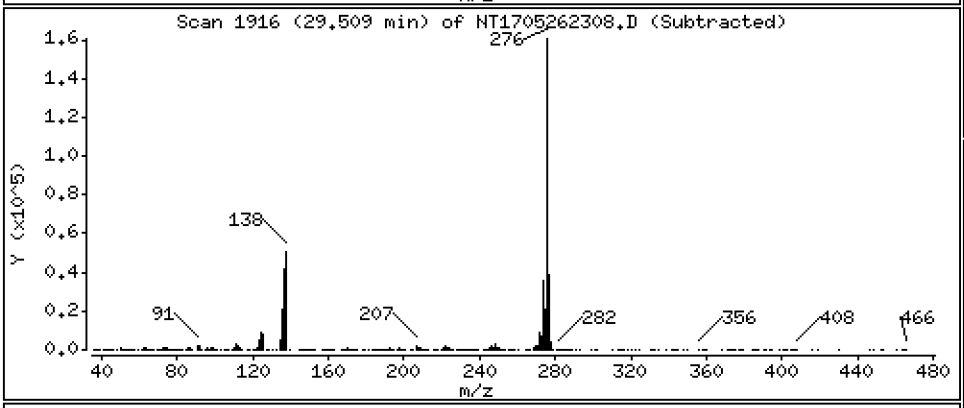
Column diameter: 0.25

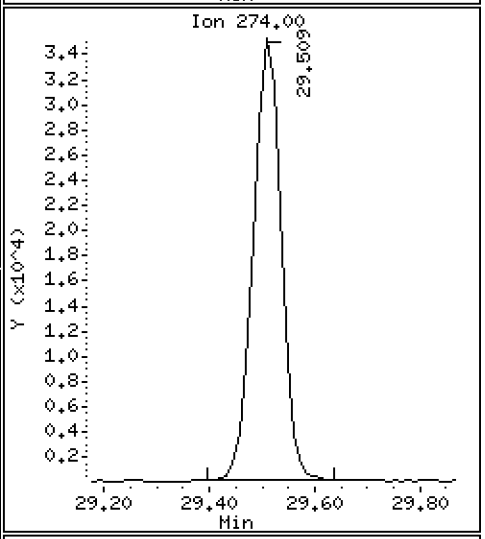
80 Benzo(g,h,i)perylene

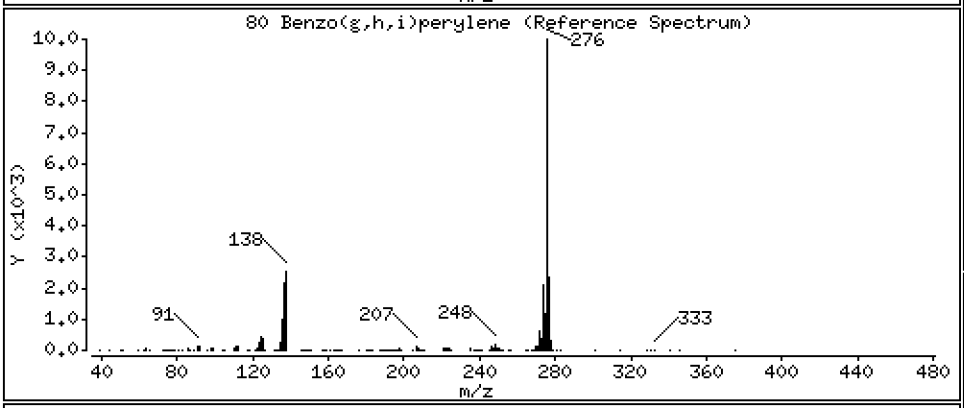
Concentration: 4.538 ug/mL

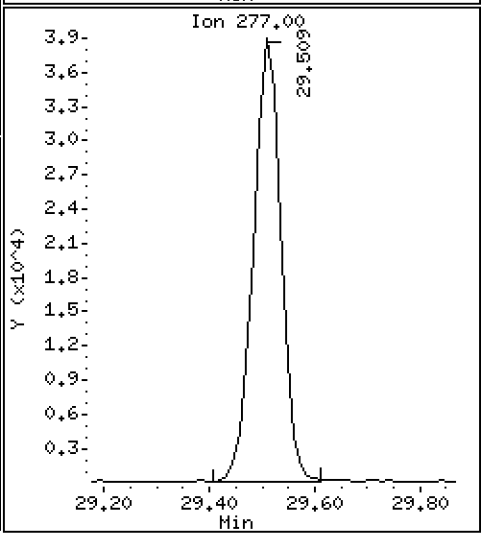


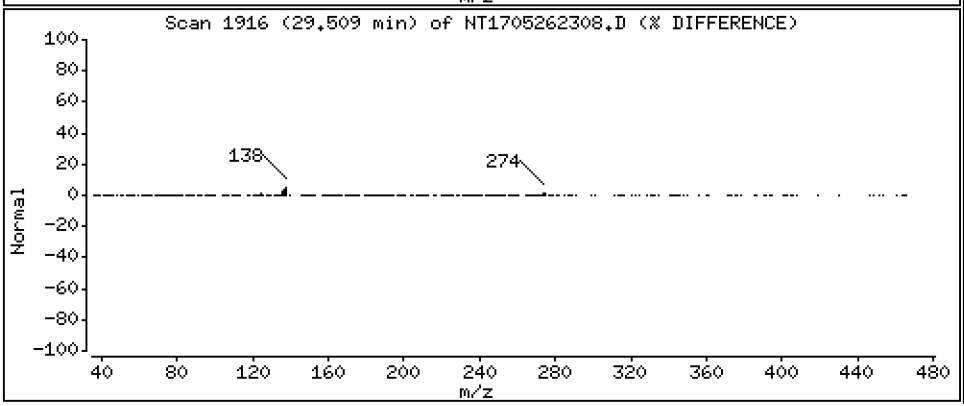












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

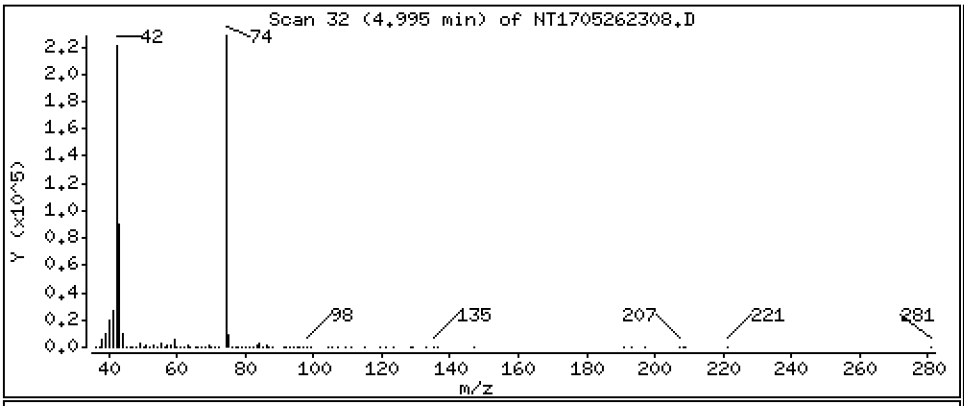
Operator: VTS

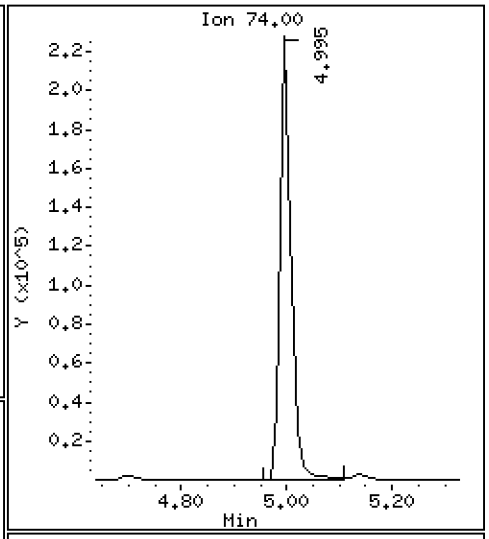
Column phase: ZB-5msi

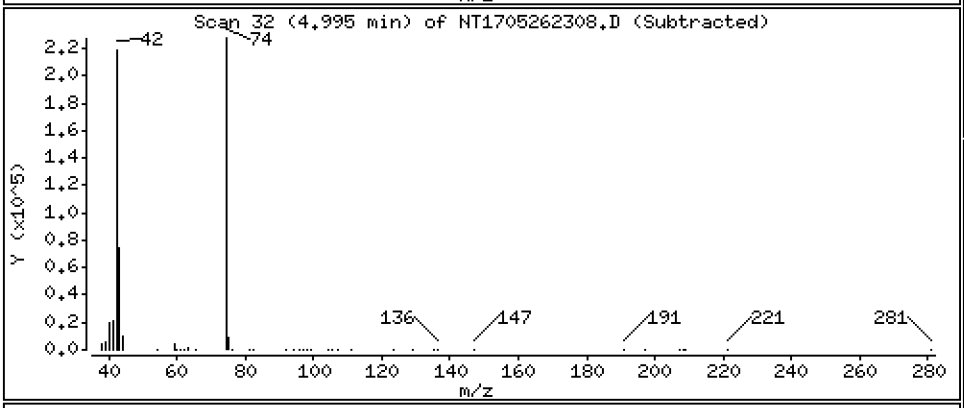
Column diameter: 0.25

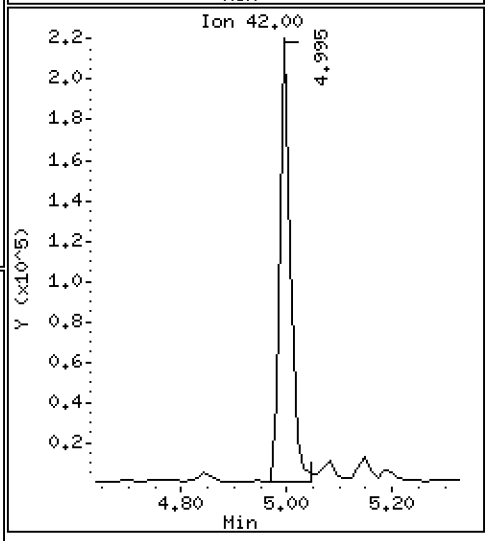
90 N-Nitrosodimethylamine

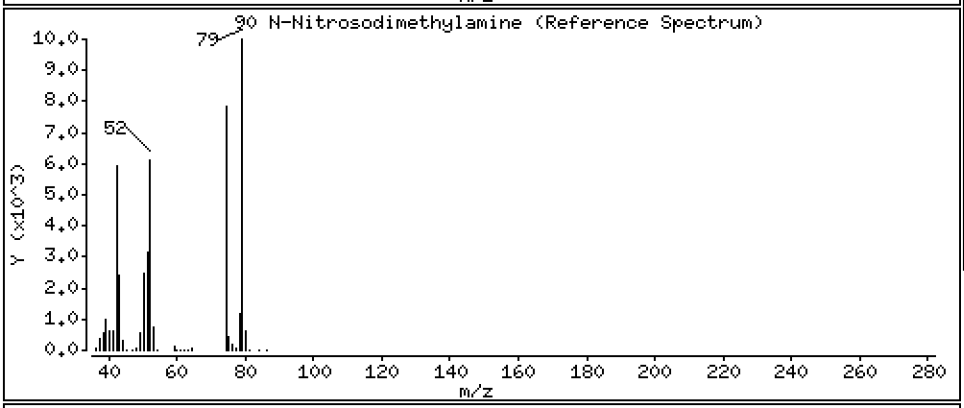
Concentration: 5.528 ug/mL

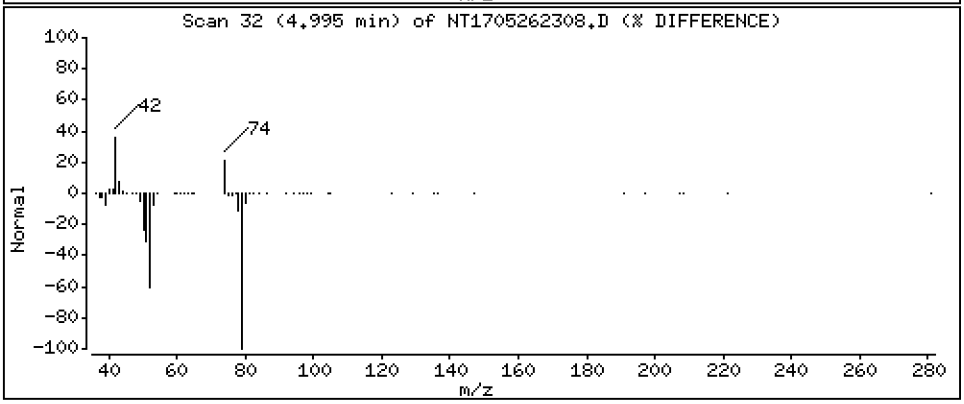












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

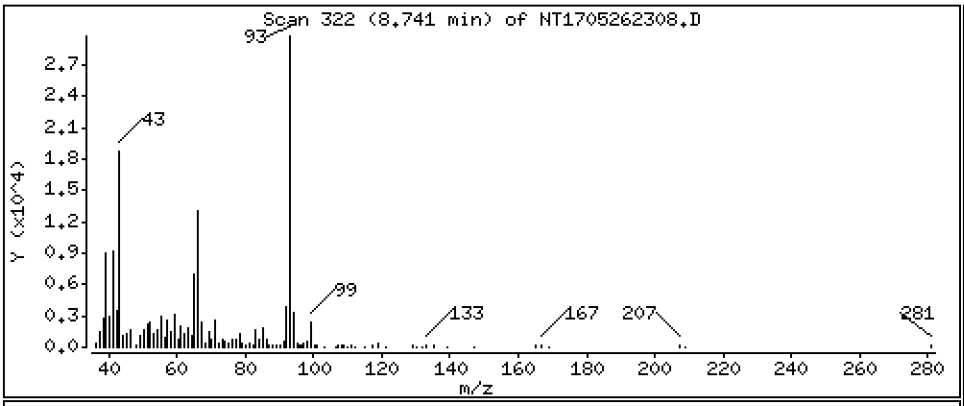
Operator: VTS

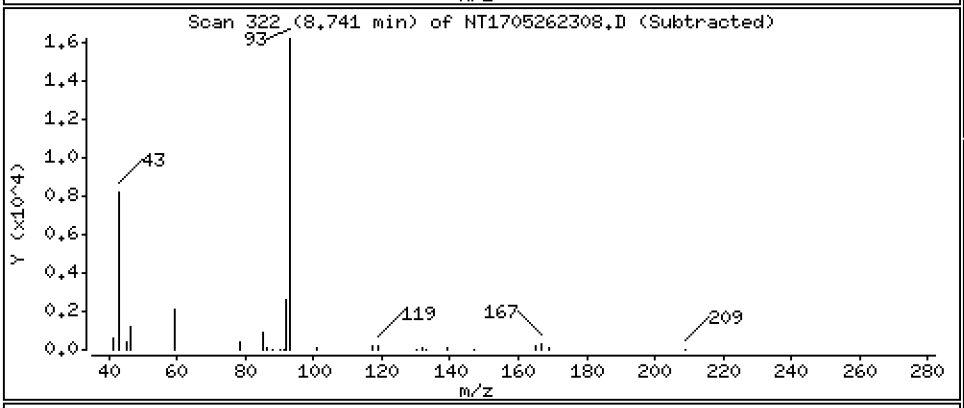
Column phase: ZB-5msi

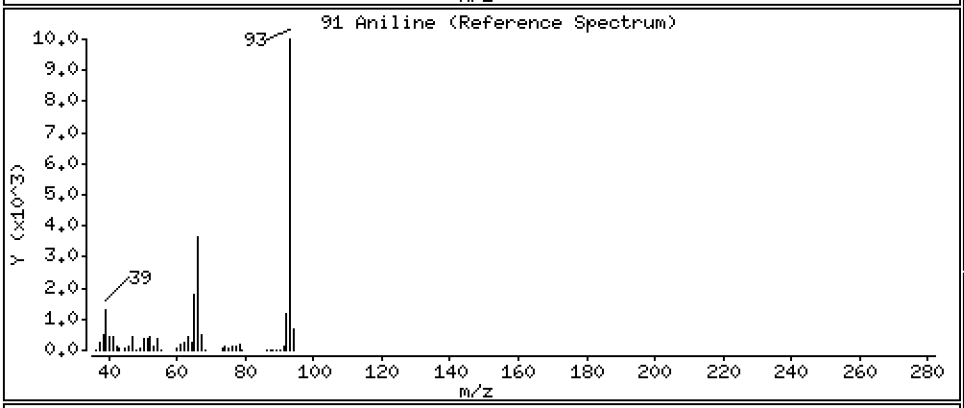
Column diameter: 0.25

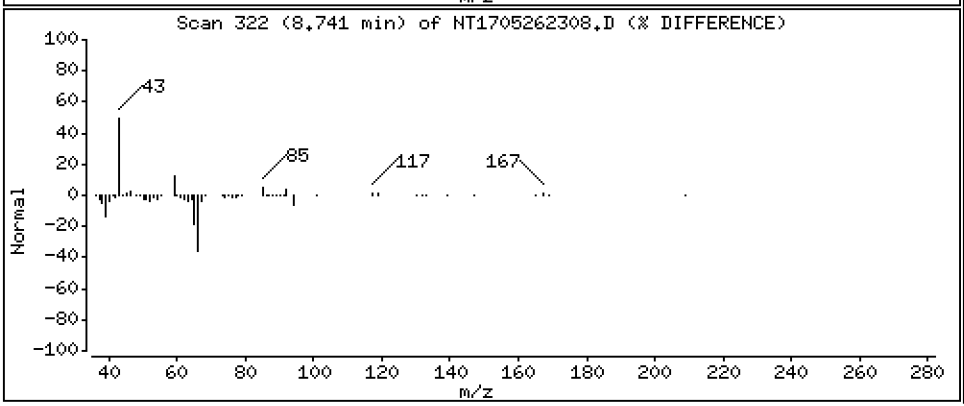
91 Aniline

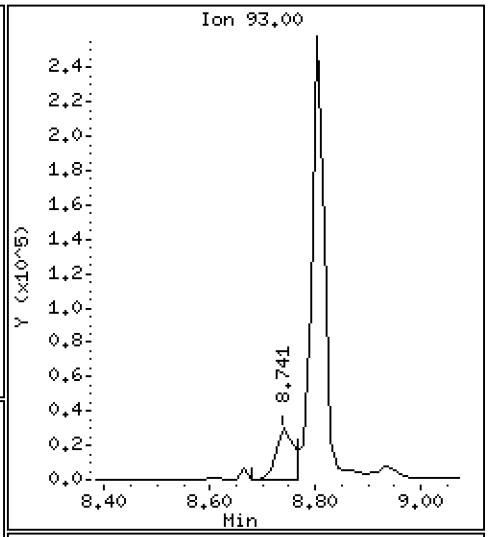
Concentration: 0.7147 ug/mL

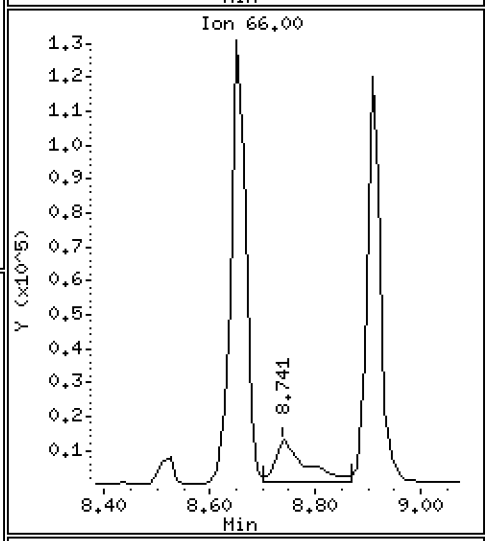


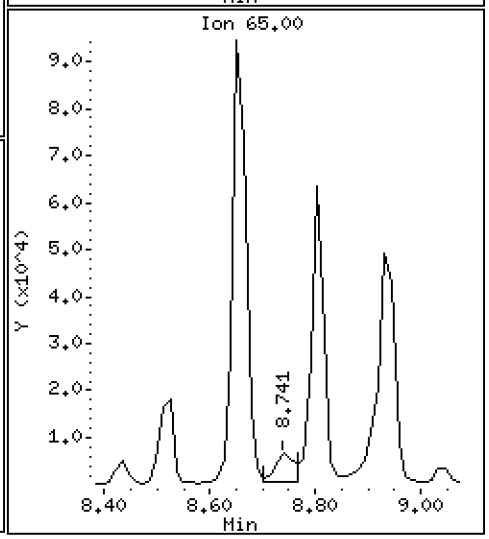












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

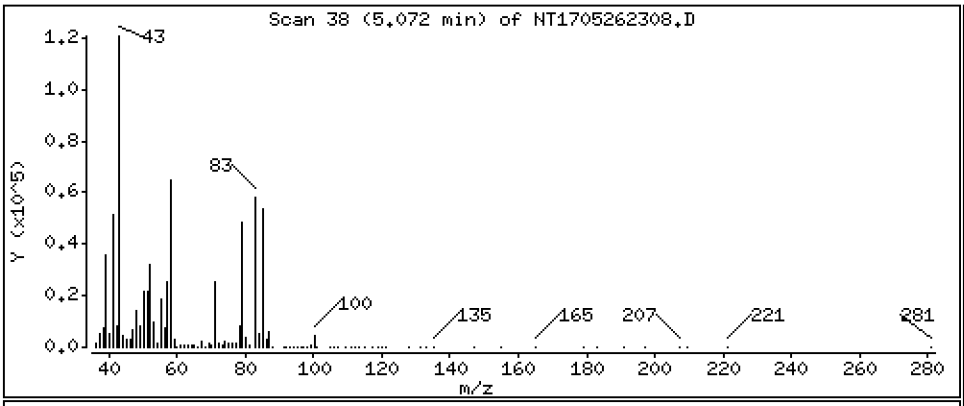
Operator: VTS

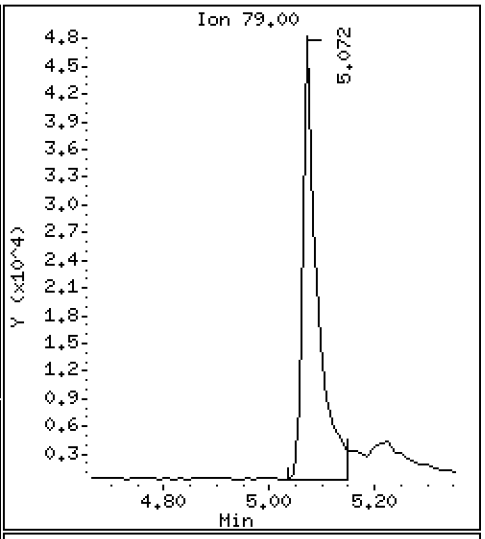
Column phase: ZB-5msi

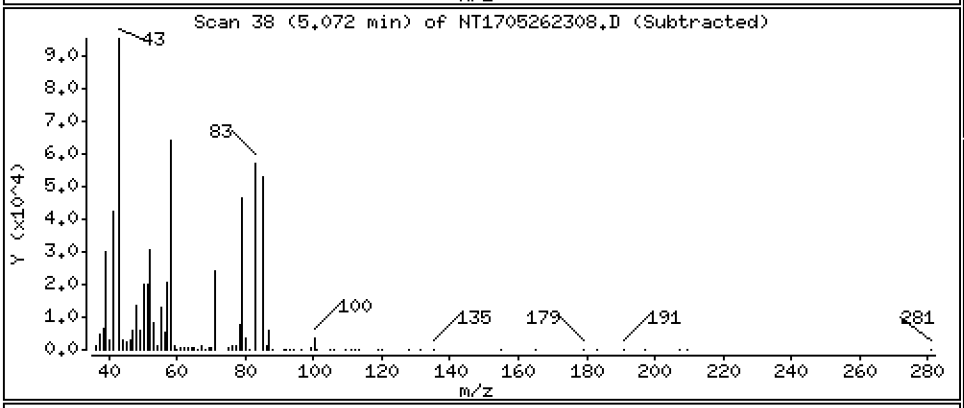
Column diameter: 0.25

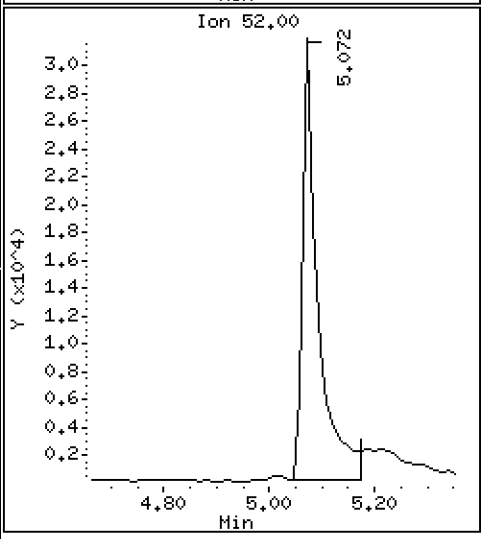
103 Pyridine

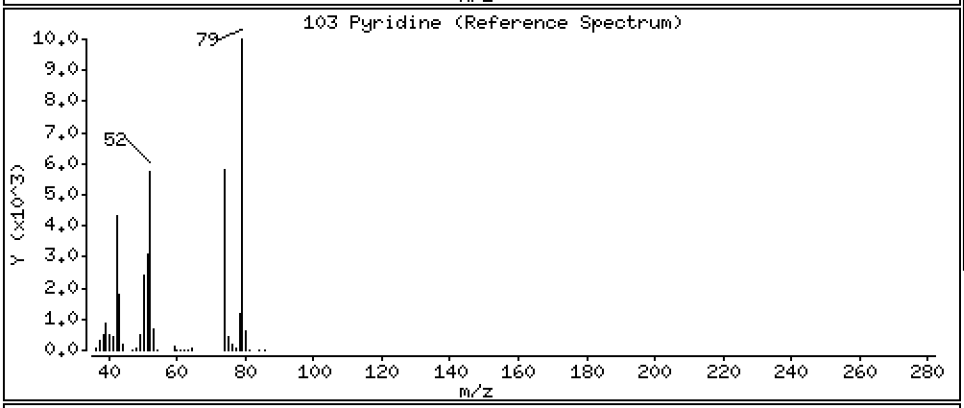
Concentration: 0.9713 ug/mL

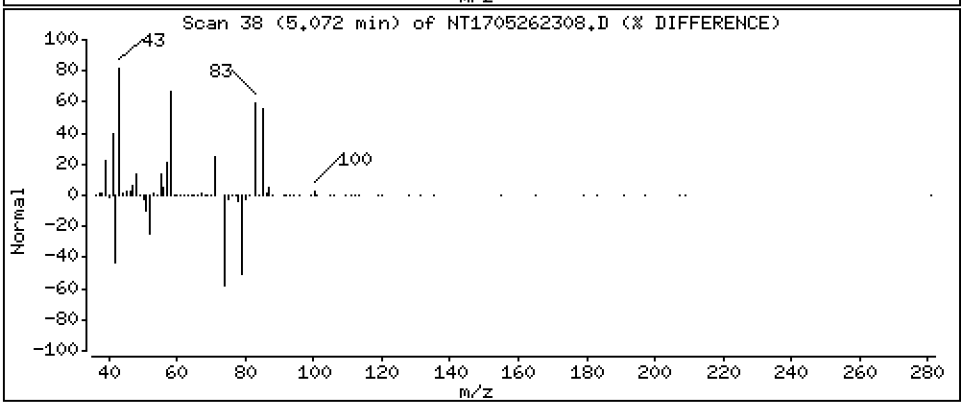












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

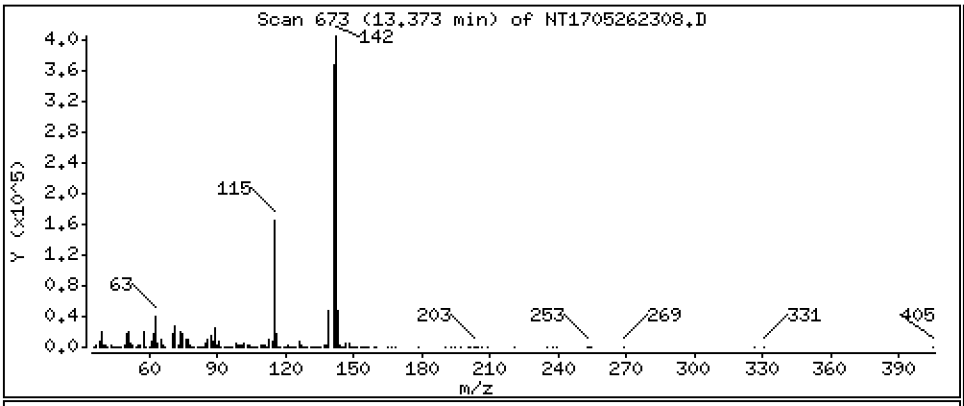
Operator: VTS

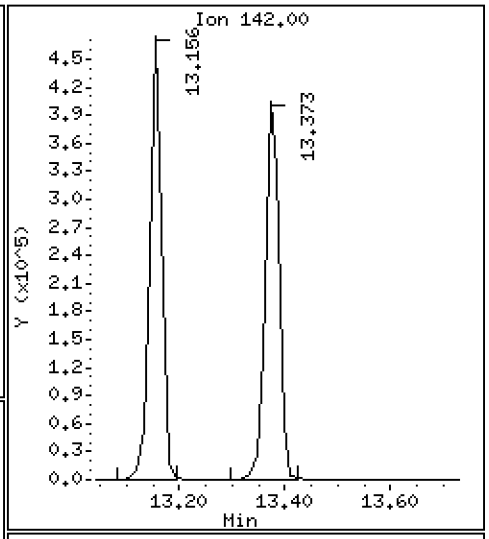
Column phase: ZB-5msi

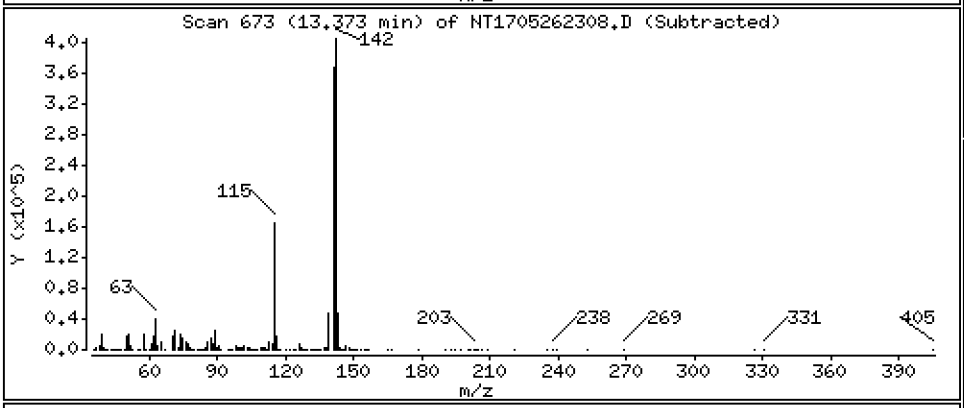
Column diameter: 0.25

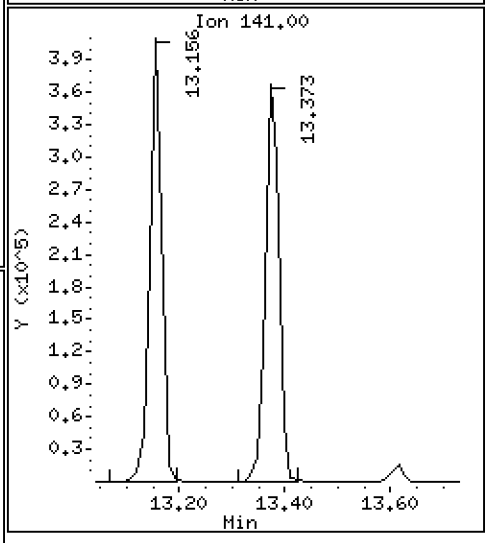
105 1-methylnaphthalene

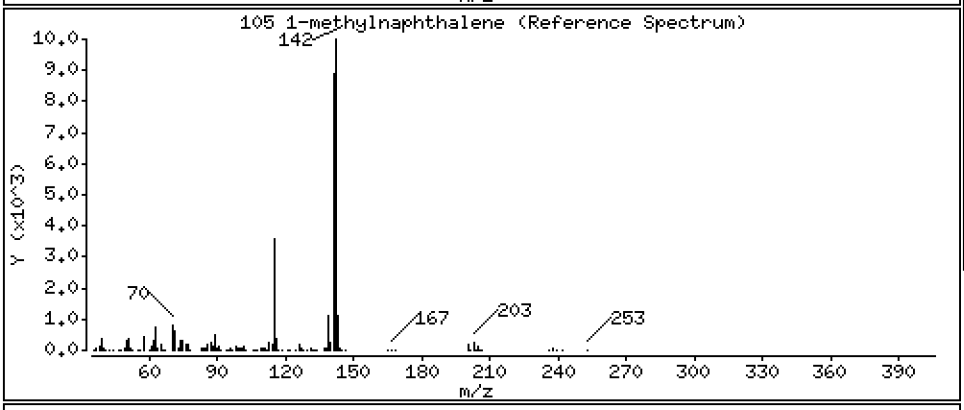
Concentration: 3.962 ug/mL

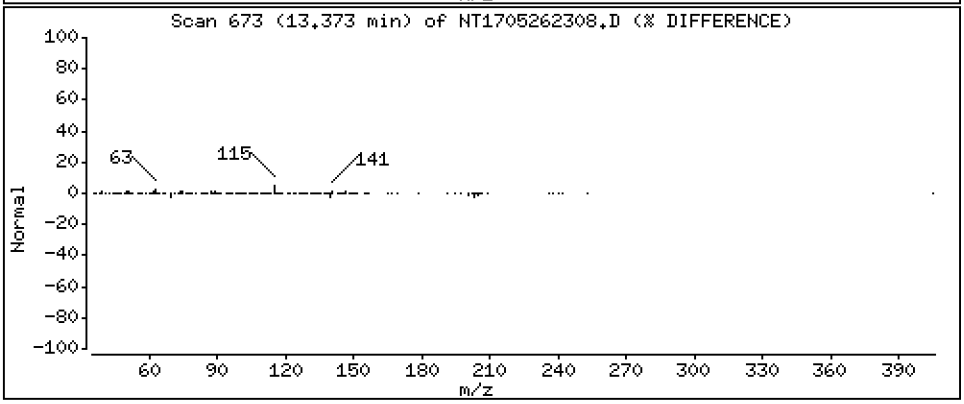












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

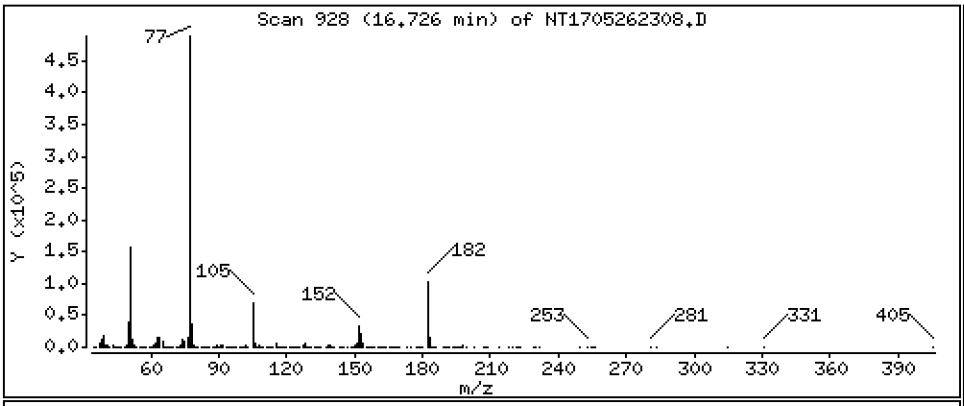
Operator: VTS

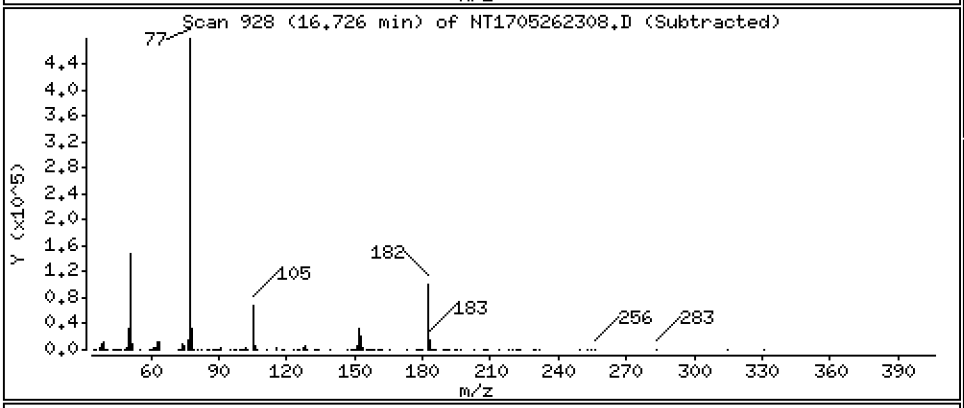
Column phase: ZB-5msi

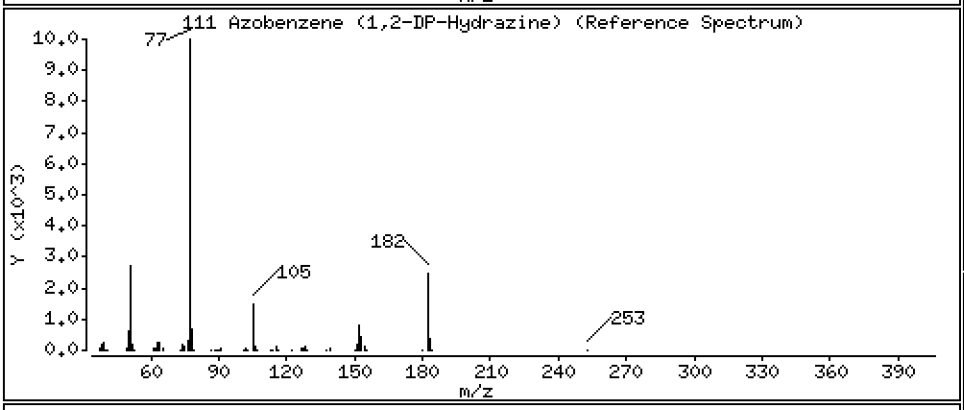
Column diameter: 0.25

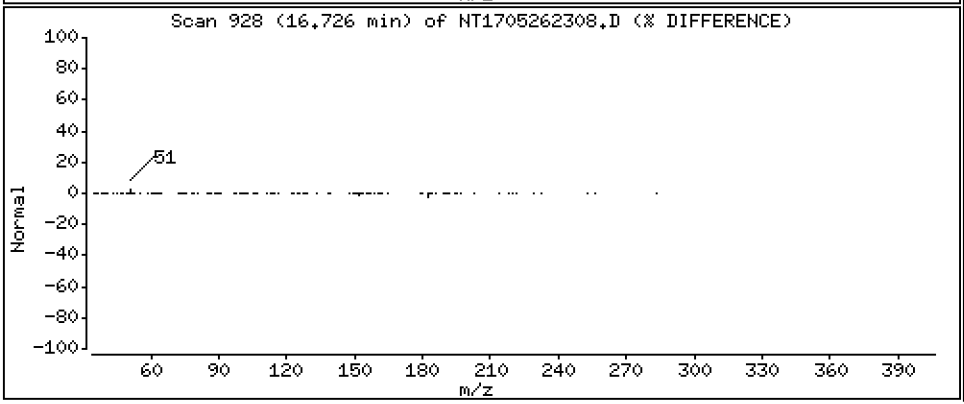
111 Azobenzene (1,2-DP-Hydrazine)

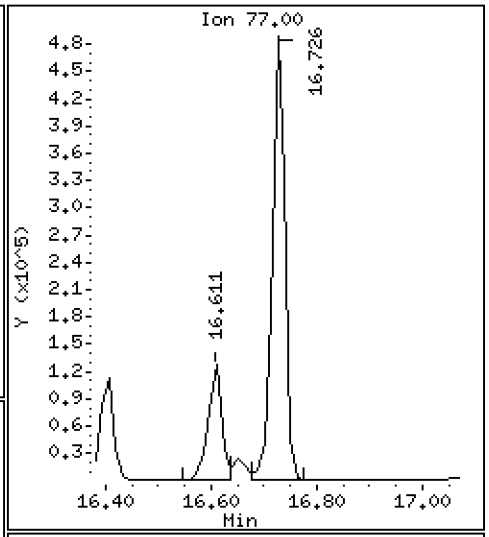
Concentration: 4.131 ug/mL

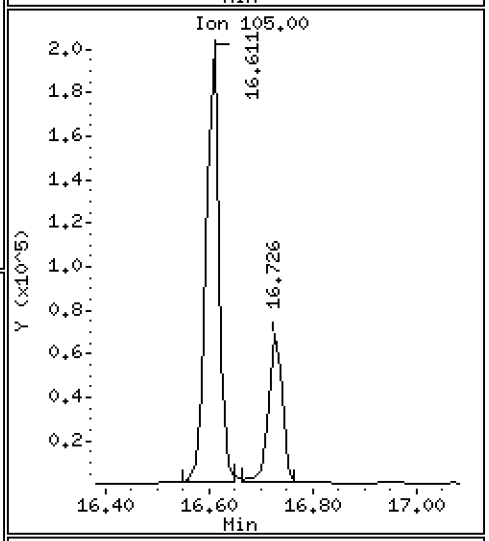


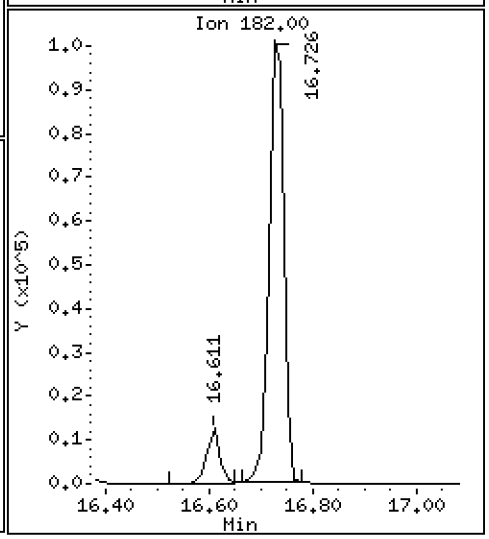












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

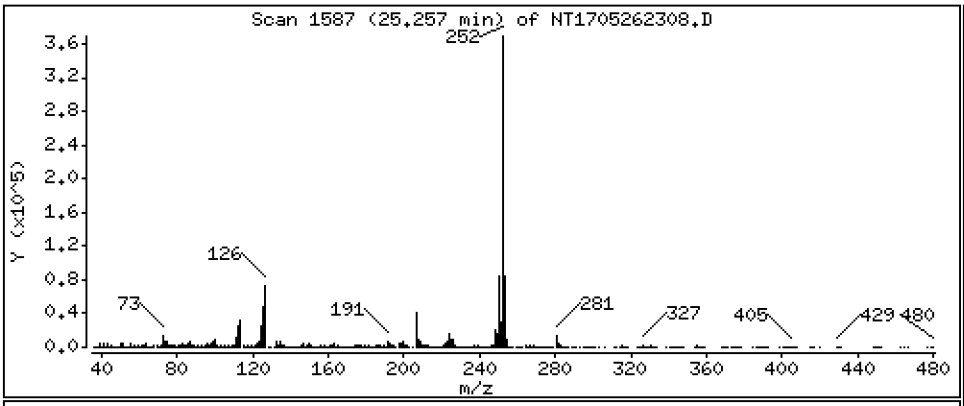
Operator: VTS

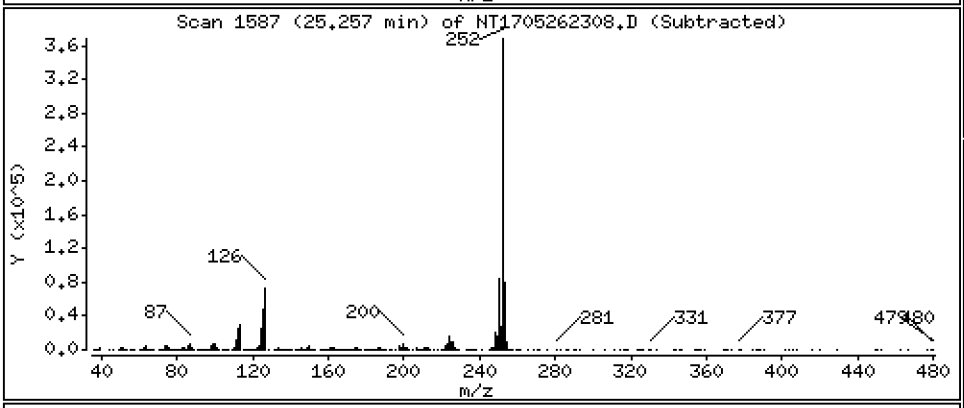
Column phase: ZB-5msi

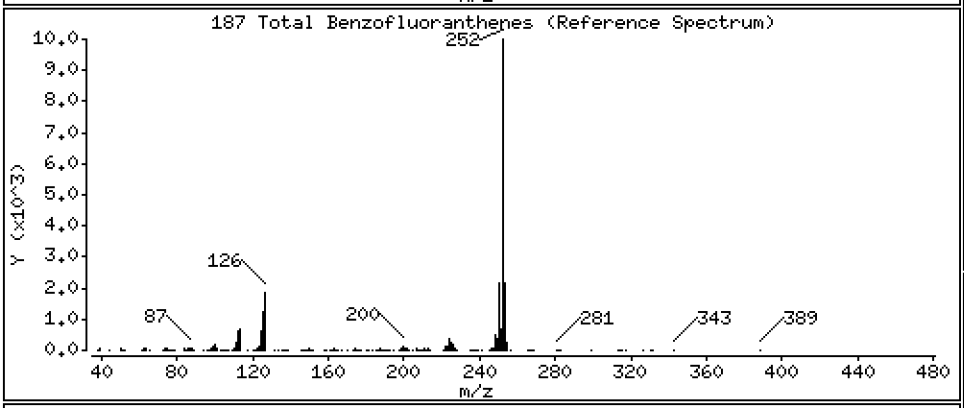
Column diameter: 0.25

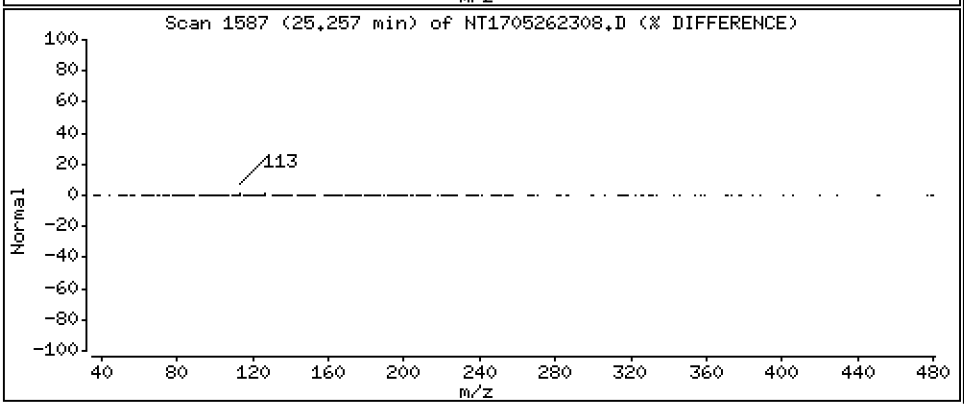
187 Total Benzofluoranthenes

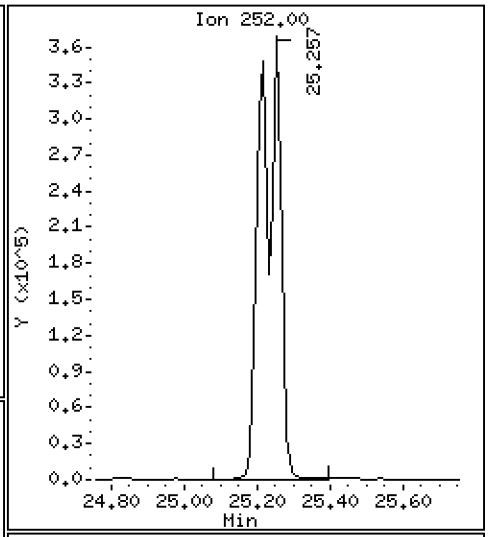
Concentration: 9.097 ug/mL

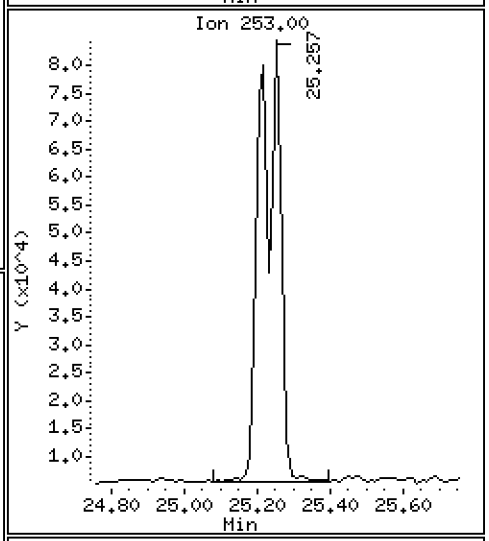


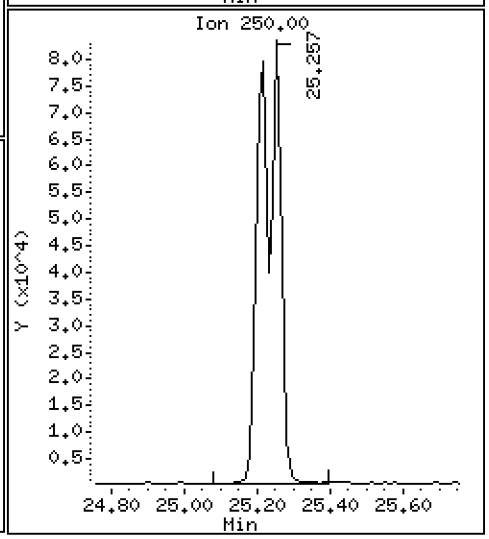












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD1

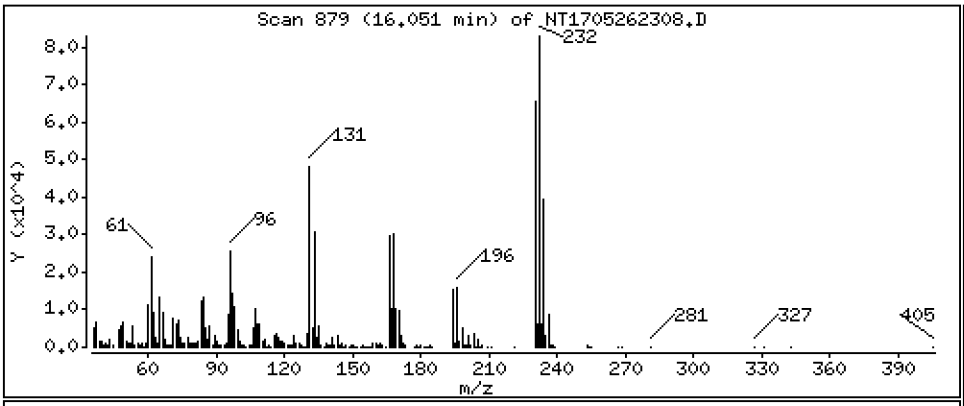
Operator: VTS

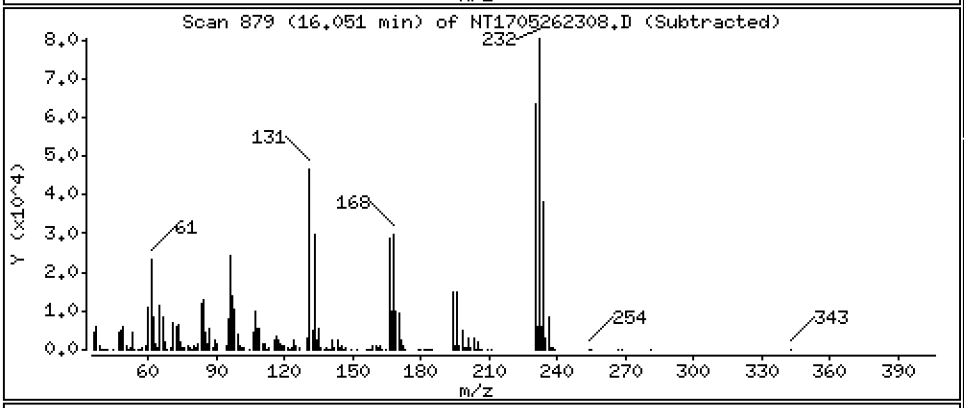
Column phase: ZB-5msi

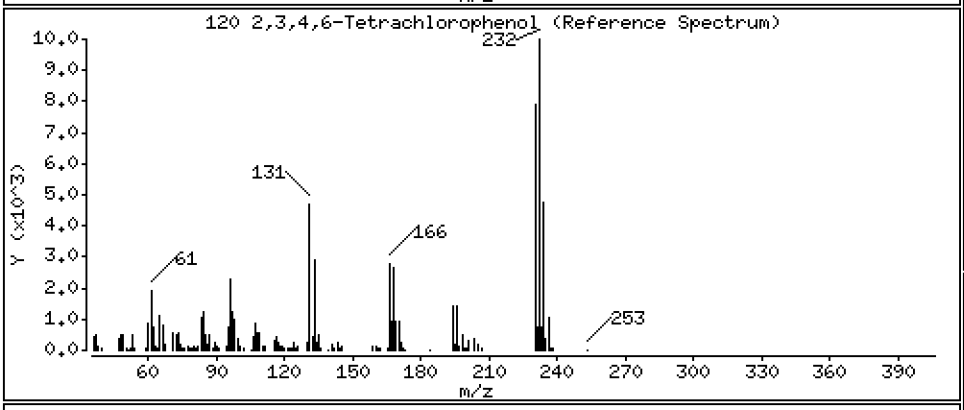
Column diameter: 0.25

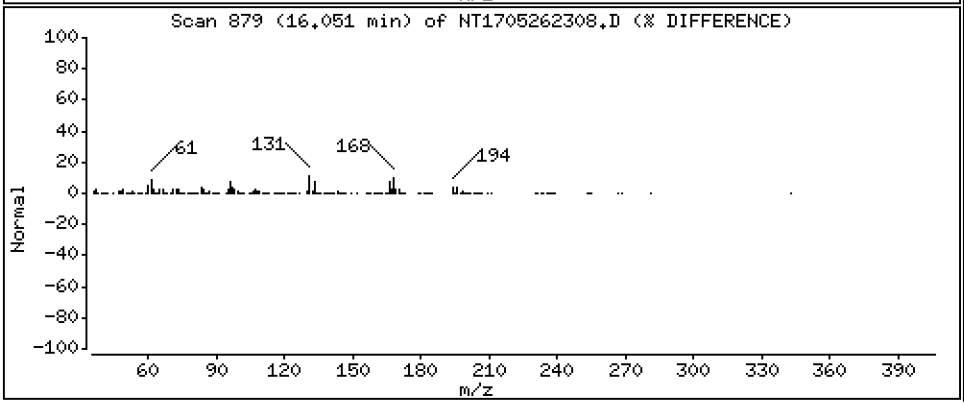
120 2,3,4,6-Tetrachlorophenol

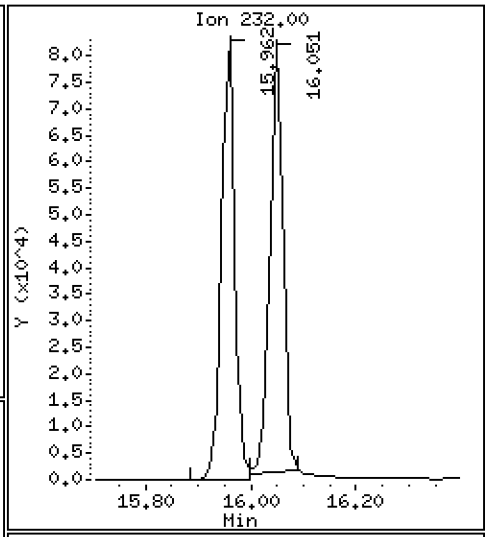
Concentration: 2.164 ug/mL

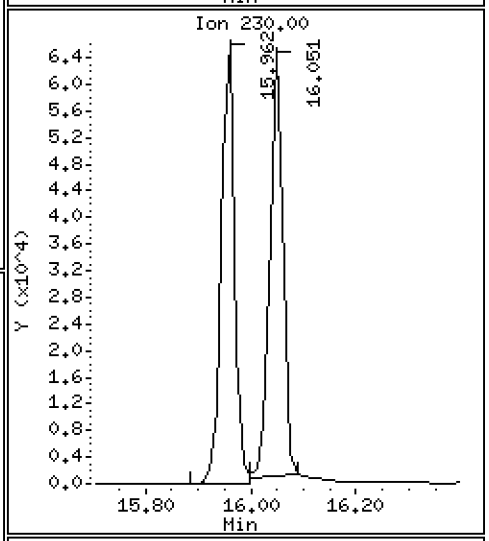


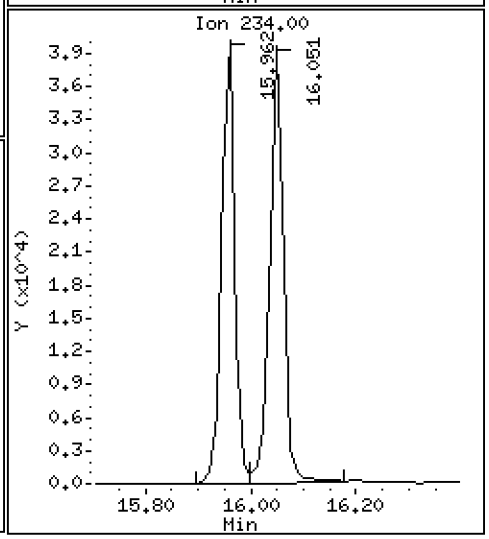












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262308.D
Lab Smp Id: BLD0607-BSD1
Inj Date : 26-MAY-2023 17:02
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-BSD1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 12:20 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.084	7.071	(0.765)	549216	6.12031	6.120
$	2 Phenol-d5	99	8.639	8.638	(0.933)	712590	6.00050	6.001
	3 Phenol	94	8.651	8.651	(0.934)	486178	3.86517	3.865
$	5 2-Chlorophenol-d4	132	8.906	8.906	(0.961)	605165	6.36193	6.362
	4 Bis(2-Chloroethyl)ether	93	8.804	8.804	(0.950)	408186	4.45150	4.452
	6 2-Chlorophenol	128	8.944	8.931	(0.966)	375056	3.57059	3.571
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	410360	3.86010	3.860
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	274132	4.00000	
	9 1,4-Dichlorobenzene	146	9.289	9.289	(1.003)	405188	3.82162	3.822
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	270357	4.04366	4.044
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	408181	4.09537	4.095
	11 Benzyl alcohol	108	9.531	9.531	(1.029)	263857	4.50554	4.506
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	134570	4.79016	4.790
	13 2-Methylphenol	108	9.761	9.748	(1.054)	221853	2.39987	2.400
	17 Hexachloroethane	117	10.234	10.234	(1.105)	171743	4.04938	4.049
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	166890	2.35963	2.360
	15 4-Methylphenol	108	10.030	10.017	(1.083)	299243	3.17917	3.179
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	497278	4.28054	4.281
	19 Nitrobenzene	77	10.387	10.387	(0.886)	482668	4.35478	4.355
	20 Isophorone	82	10.822	10.834	(0.923)	742762	4.89555	4.896
	21 2-Nitrophenol	139	11.001	11.013	(0.938)	259723	4.86294	4.863
	22 2,4-Dimethylphenol	107	11.052	11.051	(0.942)	86878	0.83780	0.8378
	23 Bis(2-Chloroethoxy)methane	93	11.243	11.243	(0.959)	444430	4.77949	4.779
	24 Benzoic acid	105	11.320	11.307	(0.965)	1777357	25.4800	25.48
	25 2,4-Dichlorophenol	162	11.460	11.460	(0.977)	913335	10.9608	10.96
	26 1,2,4-Trichlorobenzene	180	11.639	11.651	(0.992)	411783	4.55009	4.550
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1020740	4.00000	
	28 Naphthalene	128	11.766	11.779	(1.003)	1105543	3.93849	3.938
	29 4-Chloroaniline	127	11.906	11.893	(1.015)	231341	2.09080	2.091
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	226202	5.04581	5.046
	31 4-Chloro-3-methylphenol	107	12.850	12.850	(1.096)	1041551	11.6086	11.61
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	764615	3.80439	3.804
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	156007	3.23429	3.234

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.781	13.781	(0.899)	633105	11.6650	11.67
	35 2,4,5-Trichlorophenol	196	13.857	13.857	(0.904)	690394	12.0163	12.02
$	36 2-Fluorobiphenyl	172	13.934	13.934	(0.909)	881002	4.31110	4.311
	37 2-Chloronaphthalene	162	14.138	14.151	(0.923)	698028	4.21043	4.210
	38 2-Nitroaniline	65	14.406	14.406	(0.940)	688206	12.2572	12.26
	39 Dimethylphthalate	163	14.827	14.826	(0.968)	810489	4.54098	4.541
	40 Acenaphthylene	152	15.018	15.018	(0.980)	948008	3.60089	3.601
	41 2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	527392	12.6209	12.62
*	42 Acenaphthene-d10	164	15.324	15.324	(1.000)	518733	4.00000	
	43 3-Nitroaniline	138	15.260	15.247	(0.996)	146130	3.77567	3.776
	44 Acenaphthene	153	15.388	15.388	(1.004)	680369	4.13421	4.134
	45 2,4-Dinitrophenol	184	15.464	15.464	(1.009)	582121	22.1412	22.14
	46 Dibenzofuran	168	15.719	15.719	(1.026)	952702	4.14771	4.148
	47 4-Nitrophenol	109	15.579	15.579	(1.017)	311619	12.1218	12.12
	48 2,4-Dinitrotoluene	165	15.770	15.770	(1.029)	688674	12.5898	12.59
	50 Diethylphthalate	149	16.267	16.267	(1.062)	1044308	5.99963	6.000
	49 Fluorene	166	16.420	16.420	(1.072)	989672	4.53201	4.532
	51 4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	453201	4.51415	4.514
	52 4-Nitroaniline	138	16.522	16.509	(1.078)	210375	5.74266	5.743
	53 4,6-Dinitro-2-methylphenol	198	16.611	16.611	(0.906)	743546	22.0626	22.06
	54 N-Nitrosodiphenylamine	169	16.649	16.662	(0.908)	279914	2.36618	2.366
$	55 2,4,6-Tribromophenol	330	16.954	16.954	(1.106)	126211	5.57791	5.578
	56 4-Bromophenyl-phenylether	248	17.400	17.400	(0.949)	188489	4.54753	4.548
	57 Hexachlorobenzene	284	17.718	17.731	(0.966)	187840	4.44753	4.448
	58 Pentachlorophenol	266	18.088	18.088	(0.986)	294333	11.3809	11.38
*	59 Phenanthrene-d10	188	18.343	18.343	(1.000)	844493	4.00000	
	60 Phenanthrene	178	18.394	18.394	(1.003)	1011338	4.10428	4.104
	61 Anthracene	178	18.484	18.483	(1.008)	694872	3.00367	3.004
	62 Carbazole	167	18.815	18.815	(1.026)	506371	3.48238	3.482
	63 Di-n-butylphthalate	149	19.580	19.580	(1.067)	1305362	4.67293	4.673
	64 Fluoranthene	202	20.753	20.753	(0.889)	1065487	4.55972	4.560
	65 Pyrene	202	21.174	21.174	(0.907)	1057712	4.46515	4.465
$	66 Terphenyl-d14	244	21.455	21.455	(0.919)	811913	4.82148	4.821
	67 Butylbenzylphthalate	149	22.360	22.360	(0.958)	521085	4.91494	4.915
	68 Benzo(a)anthracene	228	23.317	23.317	(0.999)	789563	4.29231	4.292
*	69 Chrysene-d12	240	23.343	23.355	(1.000)	499547	4.00000	
	70 3,3'-Dichlorobenzidine	252	23.266	23.266	(0.997)	155321	4.29984	4.300
	71 Chrysene	228	23.394	23.394	(1.002)	751876	4.34378	4.344
	72 bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	723524	4.72498	4.725
*	134 Di-n-octylphthalate-d4	153	24.351	24.363	(1.000)	1058373	4.00000	
	73 Di-n-octylphthalate	149	24.363	24.363	(1.001)	1236144	4.60776	4.608
	74 Benzo(b)fluoranthene	252	25.218	25.218	(0.970)	738598	4.36126	4.361
	75 Benzo(k)fluoranthene	252	25.256	25.256	(0.972)	760770	4.75473	4.755
	76 Benzo(a)pyrene	252	25.881	25.881	(0.996)	451573	3.38492	3.385
*	77 Perylene-d12	264	25.996	25.996	(1.000)	427148	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.703	28.716	(1.104)	709073	4.58230	4.582
	79 Dibenzo(a,h)anthracene	278	28.716	28.729	(1.105)	592757	4.56419	4.564
	80 Benzo(g,h,i)perylene	276	29.509	29.521	(1.135)	579570	4.53772	4.538
	90 N-Nitrosodimethylamine	74	4.995	4.982	(0.539)	330905	5.52816	5.528
	91 Aniline	93	8.740	8.728	(0.944)	75331	0.71467	0.7147
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	5.071	5.007	(0.547)	92215	0.97126	0.9713
	105 1-methylnaphthalene	142	13.373	13.385	(1.140)	738762	3.96221	3.962
	111 Azobenzene (1,2-DP-Hydrazine)	77	16.725	16.725	(1.091)	839417	4.13132	4.131

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.256	25.256	(0.972)	1383033	9.09749	9.097
120 2,3,4,6-Tetrachlorophenol	232	16.050	16.050	(1.047)	140531	2.16410	2.164

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262308.D
Lab Smp Id: BLD0607-BSD1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:16
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	303517	151759	607034	274132	-9.68
27 Naphthalene-d8	1140476	570238	2280952	1020740	-10.50
42 Acenaphthene-d10	622461	311231	1244922	518733	-16.66
59 Phenanthrene-d10	1074054	537027	2148108	844493	-21.37
69 Chrysene-d12	723807	361904	1447614	499547	-30.98
134 Di-n-octylphthala	1524055	762028	3048110	1058373	-30.56
77 Perylene-d12	666992	333496	1333984	427148	-35.96

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	0.00
69 Chrysene-d12	23.36	22.86	23.86	23.34	-0.05
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.05
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262308.D

Lab ID: BLD0607-BSD1
nt17.i, ABN.m, 26-MAY-2023 17:02

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.547	0.541	0.0069	Pyridine

RRT check based on Ccal File: NT1705262302.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0607-SRM1
Batch: BLD0607
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 05/26/2023 18:56
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Phenol	2660.0	2180	43.9	200		81.9	26 - 174
4-Methylphenol	6617.0	5220	73.9	200		78.9	40 - 160
Naphthalene	4458.0	4200	42.4	200		94.3	25 - 175
Acenaphthylene	1948.0	1400	62.4	200		71.7	37 - 167
Dibenzofuran	6130.0	5490	141	200		89.6	45 - 155
Fluorene	3724.0	3330	146	200		89.4	44 - 156
Phenanthrene	5052.0	4160	87.2	200		82.3	46 - 154
Anthracene	2866.0	1650	71.9	200		57.6	42 - 158
Fluoranthene	2497.0	1590	60.9	200		63.8	39 - 161
Pyrene	2964.0	2040	56.8	200		68.7	38 - 162
Butylbenzylphthalate	3511.0	2630	94.1	200		74.9	36 - 164
Benzo(a)anthracene	5751.0	4670	59.6	200		81.1	49 - 151
Chrysene	1477.0	1170	60.6	200		79.2	45 - 155
bis(2-Ethylhexyl)phthalate	2905.0	1840	54.6	500		63.2	26 - 174
Benzofluoranthenes, Total	6534.0	4660	100	400		71.4	40 - 160
Benzo(a)pyrene	5902.0	3360	42.3	200		57.0	43 - 157
Indeno(1,2,3-cd)pyrene	3914.0	2170	147	200		55.3	22 - 178
Dibenzo(a,h)anthracene	3420.0	2070	172	200		60.6	37 - 163
Benzo(g,h,i)perylene	1380.0	630	136	200		45.6	35 - 165

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262311.D

Date : 26-MAY-2023 18:56

Client ID:

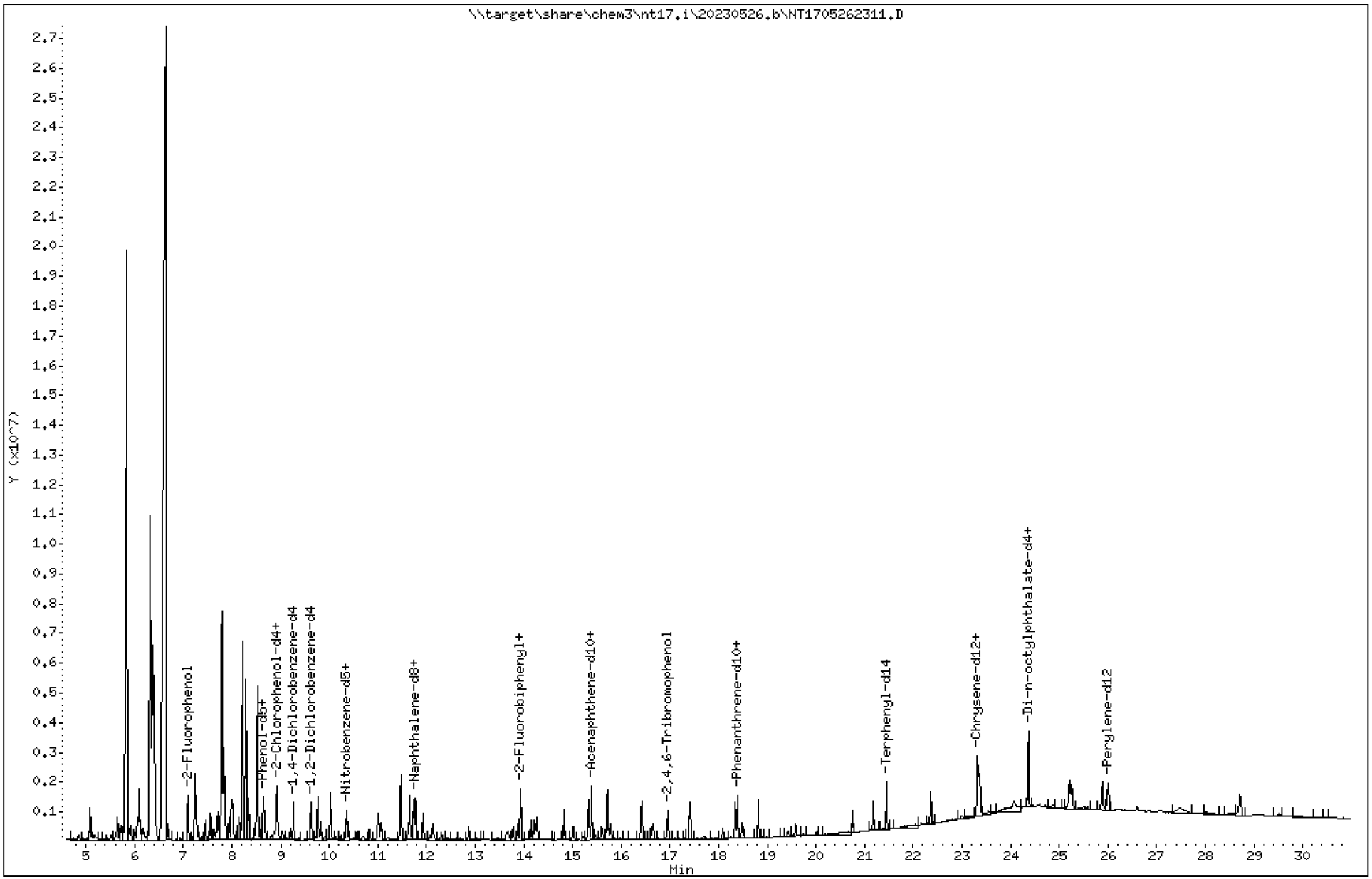
Sample Info: BLD0607-SRM1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: VTS

Column diameter: 0.25



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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

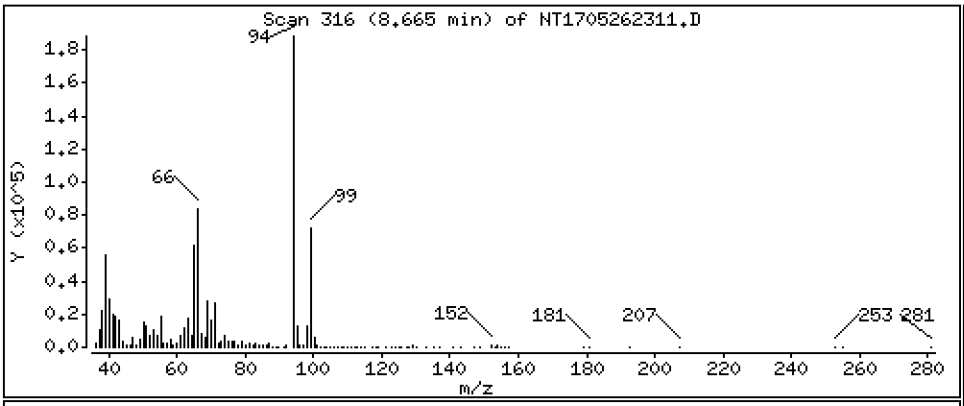
Operator: VTS

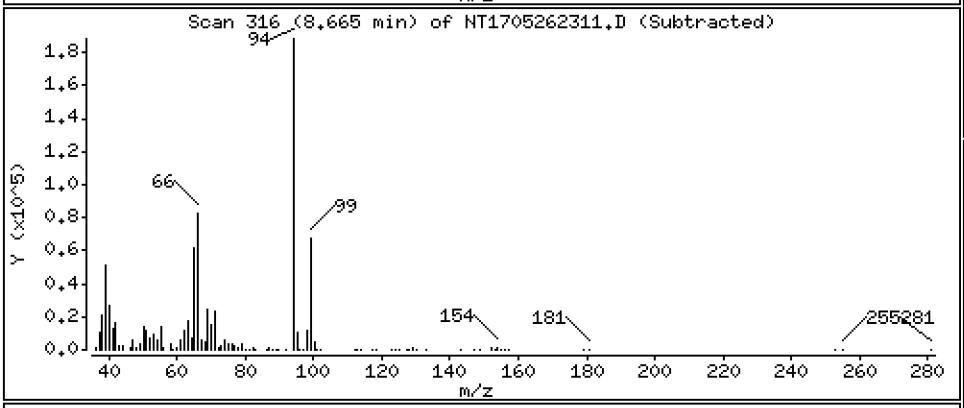
Column phase: ZB-5msi

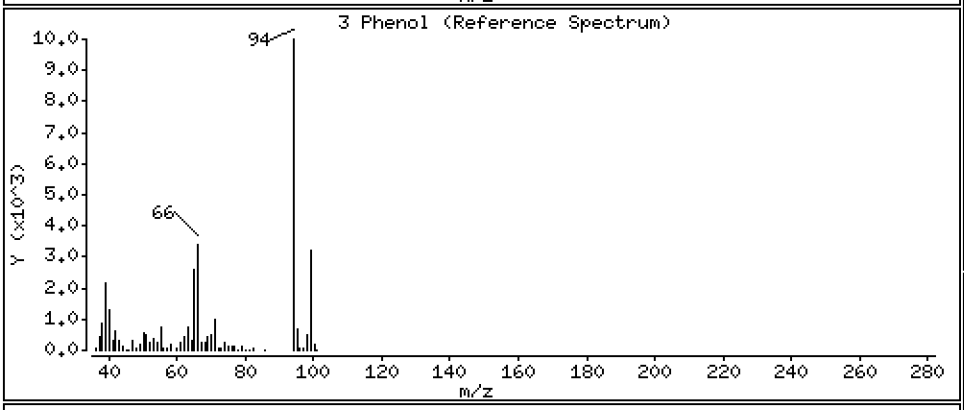
Column diameter: 0.25

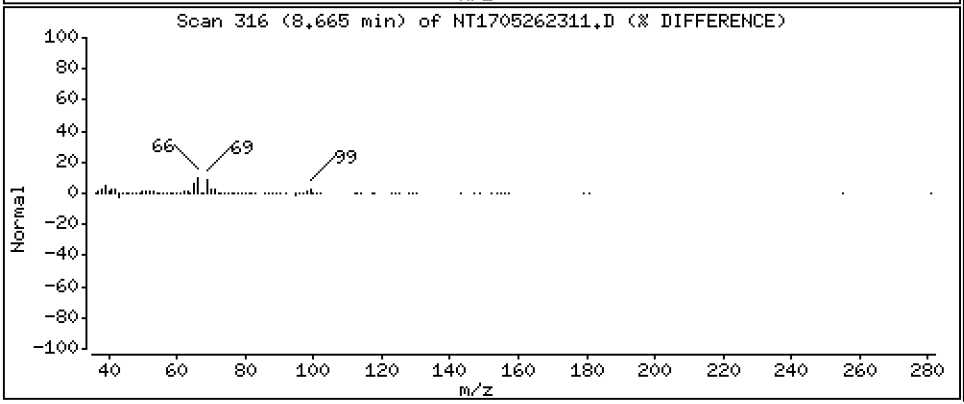
3 Phenol

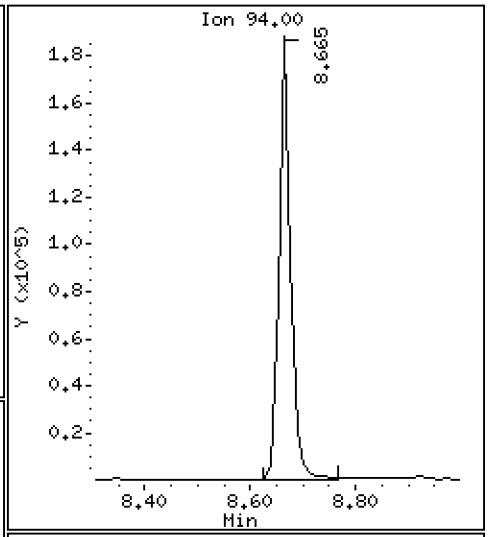
Concentration: 2.178 ug/mL

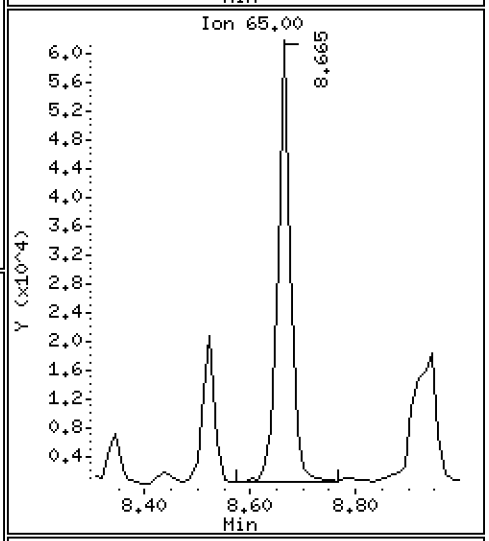


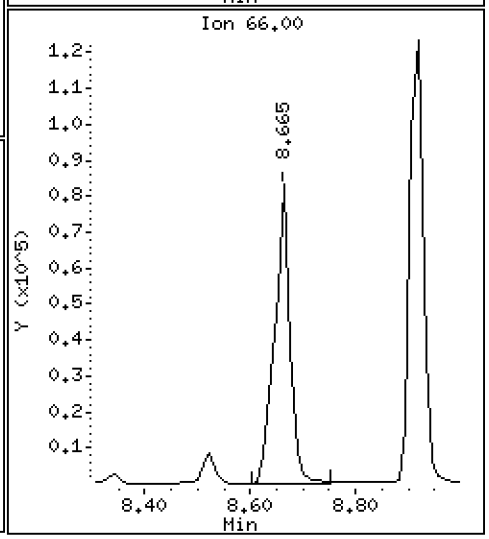












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

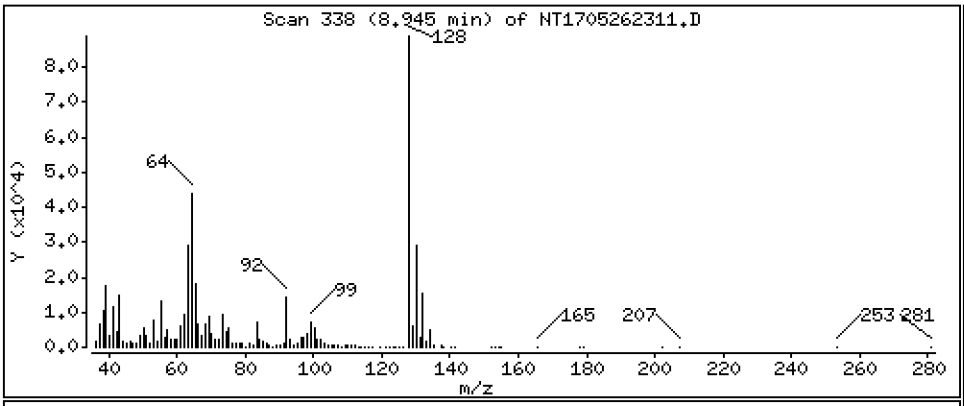
Operator: VTS

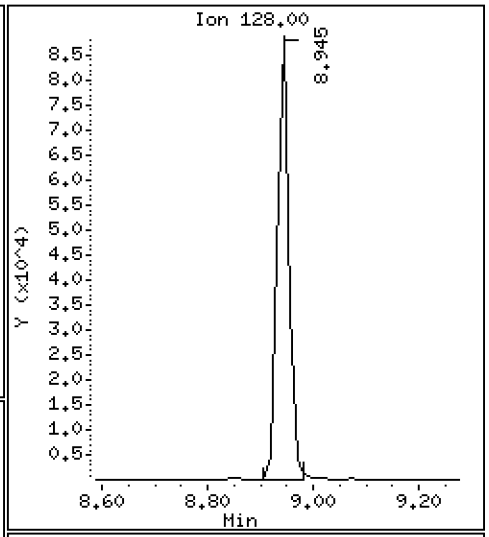
Column phase: ZB-5msi

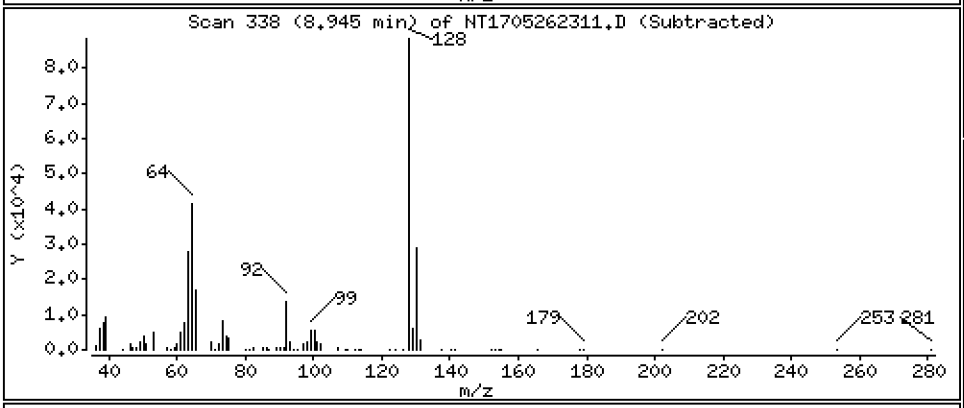
Column diameter: 0.25

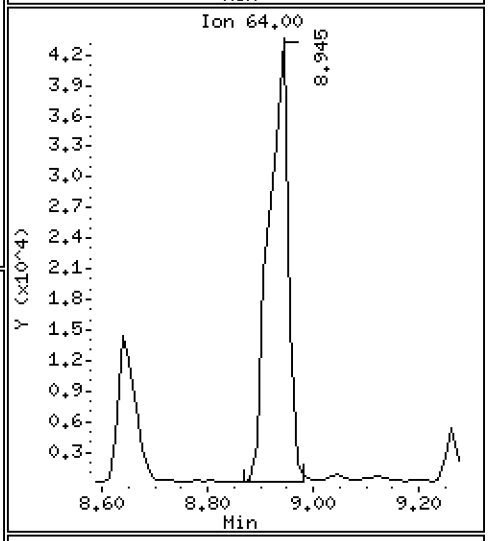
6 2-Chlorophenol

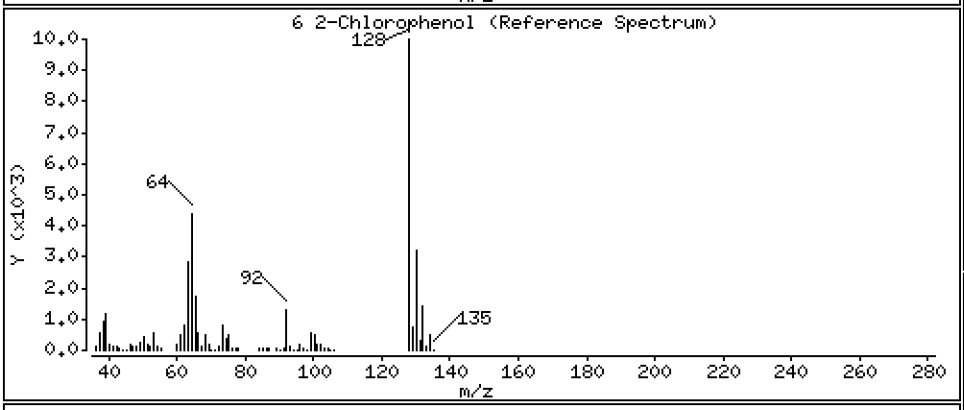
Concentration: 1.166 ug/mL

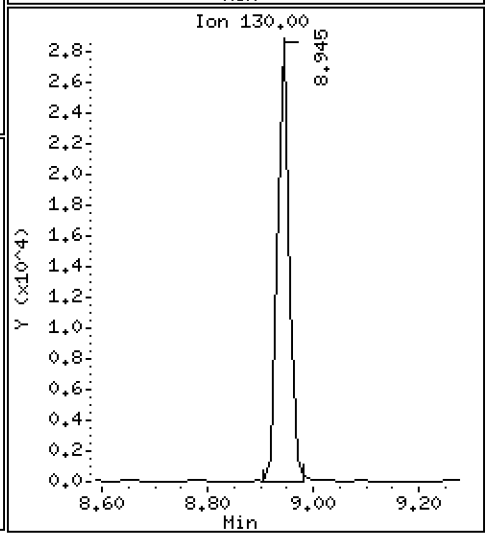


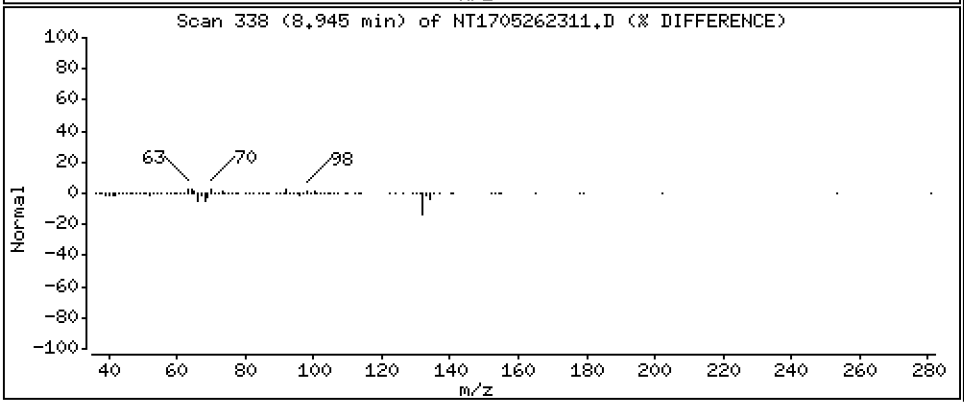












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

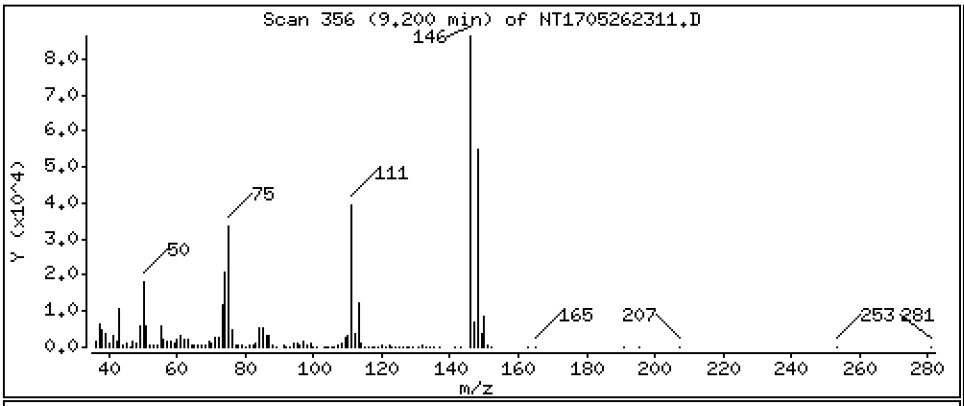
Operator: VTS

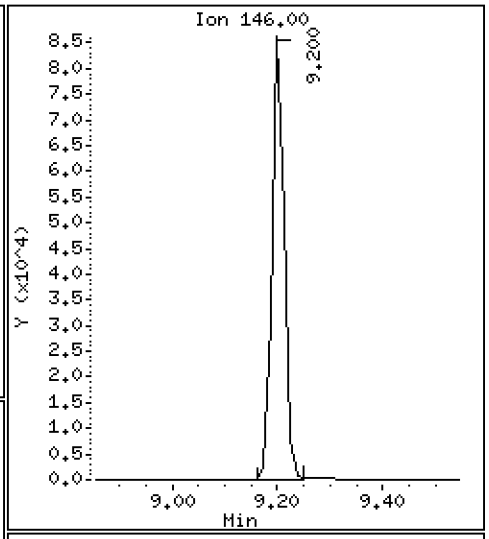
Column phase: ZB-5msi

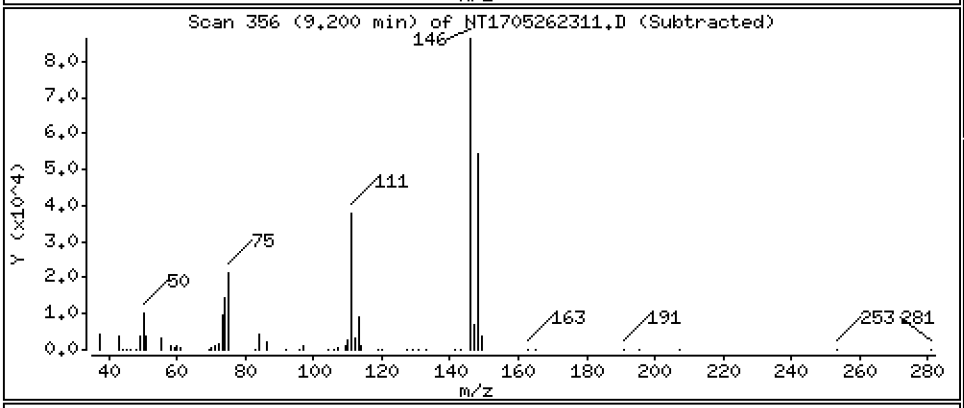
Column diameter: 0.25

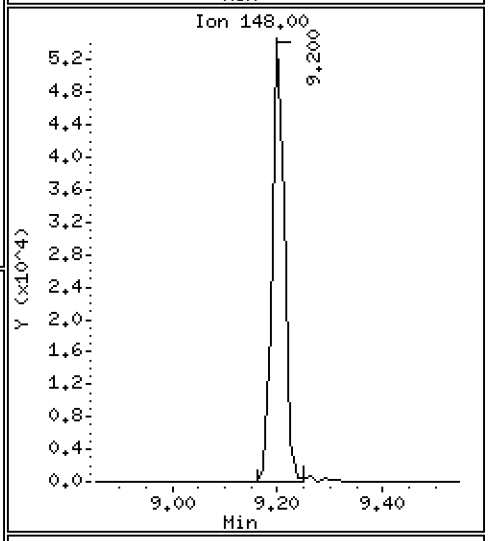
7 1,3-Dichlorobenzene

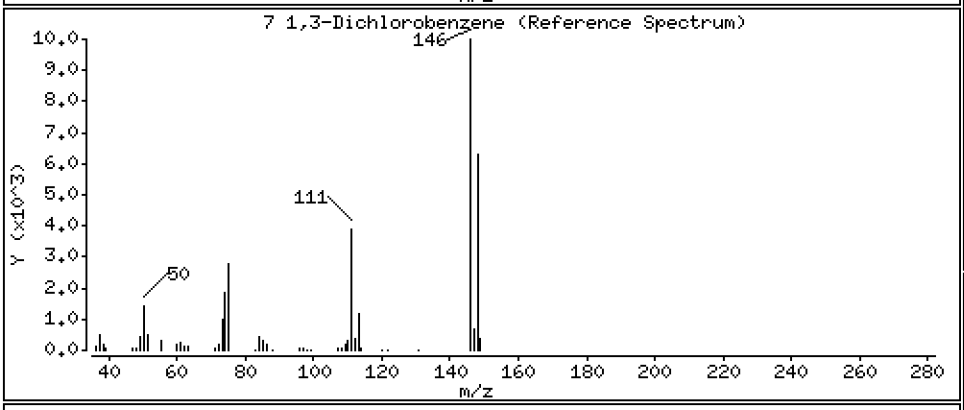
Concentration: 1.171 ug/mL

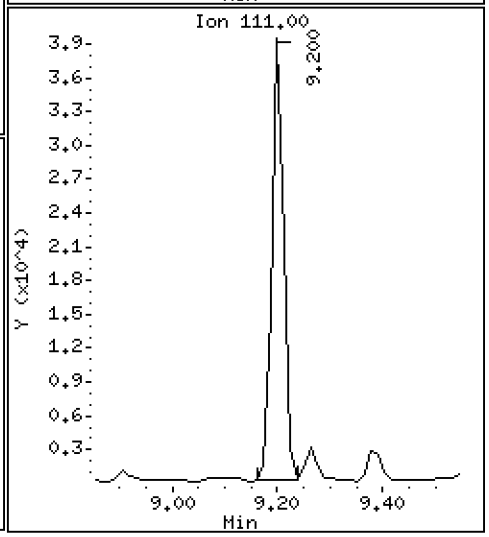


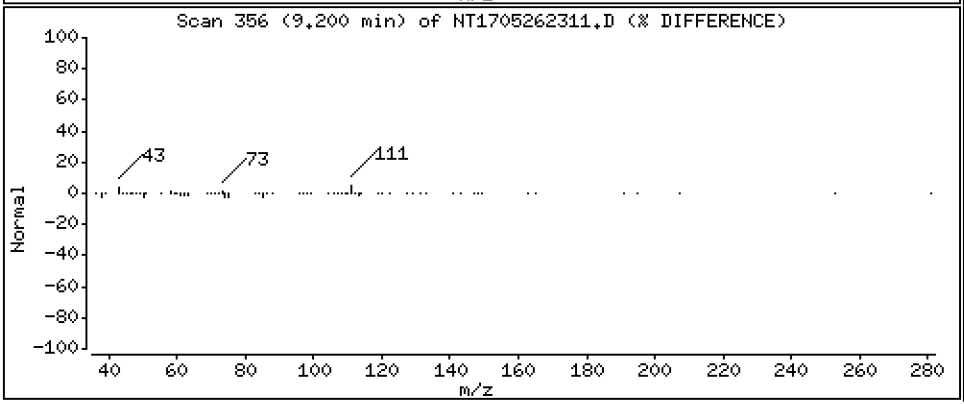












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

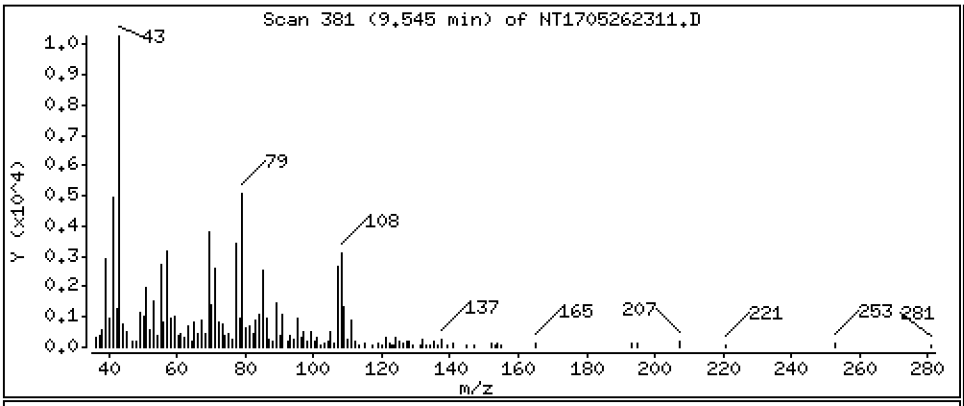
Operator: VTS

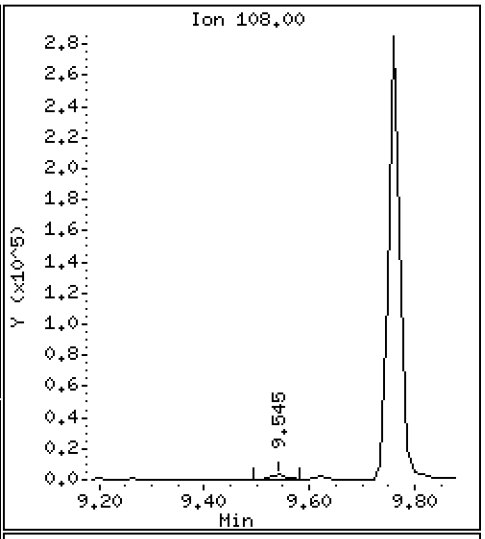
Column phase: ZB-5msi

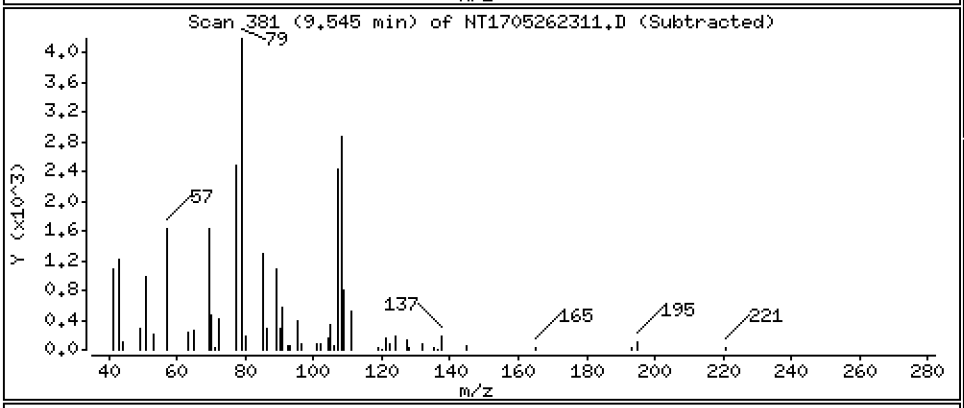
Column diameter: 0.25

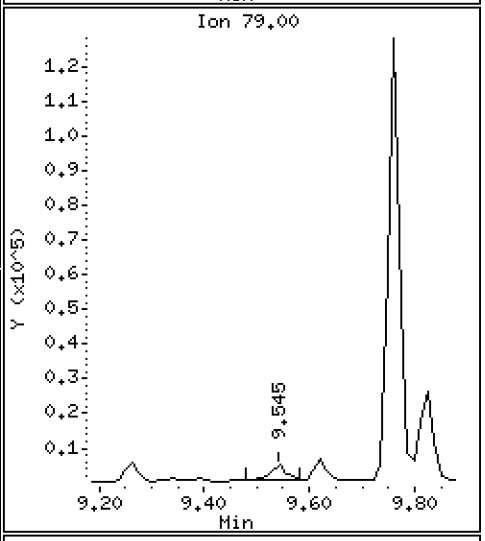
11 Benzyl alcohol

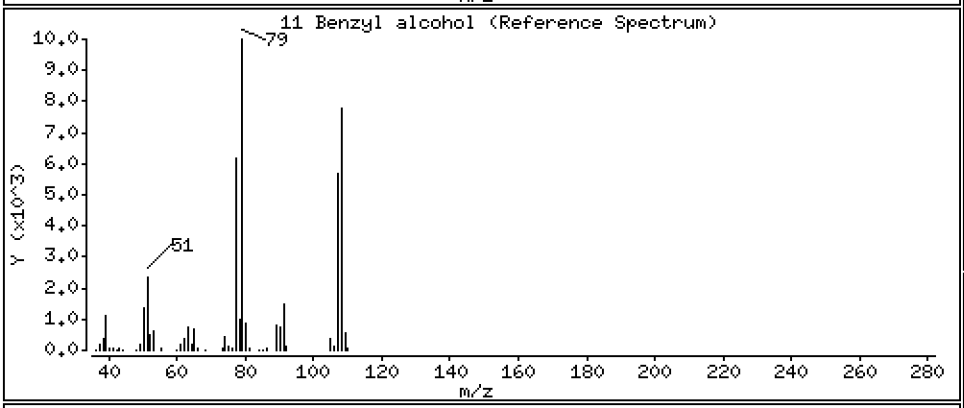
Concentration: 0.08820 ug/mL

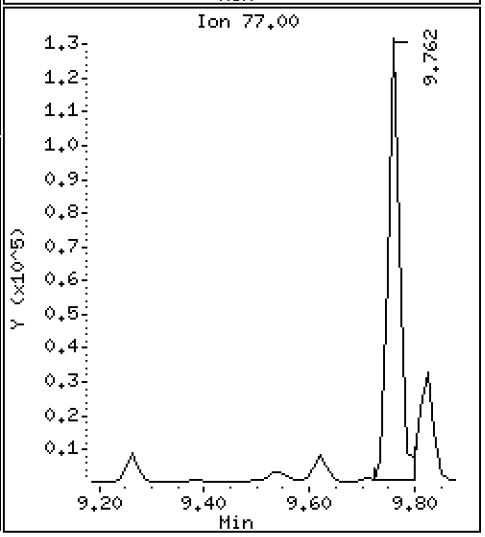


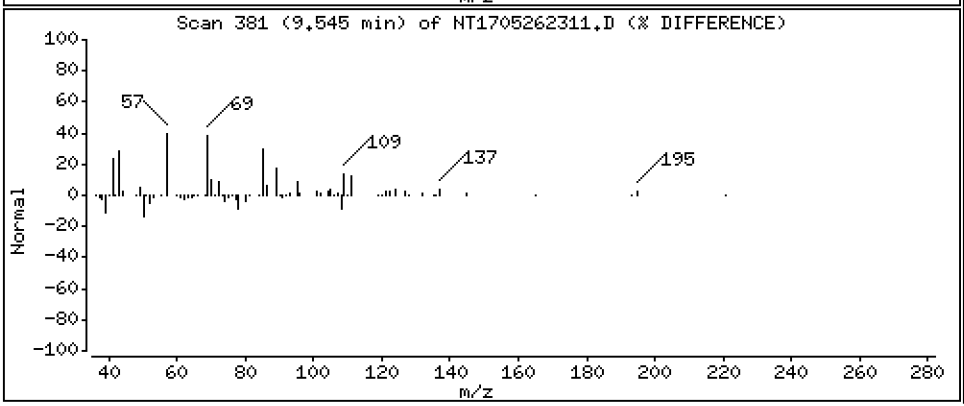












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

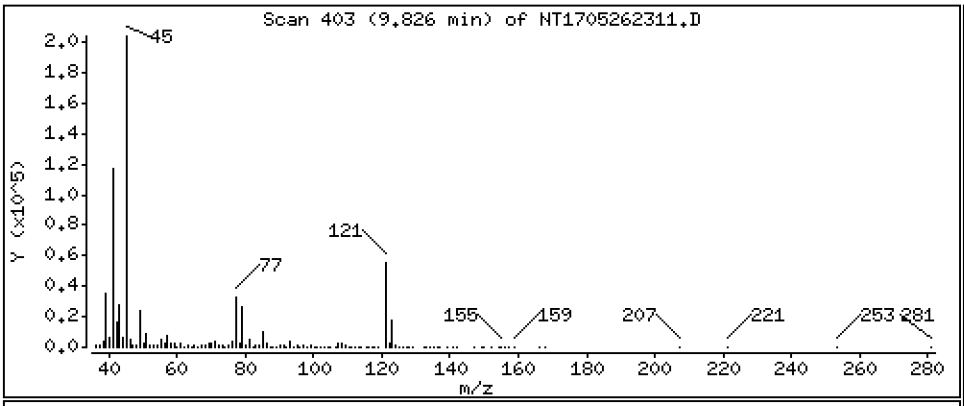
Operator: VTS

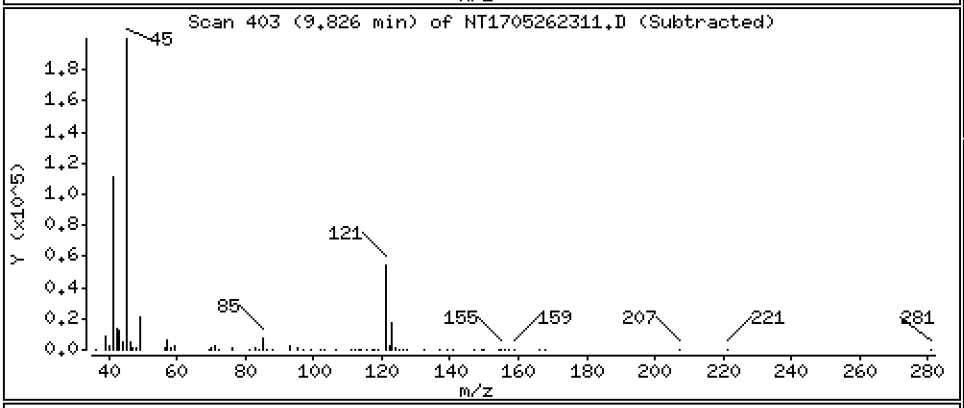
Column phase: ZB-5msi

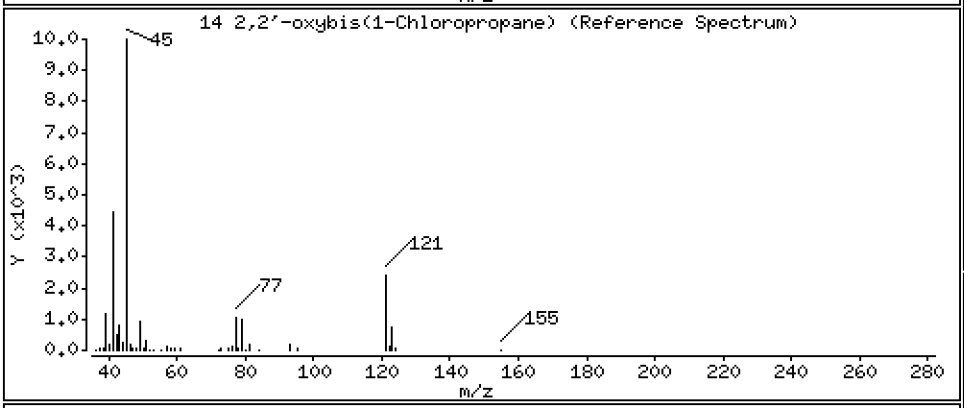
Column diameter: 0.25

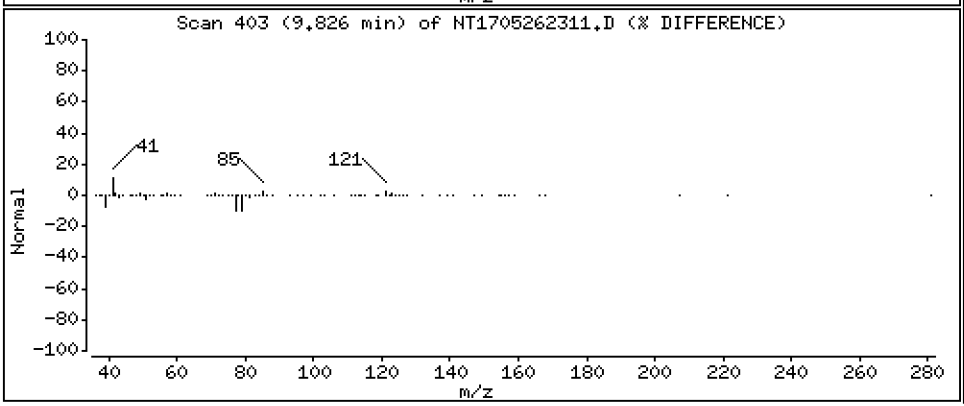
14 2,2'-oxybis(1-Chloropropane)

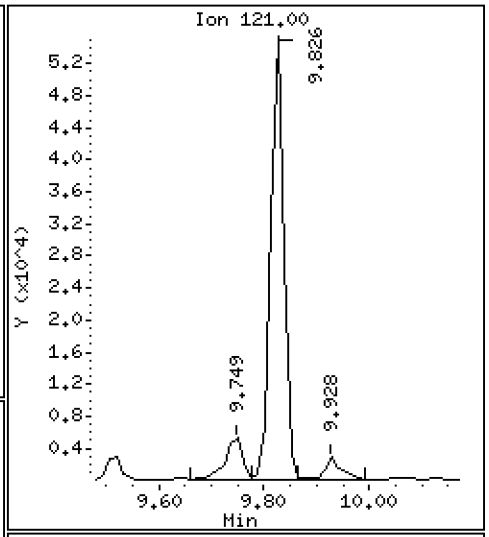
Concentration: 3.122 ug/mL

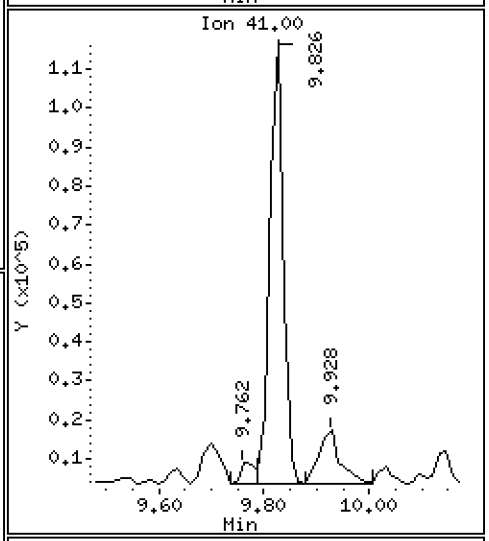


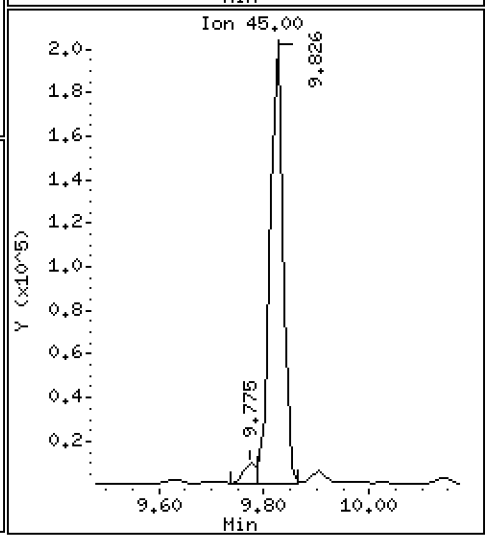












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

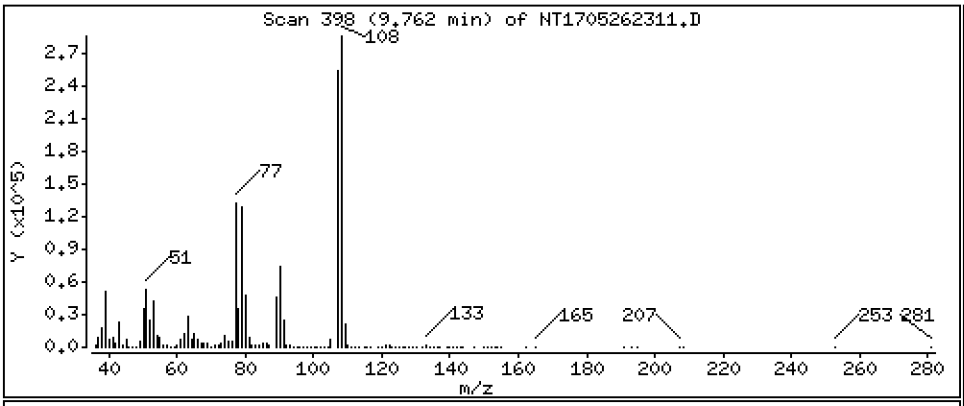
Operator: VTS

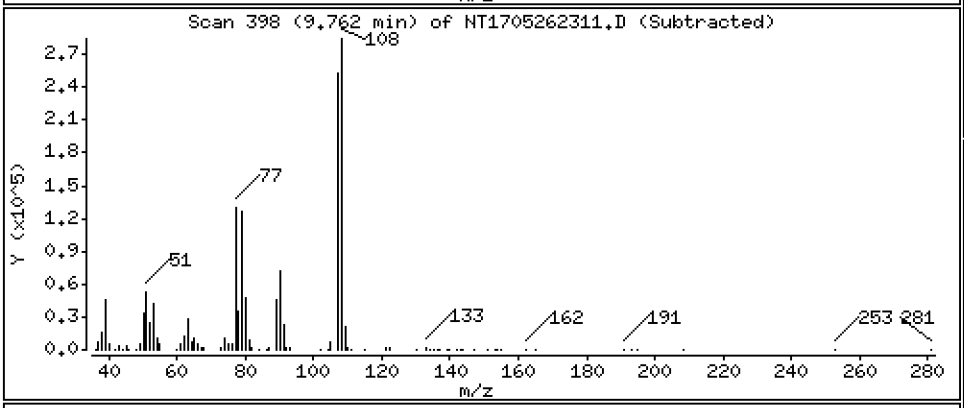
Column phase: ZB-5msi

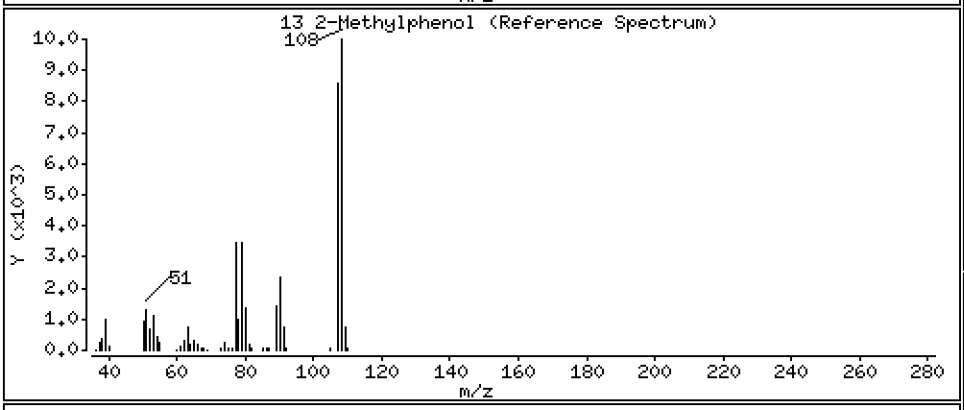
Column diameter: 0.25

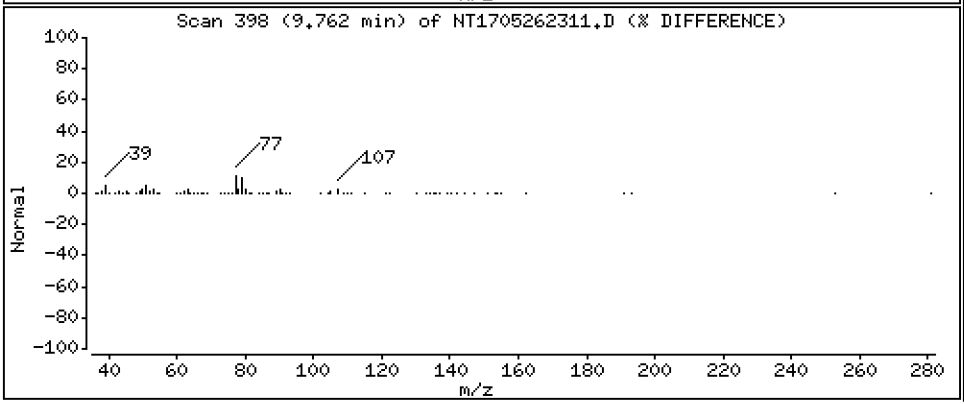
13 2-Methylphenol

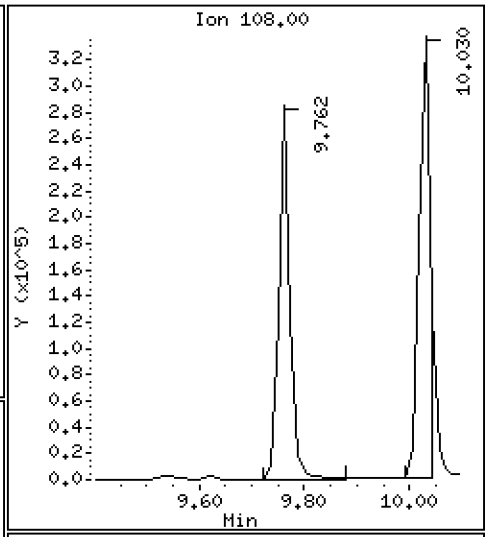
Concentration: 4.241 ug/mL

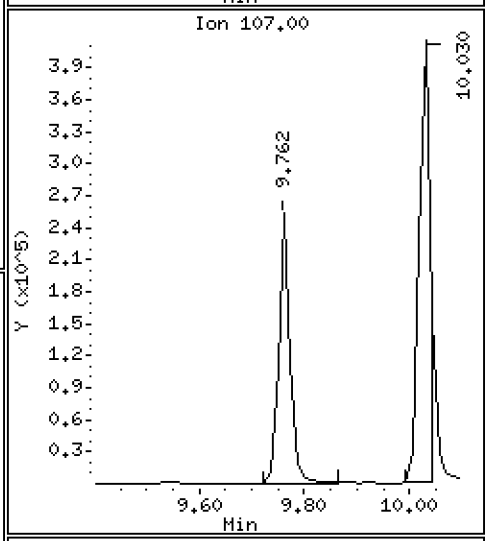


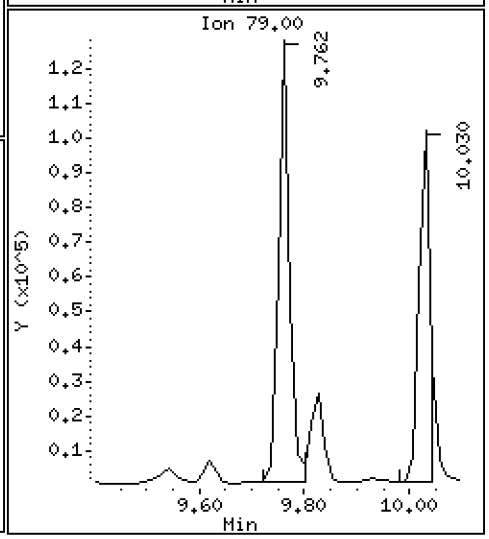












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

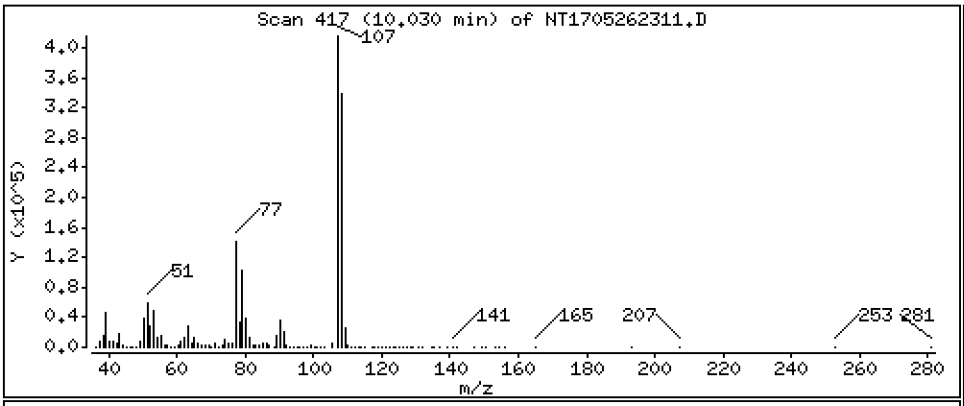
Operator: VTS

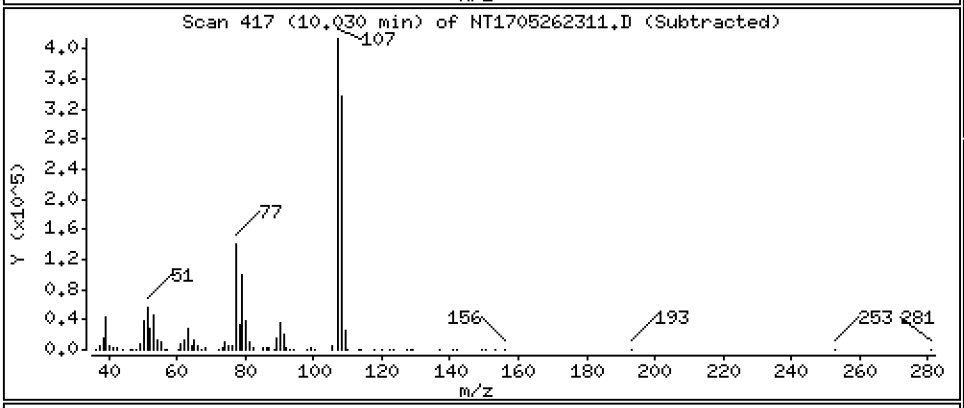
Column phase: ZB-5msi

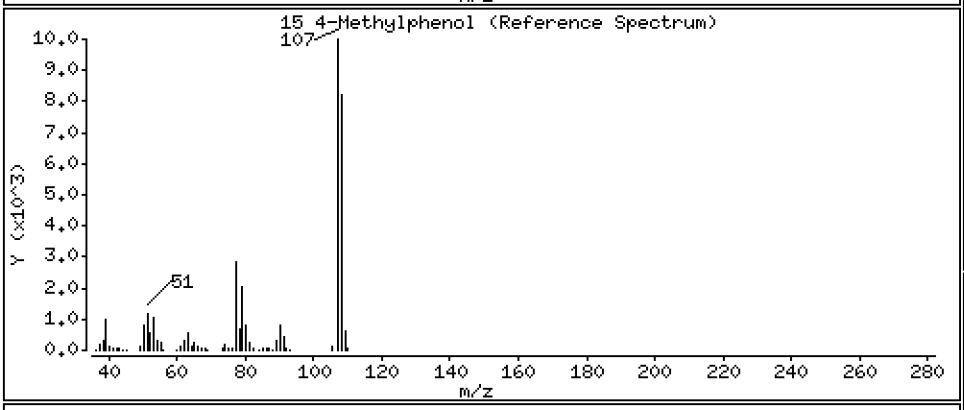
Column diameter: 0.25

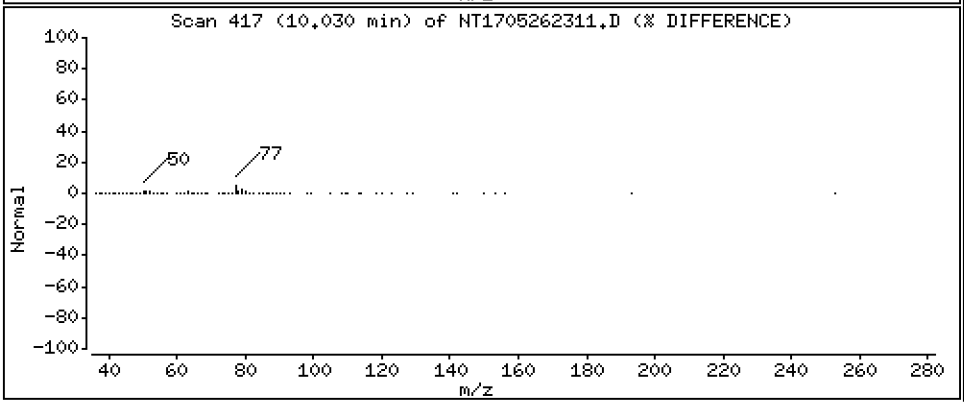
15 4-Methylphenol

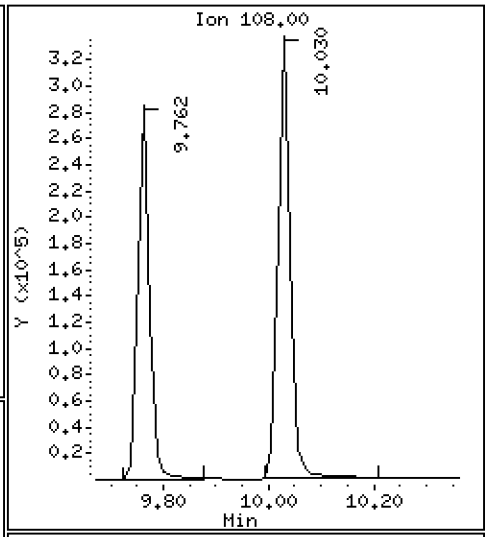
Concentration: 5.221 ug/mL

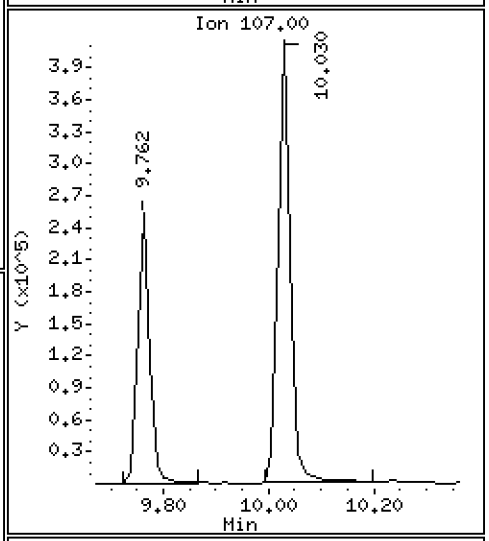


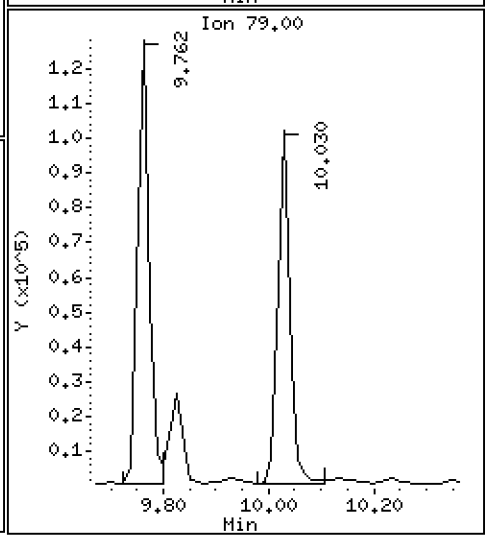












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

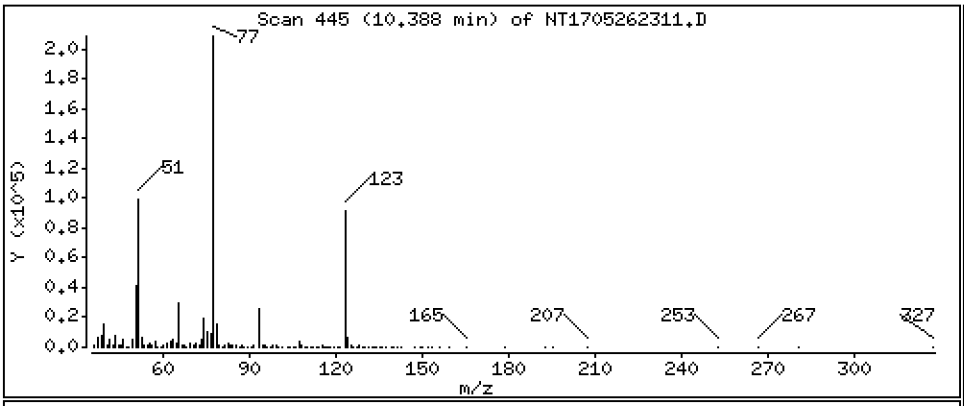
Operator: VTS

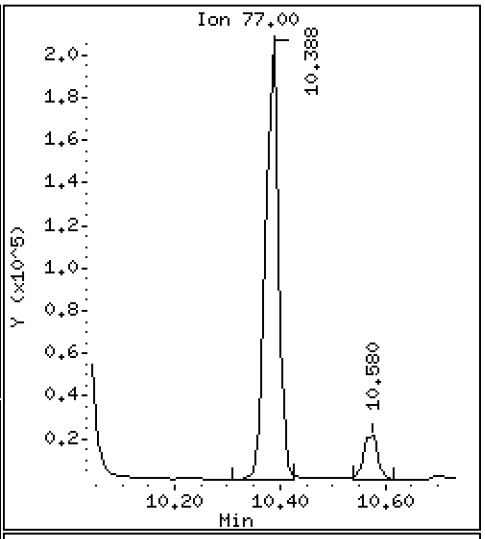
Column phase: ZB-5msi

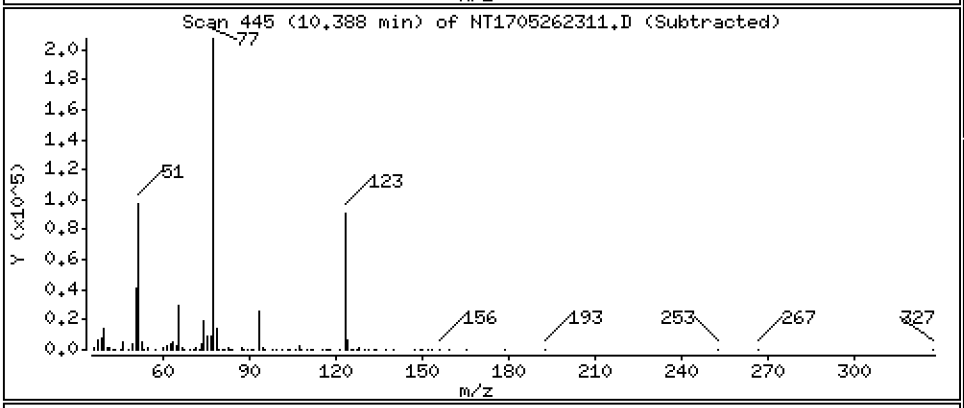
Column diameter: 0.25

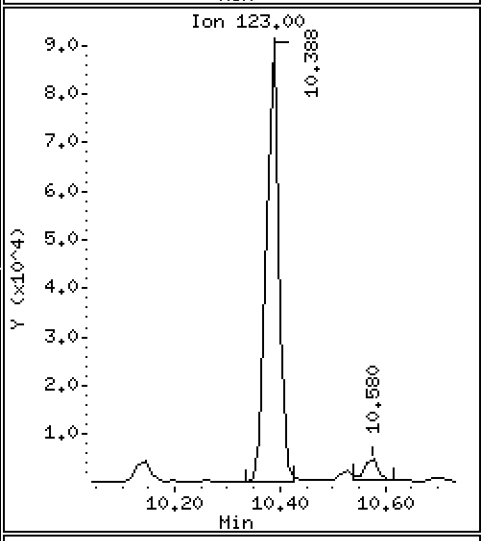
19 Nitrobenzene

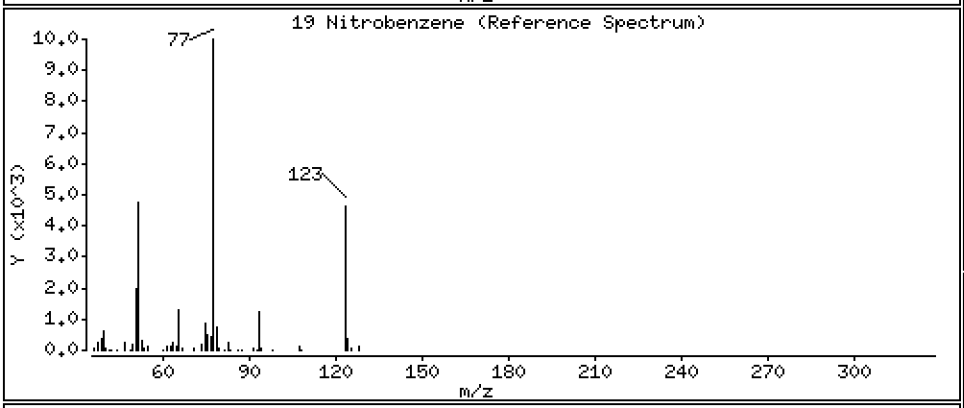
Concentration: 3.021 ug/mL

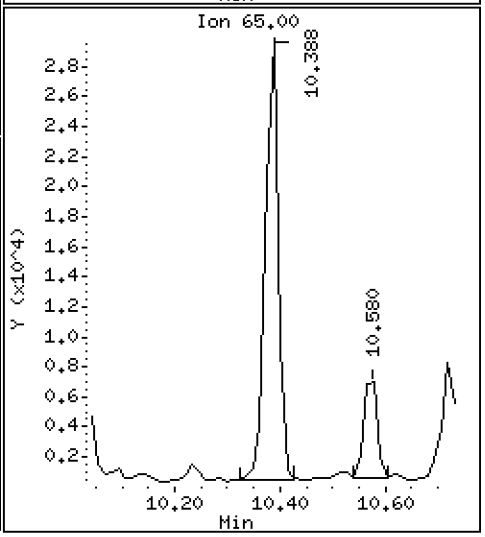


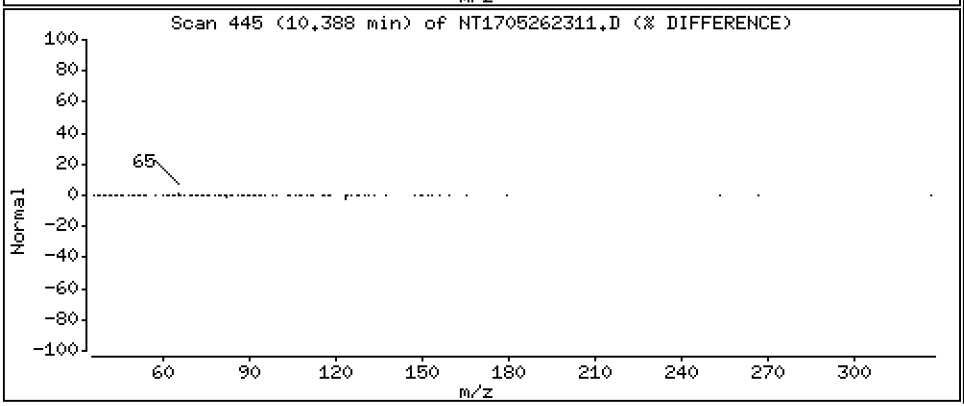












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

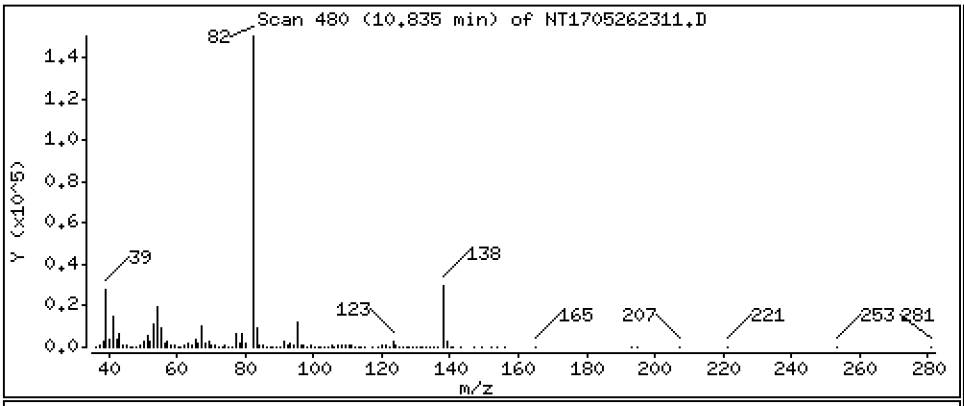
Operator: VTS

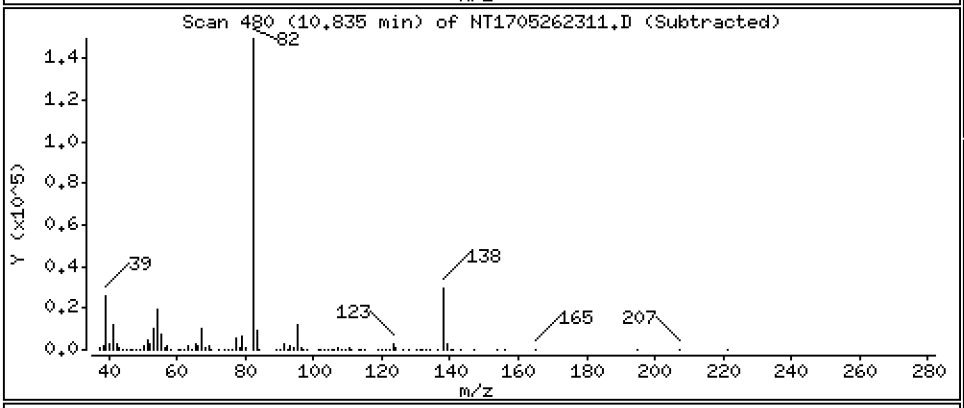
Column phase: ZB-5msi

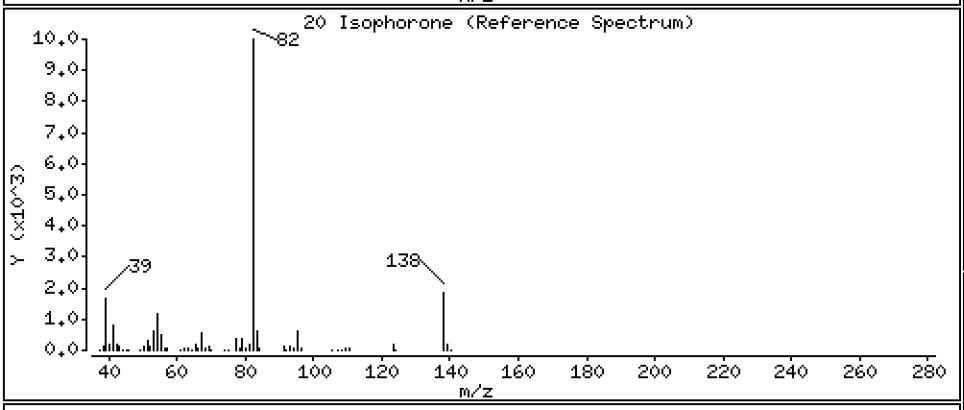
Column diameter: 0.25

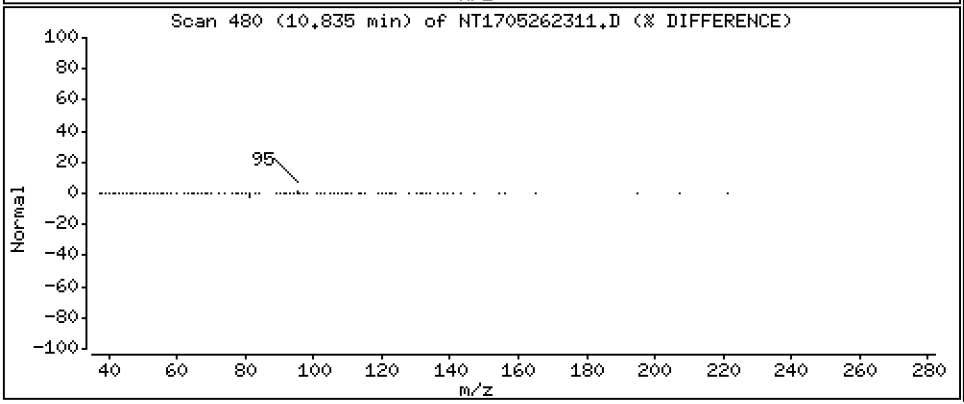
20 Isophorone

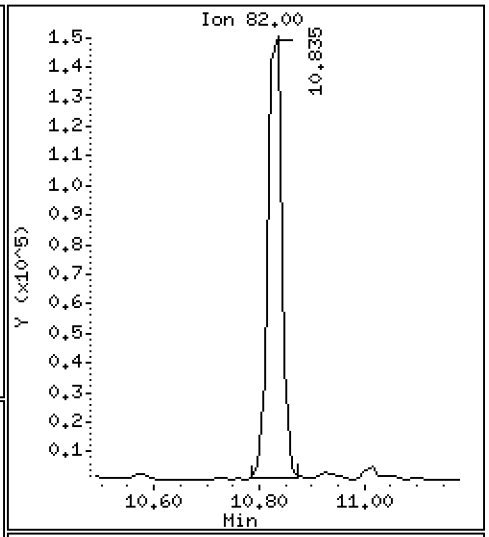
Concentration: 1.826 ug/mL

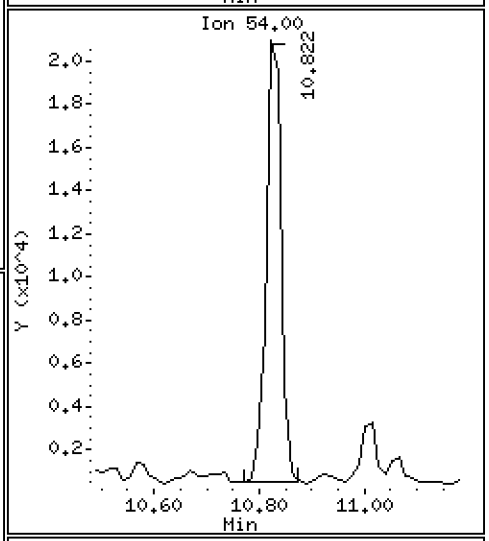


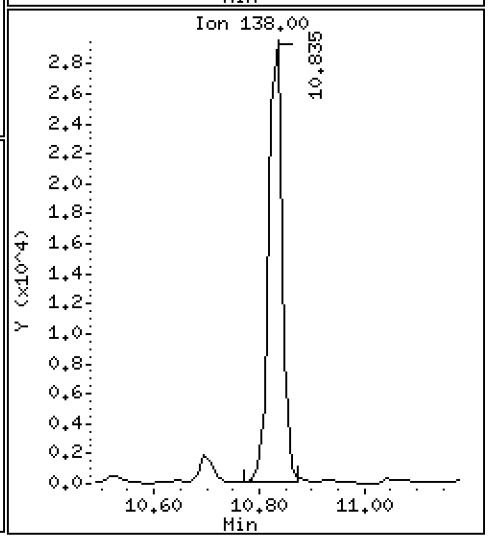












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

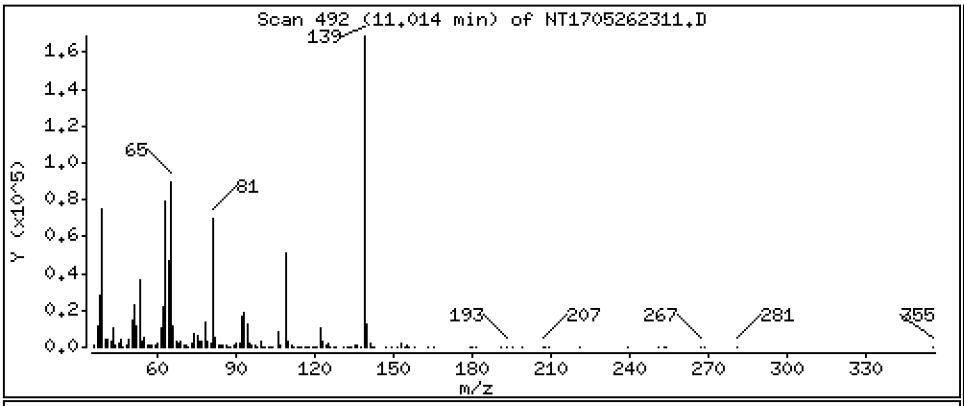
Operator: VTS

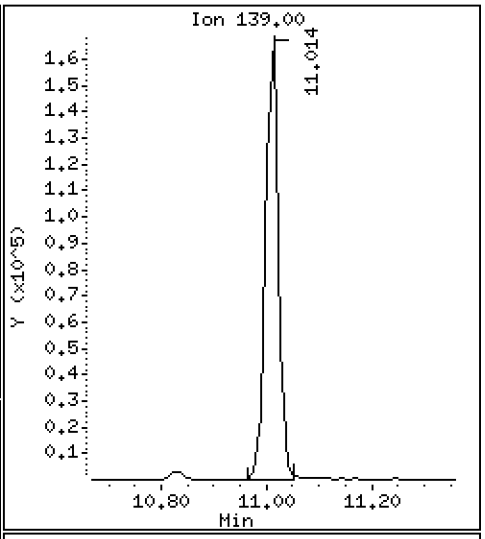
Column phase: ZB-5msi

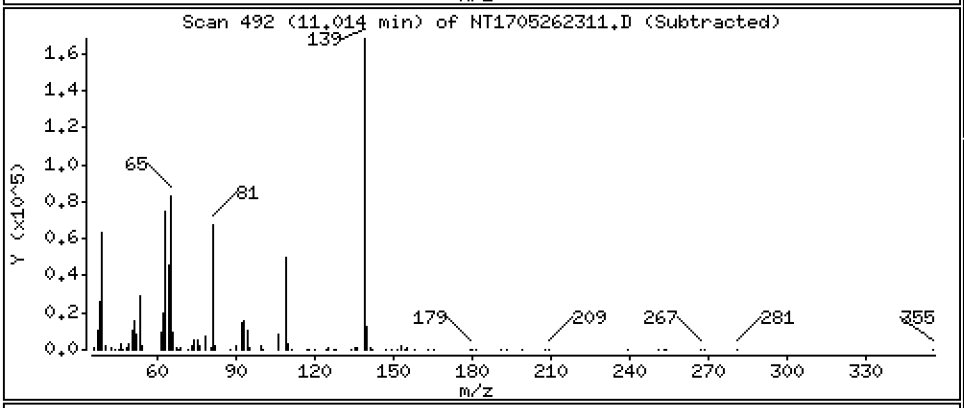
Column diameter: 0.25

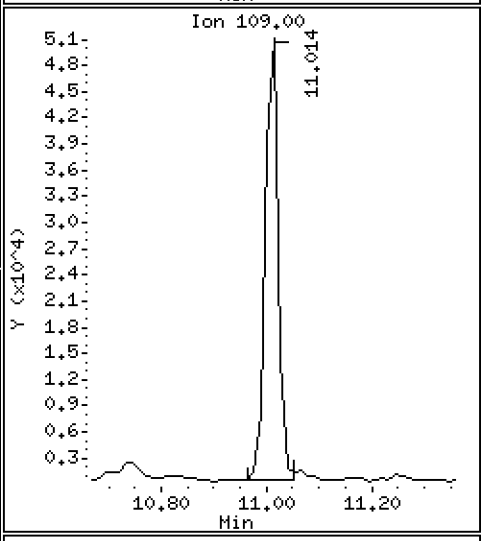
21 2-Nitrophenol

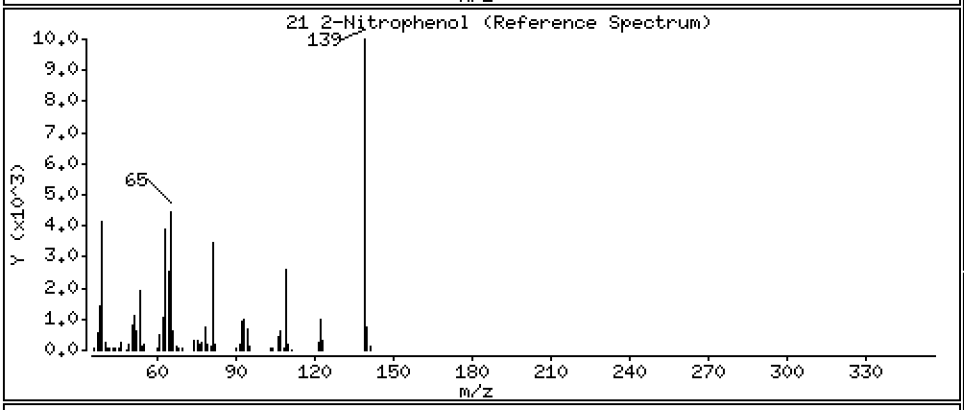
Concentration: 5.246 ug/mL

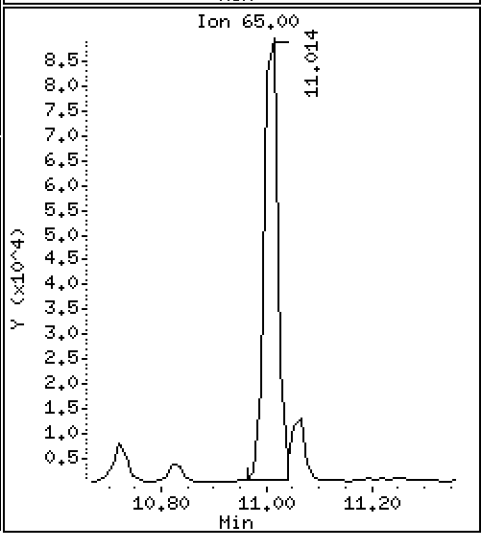


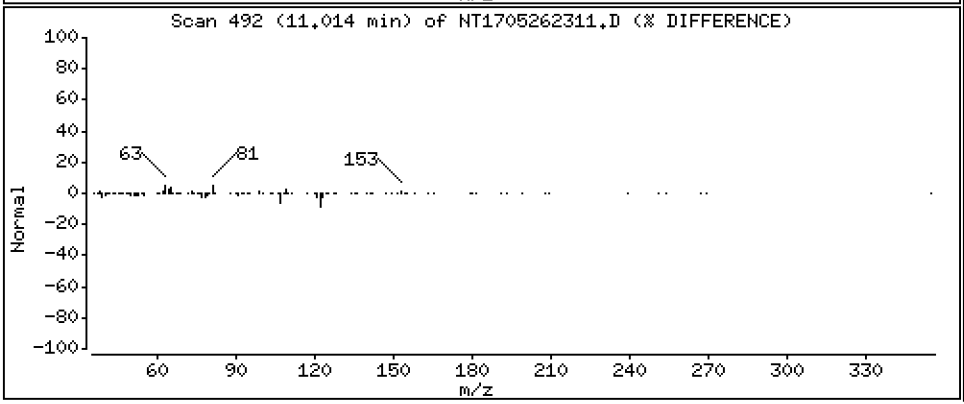












Date : 26-MAY-2023 18:56

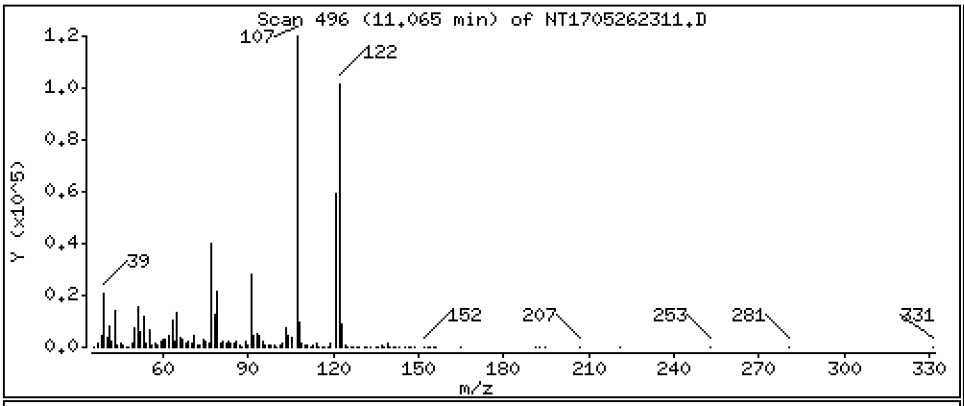
Client ID: Instrument: nt17.i

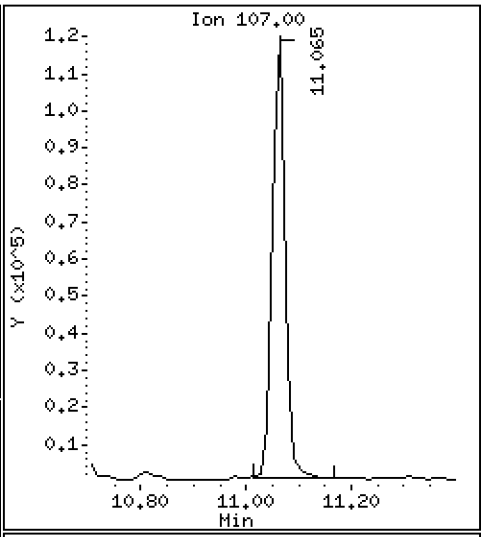
Sample Info: BLD0607-SRM1

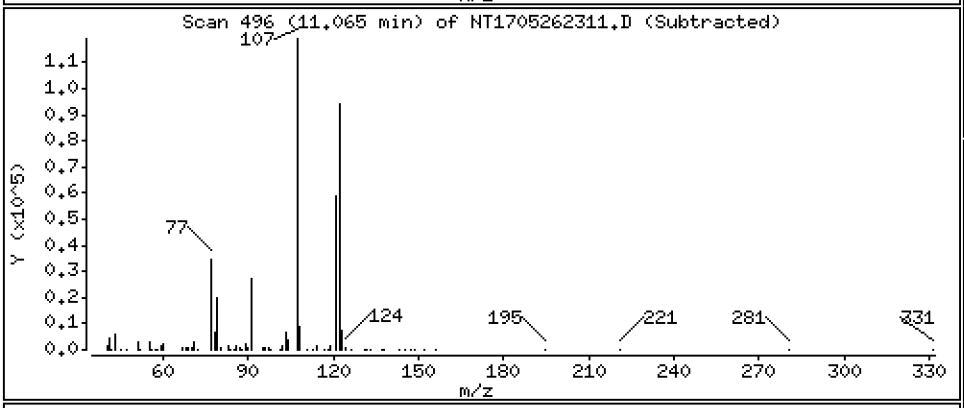
Operator: VTS

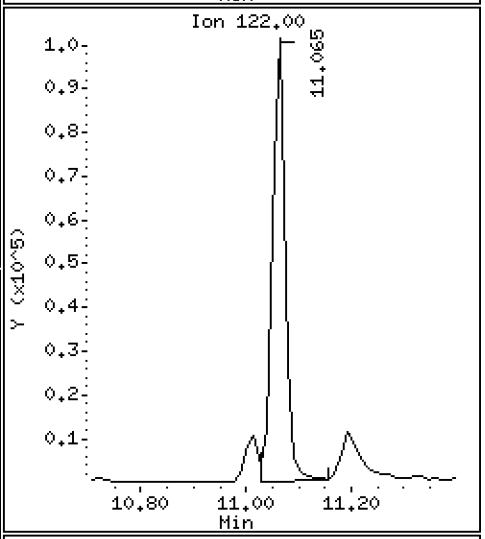
Column phase: ZB-5msi Column diameter: 0.25

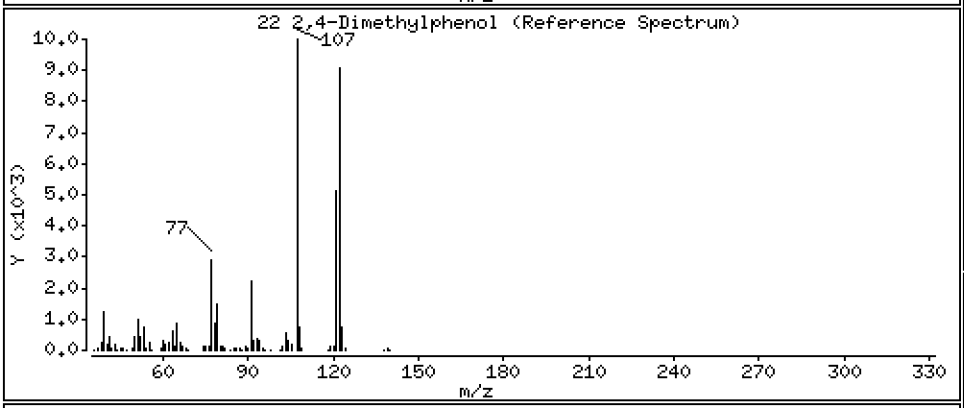
22 2,4-Dimethylphenol Concentration: 1.930 ug/mL

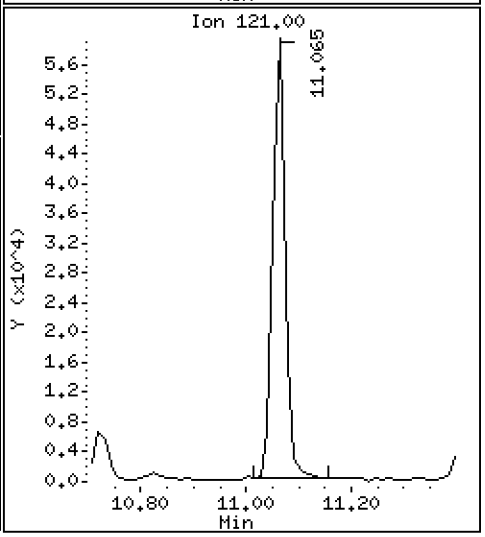


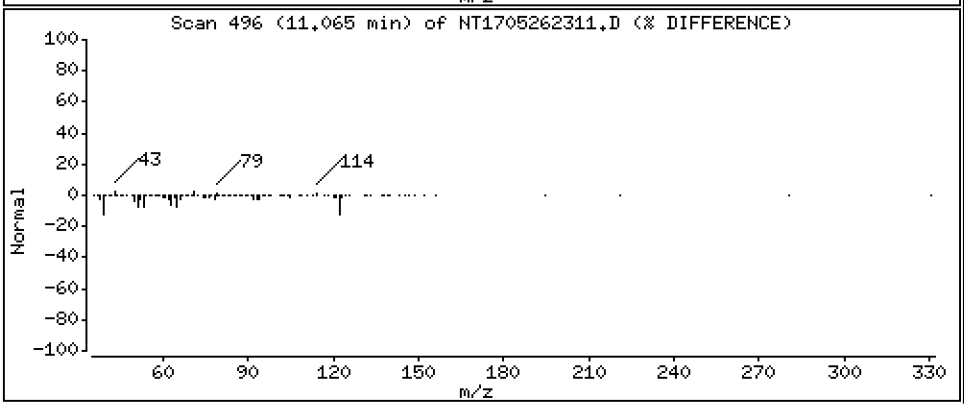












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

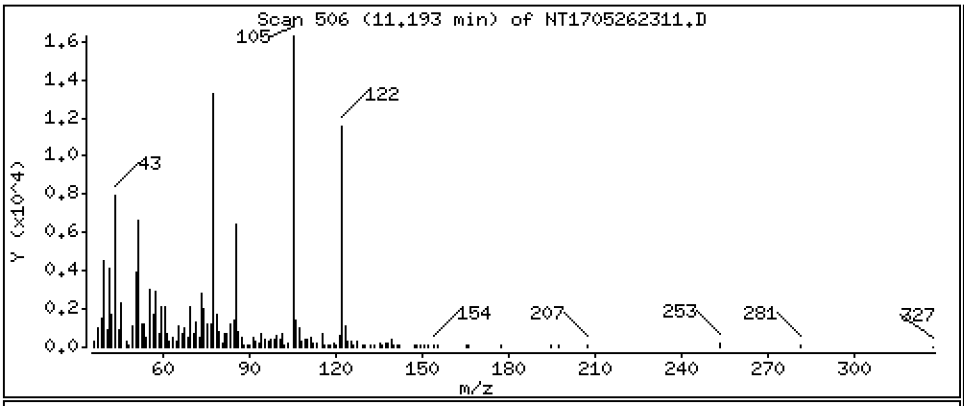
Operator: VTS

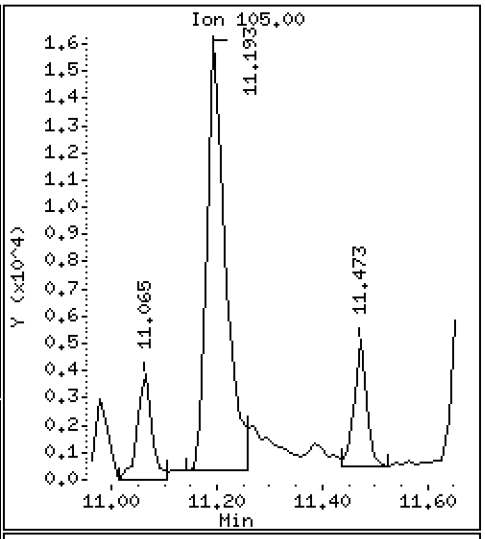
Column phase: ZB-5msi

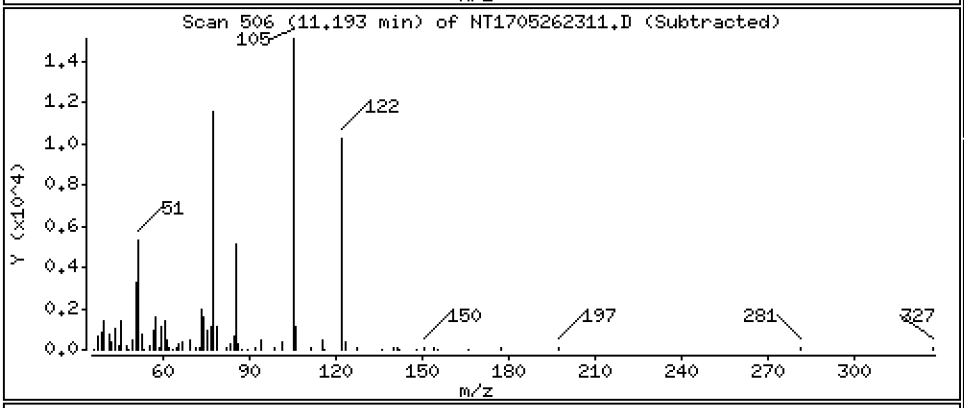
Column diameter: 0.25

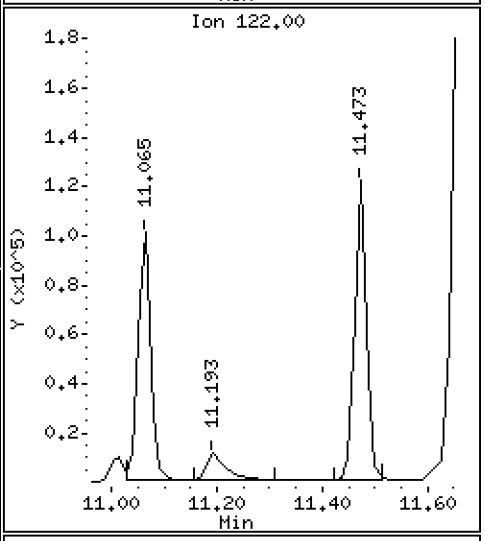
24 Benzoic acid

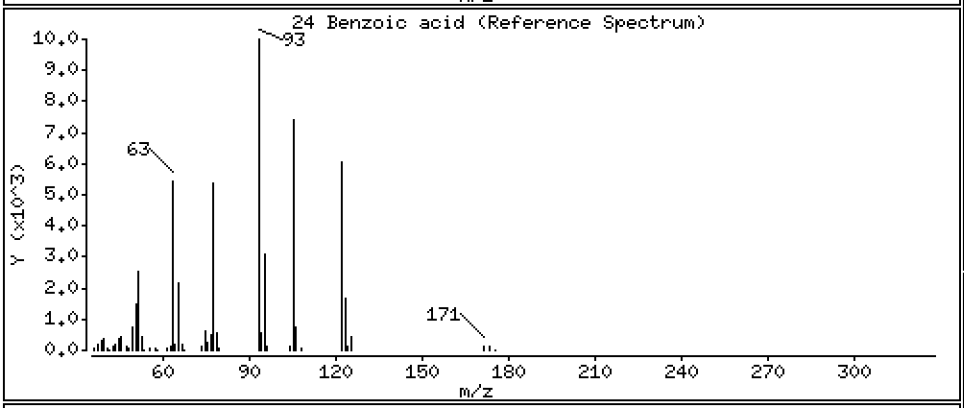
Concentration: 0.5509 ug/mL

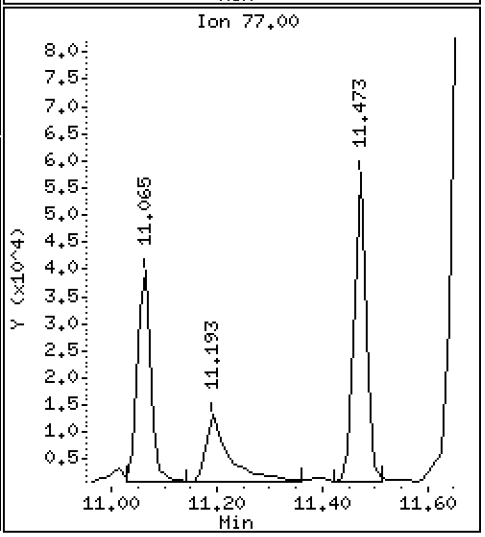


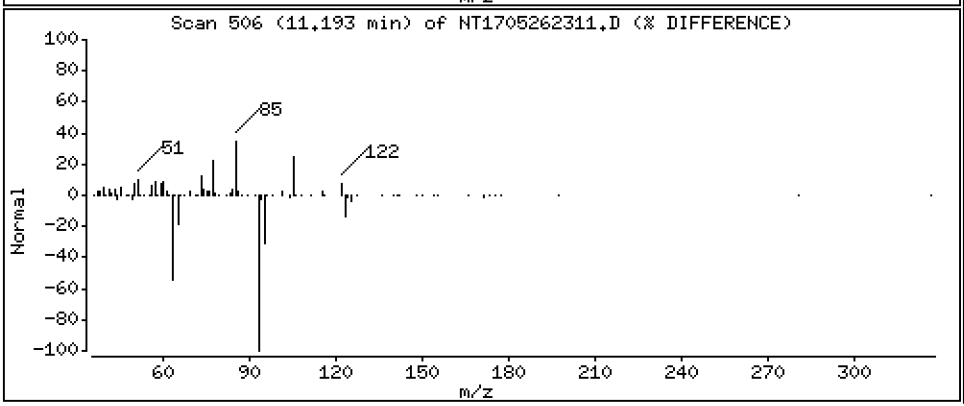












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

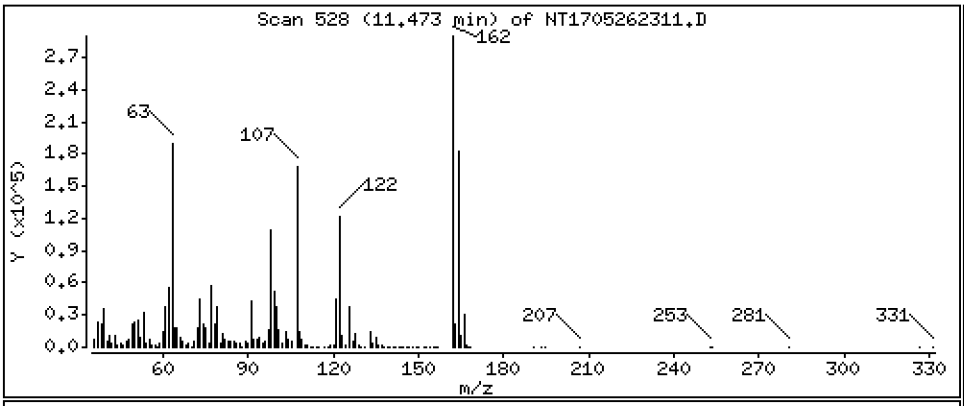
Operator: VTS

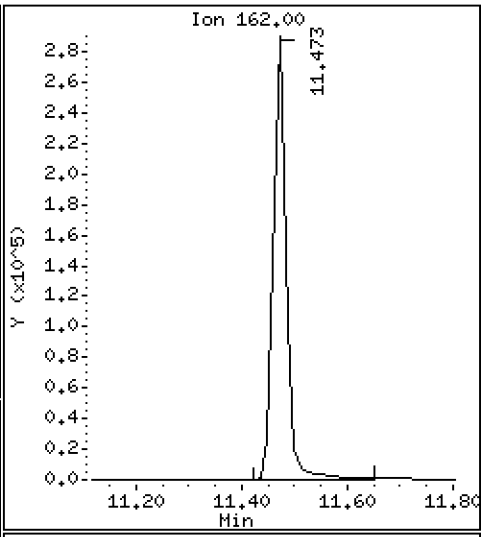
Column phase: ZB-5msi

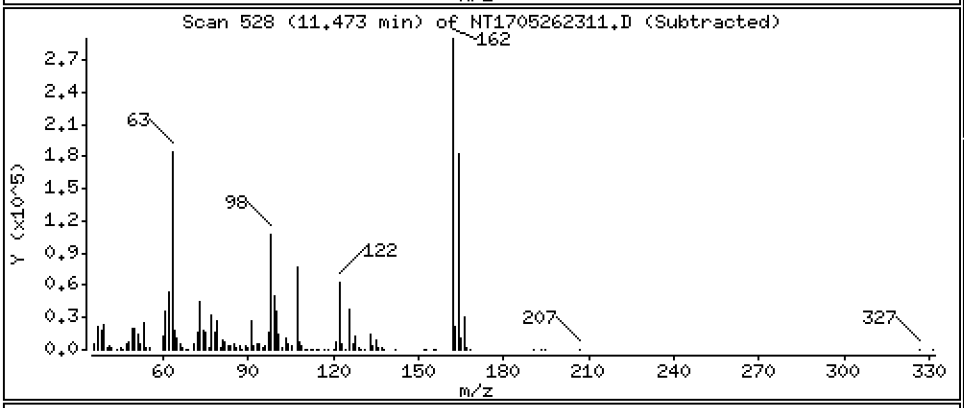
Column diameter: 0.25

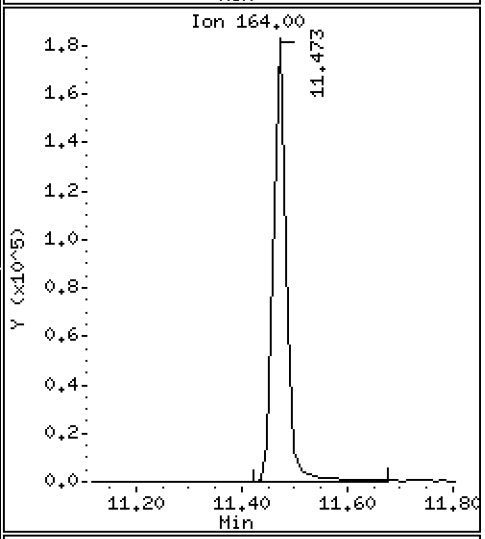
25 2,4-Dichlorophenol

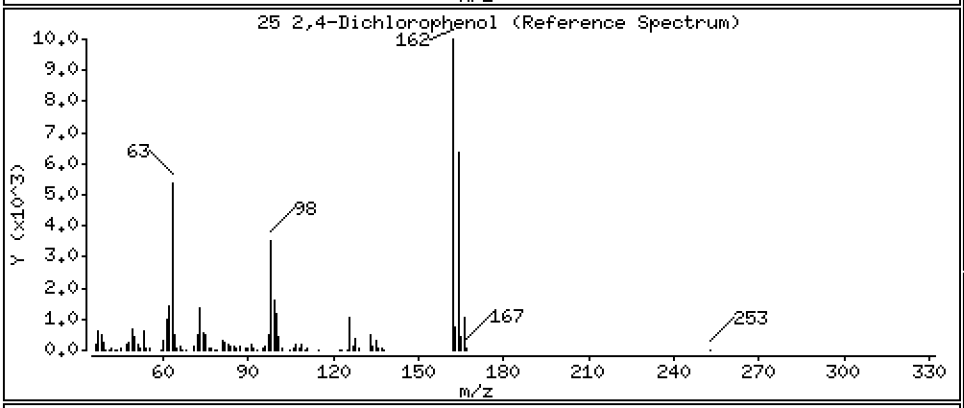
Concentration: 6.588 ug/mL

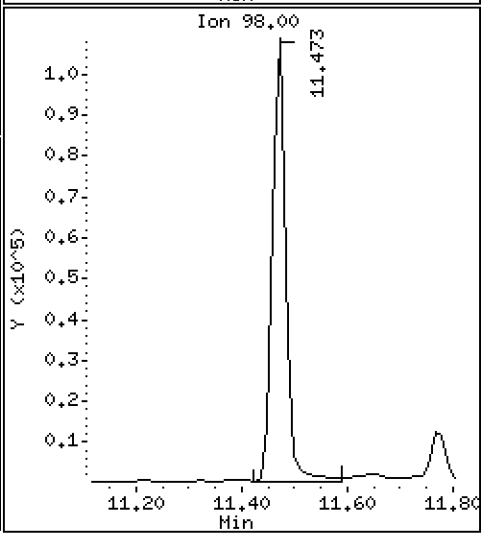


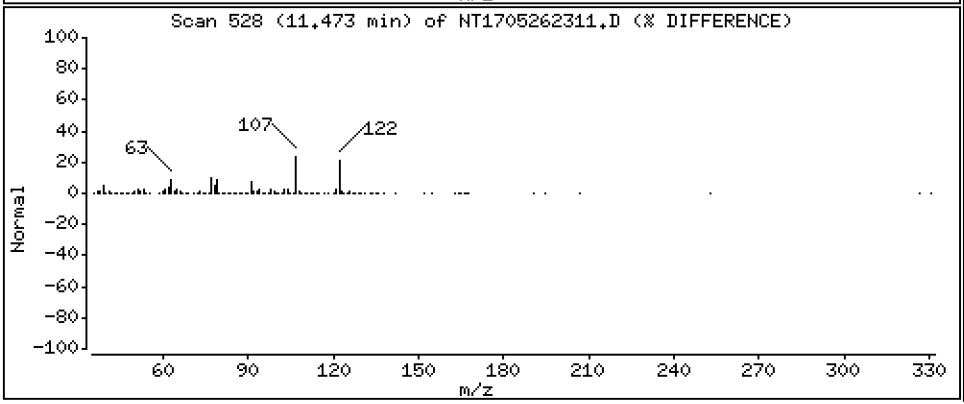












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

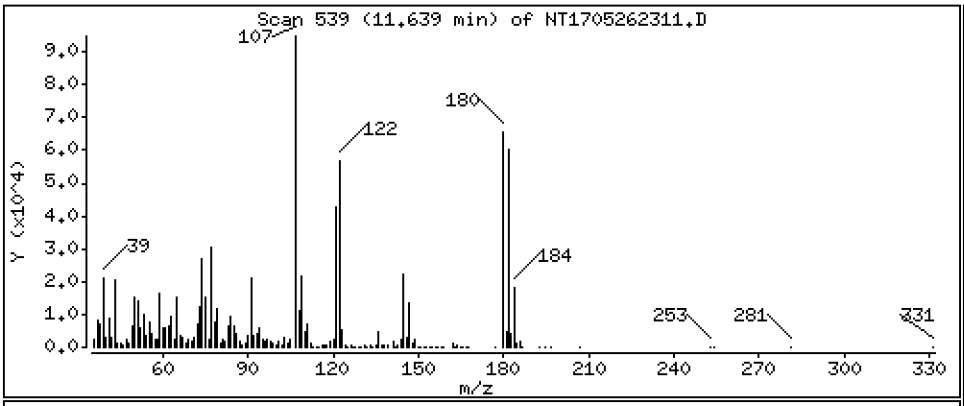
Operator: VTS

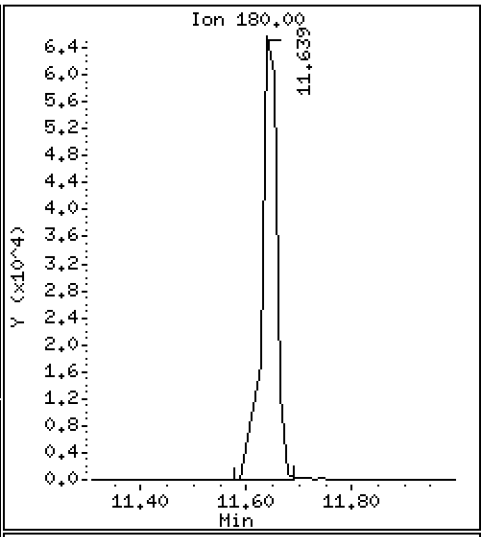
Column phase: ZB-5msi

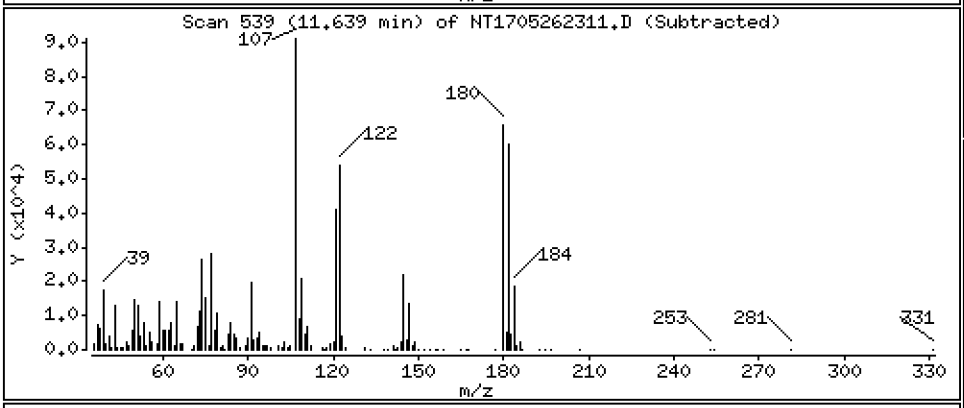
Column diameter: 0.25

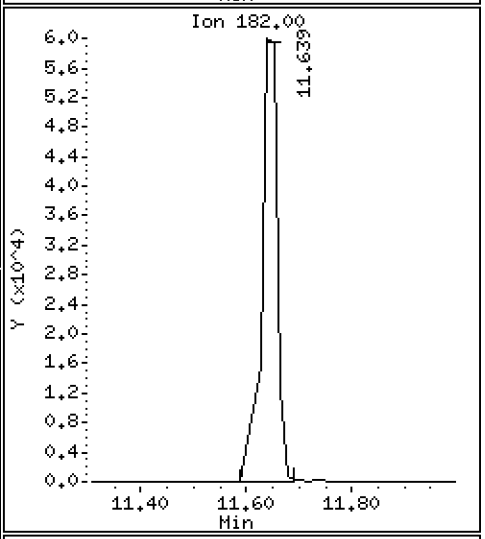
26 1,2,4-Trichlorobenzene

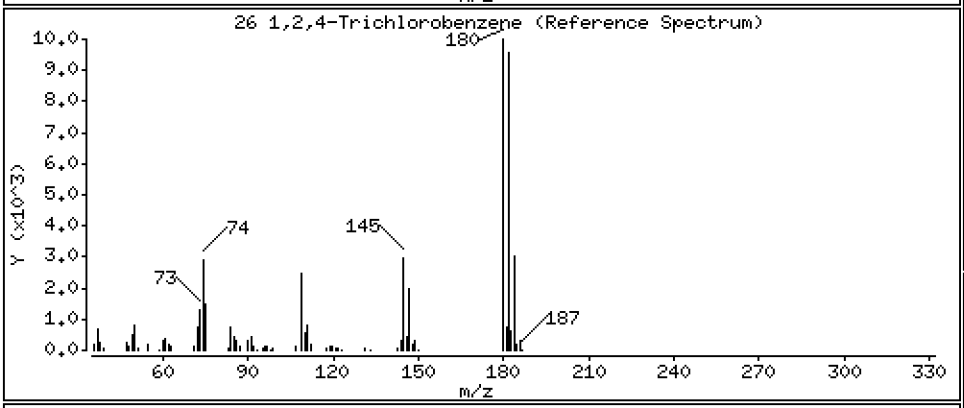
Concentration: 1.674 ug/mL

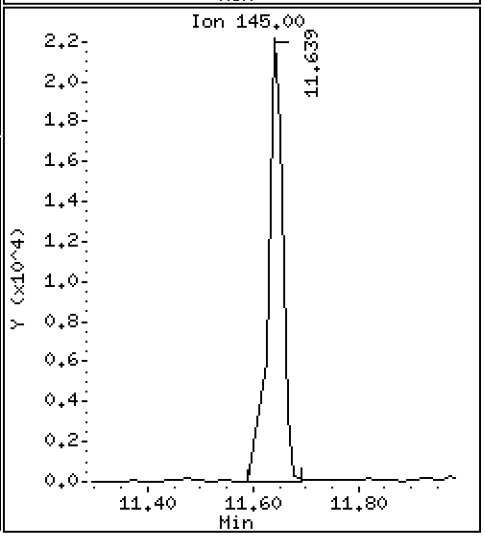


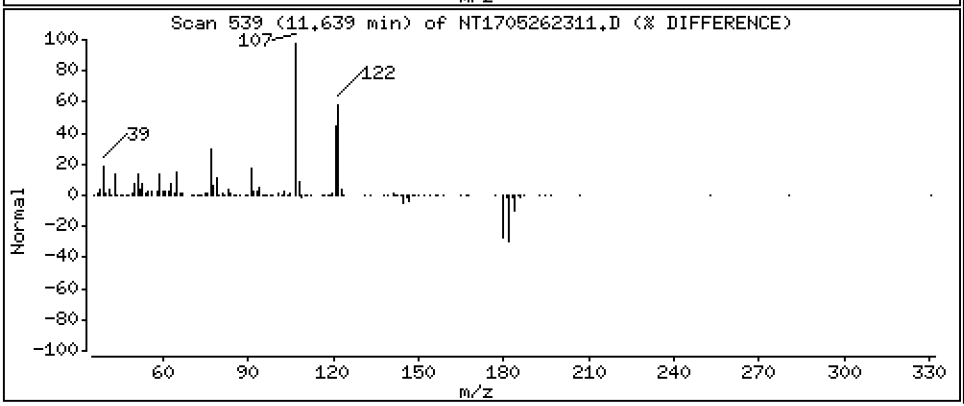












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

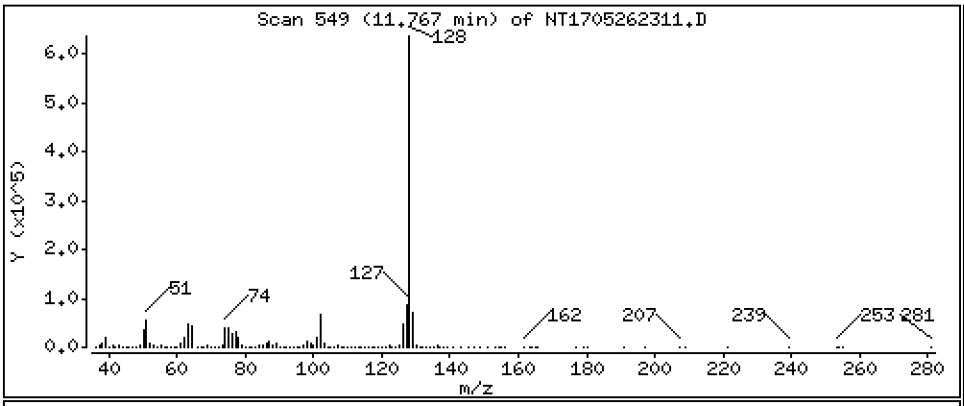
Operator: VTS

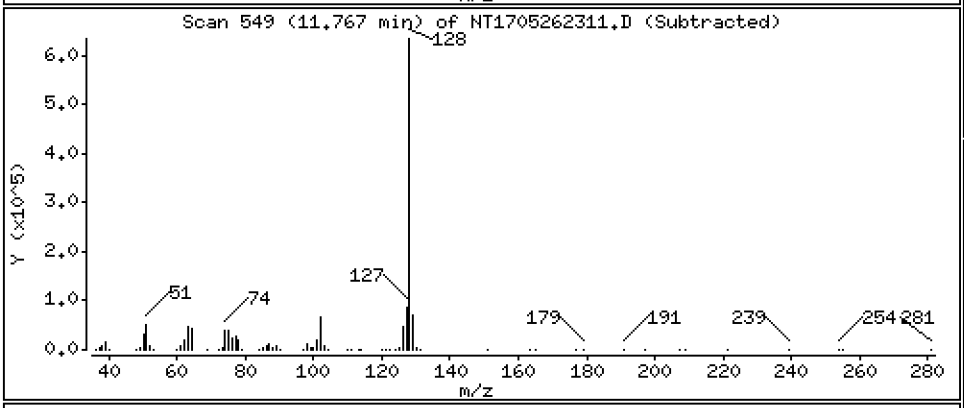
Column phase: ZB-5msi

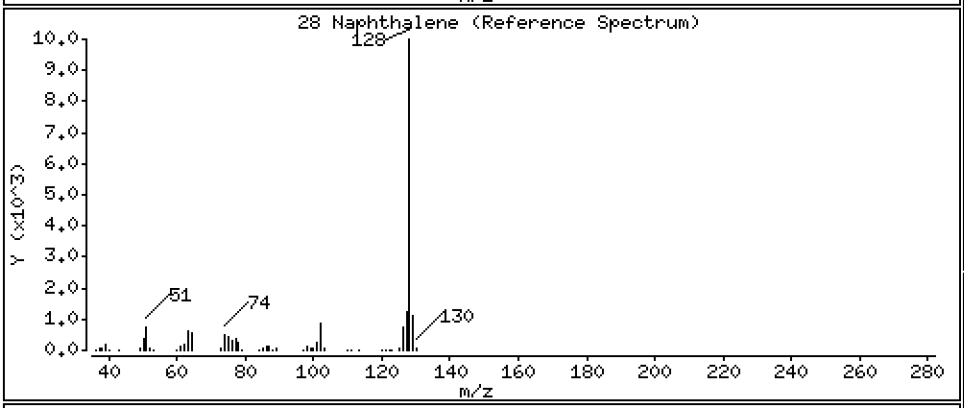
Column diameter: 0.25

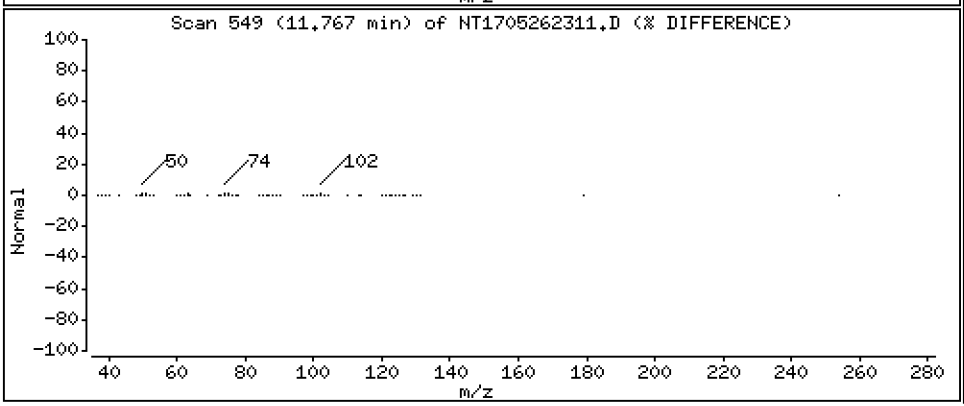
28 Naphthalene

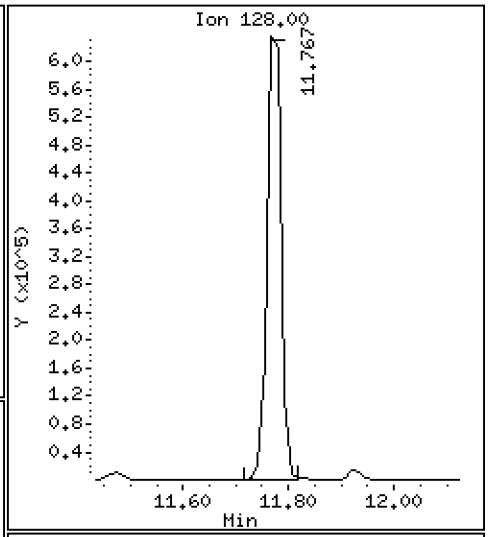
Concentration: 4.205 ug/mL

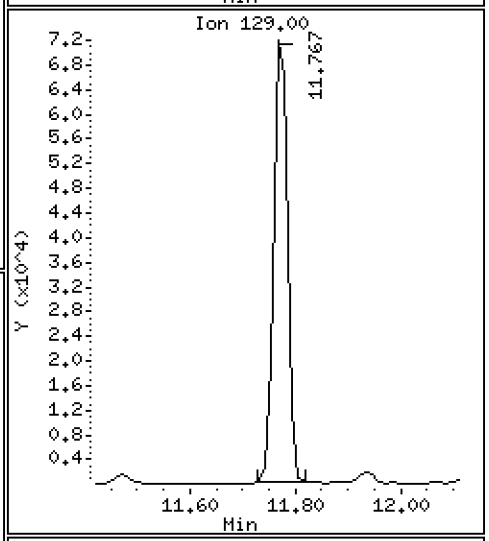


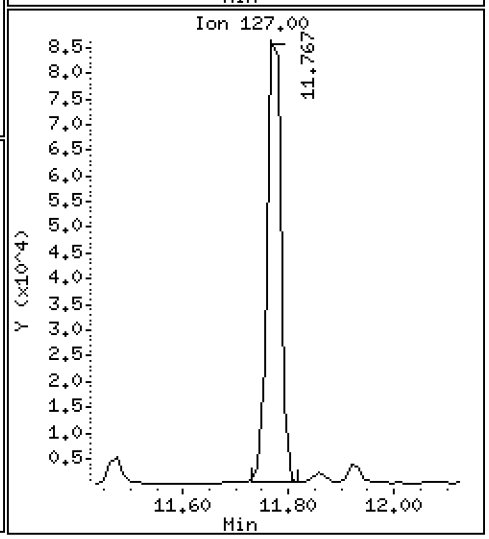












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

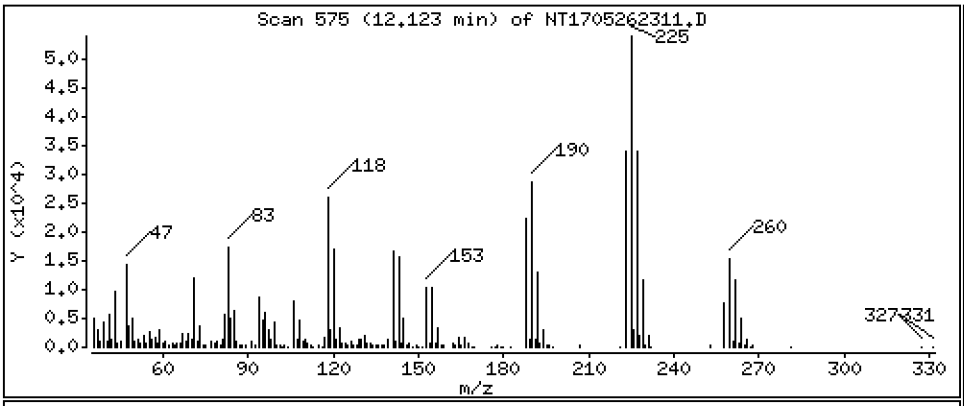
Operator: VTS

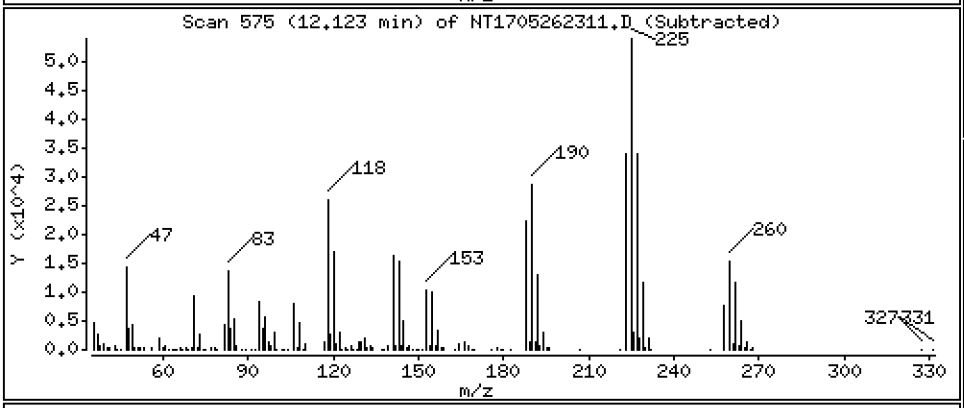
Column phase: ZB-5msi

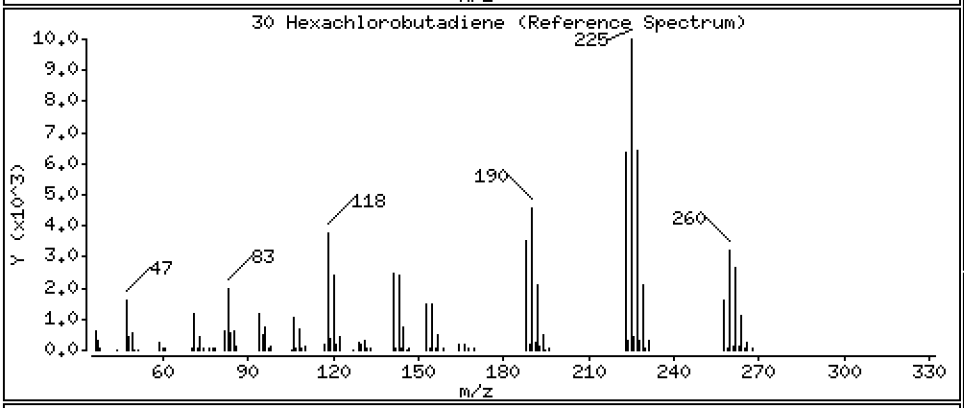
Column diameter: 0.25

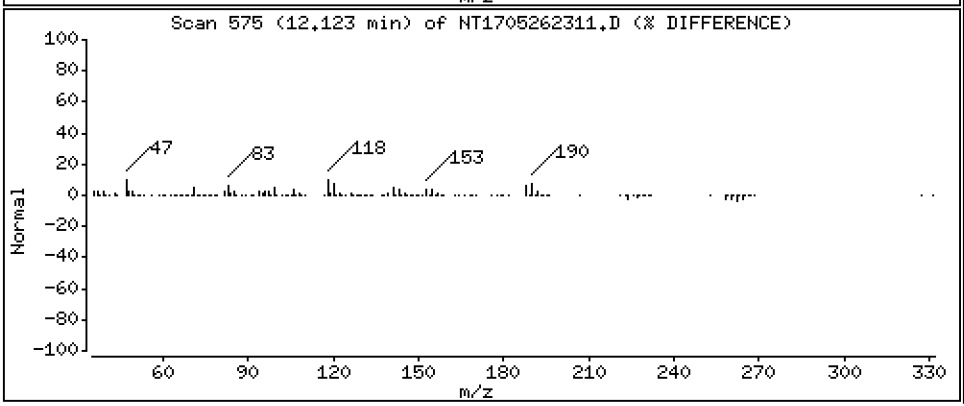
30 Hexachlorobutadiene

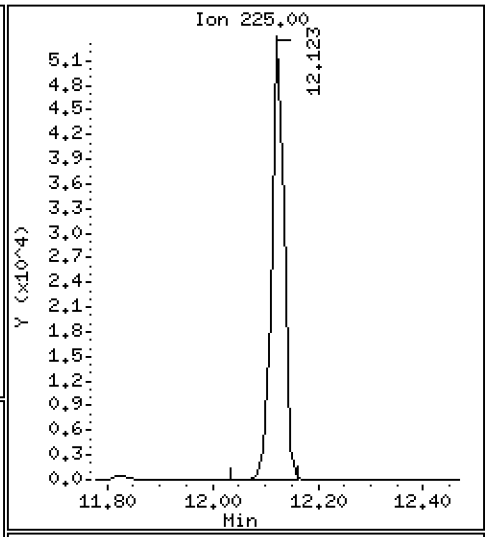
Concentration: 2.415 ug/mL

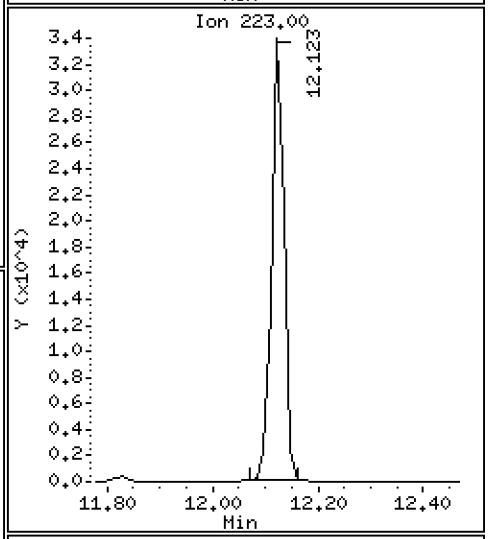


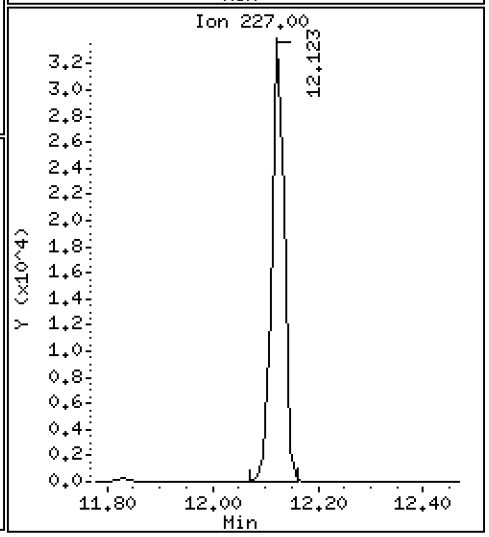












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

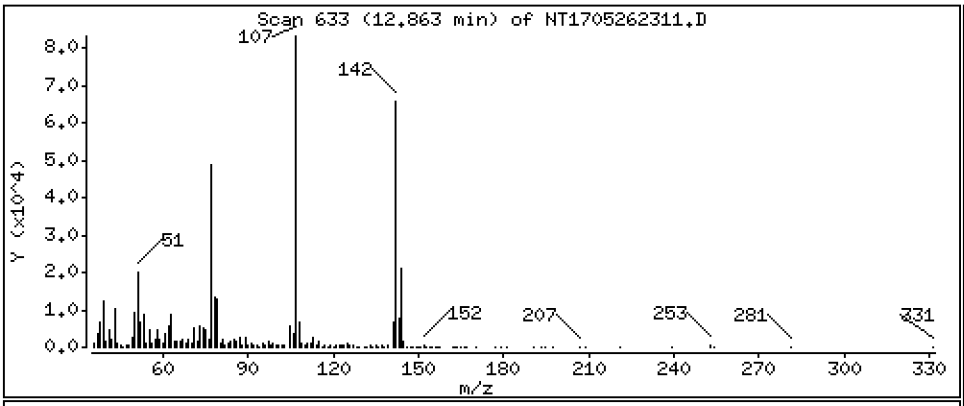
Operator: VTS

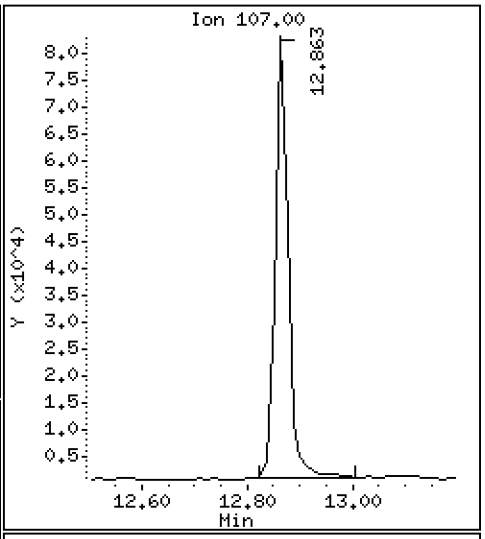
Column phase: ZB-5msi

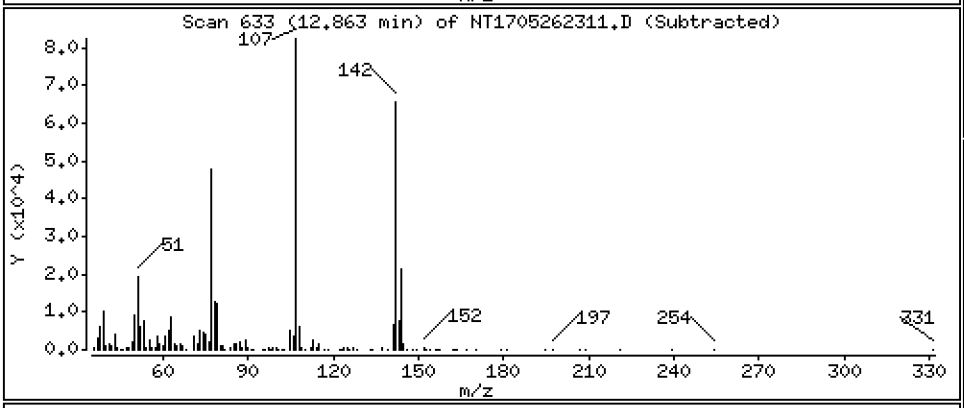
Column diameter: 0.25

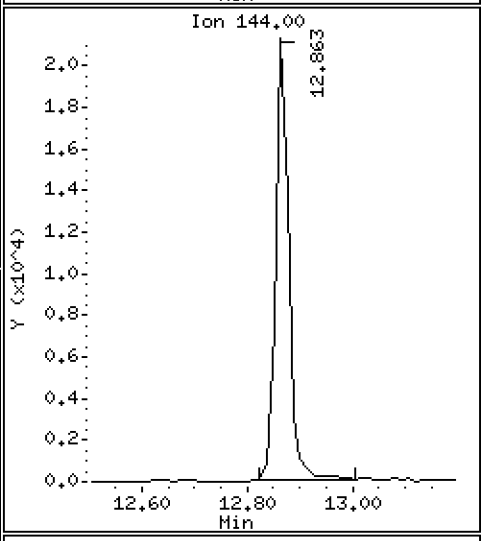
31 4-Chloro-3-methylphenol

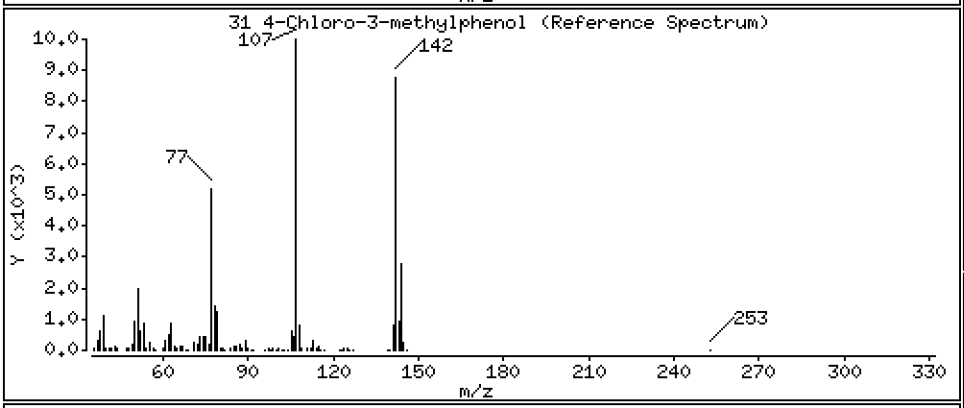
Concentration: 1.546 ug/mL

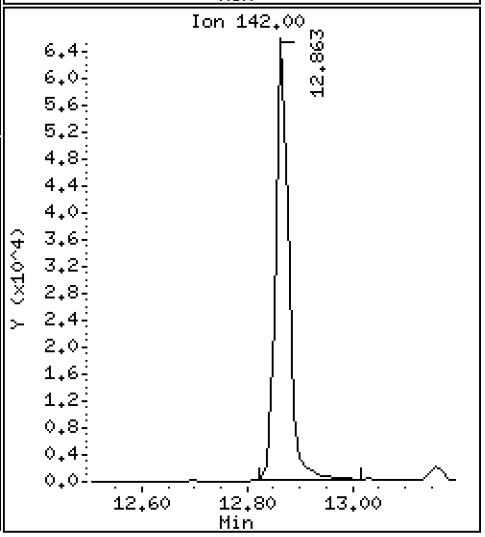


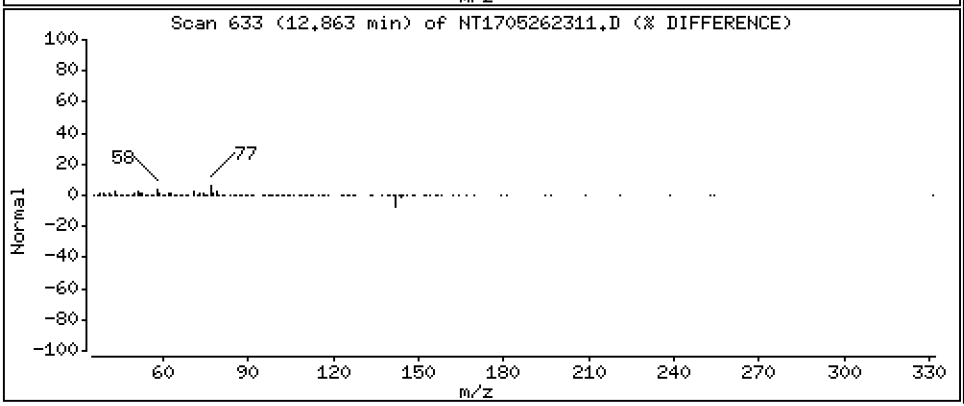












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

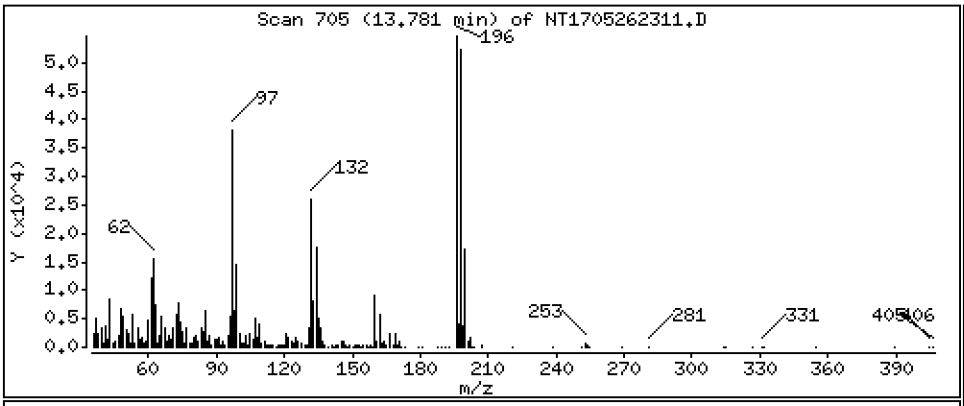
Operator: VTS

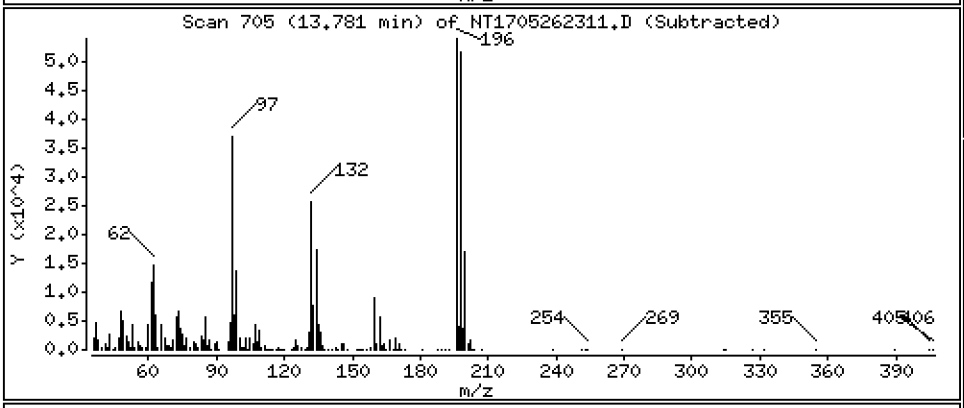
Column phase: ZB-5msi

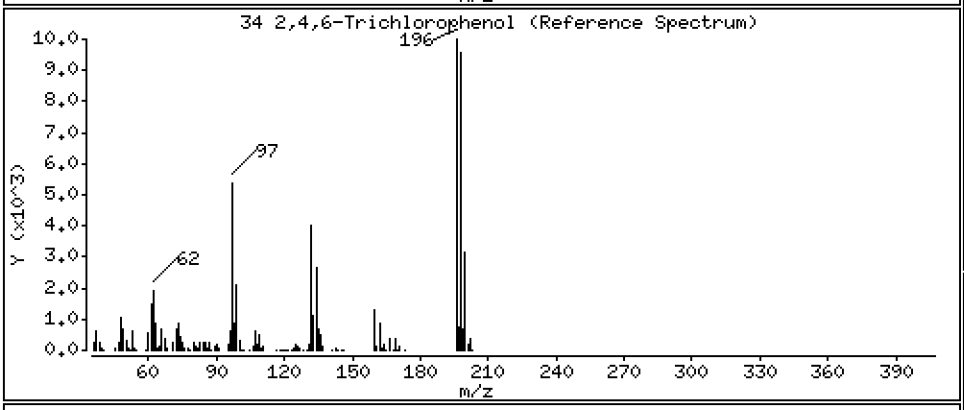
Column diameter: 0.25

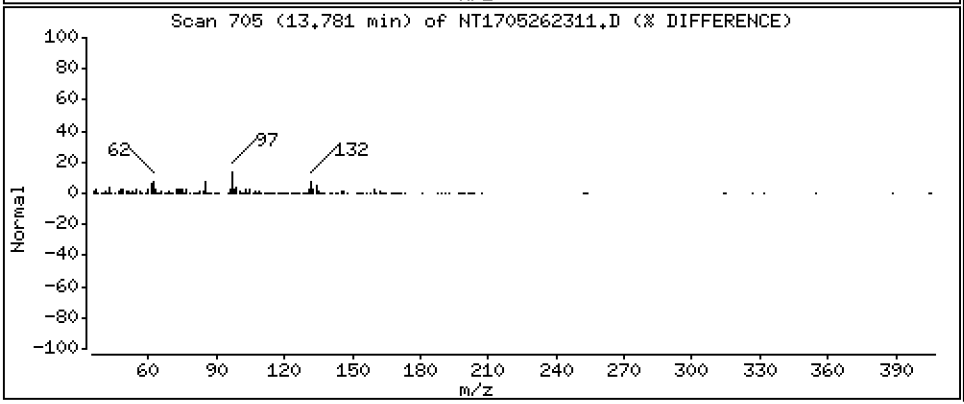
34 2,4,6-Trichlorophenol

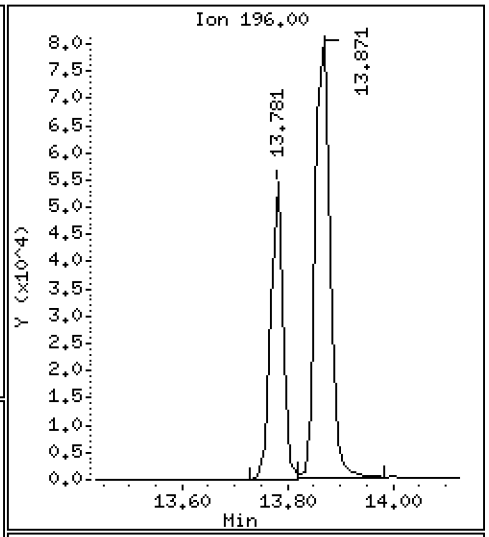
Concentration: 1.751 ug/mL

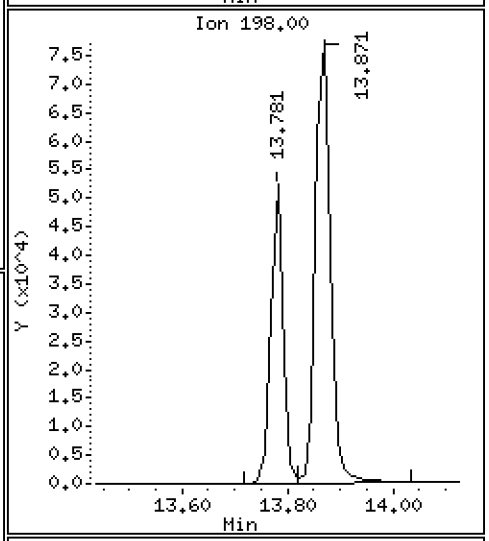


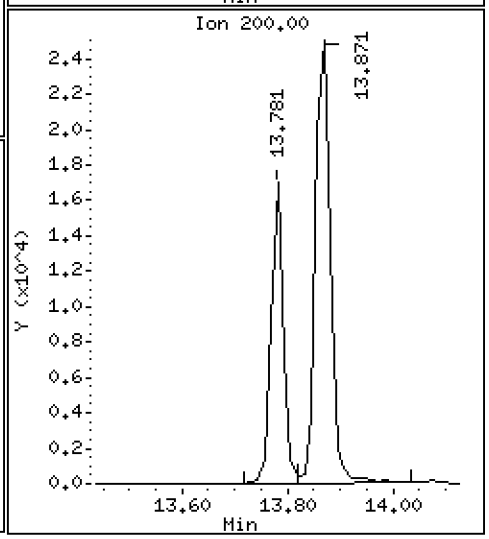












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

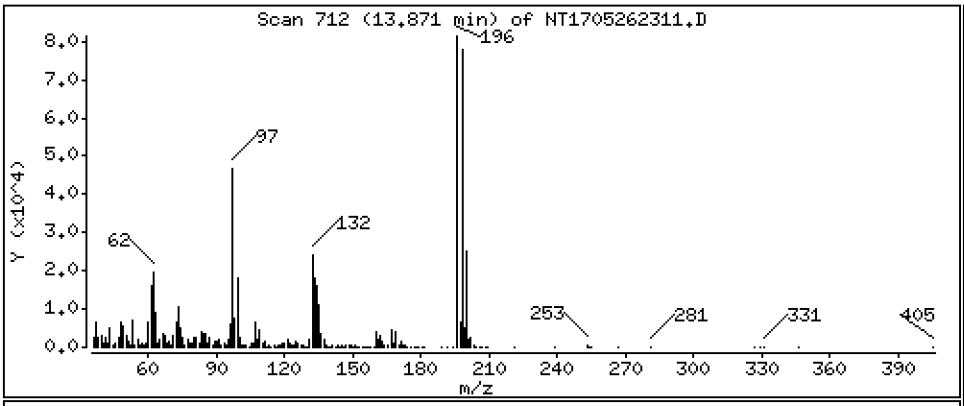
Operator: VTS

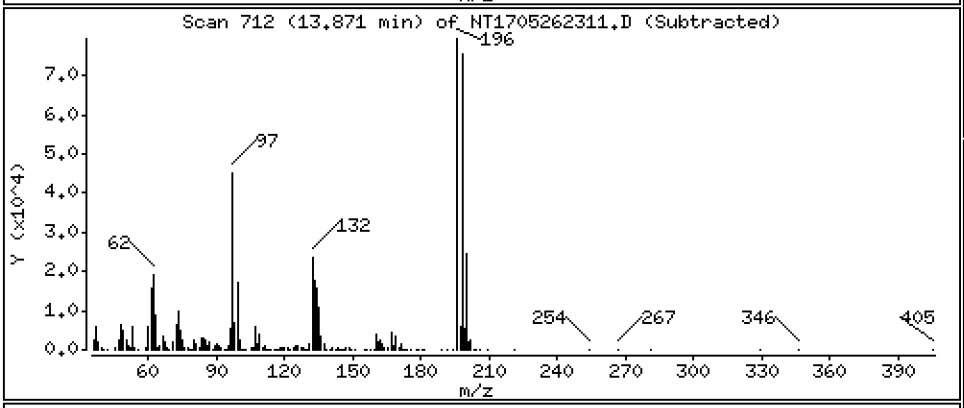
Column phase: ZB-5msi

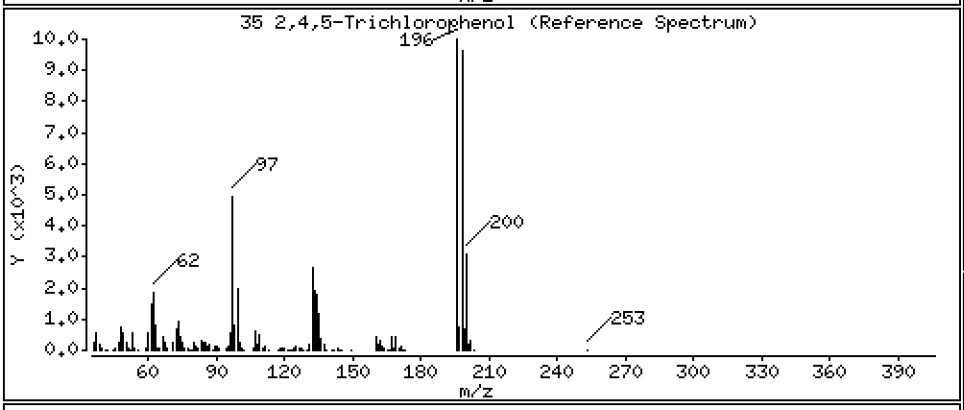
Column diameter: 0.25

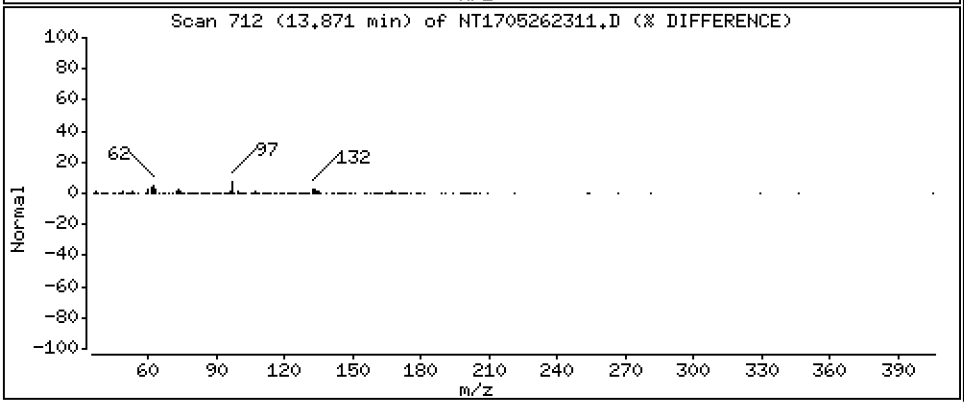
35 2,4,5-Trichlorophenol

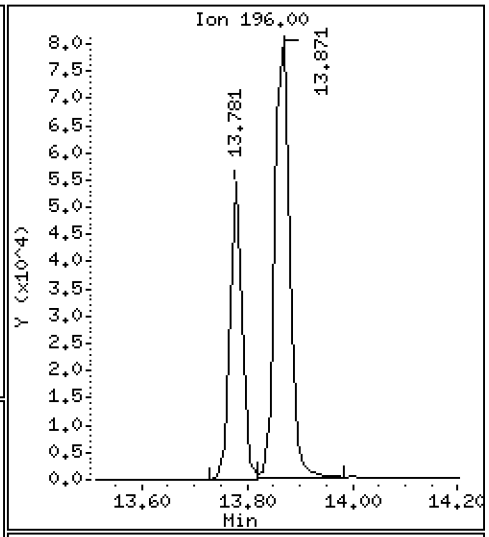
Concentration: 2.808 ug/mL

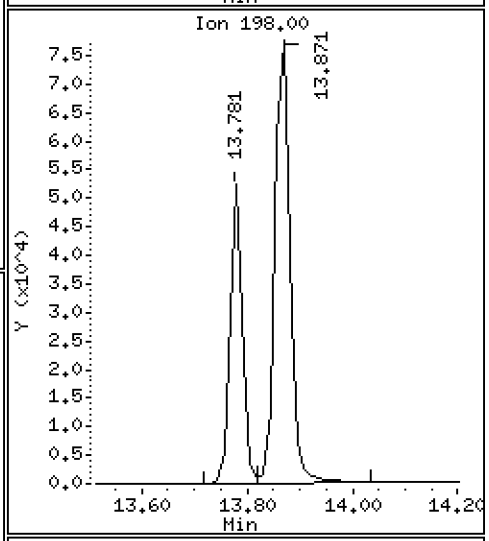


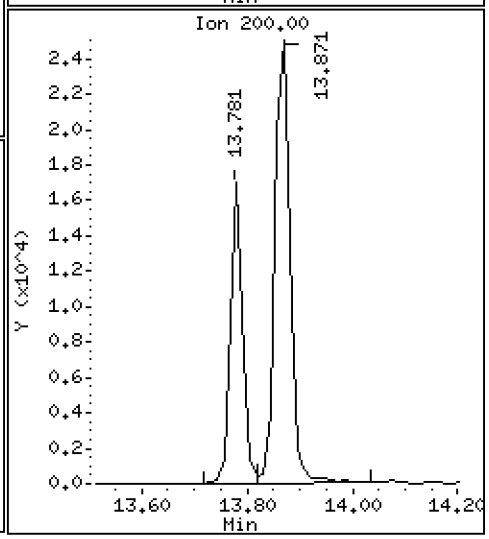












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

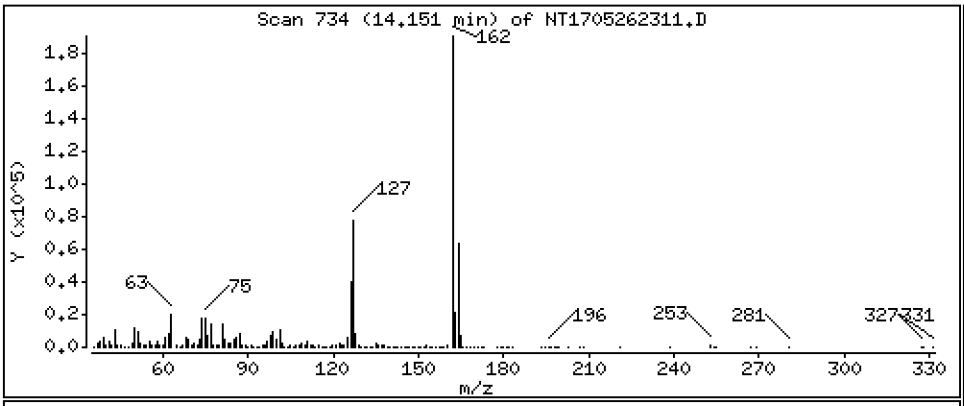
Operator: VTS

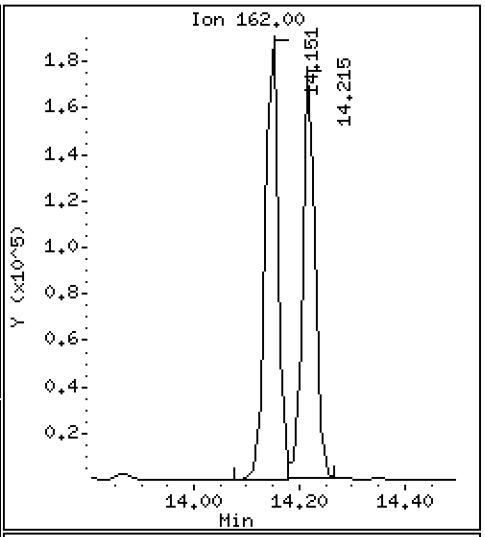
Column phase: ZB-5msi

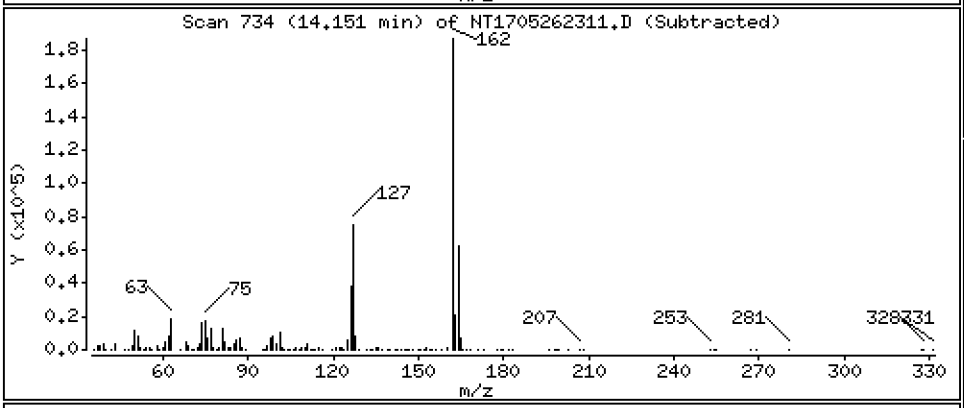
Column diameter: 0.25

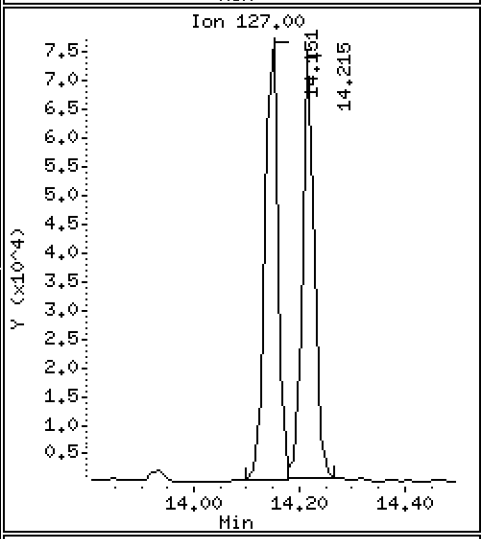
37 2-Chloronaphthalene

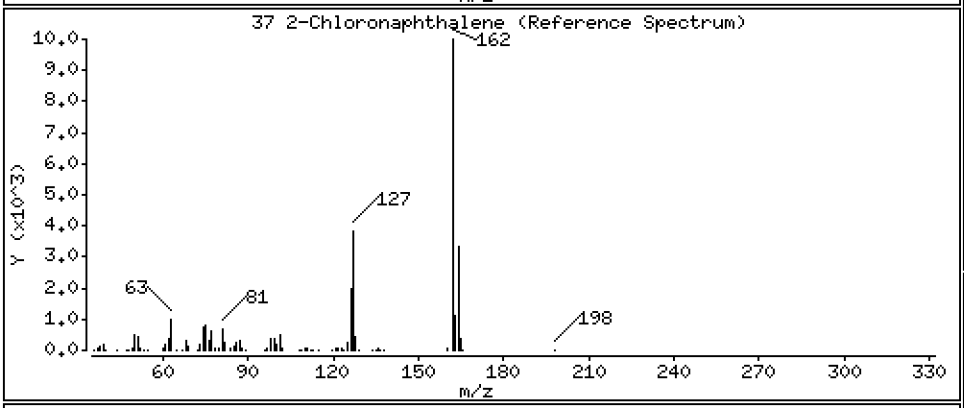
Concentration: 2.088 ug/mL

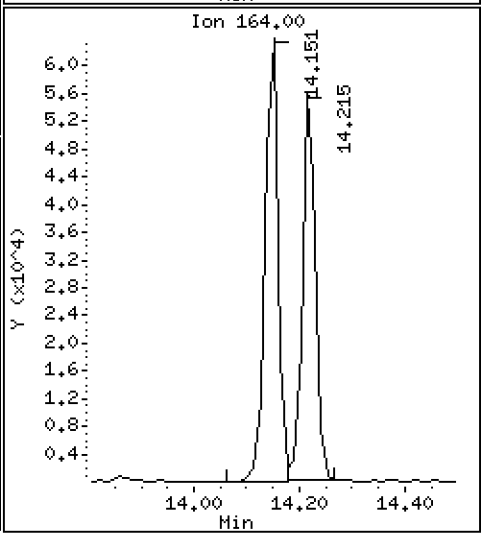


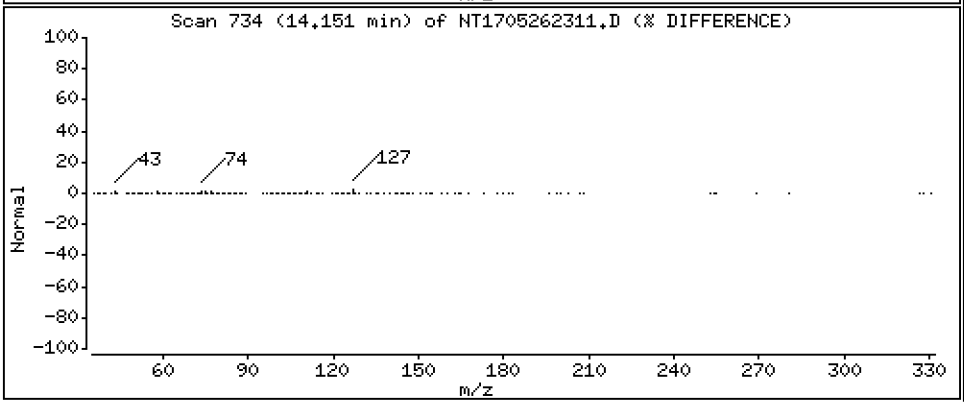












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

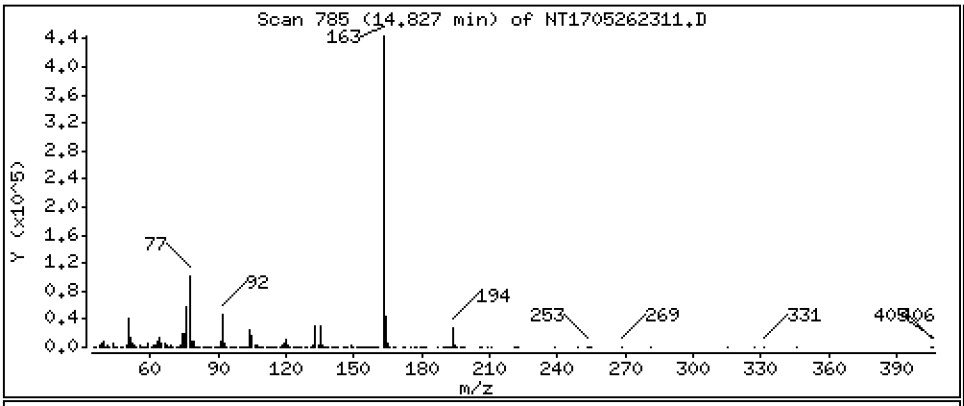
Operator: VTS

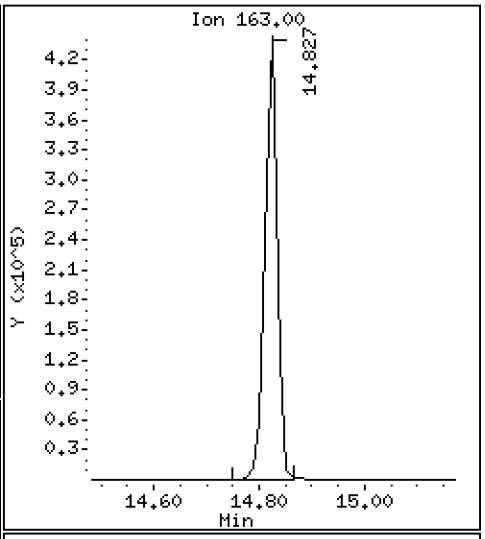
Column phase: ZB-5msi

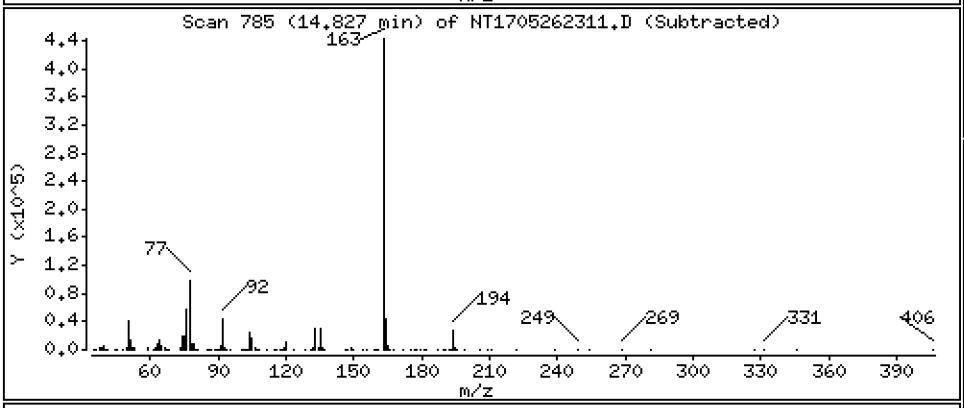
Column diameter: 0.25

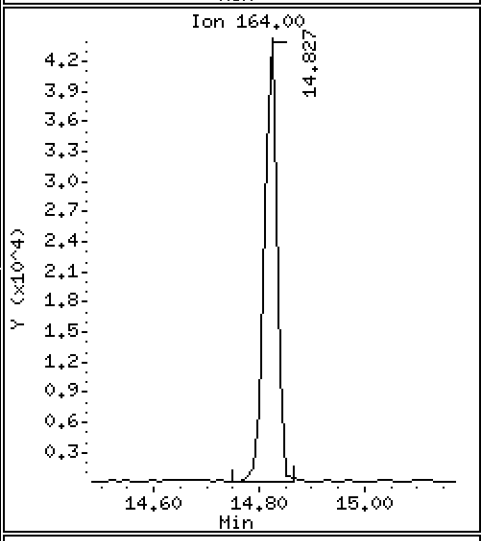
39 Dimethylphthalate

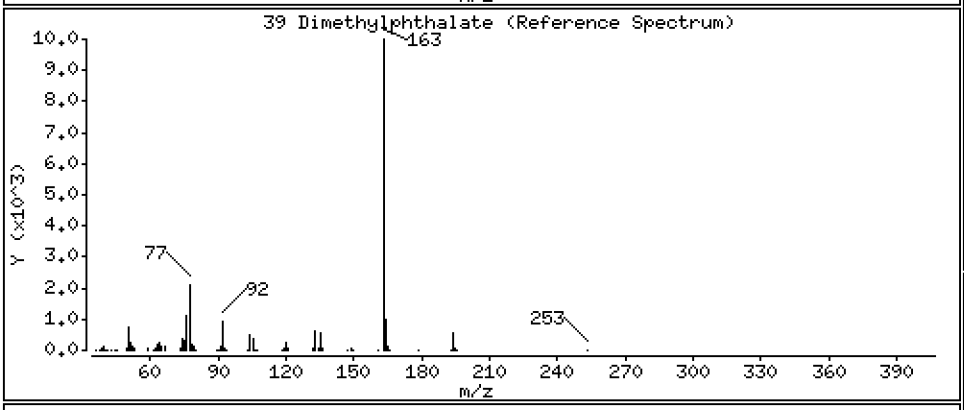
Concentration: 4.216 ug/mL

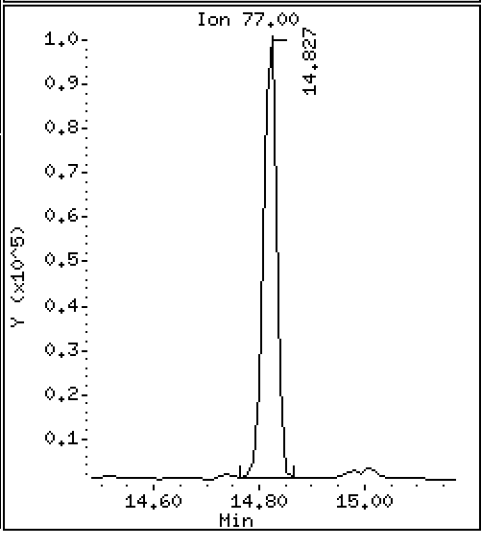


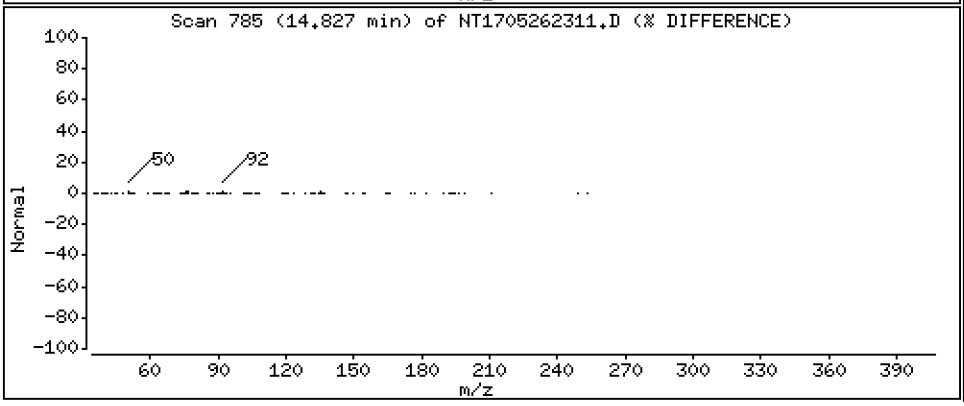












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

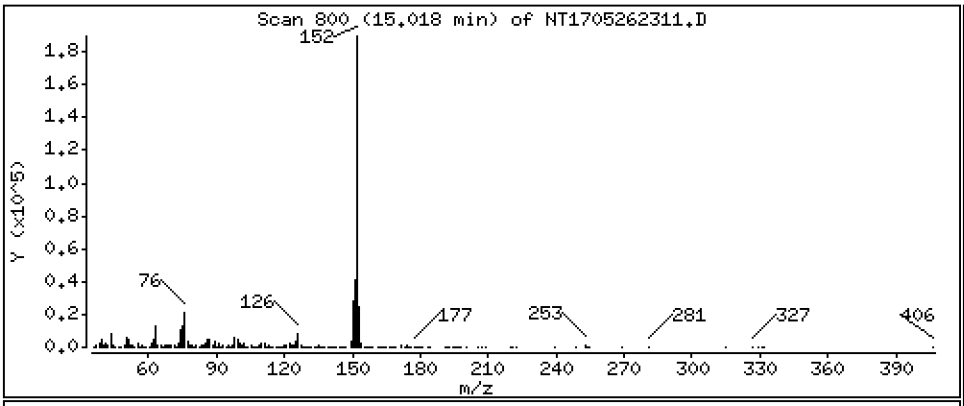
Operator: VTS

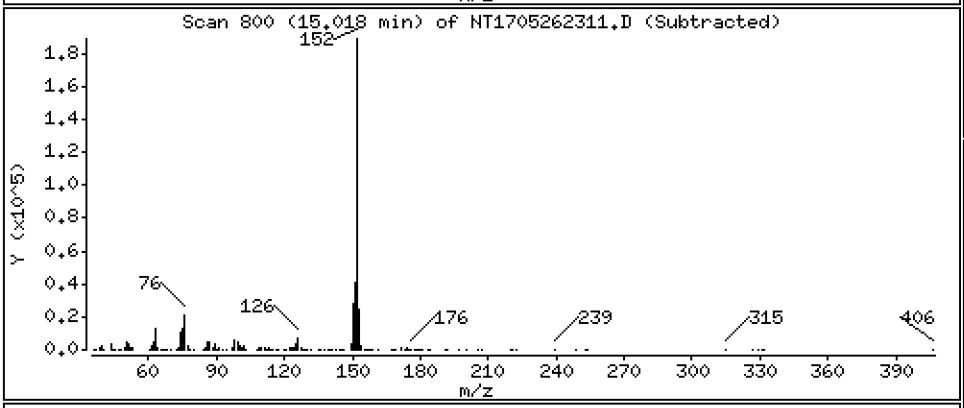
Column phase: ZB-5msi

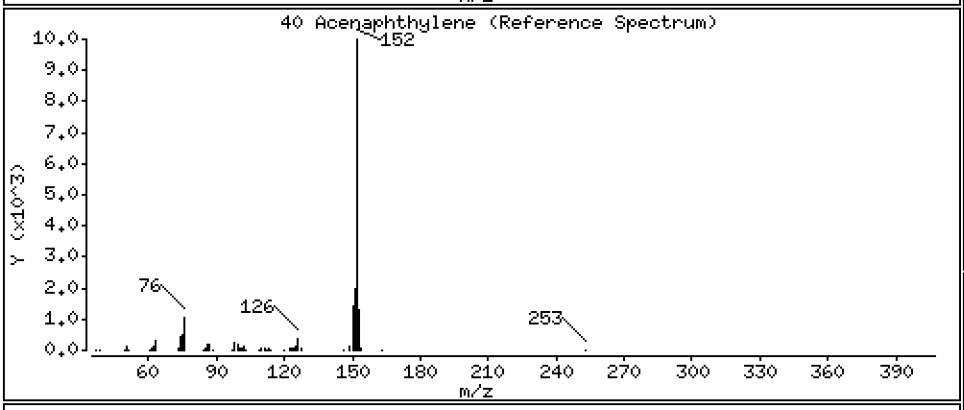
Column diameter: 0.25

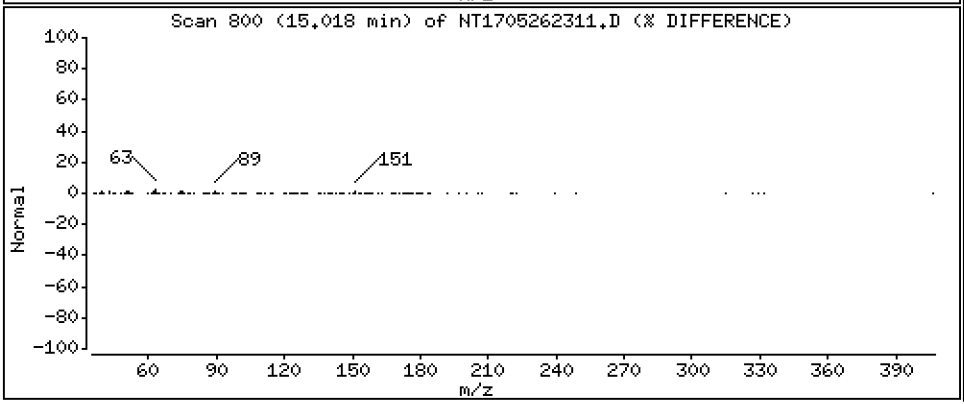
40 Acenaphthylene

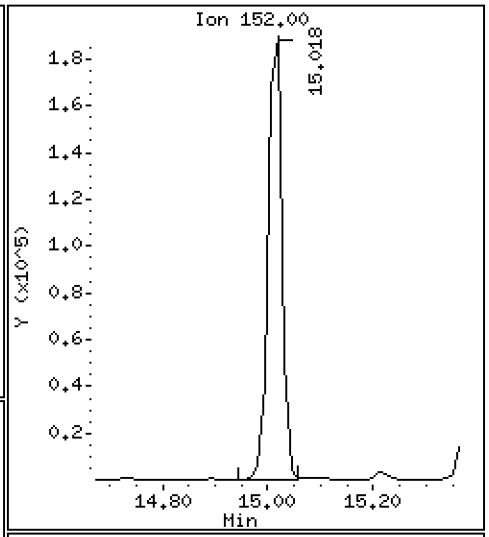
Concentration: 1.397 ug/mL

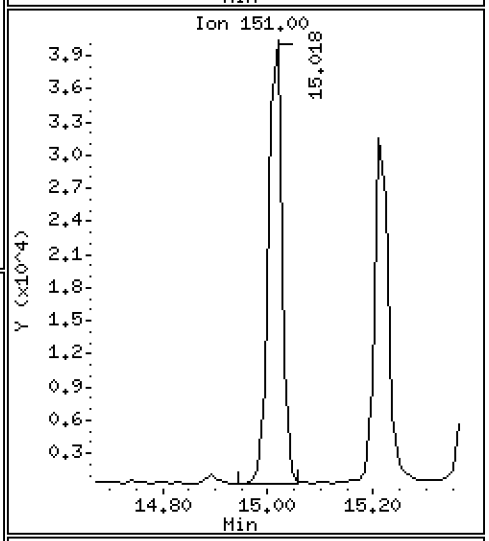


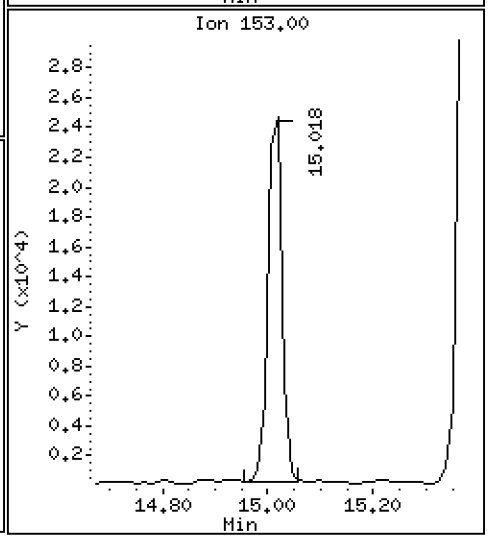












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

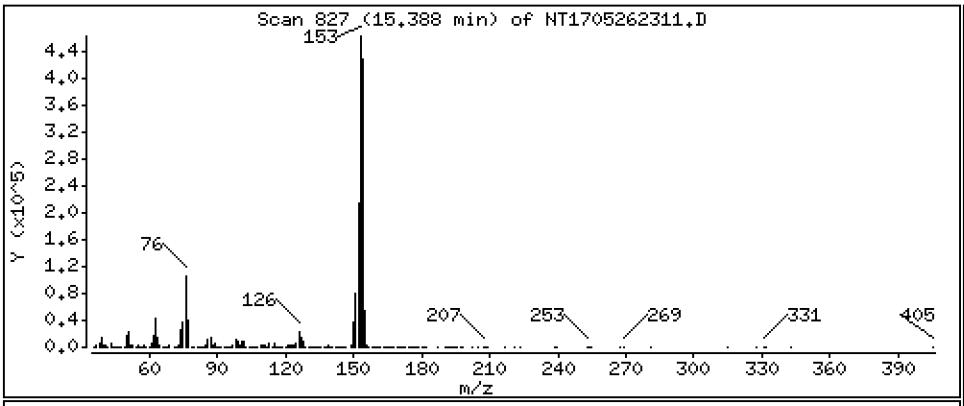
Operator: VTS

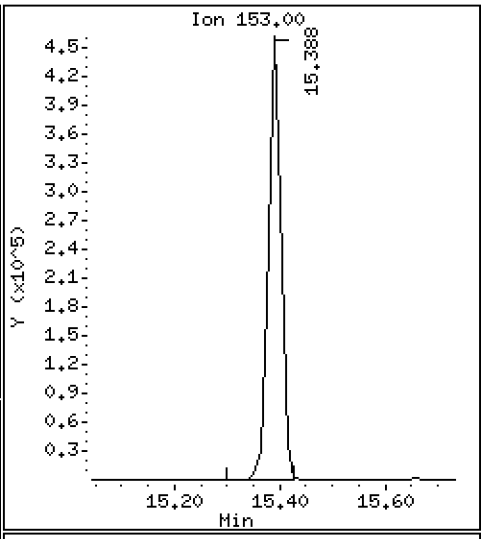
Column phase: ZB-5msi

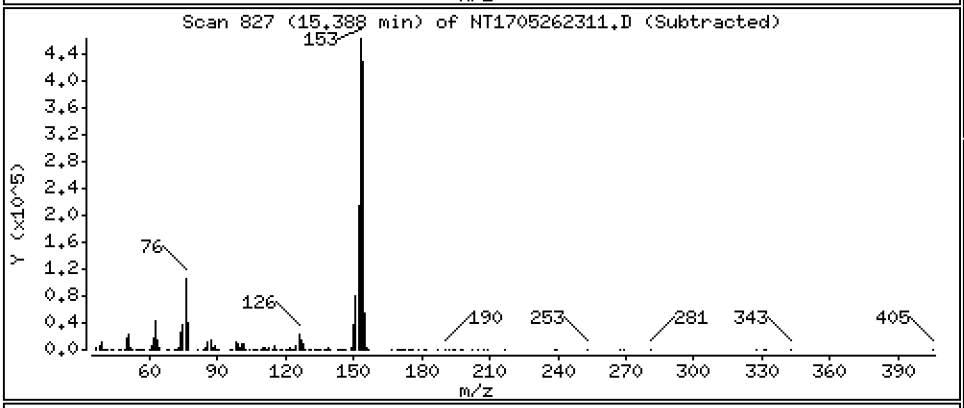
Column diameter: 0.25

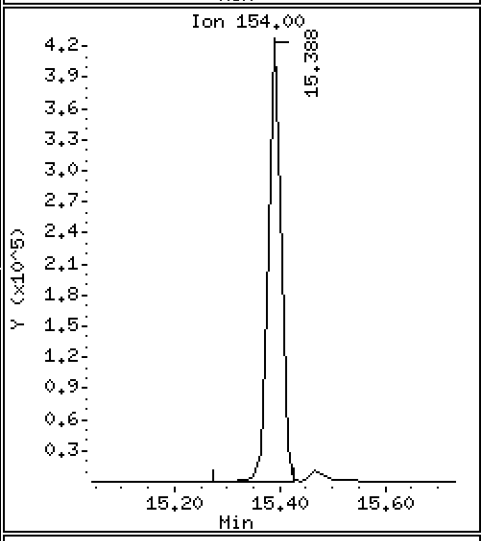
44 Acenaphthene

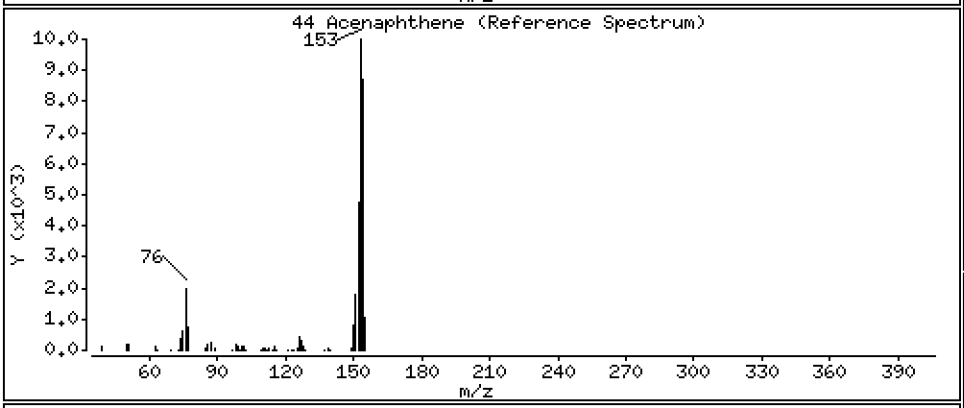
Concentration: 4.869 ug/mL

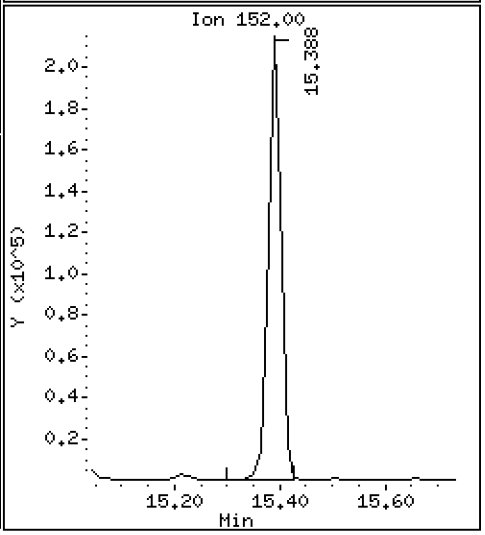


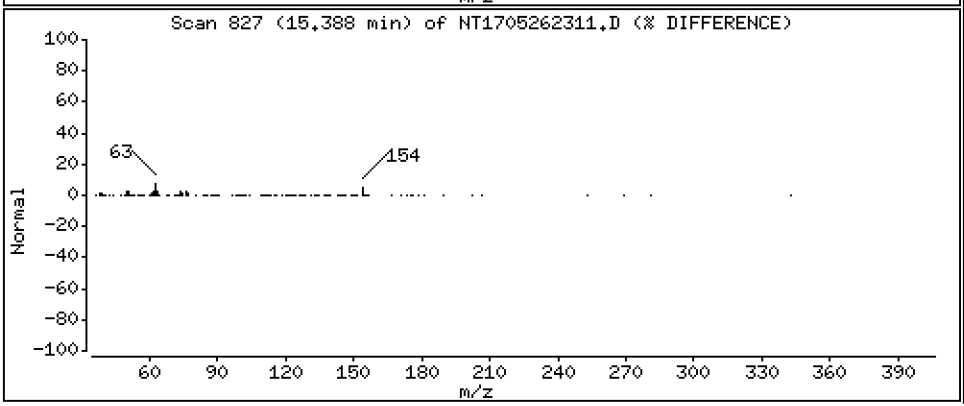












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

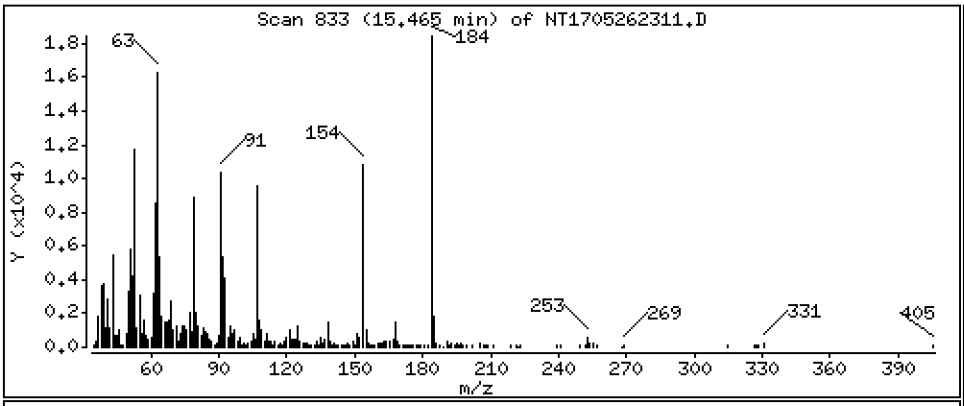
Operator: VTS

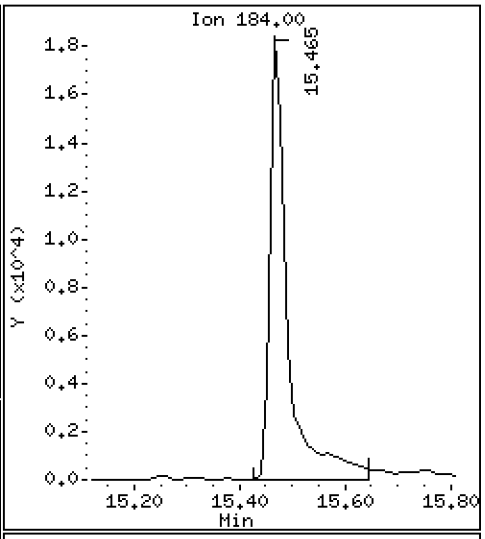
Column phase: ZB-5msi

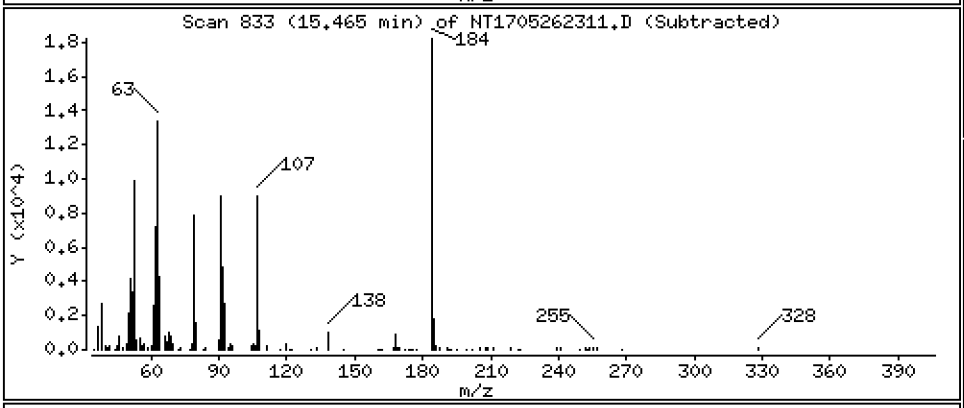
Column diameter: 0.25

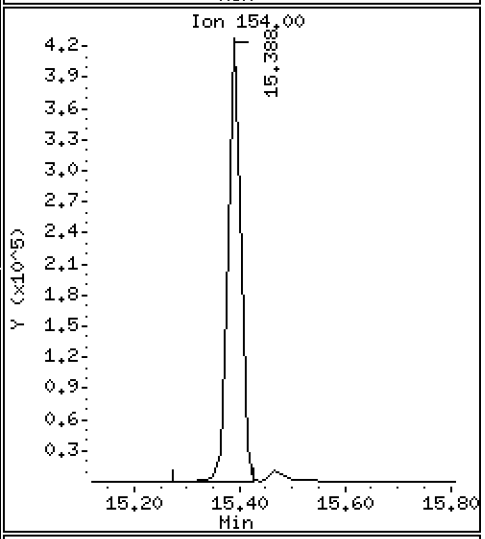
45 2,4-Dinitrophenol

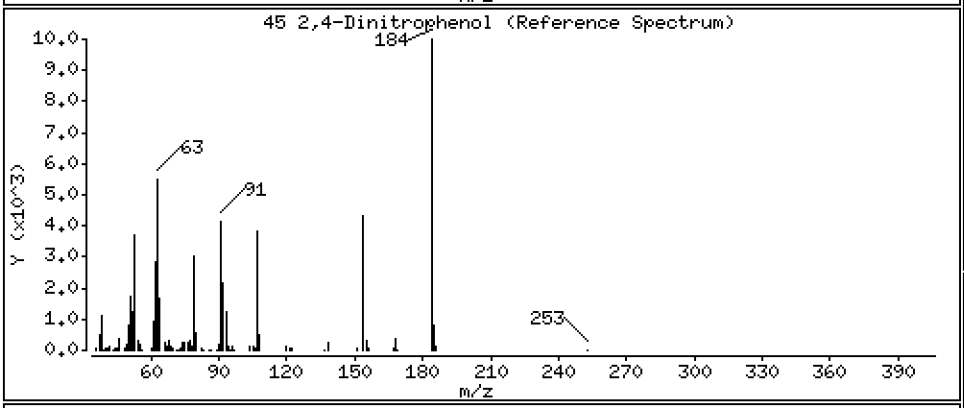
Concentration: 1.786 ug/mL

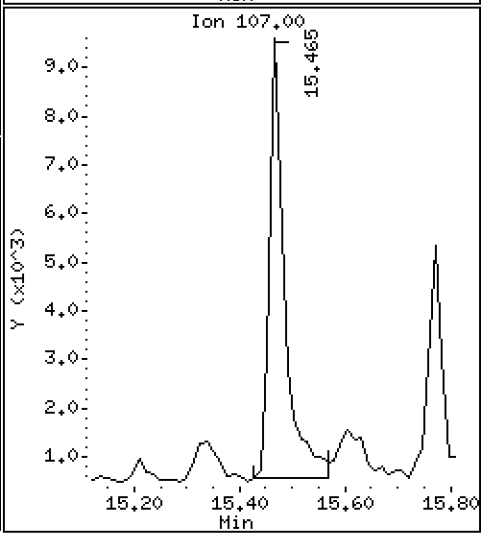


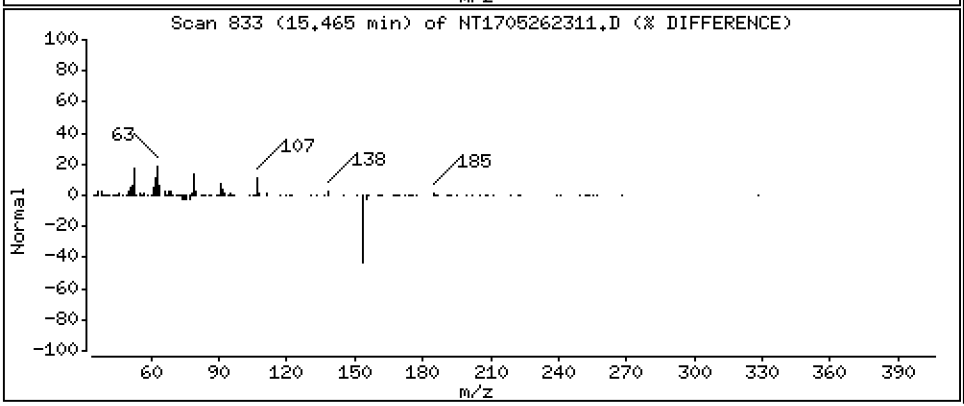












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

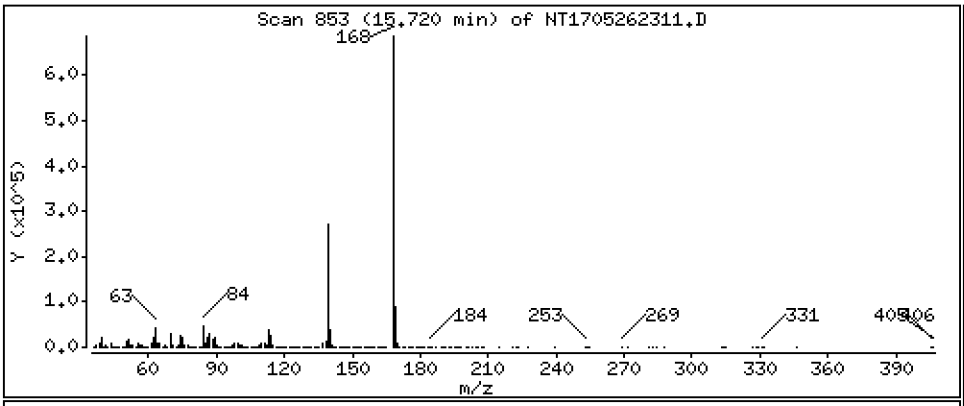
Operator: VTS

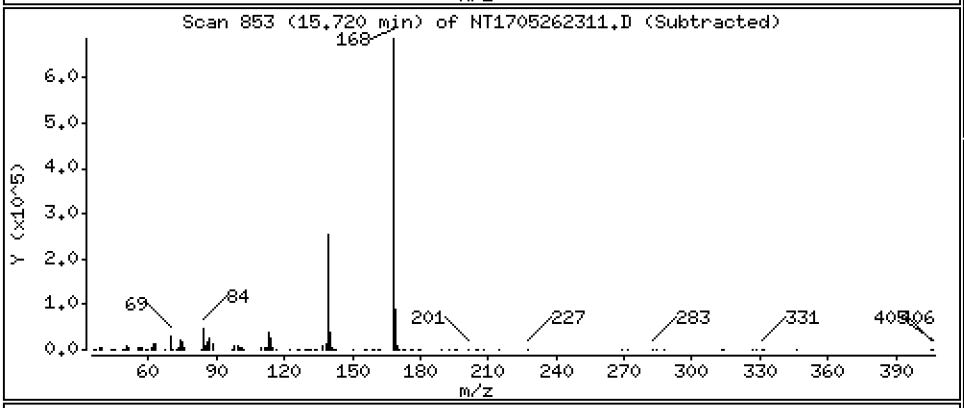
Column phase: ZB-5msi

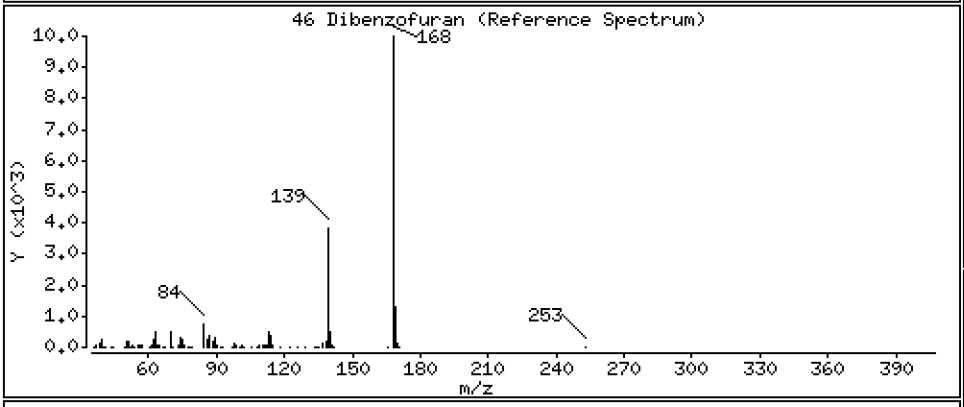
Column diameter: 0.25

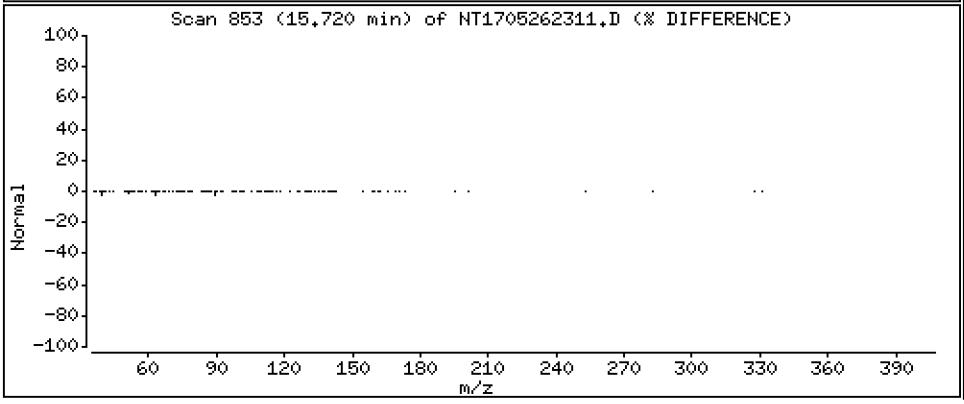
46 Dibenzofuran

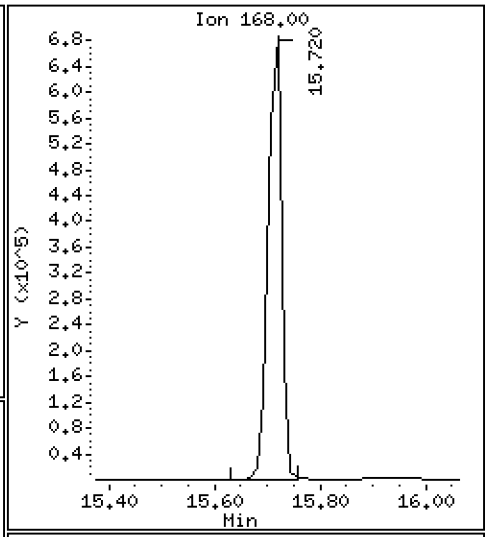
Concentration: 5.490 ug/mL

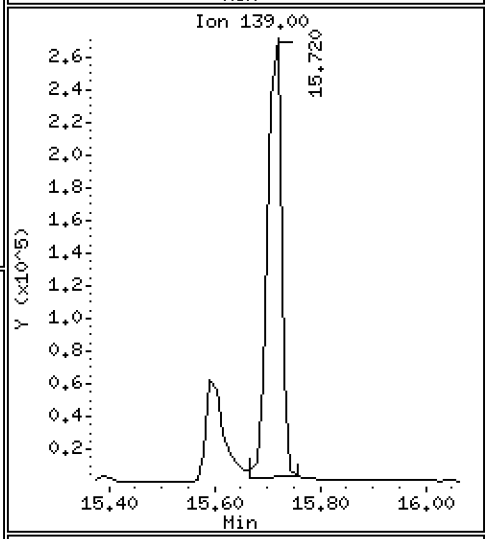


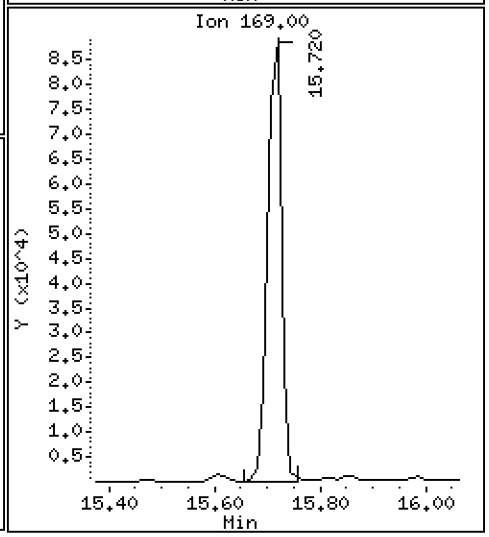












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262311.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

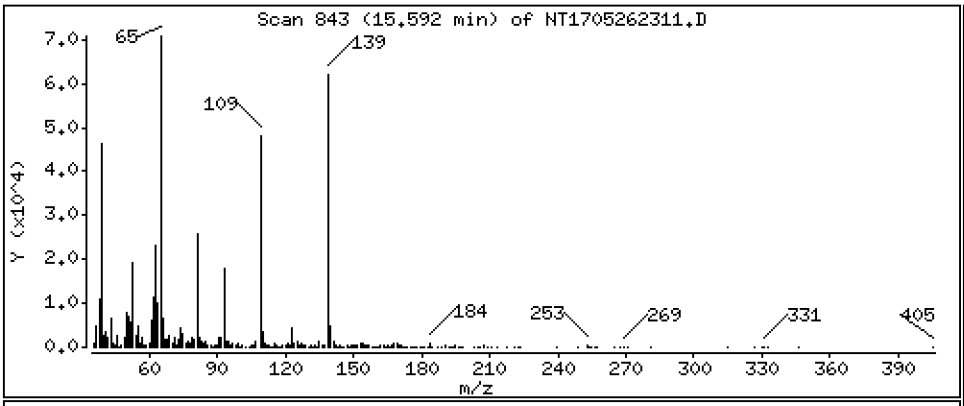
Operator: VTS

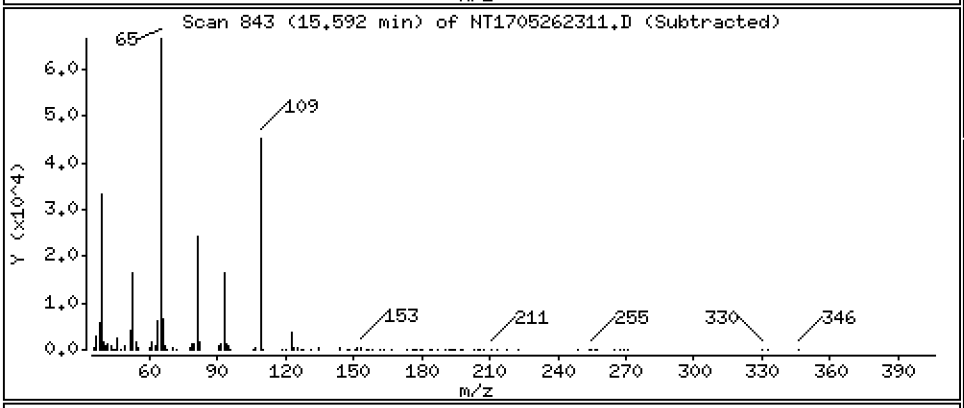
Column phase: ZB-5msi

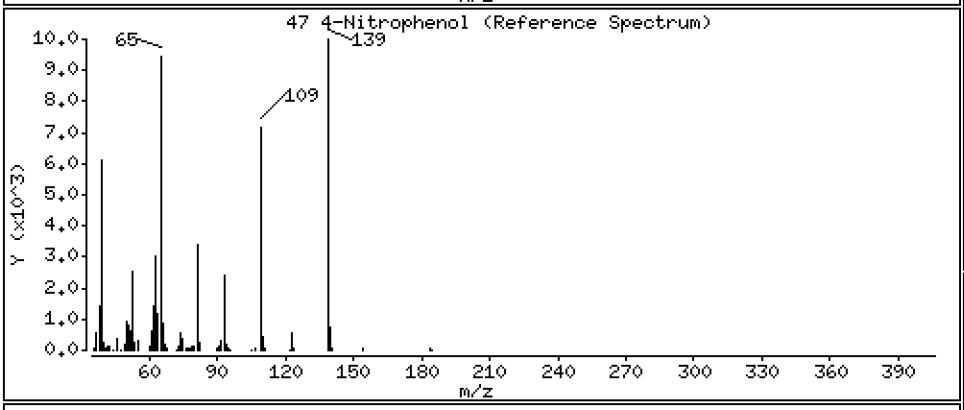
Column diameter: 0.25

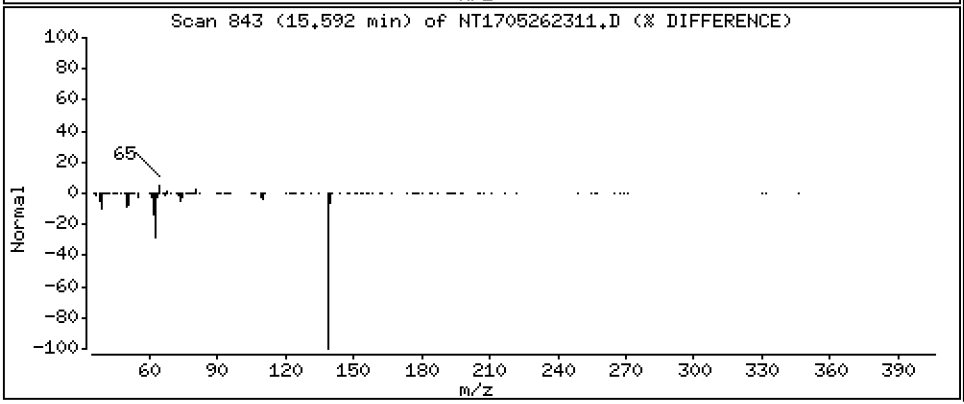
47 4-Nitrophenol

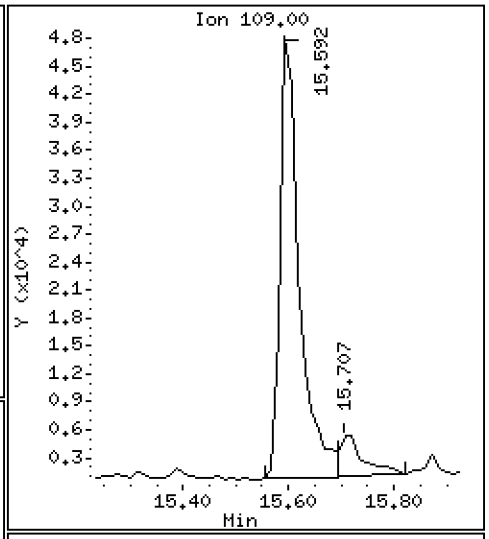
Concentration: 4.996 ug/mL

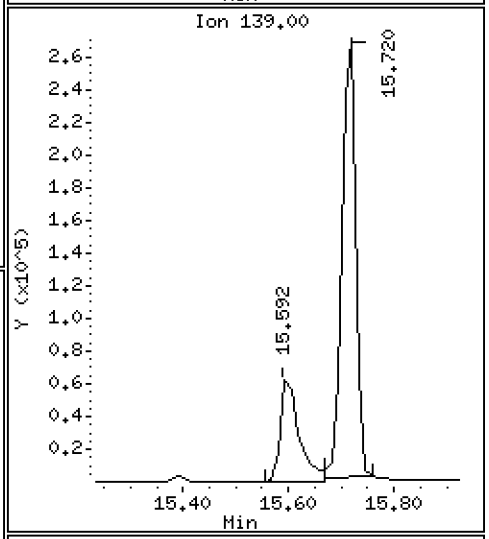


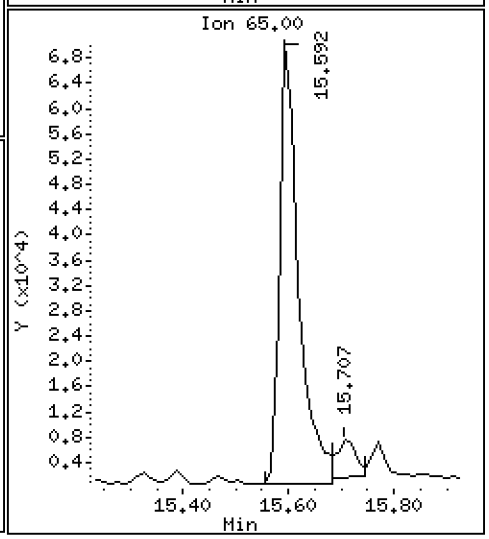












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

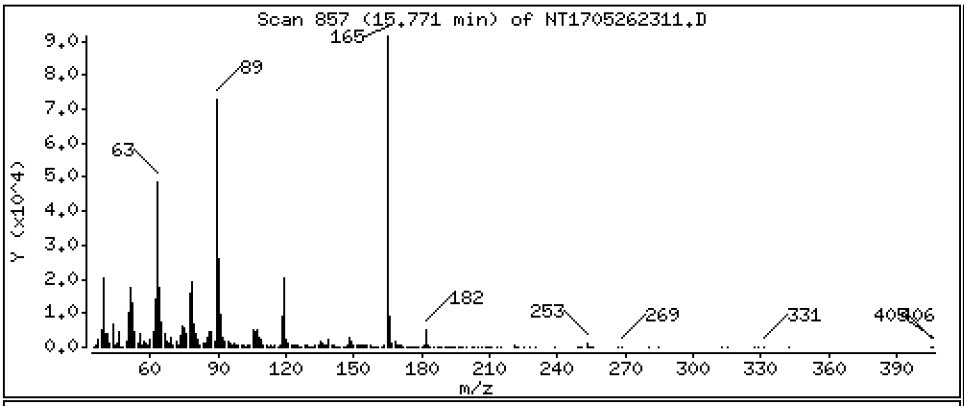
Operator: VTS

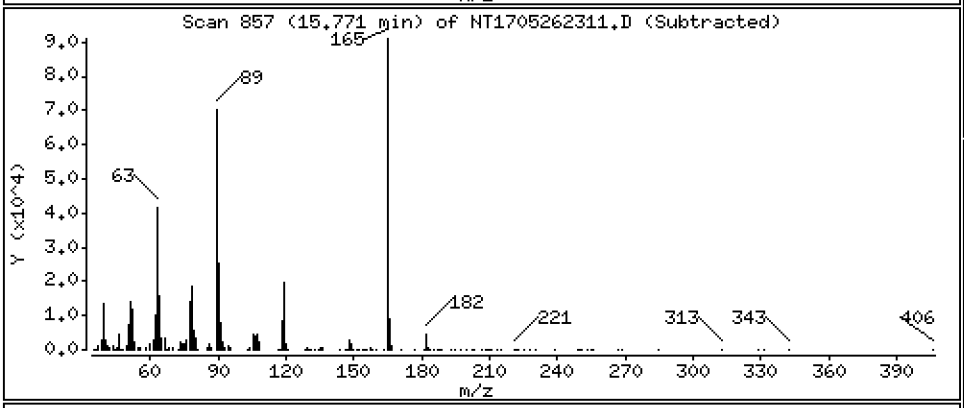
Column phase: ZB-5msi

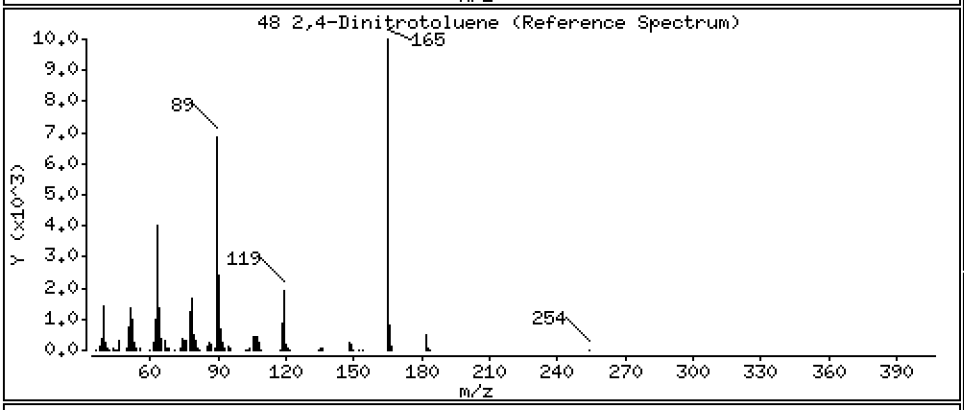
Column diameter: 0.25

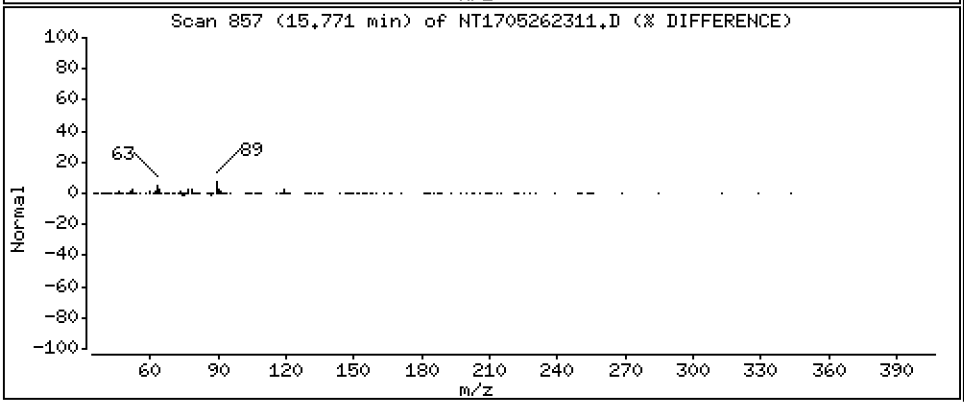
48 2,4-Dinitrotoluene

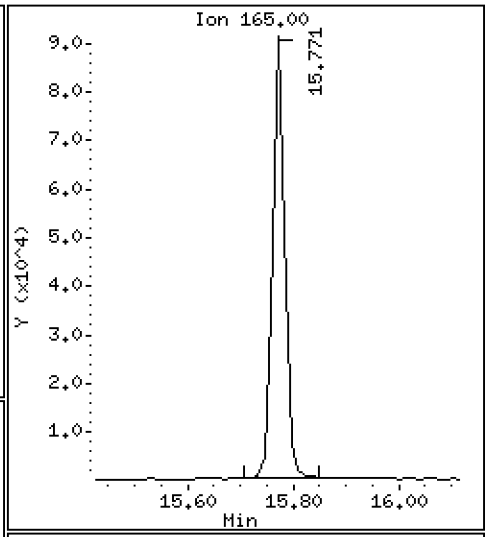
Concentration: 2.796 ug/mL

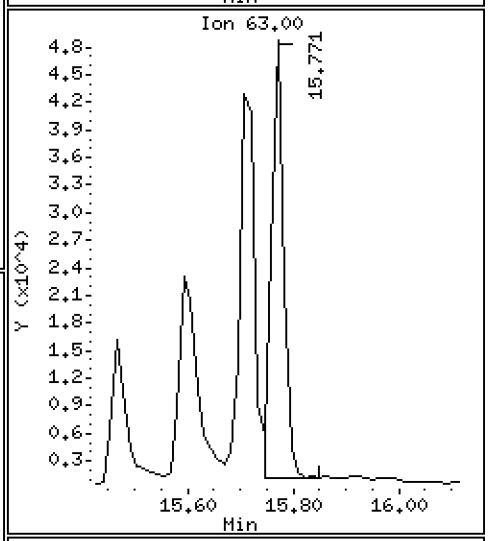


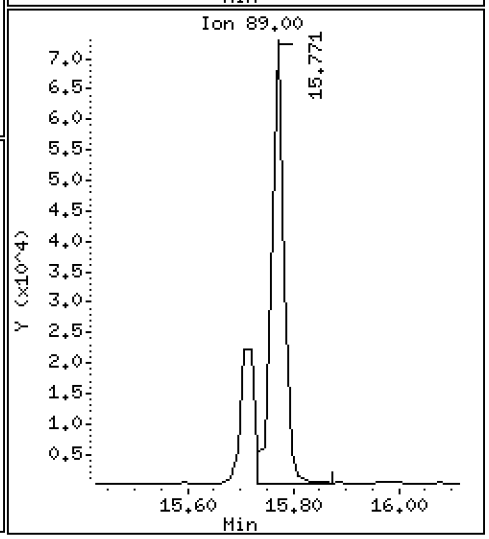












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

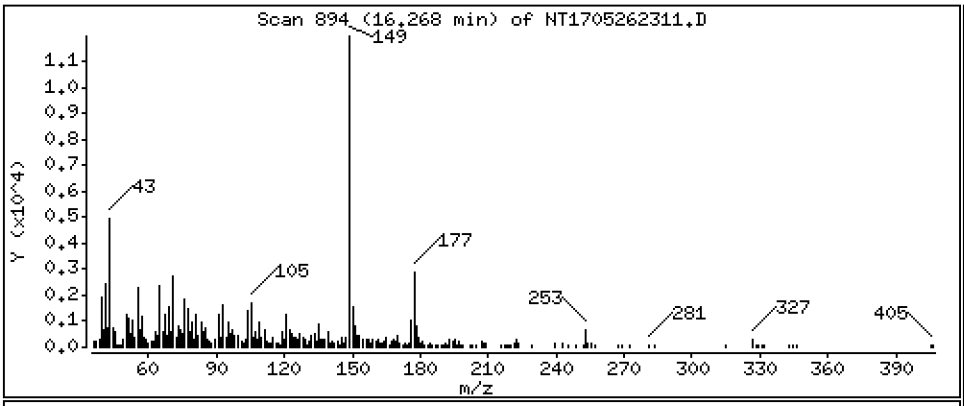
Operator: VTS

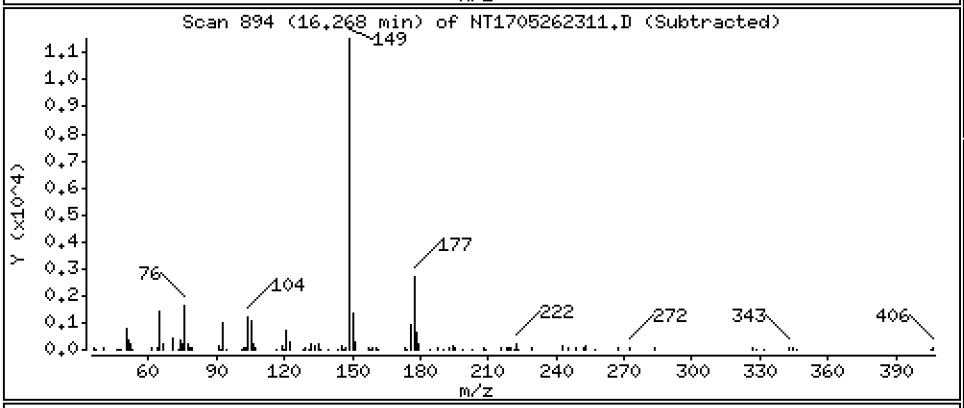
Column phase: ZB-5msi

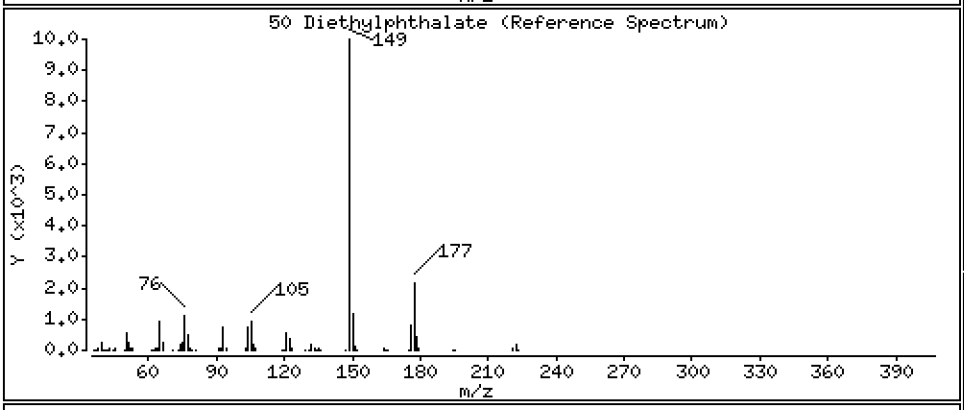
Column diameter: 0.25

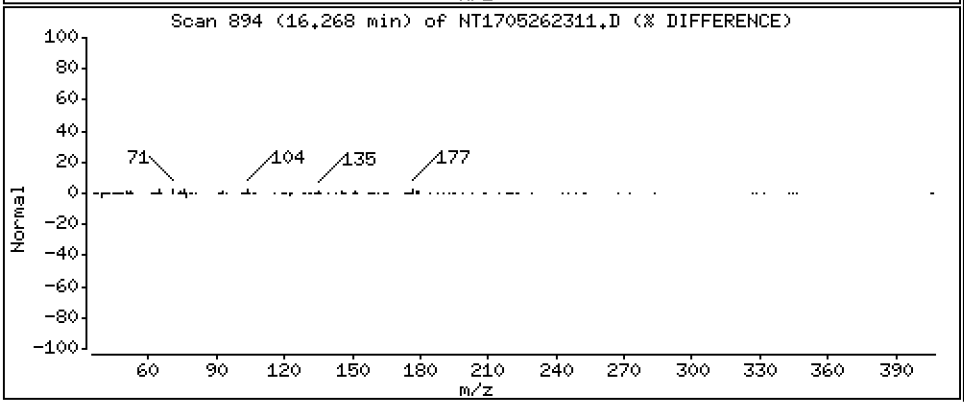
50 Diethylphthalate

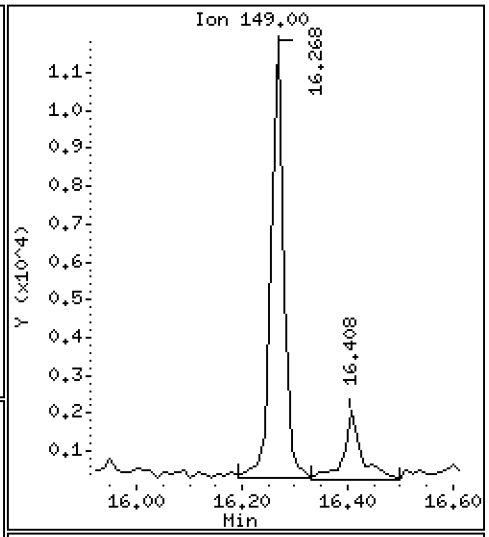
Concentration: 0.1404 ug/mL

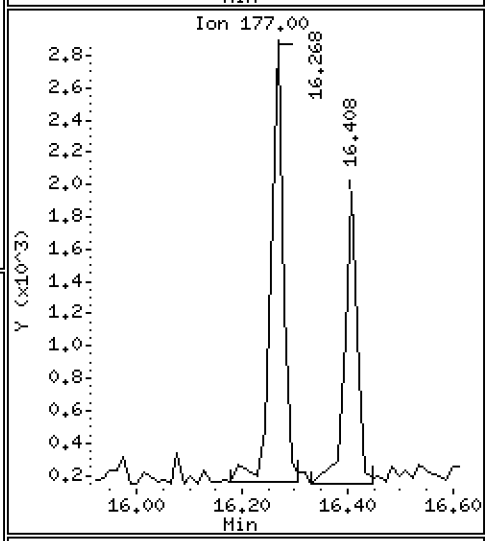


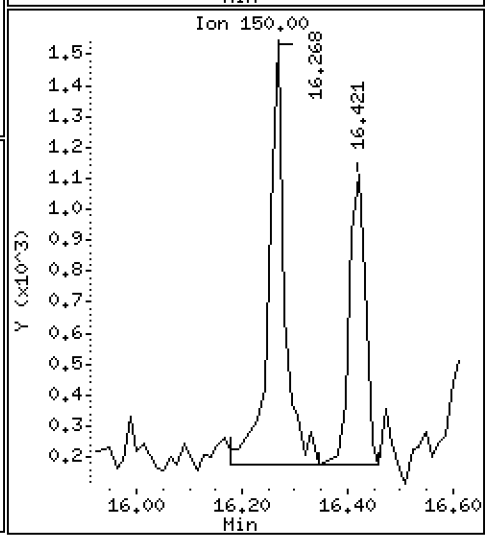












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

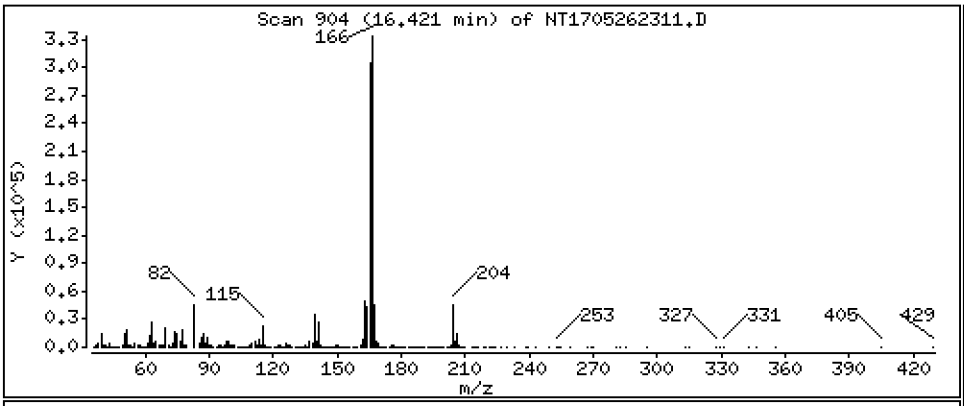
Operator: VTS

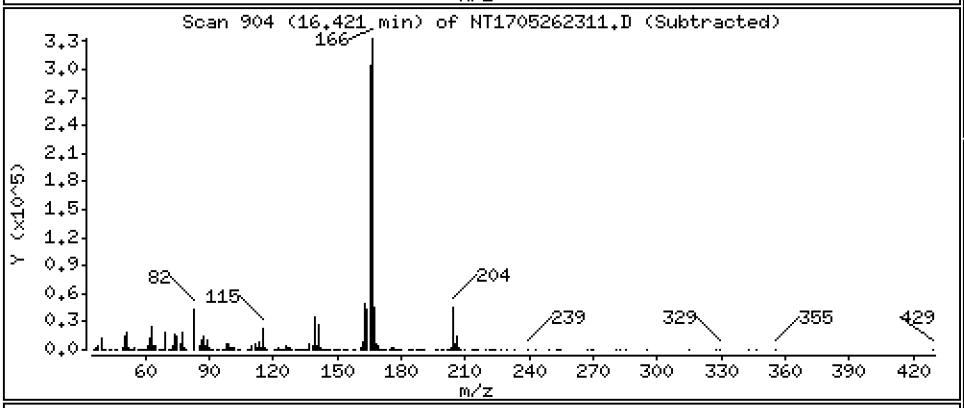
Column phase: ZB-5msi

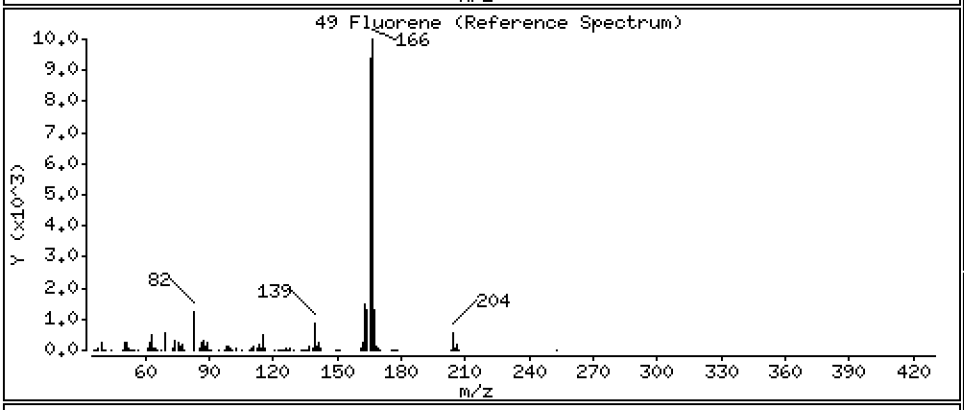
Column diameter: 0.25

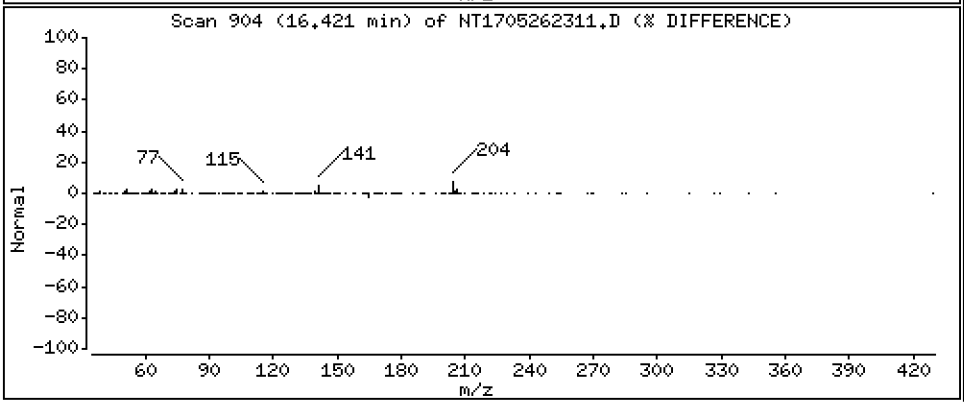
49 Fluorene

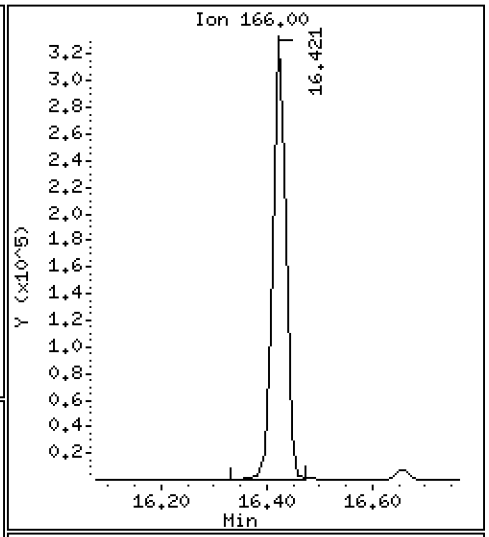
Concentration: 3.328 ug/mL

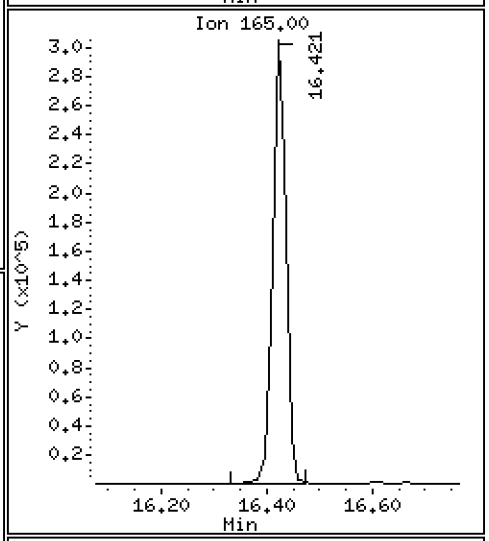


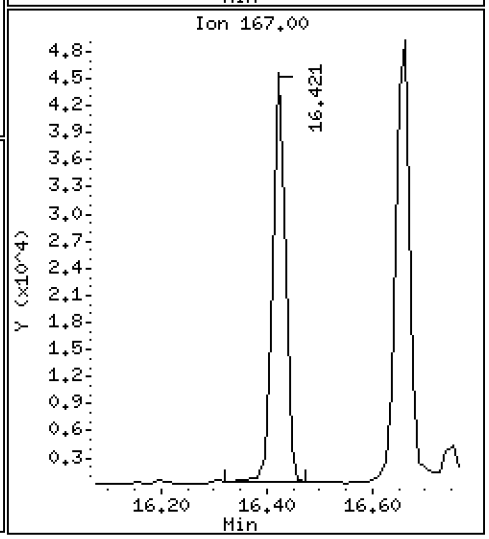












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

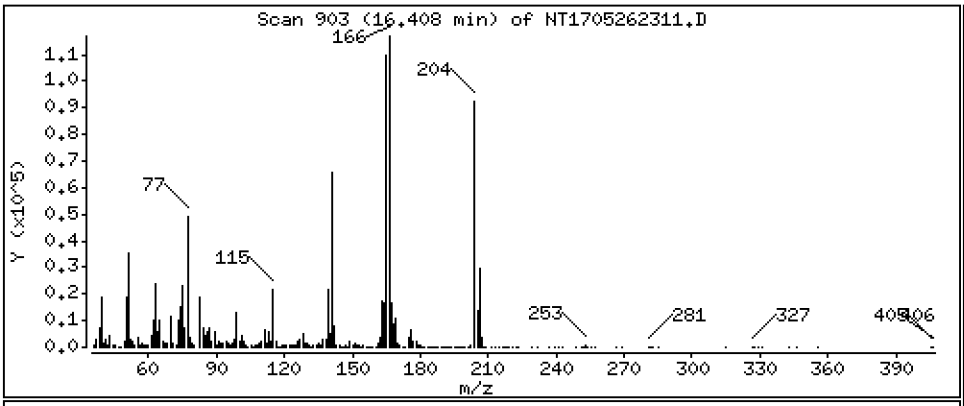
Operator: VTS

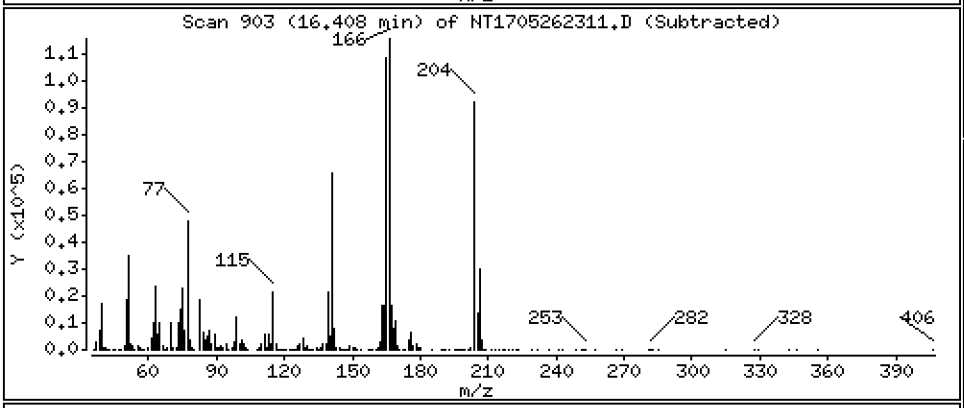
Column phase: ZB-5msi

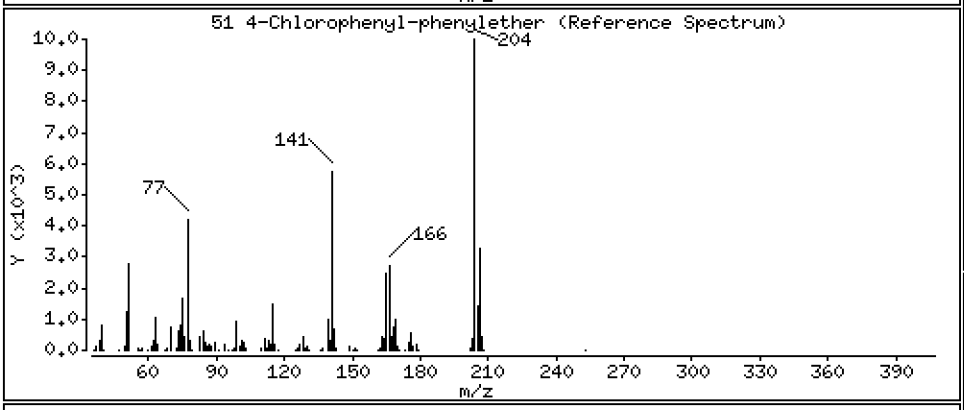
Column diameter: 0.25

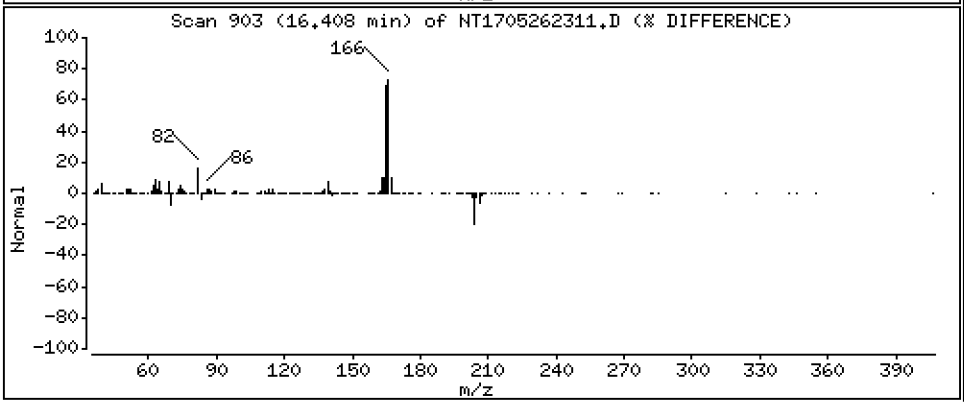
51 4-Chlorophenyl-phenylether

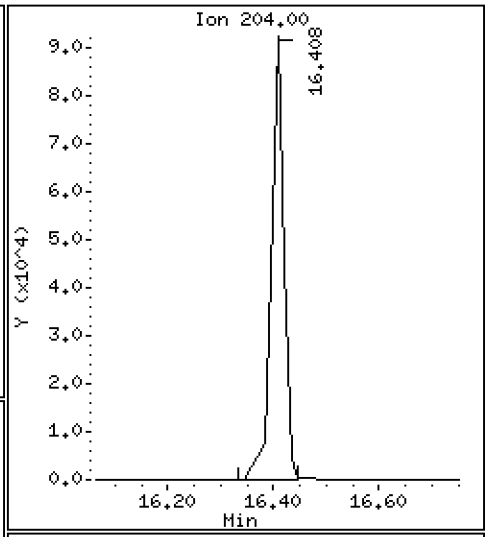
Concentration: 1.964 ug/mL

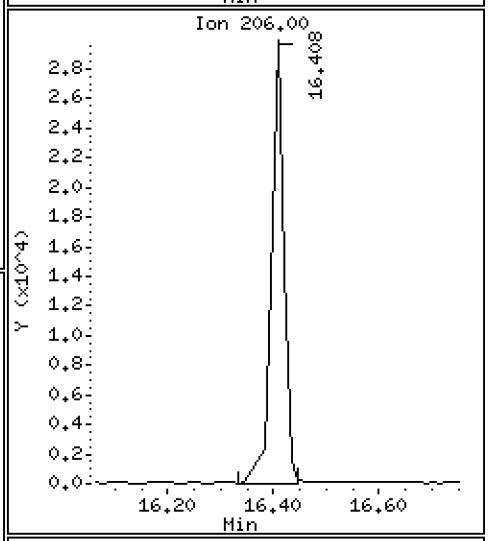


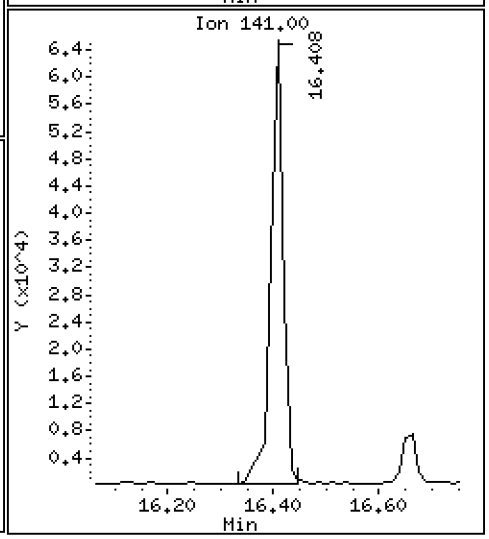












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

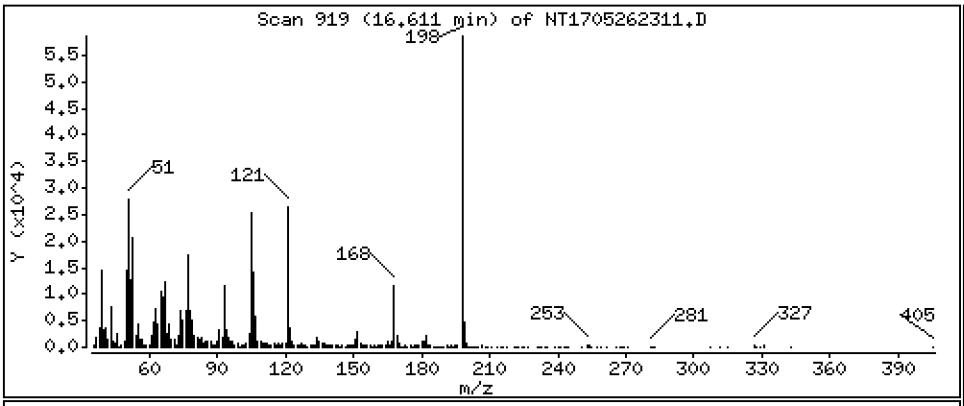
Operator: VTS

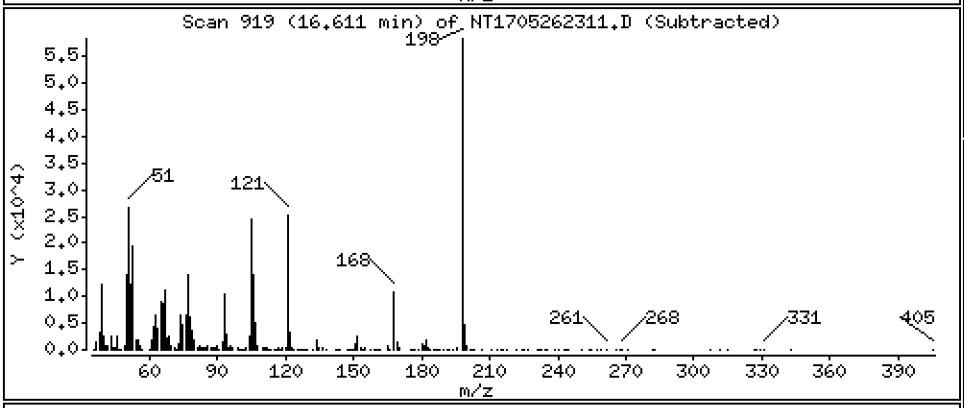
Column phase: ZB-5msi

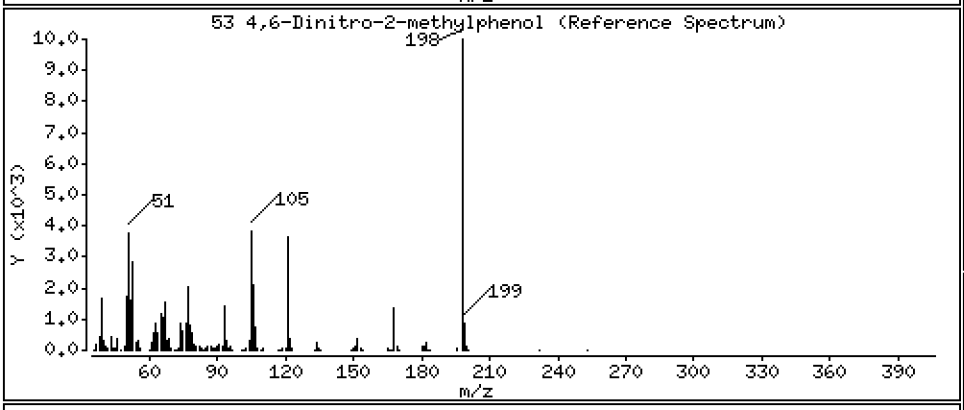
Column diameter: 0.25

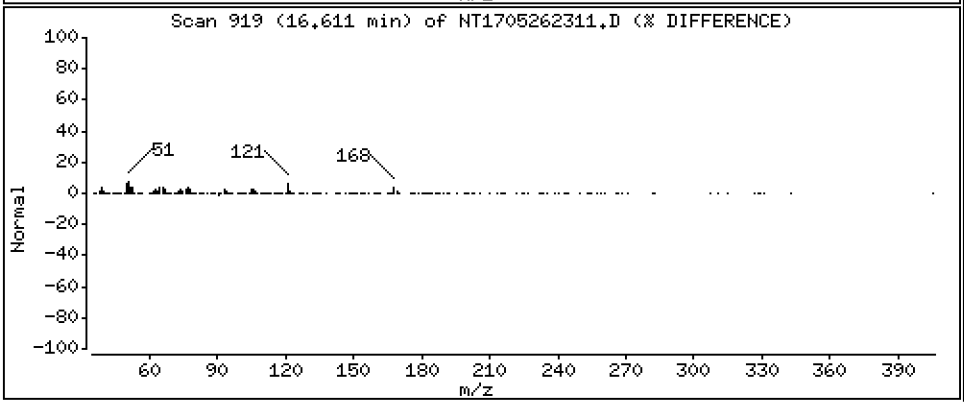
53 4,6-Dinitro-2-methylphenol

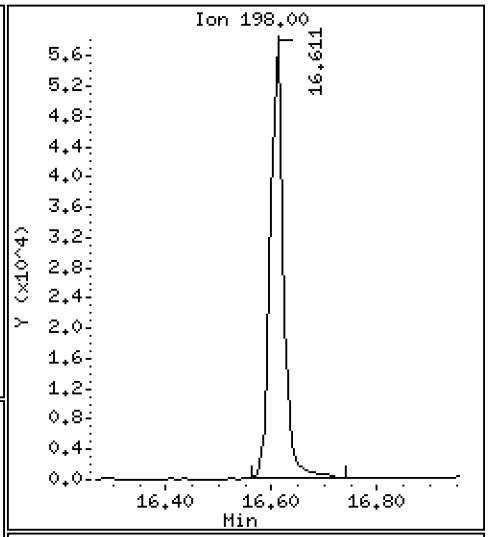
Concentration: 3.349 ug/mL

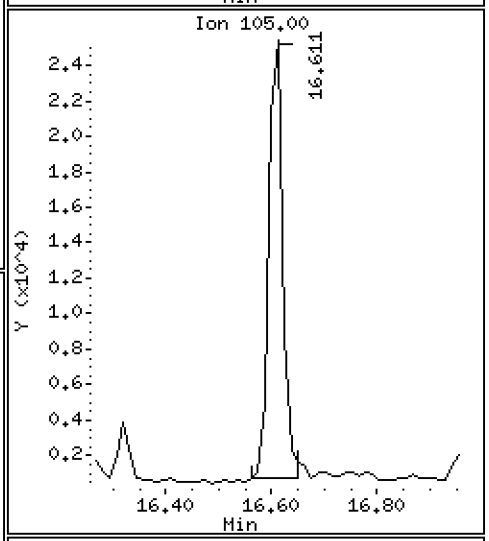


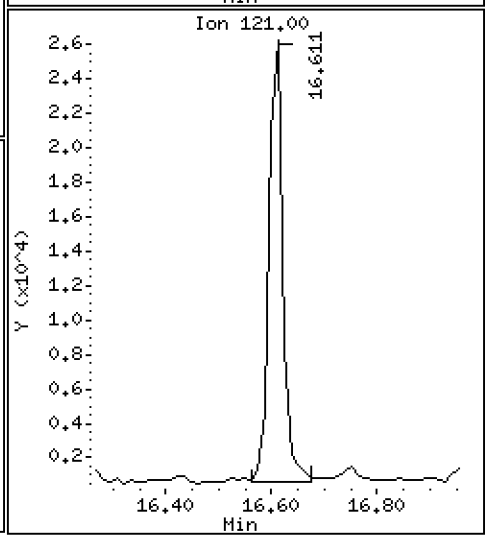












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

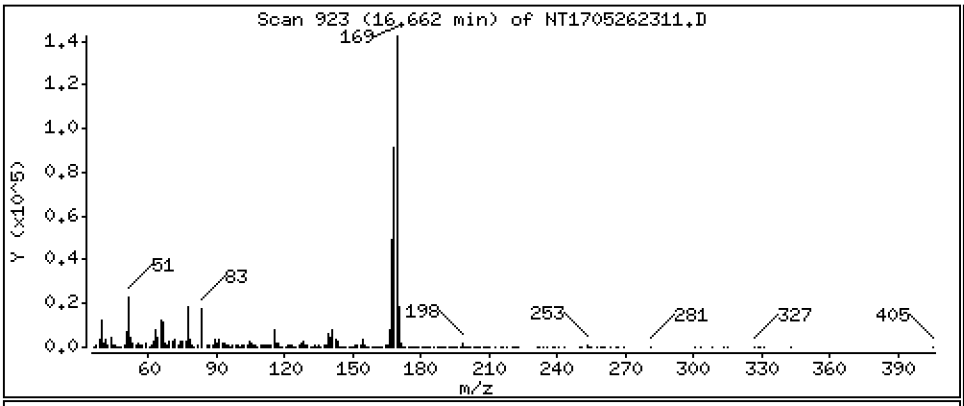
Operator: VTS

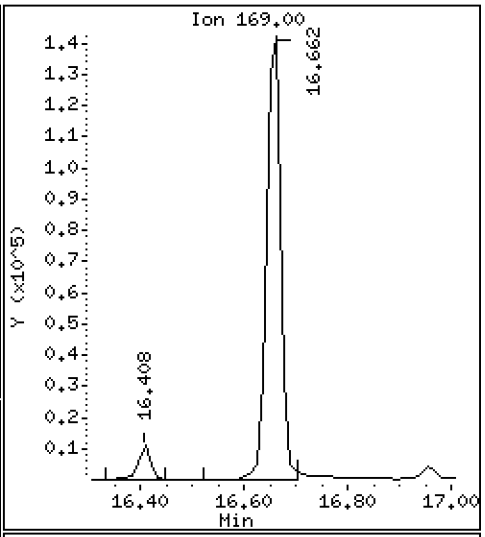
Column phase: ZB-5msi

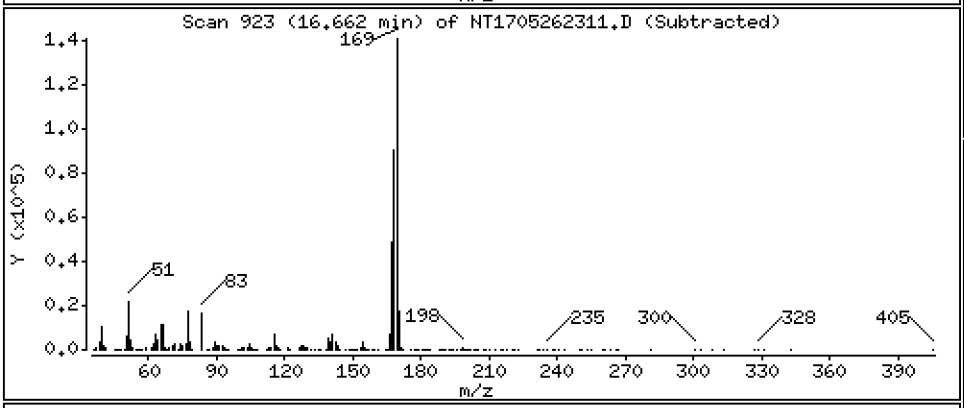
Column diameter: 0.25

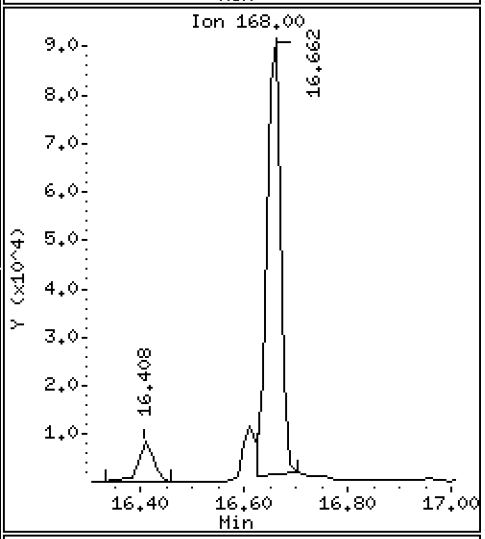
54 N-Nitrosodiphenylamine

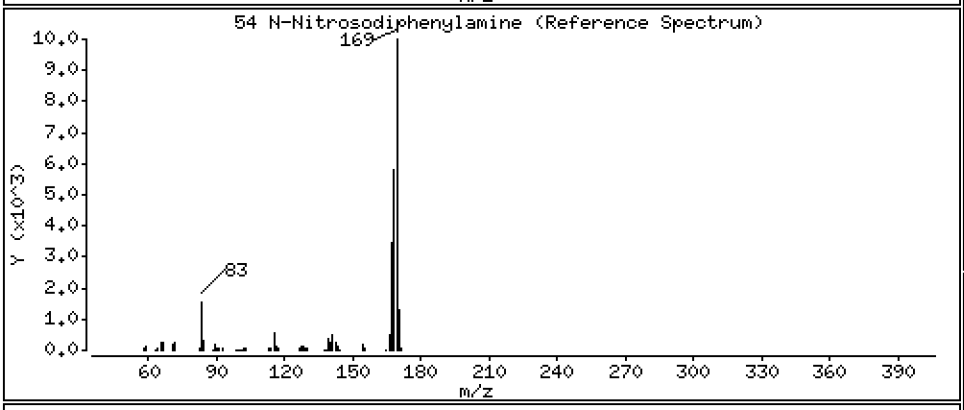
Concentration: 2.518 ug/mL

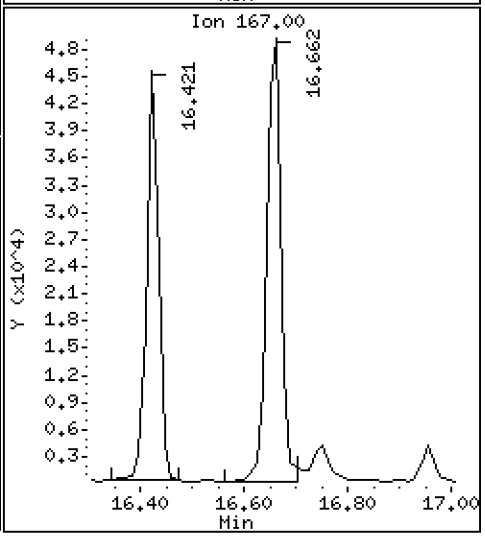


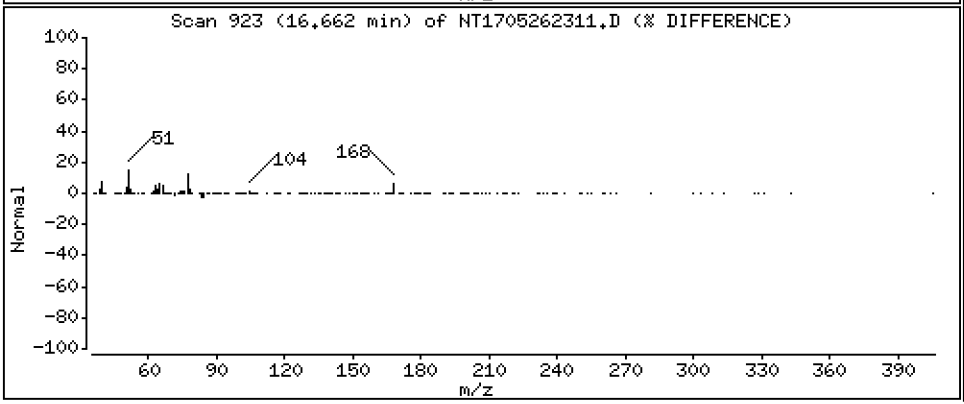












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262311.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

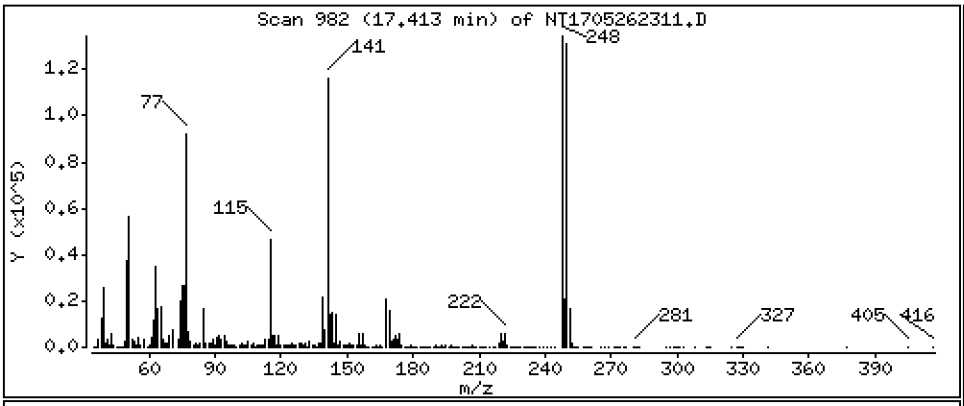
Operator: VTS

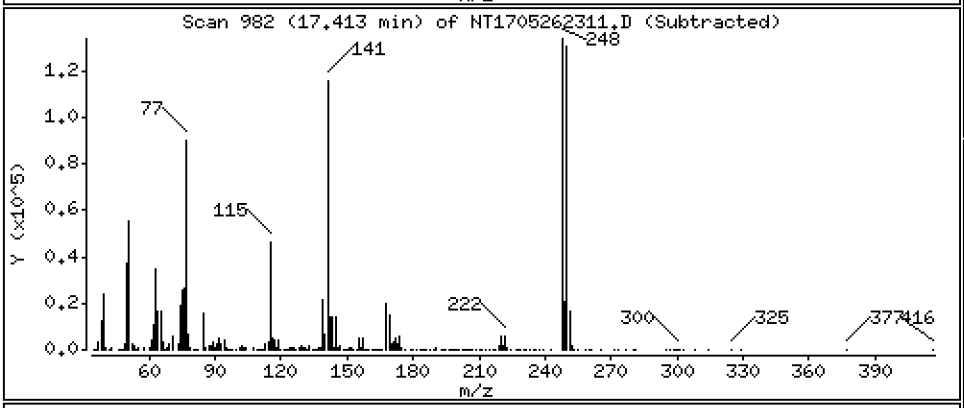
Column phase: ZB-5msi

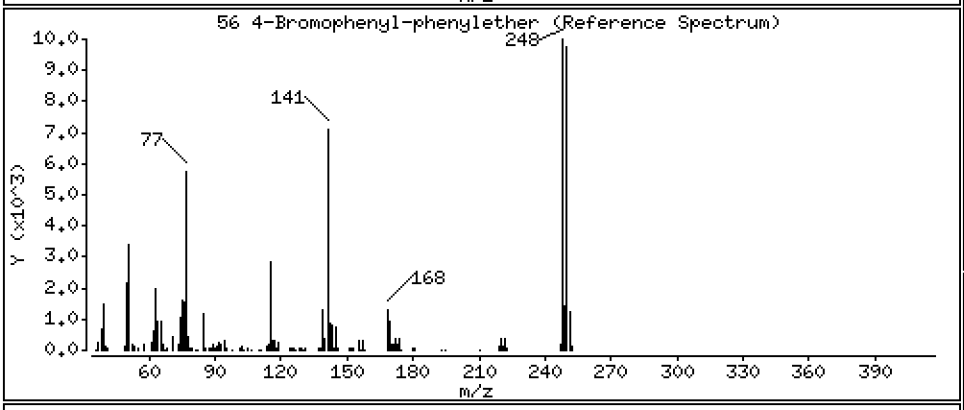
Column diameter: 0.25

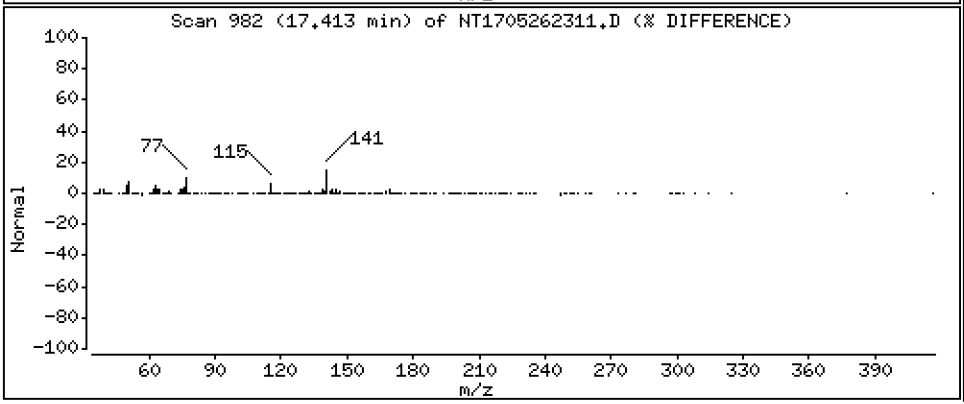
56 4-Bromophenyl-phenylether

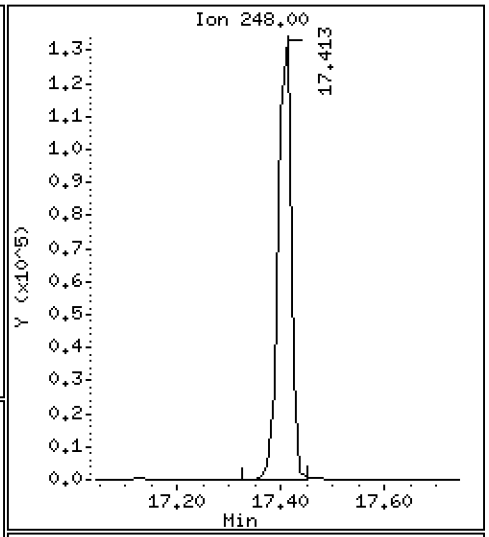
Concentration: 6.359 ug/mL

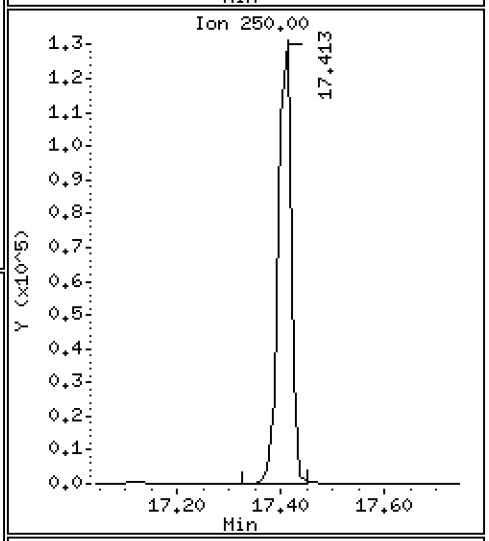


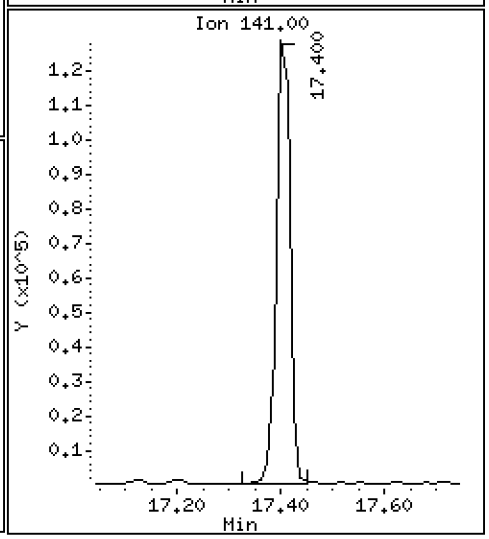












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

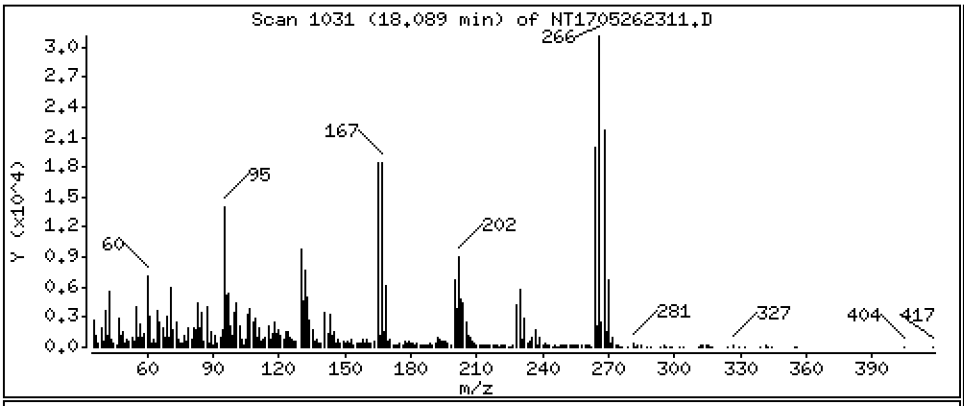
Operator: VTS

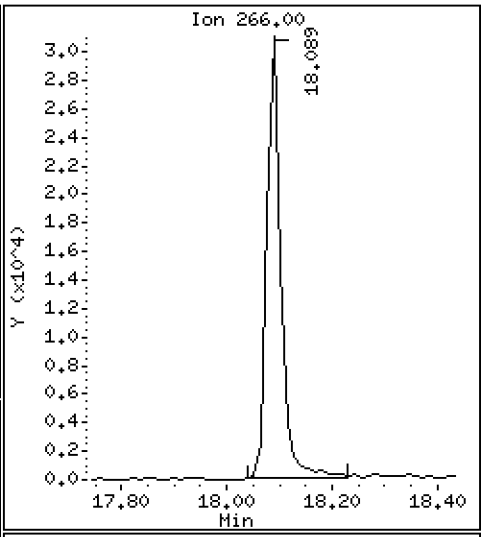
Column phase: ZB-5msi

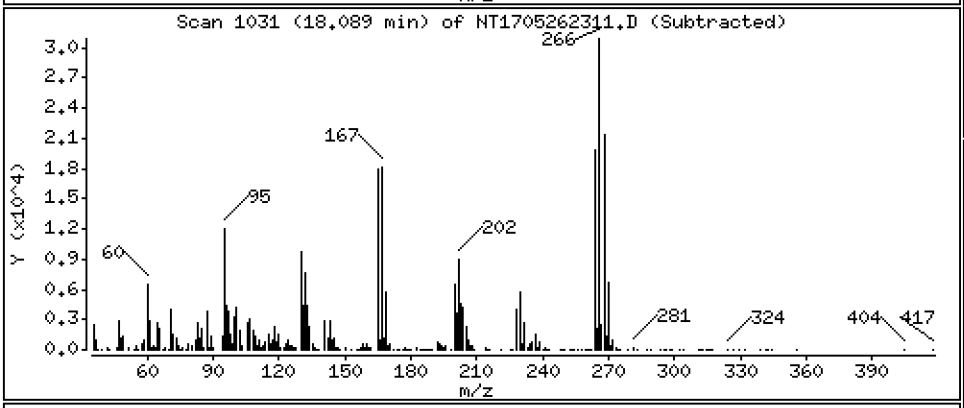
Column diameter: 0.25

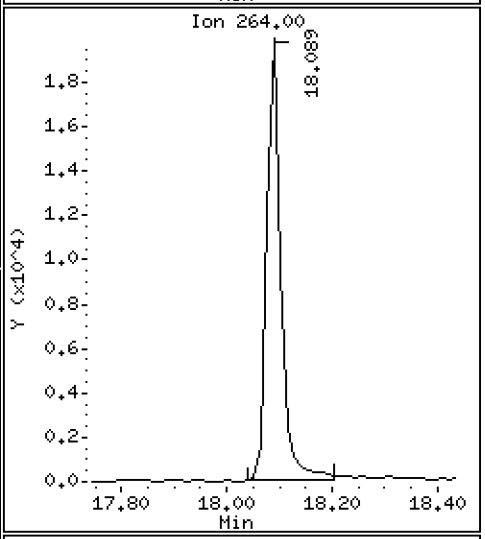
58 Pentachlorophenol

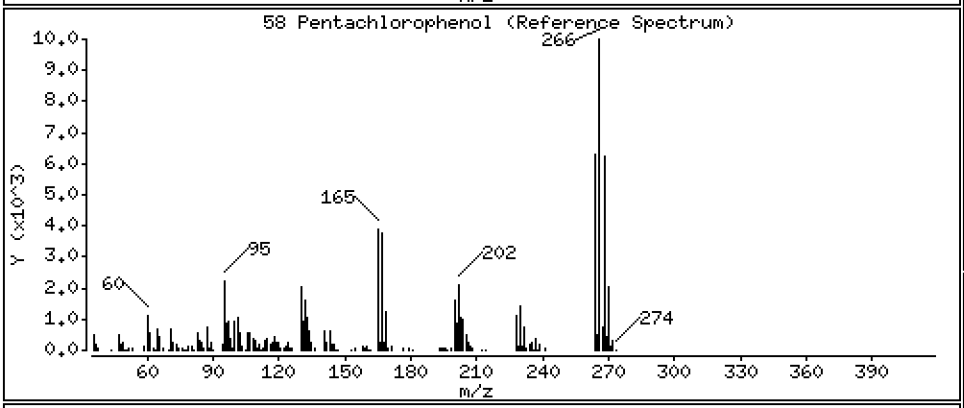
Concentration: 2.592 ug/mL

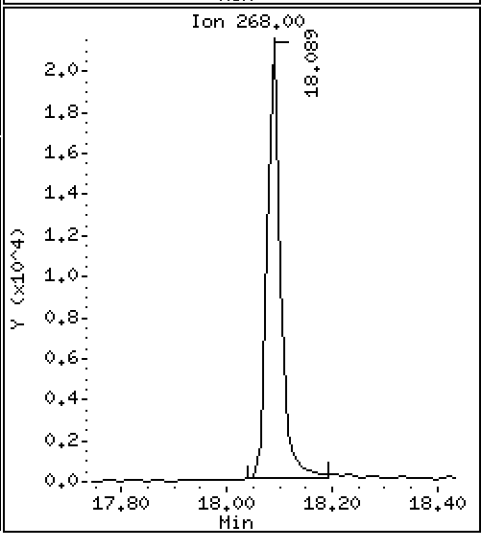


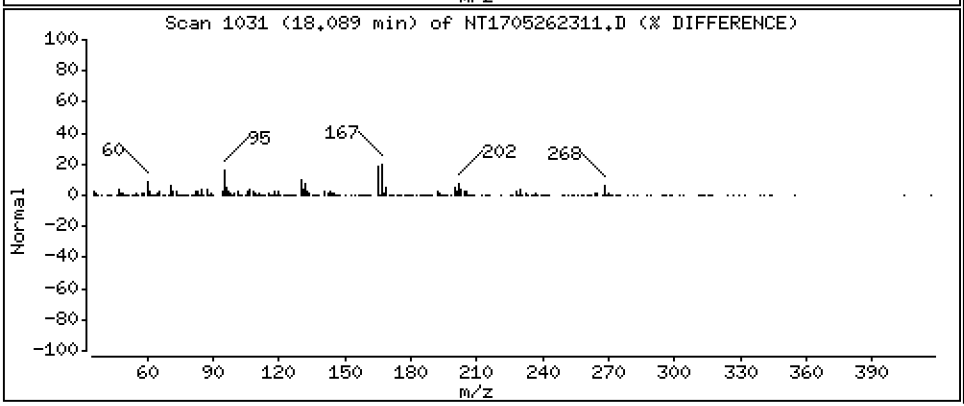












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

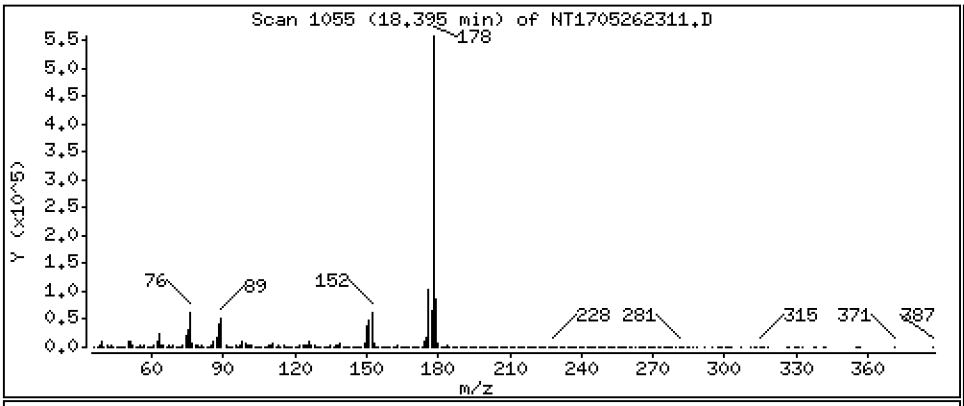
Operator: VTS

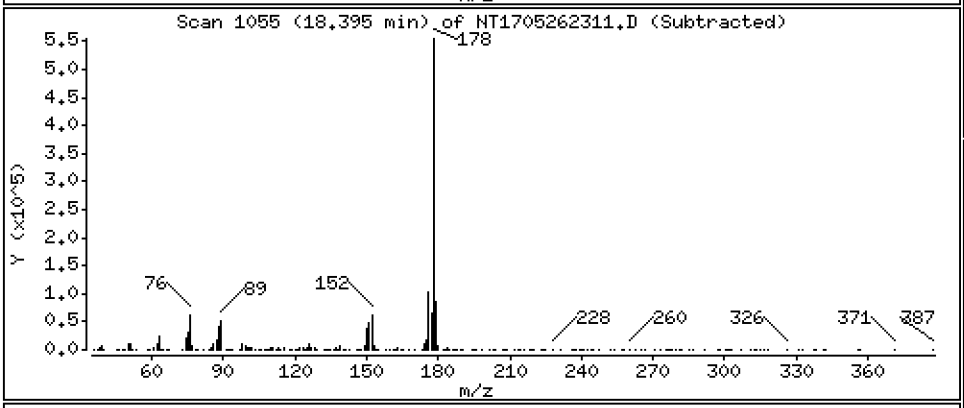
Column phase: ZB-5msi

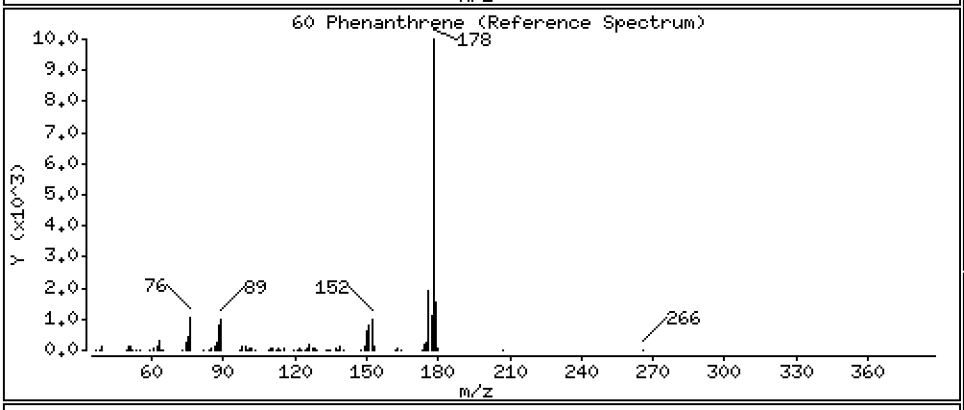
Column diameter: 0.25

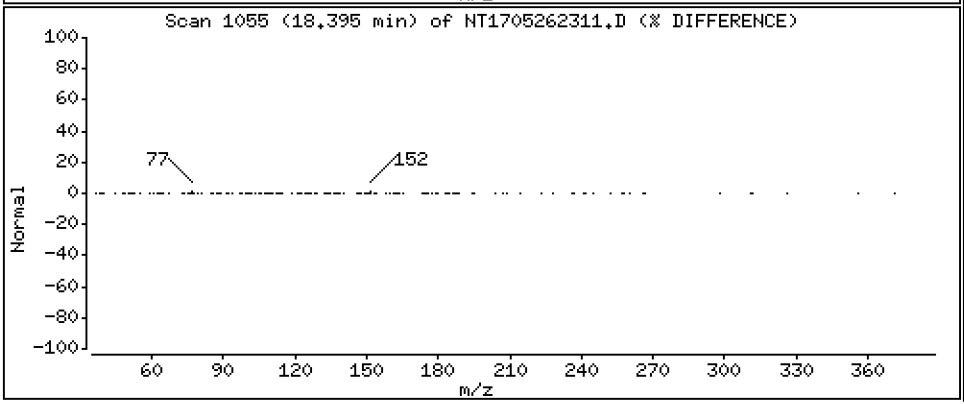
60 Phenanthrene

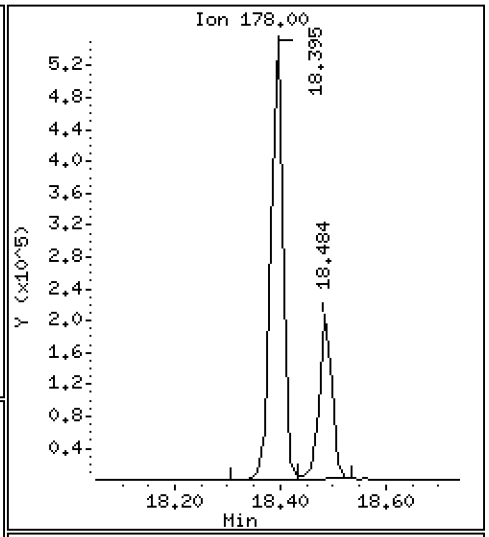
Concentration: 4.157 ug/mL

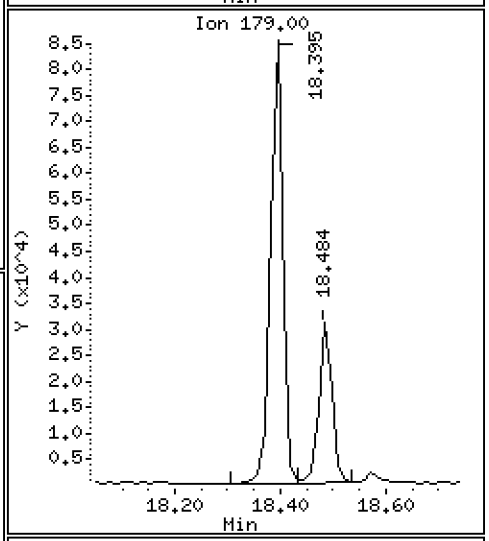


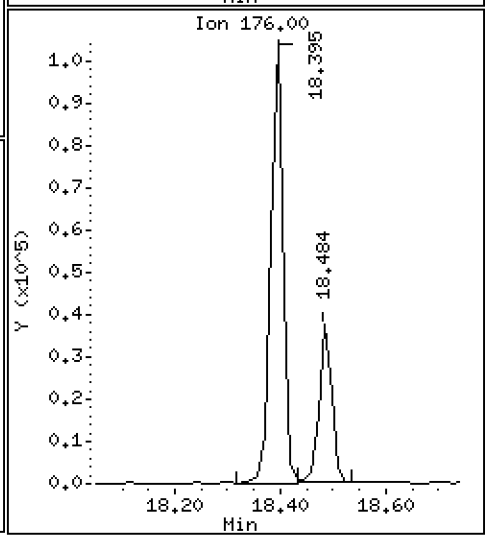












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

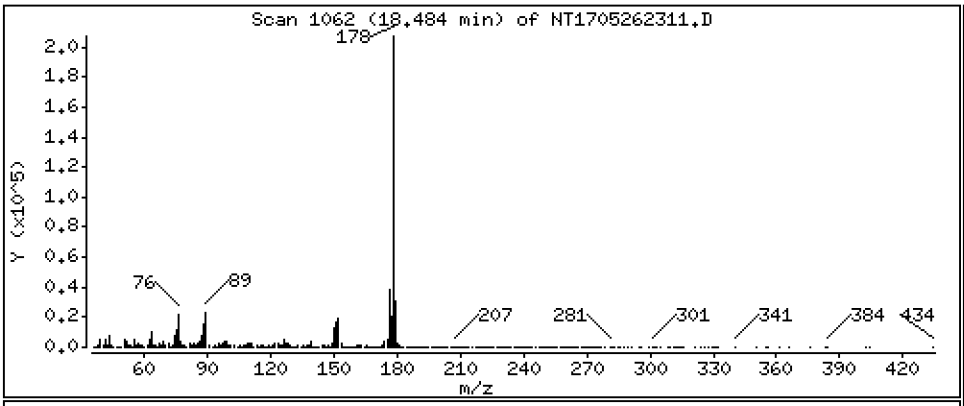
Operator: VTS

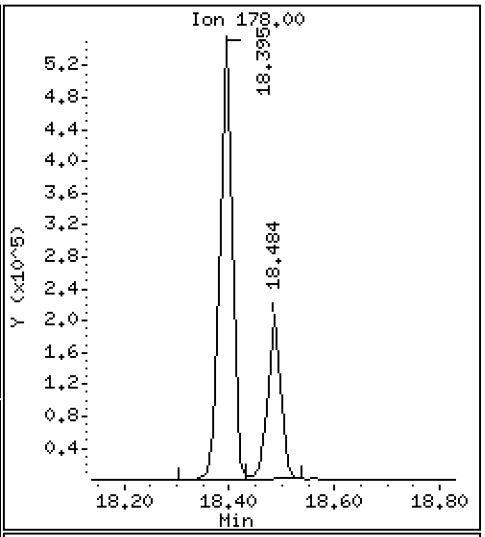
Column phase: ZB-5msi

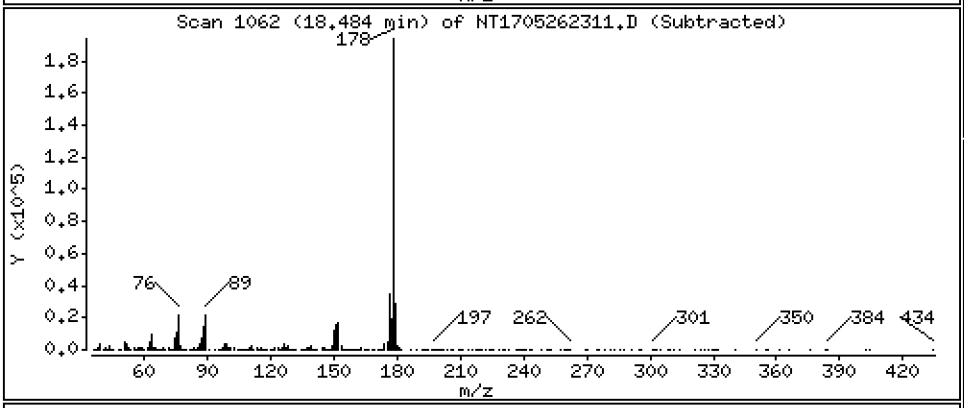
Column diameter: 0.25

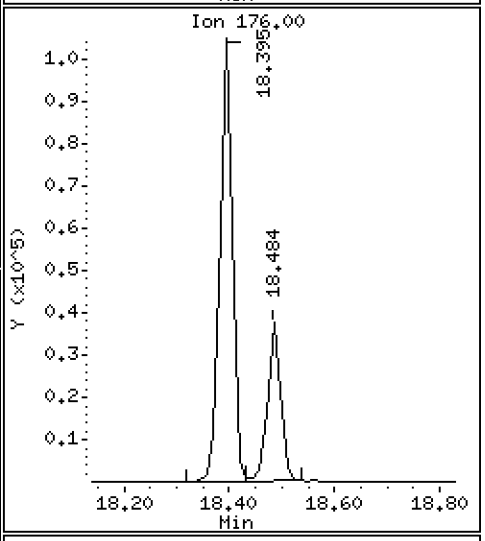
61 Anthracene

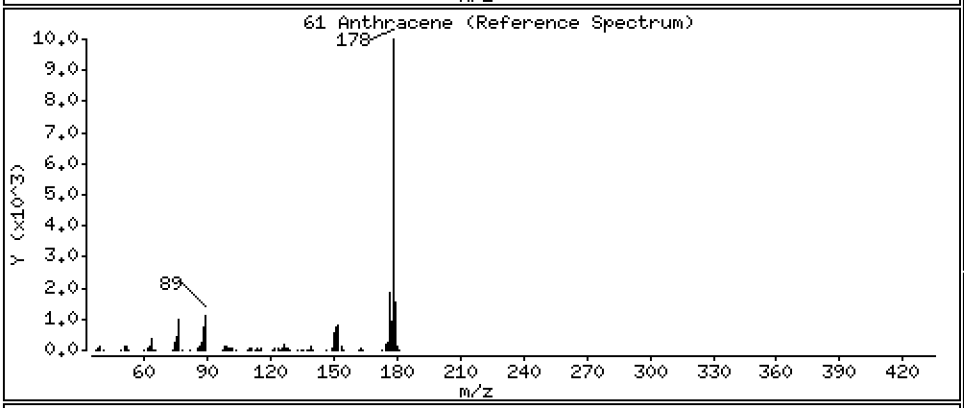
Concentration: 1.650 ug/mL

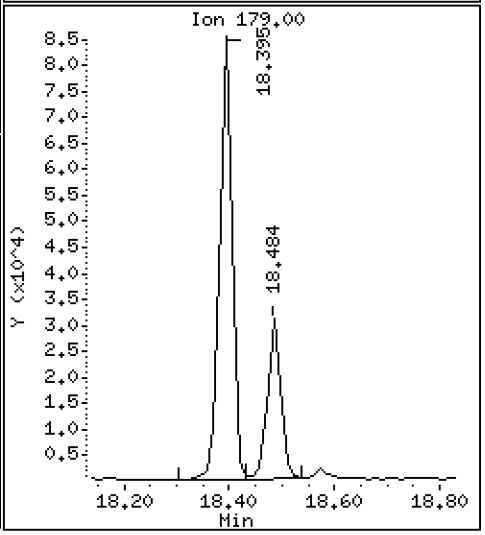


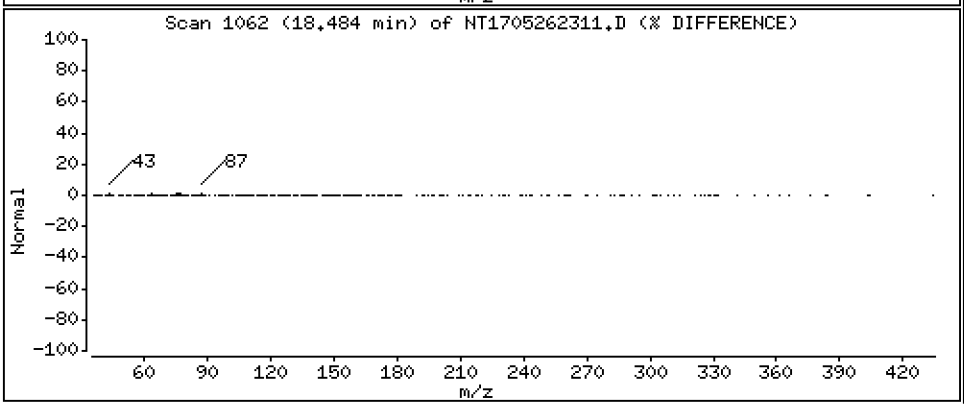












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

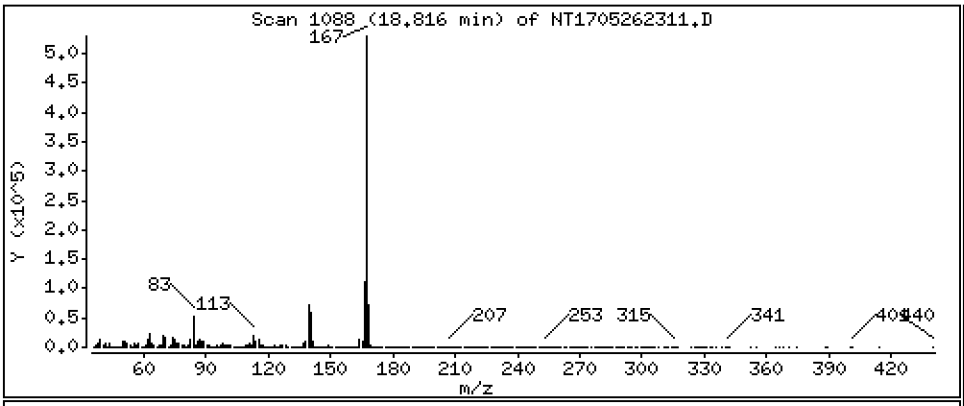
Operator: VTS

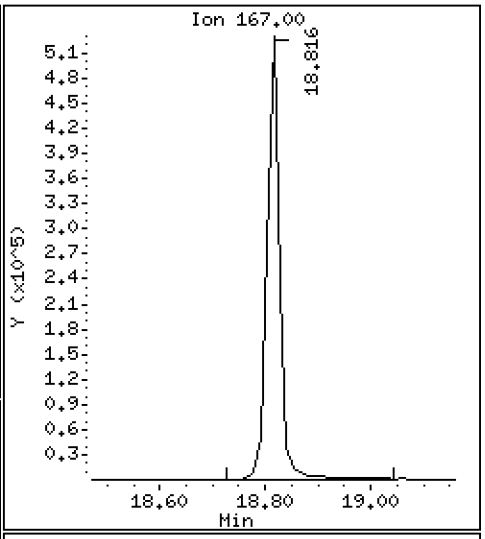
Column phase: ZB-5msi

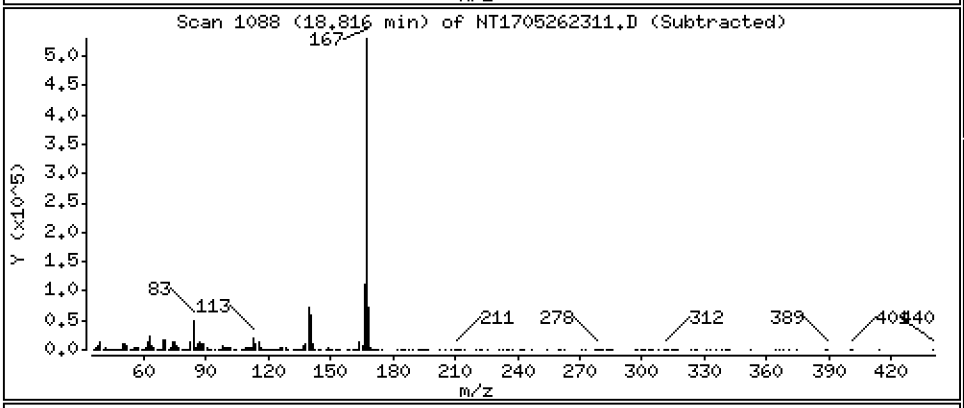
Column diameter: 0.25

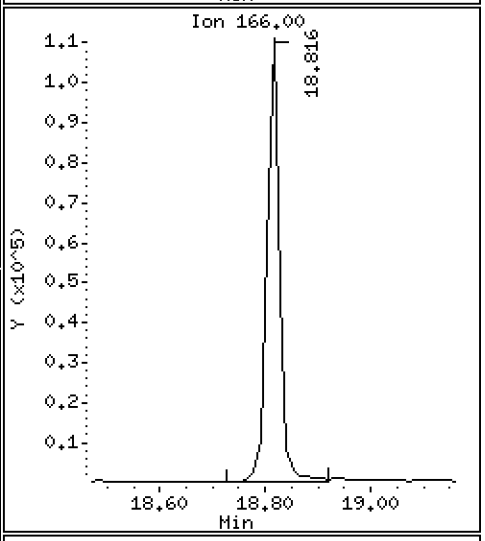
62 Carbazole

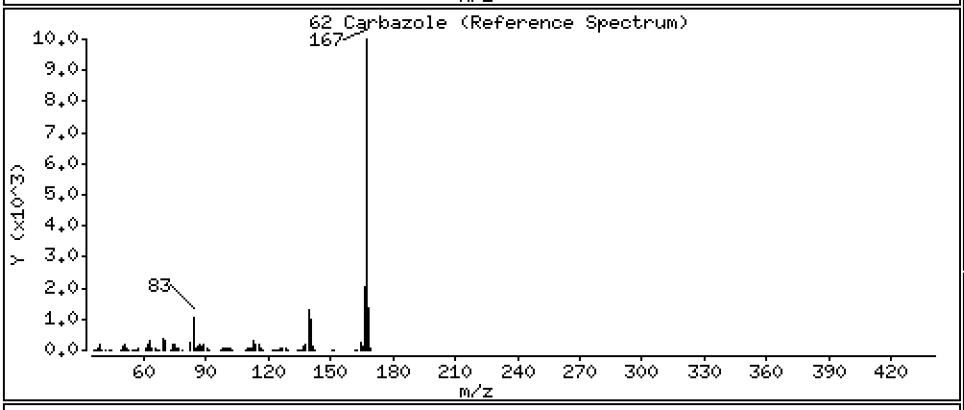
Concentration: 6.719 ug/mL

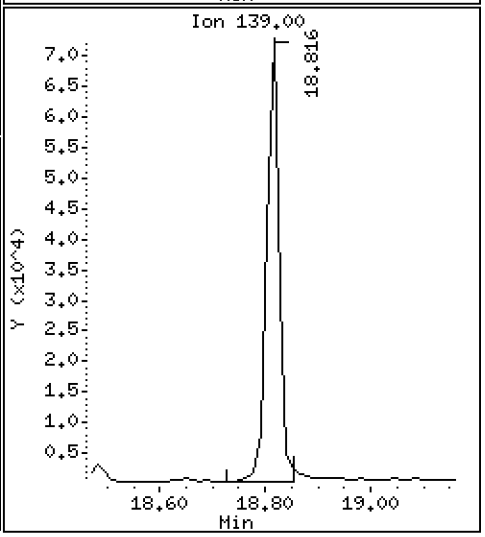


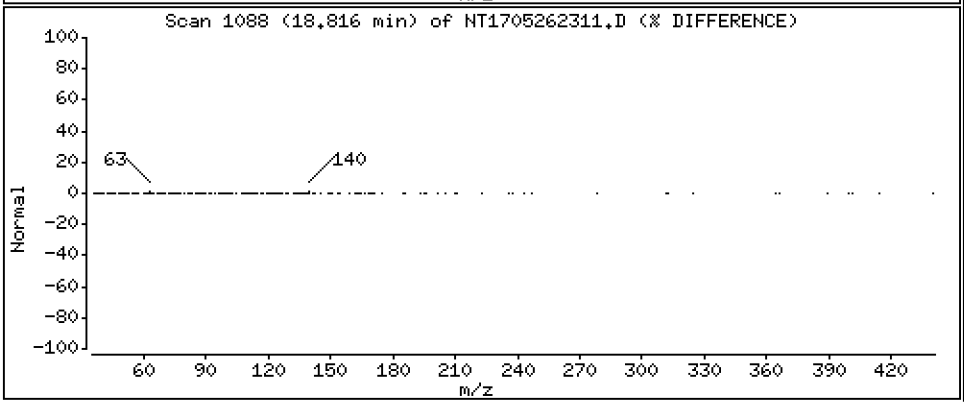












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

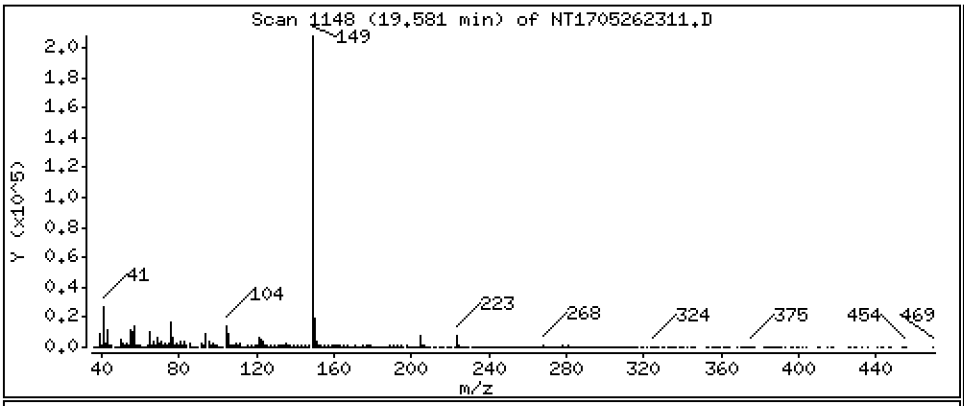
Operator: VTS

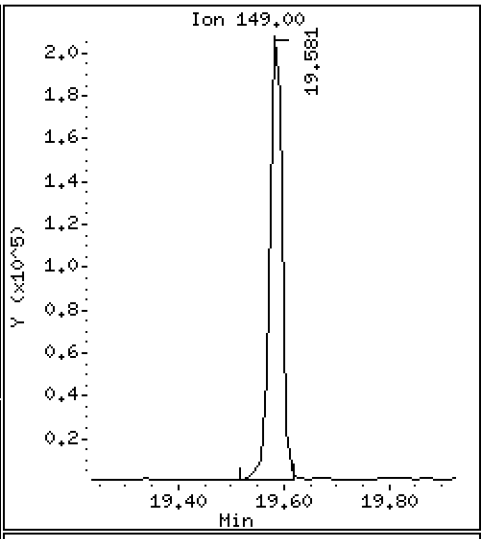
Column phase: ZB-5msi

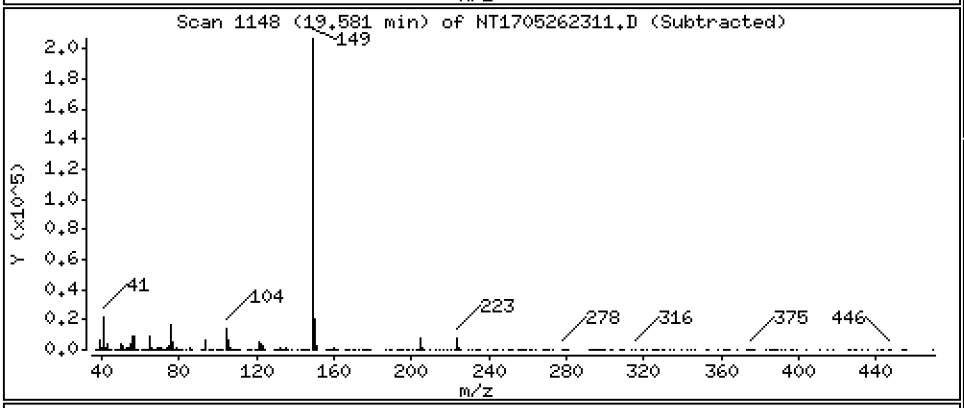
Column diameter: 0.25

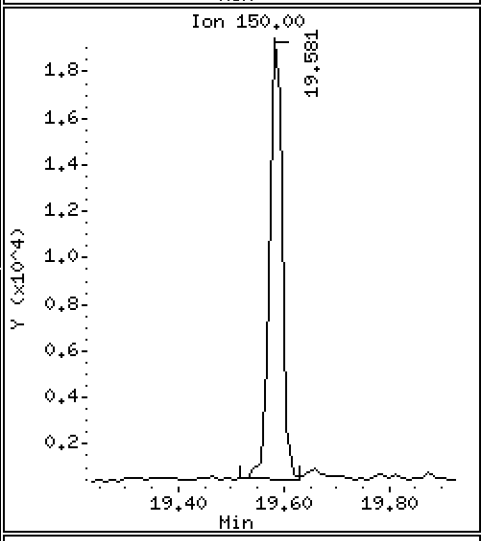
63 Di-n-butylphthalate

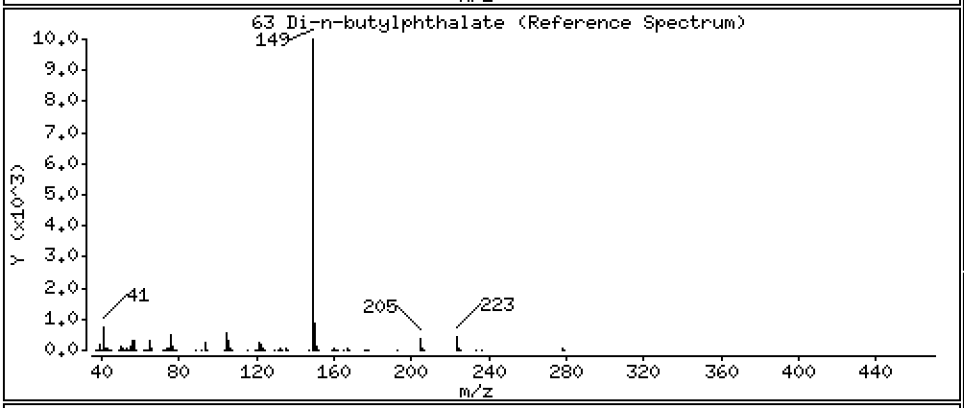
Concentration: 1.433 ug/mL

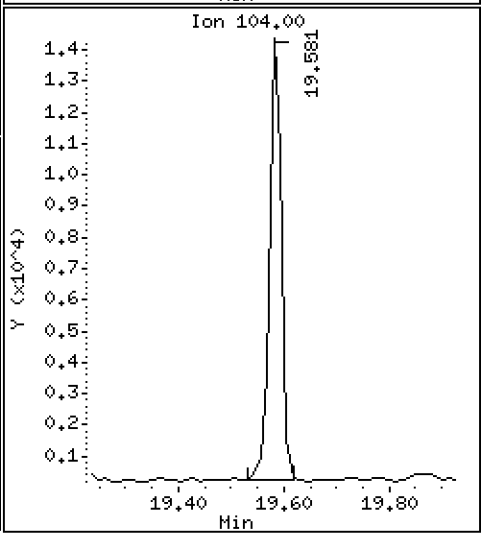


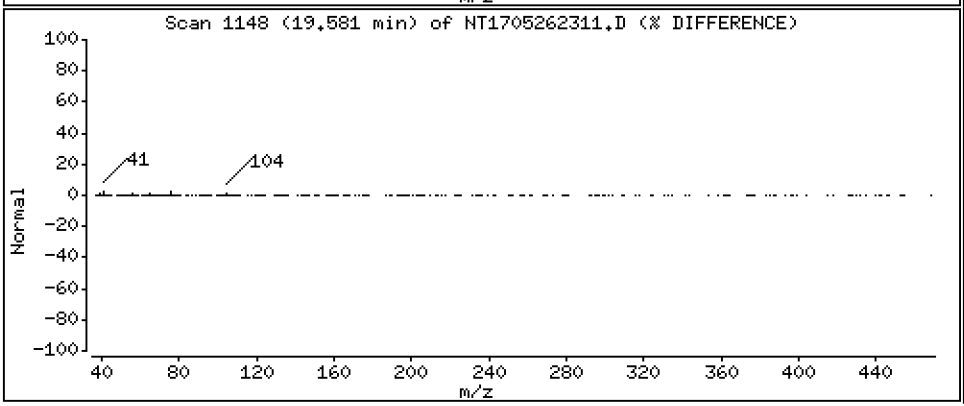












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

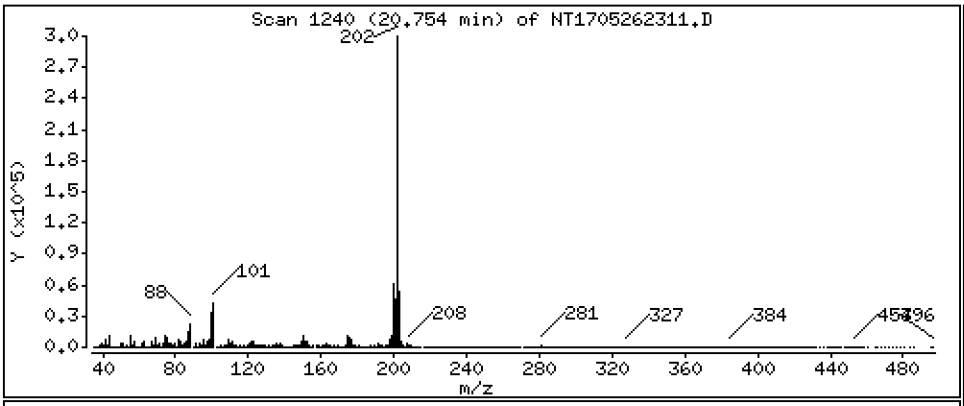
Operator: VTS

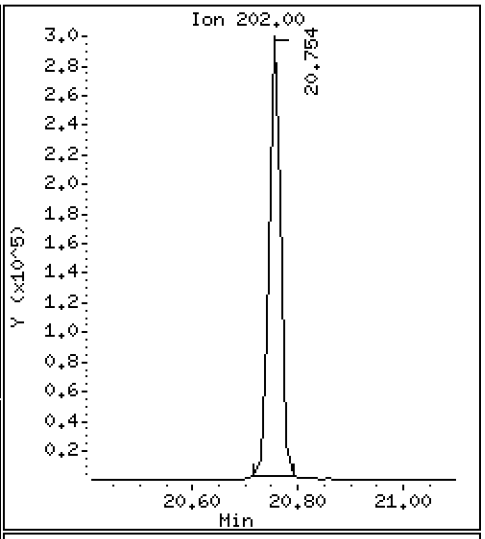
Column phase: ZB-5msi

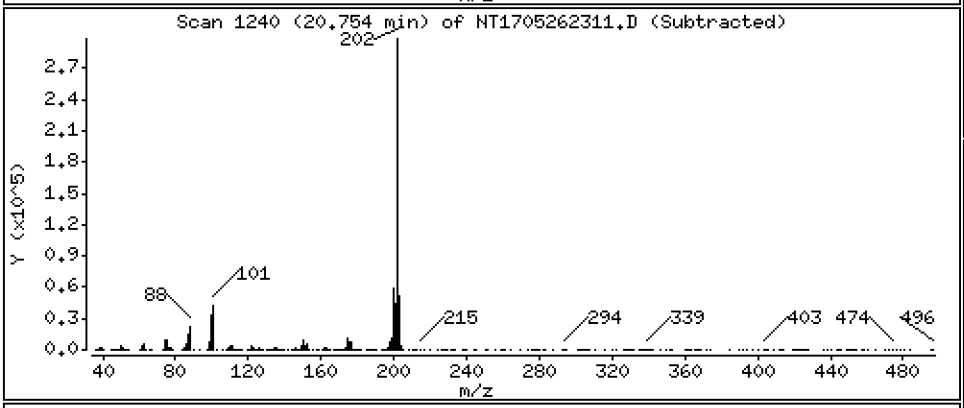
Column diameter: 0.25

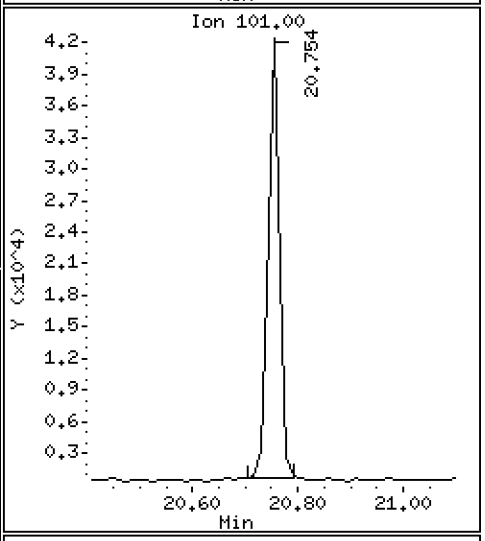
64 Fluoranthene

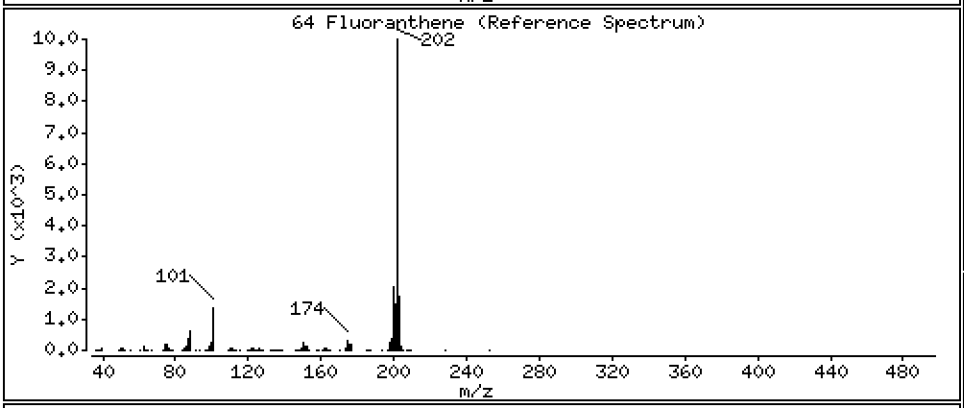
Concentration: 1.592 ug/mL

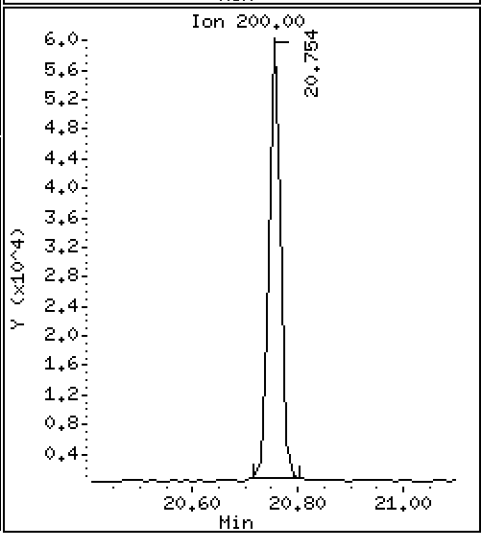


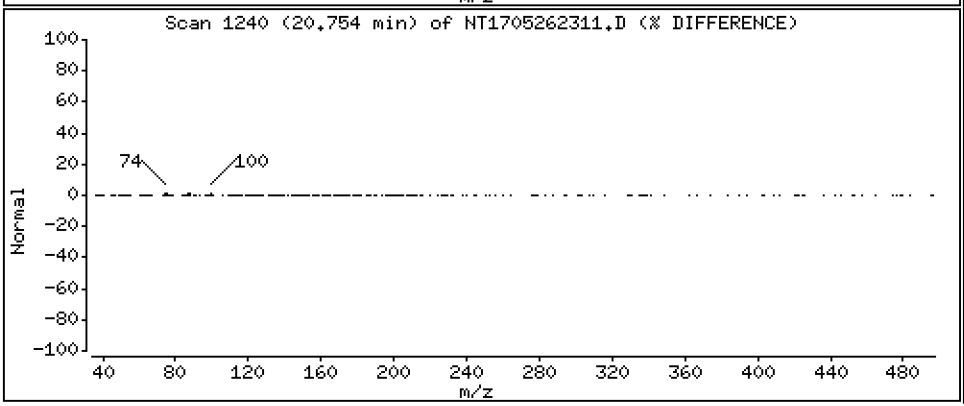












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

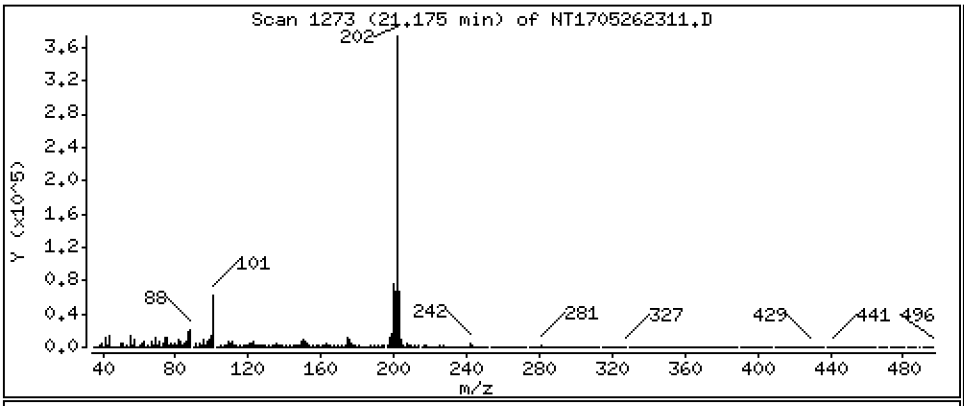
Operator: VTS

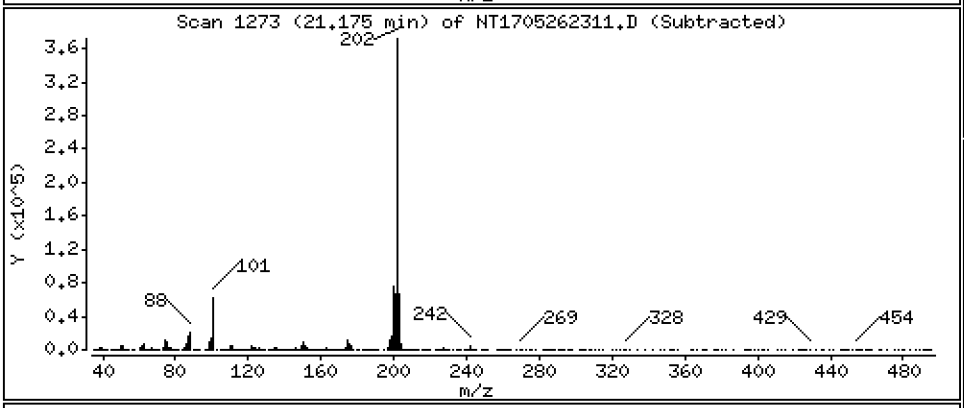
Column phase: ZB-5msi

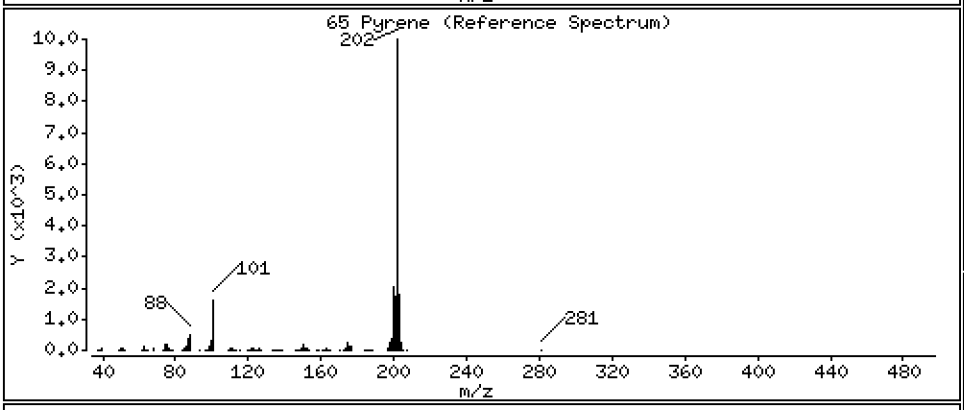
Column diameter: 0.25

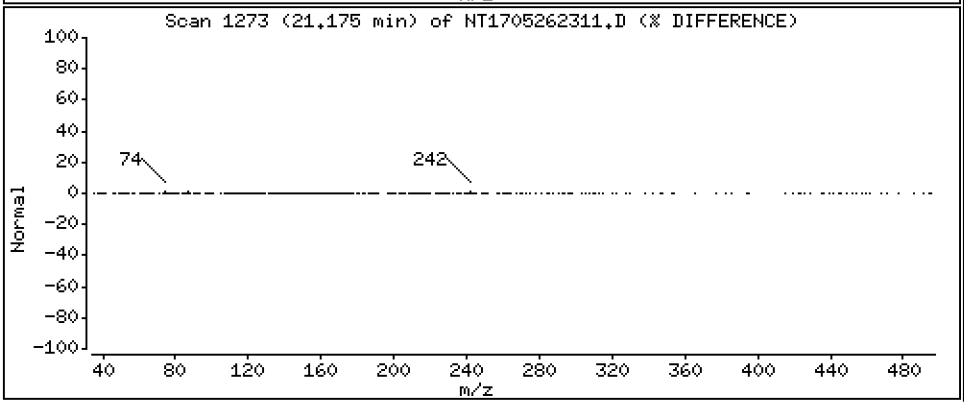
65 Pyrene

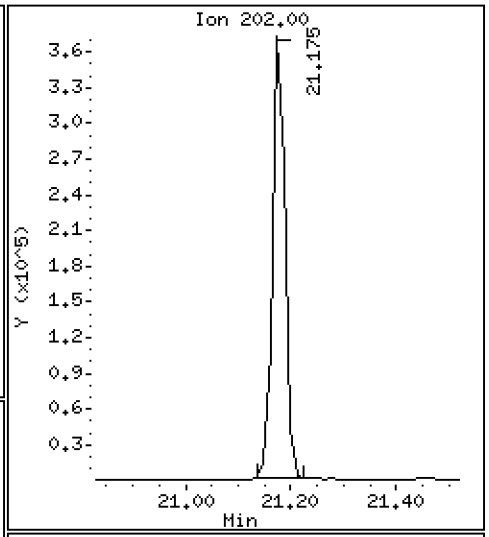
Concentration: 2.036 ug/mL

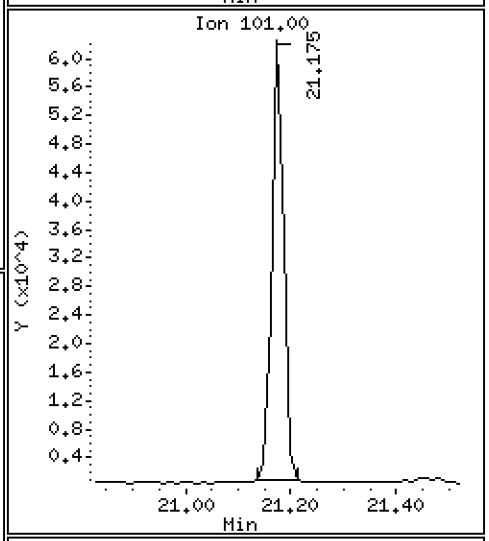


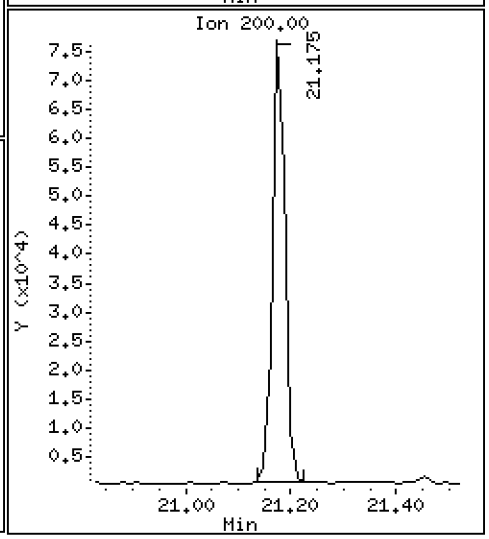












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

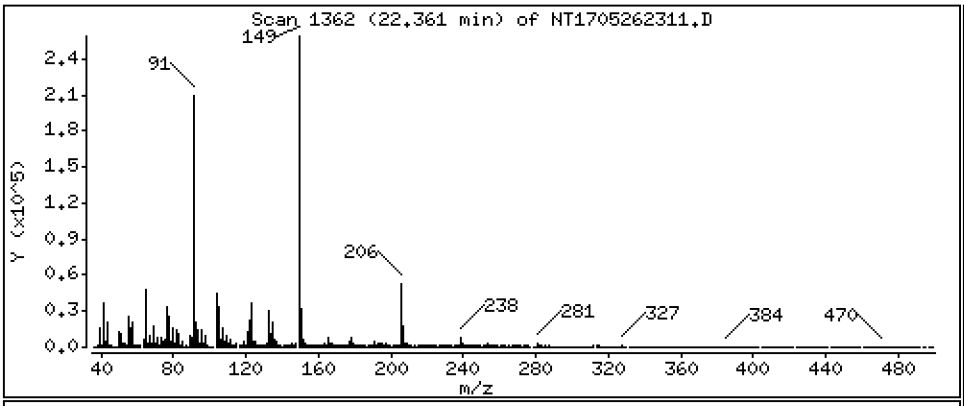
Operator: VTS

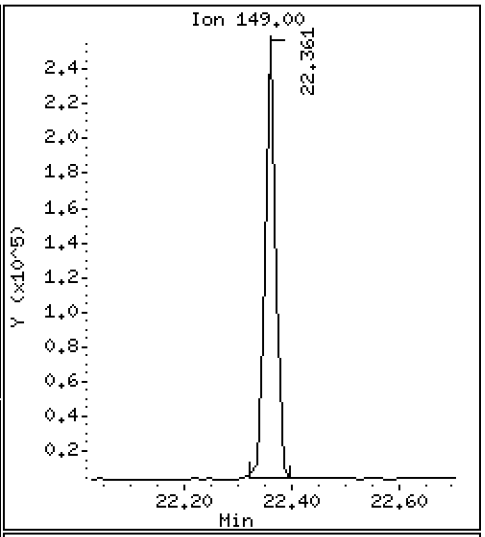
Column phase: ZB-5msi

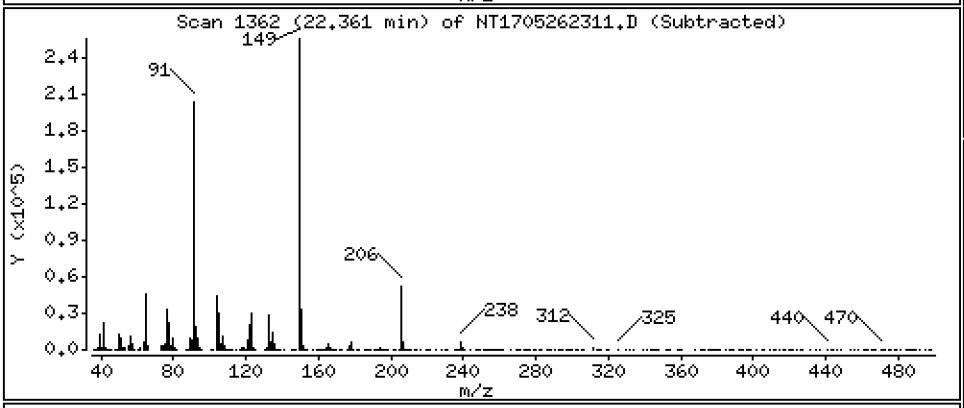
Column diameter: 0.25

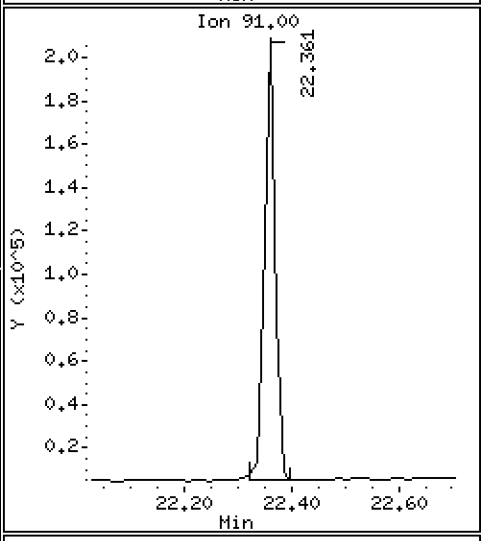
67 Butylbenzylphthalate

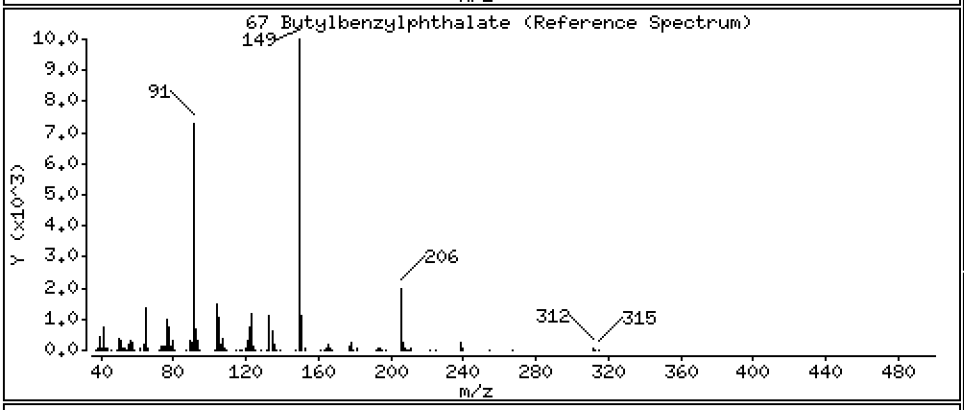
Concentration: 2.631 ug/mL

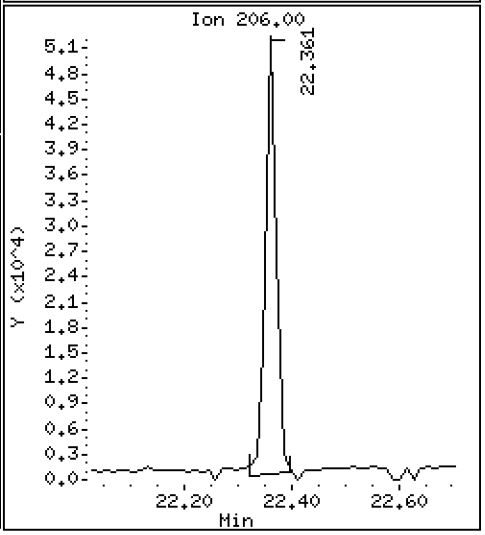


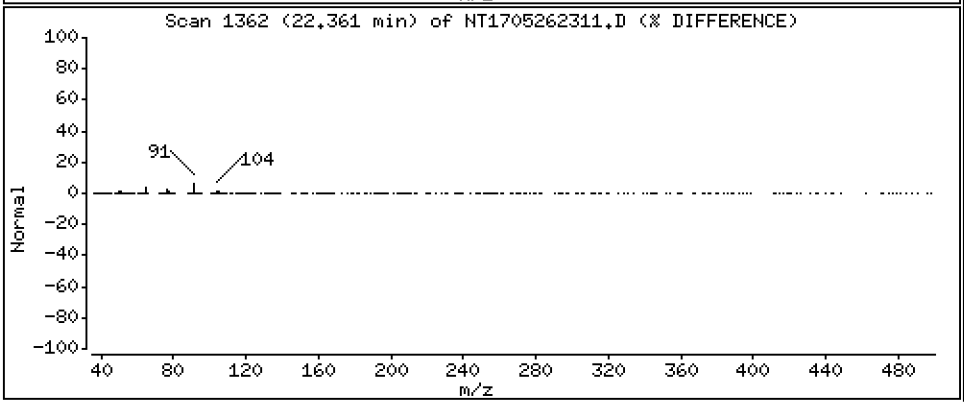












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

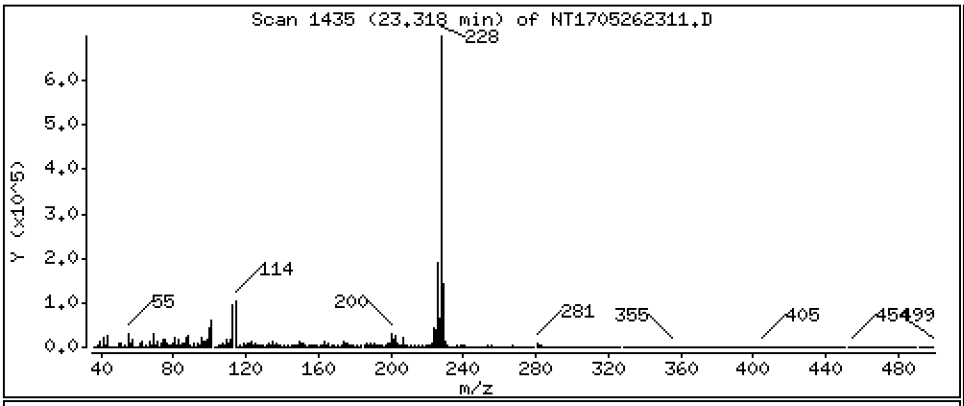
Operator: VTS

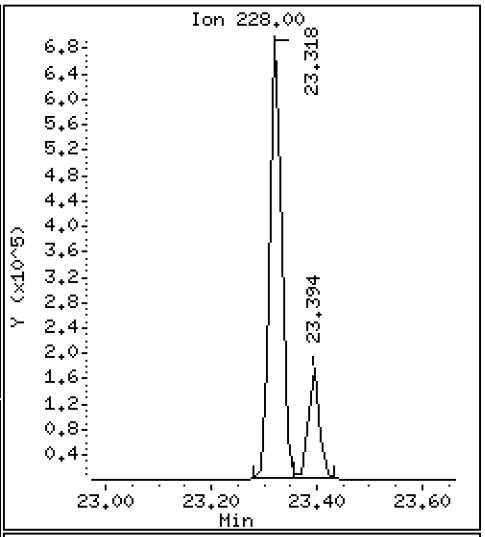
Column phase: ZB-5msi

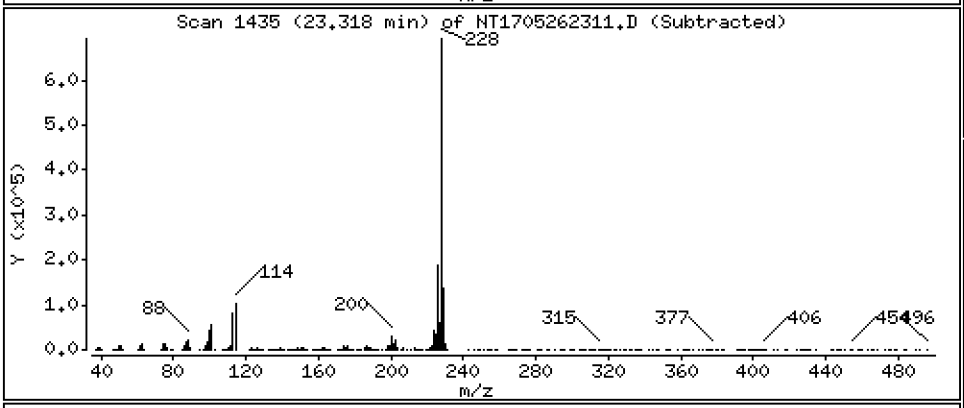
Column diameter: 0.25

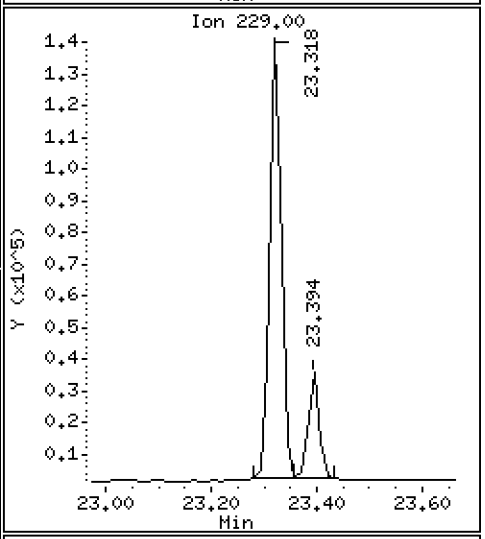
68 Benzo(a)anthracene

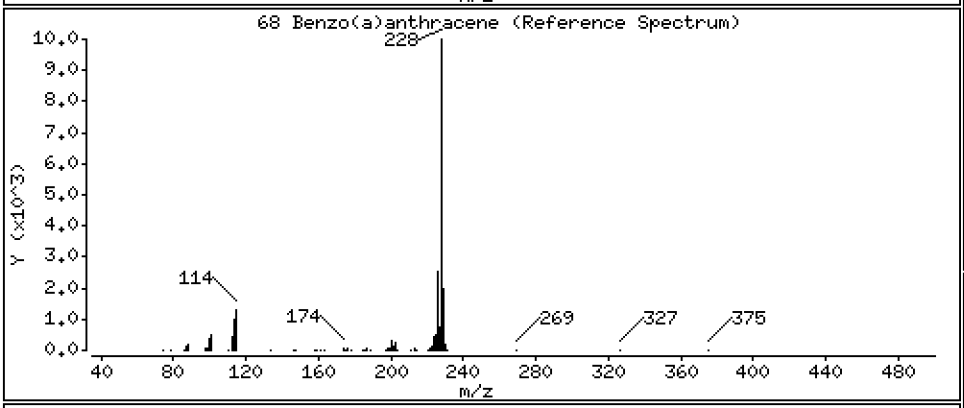
Concentration: 4.666 ug/mL

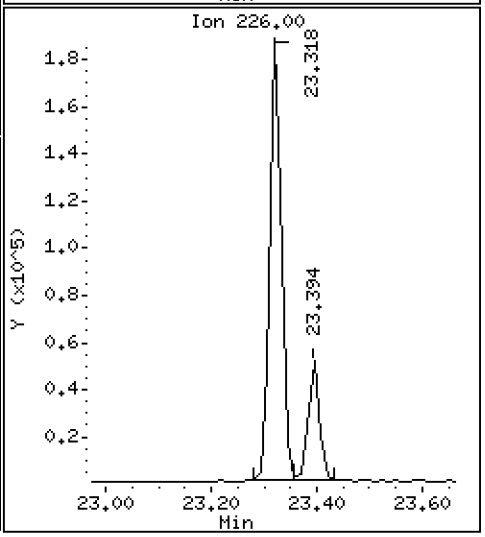


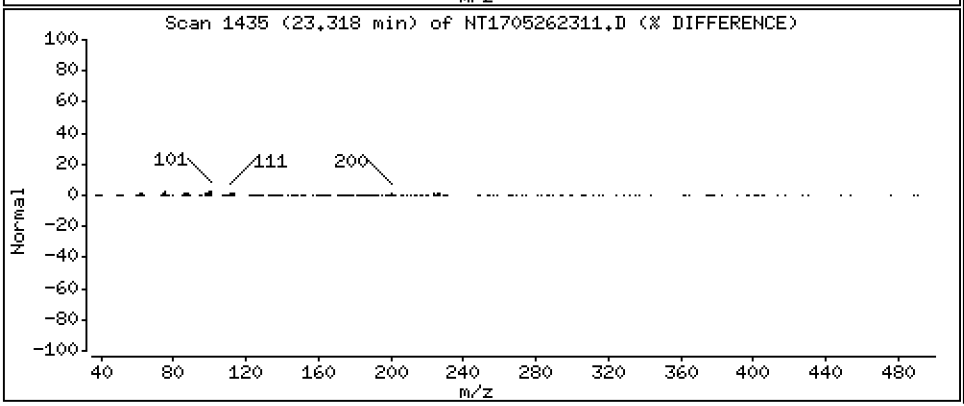












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

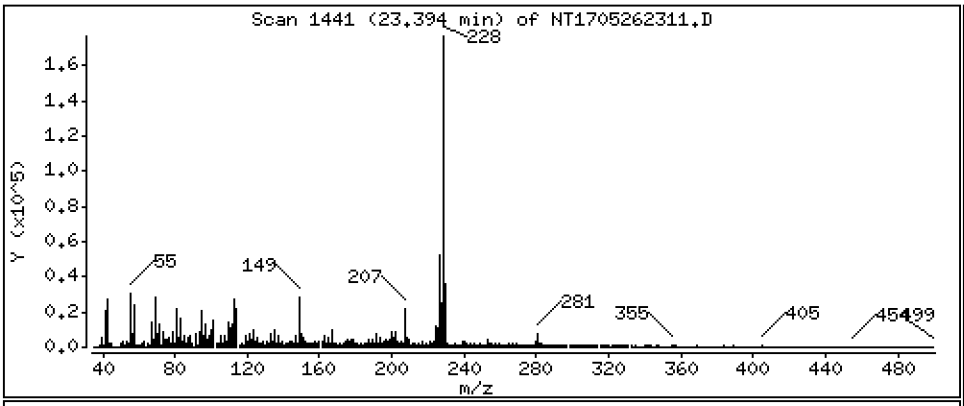
Operator: VTS

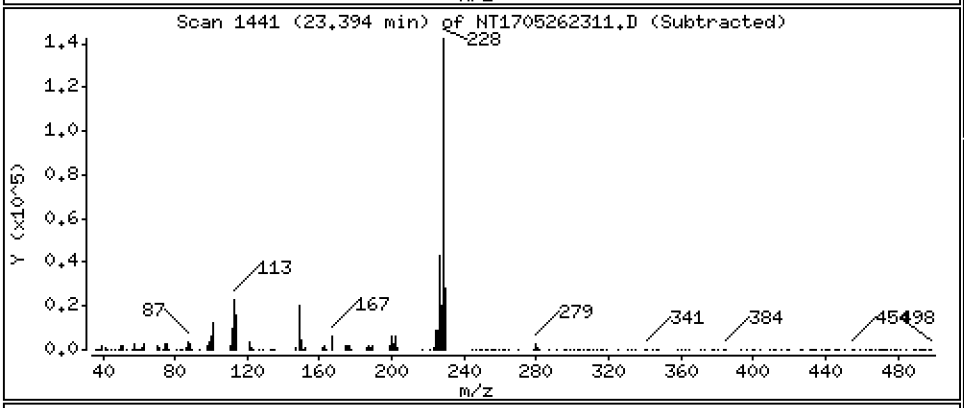
Column phase: ZB-5msi

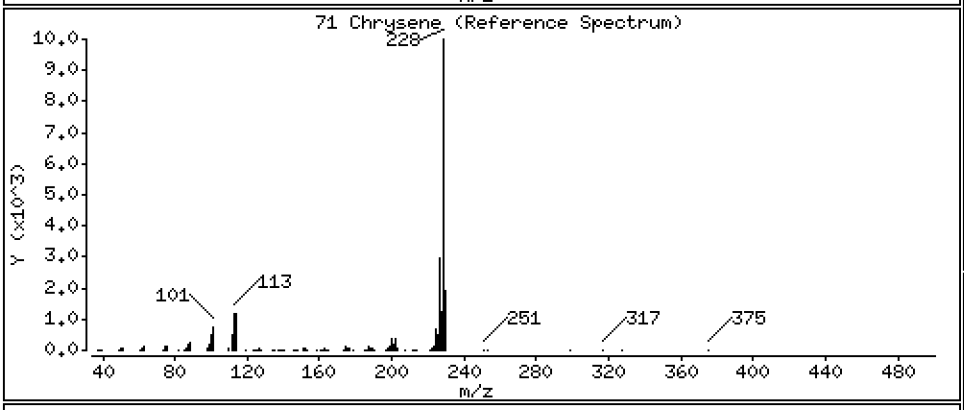
Column diameter: 0.25

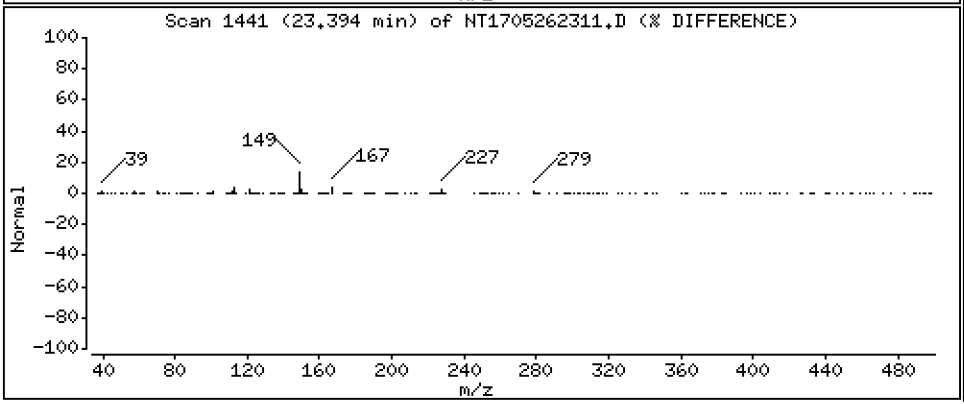
71 Chrysene

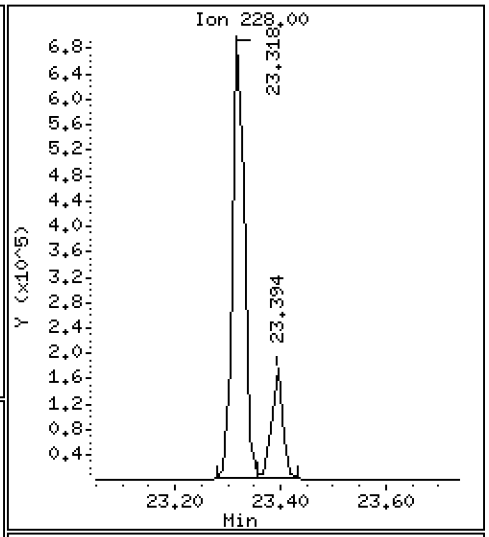
Concentration: 1.169 ug/mL

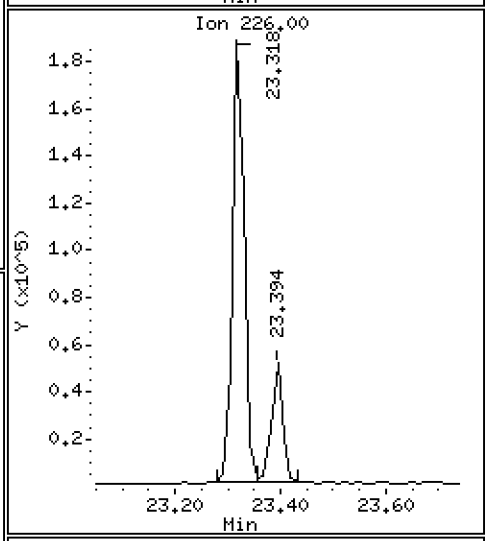


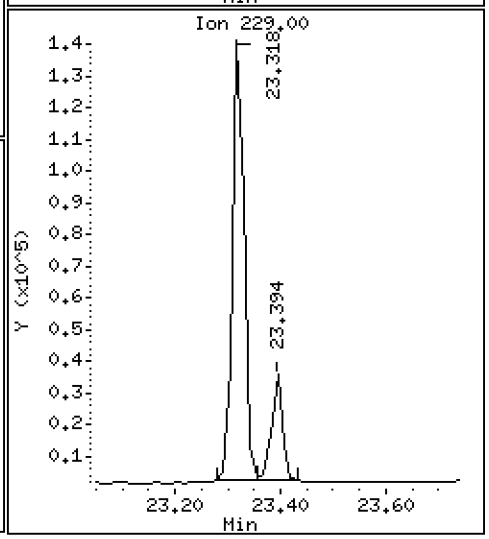












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

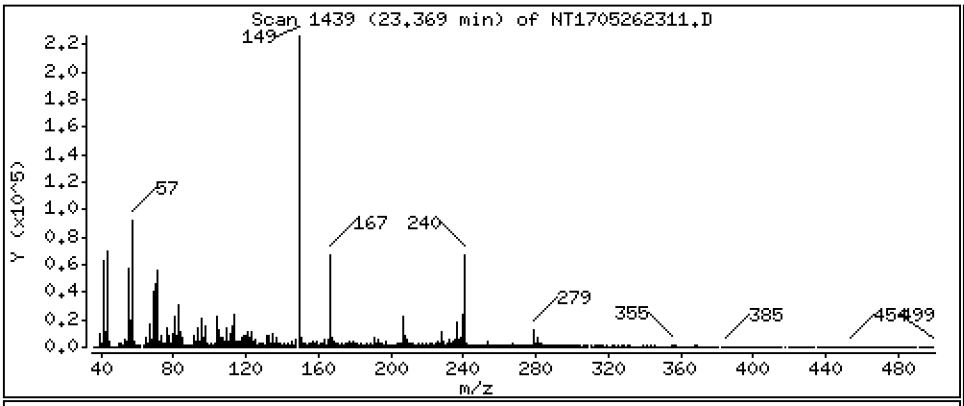
Operator: VTS

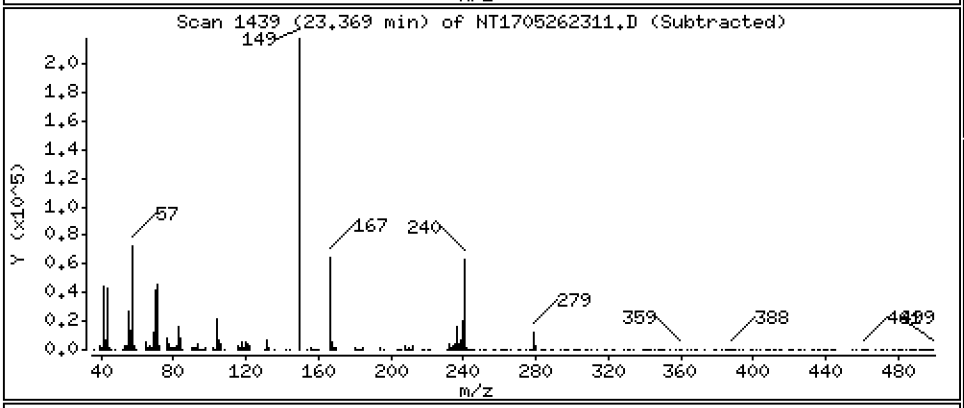
Column phase: ZB-5msi

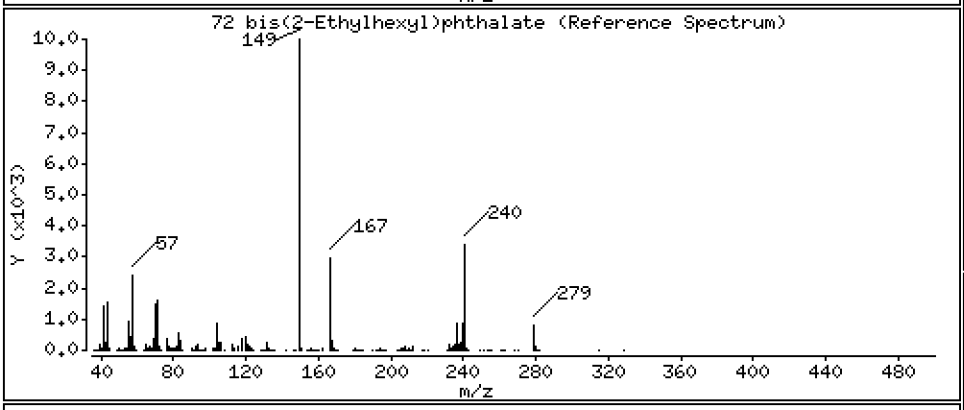
Column diameter: 0.25

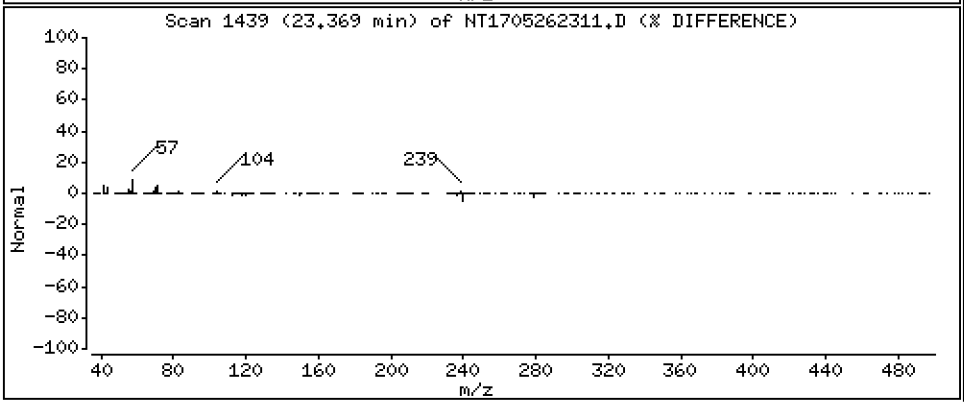
72 bis(2-Ethylhexyl)phthalate

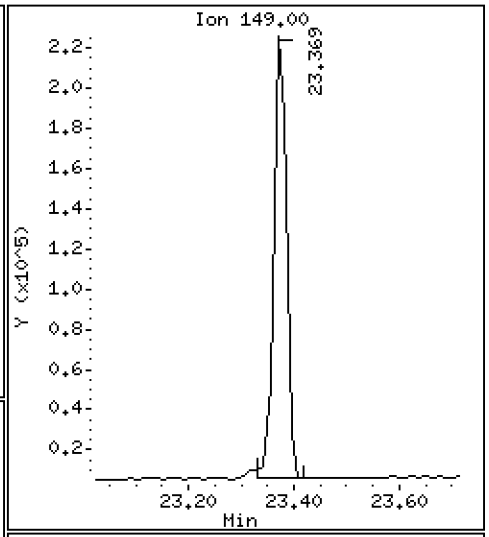
Concentration: 1.837 ug/mL

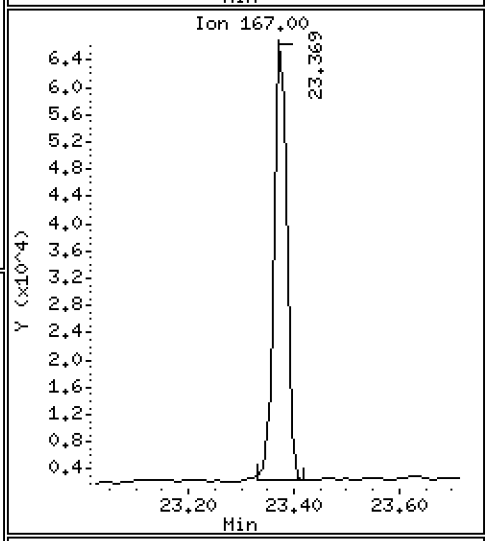


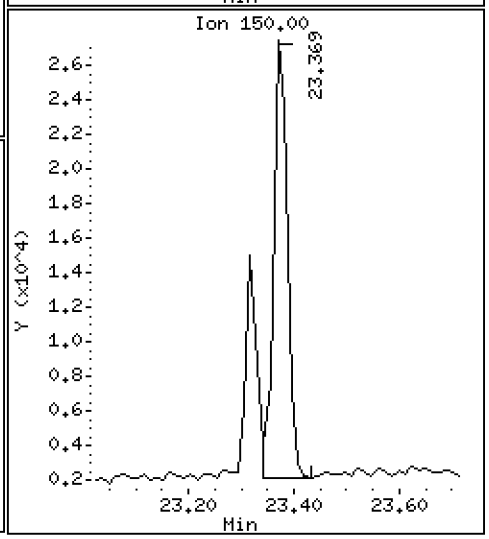












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

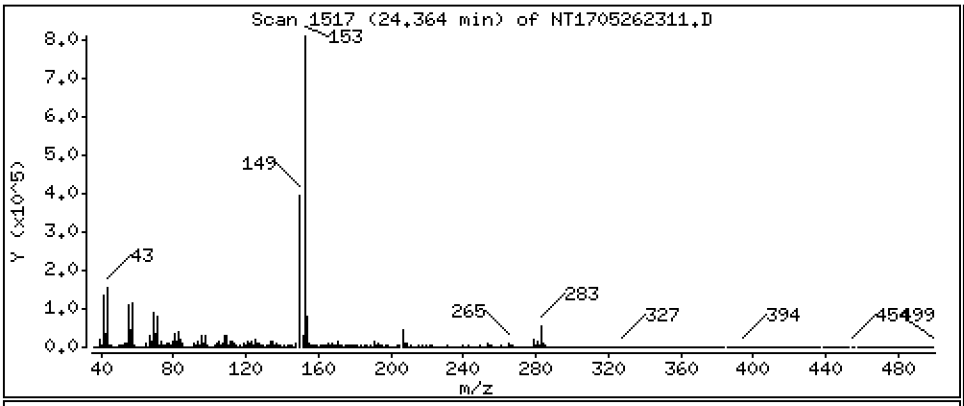
Operator: VTS

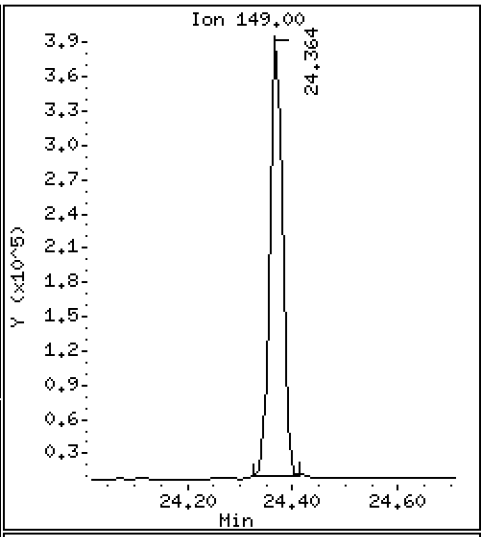
Column phase: ZB-5msi

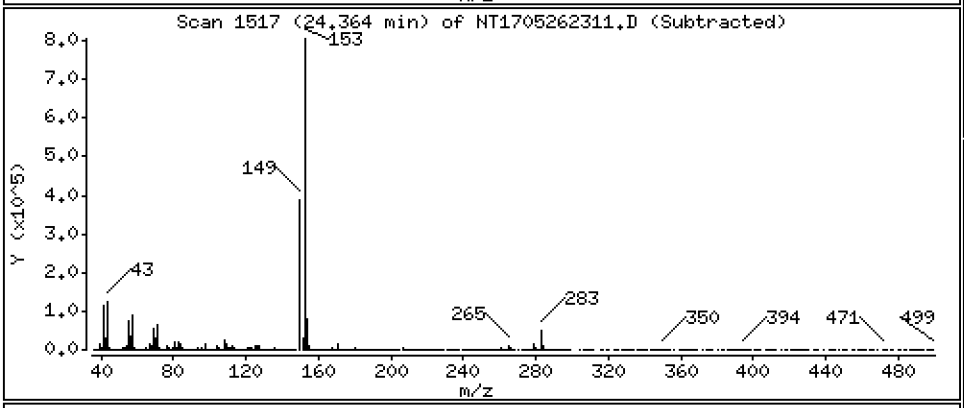
Column diameter: 0.25

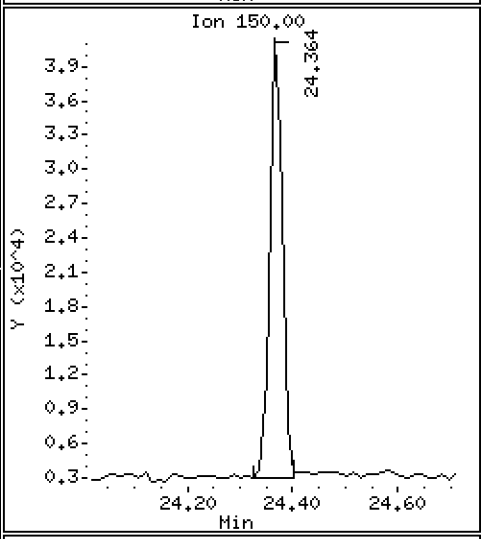
73 Di-n-octylphthalate

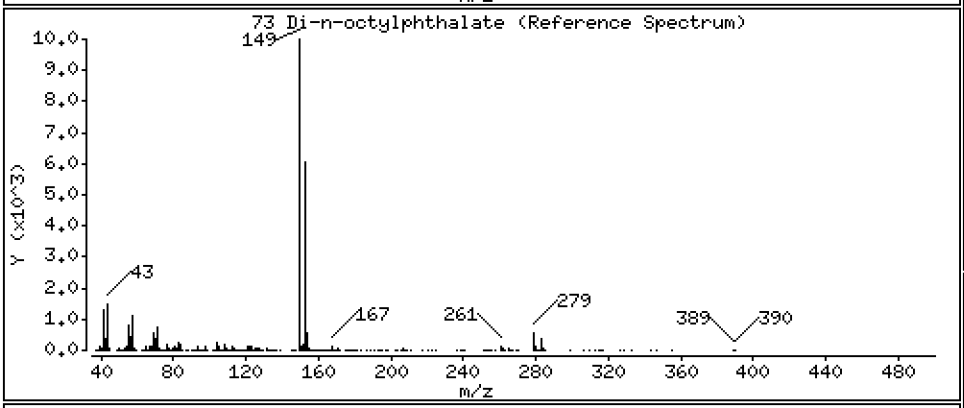
Concentration: 1.811 ug/mL

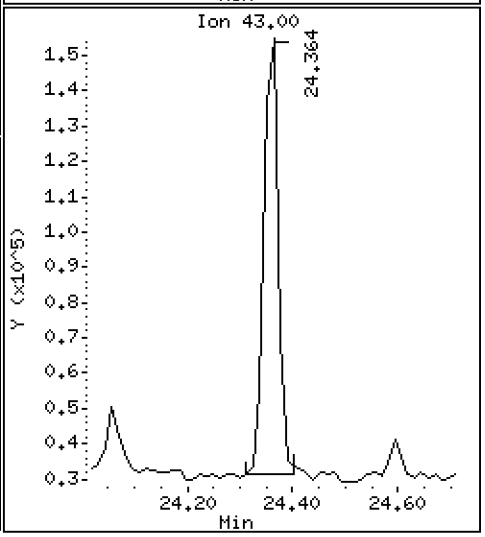


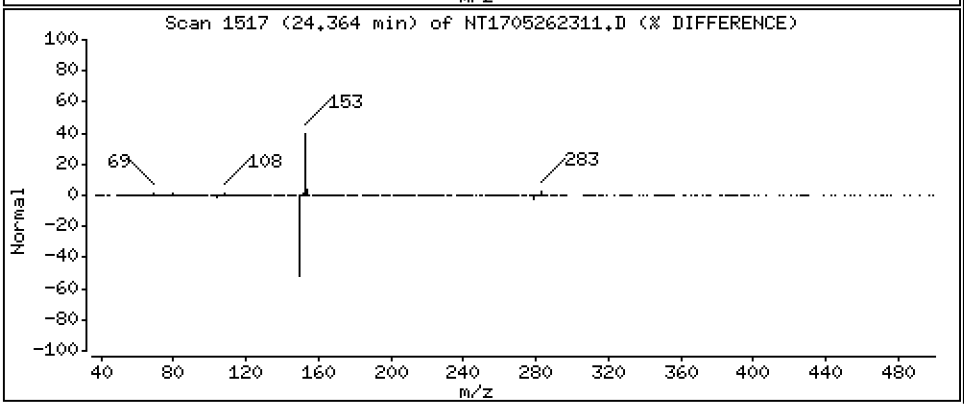












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

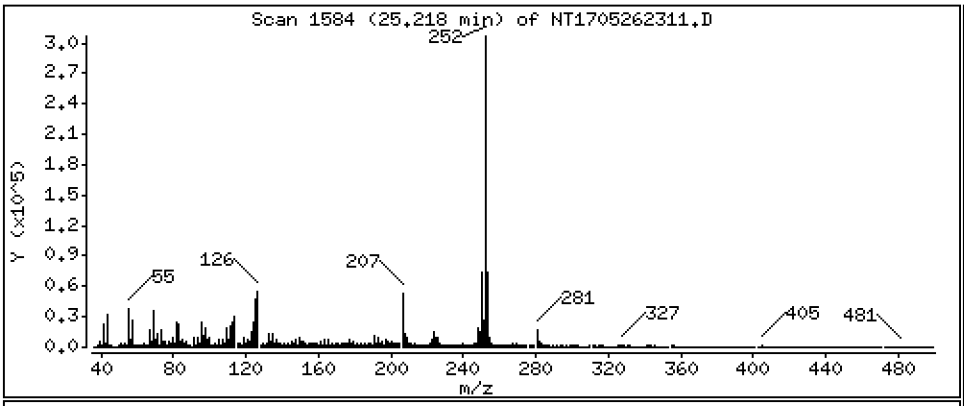
Operator: VTS

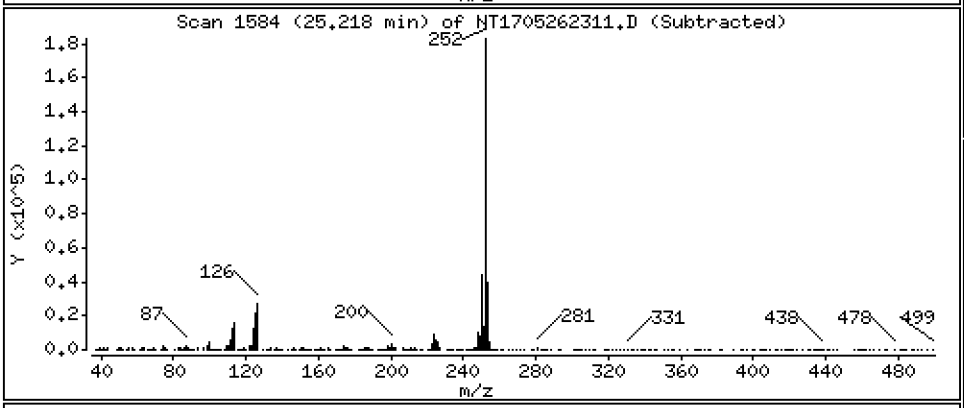
Column phase: ZB-5msi

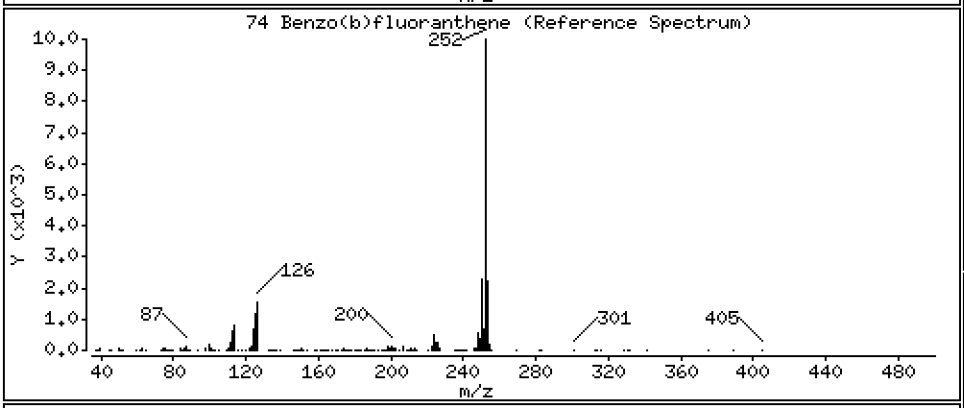
Column diameter: 0.25

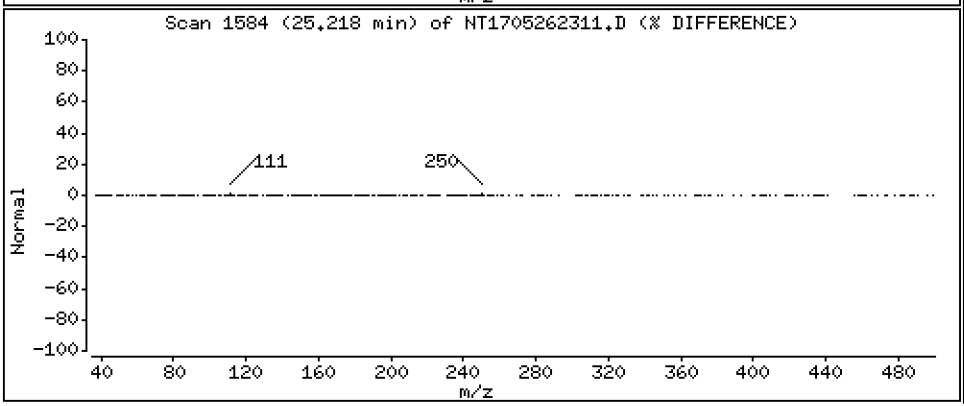
74 Benzo(b)fluoranthene

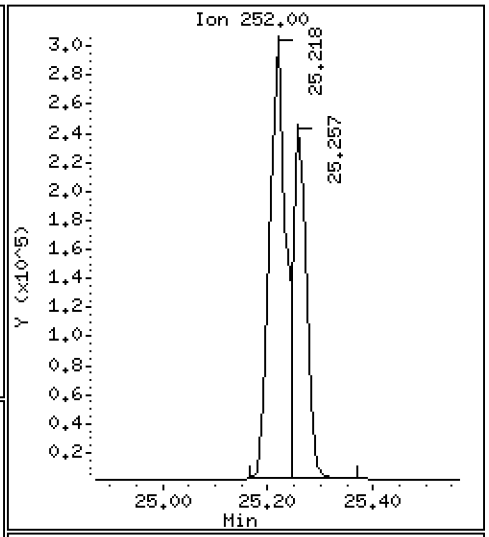
Concentration: 2.620 ug/mL

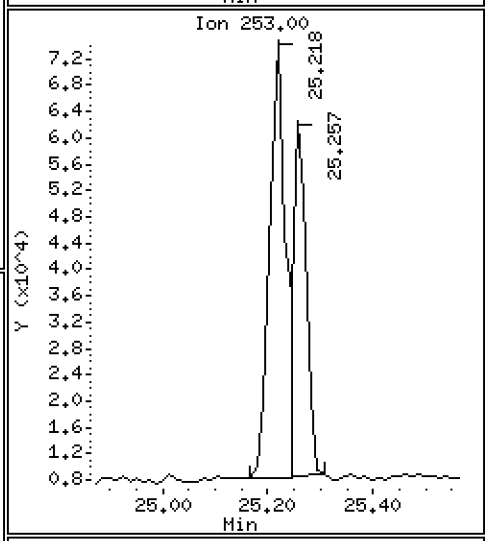


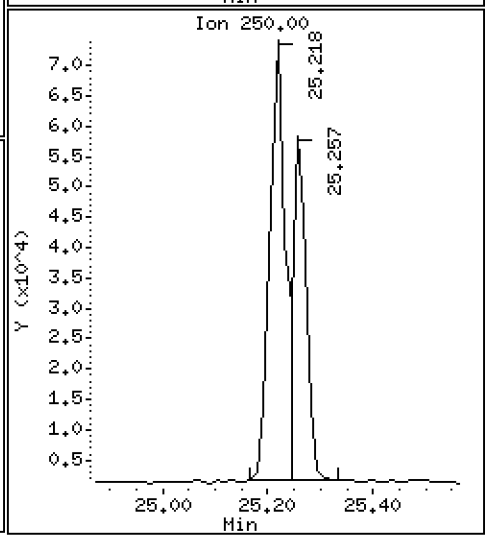












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262311.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

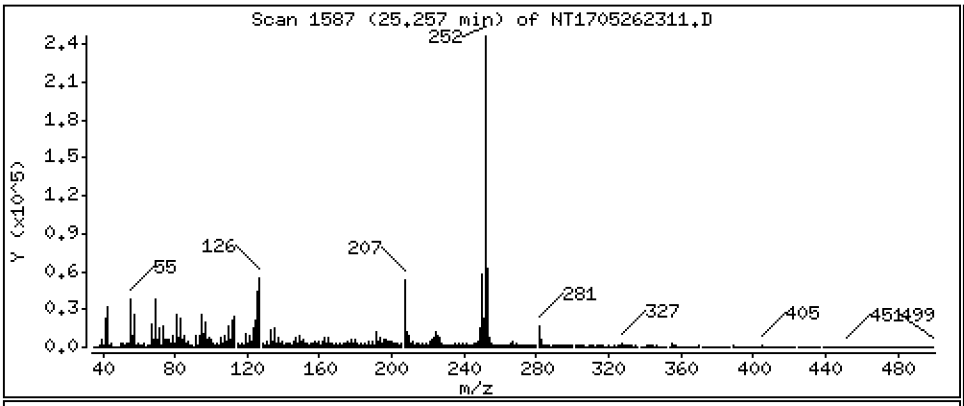
Operator: VTS

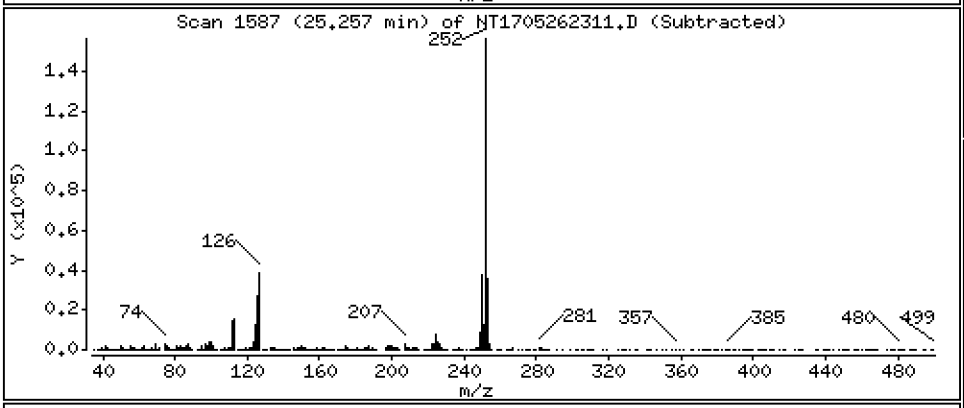
Column phase: ZB-5msi

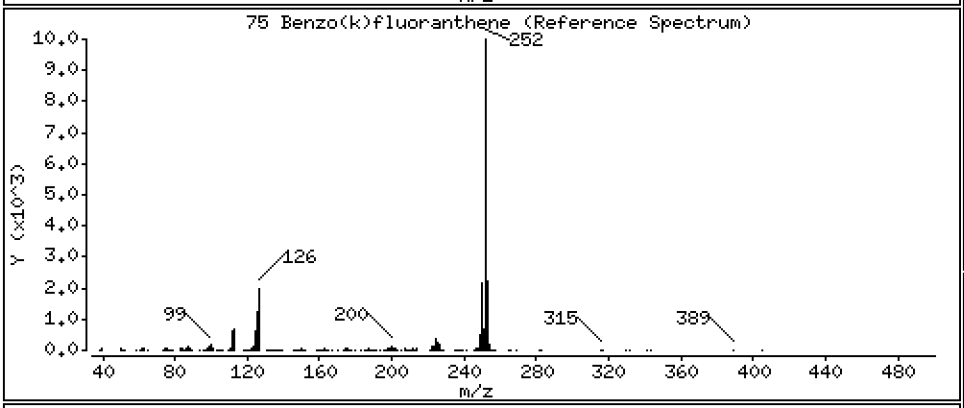
Column diameter: 0.25

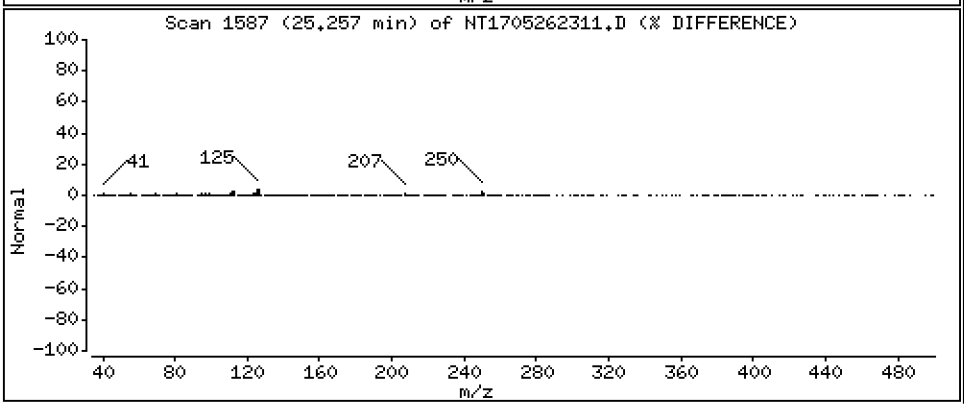
75 Benzo(k)fluoranthene

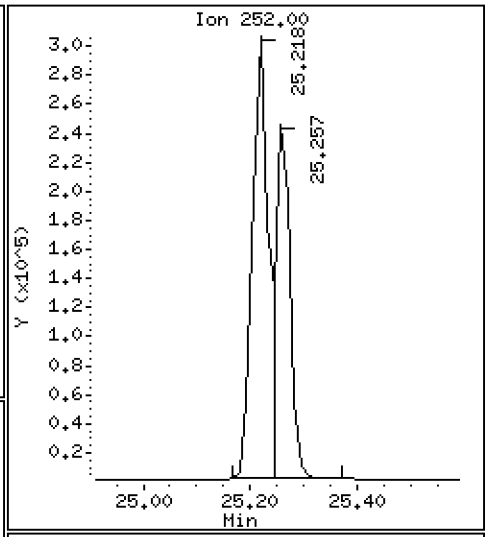
Concentration: 2.039 ug/mL

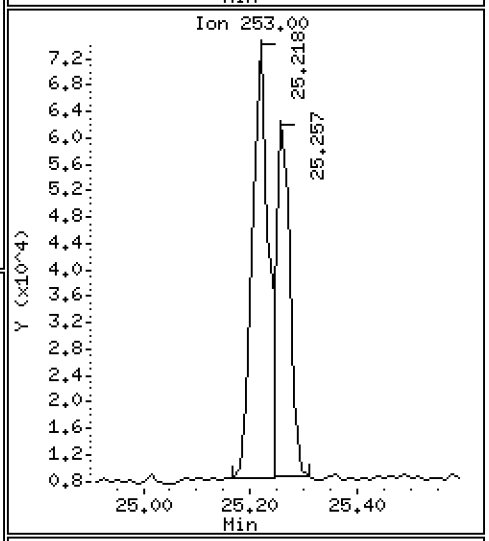


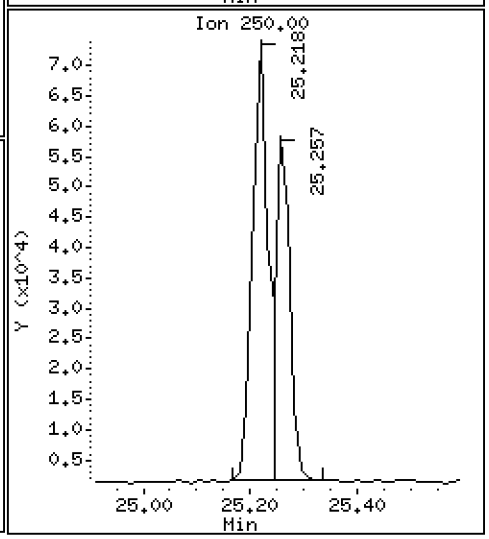












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

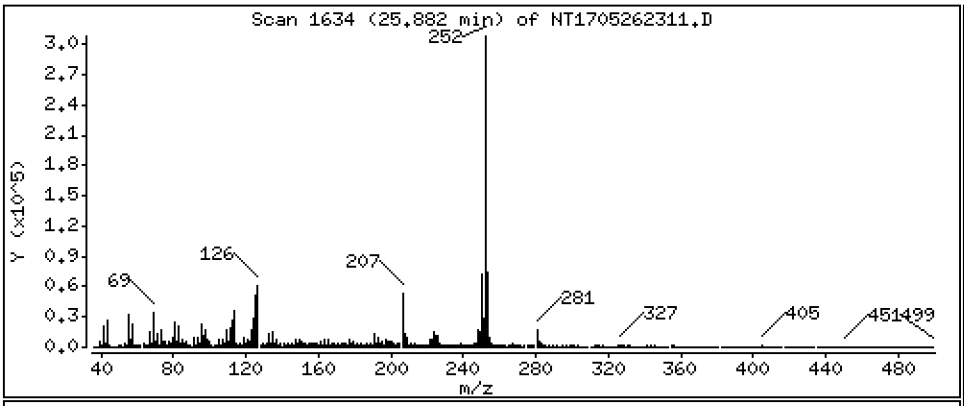
Operator: VTS

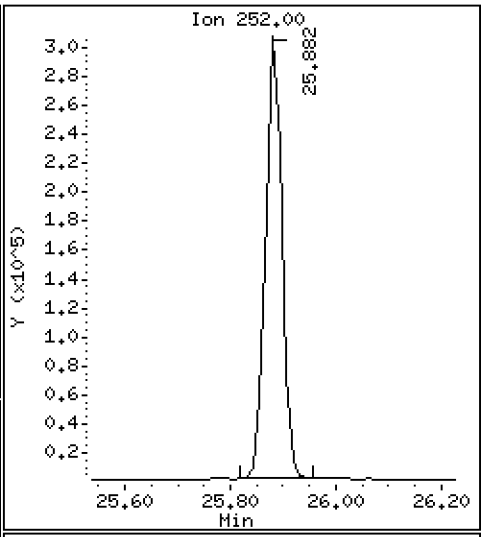
Column phase: ZB-5msi

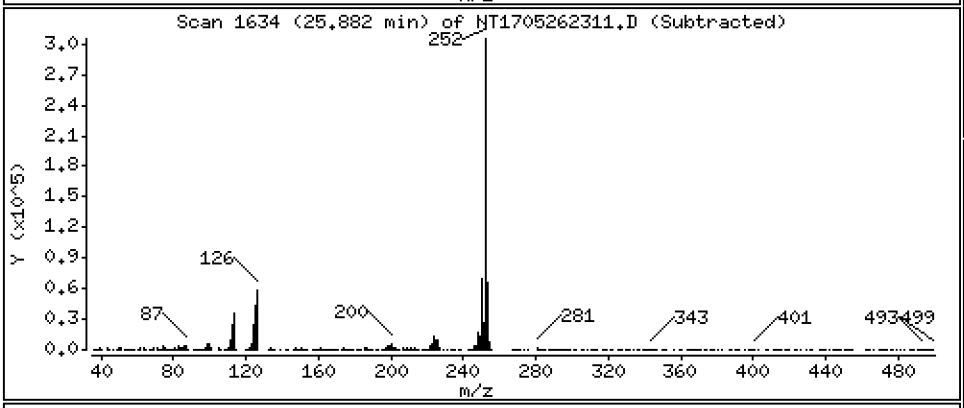
Column diameter: 0.25

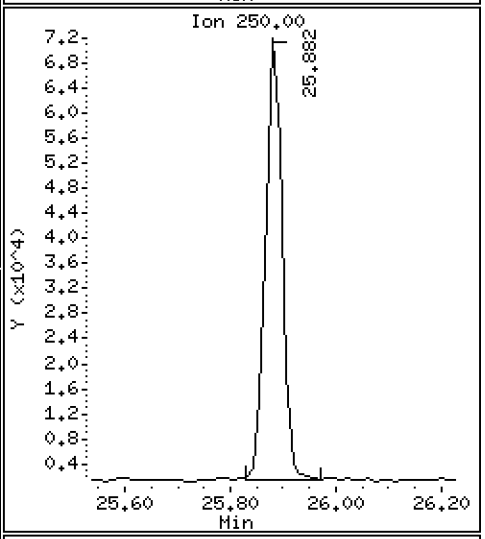
76 Benzo(a)pyrene

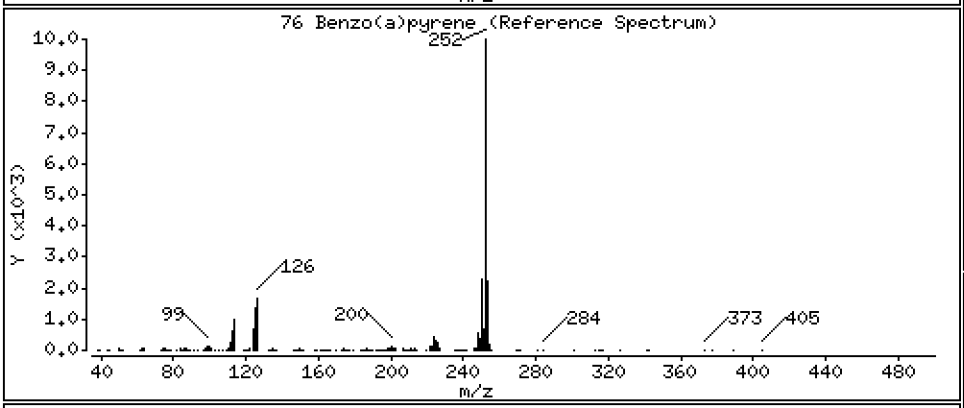
Concentration: 3.363 ug/mL

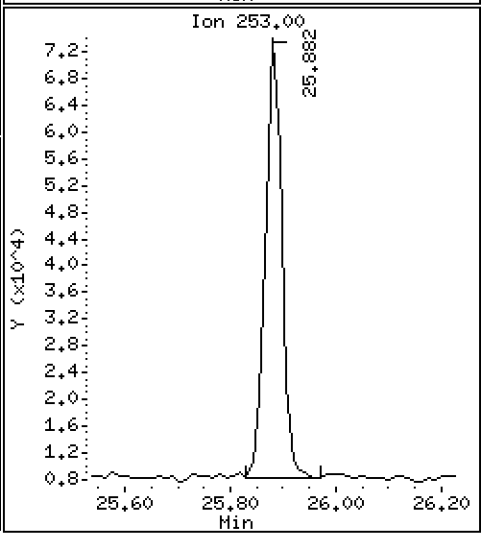


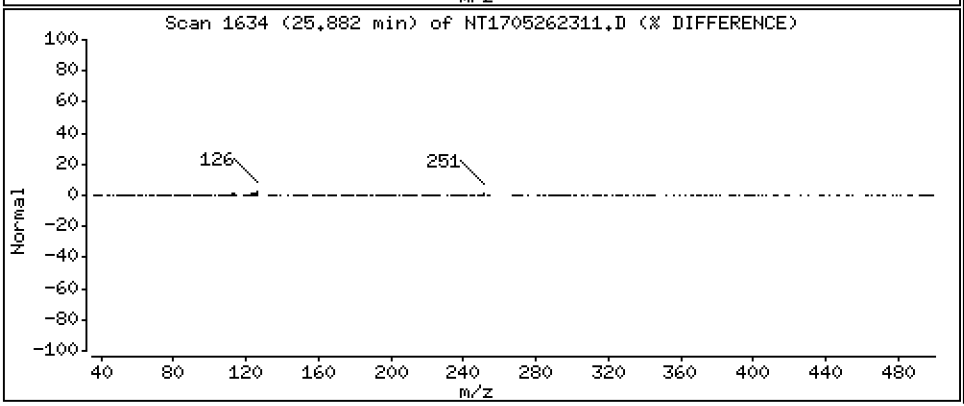












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

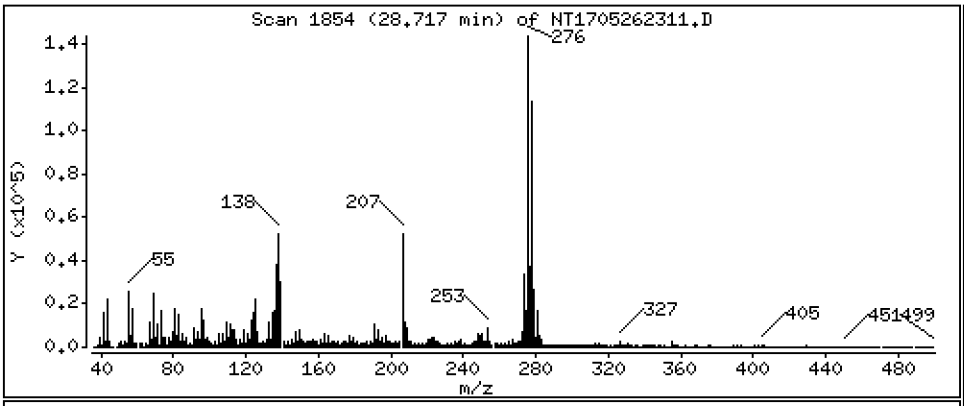
Operator: VTS

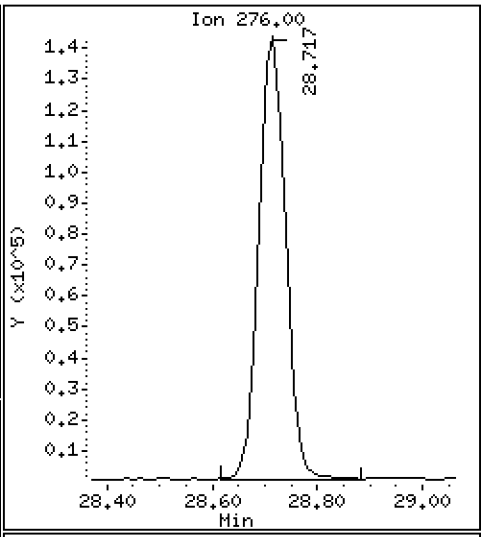
Column phase: ZB-5msi

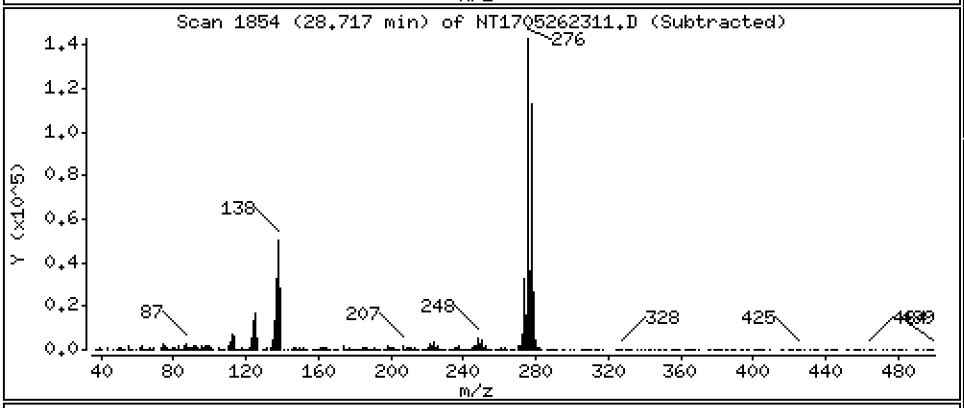
Column diameter: 0.25

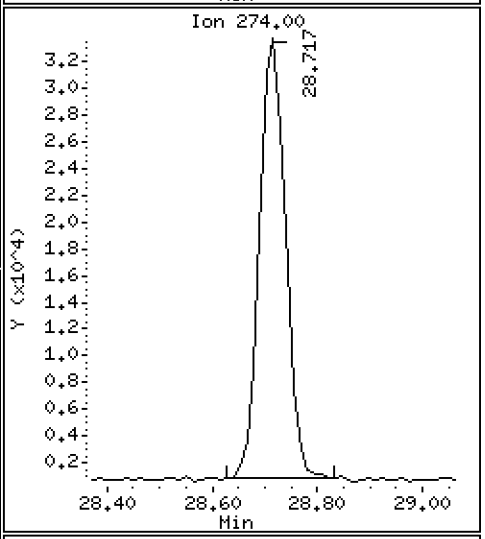
78 Indeno(1,2,3-cd)pyrene

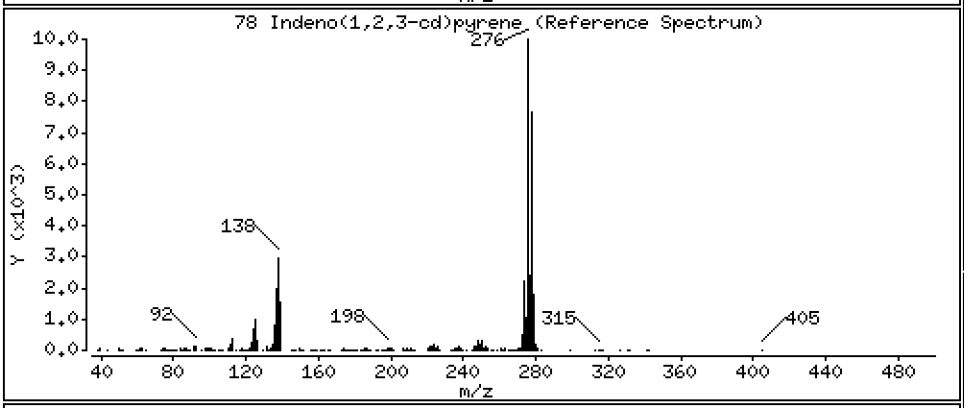
Concentration: 2.166 ug/mL

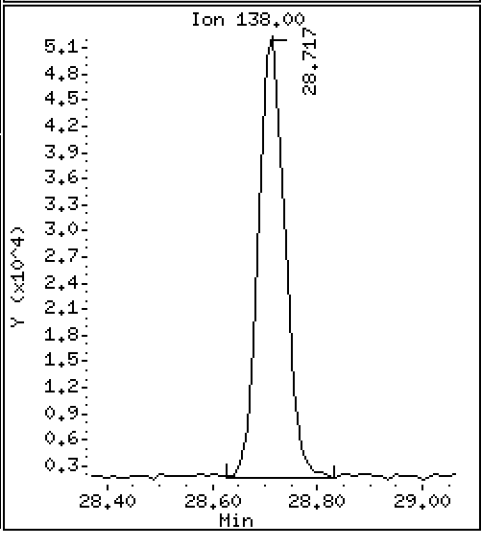


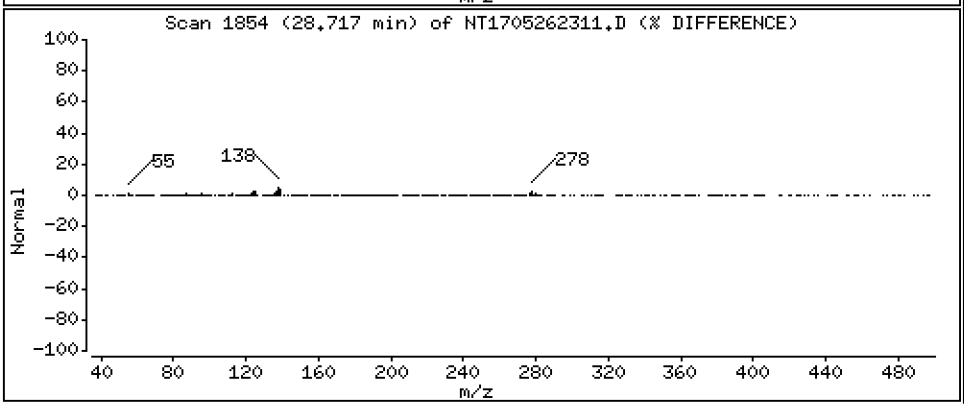












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

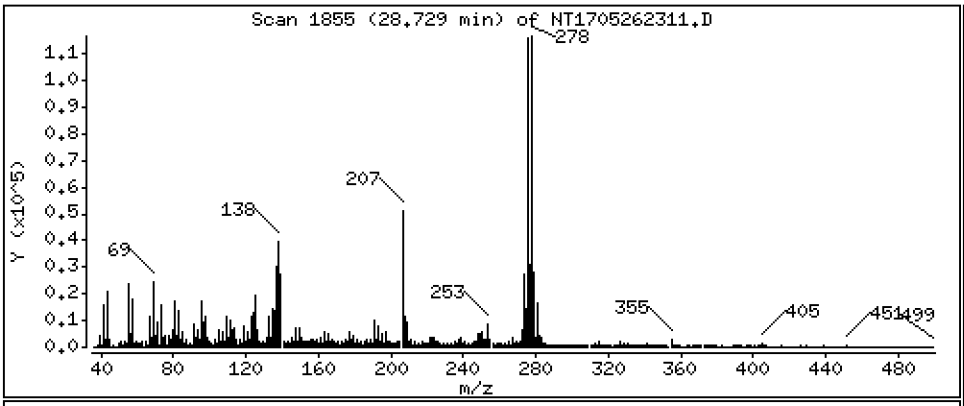
Operator: VTS

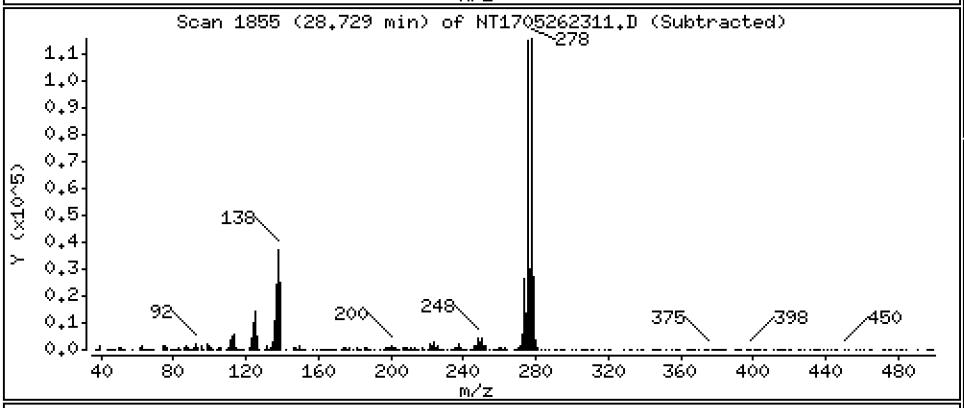
Column phase: ZB-5msi

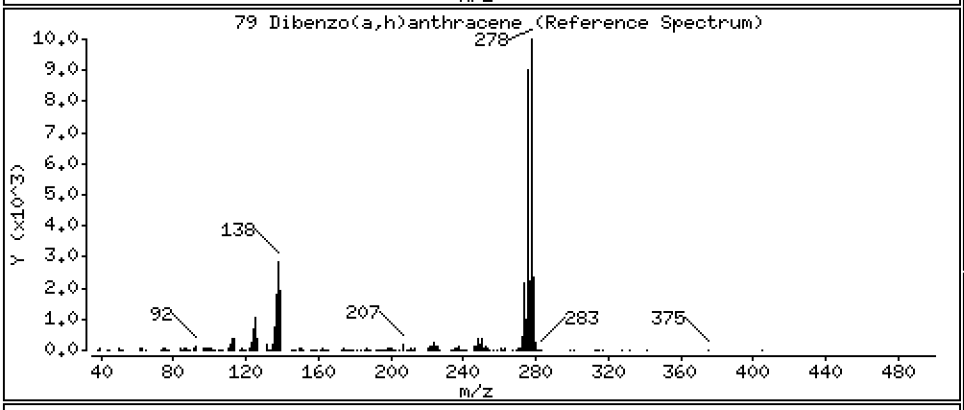
Column diameter: 0.25

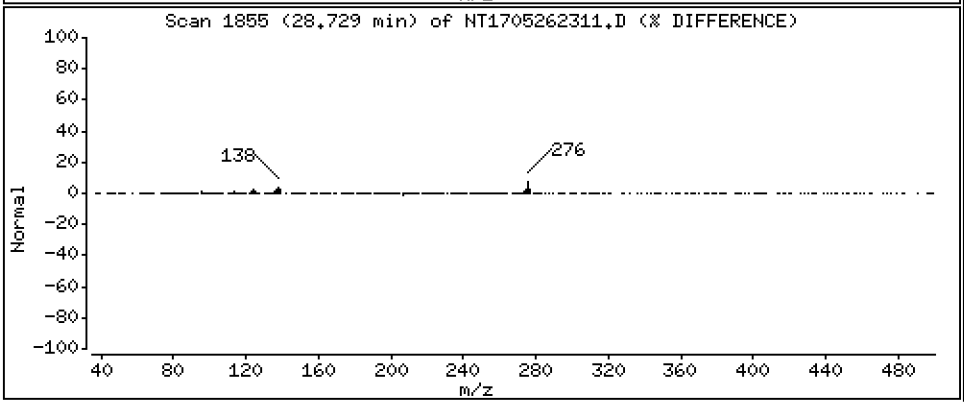
79 Dibenzo(a,h)anthracene

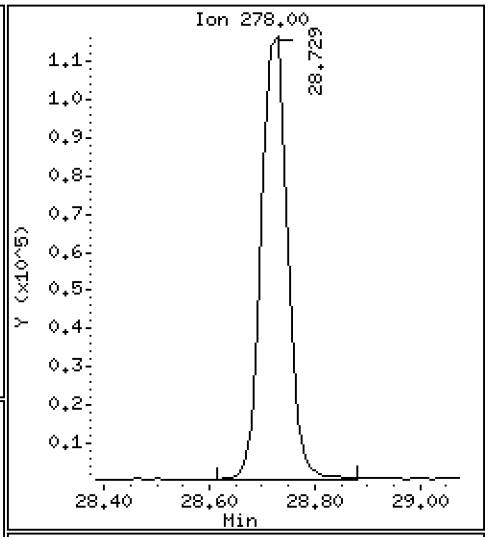
Concentration: 2.072 ug/mL

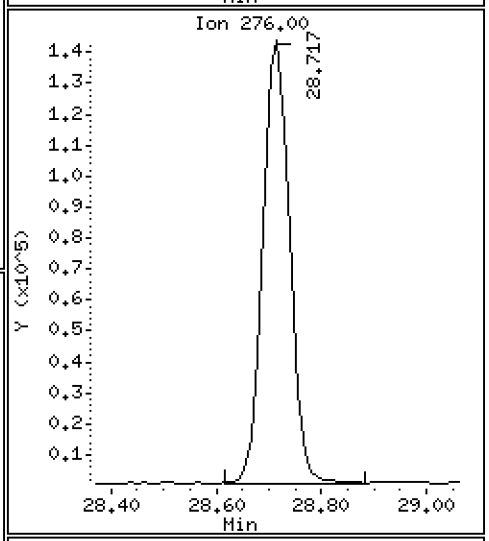


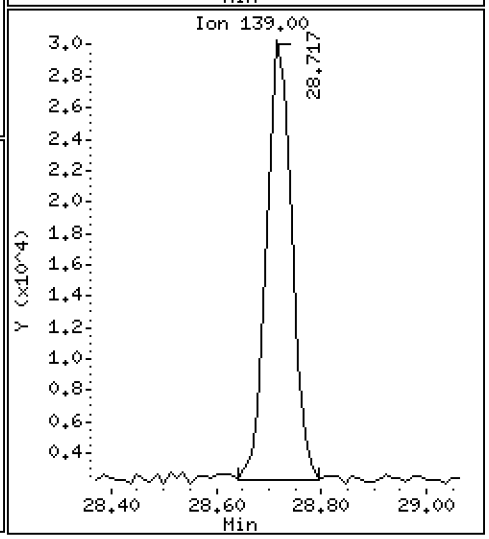












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

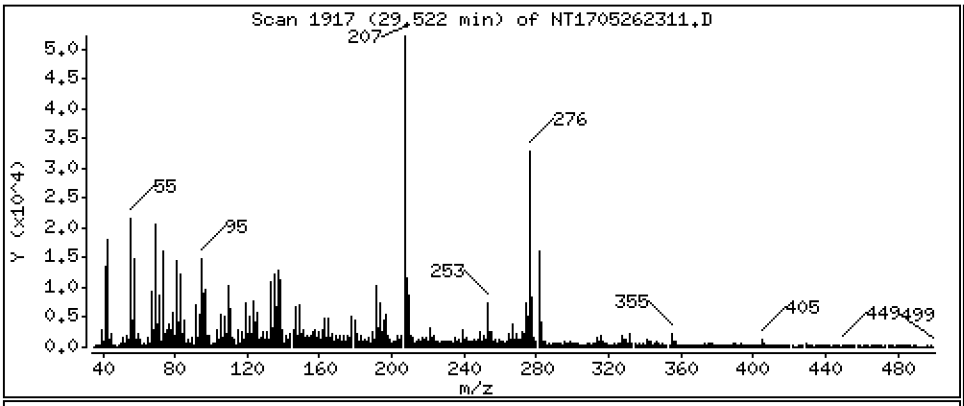
Operator: VTS

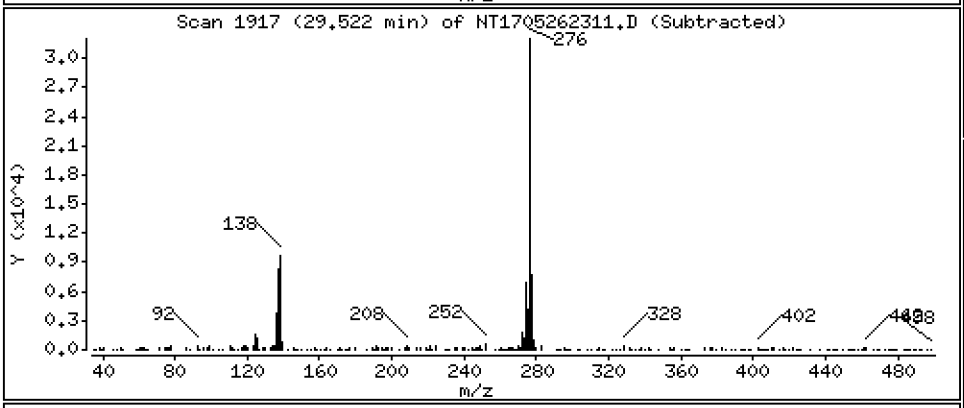
Column phase: ZB-5msi

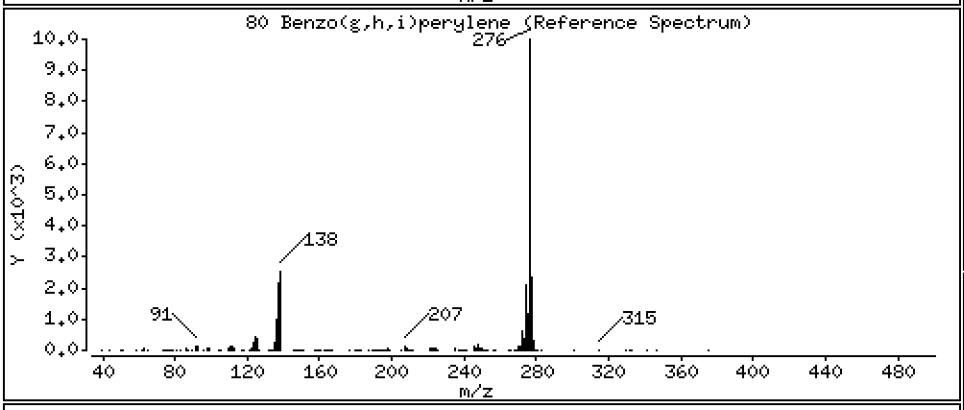
Column diameter: 0.25

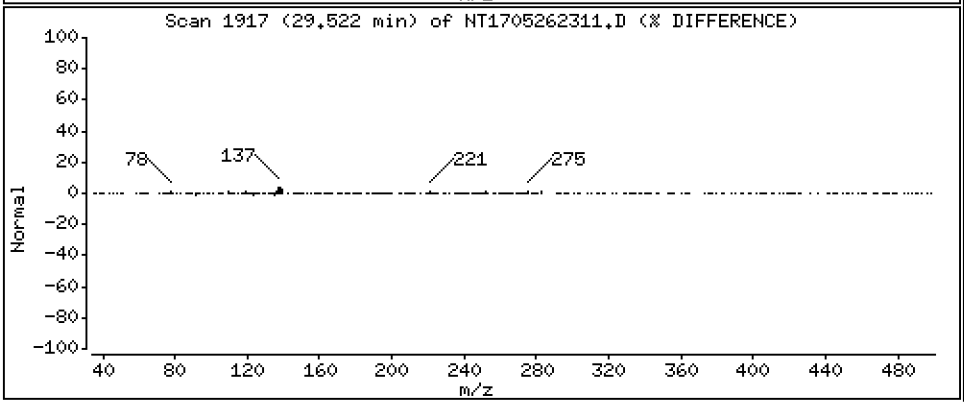
80 Benzo(g,h,i)perylene

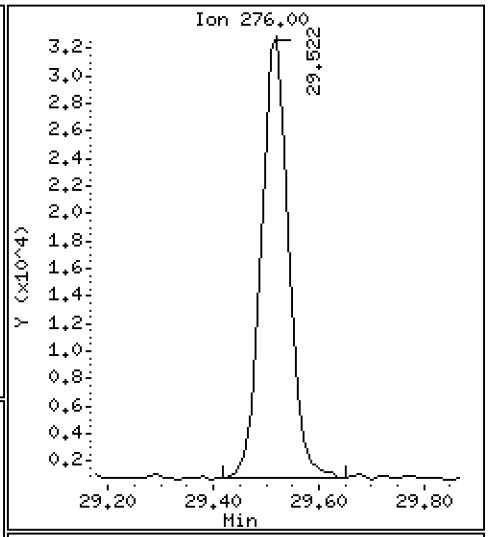
Concentration: 0.6298 ug/mL

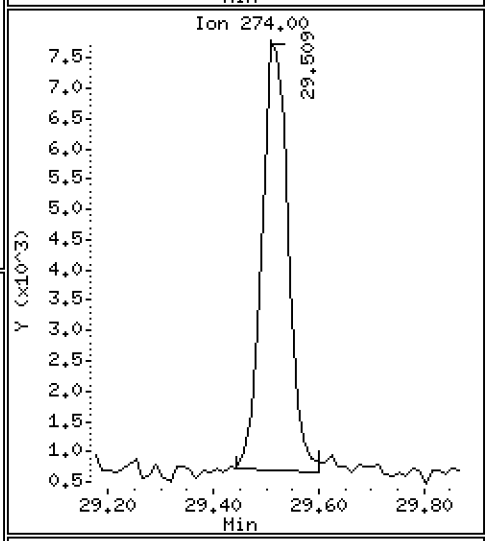


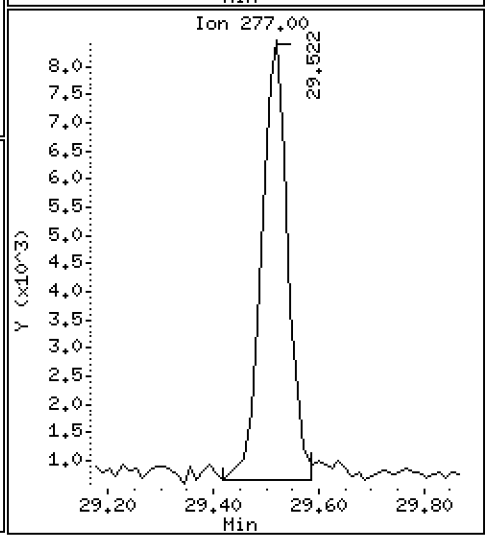












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

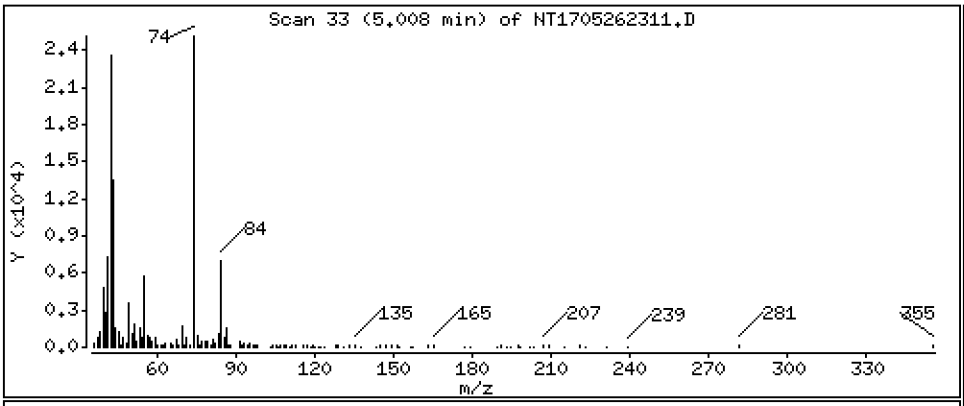
Operator: VTS

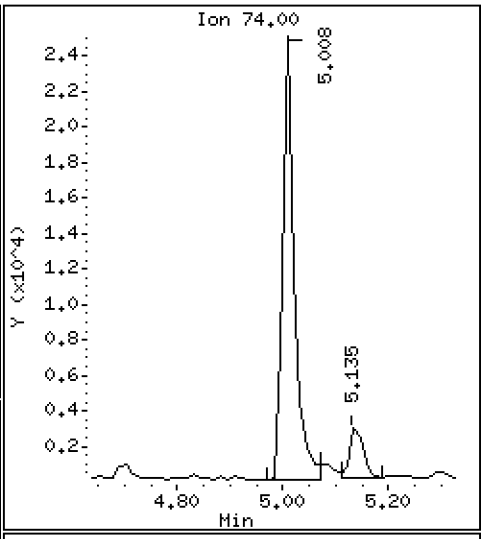
Column phase: ZB-5msi

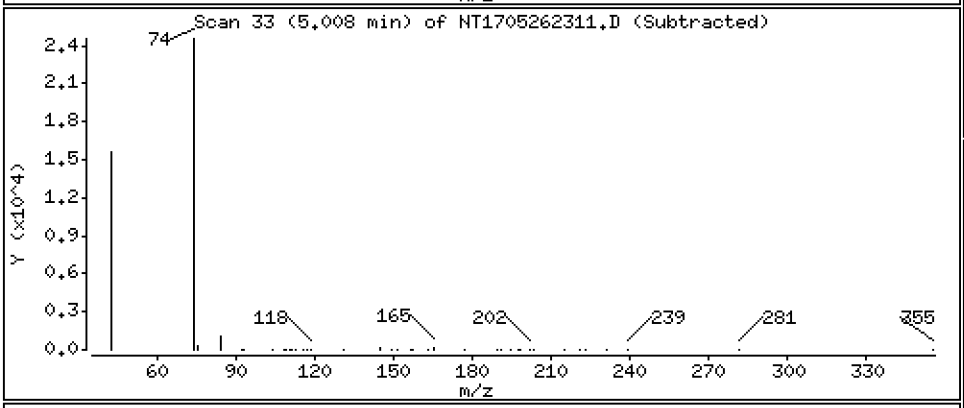
Column diameter: 0.25

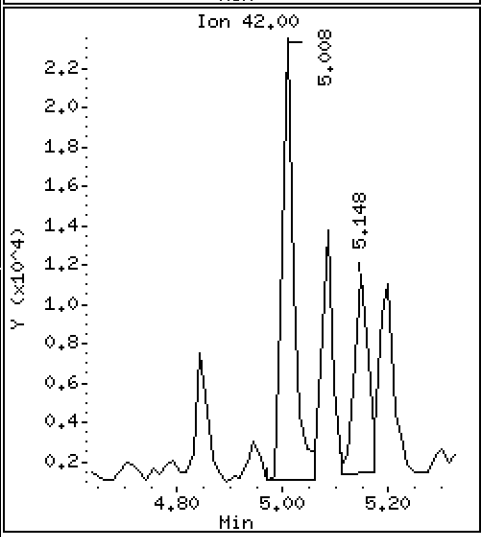
90 N-Nitrosodimethylamine

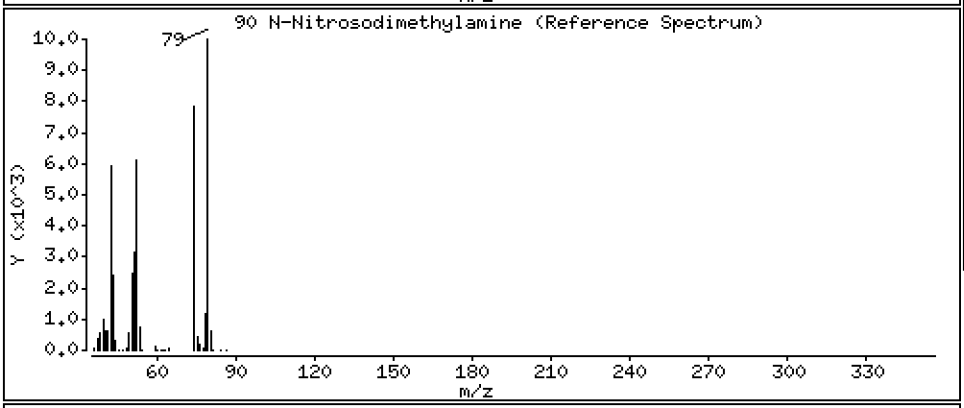
Concentration: 0.5989 ug/mL

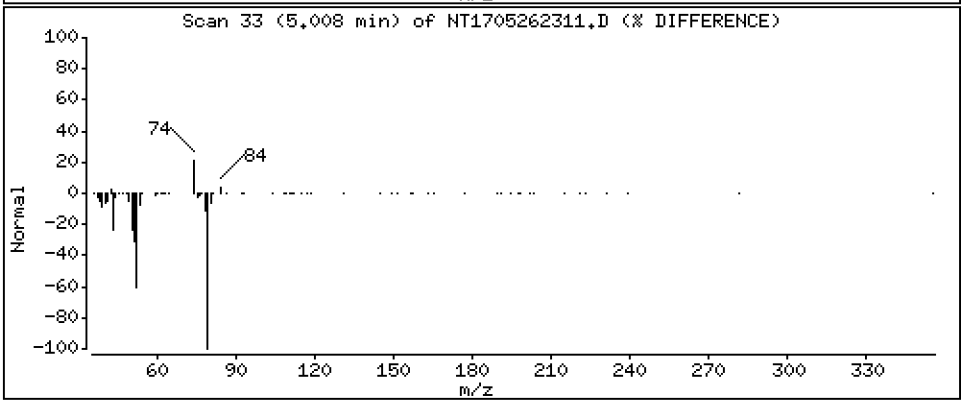












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

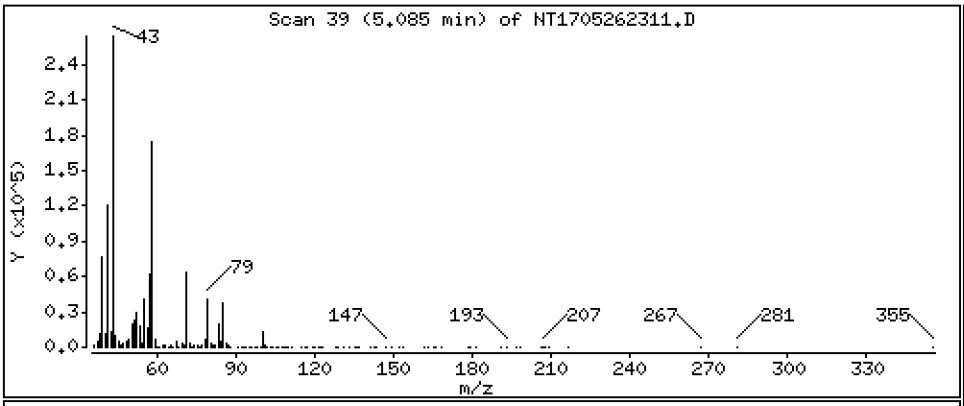
Operator: VTS

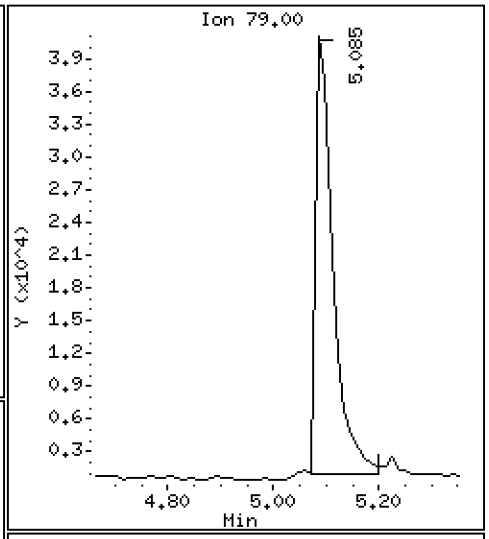
Column phase: ZB-5msi

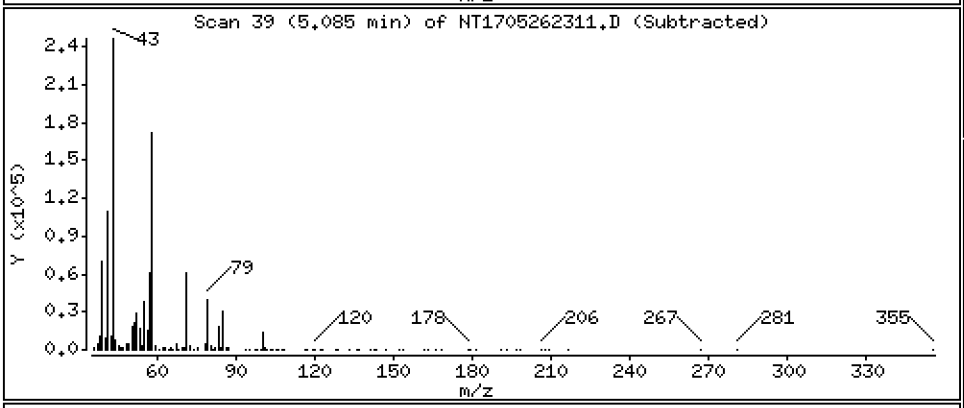
Column diameter: 0.25

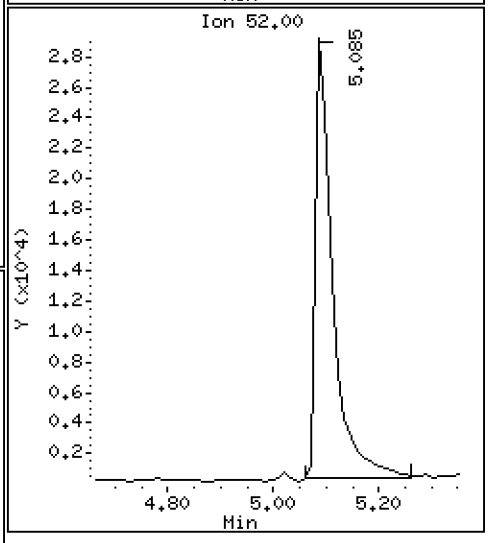
103 Pyridine

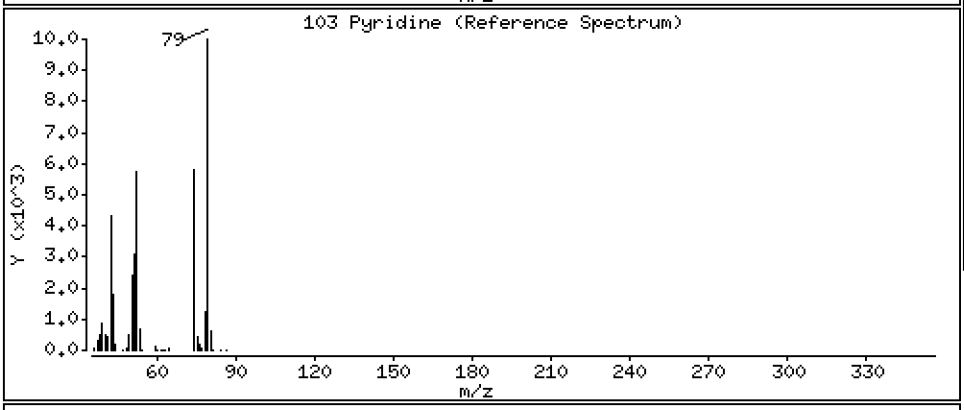
Concentration: 0.8818 ug/mL

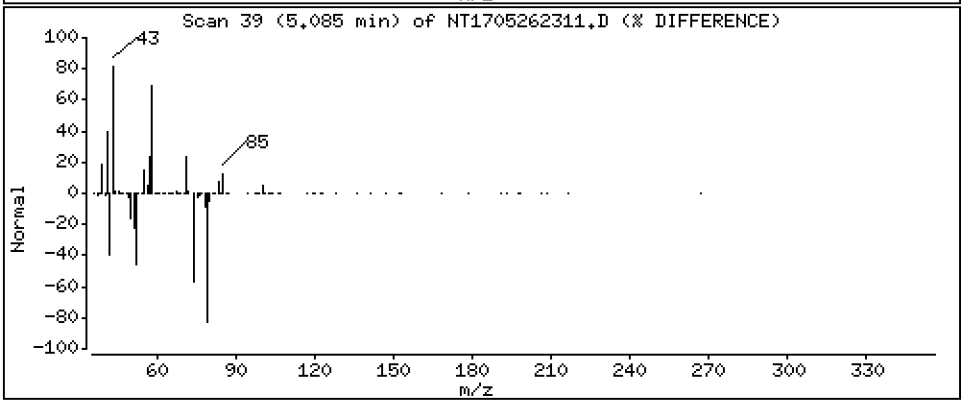












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

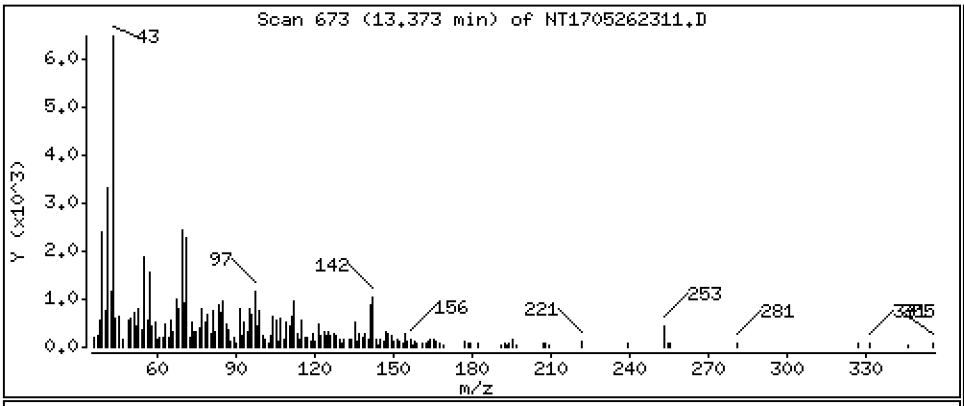
Operator: VTS

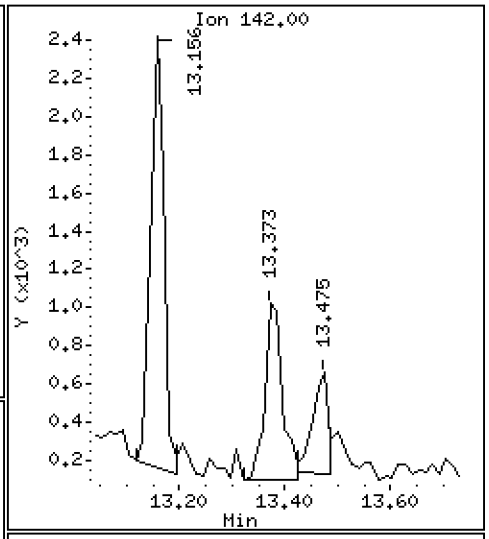
Column phase: ZB-5msi

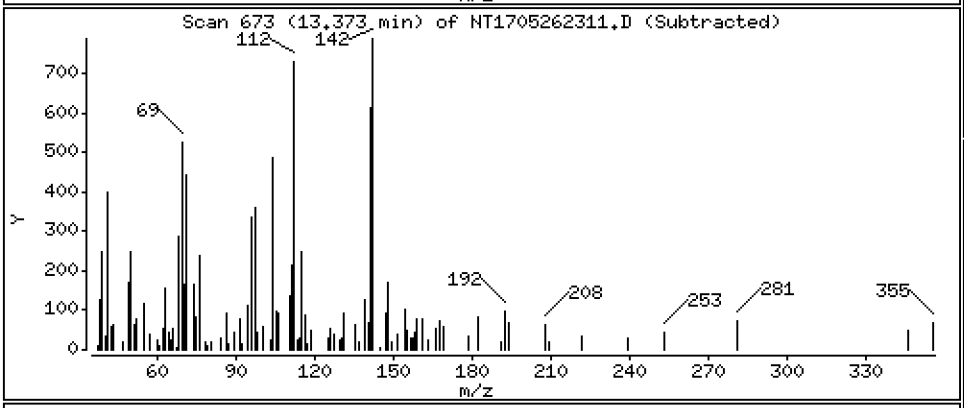
Column diameter: 0.25

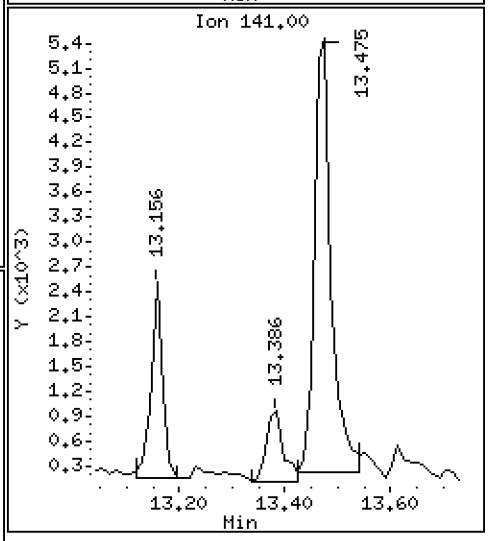
105 1-methylnaphthalene

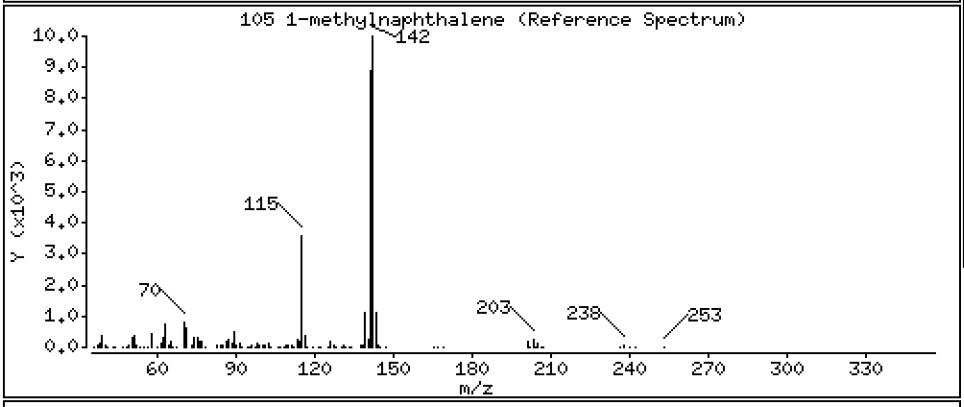
Concentration: 0.01140 ug/mL

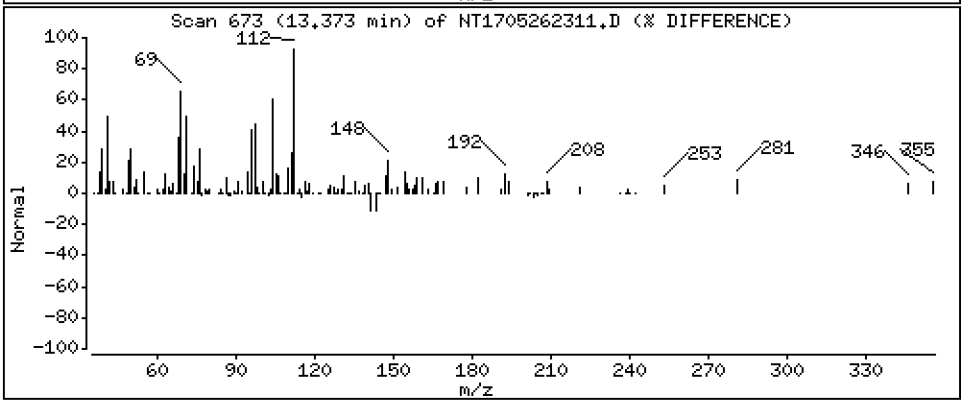












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

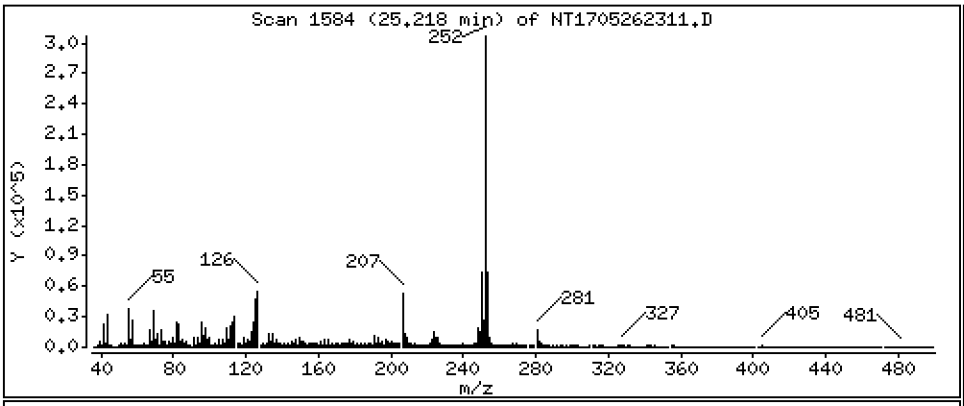
Operator: VTS

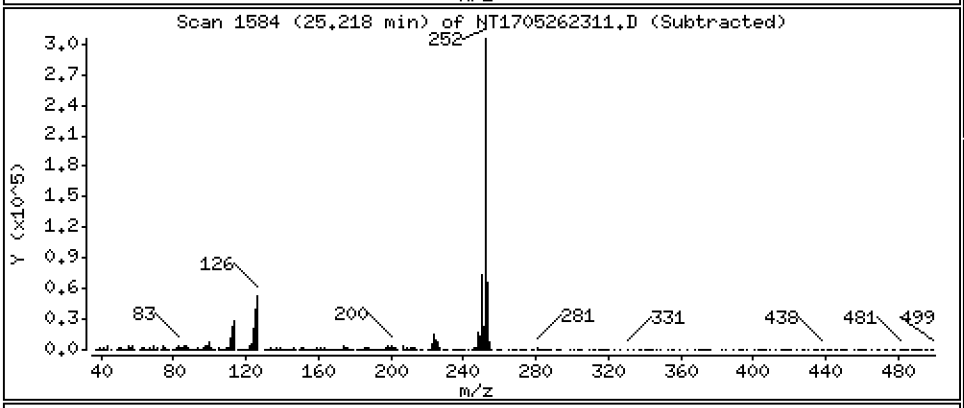
Column phase: ZB-5msi

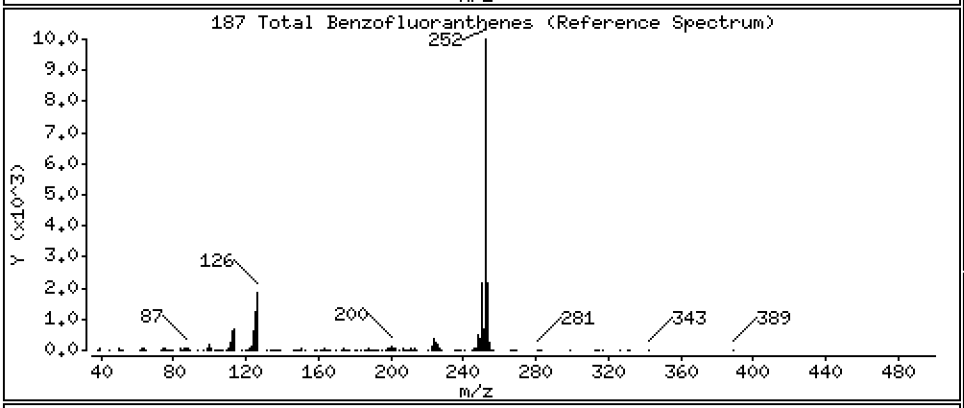
Column diameter: 0.25

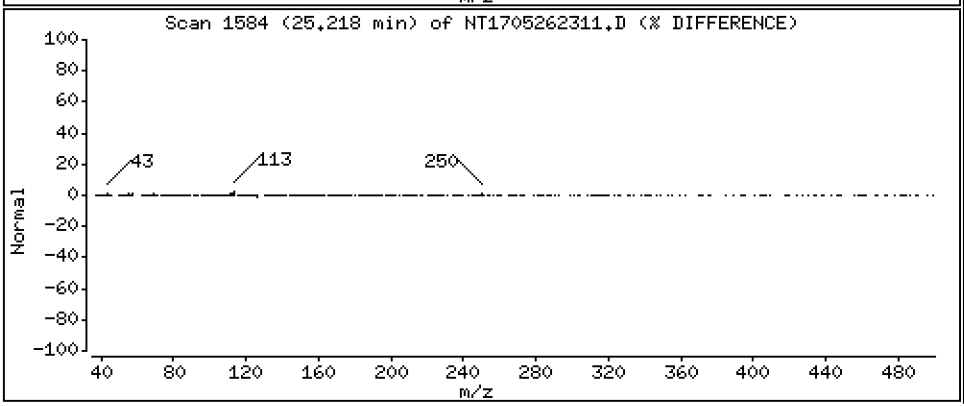
187 Total Benzofluoranthenes

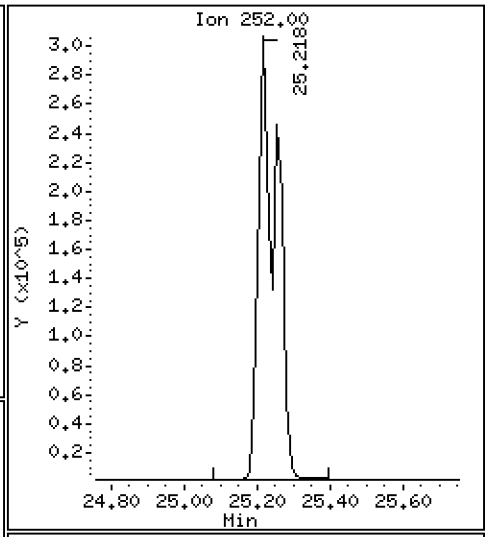
Concentration: 4.665 ug/mL

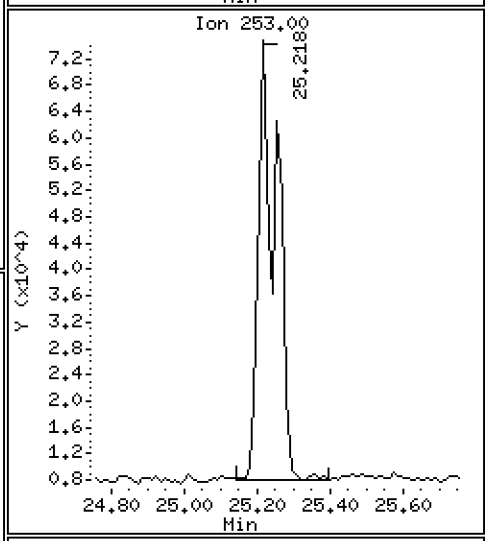


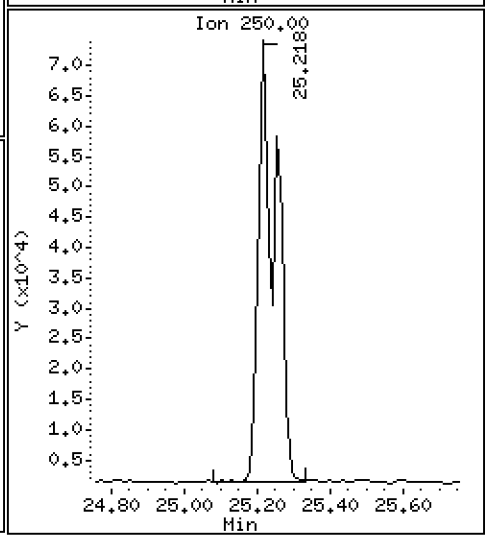












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM1

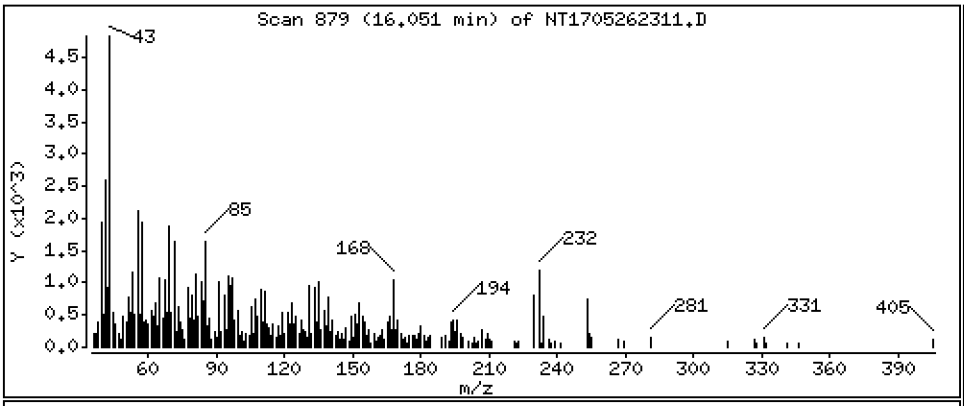
Operator: VTS

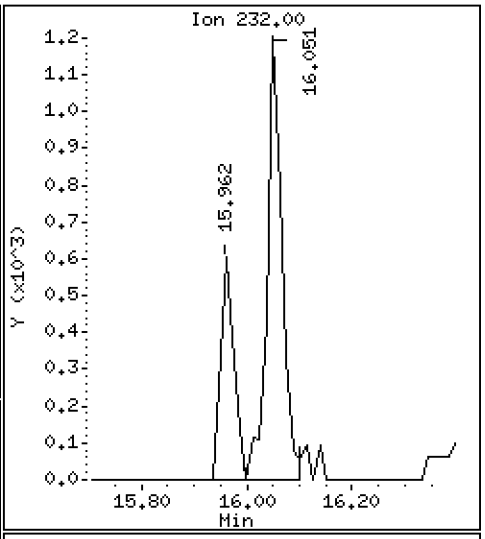
Column phase: ZB-5msi

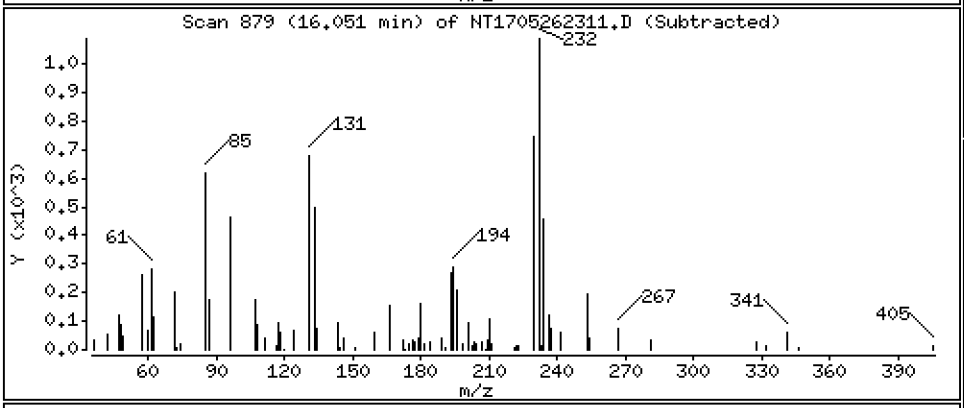
Column diameter: 0.25

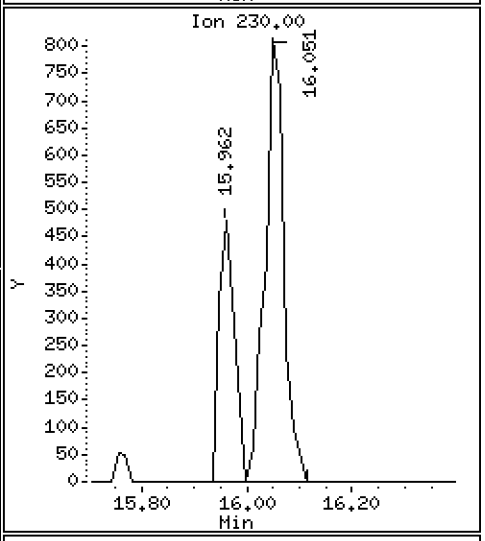
120 2,3,4,6-Tetrachlorophenol

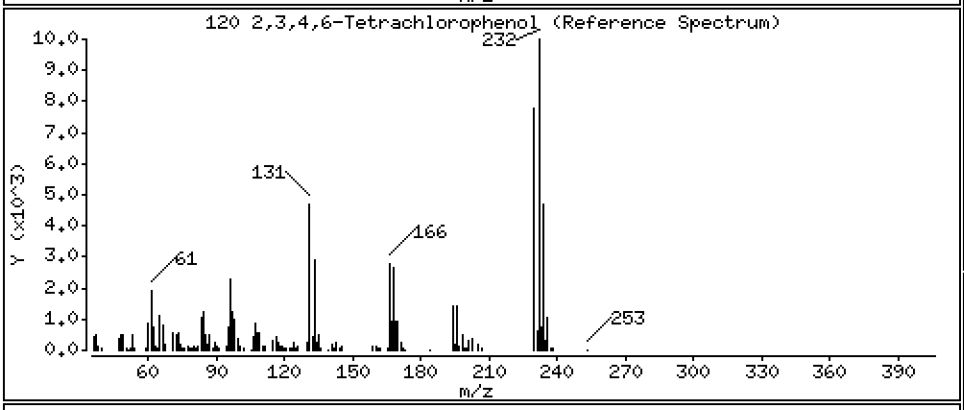
Concentration: 0.03821 ug/mL

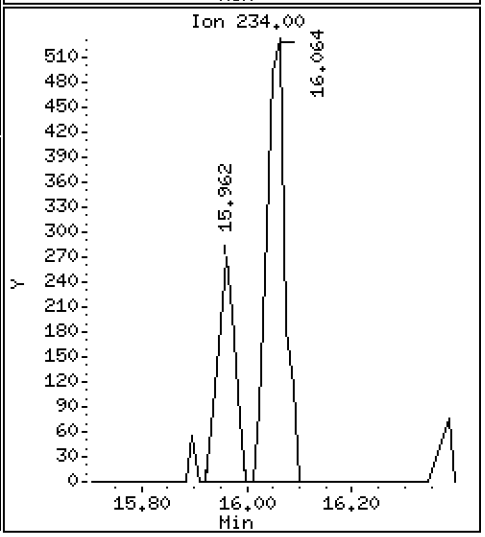


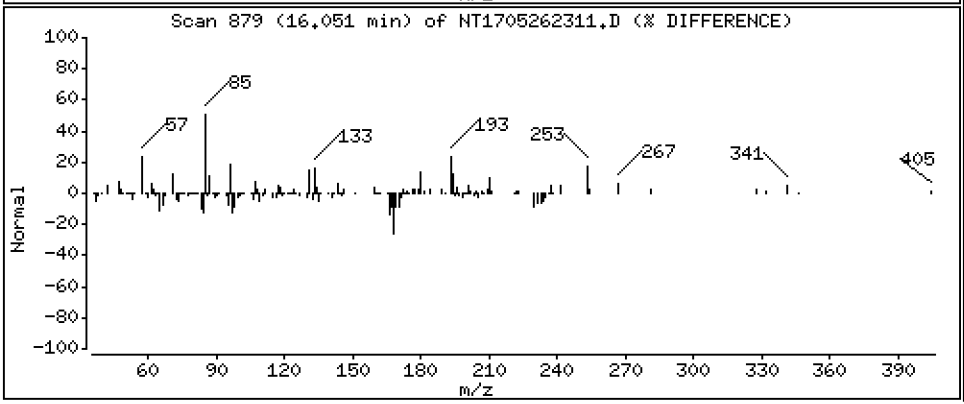












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262311.D
Lab Smp Id: BLD0607-SRM1
Inj Date : 26-MAY-2023 18:56
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-SRM1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 12:20 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.097	7.071	(0.766)	619053	6.23696	6.237
$	2 Phenol-d5	99	8.639	8.638	(0.933)	784513	5.97259	5.973
	3 Phenol	94	8.664	8.651	(0.935)	303086	2.17848	2.178
$	5 2-Chlorophenol-d4	132	8.919	8.906	(0.963)	670081	6.36879	6.369
	4 Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
	6 2-Chlorophenol	128	8.944	8.931	(0.966)	135488	1.16616	1.166
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	137702	1.17109	1.171
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	303211	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	294613	3.98385	3.984
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	108	9.544	9.531	(1.030)	5713	0.08820	0.08820(M)
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	96997	3.12158	3.122
	13 2-Methylphenol	108	9.761	9.748	(1.054)	433628	4.24087	4.241
	17 Hexachloroethane	117	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	15 4-Methylphenol	108	10.030	10.017	(1.083)	543591	5.22128	5.221
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	516950	4.36951	4.370
	19 Nitrobenzene	77	10.387	10.387	(0.886)	340978	3.02085	3.021
	20 Isophorone	82	10.835	10.834	(0.924)	282086	1.82565	1.826
	21 2-Nitrophenol	139	11.013	11.013	(0.939)	285332	5.24595	5.246
	22 2,4-Dimethylphenol	107	11.064	11.051	(0.943)	203772	1.92958	1.930
	23 Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
	24 Benzoic acid	105	11.192	11.307	(0.954)	39132	0.55086	0.5509
	25 2,4-Dichlorophenol	162	11.473	11.460	(0.978)	559031	6.58770	6.588
	26 1,2,4-Trichlorobenzene	180	11.639	11.651	(0.992)	154281	1.67398	1.674
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1039513	4.00000	
	28 Naphthalene	128	11.766	11.779	(1.003)	1201934	4.20456	4.205
	29 4-Chloroaniline	127	Compound Not Detected.					
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	110243	2.41474	2.415
	31 4-Chloro-3-methylphenol	107	12.863	12.850	(1.097)	141237	1.54572	1.546
	32 2-Methylnaphthalene	142	Compound Not Detected.					
	33 Hexachlorocyclopentadiene	237	Compound Not Detected.					

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34 2,4,6-Trichlorophenol	196	13.781	13.781	(0.899)	91129	1.75068	1.751
	35 2,4,5-Trichlorophenol	196	13.870	13.857	(0.905)	154729	2.80791	2.808
$	36 2-Fluorobiphenyl	172	13.934	13.934	(0.909)	908573	4.63564	4.636
	37 2-Chloronaphthalene	162	14.151	14.151	(0.923)	332074	2.08847	2.088
	38 2-Nitroaniline	65	Compound Not Detected.					
	39 Dimethylphthalate	163	14.827	14.826	(0.968)	721780	4.21644	4.216
	40 Acenaphthylene	152	15.018	15.018	(0.980)	352830	1.39734	1.397
	41 2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42 Acenaphthene-d10	164	15.324	15.324	(1.000)	497514	4.00000	
	43 3-Nitroaniline	138	Compound Not Detected.					
	44 Acenaphthene	153	15.388	15.388	(1.004)	768487	4.86882	4.869
	45 2,4-Dinitrophenol	184	15.464	15.464	(1.009)	43281	1.78631	1.786
	46 Dibenzofuran	168	15.719	15.719	(1.026)	1209446	5.49004	5.490
	47 4-Nitrophenol	109	15.592	15.579	(1.017)	123192	4.99647	4.996
	48 2,4-Dinitrotoluene	165	15.770	15.770	(1.029)	146711	2.79645	2.796
	50 Diethylphthalate	149	16.267	16.267	(1.062)	23432	0.14036	0.1404
	49 Fluorene	166	16.420	16.420	(1.072)	697027	3.32803	3.328
	51 4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	189122	1.96411	1.964
	52 4-Nitroaniline	138	Compound Not Detected.					
	53 4,6-Dinitro-2-methylphenol	198	16.611	16.611	(0.906)	101782	3.34912	3.349
	54 N-Nitrosodiphenylamine	169	16.662	16.662	(0.908)	268630	2.51820	2.518
$	55 2,4,6-Tribromophenol	330	16.954	16.954	(1.106)	129023	5.94539	5.945
	56 4-Bromophenyl-phenylether	248	17.413	17.400	(0.949)	237679	6.35905	6.359
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.088	18.088	(0.986)	57870	2.59250	2.592
*	59 Phenanthrene-d10	188	18.343	18.343	(1.000)	761526	4.00000	
	60 Phenanthrene	178	18.394	18.394	(1.003)	923643	4.15677	4.157
	61 Anthracene	178	18.484	18.483	(1.008)	344169	1.64980	1.650
	62 Carbazole	167	18.815	18.815	(1.026)	918296	6.71895	6.719
	63 Di-n-butylphthalate	149	19.580	19.580	(1.067)	360959	1.43294	1.433
	64 Fluoranthene	202	20.753	20.753	(0.889)	471093	1.59246	1.592
	65 Pyrene	202	21.174	21.174	(0.907)	610583	2.03603	2.036
$	66 Terphenyl-d14	244	21.455	21.455	(0.919)	805794	3.77979	3.780
	67 Butylbenzylphthalate	149	22.360	22.360	(0.957)	353128	2.63096	2.631
	68 Benzo(a)anthracene	228	23.317	23.317	(0.998)	1086682	4.66637	4.666
*	69 Chrysene-d12	240	23.356	23.355	(1.000)	632418	4.00000	
	70 3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71 Chrysene	228	23.394	23.394	(1.002)	256248	1.16938	1.169
	72 bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.959)	366625	1.83715	1.837
*	134 Di-n-octylphthalate-d4	153	24.363	24.363	(1.000)	1379317	4.00000	
	73 Di-n-octylphthalate	149	24.363	24.363	(1.000)	633265	1.81126	1.811
	74 Benzo(b)fluoranthene	252	25.218	25.218	(0.970)	658690	2.61985	2.620
	75 Benzo(k)fluoranthene	252	25.256	25.256	(0.972)	484454	2.03947	2.039
	76 Benzo(a)pyrene	252	25.881	25.881	(0.996)	666110	3.36325	3.363
*	77 Perylene-d12	264	25.996	25.996	(1.000)	634142	4.00000	
	78 Indeno(1,2,3-cd)pyrene	276	28.716	28.716	(1.105)	497656	2.16627	2.166
	79 Dibenzo(a,h)anthracene	278	28.729	28.729	(1.105)	399456	2.07180	2.072
	80 Benzo(g,h,i)perylene	276	29.521	29.521	(1.136)	119418	0.62979	0.6298
	90 N-Nitrosodimethylamine	74	5.008	4.982	(0.541)	39655	0.59895	0.5989
	91 Aniline	93	Compound Not Detected.					
	93 Benzidine	184	Compound Not Detected.					
	103 Pyridine	79	5.084	5.007	(0.549)	92600	0.88178	0.8818
	105 1-methylnaphthalene	142	13.373	13.385	(1.140)	2164	0.01140	0.01140
	111 Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.218	25.256	(0.970)	1052858	4.66499	4.665
120 2,3,4,6-Tetrachlorophenol	232	16.050	16.050	(1.047)	2380	0.03821	0.03821

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262311.D
Lab Smp Id: BLD0607-SRM1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:16
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	303517	151759	607034	303211	-0.10
27 Naphthalene-d8	1140476	570238	2280952	1039513	-8.85
42 Acenaphthene-d10	622461	311231	1244922	497514	-20.07
59 Phenanthrene-d10	1074054	537027	2148108	761526	-29.10
69 Chrysene-d12	723807	361904	1447614	632418	-12.63
134 Di-n-octylphthala	1524055	762028	3048110	1379317	-9.50
77 Perylene-d12	666992	333496	1333984	634142	-4.93

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	0.00
69 Chrysene-d12	23.36	22.86	23.86	23.36	0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	0.00
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262311.D

Lab ID: BLD0607-SRM1
nt17.i, ABN.m, 26-MAY-2023 18:56

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.954	0.964	-0.0098	Benzoic acid
0.549	0.541	0.0083	Pyridine

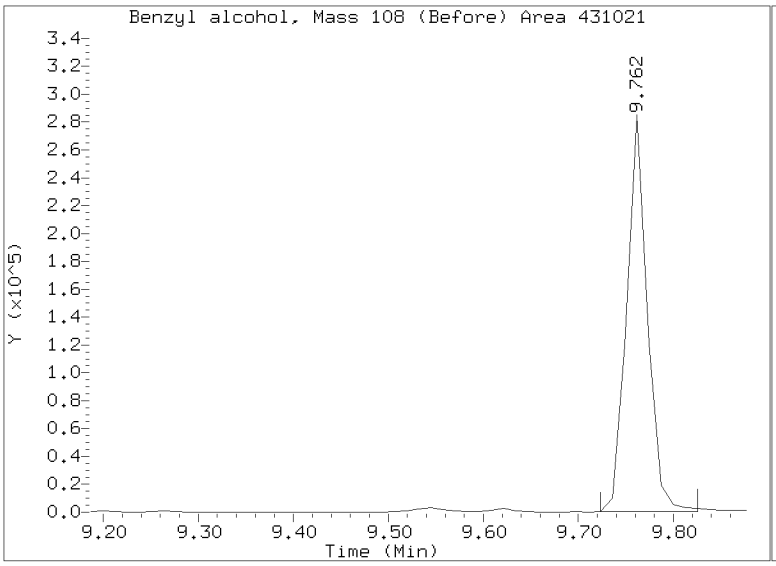
RRT check based on Ccal File: NT1705262302.D

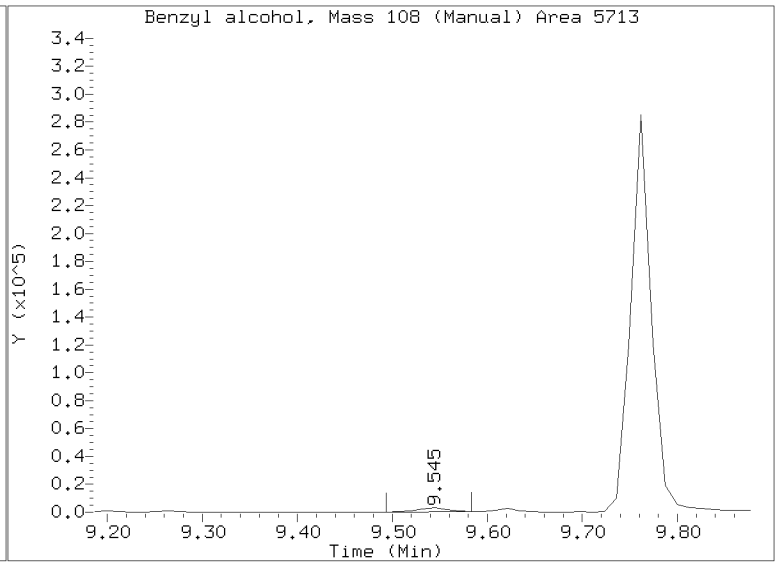
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230526.b/NT1705262311.D
Injection Date: 26-MAY-2023 18:56
Lab ID:BLD0607-SRM1 Client ID:
Report Date: 05/27/2023 12:21





Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E

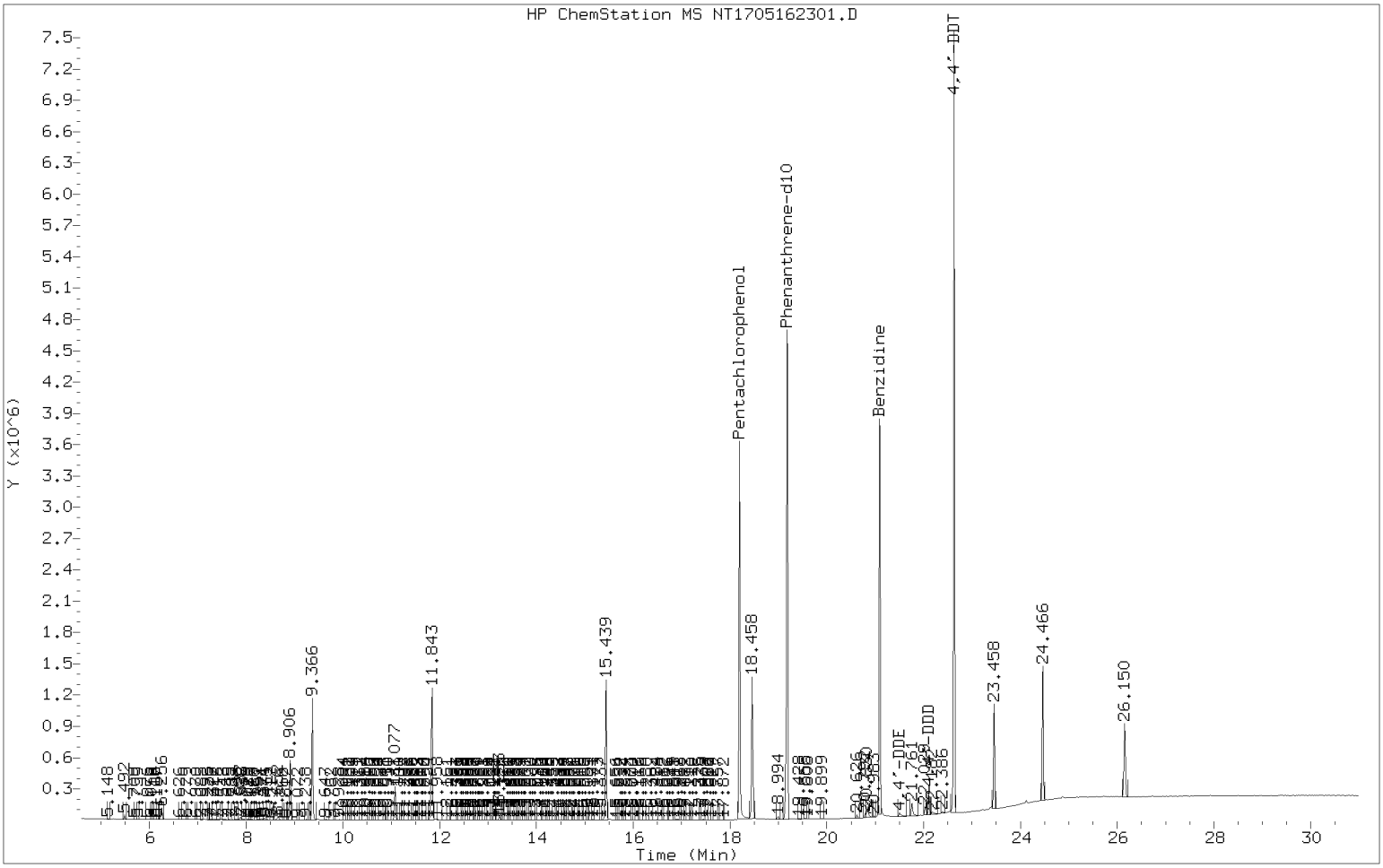
Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1705162301.D	Injection Date:	05/16/23
Instrument ID:	NT17	Injection Time:	18:14
Sequence:	SLE0338	Lab Sample ID:	SLE0338-TUN1

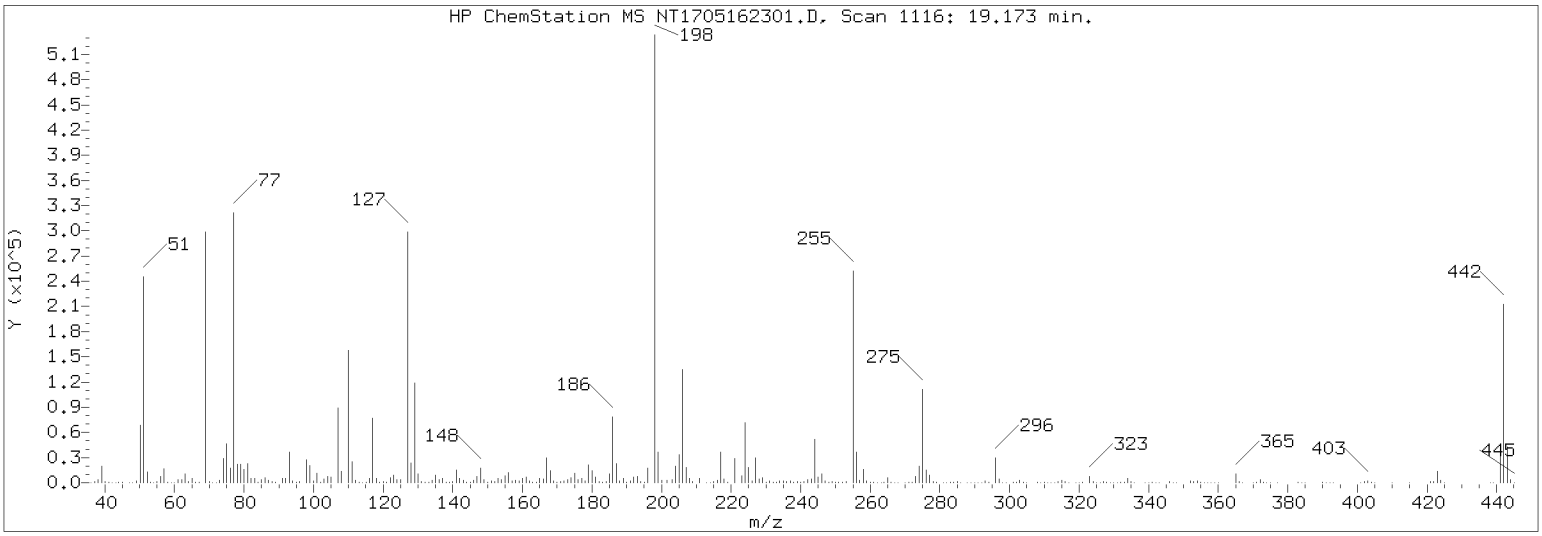
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	55.7	PASS
70	Less than 2% of 69	0.497	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.89	PASS
365	1 - 100% of 198	2.01	PASS
441	Less than 150% of 443	80.7	PASS
442	1 - 200% of 198	39.8	PASS
443	15 - 24% of 442	20.1	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Base peak, 100% relative abundance		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLE0338-TUN1	NT1705162301.D	05/16/2023	18:14
Cal Standard	SLE0338-CAL7	NT1705162302.D	05/16/2023	18:52
Cal Standard	SLE0338-CAL6	NT1705162303.D	05/16/2023	19:29
Cal Standard	SLE0338-CAL5	NT1705162304.D	05/16/2023	20:07
Cal Standard	SLE0338-CAL4	NT1705162305.D	05/16/2023	20:44
Cal Standard	SLE0338-CAL3	NT1705162306.D	05/16/2023	21:22
Cal Standard	SLE0338-CAL2	NT1705162307.D	05/16/2023	21:59
Cal Standard	SLE0338-CAL1	NT1705162308.D	05/16/2023	22:37
Secondary Cal Check	SLE0338-SCV1	NT1705162311.D	05/17/2023	0:29
Initial Cal Blank	SLE0338-ICB1	NT1705162312.D	05/17/2023	1:07

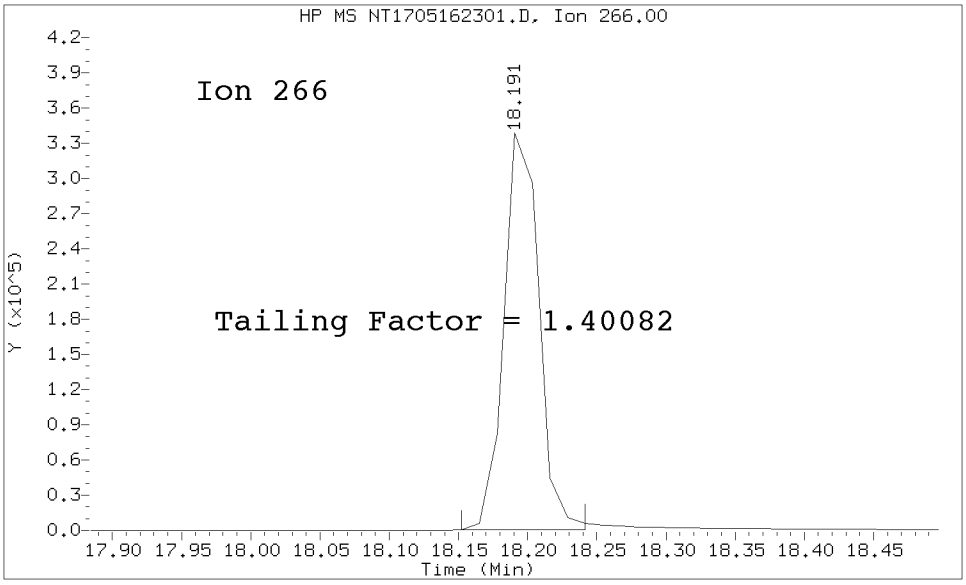
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230516.b/NT1705162301.D/NT1705162301.D
Method Used: \20230516.b\DFTPP8270E.m Inst: nt17
Injection Date: 16-MAY-2023 18:14 Operator: VTS
Sample Info: SLE0338-TUN1 SLE0338-TUN1
Report Date: 05/20/2023 13:10



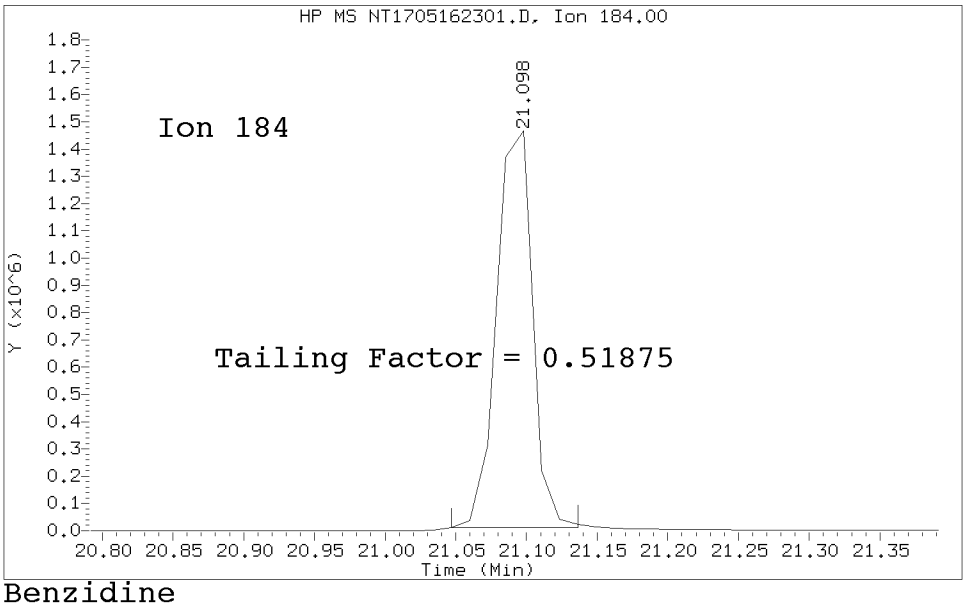


Datafile Analyzed: /20230516.b/NT1705162301.D/NT1705162301.D
Method Used: \20230516.b\DFTPP8270E.m\sw846ddt.m Inst: nt17
Injection Date: 16-MAY-2023 18:14 Operator: JGR
Sample Info: NT1705162301
Report Date: 05/20/2023 13:10



Pentachlorophenol
==========
Exp. RT = 18.191
Found RT = 18.191

Tail Factor = 1.401 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 21.098
Found RT = 21.098

Tail Factor = 0.519 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.4008163	2.000	PASS
Benzidine	0.5187468	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1797024			N/A
4,4-DDE	5899	0.3	20.0	PASS
4,4-DDD	55596	3.0	20.0	PASS
4,4-DDD + DDE	61495	3.3	20.0	PASS

Tuning Sample, nt17.i/20230516.b/NT1705162301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	55.71
70	Less than 2.00% of mass 69	0.28 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.89
365	1.00 - 100.00% of mass 198	2.01
441	Less than 150.00% of mass 443	6.45 (80.67)
442	Less than 200.00% of mass 198	39.79
443	15.00 - 24.00% of mass 442	8.00 (20.10)

Data File: NT1705162301.D
Spectrum: HP ChemStation MS NT1705162301.D, Scan 1116: 19.173 min.
Location of Maximum: 198.00
Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	373	125.00	3764	212.90	378	304.10	870
37.10	1236	127.00	299008	214.00	187	304.90	93
38.10	3574	128.00	23768	215.00	1418	308.00	456
39.10	19776	129.00	119136	216.10	3082	309.00	262
40.10	1147	130.00	10361	217.00	36592	310.00	402
41.10	878	131.00	1814	218.00	4762	311.00	86
42.00	117	132.00	965	219.00	396	312.00	116
43.10	290	133.10	535	221.00	29232	313.00	219
44.00	563	134.00	3393	223.00	8299	314.00	1504
45.00	582	135.00	9407	224.00	71792	315.00	3072
47.00	97	136.00	3952	225.00	17928	316.00	1521
48.00	170	137.00	4988	226.10	2276	317.00	314
49.10	2254	138.00	1078	227.00	30000	319.10	73
50.10	68392	139.00	652	228.00	4583	320.10	106
51.10	245312	140.00	1657	229.00	6282	321.00	853
52.10	13090	141.00	15600	230.00	812	323.00	7992
53.10	590	142.00	5275	231.00	2667	324.10	1422
54.10	108	143.00	3193	232.00	430	325.00	180
55.00	1424	144.00	947	233.00	547	326.10	206
56.00	7762	145.00	844	234.00	1964	327.00	1582
57.00	17056	146.00	3027	235.00	2156	328.00	897
58.00	866	147.00	7959	236.00	1308	329.00	186
59.10	293	148.00	17552	237.00	2222	329.90	82
60.00	267	149.00	3605	237.90	416	331.10	85
61.00	3445	150.00	847	239.00	1164	332.00	681
62.10	3924	151.10	1978	240.00	951	333.00	829
63.10	10682	152.00	1250	241.00	1482	334.00	5269
64.00	1343	153.00	5043	242.00	3506	335.00	1251
65.10	5380	154.00	3616	243.10	4237	335.90	192
66.00	439	155.00	8310	244.00	51672	339.00	128
67.10	548	156.00	12288	245.00	7098	340.10	147
69.00	297216	157.00	2390	246.00	10908	341.00	859
70.00	1476	158.00	3197	247.00	2147	342.00	240
70.90	268	159.00	2124	248.10	405	343.10	69
72.10	180	160.00	4998	249.00	1791	346.00	1668
73.00	2846	161.00	6841	250.00	400	347.00	375
74.10	28912	162.00	1948	250.90	471	348.00	75
75.00	46408	163.00	565	252.00	547	352.00	2294
76.10	17424	164.00	677	253.00	1432	353.00	1625
77.10	321920	165.00	5602	255.00	252288	354.10	2225
78.10	22048	166.00	4612	256.00	36264	355.00	516
79.00	22016	167.00	29864	257.00	3077	356.00	63
80.00	16324	168.00	14362	258.00	15639	356.90	53
81.00	22800	169.00	2523	259.00	2592	358.00	71
82.00	5387	170.00	957	260.10	431	359.00	210
83.00	5076	171.00	1311	261.00	461	360.10	57
84.00	563	172.00	2519	262.00	108	365.00	10733
85.00	4136	173.00	3591	263.10	161	366.00	1640
86.00	6323	174.00	6157	264.00	692	366.90	121

87.00	3104	175.00	11592	265.00	6219	370.00	199
88.00	1154	176.00	3445	266.00	980	371.00	691
89.00	552	177.00	5417	267.00	143	372.00	3968
91.00	5210	178.00	1917	267.90	329	373.00	1018
92.00	5631	179.00	21584	270.00	364	374.00	88
93.00	36336	180.00	14393	271.00	614	375.00	64
94.00	2258	181.00	6949	272.00	778	377.00	178
95.10	602	182.00	1161	273.00	7503	382.90	939
96.00	1677	183.00	749	274.00	19672	384.00	273
98.00	27664	184.00	1652	275.00	111592	385.00	126
99.00	20856	185.00	10677	276.00	15342	390.00	425
100.00	1939	186.00	78320	277.00	9319	391.00	350
101.00	11566	187.00	22896	278.00	1573	392.10	253
102.00	831	188.00	2244	279.00	451	393.00	72
103.00	4398	189.00	5077	281.00	219	401.00	268
104.00	7600	190.00	951	282.00	285	402.00	1410
105.00	7080	191.00	2327	283.00	1010	403.00	2061
107.00	89200	192.00	6979	284.00	690	404.00	774
108.00	13702	193.00	7409	285.00	1524	405.00	123
110.00	158144	194.00	1633	286.00	314	410.00	81
111.00	25024	195.10	1054	287.90	160	414.90	77
112.00	3002	196.00	17264	289.00	314	421.00	1760
113.00	864	198.00	533504	290.00	311	422.00	1730
114.00	302	199.00	36760	291.00	191	423.00	13610
115.10	463	200.00	2858	292.00	365	424.00	2795
116.00	5300	201.50	3067	293.00	1946	425.00	303
117.00	76832	203.00	3883	294.00	397	438.30	74
118.00	5637	204.00	19736	296.00	30016	439.10	152
119.00	739	205.00	33208	297.00	4246	441.10	34424
120.00	1147	206.00	134656	297.90	294	442.00	212288
121.00	584	207.00	18008	299.00	90	443.00	42672
122.00	6244	208.00	5001	301.10	394	444.00	3817
123.00	9329	209.00	1511	302.00	506	445.10	229
124.00	4061	211.00	5429	303.00	3269		

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	0.2	1.515327	0.5	1.64205	1	1.951215	2.5	1.946316	5	1.925094	10	1.955636
bis(2-chloroethyl) ether	0.2	1.304717	0.5	1.295399	1	1.478041	2.5	1.369821	5	1.331908	10	1.311267
2-Chlorophenol	0.2	1.499455	0.5	1.50802	1	1.717396	2.5	1.490307	5	1.498177	10	1.510733
1,3-Dichlorobenzene	0.2	1.503555	0.5	1.466725	1	1.638838	2.5	1.565023	5	1.556608	10	1.567334
1,4-Dichlorobenzene	0.2	1.412365	0.5	1.630819	1	1.798907	2.5	1.49308	5	1.488694	10	1.498669
1,2-Dichlorobenzene	0.2	1.339741	0.5	1.338052	1	1.531626	2.5	1.47113	5	1.476145	10	1.514948
Benzyl Alcohol	0.2	0.7011163	0.5	0.7351646	1	0.8941789	2.5	0.9302211	5	0.895946	10	0.9159356
2,2'-Oxybis(1-chloropropane)	0.2	0.3827998	0.5	0.3687671	1	0.4359081	2.5	0.415285	5	0.426351	10	0.4209867
2-Methylphenol	0.2	1.154959	0.5	1.212785	1	1.39403	2.5	1.552001	5	1.358761	10	1.386669
Hexachloroethane	0.2	0.5532909	0.5	0.5679359	1	0.6395764	2.5	0.6327795	5	0.6378225	10	0.6455227
N-Nitroso-di-n-Propylamine	0.2	0.9225615	0.5	0.9325315	1	1.056034	2.5	1.093845	5	1.077681	10	1.08524
4-Methylphenol	0.2	1.167844	0.5	1.182646	1	1.409867	2.5	1.472511	5	1.451305	10	1.475234
Nitrobenzene	0.2	0.4060282	0.5	0.4412374	1	0.4422102	2.5	0.4416006	5	0.4395413	10	0.4396436
Isophorone	0.2	0.5271224	0.5	0.6360812	1	0.5537528	2.5	0.5650856	5	0.5711294	10	0.6730137
2-Nitrophenol	0.2	0.1598392	0.5	0.1864089	1	0.2418321	2.5	0.2103456	5	0.2148844	10	0.2208109
2,4-Dimethylphenol			1	0.4110101	2	0.4149893	5	0.4052563	10	0.4080673	20	0.4041597
Bis(2-Chloroethoxy)methane	0.2	0.3647075	0.5	0.3509254	1	0.3707641	2.5	0.3622648	5	0.3686203	10	0.3664199
2,4-Dichlorophenol			1	0.3423595	2	0.3461516	5	0.3130138	10	0.3135113	20	0.3246616
1,2,4-Trichlorobenzene	0.2	0.3603233	0.5	0.355971	1	0.344624	2.5	0.3402865	5	0.3396736	10	0.3383516
Naphthalene	0.2	1.111221	0.5	1.119409	1	1.102741	2.5	1.101742	5	1.095938	10	1.091171
Benzoic acid			2	7.946971E-02	4	0.1496777	10	0.2227278	20	0.2520231	40	0.2699127
4-Chloroaniline			1	0.4258349	2	0.4317672	5	0.4590405	10	0.458243	20	0.4152621
Hexachlorobutadiene	0.2	0.1706535	0.5	0.1726665	1	0.1716239	2.5	0.1748862	5	0.1756936	10	0.1783674
4-Chloro-3-Methylphenol			1	0.316369	2	0.3397437	5	0.3563181	10	0.3608724	20	0.3677406
2-Methylnaphthalene	0.2	0.7697858	0.5	0.7505503	1	0.7790407	2.5	0.7993737	5	0.8052455	10	0.8055023
Hexachlorocyclopentadiene	0.4	0.1706078	1	0.2143461	2	0.248999	5	0.308174	10	0.3174482	20	0.3571023
2,4,6-Trichlorophenol			1	0.374323	2	0.3891811	5	0.418747	10	0.417309	20	0.4480786
2,4,5-Trichlorophenol			1	0.3966077	2	0.4279123	5	0.4346061	10	0.4415632	20	0.4677754

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2-Chloronaphthalene	0.2	1.292225	0.5	1.268009	1	1.271172	2.5	1.28054	5	1.263294	10	1.297566
2-Nitroaniline			1	0.3983443	2	0.4272776	5	0.4451883	10	0.4393913	20	0.4497003
Acenaphthylene	0.2	2.036084	0.5	2.059006	1	2.070821	2.5	2.030202	5	2.003144	10	2.01163
Dimethylphthalate	0.2	1.381073	0.5	1.405351	1	1.419896	2.5	1.404543	5	1.356323	10	1.344048
2,6-Dinitrotoluene			1	0.2981727	2	0.3056219	5	0.3261255	10	0.3250702	20	0.3366974
Acenaphthene	0.2	1.245076	0.5	1.263675	1	1.27027	2.5	1.273983	5	1.257471	10	1.294951
3-Nitroaniline			1	0.2787192	2	0.26979	5	0.2540363	10	0.3089221	20	0.3301823
2,4-Dinitrophenol	0.8		2	2.818422E-02	4	9.024559E-02	10	0.1620519	20	0.1892771	40	0.2197305
Dibenzofuran	0.2	1.77706	0.5	1.756784	1	1.75382	2.5	1.749859	5	1.75933	10	1.796287
4-Nitrophenol	0.4	8.703705E-02	1	0.1305194	2	0.1641116	5	0.1933669	10	0.1918027	20	0.2002034
2,4-Dinitrotoluene			1	0.3600138	2	0.4106691	5	0.4292884	10	0.4342633	20	0.4448729
Fluorene	0.2	1.396283	0.5	1.78943	1	1.799349	2.5	1.489574	5	1.781784	10	1.757136
4-Chlorophenylphenyl ether	0.2	0.7876275	0.5	0.7844299	1	0.7827804	2.5	0.6286909	5	0.7797913	10	0.8146494
Diethyl phthalate	0.2	1.302779	0.5	1.301983	1	1.347032	2.5	1.344656	5	1.303862	10	1.302658
4-Nitroaniline			1	0.236244	2	0.2745343	5	0.2753014	10	0.2844043	20	0.3076564
4,6-Dinitro-2-methylphenol	0.8	4.197058E-02	2	6.895356E-02	4	9.431631E-02	10	0.1230775	20	0.1382111	40	0.1546454
N-Nitrosodiphenylamine	0.2	0.5626007	0.5	0.5776893	1	0.5799067	2.5	0.5397361	5	0.5250946	10	0.5644336
4-Bromophenyl phenyl ether	0.2	0.1841331	0.5	0.1895423	1	0.1861595	2.5	0.1884463	5	0.1978305	10	0.2089616
Hexachlorobenzene	0.2	0.1991402	0.5	0.1974876	1	0.1898174	2.5	0.1921283	5	0.1983506	10	0.2070359
Pentachlorophenol	0.4	3.402963E-02	1	5.405844E-02	2	6.899246E-02	5	0.0973416	10	0.1172324	20	0.132916
Phenanthrene	0.2	1.145162	0.5	1.16863	1	1.150035	2.5	1.129793	5	1.172838	10	1.208755
Anthracene	0.2	1.004975	0.5	1.044685	1	1.06765	2.5	1.107929	5	1.129767	10	1.161012
Carbazole	0.2	0.9664878	0.5	0.9864561	1	0.9266959	2.5	0.6924964	5	0.6245934	10	0.769363
Di-n-Butylphthalate	0.2	1.182153	0.5	1.239651	1	1.303818	2.5	1.366907	5	1.407721	10	1.39066
Fluoranthene	0.2	1.756504	0.5	1.854365	1	1.873671	2.5	1.893399	5	1.949547	10	1.937891
Pyrene	0.2	1.861727	0.5	1.919689	1	1.923173	2.5	1.90314	5	1.926956	10	1.929794
Butylbenzylphthalate	0.2	0.7911624	0.5	0.8403236	1	0.8780115	2.5	0.8721963	5	0.8779673	10	0.8615676
Benzo(a)anthracene	0.2	1.503088	0.5	1.501633	1	1.477556	2.5	1.461652	5	1.459356	10	1.465531

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
3,3'-Dichlorobenzidine	0.6	0.4422015	1.5	0.4353429	3	0.3605899	7.5	0.2985874	15	0.2716155	30	0.3372362
Chrysene	0.2	1.392476	0.5	1.426542	1	1.385766	2.5	1.37608	5	1.368949	10	1.392704
bis(2-Ethylhexyl)phthalate	0.2	0.5451547	0.5	0.5863116	1	0.5874959	2.5	0.5901079	5	0.5933055	10	0.5812585
Di-n-Octylphthalate	0.2	1.071564	0.5	1.044612	1	1.030433	2.5	1.013275	5	1.002075	10	0.9864001
Benzofluoranthenes, Total	0.4	1.388826	1	1.379164	2	1.378157	5	1.425352	10	1.428639	20	1.451637
Benzo(a)pyrene	0.2	1.289058	0.5	1.22301	1	1.17691	2.5	1.216623	5	1.244532	10	1.273014
Indeno(1,2,3-cd)pyrene	0.2	1.410706	0.5	1.408115	1	1.387911	2.5	1.414105	5	1.456107	10	1.465178
Dibenzo(a,h)anthracene	0.2	1.161385	0.5	1.178336	1	1.172982	2.5	1.188193	5	1.217272	10	1.233675
Benzo(g,h,i)perylene	0.2	1.160037	0.5	1.180393	1	1.147711	2.5	1.142466	5	1.207497	10	1.211392
1-Methylnaphthalene	0.2	0.7150203	0.5	0.7211858	1	0.7217567	2.5	0.7350043	5	0.738476	10	0.7401884
2-Fluorophenol	0.3	1.055315	0.75	1.150007	1.5	1.379364	3.75	1.402335	7.5	1.422699	15	1.398997
Phenol-d5	0.3	1.477121	0.75	1.562941	1.5	1.811627	3.75	1.798854	7.5	1.825745	15	1.849259
2-Chlorophenol-d4	0.3	1.244802	0.75	1.266216	1.5	1.43093	3.75	1.434268	7.5	1.436906	15	1.447931
1,2-Dichlorobenzene-d4	0.2	0.8803341	0.5	0.8720824	1	1.026267	2.5	1.000234	5	1.00558	10	1.016151
Nitrobenzene-d5	0.2	0.426305	0.5	0.4529385	1	0.4544389	2.5	0.4599618	5	0.4674622	10	0.4653675
2-Fluorobiphenyl	0.2	1.57529	0.5	1.581192	1	1.571831	2.5	1.566911	5	1.558354	10	1.584487
2,4,6-Tribromophenol	0.3	0.1091973	0.75	0.1195035	1.5	0.1300426	3.75	0.1460022	7.5	0.1466165	15	0.158924
p-Terphenyl-d14	0.2	1.37092	0.5	1.339393	1	1.370088	2.5	1.339808	5	1.352528	10	1.364215

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	20	1.912059										
bis(2-chloroethyl) ether	20	1.274754										
2-Chlorophenol	20	1.504806										
1,3-Dichlorobenzene	20	1.560279										
1,4-Dichlorobenzene	20	1.506931										
1,2-Dichlorobenzene	20	1.508603										
Benzyl Alcohol	20	0.9090791										
2,2'-Oxybis(1-chloropropane)	20	0.4193386										
2-Methylphenol	20	1.383045										
Hexachloroethane	20	0.6550718										
N-Nitroso-di-n-Propylamine	20	1.056236										
4-Methylphenol	20	1.454682										
Nitrobenzene	20	0.4300984										
Isophorone	20	0.6357134										
2-Nitrophenol	20	0.230936										
2,4-Dimethylphenol	40	0.3946827										
Bis(2-Chloroethoxy)methane	20	0.3670318										
2,4-Dichlorophenol	40	0.3195233										
1,2,4-Trichlorobenzene	20	0.4032811										
Naphthalene	20	1.077739										
Benzoic acid	80	0.276247										
4-Chloroaniline	40	0.4114227										
Hexachlorobutadiene	20	0.1858351										
4-Chloro-3-Methylphenol	40	0.3685457										
2-Methylnaphthalene	20	0.8036622										
Hexachlorocyclopentadiene	40	0.3793577										
2,4,6-Trichlorophenol	40	0.4634198										
2,4,5-Trichlorophenol	40	0.4897727										

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
2-Chloronaphthalene	20	1.275899										
2-Nitroaniline	40	0.4378235										
Acenaphthylene	20	1.999852										
Dimethylphthalate	20	1.322869										
2,6-Dinitrotoluene	40	0.3416608										
Acenaphthene	20	1.277702										
3-Nitroaniline	40	0.3490092										
2,4-Dinitrophenol	80	0.2351858										
Dibenzofuran	20	1.805194										
4-Nitrophenol	40	0.198296										
2,4-Dinitrotoluene	40	0.4517129										
Fluorene	20	1.773748										
4-Chlorophenylphenyl ether	20	0.8411589										
Diethyl phthalate	20	1.492502										
4-Nitroaniline	40	0.3167772										
4,6-Dinitro-2-methylphenol	80	0.1625065										
N-Nitrosodiphenylamine	20	0.5728148										
4-Bromophenyl phenyl ether	20	0.2191967										
Hexachlorobenzene	20	0.2163736										
Pentachlorophenol	40	0.1510293										
Phenanthrene	20	1.194775										
Anthracene	20	1.154318										
Carbazole	20	0.9554842										
Di-n-Butylphthalate	20	1.371066										
Fluoranthene	20	1.832218										
Pyrene	20	1.812931										
Butylbenzylphthalate	20	0.8213087										
Benzo(a)anthracene	20	1.441631										

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
3,3'-Dichlorobenzidine	60	0.4699082										
Chrysene	20	1.359461										
bis(2-Ethylhexyl)phthalate	20	0.5674596										
Di-n-Octylphthalate	20	0.9490266										
Benzofluoranthenes, Total	40	1.513527										
Benzo(a)pyrene	20	1.321834										
Indeno(1,2,3-cd)pyrene	20	1.601363										
Dibenzo(a,h)anthracene	20	1.361357										
Benzo(g,h,i)perylene	20	1.322862										
1-Methylnaphthalene	20	0.7429514										
2-Fluorophenol	30	1.357037										
Phenol-d5	30	1.804164										
2-Chlorophenol-d4	30	1.454858										
1,2-Dichlorobenzene-d4	20	1.028424										
Nitrobenzene-d5	20	0.4602463										
2-Fluorobiphenyl	20	1.592623										
2,4,6-Tribromophenol	30	0.1798038										
p-Terphenyl-d14	20	1.301713										

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Phenol	1.835385	9.8			RSD (15)	
bis(2-chloroethyl) ether	1.337987	5.1			RSD (15)	
2-Chlorophenol	1.532699	5.3			RSD (15)	
1,3-Dichlorobenzene	1.551195	3.5			RSD (15)	
1,4-Dichlorobenzene	1.547066	8.3			RSD (15)	
1,2-Dichlorobenzene	1.454321	5.6			RSD (15)	
Benzyl Alcohol	0.8545202	11.1			RSD (15)	
2,2'-Oxybis(1-chloropropane)	0.4099195	6.0			RSD (15)	
2-Methylphenol	1.348893	9.7			RSD (15)	
Hexachloroethane	0.6188571	6.6			RSD (15)	
N-Nitroso-di-n-Propylamine	1.032018	7.1			RSD (15)	
4-Methylphenol	1.373441	10.0			RSD (15)	
Nitrobenzene	0.4343371	3.0			RSD (15)	
Isophorone	0.5945569	9.0			RSD (15)	
2-Nitrophenol	0.2092939	13.3			RSD (15)	
2,4-Dimethylphenol	0.4063609	1.7			RSD (15)	
Bis(2-Chloroethoxy)methane	0.3643905	1.8			RSD (15)	
2,4-Dichlorophenol	0.3265369	4.4			RSD (15)	
1,2,4-Trichlorobenzene	0.3546444	6.5			RSD (15)	
Naphthalene	1.099994	1.2			RSD (15)	
Benzoic acid	0.208343	37.5	0.9973		LCOD (0.99)	
4-Chloroaniline	0.4335951	4.8			RSD (15)	
Hexachlorobutadiene	0.1756752	3.0			RSD (15)	
4-Chloro-3-Methylphenol	0.3515982	5.7			RSD (15)	
2-Methylnaphthalene	0.7875944	2.7			RSD (15)	
Hexachlorocyclopentadiene	0.2851479	26.8	0.9962		LCOD (0.99)	
2,4,6-Trichlorophenol	0.4185098	8.1			RSD (15)	
2,4,5-Trichlorophenol	0.4430396	7.3			RSD (15)	
2-Chloronaphthalene	1.278386	1.0			RSD (15)	
2-Nitroaniline	0.4329542	4.3			RSD (15)	
Acenaphthylene	2.030106	1.4			RSD (15)	

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Dimethylphthalate	1.3763	2.6			RSD (15)	
2,6-Dinitrotoluene	0.3222248	5.3			RSD (15)	
Acenaphthene	1.269018	1.2			RSD (15)	
3-Nitroaniline	0.2984432	12.4			RSD (15)	
2,4-Dinitrophenol	0.1541125	52.0		0.9967	QCOD (0.99)	
Dibenzofuran	1.771191	1.2			RSD (15)	
4-Nitrophenol	0.1664767	25.9	0.9996		LCOD (0.99)	
2,4-Dinitrotoluene	0.4218034	7.9			RSD (15)	
Fluorene	1.683901	9.9			RSD (15)	
4-Chlorophenylphenyl ether	0.7741612	8.8			RSD (15)	
Diethyl phthalate	1.34221	5.2			RSD (15)	
4-Nitroaniline	0.2824863	10.1			RSD (15)	
4,6-Dinitro-2-methylphenol	0.1119544	40.4	0.9959		LCOD (0.99)	
N-Nitrosodiphenylamine	0.5603251	3.7			RSD (15)	
4-Bromophenyl phenyl ether	0.1963243	6.7			RSD (15)	
Hexachlorobenzene	0.2000477	4.5			RSD (15)	
Pentachlorophenol	9.365712E-02	46.0		0.9982	QCOD (0.99)	
Phenanthrene	1.167141	2.4			RSD (15)	
Anthracene	1.095762	5.4			RSD (15)	
Carbazole	0.8459395	17.5		0.9984	QCOD (0.99)	
Di-n-Butylphthalate	1.323139	6.4			RSD (15)	
Fluoranthene	1.871085	3.5			RSD (15)	
Pyrene	1.896773	2.3			RSD (15)	
Butylbenzylphthalate	0.8489339	3.9			RSD (15)	
Benzo(a)anthracene	1.472921	1.5			RSD (15)	
3,3'-Dichlorobenzidine	0.3736402	20.5		0.9987	QCOD (0.99)	
Chrysene	1.385997	1.6			RSD (15)	
bis(2-Ethylhexyl)phthalate	0.5787277	2.9			RSD (15)	
Di-n-Octylphthalate	1.013912	4.0			RSD (15)	
Benzofluoranthenes, Total	1.423615	3.4			RSD (15)	
Benzo(a)pyrene	1.249283	3.9			RSD (15)	

INITIAL CALIBRATION DATA

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00065	Instrument:	NT17
Calibration Date:	05/20/2023	Column (1):	ZB-5MS

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Indeno(1,2,3-cd)pyrene	1.449069	5.0			RSD (15)	
Dibenzo(a,h)anthracene	1.216171	5.7			RSD (15)	
Benzo(g,h,i)perylene	1.196051	5.2			RSD (15)	
1-Methylnaphthalene	0.7306547	1.5			RSD (15)	
2-Fluorophenol	1.309393	11.1			RSD (15)	
Phenol-d5	1.732816	8.6			RSD (15)	
2-Chlorophenol-d4	1.387987	6.6			RSD (15)	
1,2-Dichlorobenzene-d4	0.9755818	7.0			RSD (15)	
Nitrobenzene-d5	0.4552457	3.0			RSD (15)	
2-Fluorobiphenyl	1.575813	0.7			RSD (15)	
2,4,6-Tribromophenol	0.1414414	17.0	0.9934		LCOD (0.99)	
p-Terphenyl-d14	1.348381	1.8			RSD (15)	

ANALYSIS SEQUENCE

SLE0338

Instrument ID: NT17
Calibration ID: GE00065
MS EM Level: 1450 EV

GCMS Description: Agilent 7890B/5977B
GCMS Column ID: L004289

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLE0338-TUN1	MS Tune	QC		1	L005045		05/16/2023 18:14	NT1705162301.D	VTS	
SLE0338-CAL7	ABN 20	QC		2	K011111	K010831	05/16/2023 18:52	NT1705162302.D	JGR	
SLE0338-CAL6	ABN 10	QC		3	K011110	K010831	05/16/2023 19:29	NT1705162303.D	JGR	
SLE0338-CAL5	ABN 5	QC		4	K011109	K010831	05/16/2023 20:07	NT1705162304.D	JGR	
SLE0338-CAL4	ABN 2.5	QC		5	K011108	K010831	05/16/2023 20:44	NT1705162305.D	JGR	
SLE0338-CAL3	ABN 1.0	QC		6	K011107	K010831	05/16/2023 21:22	NT1705162306.D	JGR	
SLE0338-CAL2	ABN 0.5	QC		7	K011106	K010831	05/16/2023 21:59	NT1705162307.D	JGR	
SLE0338-CAL1	ABN 0.2	QC		8	K011105	K010831	05/16/2023 22:37	NT1705162308.D	JGR	
SLE0338-SCV1	SCV 5.0	QC		9	K010066	K010831	05/17/2023 00:29	NT1705162311.D	JGR	
SLE0338-ICB1	Initial Cal Blank	QC		10	K005156	K010831	05/17/2023 01:07	NT1705162312.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230516.b

	Time	Filename	LabID	ClientId	DF																			
1	1814	NT1705162301.D	SLE0338-TUN1		1	|NO ISTDS FOUND||																		
2	1852	NT1705162302.D	SLE0338-CAL7		1	| 9.38	262646	||11.84	972245	||15.44	531394	||18.47	858760	||23.47	584767	||26.16	454990	||24.47	1150423	|				
3	1929	NT1705162303.D	SLE0338-CAL6		1	| 9.37	285800	||11.84	1067038	||15.44	581019	||18.47	929294	||23.46	582943	||26.16	481255	||24.47	1171304	|				
4	2007	NT1705162304.D	SLE0338-CAL5		1	| 9.37	287078	||11.84	1056758	||15.44	587510	||18.46	933575	||23.46	576570	||26.15	491359	||24.47	1181651	|				
5	2044	NT1705162305.D	SLE0338-CAL4		1	| 9.37	294275	||11.84	1079321	||15.44	588382	||18.46	983826	||23.46	618048	||26.15	536896	||24.47	1230644	|				
6	2122	NT1705162306.D	SLE0338-CAL3		1	| 9.37	291199	||11.84	1069618	||15.44	576693	||18.46	946973	||23.46	570480	||26.15	514255	||24.47	1138779	|				
7	2159	NT1705162307.D	SLE0338-CAL2		1	| 9.37	324107	||11.84	1038534	||15.44	548179	||18.46	888076	||23.45	524160	||26.15	482063	||24.45	1033662	|				
8	2237	NT1705162308.D	SLE0338-CAL1		1	| 9.37	341484	||11.83	1094850	||15.43	579868	||18.46	948879	||23.45	564132	||26.15	504570	||24.47	1101082	|				
9	2314	NT1705162309.D	SIM0.1		1	| 9.37	321301	||11.83	1156521	||15.44	625574	||18.46	1065678	||23.45	676035	||26.15	620220	||24.45	1323254	|				
10	2351	NT1705162310.D	SIM 0.5		1	| 9.37	332506	||11.83	1064302	||15.43	556553	||18.46	907034	||23.45	531815	||26.15	492679	||24.45	1051214	|				
11	0029	NT1705162311.D	SLE0338-SCV1		1	| 9.37	265705	||11.84	965231	||15.44	512787	||18.46	850147	||23.46	511511	||26.15	456008	||24.47	1044471	|				
12	0107	NT1705162312.D	SLE0338-ICB1		1	| 9.37	287620	||11.83	1041050	||15.44	539097	||18.46	886060	||23.45	518615	||26.15	487385	||24.45	1011857	|				

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230516.b

Instrument: nt17.i Date: 16-MAY-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1814	NT1705162301.D	SLE0338-TUN1	1	NO MANUAL INTEGRATION
1852	NT1705162302.D	SLE0338-CAL7	1	Benzoic acid, 2-Fluorophenol,
1929	NT1705162303.D	SLE0338-CAL6	1	Benzoic acid,
2007	NT1705162304.D	SLE0338-CAL5	1	NO MANUAL INTEGRATION
2044	NT1705162305.D	SLE0338-CAL4	1	Benzoic acid,
2122	NT1705162306.D	SLE0338-CAL3	1	NO MANUAL INTEGRATION
2159	NT1705162307.D	SLE0338-CAL2	1	NO MANUAL INTEGRATION
2237	NT1705162308.D	SLE0338-CAL1	1	Benzoic acid,
2314	NT1705162309.D	SIM0.1	1	Benzo(k)fluoranthene,
2351	NT1705162310.D	SIM 0.5	1	NO MANUAL INTEGRATION
0029	NT1705162311.D	SLE0338-SCV1	1	NO MANUAL INTEGRATION
0107	NT1705162312.D	SLE0338-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 20-May-2023 13:32

NT1705162301.D	Data Locked	van, 20-May-2023 13:32
NT1705162302.D	Data Locked	van, 20-May-2023 13:32
NT1705162303.D	Data Locked	van, 20-May-2023 13:32
NT1705162304.D	Data Locked	van, 20-May-2023 13:32
NT1705162305.D	Data Locked	van, 20-May-2023 13:32
NT1705162306.D	Data Locked	van, 20-May-2023 13:32
NT1705162307.D	Data Locked	van, 20-May-2023 13:32
NT1705162308.D	Data Locked	van, 20-May-2023 13:32
NT1705162309.D	Data Locked	van, 20-May-2023 13:32
NT1705162310.D	Data Locked	van, 20-May-2023 13:32
NT1705162311.D	Data Locked	van, 20-May-2023 13:32
NT1705162312.D	Data Locked	van, 20-May-2023 13:32

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INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2023 11:13
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Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Last Edit : 18-May-2023 07:42 jrains

Calibration File Names:
Level 1: \\target\share\chem3\nt17.i\20230516.b\NT1705162308.D
Level 2: \\target\share\chem3\nt17.i\20230516.b\NT1705162307.D
Level 3: \\target\share\chem3\nt17.i\20230516.b\NT1705162306.D
Level 4: \\target\share\chem3\nt17.i\20230516.b\NT1705162305.D
Level 5: \\target\share\chem3\nt17.i\20230516.b\NT1705162304.D
Level 6: \\target\share\chem3\nt17.i\20230516.b\NT1705162303.D
Level 7: \\target\share\chem3\nt17.i\20230516.b\NT1705162302.D

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

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

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

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

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

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

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Compound	0.2000000 Level 1 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
120 2,3,4,6-Tetrachlorophenol	8430	21645	51169	146074	319360	688855						
	1360268						LINR	0.000e+000	0.50074		0.99583	
178 2-Benzyl-4-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
119 7,12-Dimethylbenz(a)anthracen	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
117 Butyl Diphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
116 Dibutyl Phenyl Phosphate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
115 Tributyl Phosphate	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
114 Beta-Pinene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
113 Diphenyl Oxide	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
112 Biphenyl	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
111 Azobenzene (1,2-DP-Hydrazine)	1.48237 / 1.53148	1.56765	1.61750	1.64942	1.55052	1.56844	AVRG		1.56677		3.49977	
110 Tetrachloroguaiacol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-

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

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
	20.0000 Level 7											
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
105 1-methylnaphthalene	0.71502	0.72119	0.72176	0.73500	0.73848	0.74019						
	0.74295						AVRG		0.73065		1.51528	
151 1,2,4,5-Tetrachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
163 1,2,3,5,8-Pentachloronaphthal	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
164 1,2,3,4,6,7-Hexachloronaphtha	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
165 1,2,3,4,5,6,7-Heptachloronaph	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
166 Octachloronaphthalene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
167 2,2',4,4',5-Pentabromobipheny	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
3 Phenol	1.51533 / 1.91206	1.64205	1.95122	1.94632	1.92509	1.95564	AVRG		1.83539		9.79520	
4 Bis(2-Chloroethyl)ether	1.30472 / 1.27475	1.29540	1.47804	1.36982	1.33191	1.31127	AVRG		1.33799		5.13279	

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
6 2-Chlorophenol	1.49946	1.50802	1.71740	1.49031	1.49818	1.51073					
	1.50481						AVRG		1.53270		5.33228
7 1,3-Dichlorobenzene	1.50356	1.46673	1.63884	1.56502	1.55661	1.56733					
	1.56028						AVRG		1.55119		3.49642
9 1,4-Dichlorobenzene	1.41236	1.63082	1.79891	1.49308	1.48869	1.49867					
	1.50693						AVRG		1.54707		8.29701
11 Benzyl alcohol	0.70112	0.73516	0.89418	0.93022	0.89595	0.91594					
	0.90908						AVRG		0.85452		11.05523
12 1,2-Dichlorobenzene	1.33974	1.33805	1.53163	1.47113	1.47615	1.51495					
	1.50860						AVRG		1.45432		5.61458
13 2-Methylphenol	1.15496	1.21278	1.39403	1.55200	1.35876	1.38667					
	1.38304						AVRG		1.34889		9.67155
14 2,2'-oxybis(1-Chloropropane)	0.38280	0.36877	0.43591	0.41529	0.42635	0.42099					
	0.41934						AVRG		0.40992		5.98747

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Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\ABN.m
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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
15 4-Methylphenol	1.16784	1.18265	1.40987	1.47251	1.45130	1.47523					
	1.45468						AVRG		1.37344		9.98491
16 N-Nitroso-di-n-propylamine	0.92256	0.93253	1.05603	1.09384	1.07768	1.08524					
	1.05624						AVRG		1.03202		7.05222
17 Hexachloroethane	0.55329	0.56794	0.63958	0.63278	0.63782	0.64552					
	0.65507						AVRG		0.61886		6.56284
19 Nitrobenzene	0.40603	0.44124	0.44221	0.44160	0.43954	0.43964					
	0.43010						AVRG		0.43434		3.02676
20 Isophorone	0.52712	0.63608	0.55375	0.56509	0.57113	0.67301					
	0.63571						AVRG		0.59456		9.00612
21 2-Nitrophenol	0.15984	0.18641	0.24183	0.21035	0.21488	0.22081					
	0.23094						AVRG		0.20929		13.31789
22 2,4-Dimethylphenol	+++++	0.41101	0.41499	0.40526	0.40807	0.40416					
	0.39468						AVRG		0.40636		1.70998

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
23 Bis(2-Chloroethoxy)methane	0.36471	0.35093	0.37076	0.36226	0.36862	0.36642					
	0.36703						AVRG		0.36439		1.79095
24 Benzoic acid	+++++	41266	160098	600987	1331637	2880071					
	5371595						LINR	0.000e+000	0.27335		0.99728
25 2,4-Dichlorophenol	+++++	0.34236	0.34615	0.31301	0.31351	0.32466					
	0.31952						AVRG		0.32654		4.41744
26 1,2,4-Trichlorobenzene	0.36032	0.35597	0.34462	0.34029	0.33967	0.33835					
	0.40328						AVRG		0.35464		6.50747
28 Naphthalene	1.11122	1.11941	1.10274	1.10174	1.09594	1.09117					
	1.07774						AVRG		1.09999		1.23270
29 4-Chloroaniline	+++++	0.42583	0.43177	0.45904	0.45824	0.41526					
	0.41142						AVRG		0.43360		4.77829
30 Hexachlorobutadiene	0.17065	0.17267	0.17162	0.17489	0.17569	0.17837					
	0.18584						AVRG		0.17568		2.95578

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
31 4-Chloro-3-methylphenol	+++++	0.31637	0.33974	0.35632	0.36087	0.36774					
	0.36855						AVRG		0.35160		5.74168
32 2-Methylnaphthalene	0.76979	0.75055	0.77904	0.79937	0.80525	0.80550					
	0.80366						AVRG		0.78759		2.73880
33 Hexachlorocyclopentadiene	+++++	29375	71798	226655	466260	1037416					
	2015884						LINR	0.000e+000	0.37195		0.99573
34 2,4,6-Trichlorophenol	+++++	0.37432	0.38918	0.41875	0.41731	0.44808					
	0.46342						AVRG		0.41851		8.07145
35 2,4,5-Trichlorophenol	+++++	0.39661	0.42791	0.43461	0.44156	0.46778					
	0.48977						AVRG		0.44304		7.31668
37 2-Chloronaphthalene	1.29223	1.26801	1.27117	1.28054	1.26329	1.29757					
	1.27590						AVRG		1.27839		0.98828
38 2-Nitroaniline	+++++	0.39834	0.42728	0.44519	0.43939	0.44970					
	0.43782						AVRG		0.43295		4.29050

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
39 Dimethylphthalate	1.38107	1.40535	1.41990	1.40454	1.35632	1.34405						
	1.32287						AVRG		1.37630		2.62967	
40 Acenaphthylene	2.03608	2.05901	2.07082	2.03020	2.00314	2.01163						
	1.99985						AVRG		2.03011		1.35084	
41 2,6-Dinitrotoluene	+++++	0.29817	0.30562	0.32613	0.32507	0.33670						
	0.34166						AVRG		0.32222		5.31164	
43 3-Nitroaniline	+++++	0.27872	0.26979	0.25404	0.30892	0.33018						
	0.34901						AVRG		0.29844		12.40773	
44 Acenaphthene	1.24508	1.26367	1.27027	1.27398	1.25747	1.29495						
	1.27770						AVRG		1.26902		1.24978	
45 2,4-Dinitrophenol	+++++	7725	52044	238371	556011	1276676						
	2499526						QUAD	0.000e+000	5.15029	-0.19402	0.99884	<-
46 Dibenzofuran	1.77706	1.75678	1.75382	1.74986	1.75933	1.79629						
	1.80519						AVRG		1.77119		1.24669	

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Compound	0.2000000 Level 1	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	20.0000 Level 7										
47 4-Nitrophenol	+++++	17887	47321	142217	281715	581610					
	1053733						LINR	0.000e+000	0.19823		0.99965
48 2,4-Dinitrotoluene	+++++	0.36001	0.41067	0.42929	0.43426	0.44487					
	0.45171						AVRG		0.42180		7.91993
49 Fluorene	1.39628	1.78943	1.79935	1.48957	1.78178	1.75714					
	1.77375						AVRG		1.68390		9.93624
50 Diethylphthalate	1.30278	1.30198	1.34703	1.34466	1.30386	1.30266					
	1.49250						AVRG		1.34221		5.16401
51 4-Chlorophenyl-phenylether	0.78763	0.78443	0.78278	0.62869	0.77979	0.81465					
	0.84116						AVRG		0.77416		8.77394
52 4-Nitroaniline	+++++	0.23624	0.27453	0.27530	0.28440	0.30766					
	0.31678						AVRG		0.28249		10.09524
53 4,6-Dinitro-2-methylphenol	+++++	30618	89315	302717	645152	1437110					
	2791081						LINR	0.000e+000	0.15963		0.99551

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
54 N-Nitrosodiphenylamine	0.56260	0.57769	0.57991	0.53974	0.52509	0.56443					
	0.57281						AVRG		0.56033		3.66338
56 4-Bromophenyl-phenylether	0.18413	0.18954	0.18616	0.18845	0.19783	0.20896					
	0.21920						AVRG		0.19632		6.72256
57 Hexachlorobenzene	0.19914	0.19749	0.18982	0.19213	0.19835	0.20704					
	0.21637						AVRG		0.20005		4.53122
58 Pentachlorophenol	+++++	12002	32667	119709	273613	617590					
	1296979						QUAD	0.000e+000	8.63071	-1.34063	0.99924
60 Phenanthrene	1.14516	1.16863	1.15003	1.12979	1.17284	1.20875					
	1.19477						AVRG		1.16714		2.39814
61 Anthracene	1.00498	1.04469	1.06765	1.10793	1.12977	1.16101					
	1.15432						AVRG		1.09576		5.35155
62 Carbazole	45854	109506	219389	425810	728881	1787411					
	4102658						QUAD	0.000e+000	1.51022	-0.09723	0.99848

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
63 Di-n-butylphthalate	1.18215	1.23965	1.30382	1.36691	1.40772	1.39066					
	1.37107						AVRG		1.32314		6.40902
64 Fluoranthene	1.75650	1.85437	1.87367	1.89340	1.94955	1.93789					
	1.83222						AVRG		1.87108		3.52109
65 Pyrene	1.86173	1.91969	1.92317	1.90314	1.92696	1.92979					
	1.81293						AVRG		1.89677		2.31029
67 Butylbenzylphthalate	0.79116	0.84032	0.87801	0.87220	0.87797	0.86157					
	0.82131						AVRG		0.84893		3.89615
68 Benzo(a)anthracene	1.50309	1.50163	1.47756	1.46165	1.45936	1.46553					
	1.44163						AVRG		1.47292		1.54337
70 3,3'-Dichlorobenzidine	37419	85571	154282	346015	587270	1474421					
	4121802						QUAD	0.000e+000	3.51872	-0.19750	0.99874
71 Chrysene	1.39248	1.42654	1.38577	1.37608	1.36895	1.39270					
	1.35946						AVRG		1.38600		1.56529

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	Coefficients m1	Coefficients m2	%RSD or R^2
72 bis(2-Ethylhexyl)phthalate	0.54515	0.58631	0.58750	0.59011	0.59331	0.58126					
	0.56746						AVRG		0.57873		2.93997
73 Di-n-octylphthalate	1.07156	1.04461	1.03043	1.01328	1.00208	0.98640					
	0.94903						AVRG		1.01391		3.95471
74 Benzo(b)fluoranthene	1.67806	1.58426	1.59279	1.55259	1.48360	1.65816					
	1.55191						AVRG		1.58591		4.19018
75 Benzo(k)fluoranthene	1.44075	1.37079	1.41319	1.48869	1.57004	1.46139					
	1.74349						AVRG		1.49834		8.33302
187 Total Benzofluoranthenes	1.38883	1.37916	1.37816	1.42535	1.42864	1.45164					
	1.51353						AVRG		1.42361		3.41126
76 Benzo(a)pyrene	1.28906	1.22301	1.17691	1.21662	1.24453	1.27301					
	1.32183						AVRG		1.24928		3.92500
78 Indeno(1,2,3-cd)pyrene	1.41071	1.40811	1.38791	1.41410	1.45611	1.46518					
	1.60136						AVRG		1.44907		5.00930

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
79 Dibenzo(a,h)anthracene	1.16138	1.17834	1.17298	1.18819	1.21727	1.23368						
	1.36136						AVRG		1.21617		5.66377	
80 Benzo(g,h,i)perylene	1.16004	1.18039	1.14771	1.14247	1.20750	1.21139						
	1.32286						AVRG		1.19605		5.19871	
90 N-Nitrosodimethylamine	0.75734	0.78089	0.93590	0.94678	0.91987	0.91954						
	0.85362						AVRG		0.87342		8.86830	
91 Aniline	+++++	1.32671	1.49931	1.55787	1.60682	1.64294						
	1.59466						AVRG		1.53805		7.44122	
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
93 Benzidine	+++++	73568	119355	332205	535492	1662132						
	3987621						QUAD	0.000e+000	2.15780	-0.10234	0.99414	
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
97 Caffeine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
98 Retene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
99 Perylene	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
100 3-beta-Coprostanol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
101 Cholesterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
102 beta-Sitosterol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
103 Pyridine	1.28770 / 1.29504	1.32196	1.47087	1.48489	1.44527	1.39185	AVRG		1.38537		6.07970	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
188 2,6-Dichlorophenol	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
189 N-Nitrosomethylethylamine	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
$ 1 2-Fluorophenol	1.05532 / 1.35704	1.15001	1.37936	1.40233	1.42270	1.39900	AVRG		1.30939		11.09490	
$ 137 d8-1,4-Dioxane	+++++ / +++++	+++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000	<-
$ 2 Phenol-d5	1.47712 / 1.80416	1.56294	1.81163	1.79885	1.82574	1.84926	AVRG		1.73282		8.56278	
$ 5 2-Chlorophenol-d4	1.24480 / 1.45486	1.26622	1.43093	1.43427	1.43691	1.44793	AVRG		1.38799		6.56208	
$ 10 1,2-Dichlorobenzene-d4	0.88033 / 1.02842	0.87208	1.02627	1.00023	1.00558	1.01615	AVRG		0.97558		7.03958	

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Compound	0.2000000 Level 1 / 20.0000 Level 7	0.5000000 Level 2	1.0000 Level 3	2.5000 Level 4	5.0000 Level 5	10.0000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2	
$ 18 Nitrobenzene-d5	0.42630	0.45294	0.45444	0.45996	0.46746	0.46537						
	0.46025						AVRG		0.45525		3.03112	
$ 36 2-Fluorobiphenyl	1.57529	1.58119	1.57183	1.56691	1.55835	1.58449						
	1.59262						AVRG		1.57581		0.72674	
$ 55 2,4,6-Tribromophenol	4749	12283	28123	80536	161510	346267						
	716600						LINR	0.000e+000	0.17448		0.99340	
$ 66 Terphenyl-d14	1.37092	1.33939	1.37009	1.33981	1.35253	1.36422						
	1.30171						AVRG		1.34838		1.81140	
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-
$ 87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++						
	+++++						AVRG		0.000e+000		0.000e+000	<-

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

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 09-MAY-2023 11:13
End Cal Date : 16-MAY-2023 22:37
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Last Edit : 18-May-2023 07:42 jrains

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Batch File: \\target\share\chem3\nt17.i\20230516.b
Inst ID: nt17.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	NT1705162302	NT1705162303	NT1705162304	NT1705162305	NT1705162306	NT1705162307	NT1705162308
INJ.DATE:	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023
INJ.TIME:	18:52	19:29	20:07	20:44	21:22	21:59	22:37

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	7.161	7.161	7.148	7.148	7.161	7.161	7.161	7.161	4.161-10.161	7.157	0.006
186 Carbaryl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.785	15.785-21.785	+++++	+++++
179 n-Decane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	5.921-11.921	+++++	+++++
180 n-Octadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.908	14.908-20.908	+++++	+++++
169 4-tert-Butylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.871	17.871-23.871	+++++	+++++
170 N,N-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.829	17.829-23.829	+++++	+++++
171 2,3-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
172 2,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
173 2,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.506	21.506-27.506	+++++	+++++
174 2,6-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.196	16.196-22.196	+++++	+++++
175 3,4-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.559	16.559-22.559	+++++	+++++
176 3,5-Dimethylaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.572	18.572-24.572	+++++	+++++
177 p-Benzoquinone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.736	5.736-11.736	+++++	+++++
168 Pentachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.842	12.842-18.842	+++++	+++++
145 4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.212	44.212-50.212	+++++	+++++
146 4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.746	44.746-50.746	+++++	+++++
147 4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.216	45.216-51.216	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Batch File: \\target\share\chem3\nt17.i\20230516.b
Inst ID: nt17.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
148 Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.281	44.281-50.281	+++++	+++++
149 TCMX	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.387	40.387-46.387	+++++	+++++
150 DCBP	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.989	47.989-53.989	+++++	+++++
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	67.733	64.733-70.733	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.067	62.067-68.067	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.487	62.487-68.487	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.917	46.917-52.917	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.672	13.672-19.672	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.317	36.317-42.317	+++++	+++++
$ 137 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.445	0.000-5.445	+++++	+++++
* 134 Di-n-octylphthalate-d4	24.466	24.466	24.466	24.466	24.466	24.453	24.466	24.466	21.466-27.466	24.464	0.005
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.539	13.539-19.539	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	65.450	62.450-68.450	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	64.400	61.400-67.400	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	62.100	59.100-65.100	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.912	51.912-57.912	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.212	51.212-57.212	+++++	+++++
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	57.650	54.650-60.650	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.750	53.750-59.750	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.260	9.260-15.260	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.166	49.166-55.166	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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Batch File: \\target\share\chem3\nt17.i\20230516.b
Inst ID: nt17.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.617	47.617-53.617	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.381	8.381-14.381	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.467	40.467-46.467	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.697	0.000-5.697	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	54.500	51.500-57.500	+++++	+++++
120 2,3,4,6-Tetrachlorophe	16.166	16.166	16.166	16.153	16.153	16.153	16.153	16.153	13.153-19.153	16.158	0.007
178 2-Benzyl-4-Chloropheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.963	15.963-21.963	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	47.069	44.069-50.069	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.215	18.215-24.215	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.541	14.541-20.541	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.747	15.747-21.747	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.049	14.049-20.049	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	48.950	45.950-51.950	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.341	11.341-17.341	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.526	12.526-18.526	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	16.853	16.853	16.841	16.841	16.841	16.841	16.841	16.841	13.841-19.841	16.844	0.006
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.874	14.874-20.874	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.070	12.070-18.070	+++++	+++++
181 3,4,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.232	12.232-18.232	+++++	+++++
108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.374	13.374-19.374	+++++	+++++
184 3,4-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.739	10.739-16.739	+++++	+++++
107 4,5-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.160	11.160-17.160	+++++	+++++
182 4,6-Dichloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.160	11.160-17.160	+++++	+++++
185 4-Chloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.737	8.737-14.737	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Batch File: \\target\share\chem3\nt17.i\20230516.b
Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	6.750-12.750	+++++	+++++
	105 1-methylnaphthalene	13.501	13.488	13.488	13.488	13.488	13.488	13.488	13.488	10.488-16.488	13.490	0.005
	151 1,2,4,5-Tetrachloroben	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.499	8.499-14.499	+++++	+++++
	152 Benzo(e)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.943	27.943-33.943	+++++	+++++
	153 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.456	25.456-31.456	+++++	+++++
	154 Diazinon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.930	23.930-29.930	+++++	+++++
	155 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.054	26.054-32.054	+++++	+++++
	156 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.586	23.586-29.586	+++++	+++++
	157 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.276	24.276-30.276	+++++	+++++
	158 Ethion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.808	21.808-27.808	+++++	+++++
	159 4-Nonylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.109	23.109-29.109	+++++	+++++
	160 Tetraethyl Tin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.115	18.115-24.115	+++++	+++++
	161 1,2,3-Trichloronaphtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	36.246	33.246-39.246	+++++	+++++
	162 1,2,3,4-Tetrachloronap	+++++	+++++	+++++	+++++	+++++	+++++	+++++	37.506	34.506-40.506	+++++	+++++
	163 1,2,3,5,8-Pentachloron	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.893	35.893-41.893	+++++	+++++
	164 1,2,3,4,6,7-Hexachloro	+++++	+++++	+++++	+++++	+++++	+++++	+++++	39.681	36.681-42.681	+++++	+++++
	165 1,2,3,4,5,6,7-Heptachl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	41.123	38.123-44.123	+++++	+++++
	166 Octachloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.253	39.253-45.253	+++++	+++++
	167 2,2',4,4',5-Pentabromo	+++++	+++++	+++++	+++++	+++++	+++++	+++++	42.033	39.033-45.033	+++++	+++++
$	2 Phenol-d5	8.741	8.728	8.716	8.715	8.715	8.716	8.715	8.715	5.715-11.715	8.721	0.010
	3 Phenol	8.766	8.754	8.741	8.741	8.741	8.741	8.741	8.741	5.741-11.741	8.746	0.010
	4 Bis(2-Chloroethyl)ethe	8.919	8.919	8.907	8.907	8.906	8.907	8.906	8.906	5.906-11.906	8.910	0.006
$	5 2-Chlorophenol-d4	9.021	9.008	9.008	9.008	9.008	9.008	9.008	9.008	6.008-12.008	9.010	0.005

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Batch File: \\target\share\chem3\nt17.i\20230516.b
Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	6 2-Chlorophenol	9.047	9.047	9.034	9.034	9.034	9.034	9.034	9.034	6.034-12.034	9.038	0.006
	7 1,3-Dichlorobenzene	9.314	9.302	9.302	9.302	9.302	9.302	9.302	9.302	6.302-12.302	9.304	0.005
*	8 1,4-Dichlorobenzene-d4	9.378	9.366	9.366	9.366	9.366	9.366	9.366	9.366	6.366-12.366	9.367	0.005
	9 1,4-Dichlorobenzene	9.404	9.404	9.404	9.391	9.391	9.391	9.391	9.391	6.391-12.391	9.397	0.007
$	10 1,2-Dichlorobenzene-d4	9.736	9.736	9.723	9.723	9.723	9.723	9.723	9.723	6.723-12.723	9.727	0.006
	11 Benzyl alcohol	9.647	9.634	9.634	9.634	9.634	9.634	9.634	9.634	6.634-12.634	9.636	0.005
	12 1,2-Dichlorobenzene	9.762	9.762	9.749	9.749	9.749	9.749	9.749	9.749	6.749-12.749	9.753	0.006
	13 2-Methylphenol	9.864	9.851	9.851	9.851	9.851	9.851	9.851	9.851	6.851-12.851	9.853	0.005
	14 2,2'-oxybis(1-Chloropr	9.928	9.928	9.928	9.928	9.928	9.915	9.915	9.915	6.915-12.915	9.924	0.006
	15 4-Methylphenol	10.132	10.119	10.119	10.107	10.107	10.107	10.119	10.119	7.119-13.119	10.116	0.010
	16 N-Nitroso-di-n-propyla	10.209	10.196	10.183	10.183	10.183	10.171	10.170	10.170	7.170-13.170	10.185	0.014
	17 Hexachloroethane	10.349	10.337	10.337	10.337	10.337	10.337	10.337	10.337	7.337-13.337	10.338	0.005
$	18 Nitrobenzene-d5	10.464	10.464	10.452	10.452	10.451	10.452	10.452	10.452	7.452-13.452	10.455	0.006
	19 Nitrobenzene	10.503	10.490	10.490	10.490	10.490	10.490	10.490	10.490	7.490-13.490	10.492	0.005
	20 Isophorone	10.975	10.950	10.937	10.924	10.924	10.924	10.924	10.924	7.924-13.924	10.937	0.020
	21 2-Nitrophenol	11.129	11.116	11.116	11.116	11.116	11.116	11.116	11.116	8.116-14.116	11.118	0.005
	22 2,4-Dimethylphenol	11.167	11.167	11.154	11.154	11.154	11.154	11.154	11.154	8.154-14.154	11.158	0.006
	23 Bis(2-Chloroethoxy)met	11.358	11.358	11.346	11.346	11.346	11.346	11.346	11.346	8.346-14.346	11.349	0.006
	24 Benzoic acid	11.550	11.473	11.397	11.346	11.294	11.269	11.333	11.333	8.333-14.333	11.380	0.101
	25 2,4-Dichlorophenol	11.575	11.575	11.563	11.563	11.563	11.563	11.563	11.563	8.563-14.563	11.566	0.006
	26 1,2,4-Trichlorobenzene	11.754	11.754	11.754	11.754	11.754	11.754	11.754	11.754	8.754-14.754	11.754	0.000
*	27 Naphthalene-d8	11.843	11.843	11.843	11.843	11.843	11.843	11.830	11.830	8.830-14.830	11.841	0.005
	28 Naphthalene	11.894	11.881	11.881	11.881	11.881	11.881	11.881	11.881	8.881-14.881	11.883	0.005
	29 4-Chloroaniline	12.021	12.009	12.009	11.996	11.996	11.996	11.996	11.996	8.996-14.996	12.003	0.010

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Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	30 Hexachlorobutadiene	12.238	12.238	12.238	12.225	12.225	12.225	12.225	12.225	9.225-15.225	12.231	0.007
	31 4-Chloro-3-methylpheno	12.965	12.952	12.952	12.952	12.952	12.952	12.952	12.952	9.952-15.952	12.954	0.005
	32 2-Methylnaphthalene	13.271	13.271	13.271	13.258	13.258	13.258	13.258	13.258	10.258-16.258	13.264	0.007
	33 Hexachlorocyclopentadi	13.730	13.730	13.730	13.730	13.730	13.730	13.730	13.730	10.730-16.730	13.730	0.000
	34 2,4,6-Trichlorophenol	13.896	13.883	13.883	13.883	13.883	13.883	13.883	13.883	10.883-16.883	13.885	0.005
	35 2,4,5-Trichlorophenol	13.972	13.960	13.960	13.960	13.960	13.960	13.960	13.960	10.960-16.960	13.962	0.005
$	36 2-Fluorobiphenyl	14.049	14.036	14.036	14.036	14.036	14.036	14.036	14.036	11.036-17.036	14.038	0.005
	37 2-Chloronaphthalene	14.266	14.266	14.253	14.253	14.253	14.253	14.253	14.253	11.253-17.253	14.257	0.006
	38 2-Nitroaniline	14.534	14.521	14.508	14.508	14.508	14.508	14.508	14.508	11.508-17.508	14.514	0.010
	39 Dimethylphthalate	14.955	14.942	14.929	14.929	14.929	14.929	14.929	14.929	11.929-17.929	14.935	0.010
	40 Acenaphthylene	15.133	15.133	15.120	15.120	15.120	15.120	15.120	15.120	12.120-18.120	15.124	0.006
	41 2,6-Dinitrotoluene	15.095	15.082	15.082	15.069	15.069	15.069	15.069	15.069	12.069-18.069	15.077	0.010
*	42 Acenaphthene-d10	15.439	15.439	15.439	15.439	15.439	15.439	15.426	15.426	12.426-18.426	15.437	0.005
	43 3-Nitroaniline	15.388	15.375	15.363	15.363	15.350	15.350	15.350	15.350	12.350-18.350	15.363	0.015
	44 Acenaphthene	15.516	15.503	15.503	15.503	15.503	15.503	15.503	15.503	12.503-18.503	15.505	0.005
	45 2,4-Dinitrophenol	15.605	15.592	15.579	15.567	15.567	15.567	+++++	15.567	12.567-18.567	15.579	0.016
	46 Dibenzofuran	15.847	15.834	15.834	15.822	15.821	15.822	15.821	15.821	12.821-18.821	15.829	0.010
	47 4-Nitrophenol	15.707	15.681	15.681	15.669	15.668	15.669	15.681	15.681	12.681-18.681	15.679	0.014
	48 2,4-Dinitrotoluene	15.911	15.898	15.885	15.872	15.872	15.873	15.872	15.872	12.872-18.872	15.883	0.015
	49 Fluorene	16.548	16.548	16.535	16.535	16.535	16.535	16.535	16.535	13.535-19.535	16.539	0.006
	50 Diethylphthalate	16.395	16.395	16.382	16.370	16.370	16.370	16.370	16.370	13.370-19.370	16.379	0.012
	51 4-Chlorophenyl-phenyle	16.522	16.523	16.523	16.523	16.510	16.510	16.510	16.510	13.510-19.510	16.517	0.007
	52 4-Nitroaniline	16.675	16.650	16.637	16.624	16.611	16.612	16.612	16.612	13.612-19.612	16.632	0.024
	53 4,6-Dinitro-2-methylph	16.752	16.739	16.726	16.713	16.713	16.713	16.713	16.713	13.713-19.713	16.724	0.015

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Batch File: \\target\share\chem3\nt17.i\20230516.b
Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	54 N-Nitrosodiphenylamine	16.790	16.777	16.764	16.764	16.764	16.764	16.764	16.764	13.764-19.764	16.770	0.010
$	55 2,4,6-Tribromophenol	17.082	17.082	17.070	17.070	17.070	17.070	17.070	17.070	14.070-20.070	17.073	0.006
	56 4-Bromophenyl-phenylet	17.528	17.528	17.515	17.515	17.515	17.515	17.515	17.515	14.515-20.515	17.519	0.006
	57 Hexachlorobenzene	17.846	17.846	17.846	17.834	17.833	17.834	17.834	17.834	14.834-20.834	17.839	0.007
	58 Pentachlorophenol	18.203	18.203	18.191	18.191	18.191	18.191	18.203	18.203	15.203-21.203	18.196	0.007
*	59 Phenanthrene-d10	18.471	18.471	18.459	18.459	18.458	18.459	18.458	18.458	15.458-21.458	18.462	0.006
	60 Phenanthrene	18.522	18.510	18.510	18.510	18.509	18.510	18.497	18.497	15.497-21.497	18.510	0.007
	61 Anthracene	18.611	18.612	18.599	18.599	18.599	18.599	18.599	18.599	15.599-21.599	18.602	0.006
	62 Carbazole	18.930	18.930	18.918	18.918	18.917	18.918	18.918	18.918	15.918-21.918	18.921	0.006
	63 Di-n-butylphthalate	19.695	19.695	19.695	19.683	19.683	19.683	19.683	19.683	16.683-22.683	19.688	0.007
	64 Fluoranthene	20.869	20.869	20.869	20.869	20.856	20.856	20.856	20.856	17.856-23.856	20.863	0.007
	65 Pyrene	21.302	21.289	21.289	21.289	21.289	21.277	21.277	21.277	18.277-24.277	21.288	0.009
$	66 Terphenyl-d14	21.557	21.557	21.557	21.557	21.557	21.557	21.557	21.557	18.557-24.557	21.557	0.000
	67 Butylbenzylphthalate	22.463	22.463	22.463	22.463	22.463	22.463	22.463	22.463	19.463-25.463	22.463	0.000
	68 Benzo(a)anthracene	23.432	23.433	23.420	23.420	23.420	23.420	23.420	23.420	20.420-26.420	23.423	0.006
*	69 Chrysene-d12	23.471	23.458	23.458	23.458	23.458	23.445	23.445	23.445	20.445-26.445	23.456	0.009
	70 3,3'-Dichlorobenzidine	23.394	23.381	23.369	23.369	23.369	23.369	23.369	23.369	20.369-26.369	23.374	0.010
	71 Chrysene	23.509	23.509	23.496	23.496	23.496	23.496	23.496	23.496	20.496-26.496	23.500	0.006
	72 bis(2-Ethylhexyl)phtha	23.471	23.471	23.471	23.471	23.471	23.471	23.471	23.471	20.471-26.471	23.471	0.000
	73 Di-n-octylphthalate	24.478	24.479	24.479	24.466	24.466	24.466	24.466	24.466	21.466-27.466	24.471	0.007
	74 Benzo(b)fluoranthene	25.371	25.359	25.346	25.346	25.346	25.346	25.346	25.346	22.346-28.346	25.351	0.010
	75 Benzo(k)fluoranthene	25.410	25.410	25.397	25.397	25.384	25.384	25.384	25.384	22.384-28.384	25.395	0.011
	187 Total Benzofluoranthen	25.410	25.359	25.397	25.346	25.346	25.346	25.384	25.384	22.384-28.384	25.370	0.027
	76 Benzo(a)pyrene	26.048	26.035	26.035	26.035	26.022	26.022	26.022	26.022	23.022-29.022	26.031	0.010

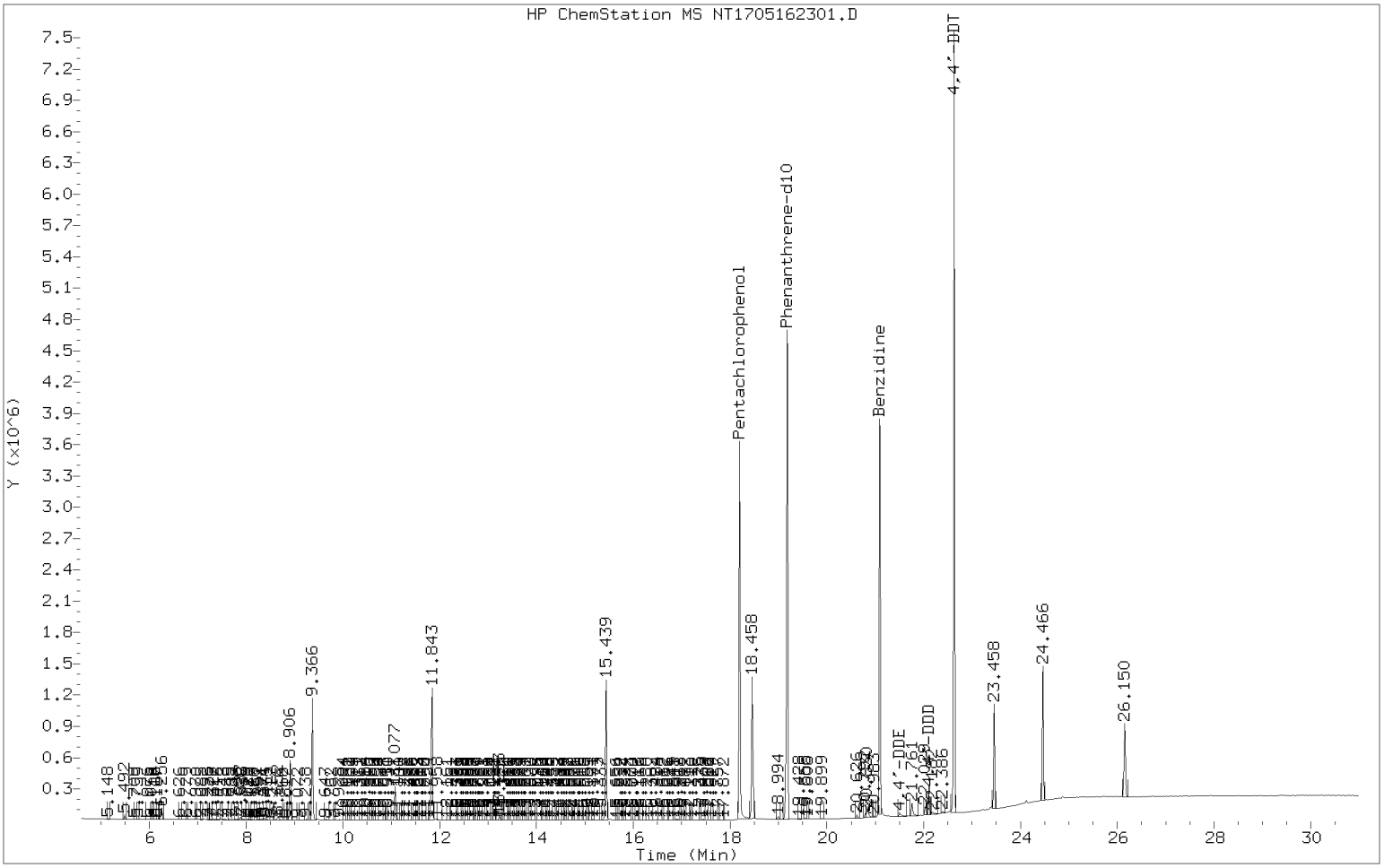
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

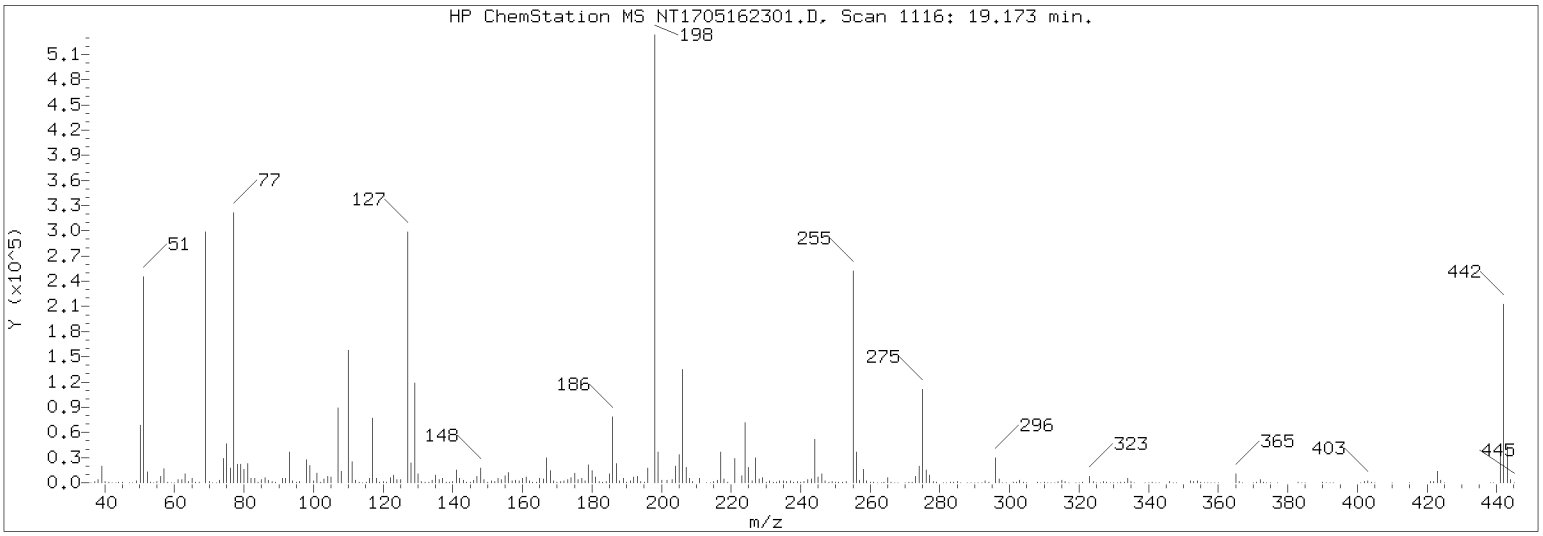
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Batch File: \\target\share\chem3\nt17.i\20230516.b
Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	77 Perylene-d12	26.162	26.162	26.150	26.150	26.150	26.150	26.150	26.150	23.150-29.150	26.153	0.006
	78 Indeno(1,2,3-cd)pyrene	28.998	28.959	28.947	28.934	28.934	28.934	28.934	28.934	25.934-31.934	28.948	0.024
	79 Dibenzo(a,h)anthracene	28.998	28.972	28.959	28.947	28.934	28.934	28.947	28.947	25.947-31.947	28.956	0.023
	80 Benzo(g,h,i)perylene	29.828	29.790	29.777	29.765	29.765	29.752	29.752	29.752	26.752-32.752	29.776	0.027
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	51.633	48.633-54.633	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	63.533	60.533-66.533	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	60.273	57.273-63.273	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	78.600	75.600-81.600	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	50.841	47.841-53.841	+++++	+++++
	90 N-Nitrosodimethylamine	5.097	5.084	5.072	5.072	5.072	5.072	5.072	5.072	2.072-8.072	5.077	0.010
	91 Aniline	8.843	8.830	8.830	8.830	8.830	8.830	8.830	8.830	5.830-11.830	8.832	0.005
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	56.160	53.160-59.160	+++++	+++++
	93 Benzidine	21.098	21.098	21.085	21.085	21.085	21.085	21.085	21.085	18.085-24.085	21.089	0.006
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	52.075	49.075-55.075	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	49.250	46.250-52.250	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	61.202	58.202-64.202	+++++	+++++
	98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.248	15.248-21.248	+++++	+++++
	99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.094	23.094-29.094	+++++	+++++
	100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.411	22.411-28.411	+++++	+++++
	101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.023	23.023-29.023	+++++	+++++
	102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	79.550	76.550-82.550	+++++	+++++
	103 Pyridine	5.097	5.110	5.097	5.097	5.110	5.110	5.123	5.123	2.123-8.123	5.106	0.010
	188 2,6-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.874	8.874-14.874	+++++	+++++
	189 N-Nitrosomethylethylam	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.818	2.818-8.818	+++++	+++++

DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230516.b/NT1705162301.D/NT1705162301.D
Method Used: \20230516.b\DFTPP8270E.m Inst: nt17
Injection Date: 16-MAY-2023 18:14 Operator: VTS
Sample Info: SLE0338-TUN1 SLE0338-TUN1
Report Date: 05/20/2023 13:10





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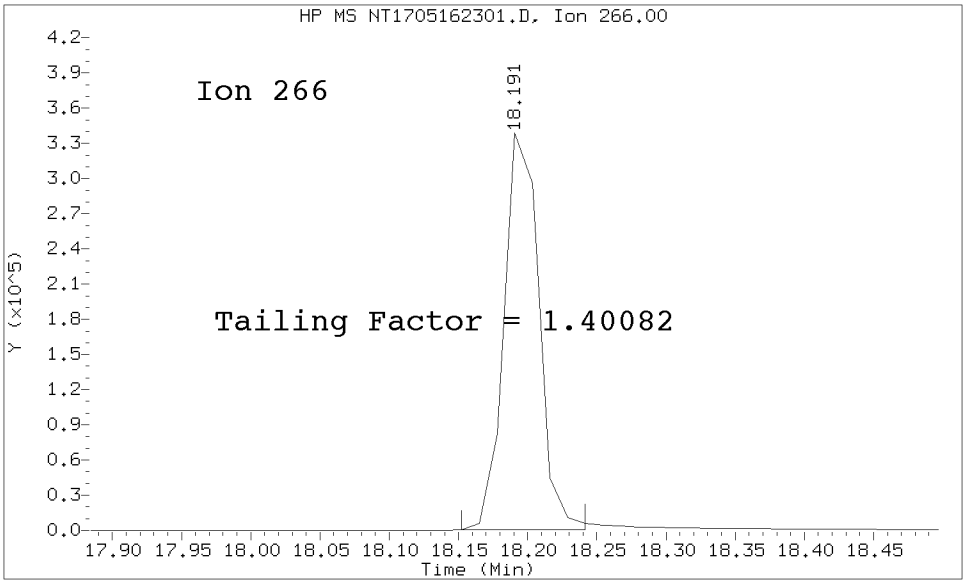
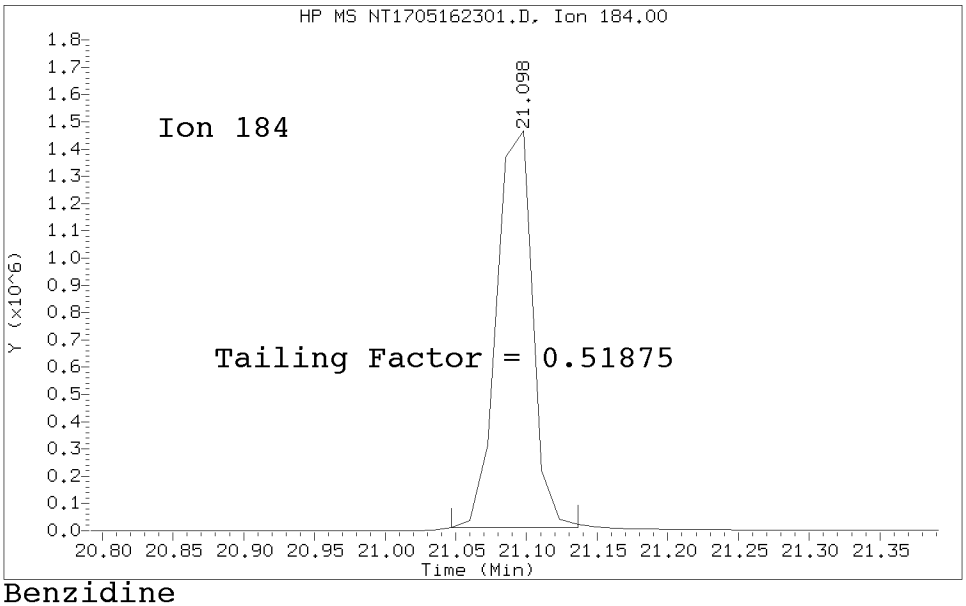
Method Used: \20230516.b\DFTPP8270E.m\sw846ddt.m Inst: nt17
Injection Date: 16-MAY-2023 18:14 Operator: JGR
Sample Info: NT1705162301
Report Date: 05/20/2023 13:10



Pentachlorophenol
==========
Exp. RT = 18.191
Found RT = 18.191

Tail Factor = 1.401 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 21.098
Found RT = 21.098

Tail Factor = 0.519 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.4008163	2.000	PASS
Benzidine	0.5187468	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1797024			N/A
4,4-DDE	5899	0.3	20.0	PASS
4,4-DDD	55596	3.0	20.0	PASS
4,4-DDD + DDE	61495	3.3	20.0	PASS

Tuning Sample, nt17.i/20230516.b/NT1705162301.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	55.71
70	Less than 2.00% of mass 69	0.28 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.89
365	1.00 - 100.00% of mass 198	2.01
441	Less than 150.00% of mass 443	6.45 (80.67)
442	Less than 200.00% of mass 198	39.79
443	15.00 - 24.00% of mass 442	8.00 (20.10)

Data File: NT1705162301.D
Spectrum: HP ChemStation MS NT1705162301.D, Scan 1116: 19.173 min.
Location of Maximum: 198.00
Number of points: 331

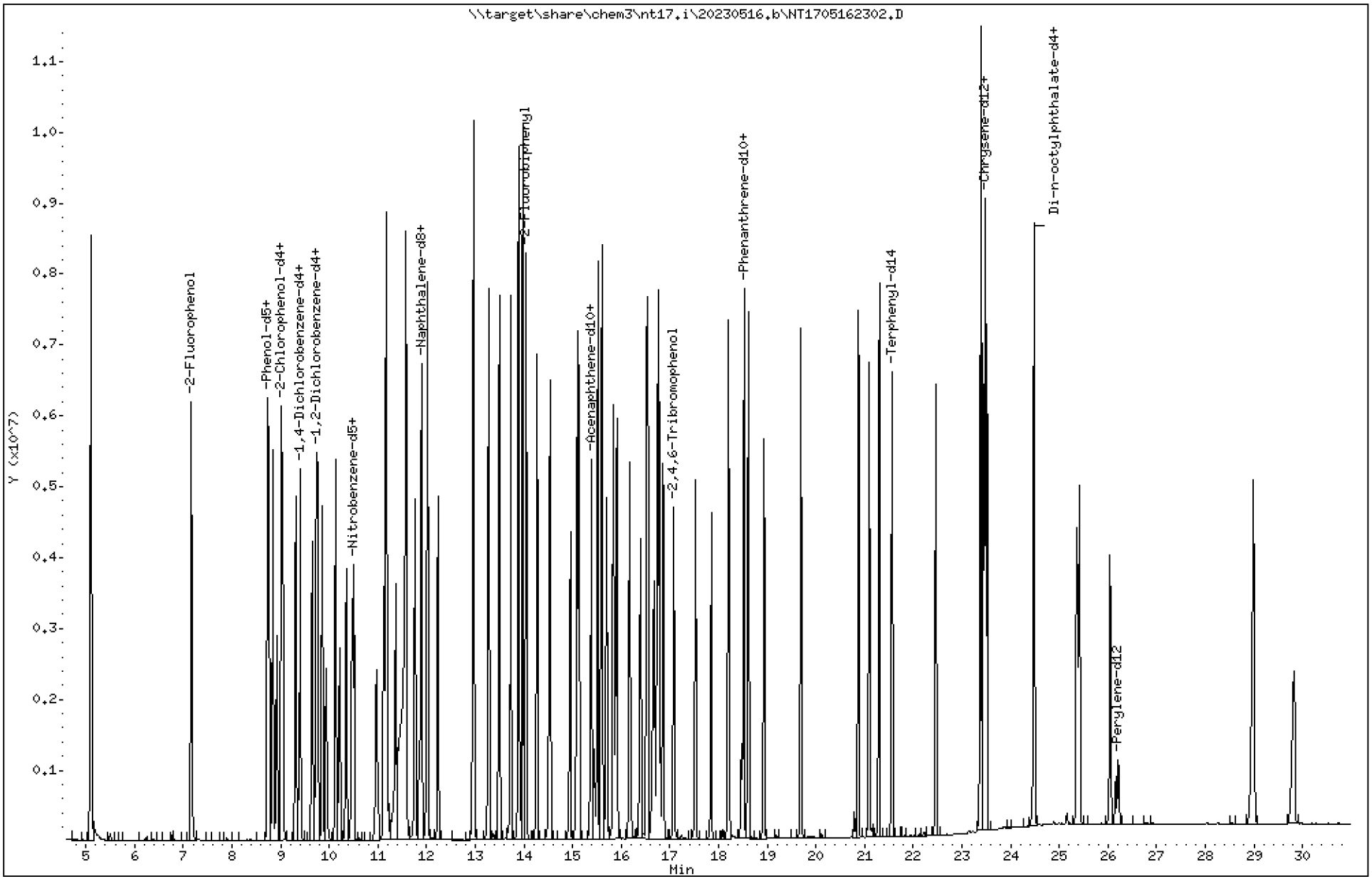
m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	373	125.00	3764	212.90	378	304.10	870
37.10	1236	127.00	299008	214.00	187	304.90	93
38.10	3574	128.00	23768	215.00	1418	308.00	456
39.10	19776	129.00	119136	216.10	3082	309.00	262
40.10	1147	130.00	10361	217.00	36592	310.00	402
41.10	878	131.00	1814	218.00	4762	311.00	86
42.00	117	132.00	965	219.00	396	312.00	116
43.10	290	133.10	535	221.00	29232	313.00	219
44.00	563	134.00	3393	223.00	8299	314.00	1504
45.00	582	135.00	9407	224.00	71792	315.00	3072
47.00	97	136.00	3952	225.00	17928	316.00	1521
48.00	170	137.00	4988	226.10	2276	317.00	314
49.10	2254	138.00	1078	227.00	30000	319.10	73
50.10	68392	139.00	652	228.00	4583	320.10	106
51.10	245312	140.00	1657	229.00	6282	321.00	853
52.10	13090	141.00	15600	230.00	812	323.00	7992
53.10	590	142.00	5275	231.00	2667	324.10	1422
54.10	108	143.00	3193	232.00	430	325.00	180
55.00	1424	144.00	947	233.00	547	326.10	206
56.00	7762	145.00	844	234.00	1964	327.00	1582
57.00	17056	146.00	3027	235.00	2156	328.00	897
58.00	866	147.00	7959	236.00	1308	329.00	186
59.10	293	148.00	17552	237.00	2222	329.90	82
60.00	267	149.00	3605	237.90	416	331.10	85
61.00	3445	150.00	847	239.00	1164	332.00	681
62.10	3924	151.10	1978	240.00	951	333.00	829
63.10	10682	152.00	1250	241.00	1482	334.00	5269
64.00	1343	153.00	5043	242.00	3506	335.00	1251
65.10	5380	154.00	3616	243.10	4237	335.90	192
66.00	439	155.00	8310	244.00	51672	339.00	128
67.10	548	156.00	12288	245.00	7098	340.10	147
69.00	297216	157.00	2390	246.00	10908	341.00	859
70.00	1476	158.00	3197	247.00	2147	342.00	240
70.90	268	159.00	2124	248.10	405	343.10	69
72.10	180	160.00	4998	249.00	1791	346.00	1668
73.00	2846	161.00	6841	250.00	400	347.00	375
74.10	28912	162.00	1948	250.90	471	348.00	75
75.00	46408	163.00	565	252.00	547	352.00	2294
76.10	17424	164.00	677	253.00	1432	353.00	1625
77.10	321920	165.00	5602	255.00	252288	354.10	2225
78.10	22048	166.00	4612	256.00	36264	355.00	516
79.00	22016	167.00	29864	257.00	3077	356.00	63
80.00	16324	168.00	14362	258.00	15639	356.90	53
81.00	22800	169.00	2523	259.00	2592	358.00	71
82.00	5387	170.00	957	260.10	431	359.00	210
83.00	5076	171.00	1311	261.00	461	360.10	57
84.00	563	172.00	2519	262.00	108	365.00	10733
85.00	4136	173.00	3591	263.10	161	366.00	1640
86.00	6323	174.00	6157	264.00	692	366.90	121

87.00	3104	175.00	11592	265.00	6219	370.00	199
88.00	1154	176.00	3445	266.00	980	371.00	691
89.00	552	177.00	5417	267.00	143	372.00	3968
91.00	5210	178.00	1917	267.90	329	373.00	1018
92.00	5631	179.00	21584	270.00	364	374.00	88
93.00	36336	180.00	14393	271.00	614	375.00	64
94.00	2258	181.00	6949	272.00	778	377.00	178
95.10	602	182.00	1161	273.00	7503	382.90	939
96.00	1677	183.00	749	274.00	19672	384.00	273
98.00	27664	184.00	1652	275.00	111592	385.00	126
99.00	20856	185.00	10677	276.00	15342	390.00	425
100.00	1939	186.00	78320	277.00	9319	391.00	350
101.00	11566	187.00	22896	278.00	1573	392.10	253
102.00	831	188.00	2244	279.00	451	393.00	72
103.00	4398	189.00	5077	281.00	219	401.00	268
104.00	7600	190.00	951	282.00	285	402.00	1410
105.00	7080	191.00	2327	283.00	1010	403.00	2061
107.00	89200	192.00	6979	284.00	690	404.00	774
108.00	13702	193.00	7409	285.00	1524	405.00	123
110.00	158144	194.00	1633	286.00	314	410.00	81
111.00	25024	195.10	1054	287.90	160	414.90	77
112.00	3002	196.00	17264	289.00	314	421.00	1760
113.00	864	198.00	533504	290.00	311	422.00	1730
114.00	302	199.00	36760	291.00	191	423.00	13610
115.10	463	200.00	2858	292.00	365	424.00	2795
116.00	5300	201.50	3067	293.00	1946	425.00	303
117.00	76832	203.00	3883	294.00	397	438.30	74
118.00	5637	204.00	19736	296.00	30016	439.10	152
119.00	739	205.00	33208	297.00	4246	441.10	34424
120.00	1147	206.00	134656	297.90	294	442.00	212288
121.00	584	207.00	18008	299.00	90	443.00	42672
122.00	6244	208.00	5001	301.10	394	444.00	3817
123.00	9329	209.00	1511	302.00	506	445.10	229
124.00	4061	211.00	5429	303.00	3269		

Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162302.D
Date : 16-MAY-2023 18:52
Client ID:
Sample Info: SLE0338-CAL7

Instrument: nt17.i
Operator: JGR
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 16-MAY-2023 18:52
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-CAL7
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 2 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.161	7.161	(0.764)	2673153	30.0000	31.09(M)
$	2 Phenol-d5	99	8.740	8.715	(0.932)	3553924	30.0000	31.24
	3 Phenol	94	8.766	8.740	(0.935)	2510973	20.0000	20.84
$	5 2-Chlorophenol-d4	132	9.021	9.008	(0.962)	2865845	30.0000	31.45
	4 Bis(2-Chloroethyl)ether	93	8.919	8.906	(0.951)	1674045	20.0000	19.05
	6 2-Chlorophenol	128	9.046	9.033	(0.965)	1976156	20.0000	19.64
	7 1,3-Dichlorobenzene	146	9.314	9.301	(0.993)	2049005	20.0000	20.12
*	8 1,4-Dichlorobenzene-d4	152	9.378	9.365	(1.000)	262646	4.00000	
	9 1,4-Dichlorobenzene	146	9.403	9.391	(1.003)	1978947	20.0000	19.48
$	10 1,2-Dichlorobenzene-d4	152	9.736	9.723	(1.038)	1350557	20.0000	21.08
	12 1,2-Dichlorobenzene	146	9.761	9.748	(1.041)	1981143	20.0000	20.75
	11 Benzyl alcohol	108	9.646	9.633	(1.029)	1193830	20.0000	21.28
	14 2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.059)	550688	20.0000	20.46
	13 2-Methylphenol	108	9.863	9.851	(1.052)	1816256	20.0000	20.51
	17 Hexachloroethane	117	10.349	10.336	(1.104)	860260	20.0000	21.17
	16 N-Nitroso-di-n-propylamine	70	10.208	10.170	(1.089)	1387081	20.0000	20.47
	15 4-Methylphenol	108	10.132	10.119	(1.080)	1910332	20.0000	21.18
$	18 Nitrobenzene-d5	82	10.464	10.451	(0.884)	2237361	20.0000	20.22
	19 Nitrobenzene	77	10.502	10.489	(0.887)	2090805	20.0000	19.80
	20 Isophorone	82	10.975	10.924	(0.927)	3090346	20.0000	21.38
	21 2-Nitrophenol	139	11.128	11.115	(0.940)	1122632	20.0000	22.07
	22 2,4-Dimethylphenol	107	11.166	11.154	(0.943)	3837283	40.0000	38.85
	23 Bis(2-Chloroethoxy)methane	93	11.358	11.345	(0.959)	1784224	20.0000	20.14
	24 Benzoic acid	105	11.549	11.333	(0.975)	5371595	80.0000	80.85(M)
	25 2,4-Dichlorophenol	162	11.575	11.562	(0.977)	3106549	40.0000	39.14
	26 1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	1960440	20.0000	22.74
*	27 Naphthalene-d8	136	11.843	11.830	(1.000)	972245	4.00000	
	28 Naphthalene	128	11.893	11.881	(1.004)	5239130	20.0000	19.60
	29 4-Chloroaniline	127	12.021	11.995	(1.015)	4000037	40.0000	37.95
	30 Hexachlorobutadiene	225	12.237	12.225	(1.033)	903386	20.0000	21.16
	31 4-Chloro-3-methylphenol	107	12.964	12.952	(1.095)	3583167	40.0000	41.93
	32 2-Methylnaphthalene	142	13.271	13.258	(1.121)	3906783	20.0000	20.41
	33 Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	2015884	40.0000	40.80

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.895	13.883	(0.900)	2462585	40.0000	44.29
	35	2,4,5-Trichlorophenol	196	13.972	13.959	(0.905)	2602623	40.0000	44.22
$	36	2-Fluorobiphenyl	172	14.048	14.036	(0.910)	4231551	20.0000	20.21
	37	2-Chloronaphthalene	162	14.265	14.253	(0.924)	3390026	20.0000	19.96
	38	2-Nitroaniline	65	14.533	14.508	(0.941)	2326568	40.0000	40.45
	39	Dimethylphthalate	163	14.954	14.929	(0.969)	3514822	20.0000	19.22
	40	Acenaphthylene	152	15.133	15.120	(0.980)	5313547	20.0000	19.70
	41	2,6-Dinitrotoluene	165	15.094	15.069	(0.978)	1815565	40.0000	42.41
*	42	Acenaphthene-d10	164	15.439	15.426	(1.000)	531394	4.00000	
	43	3-Nitroaniline	138	15.388	15.349	(0.997)	1854614	40.0000	46.78
	44	Acenaphthene	153	15.515	15.502	(1.005)	3394815	20.0000	20.14
	45	2,4-Dinitrophenol	184	15.604	15.567	(1.011)	2499526	80.0000	79.73
	46	Dibenzofuran	168	15.846	15.821	(1.026)	4796346	20.0000	20.38
	47	4-Nitrophenol	109	15.706	15.681	(1.017)	1053733	40.0000	40.01
	48	2,4-Dinitrotoluene	165	15.910	15.872	(1.031)	2400375	40.0000	42.84
	50	Diethylphthalate	149	16.395	16.369	(1.062)	3965533	20.0000	22.24
	49	Fluorene	166	16.547	16.535	(1.072)	4712796	20.0000	21.07
	51	4-Chlorophenyl-phenylether	204	16.522	16.509	(1.070)	2234934	20.0000	21.73
	52	4-Nitroaniline	138	16.675	16.611	(1.080)	1683335	40.0000	44.86
	53	4,6-Dinitro-2-methylphenol	198	16.751	16.713	(0.907)	2791081	80.0000	81.44
	54	N-Nitrosodiphenylamine	169	16.789	16.764	(0.909)	2459552	20.0000	20.45
$	55	2,4,6-Tribromophenol	330	17.082	17.070	(1.106)	716600	30.0000	30.92
	56	4-Bromophenyl-phenylether	248	17.527	17.515	(0.949)	941187	20.0000	22.33
	57	Hexachlorobenzene	284	17.846	17.833	(0.966)	929065	20.0000	21.63
	58	Pentachlorophenol	266	18.203	18.203	(0.986)	1296979	40.0000	39.91
*	59	Phenanthrene-d10	188	18.471	18.458	(1.000)	858760	4.00000	
	60	Phenanthrene	178	18.522	18.496	(1.003)	5130124	20.0000	20.47
	61	Anthracene	178	18.611	18.598	(1.008)	4956412	20.0000	21.07
	62	Carbazole	167	18.930	18.918	(1.025)	4102658	20.0000	19.98
	63	Di-n-butylphthalate	149	19.695	19.682	(1.066)	5887085	20.0000	20.72
	64	Fluoranthene	202	20.868	20.855	(0.889)	5357102	20.0000	19.58
	65	Pyrene	202	21.302	21.276	(0.908)	5300712	20.0000	19.12
$	66	Terphenyl-d14	244	21.557	21.557	(0.918)	3805993	20.0000	19.31
	67	Butylbenzylphthalate	149	22.462	22.462	(0.957)	2401371	20.0000	19.35
	68	Benzo(a)anthracene	228	23.432	23.419	(0.998)	4215090	20.0000	19.58
*	69	Chrysene-d12	240	23.470	23.445	(1.000)	584767	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.394	23.369	(0.997)	4121802	60.0000	59.96
	71	Chrysene	228	23.508	23.496	(1.002)	3974840	20.0000	19.62
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	3264093	20.0000	19.61
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1150423	4.00000	
	73	Di-n-octylphthalate	149	24.478	24.465	(1.001)	5458910	20.0000	18.72
	74	Benzo(b)fluoranthene	252	25.371	25.345	(0.970)	3530511	20.0000	19.57
	75	Benzo(k)fluoranthene	252	25.409	25.384	(0.971)	3966360	20.0000	23.27(H)
	76	Benzo(a)pyrene	252	26.047	26.022	(0.996)	3007107	20.0000	21.16
*	77	Perylene-d12	264	26.162	26.149	(1.000)	454990	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.997	28.933	(1.108)	3643021	20.0000	22.10
	79	Dibenzo(a,h)anthracene	278	28.997	28.946	(1.108)	3097019	20.0000	22.39
	80	Benzo(g,h,i)perylene	276	29.828	29.751	(1.140)	3009444	20.0000	22.12
	90	N-Nitrosodimethylamine	74	5.097	5.071	(0.543)	2242002	40.0000	39.09
	91	Aniline	93	8.842	8.830	(0.943)	4188310	40.0000	41.47
	93	Benzidine	184	21.098	21.085	(0.899)	3987621	40.0000	39.82
	103	Pyridine	79	5.097	5.122	(0.543)	3401382	40.0000	37.39
	105	1-methylnaphthalene	142	13.500	13.487	(1.140)	3611654	20.0000	20.34
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.853	16.840	(1.092)	4069093	20.0000	19.55

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.409	25.384	(0.971)	6886398	40.0000	42.53
120 2,3,4,6-Tetrachlorophenol	232	16.165	16.152	(1.047)	1360268	20.0000	20.45

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162302.D
Lab Smp Id: SLE0338-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	262646	-8.51
27 Naphthalene-d8	1056758	528379	2113516	972245	-8.00
42 Acenaphthene-d10	587510	293755	1175020	531394	-9.55
59 Phenanthrene-d10	933575	466788	1867150	858760	-8.01
69 Chrysene-d12	576570	288285	1153140	584767	1.42
134 Di-n-octylphthala	1181651	590826	2363302	1150423	-2.64
77 Perylene-d12	491359	245680	982718	454990	-7.40

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.38	0.14
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.47	0.07
69 Chrysene-d12	23.46	22.96	23.96	23.47	0.05
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.16	0.05

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

REVIEW SUMMARY FOR FILE - NT1705162302.D

Lab ID: SLE0338-CAL7
nt17.i, ABN.m, 16-MAY-2023 18:52

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.975	0.958	0.0173	Benzoic acid
1.011	0.000	1.0107	2,4-Dinitrophenol

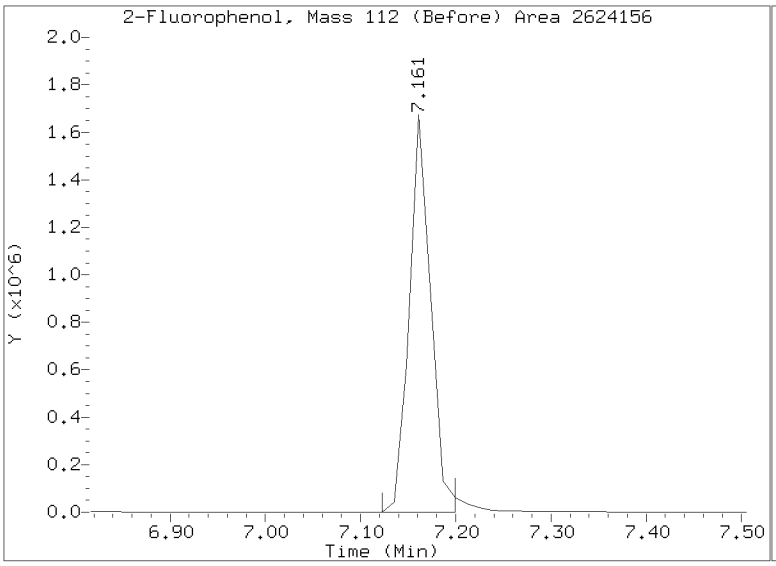
RRT check based on Ccal File: NT1705162308.D

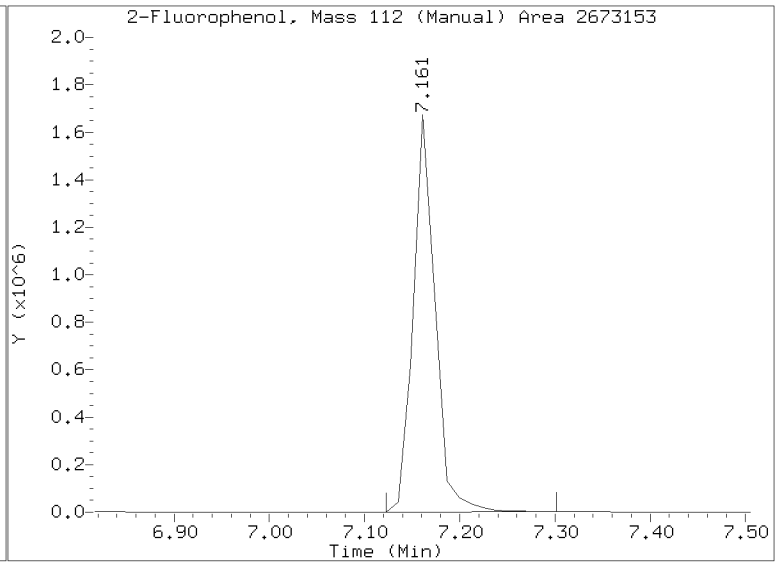
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

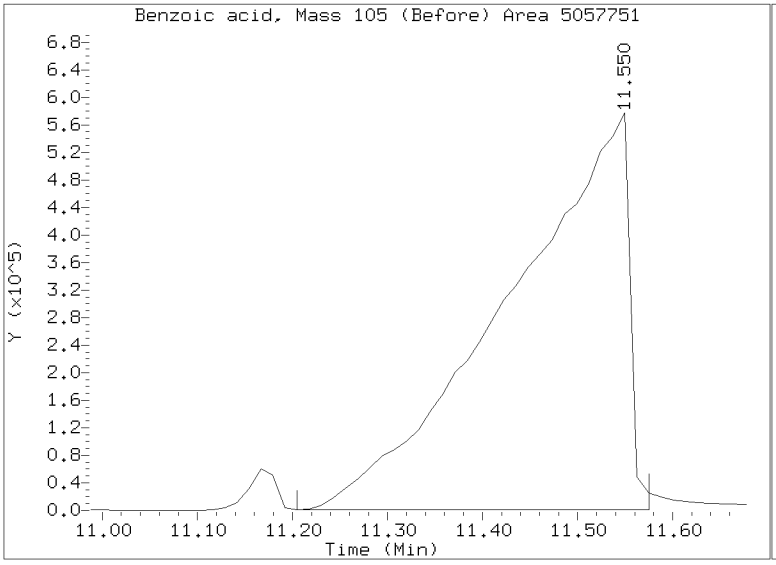
* Only compounds listed in the work order have been verified by the analyst *

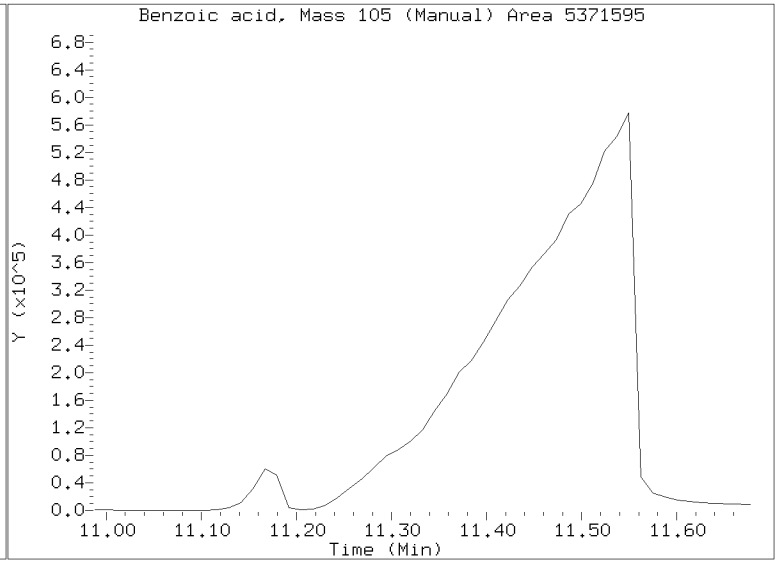
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/NT1705162302.D
Injection Date: 16-MAY-2023 18:52
Lab ID:SLE0338-CAL7 Client ID:
Report Date: 05/20/2023 12:55









Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162303.D

Page 1

Date : 16-MAY-2023 19:29

Client ID:

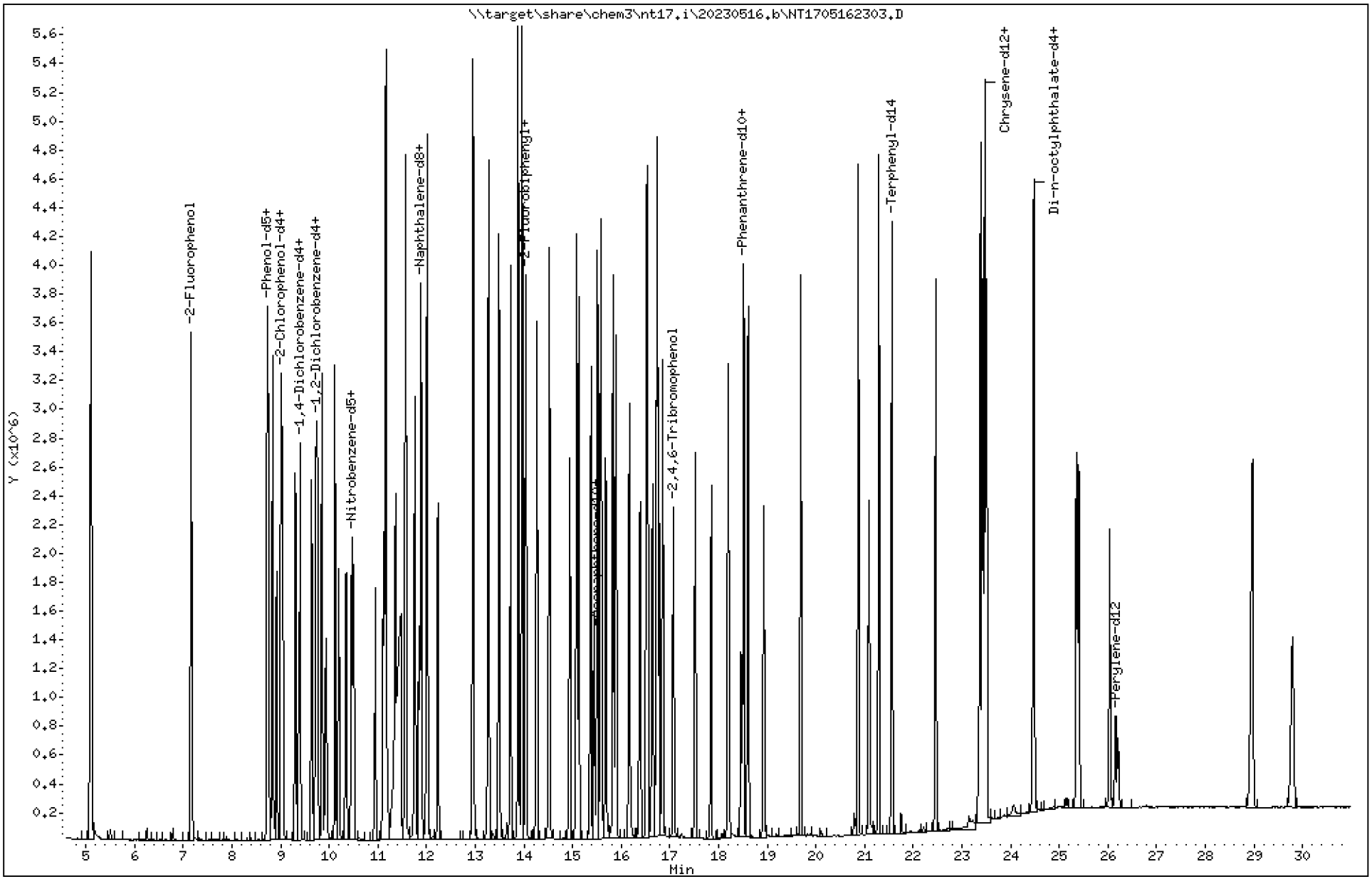
Instrument: nt17.i

Sample Info: SLE0338-CAL6

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162303.D
Lab Smp Id: SLE0338-CAL6
Inj Date : 16-MAY-2023 19:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-CAL6
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 3 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.161	7.161	(0.765)	1499375	15.0000	16.03
$	2 Phenol-d5	99	8.728	8.715	(0.932)	1981943	15.0000	16.01
	3 Phenol	94	8.753	8.740	(0.935)	1397302	10.0000	10.66
$	5 2-Chlorophenol-d4	132	9.008	9.008	(0.962)	1551820	15.0000	15.65
	4 Bis(2-Chloroethyl)ether	93	8.919	8.906	(0.952)	936900	10.0000	9.800
	6 2-Chlorophenol	128	9.046	9.033	(0.966)	1079419	10.0000	9.857
	7 1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	1119860	10.0000	10.10
*	8 1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	285800	4.00000	
	9 1,4-Dichlorobenzene	146	9.403	9.391	(1.004)	1070799	10.0000	9.687
$	10 1,2-Dichlorobenzene-d4	152	9.736	9.723	(1.040)	726040	10.0000	10.42
	12 1,2-Dichlorobenzene	146	9.761	9.748	(1.042)	1082430	10.0000	10.42
	11 Benzyl alcohol	108	9.633	9.633	(1.029)	654436	10.0000	10.72
	14 2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.060)	300795	10.0000	10.27
	13 2-Methylphenol	108	9.851	9.851	(1.052)	990775	10.0000	10.28
	17 Hexachloroethane	117	10.336	10.336	(1.104)	461226	10.0000	10.43
	16 N-Nitroso-di-n-propylamine	70	10.196	10.170	(1.089)	775404	10.0000	10.52
	15 4-Methylphenol	108	10.119	10.119	(1.080)	1054055	10.0000	10.74
$	18 Nitrobenzene-d5	82	10.464	10.451	(0.884)	1241412	10.0000	10.22
	19 Nitrobenzene	77	10.489	10.489	(0.886)	1172791	10.0000	10.12
	20 Isophorone	82	10.949	10.924	(0.925)	1795328	10.0000	11.32
	21 2-Nitrophenol	139	11.115	11.115	(0.939)	589034	10.0000	10.55
	22 2,4-Dimethylphenol	107	11.166	11.154	(0.943)	2156269	20.0000	19.89
	23 Bis(2-Chloroethoxy)methane	93	11.358	11.345	(0.959)	977460	10.0000	10.06
	24 Benzoic acid	105	11.473	11.333	(0.969)	2880071	40.0000	39.50(M)
	25 2,4-Dichlorophenol	162	11.575	11.562	(0.977)	1732131	20.0000	19.89
	26 1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	902585	10.0000	9.541
*	27 Naphthalene-d8	136	11.843	11.830	(1.000)	1067038	4.00000	
	28 Naphthalene	128	11.881	11.881	(1.003)	2910801	10.0000	9.920
	29 4-Chloroaniline	127	12.008	11.995	(1.014)	2215502	20.0000	19.15
	30 Hexachlorobutadiene	225	12.238	12.225	(1.033)	475812	10.0000	10.15
	31 4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	1961966	20.0000	20.92
	32 2-Methylnaphthalene	142	13.271	13.258	(1.121)	2148754	10.0000	10.23
	33 Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	1037416	20.0000	19.20

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	1301711	20.0000	21.41
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	1358932	20.0000	21.12
$	36	2-Fluorobiphenyl	172	14.036	14.036	(0.909)	2301542	10.0000	10.06
	37	2-Chloronaphthalene	162	14.265	14.253	(0.924)	1884776	10.0000	10.15
	38	2-Nitroaniline	65	14.520	14.508	(0.941)	1306422	20.0000	20.77
	39	Dimethylphthalate	163	14.941	14.929	(0.968)	1952293	10.0000	9.766
	40	Acenaphthylene	152	15.133	15.120	(0.980)	2921988	10.0000	9.909
	41	2,6-Dinitrotoluene	165	15.082	15.069	(0.977)	978138	20.0000	20.90
*	42	Acenaphthene-d10	164	15.439	15.426	(1.000)	581019	4.00000	
	43	3-Nitroaniline	138	15.375	15.349	(0.996)	959211	20.0000	22.13
	44	Acenaphthene	153	15.502	15.502	(1.004)	1880978	10.0000	10.20
	45	2,4-Dinitrophenol	184	15.592	15.567	(1.010)	1276676	40.0000	41.52
	46	Dibenzofuran	168	15.834	15.821	(1.026)	2609192	10.0000	10.14
	47	4-Nitrophenol	109	15.681	15.681	(1.016)	581610	20.0000	20.20
	48	2,4-Dinitrotoluene	165	15.897	15.872	(1.030)	1292398	20.0000	21.09
	50	Diethylphthalate	149	16.395	16.369	(1.062)	1892172	10.0000	9.705
	49	Fluorene	166	16.547	16.535	(1.072)	2552323	10.0000	10.43
	51	4-Chlorophenyl-phenylether	204	16.522	16.509	(1.070)	1183317	10.0000	10.52
	52	4-Nitroaniline	138	16.649	16.611	(1.078)	893771	20.0000	21.78
	53	4,6-Dinitro-2-methylphenol	198	16.738	16.713	(0.906)	1437110	40.0000	38.75
	54	N-Nitrosodiphenylamine	169	16.777	16.764	(0.908)	1311312	10.0000	10.07
$	55	2,4,6-Tribromophenol	330	17.082	17.070	(1.106)	346267	15.0000	13.66
	56	4-Bromophenyl-phenylether	248	17.527	17.515	(0.949)	485467	10.0000	10.64
	57	Hexachlorobenzene	284	17.846	17.833	(0.966)	480993	10.0000	10.35
	58	Pentachlorophenol	266	18.203	18.203	(0.986)	617590	20.0000	20.57
*	59	Phenanthrene-d10	188	18.471	18.458	(1.000)	929294	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.002)	2808221	10.0000	10.36
	61	Anthracene	178	18.611	18.598	(1.008)	2697304	10.0000	10.60
	62	Carbazole	167	18.930	18.918	(1.025)	1787411	10.0000	10.18
	63	Di-n-butylphthalate	149	19.695	19.682	(1.066)	3230829	10.0000	10.51
	64	Fluoranthene	202	20.868	20.855	(0.890)	2824200	10.0000	10.36
	65	Pyrene	202	21.289	21.276	(0.908)	2812400	10.0000	10.17
$	66	Terphenyl-d14	244	21.557	21.557	(0.919)	1988149	10.0000	10.12
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	1255612	10.0000	10.15
	68	Benzo(a)anthracene	228	23.432	23.419	(0.999)	2135802	10.0000	9.950
*	69	Chrysene-d12	240	23.458	23.445	(1.000)	582943	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.381	23.369	(0.997)	1474421	30.0000	30.55
	71	Chrysene	228	23.509	23.496	(1.002)	2029668	10.0000	10.05
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	1702076	10.0000	10.04
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1171304	4.00000	
	73	Di-n-octylphthalate	149	24.478	24.465	(1.001)	2888436	10.0000	9.729
	74	Benzo(b)fluoranthene	252	25.358	25.345	(0.969)	1994991	10.0000	10.46
	75	Benzo(k)fluoranthene	252	25.409	25.384	(0.971)	1758254	10.0000	9.753(H)
	76	Benzo(a)pyrene	252	26.034	26.022	(0.995)	1531611	10.0000	10.19
*	77	Perylene-d12	264	26.162	26.149	(1.000)	481255	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.959	28.933	(1.107)	1762811	10.0000	10.11
	79	Dibenzo(a,h)anthracene	278	28.972	28.946	(1.107)	1484281	10.0000	10.14
	80	Benzo(g,h,i)perylene	276	29.790	29.751	(1.139)	1457471	10.0000	10.13
	90	N-Nitrosodimethylamine	74	5.084	5.071	(0.543)	1314020	20.0000	21.06
	91	Aniline	93	8.830	8.830	(0.943)	2347756	20.0000	21.36
	93	Benzidine	184	21.098	21.085	(0.899)	1662132	20.0000	21.28
	103	Pyridine	79	5.109	5.122	(0.546)	1988954	20.0000	20.09
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	1974523	10.0000	10.13
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.853	16.840	(1.092)	2278228	10.0000	10.01

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.358	25.384	(0.969)	3493039	20.0000	20.39
120 2,3,4,6-Tetrachlorophenol	232	16.165	16.152	(1.047)	688855	10.0000	9.471

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162303.D
Lab Smp Id: SLE0338-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	285800	-0.45
27 Naphthalene-d8	1056758	528379	2113516	1067038	0.97
42 Acenaphthene-d10	587510	293755	1175020	581019	-1.10
59 Phenanthrene-d10	933575	466788	1867150	929294	-0.46
69 Chrysene-d12	576570	288285	1153140	582943	1.11
134 Di-n-octylphthala	1181651	590826	2363302	1171304	-0.88
77 Perylene-d12	491359	245680	982718	481255	-2.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.47	0.07
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.16	0.05

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

REVIEW SUMMARY FOR FILE - NT1705162303.D

Lab ID: SLE0338-CAL6
nt17.i, ABN.m, 16-MAY-2023 19:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.969	0.958	0.0108	Benzoic acid
1.010	0.000	1.0099	2,4-Dinitrophenol

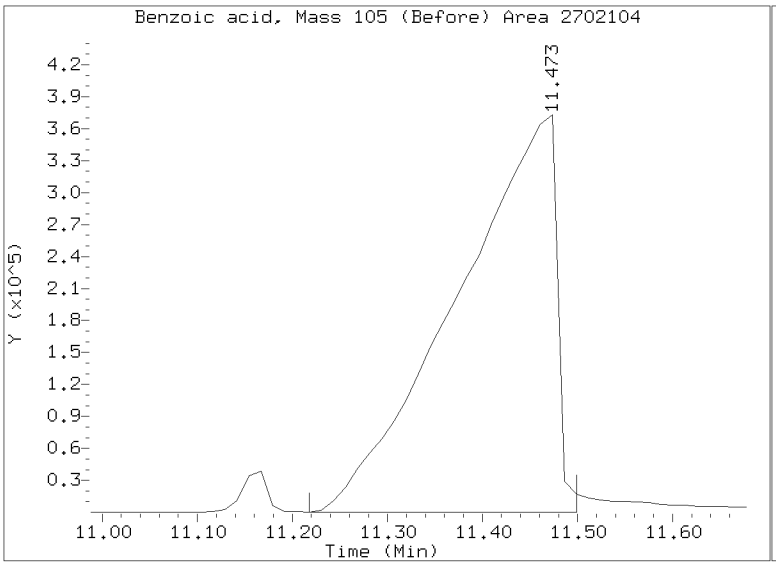
RRT check based on Ccal File: NT1705162308.D

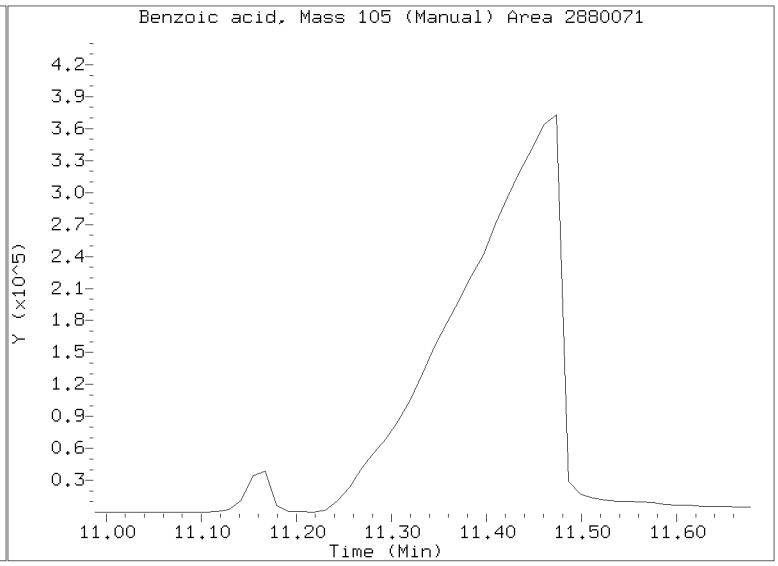
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/NT1705162303.D
Injection Date: 16-MAY-2023 19:29
Lab ID:SLE0338-CAL6 Client ID:
Report Date: 05/20/2023 12:55





Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162304.D

Page 1

Date : 16-MAY-2023 20:07

Client ID:

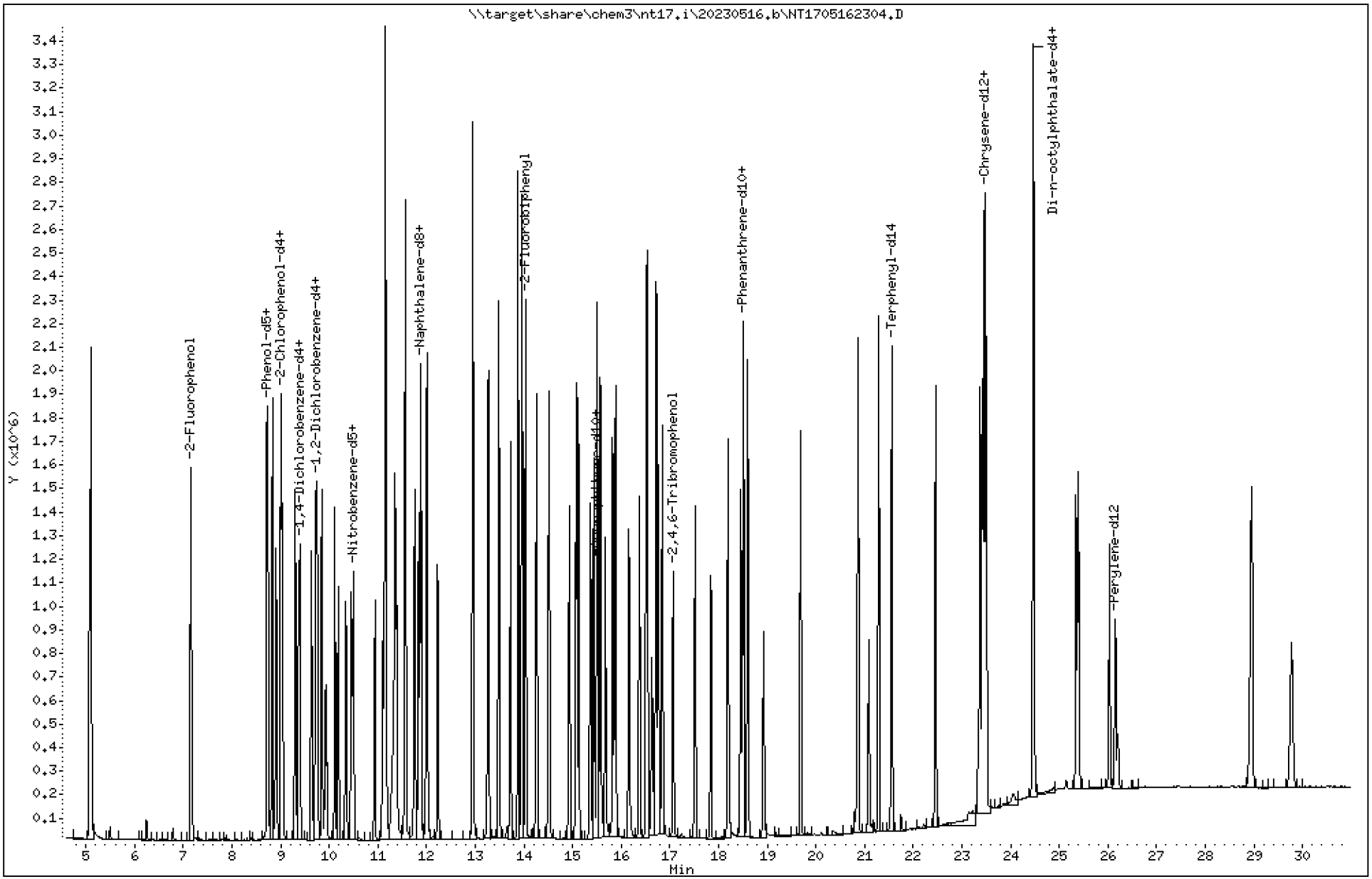
Instrument: nt17.i

Sample Info: SLE0338-CAL5

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162304.D
Lab Smp Id: SLE0338-CAL5
Inj Date : 16-MAY-2023 20:07
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-CAL5
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 4 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.148	7.161	(0.763)	765798	7.50000	8.149
$	2 Phenol-d5	99	8.715	8.715	(0.931)	982746	7.50000	7.902
	3 Phenol	94	8.740	8.740	(0.933)	690815	5.00000	5.244
$	5 2-Chlorophenol-d4	132	9.008	9.008	(0.962)	773445	7.50000	7.764
	4 Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	477952	5.00000	4.977
	6 2-Chlorophenol	128	9.033	9.033	(0.965)	537617	5.00000	4.887
	7 1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	558585	5.00000	5.017
*	8 1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	287078	4.00000	
	9 1,4-Dichlorobenzene	146	9.403	9.391	(1.004)	534214	5.00000	4.811
$	10 1,2-Dichlorobenzene-d4	152	9.723	9.723	(1.038)	360850	5.00000	5.154
	12 1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	529711	5.00000	5.075
	11 Benzyl alcohol	108	9.633	9.633	(1.029)	321508	5.00000	5.242
	14 2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.060)	152995	5.00000	5.200
	13 2-Methylphenol	108	9.851	9.851	(1.052)	487588	5.00000	5.037
	17 Hexachloroethane	117	10.336	10.336	(1.104)	228881	5.00000	5.153
	16 N-Nitroso-di-n-propylamine	70	10.183	10.170	(1.087)	386723	5.00000	5.221
	15 4-Methylphenol	108	10.119	10.119	(1.080)	520797	5.00000	5.283
$	18 Nitrobenzene-d5	82	10.451	10.451	(0.883)	617493	5.00000	5.134
	19 Nitrobenzene	77	10.489	10.489	(0.886)	580611	5.00000	5.060
	20 Isophorone	82	10.937	10.924	(0.923)	754432	5.00000	4.803
	21 2-Nitrophenol	139	11.115	11.115	(0.939)	283851	5.00000	5.134
	22 2,4-Dimethylphenol	107	11.154	11.154	(0.942)	1078071	10.0000	10.04
	23 Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.958)	486928	5.00000	5.058
	24 Benzoic acid	105	11.396	11.333	(0.962)	1331637	20.0000	18.44
	25 2,4-Dichlorophenol	162	11.562	11.562	(0.976)	828264	10.0000	9.601
	26 1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	448691	5.00000	4.789
*	27 Naphthalene-d8	136	11.843	11.830	(1.000)	1056758	4.00000	
	28 Naphthalene	128	11.881	11.881	(1.003)	1447676	5.00000	4.982
	29 4-Chloroaniline	127	12.008	11.995	(1.014)	1210630	10.0000	10.57
	30 Hexachlorobutadiene	225	12.238	12.225	(1.033)	232082	5.00000	5.001
	31 4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	953387	10.0000	10.26
	32 2-Methylnaphthalene	142	13.271	13.258	(1.121)	1063687	5.00000	5.112
	33 Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	466260	10.0000	8.535

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	612933	10.0000	9.971
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	648557	10.0000	9.967
$	36	2-Fluorobiphenyl	172	14.036	14.036	(0.909)	1144436	5.00000	4.945
	37	2-Chloronaphthalene	162	14.253	14.253	(0.923)	927747	5.00000	4.941
	38	2-Nitroaniline	65	14.508	14.508	(0.940)	645367	10.0000	10.15
	39	Dimethylphthalate	163	14.929	14.929	(0.967)	996067	5.00000	4.927
	40	Acenaphthylene	152	15.120	15.120	(0.979)	1471084	5.00000	4.934
	41	2,6-Dinitrotoluene	165	15.082	15.069	(0.977)	477455	10.0000	10.09
*	42	Acenaphthene-d10	164	15.439	15.426	(1.000)	587510	4.00000	
	43	3-Nitroaniline	138	15.362	15.349	(0.995)	453737	10.0000	10.35
	44	Acenaphthene	153	15.502	15.502	(1.004)	923471	5.00000	4.955
	45	2,4-Dinitrophenol	184	15.579	15.567	(1.009)	556011	20.0000	18.80
	46	Dibenzofuran	168	15.834	15.821	(1.026)	1292030	5.00000	4.967
	47	4-Nitrophenol	109	15.681	15.681	(1.016)	281715	10.0000	9.676
	48	2,4-Dinitrotoluene	165	15.885	15.872	(1.029)	637835	10.0000	10.30
	50	Diethylphthalate	149	16.382	16.369	(1.061)	957540	5.00000	4.857
	49	Fluorene	166	16.535	16.535	(1.071)	1308520	5.00000	5.291
	51	4-Chlorophenyl-phenylether	204	16.522	16.509	(1.070)	572669	5.00000	5.036
	52	4-Nitroaniline	138	16.637	16.611	(1.078)	417726	10.0000	10.07
	53	4,6-Dinitro-2-methylphenol	198	16.726	16.713	(0.906)	645152	20.0000	17.32
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	612769	5.00000	4.686
$	55	2,4,6-Tribromophenol	330	17.069	17.070	(1.106)	161510	7.50000	6.302
	56	4-Bromophenyl-phenylether	248	17.515	17.515	(0.949)	230862	5.00000	5.038
	57	Hexachlorobenzene	284	17.846	17.833	(0.967)	231469	5.00000	4.958
	58	Pentachlorophenol	266	18.190	18.203	(0.985)	273613	10.0000	9.657
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	933575	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.003)	1368665	5.00000	5.024
	61	Anthracene	178	18.598	18.598	(1.008)	1318403	5.00000	5.155
	62	Carbazole	167	18.917	18.918	(1.025)	728881	5.00000	4.479
	63	Di-n-butylphthalate	149	19.695	19.682	(1.067)	1642766	5.00000	5.320
	64	Fluoranthene	202	20.868	20.855	(0.890)	1405063	5.00000	5.210
	65	Pyrene	202	21.289	21.276	(0.908)	1388781	5.00000	5.080
$	66	Terphenyl-d14	244	21.557	21.557	(0.919)	974784	5.00000	5.015
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	632762	5.00000	5.171
	68	Benzo(a)anthracene	228	23.419	23.419	(0.998)	1051776	5.00000	4.954
*	69	Chrysene-d12	240	23.458	23.445	(1.000)	576570	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.996)	587270	15.0000	13.52
	71	Chrysene	228	23.496	23.496	(1.002)	986619	5.00000	4.939
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	876350	5.00000	5.126
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1181651	4.00000	
	73	Di-n-octylphthalate	149	24.478	24.465	(1.001)	1480129	5.00000	4.942
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	911226	5.00000	4.677
	75	Benzo(k)fluoranthene	252	25.397	25.384	(0.971)	964317	5.00000	5.239(H)
	76	Benzo(a)pyrene	252	26.034	26.022	(0.996)	764390	5.00000	4.981
*	77	Perylene-d12	264	26.149	26.149	(1.000)	491359	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.946	28.933	(1.107)	894339	5.00000	5.024
	79	Dibenzo(a,h)anthracene	278	28.959	28.946	(1.107)	747647	5.00000	5.005
	80	Benzo(g,h,i)perylene	276	29.777	29.751	(1.139)	741643	5.00000	5.048
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	660188	10.0000	10.53
	91	Aniline	93	8.830	8.830	(0.943)	1153210	10.0000	10.45
	93	Benzidine	184	21.085	21.085	(0.899)	535492	10.0000	7.663
	103	Pyridine	79	5.097	5.122	(0.544)	1037266	10.0000	10.43
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	975488	5.00000	5.054
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.091)	1138685	5.00000	4.948

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.397	25.384	(0.971)	1754937	10.0000	10.04
120 2,3,4,6-Tetrachlorophenol	232	16.165	16.152	(1.047)	319360	5.00000	4.342

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162304.D
Lab Smp Id: SLE0338-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	287078	0.00
27 Naphthalene-d8	1056758	528379	2113516	1056758	0.00
42 Acenaphthene-d10	587510	293755	1175020	587510	0.00
59 Phenanthrene-d10	933575	466788	1867150	933575	0.00
69 Chrysene-d12	576570	288285	1153140	576570	0.00
134 Di-n-octylphthala	1181651	590826	2363302	1181651	0.00
77 Perylene-d12	491359	245680	982718	491359	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	0.00
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	0.00
77 Perylene-d12	26.15	25.65	26.65	26.15	0.00

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

REVIEW SUMMARY FOR FILE - NT1705162304.D

Lab ID: SLE0338-CAL5
nt17.i, ABN.m, 16-MAY-2023 20:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.009	0.000	1.0091	2,4-Dinitrophenol

RRT check based on Ccal File: NT1705162308.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162305.D

Page 1

Date : 16-MAY-2023 20:44

Client ID:

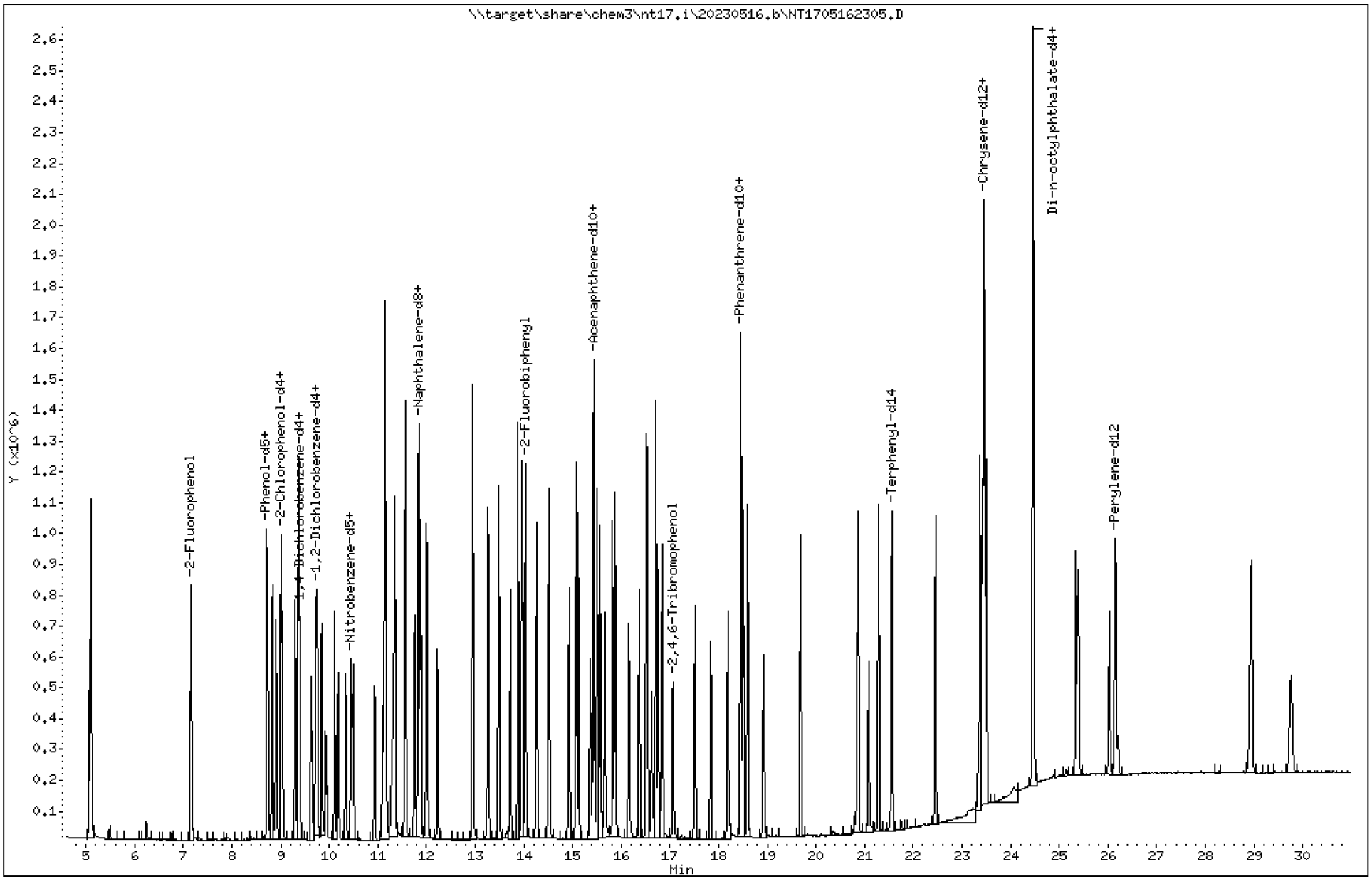
Instrument: nt17.i

Sample Info: SLE0338-CAL4

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 16-MAY-2023 20:44
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-CAL4
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 5 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.148	7.161	(0.763)	386880	3.75000	4.016
$	2 Phenol-d5	99	8.715	8.715	(0.931)	496273	3.75000	3.893
	3 Phenol	94	8.740	8.740	(0.933)	357970	2.50000	2.651
$	5 2-Chlorophenol-d4	132	9.008	9.008	(0.962)	395690	3.75000	3.875
	4 Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	251940	2.50000	2.559
	6 2-Chlorophenol	128	9.033	9.033	(0.965)	274100	2.50000	2.431
	7 1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	287842	2.50000	2.522
*	8 1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	294275	4.00000	
	9 1,4-Dichlorobenzene	146	9.391	9.391	(1.003)	274610	2.50000	2.413
$	10 1,2-Dichlorobenzene-d4	152	9.723	9.723	(1.038)	183965	2.50000	2.563
	12 1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	270573	2.50000	2.529
	11 Benzyl alcohol	108	9.633	9.633	(1.029)	171088	2.50000	2.721
	14 2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.060)	76380	2.50000	2.533
	13 2-Methylphenol	108	9.851	9.851	(1.052)	285447	2.50000	2.876
	17 Hexachloroethane	117	10.336	10.336	(1.104)	116382	2.50000	2.556
	16 N-Nitroso-di-n-propylamine	70	10.183	10.170	(1.087)	201182	2.50000	2.650
	15 4-Methylphenol	108	10.106	10.119	(1.079)	270827	2.50000	2.680
$	18 Nitrobenzene-d5	82	10.451	10.451	(0.883)	310279	2.50000	2.526
	19 Nitrobenzene	77	10.489	10.489	(0.886)	297893	2.50000	2.542
	20 Isophorone	82	10.924	10.924	(0.922)	381193	2.50000	2.376
	21 2-Nitrophenol	139	11.115	11.115	(0.939)	141894	2.50000	2.513
	22 2,4-Dimethylphenol	107	11.154	11.154	(0.942)	546752	5.00000	4.986
	23 Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.958)	244375	2.50000	2.485
	24 Benzoic acid	105	11.345	11.333	(0.958)	600987	10.0000	8.148(M)
	25 2,4-Dichlorophenol	162	11.562	11.562	(0.976)	422303	5.00000	4.793
	26 1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	229549	2.50000	2.399
*	27 Naphthalene-d8	136	11.843	11.830	(1.000)	1079321	4.00000	
	28 Naphthalene	128	11.881	11.881	(1.003)	743208	2.50000	2.504
	29 4-Chloroaniline	127	11.995	11.995	(1.013)	619315	5.00000	5.293
	30 Hexachlorobutadiene	225	12.225	12.225	(1.032)	117974	2.50000	2.489
	31 4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	480727	5.00000	5.067
	32 2-Methylnaphthalene	142	13.258	13.258	(1.119)	539238	2.50000	2.537
	33 Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	226655	5.00000	4.143

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	307979	5.00000	5.003
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	319643	5.00000	4.905
$	36	2-Fluorobiphenyl	172	14.036	14.036	(0.909)	576214	2.50000	2.486
	37	2-Chloronaphthalene	162	14.253	14.253	(0.923)	470904	2.50000	2.504
	38	2-Nitroaniline	65	14.508	14.508	(0.940)	327426	5.00000	5.141
	39	Dimethylphthalate	163	14.929	14.929	(0.967)	516505	2.50000	2.551
	40	Acenaphthylene	152	15.120	15.120	(0.979)	746584	2.50000	2.500
	41	2,6-Dinitrotoluene	165	15.069	15.069	(0.976)	239858	5.00000	5.061
*	42	Acenaphthene-d10	164	15.439	15.426	(1.000)	588382	4.00000	
	43	3-Nitroaniline	138	15.362	15.349	(0.995)	186838	5.00000	4.256
	44	Acenaphthene	153	15.502	15.502	(1.004)	468493	2.50000	2.510
	45	2,4-Dinitrophenol	184	15.566	15.567	(1.008)	238371	10.0000	8.219
	46	Dibenzofuran	168	15.821	15.821	(1.025)	643491	2.50000	2.470
	47	4-Nitrophenol	109	15.668	15.681	(1.015)	142217	5.00000	4.877
	48	2,4-Dinitrotoluene	165	15.872	15.872	(1.028)	315732	5.00000	5.089
	50	Diethylphthalate	149	16.369	16.369	(1.060)	494482	2.50000	2.505
	49	Fluorene	166	16.535	16.535	(1.071)	547774	2.50000	2.211
	51	4-Chlorophenyl-phenylether	204	16.522	16.509	(1.070)	231194	2.50000	2.030
	52	4-Nitroaniline	138	16.624	16.611	(1.077)	202478	5.00000	4.873
	53	4,6-Dinitro-2-methylphenol	198	16.713	16.713	(0.905)	302717	10.0000	7.710
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	331879	2.50000	2.408
$	55	2,4,6-Tribromophenol	330	17.069	17.070	(1.106)	80536	3.75000	3.138
	56	4-Bromophenyl-phenylether	248	17.515	17.515	(0.949)	115874	2.50000	2.400
	57	Hexachlorobenzene	284	17.833	17.833	(0.966)	118138	2.50000	2.401
	58	Pentachlorophenol	266	18.190	18.203	(0.985)	119709	5.00000	4.121
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	983826	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.003)	694700	2.50000	2.420
	61	Anthracene	178	18.598	18.598	(1.008)	681256	2.50000	2.528
	62	Carbazole	167	18.917	18.918	(1.025)	425810	2.50000	2.542
	63	Di-n-butylphthalate	149	19.682	19.682	(1.066)	840499	2.50000	2.583
	64	Fluoranthene	202	20.868	20.855	(0.890)	731382	2.50000	2.530
	65	Pyrene	202	21.289	21.276	(0.908)	735145	2.50000	2.508
$	66	Terphenyl-d14	244	21.557	21.557	(0.919)	517541	2.50000	2.484
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	336912	2.50000	2.569
	68	Benzo(a)anthracene	228	23.419	23.419	(0.998)	564607	2.50000	2.481
*	69	Chrysene-d12	240	23.458	23.445	(1.000)	618048	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.996)	346015	7.50000	7.632
	71	Chrysene	228	23.496	23.496	(1.002)	531552	2.50000	2.482
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	453883	2.50000	2.549
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1230644	4.00000	
	73	Di-n-octylphthalate	149	24.465	24.465	(1.000)	779363	2.50000	2.498
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	520986	2.50000	2.447
	75	Benzo(k)fluoranthene	252	25.396	25.384	(0.971)	499544	2.50000	2.484(H)
	76	Benzo(a)pyrene	252	26.034	26.022	(0.996)	408250	2.50000	2.435
*	77	Perylene-d12	264	26.149	26.149	(1.000)	536896	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.933	28.933	(1.106)	474517	2.50000	2.440
	79	Dibenzo(a,h)anthracene	278	28.946	28.946	(1.107)	398710	2.50000	2.442
	80	Benzo(g,h,i)perylene	276	29.764	29.751	(1.138)	383366	2.50000	2.388
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	348268	5.00000	5.420
	91	Aniline	93	8.830	8.830	(0.943)	573053	5.00000	5.064
	93	Benzidine	184	21.085	21.085	(0.899)	332205	5.00000	4.521
	103	Pyridine	79	5.097	5.122	(0.544)	546209	5.00000	5.359
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	495816	2.50000	2.515
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.091)	606555	2.50000	2.632

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.345	25.384	(0.969)	956582	5.00000	5.006
120 2,3,4,6-Tetrachlorophenol	232	16.152	16.152	(1.046)	146074	2.50000	1.983

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162305.D
Lab Smp Id: SLE0338-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	294275	2.51
27 Naphthalene-d8	1056758	528379	2113516	1079321	2.14
42 Acenaphthene-d10	587510	293755	1175020	588382	0.15
59 Phenanthrene-d10	933575	466788	1867150	983826	5.38
69 Chrysene-d12	576570	288285	1153140	618048	7.19
134 Di-n-octylphthala	1181651	590826	2363302	1230644	4.15
77 Perylene-d12	491359	245680	982718	536896	9.27

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.15	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162305.D

Lab ID: SLE0338-CAL4
nt17.i, ABN.m, 16-MAY-2023 20:44

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.008	0.000	1.0083	2,4-Dinitrophenol

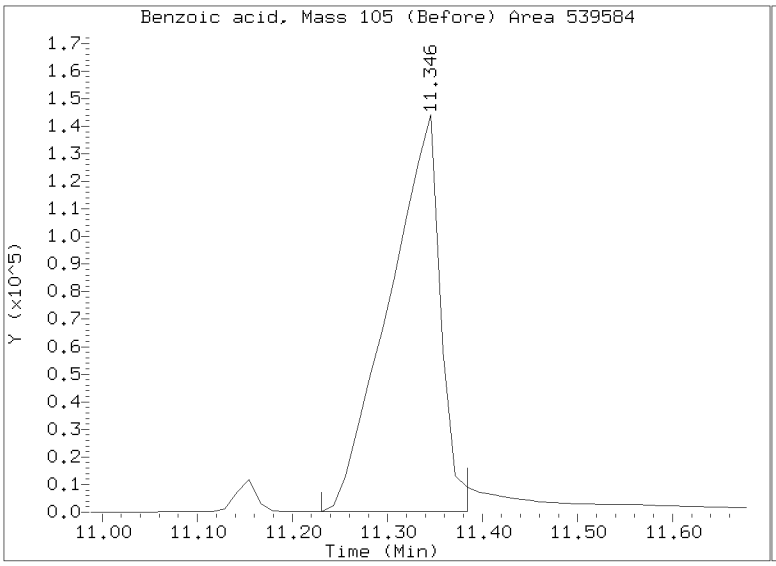
RRT check based on Ccal File: NT1705162308.D

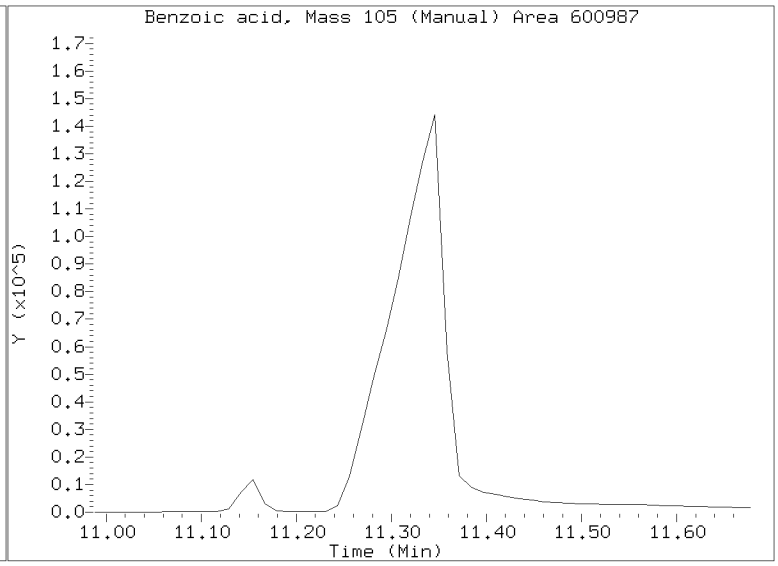
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/NT1705162305.D
Injection Date: 16-MAY-2023 20:44
Lab ID:SLE0338-CAL4 Client ID:
Report Date: 05/20/2023 12:55

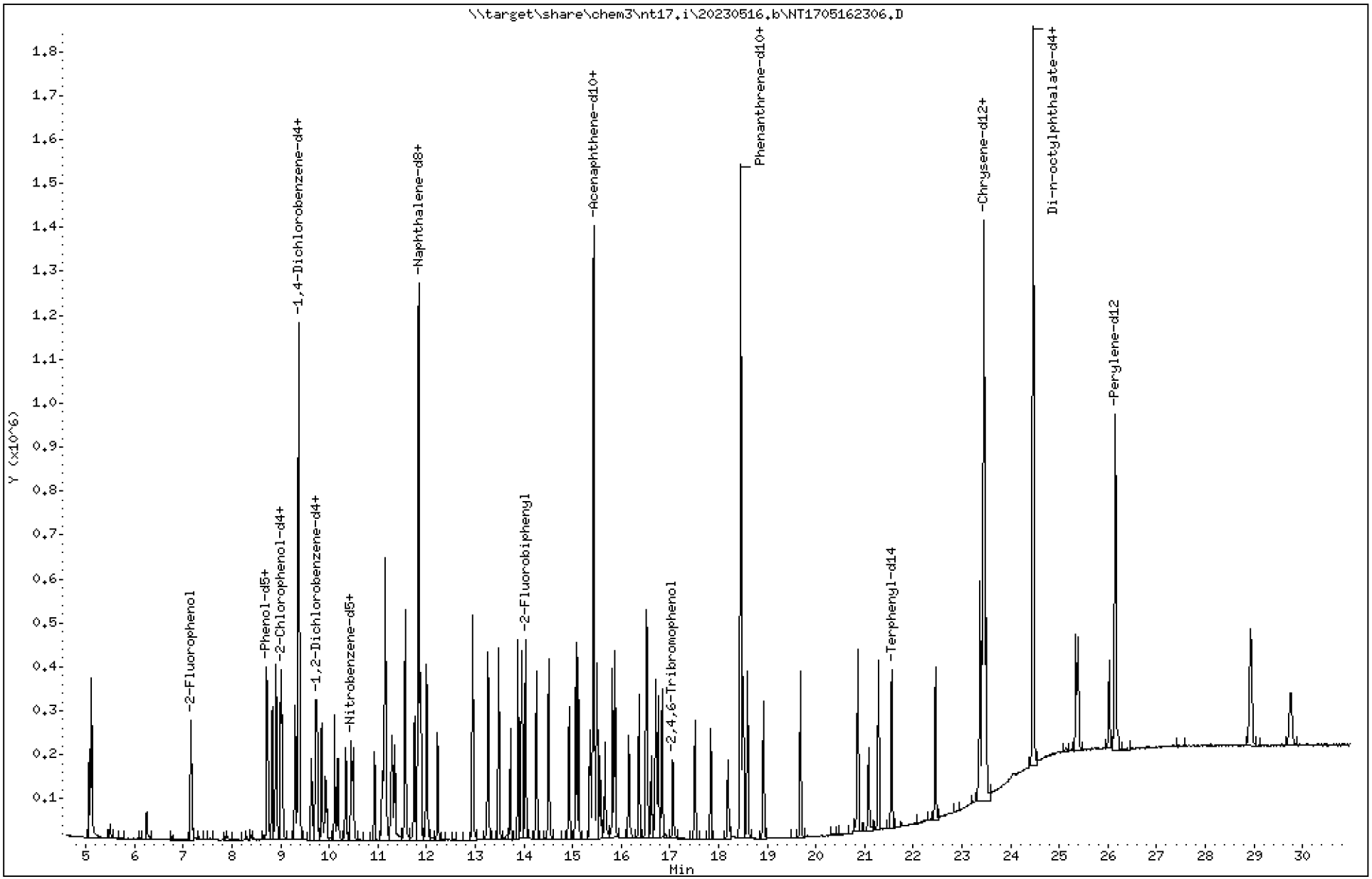




Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162306.D
Date : 16-MAY-2023 21:22
Client ID:
Sample Info: SLE0338-CAL3

Instrument: nt17.i
Operator: JGR
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162306.D
Lab Smp Id: SLE0338-CAL3
Inj Date : 16-MAY-2023 21:22
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-CAL3
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 6 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.160	7.161	(0.765)	150626	1.50000	1.580
$	2 Phenol-d5	99	8.715	8.715	(0.931)	197829	1.50000	1.568
	3 Phenol	94	8.740	8.740	(0.933)	142048	1.00000	1.063
$	5 2-Chlorophenol-d4	132	9.008	9.008	(0.962)	156257	1.50000	1.546
	4 Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	107601	1.00000	1.105
	6 2-Chlorophenol	128	9.033	9.033	(0.965)	125026	1.00000	1.121
	7 1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	119307	1.00000	1.057
*	8 1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	291199	4.00000	
	9 1,4-Dichlorobenzene	146	9.391	9.391	(1.003)	130960	1.00000	1.163
$	10 1,2-Dichlorobenzene-d4	152	9.723	9.723	(1.038)	74712	1.00000	1.052
	12 1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	111502	1.00000	1.053
	11 Benzyl alcohol	108	9.633	9.633	(1.029)	65096	1.00000	1.046
	14 2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.060)	31734	1.00000	1.063
	13 2-Methylphenol	108	9.851	9.851	(1.052)	101485	1.00000	1.033
	17 Hexachloroethane	117	10.336	10.336	(1.104)	46561	1.00000	1.033
	16 N-Nitroso-di-n-propylamine	70	10.183	10.170	(1.087)	76879	1.00000	1.023
	15 4-Methylphenol	108	10.106	10.119	(1.079)	102638	1.00000	1.027
$	18 Nitrobenzene-d5	82	10.451	10.451	(0.883)	121519	1.00000	0.9982
	19 Nitrobenzene	77	10.489	10.489	(0.886)	118249	1.00000	1.018
	20 Isophorone	82	10.924	10.924	(0.922)	148076	1.00000	0.9314
	21 2-Nitrophenol	139	11.115	11.115	(0.939)	64667	1.00000	1.155
	22 2,4-Dimethylphenol	107	11.154	11.154	(0.942)	221940	2.00000	2.042
	23 Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.958)	99144	1.00000	1.017
	24 Benzoic acid	105	11.294	11.333	(0.954)	160098	4.00000	2.190
	25 2,4-Dichlorophenol	162	11.562	11.562	(0.976)	185125	2.00000	2.120
	26 1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	92154	1.00000	0.9717
*	27 Naphthalene-d8	136	11.842	11.830	(1.000)	1069618	4.00000	
	28 Naphthalene	128	11.881	11.881	(1.003)	294878	1.00000	1.002
	29 4-Chloroaniline	127	11.995	11.995	(1.013)	230913	2.00000	1.992
	30 Hexachlorobutadiene	225	12.225	12.225	(1.032)	45893	1.00000	0.9769
	31 4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	181698	2.00000	1.933
	32 2-Methylnaphthalene	142	13.258	13.258	(1.119)	208319	1.00000	0.9891
	33 Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	71798	2.00000	1.339

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	112219	2.00000	1.860
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	123387	2.00000	1.932
$	36	2-Fluorobiphenyl	172	14.036	14.036	(0.909)	226616	1.00000	0.9975
	37	2-Chloronaphthalene	162	14.252	14.253	(0.923)	183269	1.00000	0.9944
	38	2-Nitroaniline	65	14.508	14.508	(0.940)	123204	2.00000	1.974
	39	Dimethylphthalate	163	14.928	14.929	(0.967)	204711	1.00000	1.032
	40	Acenaphthylene	152	15.120	15.120	(0.979)	298557	1.00000	1.020
	41	2,6-Dinitrotoluene	165	15.069	15.069	(0.976)	88125	2.00000	1.897
*	42	Acenaphthene-d10	164	15.439	15.426	(1.000)	576693	4.00000	
	43	3-Nitroaniline	138	15.349	15.349	(0.994)	77793	2.00000	1.808
	44	Acenaphthene	153	15.502	15.502	(1.004)	183139	1.00000	1.001
	45	2,4-Dinitrophenol	184	15.566	15.567	(1.008)	52044	4.00000	1.853
	46	Dibenzofuran	168	15.821	15.821	(1.025)	252854	1.00000	0.9902
	47	4-Nitrophenol	109	15.668	15.681	(1.015)	47321	2.00000	1.656
	48	2,4-Dinitrotoluene	165	15.872	15.872	(1.028)	118415	2.00000	1.947
	50	Diethylphthalate	149	16.369	16.369	(1.060)	194206	1.00000	1.004
	49	Fluorene	166	16.535	16.535	(1.071)	259418	1.00000	1.069
	51	4-Chlorophenyl-phenylether	204	16.509	16.509	(1.069)	112856	1.00000	1.011
	52	4-Nitroaniline	138	16.611	16.611	(1.076)	79161	2.00000	1.944
	53	4,6-Dinitro-2-methylphenol	198	16.713	16.713	(0.905)	89315	4.00000	2.363
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	137289	1.00000	1.035
$	55	2,4,6-Tribromophenol	330	17.069	17.070	(1.106)	28123	1.50000	1.118
	56	4-Bromophenyl-phenylether	248	17.514	17.515	(0.949)	44072	1.00000	0.9482
	57	Hexachlorobenzene	284	17.833	17.833	(0.966)	44938	1.00000	0.9489
	58	Pentachlorophenol	266	18.190	18.203	(0.985)	32667	2.00000	1.185
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	946973	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.003)	272263	1.00000	0.9853
	61	Anthracene	178	18.598	18.598	(1.008)	252759	1.00000	0.9743
	62	Carbazole	167	18.917	18.918	(1.025)	219389	1.00000	1.379
	63	Di-n-butylphthalate	149	19.682	19.682	(1.066)	308670	1.00000	0.9854
	64	Fluoranthene	202	20.855	20.855	(0.889)	267223	1.00000	1.001
	65	Pyrene	202	21.289	21.276	(0.908)	274283	1.00000	1.014
$	66	Terphenyl-d14	244	21.557	21.557	(0.919)	195402	1.00000	1.016
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	125222	1.00000	1.034
	68	Benzo(a)anthracene	228	23.419	23.419	(0.998)	210729	1.00000	1.003
*	69	Chrysene-d12	240	23.457	23.445	(1.000)	570480	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.996)	154282	3.00000	3.749
	71	Chrysene	228	23.496	23.496	(1.002)	197638	1.00000	0.9998
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	167257	1.00000	1.015
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1138779	4.00000	
	73	Di-n-octylphthalate	149	24.465	24.465	(1.000)	293359	1.00000	1.016
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	204775	1.00000	1.004
	75	Benzo(k)fluoranthene	252	25.384	25.384	(0.971)	181685	1.00000	0.9432(H)
	76	Benzo(a)pyrene	252	26.022	26.022	(0.995)	151308	1.00000	0.9421
*	77	Perylene-d12	264	26.149	26.149	(1.000)	514255	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.933	28.933	(1.106)	178435	1.00000	0.9578
	79	Dibenzo(a,h)anthracene	278	28.933	28.946	(1.106)	150803	1.00000	0.9645
	80	Benzo(g,h,i)perylene	276	29.764	29.751	(1.138)	147554	1.00000	0.9596
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	136266	2.00000	2.143
	91	Aniline	93	8.830	8.830	(0.943)	218299	2.00000	1.950
	93	Benzidine	184	21.085	21.085	(0.899)	119355	2.00000	1.788
	103	Pyridine	79	5.109	5.122	(0.546)	214158	2.00000	2.123
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	193001	1.00000	0.9878
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.091)	233200	1.00000	1.032

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.345	25.384	(0.969)	354362	2.00000	1.936
120 2,3,4,6-Tetrachlorophenol	232	16.152	16.152	(1.046)	51169	1.00000	0.7088

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162306.D
Lab Smp Id: SLE0338-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	291199	1.44
27 Naphthalene-d8	1056758	528379	2113516	1069618	1.22
42 Acenaphthene-d10	587510	293755	1175020	576693	-1.84
59 Phenanthrene-d10	933575	466788	1867150	946973	1.44
69 Chrysene-d12	576570	288285	1153140	570480	-1.06
134 Di-n-octylphthala	1181651	590826	2363302	1138779	-3.63
77 Perylene-d12	491359	245680	982718	514255	4.66

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.15	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162306.D

Lab ID: SLE0338-CAL3
nt17.i, ABN.m, 16-MAY-2023 21:22

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.008	0.000	1.0083	2,4-Dinitrophenol

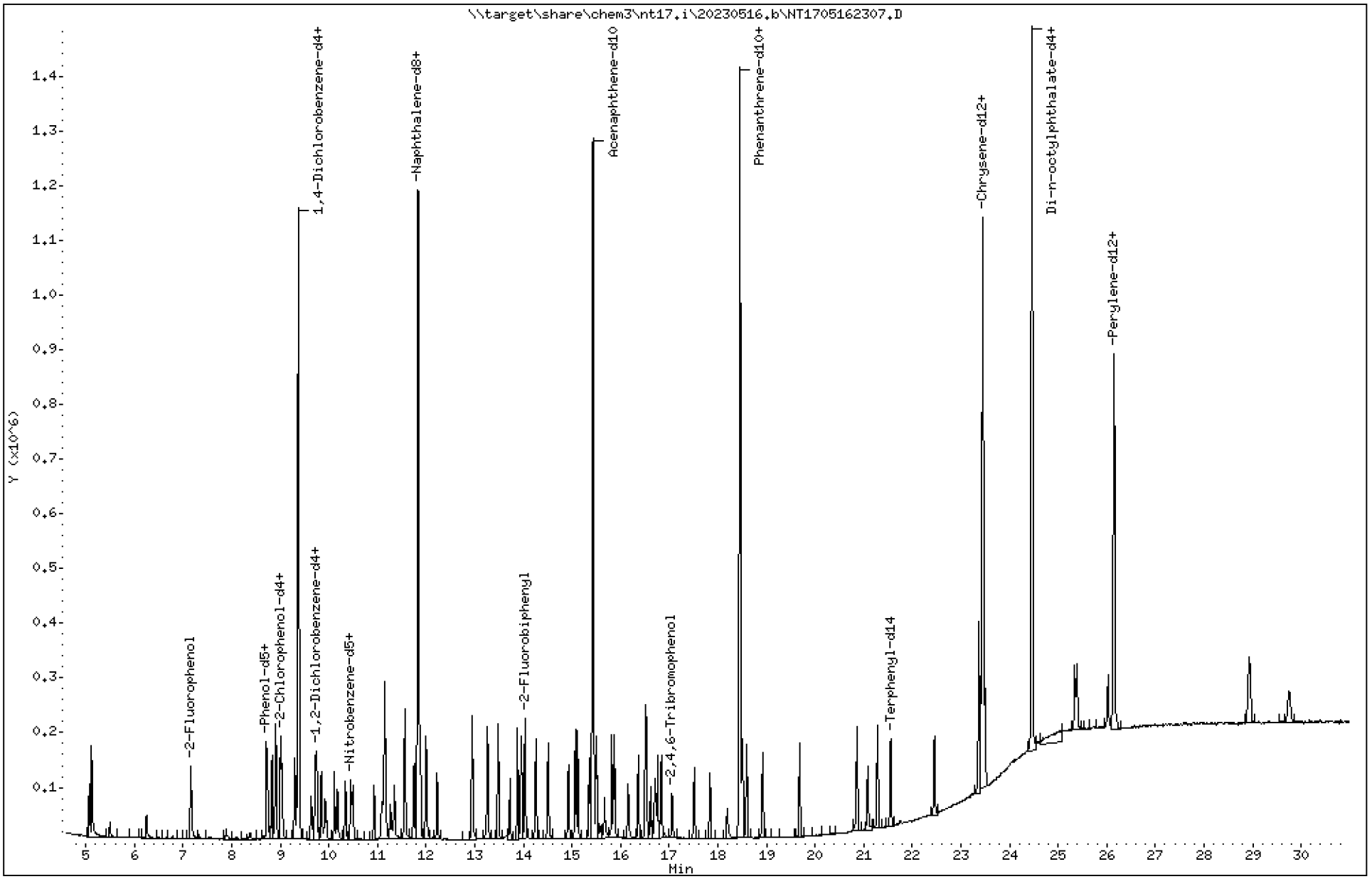
RRT check based on Ccal File: NT1705162308.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162307.D
Date : 16-MAY-2023 21:59
Client ID:
Sample Info: SLE0338-CAL2

Instrument: nt17.i
Operator: JGR
Column phase: ZB-5msi
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162307.D
Lab Smp Id: SLE0338-CAL2
Inj Date : 16-MAY-2023 21:59
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-CAL2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 7 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.161	7.161	(0.765)	69886	0.75000	0.6587
$	2	Phenol-d5	99	8.715	8.715	(0.931)	94980	0.75000	0.6765
	3	Phenol	94	8.740	8.740	(0.933)	66525	0.50000	0.4473
$	5	2-Chlorophenol-d4	132	9.008	9.008	(0.962)	76948	0.75000	0.6842
	4	Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	52481	0.50000	0.4841
	6	2-Chlorophenol	128	9.033	9.033	(0.965)	61095	0.50000	0.4919
	7	1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	59422	0.50000	0.4728
*	8	1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	324107	4.00000	
	9	1,4-Dichlorobenzene	146	9.391	9.391	(1.003)	66070	0.50000	0.5271
$	10	1,2-Dichlorobenzene-d4	152	9.723	9.723	(1.038)	35331	0.50000	0.4470
	12	1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	54209	0.50000	0.4600
	11	Benzyl alcohol	108	9.633	9.633	(1.029)	29784	0.50000	0.4302
	14	2,2'-oxybis(1-Chloropropane)	121	9.915	9.914	(1.059)	14940	0.50000	0.4498
	13	2-Methylphenol	108	9.851	9.851	(1.052)	49134	0.50000	0.4495
	17	Hexachloroethane	117	10.336	10.336	(1.104)	23009	0.50000	0.4589
	16	N-Nitroso-di-n-propylamine	70	10.170	10.170	(1.086)	37780	0.50000	0.4518
	15	4-Methylphenol	108	10.106	10.119	(1.079)	47913	0.50000	0.4305
$	18	Nitrobenzene-d5	82	10.451	10.451	(0.883)	58799	0.50000	0.4975
	19	Nitrobenzene	77	10.489	10.489	(0.886)	57280	0.50000	0.5079
	20	Isophorone	82	10.924	10.924	(0.922)	82574	0.50000	0.5349
	21	2-Nitrophenol	139	11.115	11.115	(0.939)	24199	0.50000	0.4453
	22	2,4-Dimethylphenol	107	11.154	11.154	(0.942)	106712	1.00000	1.011
	23	Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.958)	45556	0.50000	0.4815
	24	Benzoic acid	105	11.269	11.333	(0.952)	41266	2.00000	0.5814
	25	2,4-Dichlorophenol	162	11.562	11.562	(0.976)	88888	1.00000	1.048
	26	1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	46211	0.50000	0.5019
*	27	Naphthalene-d8	136	11.843	11.830	(1.000)	1038534	4.00000	
	28	Naphthalene	128	11.881	11.881	(1.003)	145318	0.50000	0.5088
	29	4-Chloroaniline	127	11.995	11.995	(1.013)	110561	1.00000	0.9821
	30	Hexachlorobutadiene	225	12.225	12.225	(1.032)	22415	0.50000	0.4914
	31	4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	82140	1.00000	0.8998
	32	2-Methylnaphthalene	142	13.258	13.258	(1.119)	97434	0.50000	0.4765
	33	Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	29375	1.00000	0.5763

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	51299	1.00000	0.8944
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	54353	1.00000	0.8952
$	36	2-Fluorobiphenyl	172	14.036	14.036	(0.909)	108347	0.50000	0.5017
	37	2-Chloronaphthalene	162	14.253	14.253	(0.923)	86887	0.50000	0.4959
	38	2-Nitroaniline	65	14.508	14.508	(0.940)	54591	1.00000	0.9201
	39	Dimethylphthalate	163	14.929	14.929	(0.967)	96298	0.50000	0.5106
	40	Acenaphthylene	152	15.120	15.120	(0.979)	141088	0.50000	0.5071
	41	2,6-Dinitrotoluene	165	15.069	15.069	(0.976)	40863	1.00000	0.9254
*	42	Acenaphthene-d10	164	15.439	15.426	(1.000)	548179	4.00000	
	43	3-Nitroaniline	138	15.349	15.349	(0.994)	38197	1.00000	0.9339
	44	Acenaphthene	153	15.502	15.502	(1.004)	86590	0.50000	0.4979
	45	2,4-Dinitrophenol	184	15.566	15.567	(1.008)	7725	2.00000	0.2902
	46	Dibenzofuran	168	15.821	15.821	(1.025)	120379	0.50000	0.4959
	47	4-Nitrophenol	109	15.668	15.681	(1.015)	17887	1.00000	0.6584
	48	2,4-Dinitrotoluene	165	15.872	15.872	(1.028)	49338	1.00000	0.8535
	50	Diethylphthalate	149	16.369	16.369	(1.060)	89215	0.50000	0.4850
	49	Fluorene	166	16.535	16.535	(1.071)	122616	0.50000	0.5313
	51	4-Chlorophenyl-phenylether	204	16.509	16.509	(1.069)	53751	0.50000	0.5066
	52	4-Nitroaniline	138	16.611	16.611	(1.076)	32376	1.00000	0.8363
	53	4,6-Dinitro-2-methylphenol	198	16.713	16.713	(0.905)	30618	2.00000	0.8639
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	64129	0.50000	0.5155
$	55	2,4,6-Tribromophenol	330	17.069	17.070	(1.106)	12283	0.75000	0.5137
	56	4-Bromophenyl-phenylether	248	17.515	17.515	(0.949)	21041	0.50000	0.4827
	57	Hexachlorobenzene	284	17.833	17.833	(0.966)	21923	0.50000	0.4936
	58	Pentachlorophenol	266	18.190	18.203	(0.985)	12002	1.00000	0.4656
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	888076	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.003)	129729	0.50000	0.5006
	61	Anthracene	178	18.598	18.598	(1.008)	115970	0.50000	0.4767
	62	Carbazole	167	18.917	18.918	(1.025)	109506	0.50000	0.7390
	63	Di-n-butylphthalate	149	19.682	19.682	(1.066)	137613	0.50000	0.4685
	64	Fluoranthene	202	20.855	20.855	(0.890)	121498	0.50000	0.4955
	65	Pyrene	202	21.276	21.276	(0.908)	125778	0.50000	0.5060
$	66	Terphenyl-d14	244	21.557	21.557	(0.919)	87757	0.50000	0.4967
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	55058	0.50000	0.4949
	68	Benzo(a)anthracene	228	23.419	23.419	(0.999)	98387	0.50000	0.5097
*	69	Chrysene-d12	240	23.445	23.445	(1.000)	524160	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.997)	85571	1.50000	2.277
	71	Chrysene	228	23.496	23.496	(1.002)	93467	0.50000	0.5146
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.960)	75756	0.50000	0.5066
*	134	Di-n-octylphthalate-d4	153	24.453	24.465	(1.000)	1033662	4.00000	
	73	Di-n-octylphthalate	149	24.465	24.465	(1.001)	134972	0.50000	0.5151
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	95464	0.50000	0.4995
	75	Benzo(k)fluoranthene	252	25.384	25.384	(0.971)	82601	0.50000	0.4574(H)
	76	Benzo(a)pyrene	252	26.022	26.022	(0.995)	73696	0.50000	0.4895
*	77	Perylene-d12	264	26.149	26.149	(1.000)	482063	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.933	28.933	(1.106)	84850	0.50000	0.4859
	79	Dibenzo(a,h)anthracene	278	28.933	28.946	(1.106)	71004	0.50000	0.4844
	80	Benzo(g,h,i)perylene	276	29.751	29.751	(1.138)	71128	0.50000	0.4935
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	63273	1.00000	0.8941
	91	Aniline	93	8.830	8.830	(0.943)	107499	1.00000	0.8626
	93	Benzidine	184	21.085	21.085	(0.899)	73568	1.00000	1.203
	103	Pyridine	79	5.110	5.122	(0.546)	107114	1.00000	0.9542
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	93622	0.50000	0.4935
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.091)	107419	0.50000	0.5003

						AMOUNTS	
	QUANT SIG					CAL-AMT	ON-COL
Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
187 Total Benzofluoranthenes	252	25.345	25.384	(0.969)	166211	1.00000	0.9688
120 2,3,4,6-Tetrachlorophenol	232	16.152	16.152	(1.046)	21645	0.50000	0.3154

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162307.D
Lab Smp Id: SLE0338-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	324107	12.90
27 Naphthalene-d8	1056758	528379	2113516	1038534	-1.72
42 Acenaphthene-d10	587510	293755	1175020	548179	-6.69
59 Phenanthrene-d10	933575	466788	1867150	888076	-4.87
69 Chrysene-d12	576570	288285	1153140	524160	-9.09
134 Di-n-octylphthala	1181651	590826	2363302	1033662	-12.52
77 Perylene-d12	491359	245680	982718	482063	-1.89

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	0.00
69 Chrysene-d12	23.46	22.96	23.96	23.45	-0.05
134 Di-n-octylphthala	24.47	23.97	24.97	24.45	-0.05
77 Perylene-d12	26.15	25.65	26.65	26.15	0.00

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

REVIEW SUMMARY FOR FILE - NT1705162307.D

Lab ID: SLE0338-CAL2
nt17.i, ABN.m, 16-MAY-2023 21:59

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

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.952	0.958	-0.0064	Benzoic acid
1.008	0.000	1.0083	2,4-Dinitrophenol

RRT check based on Ccal File: NT1705162308.D

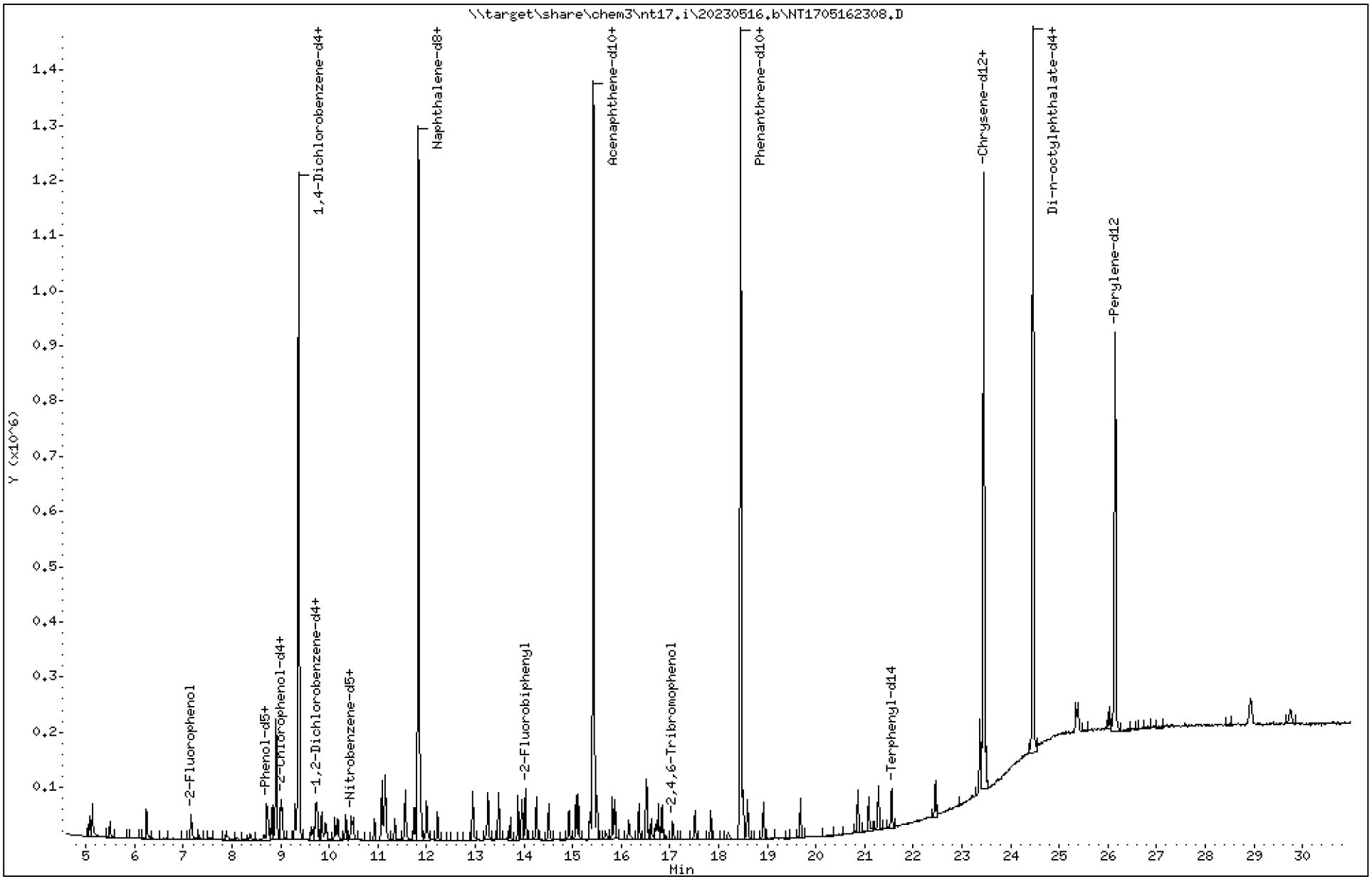
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162308.D
Date : 16-MAY-2023 22:37
Client ID:
Sample Info: SLE0338-CAL1

Instrument: nt17.i
Operator: JGR
Column diameter: 0.25

Column phase: ZB-5msi



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162308.D
Lab Smp Id: SLE0338-CAL1
Inj Date : 16-MAY-2023 22:37
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-CAL1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 8 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.161	7.161	(0.765)	27028	0.30000	0.2418
$	2 Phenol-d5	99	8.715	8.715	(0.931)	37831	0.30000	0.2557
	3 Phenol	94	8.740	8.740	(0.933)	25873	0.20000	0.1651
$	5 2-Chlorophenol-d4	132	9.008	9.008	(0.962)	31881	0.30000	0.2691
	4 Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	22277	0.20000	0.1950
	6 2-Chlorophenol	128	9.033	9.033	(0.965)	25602	0.20000	0.1957
	7 1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	25672	0.20000	0.1939
*	8 1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	341484	4.00000	
	9 1,4-Dichlorobenzene	146	9.391	9.391	(1.003)	24115	0.20000	0.1826
$	10 1,2-Dichlorobenzene-d4	152	9.723	9.723	(1.038)	15031	0.20000	0.1805
	12 1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	22875	0.20000	0.1842
	11 Benzyl alcohol	108	9.633	9.633	(1.029)	11971	0.20000	0.1641
	14 2,2'-oxybis(1-Chloropropane)	121	9.914	9.914	(1.059)	6536	0.20000	0.1868
	13 2-Methylphenol	108	9.851	9.851	(1.052)	19720	0.20000	0.1712
	17 Hexachloroethane	117	10.336	10.336	(1.104)	9447	0.20000	0.1788
	16 N-Nitroso-di-n-propylamine	70	10.170	10.170	(1.086)	15752	0.20000	0.1788
	15 4-Methylphenol	108	10.119	10.119	(1.080)	19940	0.20000	0.1701
$	18 Nitrobenzene-d5	82	10.451	10.451	(0.883)	23337	0.20000	0.1873
	19 Nitrobenzene	77	10.489	10.489	(0.887)	22227	0.20000	0.1870
	20 Isophorone	82	10.924	10.924	(0.923)	28856	0.20000	0.1773
	21 2-Nitrophenol	139	11.115	11.115	(0.940)	8750	0.20000	0.1527
	22 2,4-Dimethylphenol	107	11.154	11.154	(0.943)	42572	0.40000	0.3828
	23 Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.959)	19965	0.20000	0.2002
	24 Benzoic acid	105	11.332	11.333	(0.958)	10264	0.80000	0.1372(M)
	25 2,4-Dichlorophenol	162	11.562	11.562	(0.977)	35162	0.40000	0.3934
	26 1,2,4-Trichlorobenzene	180	11.753	11.753	(0.994)	19725	0.20000	0.2032
*	27 Naphthalene-d8	136	11.830	11.830	(1.000)	1094850	4.00000	
	28 Naphthalene	128	11.881	11.881	(1.004)	60831	0.20000	0.2020
	29 4-Chloroaniline	127	11.995	11.995	(1.014)	44419	0.40000	0.3743
	30 Hexachlorobutadiene	225	12.225	12.225	(1.033)	9342	0.20000	0.1943
	31 4-Chloro-3-methylphenol	107	12.952	12.952	(1.095)	32908	0.40000	0.3419
	32 2-Methylnaphthalene	142	13.258	13.258	(1.121)	42140	0.20000	0.1955
	33 Hexachlorocyclopentadiene	237	13.730	13.730	(0.890)	9893	0.40000	0.1835

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.900)	19996	0.40000	0.3296
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.905)	20986	0.40000	0.3268
$	36	2-Fluorobiphenyl	172	14.036	14.036	(0.910)	45673	0.20000	0.1999
	37	2-Chloronaphthalene	162	14.253	14.253	(0.924)	37466	0.20000	0.2022
	38	2-Nitroaniline	65	14.508	14.508	(0.940)	19399	0.40000	0.3091
	39	Dimethylphthalate	163	14.929	14.929	(0.968)	40042	0.20000	0.2007
	40	Acenaphthylene	152	15.120	15.120	(0.980)	59033	0.20000	0.2006
	41	2,6-Dinitrotoluene	165	15.069	15.069	(0.977)	16463	0.40000	0.3524
*	42	Acenaphthene-d10	164	15.426	15.426	(1.000)	579868	4.00000	
	43	3-Nitroaniline	138	15.349	15.349	(0.995)	14982	0.40000	0.3463
	44	Acenaphthene	153	15.502	15.502	(1.005)	36099	0.20000	0.1962
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	15.821	15.821	(1.026)	51523	0.20000	0.2007
	47	4-Nitrophenol	109	15.681	15.681	(1.017)	5047	0.40000	0.1756
	48	2,4-Dinitrotoluene	165	15.872	15.872	(1.029)	19047	0.40000	0.3115
	50	Diethylphthalate	149	16.369	16.369	(1.061)	37772	0.20000	0.1941
	49	Fluorene	166	16.535	16.535	(1.072)	40483	0.20000	0.1658
	51	4-Chlorophenyl-phenylether	204	16.509	16.509	(1.070)	22836	0.20000	0.2035
	52	4-Nitroaniline	138	16.611	16.611	(1.077)	13985	0.40000	0.3415
	53	4,6-Dinitro-2-methylphenol	198	16.713	16.713	(0.905)	7965	0.80000	0.2103
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	26692	0.20000	0.2008
$	55	2,4,6-Tribromophenol	330	17.069	17.070	(1.107)	4749	0.30000	0.1878
	56	4-Bromophenyl-phenylether	248	17.515	17.515	(0.949)	8736	0.20000	0.1876
	57	Hexachlorobenzene	284	17.833	17.833	(0.966)	9448	0.20000	0.1991
	58	Pentachlorophenol	266	18.203	18.203	(0.986)	3229	0.40000	0.1174
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	948879	4.00000	
	60	Phenanthrene	178	18.496	18.496	(1.002)	54331	0.20000	0.1962
	61	Anthracene	178	18.598	18.598	(1.008)	47680	0.20000	0.1834
	62	Carbazole	167	18.917	18.918	(1.025)	45854	0.20000	0.2910
	63	Di-n-butylphthalate	149	19.682	19.682	(1.066)	56086	0.20000	0.1787
	64	Fluoranthene	202	20.855	20.855	(0.890)	49545	0.20000	0.1878
	65	Pyrene	202	21.276	21.276	(0.908)	52513	0.20000	0.1963
$	66	Terphenyl-d14	244	21.557	21.557	(0.919)	38669	0.20000	0.2033
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	22316	0.20000	0.1864
	68	Benzo(a)anthracene	228	23.419	23.419	(0.999)	42397	0.20000	0.2041
*	69	Chrysene-d12	240	23.445	23.445	(1.000)	564132	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.997)	37419	0.60000	0.9301
	71	Chrysene	228	23.496	23.496	(1.002)	39277	0.20000	0.2009
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	30013	0.20000	0.1884
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1101082	4.00000	
	73	Di-n-octylphthalate	149	24.465	24.465	(1.000)	58994	0.20000	0.2114
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	42335	0.20000	0.2116
	75	Benzo(k)fluoranthene	252	25.384	25.384	(0.971)	36348	0.20000	0.1923(H)
	76	Benzo(a)pyrene	252	26.022	26.022	(0.995)	32521	0.20000	0.2064
*	77	Perylene-d12	264	26.149	26.149	(1.000)	504570	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.933	28.933	(1.106)	35590	0.20000	0.1947
	79	Dibenzo(a,h)anthracene	278	28.946	28.946	(1.107)	29300	0.20000	0.1910
	80	Benzo(g,h,i)perylene	276	29.751	29.751	(1.138)	29266	0.20000	0.1940
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	25862	0.40000	0.3468
	91	Aniline	93	8.830	8.830	(0.943)	44414	0.40000	0.3383
	93	Benzidine	184	21.085	21.085	(0.899)	38219	0.40000	0.5829
	103	Pyridine	79	5.122	5.122	(0.547)	43973	0.40000	0.3718
	105	1-methylnaphthalene	142	13.487	13.487	(1.140)	39142	0.20000	0.1957
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.092)	42979	0.20000	0.1892

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.384	25.384	(0.971)	70076	0.40000	0.3902
120 2,3,4,6-Tetrachlorophenol	232	16.152	16.152	(1.047)	8430	0.20000	0.1161

QC Flag Legend

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162308.D
Lab Smp Id: SLE0338-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	341484	18.95
27 Naphthalene-d8	1056758	528379	2113516	1094850	3.60
42 Acenaphthene-d10	587510	293755	1175020	579868	-1.30
59 Phenanthrene-d10	933575	466788	1867150	948879	1.64
69 Chrysene-d12	576570	288285	1153140	564132	-2.16
134 Di-n-octylphthala	1181651	590826	2363302	1101082	-6.82
77 Perylene-d12	491359	245680	982718	504570	2.69

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.83	-0.11
42 Acenaphthene-d10	15.44	14.94	15.94	15.43	-0.08
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.45	-0.05
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.15	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162308.D

Lab ID: SLE0338-CAL1
nt17.i, ABN.m, 16-MAY-2023 22:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

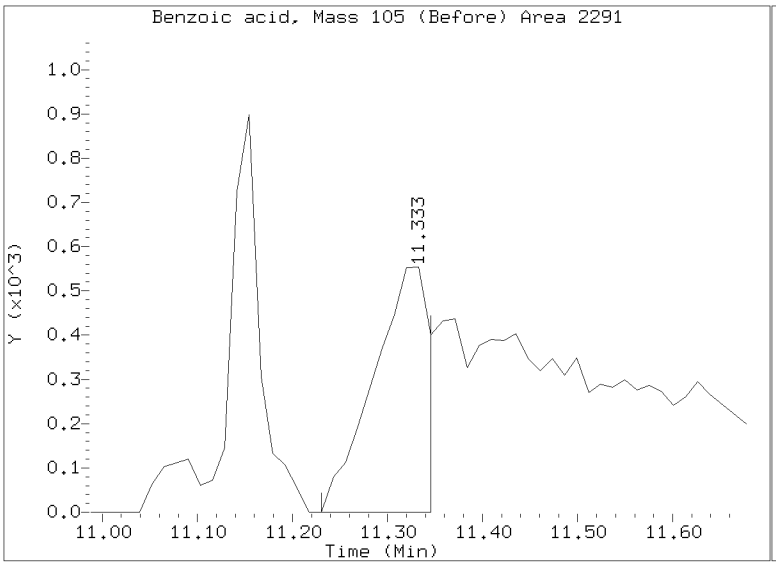
RRT check based on Ccal File: NT1705162308.D

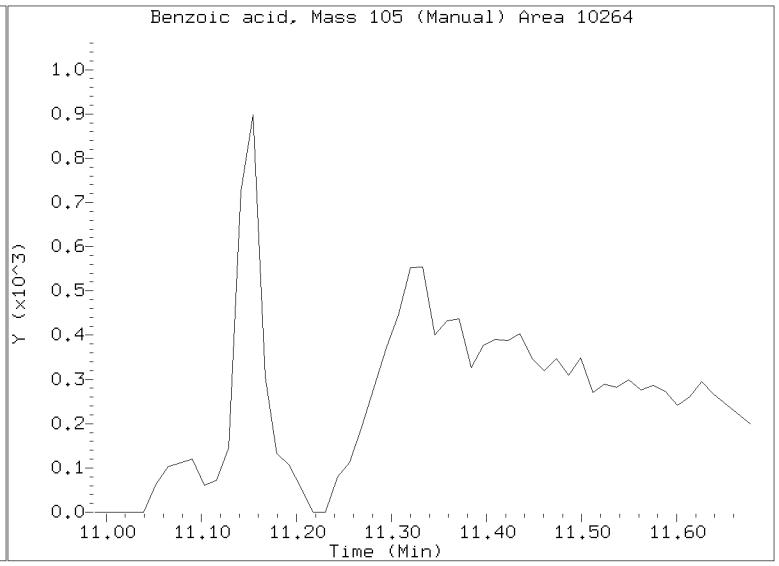
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/NT1705162308.D
Injection Date: 16-MAY-2023 22:37
Lab ID:SLE0338-CAL1 Client ID:
Report Date: 05/20/2023 12:56





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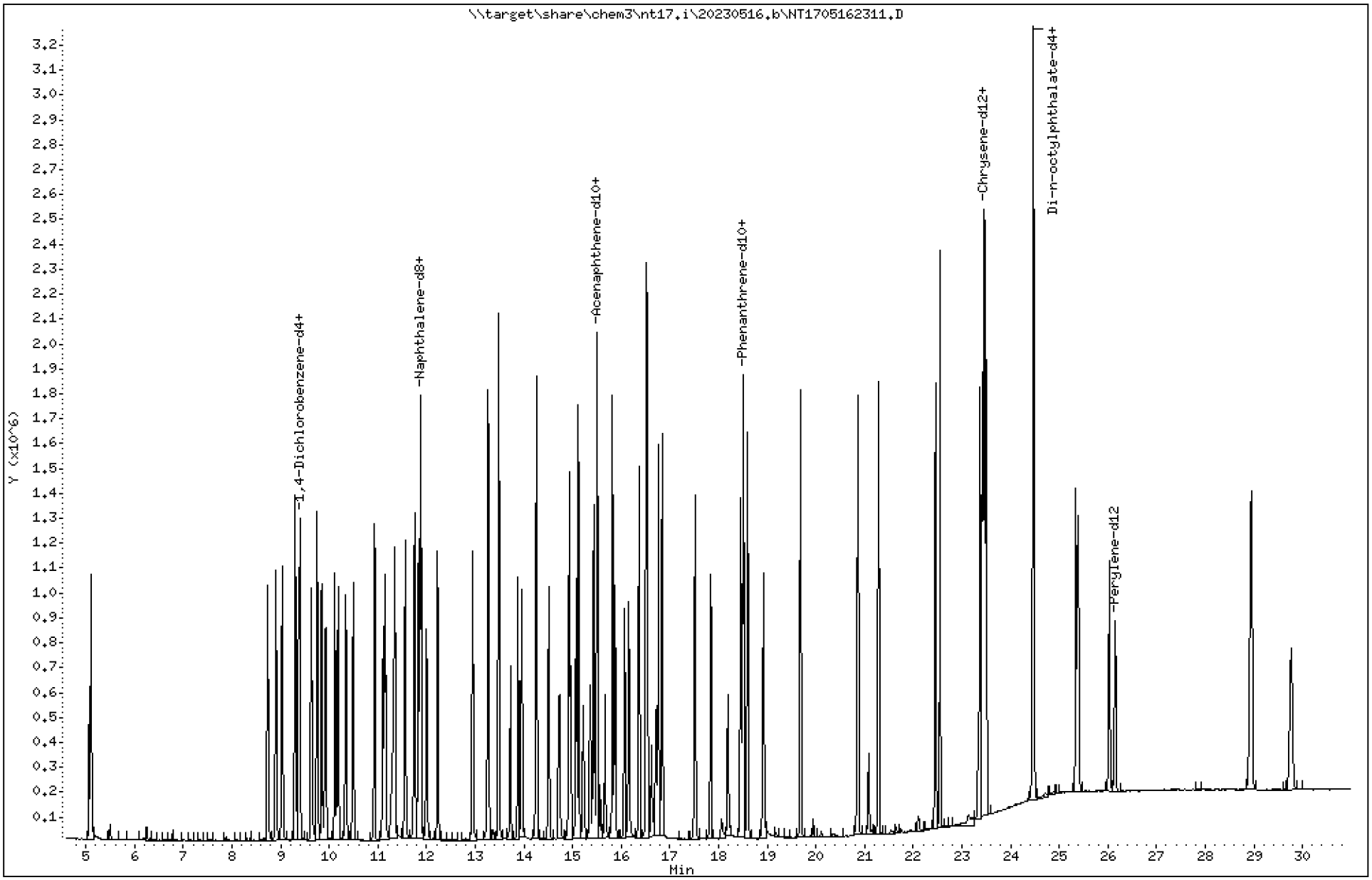
Date : 17-MAY-2023 00:29
Client ID:
Sample Info: SLE0338-SCV1

Instrument: nt17.i
Operator: JGR
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

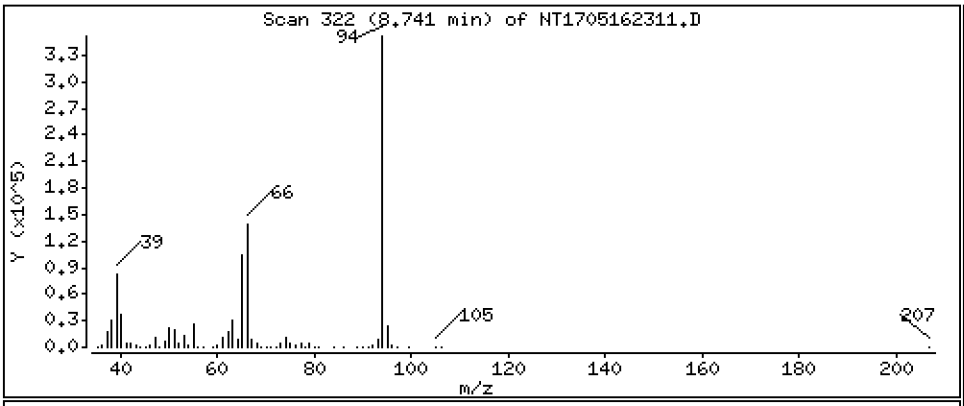
Operator: JGR

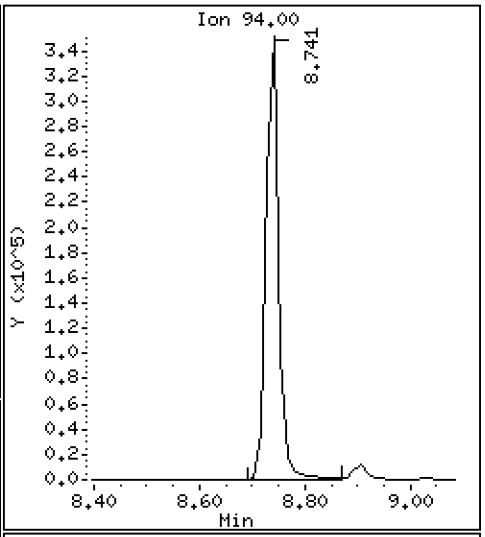
Column phase: ZB-5msi

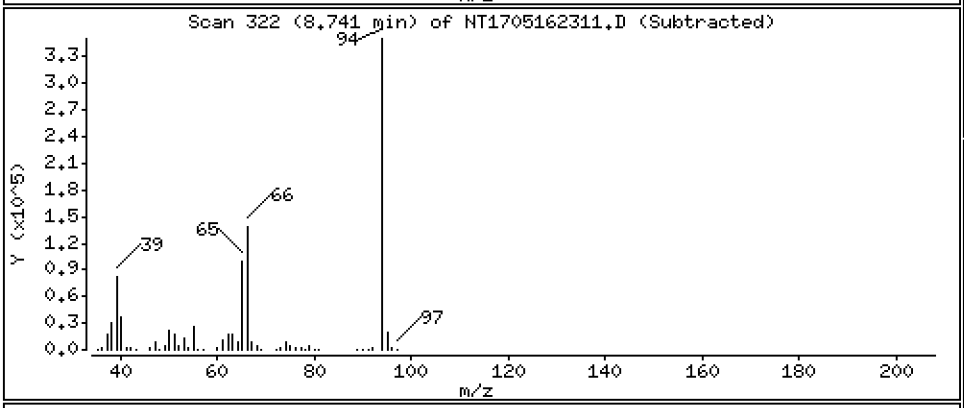
Column diameter: 0.25

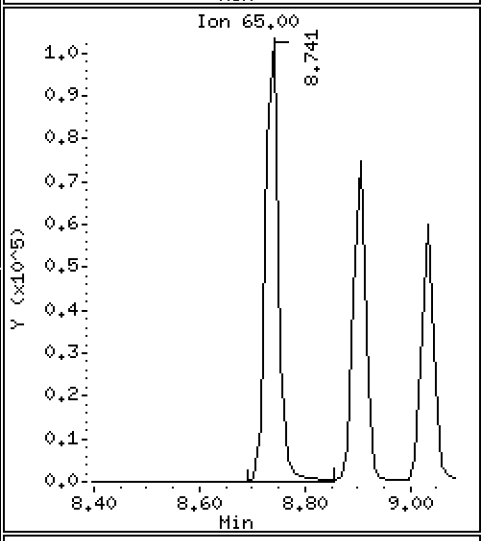
3 Phenol

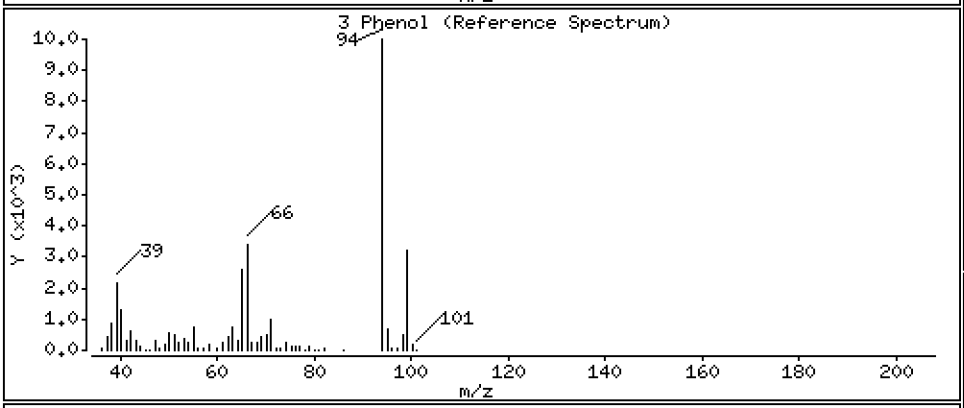
Concentration: 4.823 ug/mL

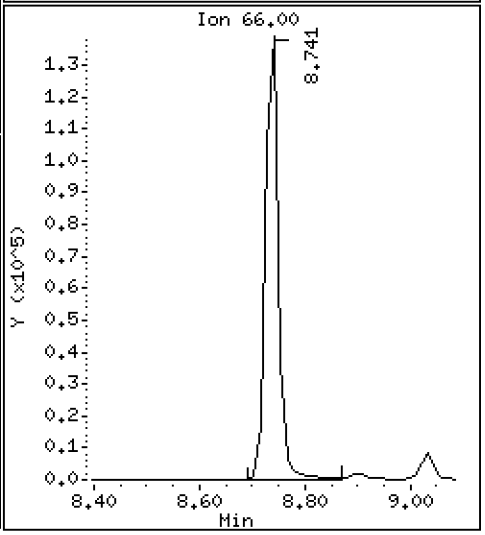


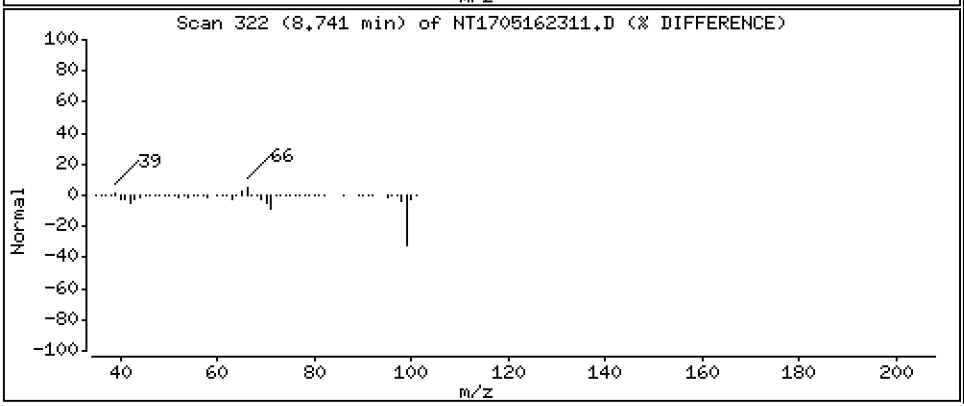












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

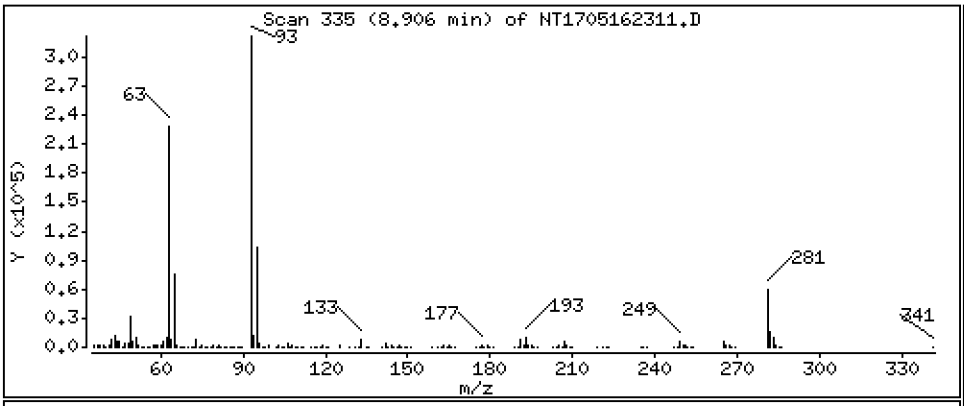
Operator: JGR

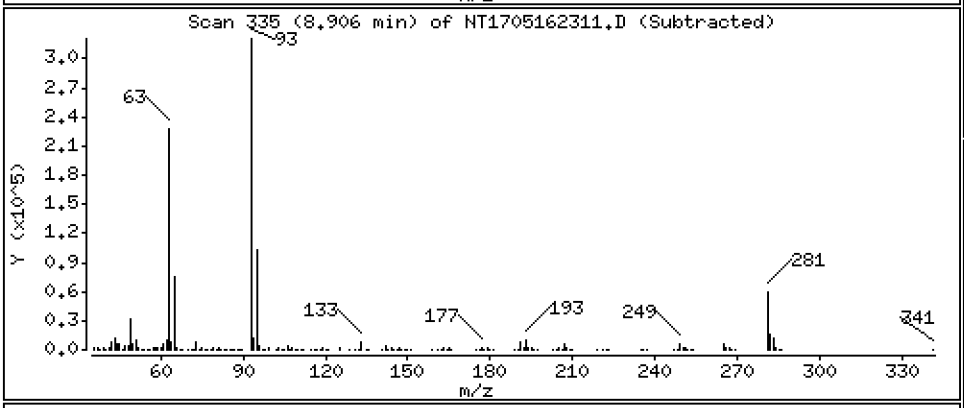
Column phase: ZB-5msi

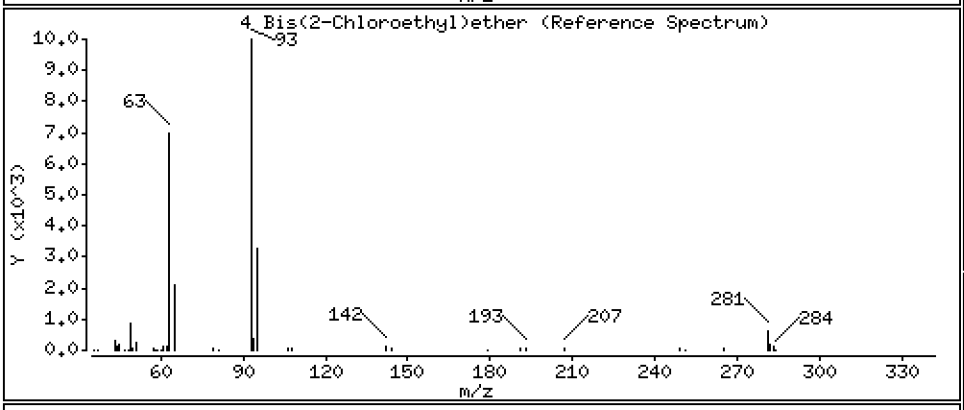
Column diameter: 0.25

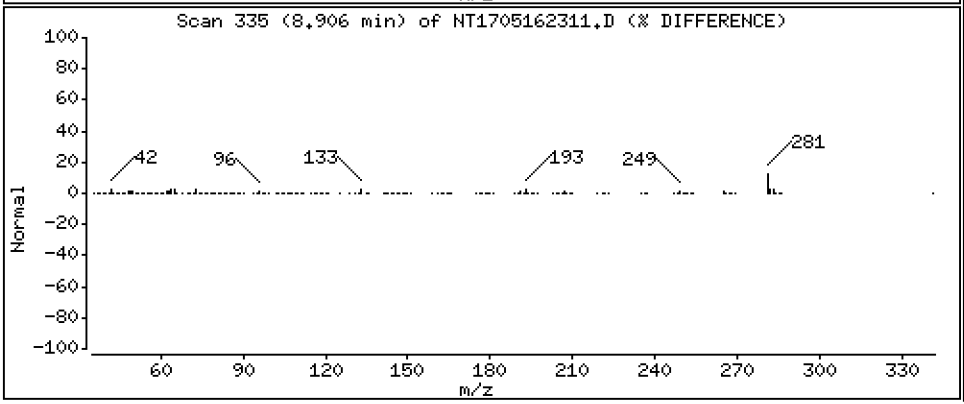
4 Bis(2-Chloroethyl)ether

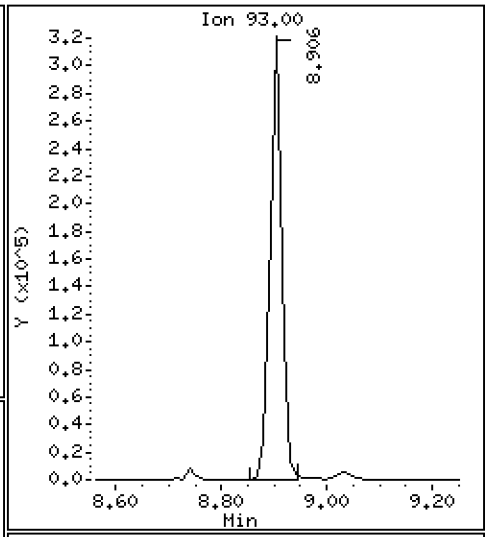
Concentration: 5.566 ug/mL

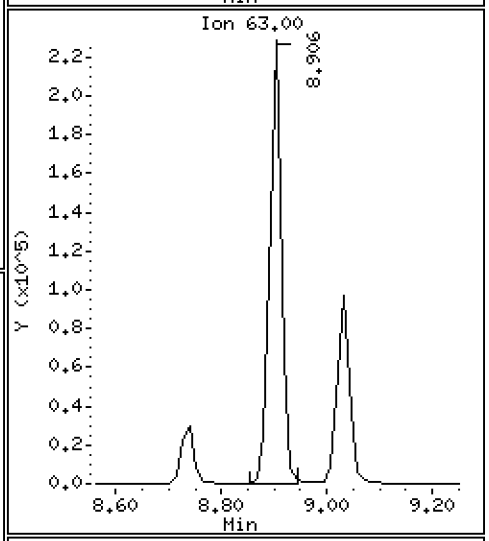


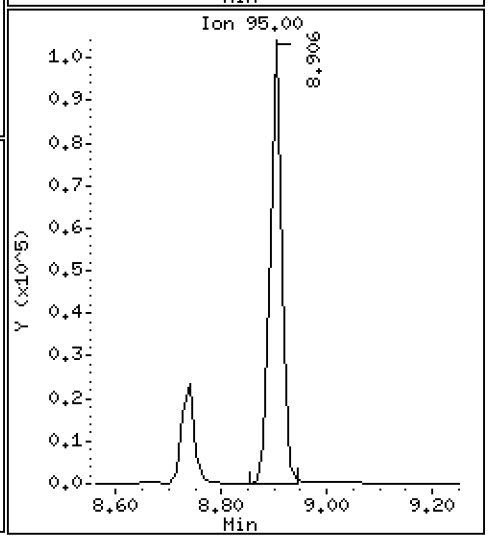












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

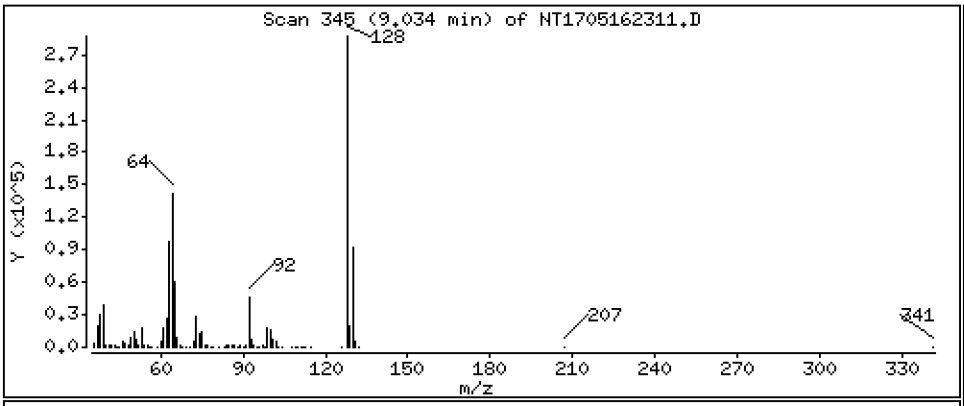
Operator: JGR

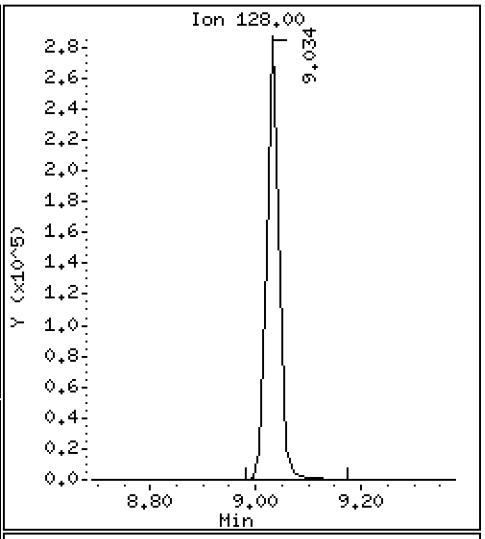
Column phase: ZB-5msi

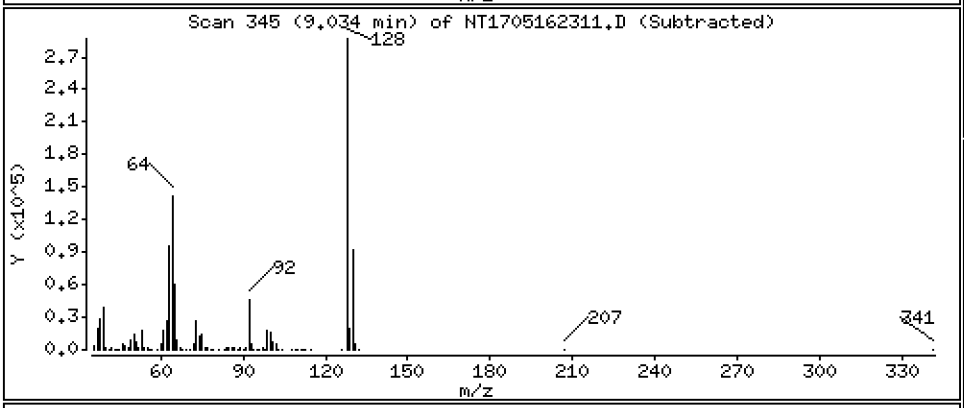
Column diameter: 0.25

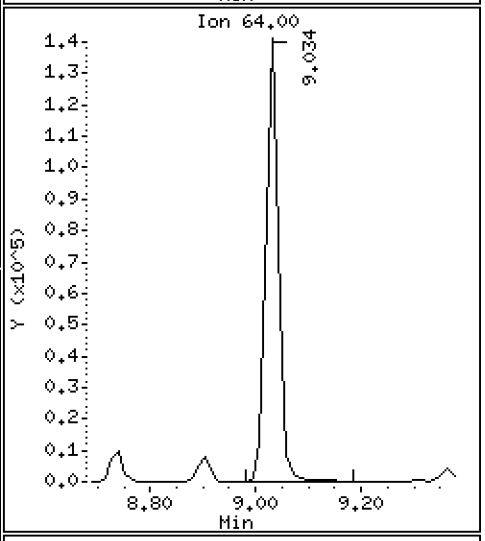
6 2-Chlorophenol

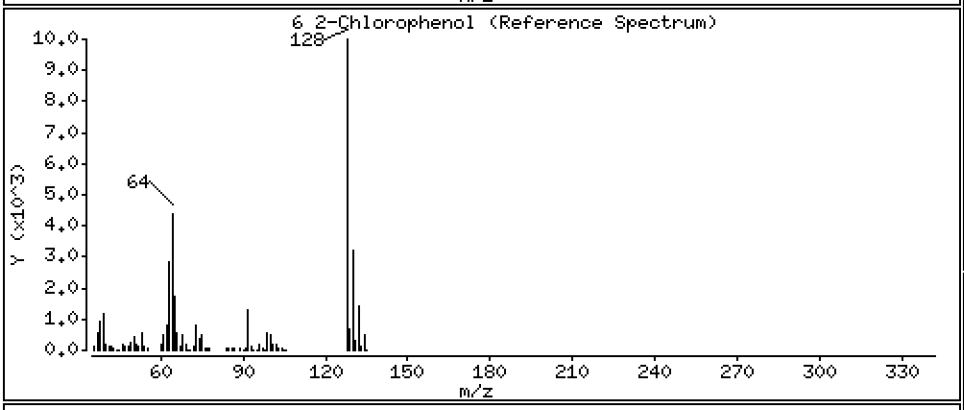
Concentration: 5.294 ug/mL

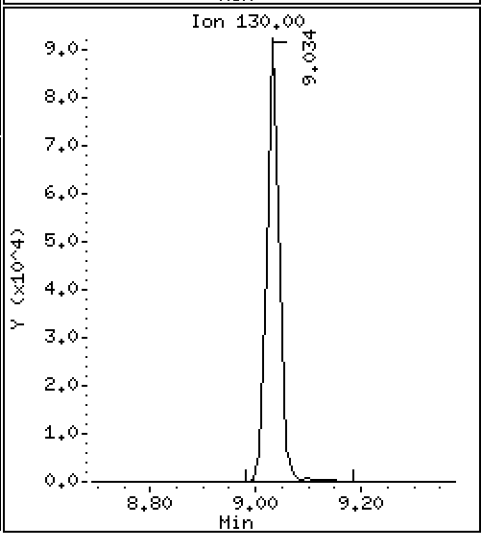


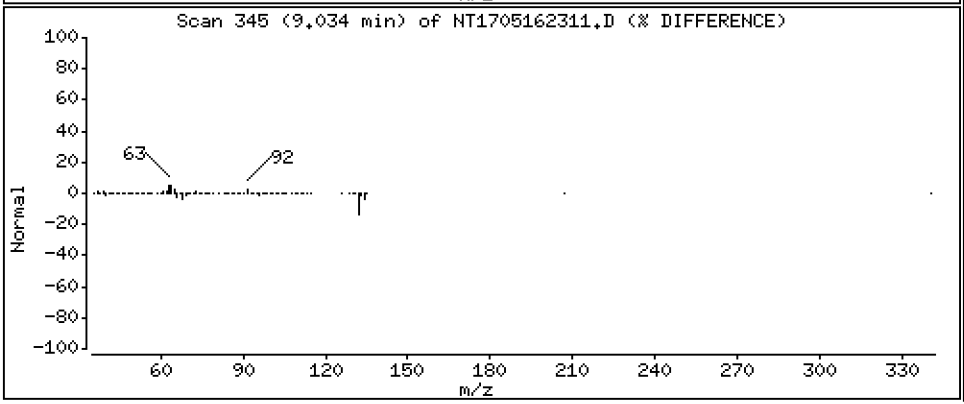












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

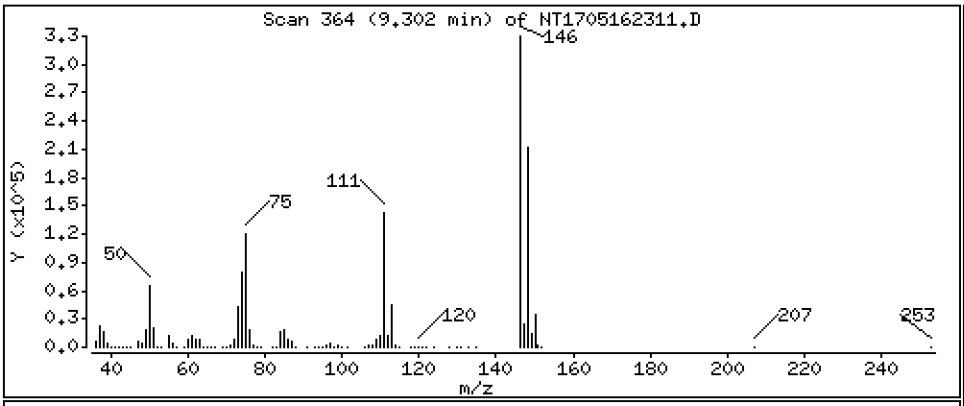
Operator: JGR

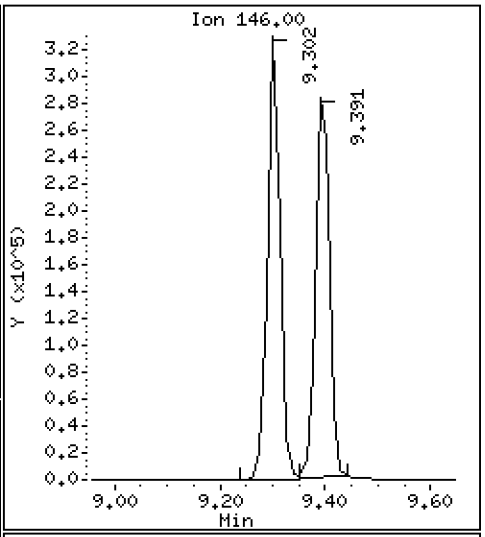
Column phase: ZB-5msi

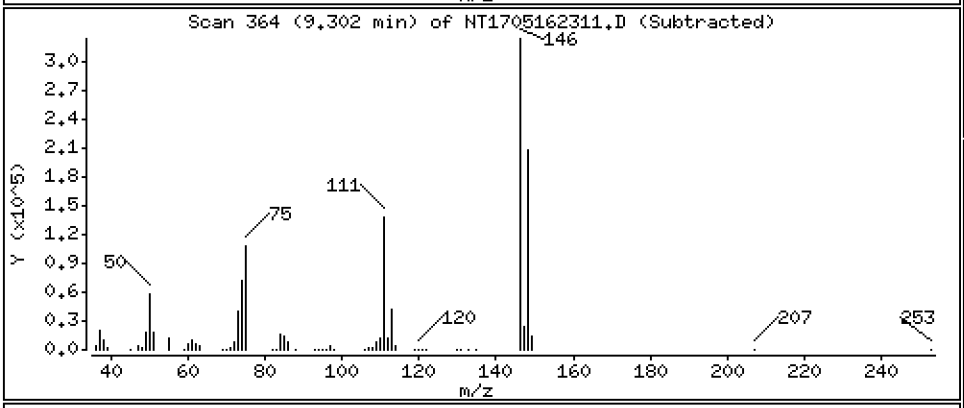
Column diameter: 0.25

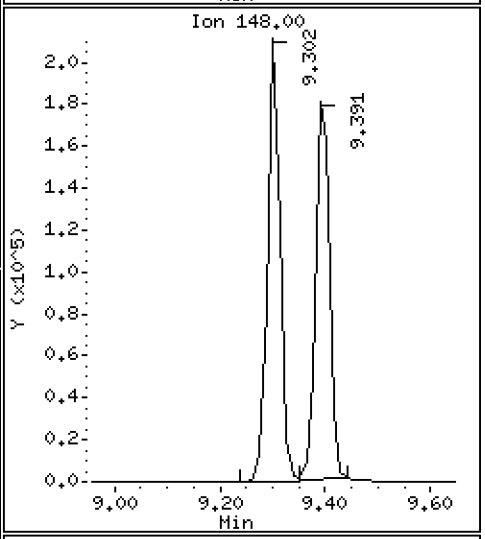
7 1,3-Dichlorobenzene

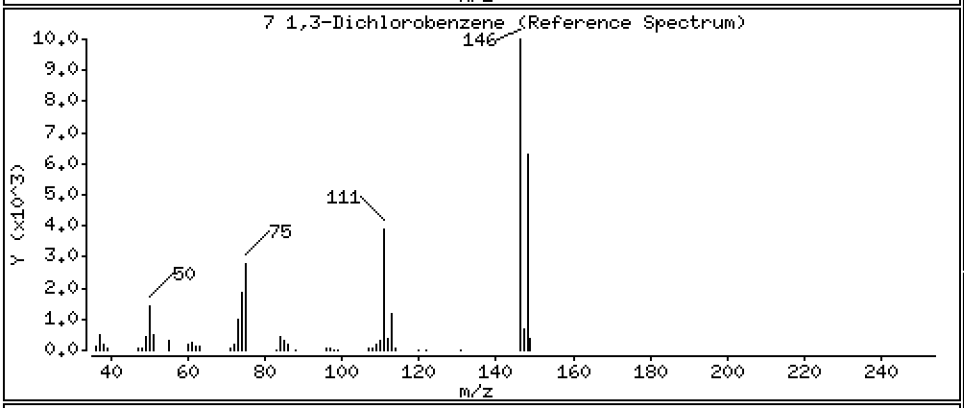
Concentration: 5.319 ug/mL

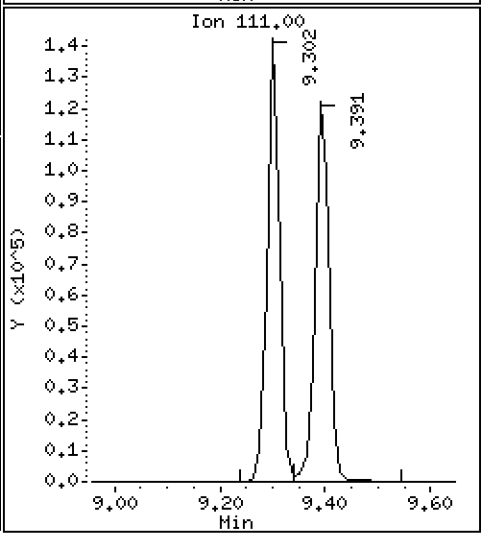


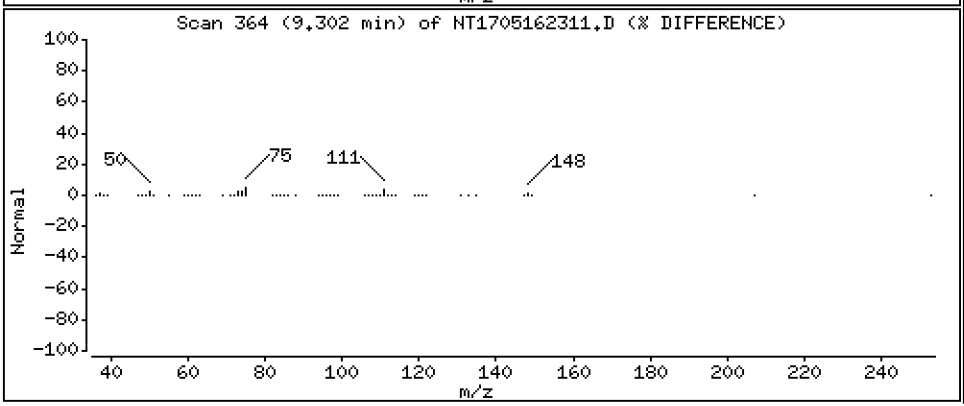












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

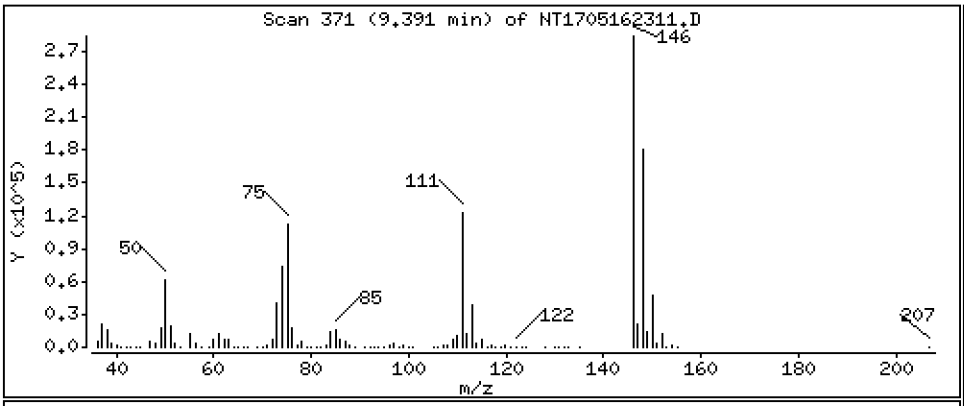
Operator: JGR

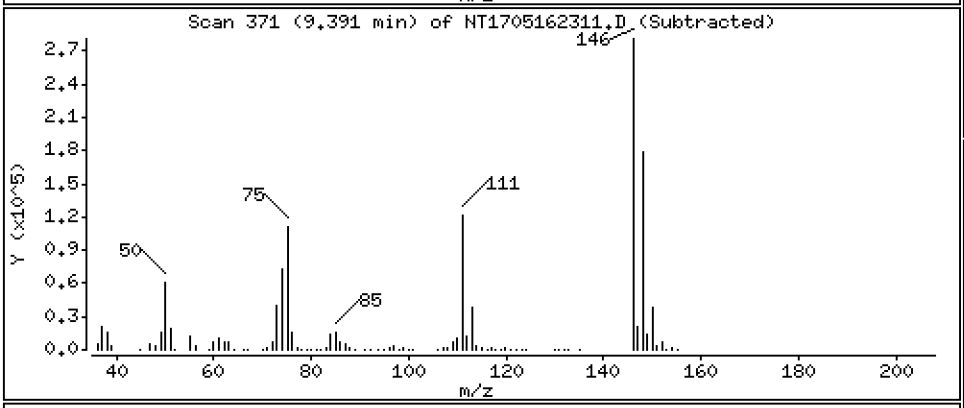
Column phase: ZB-5msi

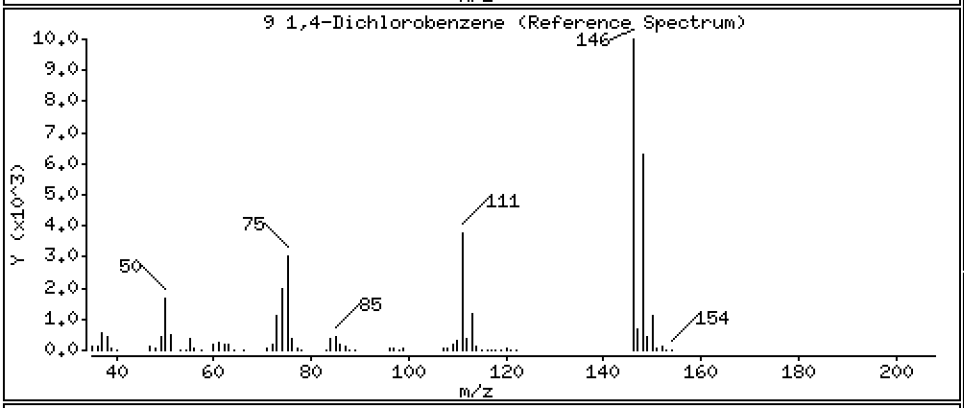
Column diameter: 0.25

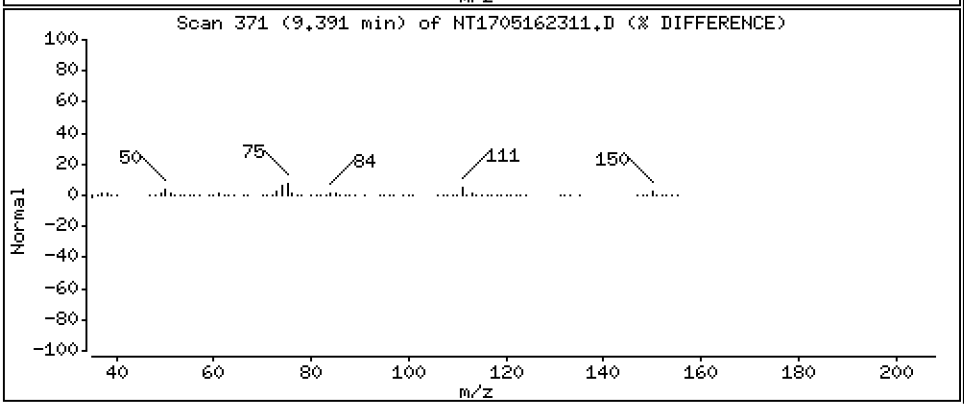
9 1,4-Dichlorobenzene

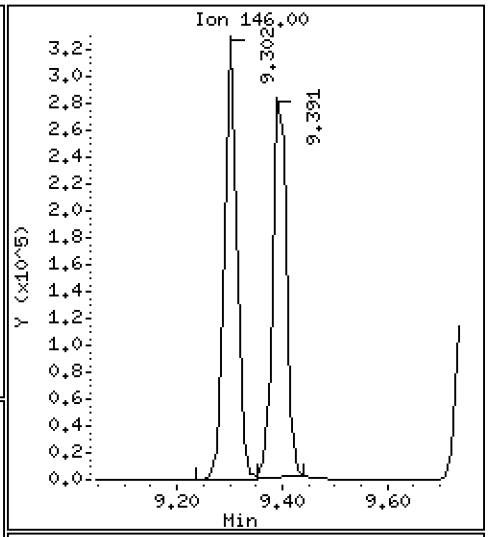
Concentration: 5.071 ug/mL

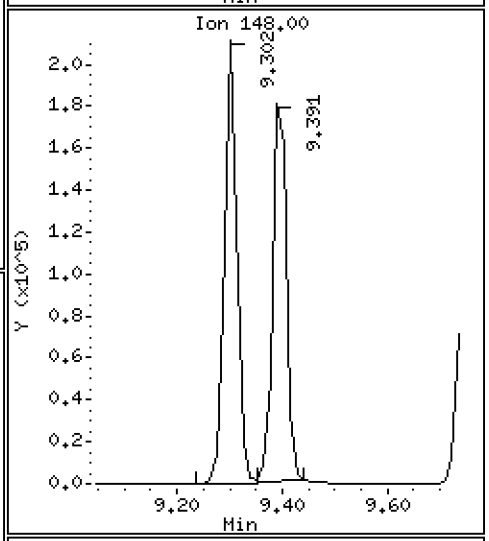


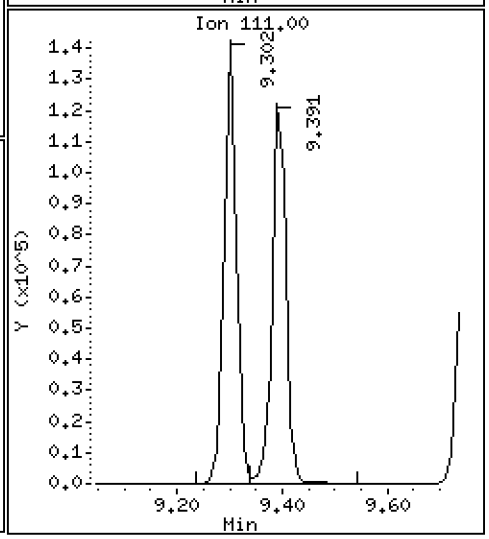












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

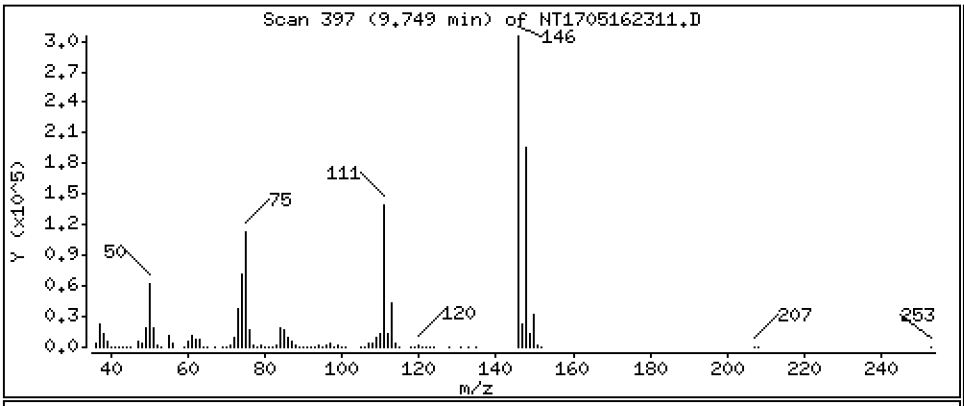
Operator: JGR

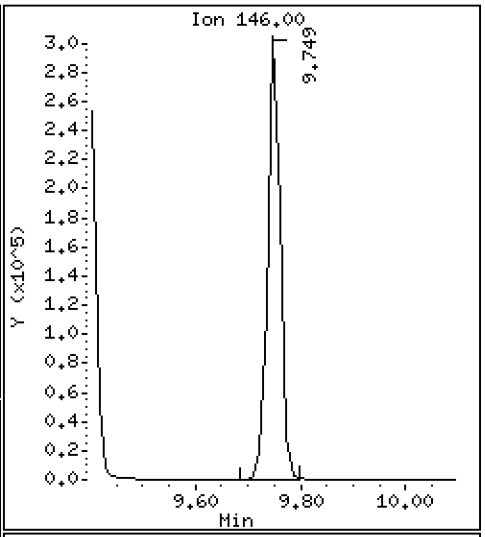
Column phase: ZB-5msi

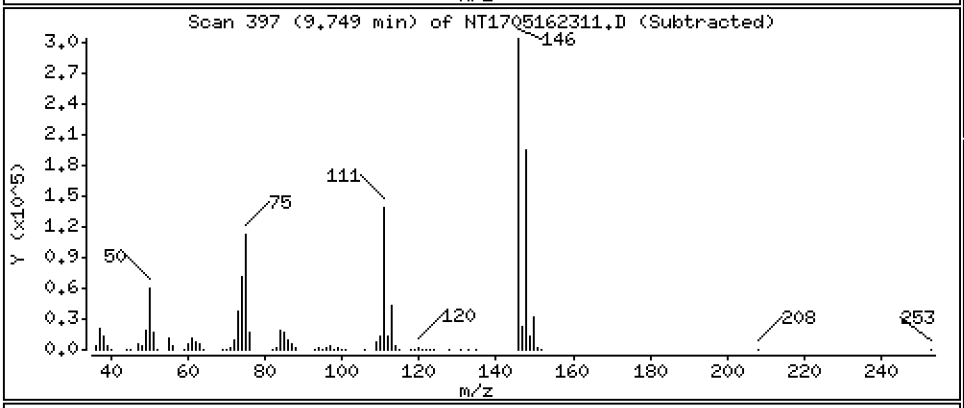
Column diameter: 0.25

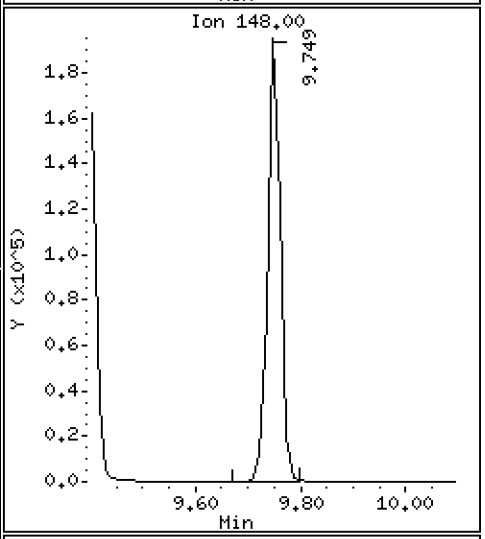
12 1,2-Dichlorobenzene

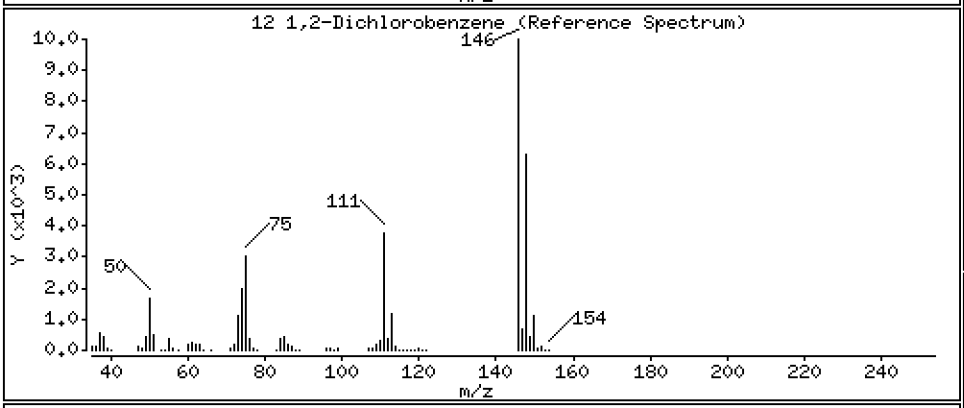
Concentration: 5.258 ug/mL

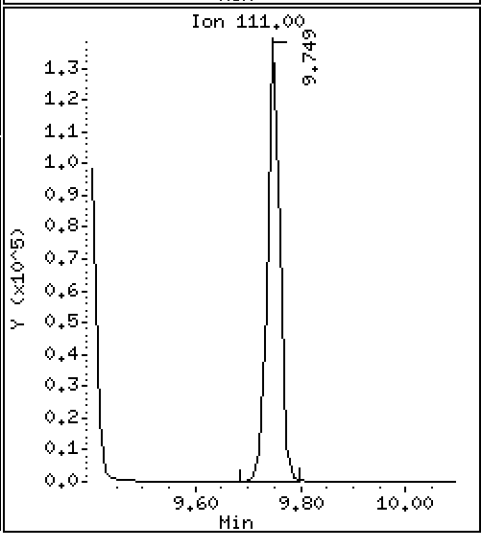


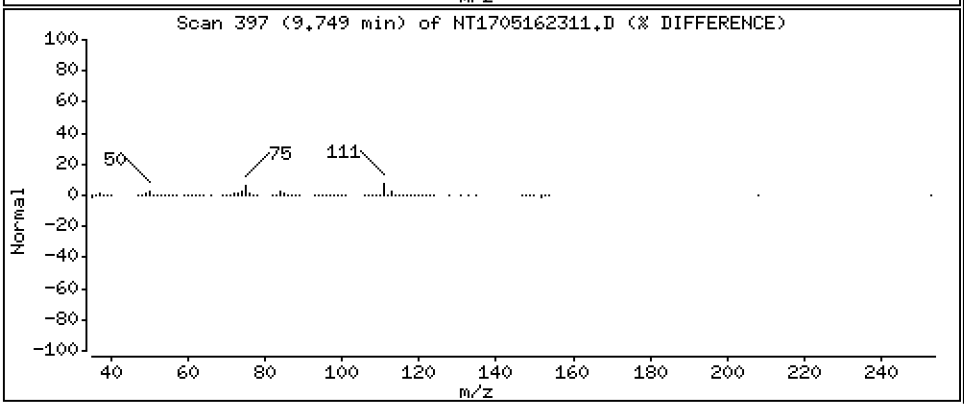












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

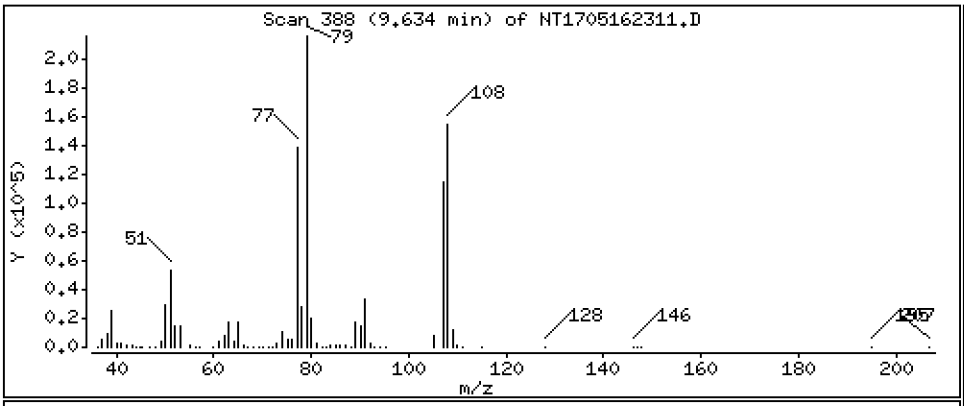
Operator: JGR

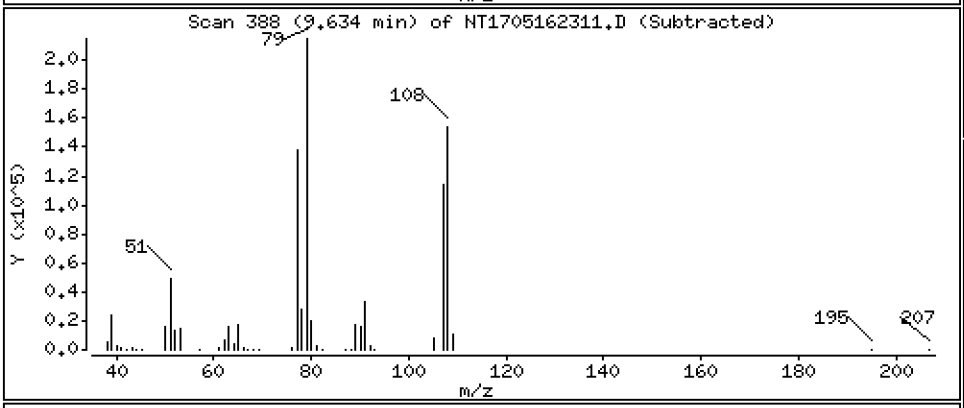
Column phase: ZB-5msi

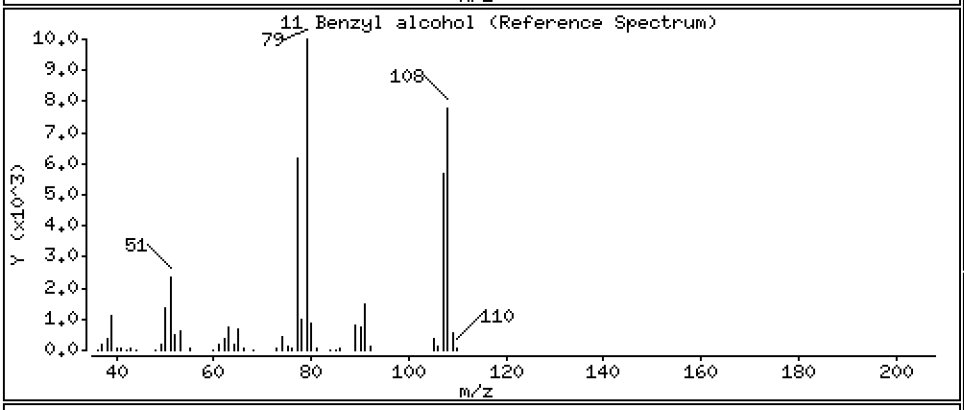
Column diameter: 0.25

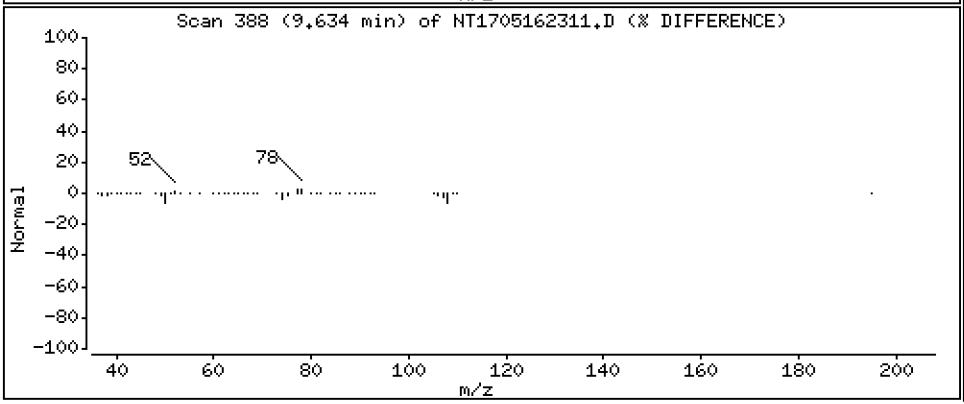
11 Benzyl alcohol

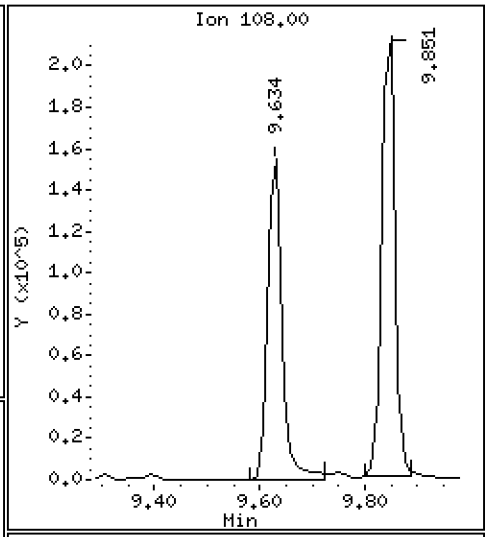
Concentration: 5.274 ug/mL

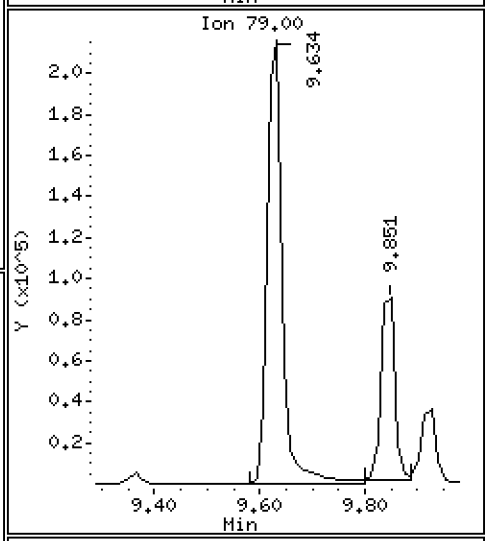


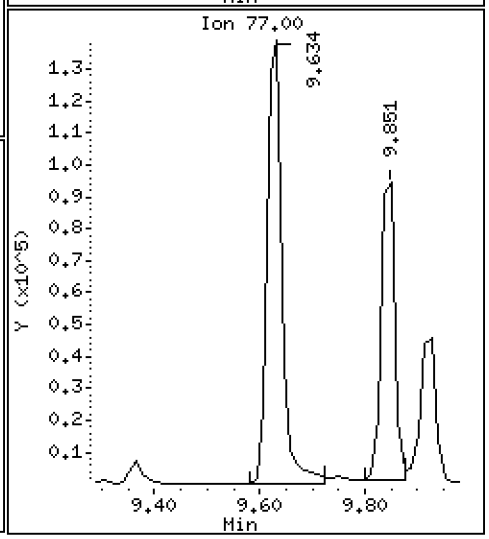












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

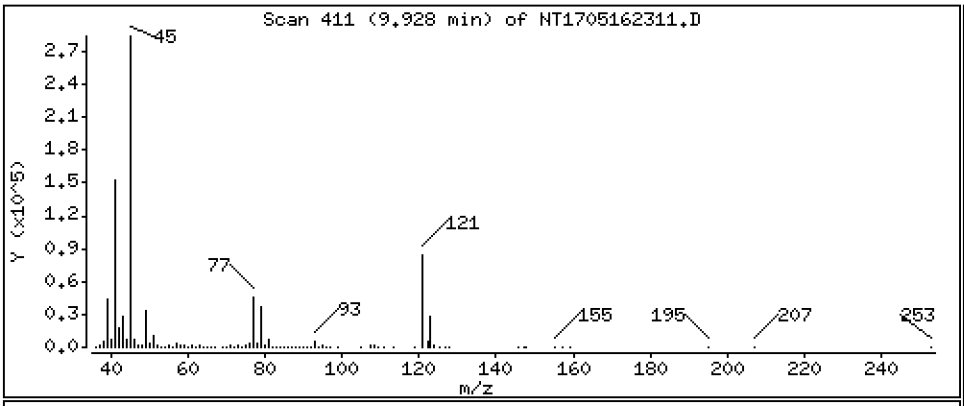
Operator: JGR

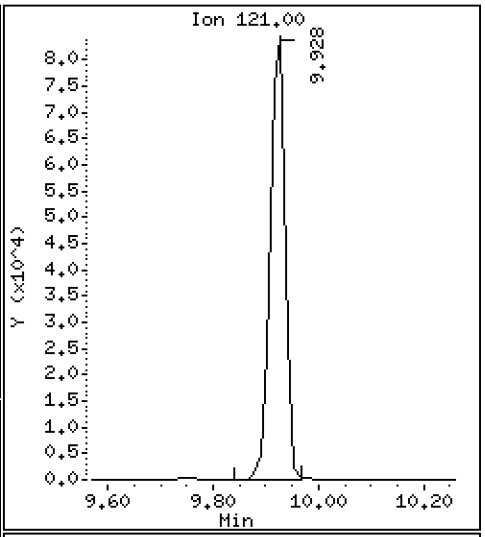
Column phase: ZB-5msi

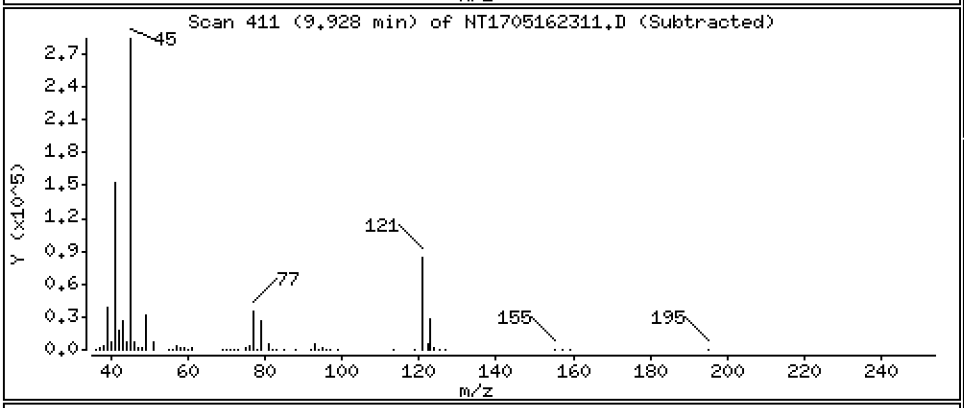
Column diameter: 0.25

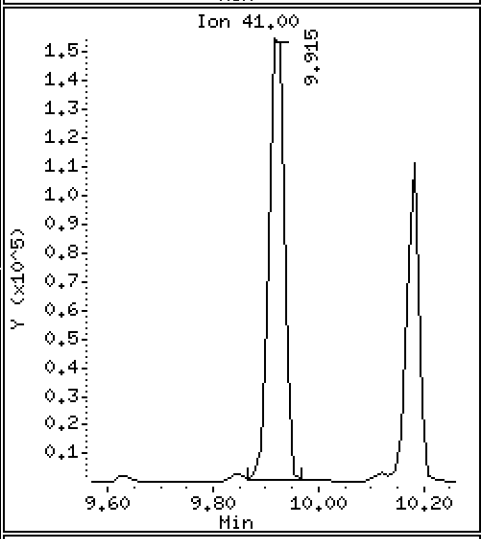
14 2,2'-oxybis(1-Chloropropane)

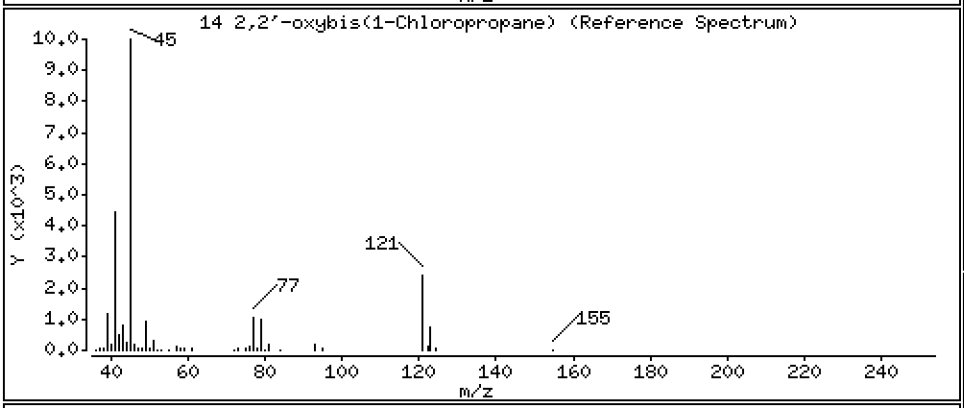
Concentration: 6.179 ug/mL

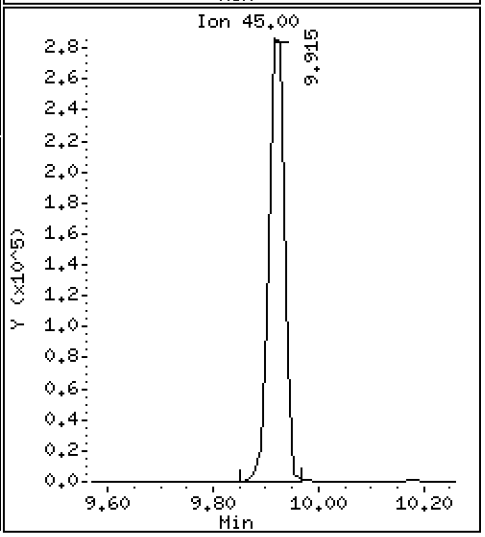


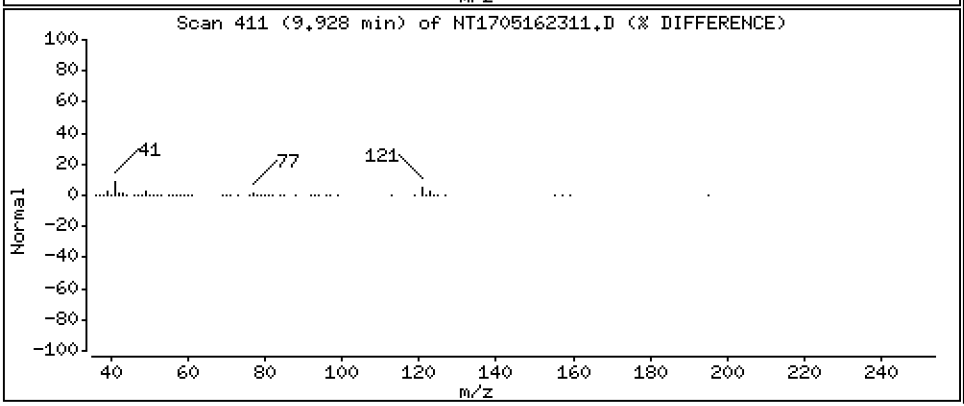












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

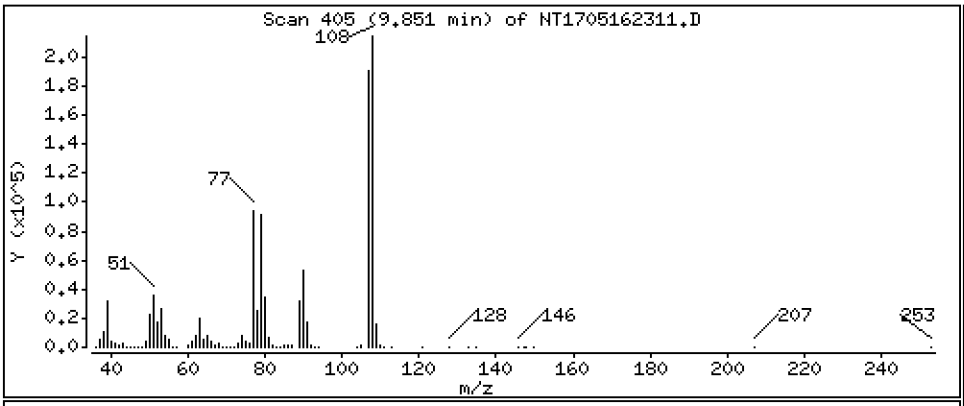
Operator: JGR

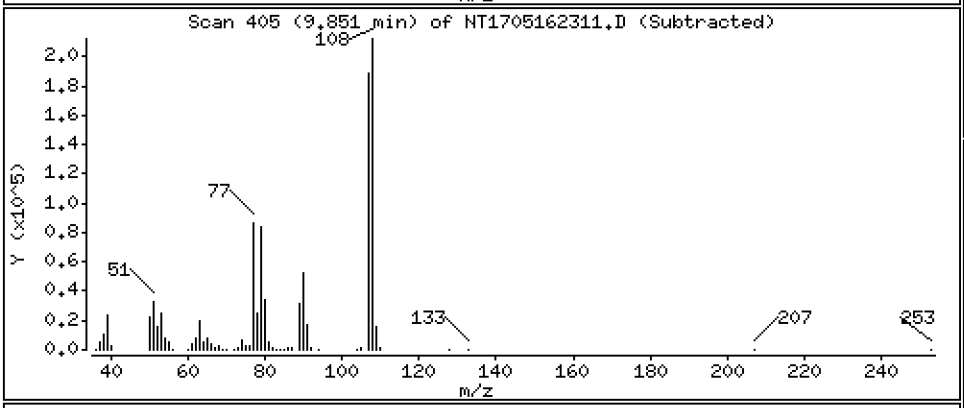
Column phase: ZB-5msi

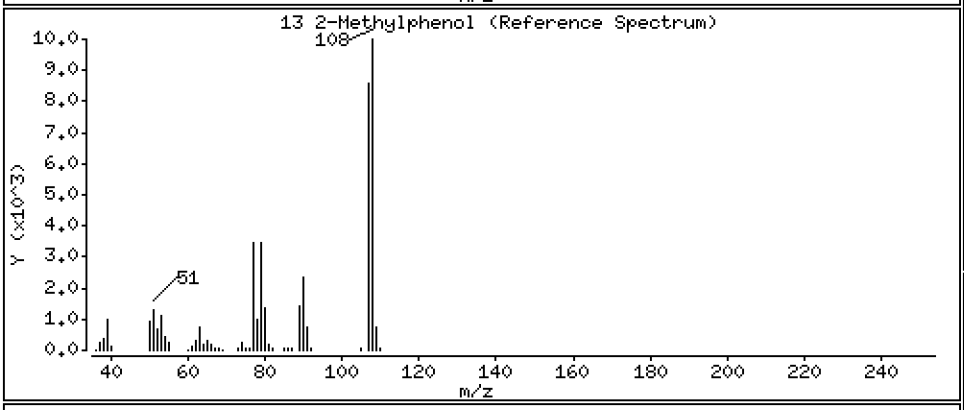
Column diameter: 0.25

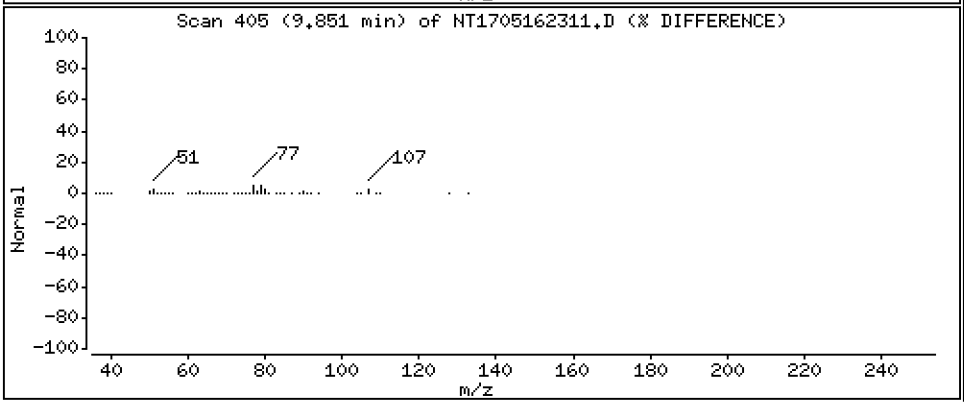
13 2-Methylphenol

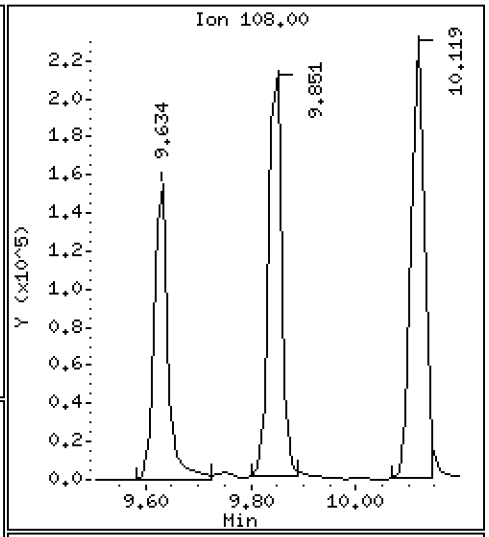
Concentration: 4.229 ug/mL

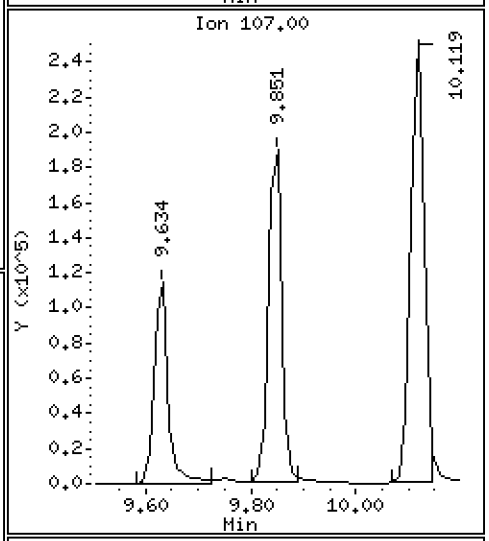


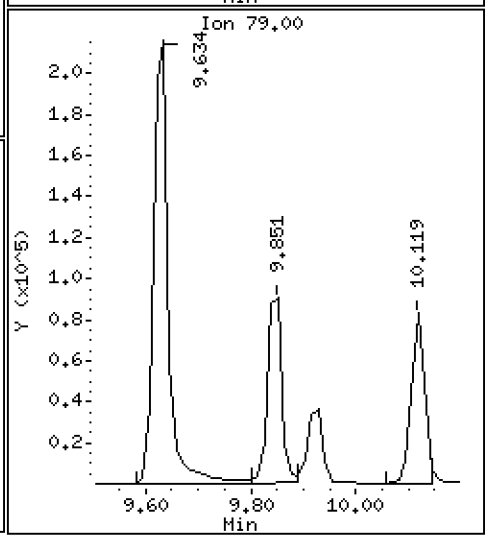












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

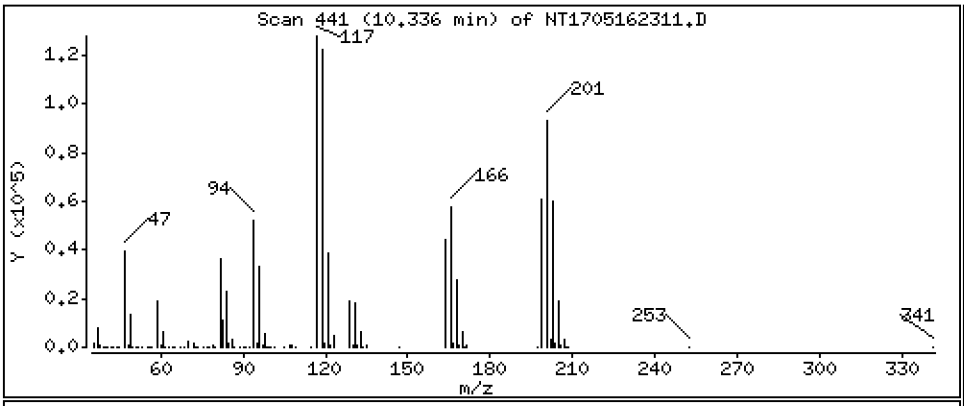
Operator: JGR

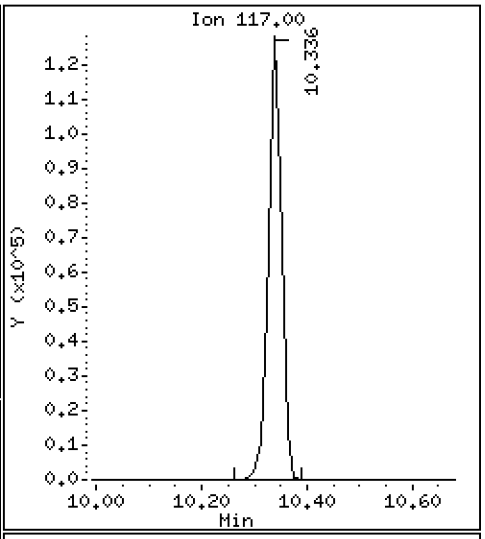
Column phase: ZB-5msi

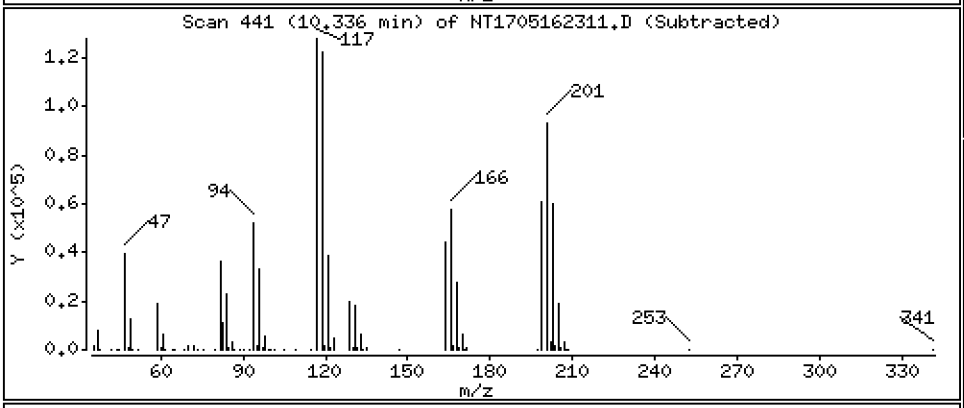
Column diameter: 0.25

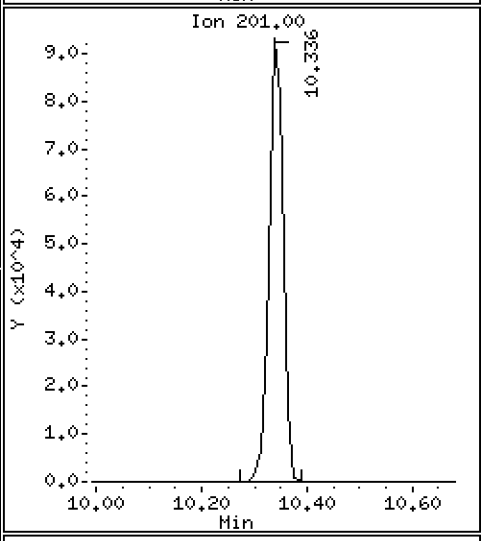
17 Hexachloroethane

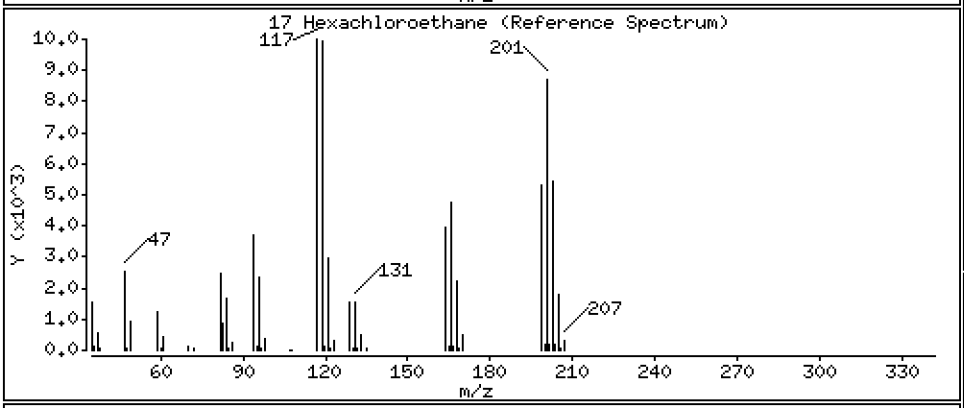
Concentration: 5.419 ug/mL

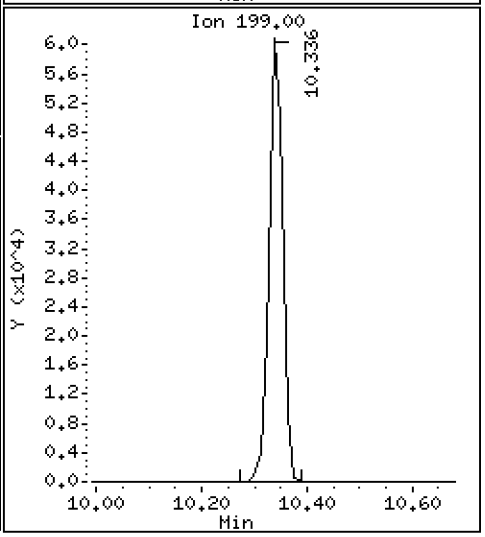


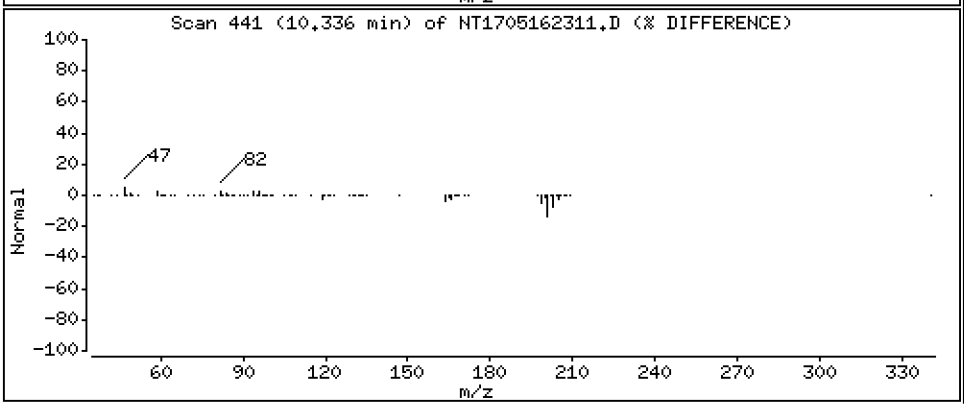












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

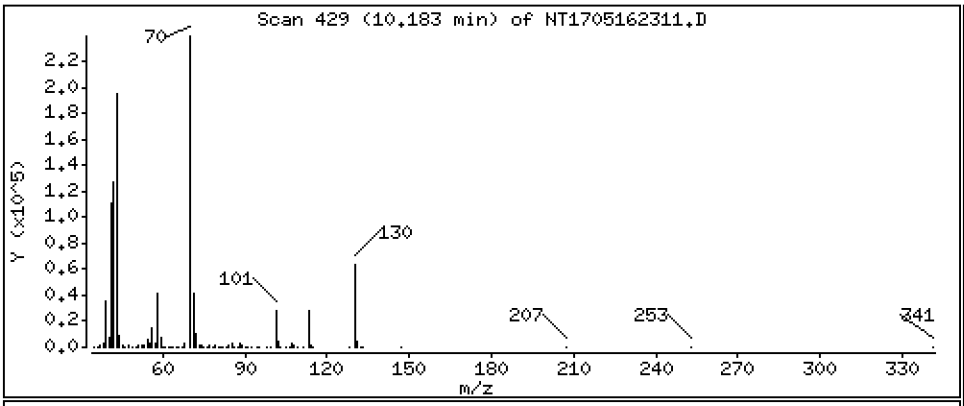
Operator: JGR

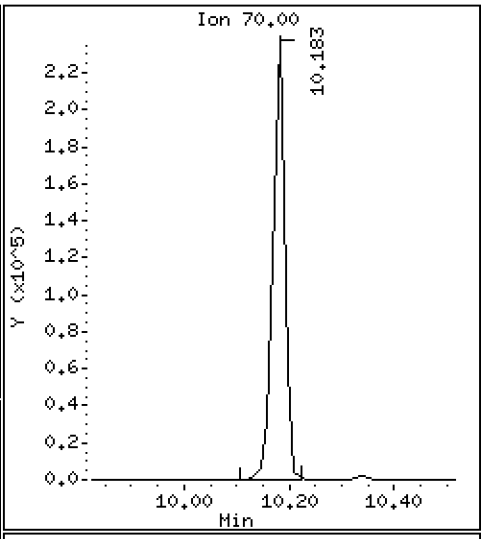
Column phase: ZB-5msi

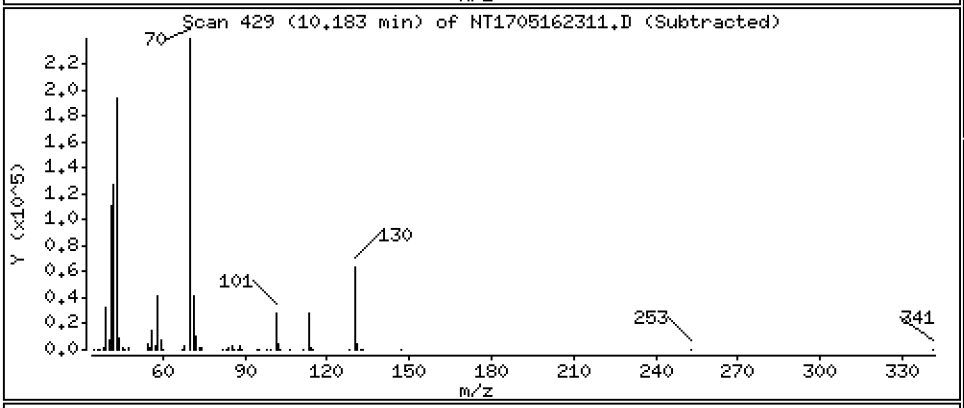
Column diameter: 0.25

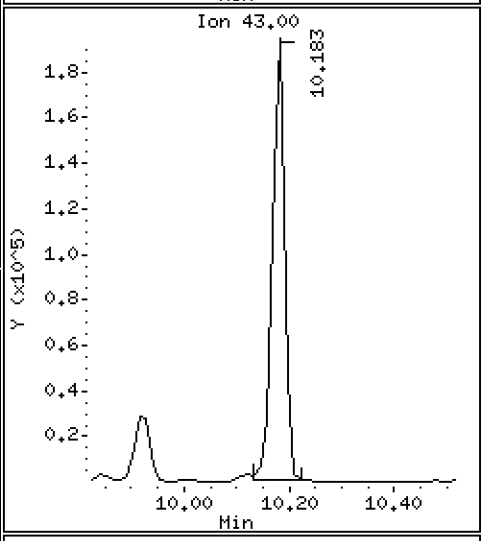
16 N-Nitroso-di-n-propylamine

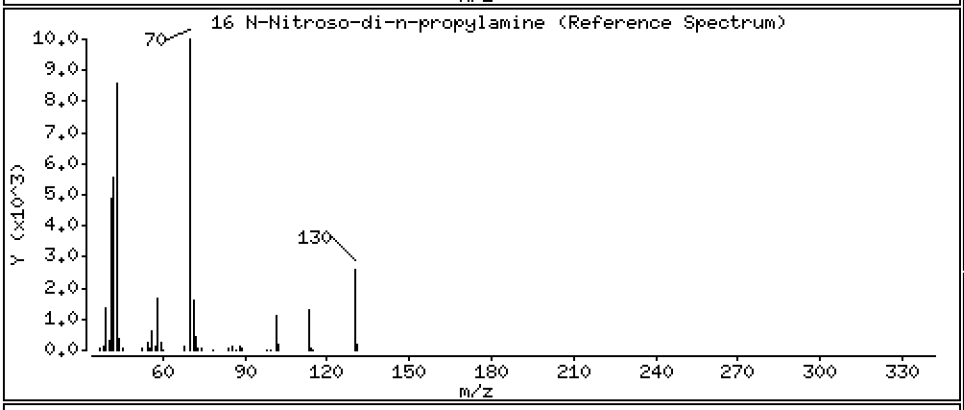
Concentration: 5.517 ug/mL

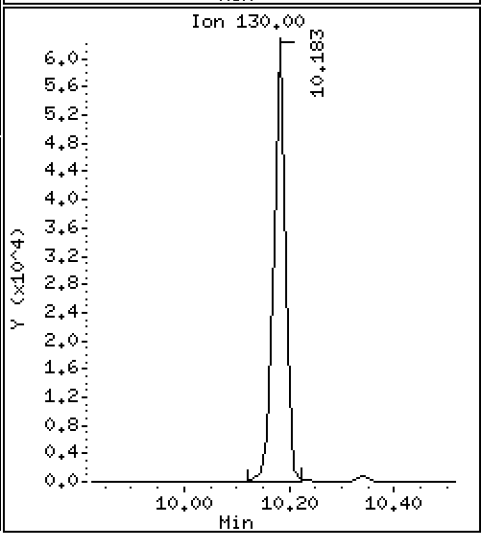


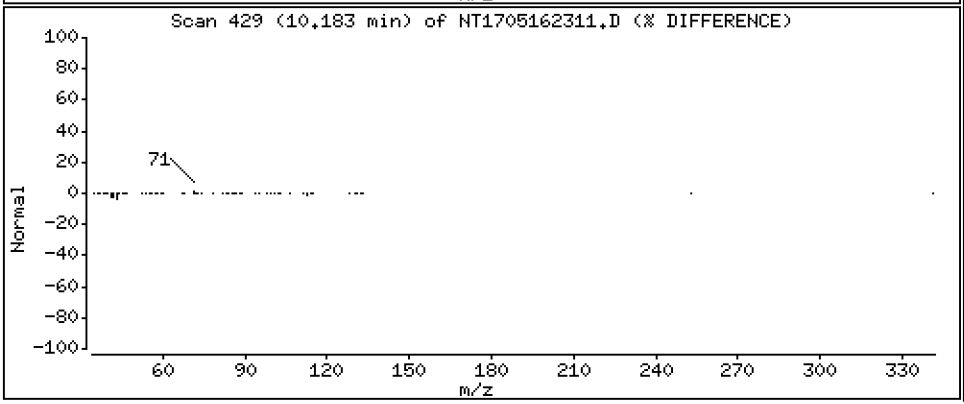












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

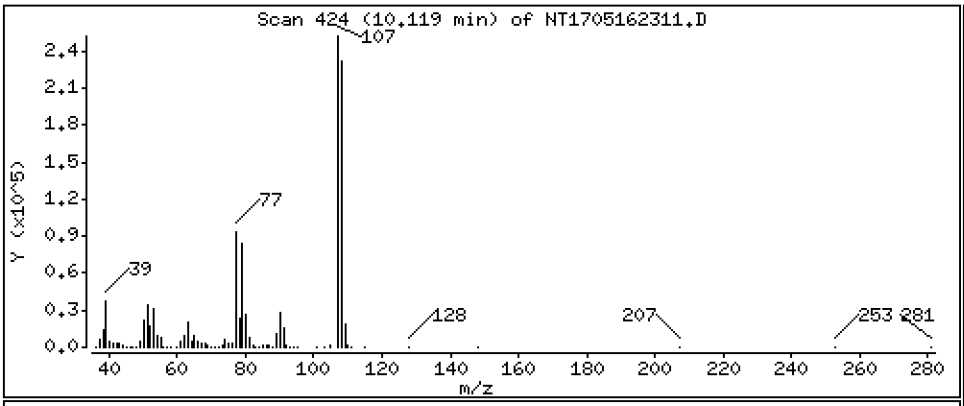
Operator: JGR

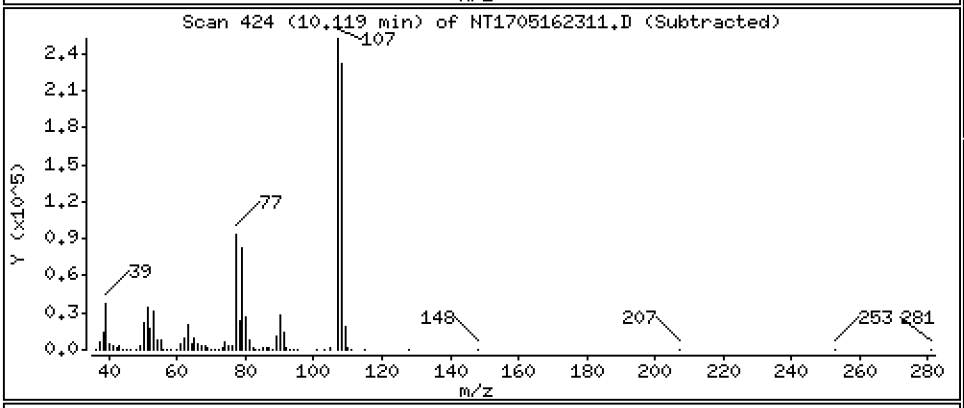
Column phase: ZB-5msi

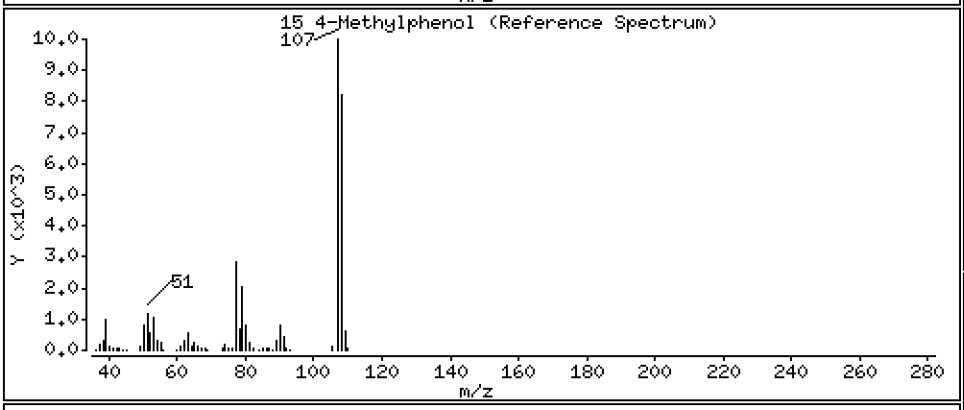
Column diameter: 0.25

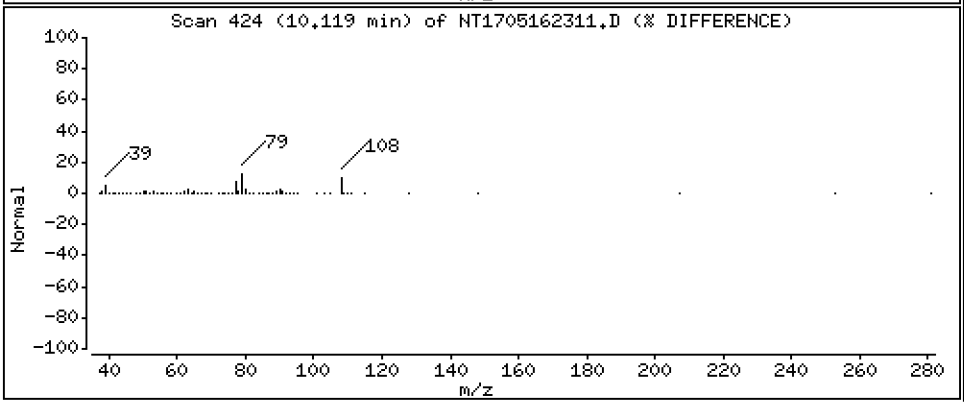
15 4-Methylphenol

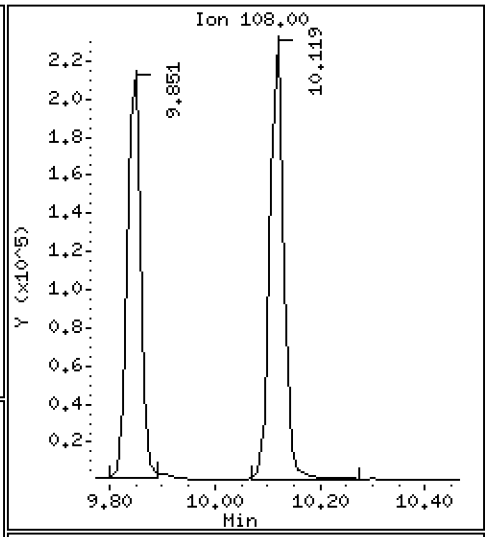
Concentration: 4.661 ug/mL

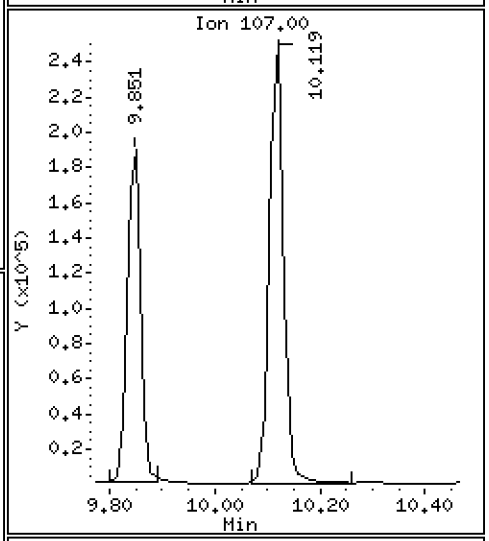


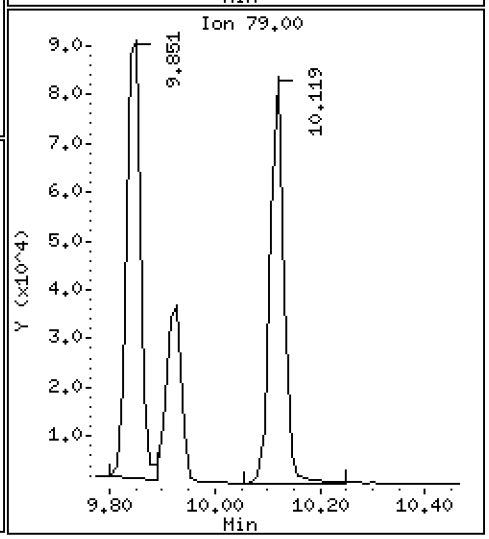












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

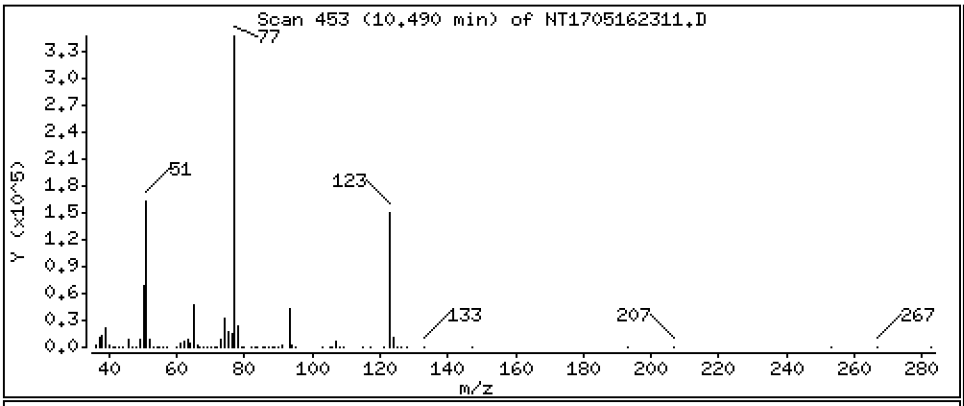
Operator: JGR

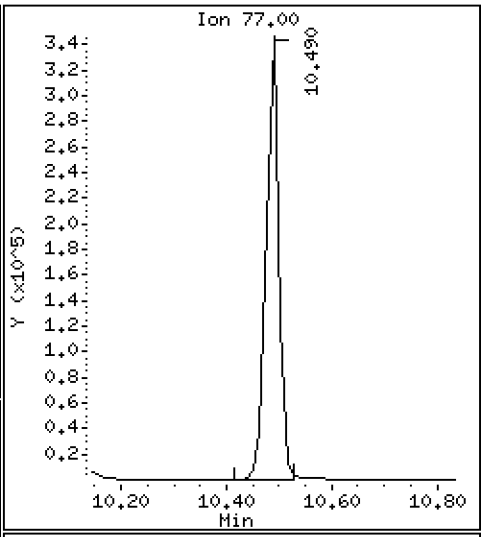
Column phase: ZB-5msi

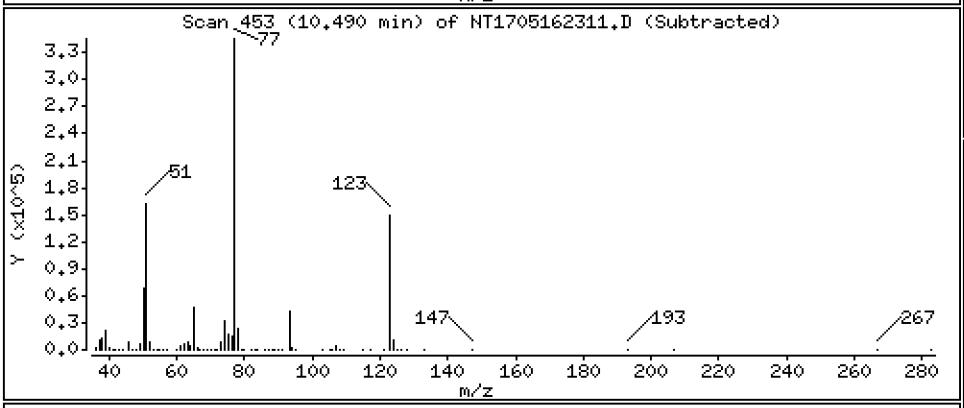
Column diameter: 0.25

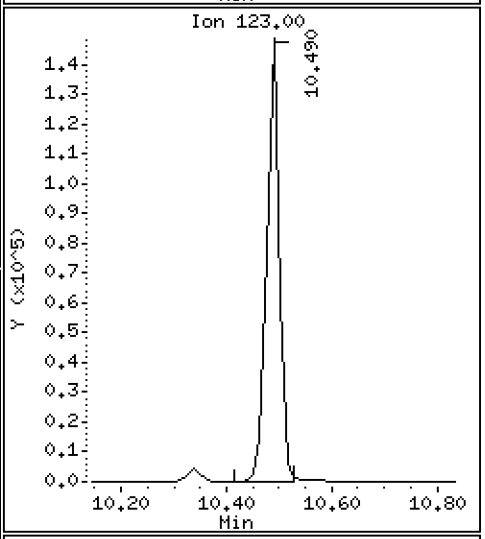
19 Nitrobenzene

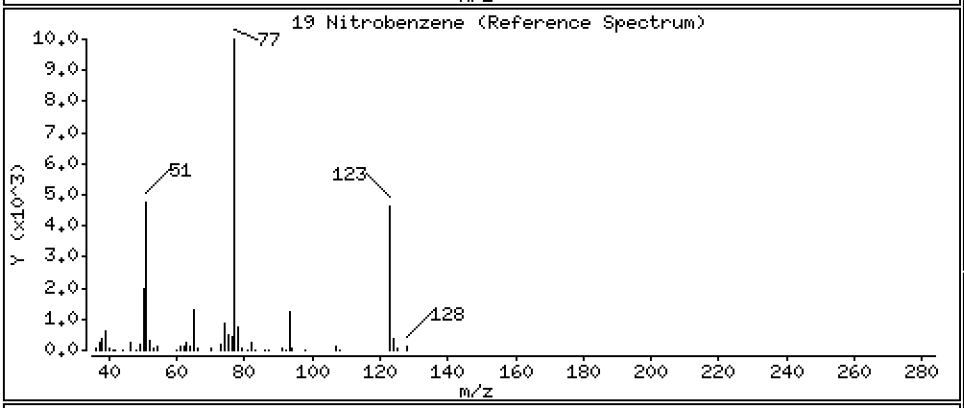
Concentration: 5.329 ug/mL

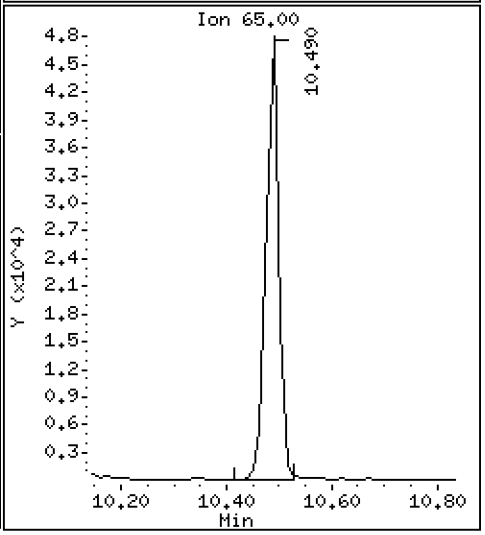


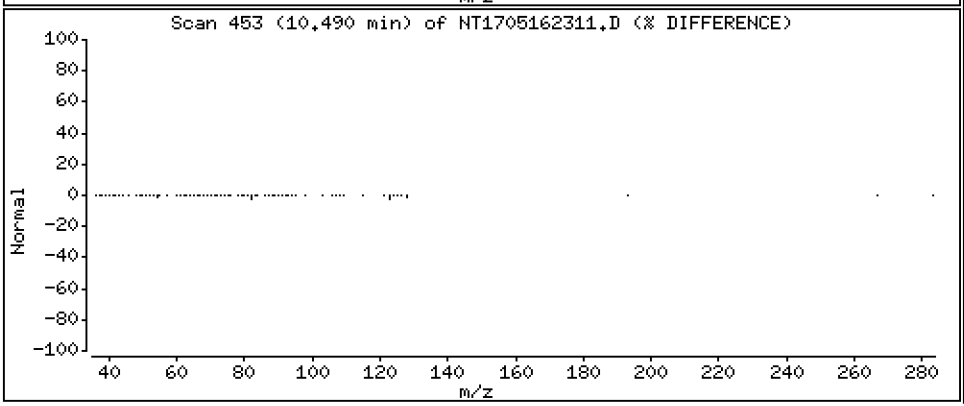












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

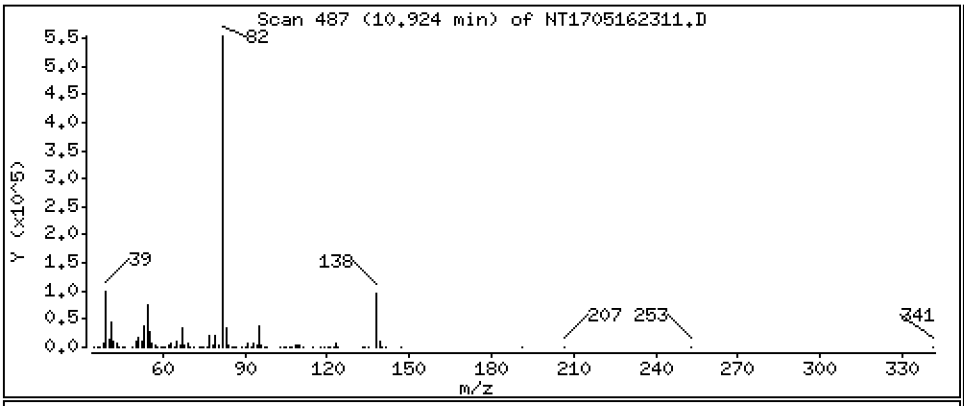
Operator: JGR

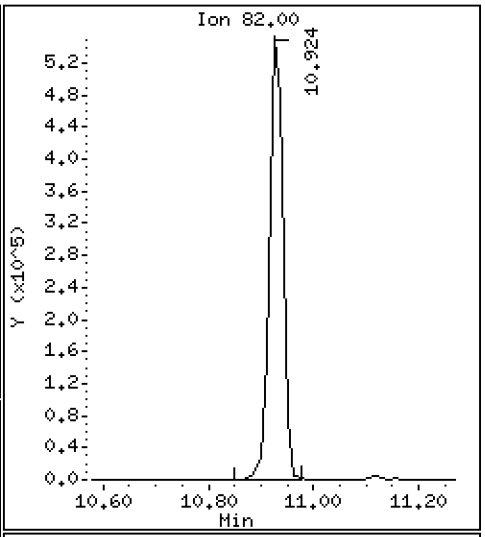
Column phase: ZB-5msi

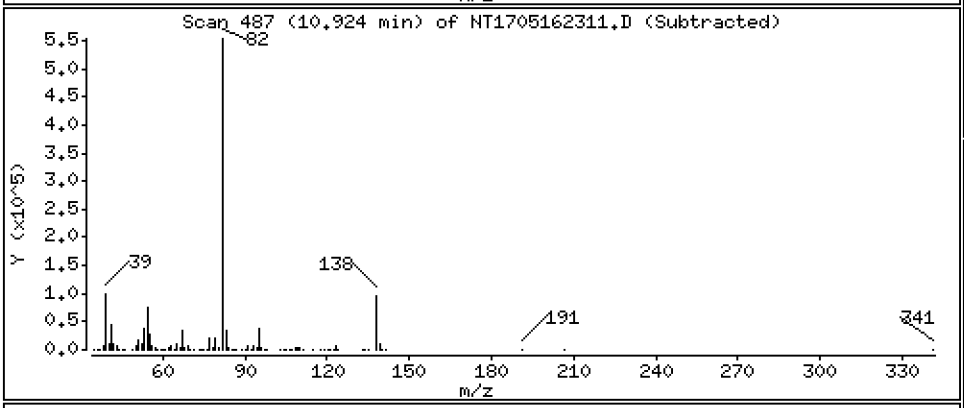
Column diameter: 0.25

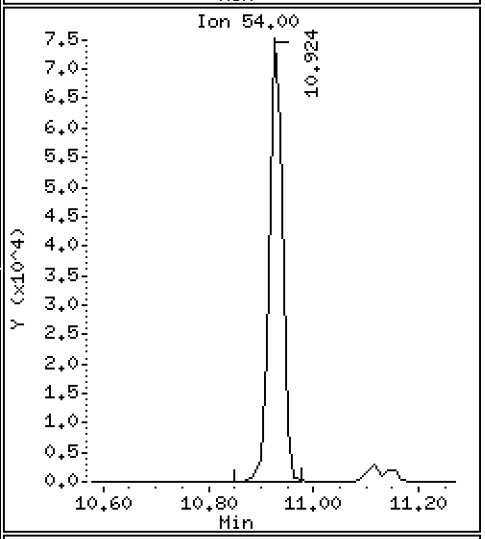
20 Isophorone

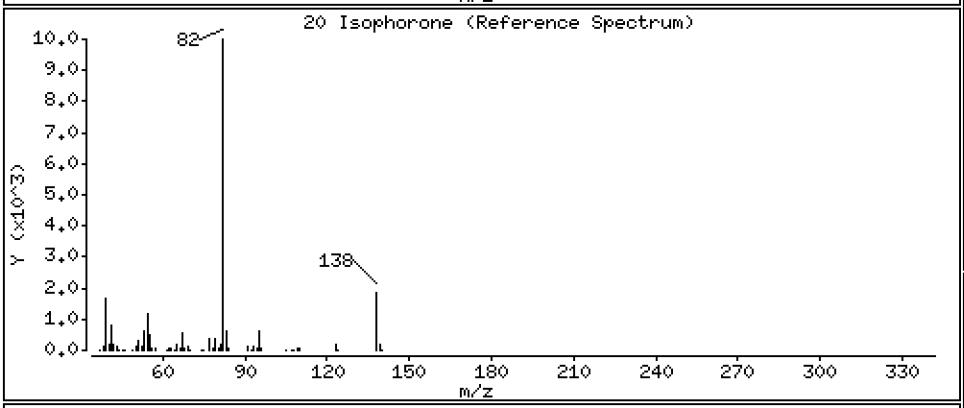
Concentration: 6.943 ug/mL

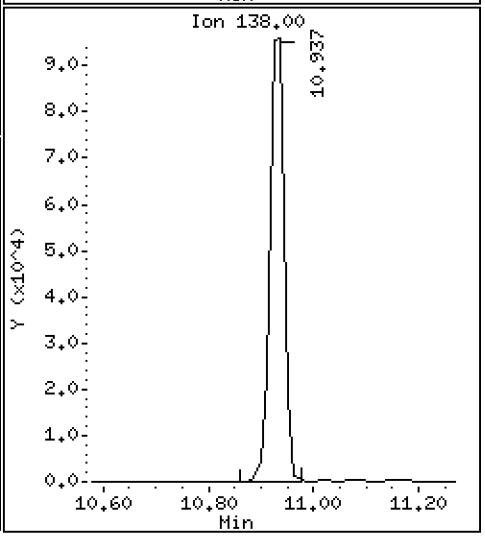


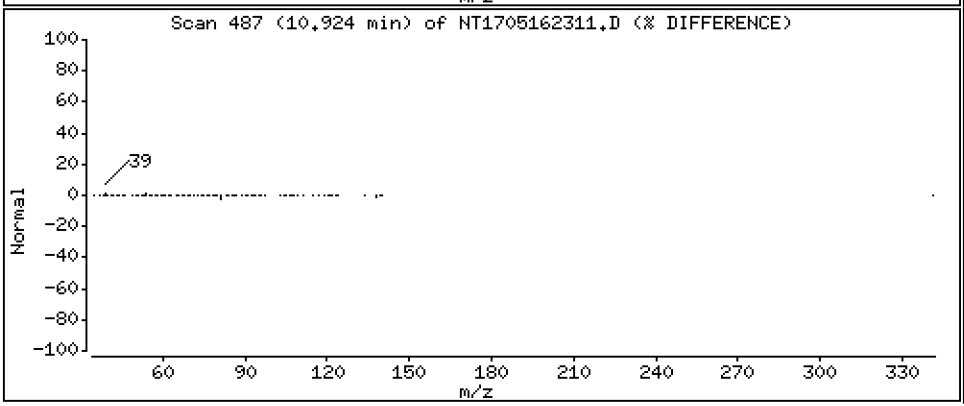












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

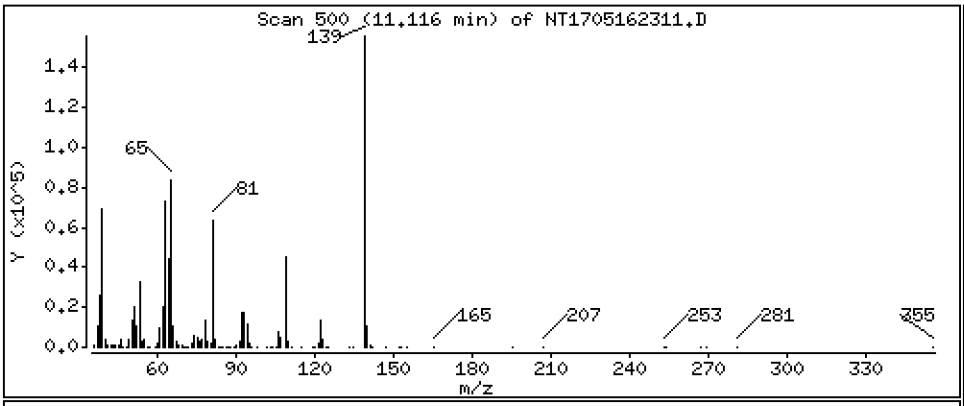
Operator: JGR

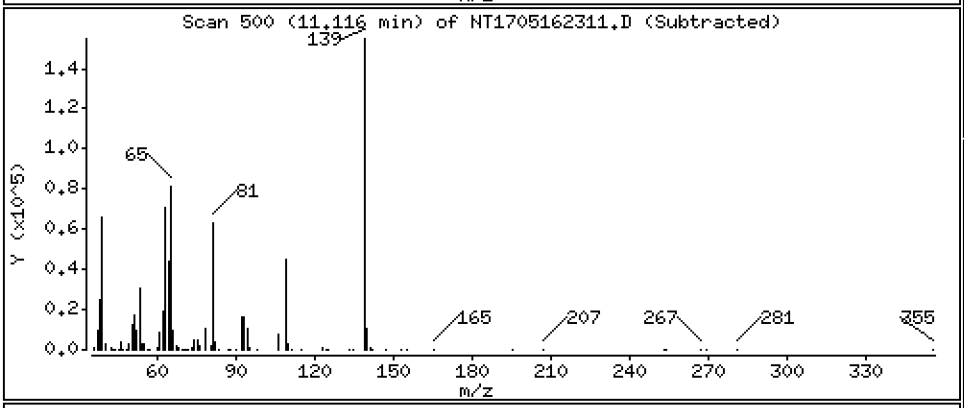
Column phase: ZB-5msi

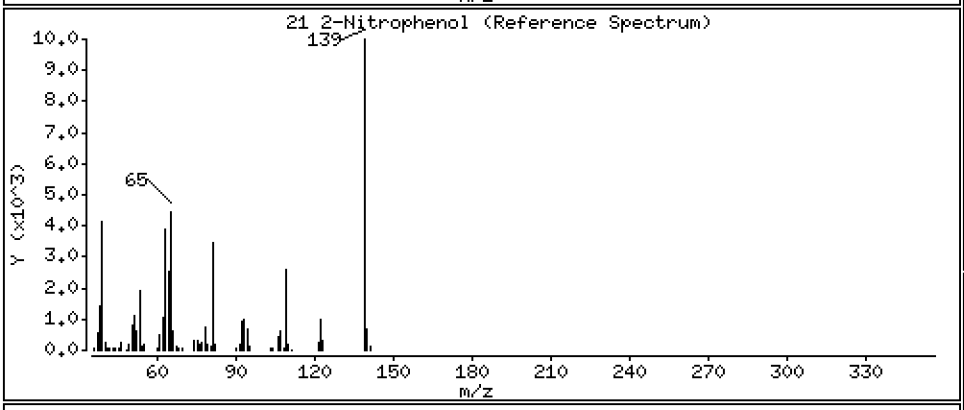
Column diameter: 0.25

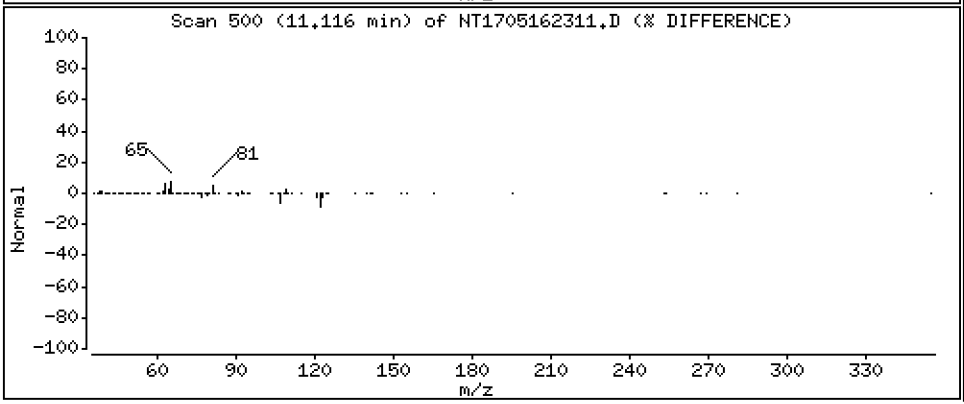
21 2-Nitrophenol

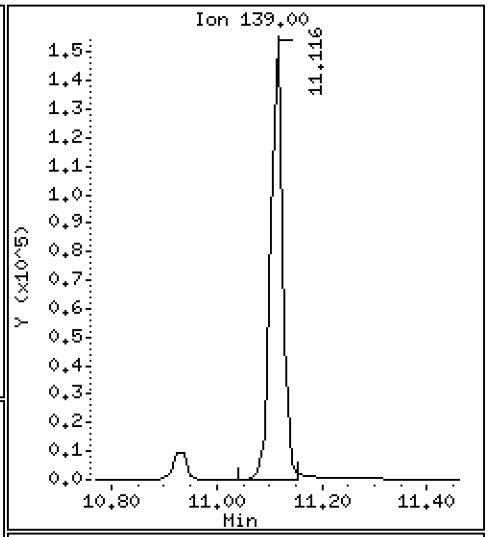
Concentration: 4.899 ug/mL

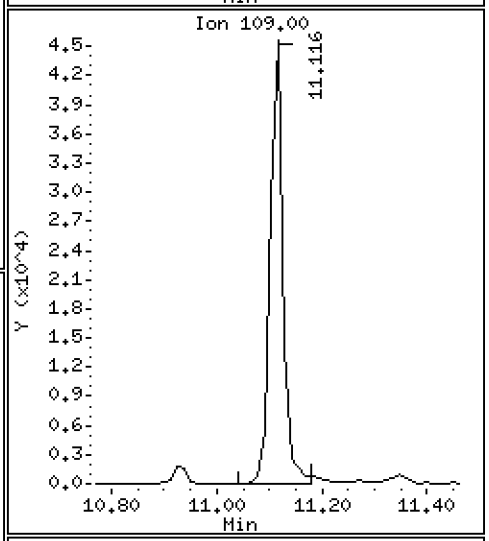


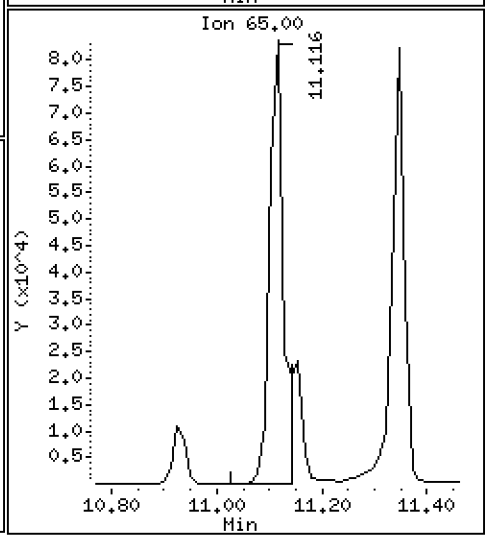












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

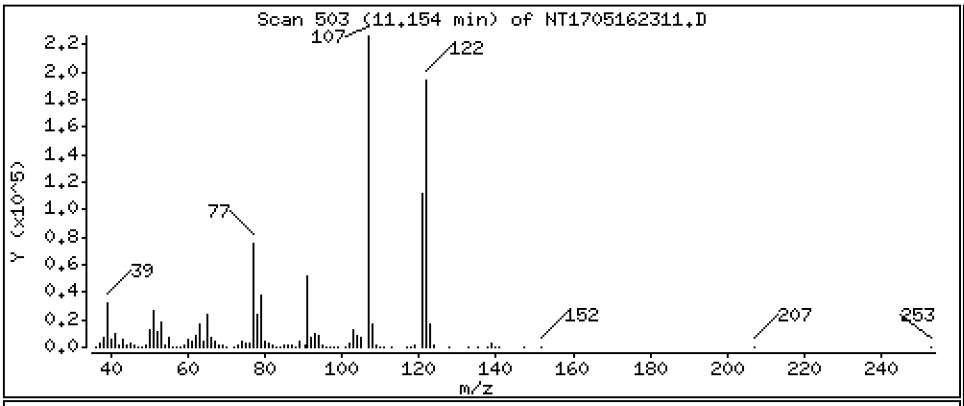
Operator: JGR

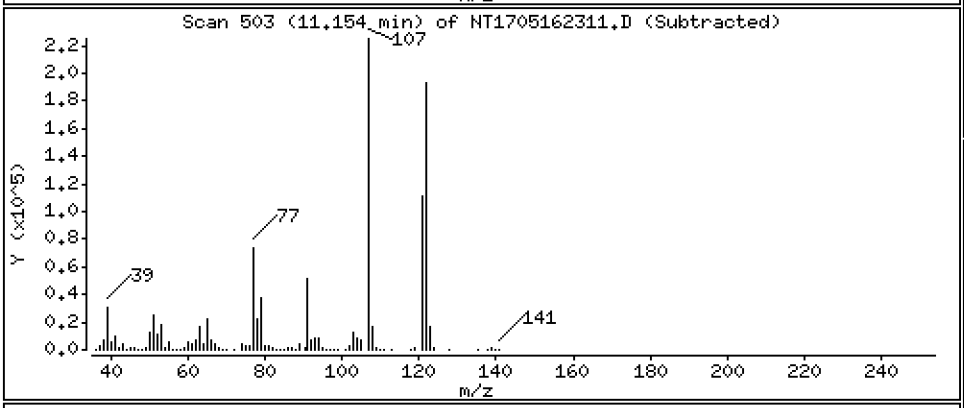
Column phase: ZB-5msi

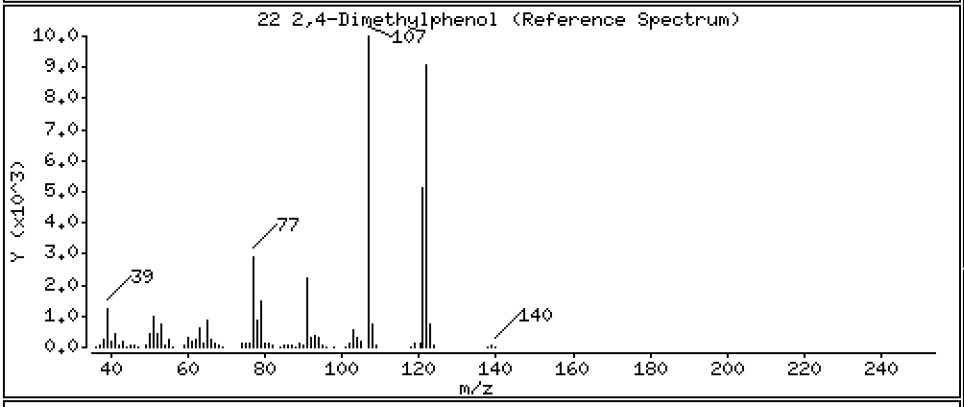
Column diameter: 0.25

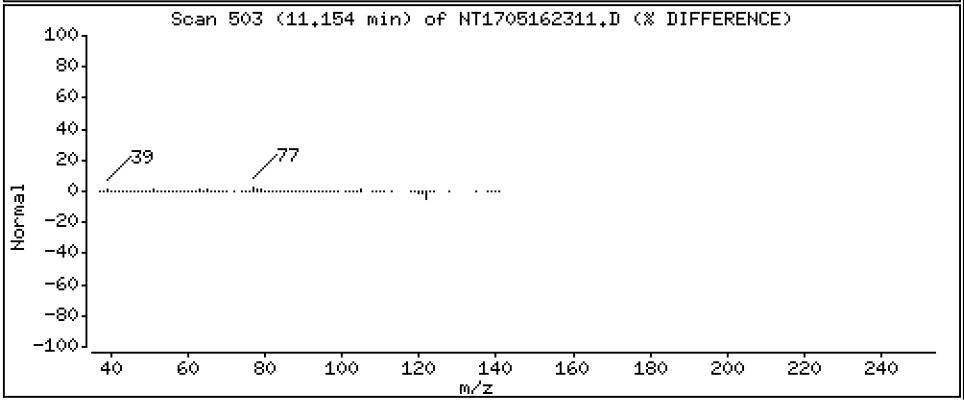
22 2,4-Dimethylphenol

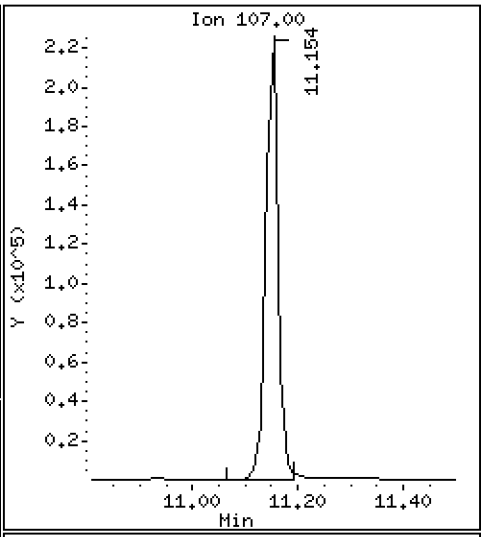
Concentration: 3.788 ug/mL

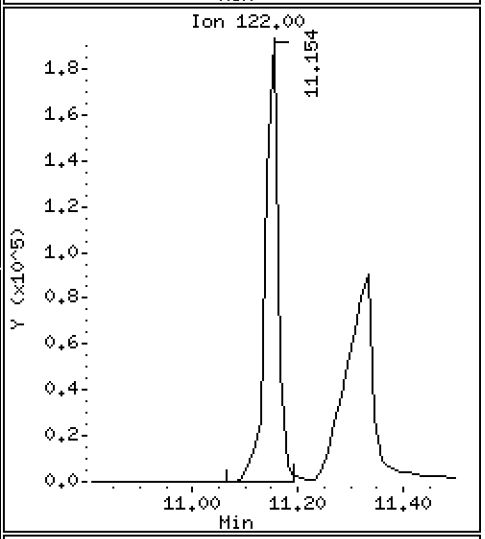


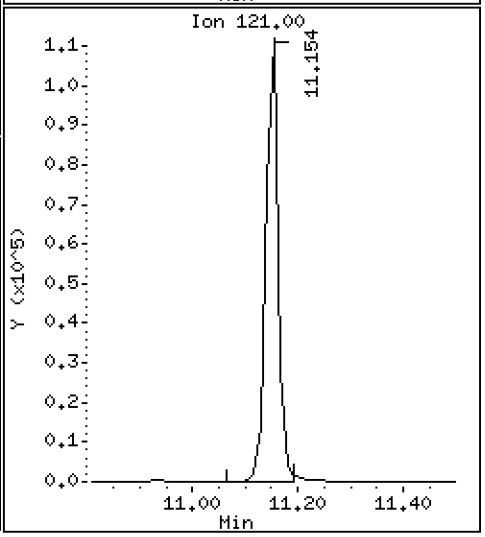












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

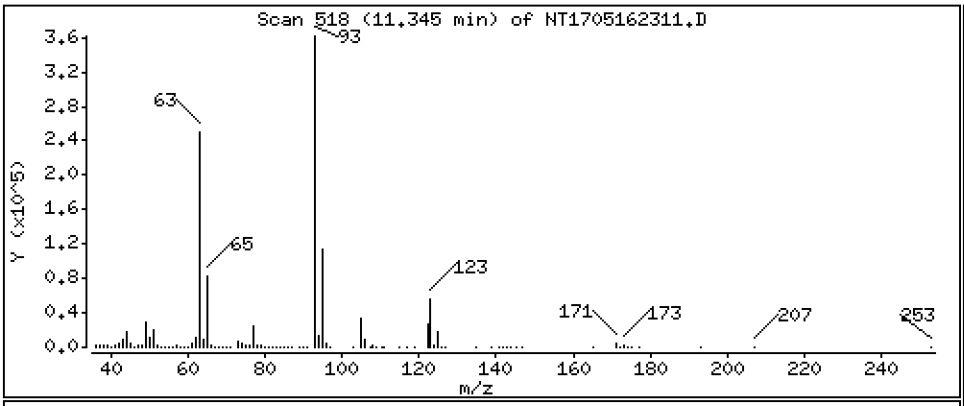
Operator: JGR

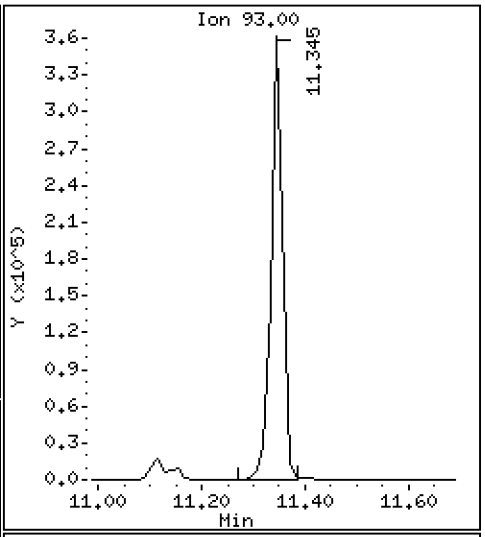
Column phase: ZB-5msi

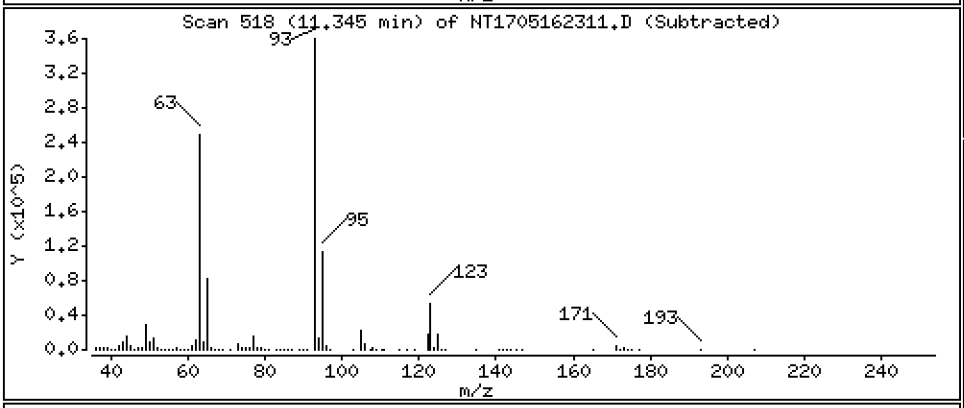
Column diameter: 0.25

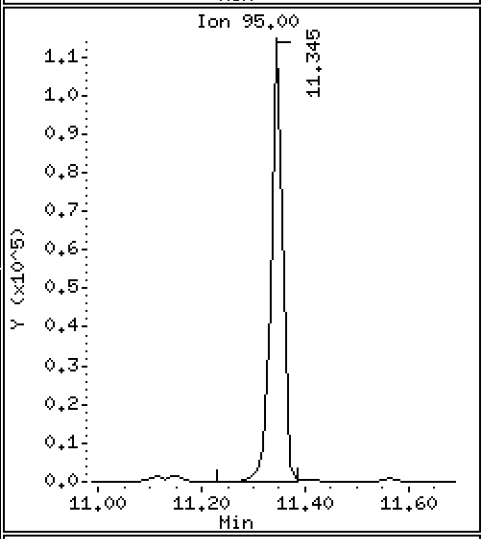
23 Bis(2-Chloroethoxy)methane

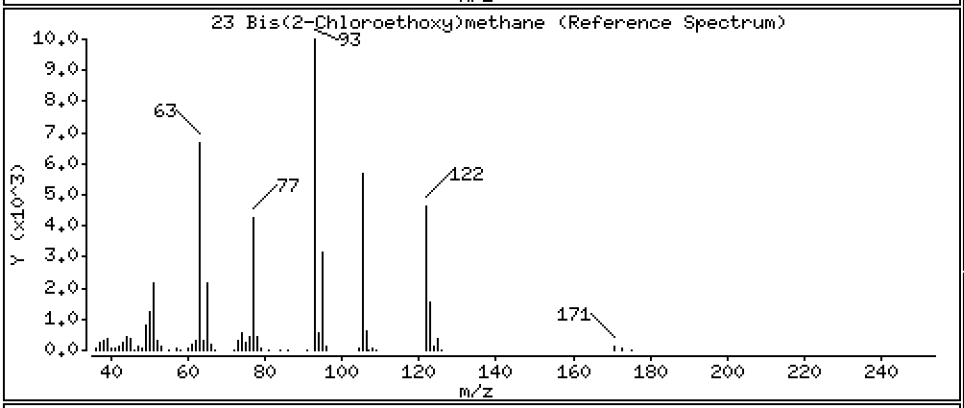
Concentration: 6.232 ug/mL

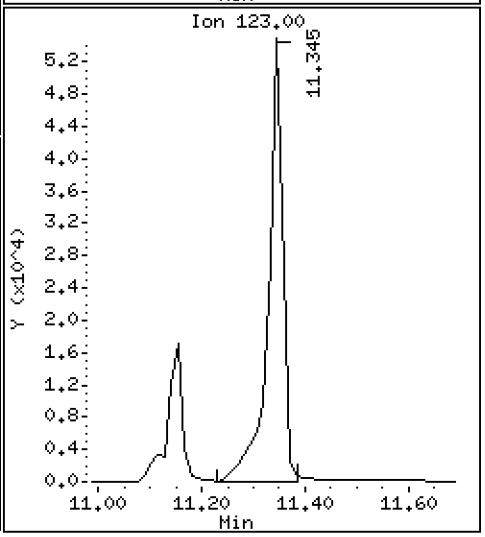


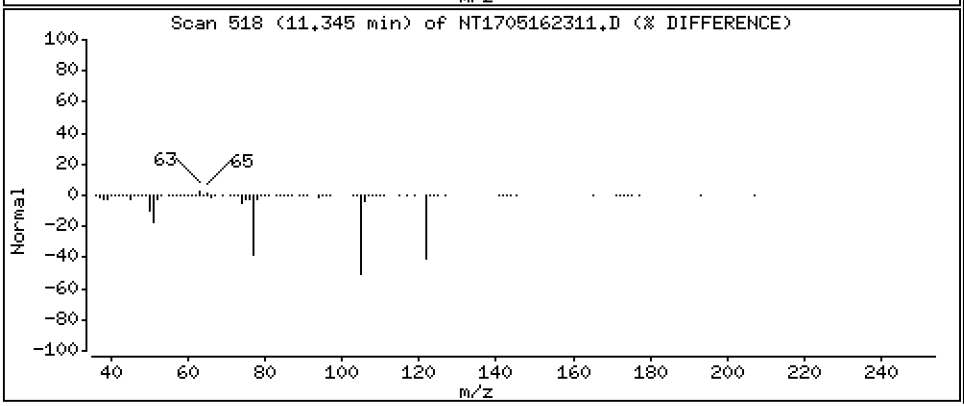












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

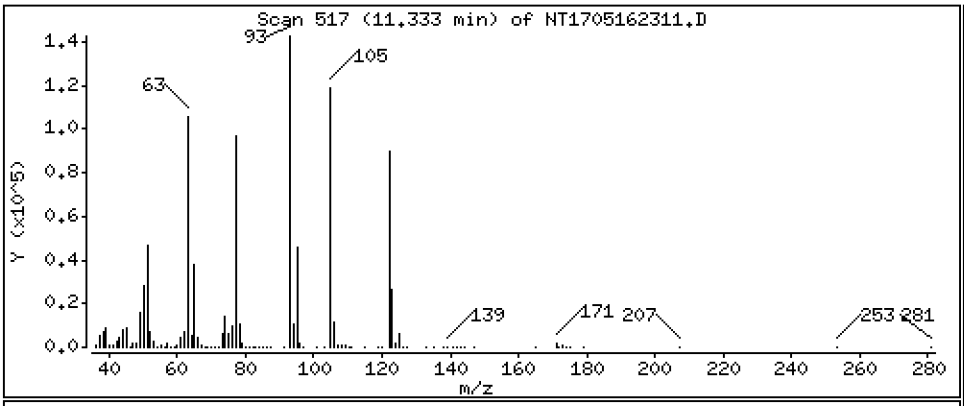
Operator: JGR

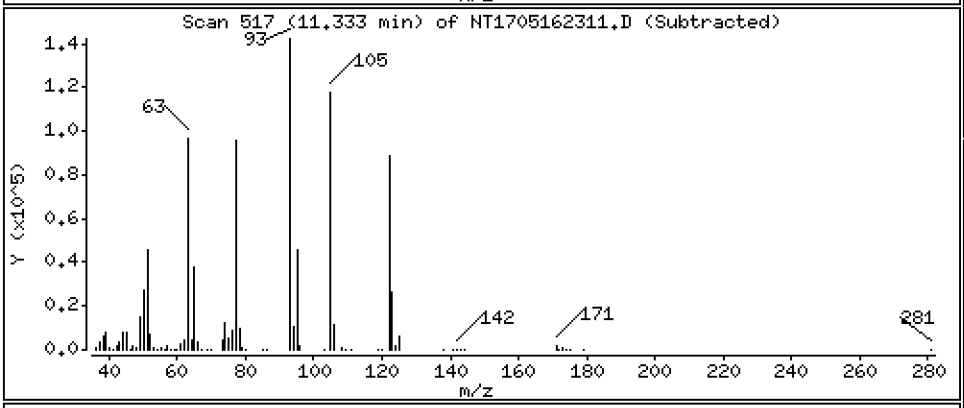
Column phase: ZB-5msi

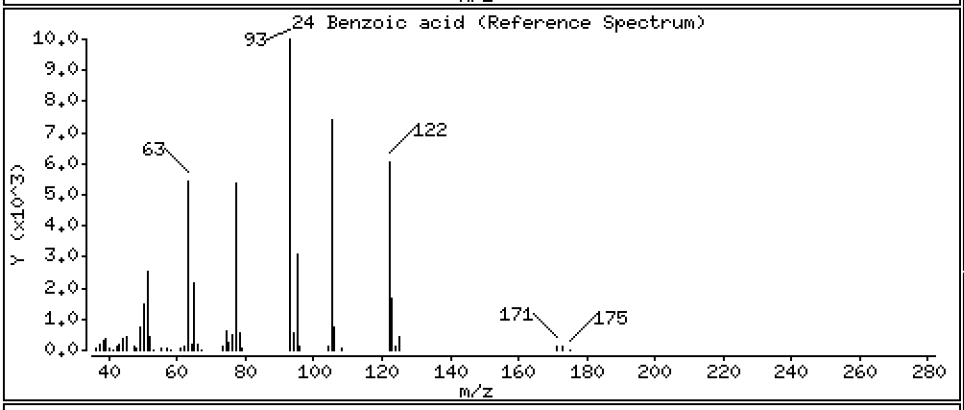
Column diameter: 0.25

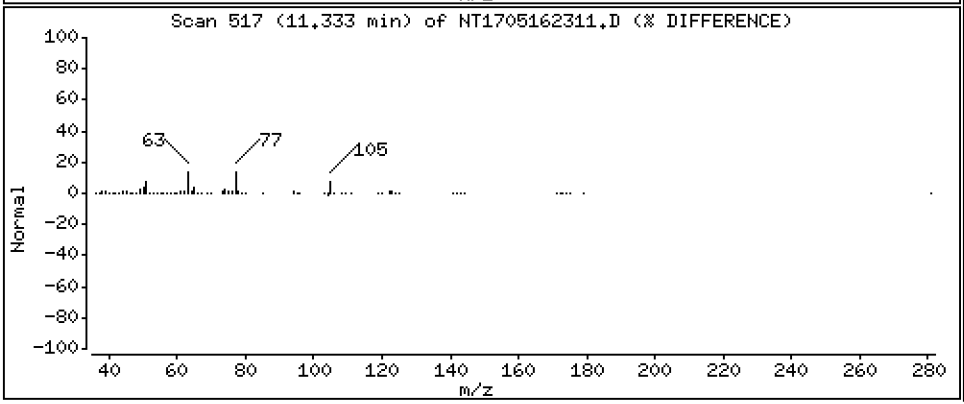
24 Benzoic acid

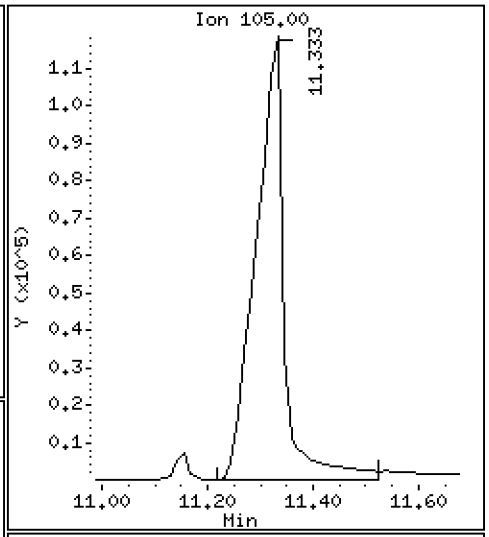
Concentration: 6.761 ug/mL

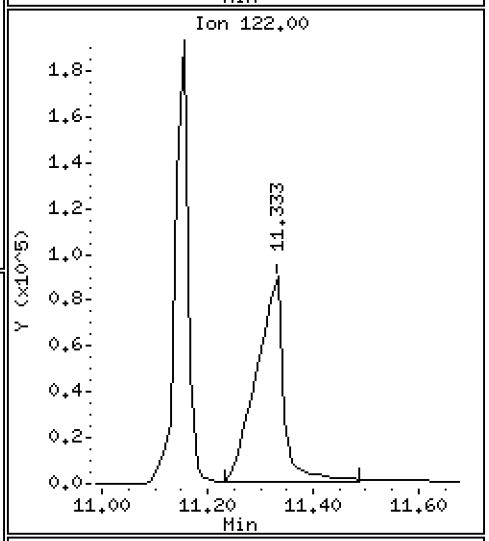


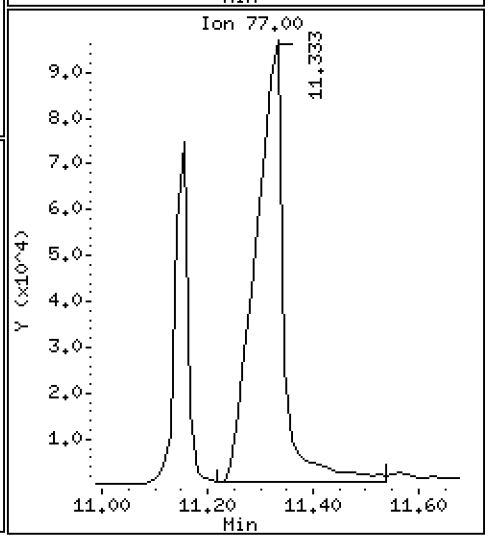












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

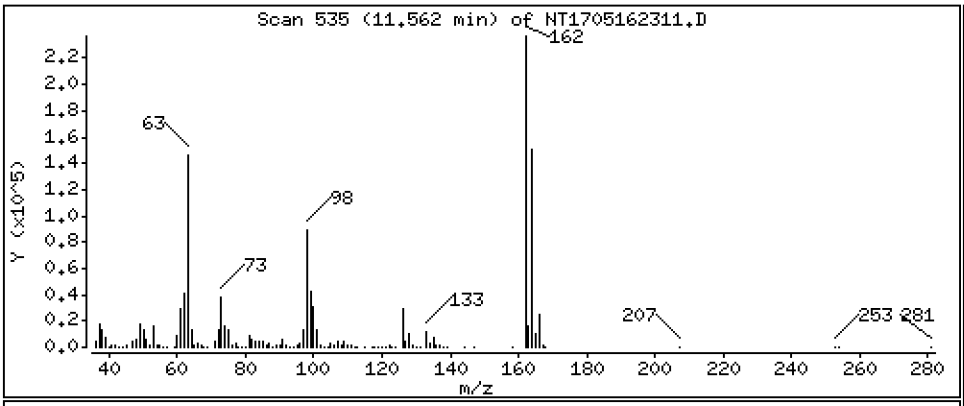
Operator: JGR

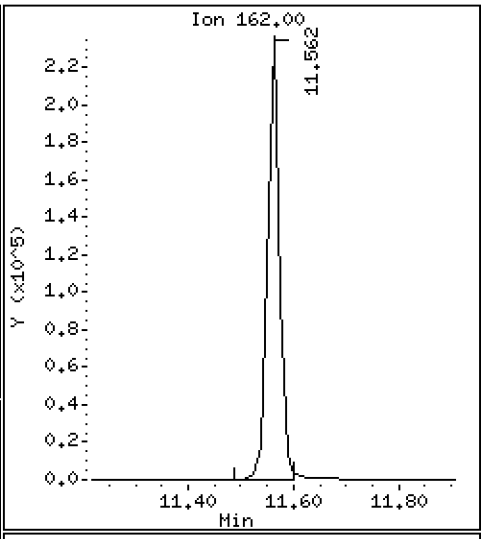
Column phase: ZB-5msi

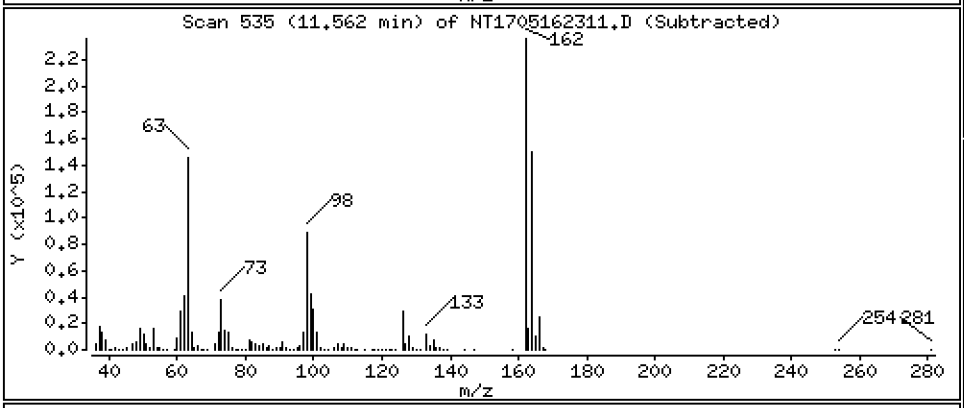
Column diameter: 0.25

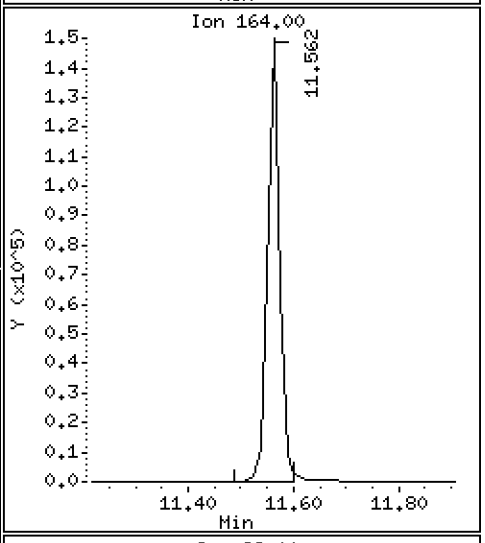
25 2,4-Dichlorophenol

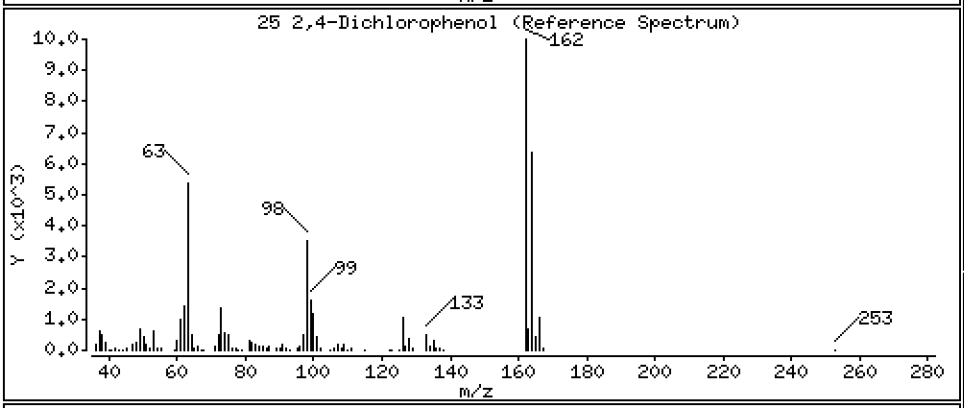
Concentration: 4.707 ug/mL

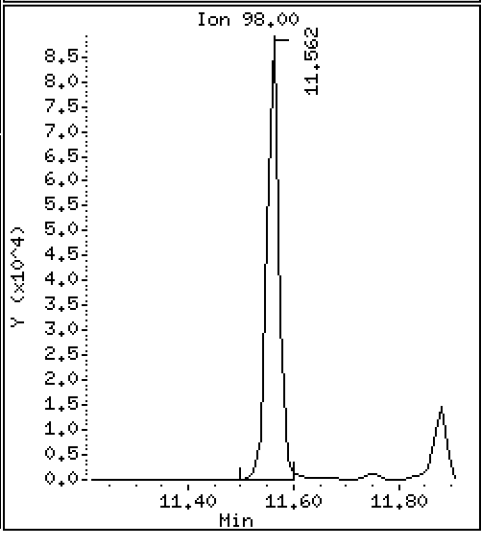


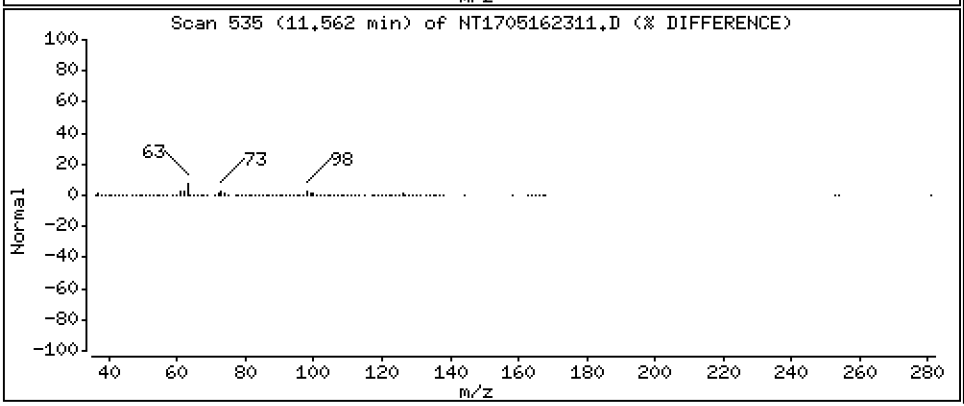












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

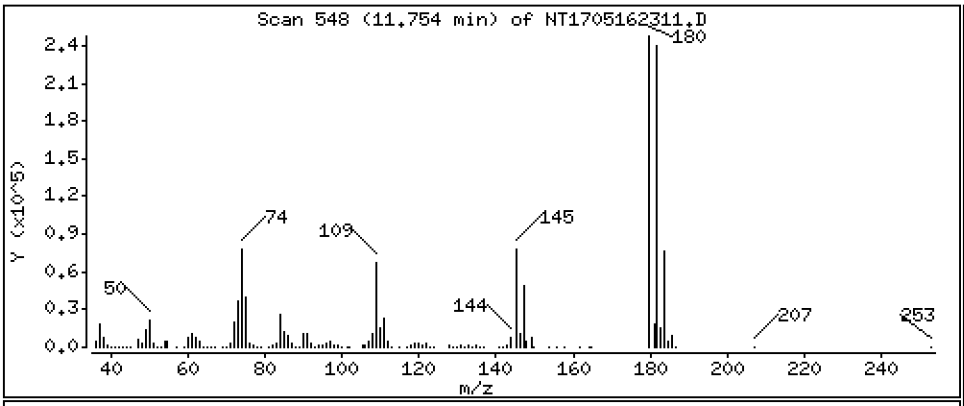
Operator: JGR

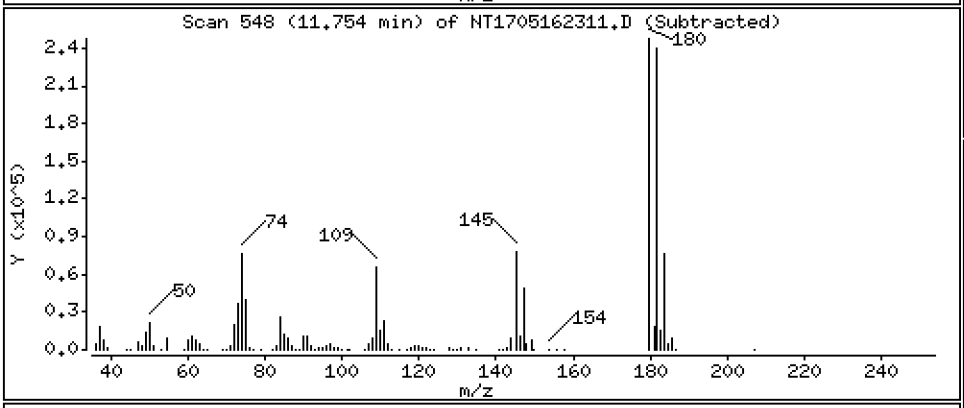
Column phase: ZB-5msi

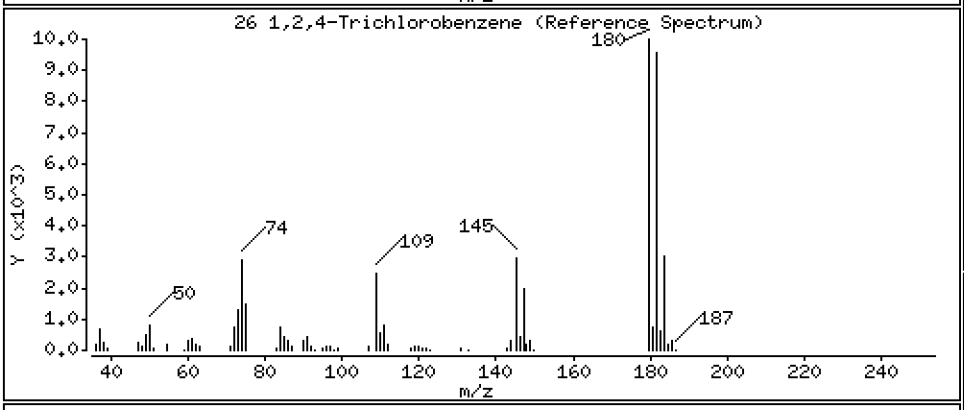
Column diameter: 0.25

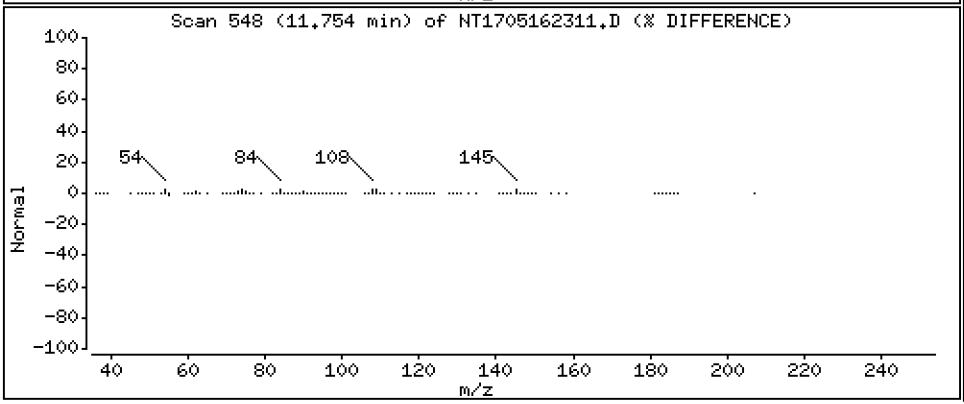
26 1,2,4-Trichlorobenzene

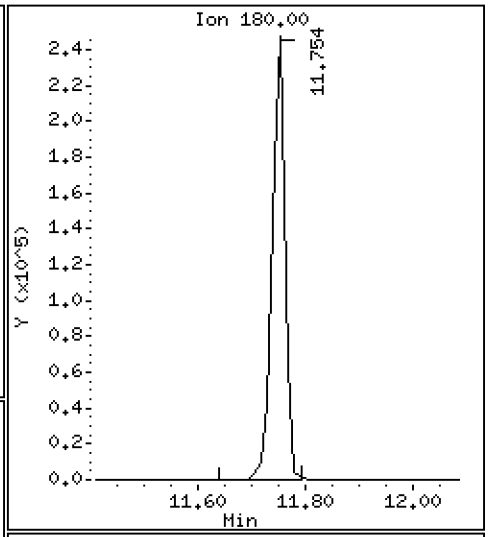
Concentration: 5.879 ug/mL

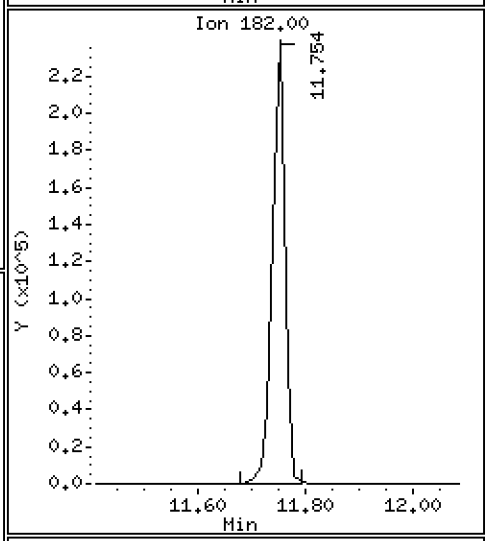


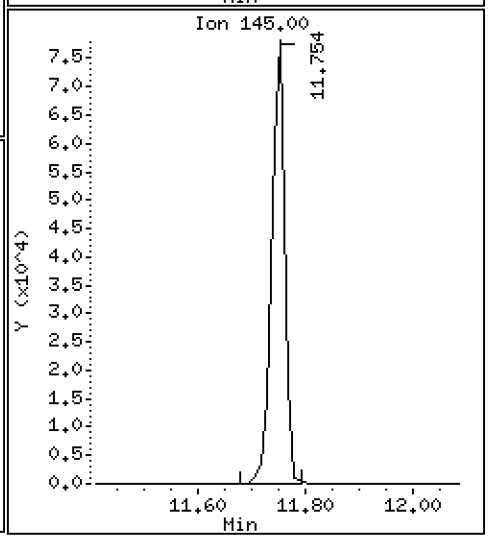












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

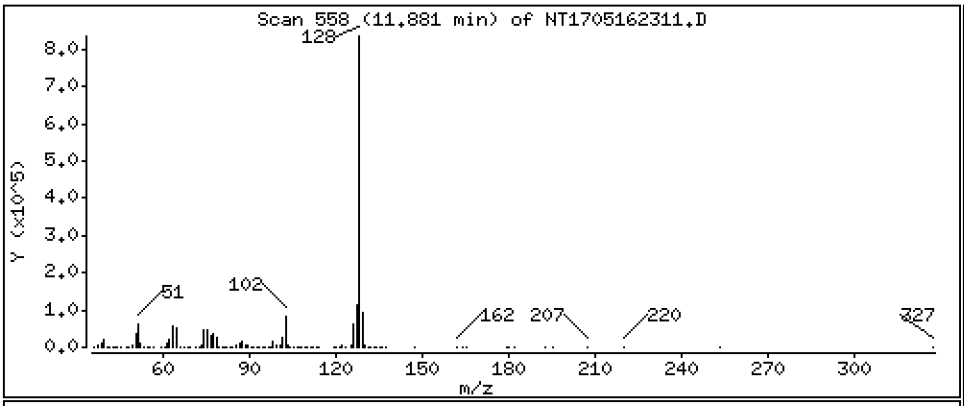
Operator: JGR

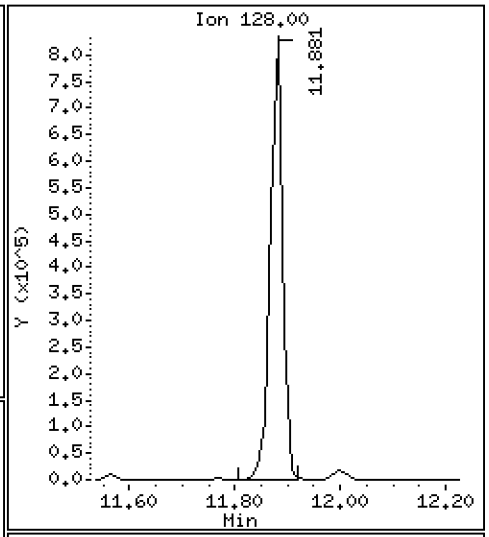
Column phase: ZB-5msi

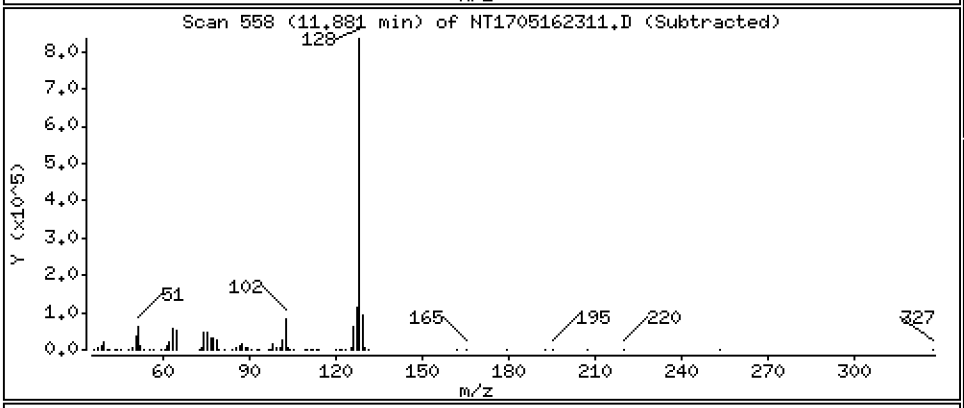
Column diameter: 0.25

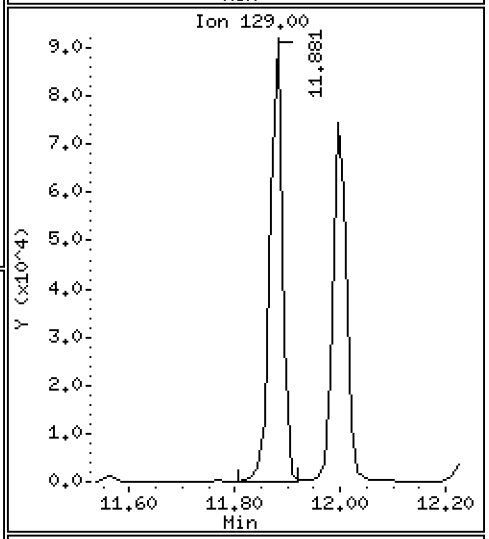
28 Naphthalene

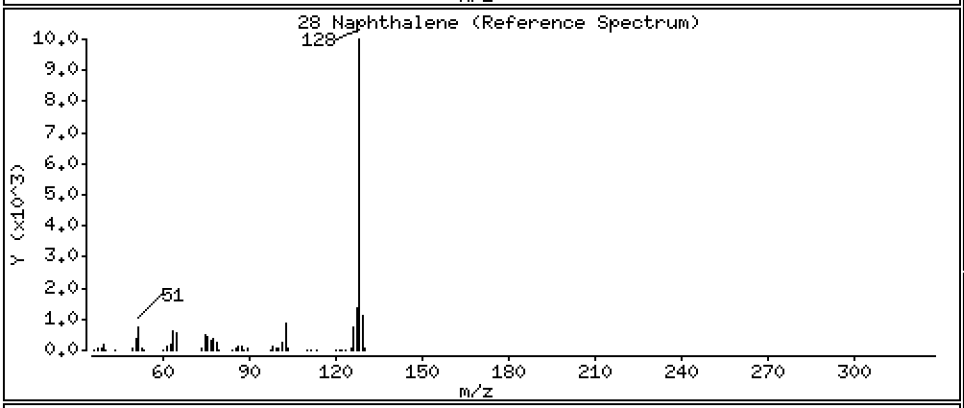
Concentration: 5.129 ug/mL

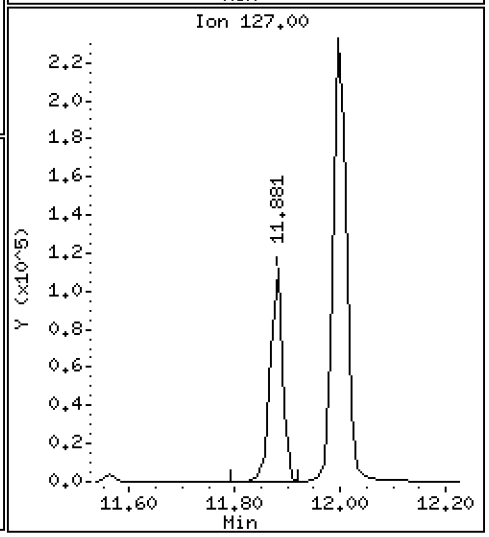


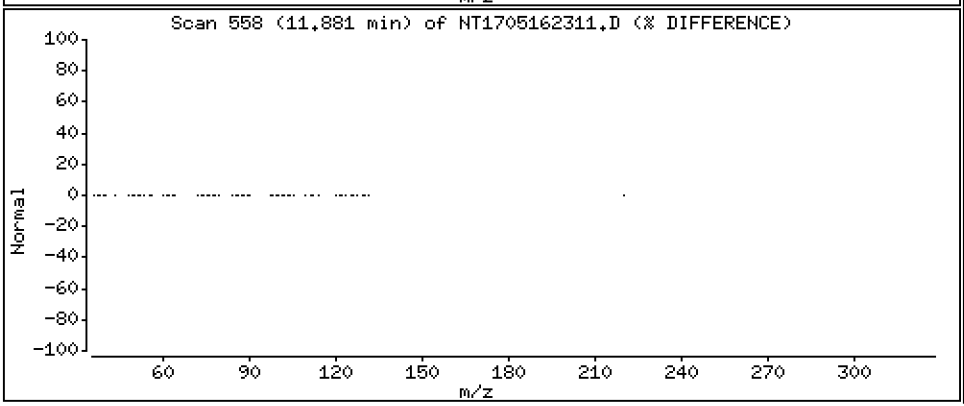












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

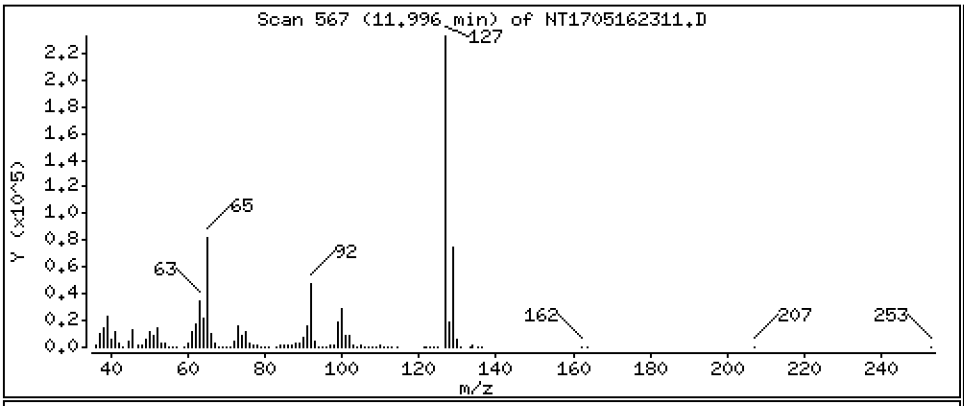
Operator: JGR

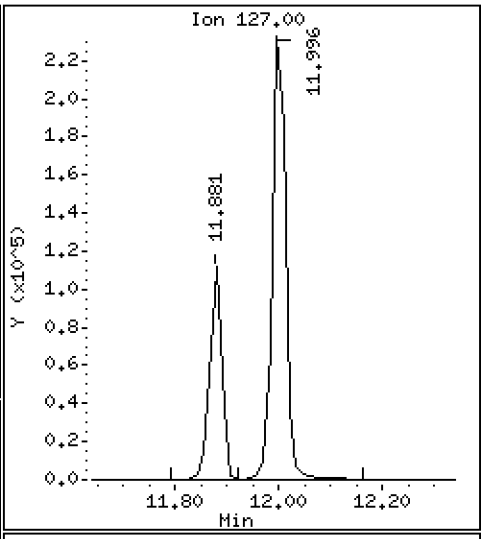
Column phase: ZB-5msi

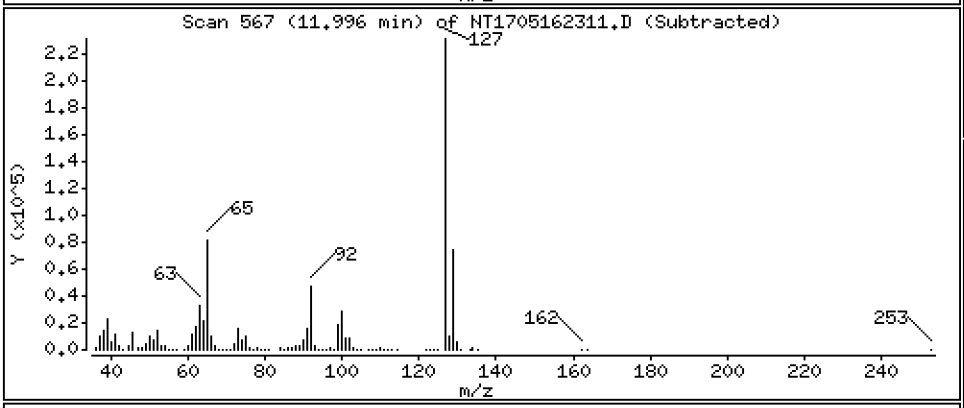
Column diameter: 0.25

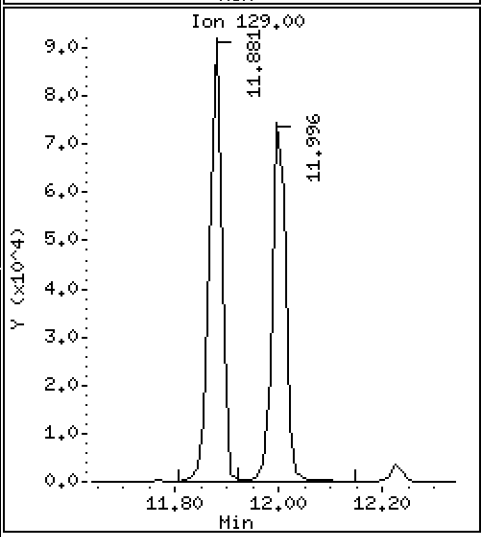
29 4-Chloroaniline

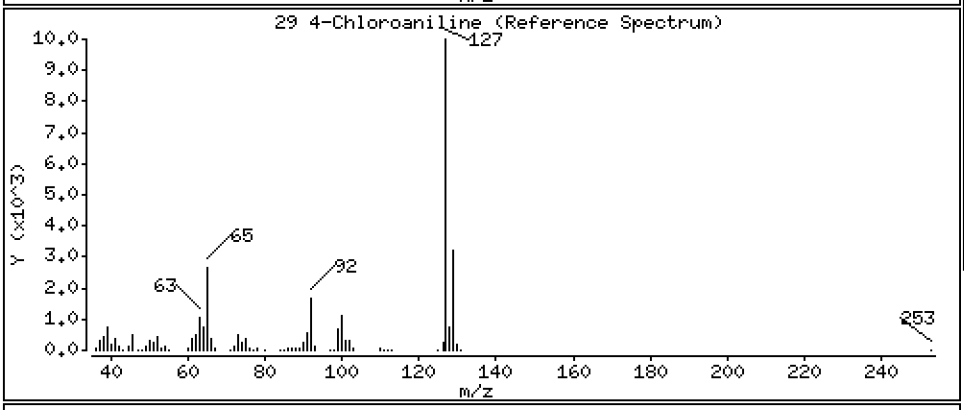
Concentration: 4.488 ug/mL

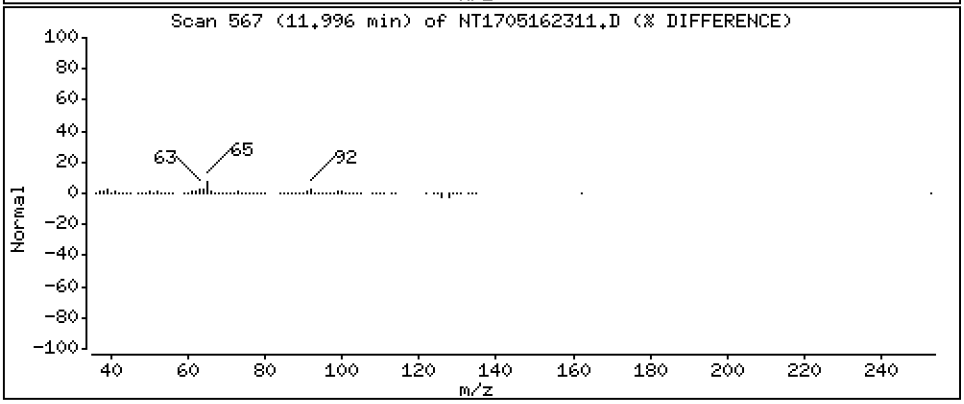












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

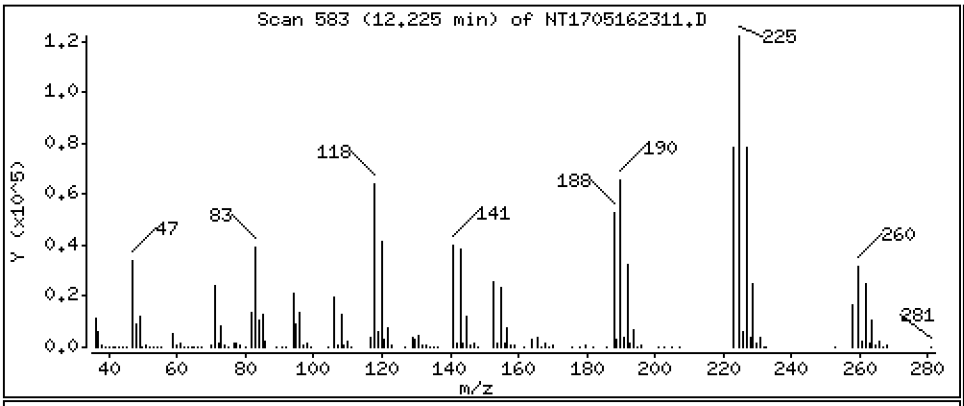
Operator: JGR

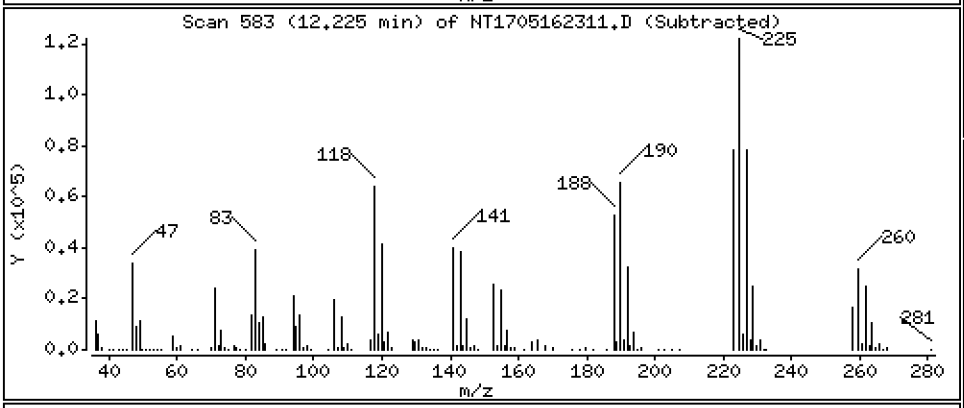
Column phase: ZB-5msi

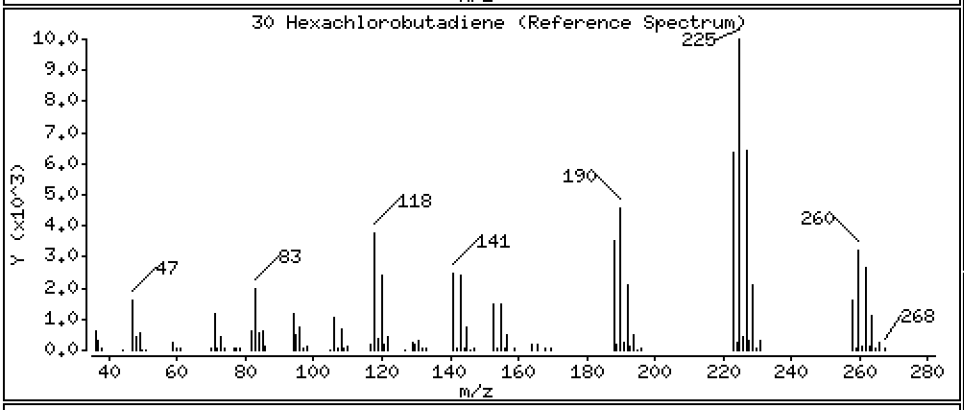
Column diameter: 0.25

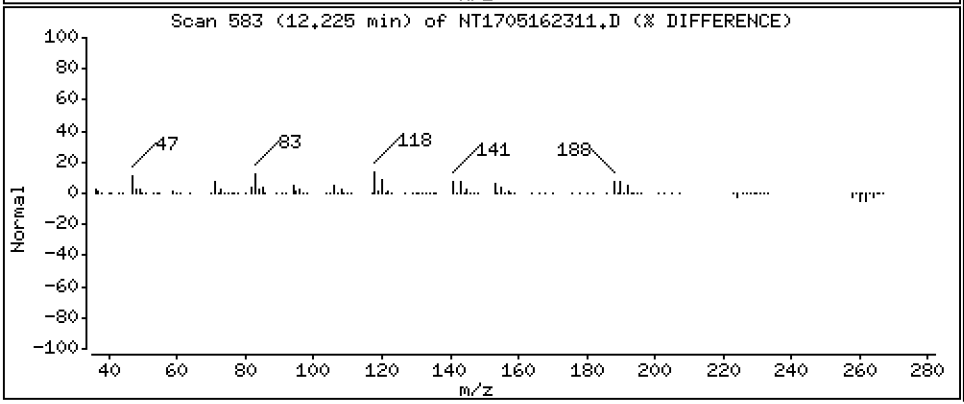
30 Hexachlorobutadiene

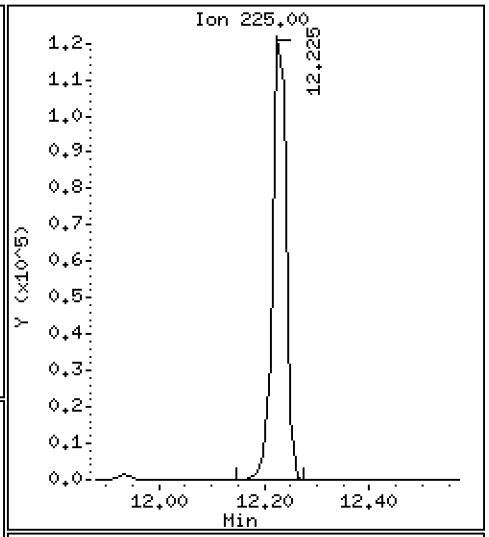
Concentration: 5.241 ug/mL

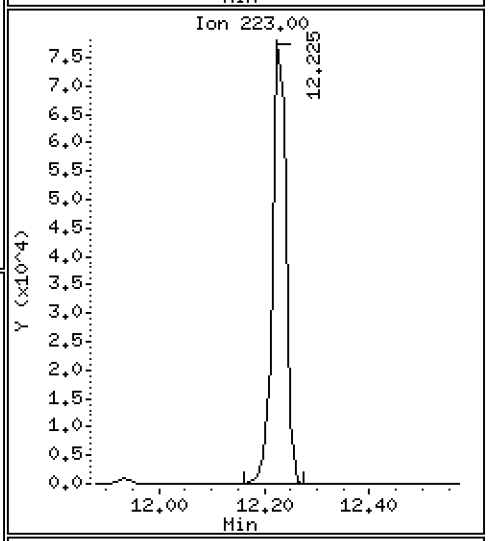


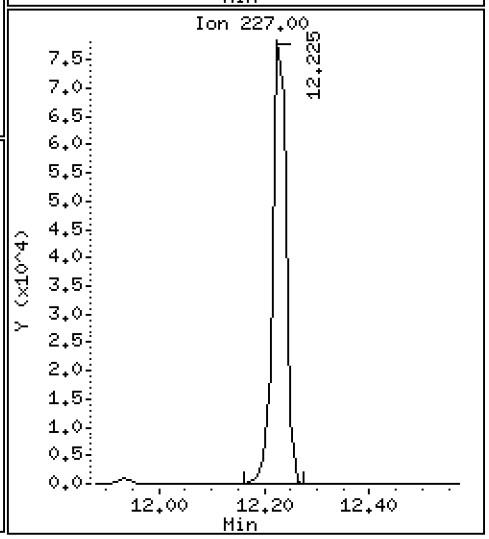












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

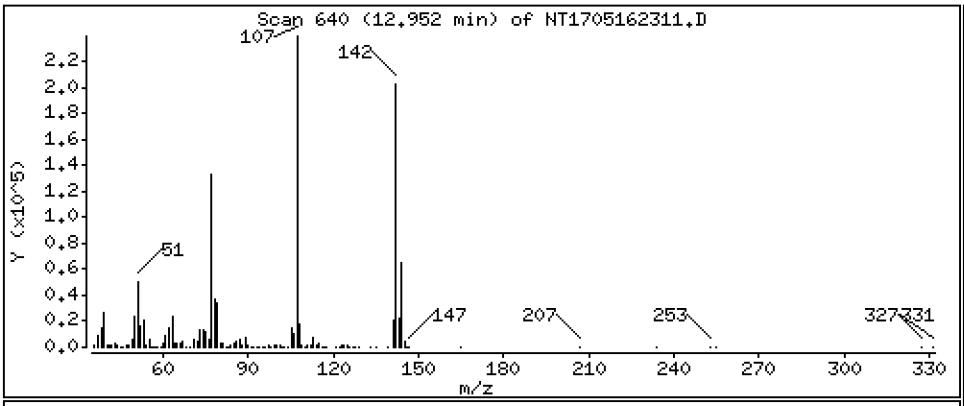
Operator: JGR

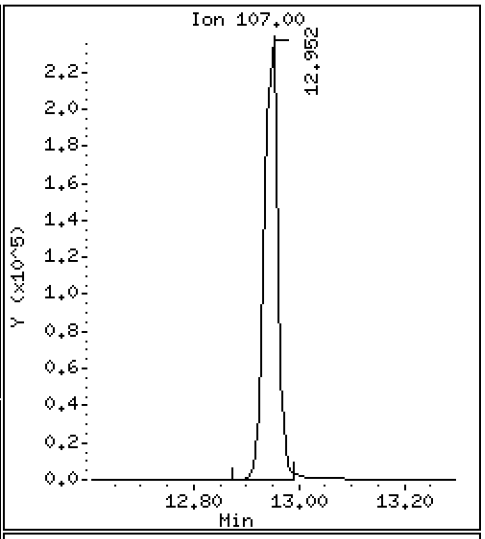
Column phase: ZB-5msi

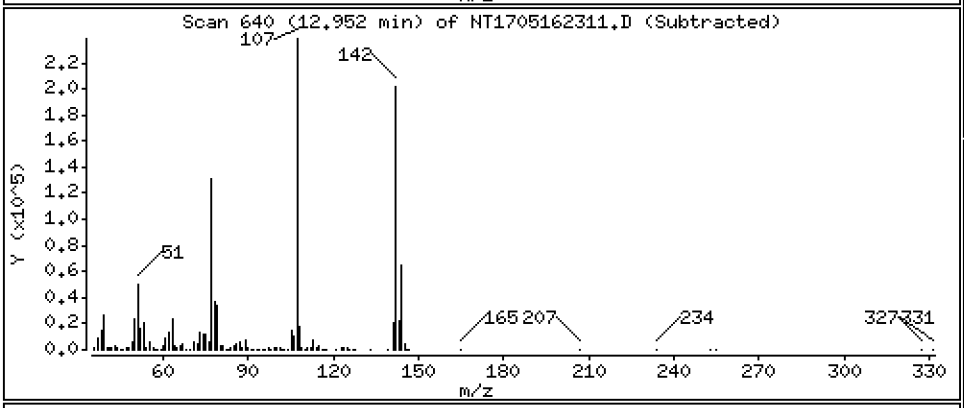
Column diameter: 0.25

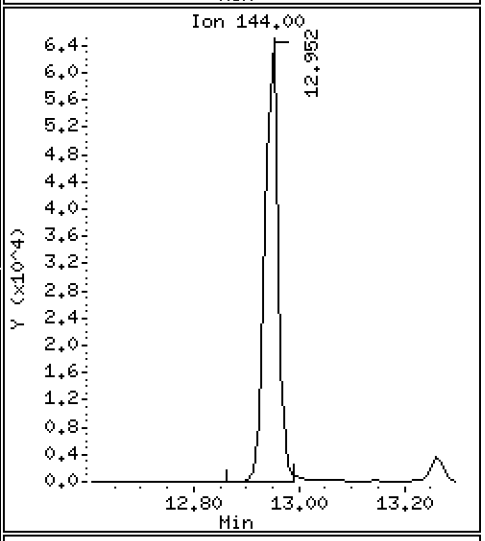
31 4-Chloro-3-methylphenol

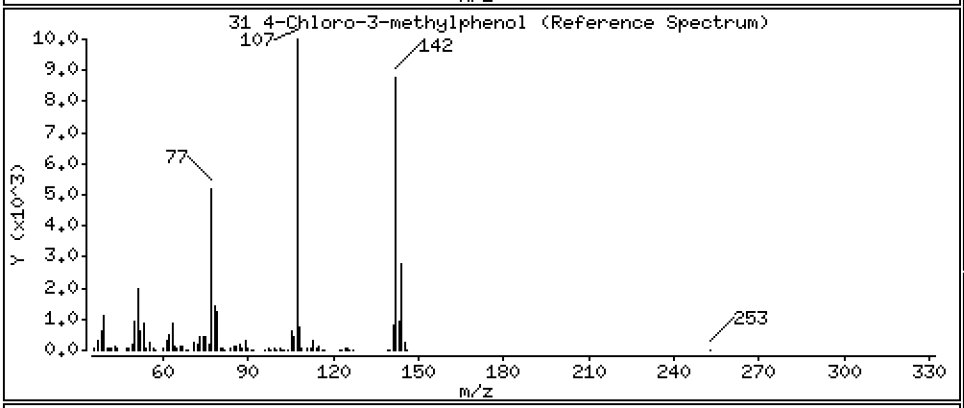
Concentration: 4.878 ug/mL

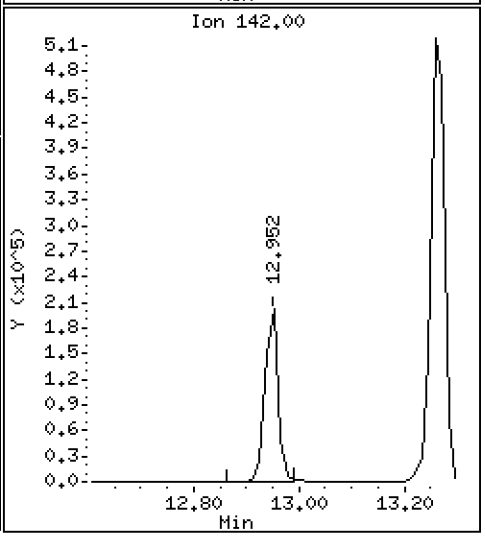


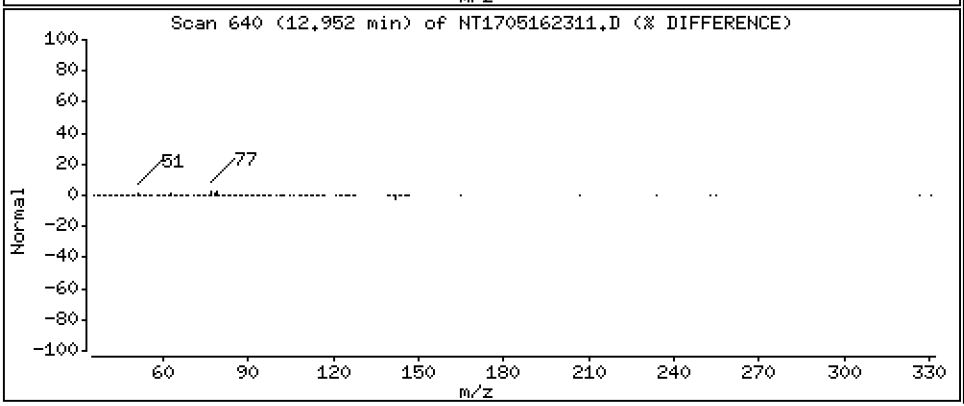












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

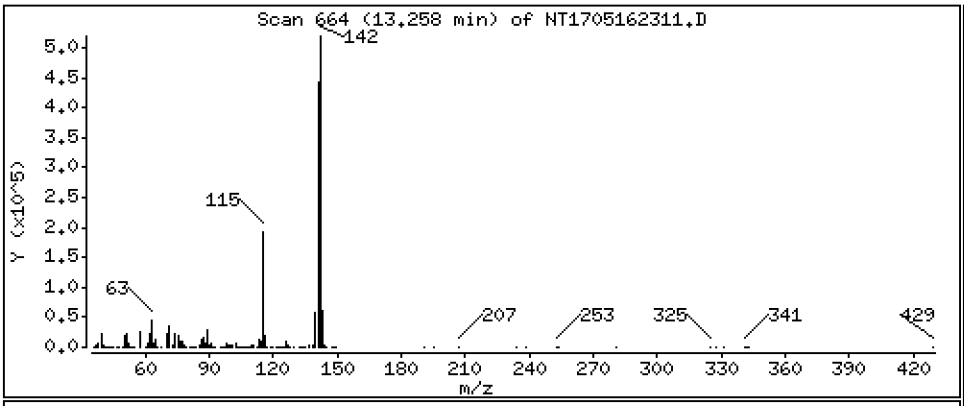
Operator: JGR

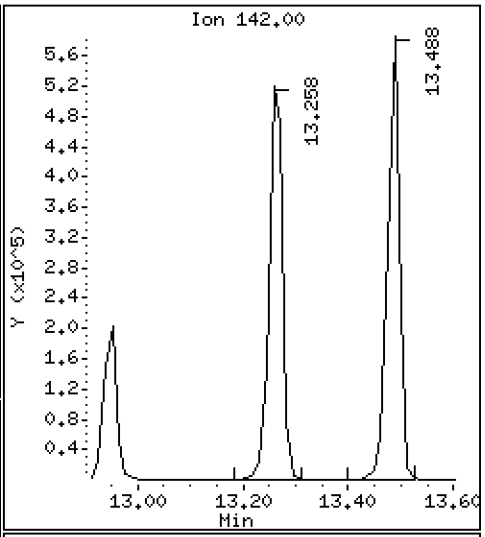
Column phase: ZB-5msi

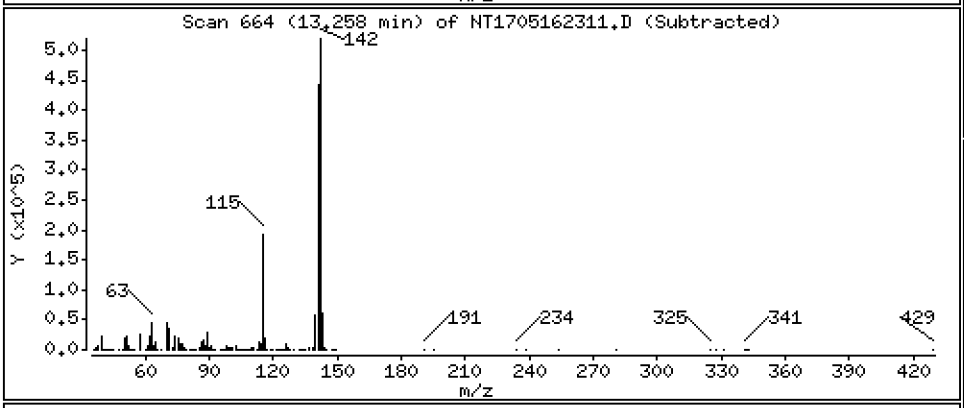
Column diameter: 0.25

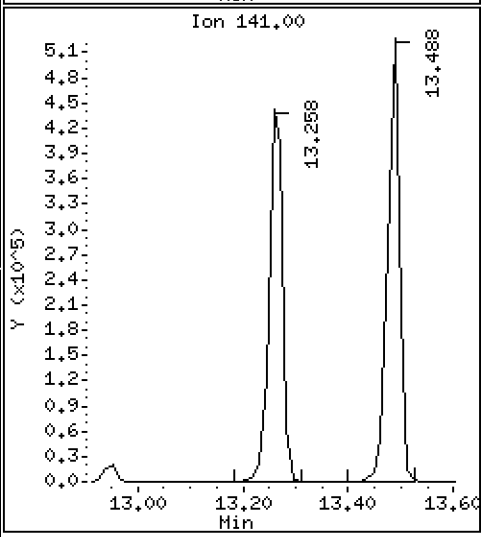
32 2-Methylnaphthalene

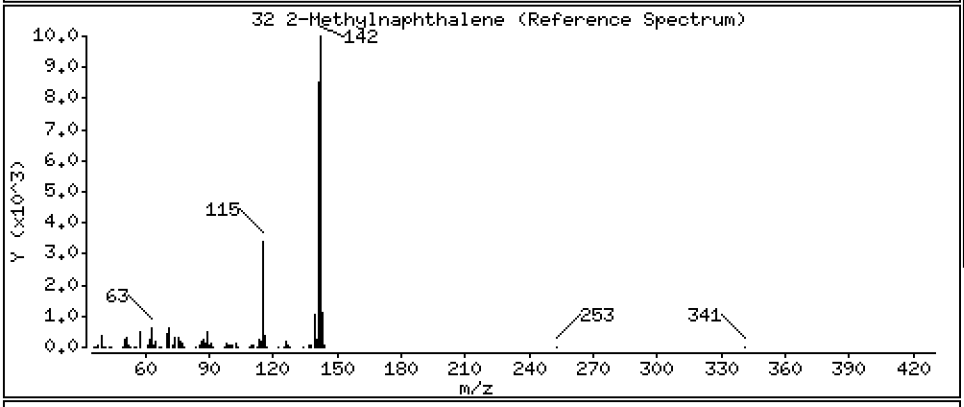
Concentration: 5.028 ug/mL

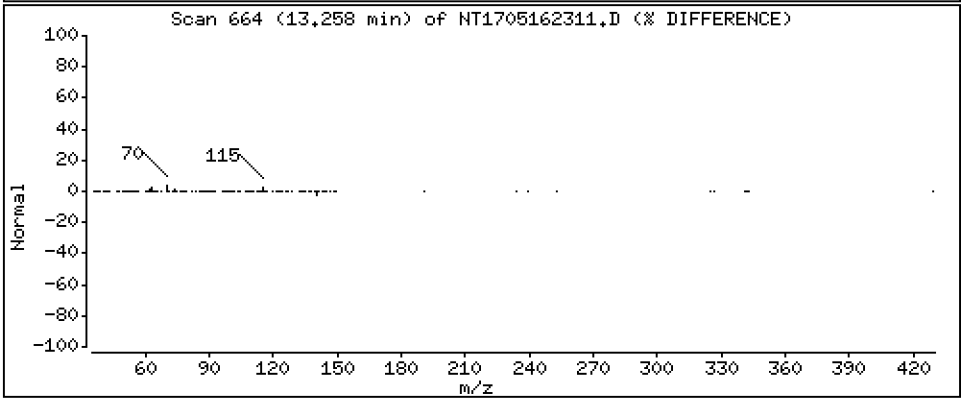












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

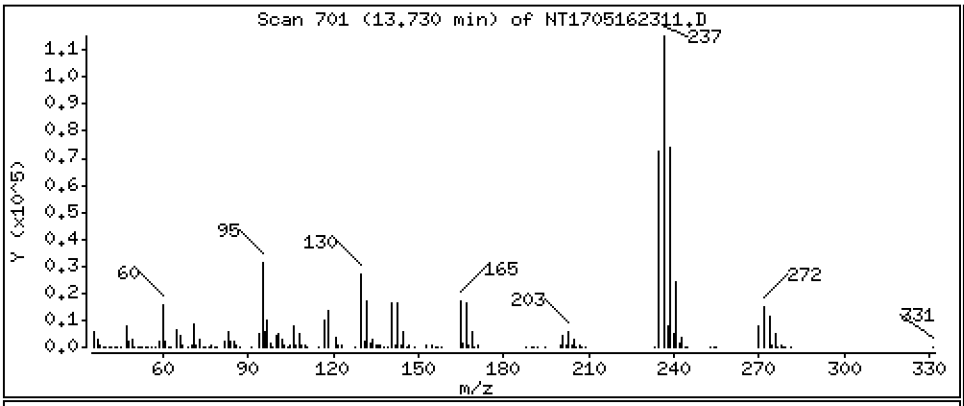
Operator: JGR

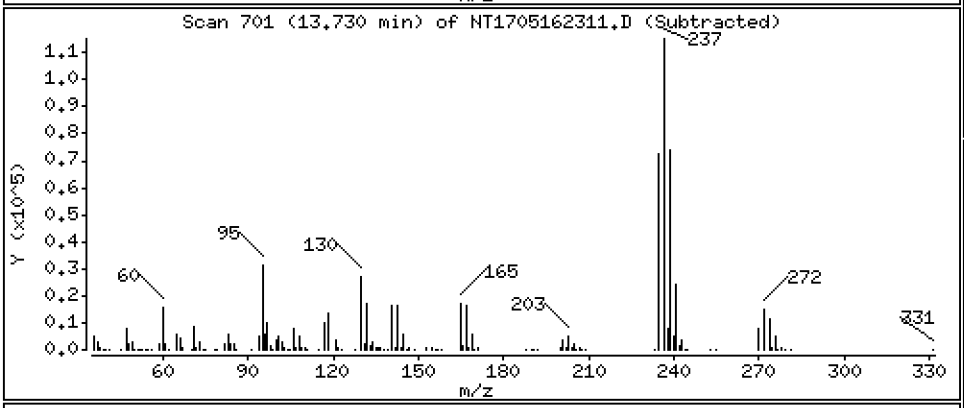
Column phase: ZB-5msi

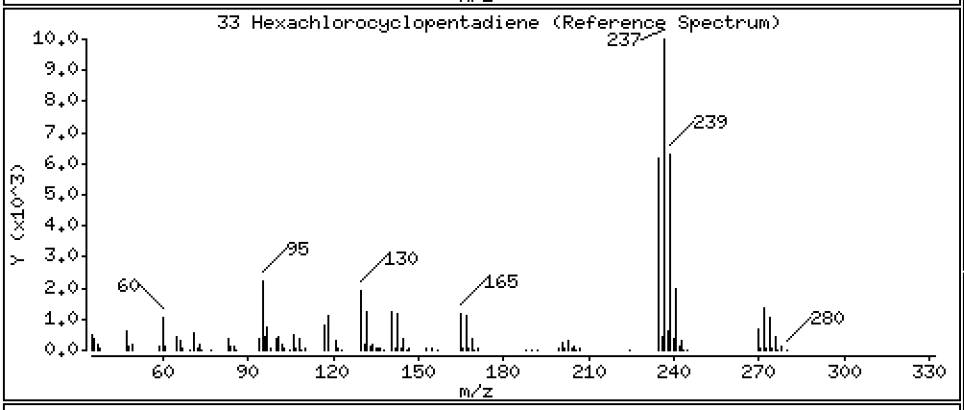
Column diameter: 0.25

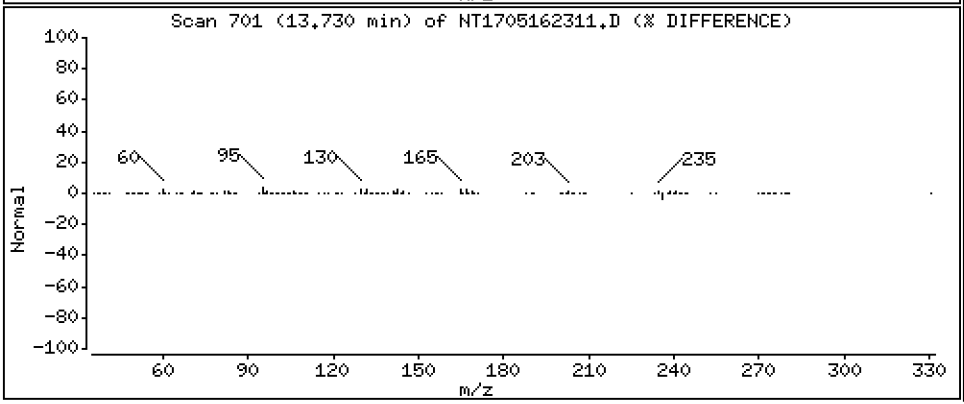
33 Hexachlorocyclopentadiene

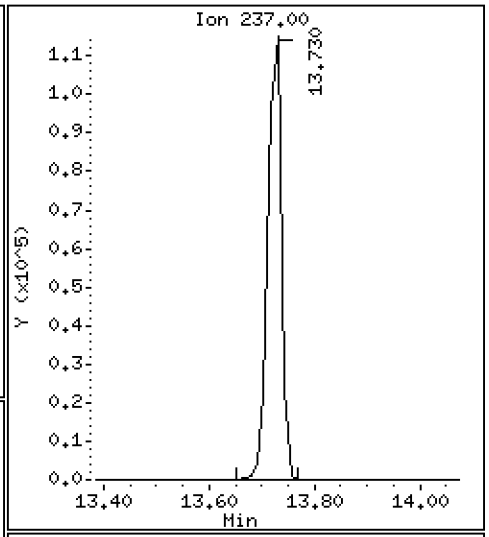
Concentration: 4.219 ug/mL

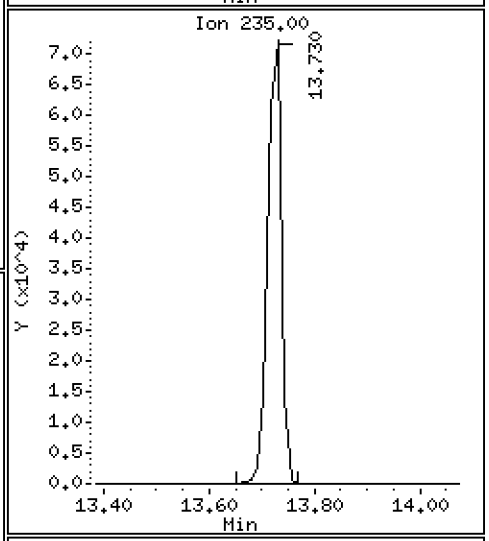


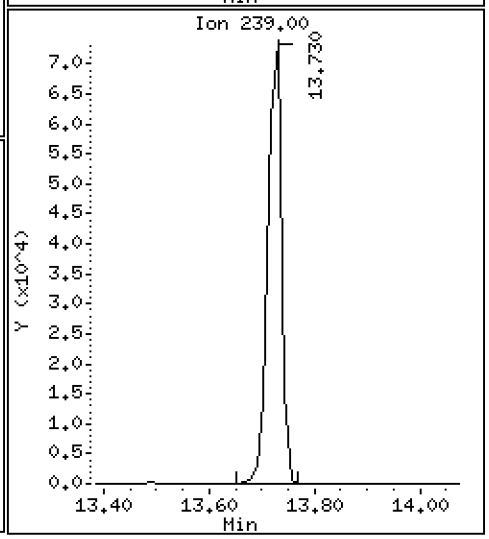












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

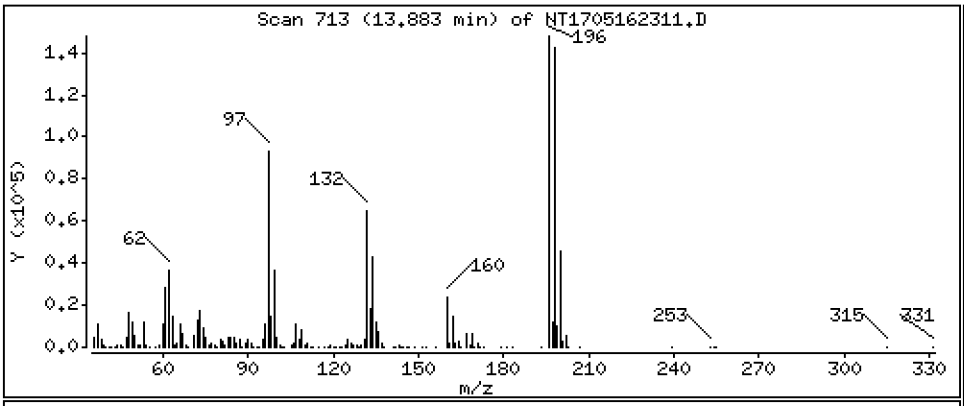
Operator: JGR

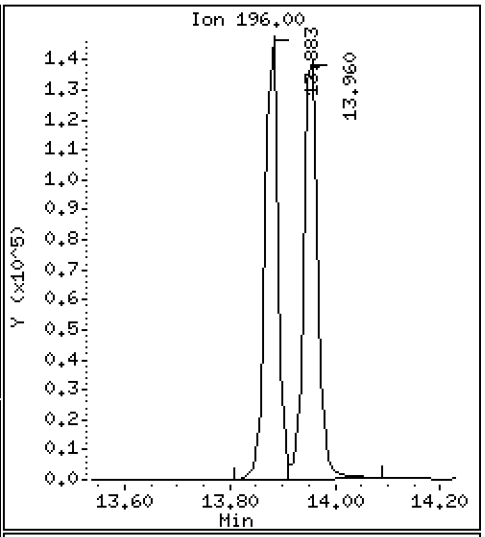
Column phase: ZB-5msi

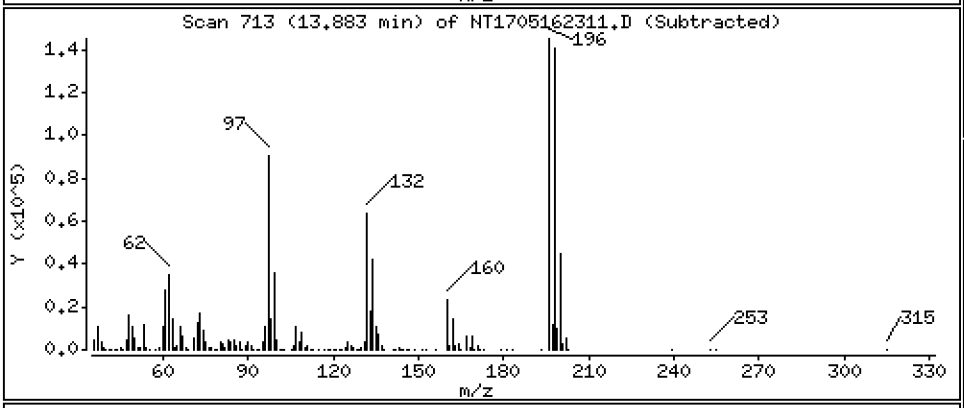
Column diameter: 0.25

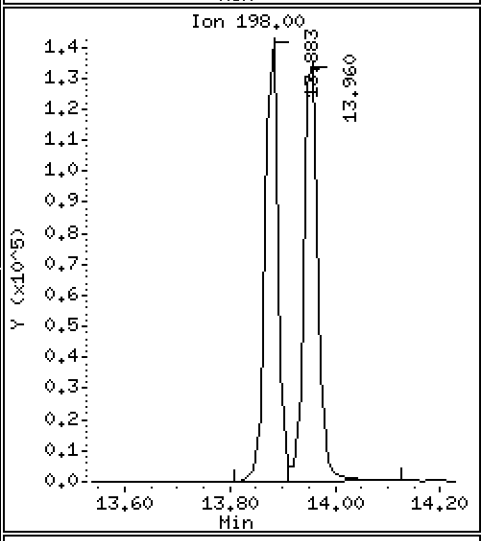
34 2,4,6-Trichlorophenol

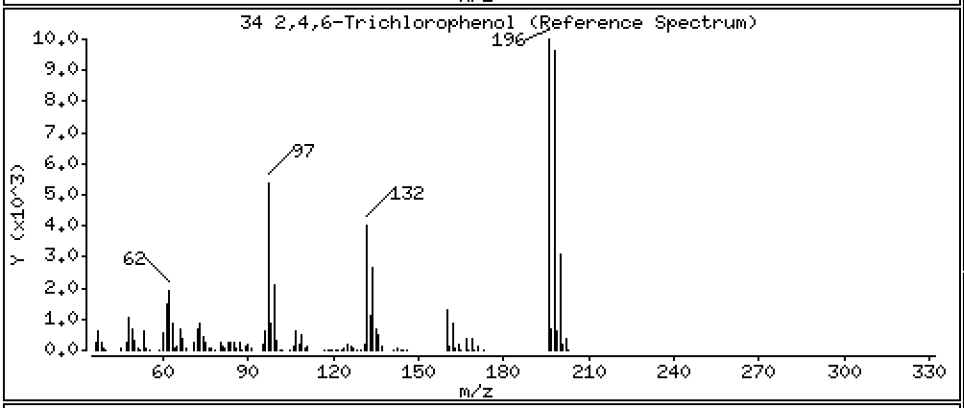
Concentration: 4.794 ug/mL

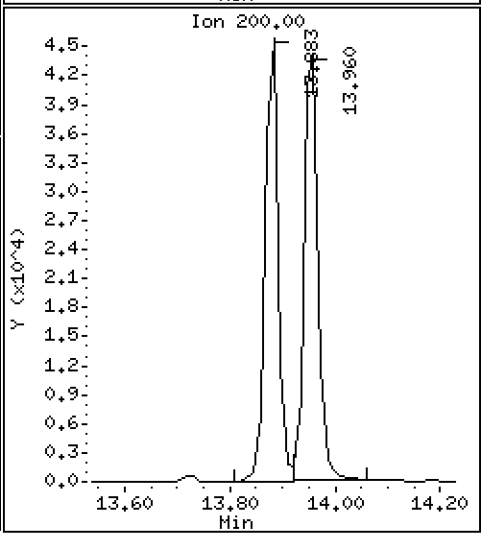


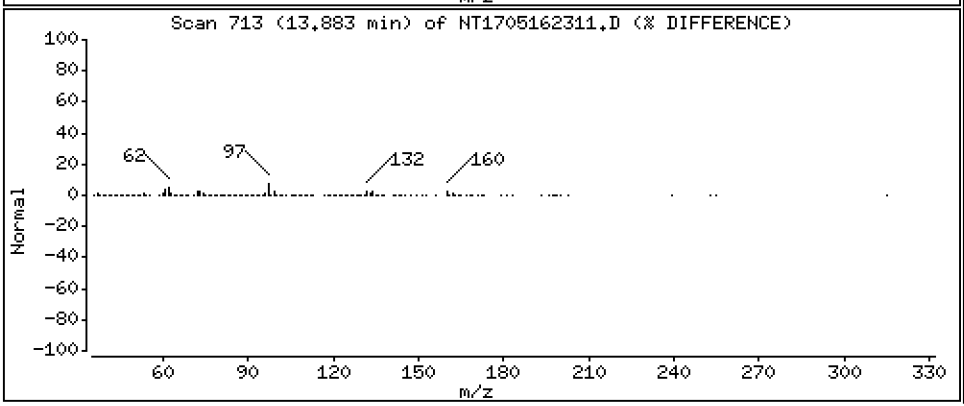












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

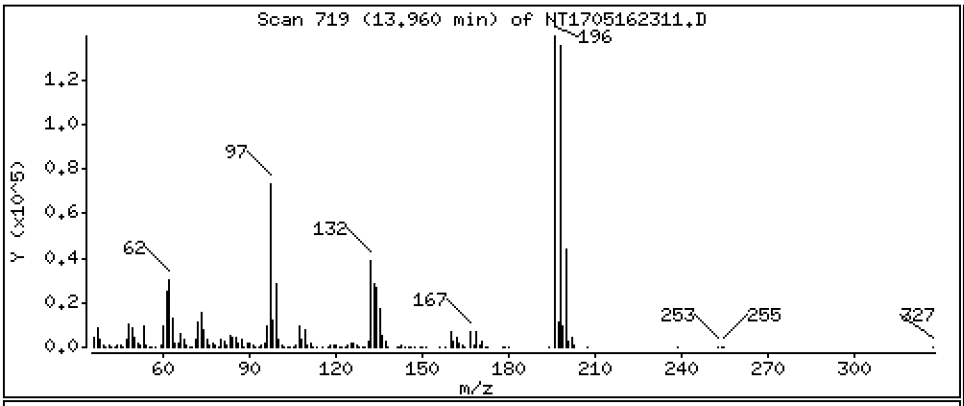
Operator: JGR

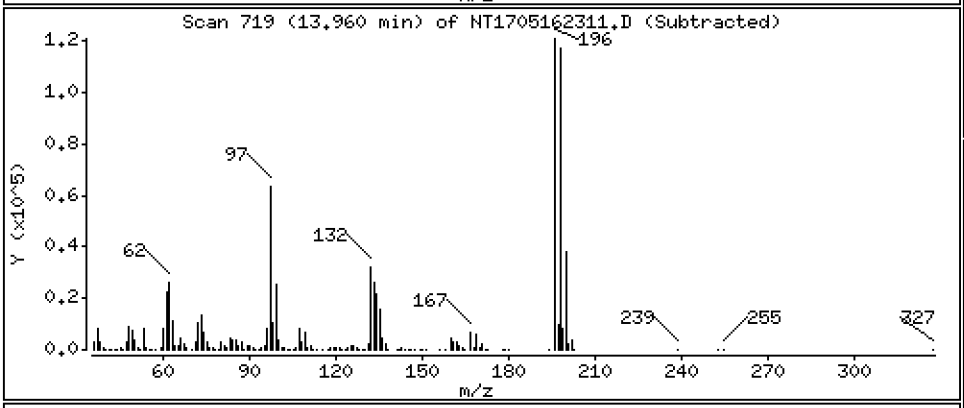
Column phase: ZB-5msi

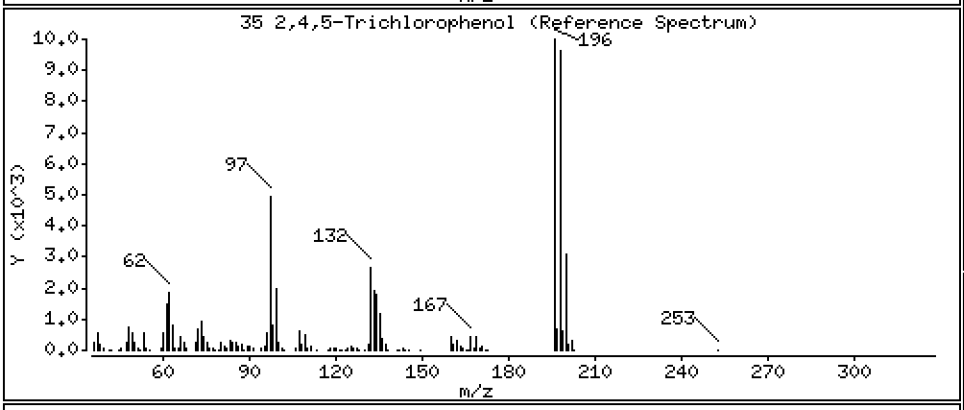
Column diameter: 0.25

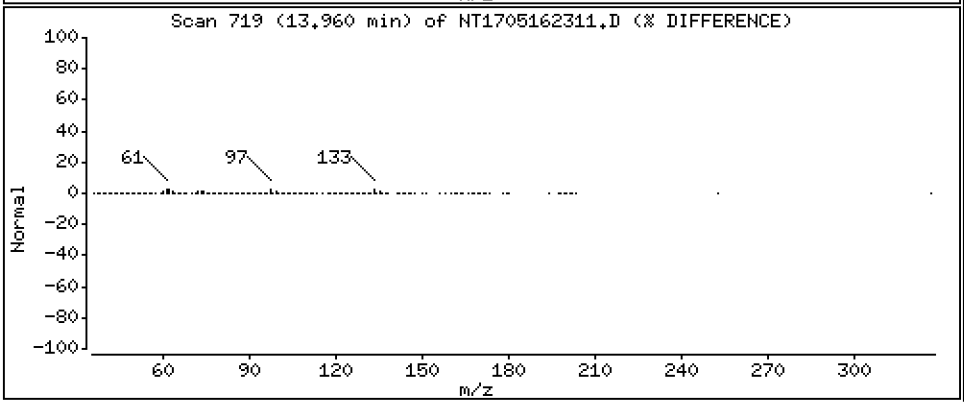
35 2,4,5-Trichlorophenol

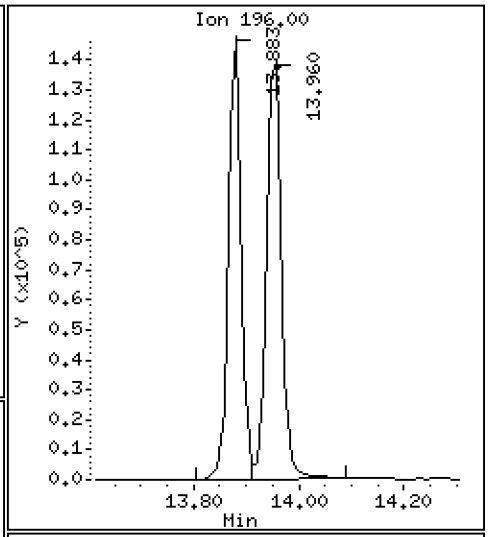
Concentration: 4.837 ug/mL

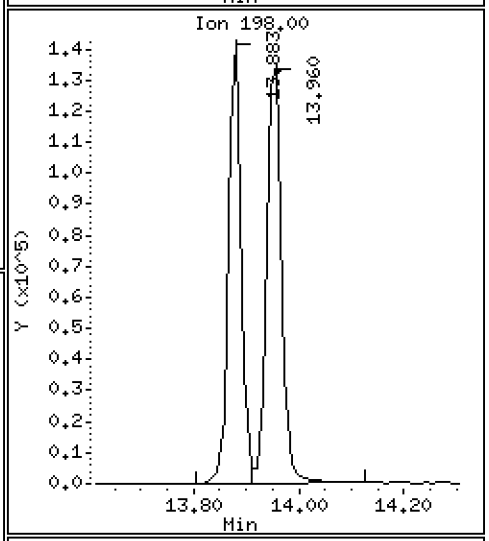


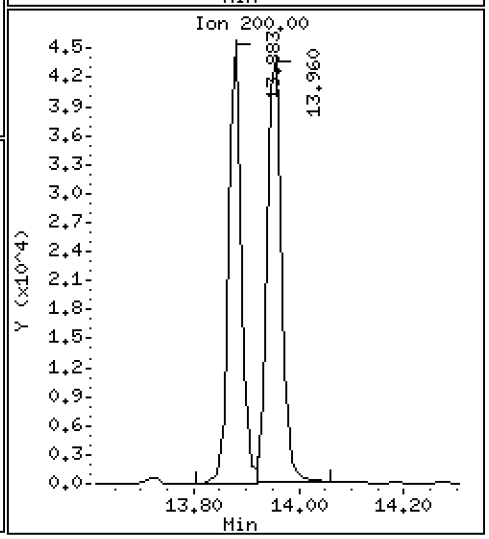












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

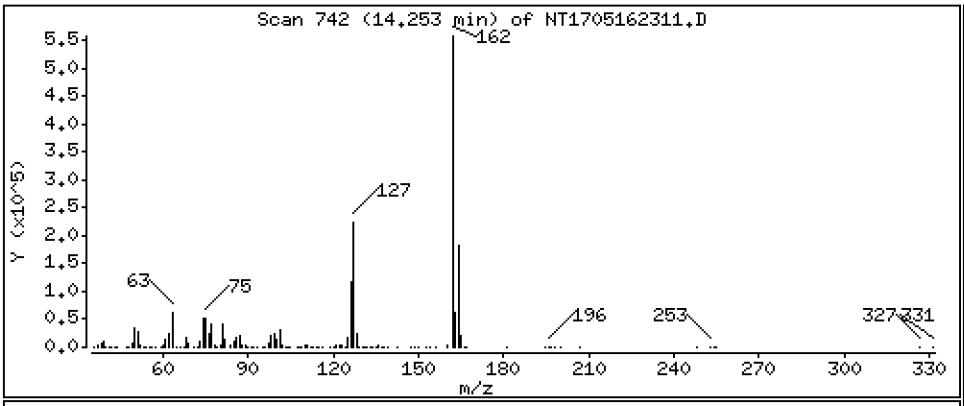
Operator: JGR

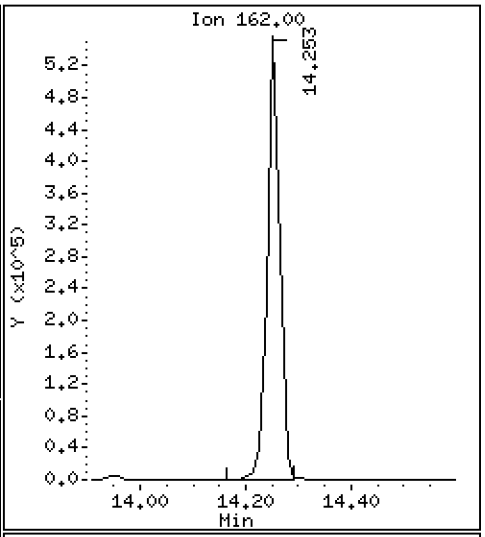
Column phase: ZB-5msi

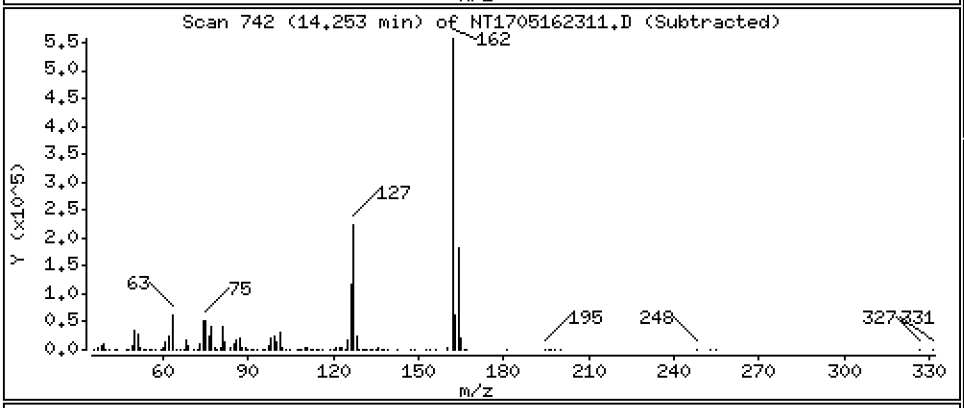
Column diameter: 0.25

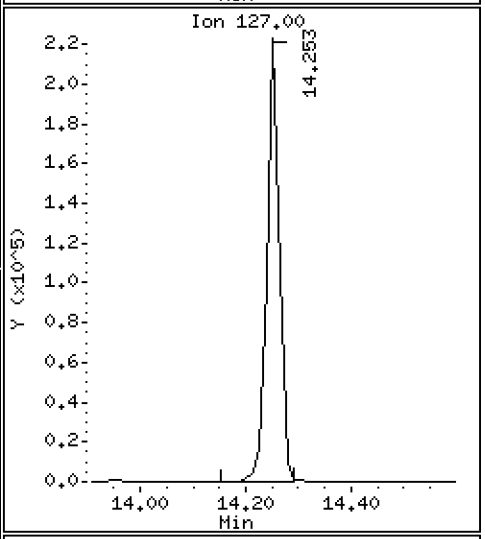
37 2-Chloronaphthalene

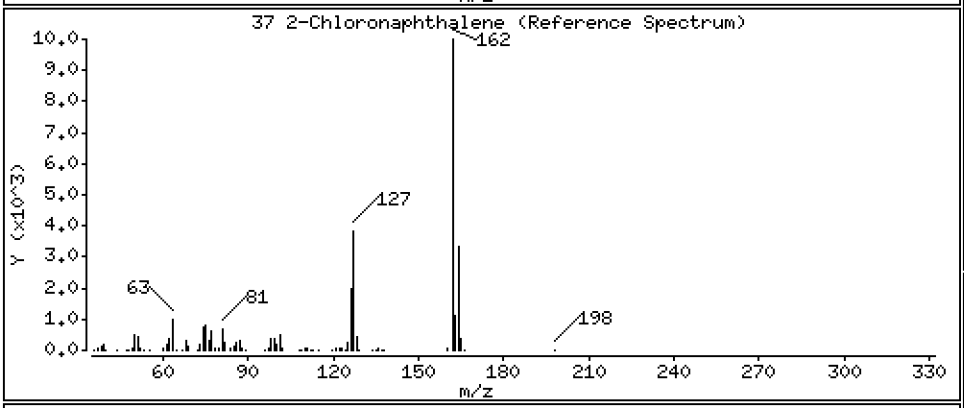
Concentration: 5.401 ug/mL

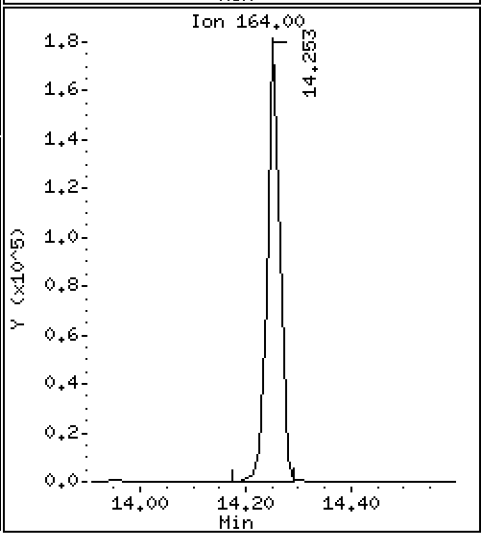


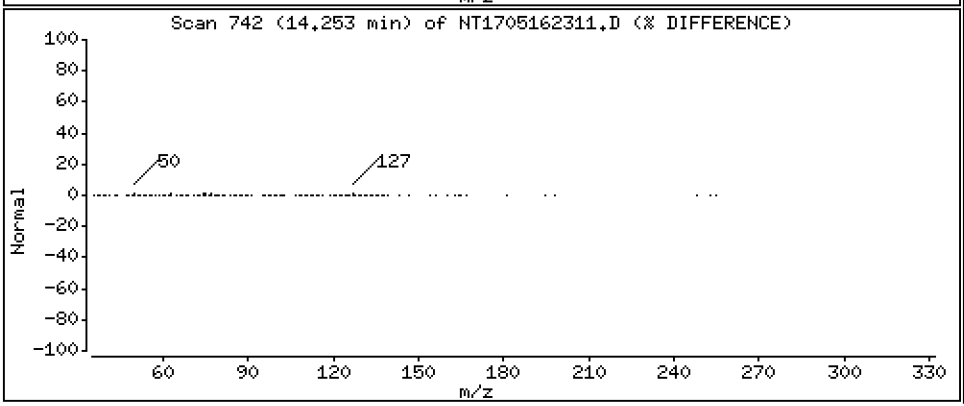












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

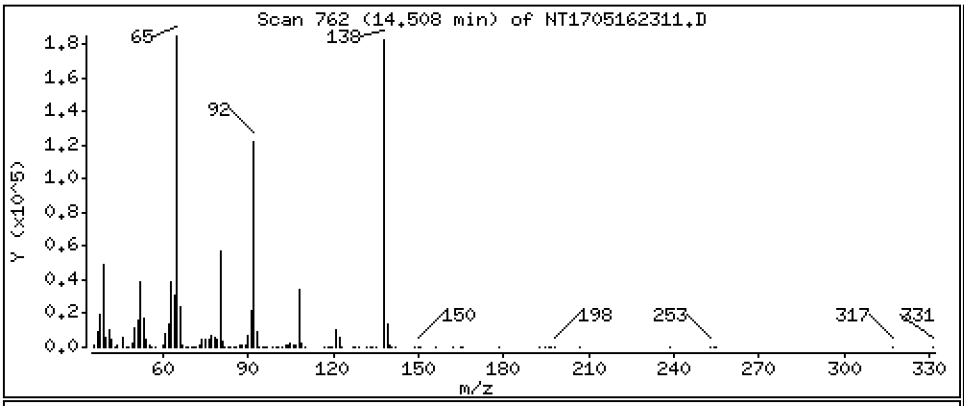
Operator: JGR

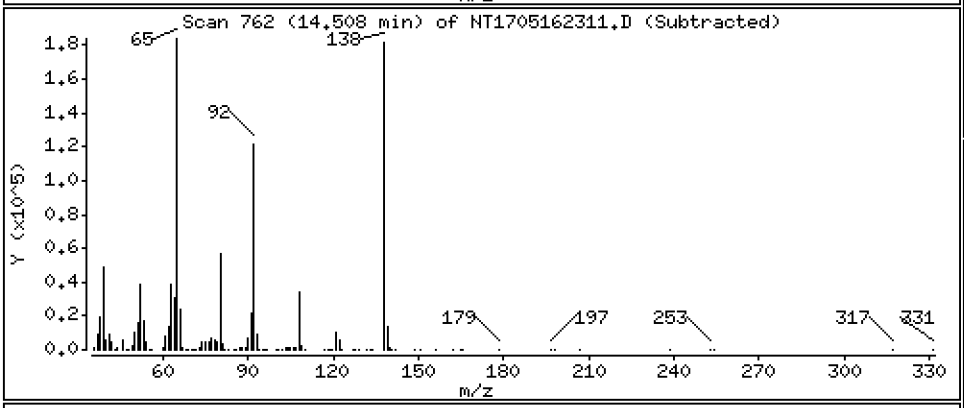
Column phase: ZB-5msi

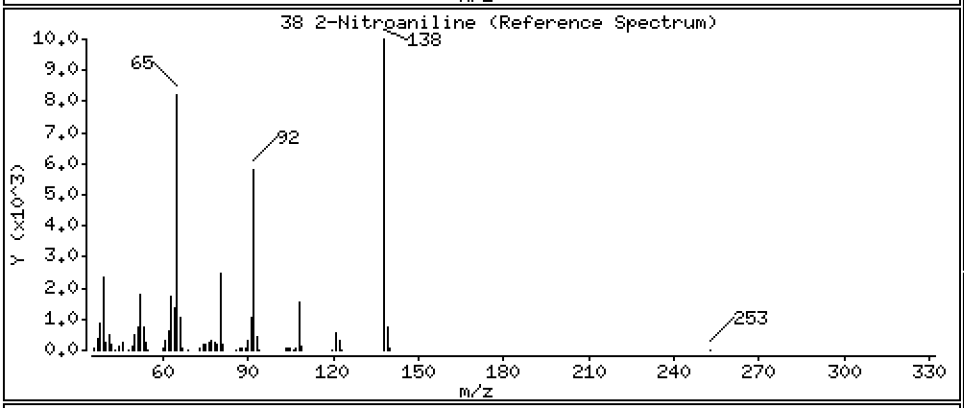
Column diameter: 0.25

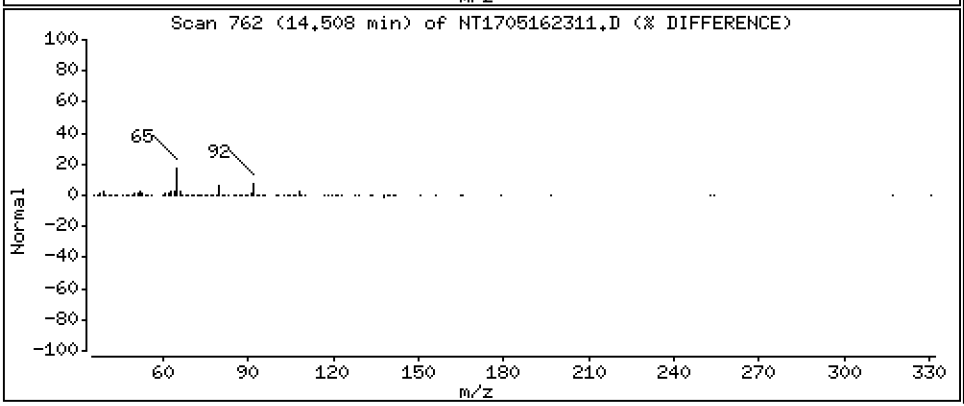
38 2-Nitroaniline

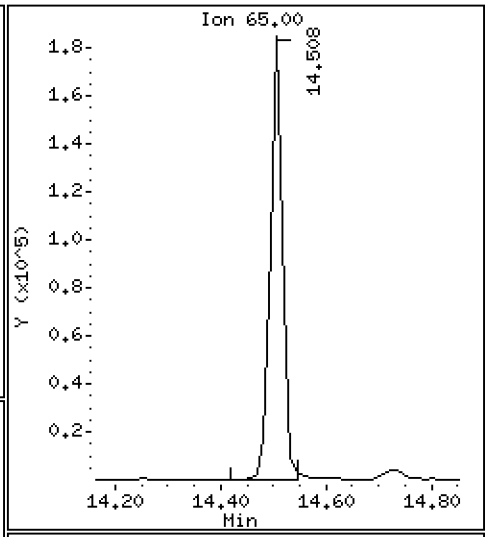
Concentration: 5.356 ug/mL

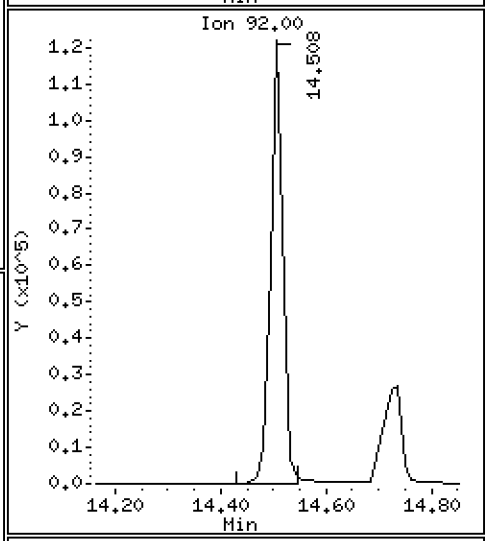


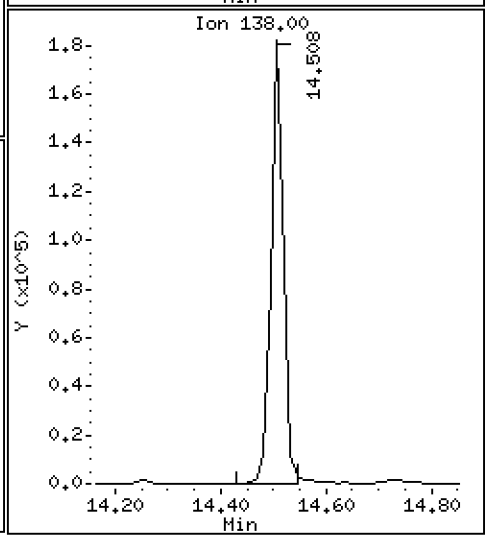












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

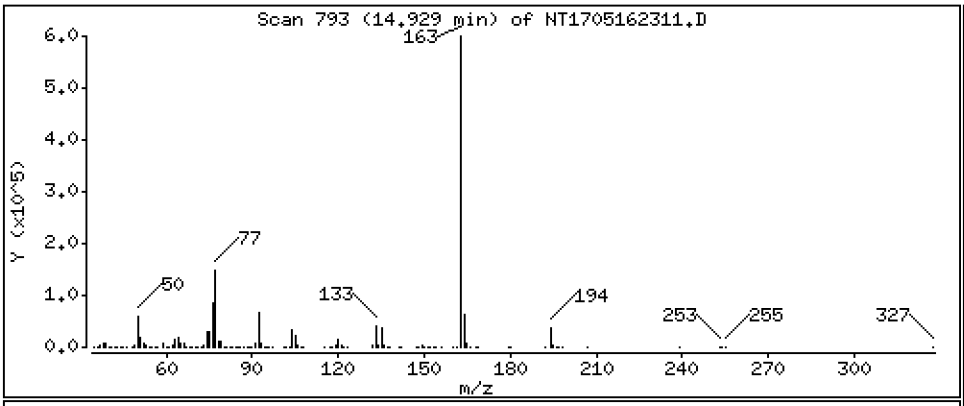
Operator: JGR

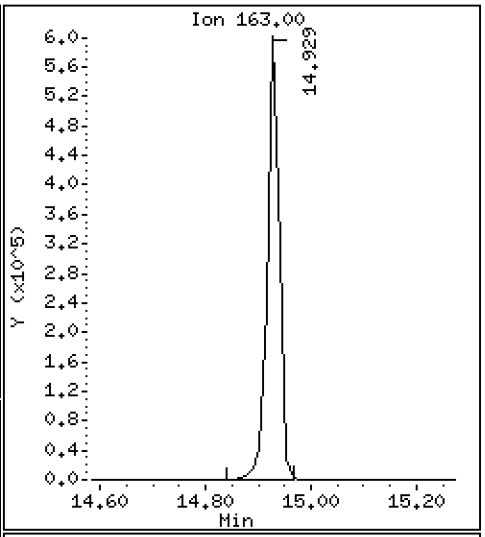
Column phase: ZB-5msi

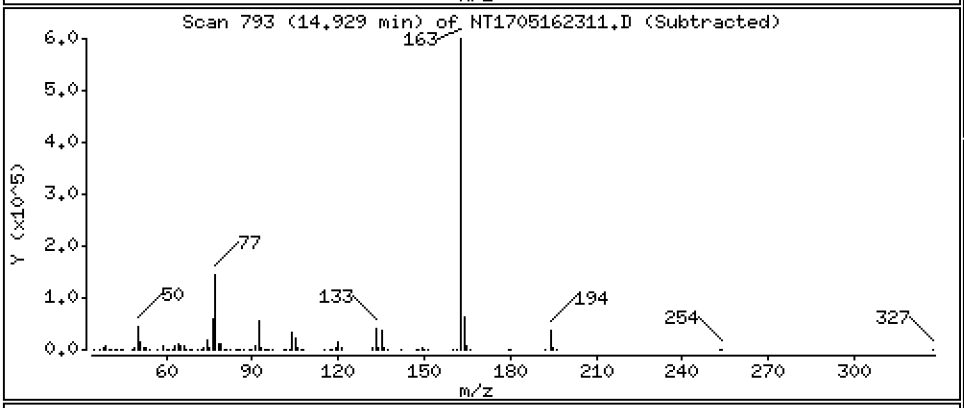
Column diameter: 0.25

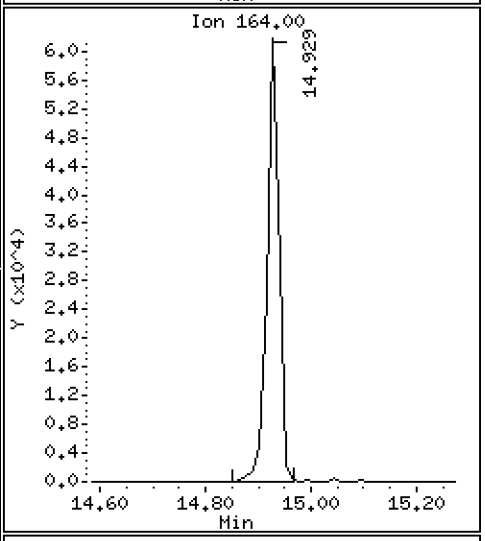
39 Dimethylphthalate

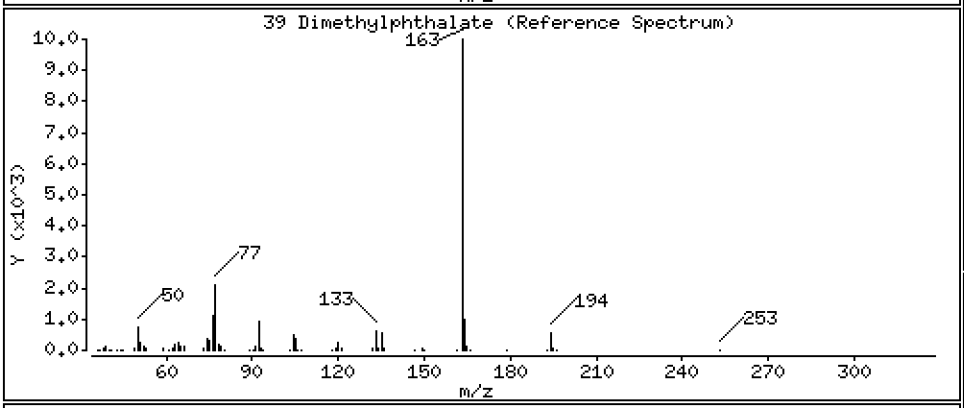
Concentration: 5.418 ug/mL

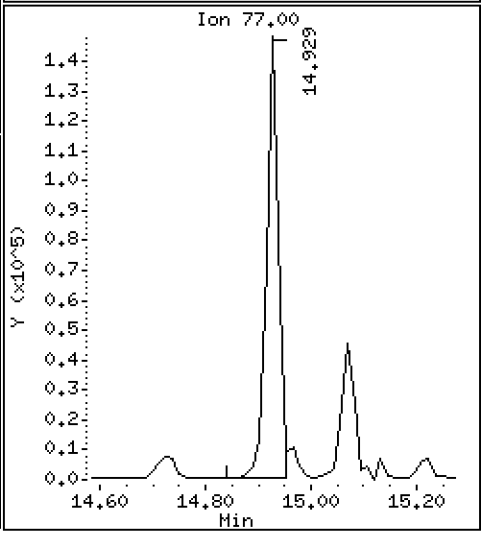


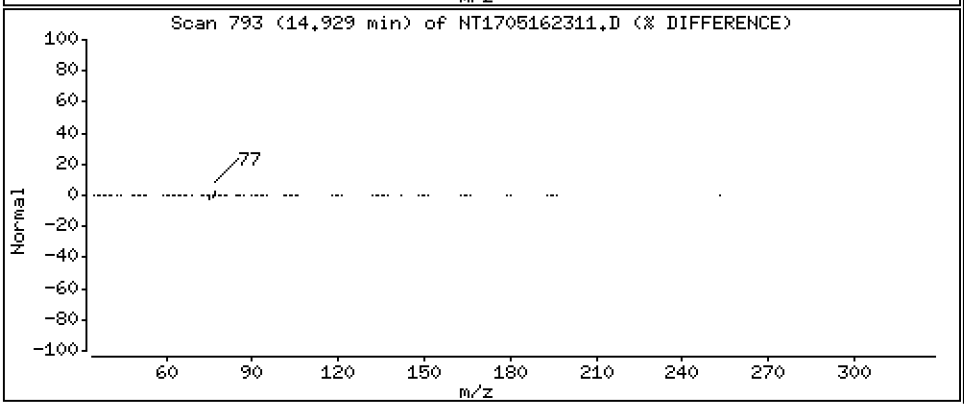












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

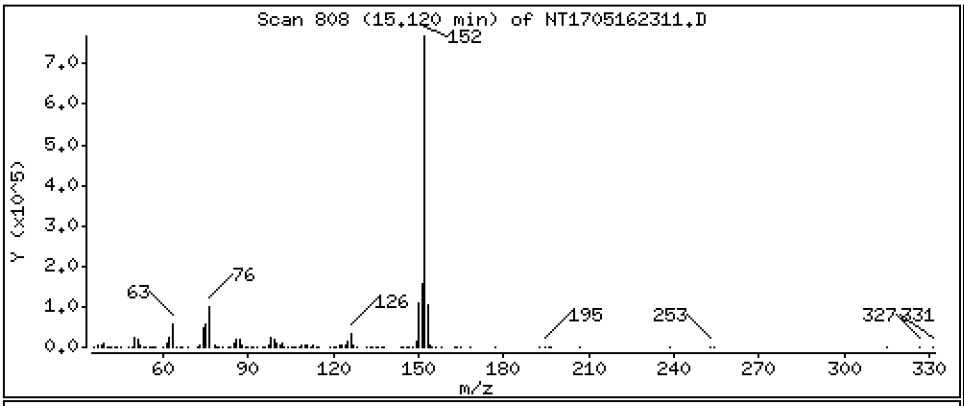
Operator: JGR

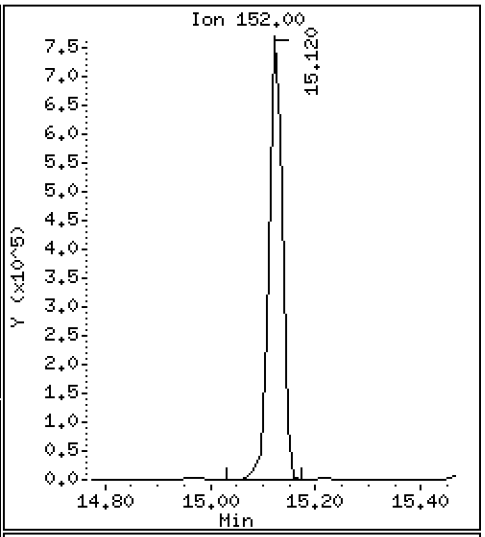
Column phase: ZB-5msi

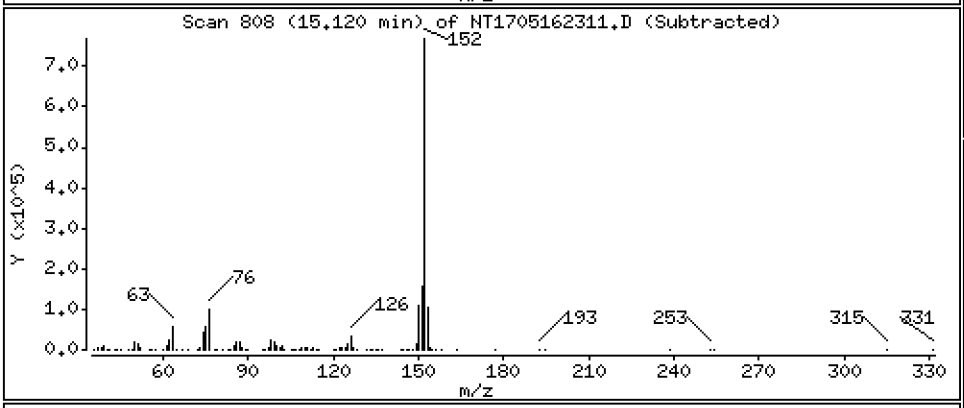
Column diameter: 0.25

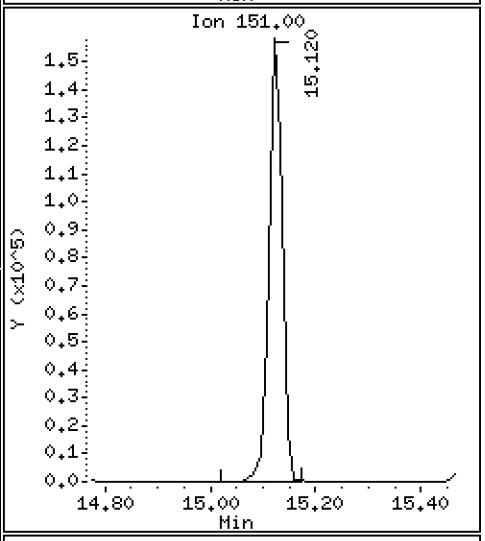
40 Acenaphthylene

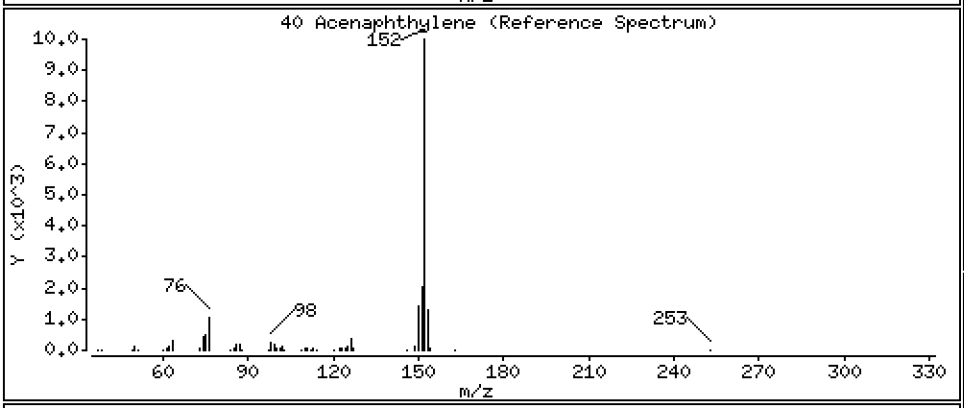
Concentration: 5.282 ug/mL

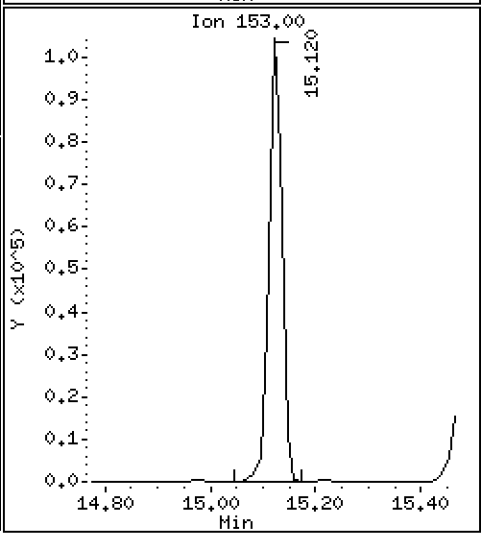


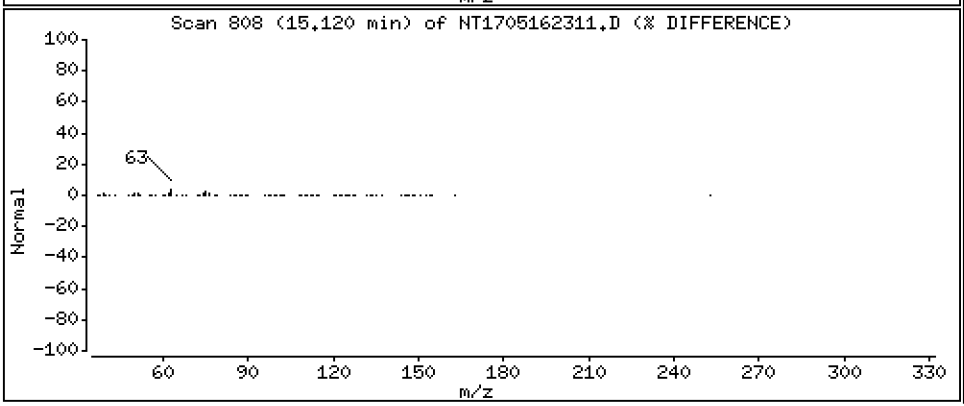












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

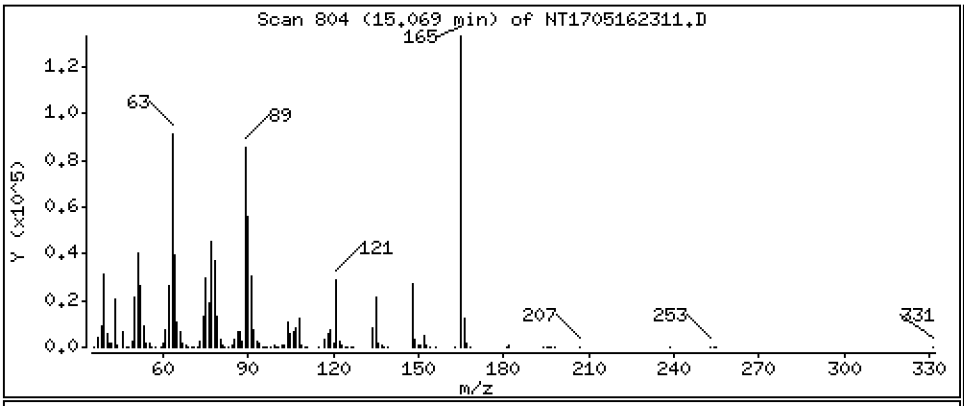
Operator: JGR

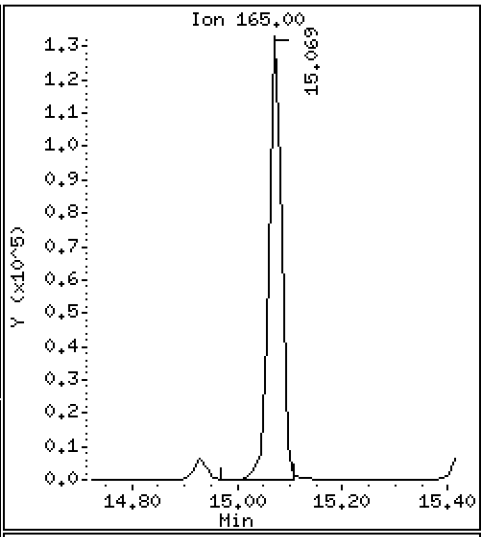
Column phase: ZB-5msi

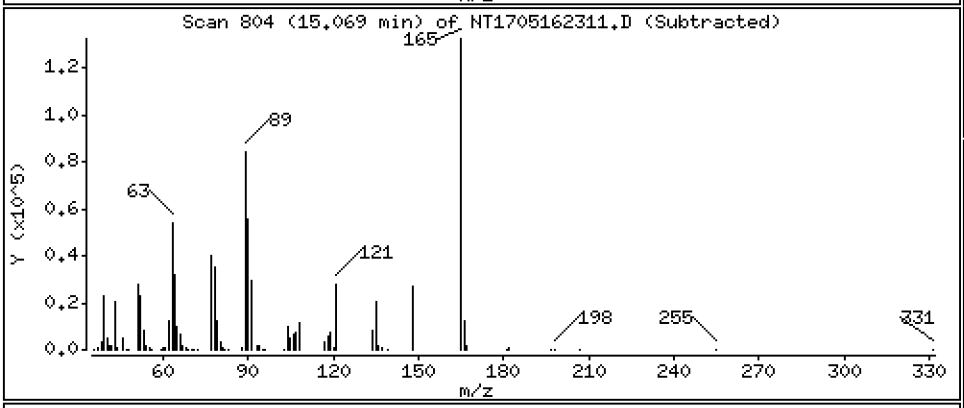
Column diameter: 0.25

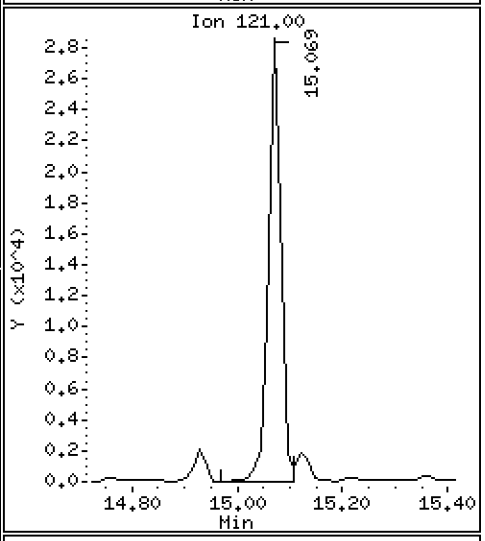
41 2,6-Dinitrotoluene

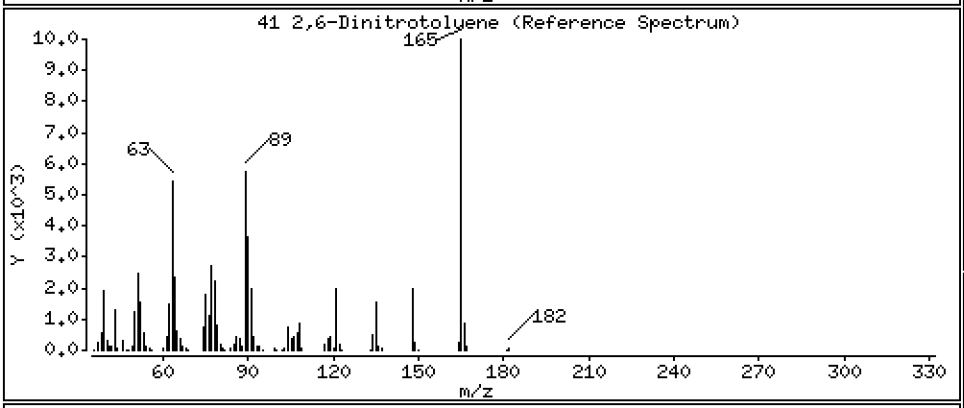
Concentration: 5.404 ug/mL

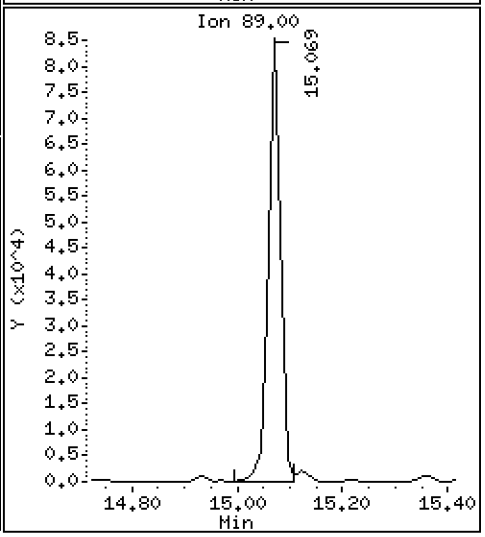


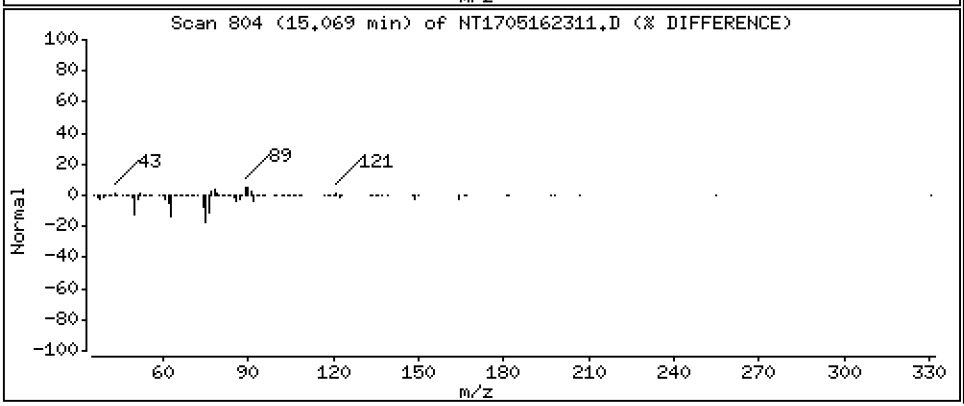












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

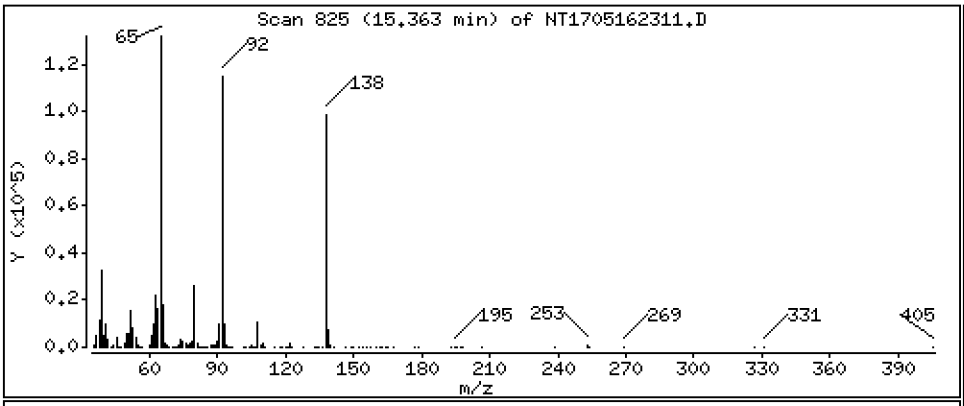
Operator: JGR

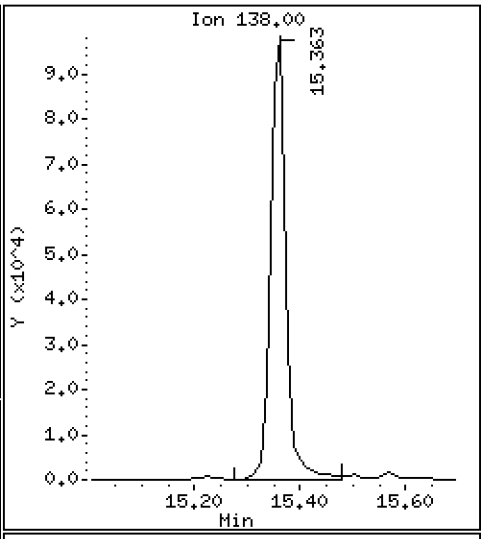
Column phase: ZB-5msi

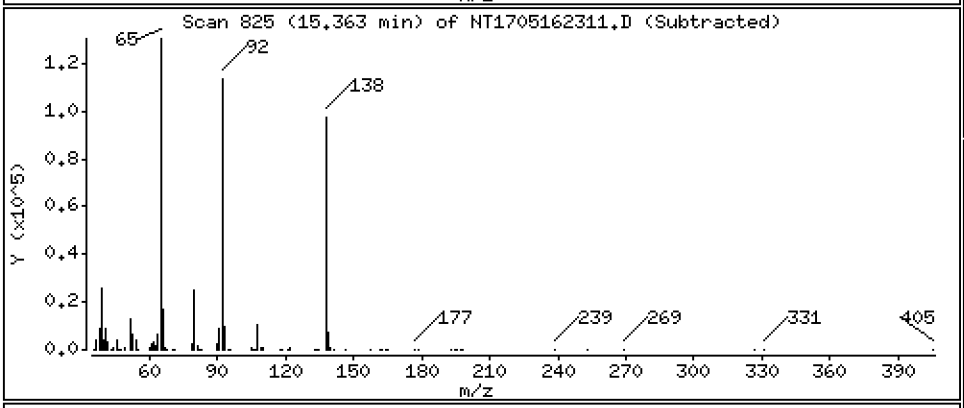
Column diameter: 0.25

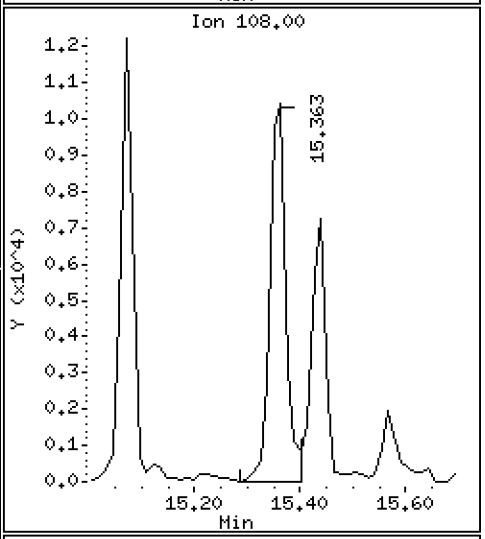
43 3-Nitroaniline

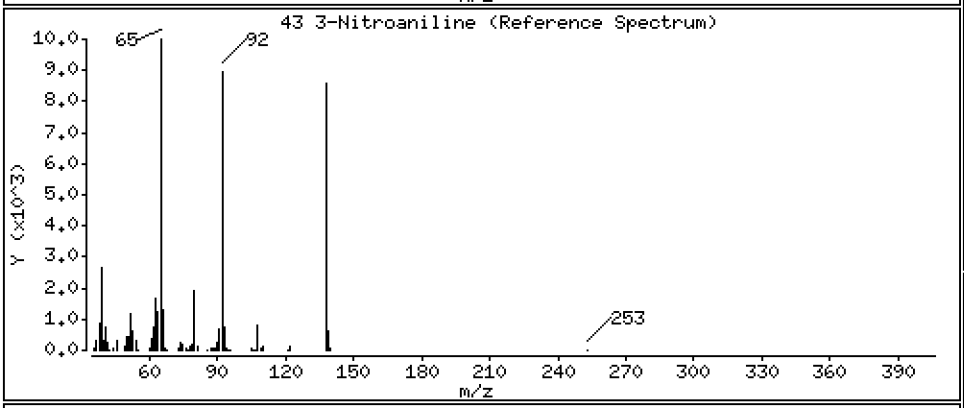
Concentration: 5.169 ug/mL

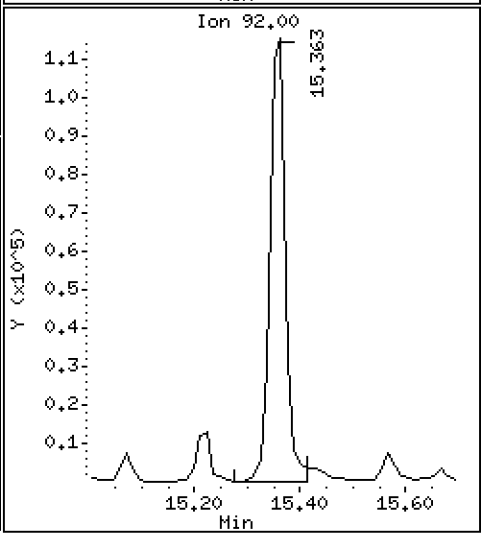


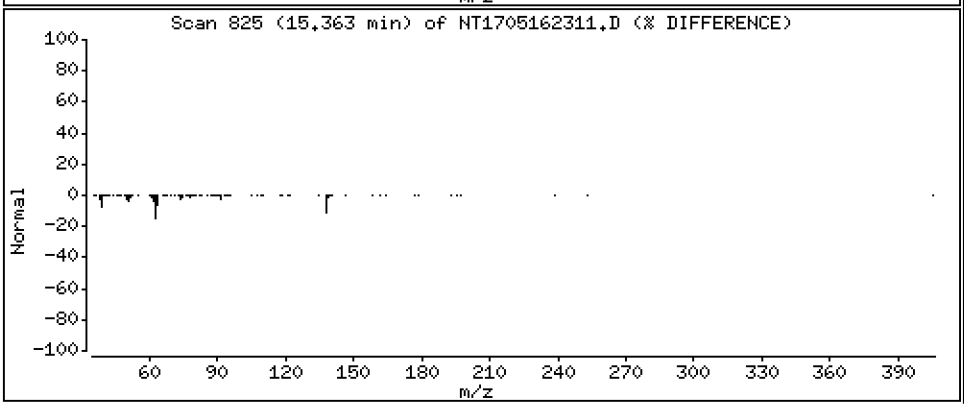












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

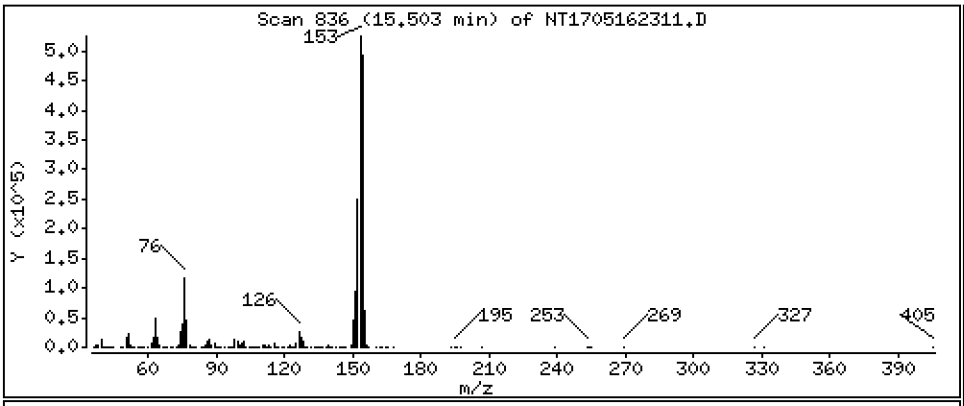
Operator: JGR

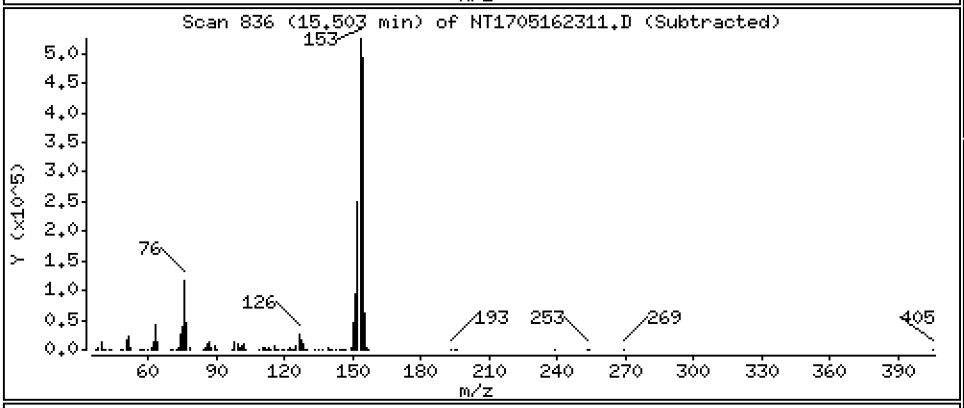
Column phase: ZB-5msi

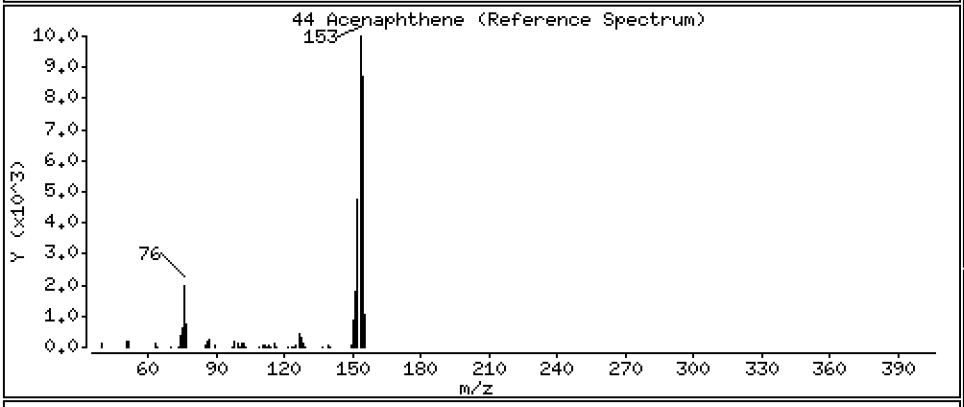
Column diameter: 0.25

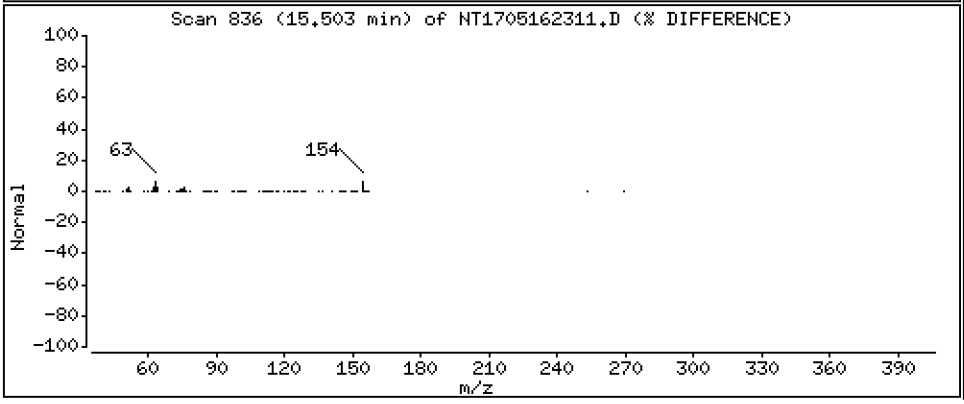
44 Acenaphthene

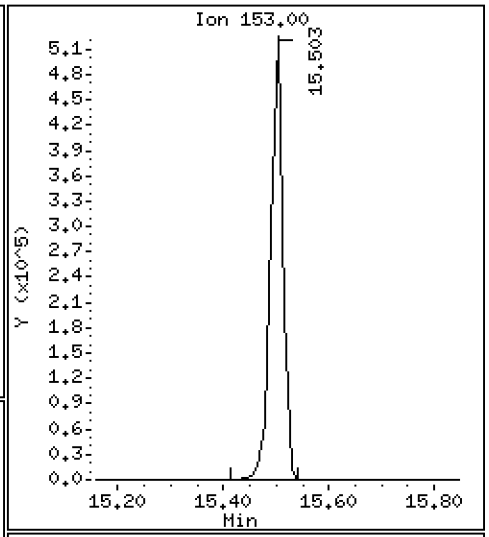
Concentration: 5.283 ug/mL

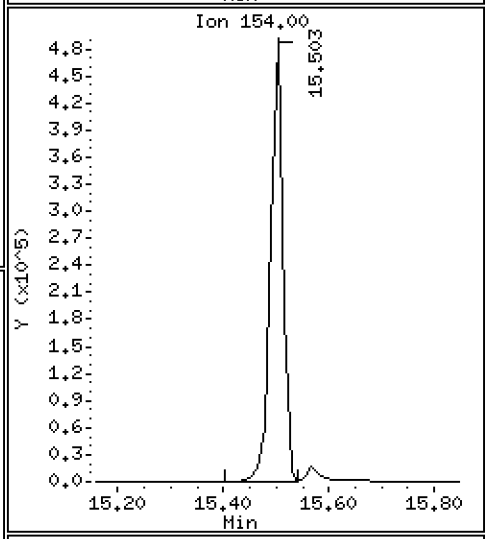


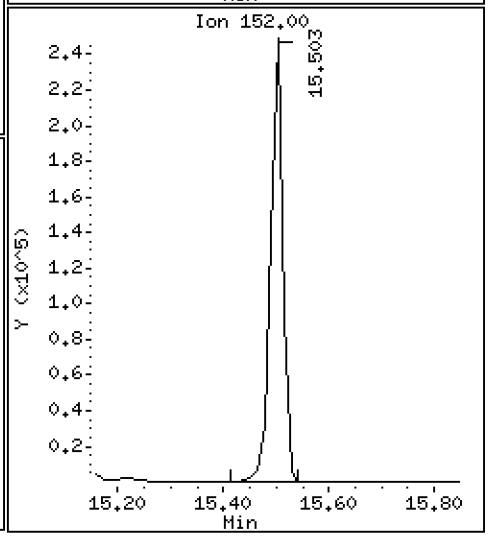












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

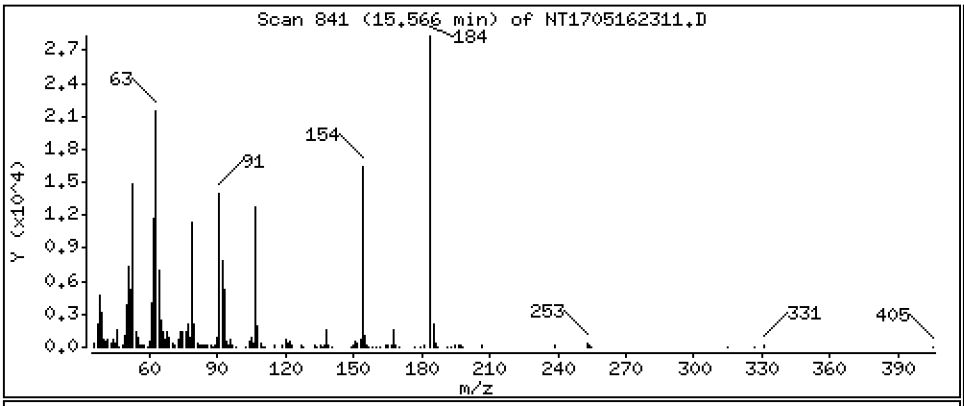
Operator: JGR

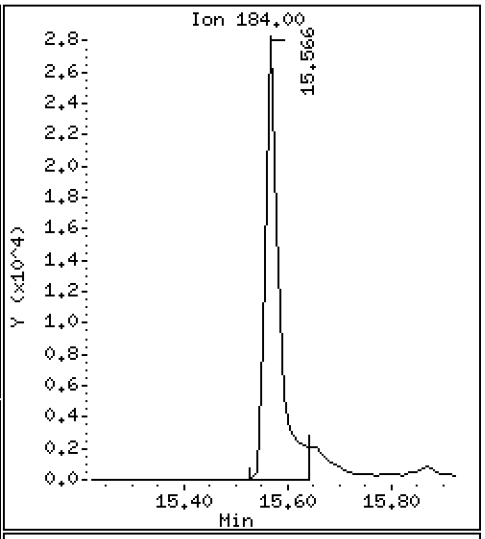
Column phase: ZB-5msi

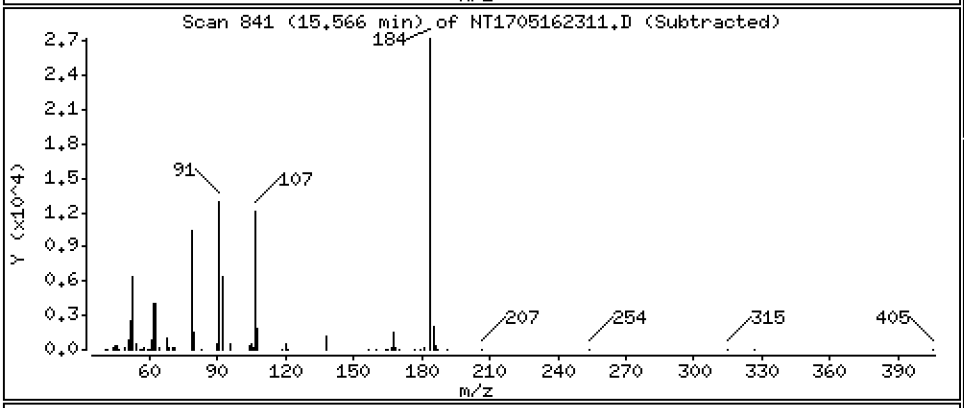
Column diameter: 0.25

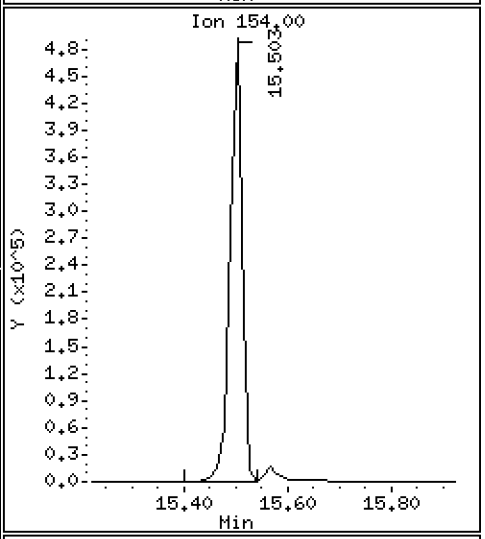
45 2,4-Dinitrophenol

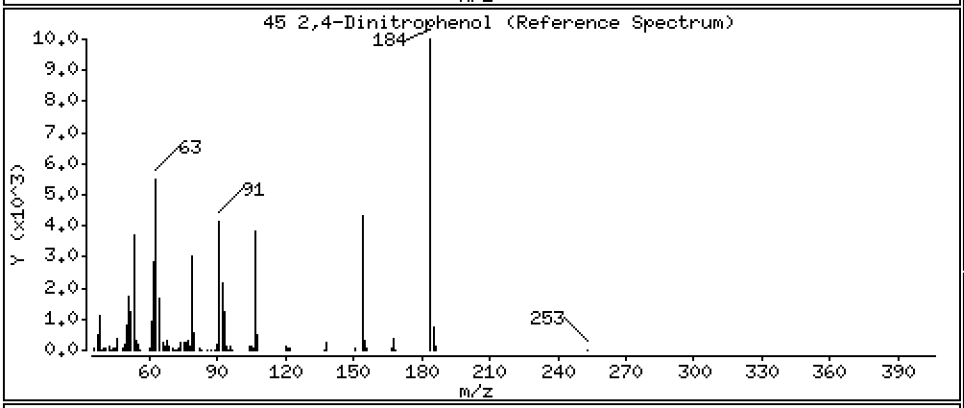
Concentration: 2.119 ug/mL

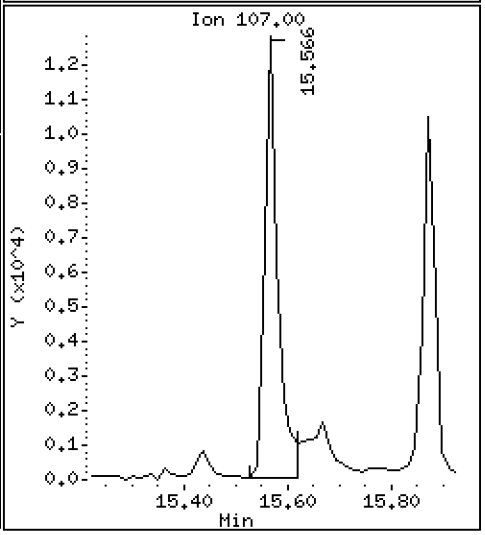


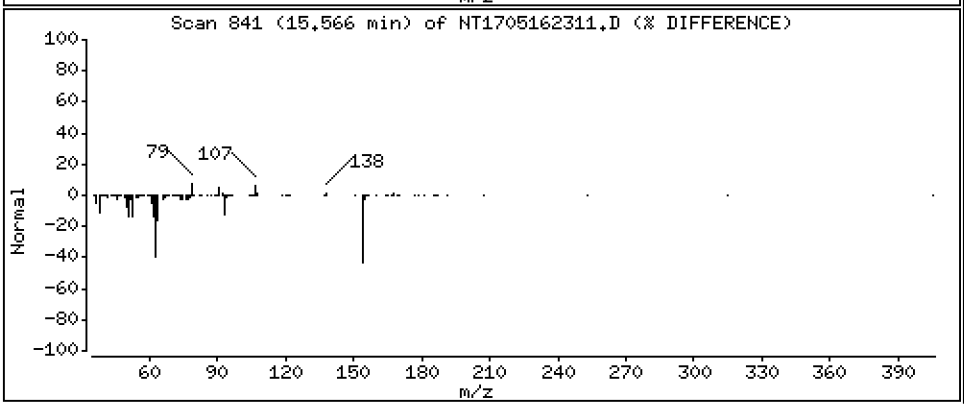












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

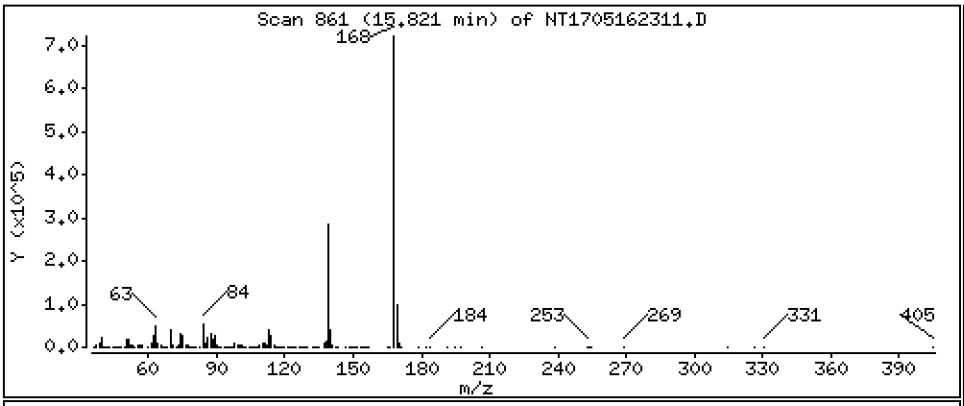
Operator: JGR

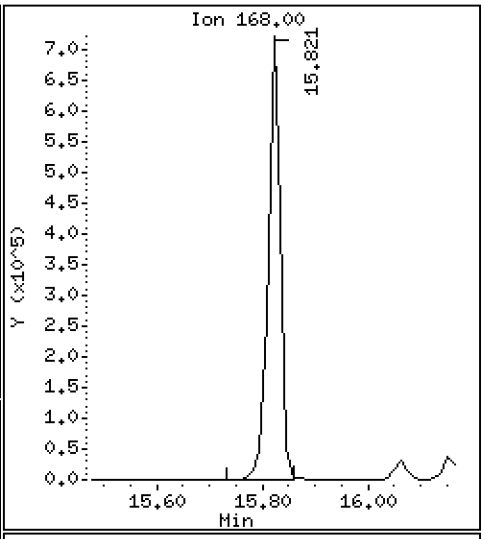
Column phase: ZB-5msi

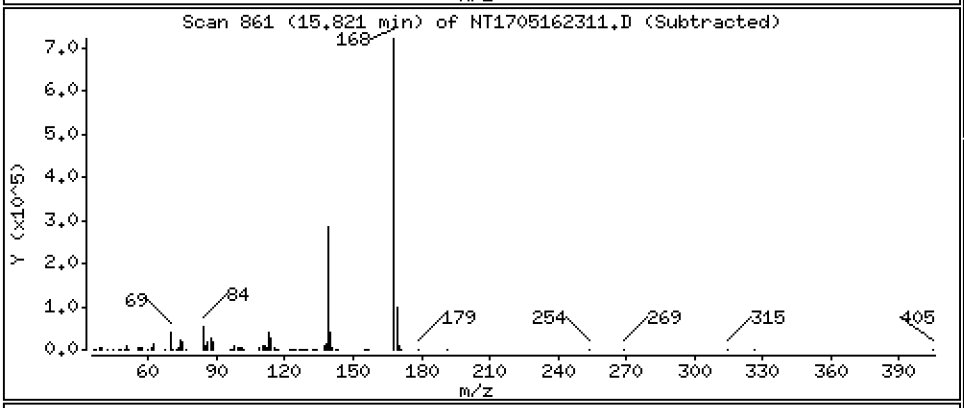
Column diameter: 0.25

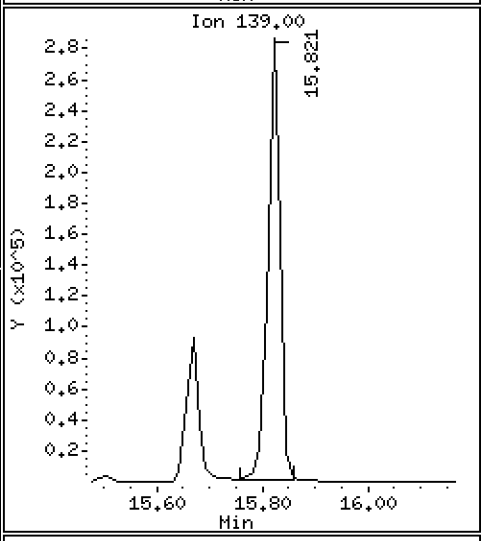
46 Dibenzofuran

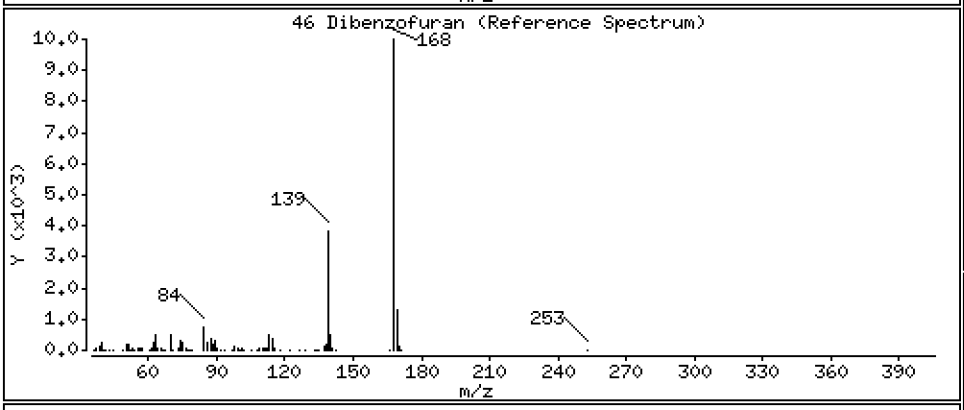
Concentration: 5.163 ug/mL

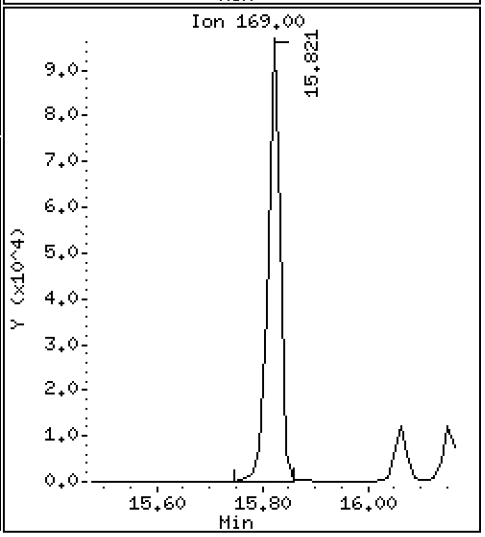


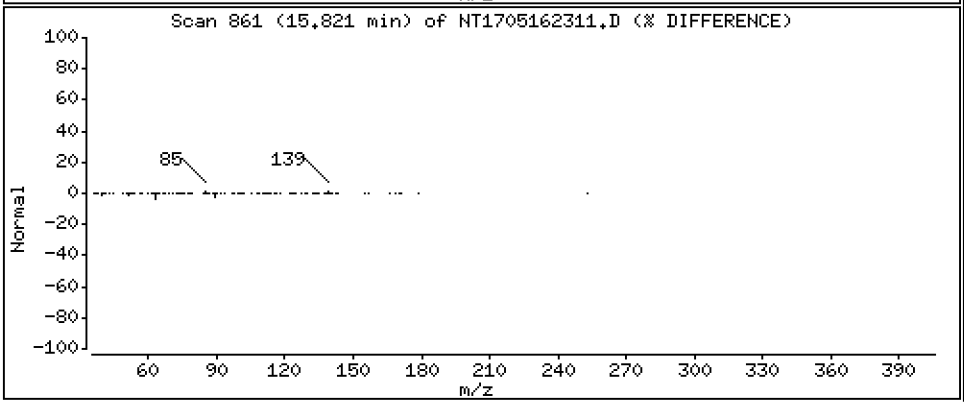












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

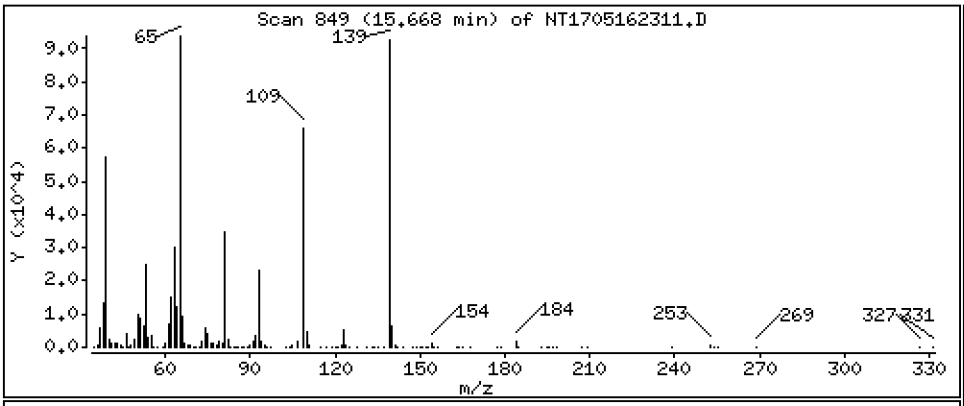
Operator: JGR

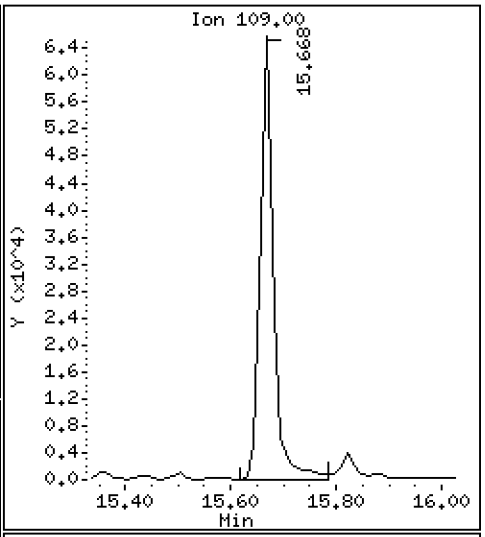
Column phase: ZB-5msi

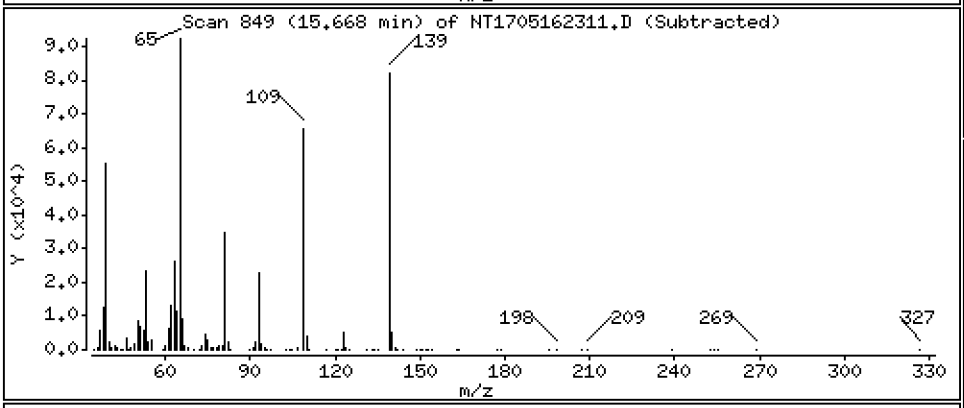
Column diameter: 0.25

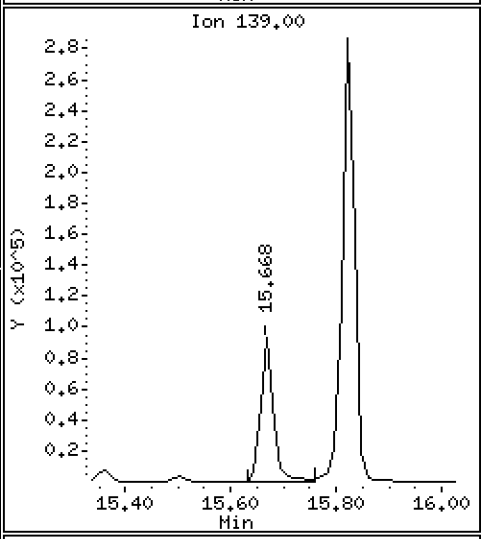
47 4-Nitrophenol

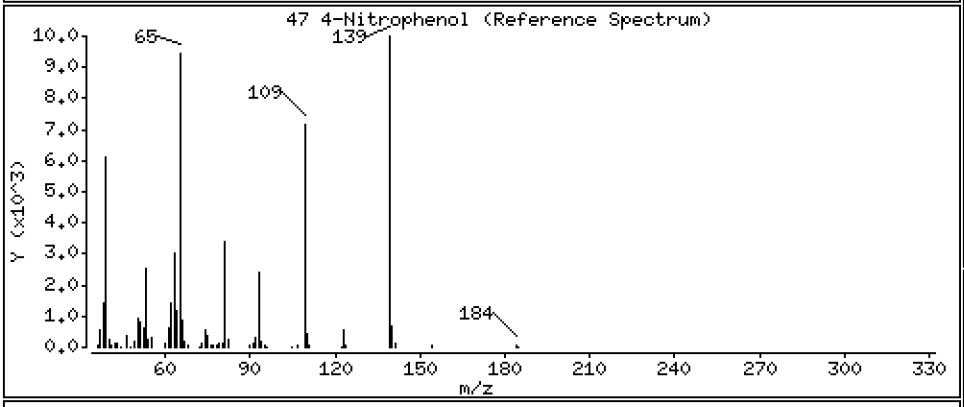
Concentration: 4.504 ug/mL

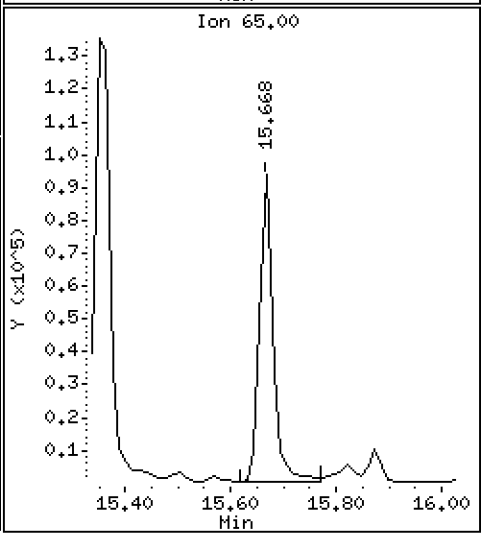


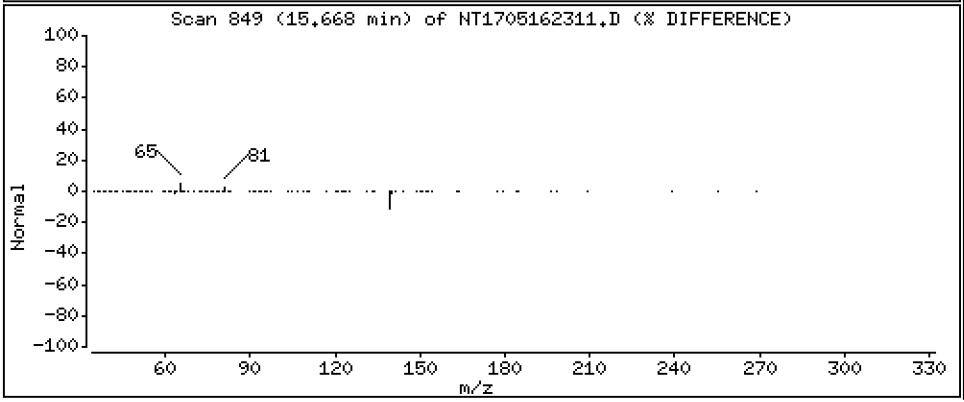












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

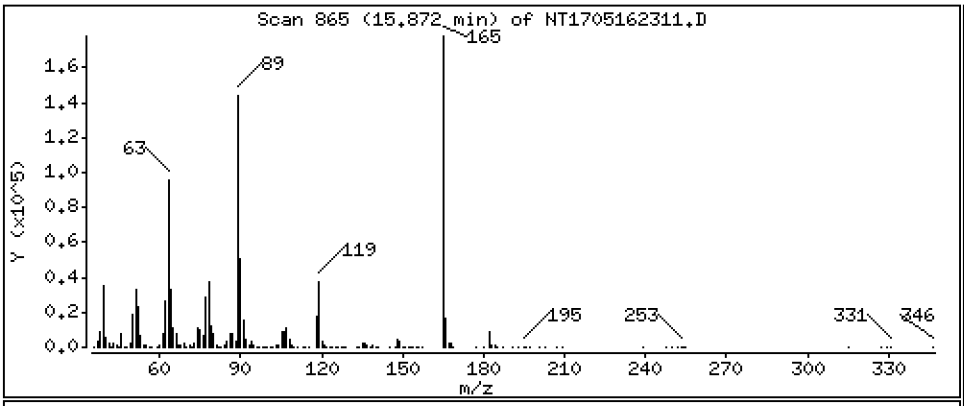
Operator: JGR

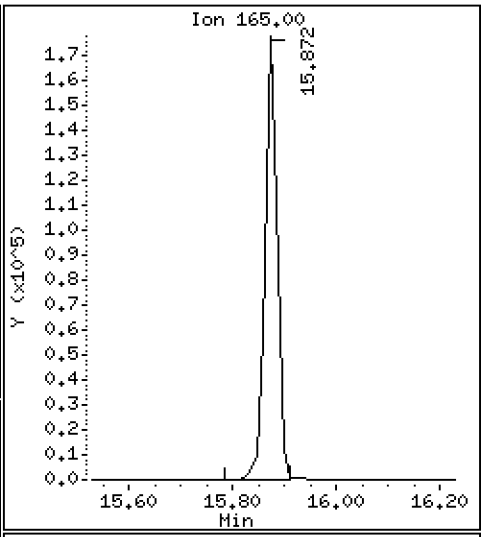
Column phase: ZB-5msi

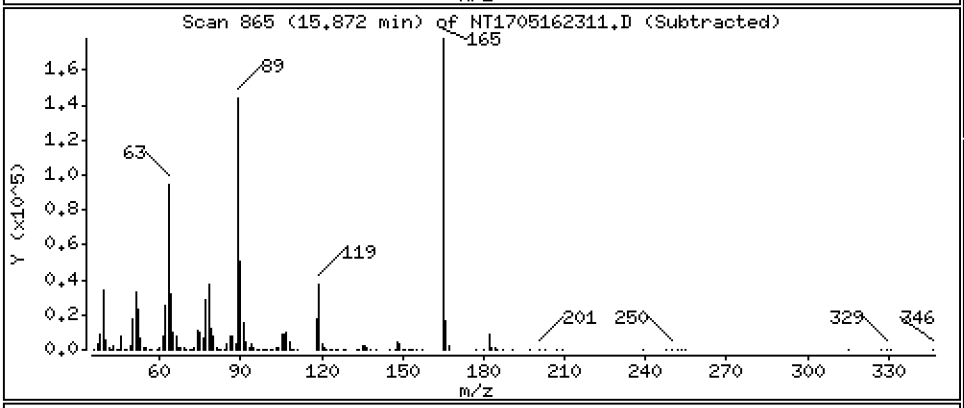
Column diameter: 0.25

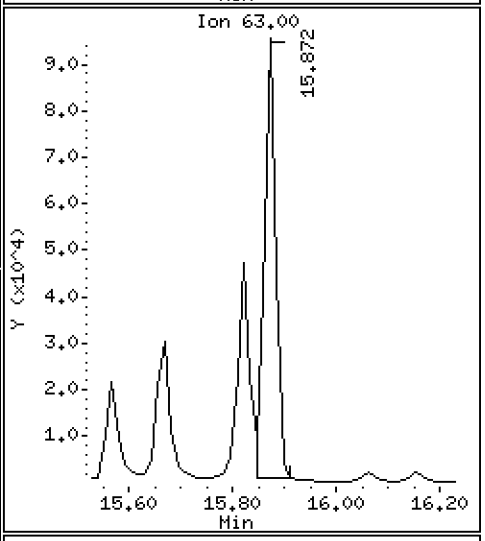
48 2,4-Dinitrotoluene

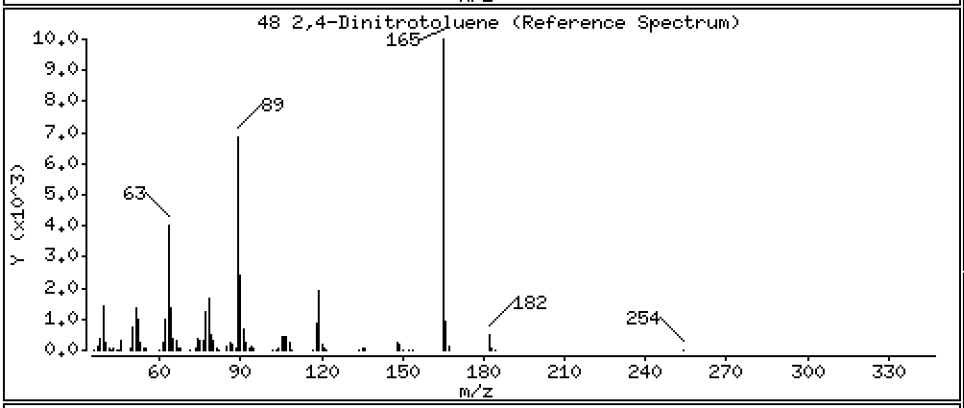
Concentration: 5.269 ug/mL

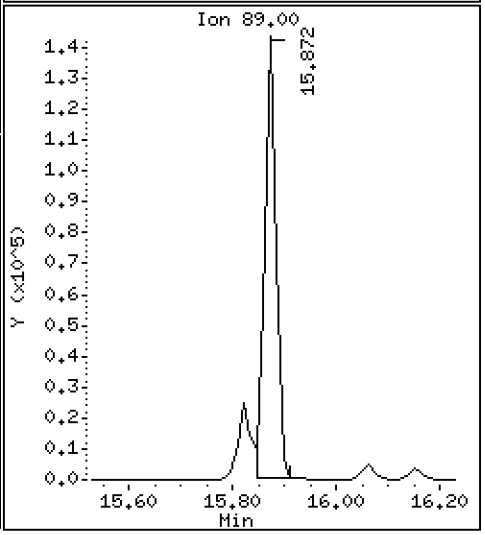


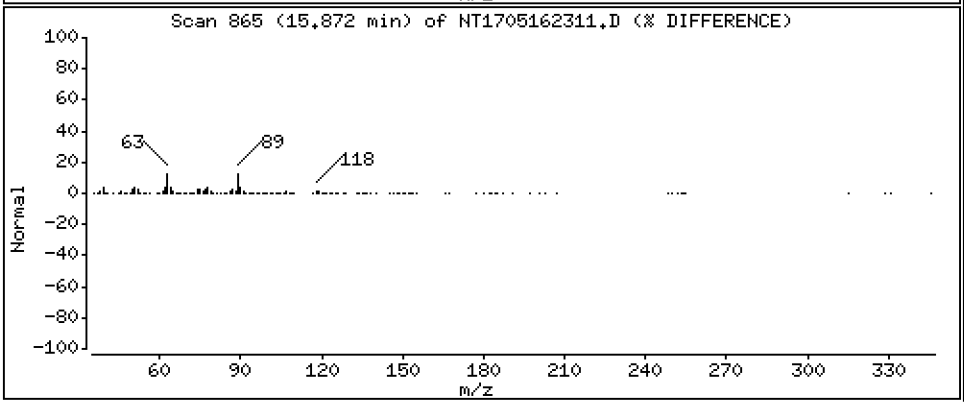












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

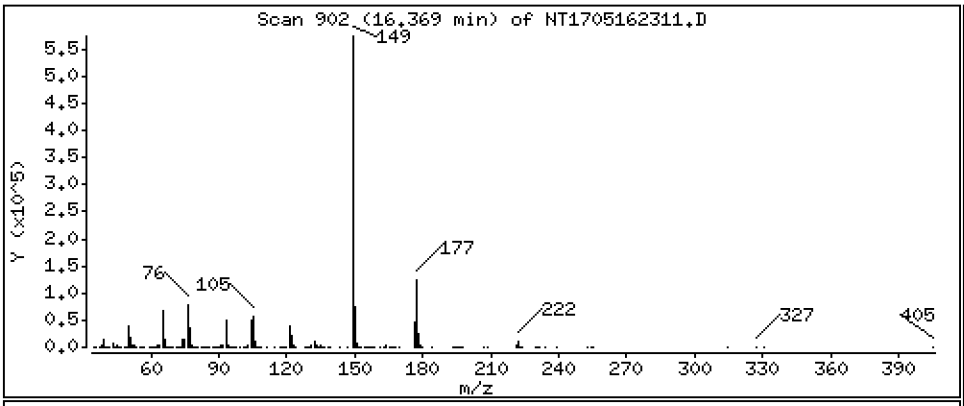
Operator: JGR

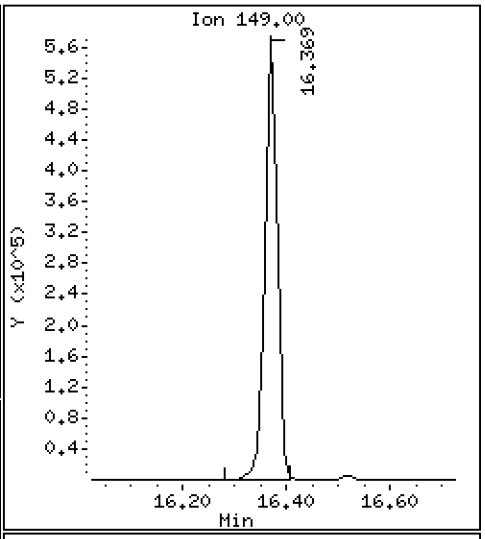
Column phase: ZB-5msi

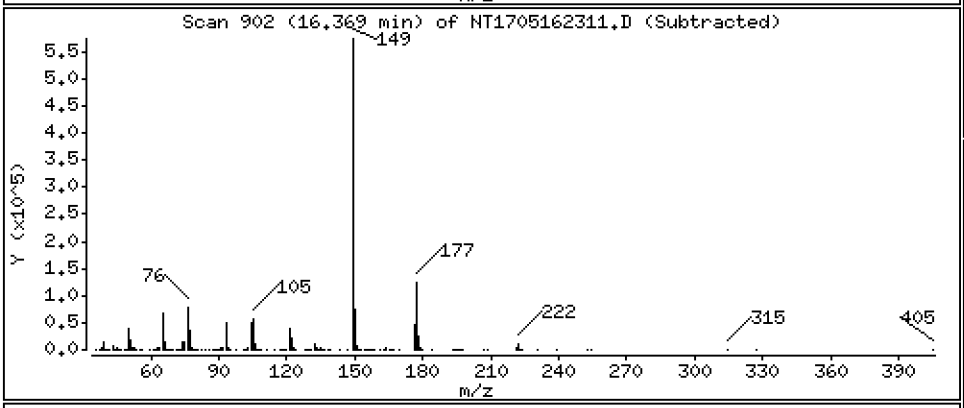
Column diameter: 0.25

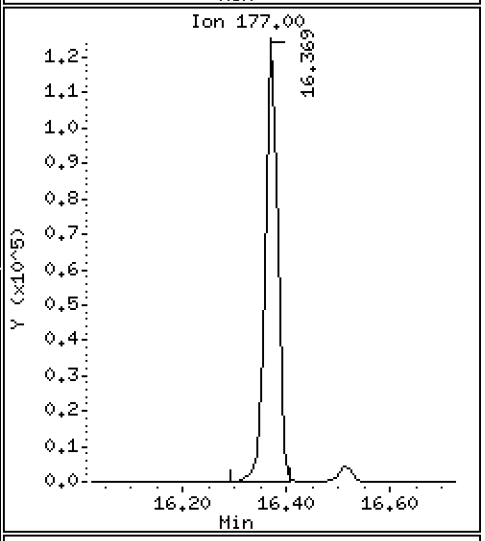
50 Diethylphthalate

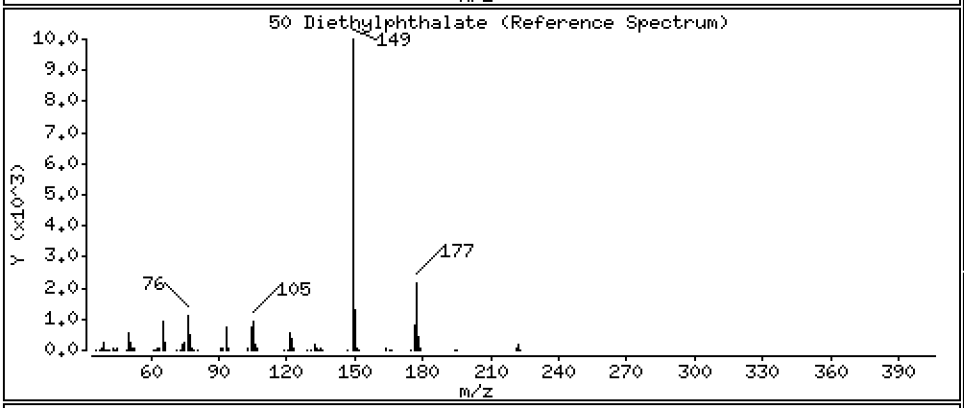
Concentration: 5.494 ug/mL

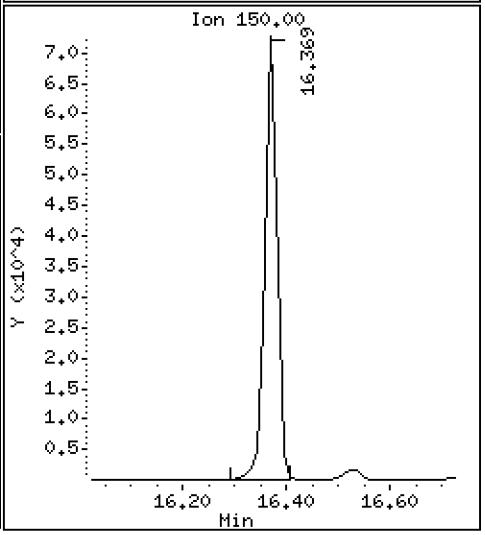


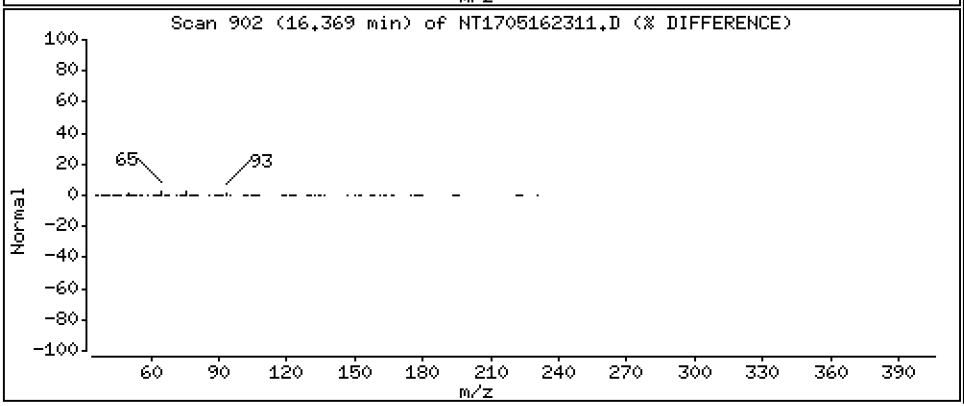












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

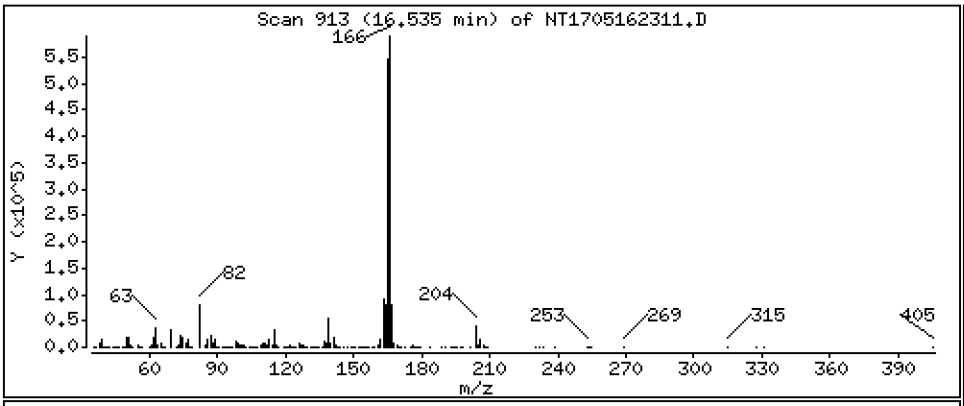
Operator: JGR

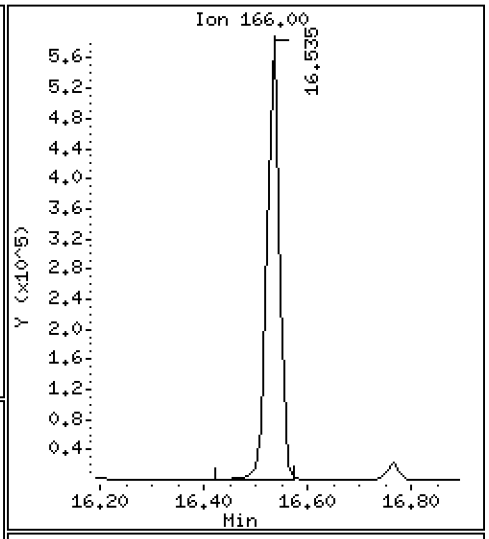
Column phase: ZB-5msi

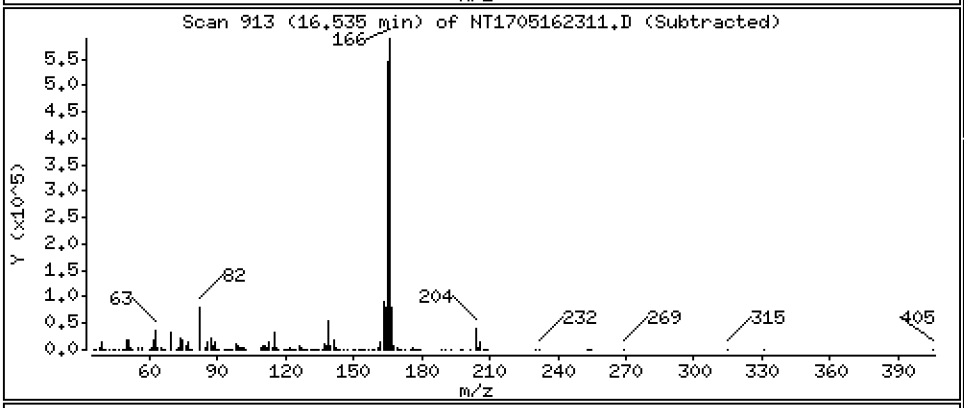
Column diameter: 0.25

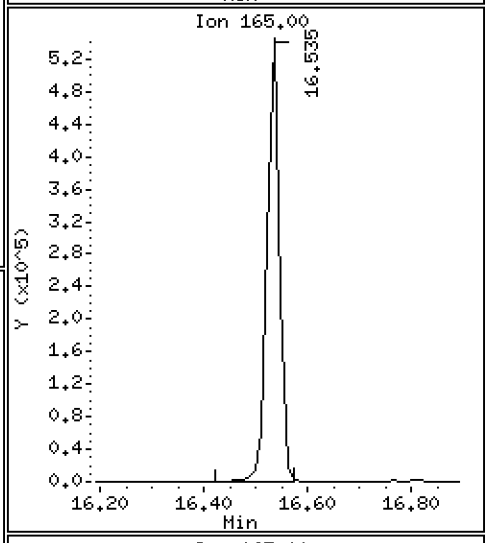
49 Fluorene

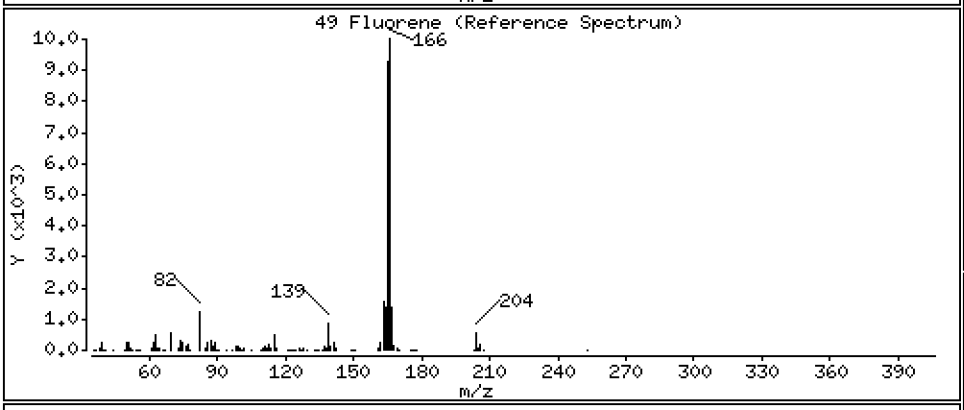
Concentration: 5.398 ug/mL

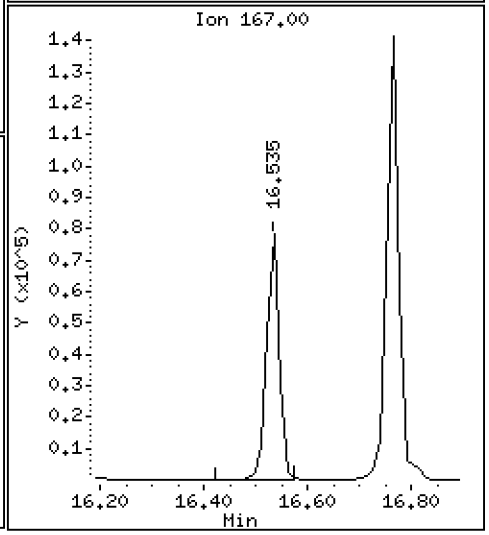


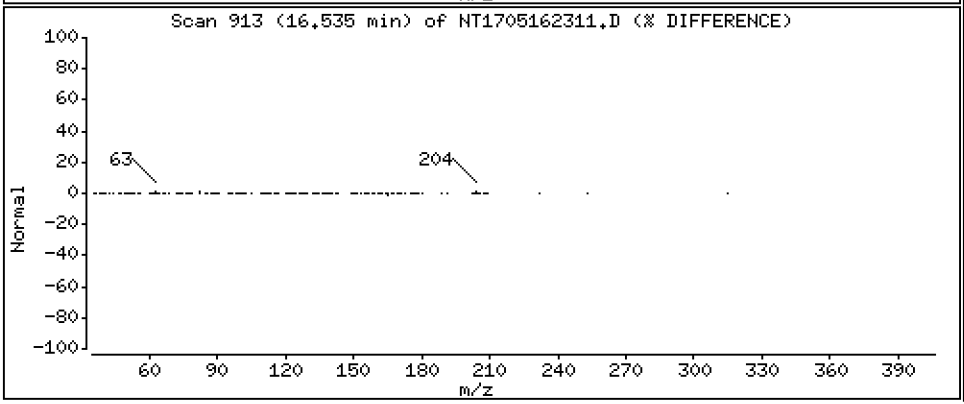












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

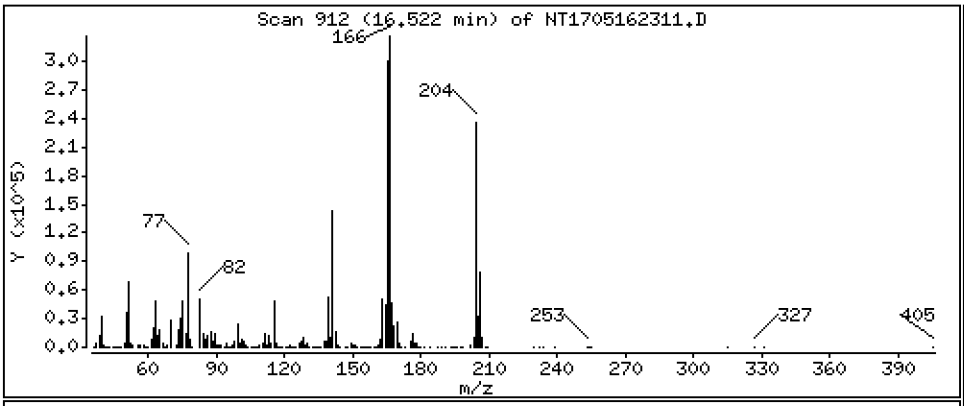
Operator: JGR

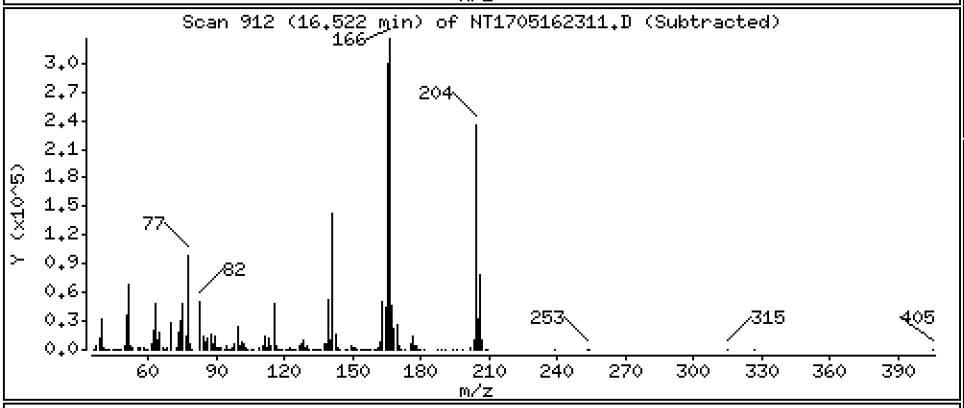
Column phase: ZB-5msi

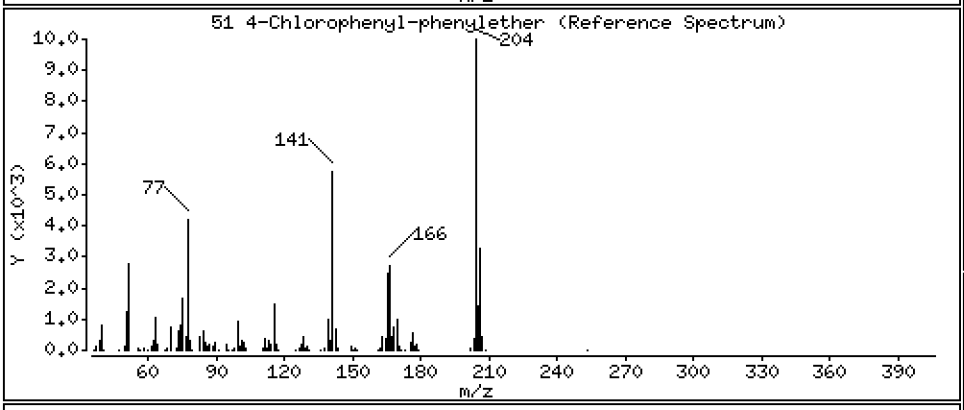
Column diameter: 0.25

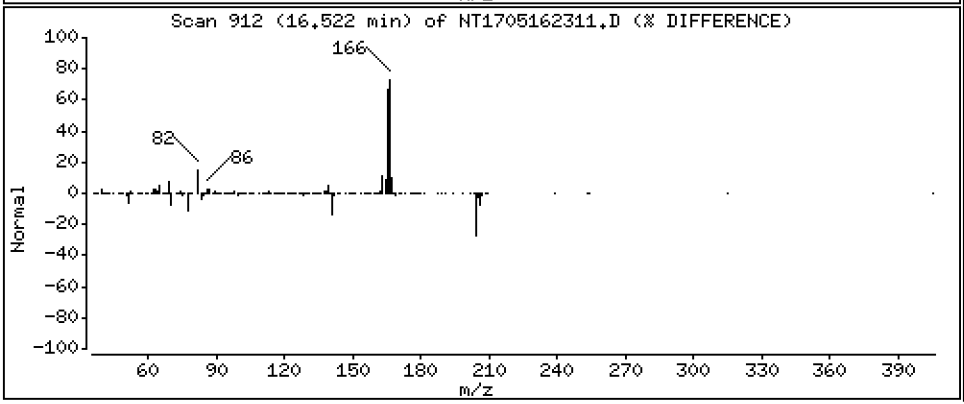
51 4-Chlorophenyl-phenylether

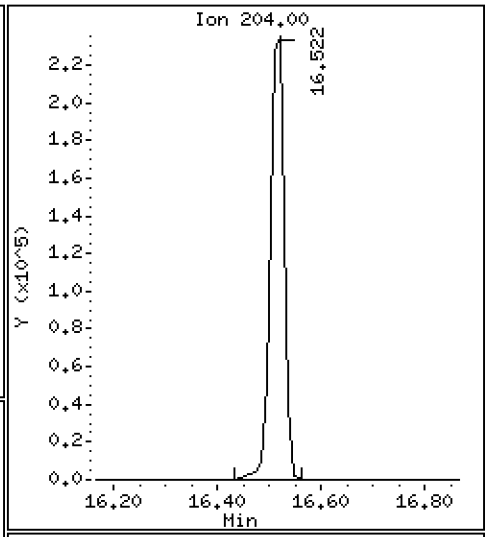
Concentration: 5.462 ug/mL

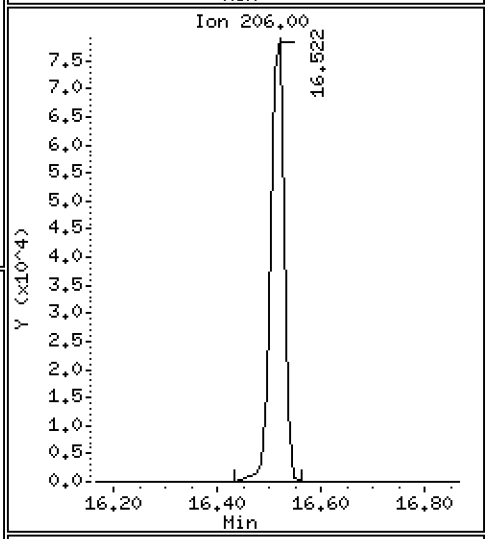


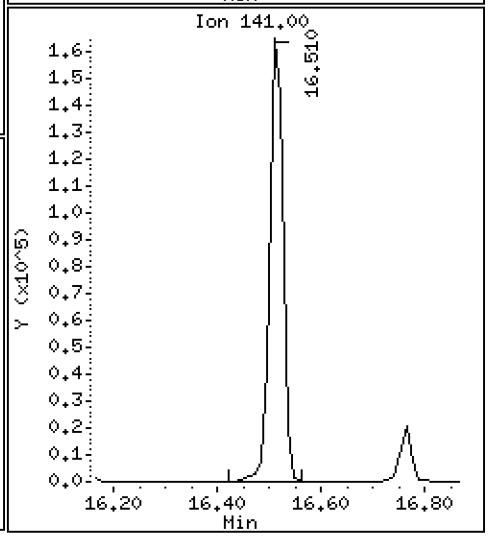












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

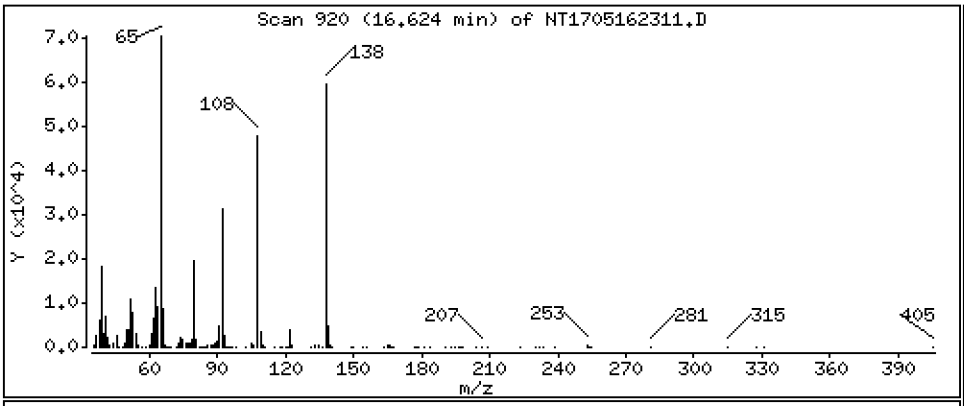
Operator: JGR

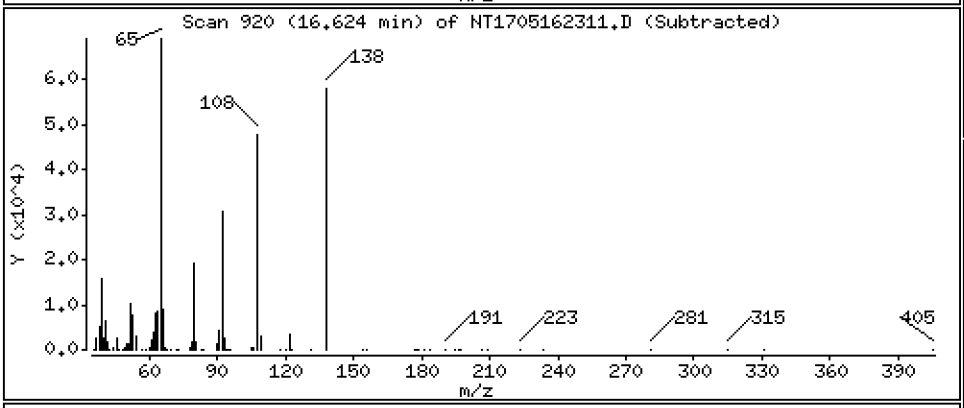
Column phase: ZB-5msi

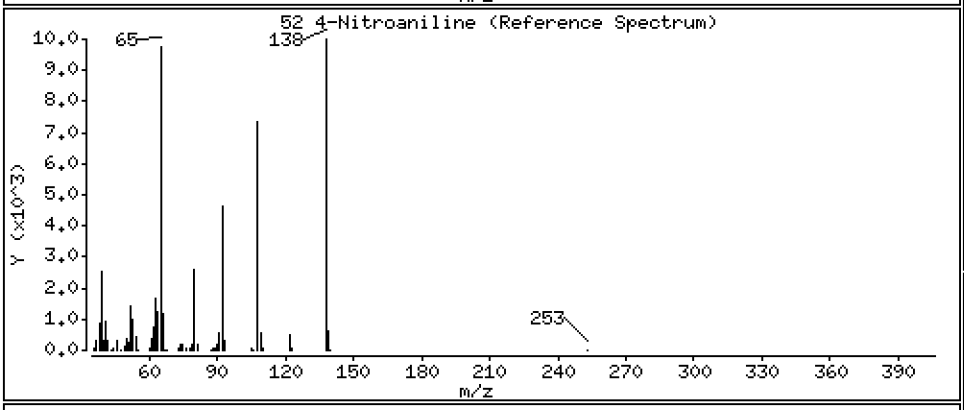
Column diameter: 0.25

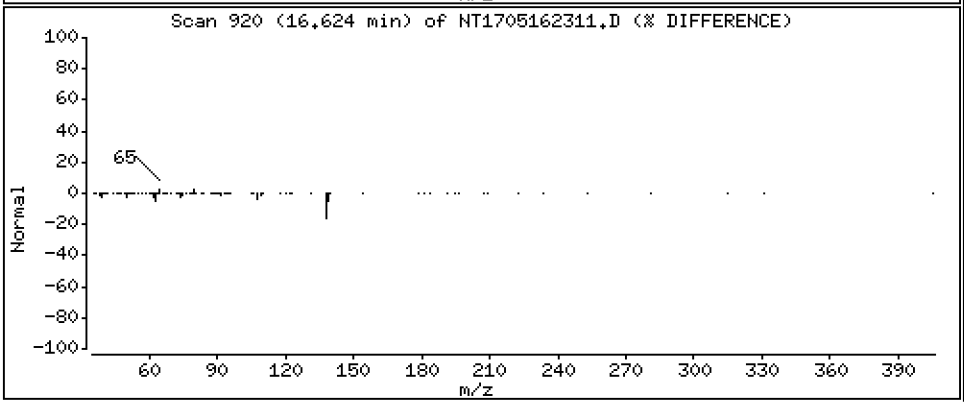
52 4-Nitroaniline

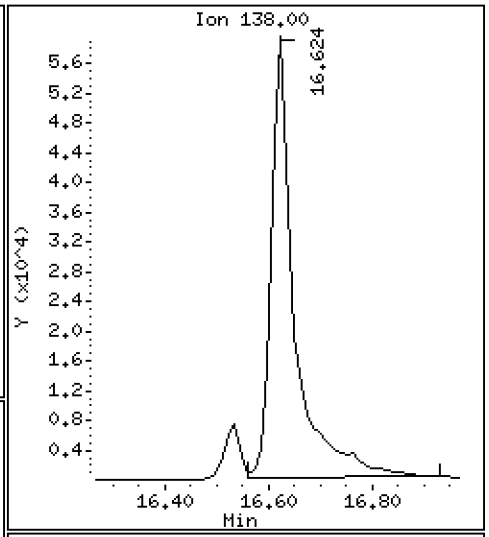
Concentration: 5.108 ug/mL

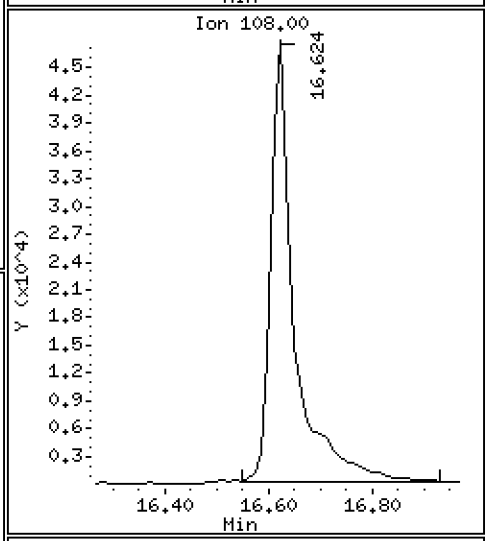


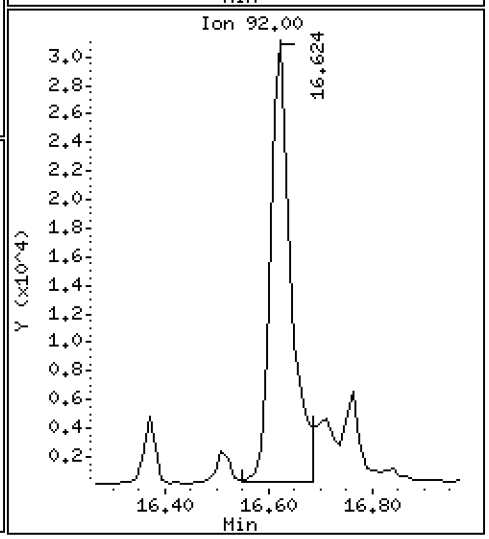












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

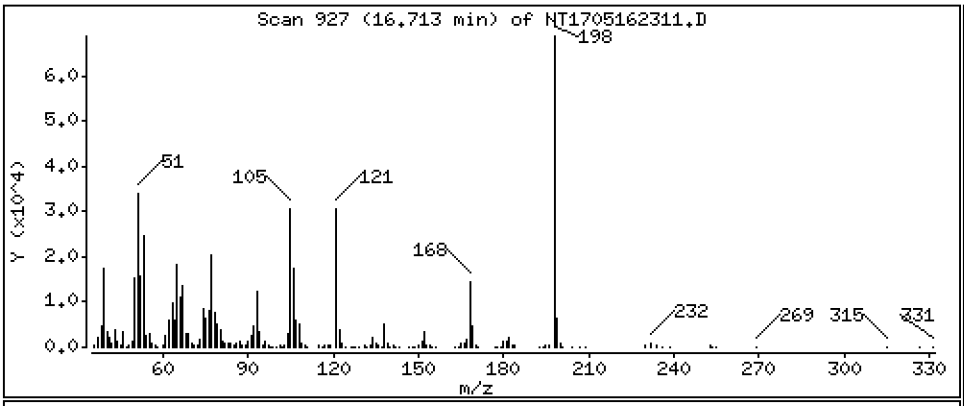
Operator: JGR

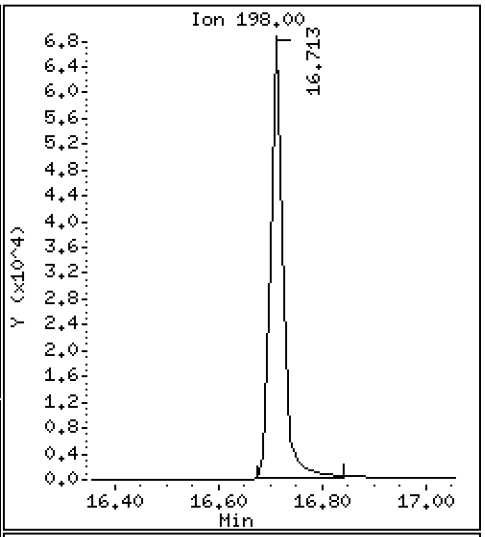
Column phase: ZB-5msi

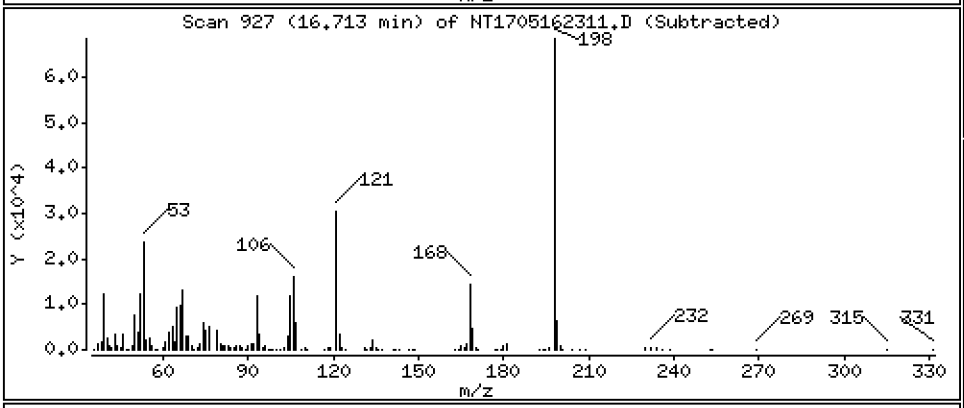
Column diameter: 0.25

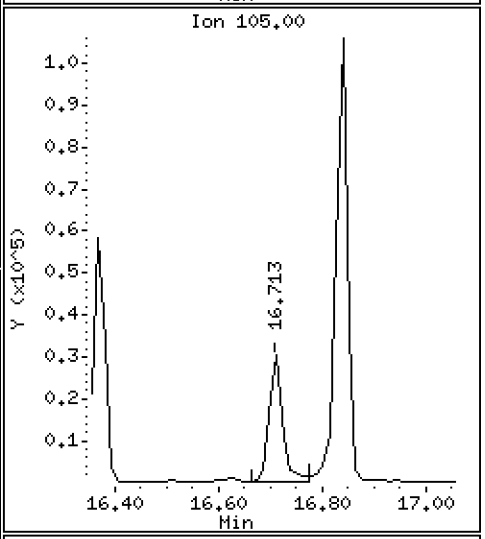
53 4,6-Dinitro-2-methylphenol

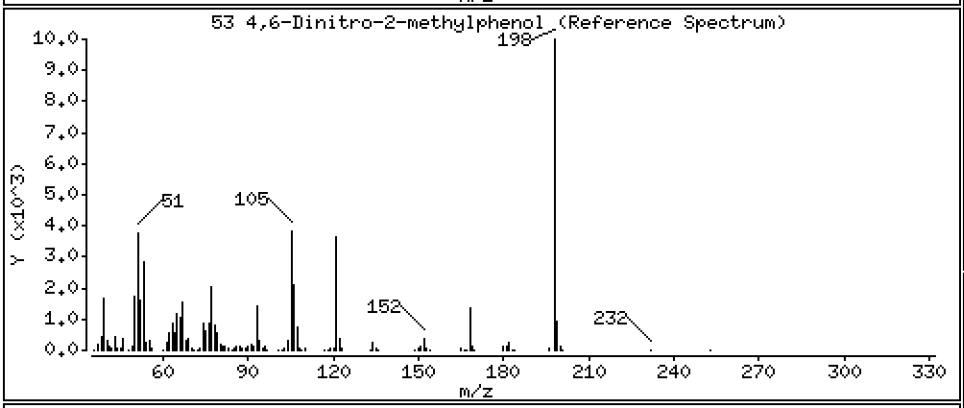
Concentration: 3.355 ug/mL

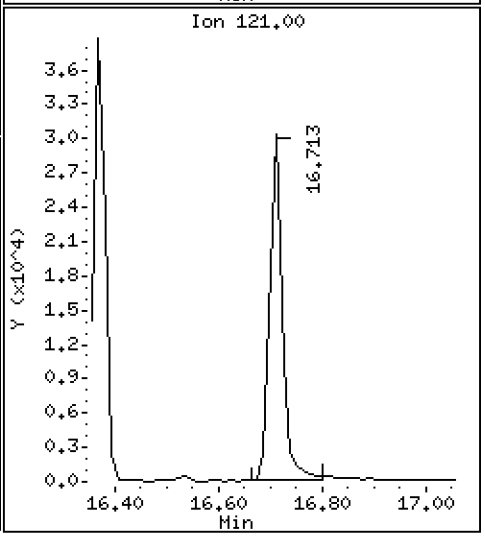


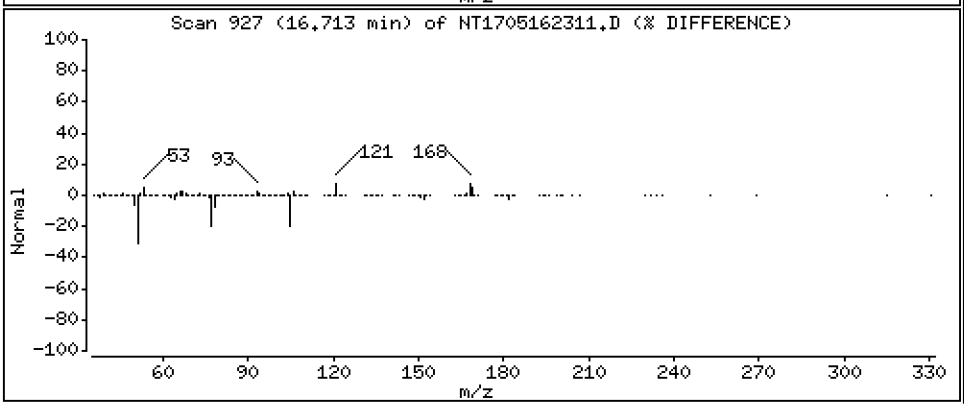












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

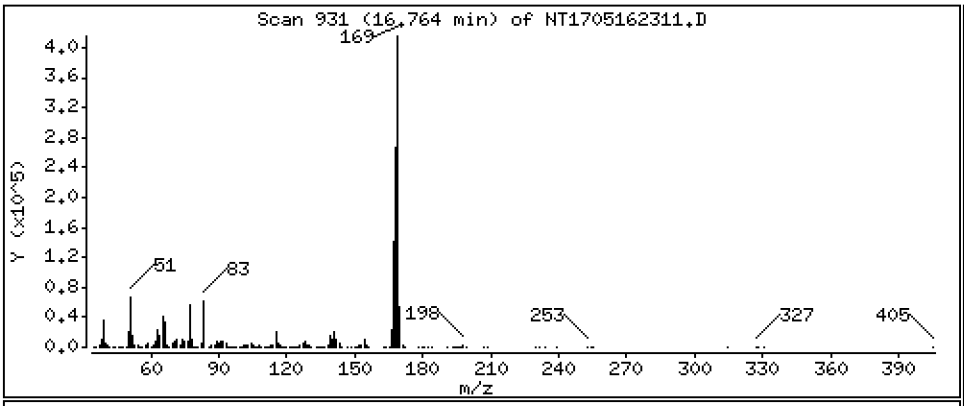
Operator: JGR

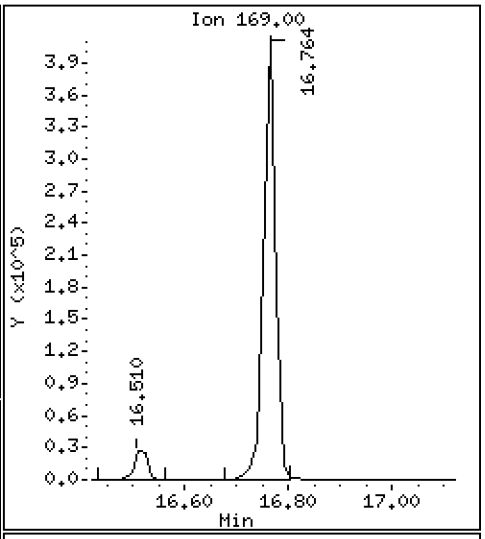
Column phase: ZB-5msi

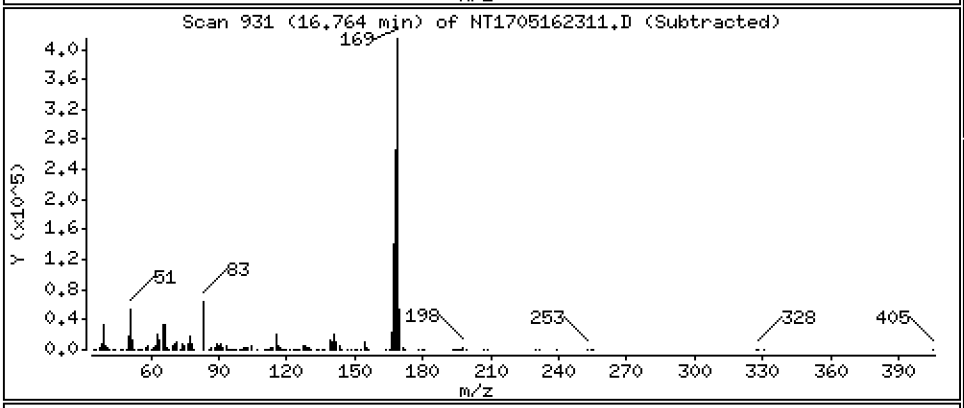
Column diameter: 0.25

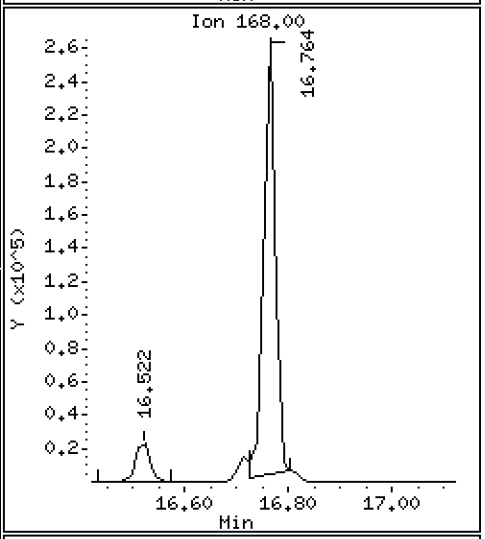
54 N-Nitrosodiphenylamine

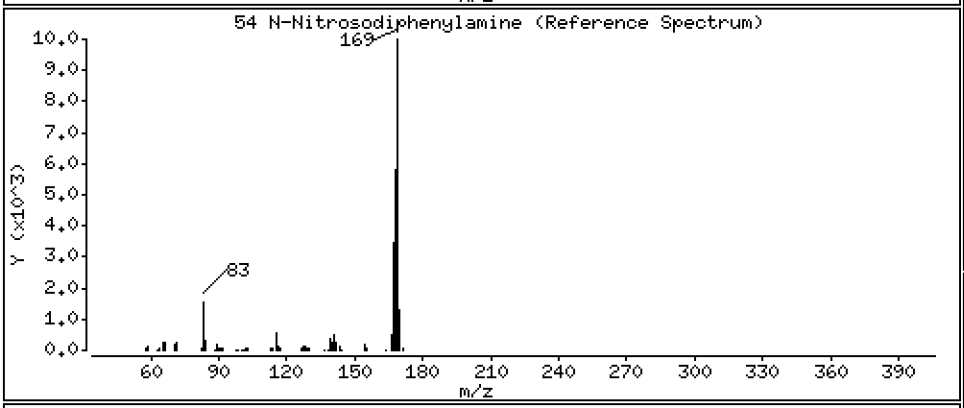
Concentration: 5.470 ug/mL

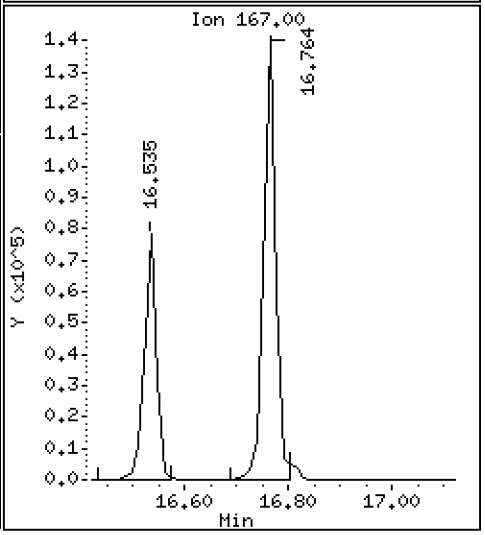


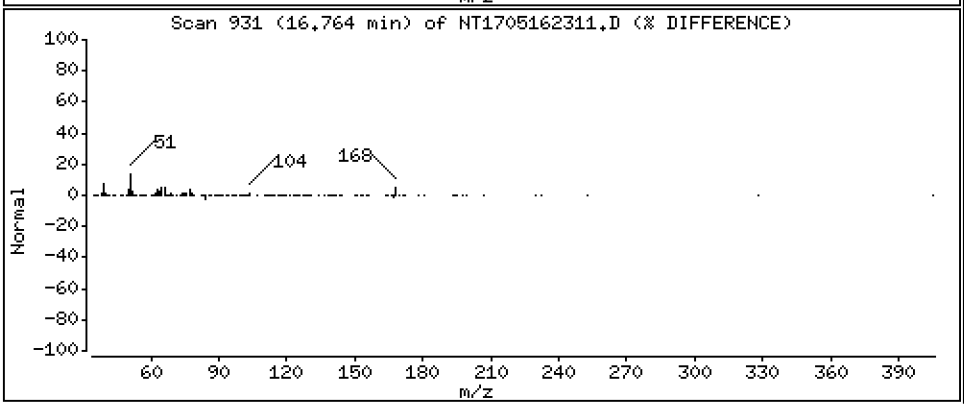












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

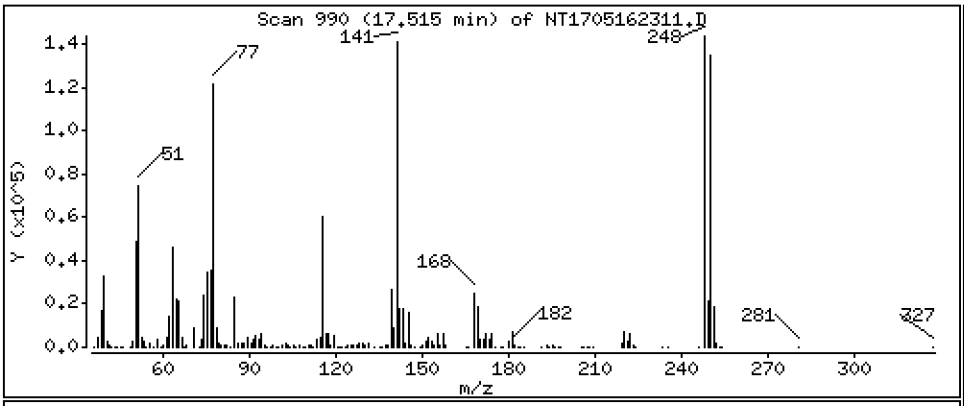
Operator: JGR

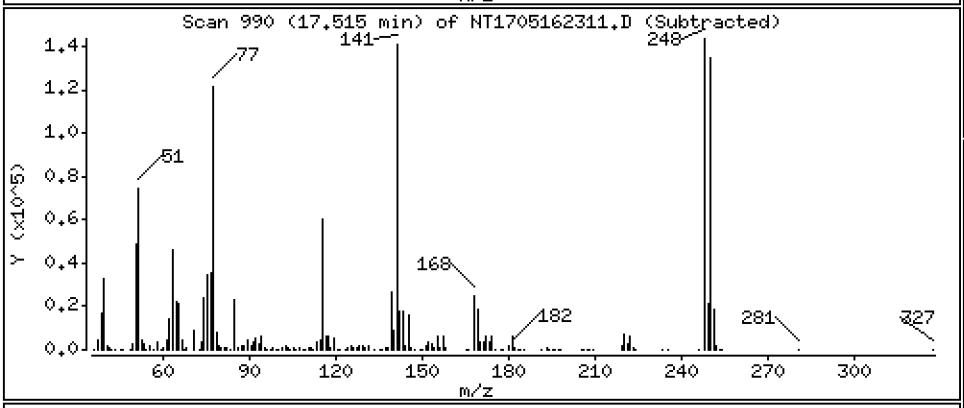
Column phase: ZB-5msi

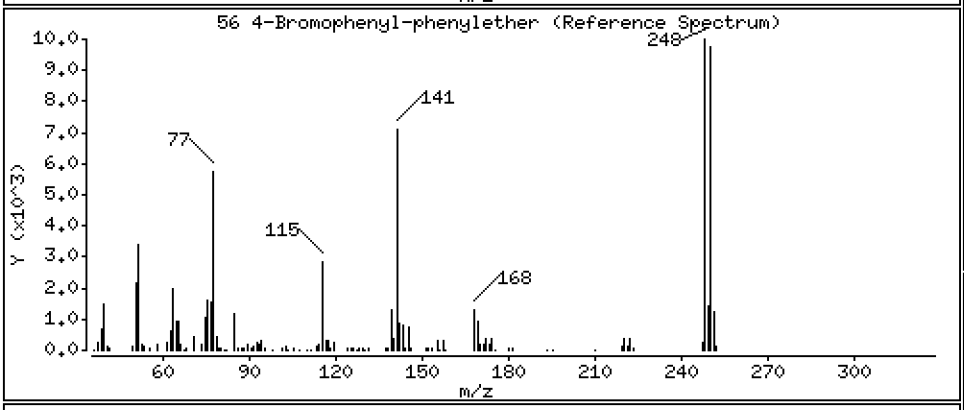
Column diameter: 0.25

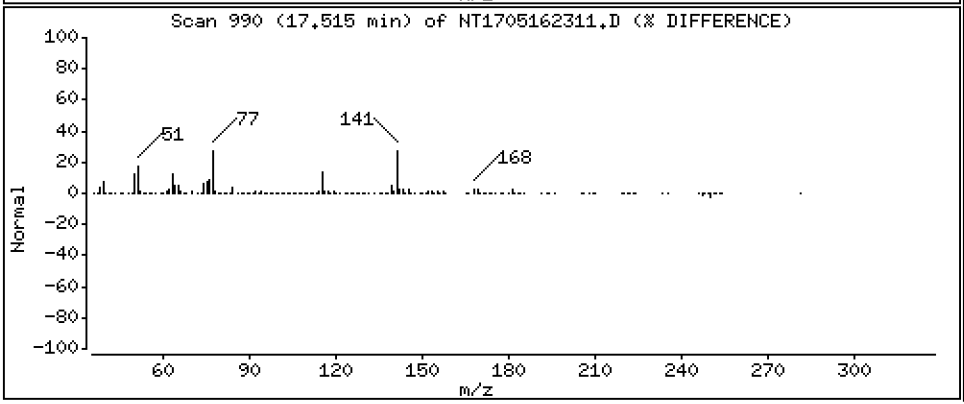
56 4-Bromophenyl-phenylether

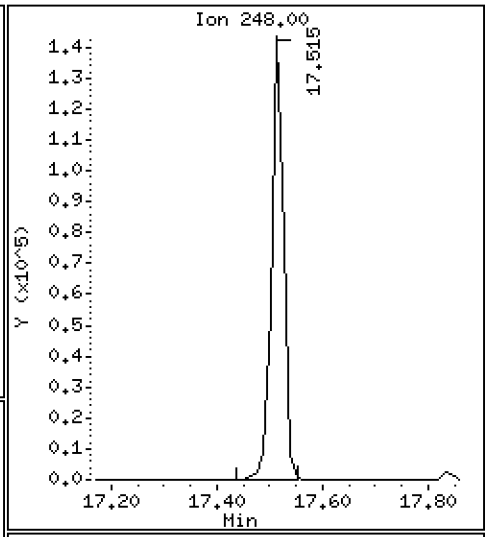
Concentration: 5.420 ug/mL

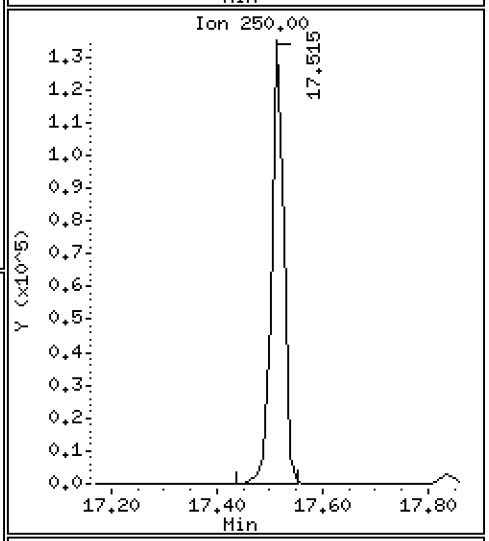


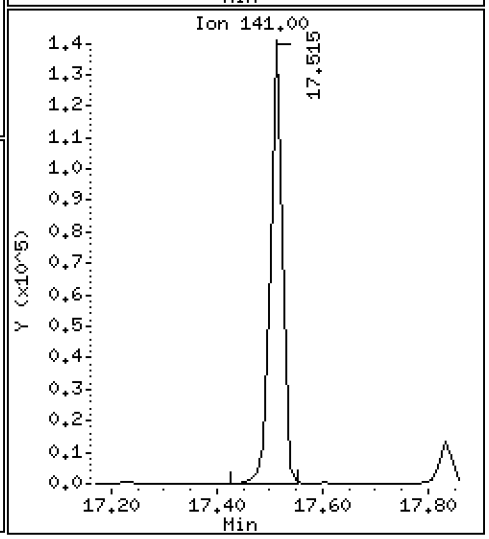












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

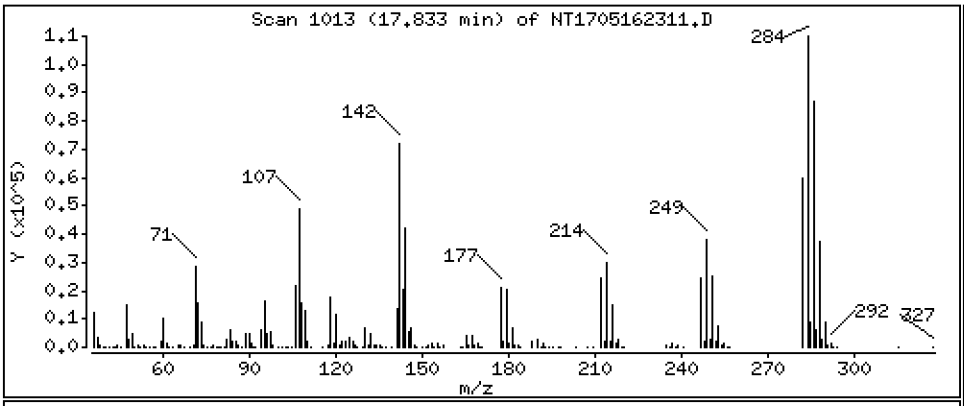
Operator: JGR

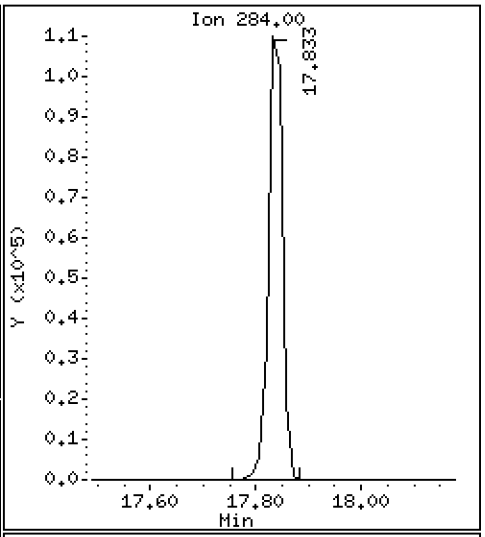
Column phase: ZB-5msi

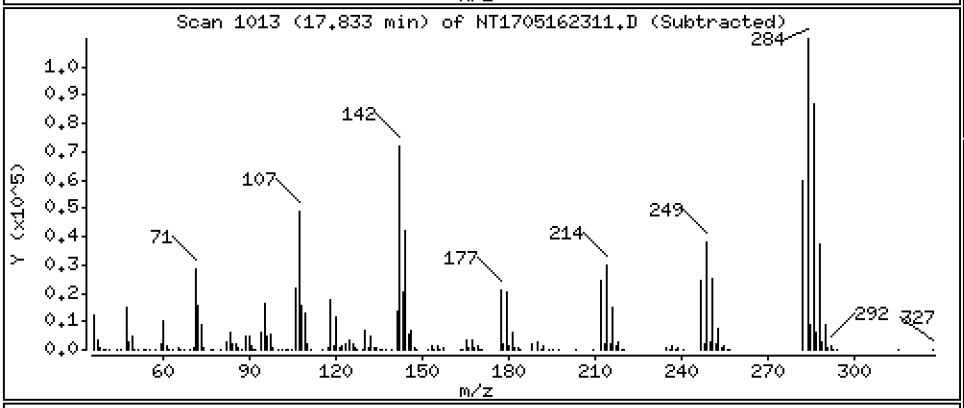
Column diameter: 0.25

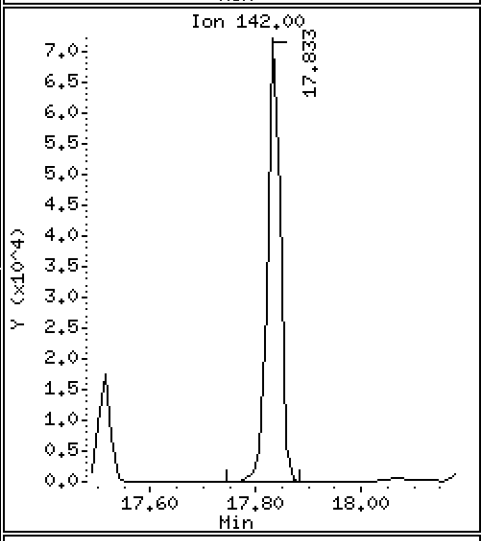
57 Hexachlorobenzene

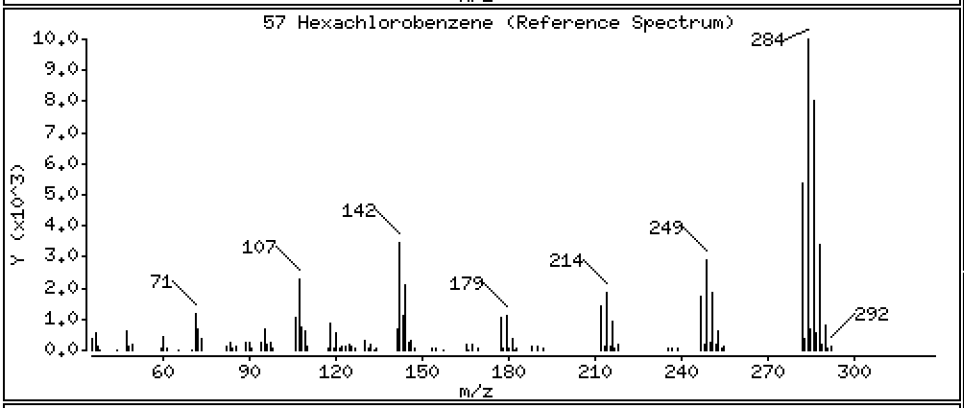
Concentration: 4.913 ug/mL

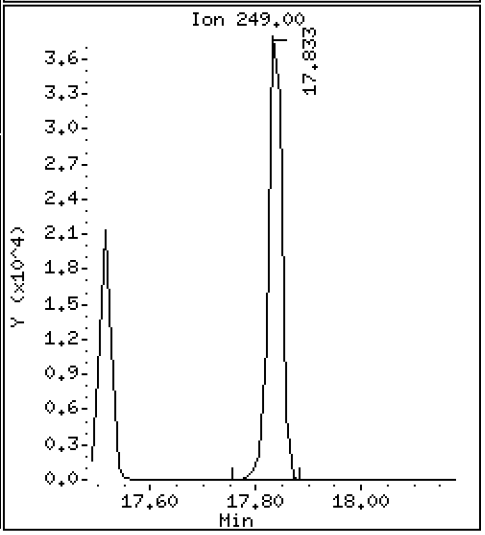


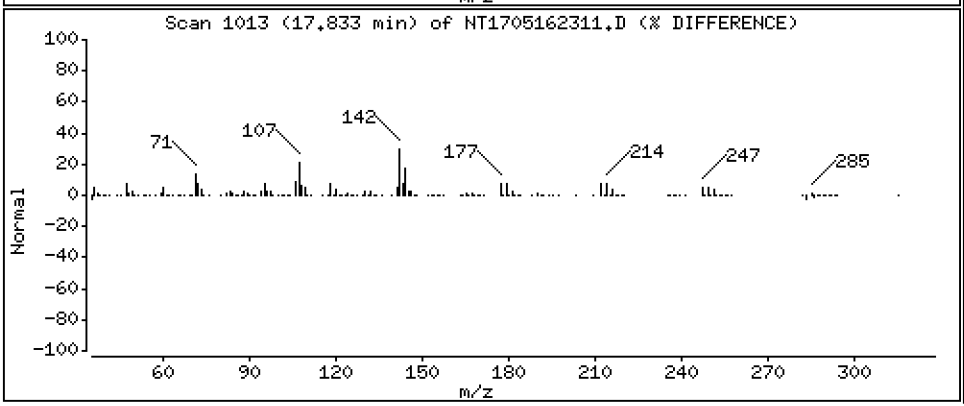












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

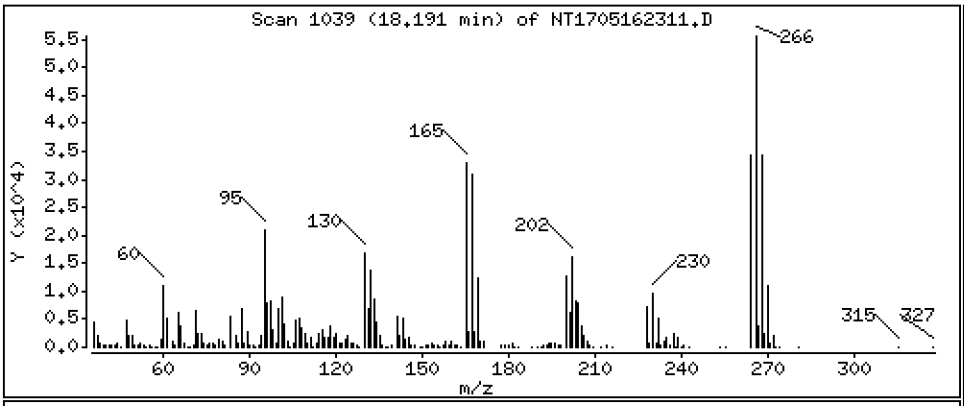
Operator: JGR

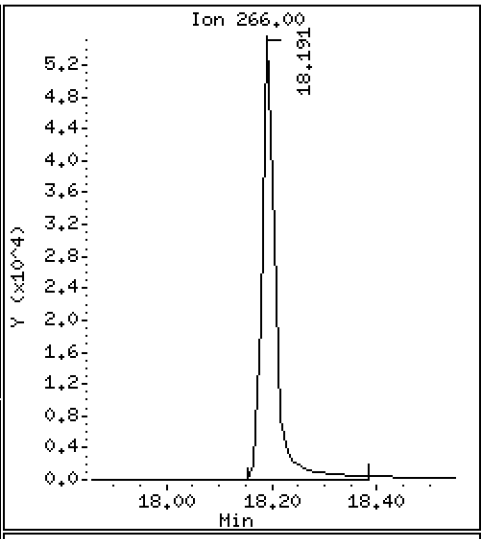
Column phase: ZB-5msi

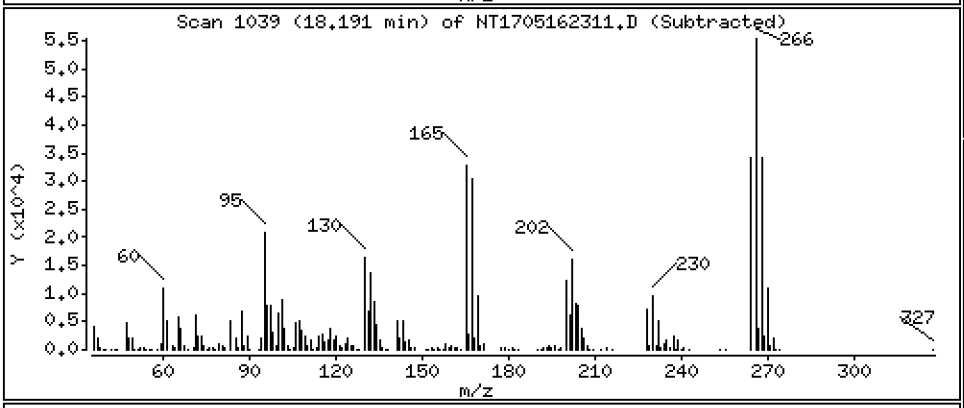
Column diameter: 0.25

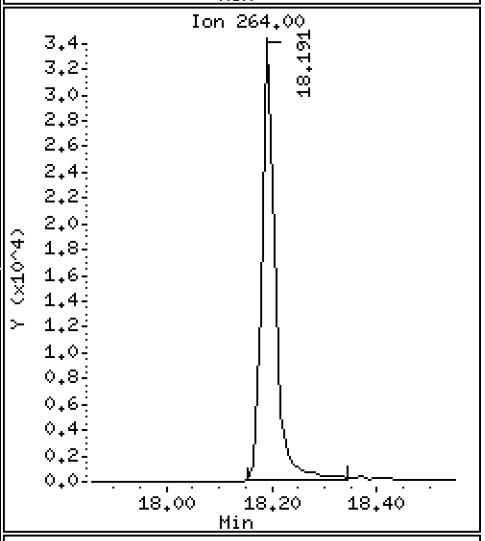
58 Pentachlorophenol

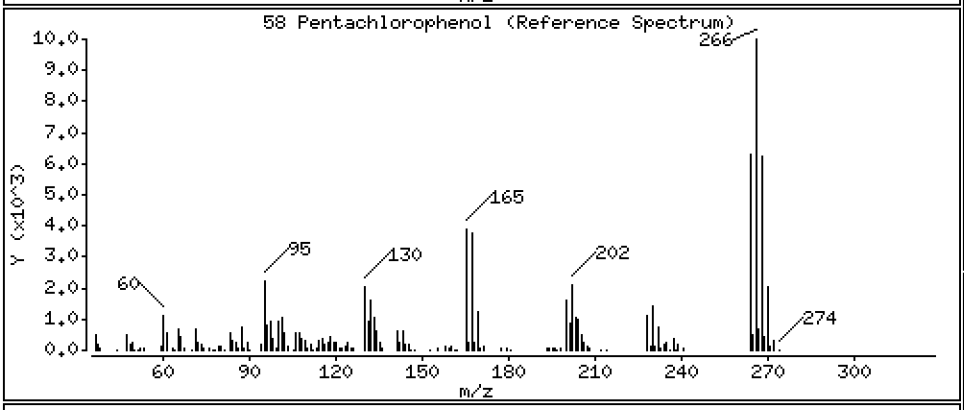
Concentration: 3.943 ug/mL

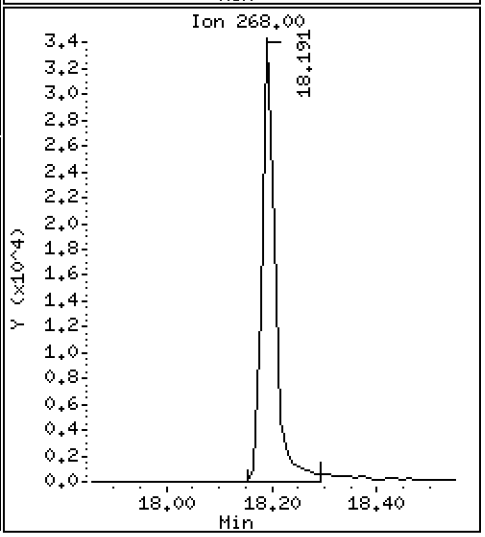


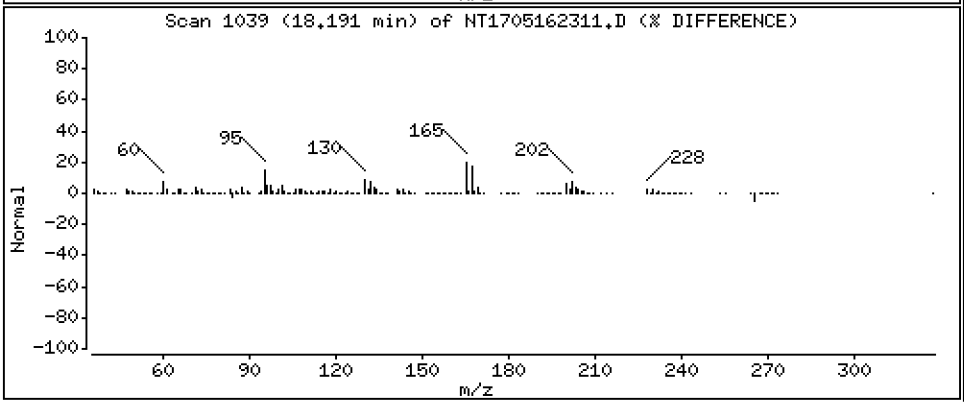












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

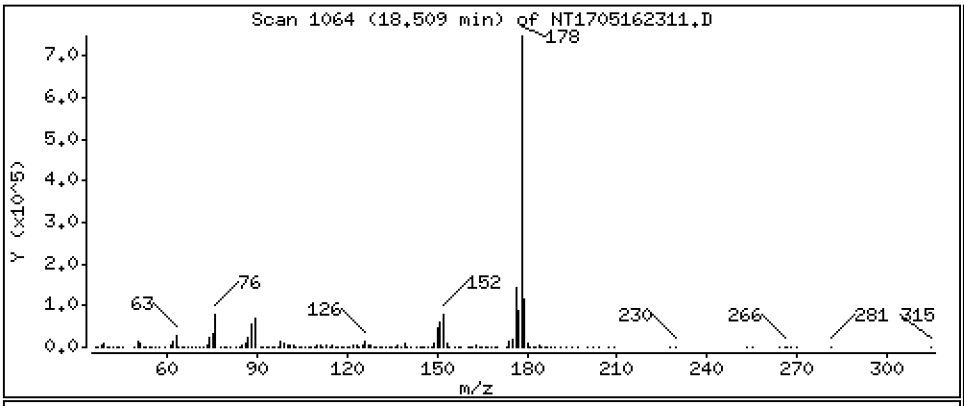
Operator: JGR

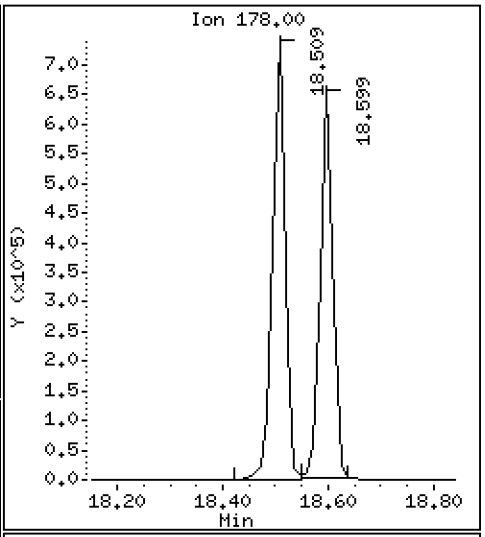
Column phase: ZB-5msi

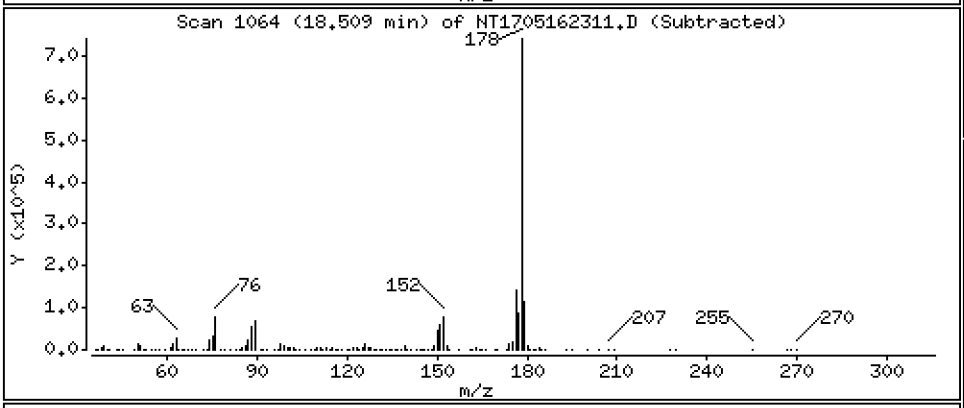
Column diameter: 0.25

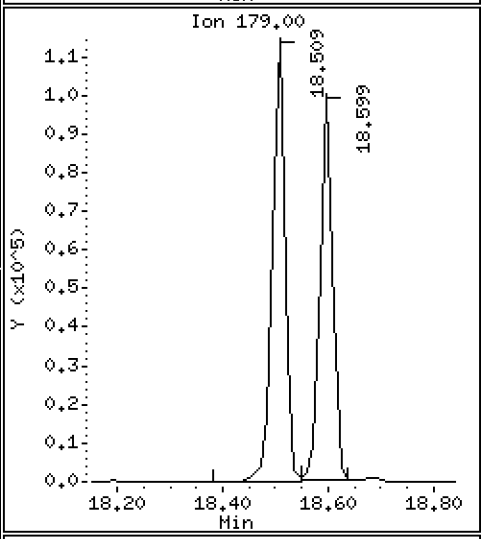
60 Phenanthrene

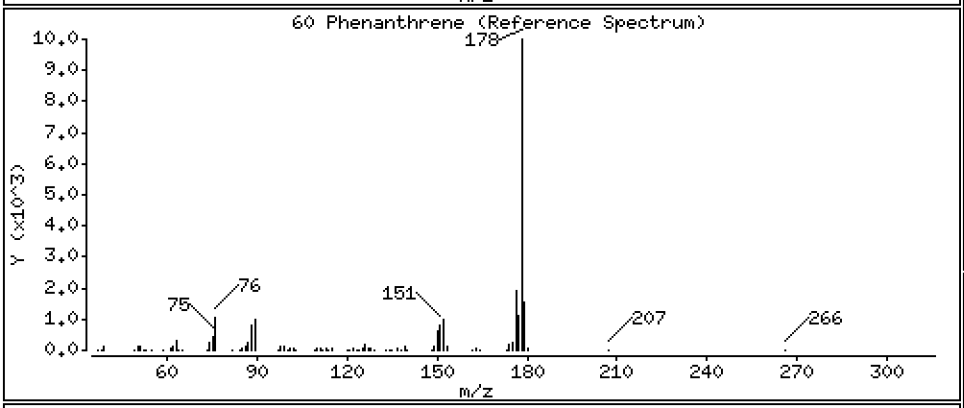
Concentration: 5.039 ug/mL

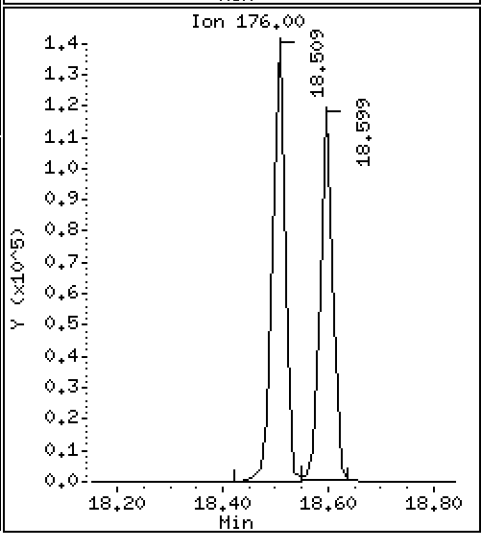


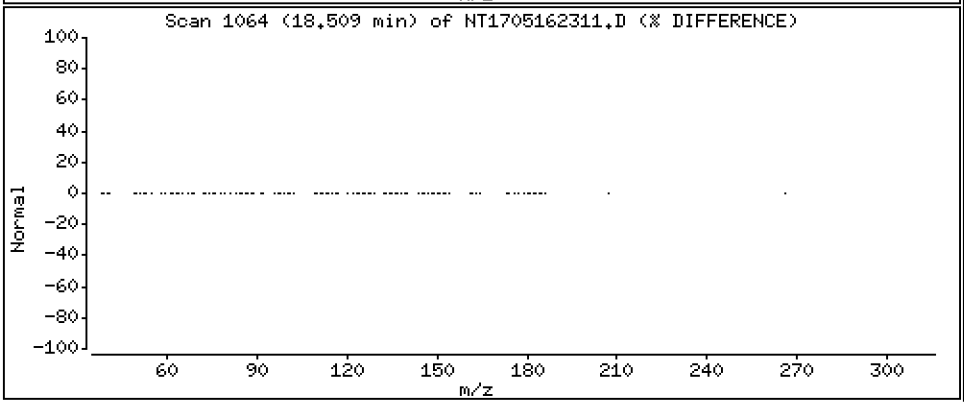












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

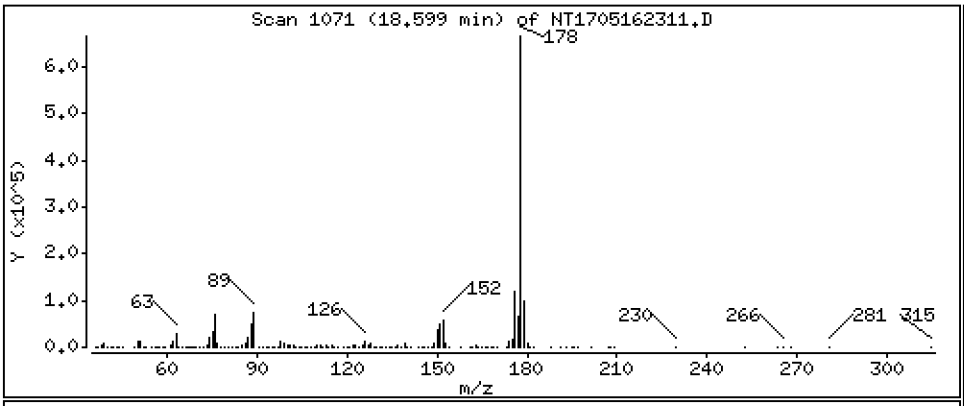
Operator: JGR

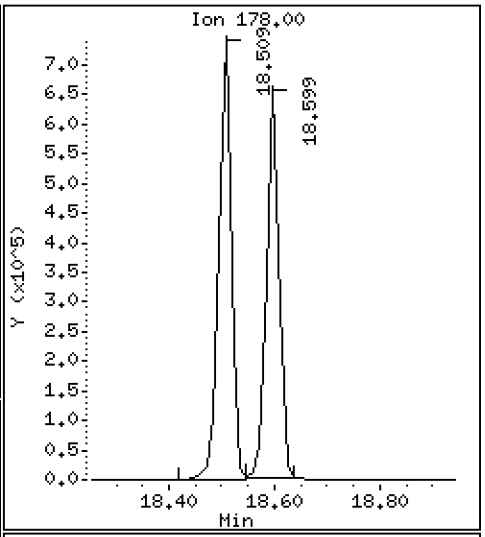
Column phase: ZB-5msi

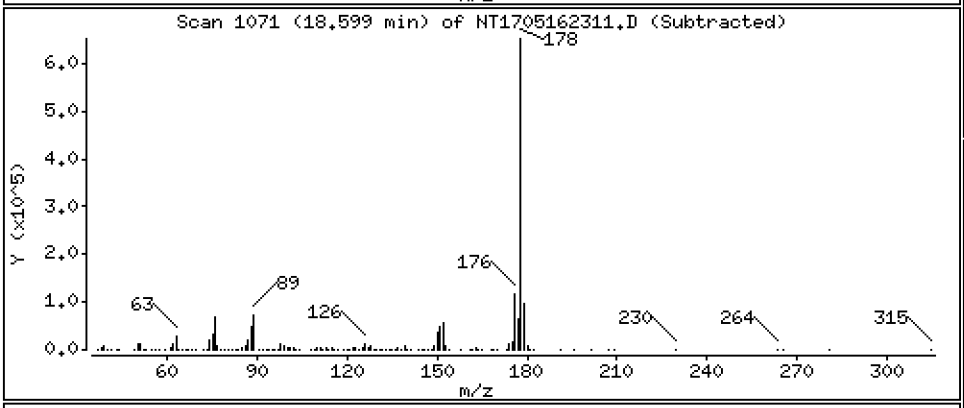
Column diameter: 0.25

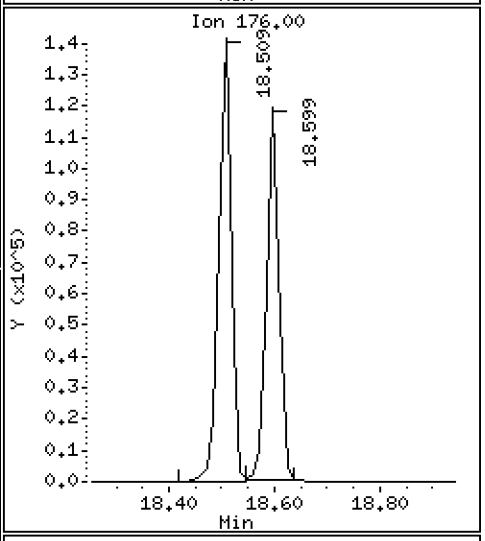
61 Anthracene

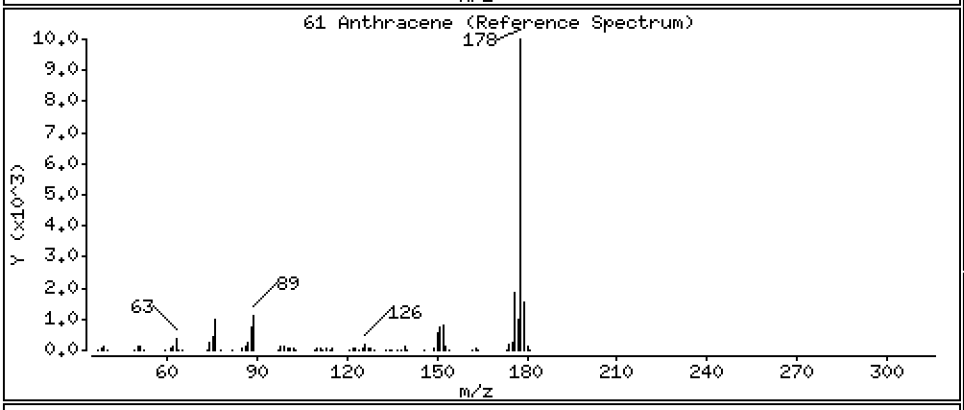
Concentration: 4.530 ug/mL

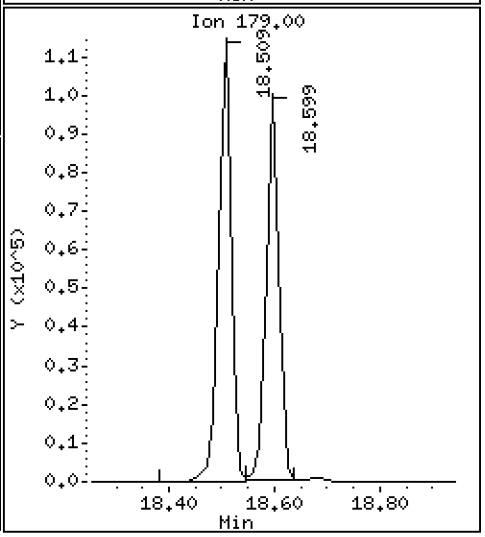


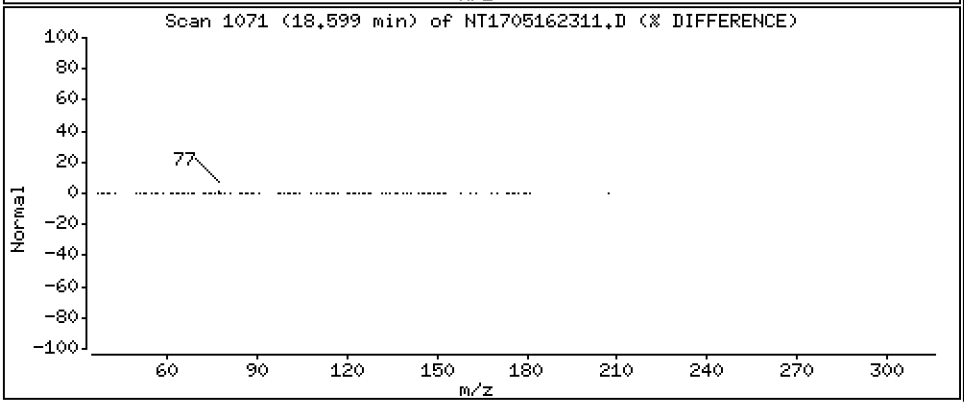












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

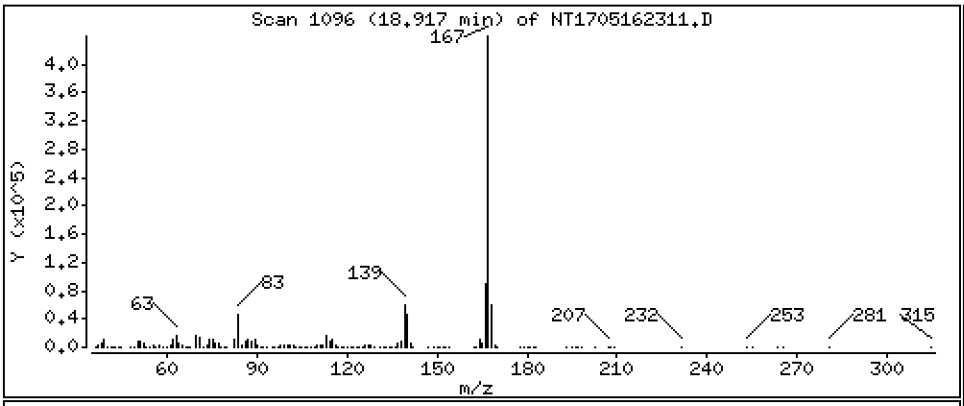
Operator: JGR

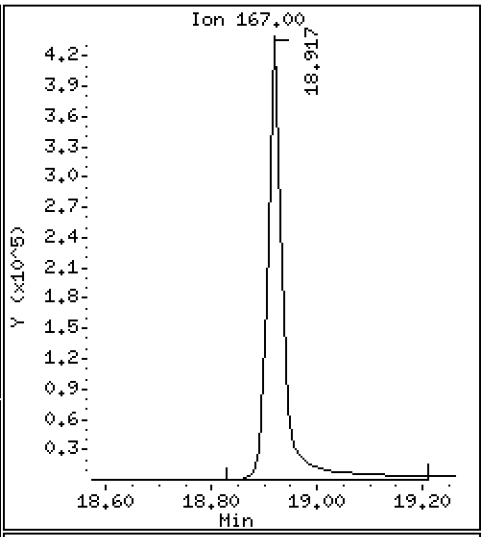
Column phase: ZB-5msi

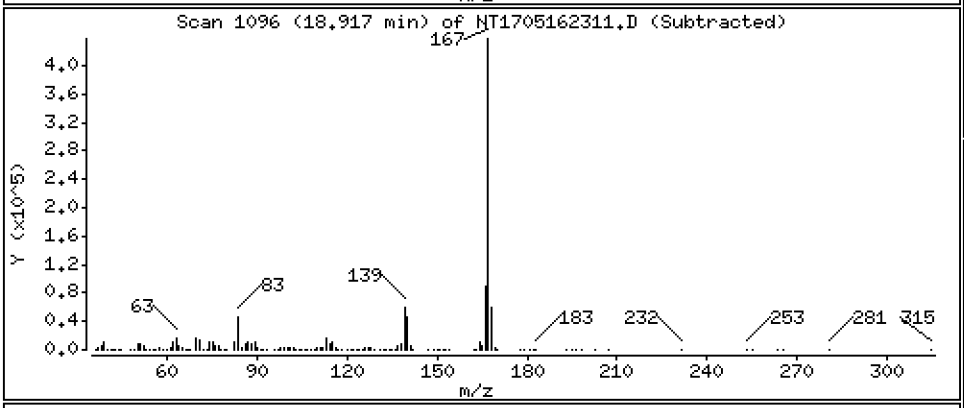
Column diameter: 0.25

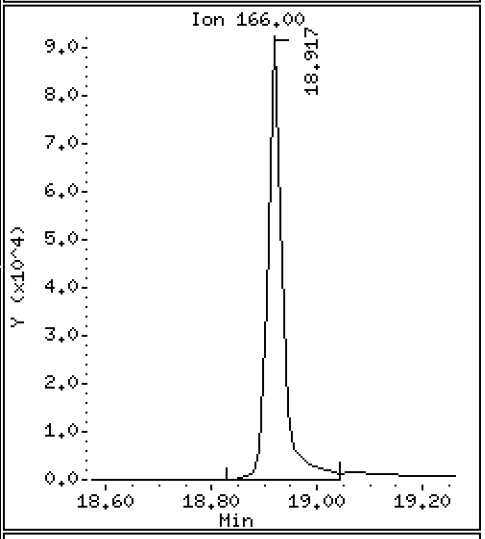
62 Carbazole

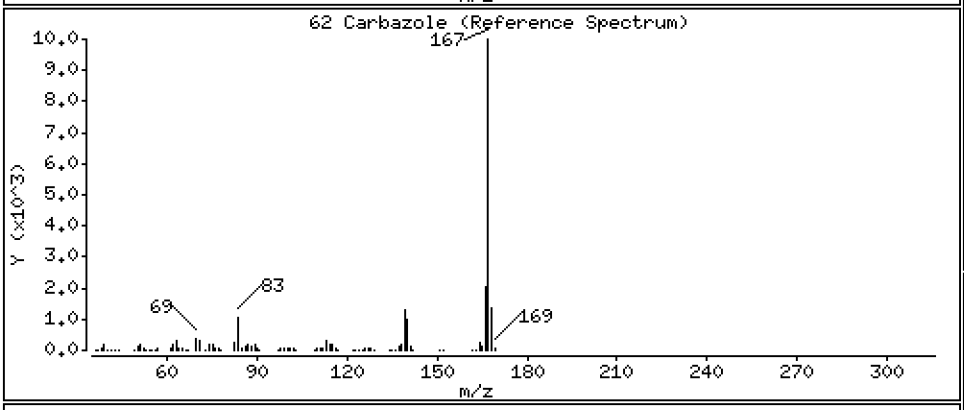
Concentration: 5.938 ug/mL

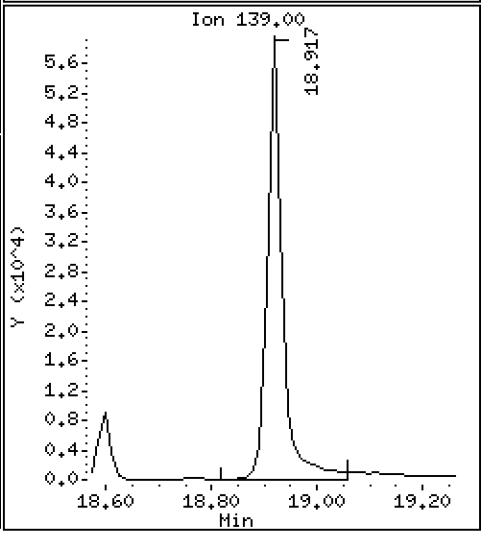


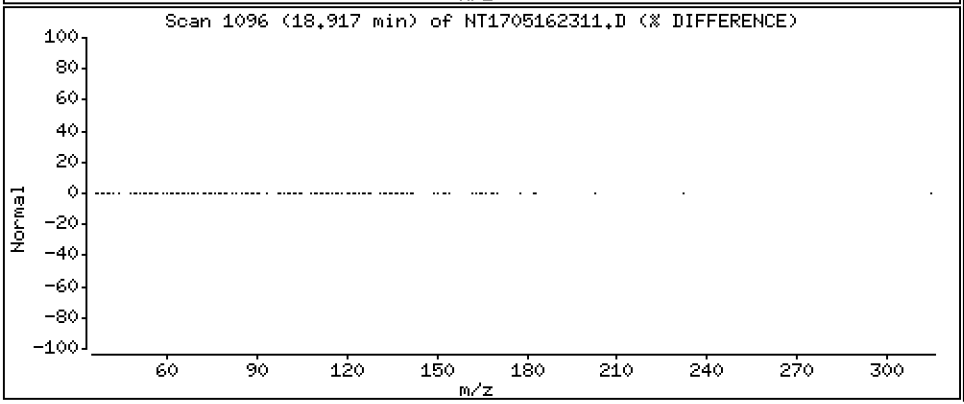












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

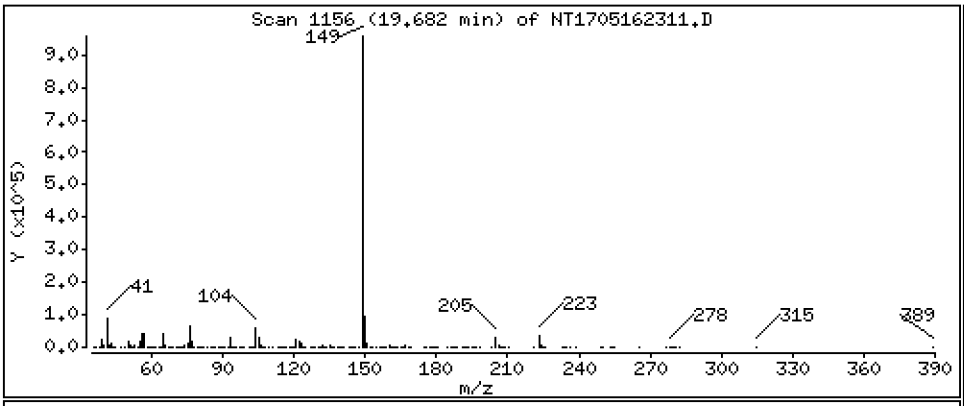
Operator: JGR

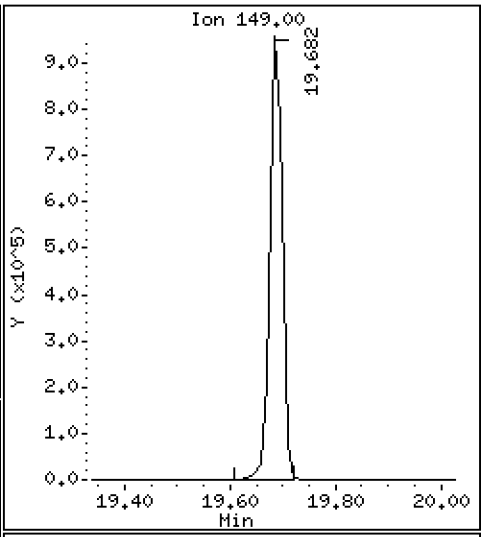
Column phase: ZB-5msi

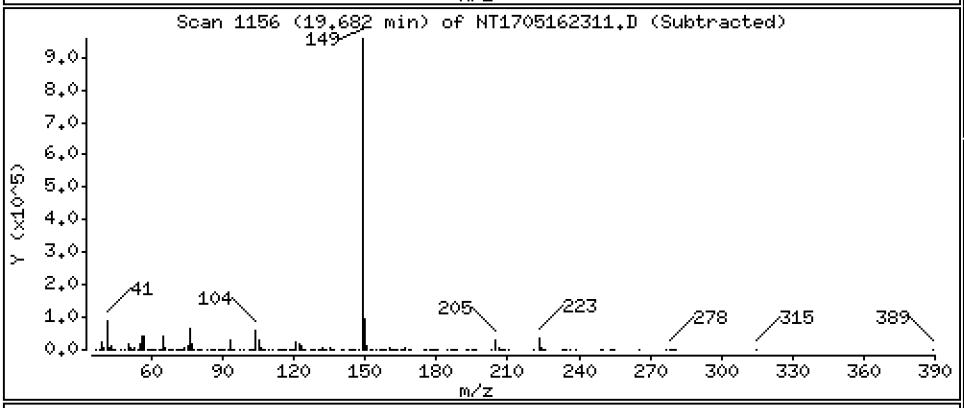
Column diameter: 0.25

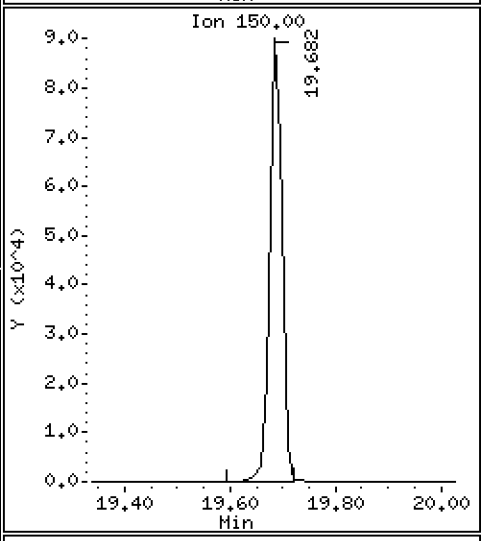
63 Di-n-butylphthalate

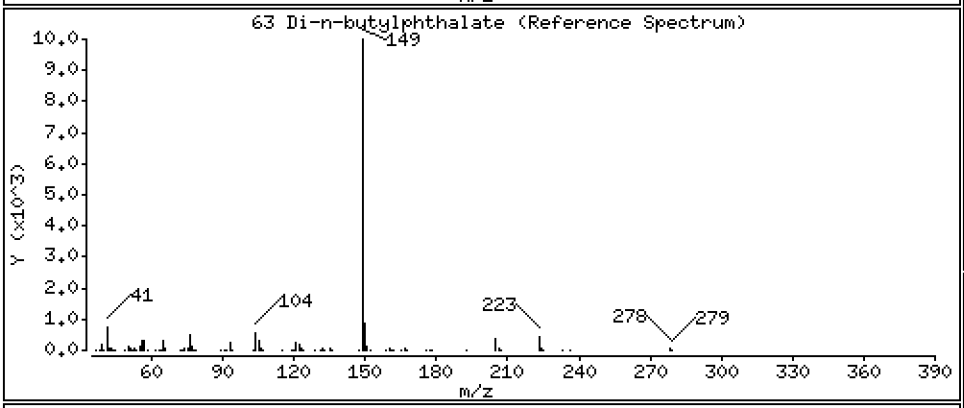
Concentration: 5.642 ug/mL

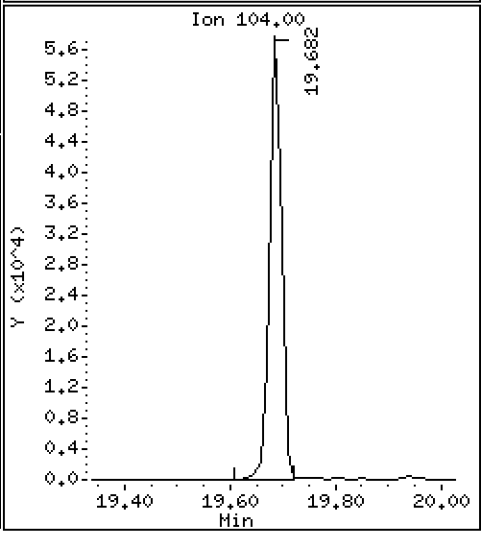


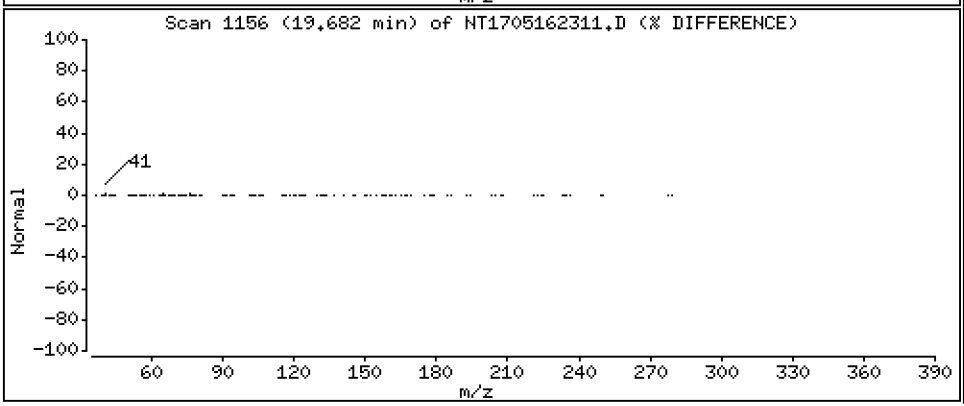












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

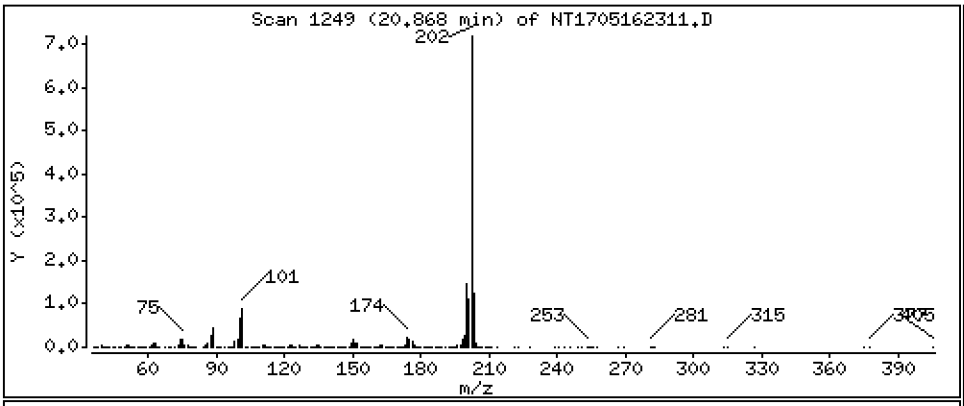
Operator: JGR

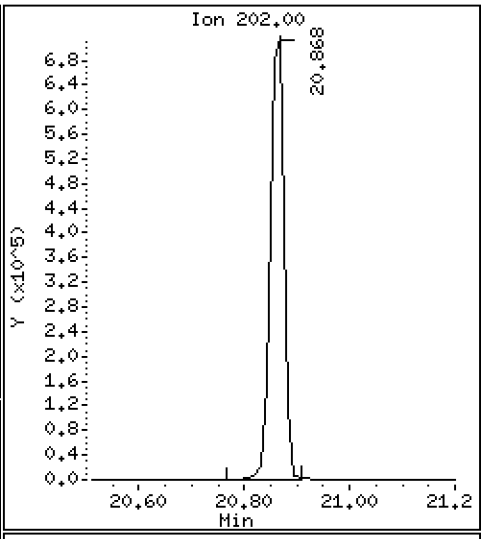
Column phase: ZB-5msi

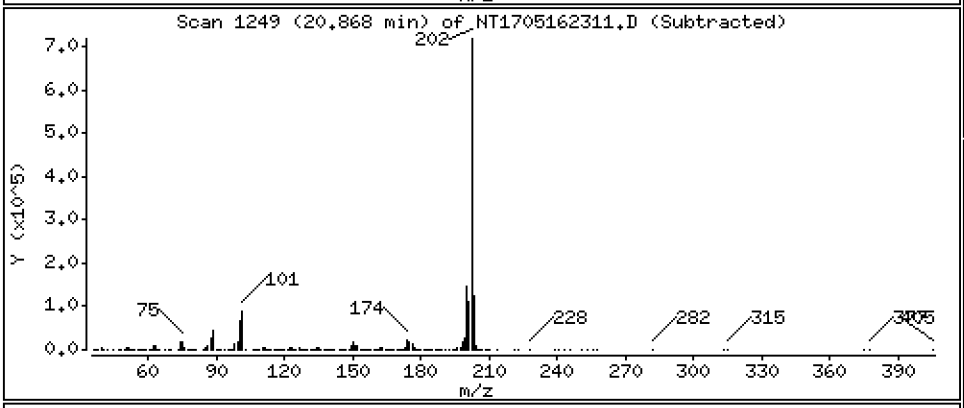
Column diameter: 0.25

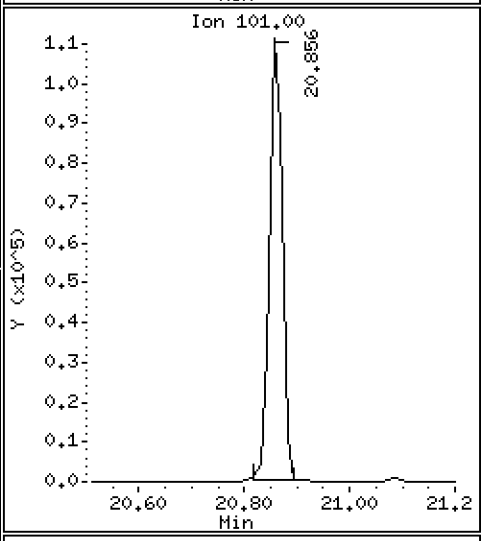
64 Fluoranthene

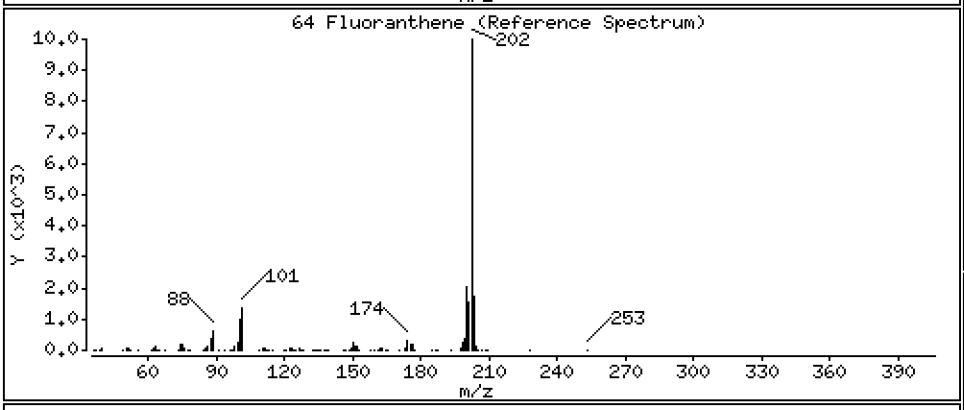
Concentration: 5.467 ug/mL

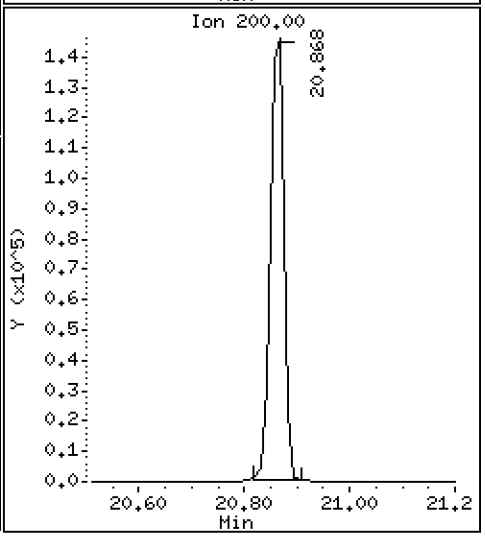


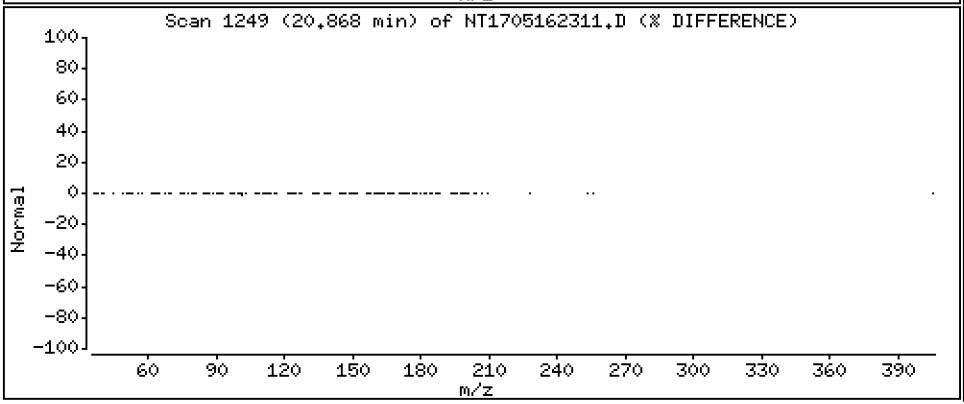












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

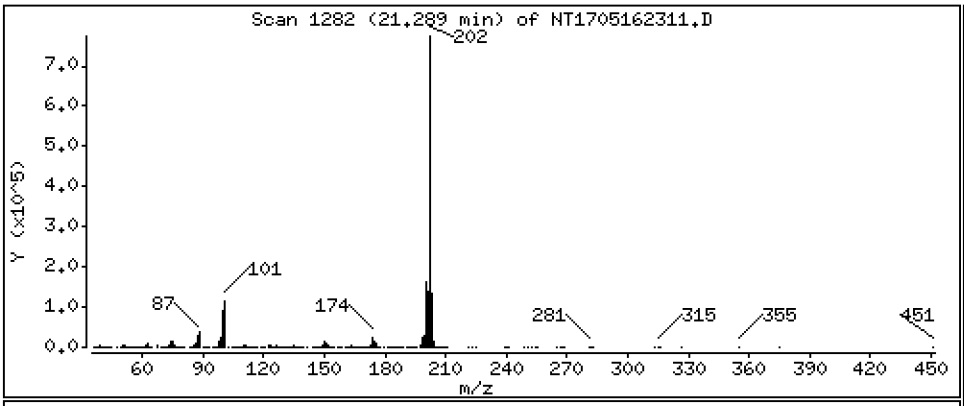
Operator: JGR

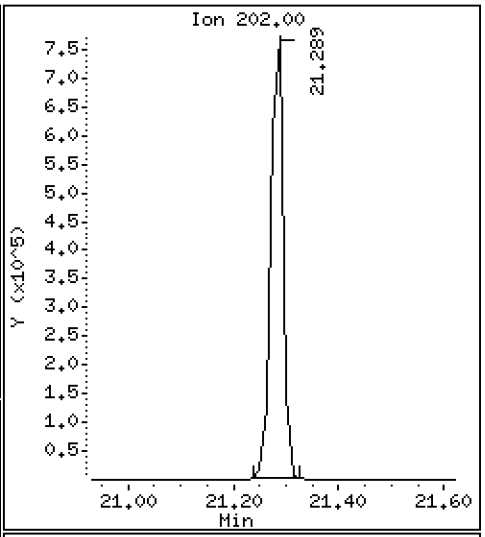
Column phase: ZB-5msi

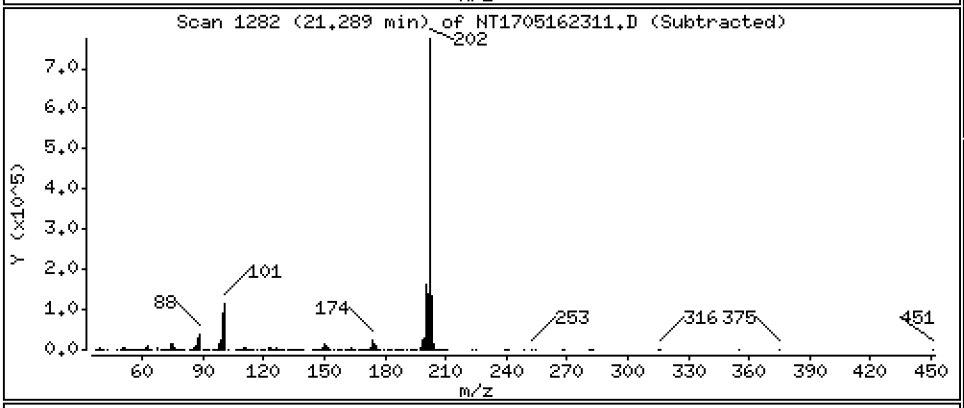
Column diameter: 0.25

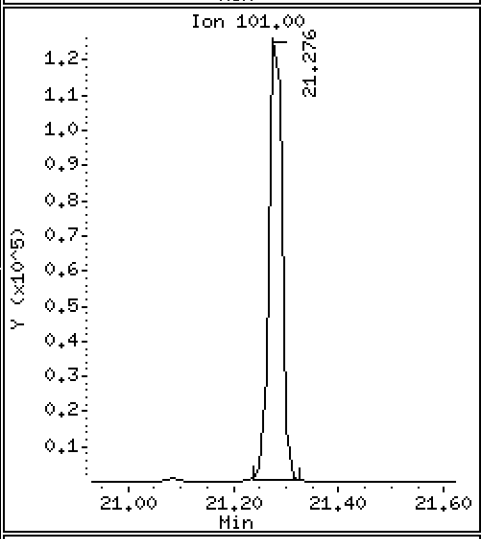
65 Pyrene

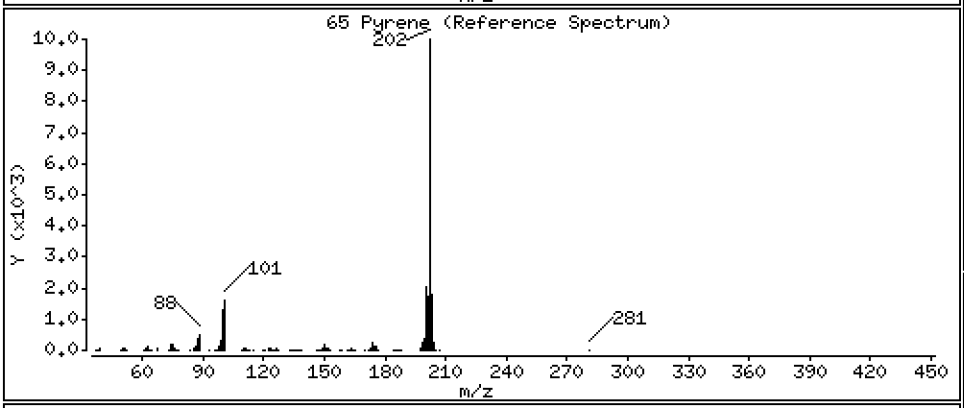
Concentration: 5.265 ug/mL

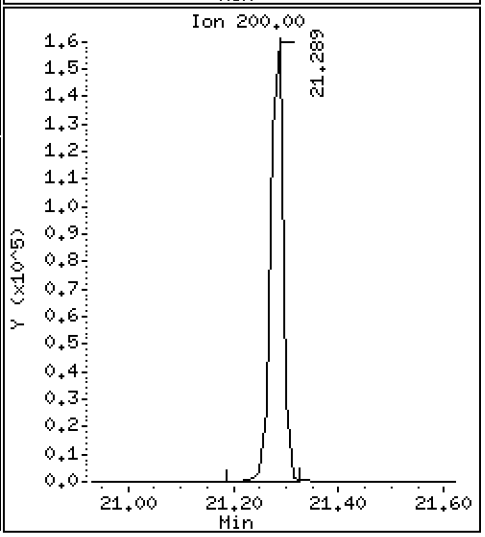


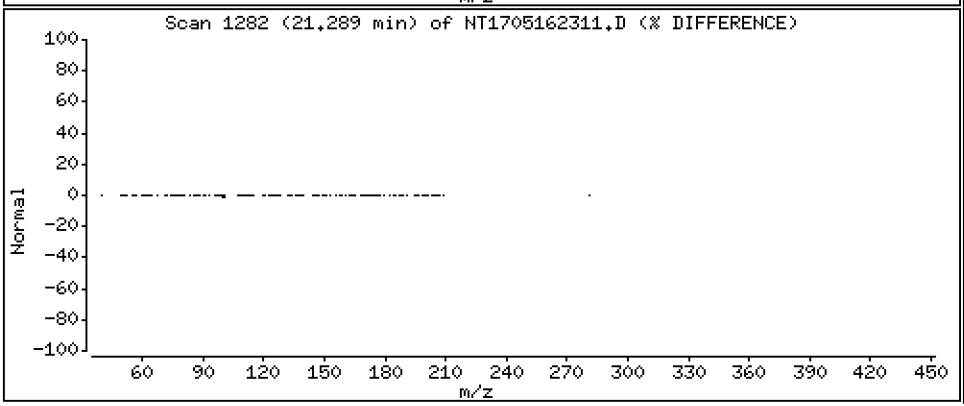












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

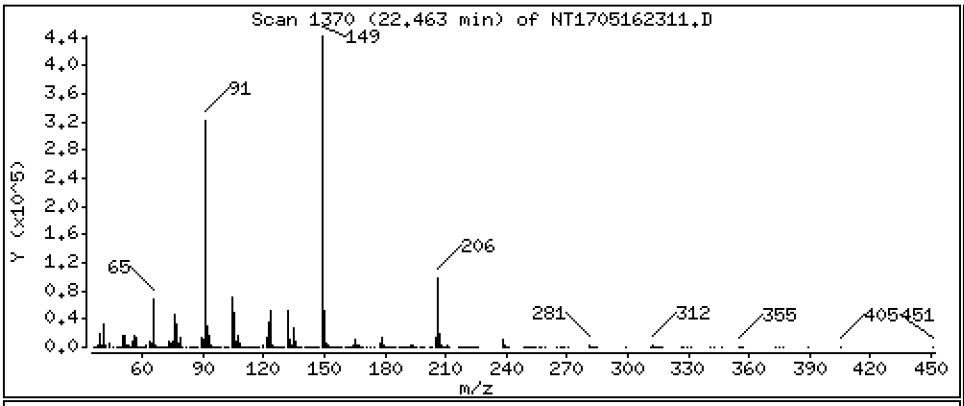
Operator: JGR

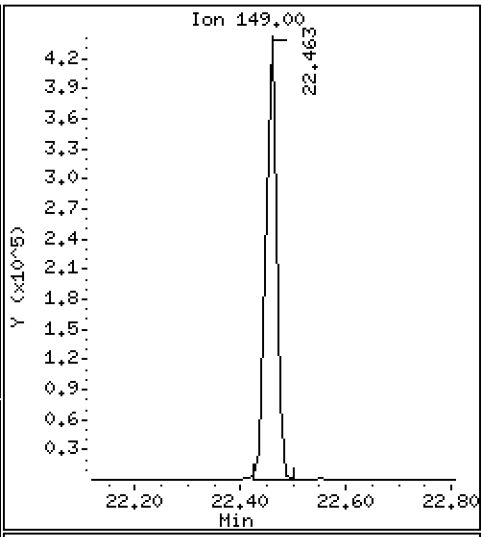
Column phase: ZB-5msi

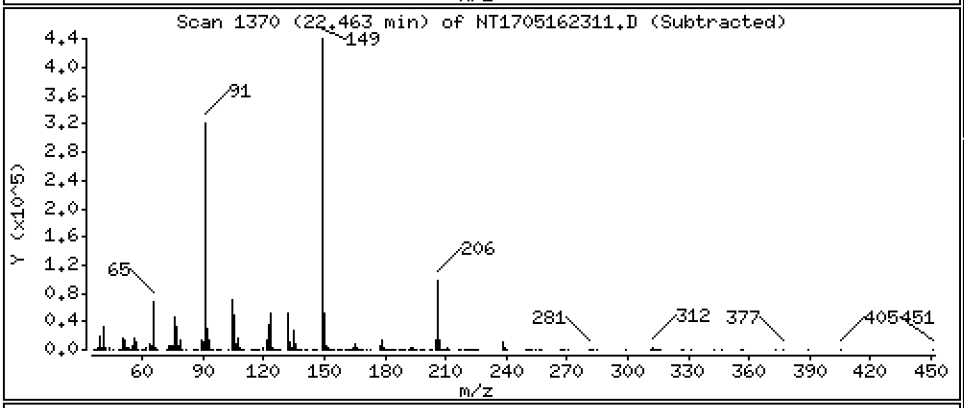
Column diameter: 0.25

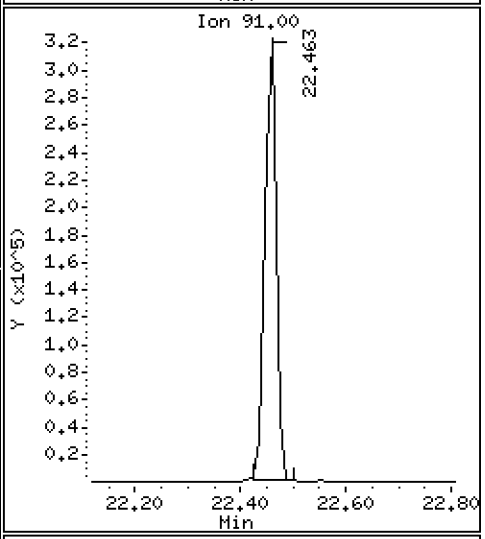
67 Butylbenzylphthalate

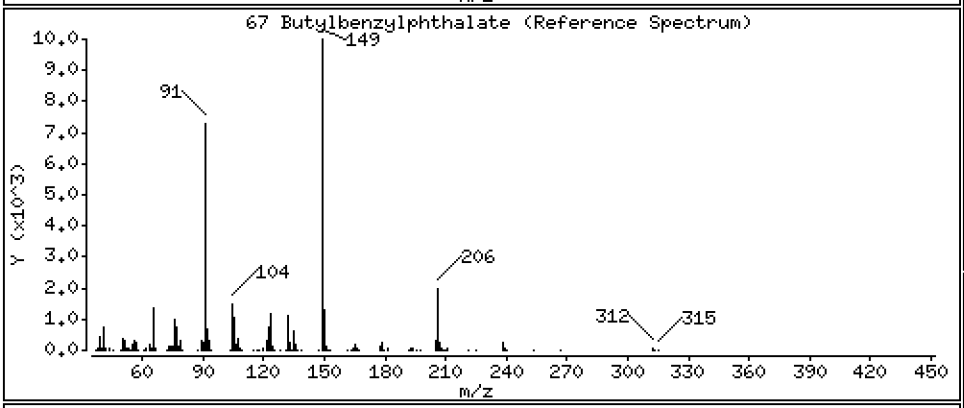
Concentration: 5.825 ug/mL

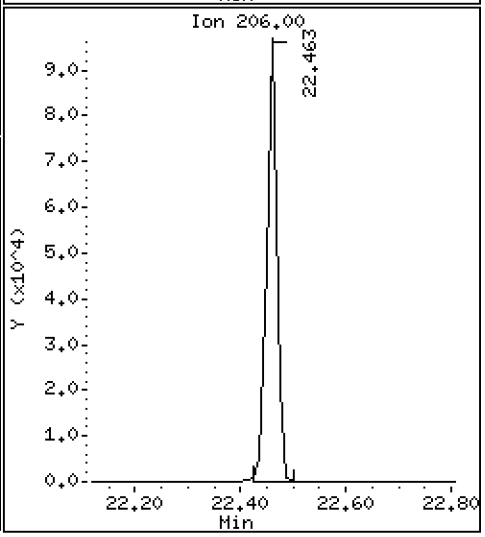


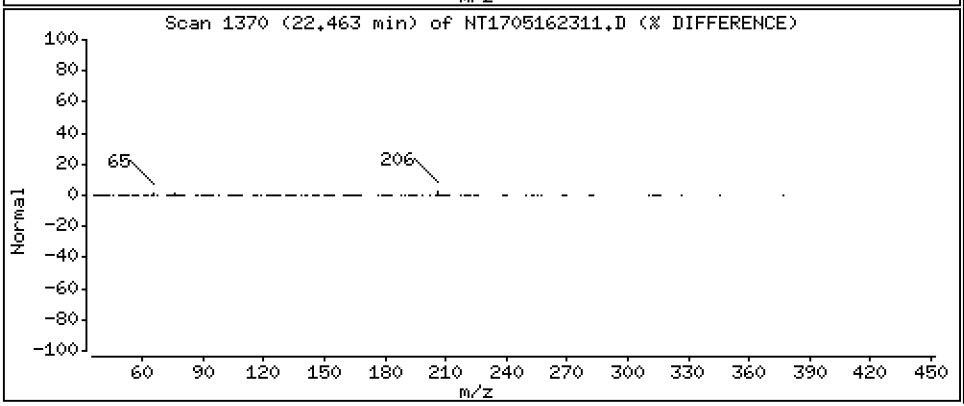












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

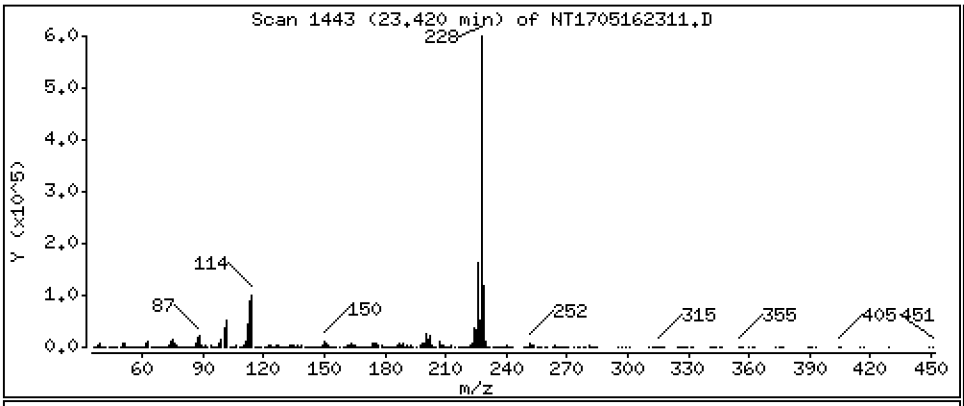
Operator: JGR

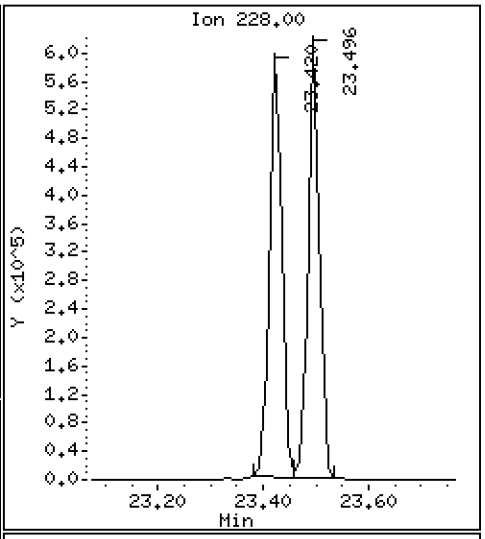
Column phase: ZB-5msi

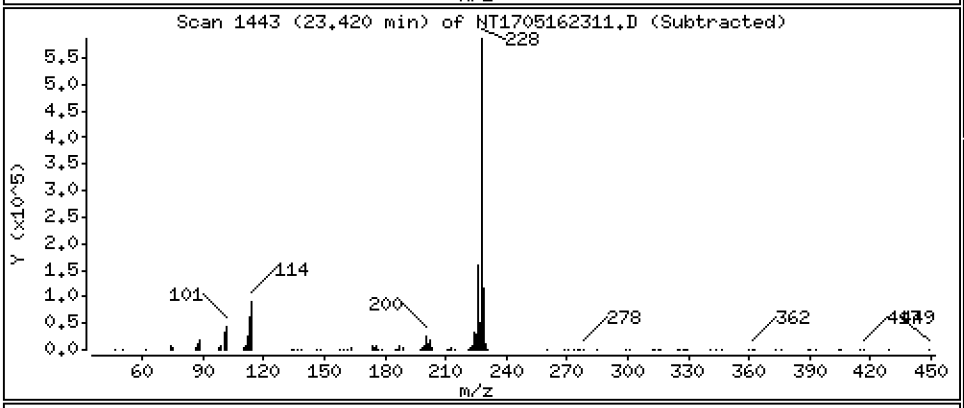
Column diameter: 0.25

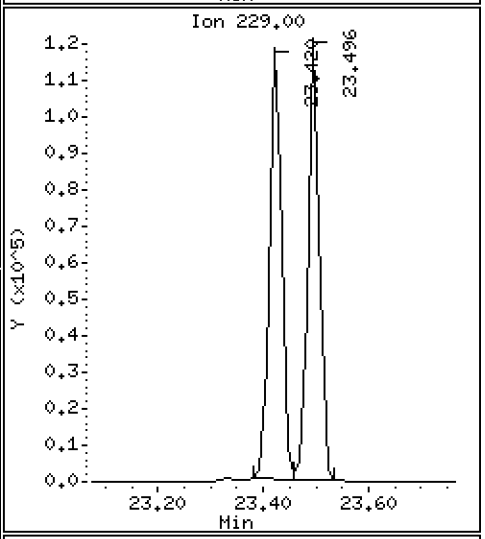
68 Benzo(a)anthracene

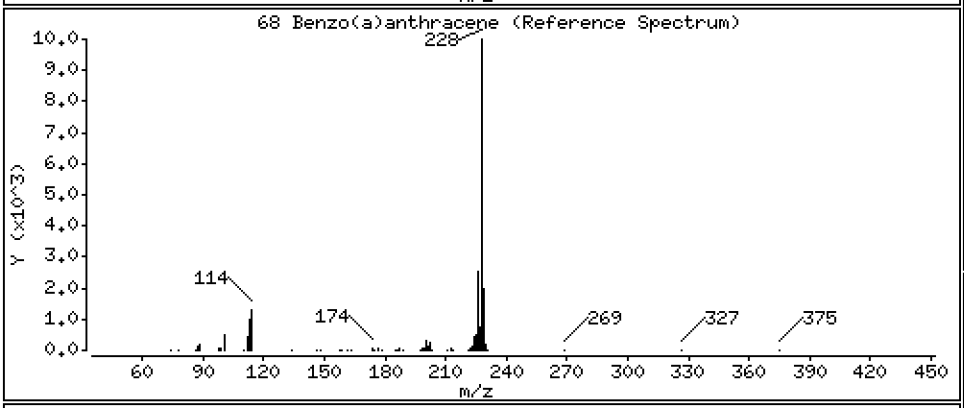
Concentration: 5.064 ug/mL

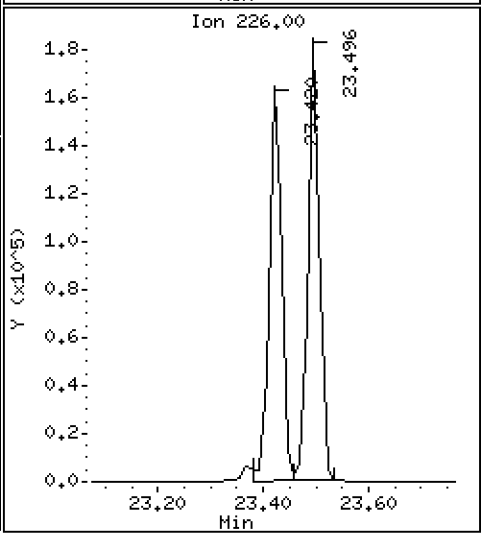


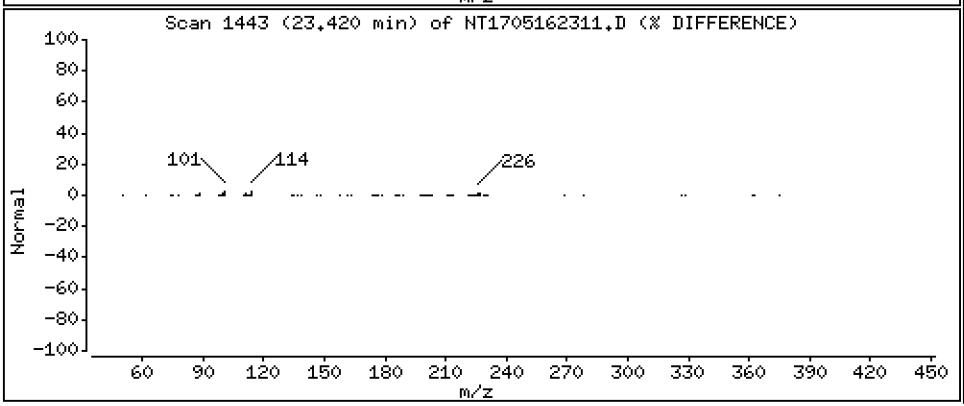












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

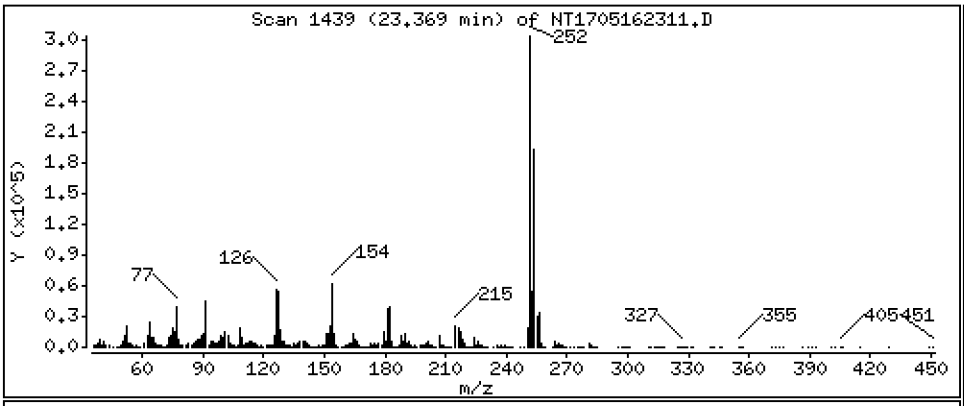
Operator: JGR

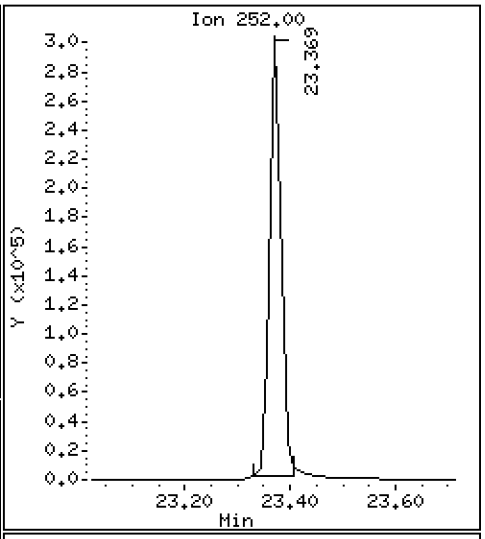
Column phase: ZB-5msi

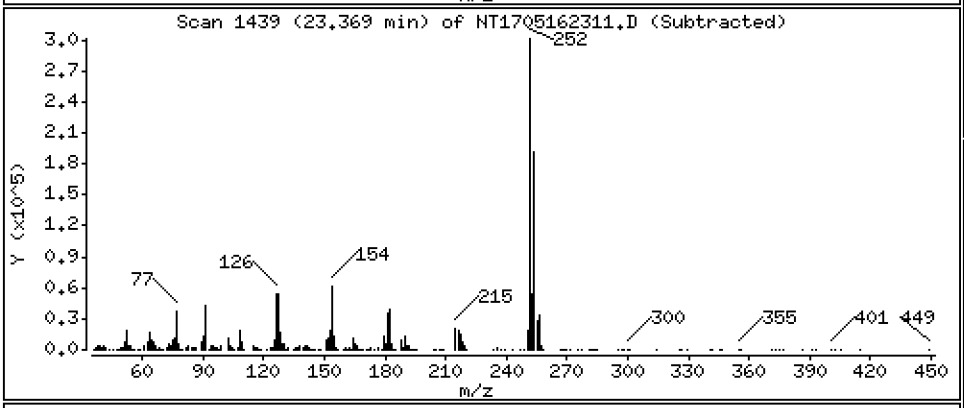
Column diameter: 0.25

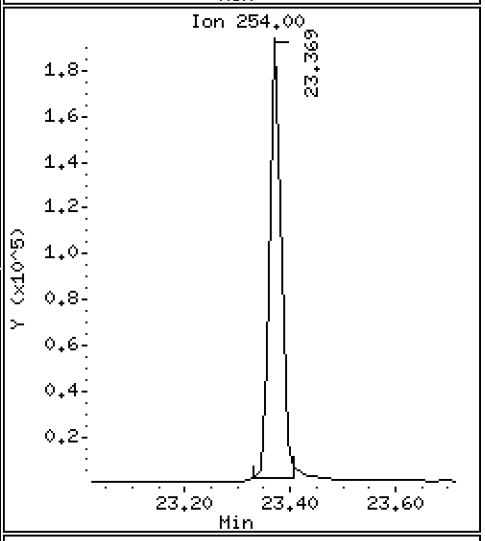
70 3,3'-Dichlorobenzidine

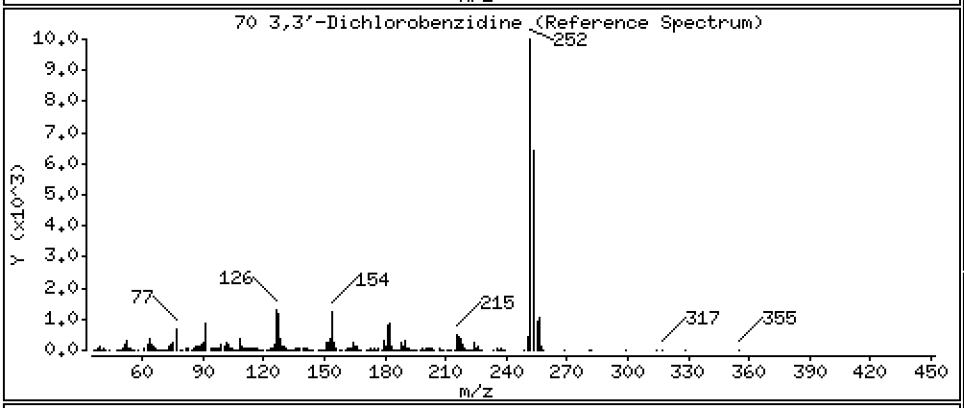
Concentration: 11.99 ug/mL

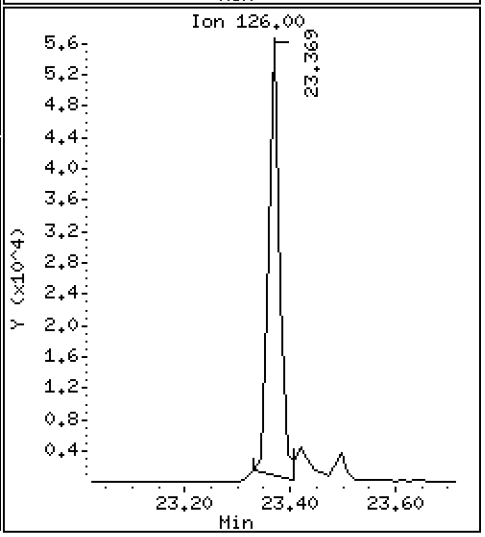


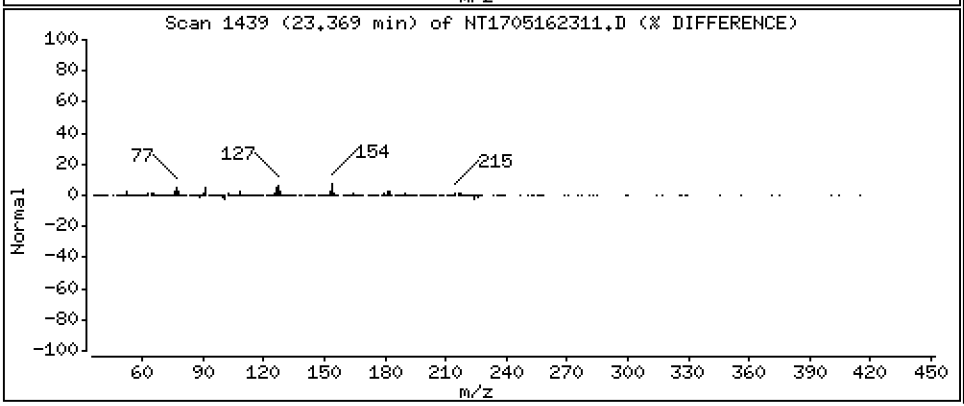












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

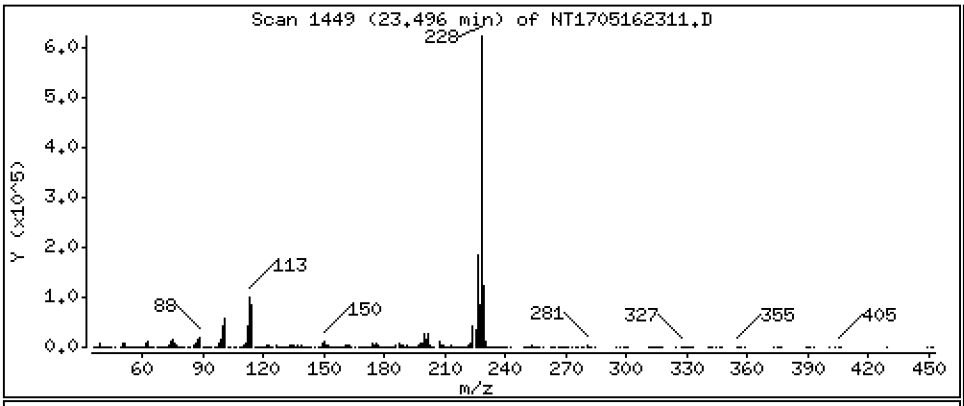
Operator: JGR

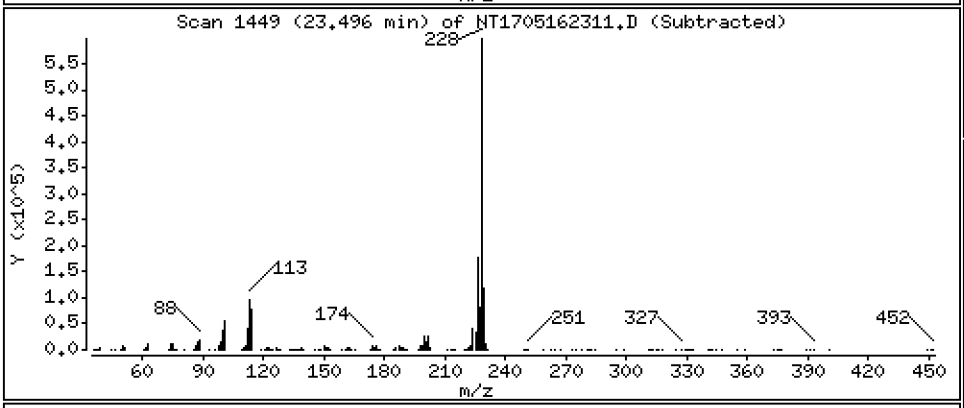
Column phase: ZB-5msi

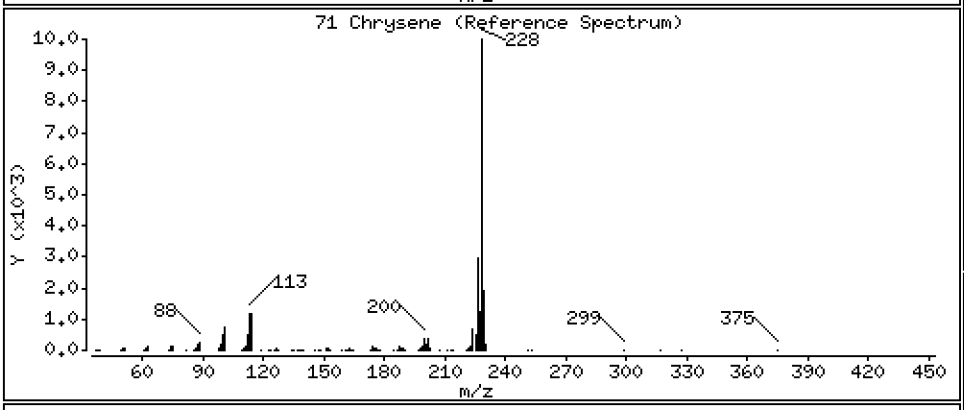
Column diameter: 0.25

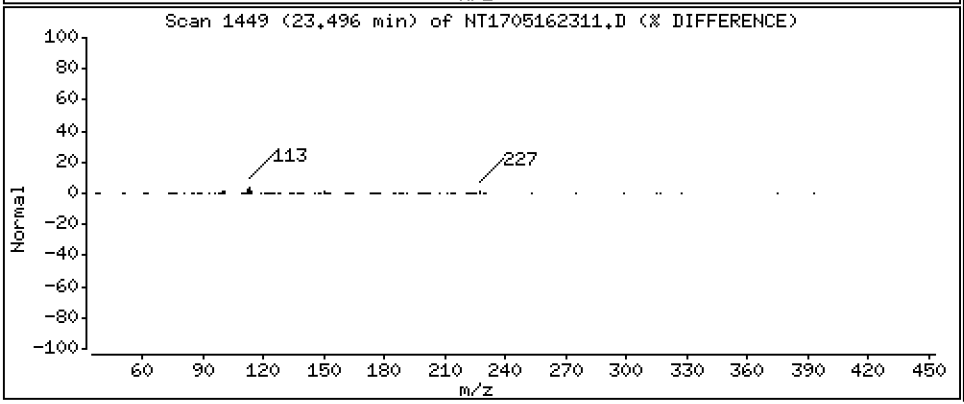
71 Chrysene

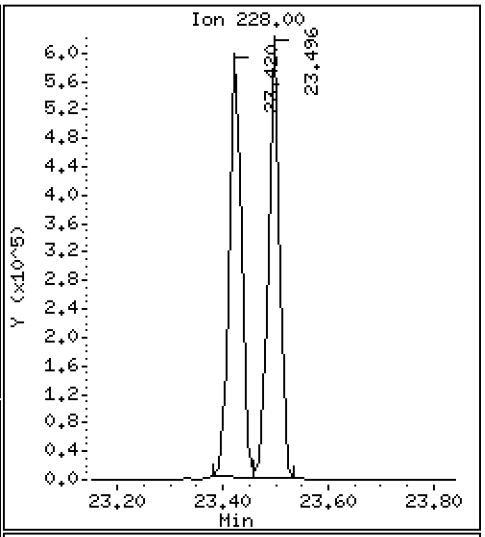
Concentration: 5.018 ug/mL

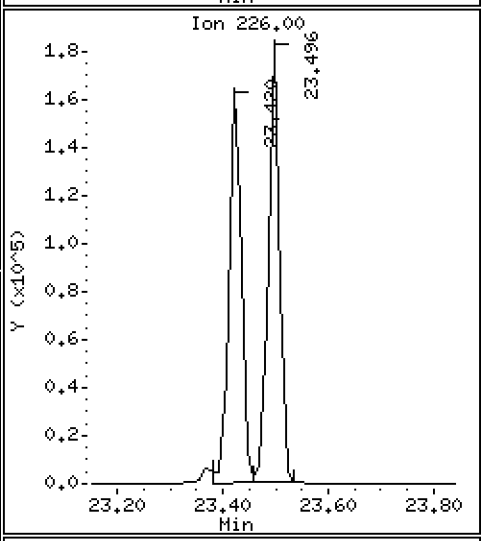


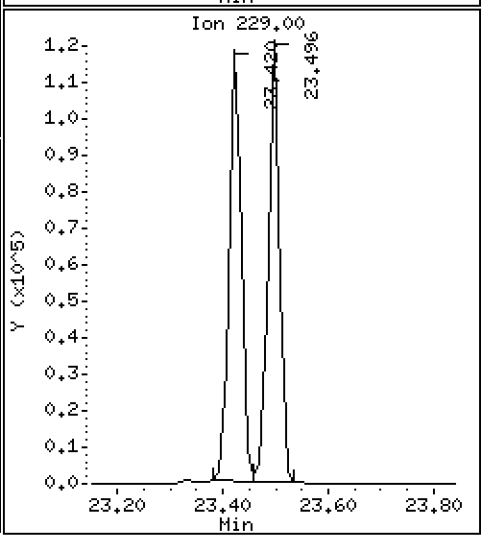












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

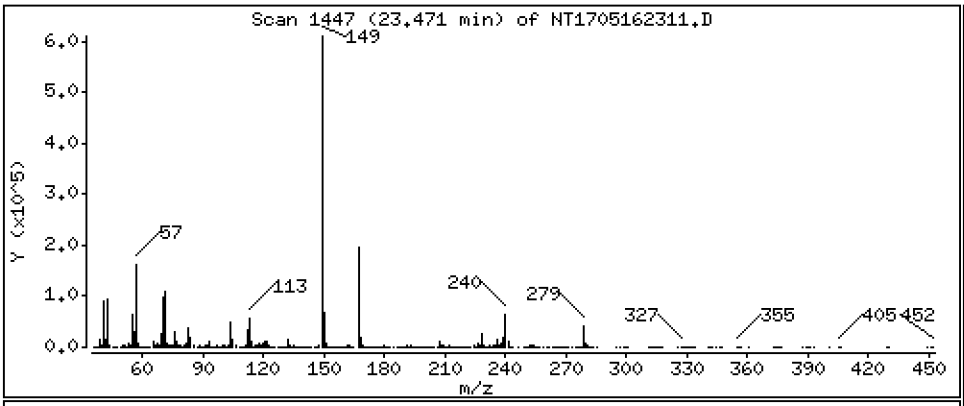
Operator: JGR

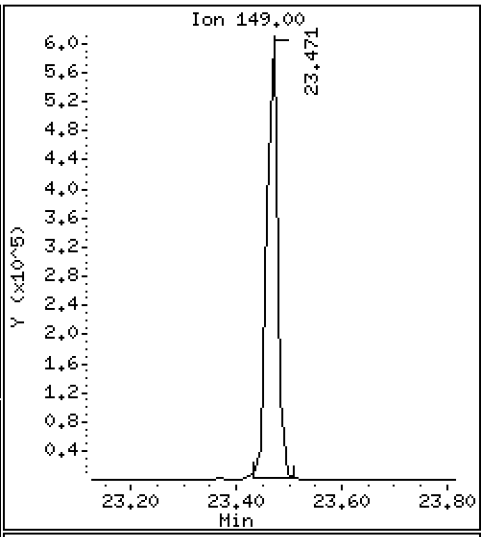
Column phase: ZB-5msi

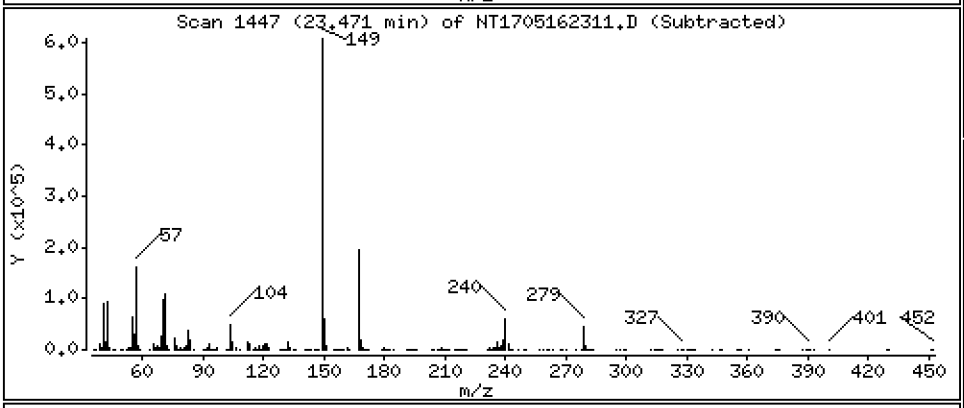
Column diameter: 0.25

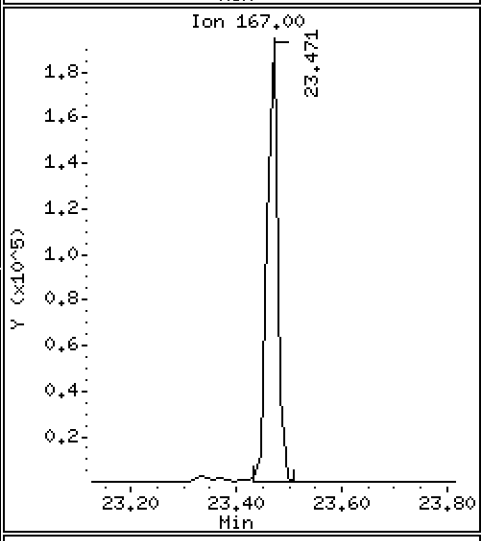
72 bis(2-Ethylhexyl)phthalate

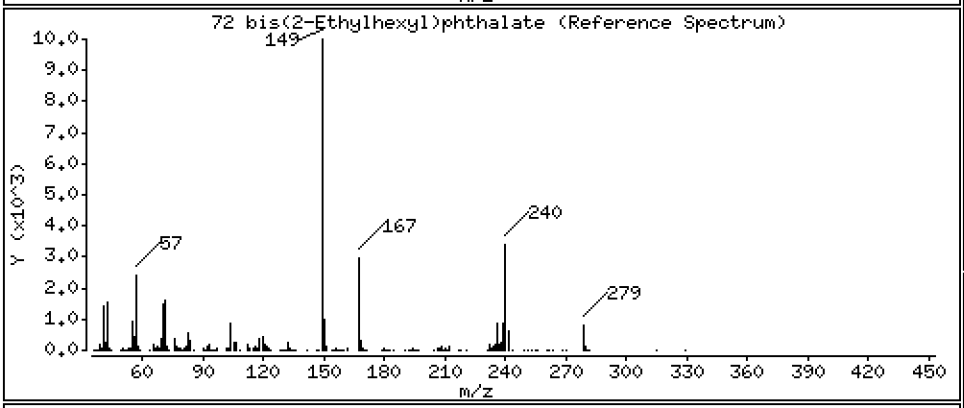
Concentration: 5.792 ug/mL

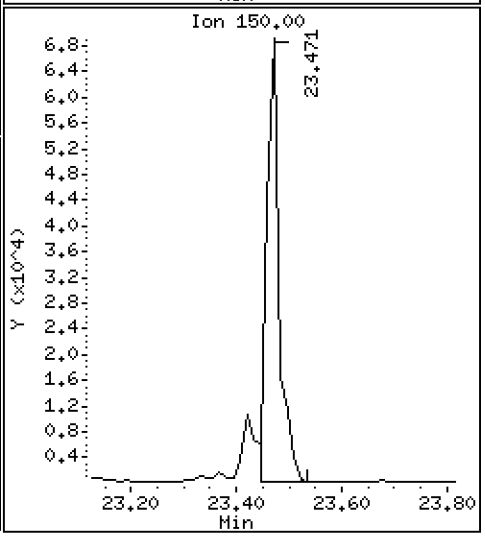


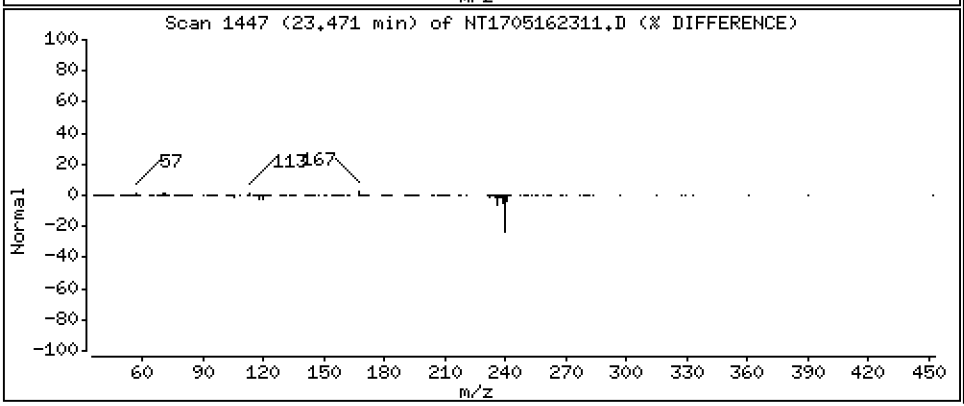












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

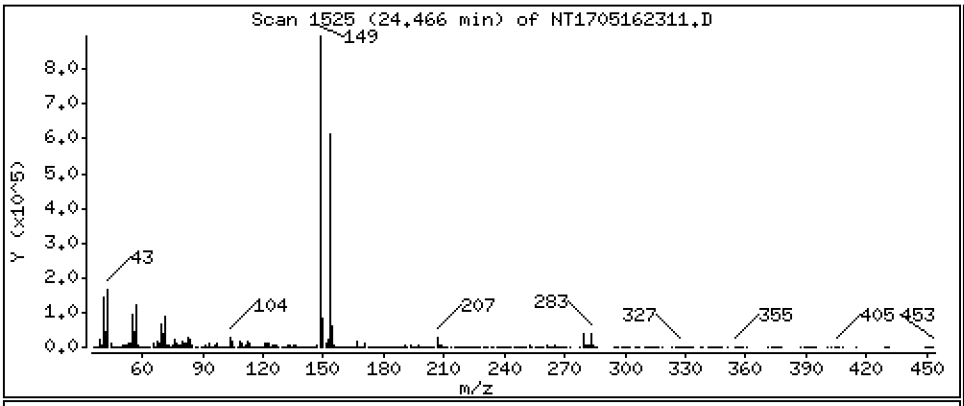
Operator: JGR

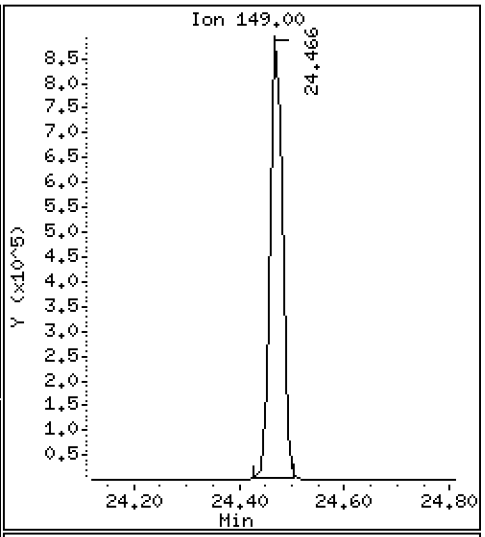
Column phase: ZB-5msi

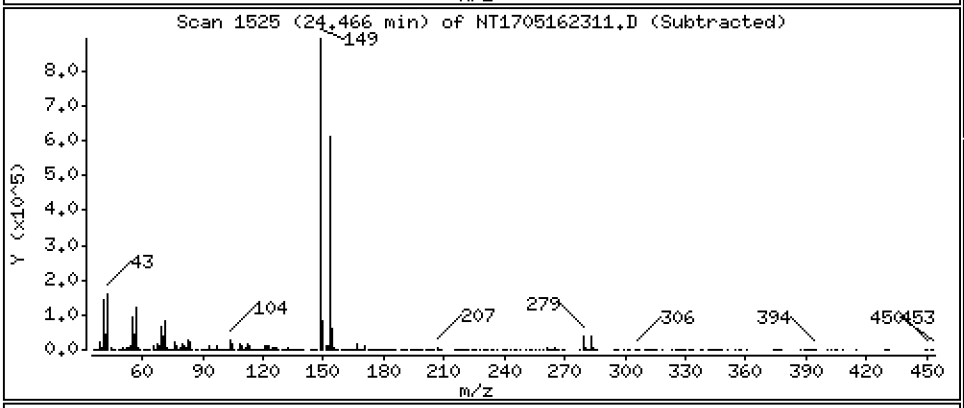
Column diameter: 0.25

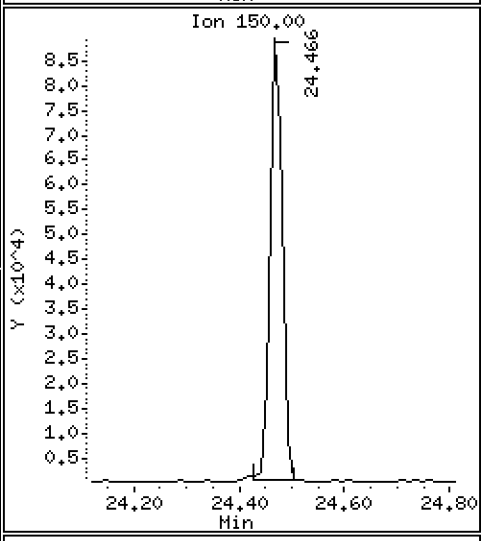
73 Di-n-octylphthalate

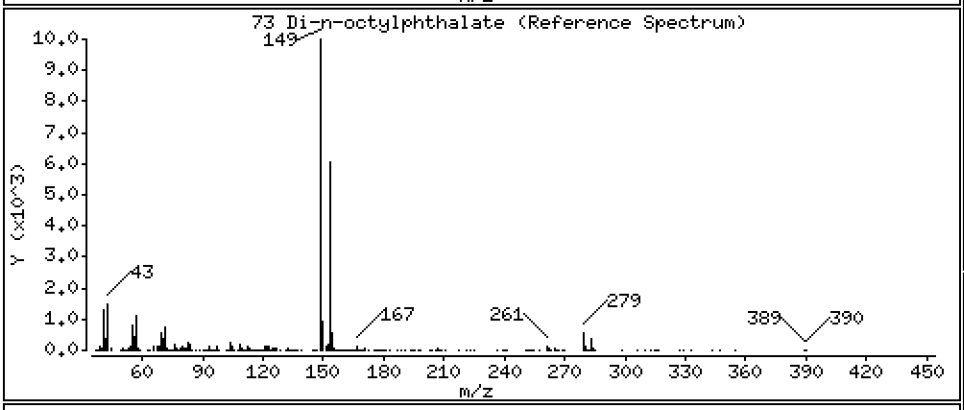
Concentration: 5.482 ug/mL

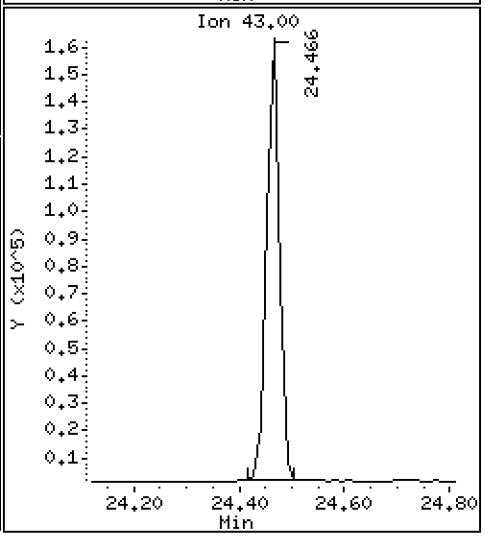


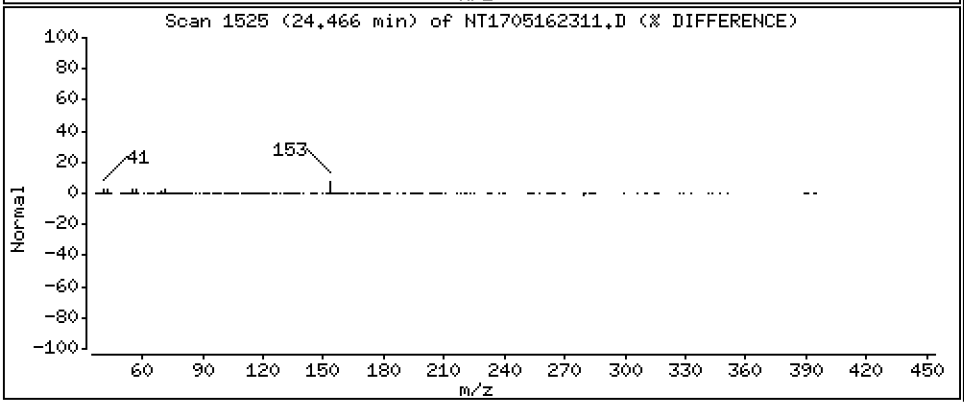












Date : 17-MAY-2023 00:29

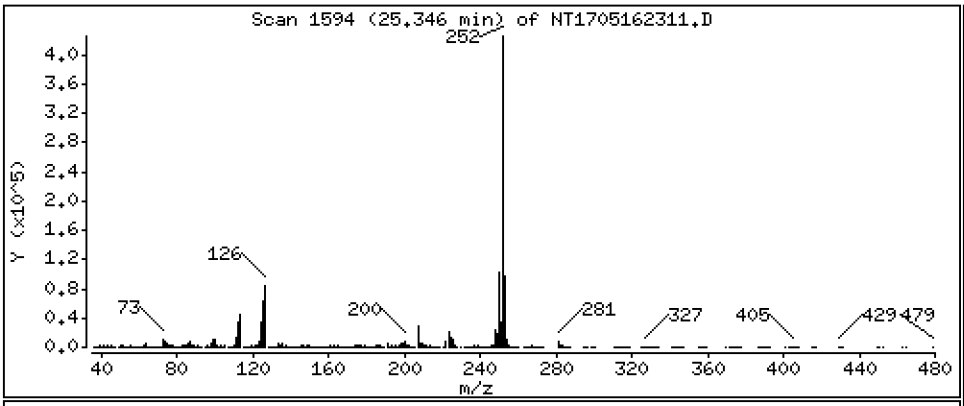
Client ID: Instrument: nt17.i

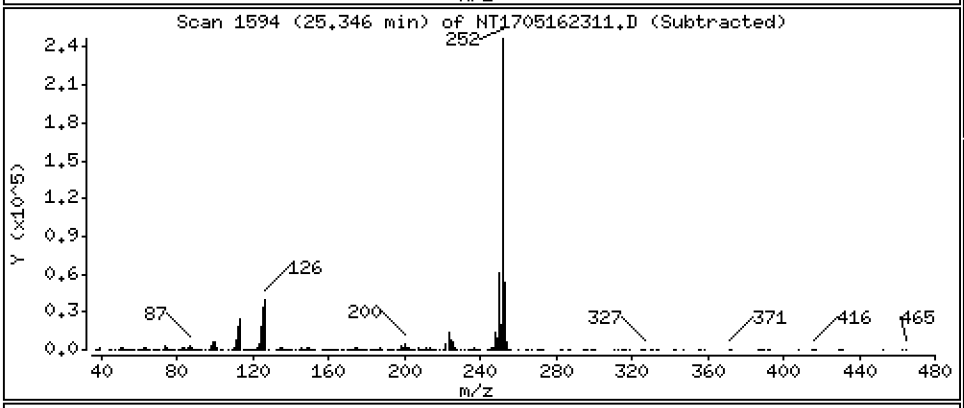
Sample Info: SLE0338-SCV1

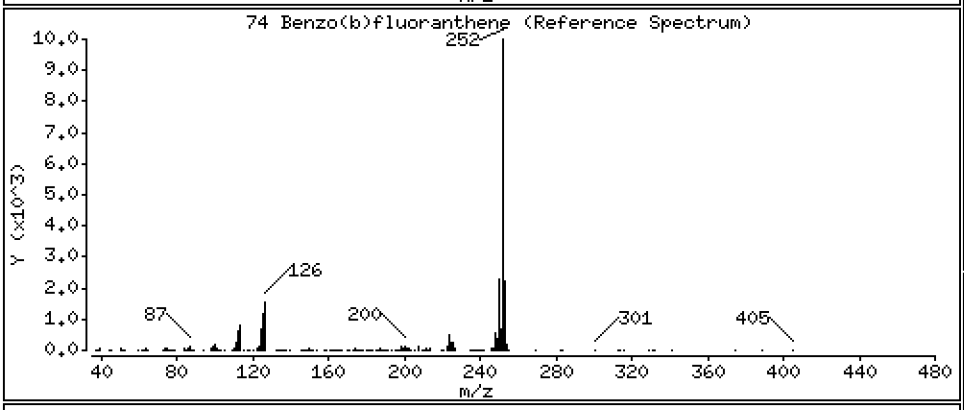
Operator: JGR

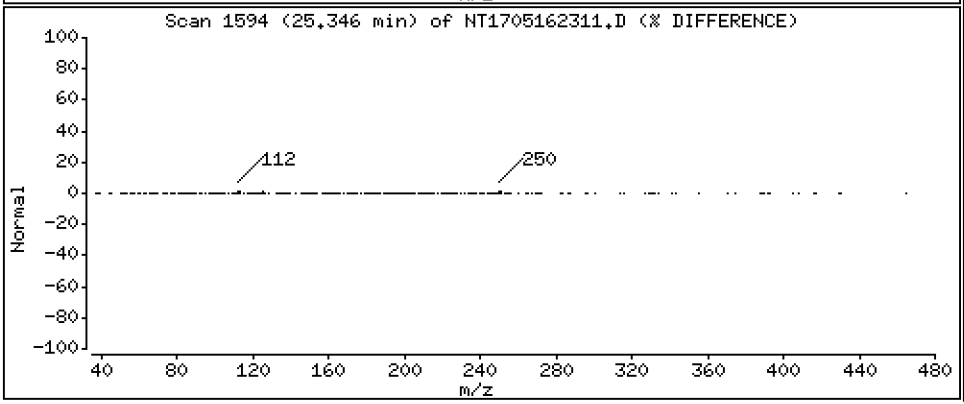
Column phase: ZB-5msi Column diameter: 0.25

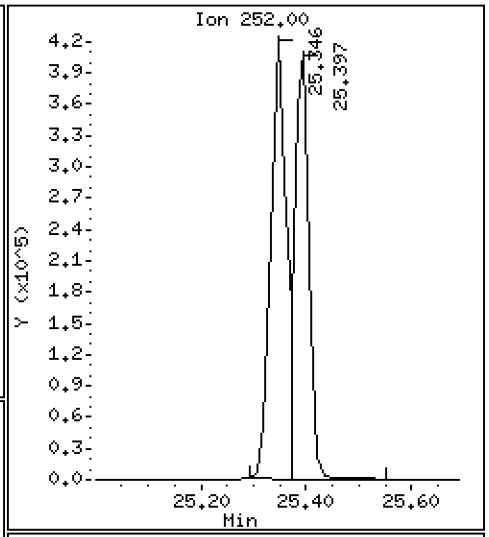
74 Benzo(b)fluoranthene Concentration: 4.912 ug/mL

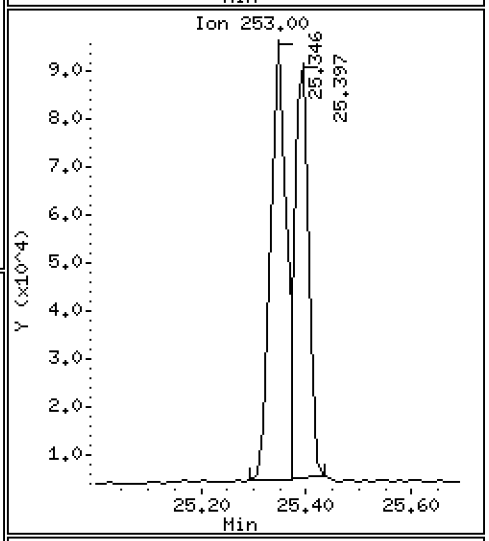


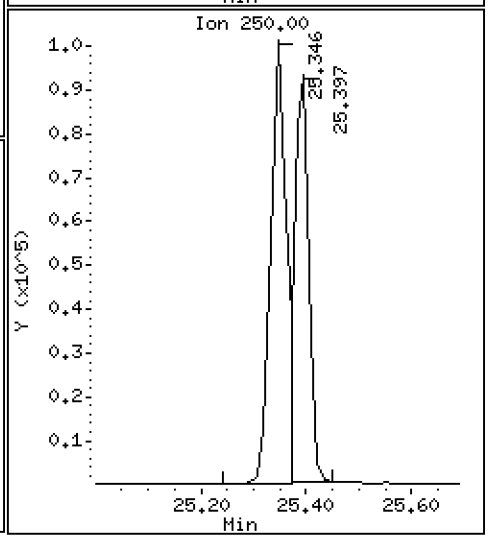












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

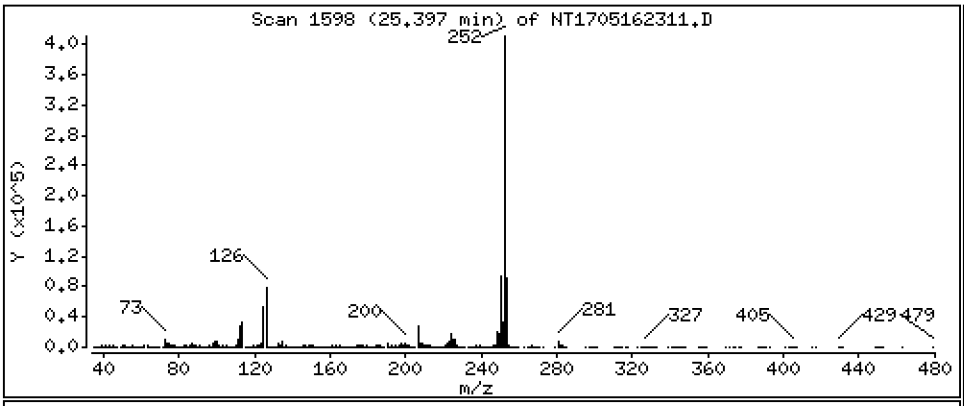
Operator: JGR

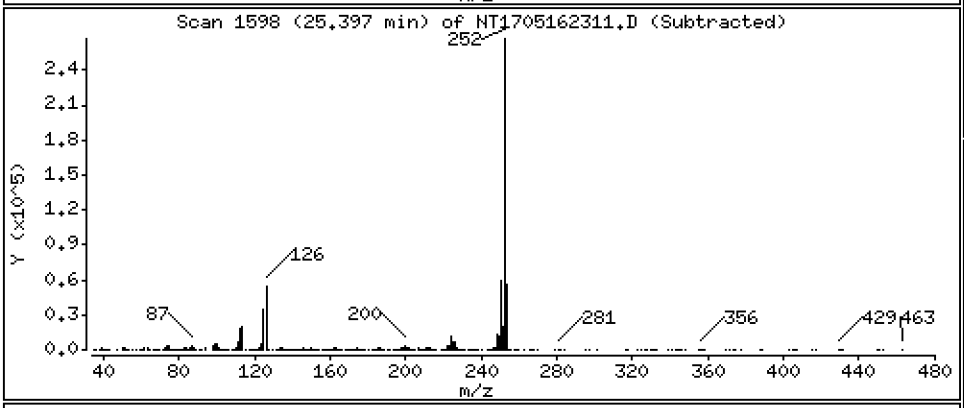
Column phase: ZB-5msi

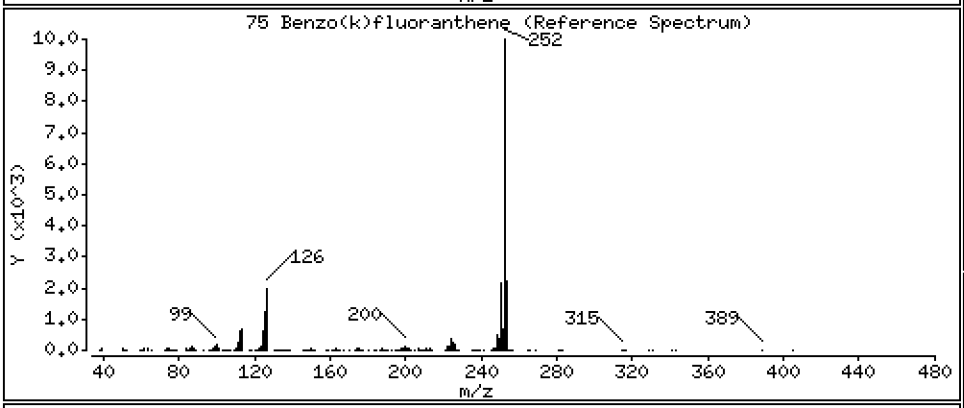
Column diameter: 0.25

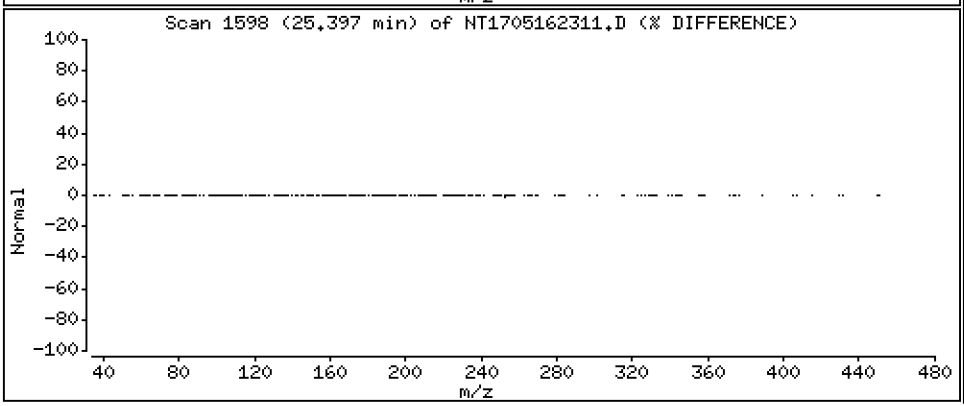
75 Benzo(k)fluoranthene

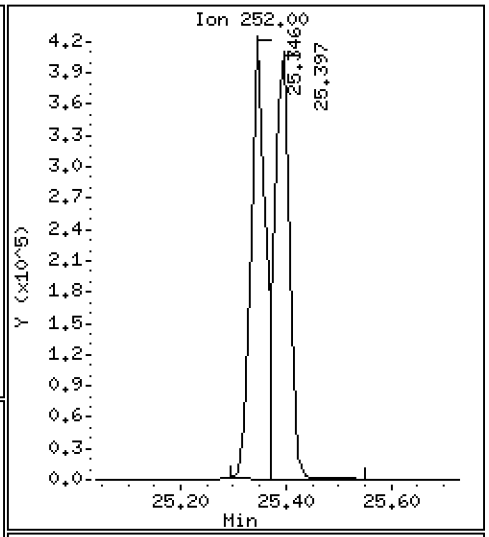
Concentration: 4.965 ug/mL

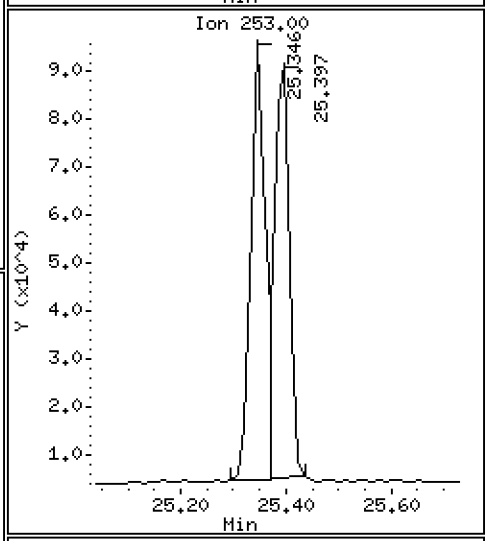


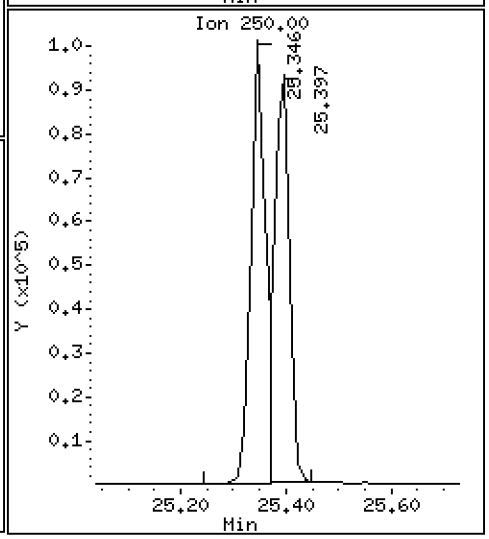












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

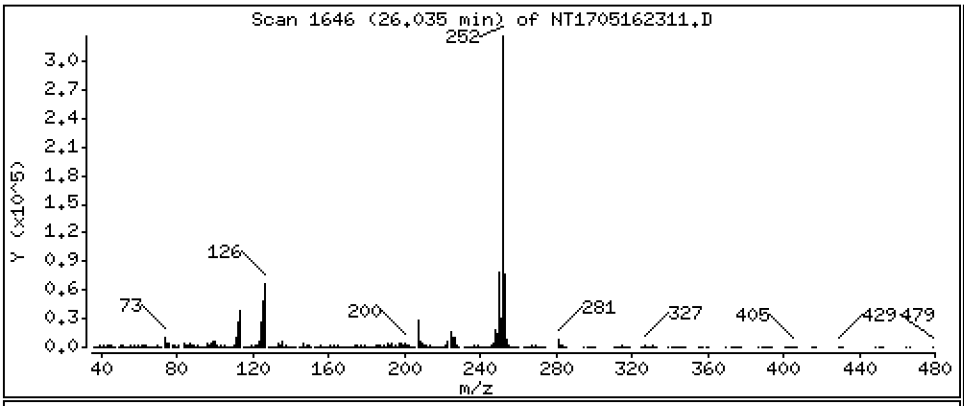
Operator: JGR

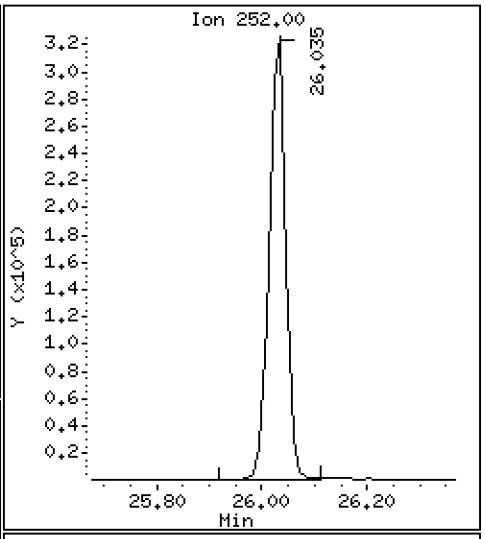
Column phase: ZB-5msi

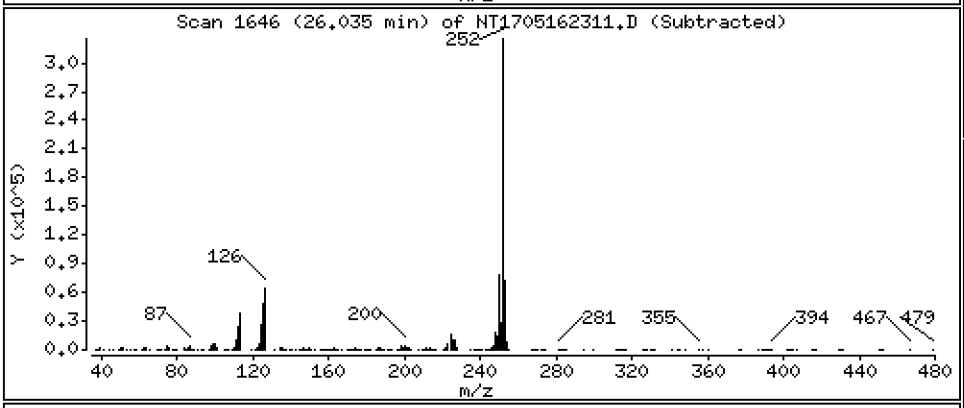
Column diameter: 0.25

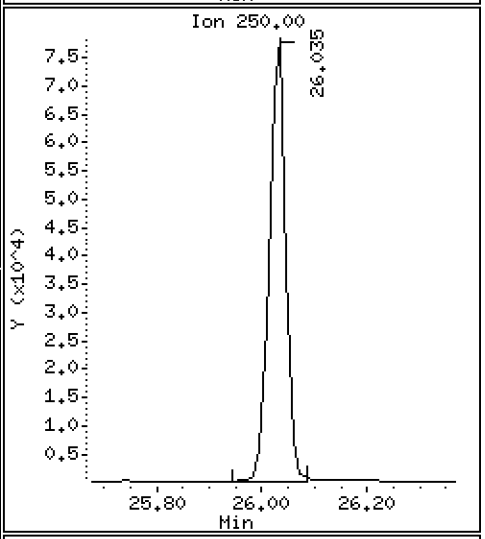
76 Benzo(a)pyrene

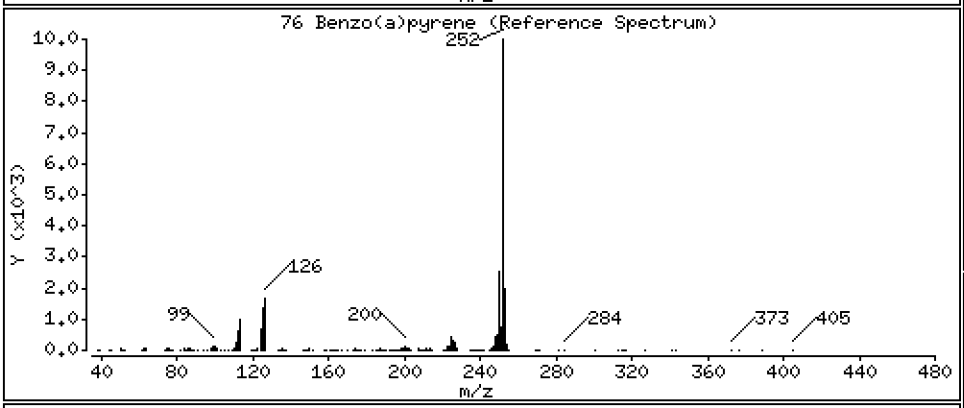
Concentration: 5.172 ug/mL

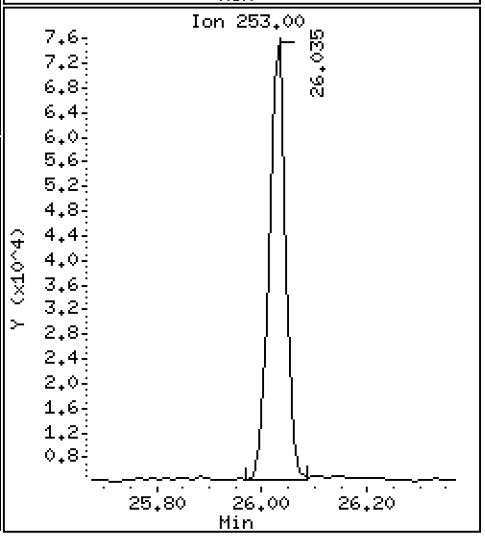


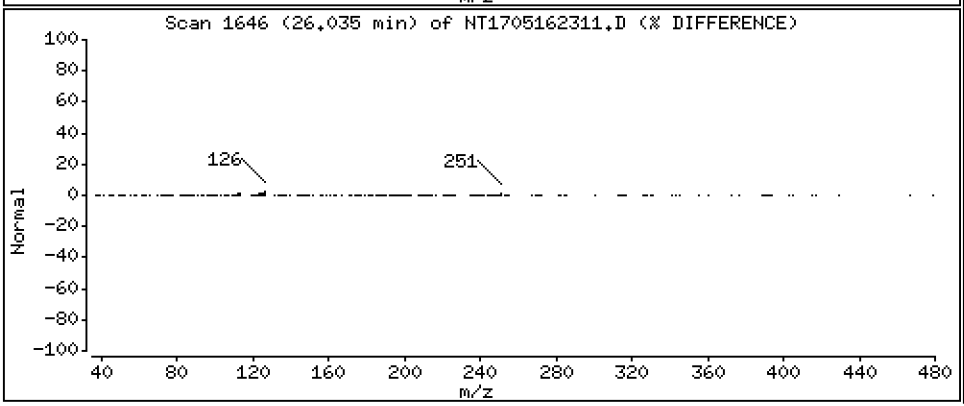












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

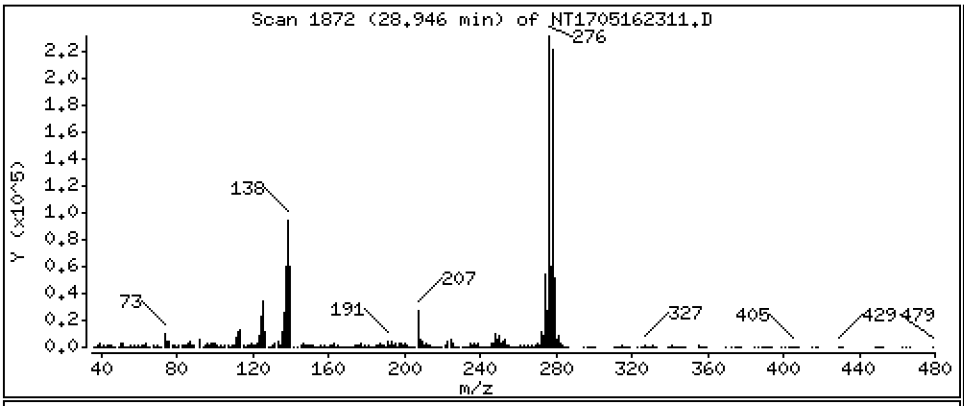
Operator: JGR

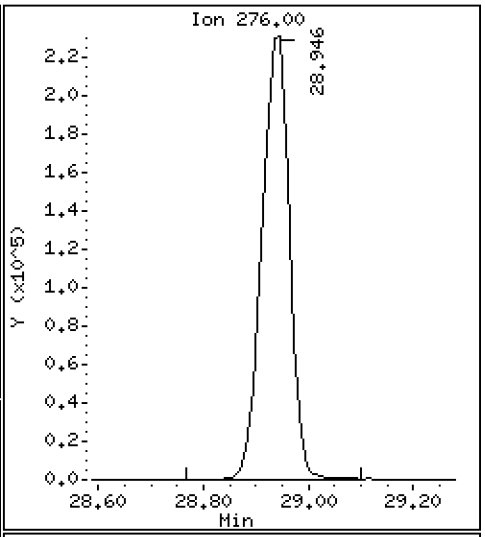
Column phase: ZB-5msi

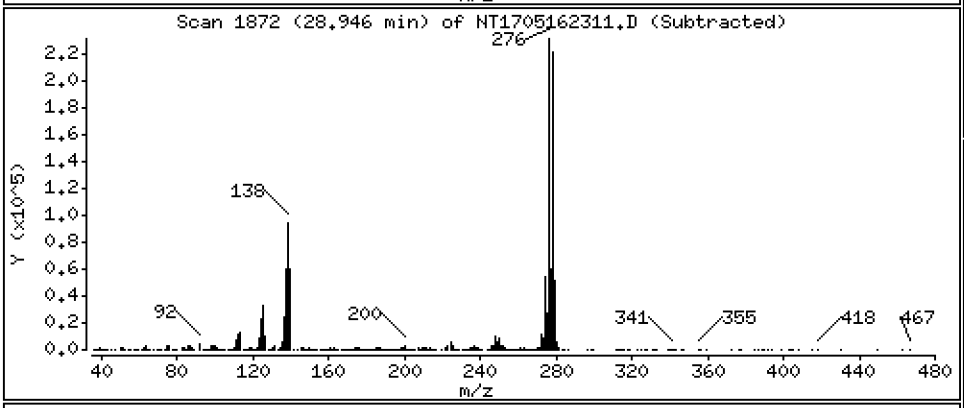
Column diameter: 0.25

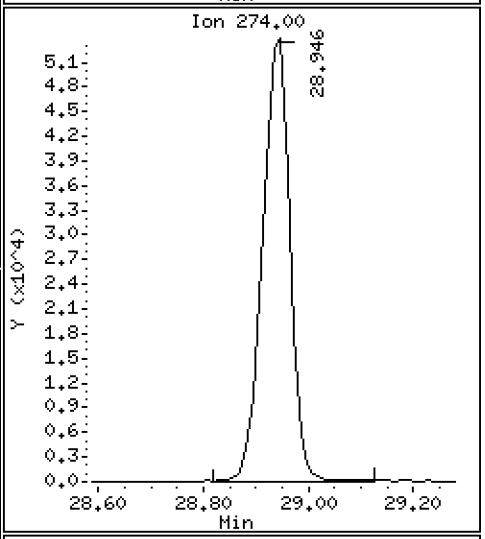
78 Indeno(1,2,3-cd)pyrene

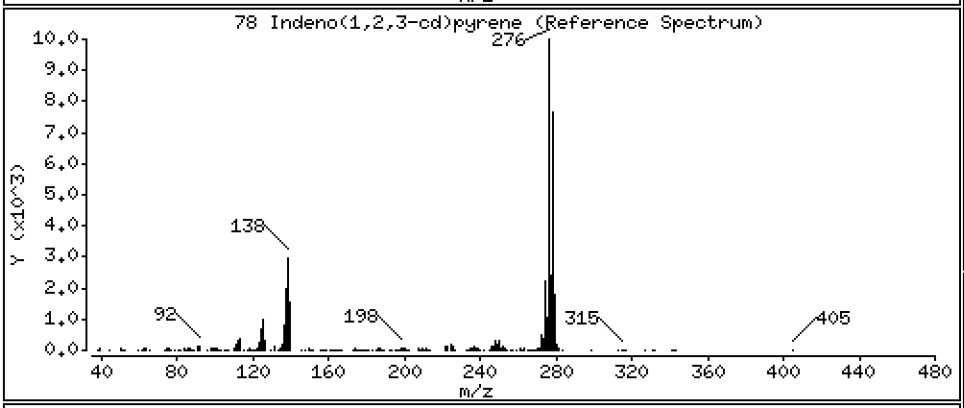
Concentration: 5.029 ug/mL

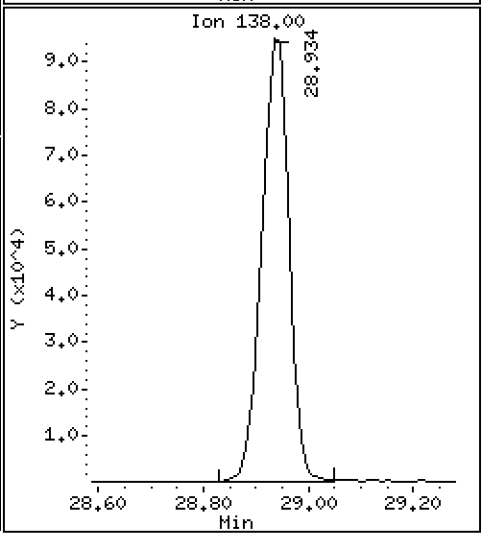


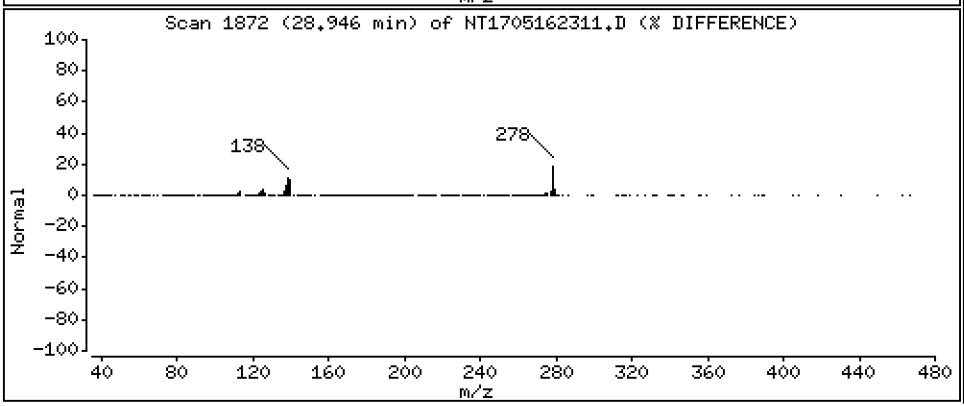












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

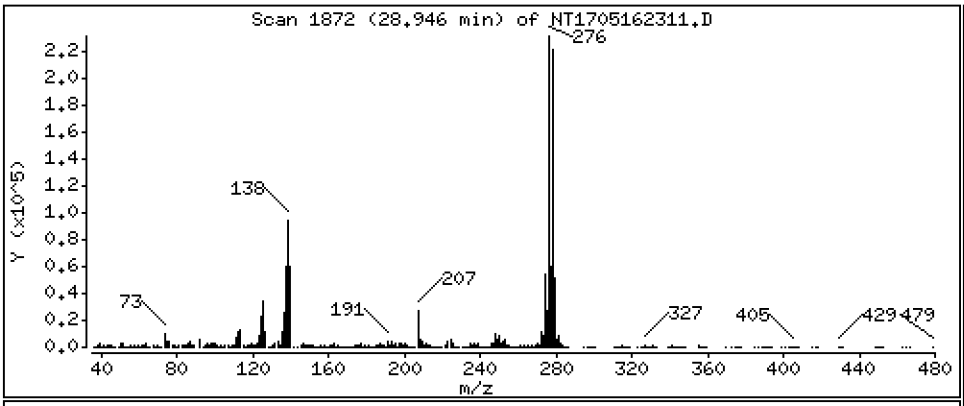
Operator: JGR

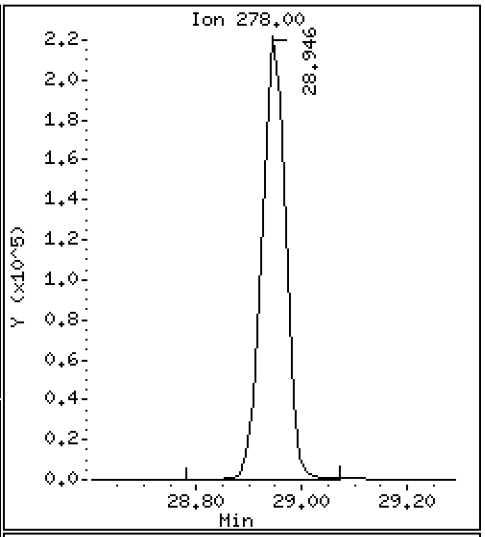
Column phase: ZB-5msi

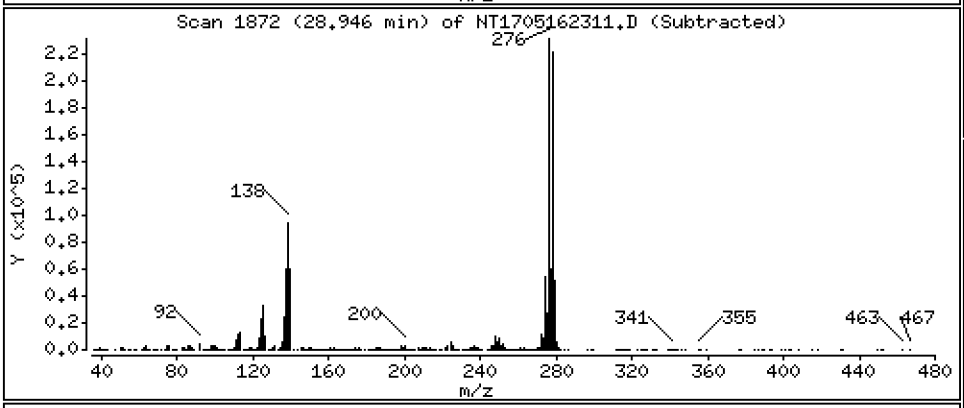
Column diameter: 0.25

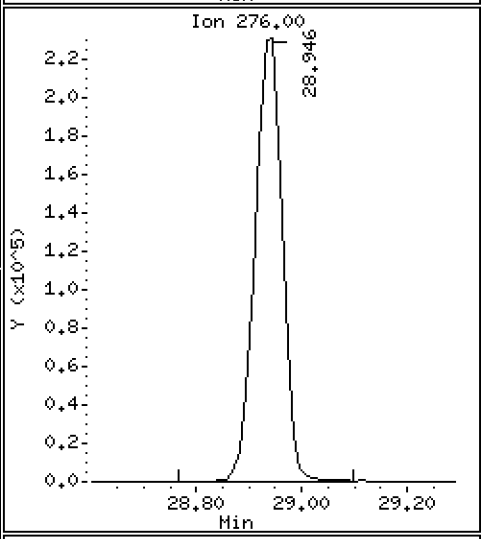
79 Dibenzo(a,h)anthracene

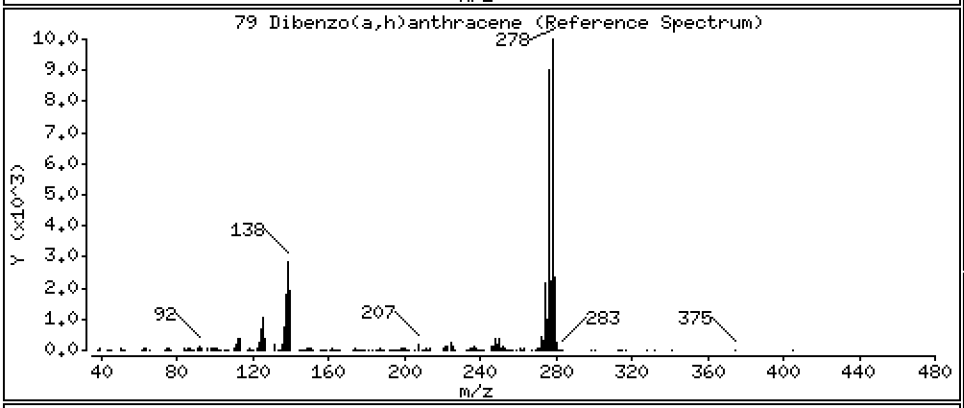
Concentration: 4.970 ug/mL

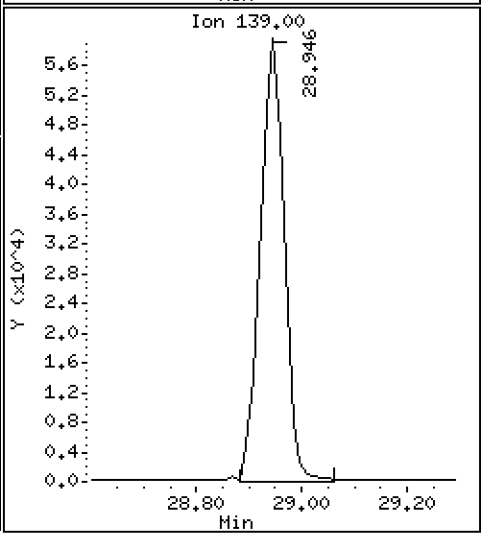


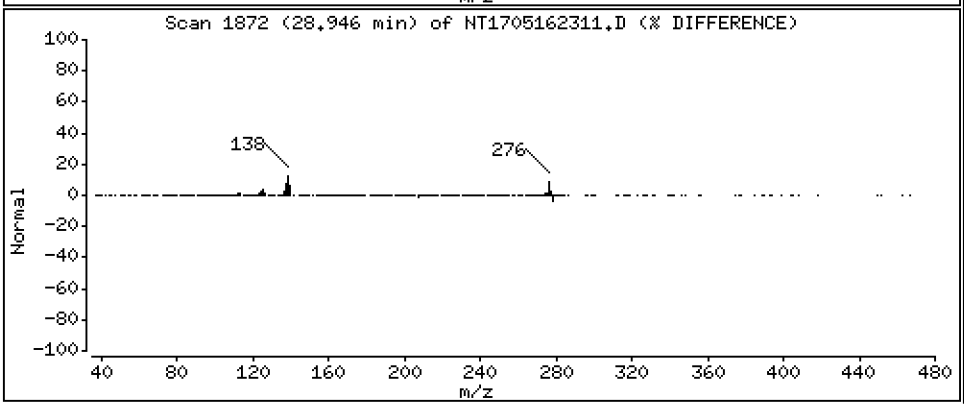












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

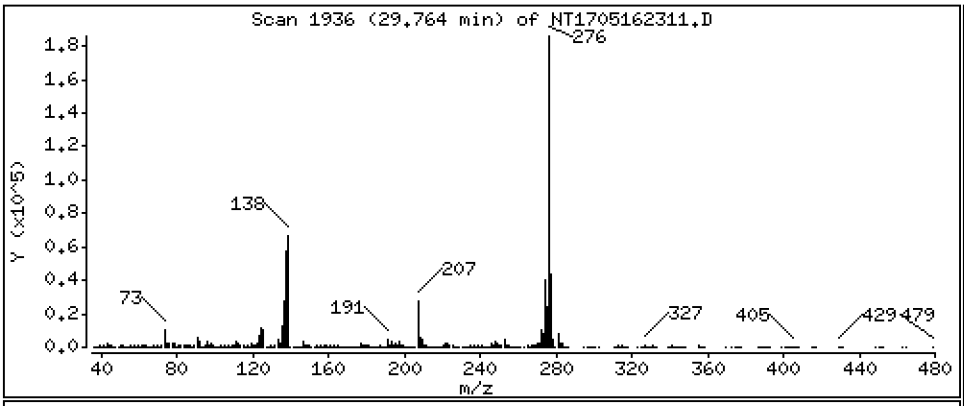
Operator: JGR

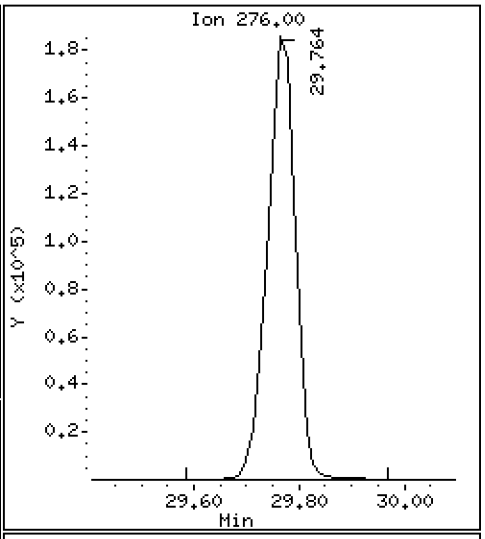
Column phase: ZB-5msi

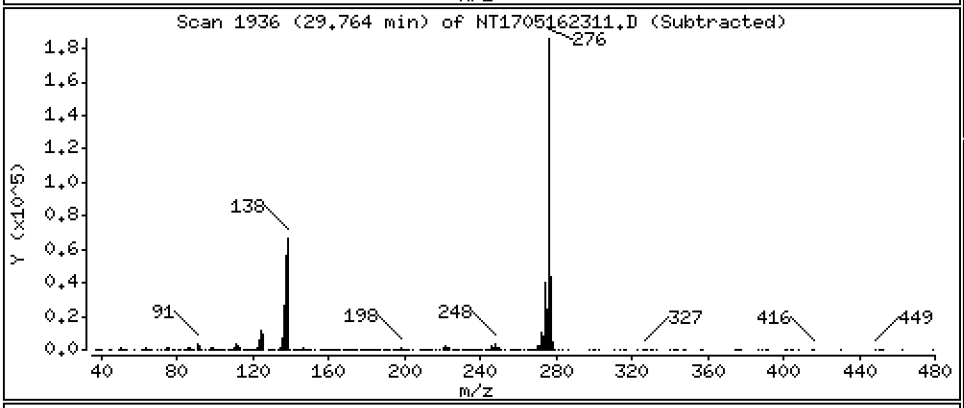
Column diameter: 0.25

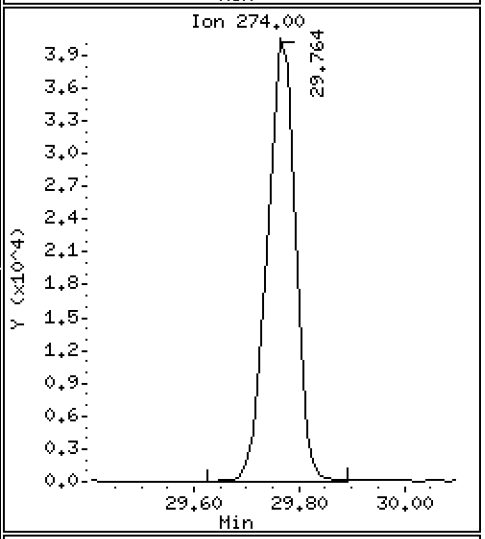
80 Benzo(g,h,i)perylene

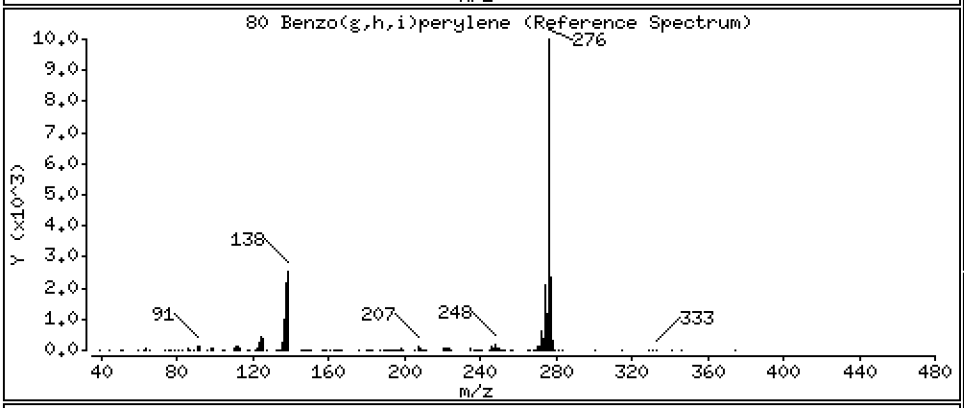
Concentration: 5.054 ug/mL

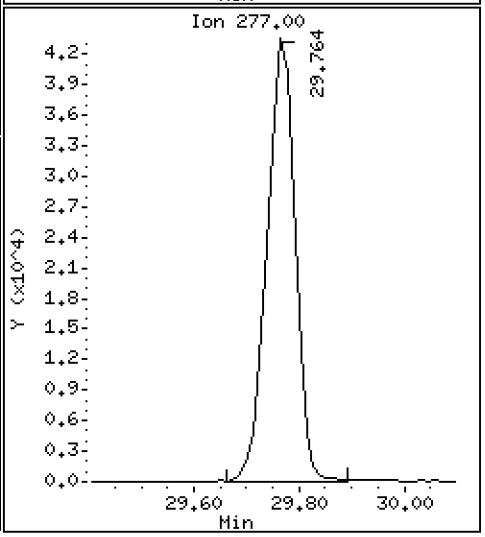


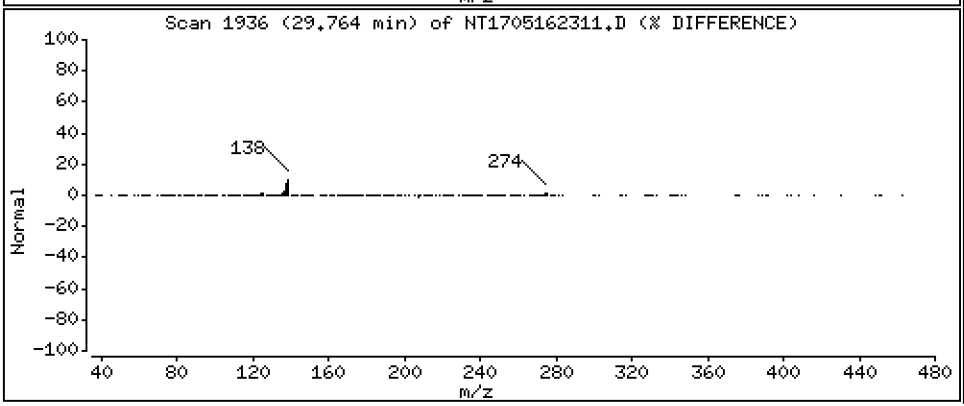












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

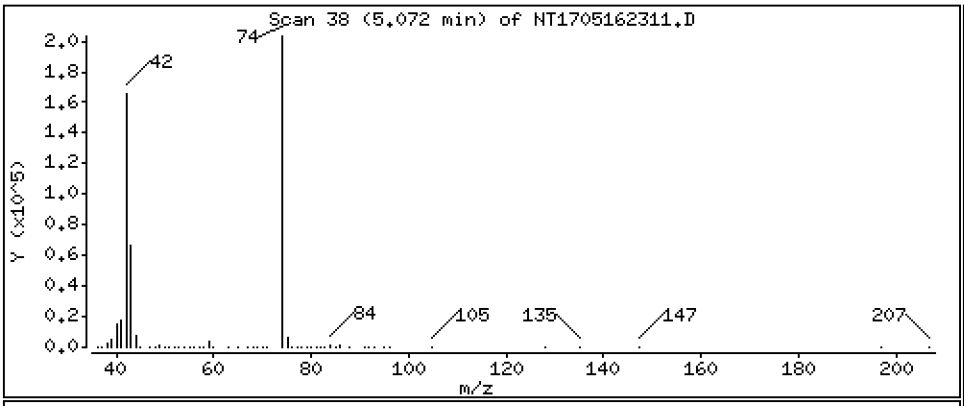
Operator: JGR

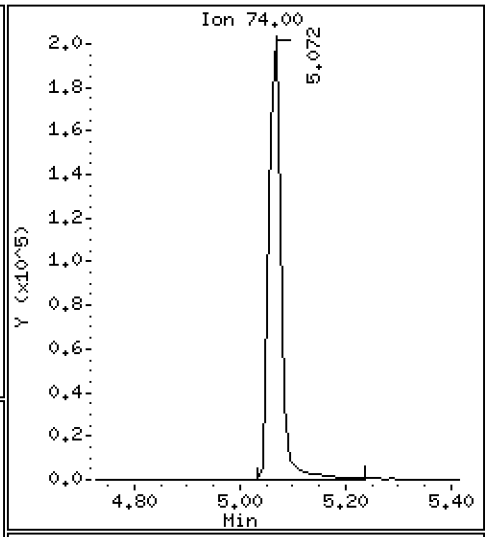
Column phase: ZB-5msi

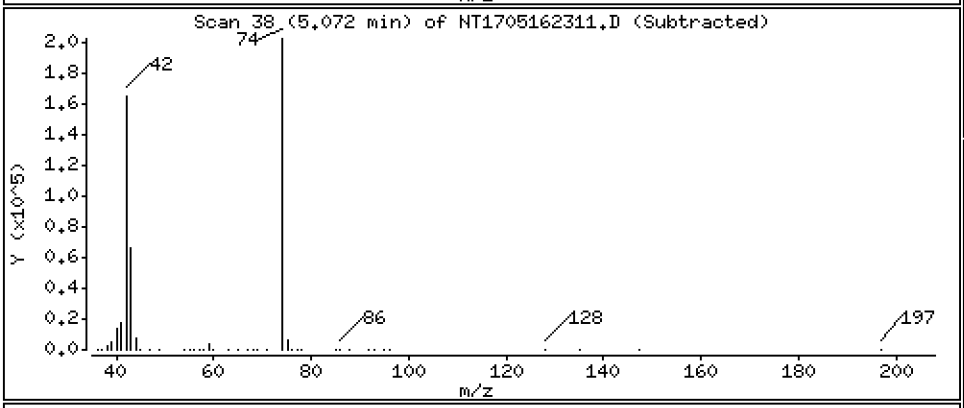
Column diameter: 0.25

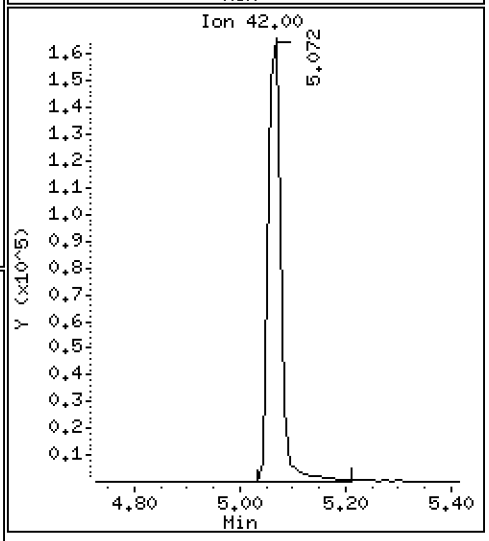
90 N-Nitrosodimethylamine

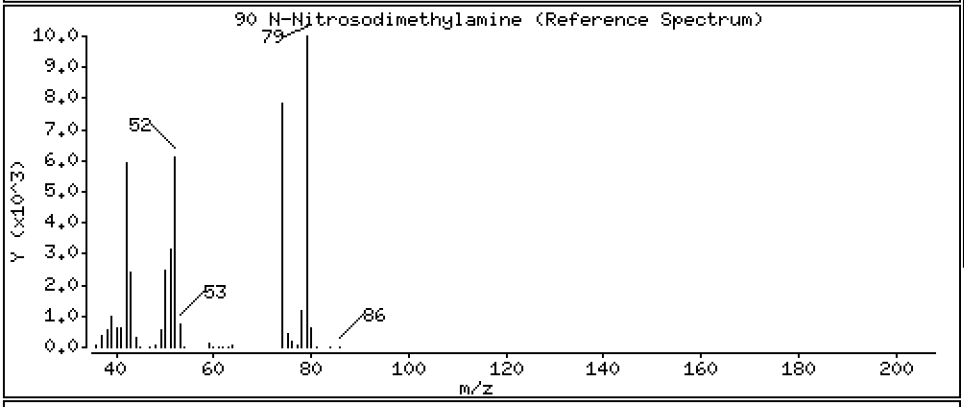
Concentration: 5.767 ug/mL

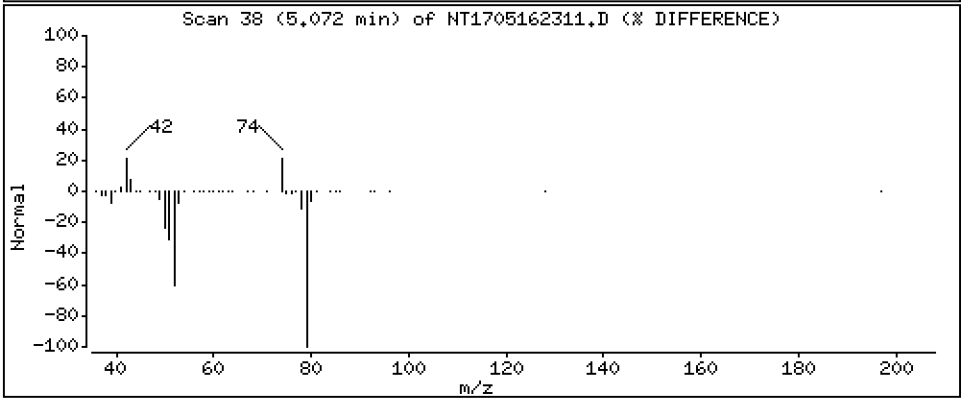












Date : 17-MAY-2023 00:29

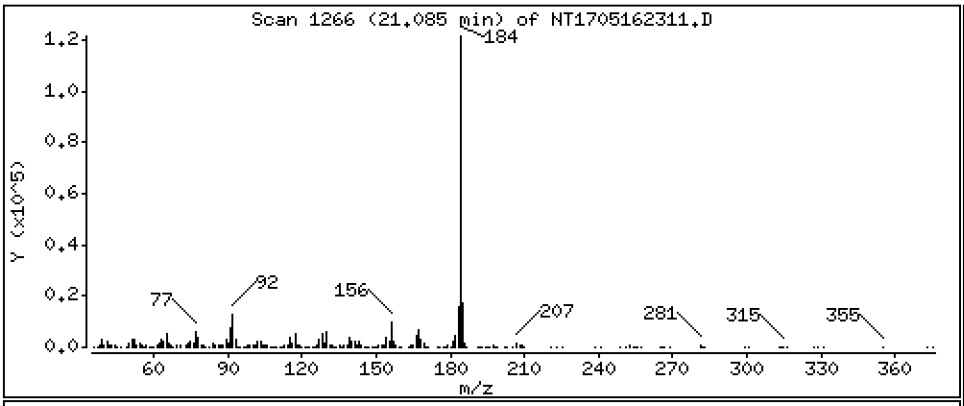
Client ID: Instrument: nt17.i

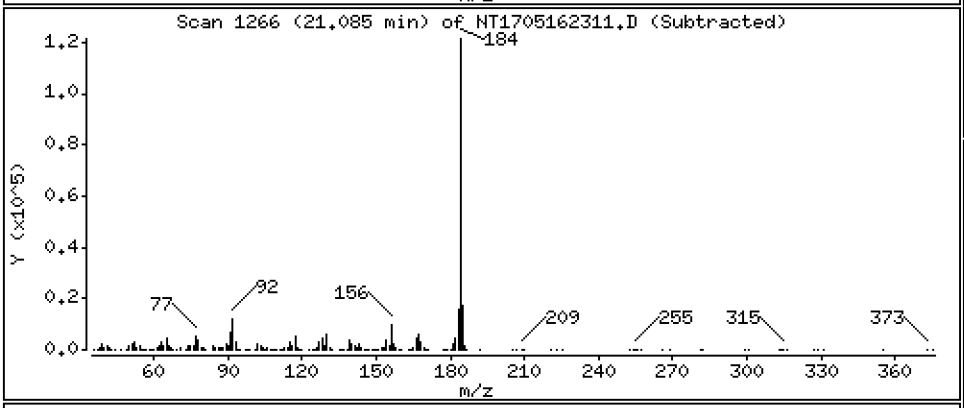
Sample Info: SLE0338-SCV1

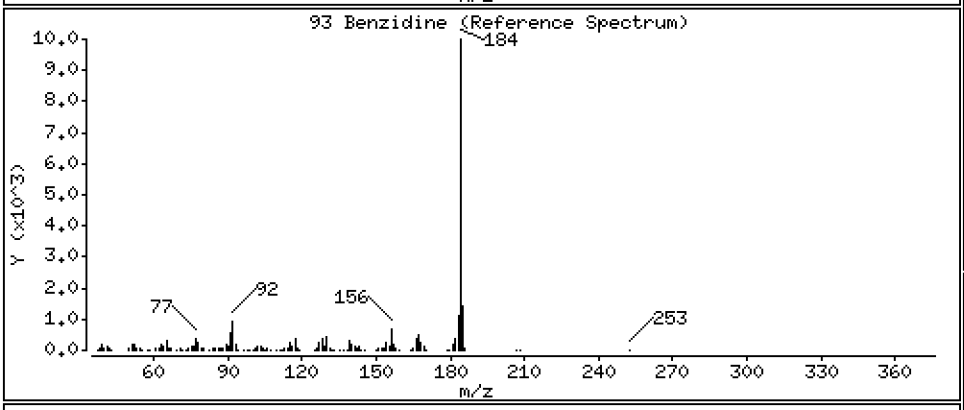
Operator: JGR

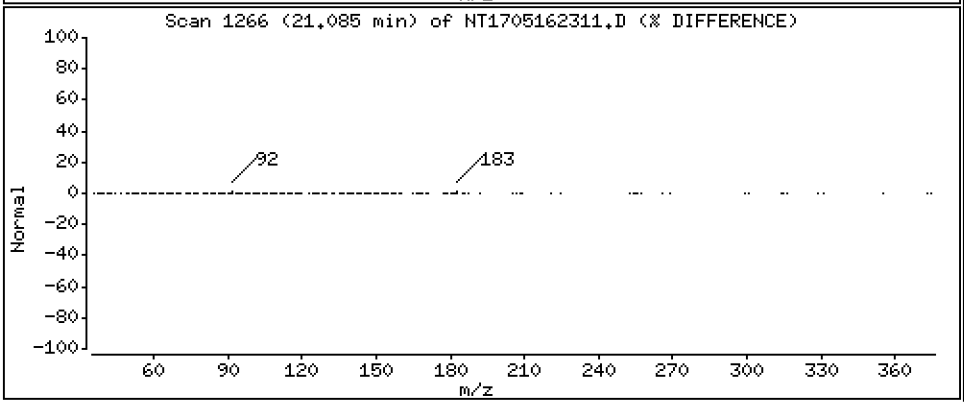
Column phase: ZB-5msi Column diameter: 0.25

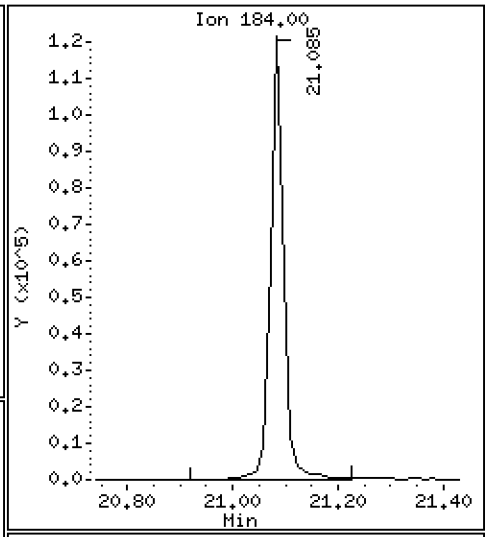
93 Benzidine Concentration: 3.457 ug/mL

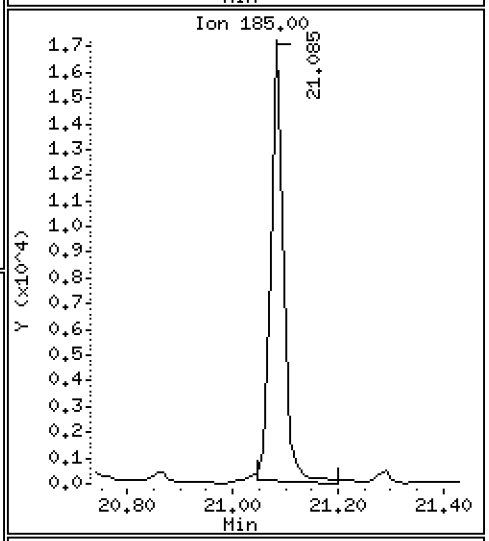


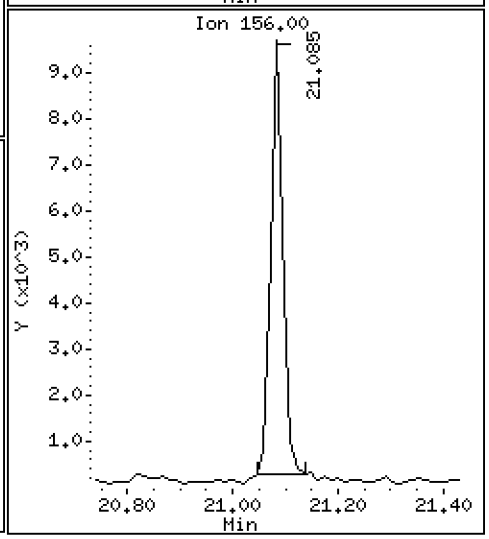












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

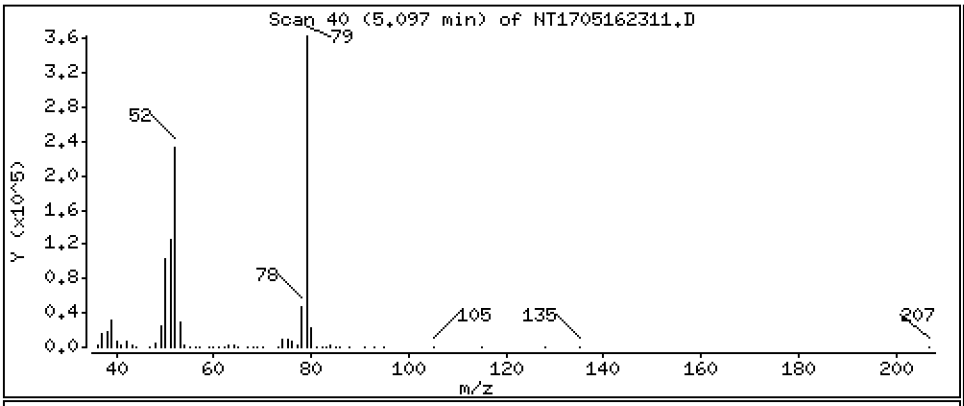
Operator: JGR

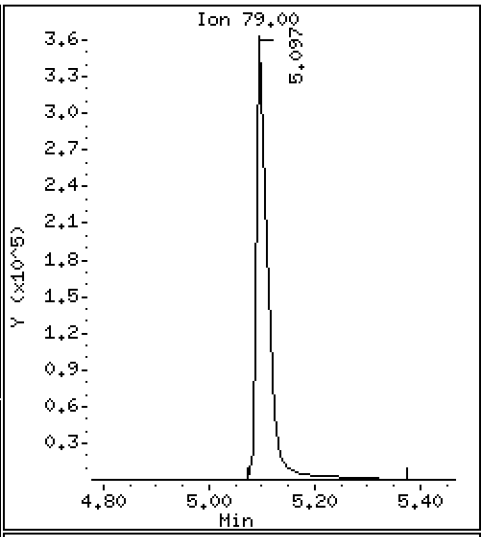
Column phase: ZB-5msi

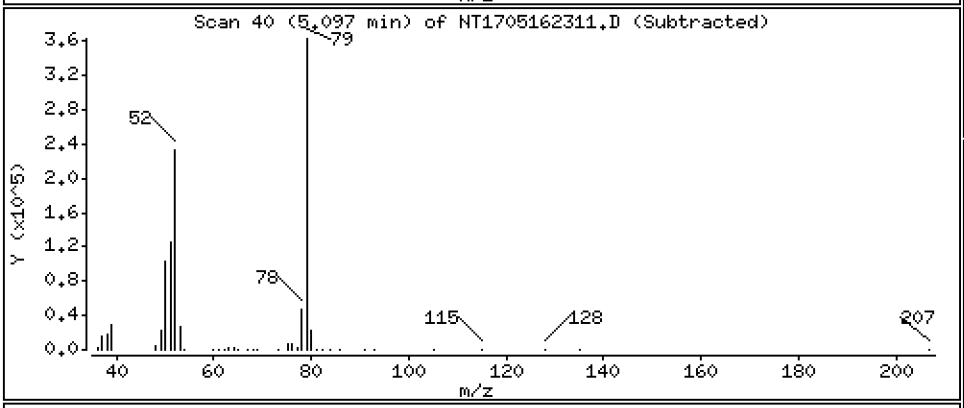
Column diameter: 0.25

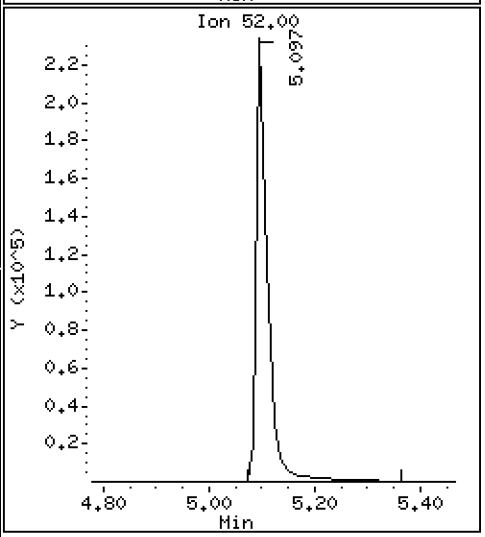
103 Pyridine

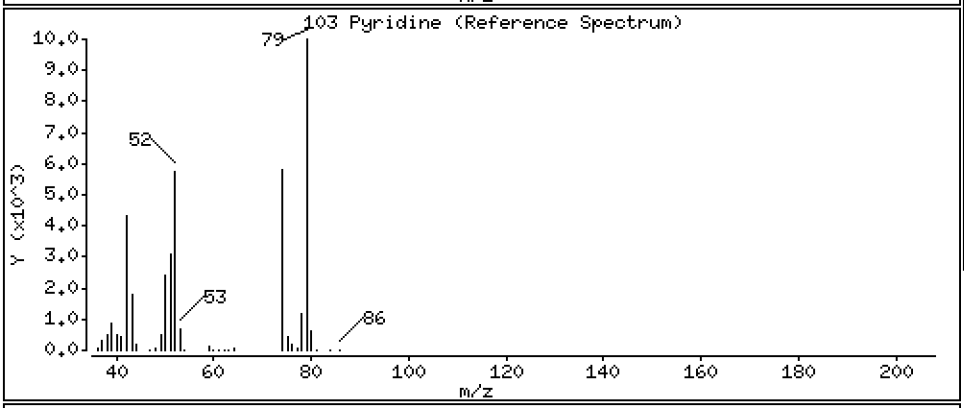
Concentration: 5.811 ug/mL

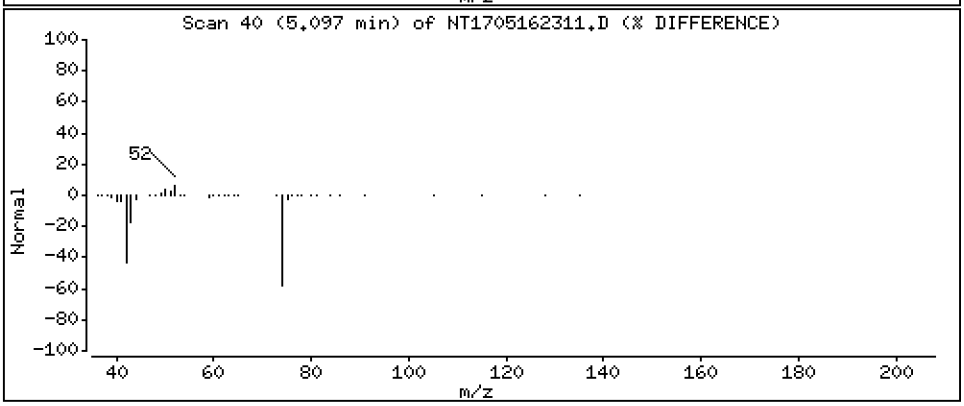












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

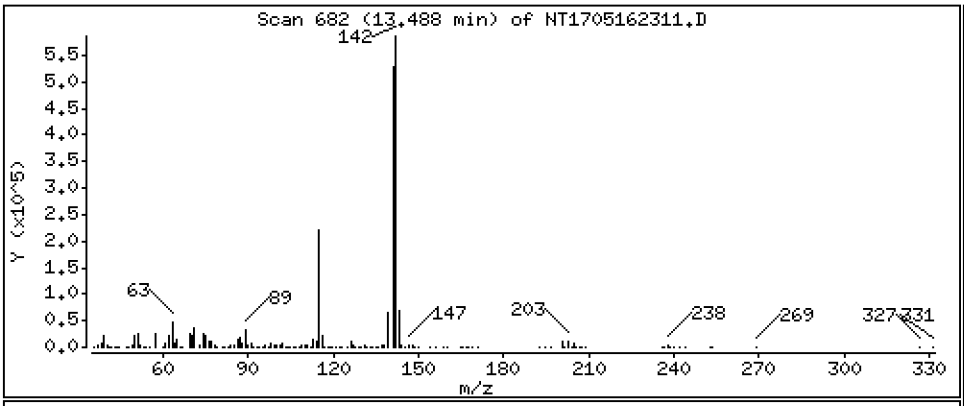
Operator: JGR

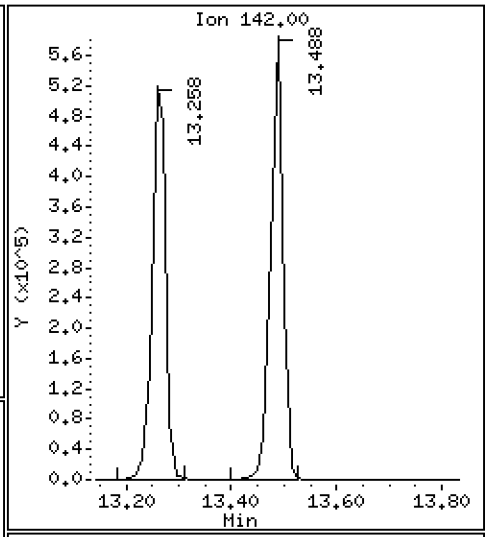
Column phase: ZB-5msi

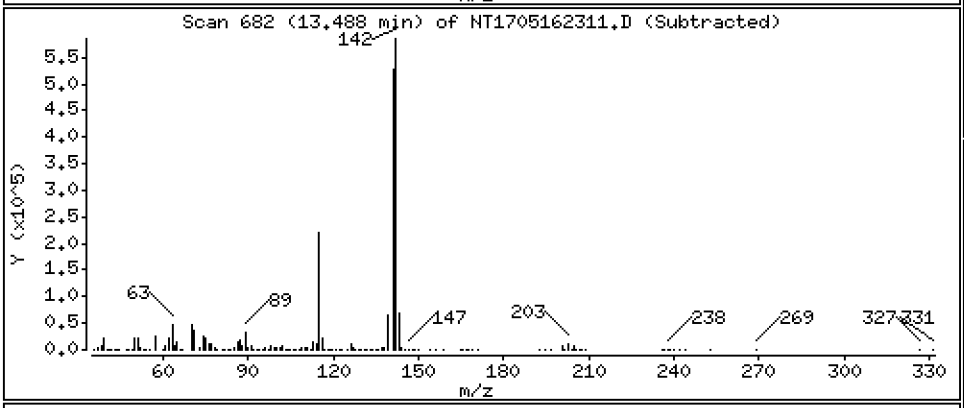
Column diameter: 0.25

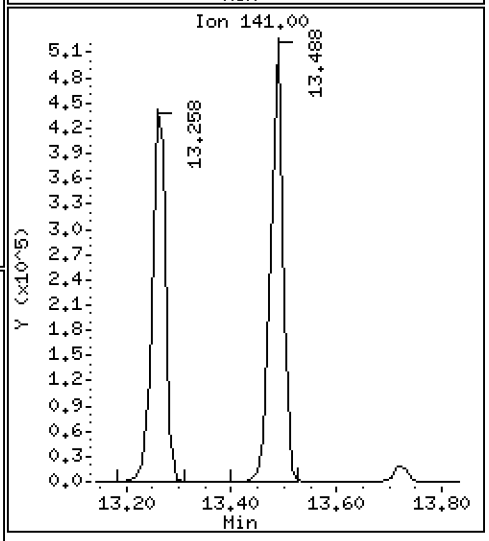
105 1-methylnaphthalene

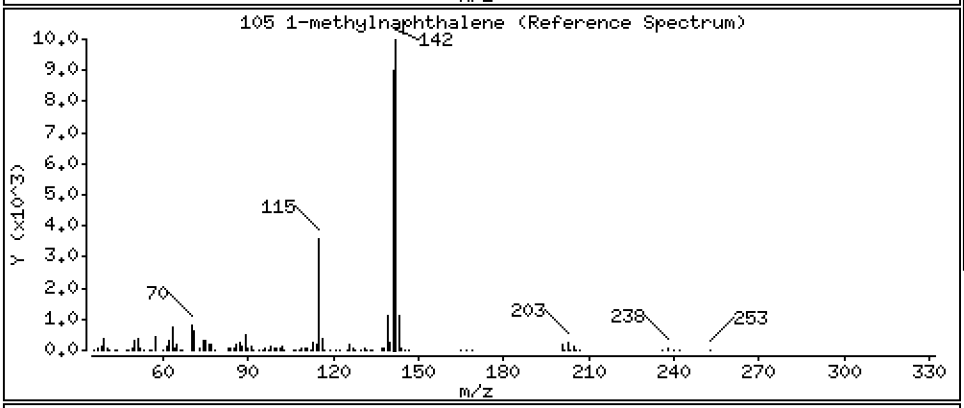
Concentration: 5.250 ug/mL

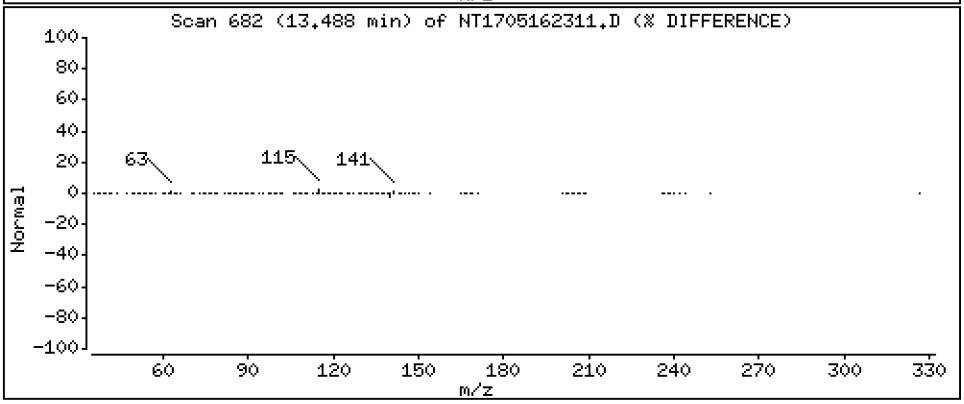












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

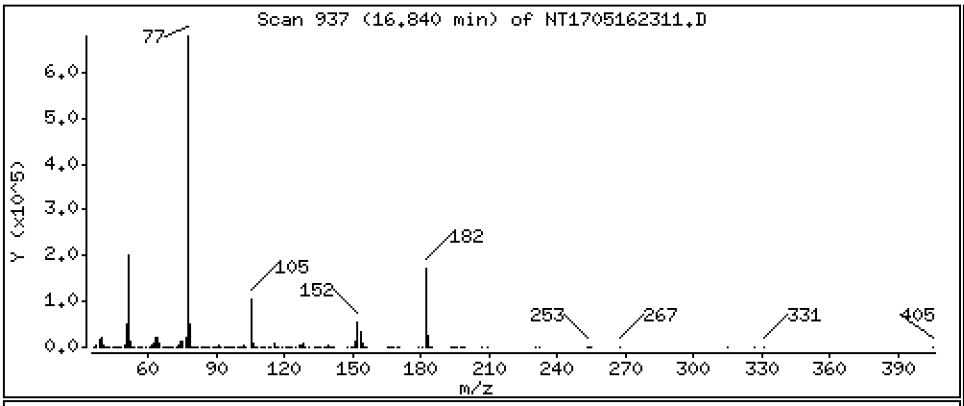
Operator: JGR

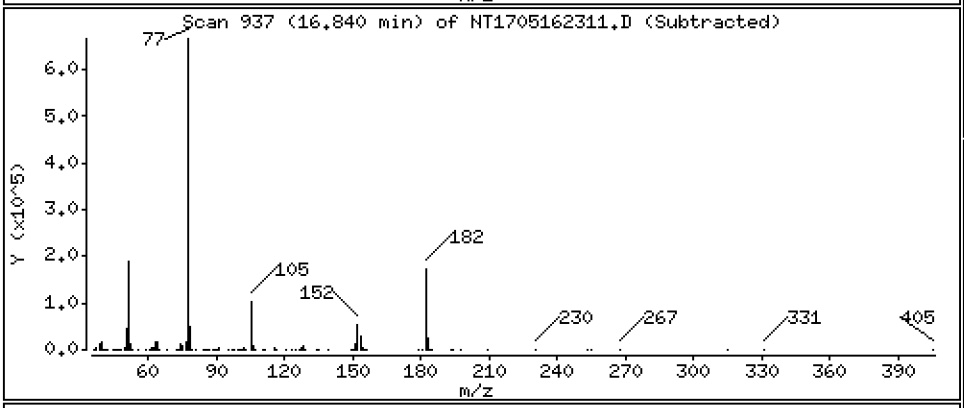
Column phase: ZB-5msi

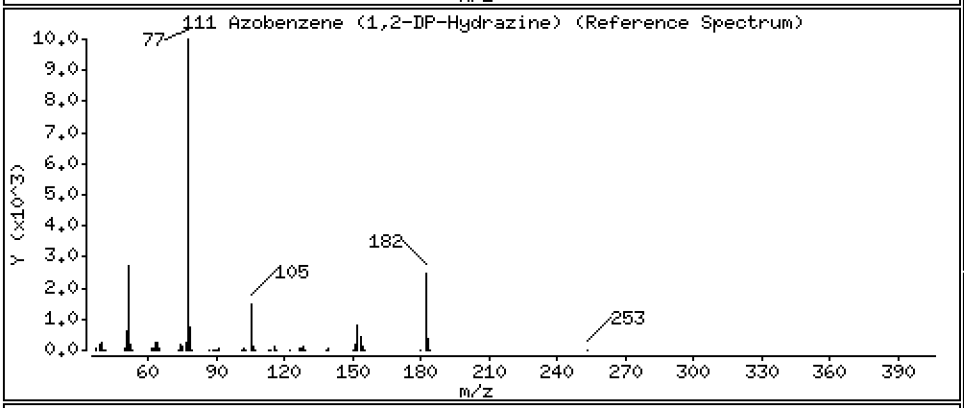
Column diameter: 0.25

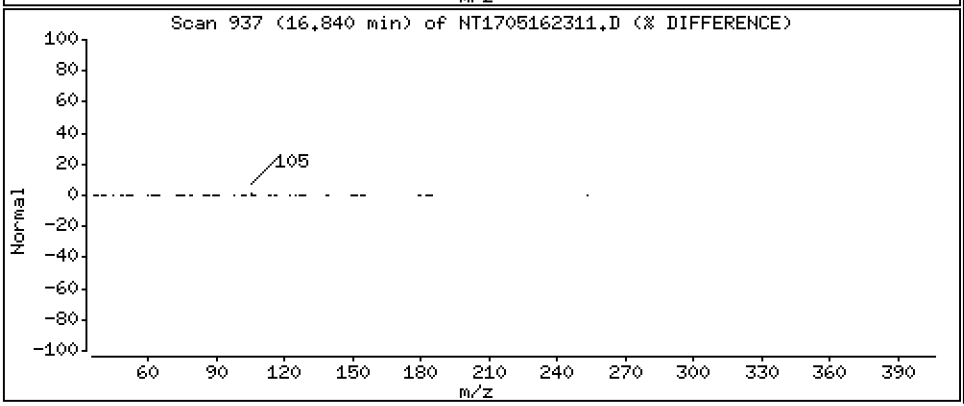
111 Azobenzene (1,2-DP-Hydrazine)

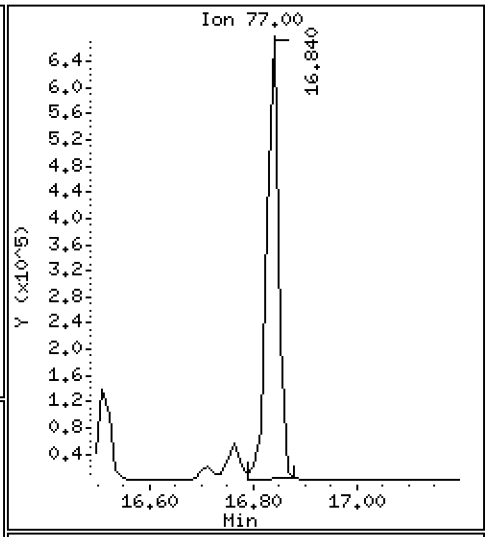
Concentration: 5.338 ug/mL

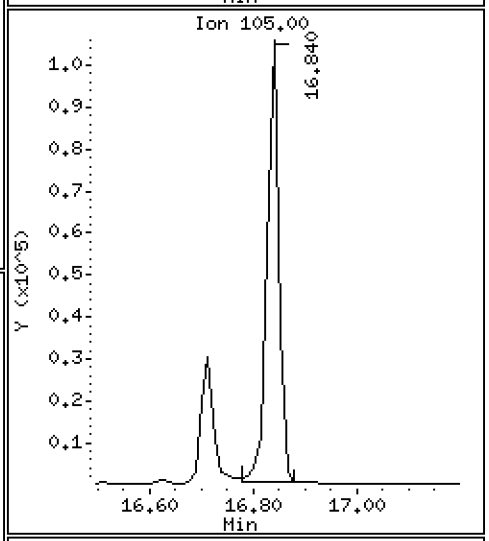


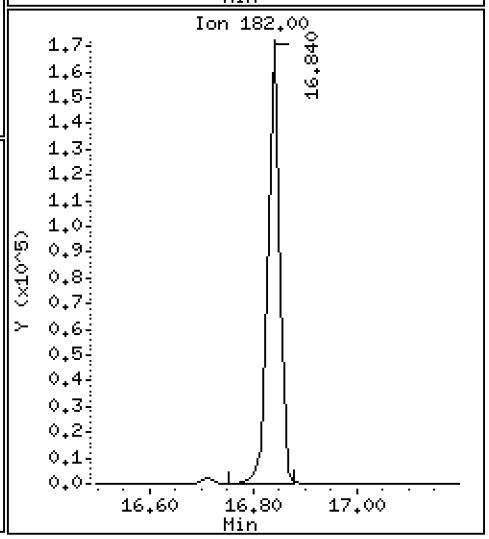












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

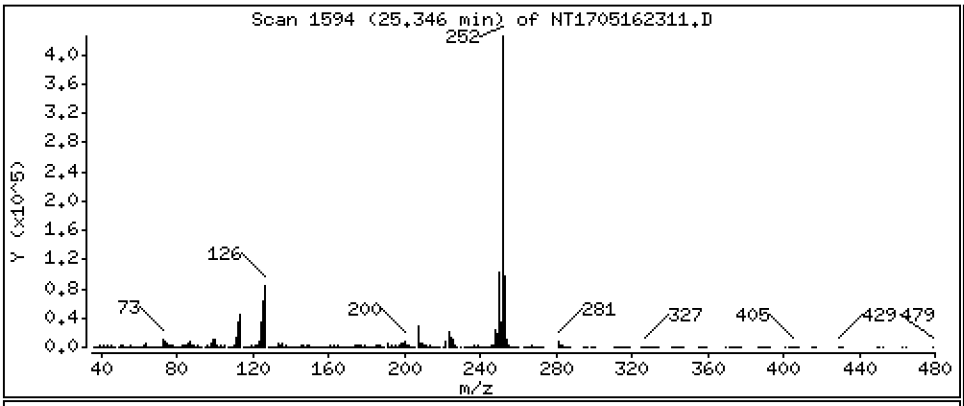
Operator: JGR

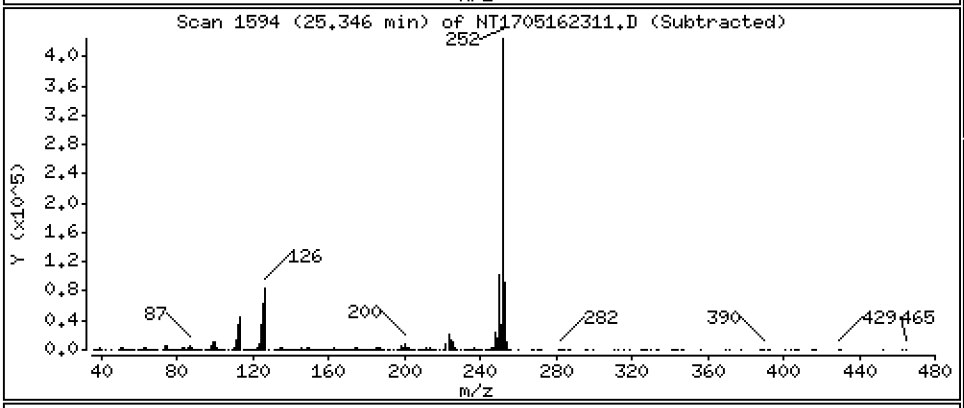
Column phase: ZB-5msi

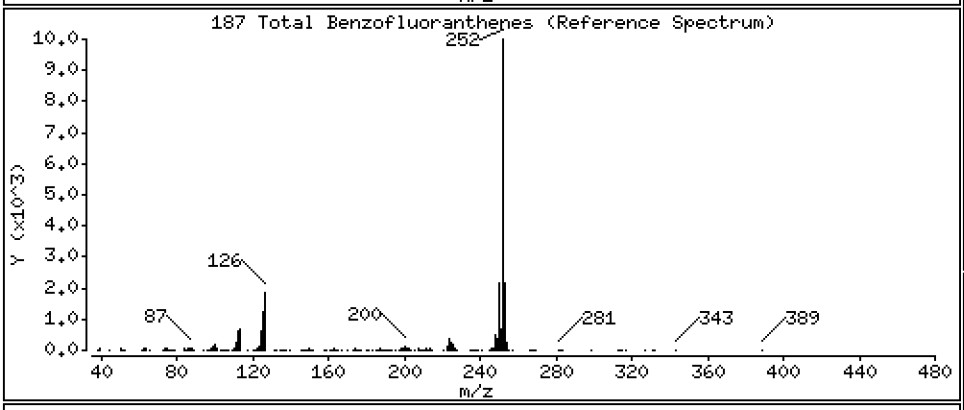
Column diameter: 0.25

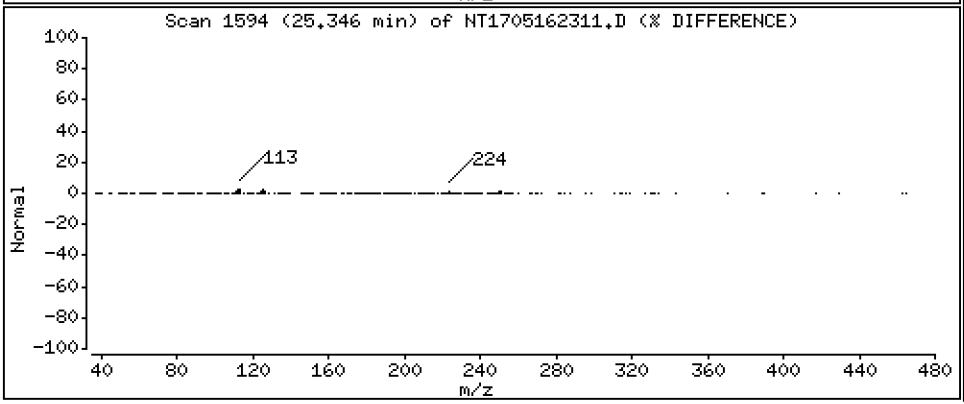
187 Total Benzofluoranthenes

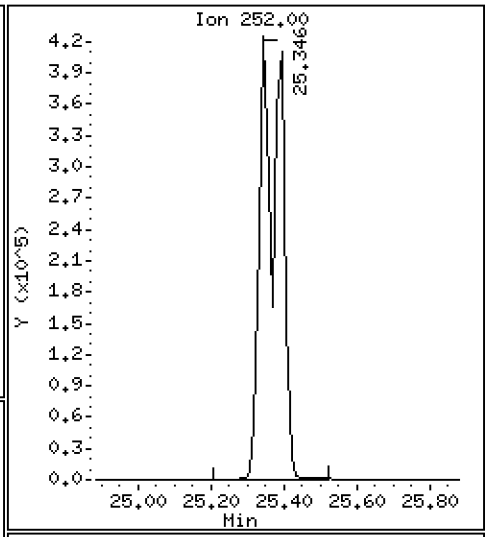
Concentration: 10.02 ug/mL

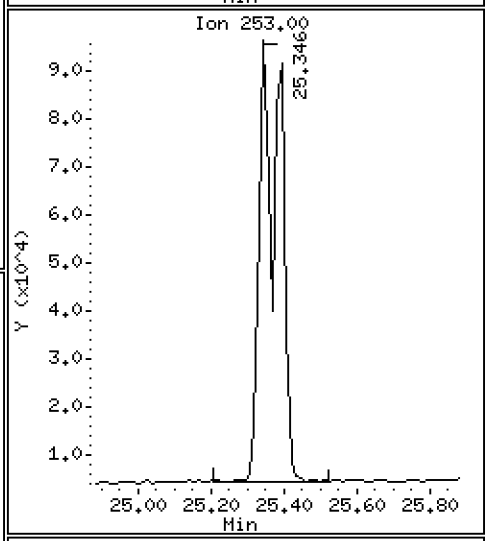


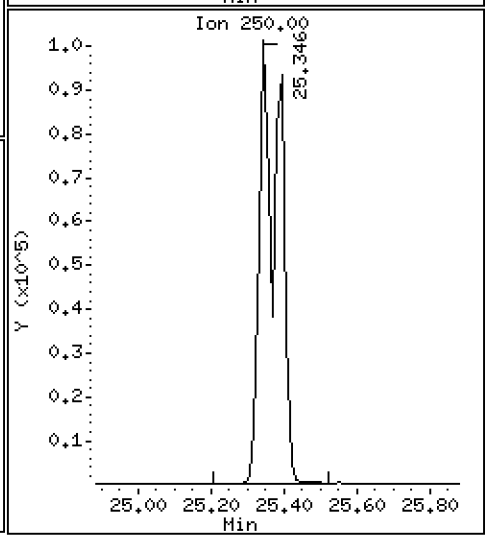












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

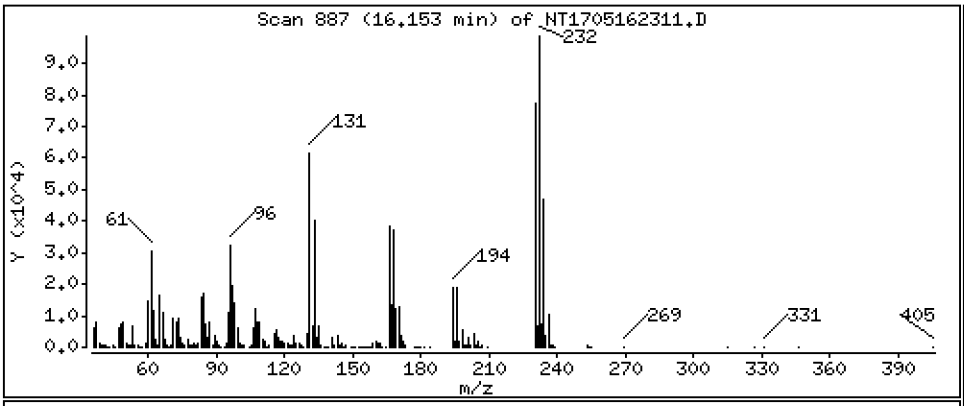
Operator: JGR

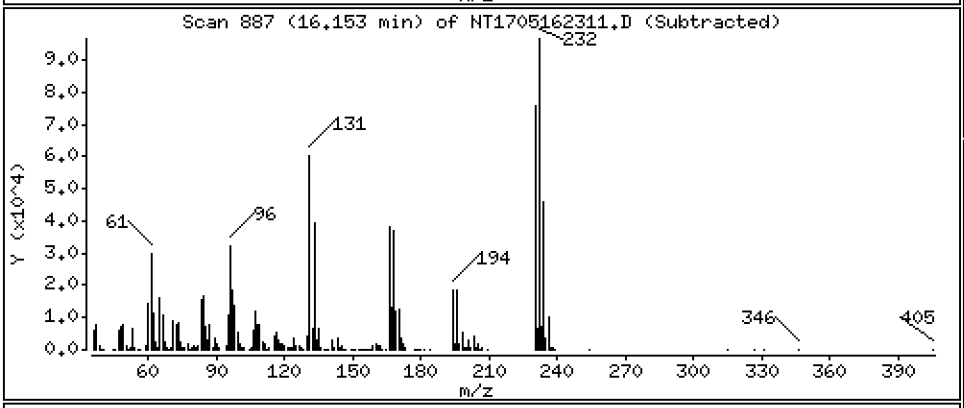
Column phase: ZB-5msi

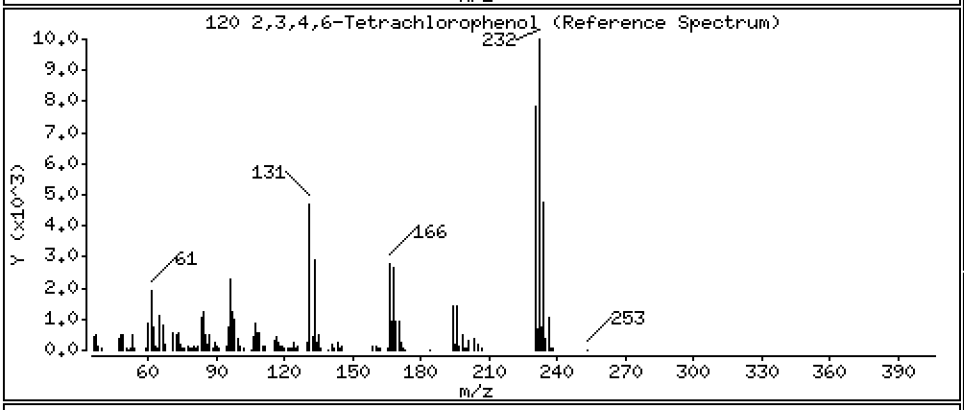
Column diameter: 0.25

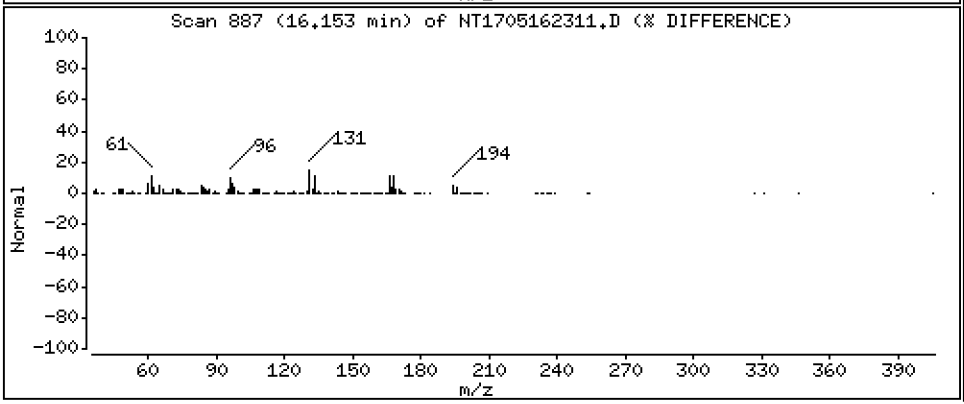
120 2,3,4,6-Tetrachlorophenol

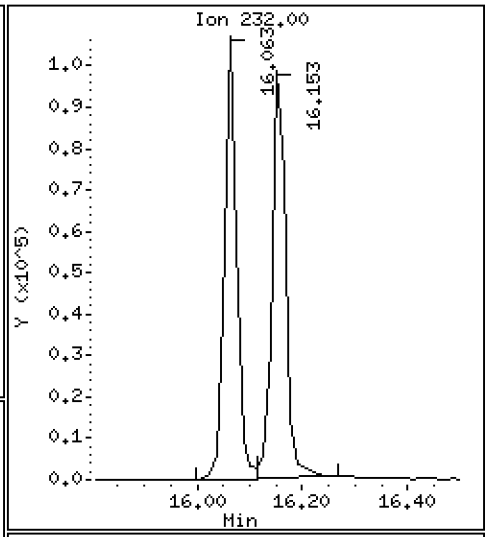
Concentration: 3.283 ug/mL

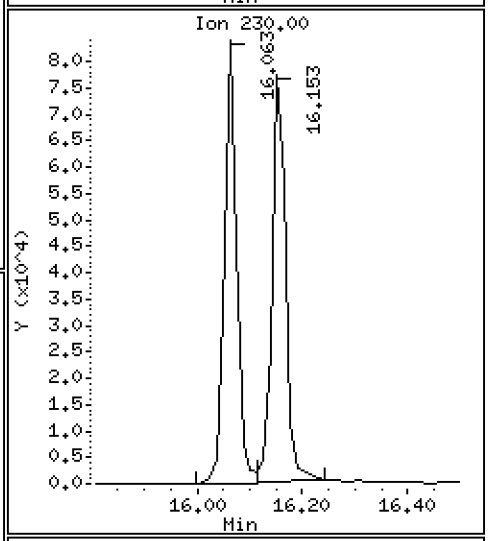


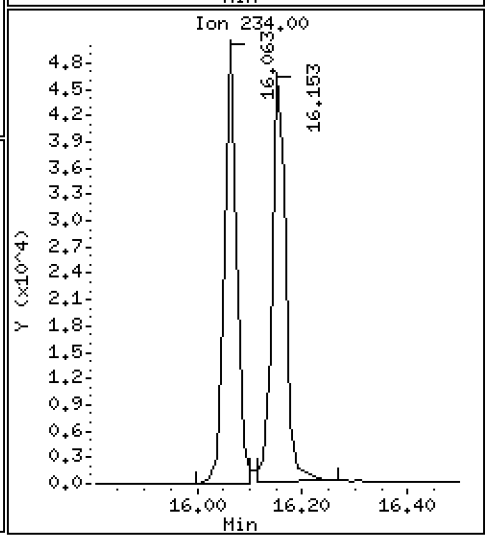












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D
Lab Smp Id: SLE0338-SCV1
Inj Date : 17-MAY-2023 00:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
$ 2	Phenol-d5	99	Compound Not Detected.					
3	Phenol	94	8.740	8.740	(0.933)	588001	4.82293	4.823
$ 5	2-Chlorophenol-d4	132	Compound Not Detected.					
4	Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	494651	5.56554	5.566
6	2-Chlorophenol	128	9.033	9.033	(0.965)	539006	5.29416	5.294
7	1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	548081	5.31911	5.319
* 8	1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	265705	4.00000	
9	1,4-Dichlorobenzene	146	9.390	9.391	(1.003)	521173	5.07146	5.071
$ 10	1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	507921	5.25771	5.258
11	Benzyl alcohol	108	9.633	9.633	(1.029)	299374	5.27414	5.274
14	2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.060)	168255	6.17916	6.179
13	2-Methylphenol	108	9.850	9.851	(1.052)	378927	4.22901	4.229
17	Hexachloroethane	117	10.336	10.336	(1.104)	222748	5.41856	5.419
16	N-Nitroso-di-n-propylamine	70	10.183	10.170	(1.087)	378231	5.51734	5.517
15	4-Methylphenol	108	10.119	10.119	(1.080)	425231	4.66096	4.661
$ 18	Nitrobenzene-d5	82	Compound Not Detected.					
19	Nitrobenzene	77	10.489	10.489	(0.886)	558517	5.32891	5.329
20	Isophorone	82	10.924	10.924	(0.922)	996054	6.94254	6.943
21	2-Nitrophenol	139	11.115	11.115	(0.939)	247403	4.89866	4.899
22	2,4-Dimethylphenol	107	11.153	11.154	(0.942)	371455	3.78811	3.788
23	Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.958)	547968	6.23185	6.232
24	Benzoic acid	105	11.332	11.333	(0.957)	445958	6.76086	6.761
25	2,4-Dichlorophenol	162	11.562	11.562	(0.976)	370930	4.70748	4.707
26	1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	503147	5.87937	5.879
* 27	Naphthalene-d8	136	11.842	11.830	(1.000)	965231	4.00000	
28	Naphthalene	128	11.881	11.881	(1.003)	1361438	5.12904	5.129
29	4-Chloroaniline	127	11.995	11.995	(1.013)	469527	4.48751	4.488
30	Hexachlorobutadiene	225	12.225	12.225	(1.032)	222159	5.24062	5.241
31	4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	413906	4.87847	4.878
32	2-Methylnaphthalene	142	13.258	13.258	(1.120)	955574	5.02794	5.028
33	Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	201170	4.21896	4.219

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	257193	4.79376	4.794
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	274739	4.83728	4.837
$	36	2-Fluorobiphenyl	172	Compound Not Detected.					
	37	2-Chloronaphthalene	162	14.252	14.253	(0.923)	885085	5.40065	5.401
	38	2-Nitroaniline	65	14.507	14.508	(0.940)	297267	5.35584	5.356
	39	Dimethylphthalate	163	14.928	14.929	(0.967)	955980	5.41824	5.418
	40	Acenaphthylene	152	15.120	15.120	(0.979)	1374665	5.28203	5.282
	41	2,6-Dinitrotoluene	165	15.069	15.069	(0.976)	223225	5.40390	5.404
*	42	Acenaphthene-d10	164	15.438	15.426	(1.000)	512787	4.00000	
	43	3-Nitroaniline	138	15.362	15.349	(0.995)	197758	5.16887	5.169
	44	Acenaphthene	153	15.502	15.502	(1.004)	859485	5.28316	5.283
	45	2,4-Dinitrophenol	184	15.566	15.567	(1.008)	52944	2.11874	2.119
	46	Dibenzofuran	168	15.821	15.821	(1.025)	1172327	5.16305	5.163
	47	4-Nitrophenol	109	15.668	15.681	(1.015)	114450	4.50365	4.504
	48	2,4-Dinitrotoluene	165	15.872	15.872	(1.028)	284935	5.26937	5.269
	50	Diethylphthalate	149	16.369	16.369	(1.060)	945291	5.49374	5.494
	49	Fluorene	166	16.535	16.535	(1.071)	1165179	5.39758	5.398
	51	4-Chlorophenyl-phenylether	204	16.522	16.509	(1.070)	542088	5.46212	5.462
	52	4-Nitroaniline	138	16.624	16.611	(1.077)	184970	5.10772	5.108
	53	4,6-Dinitro-2-methylphenol	198	16.713	16.713	(0.905)	113822	3.35487	3.355
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	651392	5.46976	5.470
$	55	2,4,6-Tribromophenol	330	Compound Not Detected.					
	56	4-Bromophenyl-phenylether	248	17.514	17.515	(0.949)	226164	5.42020	5.420
	57	Hexachlorobenzene	284	17.833	17.833	(0.966)	208878	4.91276	4.913
	58	Pentachlorophenol	266	18.190	18.203	(0.985)	98895	3.94337	3.943
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	850147	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.003)	1250084	5.03943	5.039
	61	Anthracene	178	18.598	18.598	(1.008)	1054910	4.52965	4.530
	62	Carbazole	167	18.917	18.918	(1.025)	896606	5.93842	5.938
	63	Di-n-butylphthalate	149	19.682	19.682	(1.066)	1586517	5.64164	5.642
	64	Fluoranthene	202	20.868	20.855	(0.890)	1308113	5.46710	5.467
	65	Pyrene	202	21.289	21.276	(0.908)	1277121	5.26528	5.265
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	632335	5.82476	5.825
	68	Benzo(a)anthracene	228	23.419	23.419	(0.998)	953848	5.06413	5.064
*	69	Chrysene-d12	240	23.457	23.445	(1.000)	511511	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.996)	459041	11.9948	11.99
	71	Chrysene	228	23.496	23.496	(1.002)	889381	5.01800	5.018
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	875291	5.79218	5.792
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1044471	4.00000	
	73	Di-n-octylphthalate	149	24.465	24.465	(1.000)	1451463	5.48238	5.482
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	887996	4.91157	4.912
	75	Benzo(k)fluoranthene	252	25.396	25.384	(0.971)	848094	4.96504	4.965(H)
	76	Benzo(a)pyrene	252	26.034	26.022	(0.996)	736579	5.17185	5.172
*	77	Perylene-d12	264	26.149	26.149	(1.000)	456008	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.946	28.933	(1.107)	830811	5.02922	5.029
	79	Dibenzo(a,h)anthracene	278	28.946	28.946	(1.107)	689006	4.96953	4.970
	80	Benzo(g,h,i)perylene	276	29.764	29.751	(1.138)	689189	5.05448	5.054
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	334608	5.76731	5.767
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	21.085	21.085	(0.899)	208933	3.45722	3.457
	103	Pyridine	79	5.097	5.122	(0.544)	534742	5.81084	5.811
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	925646	5.25003	5.250
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.091)	1072104	5.33771	5.338

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.345	25.384	(0.969)	1625913	10.0183	10.02
120 2,3,4,6-Tetrachlorophenol	232	16.152	16.152	(1.046)	210743	3.28296	3.283

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162311.D
Lab Smp Id: SLE0338-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	265705	-7.45
27 Naphthalene-d8	1056758	528379	2113516	965231	-8.66
42 Acenaphthene-d10	587510	293755	1175020	512787	-12.72
59 Phenanthrene-d10	933575	466788	1867150	850147	-8.94
69 Chrysene-d12	576570	288285	1153140	511511	-11.28
134 Di-n-octylphthala	1181651	590826	2363302	1044471	-11.61
77 Perylene-d12	491359	245680	982718	456008	-7.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.15	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162311.D

Lab ID: SLE0338-SCV1
nt17.i, ABN.m, 17-MAY-2023 00:29

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

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.008	0.000	1.0083	2,4-Dinitrophenol

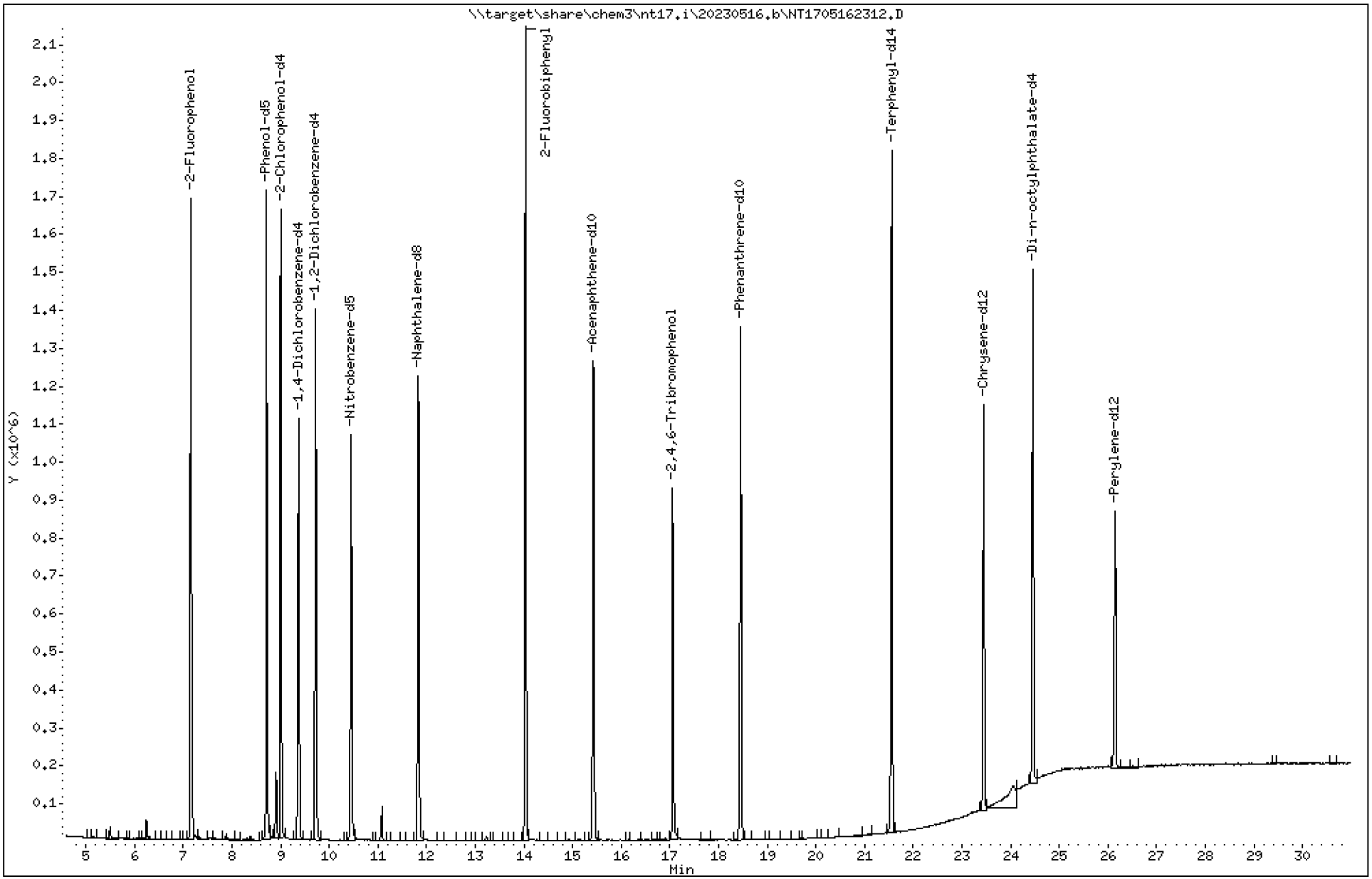
RRT check based on Ccal File: NT1705162308.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162312.D
Date : 17-MAY-2023 01:07
Client ID:
Sample Info: SLE0338-ICB1

Instrument: nt17.i
Operator: JGR
Column phase: ZB-5msi
Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162312.D

Date : 17-MAY-2023 01:07

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-ICB1

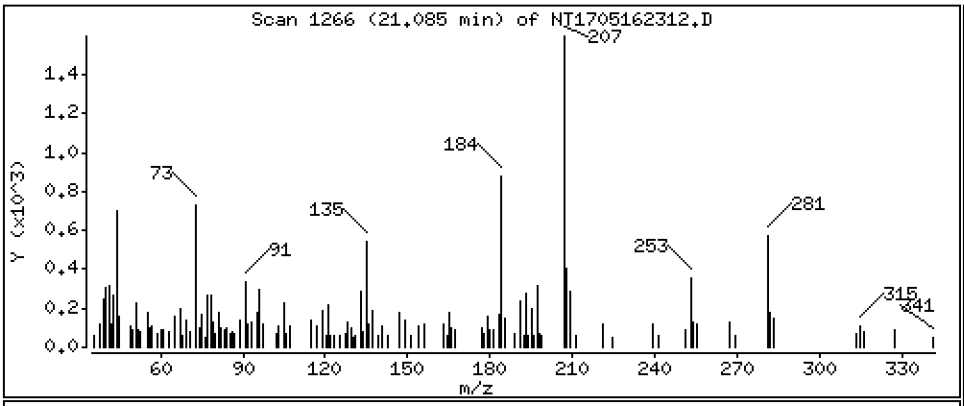
Operator: JGR

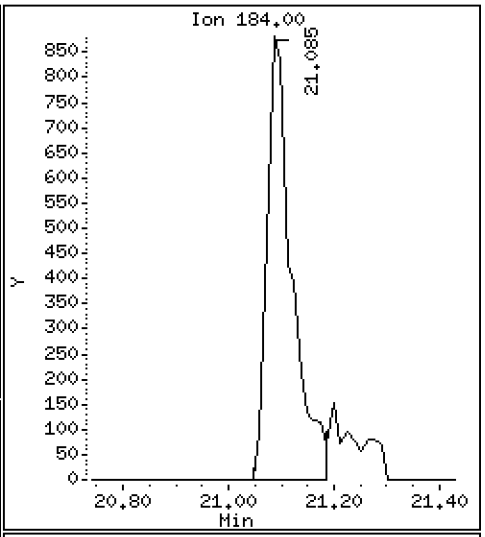
Column phase: ZB-5msi

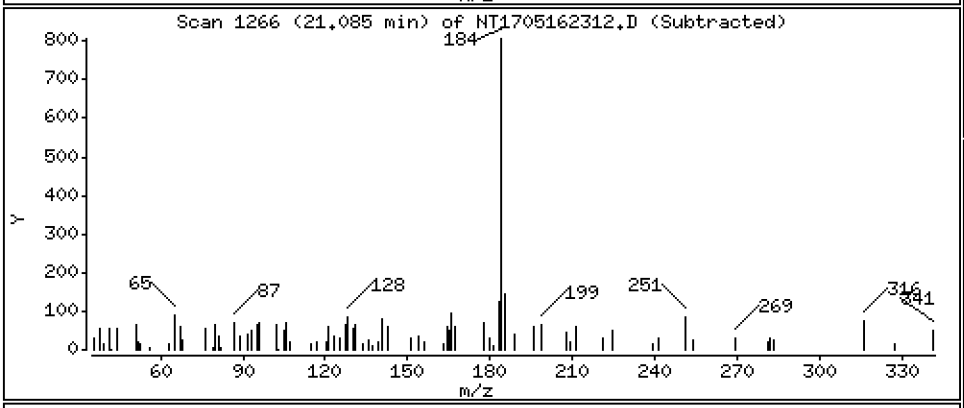
Column diameter: 0.25

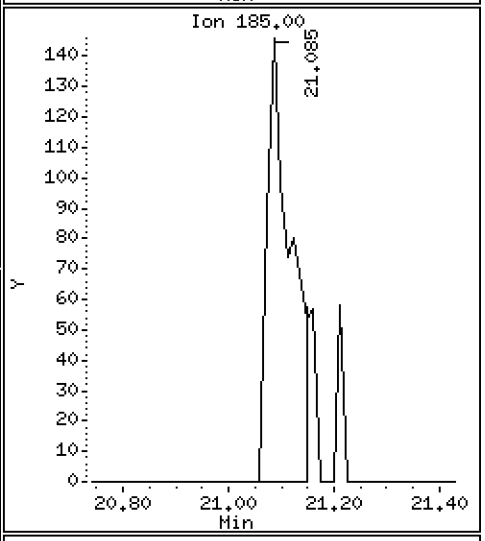
93 Benzidine

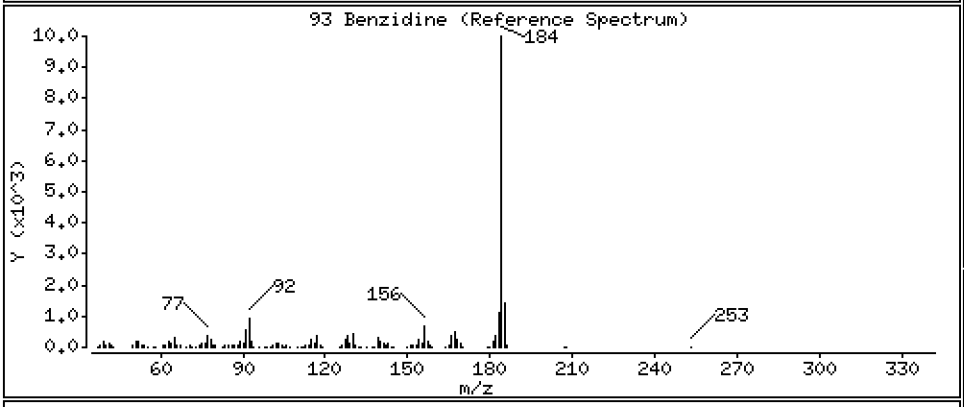
Concentration: 0.04787 ug/mL

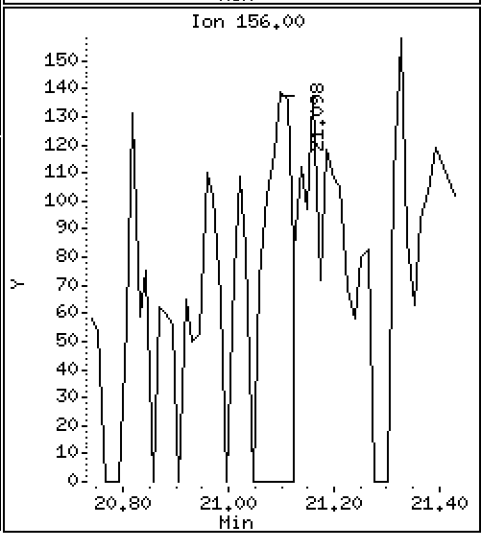


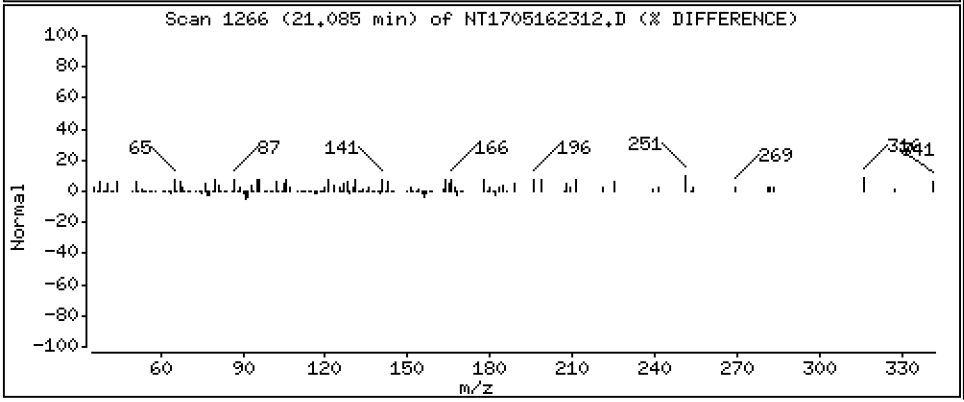












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162312.D
Lab Smp Id: SLE0338-ICB1
Inj Date : 17-MAY-2023 01:07
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-ICB1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$ 1	2-Fluorophenol	112	7.148	7.161	(0.763)	733528	7.79090	7.791
$ 2	Phenol-d5	99	8.715	8.715	(0.931)	897476	7.20297	7.203
3	Phenol	94	Compound Not Detected.					
$ 5	2-Chlorophenol-d4	132	9.008	9.008	(0.962)	759790	7.61288	7.613
4	Bis(2-Chloroethyl)ether	93	Compound Not Detected.					
6	2-Chlorophenol	128	Compound Not Detected.					
7	1,3-Dichlorobenzene	146	Compound Not Detected.					
* 8	1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	287620	4.00000	
9	1,4-Dichlorobenzene	146	Compound Not Detected.					
$ 10	1,2-Dichlorobenzene-d4	152	9.723	9.723	(1.038)	351911	5.01661	5.017
12	1,2-Dichlorobenzene	146	Compound Not Detected.					
11	Benzyl alcohol	108	Compound Not Detected.					
14	2,2'-oxybis(1-Chloropropane)	121	Compound Not Detected.					
13	2-Methylphenol	108	Compound Not Detected.					
17	Hexachloroethane	117	Compound Not Detected.					
16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
15	4-Methylphenol	108	Compound Not Detected.					
$ 18	Nitrobenzene-d5	82	10.451	10.451	(0.883)	585251	4.93952	4.940
19	Nitrobenzene	77	Compound Not Detected.					
20	Isophorone	82	Compound Not Detected.					
21	2-Nitrophenol	139	Compound Not Detected.					
22	2,4-Dimethylphenol	107	Compound Not Detected.					
23	Bis(2-Chloroethoxy)methane	93	Compound Not Detected.					
24	Benzoic acid	105	Compound Not Detected.					
25	2,4-Dichlorophenol	162	Compound Not Detected.					
26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
* 27	Naphthalene-d8	136	11.830	11.830	(1.000)	1041050	4.00000	
28	Naphthalene	128	Compound Not Detected.					
29	4-Chloroaniline	127	Compound Not Detected.					
30	Hexachlorobutadiene	225	Compound Not Detected.					
31	4-Chloro-3-methylphenol	107	Compound Not Detected.					
32	2-Methylnaphthalene	142	Compound Not Detected.					
33	Hexachlorocyclopentadiene	237	Compound Not Detected.					

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	Compound Not Detected.					
	35	2,4,5-Trichlorophenol	196	Compound Not Detected.					
$	36	2-Fluorobiphenyl	172	14.036	14.036	(0.909)	1089823	5.13150	5.132
	37	2-Chloronaphthalene	162	Compound Not Detected.					
	38	2-Nitroaniline	65	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
	40	Acenaphthylene	152	Compound Not Detected.					
	41	2,6-Dinitrotoluene	165	Compound Not Detected.					
*	42	Acenaphthene-d10	164	15.439	15.426	(1.000)	539097	4.00000	
	43	3-Nitroaniline	138	Compound Not Detected.					
	44	Acenaphthene	153	Compound Not Detected.					
	45	2,4-Dinitrophenol	184	Compound Not Detected.					
	46	Dibenzofuran	168	Compound Not Detected.					
	47	4-Nitrophenol	109	Compound Not Detected.					
	48	2,4-Dinitrotoluene	165	Compound Not Detected.					
	50	Diethylphthalate	149	Compound Not Detected.					
	49	Fluorene	166	Compound Not Detected.					
	51	4-Chlorophenyl-phenylether	204	Compound Not Detected.					
	52	4-Nitroaniline	138	Compound Not Detected.					
	53	4,6-Dinitro-2-methylphenol	198	Compound Not Detected.					
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
$	55	2,4,6-Tribromophenol	330	17.069	17.070	(1.106)	137823	5.86102	5.861
	56	4-Bromophenyl-phenylether	248	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	886060	4.00000	
	60	Phenanthrene	178	Compound Not Detected.					
	61	Anthracene	178	Compound Not Detected.					
	62	Carbazole	167	Compound Not Detected.					
	63	Di-n-butylphthalate	149	Compound Not Detected.					
	64	Fluoranthene	202	Compound Not Detected.					
	65	Pyrene	202	Compound Not Detected.					
$	66	Terphenyl-d14	244	21.557	21.557	(0.919)	956952	5.47385	5.474
	67	Butylbenzylphthalate	149	Compound Not Detected.					
	68	Benzo(a)anthracene	228	Compound Not Detected.					
*	69	Chrysene-d12	240	23.445	23.445	(1.000)	518615	4.00000	
	70	3,3'-Dichlorobenzidine	252	Compound Not Detected.					
	71	Chrysene	228	Compound Not Detected.					
	72	bis(2-Ethylhexyl)phthalate	149	Compound Not Detected.					
*	134	Di-n-octylphthalate-d4	153	24.452	24.465	(1.000)	1011857	4.00000	
	73	Di-n-octylphthalate	149	Compound Not Detected.					
	74	Benzo(b)fluoranthene	252	Compound Not Detected.					
	75	Benzo(k)fluoranthene	252	Compound Not Detected.					
	76	Benzo(a)pyrene	252	Compound Not Detected.					
*	77	Perylene-d12	264	26.149	26.149	(1.000)	487385	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	Compound Not Detected.					
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	80	Benzo(g,h,i)perylene	276	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	21.085	21.085	(0.899)	2877	0.04787	0.04787
	103	Pyridine	79	Compound Not Detected.					
	105	1-methylnaphthalene	142	Compound Not Detected.					
	111	Azobenzene (1,2-DP-Hydrazine)	77	Compound Not Detected.					

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

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162312.D
Lab Smp Id: SLE0338-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	287620	0.19
27 Naphthalene-d8	1056758	528379	2113516	1041050	-1.49
42 Acenaphthene-d10	587510	293755	1175020	539097	-8.24
59 Phenanthrene-d10	933575	466788	1867150	886060	-5.09
69 Chrysene-d12	576570	288285	1153140	518615	-10.05
134 Di-n-octylphthala	1181651	590826	2363302	1011857	-14.37
77 Perylene-d12	491359	245680	982718	487385	-0.81

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.83	-0.11
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.45	-0.06
134 Di-n-octylphthala	24.47	23.97	24.97	24.45	-0.05
77 Perylene-d12	26.15	25.65	26.65	26.15	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162312.D

Lab ID: SLE0338-ICB1
nt17.i, ABN.m, 17-MAY-2023 01:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: NT1705162308.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00065
Laboratory ID: SLE0338-SCV1
Sequence: SLE0338
Sequence Name: SCV 5.0
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.8	-3.5	20.00
bis(2-chloroethyl) ether	5.0000	5.6	11.3	20.00
2-Chlorophenol	5.0000	5.3	5.9	20.00
1,3-Dichlorobenzene	5.0000	5.3	6.4	20.00
1,4-Dichlorobenzene	5.0000	5.1	1.4	20.00
1,2-Dichlorobenzene	5.0000	5.3	5.2	20.00
Benzyl Alcohol	5.0000	5.3	5.5	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	6.2	23.6	20.00
2-Methylphenol	5.0000	4.2	-15.4	20.00
Hexachloroethane	5.0000	5.4	8.4	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.5	10.3	20.00
4-Methylphenol	5.0000	4.7	-6.8	20.00
Nitrobenzene	5.0000	5.3	6.6	20.00
Isophorone	5.0000	6.9	38.9	20.00
2-Nitrophenol	5.0000	4.9	-2.0	20.00
2,4-Dimethylphenol	5.0000	3.8	-24.2	20.00
Bis(2-Chloroethoxy)methane	5.0000	6.2	24.6	20.00
2,4-Dichlorophenol	5.0000	4.7	-5.9	20.00
1,2,4-Trichlorobenzene	5.0000	5.9	17.6	20.00
Naphthalene	5.0000	5.1	2.6	20.00
Benzoic acid	10.000	6.8	-32.4	20.00
4-Chloroaniline	5.0000	4.5	-10.2	20.00
Hexachlorobutadiene	5.0000	5.2	4.8	20.00
4-Chloro-3-Methylphenol	5.0000	4.9	-2.4	20.00
2-Methylnaphthalene	5.0000	5.0	0.6	20.00
Hexachlorocyclopentadiene	5.0000	4.2	-15.6	20.00
2,4,6-Trichlorophenol	5.0000	4.8	-4.1	20.00
2,4,5-Trichlorophenol	5.0000	4.8	-3.3	20.00
2-Chloronaphthalene	5.0000	5.4	8.0	20.00
2-Nitroaniline	5.0000	5.4	7.1	20.00
Acenaphthylene	5.0000	5.3	5.6	20.00
Dimethylphthalate	5.0000	5.4	8.4	20.00
2,6-Dinitrotoluene	5.0000	5.4	8.1	20.00
Acenaphthene	5.0000	5.3	5.7	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

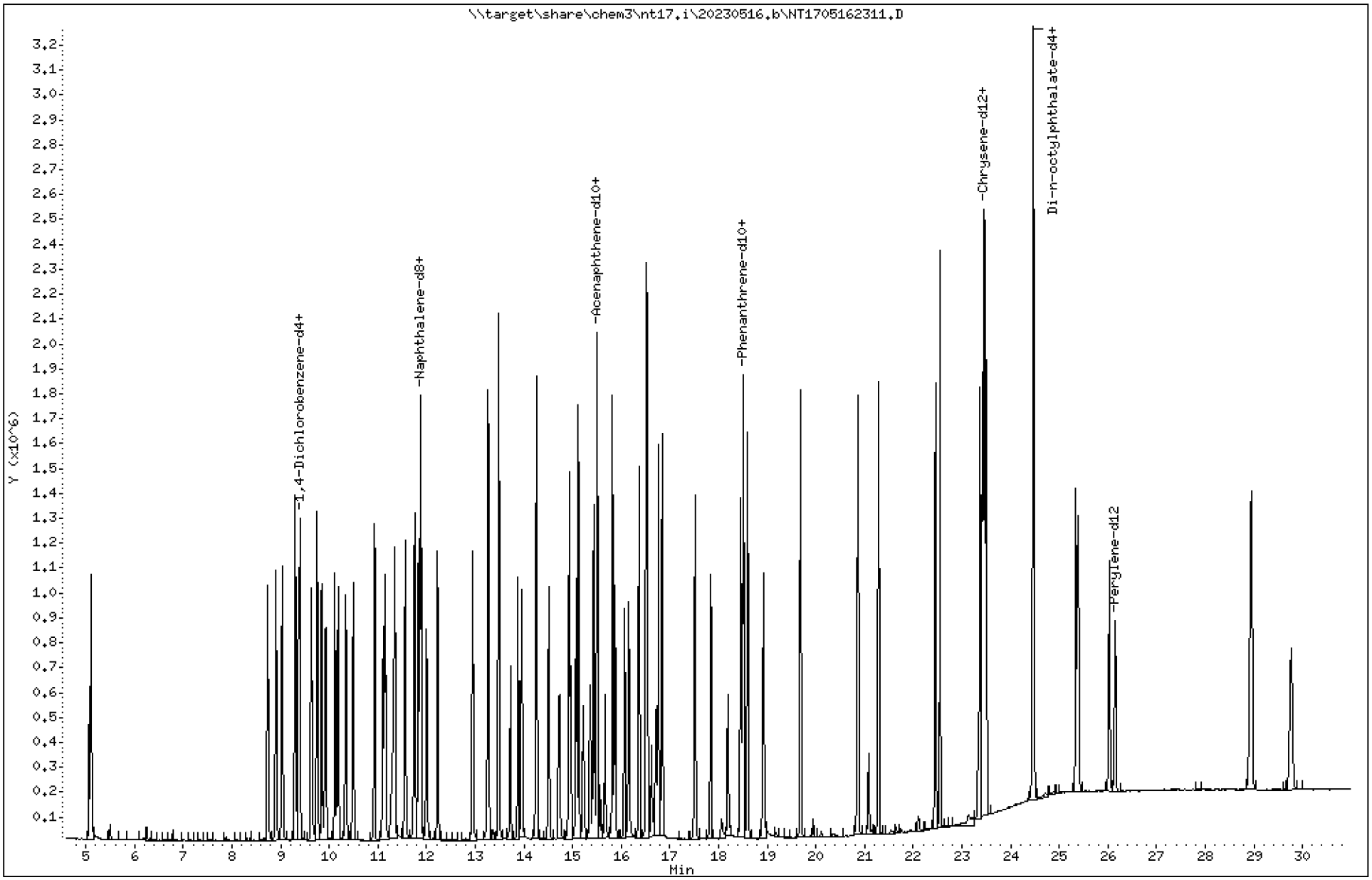
Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00065
Laboratory ID: SLE0338-SCV1
Sequence: SLE0338
Sequence Name: SCV 5.0
Standard ID: K010066

3-Nitroaniline	5.0000	5.2	3.4	20.00
2,4-Dinitrophenol	5.0000	2.1	-57.6	20.00
Dibenzofuran	5.0000	5.2	3.3	20.00
4-Nitrophenol	5.0000	4.5	-9.9	20.00
2,4-Dinitrotoluene	5.0000	5.3	5.4	20.00
Fluorene	5.0000	5.4	8.0	20.00
4-Chlorophenylphenyl ether	5.0000	5.5	9.2	20.00
Diethyl phthalate	5.0000	5.5	9.9	20.00
4-Nitroaniline	5.0000	5.1	2.2	20.00
4,6-Dinitro-2-methylphenol	5.0000	3.4	-32.9	20.00
N-Nitrosodiphenylamine	5.0000	5.5	9.4	20.00
4-Bromophenyl phenyl ether	5.0000	5.4	8.4	20.00
Hexachlorobenzene	5.0000	4.9	-1.7	20.00
Pentachlorophenol	5.0000	3.9	-21.1	20.00
Phenanthrene	5.0000	5.0	0.8	20.00
Anthracene	5.0000	4.5	-9.4	20.00
Carbazole	5.0000	5.9	18.8	20.00
Di-n-Butylphthalate	5.0000	5.6	12.8	20.00
Fluoranthene	5.0000	5.5	9.3	20.00
Pyrene	5.0000	5.3	5.3	20.00
Butylbenzylphthalate	5.0000	5.8	16.5	20.00
Benzo(a)anthracene	5.0000	5.1	1.3	20.00
3,3'-Dichlorobenzidine	10.000	12.0	19.9	20.00
Chrysene	5.0000	5.0	0.4	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.8	15.8	20.00
Di-n-Octylphthalate	5.0000	5.5	9.6	20.00
Benzofluoranthenes, Total	10.000	10.0	0.2	20.00
Benzo(a)pyrene	5.0000	5.2	3.4	20.00
Indeno(1,2,3-cd)pyrene	5.0000	5.0	0.6	20.00
Dibenzo(a,h)anthracene	5.0000	5.0	-0.6	20.00
Benzo(g,h,i)perylene	5.0000	5.1	1.1	20.00
1-Methylnaphthalene	5.0000	5.3	5.0	20.00

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D
Date : 17-MAY-2023 00:29
Client ID:
Sample Info: SLE0338-SCV1

Instrument: nt17.i
Operator: JGR
Column phase: ZB-5msi
Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

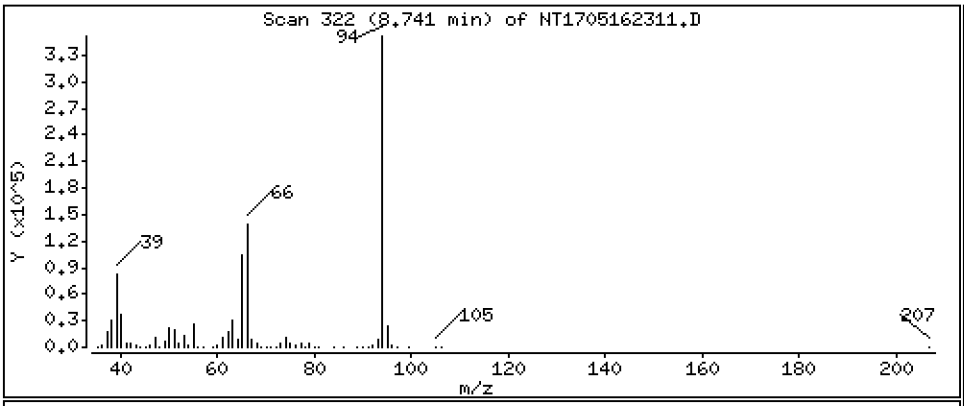
Operator: JGR

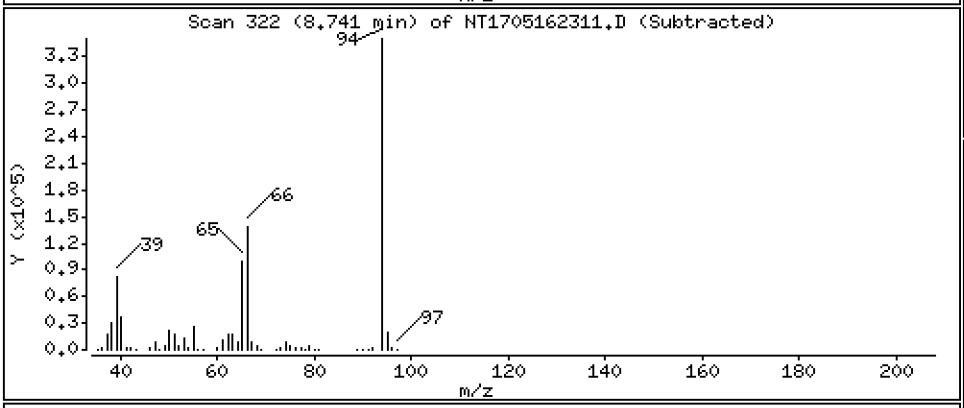
Column phase: ZB-5msi

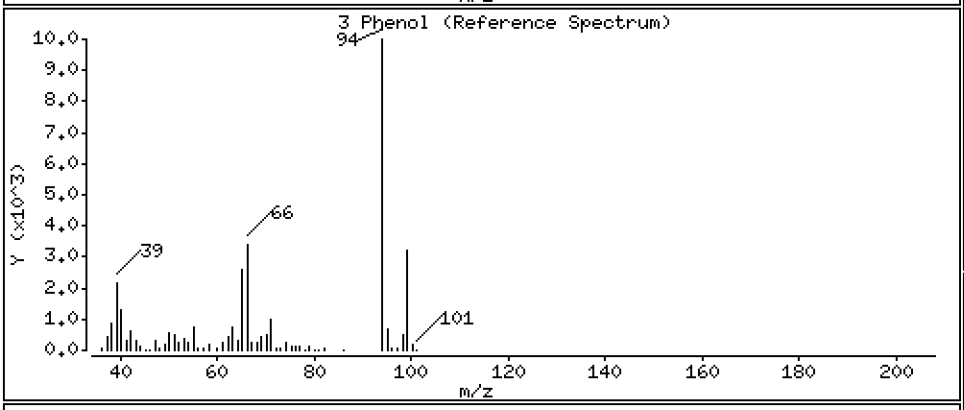
Column diameter: 0.25

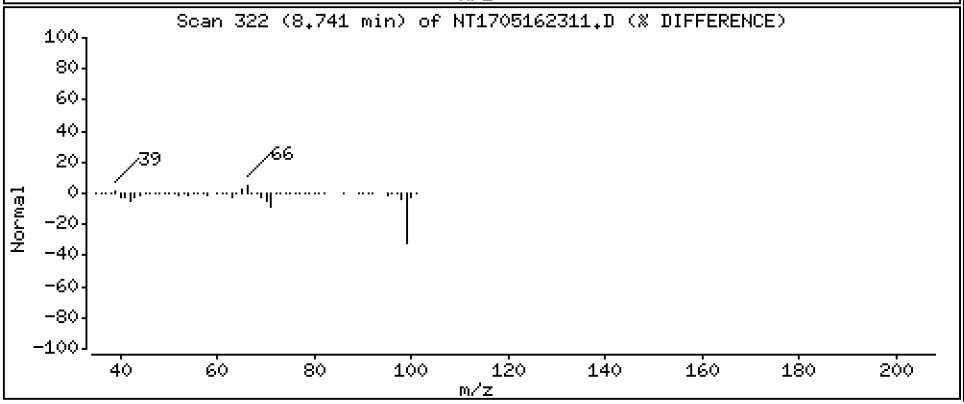
3 Phenol

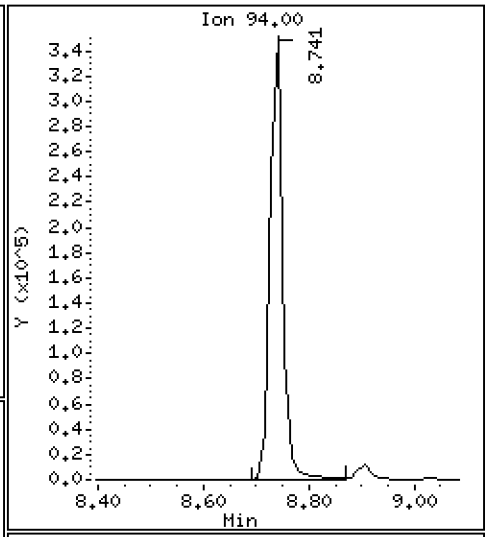
Concentration: 4.823 ug/mL

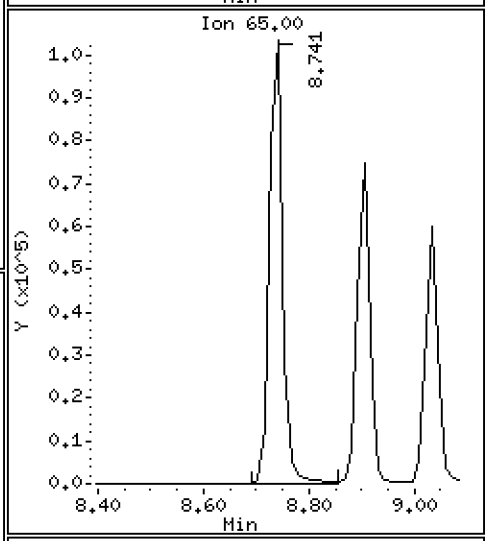


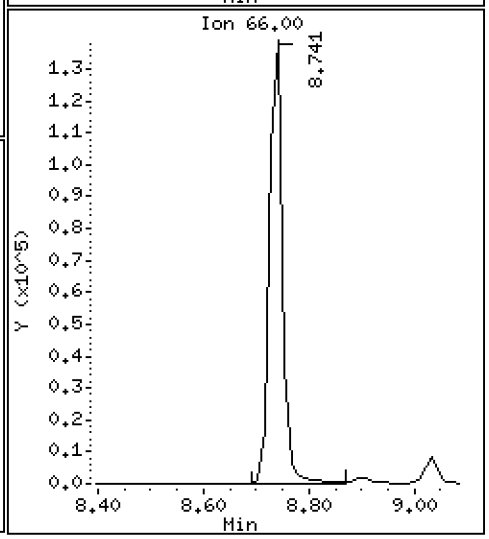












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

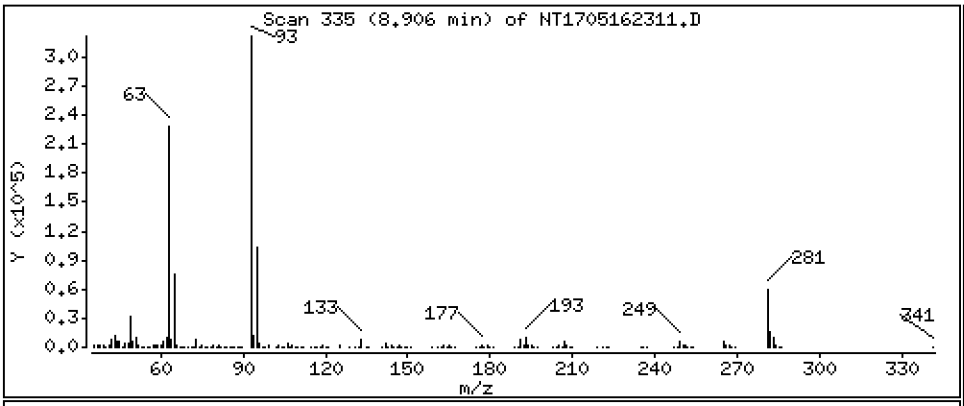
Operator: JGR

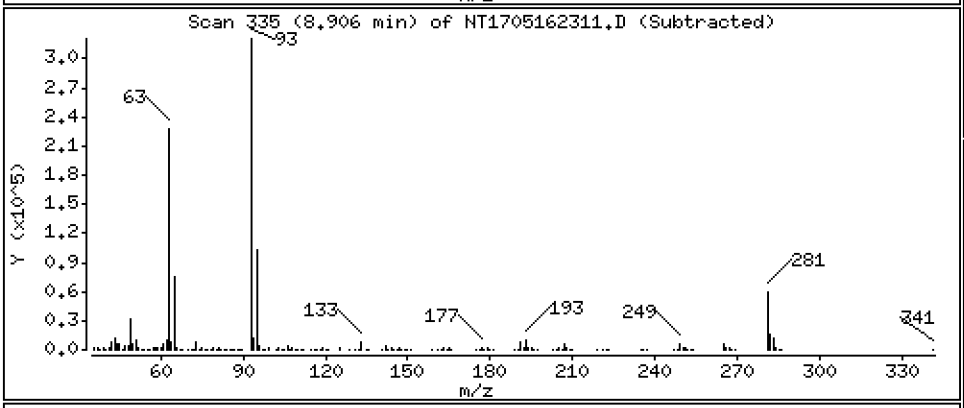
Column phase: ZB-5msi

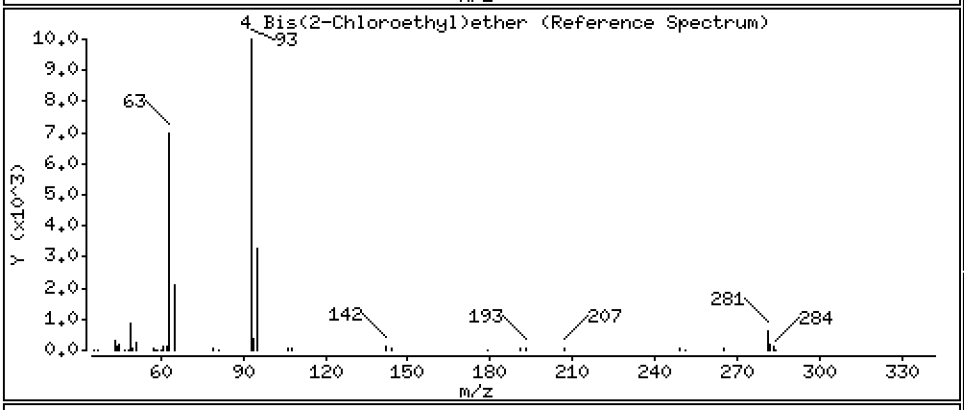
Column diameter: 0.25

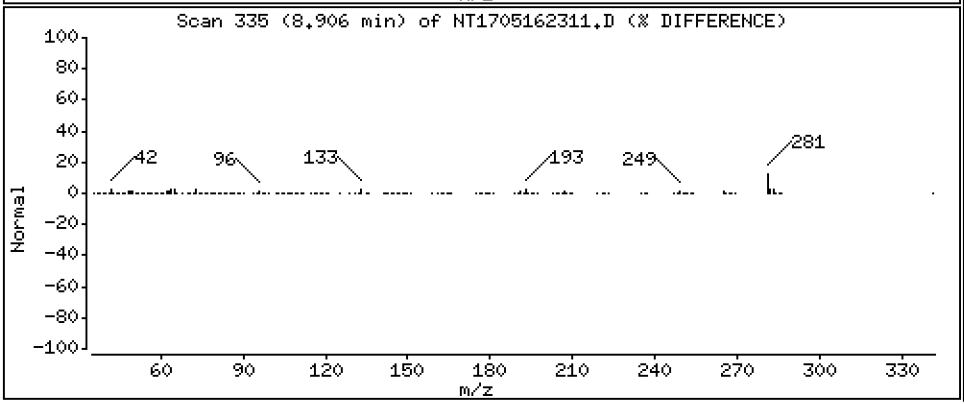
4 Bis(2-Chloroethyl)ether

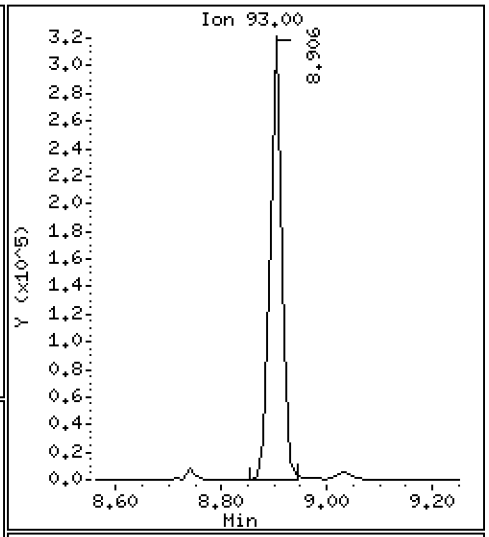
Concentration: 5.566 ug/mL

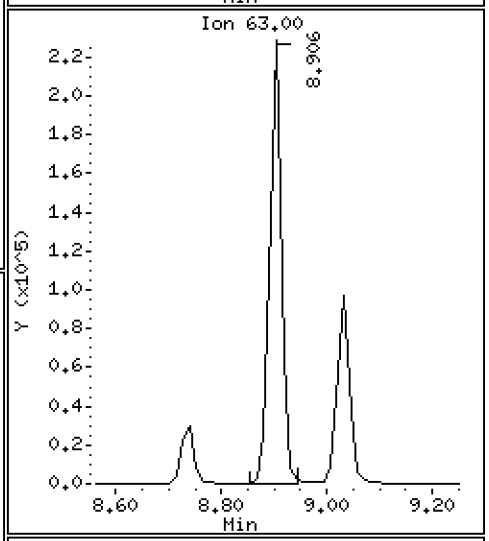


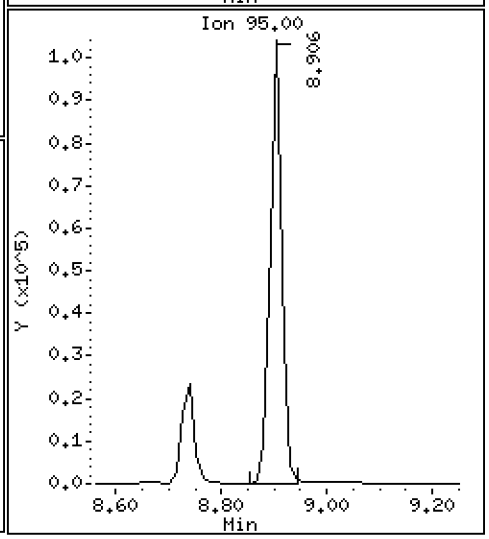












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

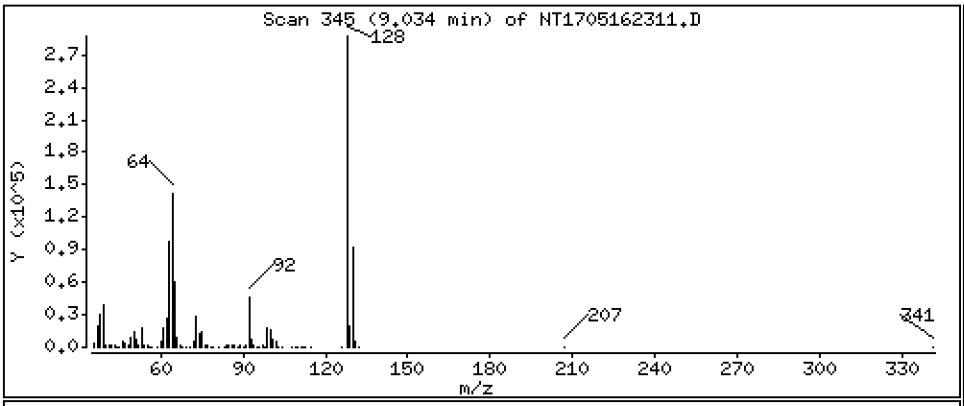
Operator: JGR

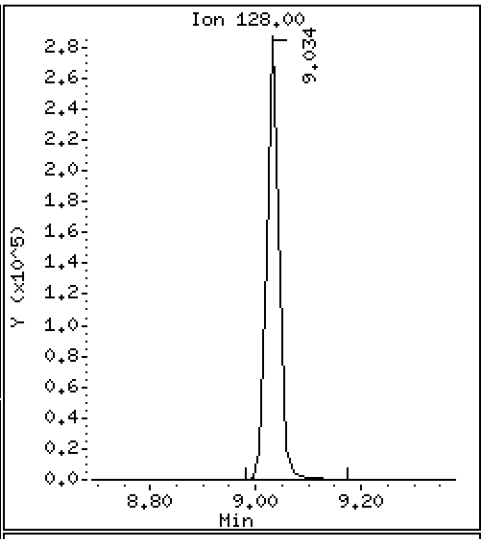
Column phase: ZB-5msi

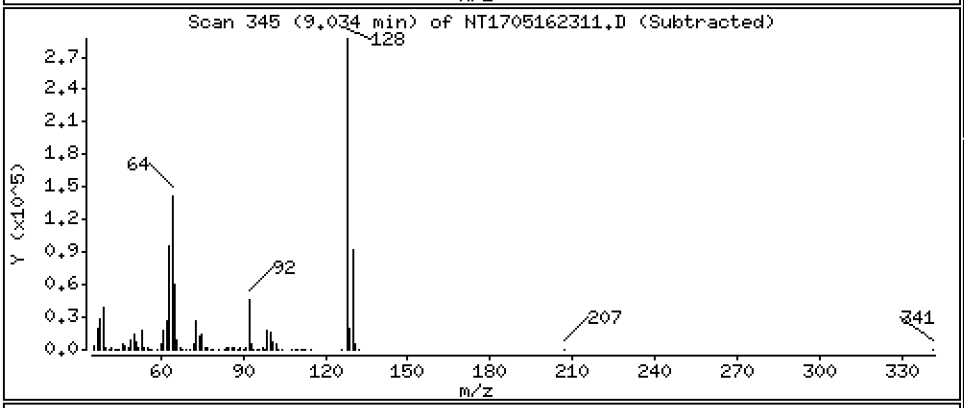
Column diameter: 0.25

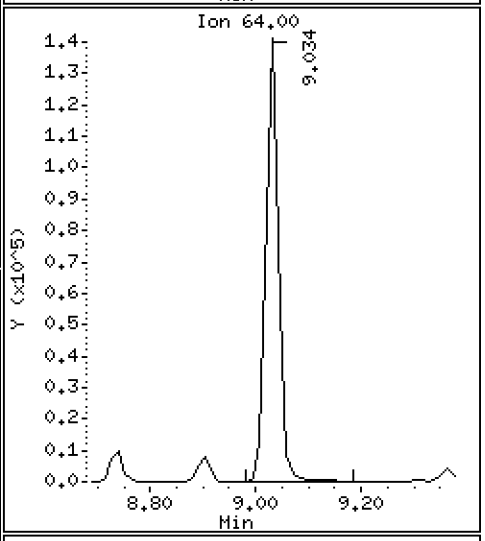
6 2-Chlorophenol

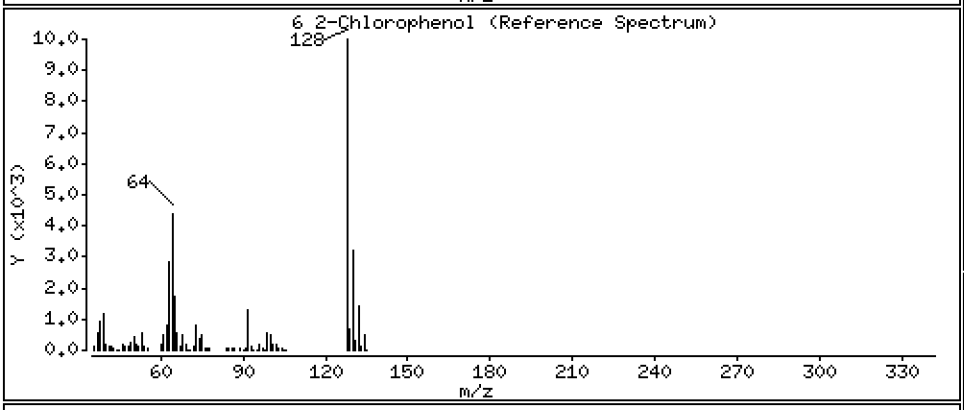
Concentration: 5.294 ug/mL

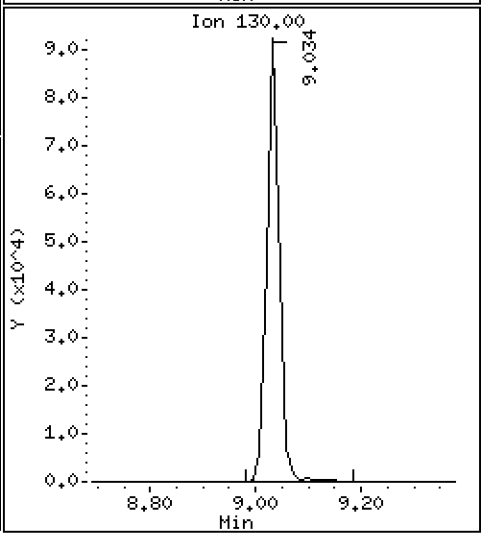


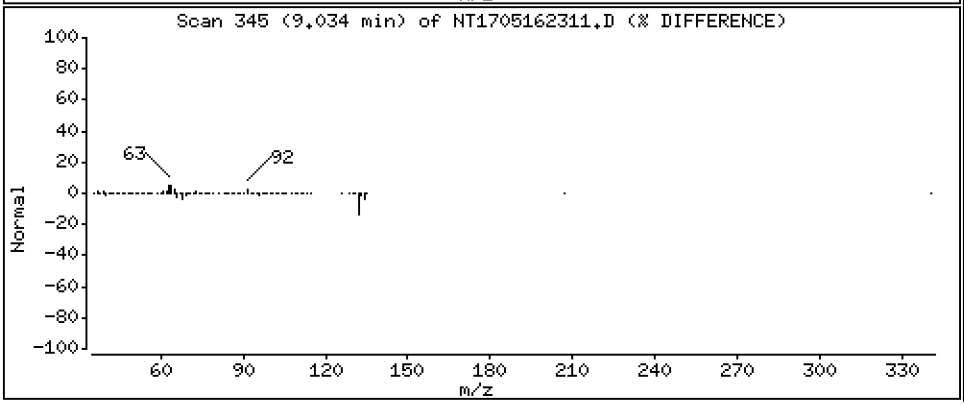












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

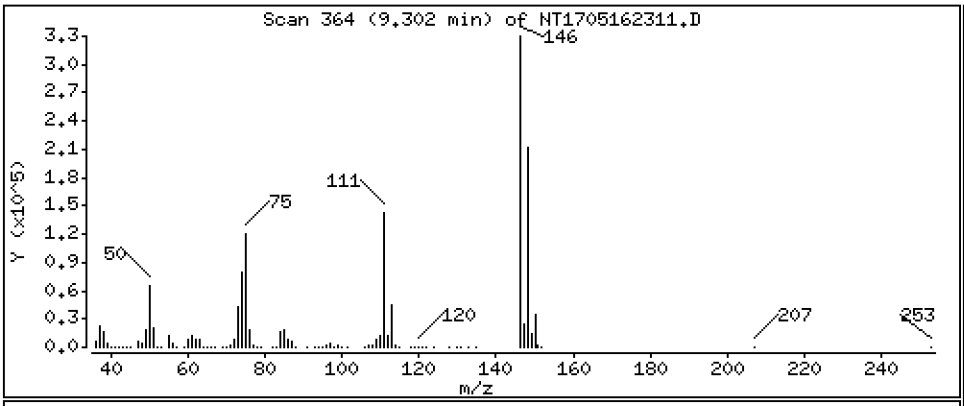
Operator: JGR

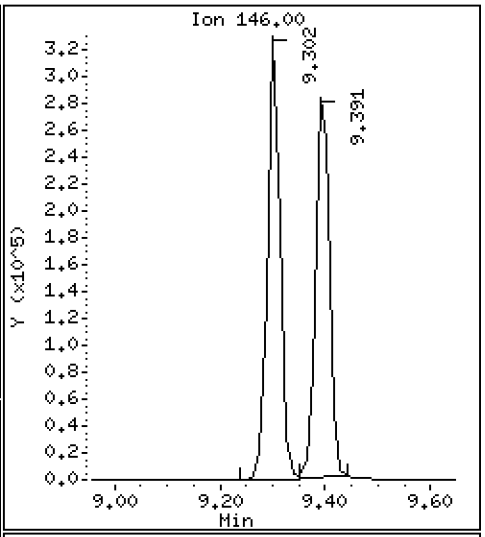
Column phase: ZB-5msi

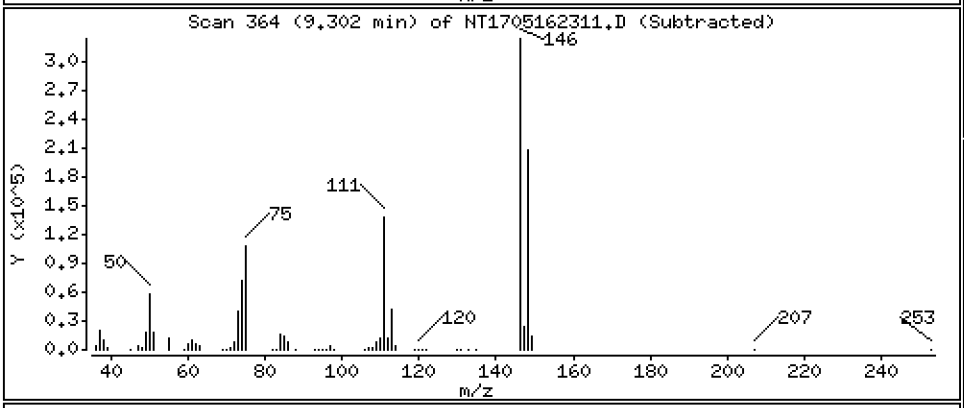
Column diameter: 0.25

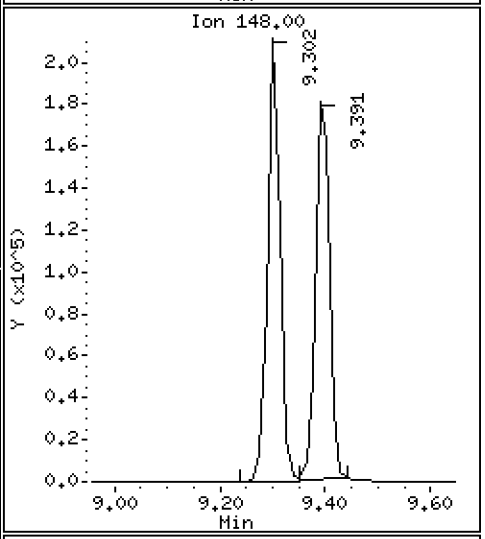
7 1,3-Dichlorobenzene

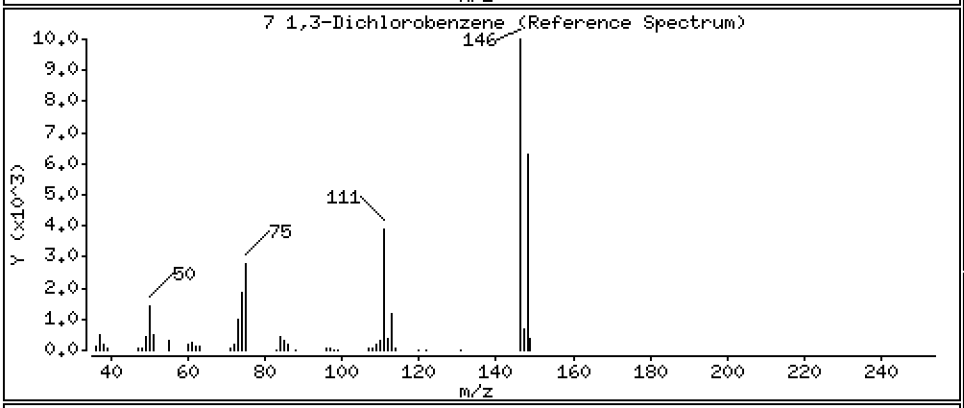
Concentration: 5.319 ug/mL

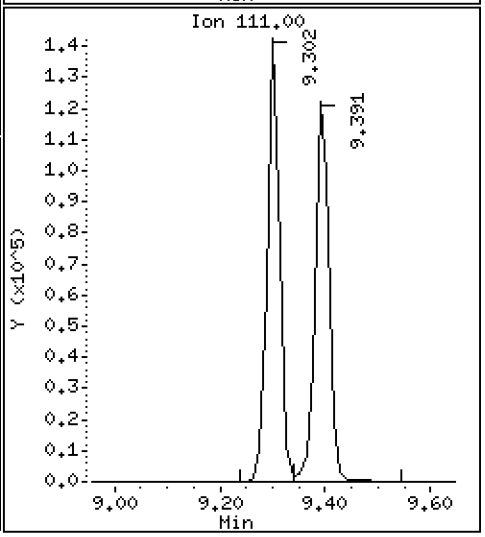


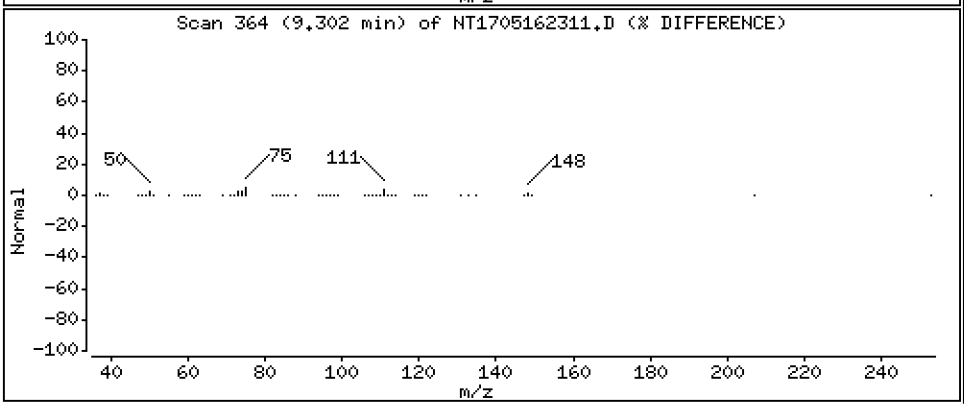












Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

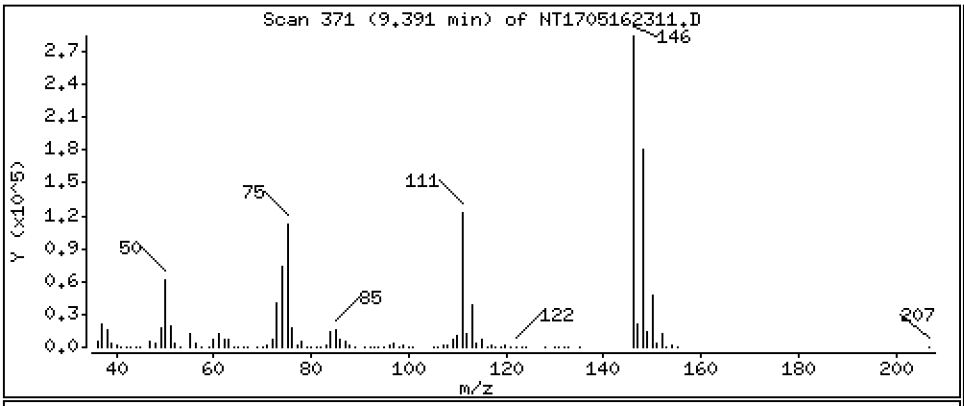
Operator: JGR

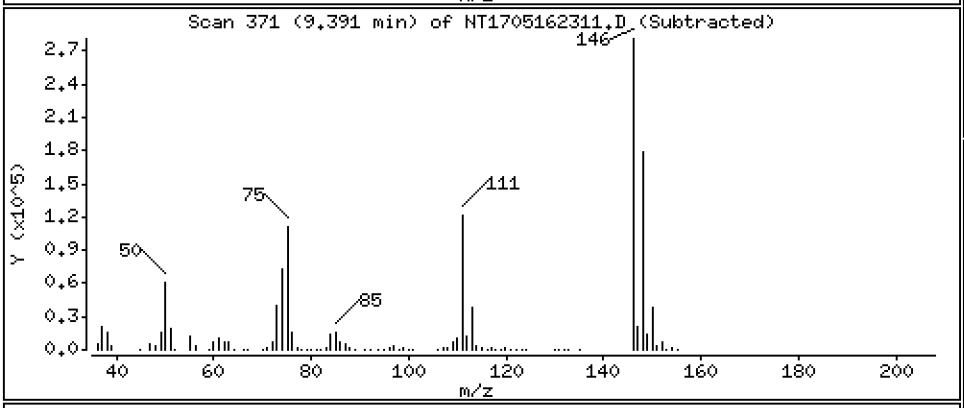
Column phase: ZB-5msi

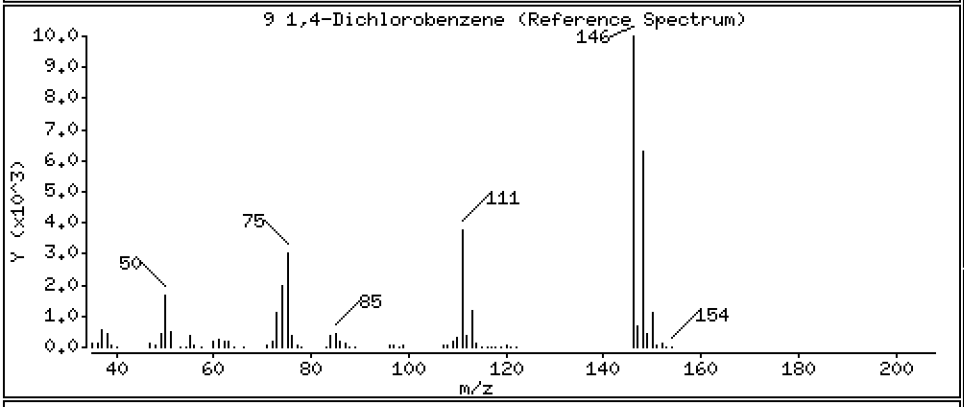
Column diameter: 0.25

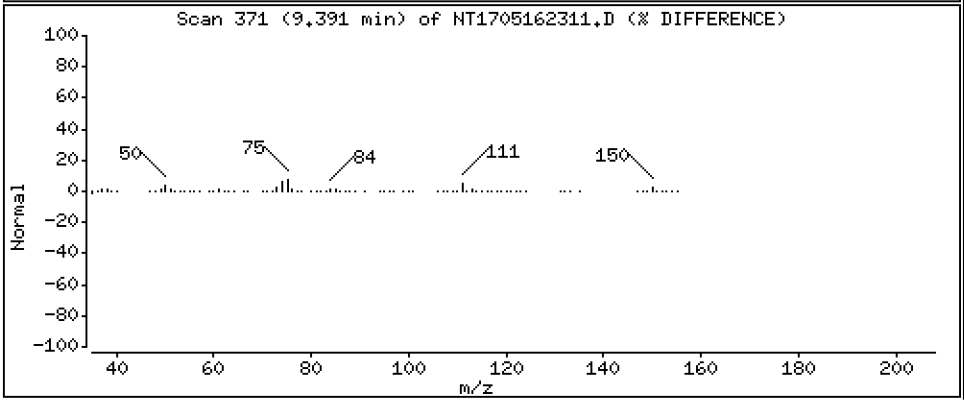
9 1,4-Dichlorobenzene

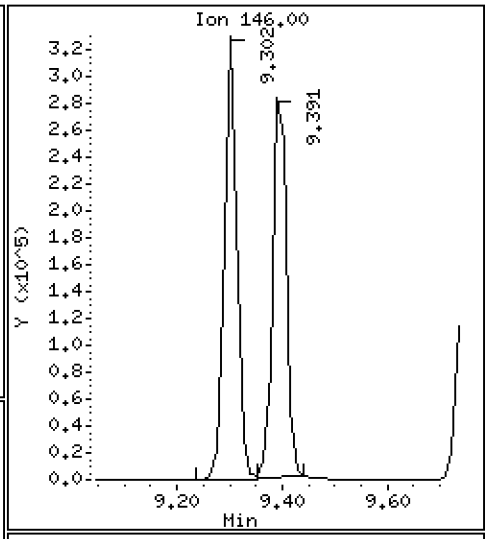
Concentration: 5.071 ug/mL

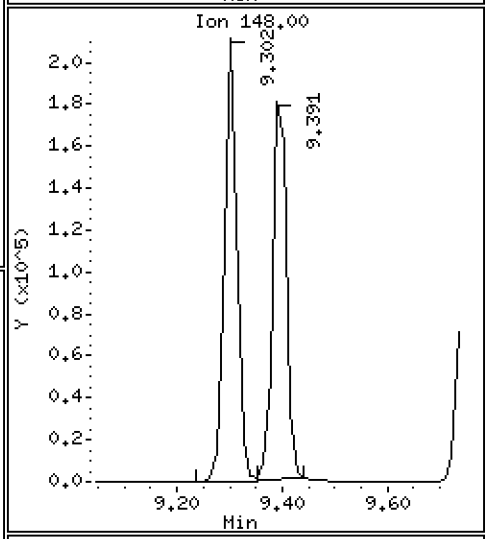


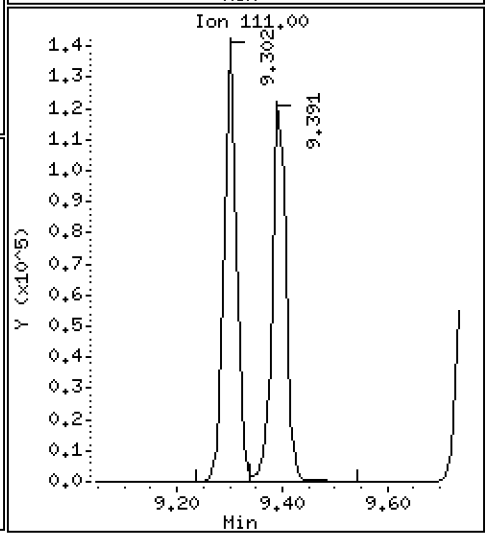












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

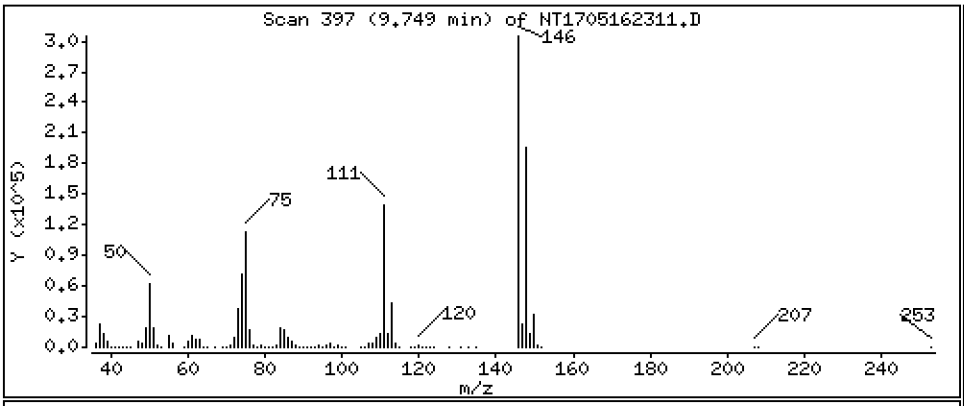
Operator: JGR

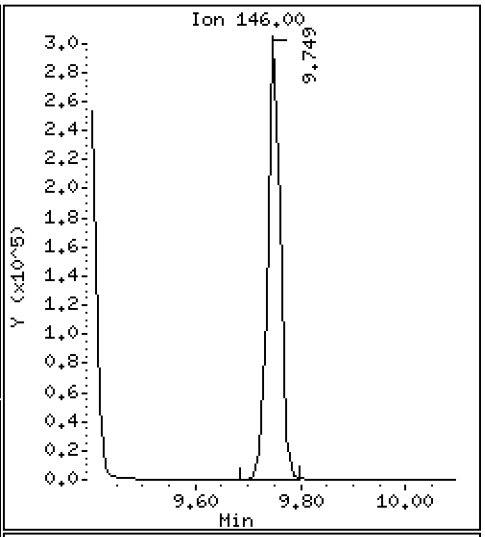
Column phase: ZB-5msi

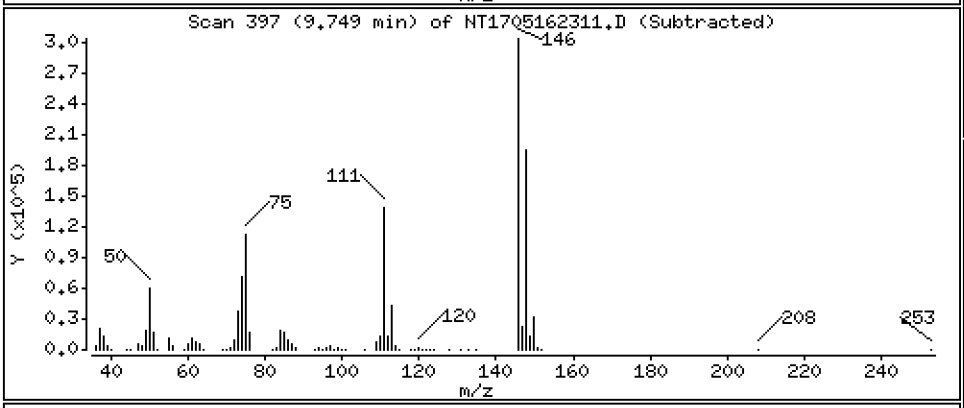
Column diameter: 0.25

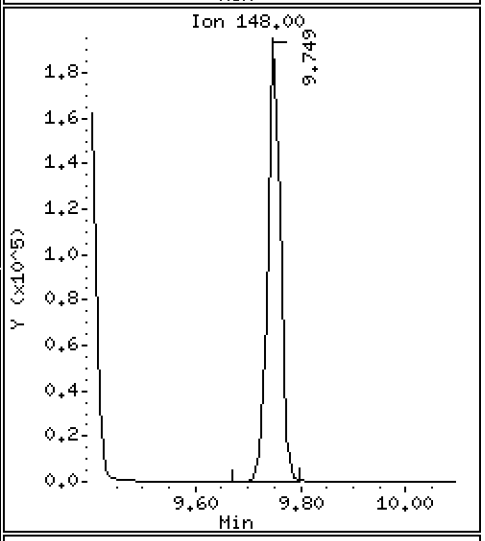
12 1,2-Dichlorobenzene

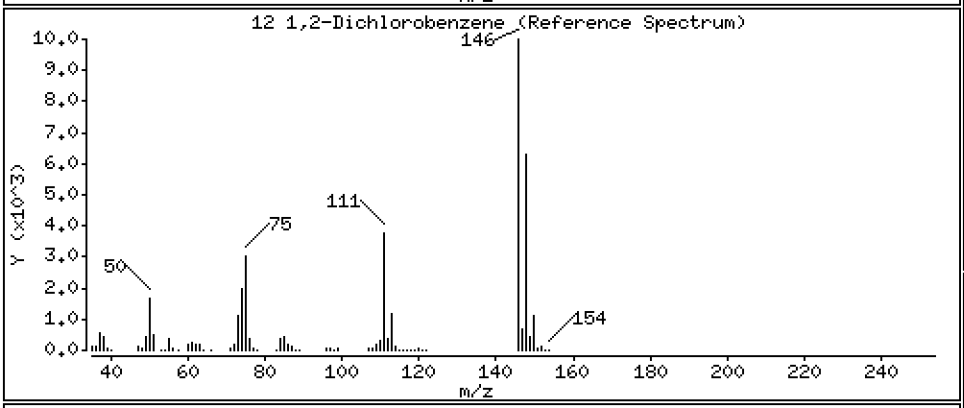
Concentration: 5.258 ug/mL

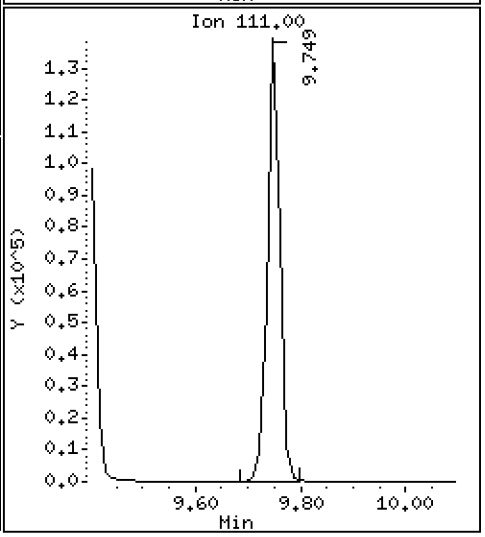


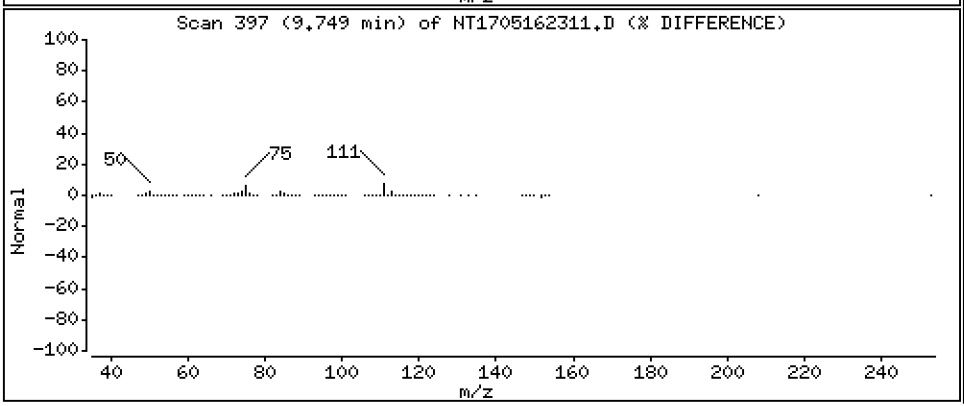












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

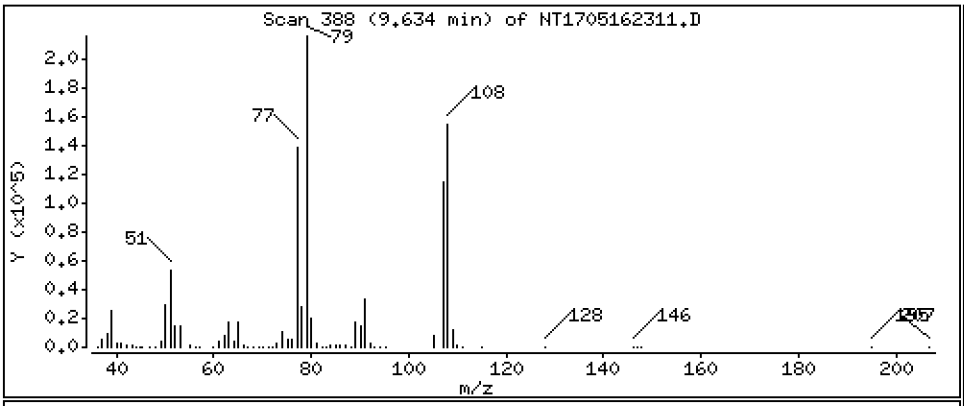
Operator: JGR

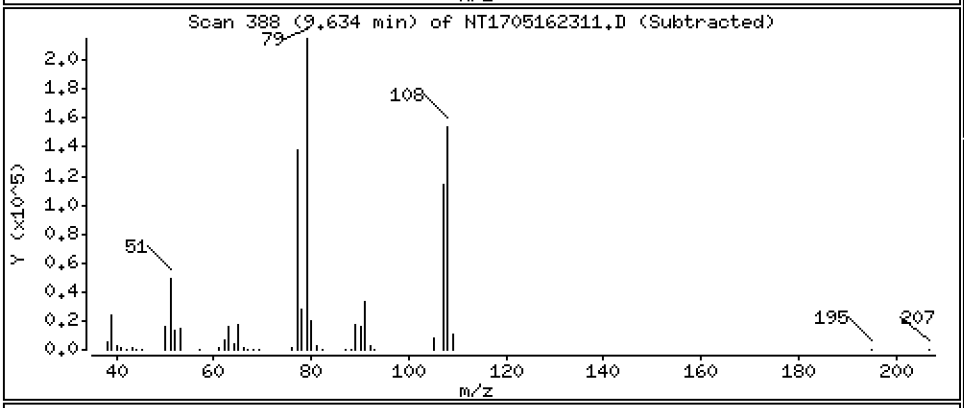
Column phase: ZB-5msi

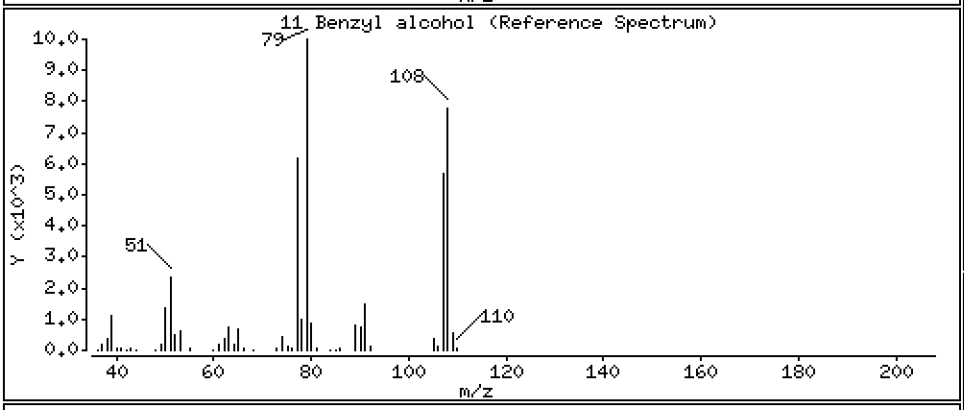
Column diameter: 0.25

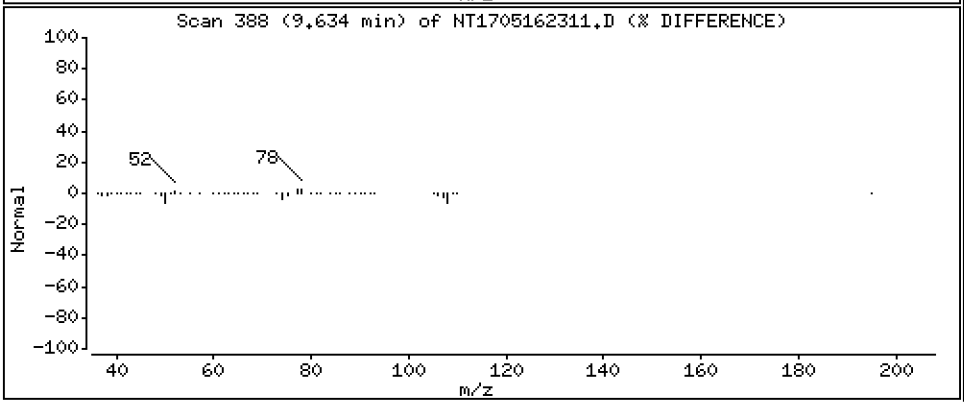
11 Benzyl alcohol

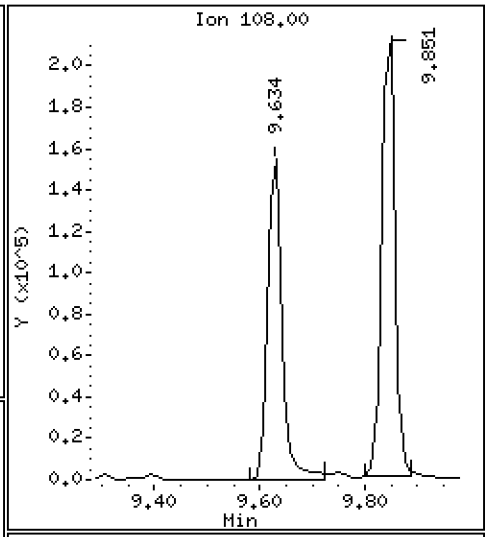
Concentration: 5.274 ug/mL

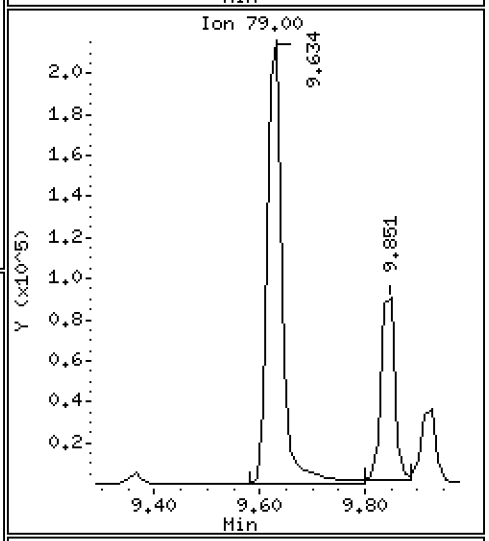


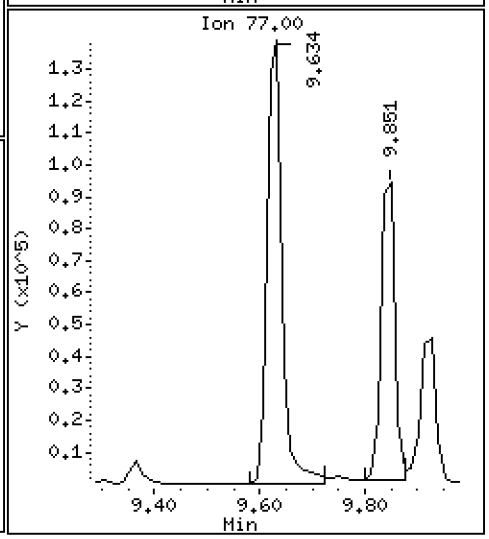












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

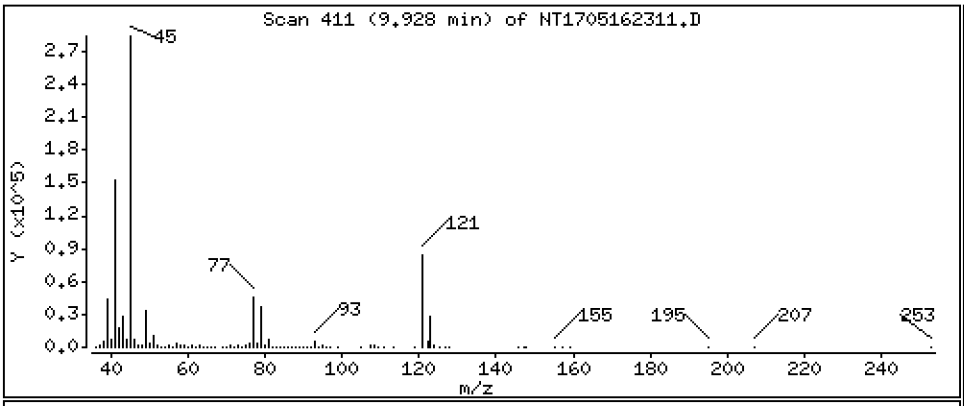
Operator: JGR

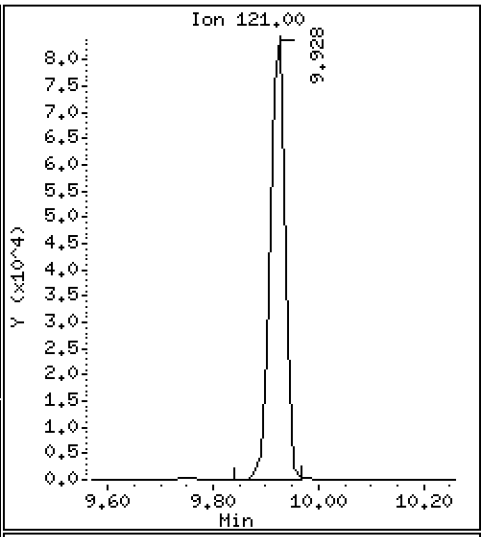
Column phase: ZB-5msi

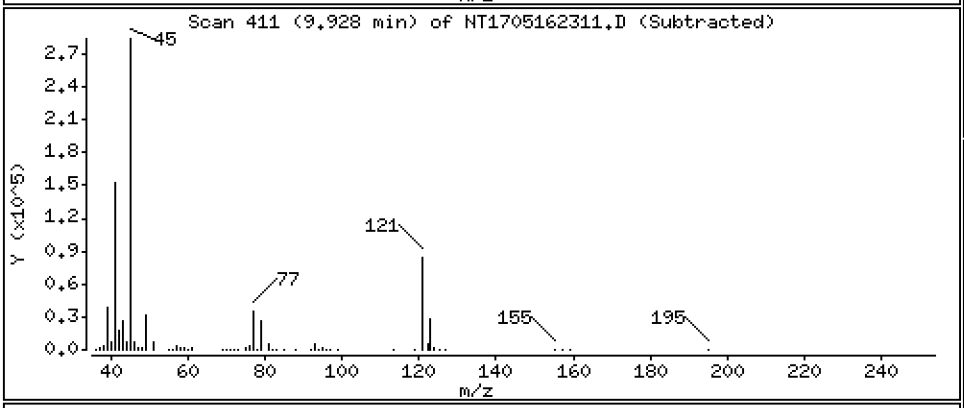
Column diameter: 0.25

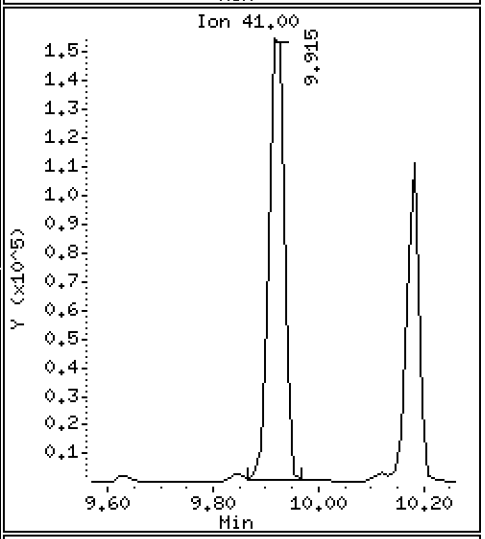
14 2,2'-oxybis(1-Chloropropane)

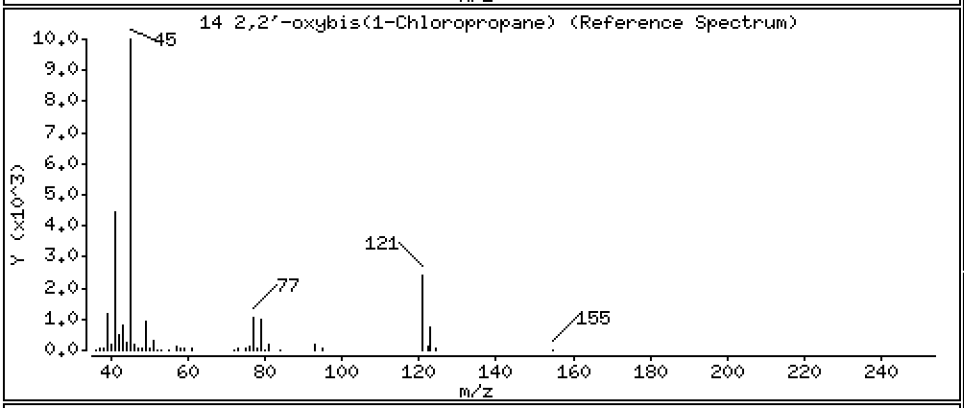
Concentration: 6.179 ug/mL

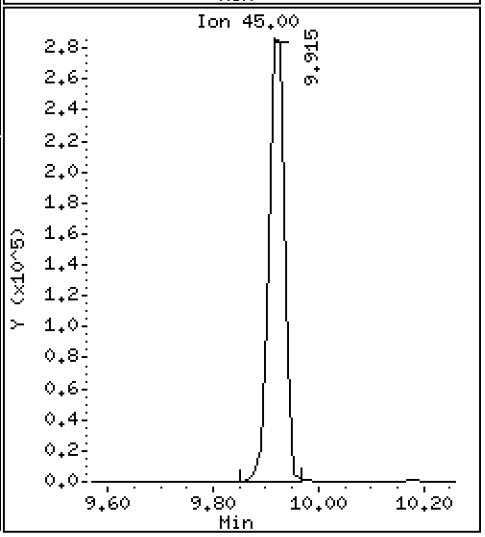


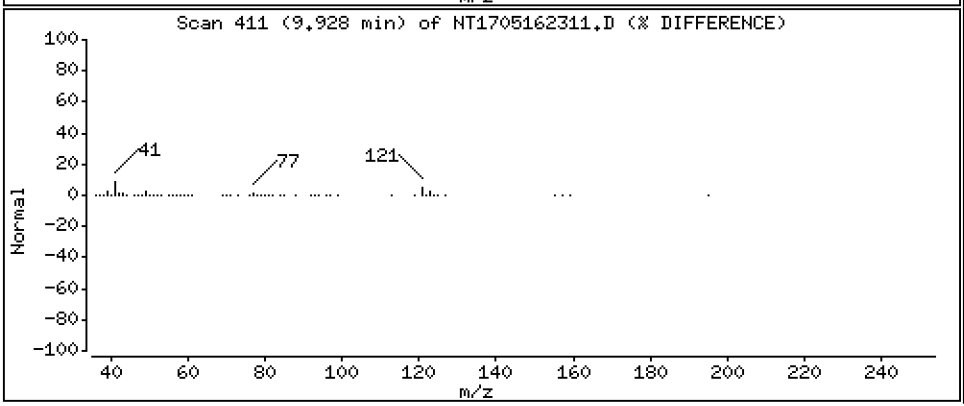












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

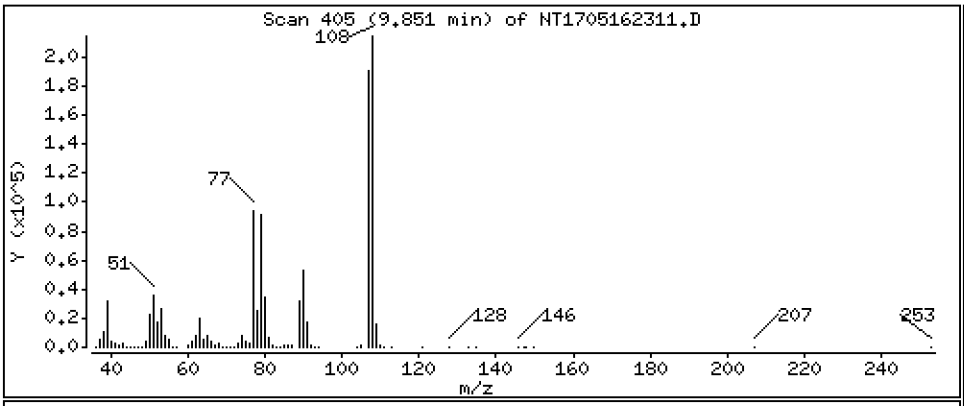
Operator: JGR

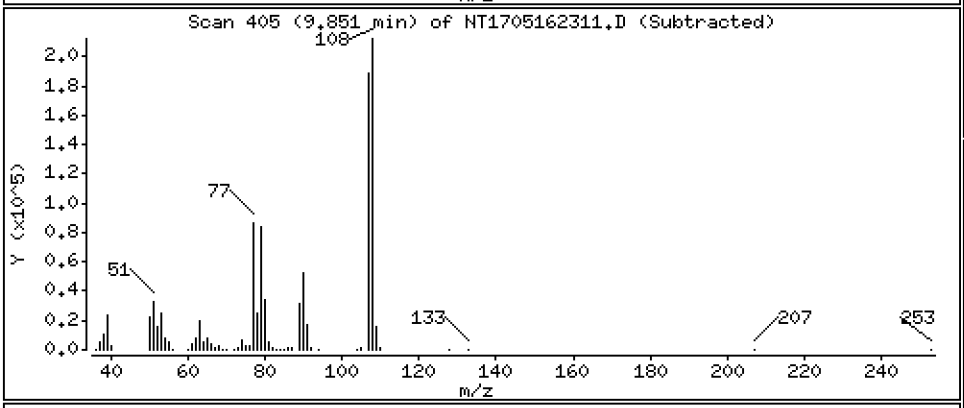
Column phase: ZB-5msi

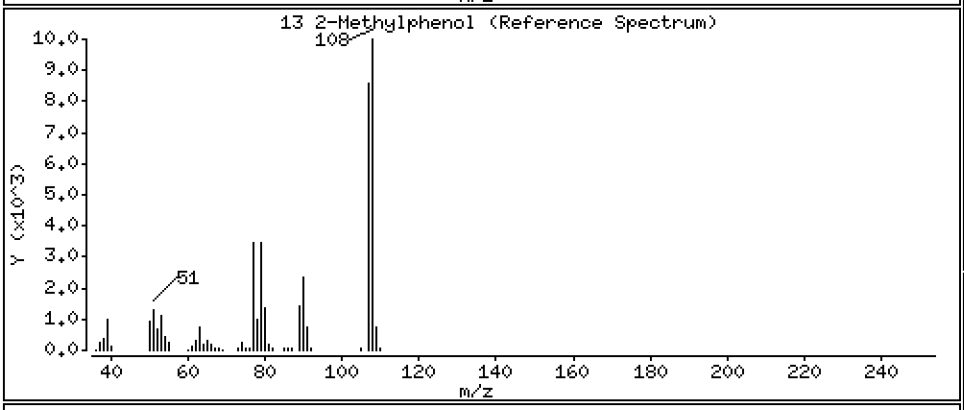
Column diameter: 0.25

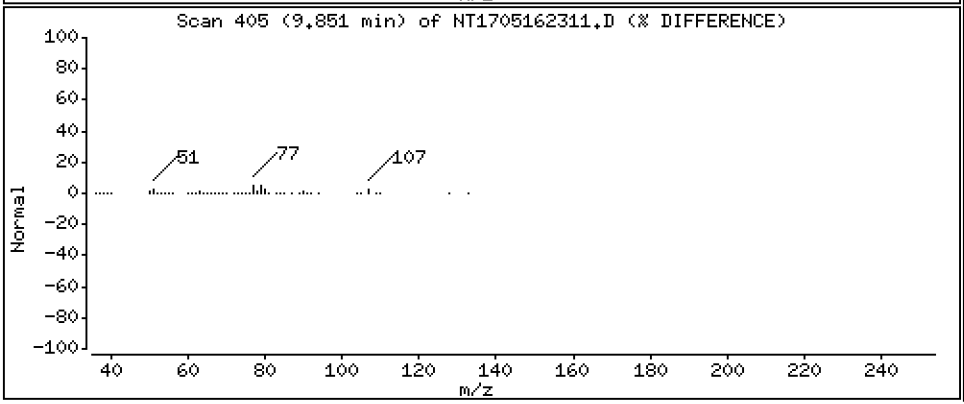
13 2-Methylphenol

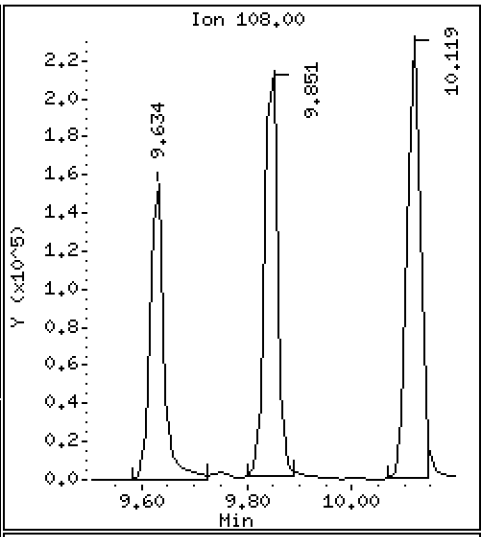
Concentration: 4.229 ug/mL

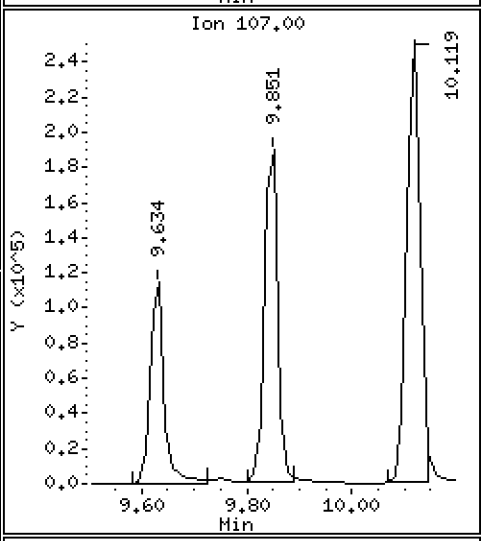


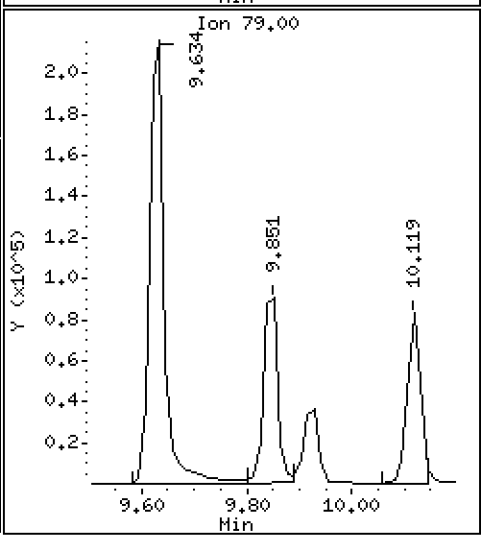












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

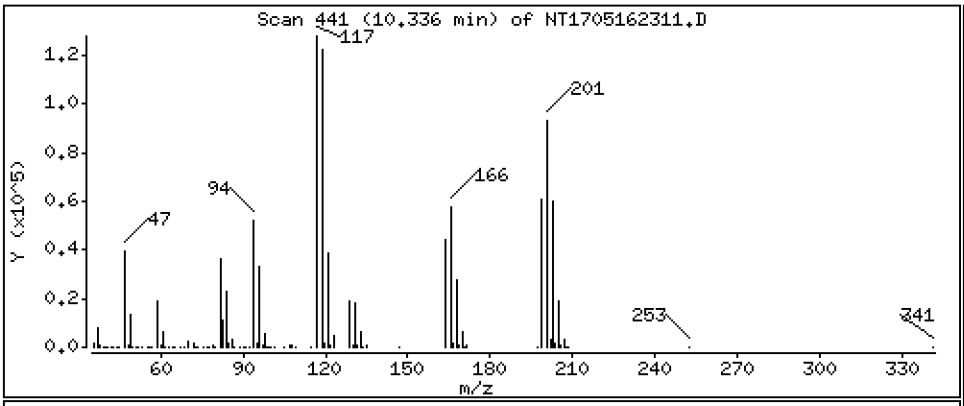
Operator: JGR

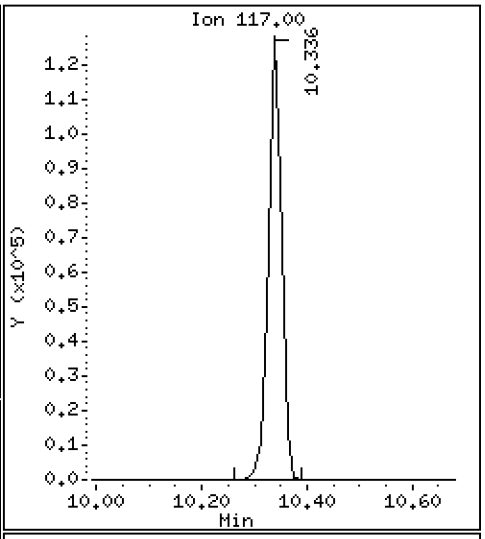
Column phase: ZB-5msi

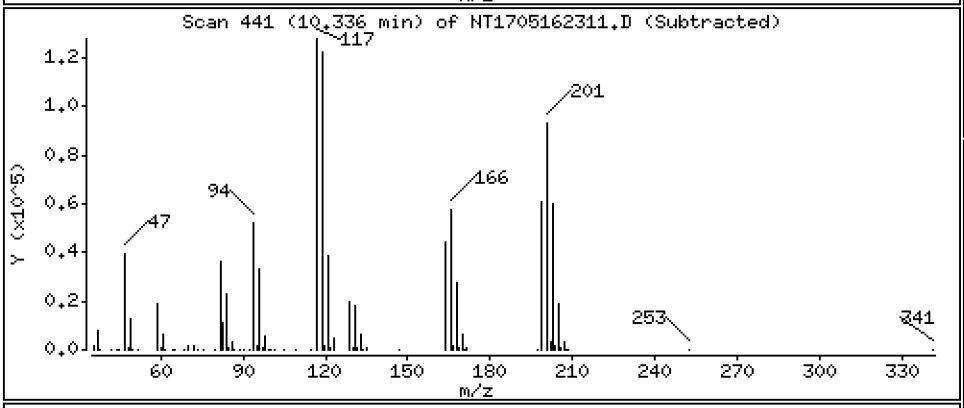
Column diameter: 0.25

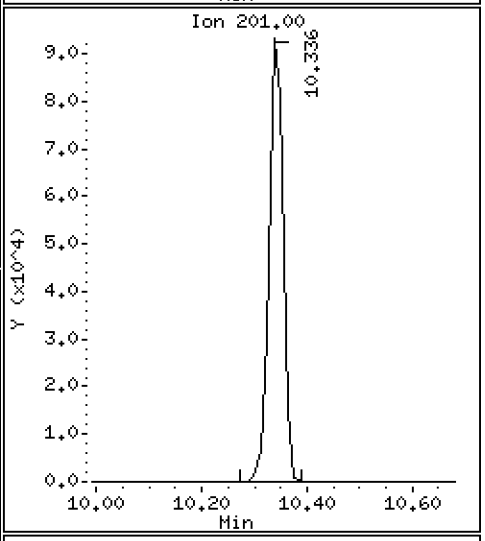
17 Hexachloroethane

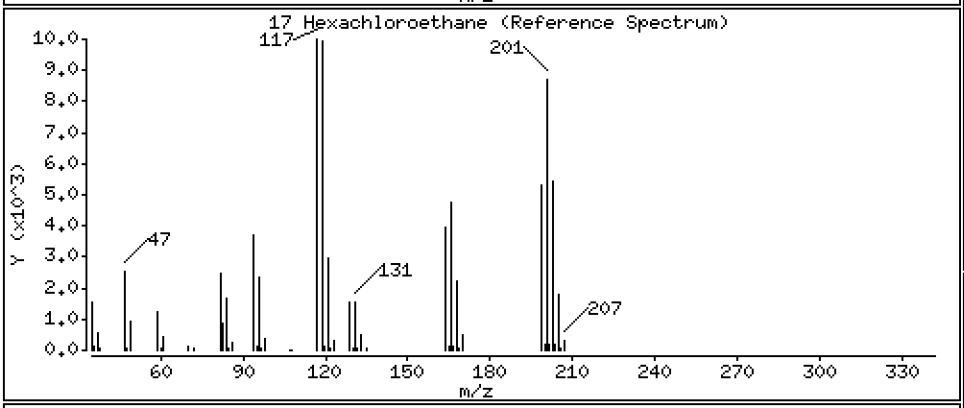
Concentration: 5.419 ug/mL

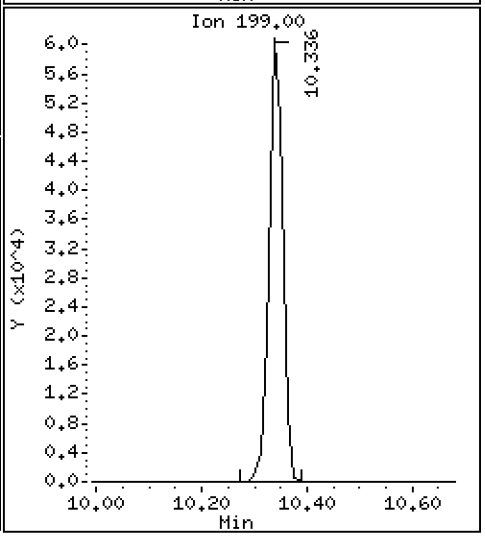


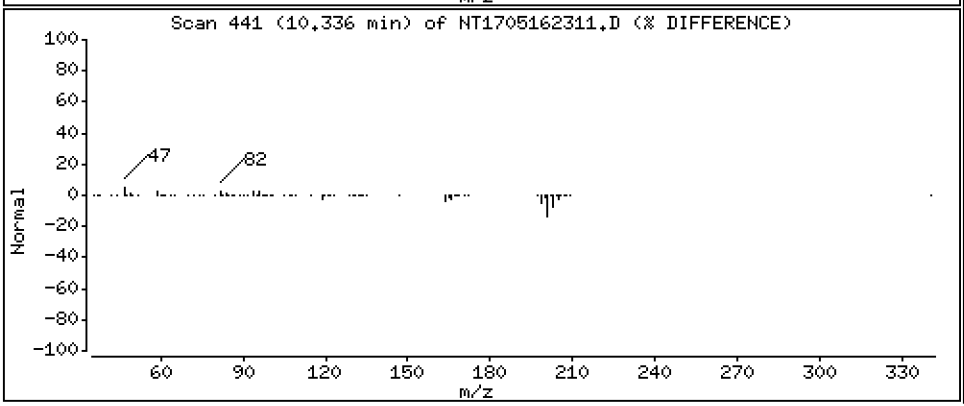












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

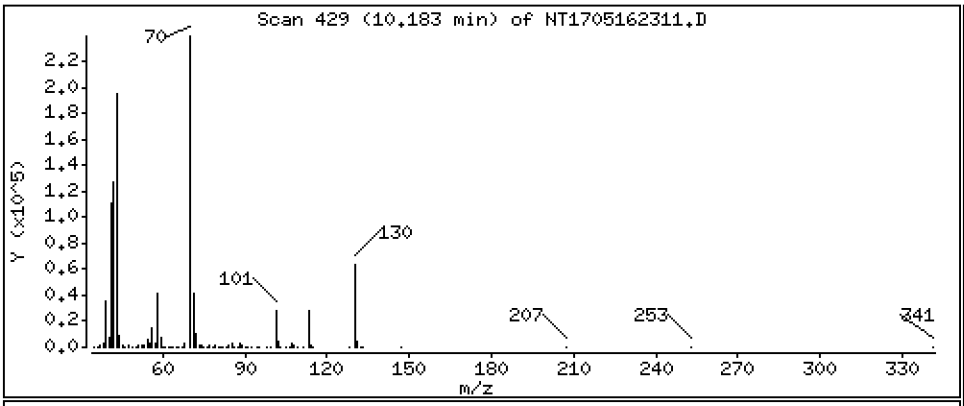
Operator: JGR

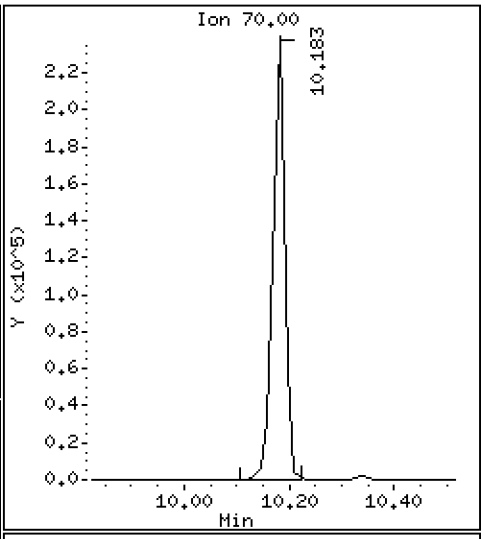
Column phase: ZB-5msi

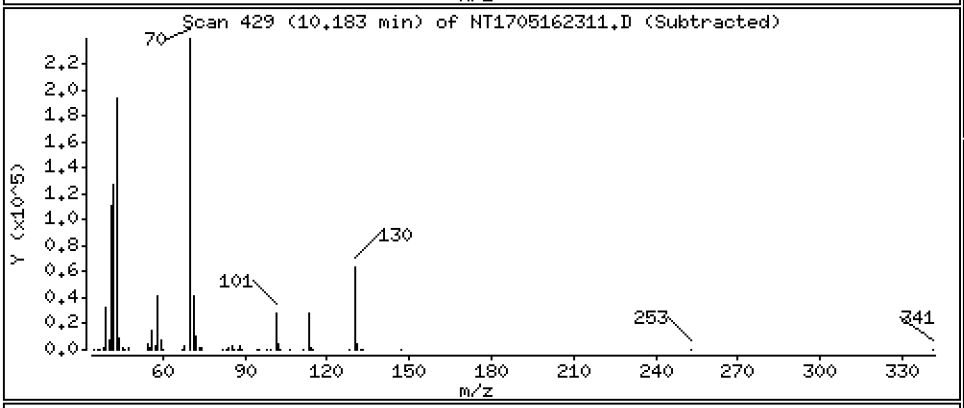
Column diameter: 0.25

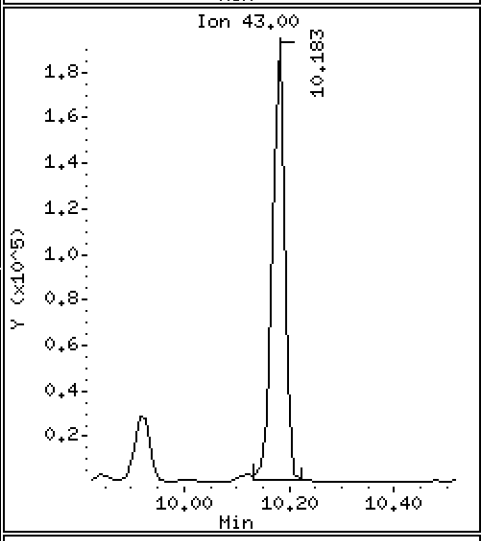
16 N-Nitroso-di-n-propylamine

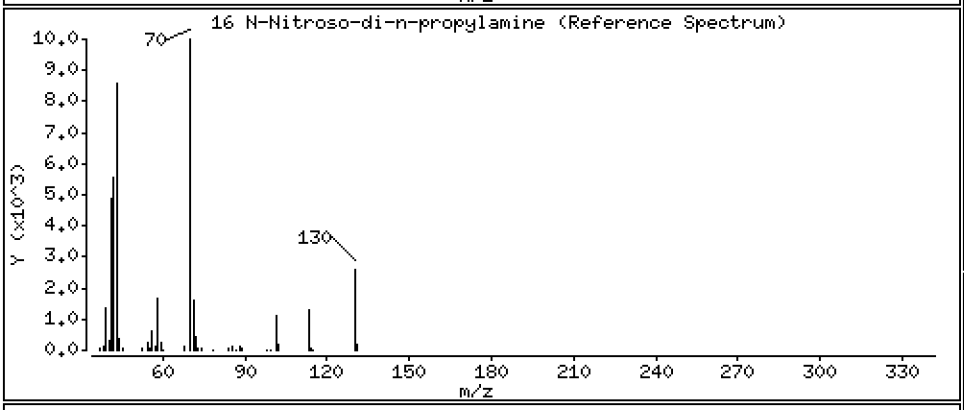
Concentration: 5.517 ug/mL

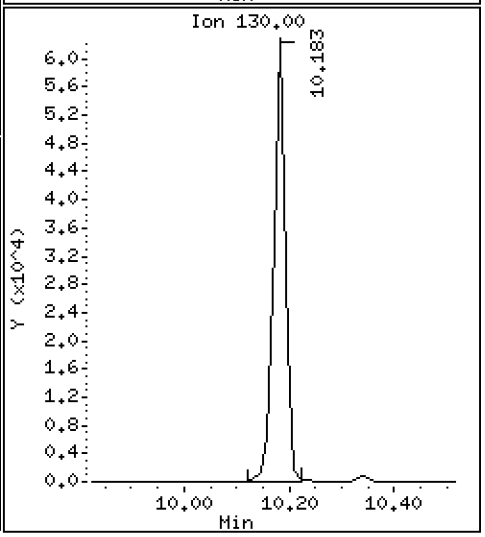


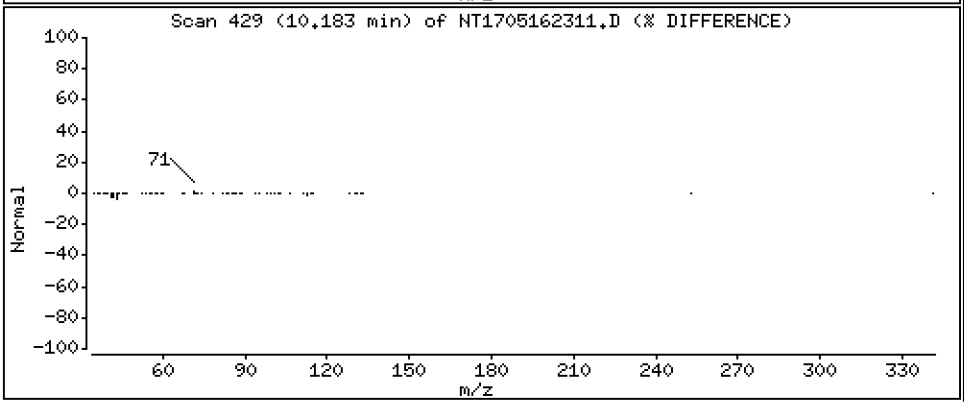












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

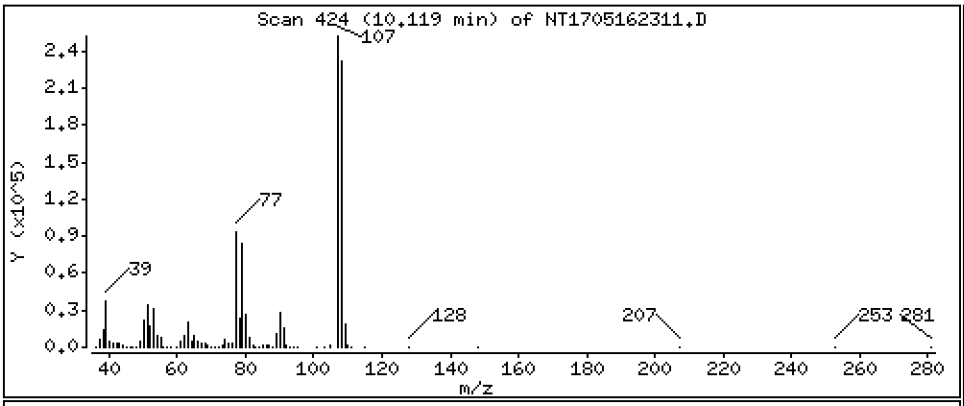
Operator: JGR

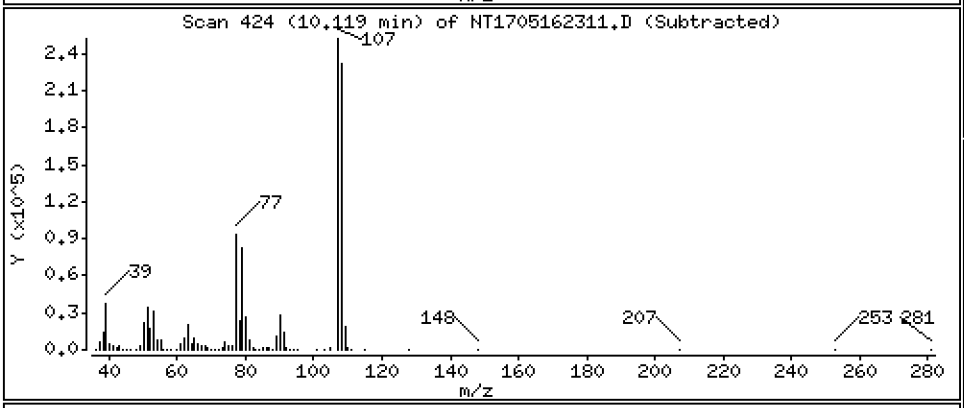
Column phase: ZB-5msi

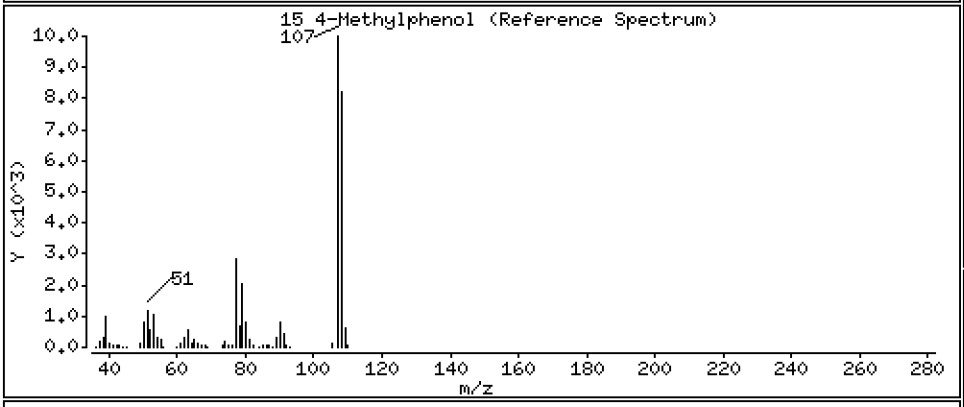
Column diameter: 0.25

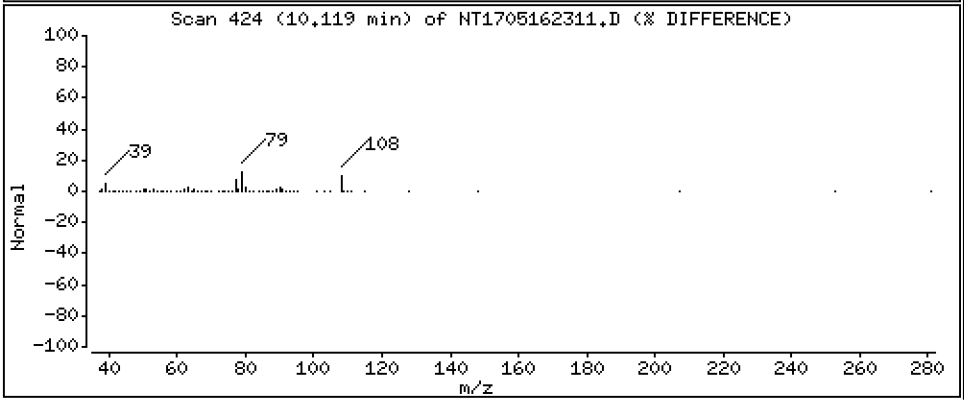
15 4-Methylphenol

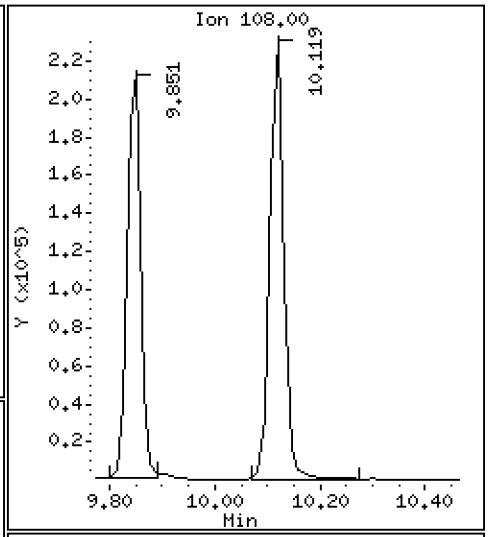
Concentration: 4.661 ug/mL

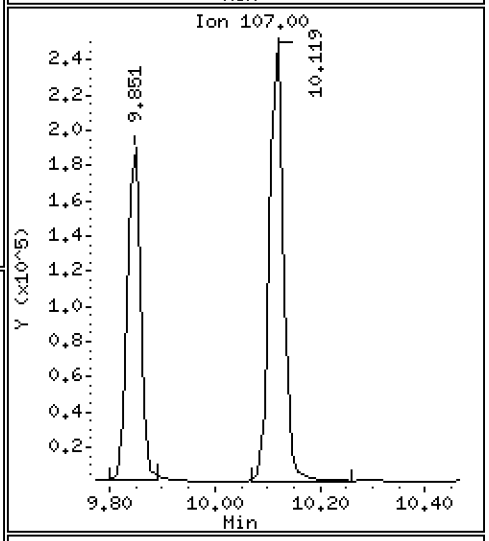


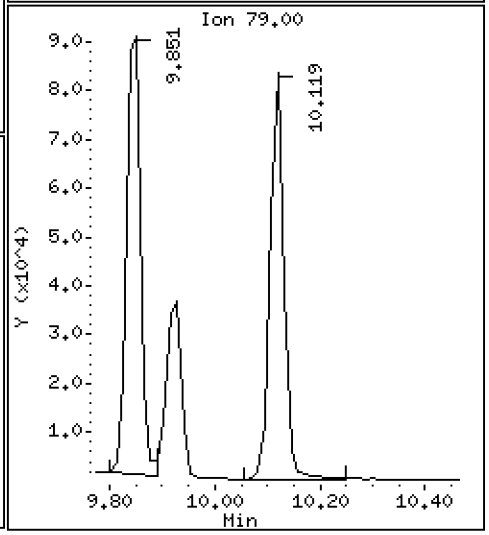












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

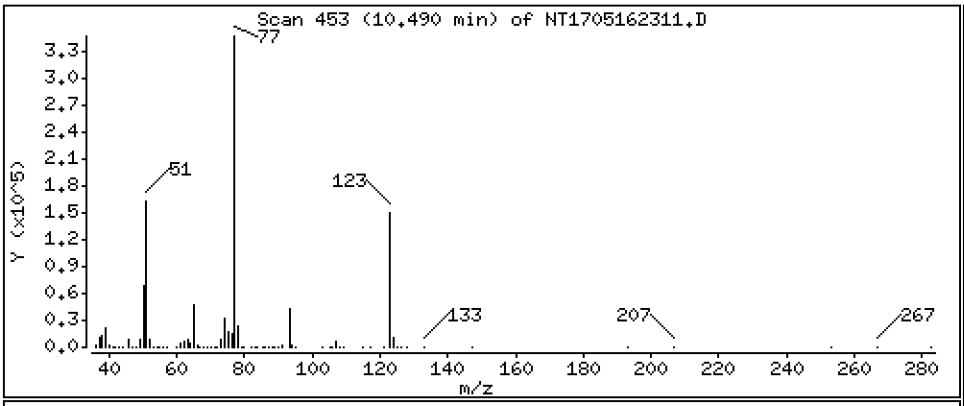
Operator: JGR

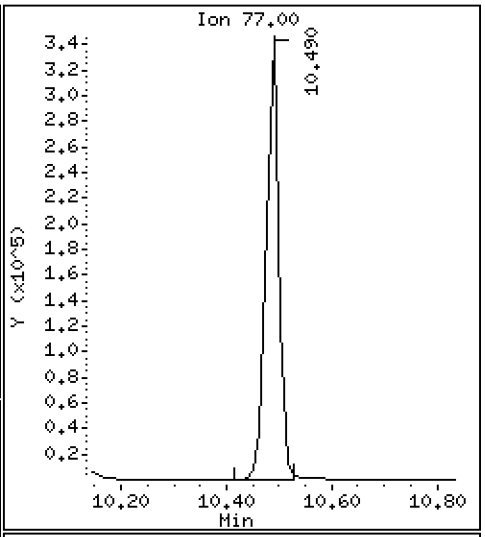
Column phase: ZB-5msi

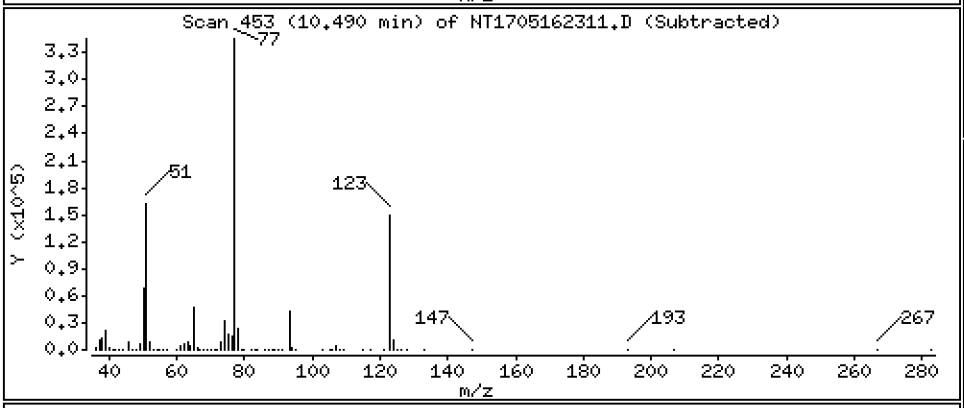
Column diameter: 0.25

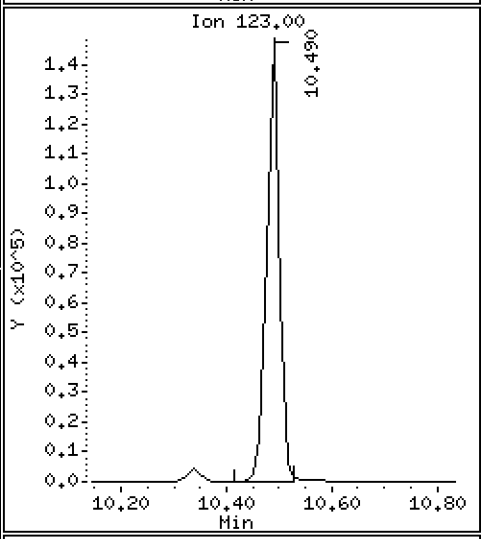
19 Nitrobenzene

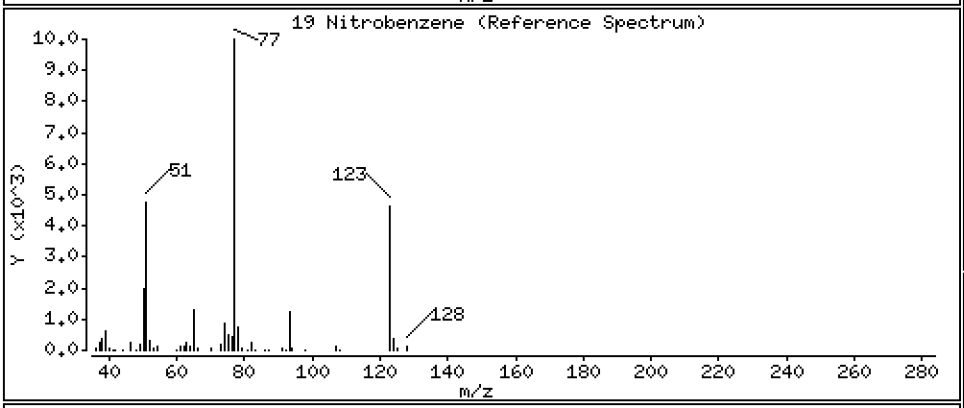
Concentration: 5.329 ug/mL

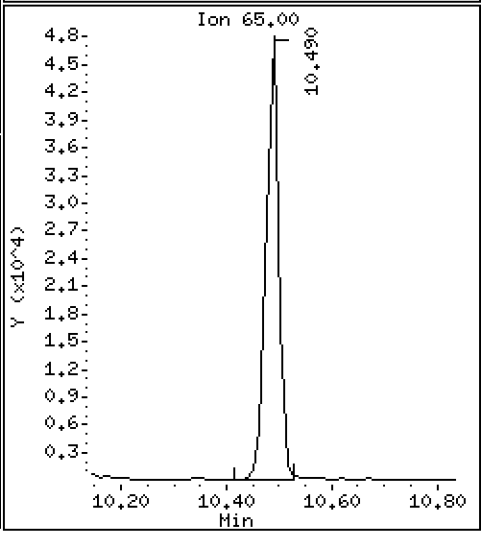


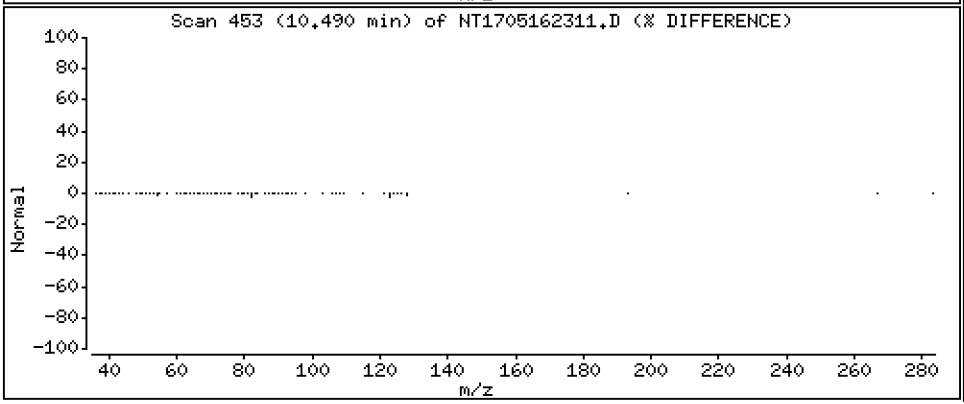












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

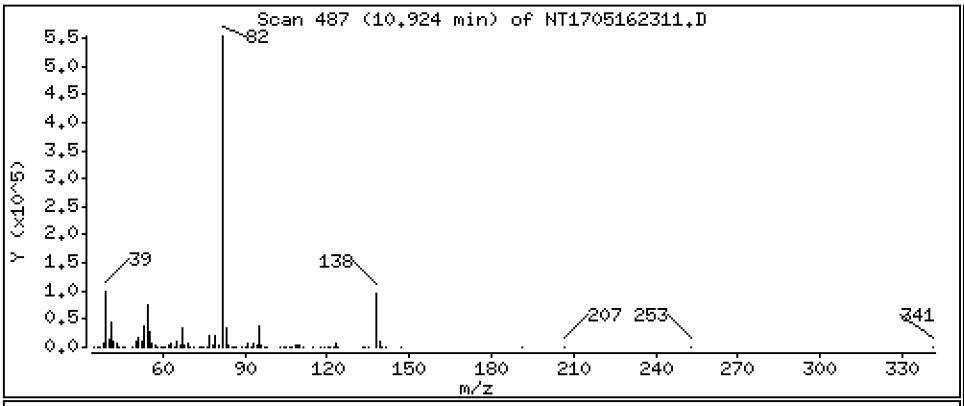
Operator: JGR

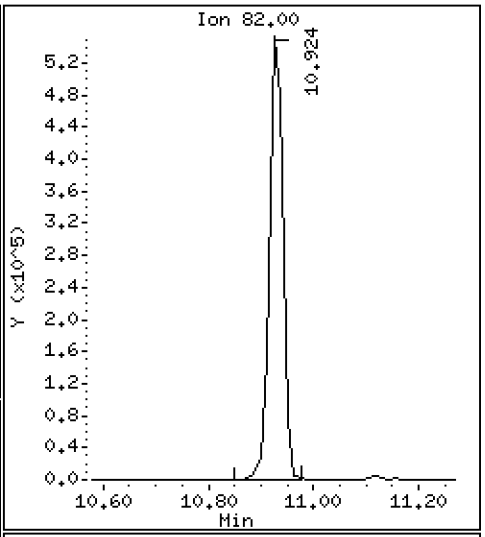
Column phase: ZB-5msi

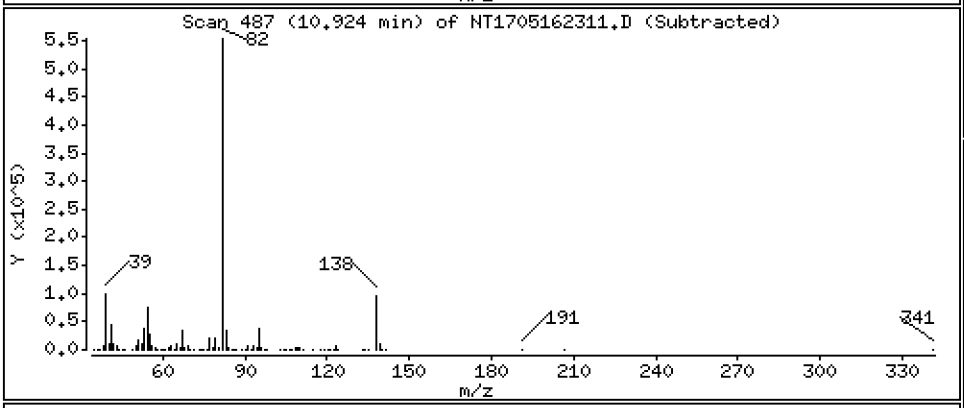
Column diameter: 0.25

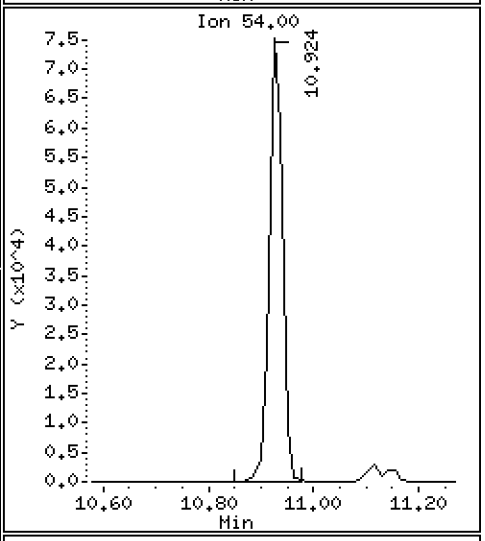
20 Isophorone

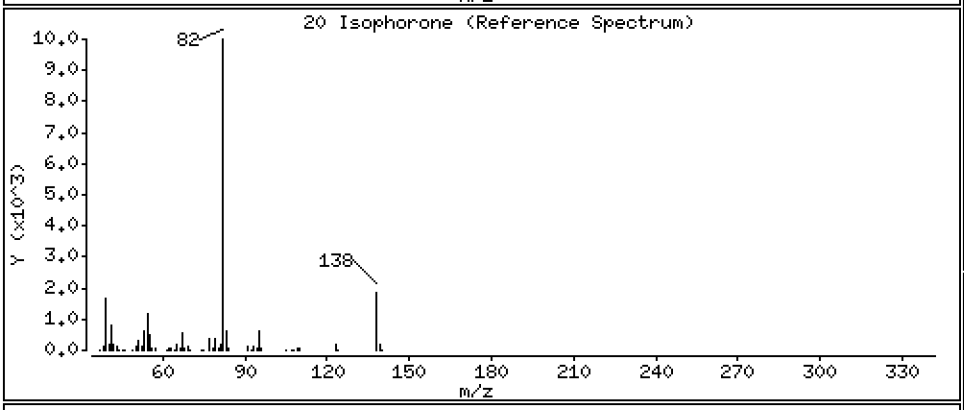
Concentration: 6.943 ug/mL

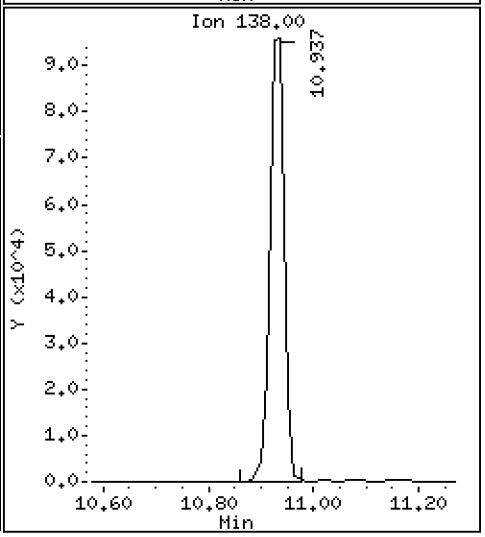


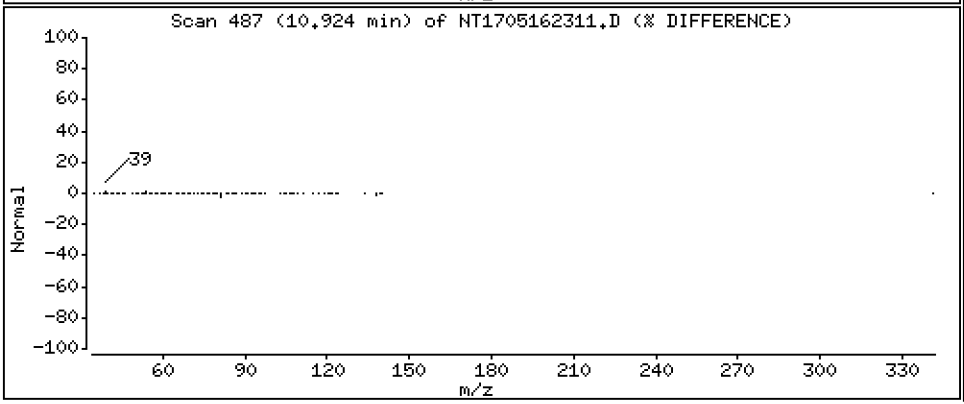












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

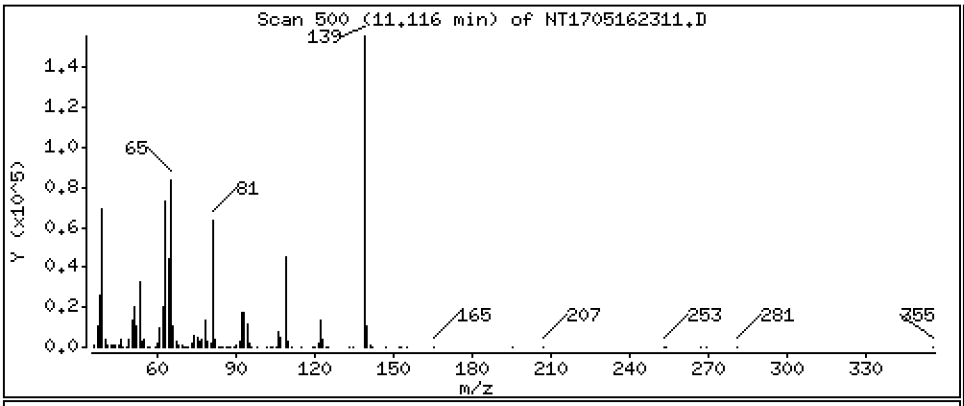
Operator: JGR

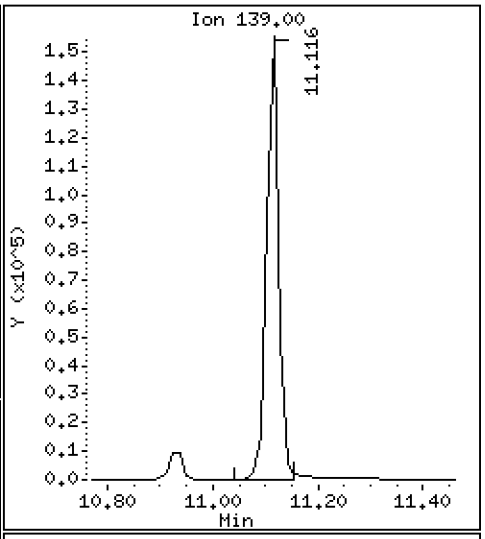
Column phase: ZB-5msi

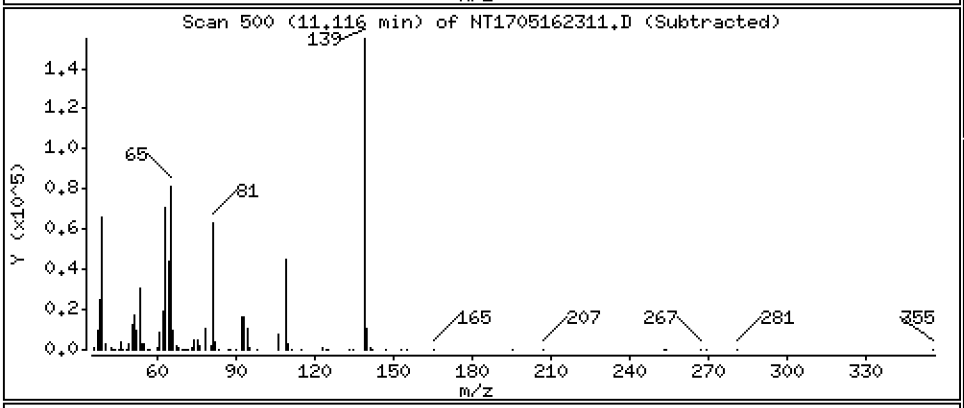
Column diameter: 0.25

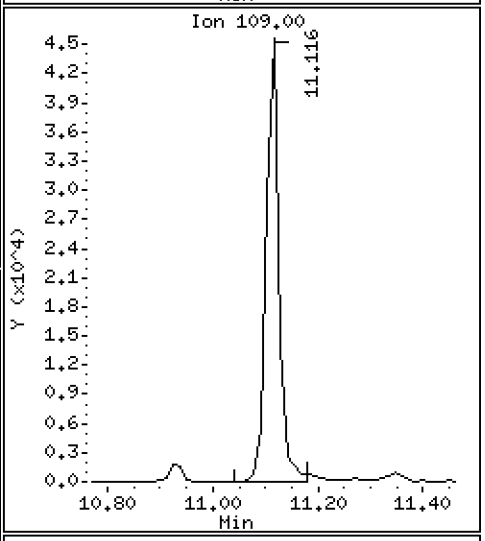
21 2-Nitrophenol

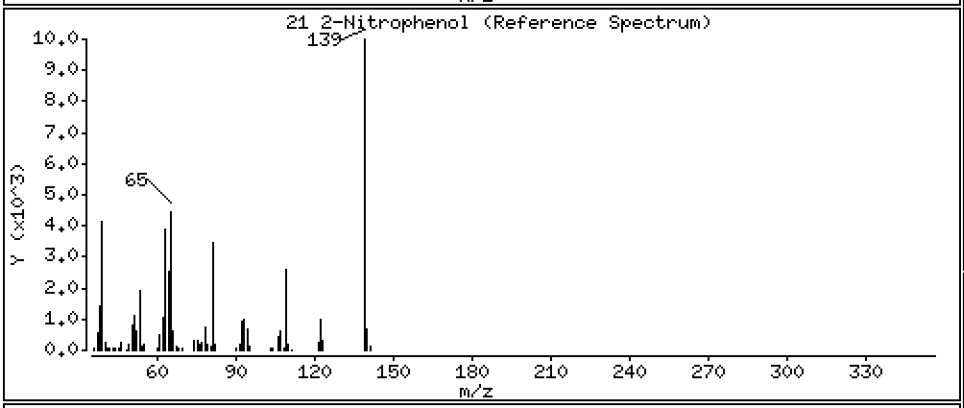
Concentration: 4.899 ug/mL

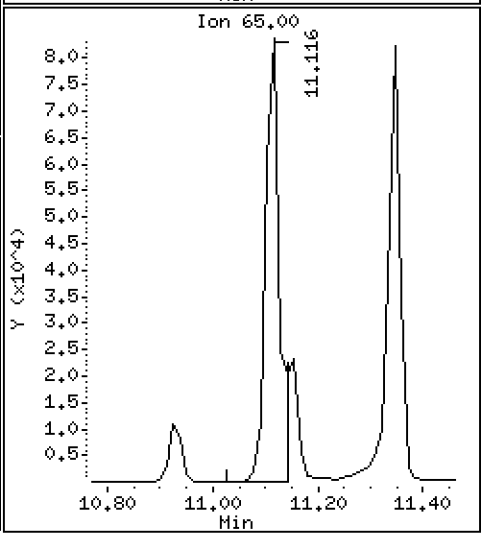


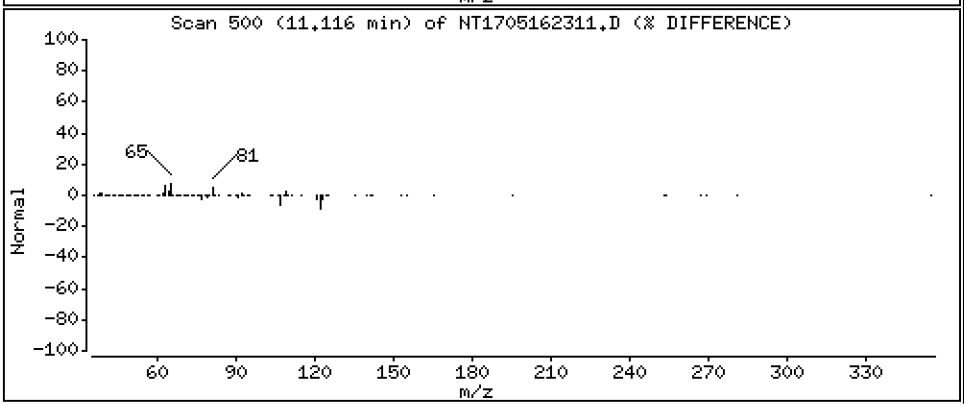












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

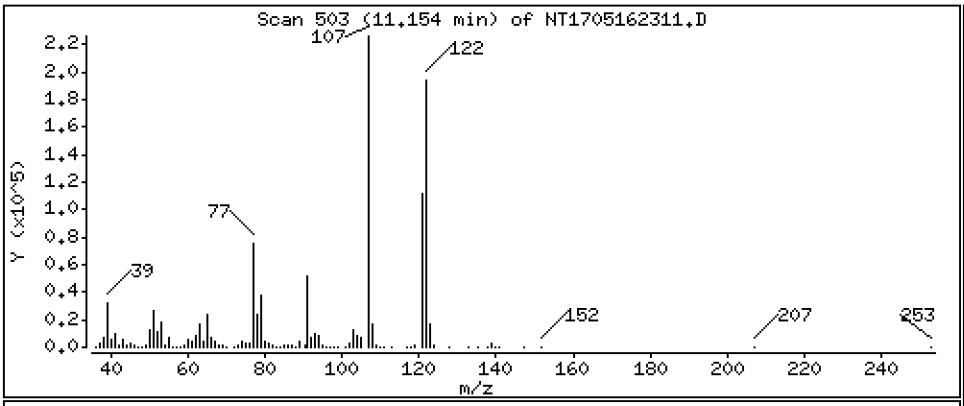
Operator: JGR

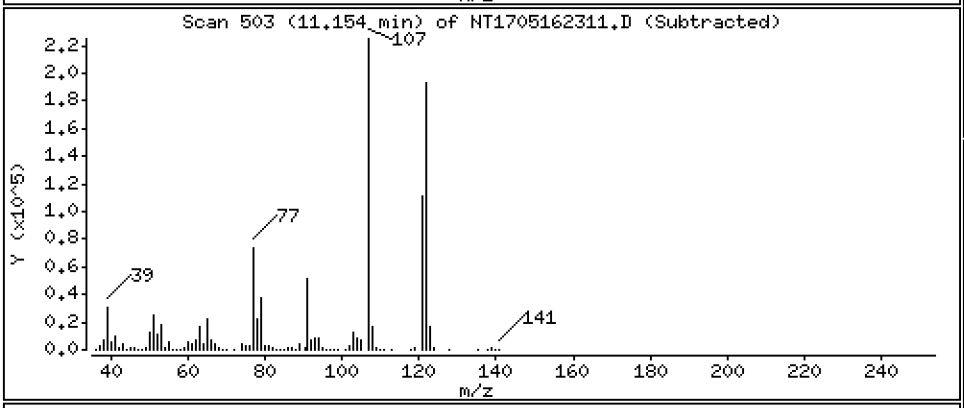
Column phase: ZB-5msi

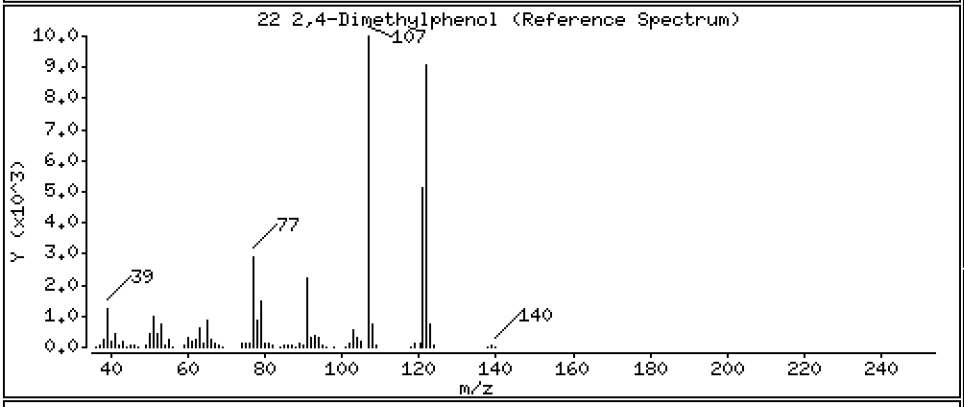
Column diameter: 0.25

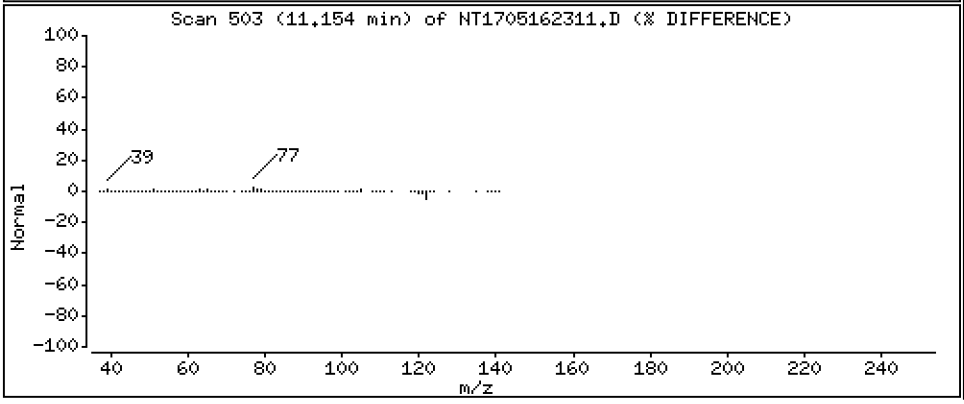
22 2,4-Dimethylphenol

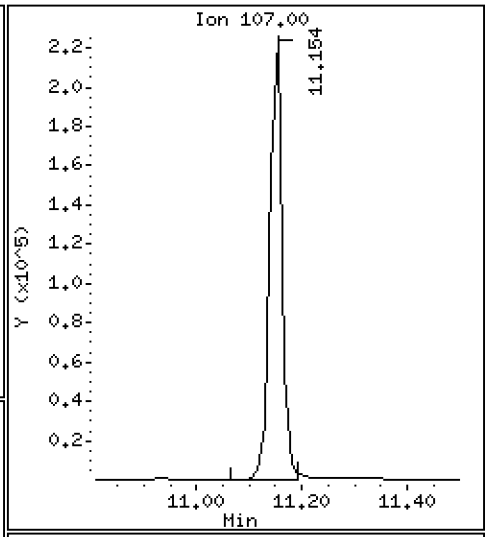
Concentration: 3.788 ug/mL

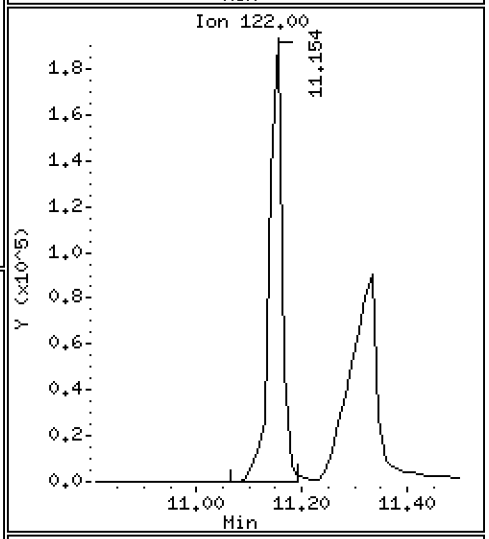


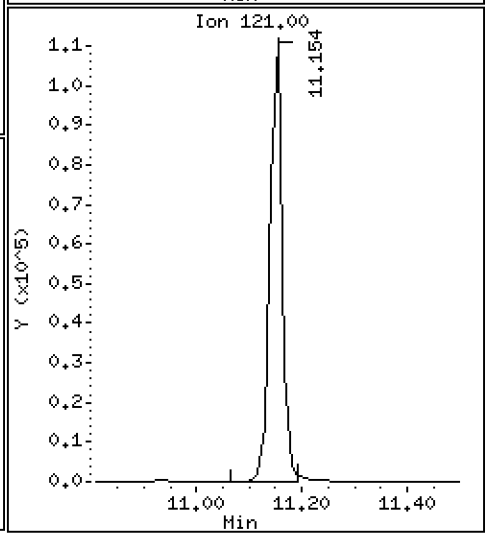












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

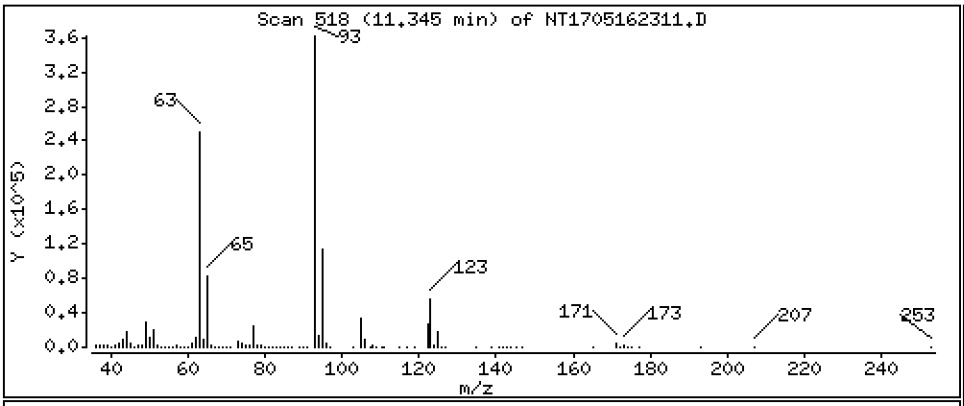
Operator: JGR

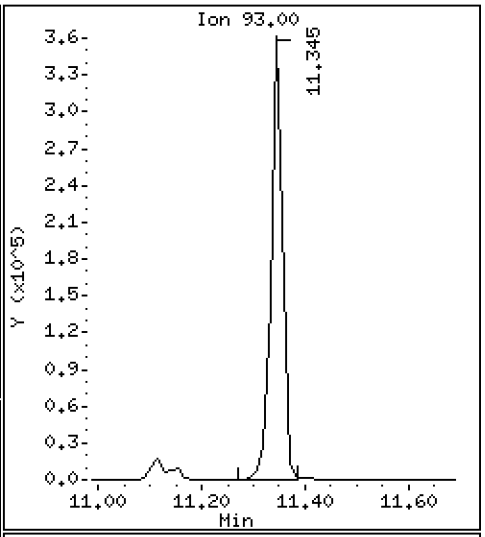
Column phase: ZB-5msi

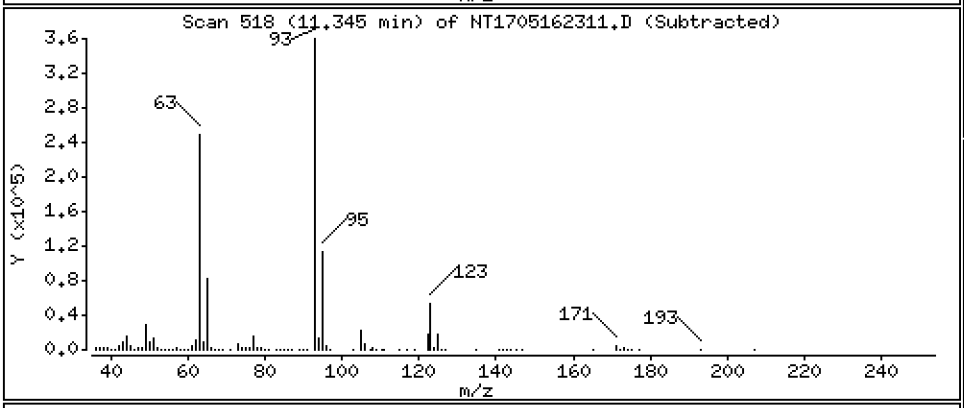
Column diameter: 0.25

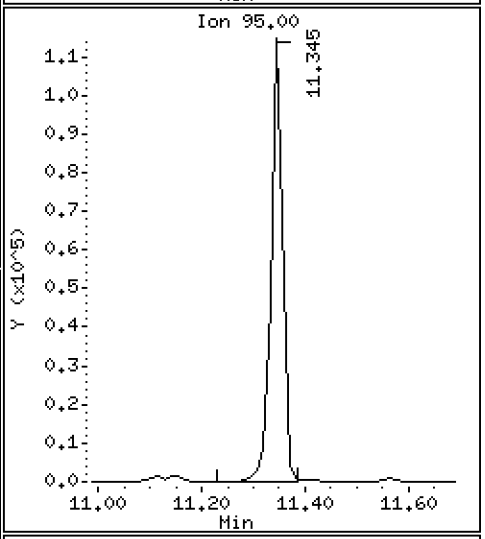
23 Bis(2-Chloroethoxy)methane

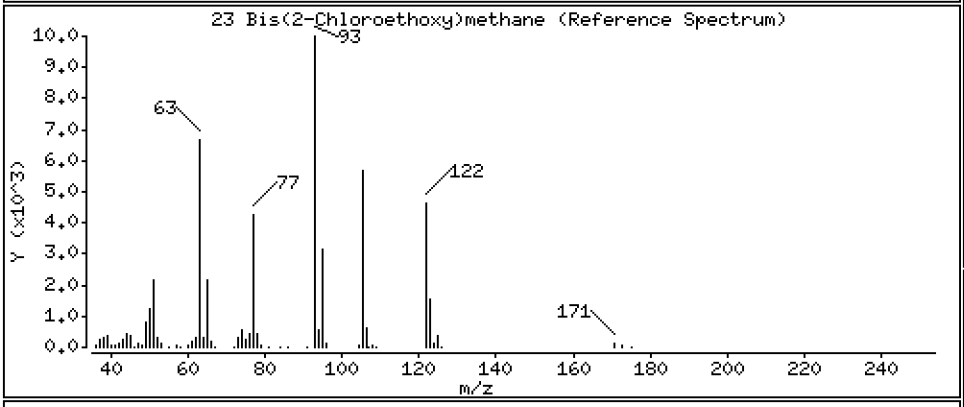
Concentration: 6.232 ug/mL

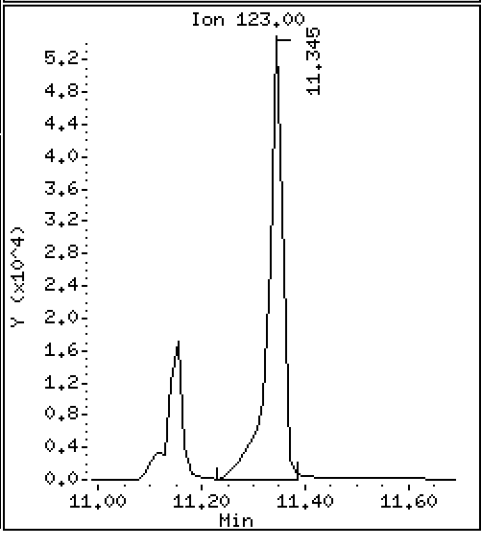


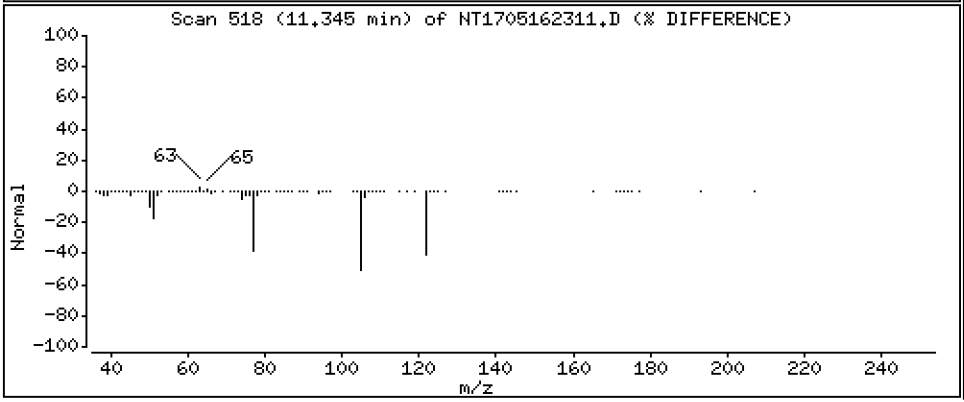












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

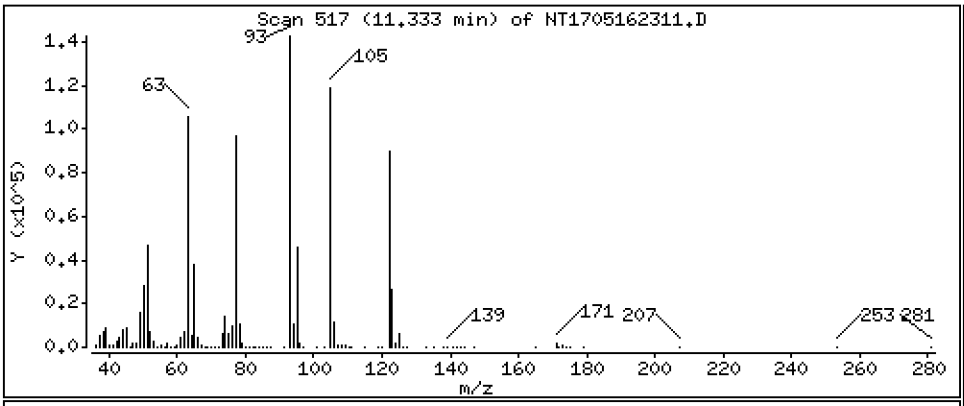
Operator: JGR

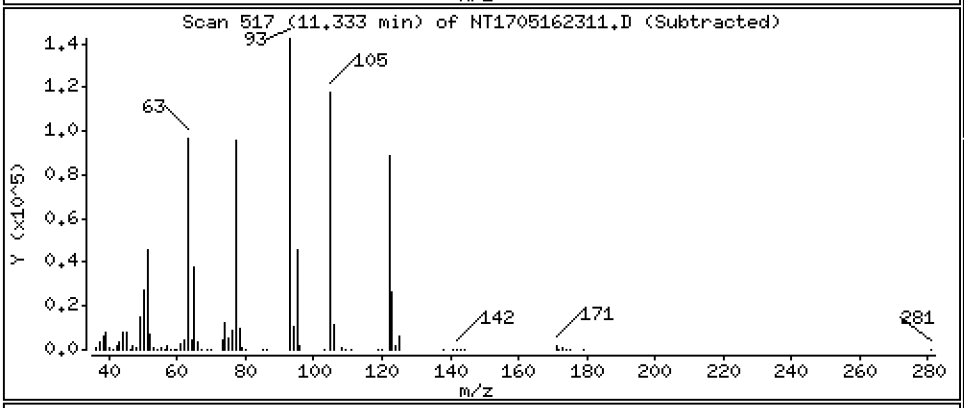
Column phase: ZB-5msi

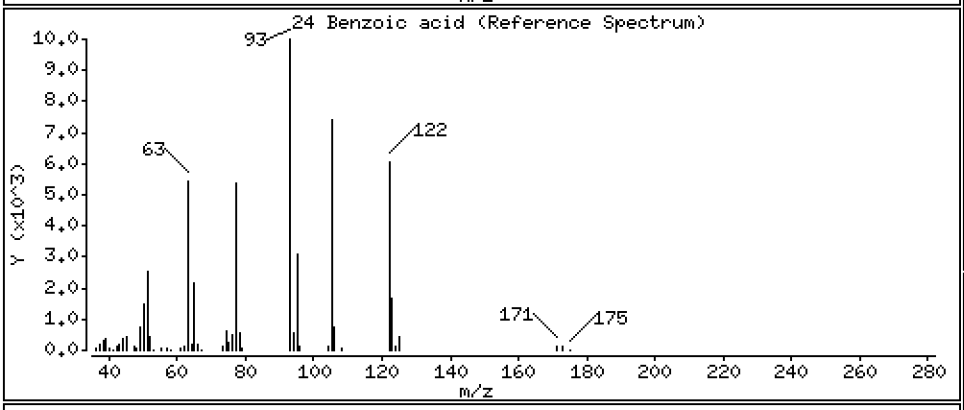
Column diameter: 0.25

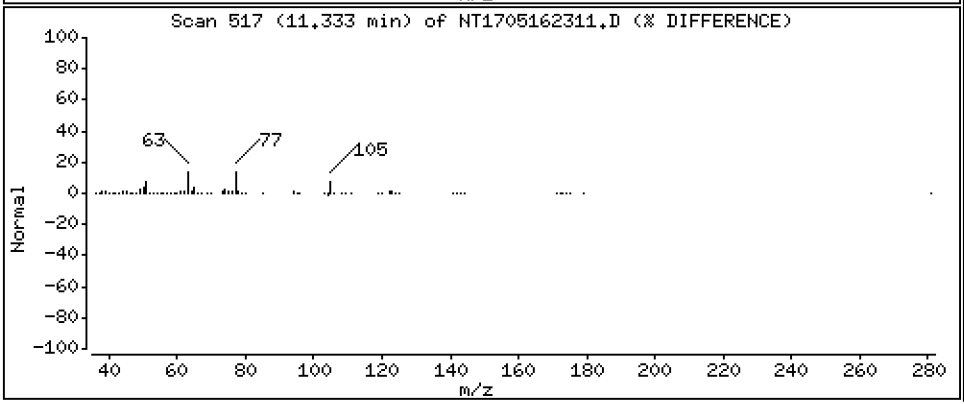
24 Benzoic acid

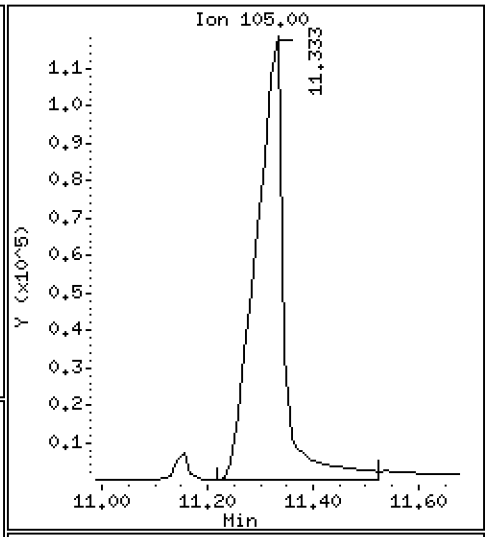
Concentration: 6.761 ug/mL

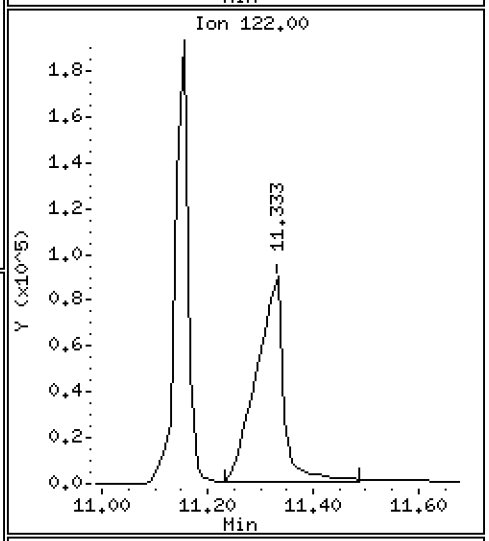


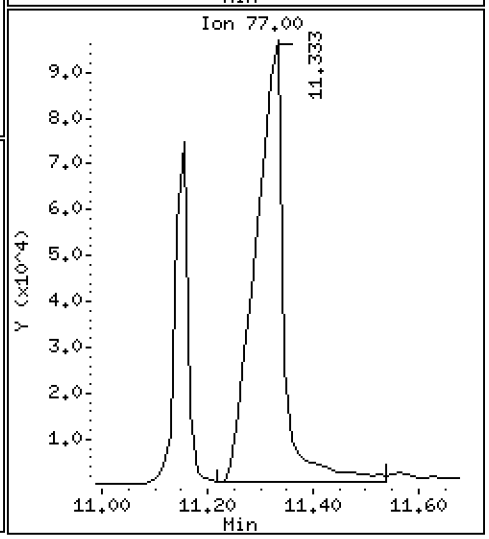












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

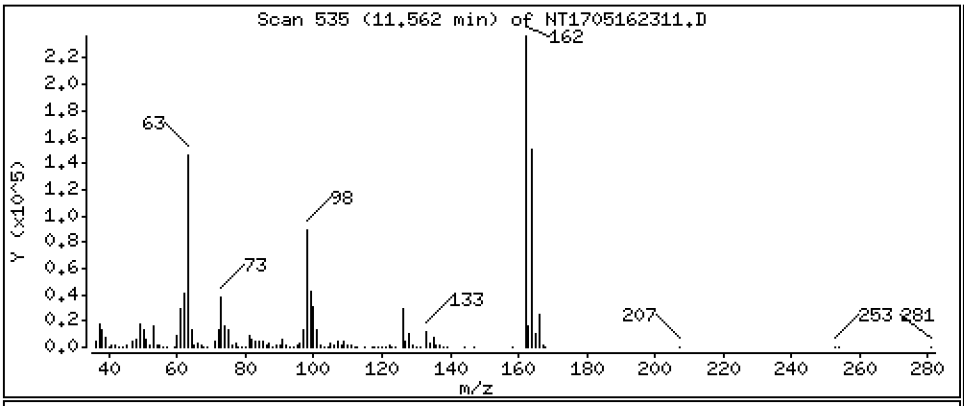
Operator: JGR

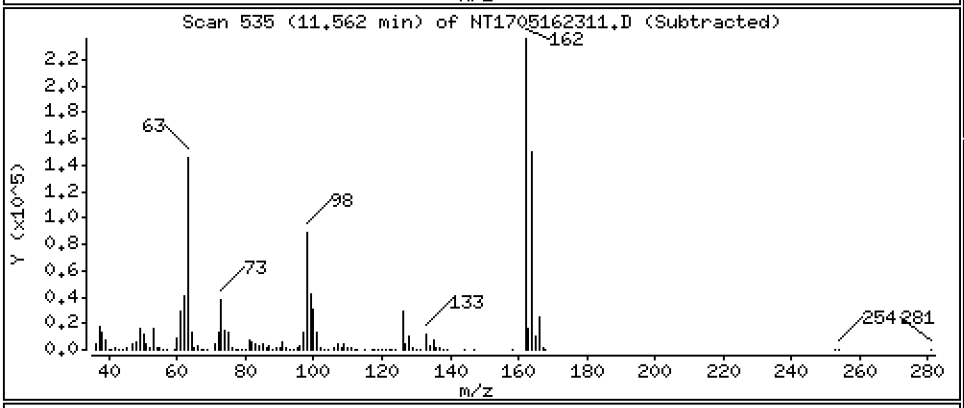
Column phase: ZB-5msi

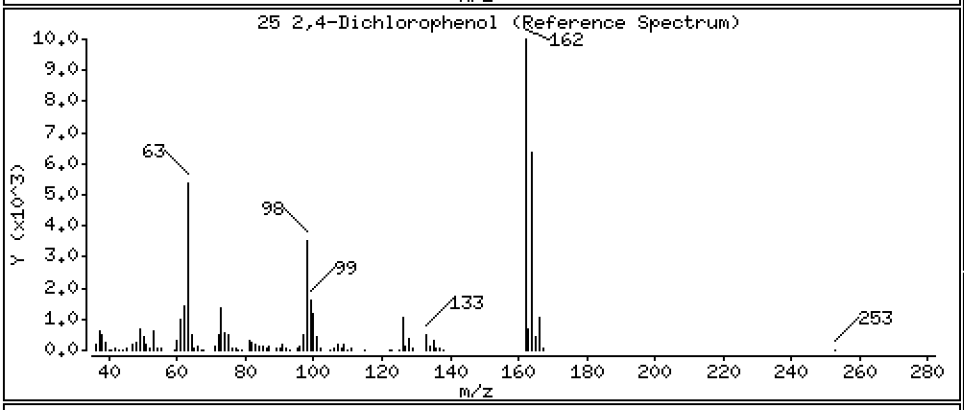
Column diameter: 0.25

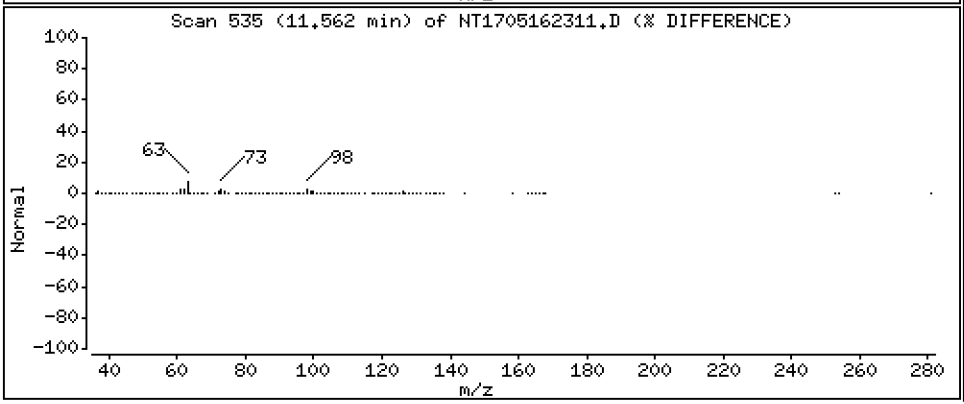
25 2,4-Dichlorophenol

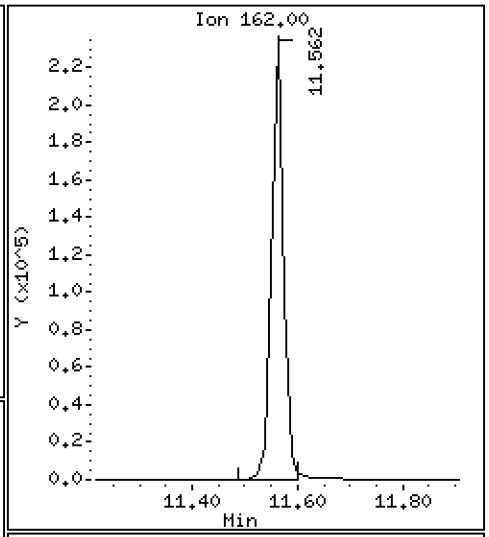
Concentration: 4.707 ug/mL

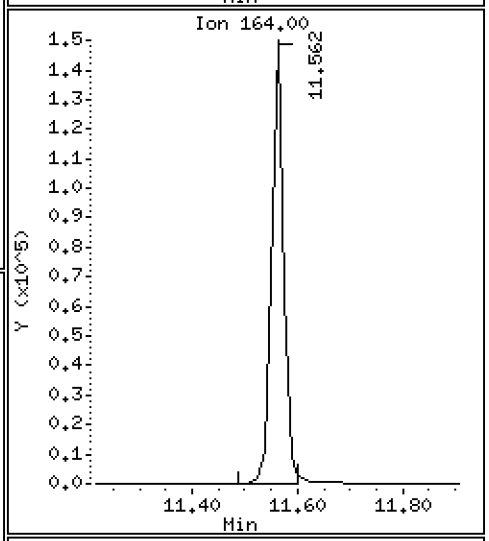


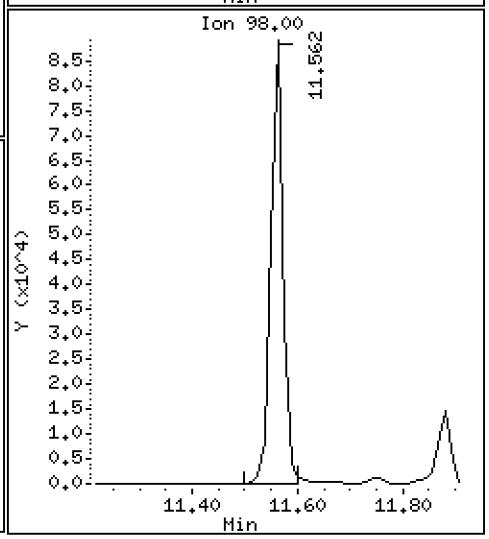












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

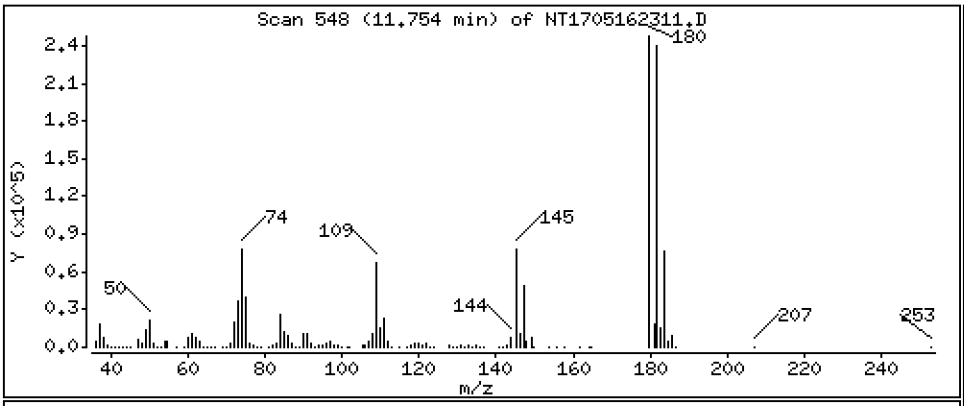
Operator: JGR

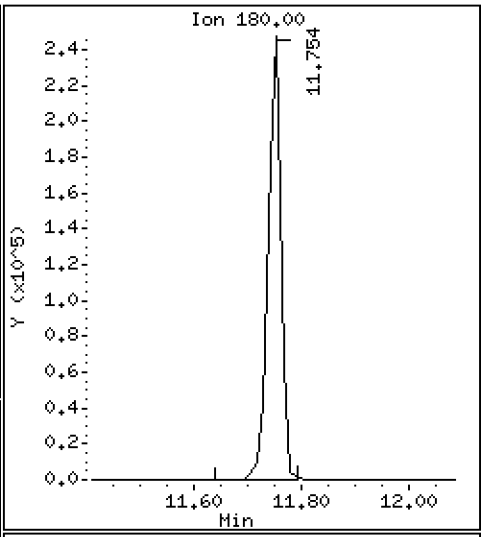
Column phase: ZB-5msi

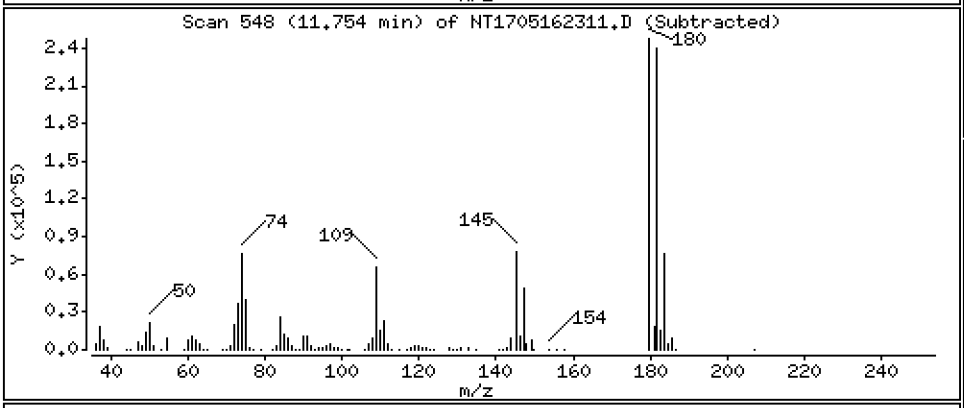
Column diameter: 0.25

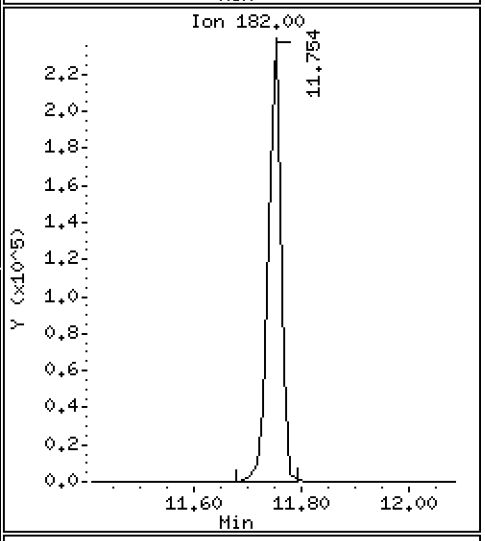
26 1,2,4-Trichlorobenzene

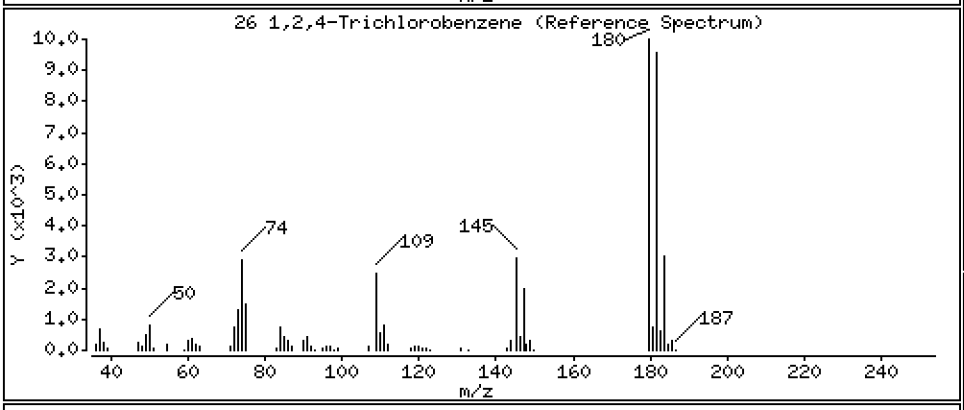
Concentration: 5.879 ug/mL

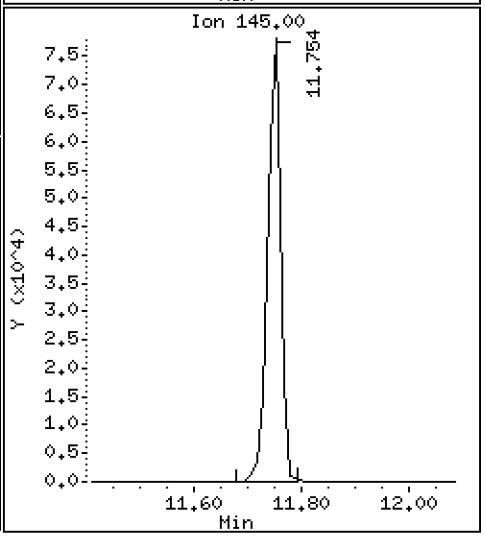


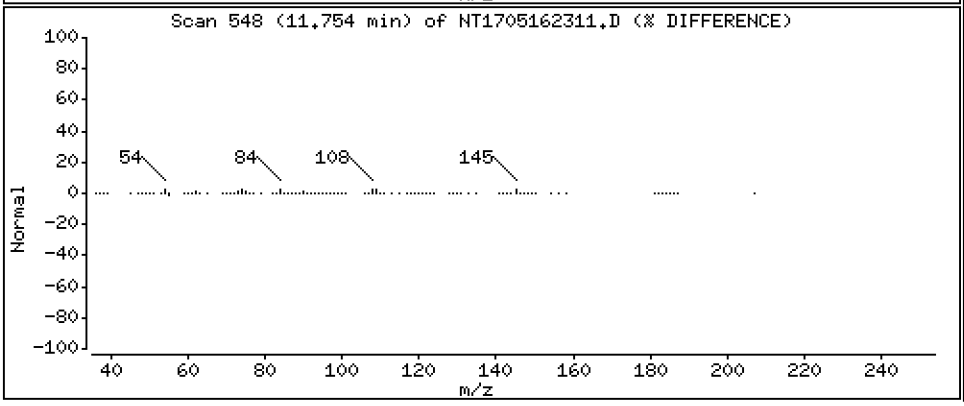












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

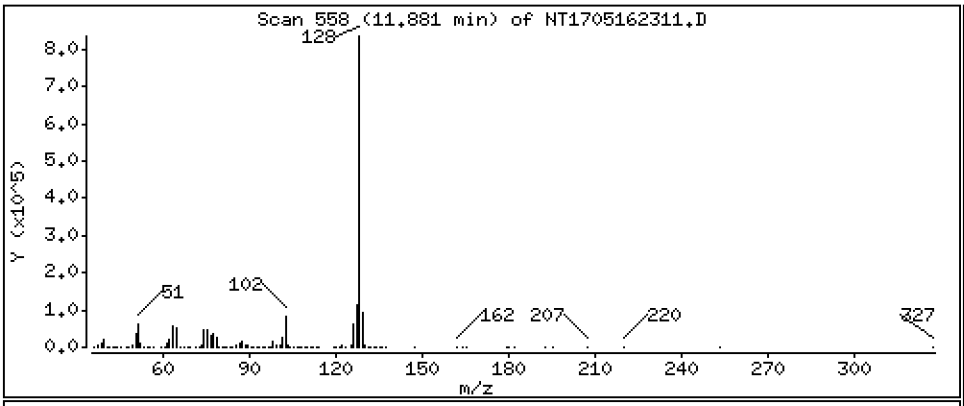
Operator: JGR

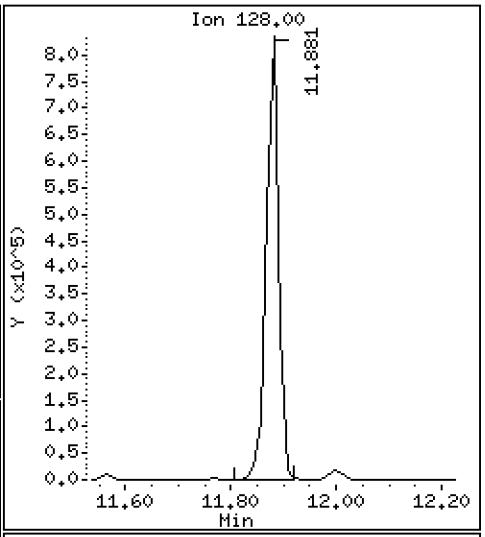
Column phase: ZB-5msi

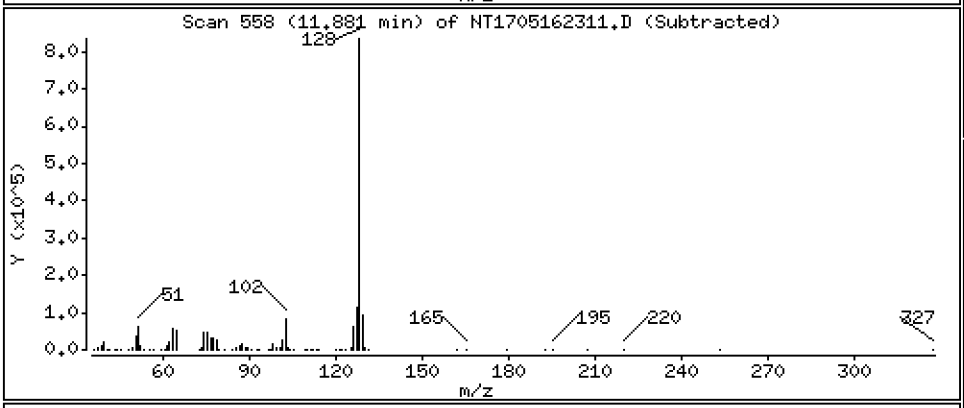
Column diameter: 0.25

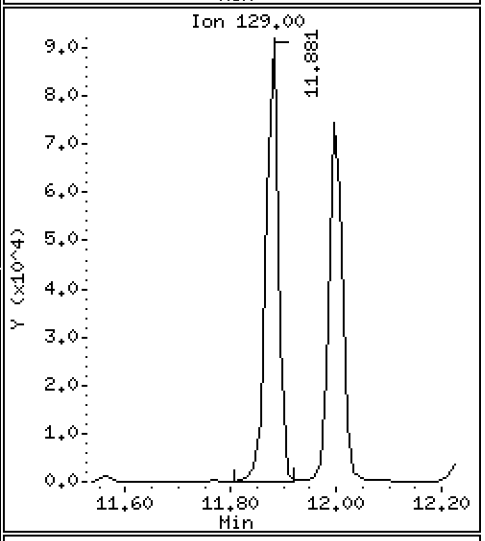
28 Naphthalene

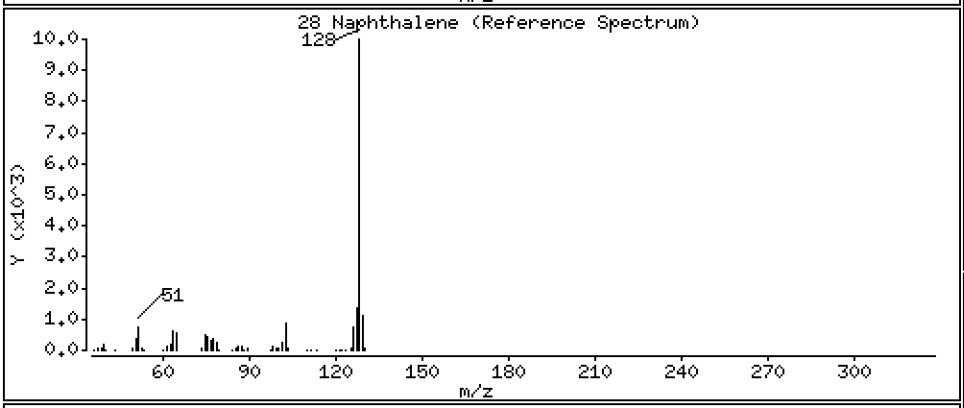
Concentration: 5.129 ug/mL

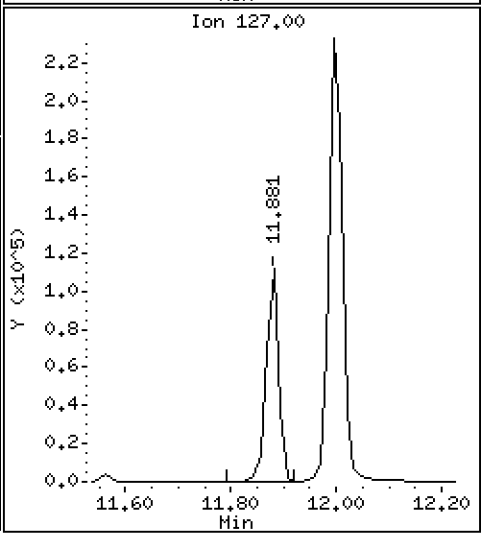


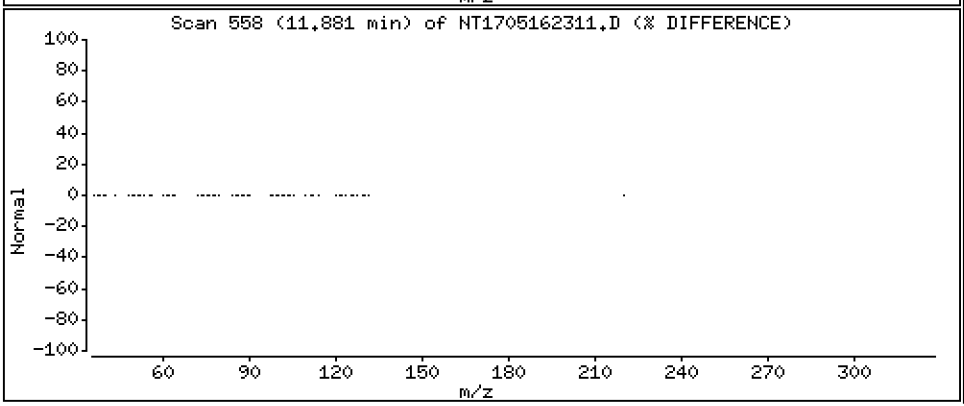












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

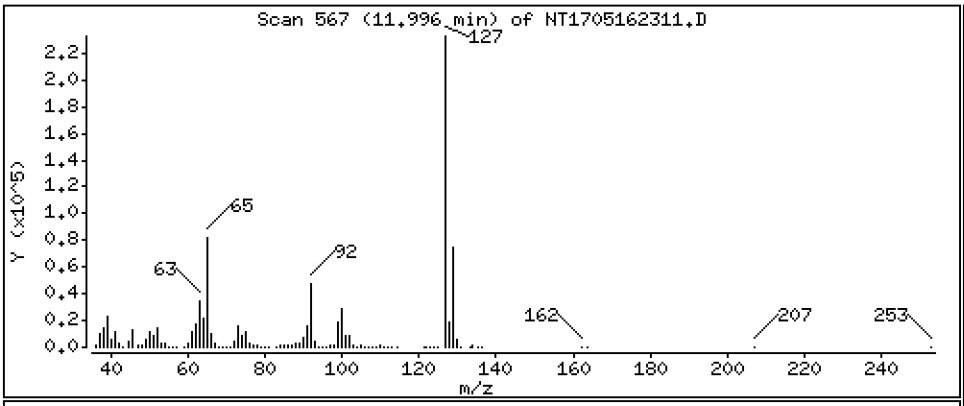
Operator: JGR

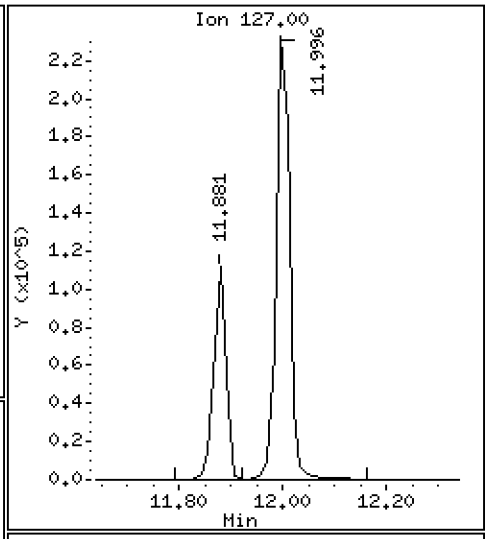
Column phase: ZB-5msi

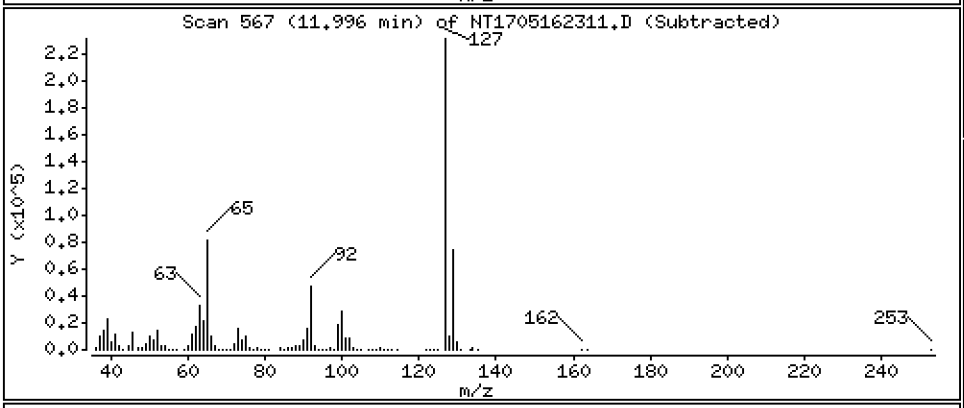
Column diameter: 0.25

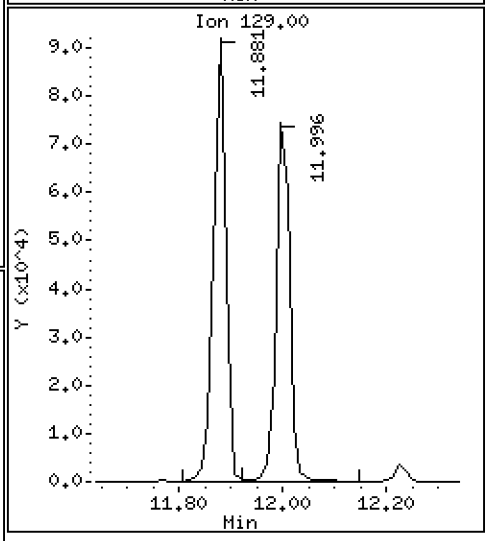
29 4-Chloroaniline

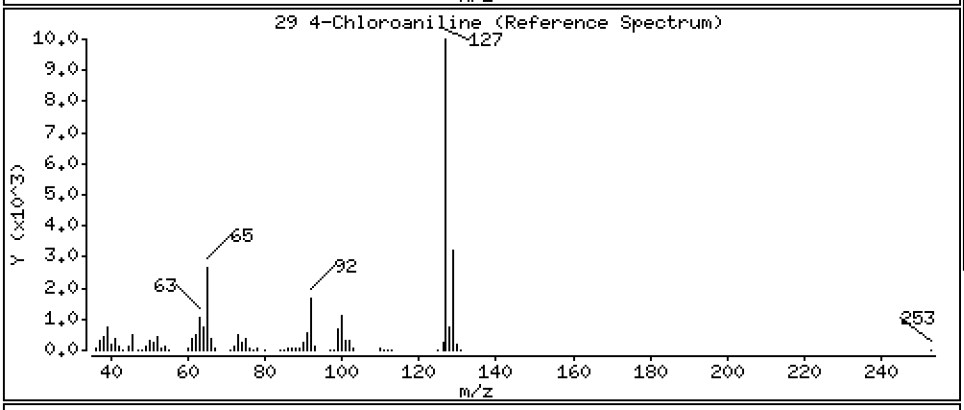
Concentration: 4.488 ug/mL

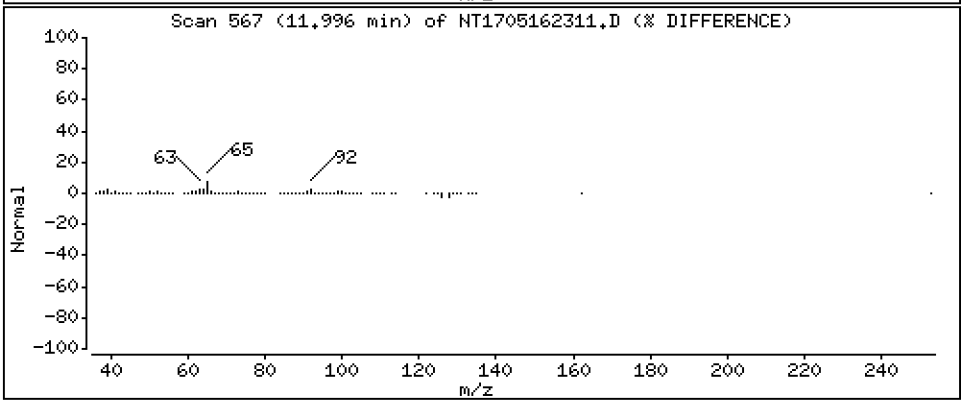












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

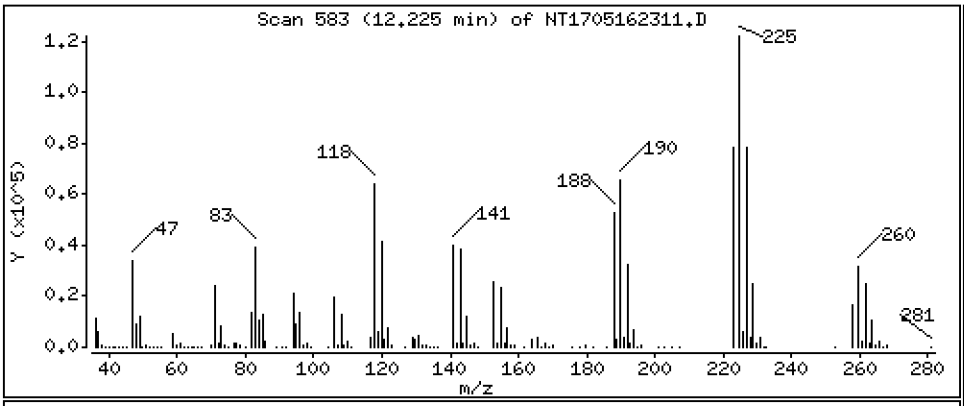
Operator: JGR

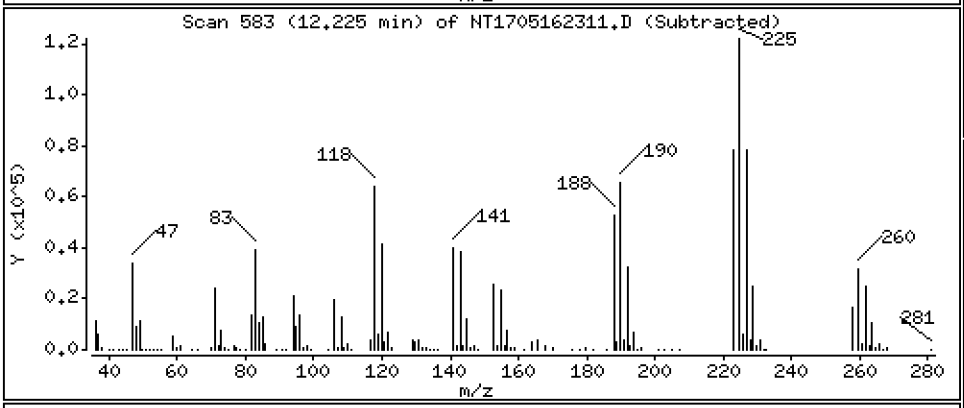
Column phase: ZB-5msi

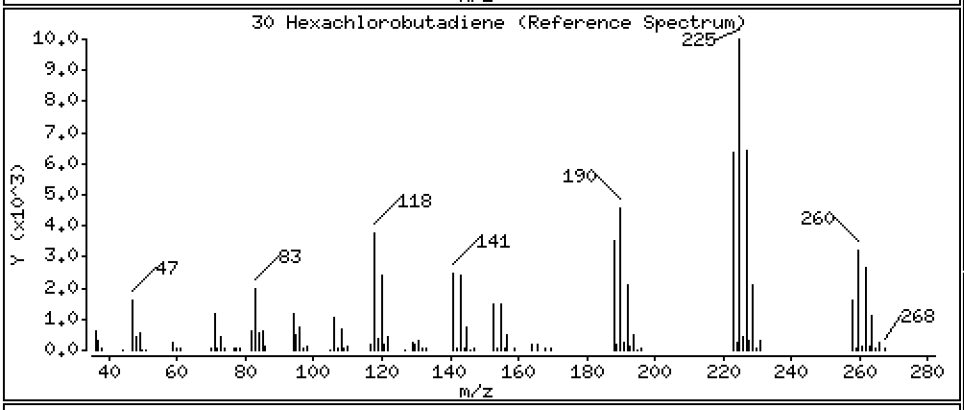
Column diameter: 0.25

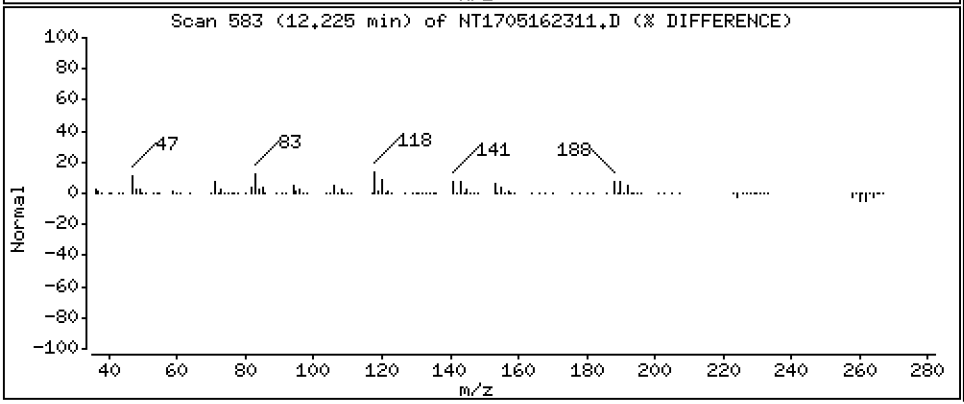
30 Hexachlorobutadiene

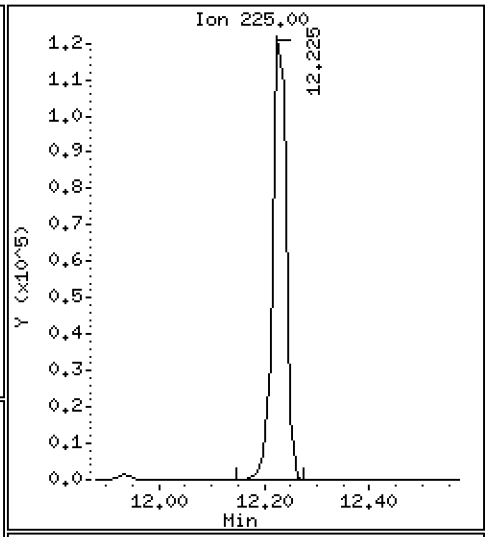
Concentration: 5.241 ug/mL

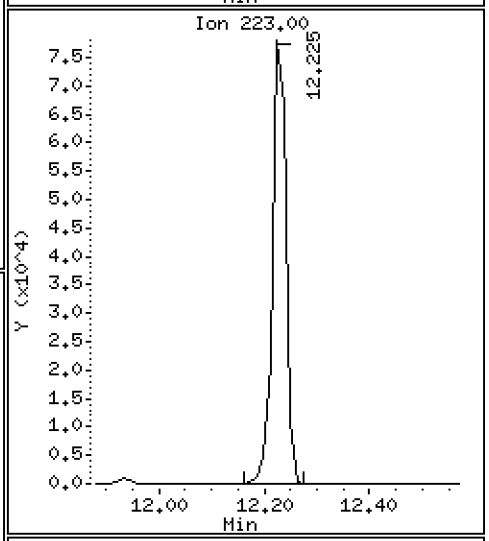


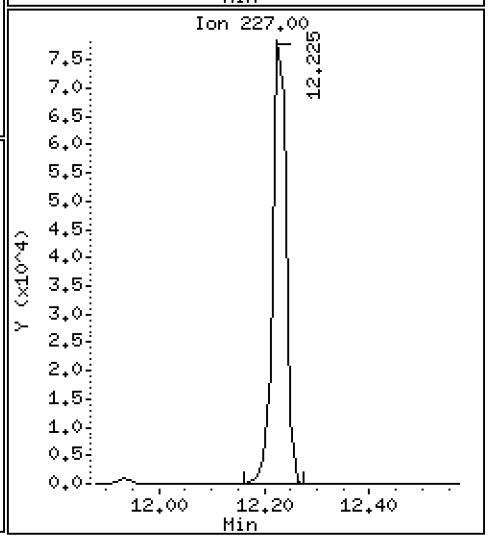












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

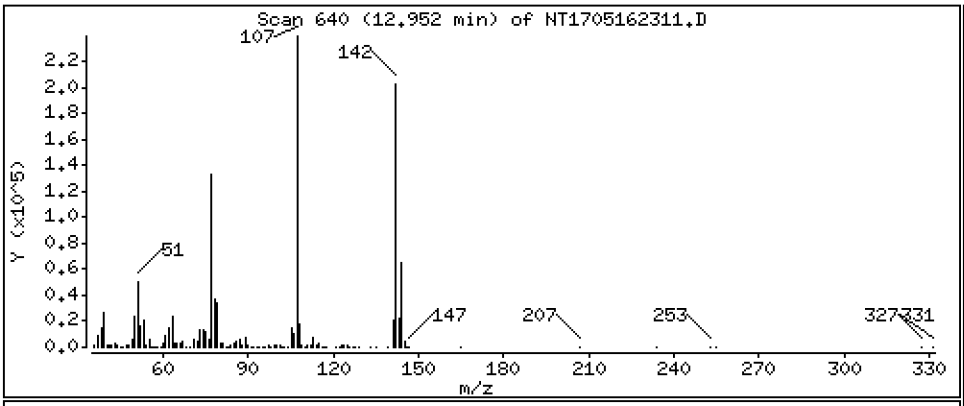
Operator: JGR

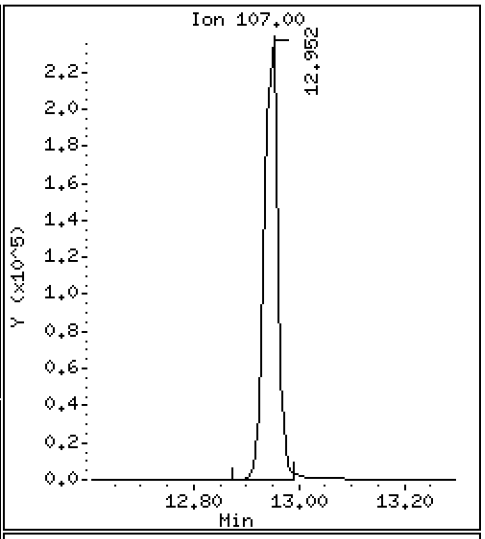
Column phase: ZB-5msi

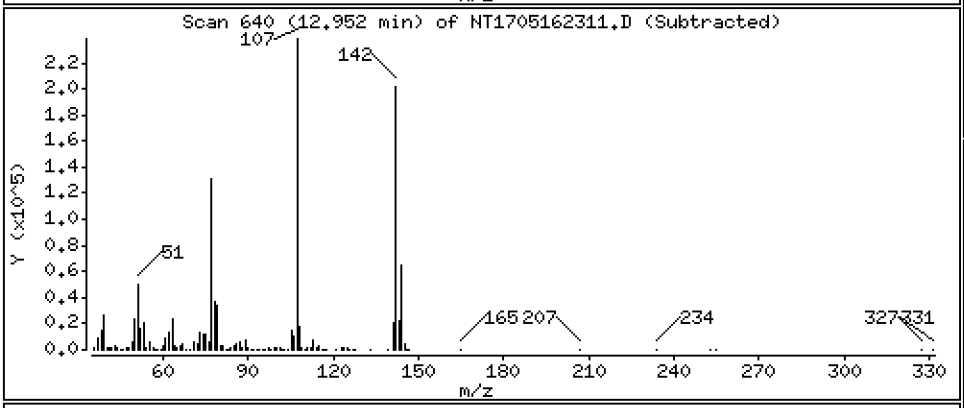
Column diameter: 0.25

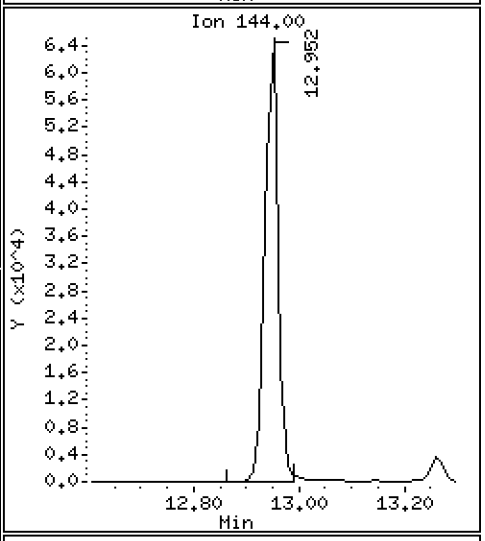
31 4-Chloro-3-methylphenol

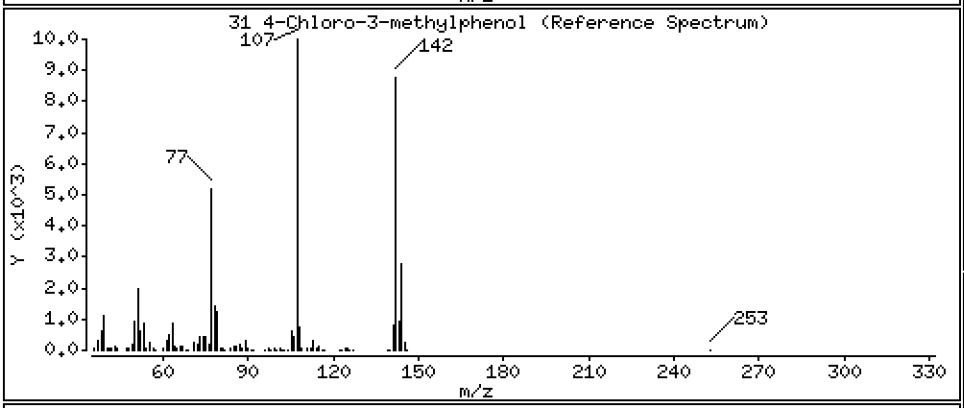
Concentration: 4.878 ug/mL

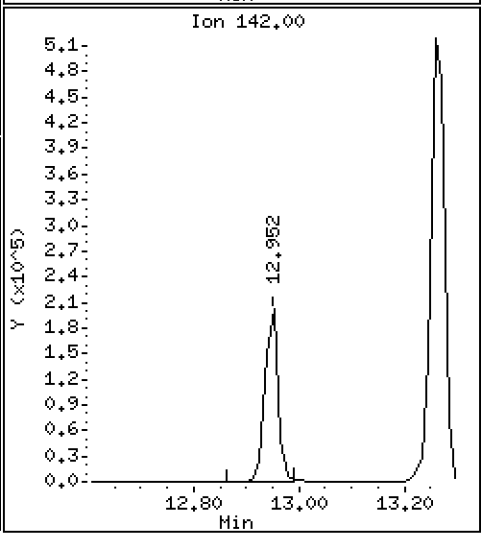


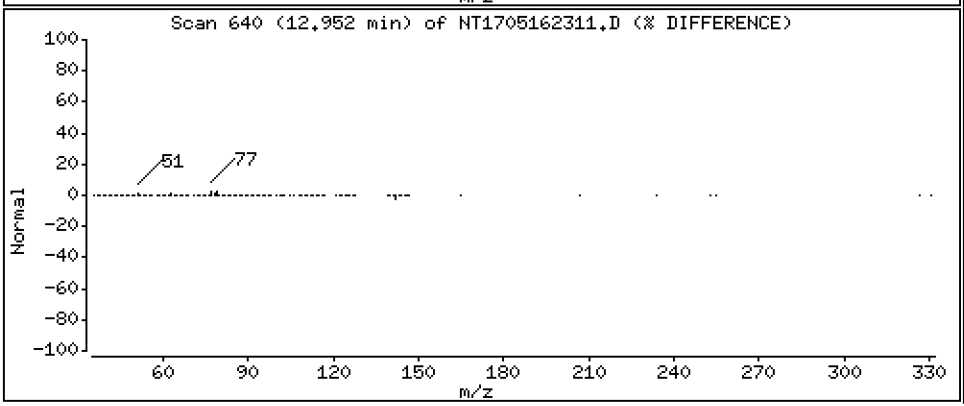












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

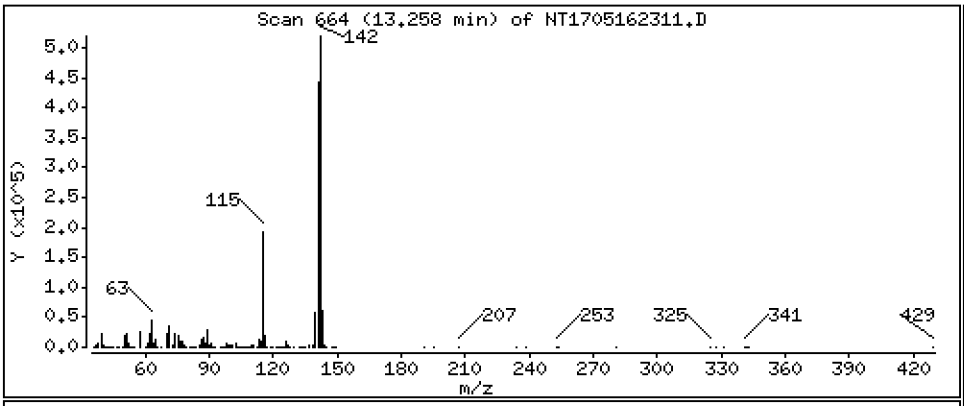
Operator: JGR

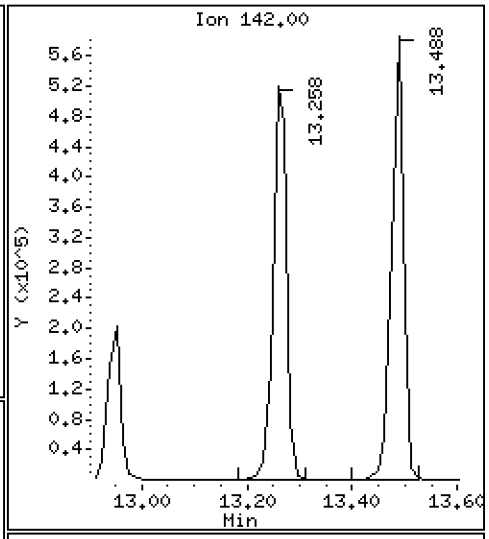
Column phase: ZB-5msi

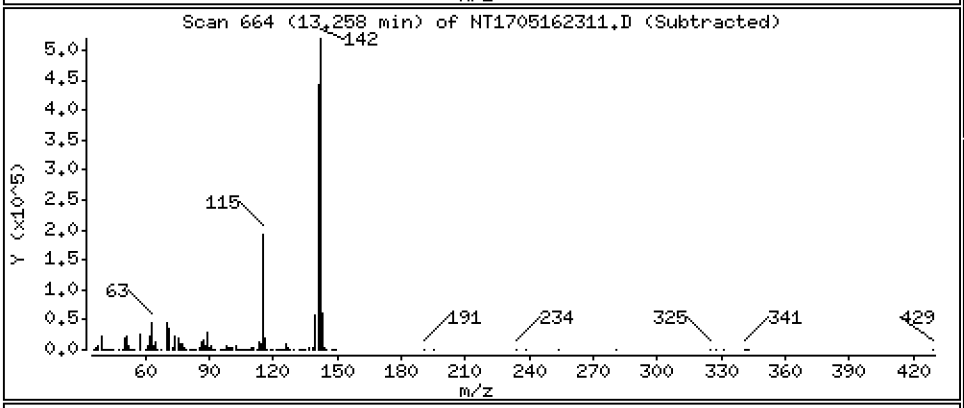
Column diameter: 0.25

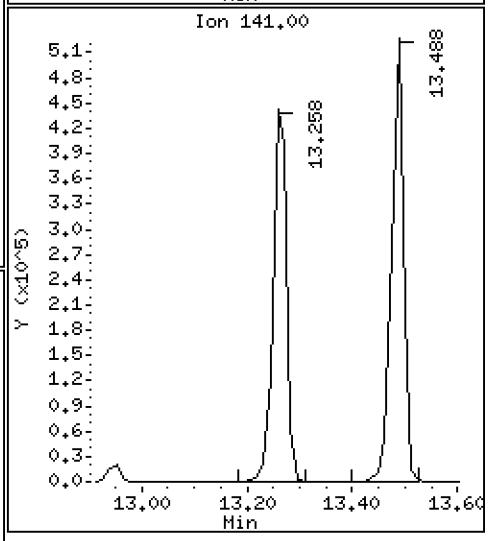
32 2-Methylnaphthalene

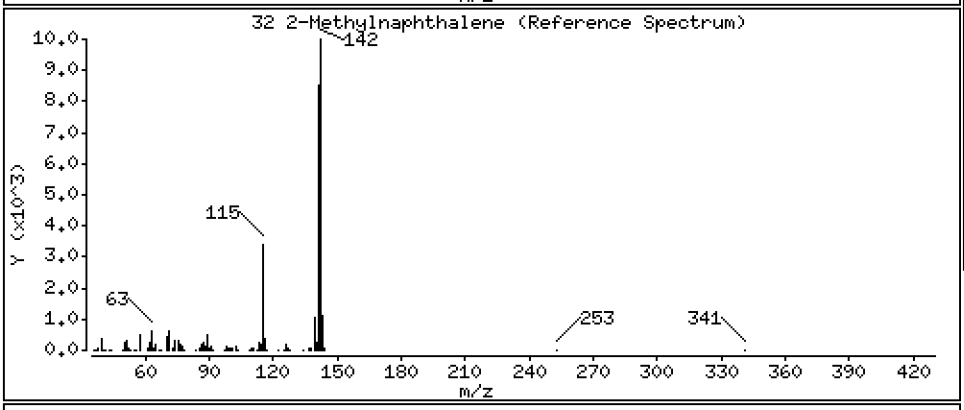
Concentration: 5.028 ug/mL

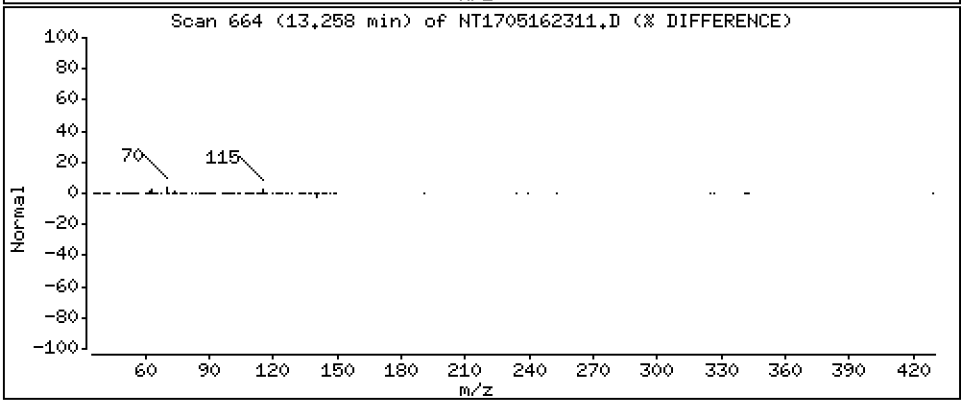












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

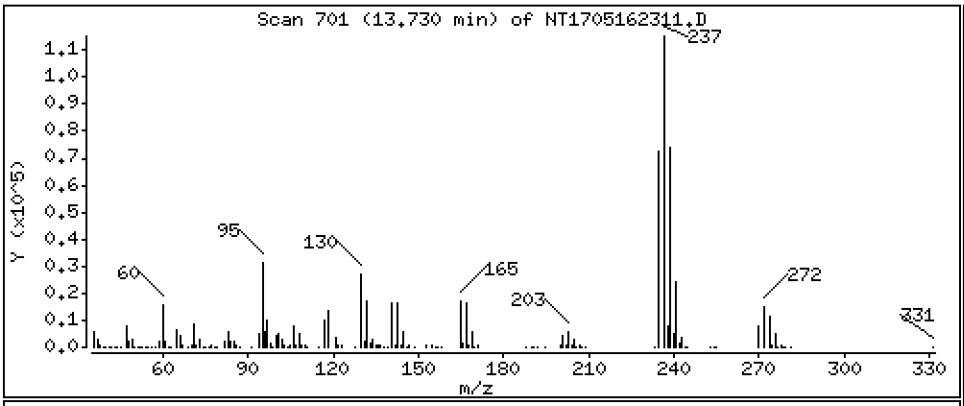
Operator: JGR

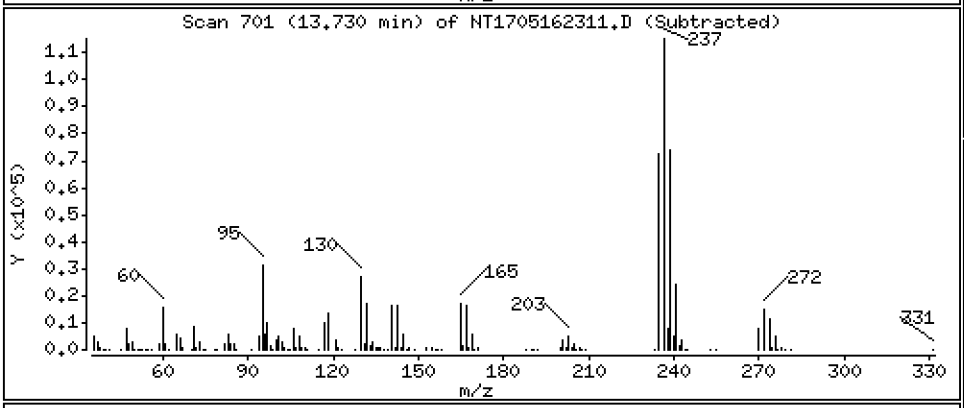
Column phase: ZB-5msi

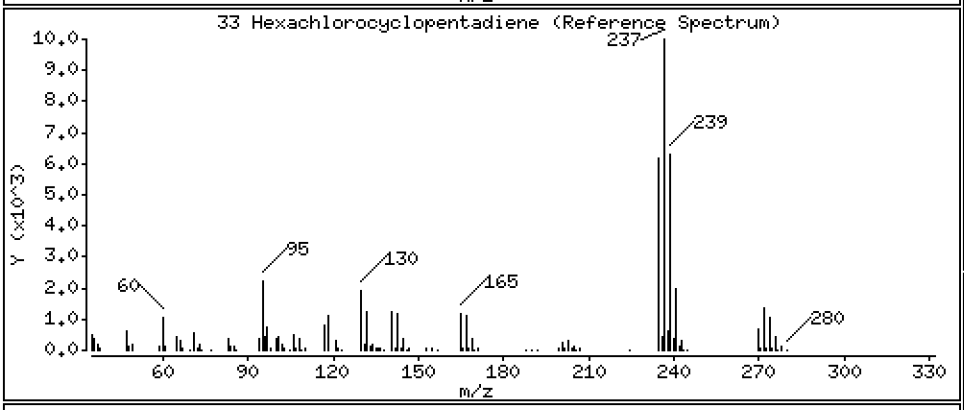
Column diameter: 0.25

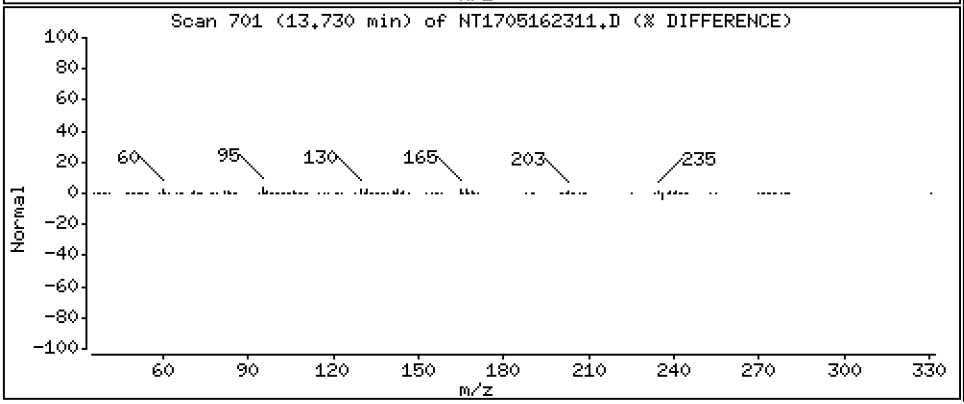
33 Hexachlorocyclopentadiene

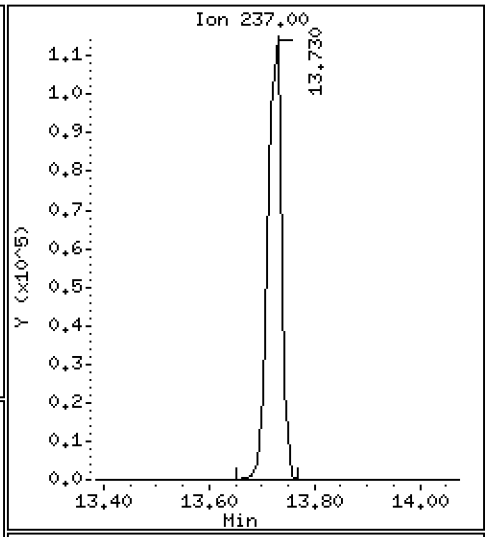
Concentration: 4.219 ug/mL

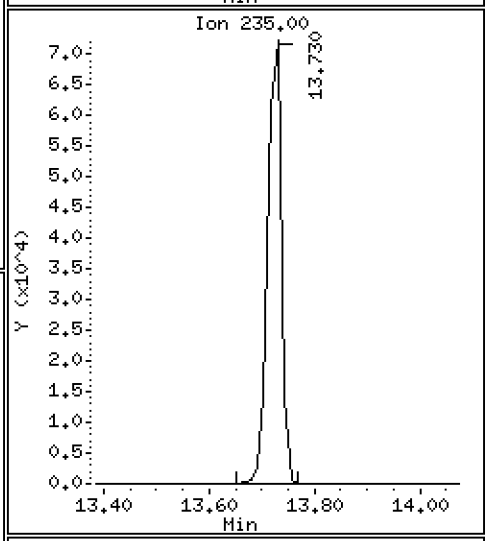


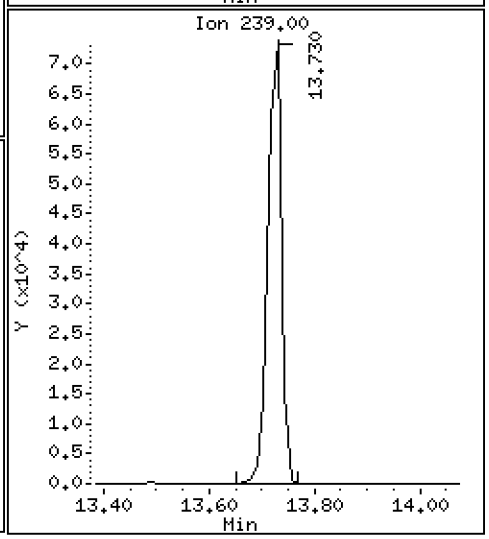












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

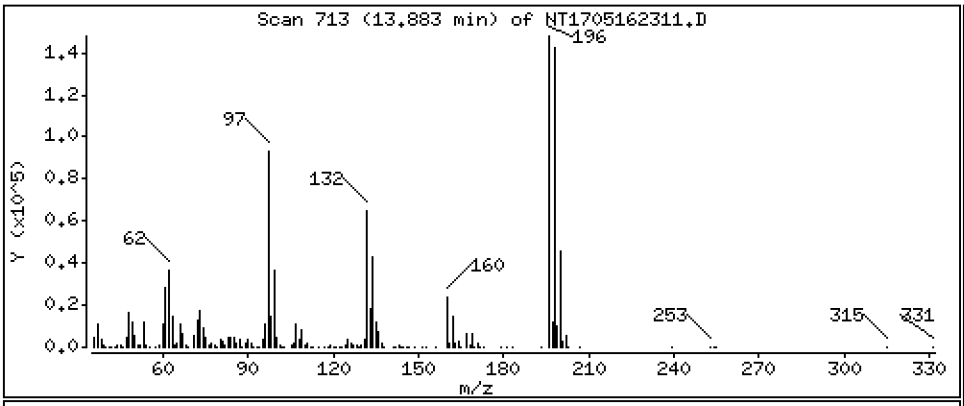
Operator: JGR

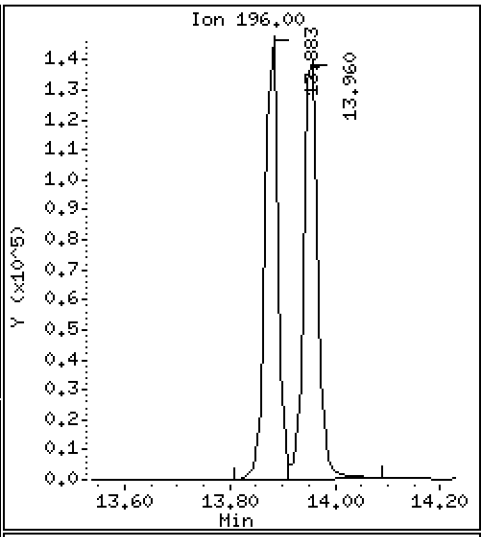
Column phase: ZB-5msi

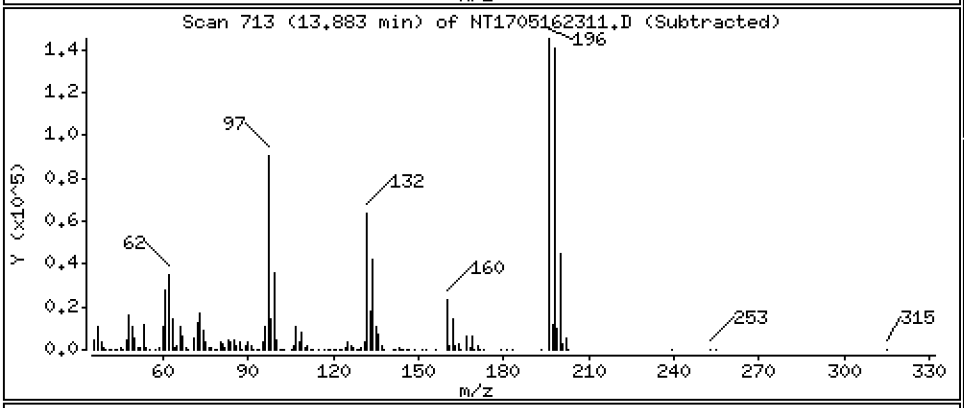
Column diameter: 0.25

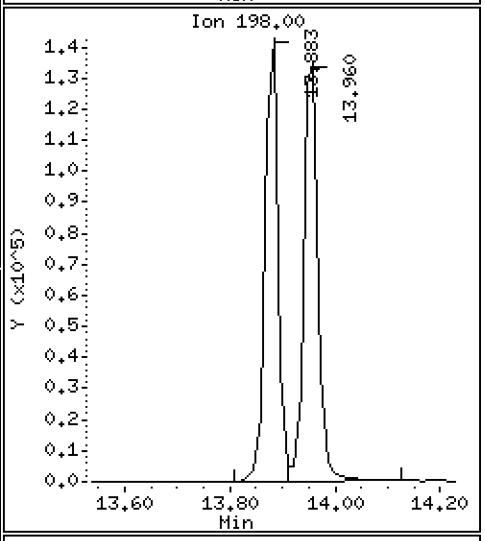
34 2,4,6-Trichlorophenol

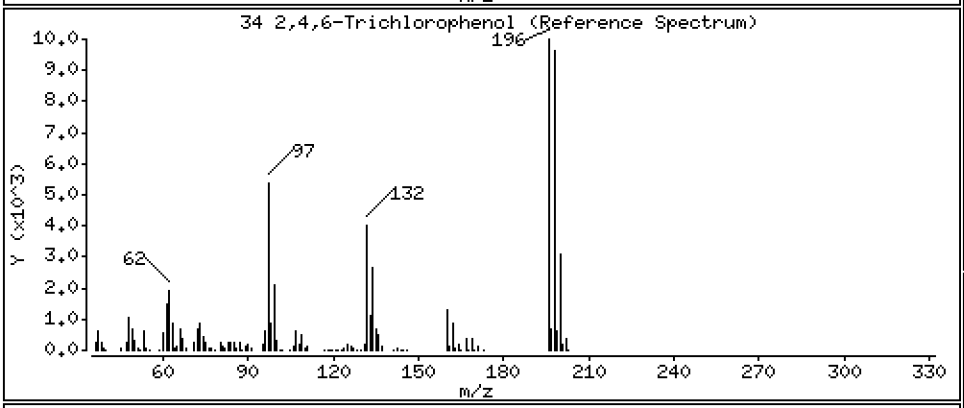
Concentration: 4.794 ug/mL

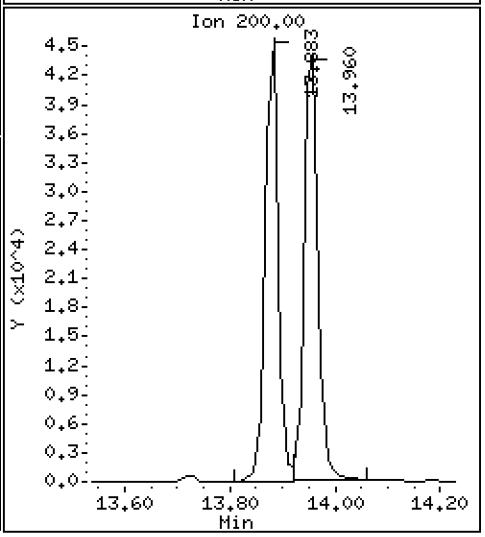


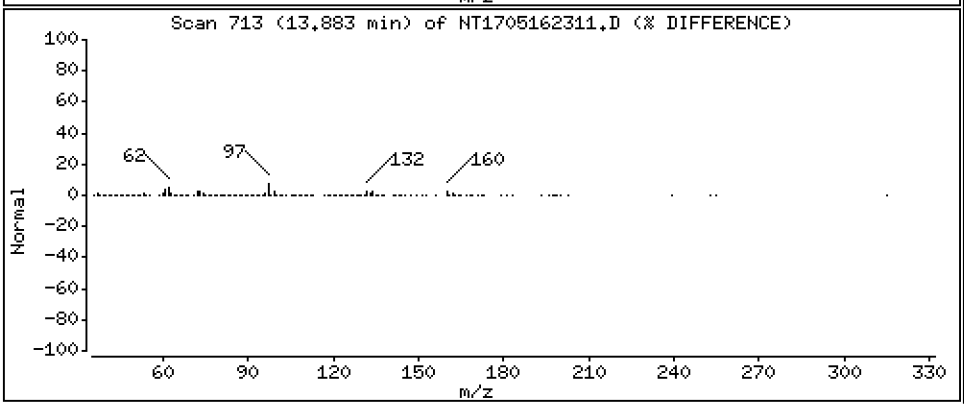












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

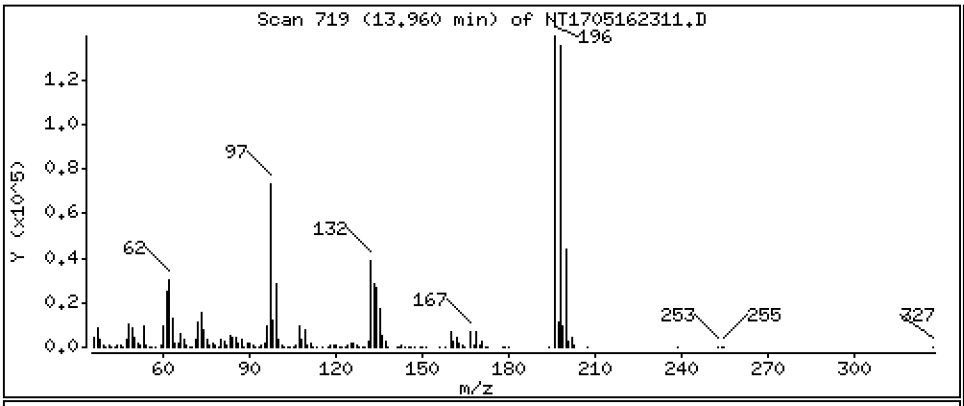
Operator: JGR

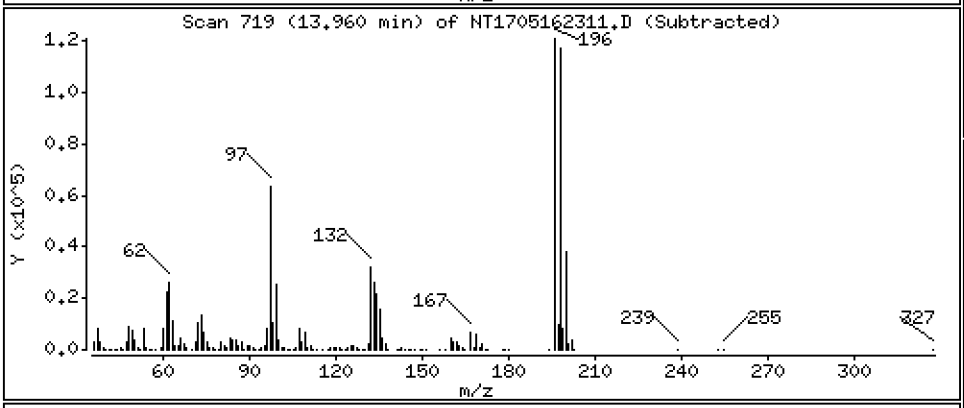
Column phase: ZB-5msi

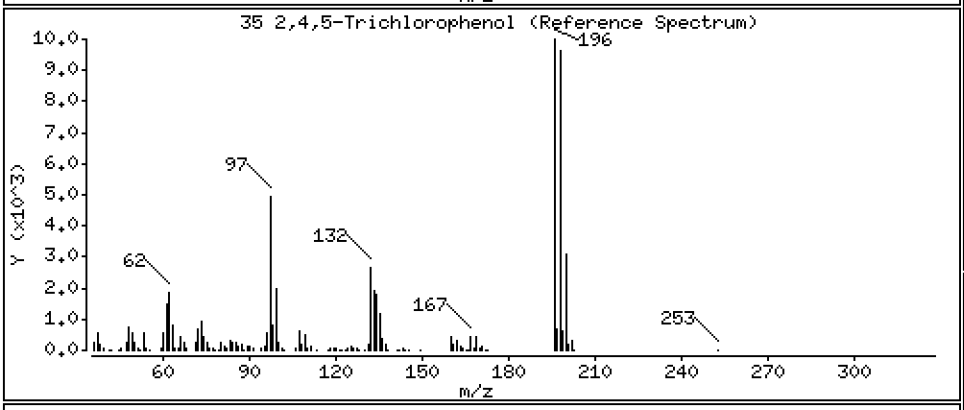
Column diameter: 0.25

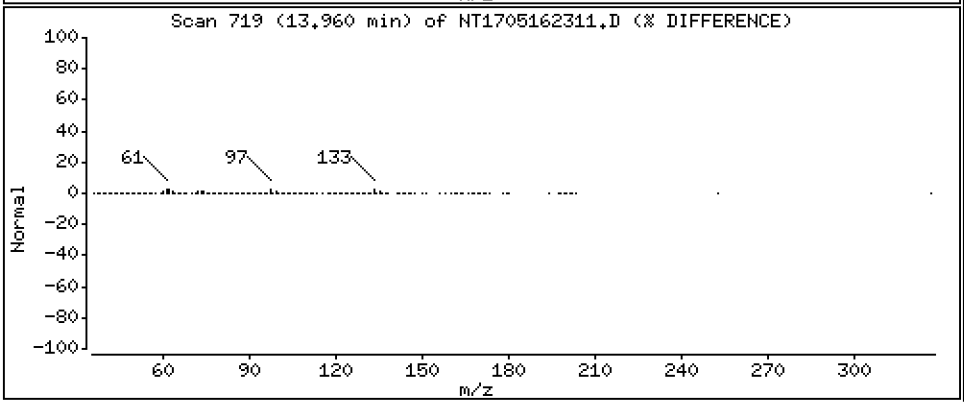
35 2,4,5-Trichlorophenol

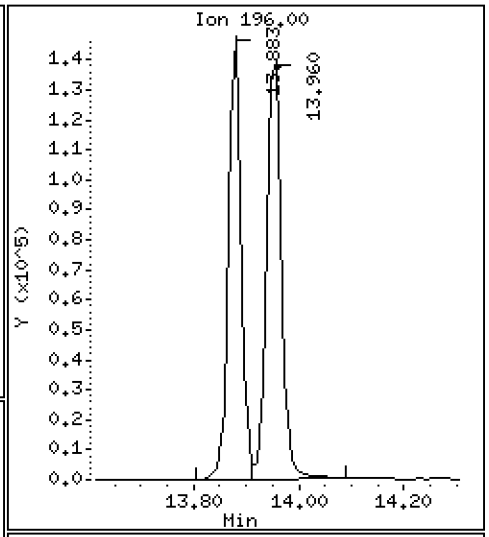
Concentration: 4.837 ug/mL

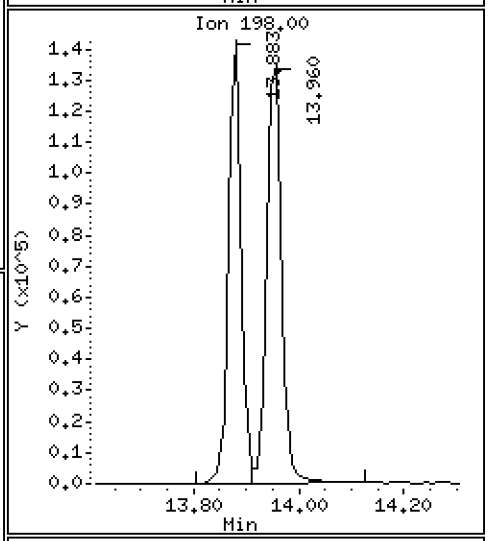


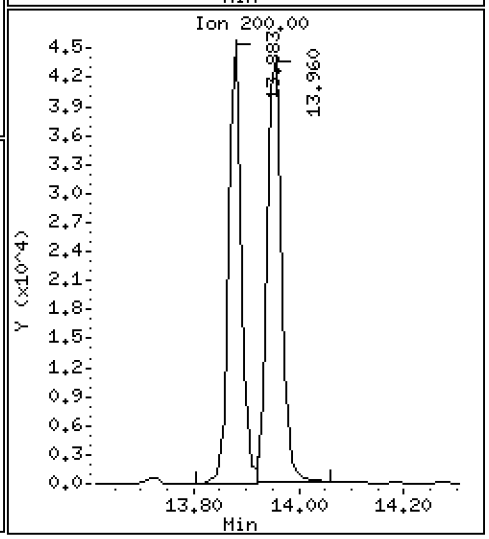












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

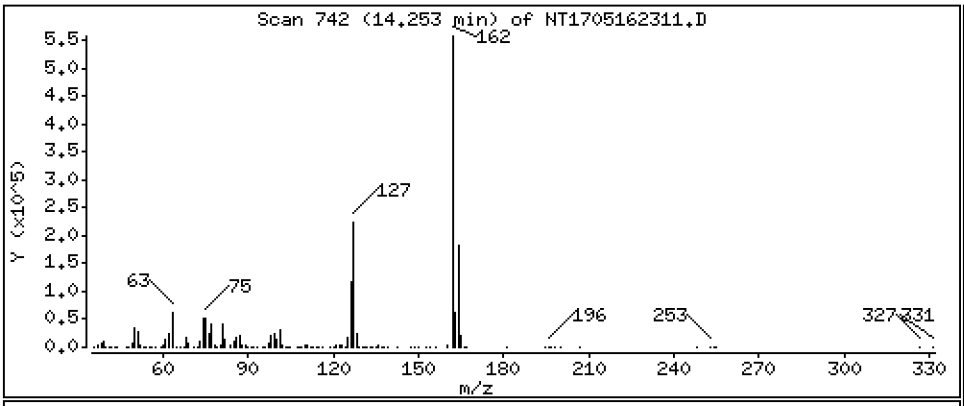
Operator: JGR

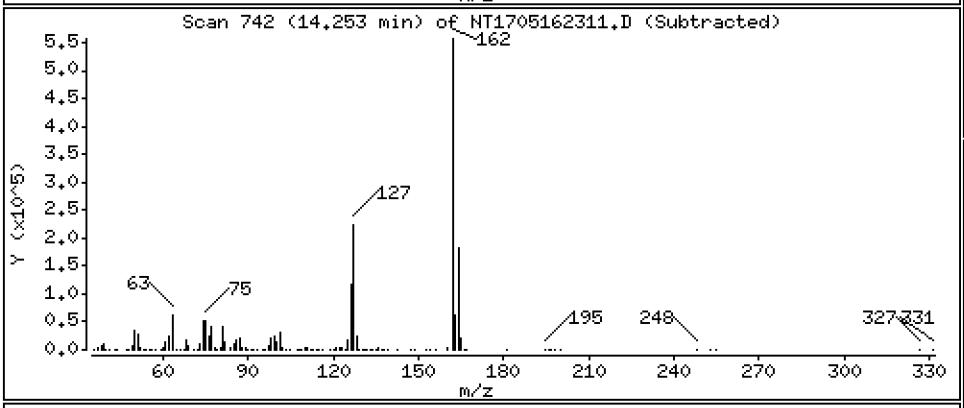
Column phase: ZB-5msi

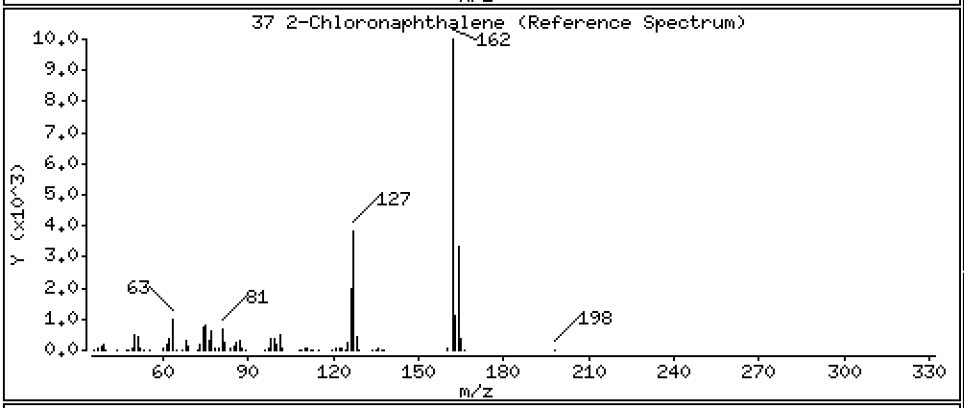
Column diameter: 0.25

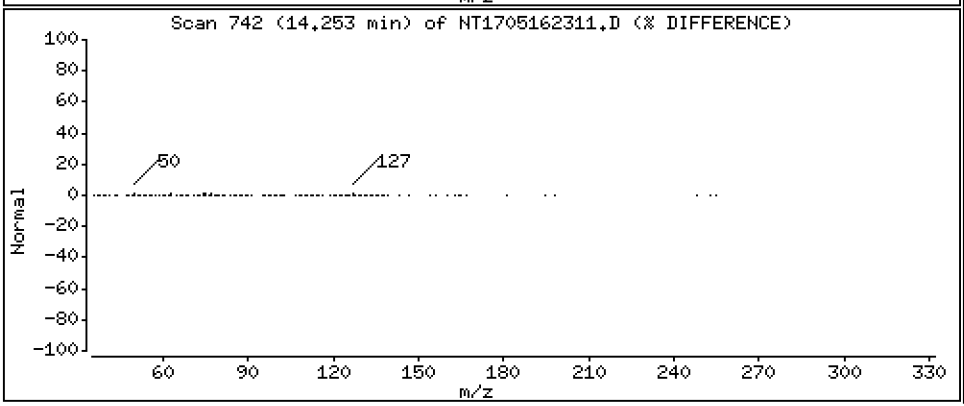
37 2-Chloronaphthalene

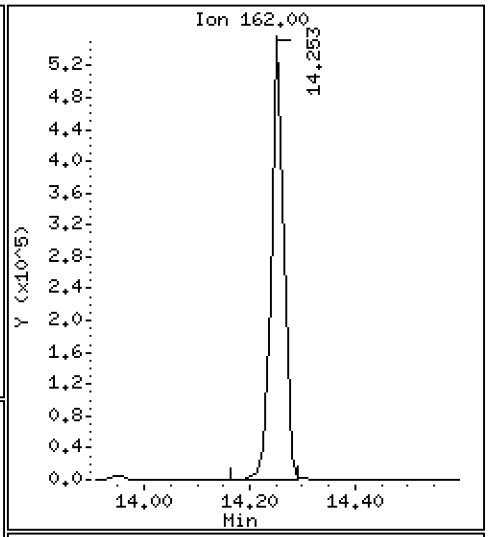
Concentration: 5.401 ug/mL

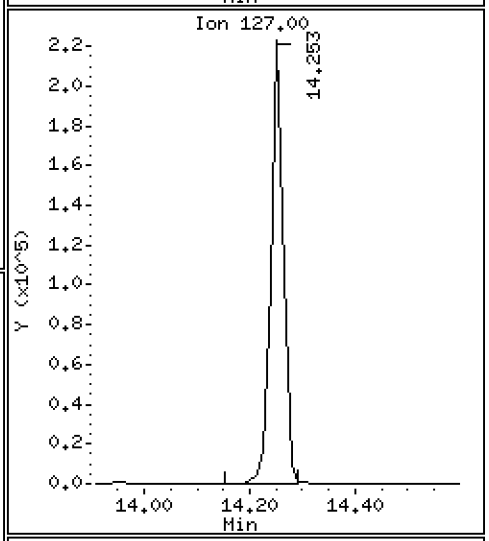


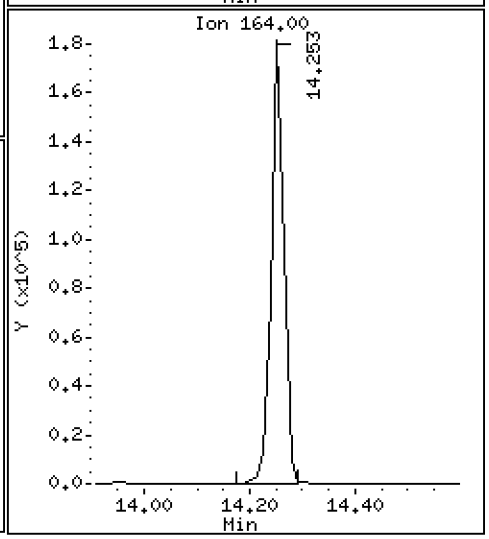












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

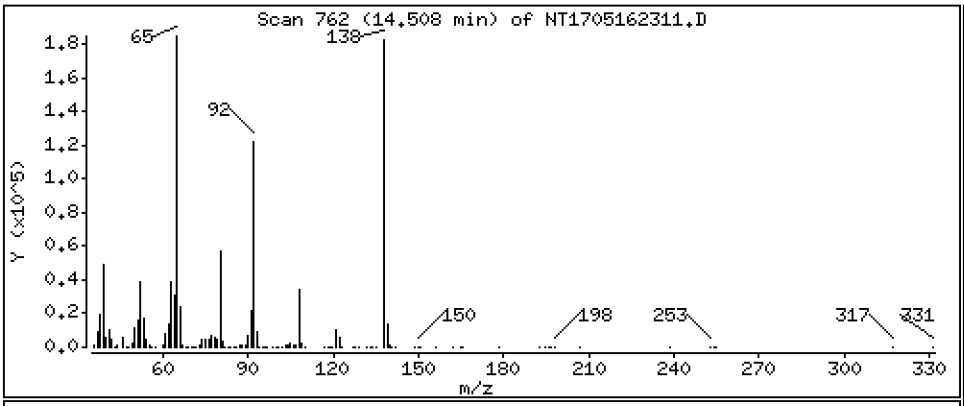
Operator: JGR

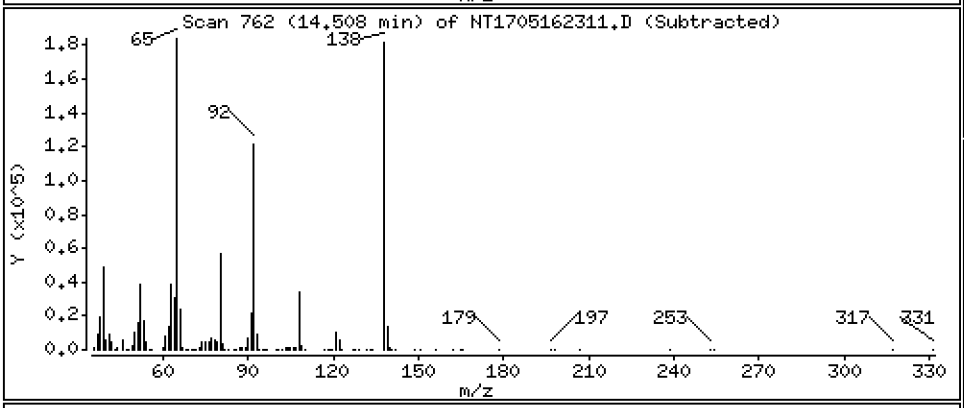
Column phase: ZB-5msi

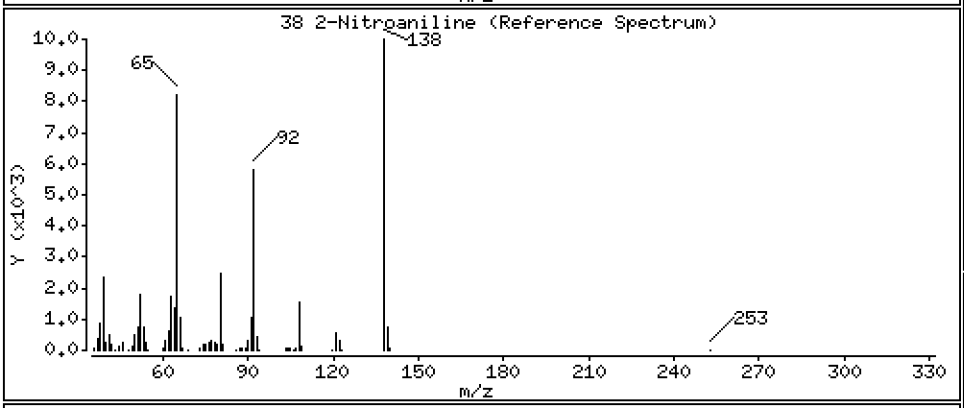
Column diameter: 0.25

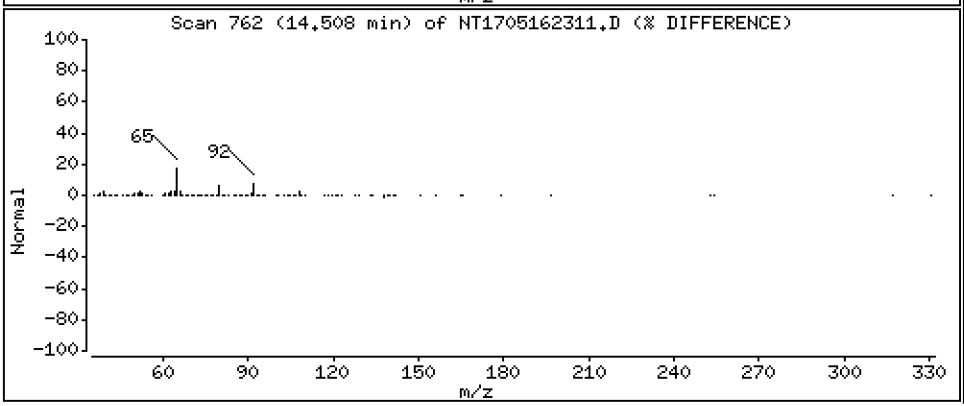
38 2-Nitroaniline

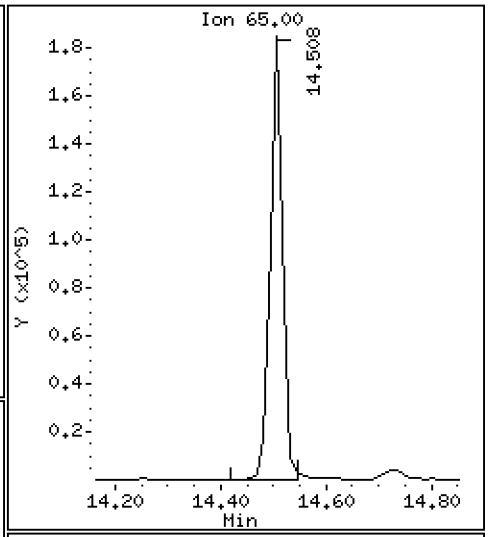
Concentration: 5.356 ug/mL

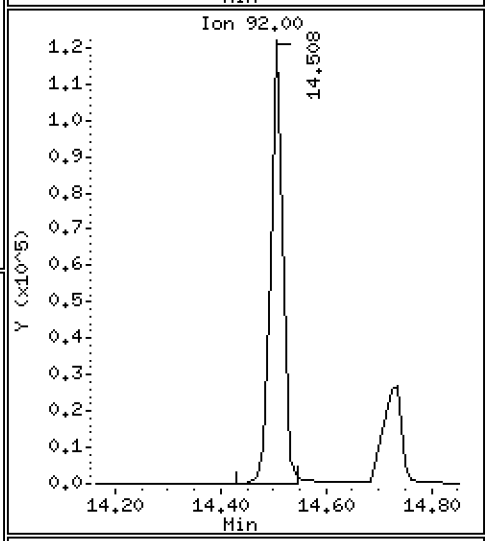


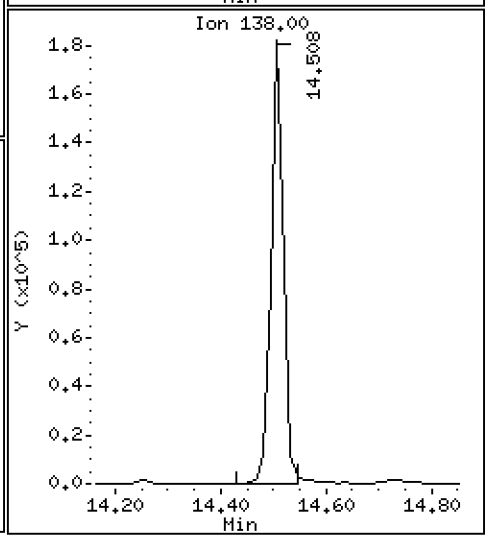












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

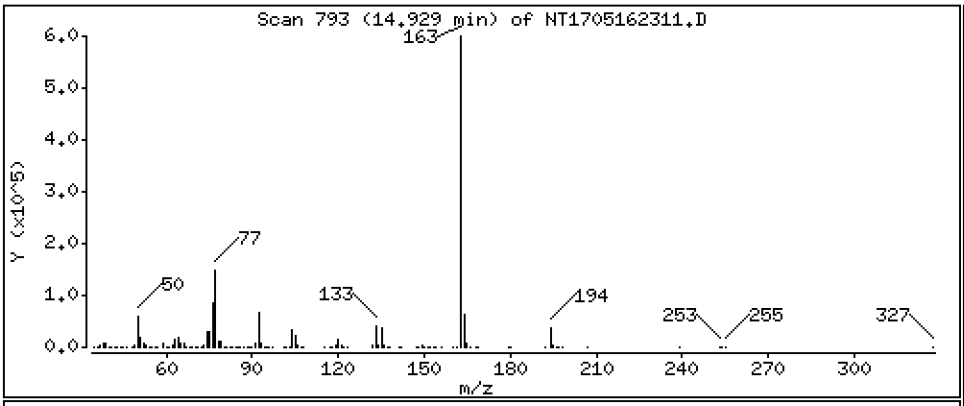
Operator: JGR

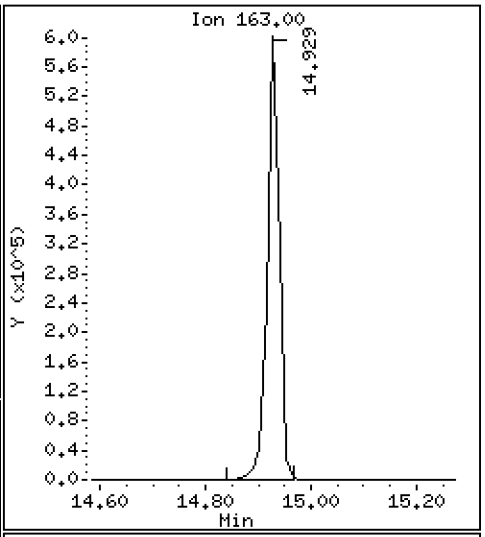
Column phase: ZB-5msi

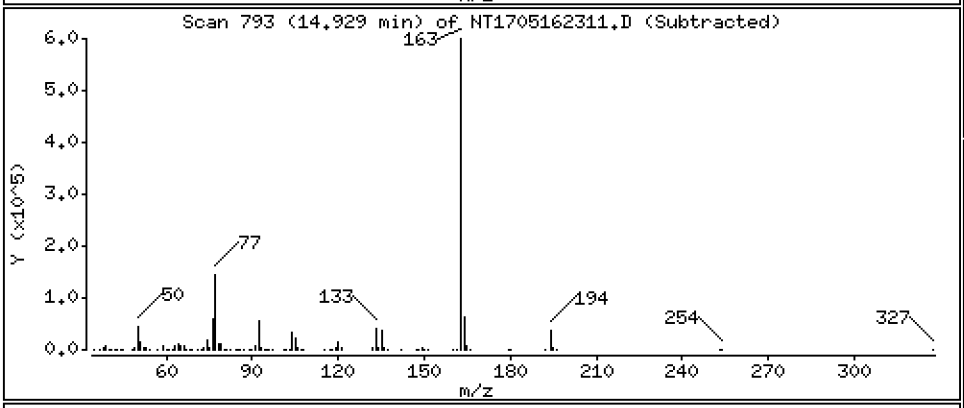
Column diameter: 0.25

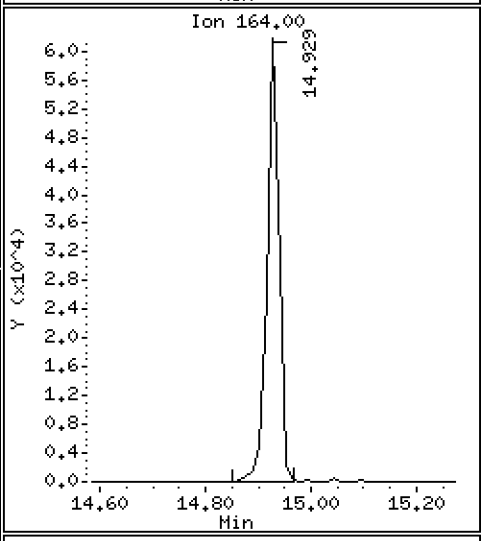
39 Dimethylphthalate

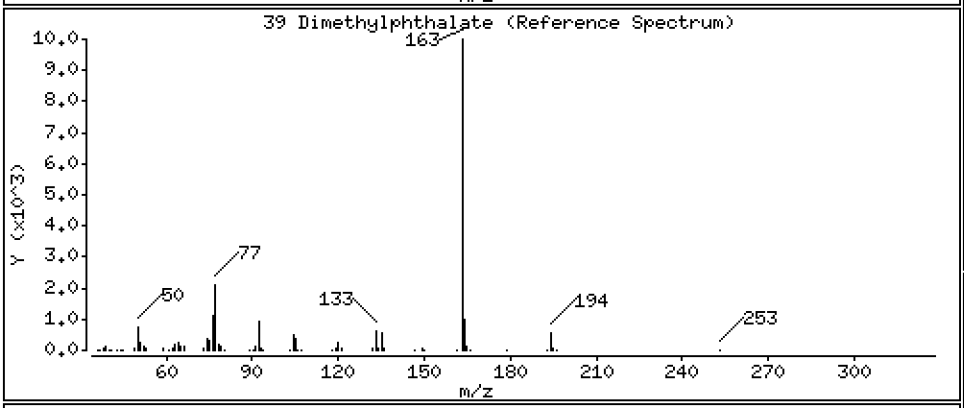
Concentration: 5.418 ug/mL

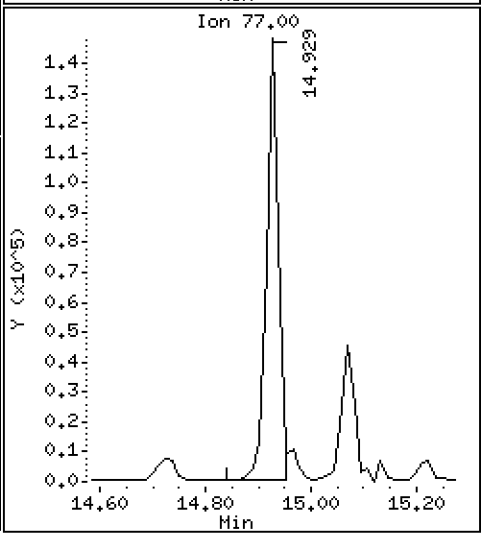


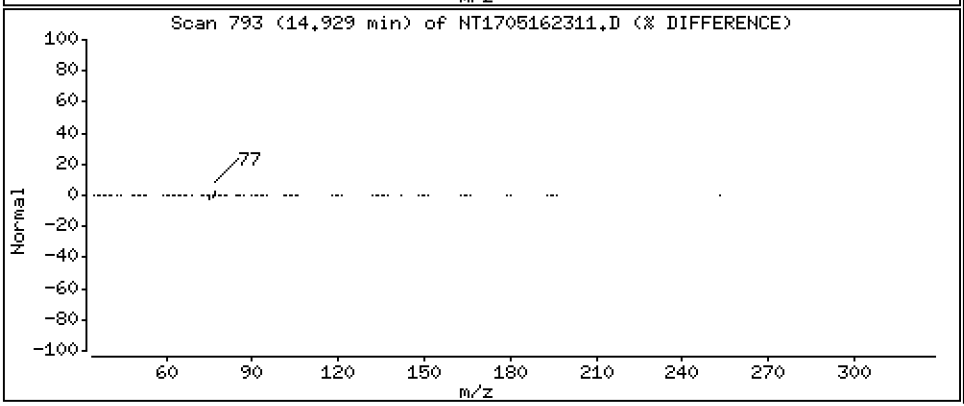












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

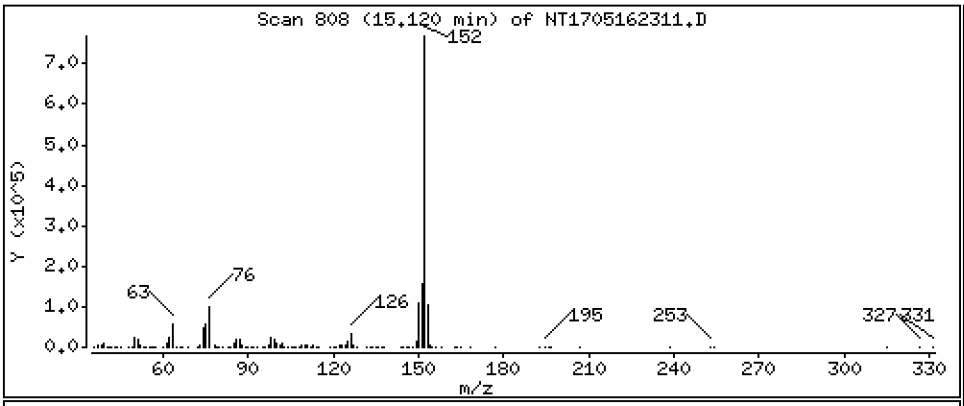
Operator: JGR

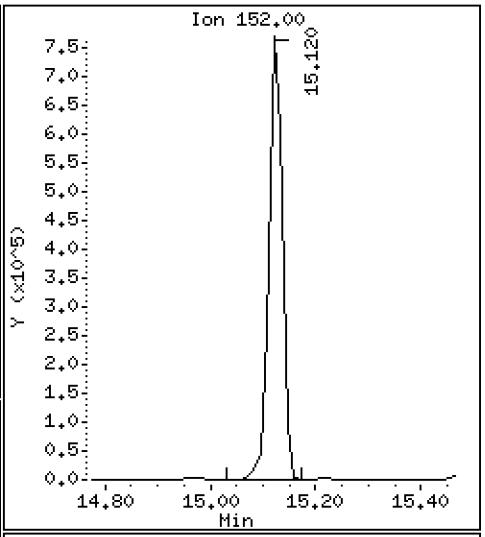
Column phase: ZB-5msi

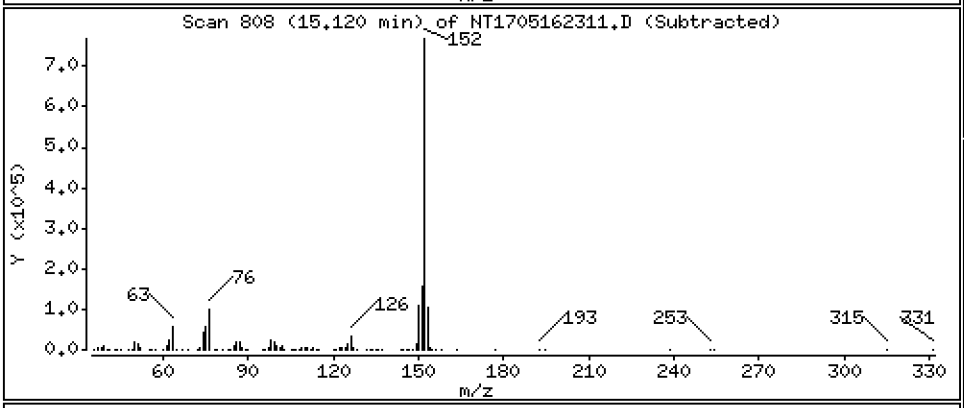
Column diameter: 0.25

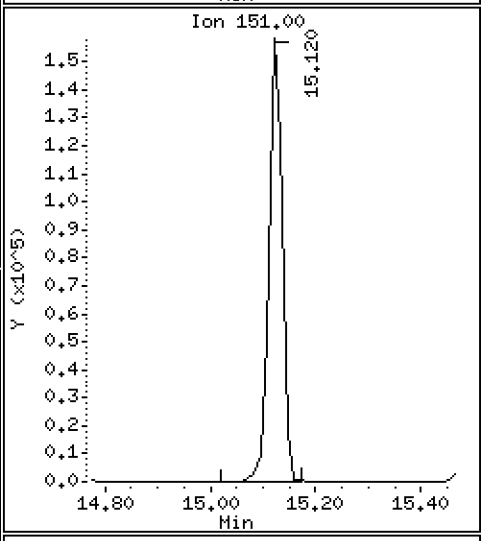
40 Acenaphthylene

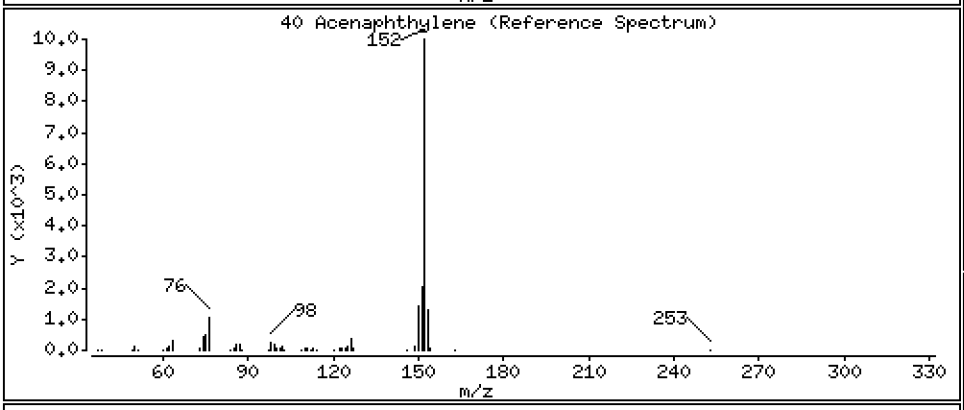
Concentration: 5.282 ug/mL

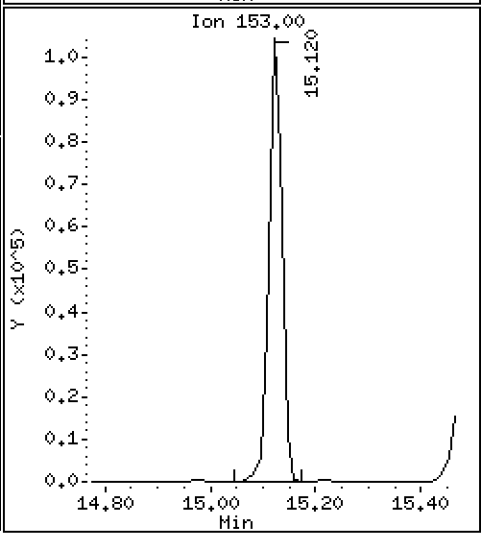


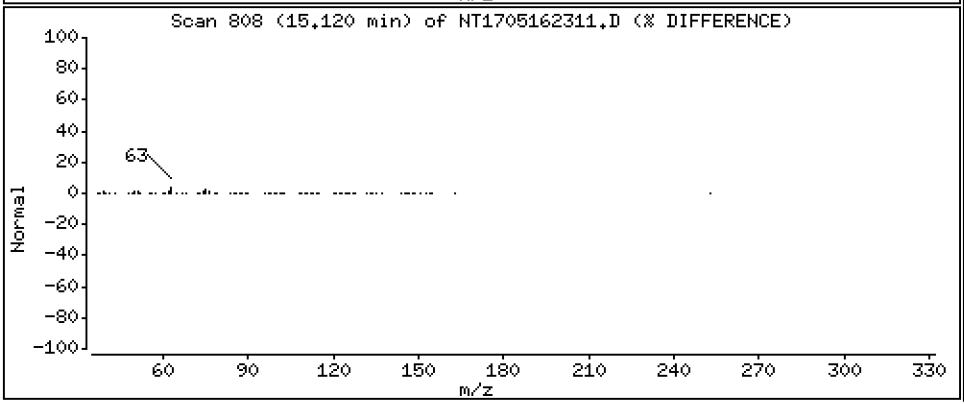












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

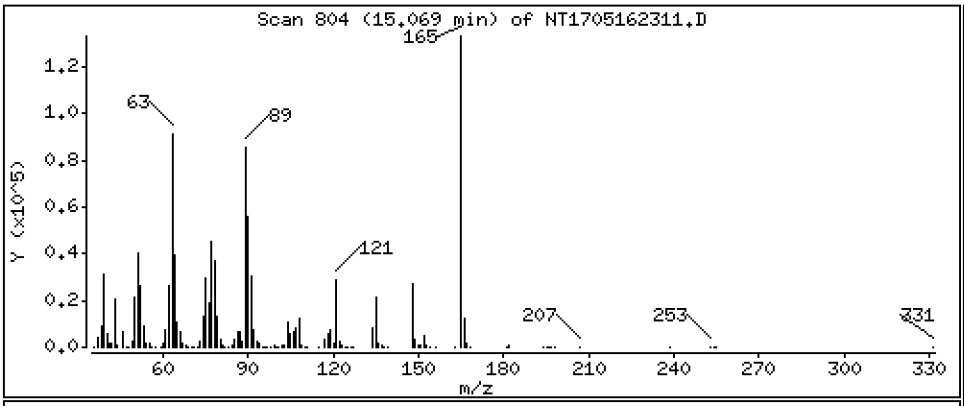
Operator: JGR

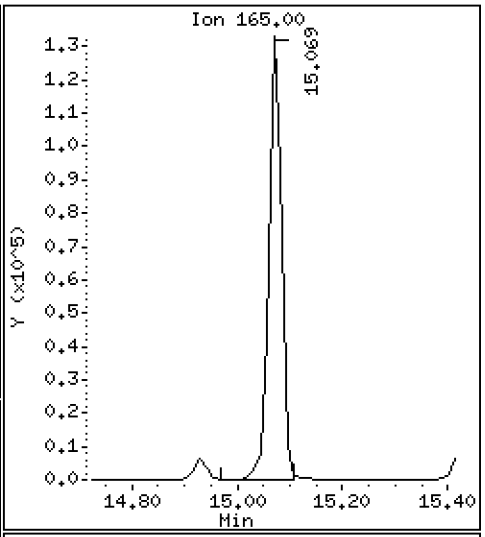
Column phase: ZB-5msi

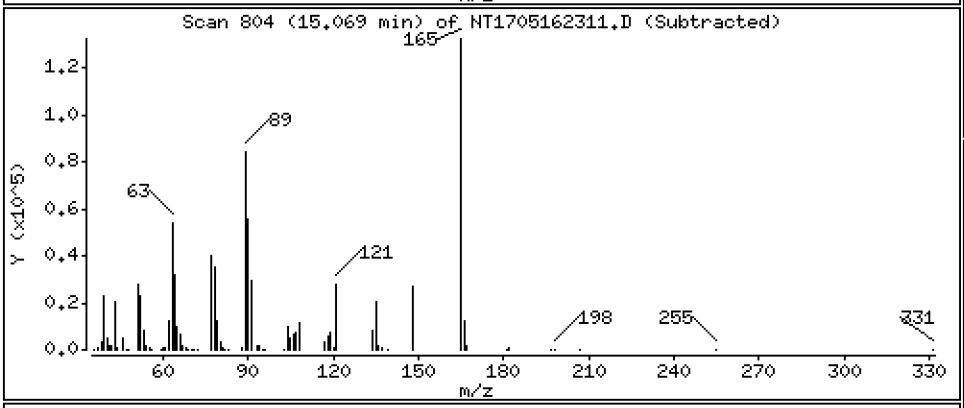
Column diameter: 0.25

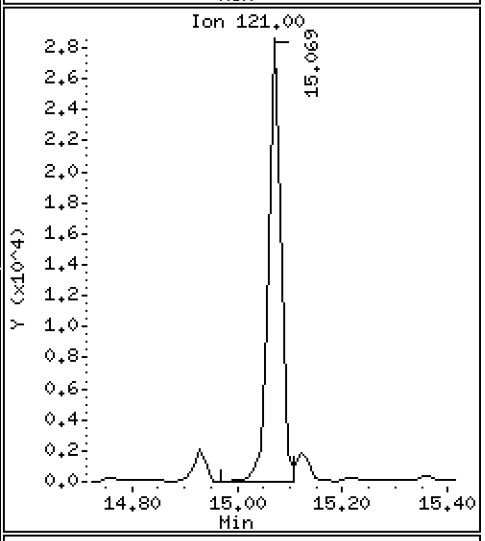
41 2,6-Dinitrotoluene

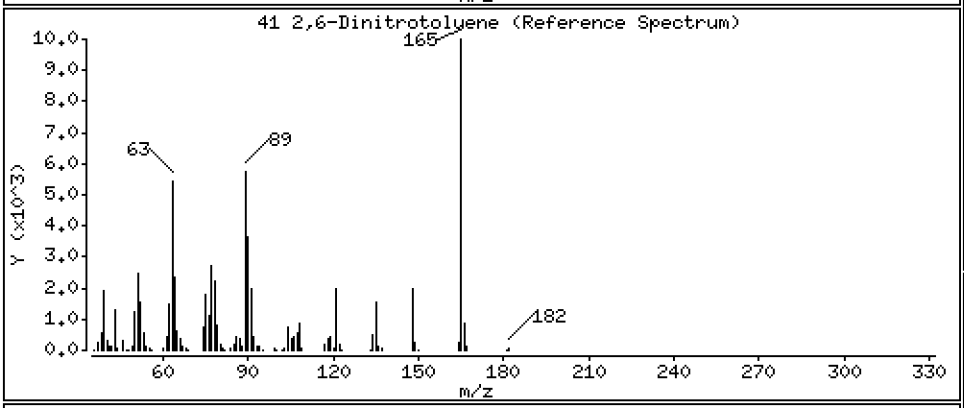
Concentration: 5.404 ug/mL

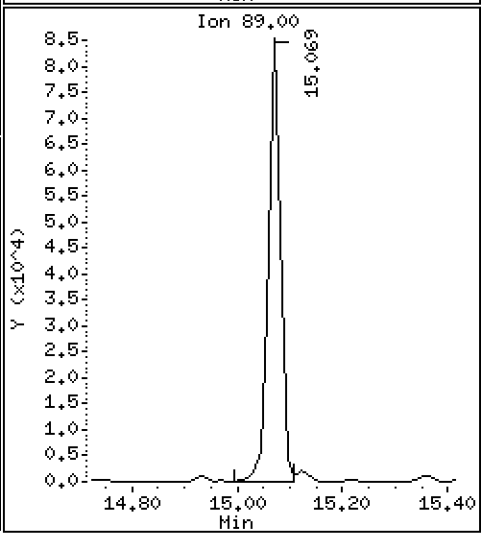


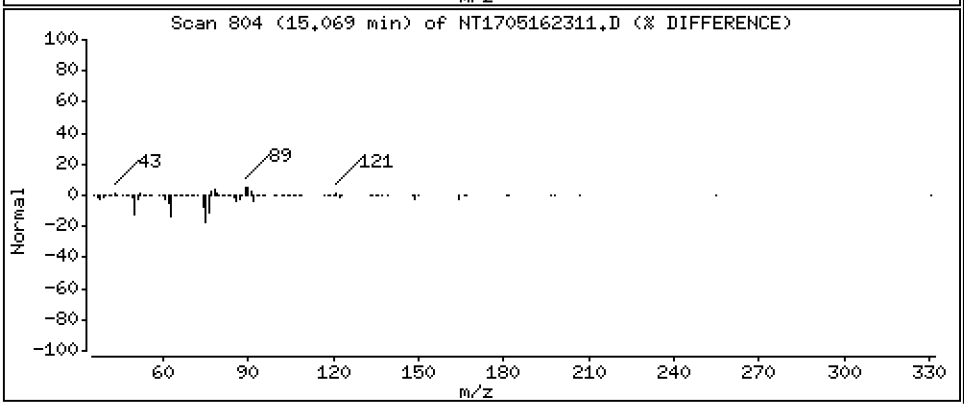












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

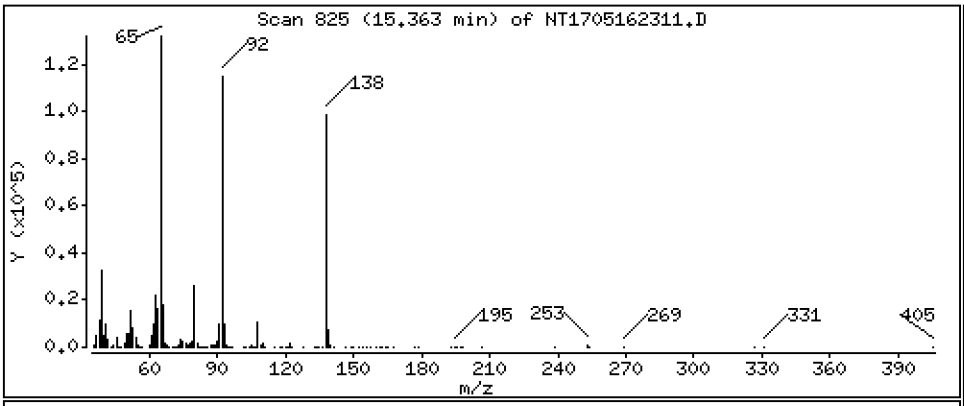
Operator: JGR

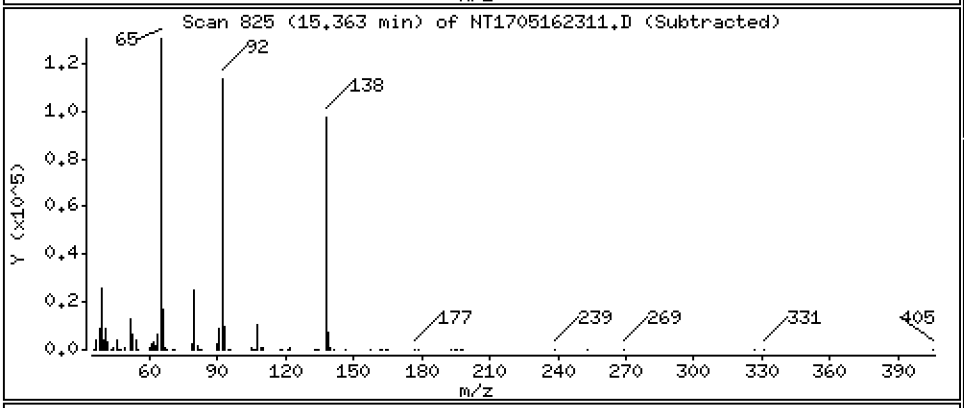
Column phase: ZB-5msi

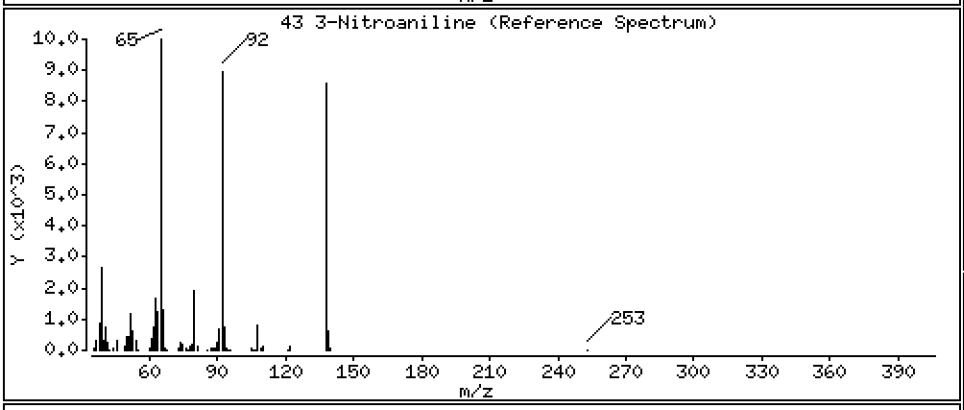
Column diameter: 0.25

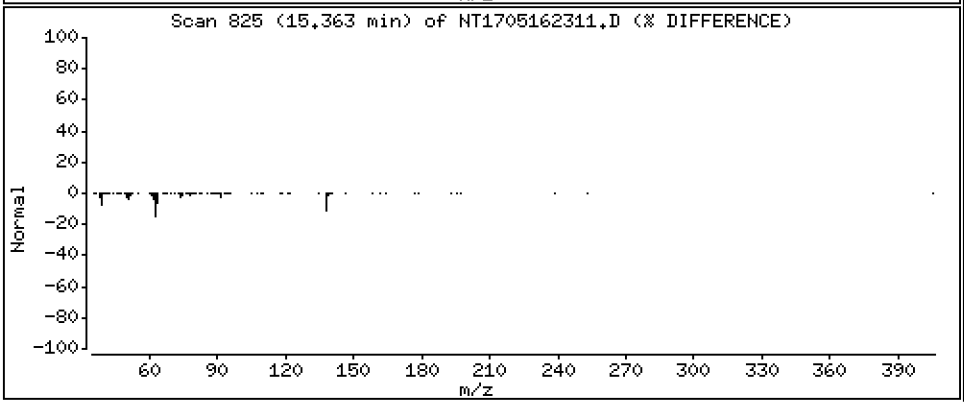
43 3-Nitroaniline

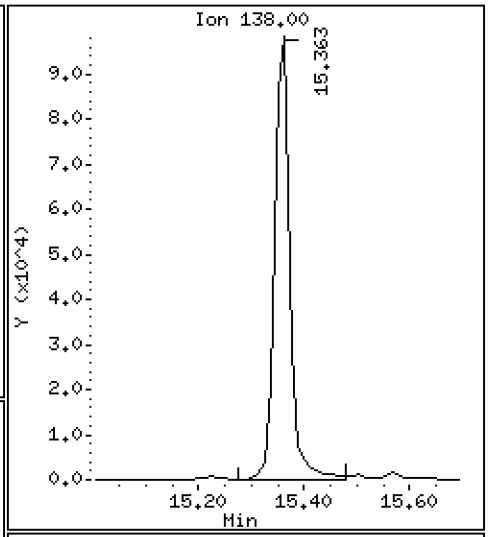
Concentration: 5.169 ug/mL

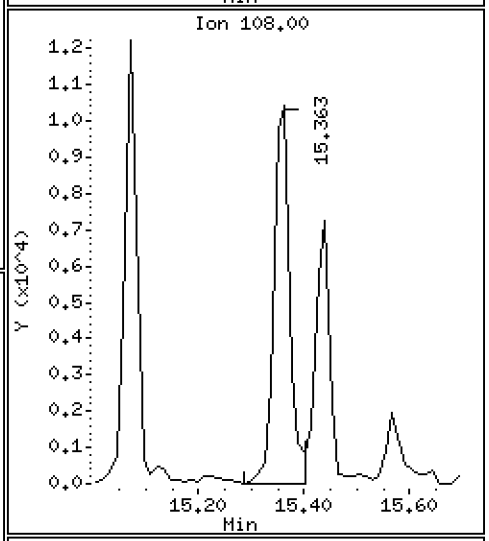


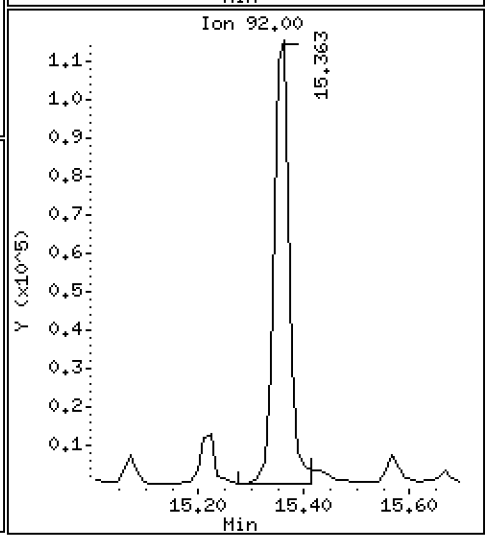












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

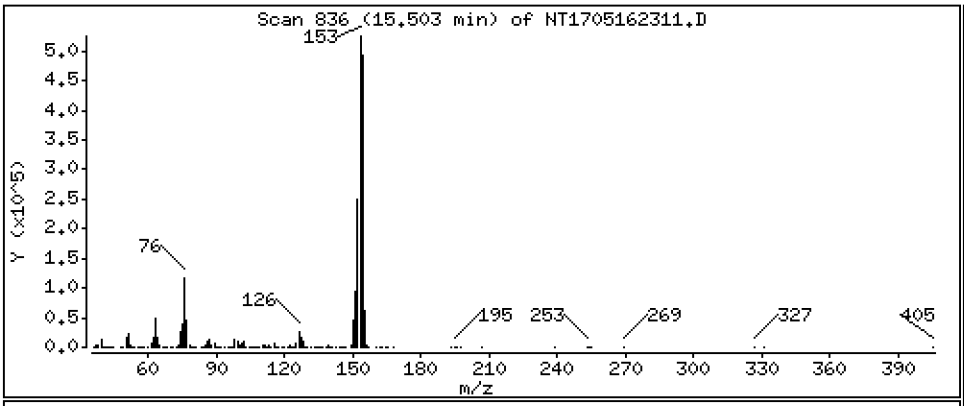
Operator: JGR

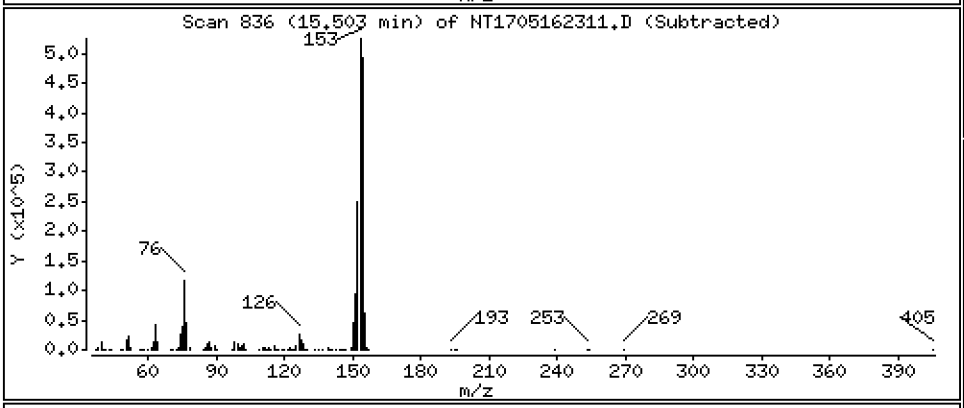
Column phase: ZB-5msi

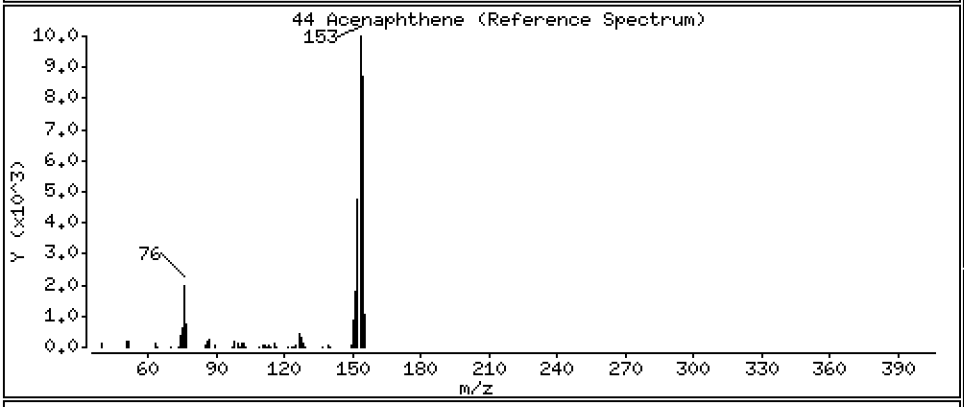
Column diameter: 0.25

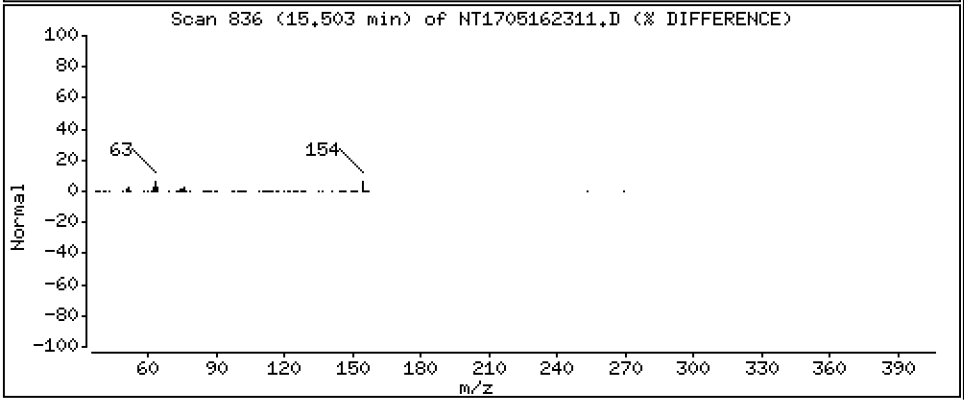
44 Acenaphthene

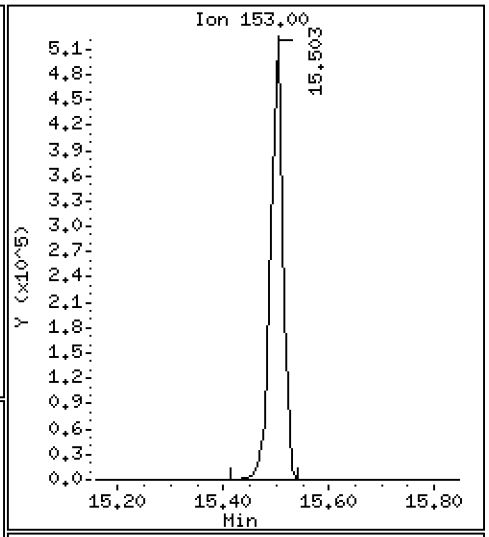
Concentration: 5.283 ug/mL

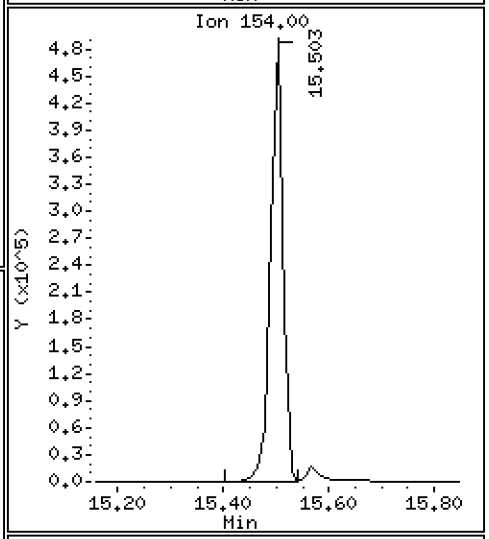


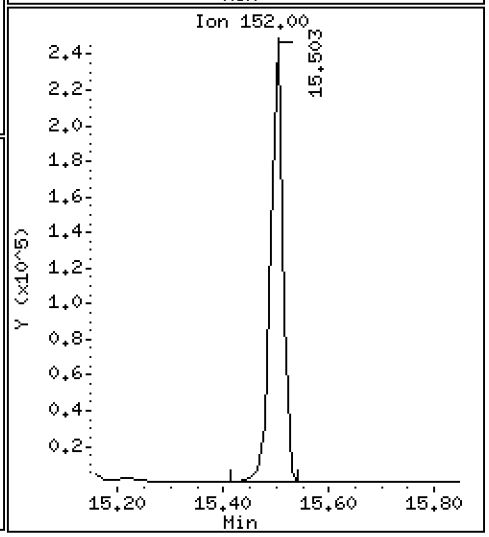












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

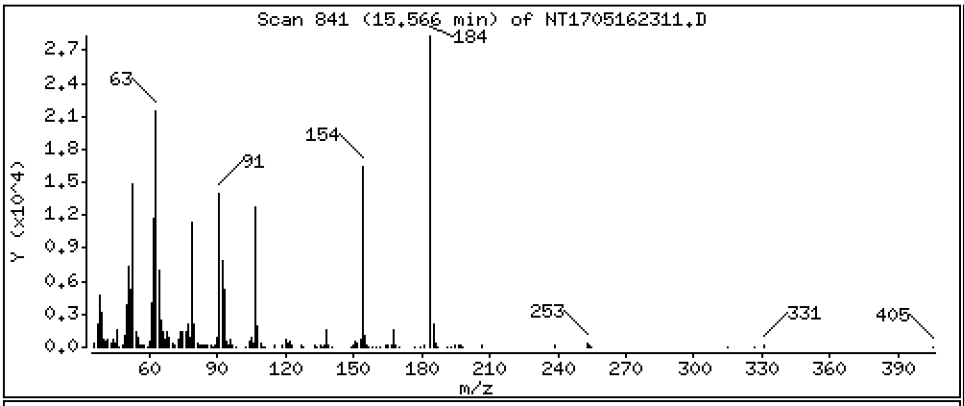
Operator: JGR

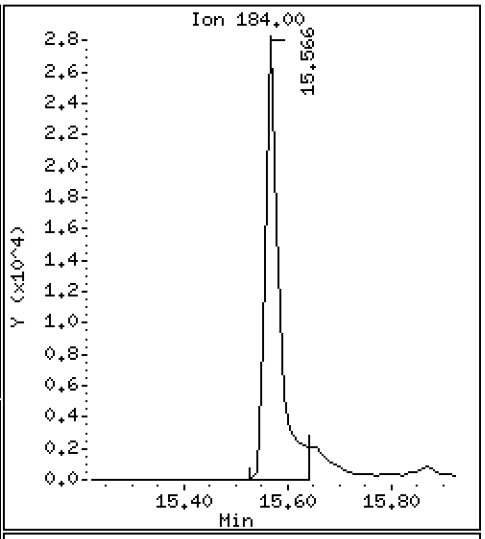
Column phase: ZB-5msi

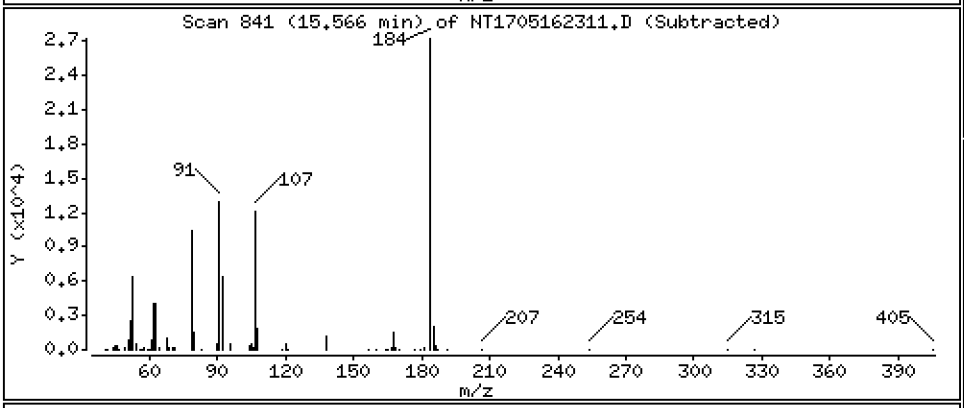
Column diameter: 0.25

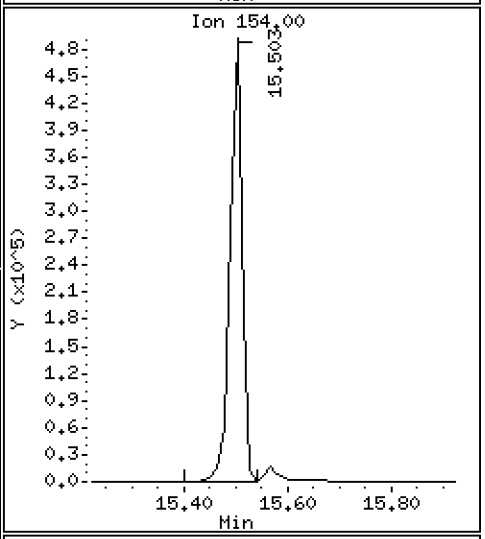
45 2,4-Dinitrophenol

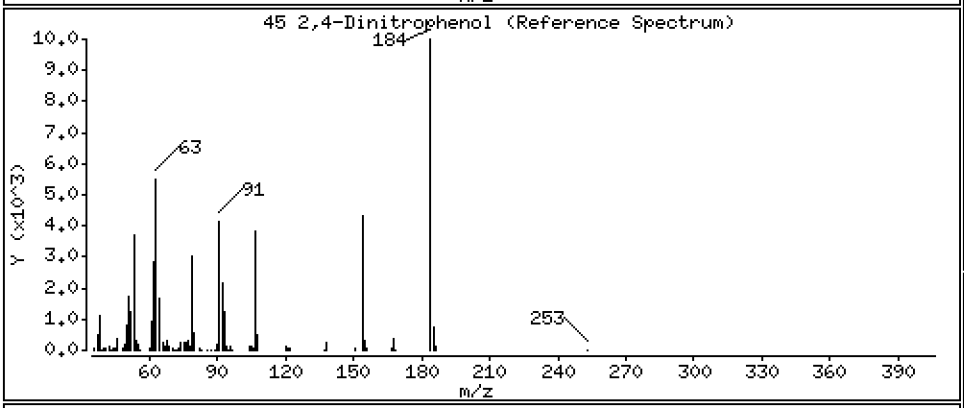
Concentration: 2.119 ug/mL

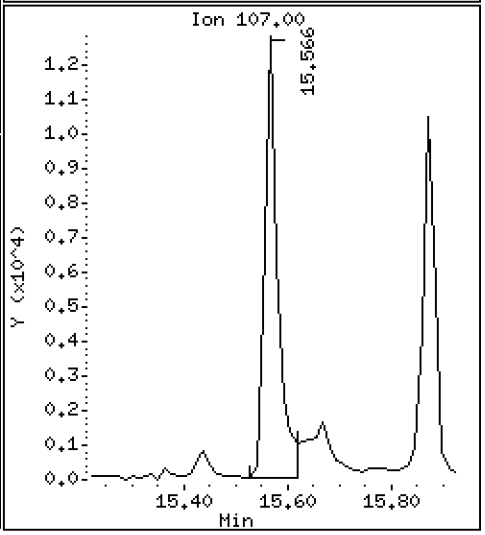


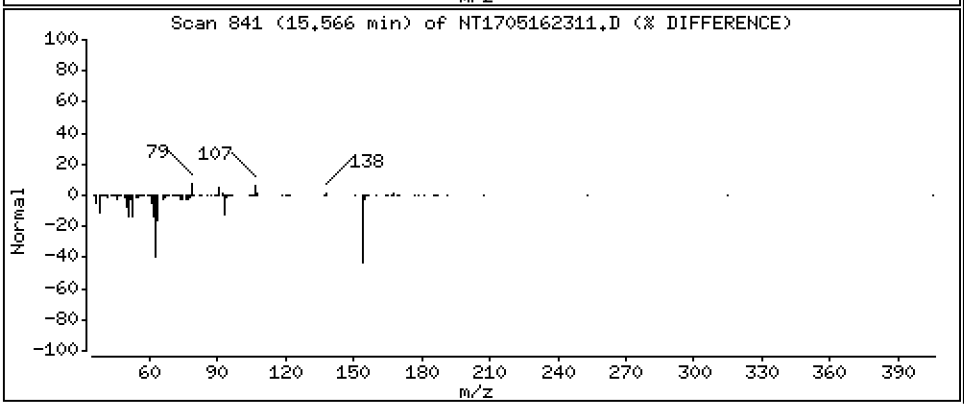












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

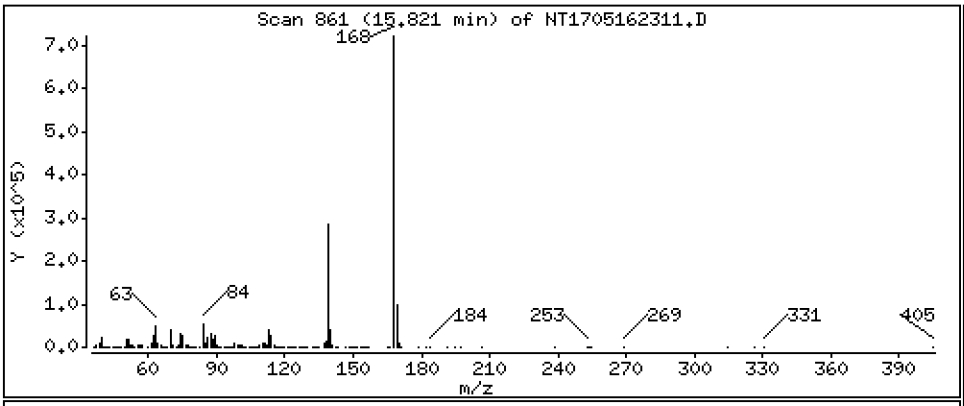
Operator: JGR

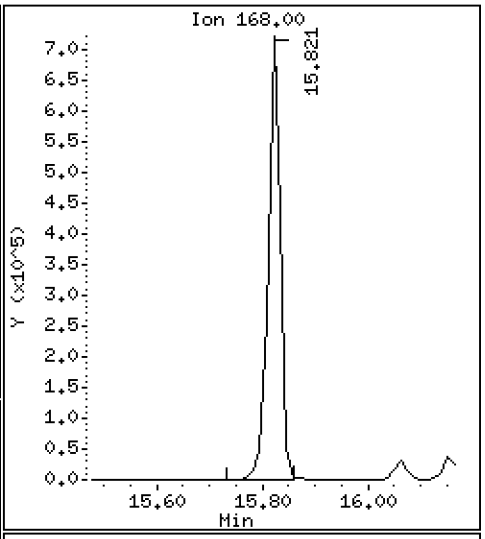
Column phase: ZB-5msi

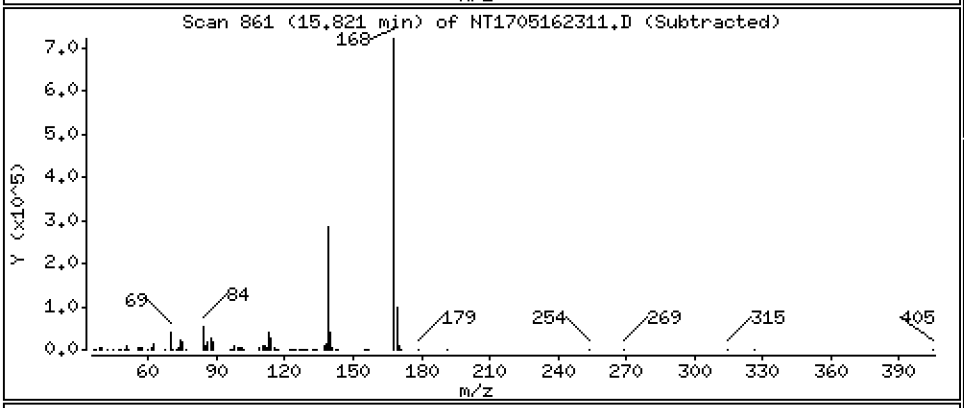
Column diameter: 0.25

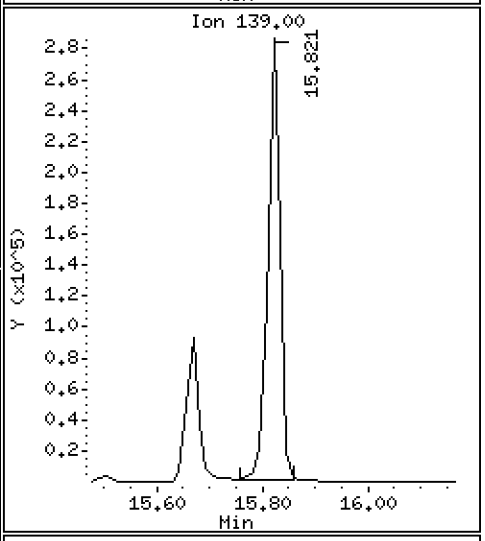
46 Dibenzofuran

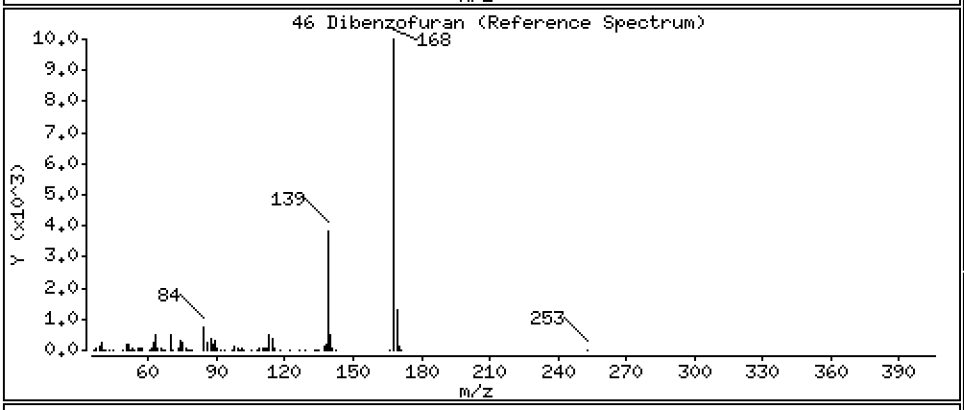
Concentration: 5.163 ug/mL

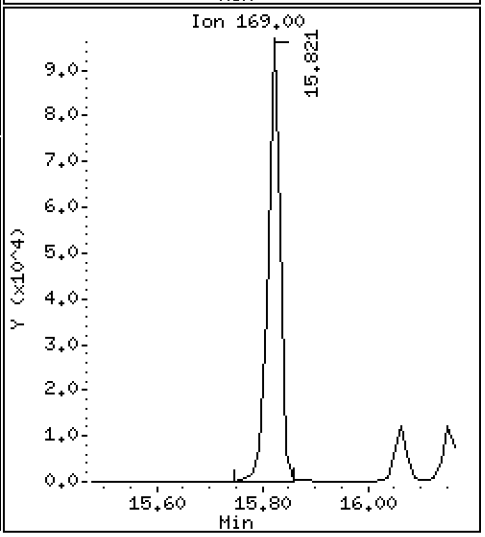


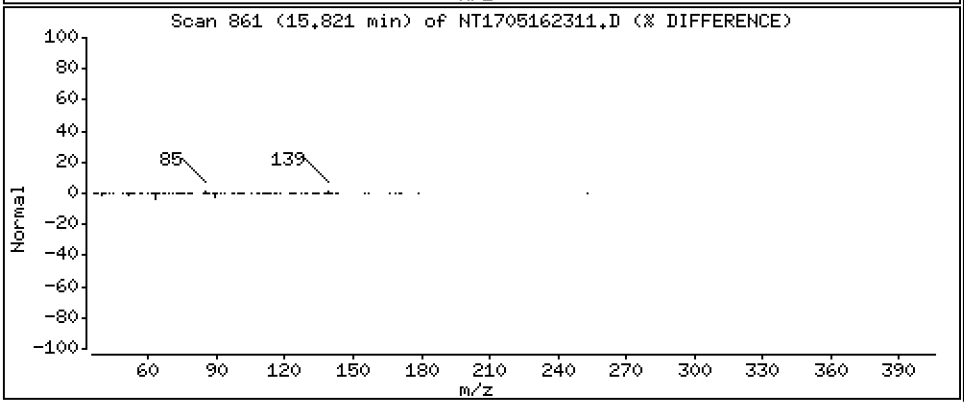












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

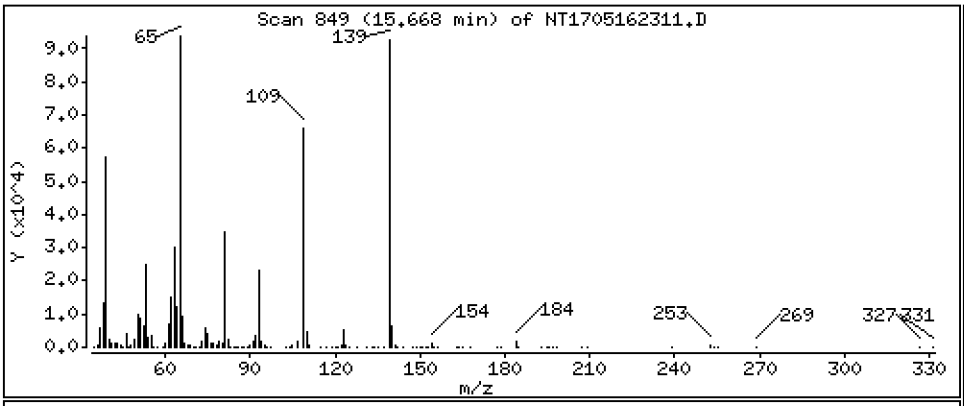
Operator: JGR

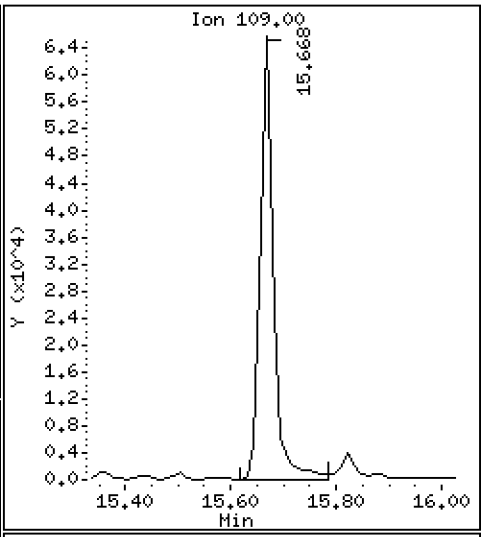
Column phase: ZB-5msi

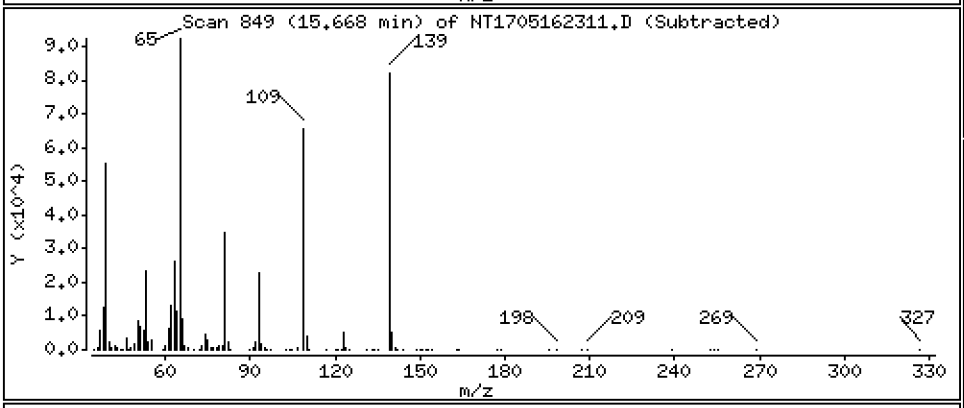
Column diameter: 0.25

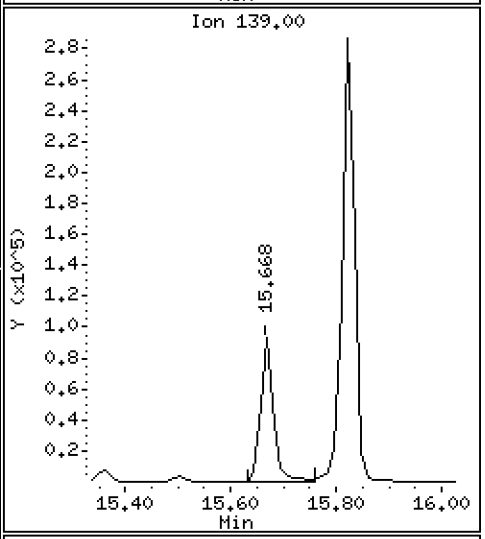
47 4-Nitrophenol

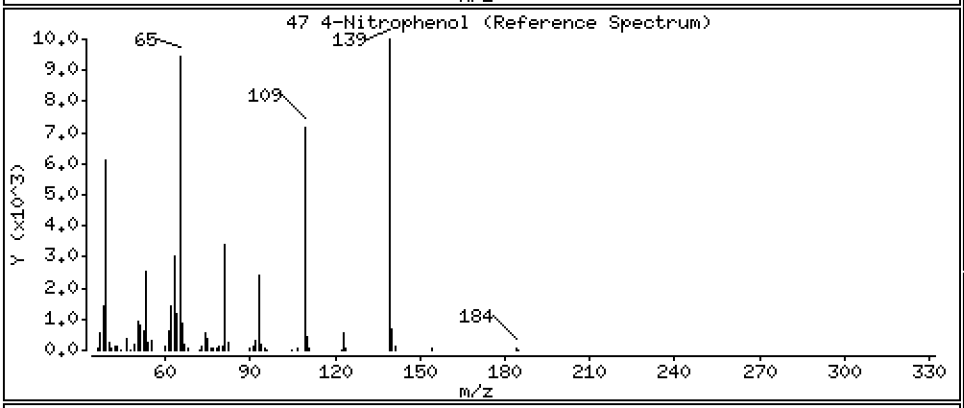
Concentration: 4.504 ug/mL

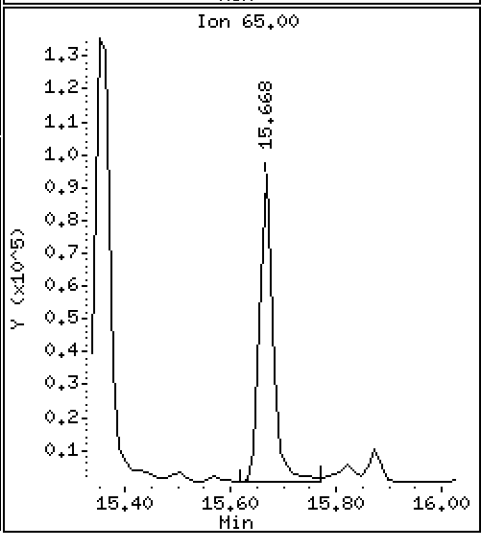


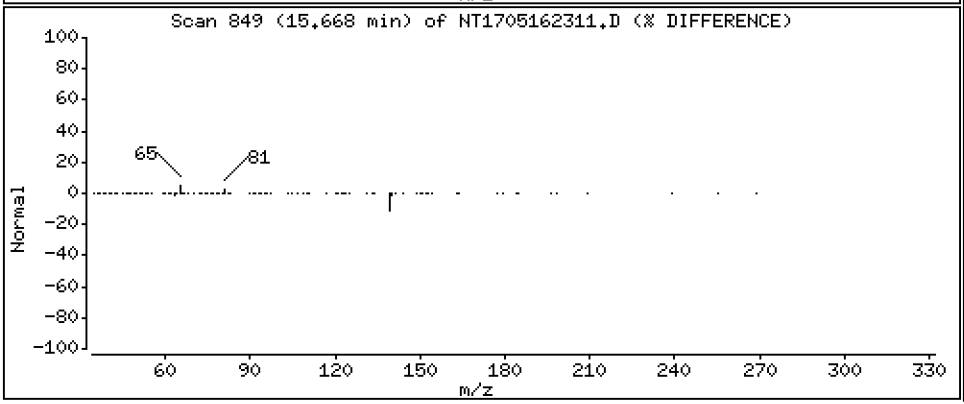












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

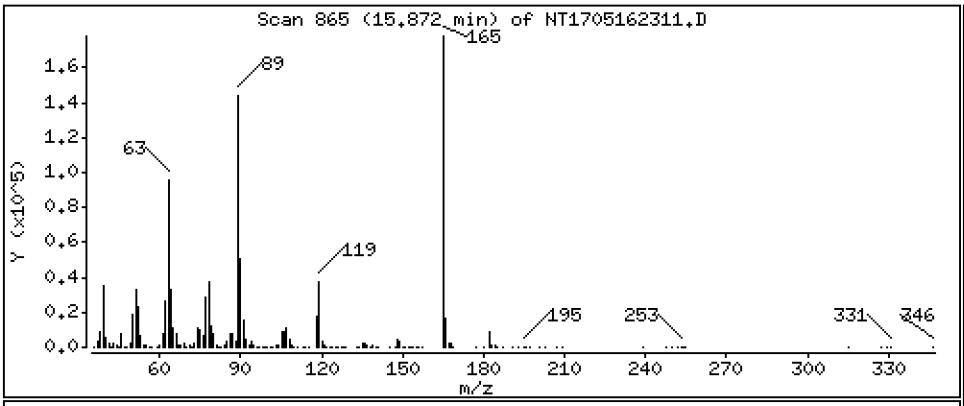
Operator: JGR

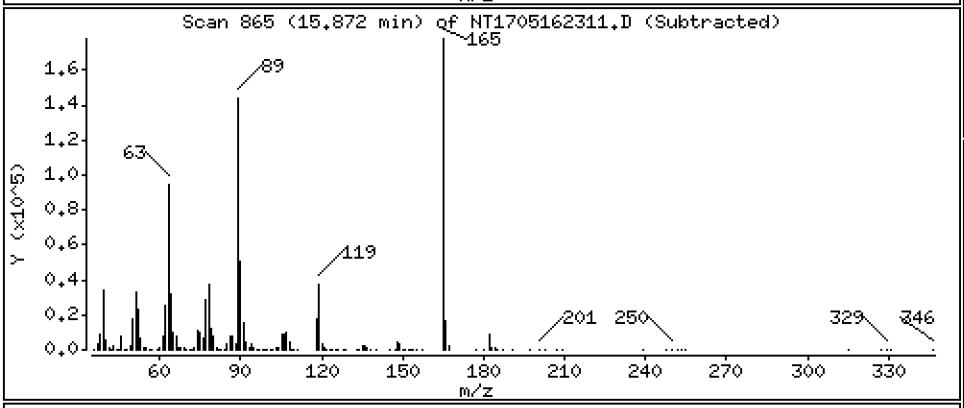
Column phase: ZB-5msi

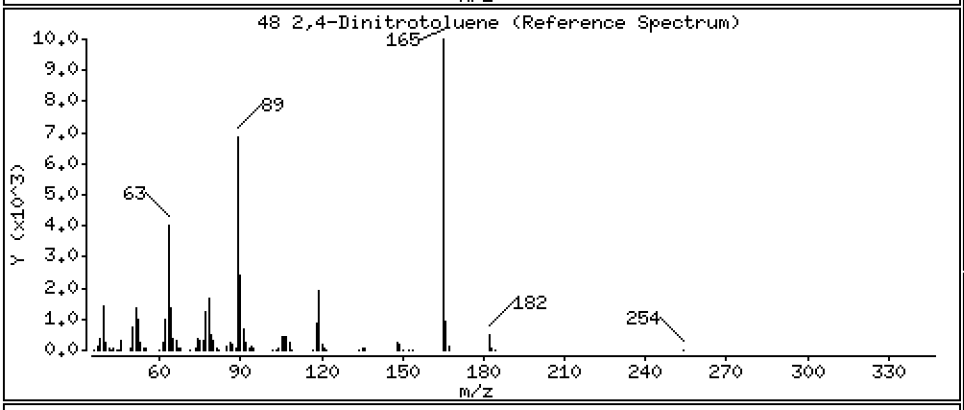
Column diameter: 0.25

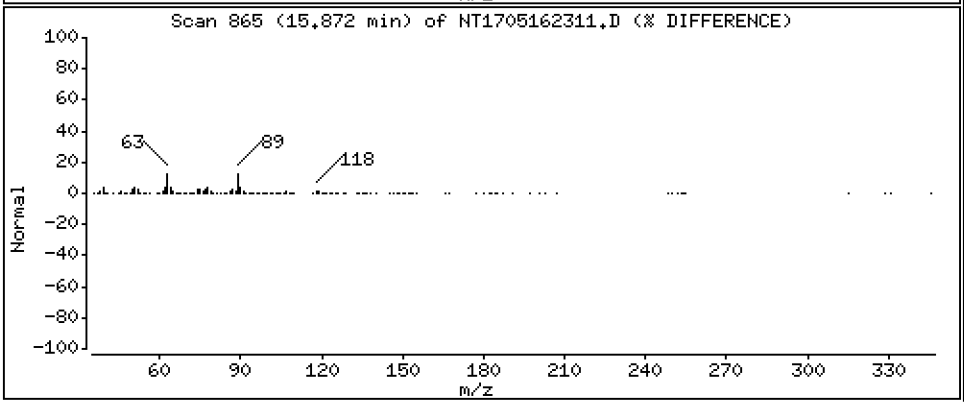
48 2,4-Dinitrotoluene

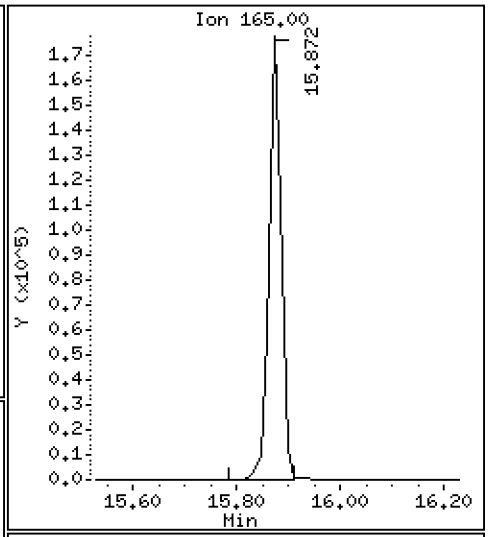
Concentration: 5.269 ug/mL

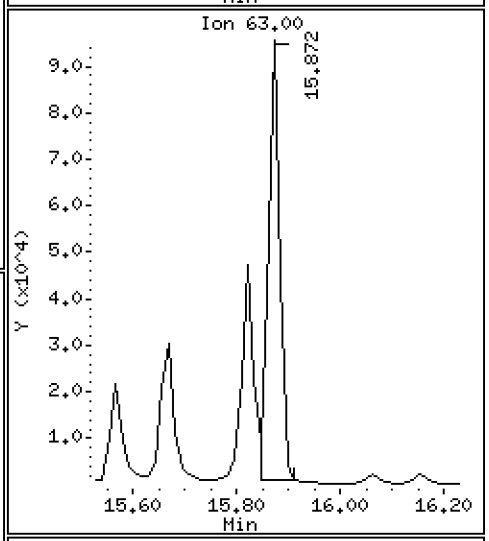


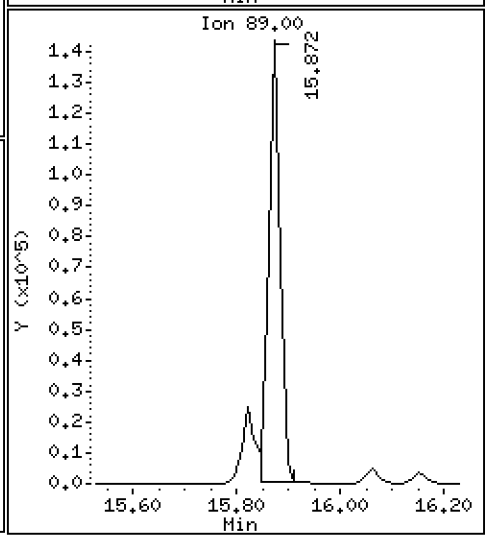












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

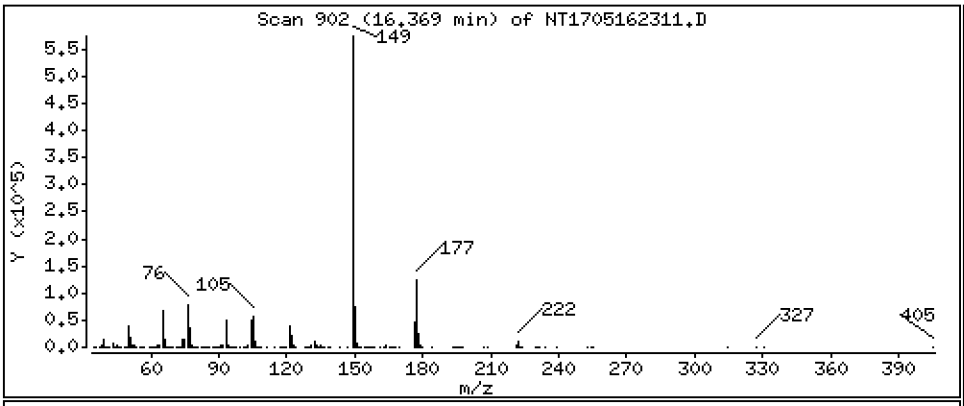
Operator: JGR

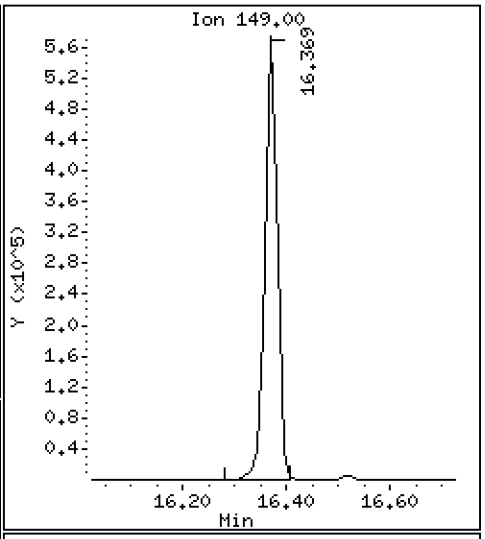
Column phase: ZB-5msi

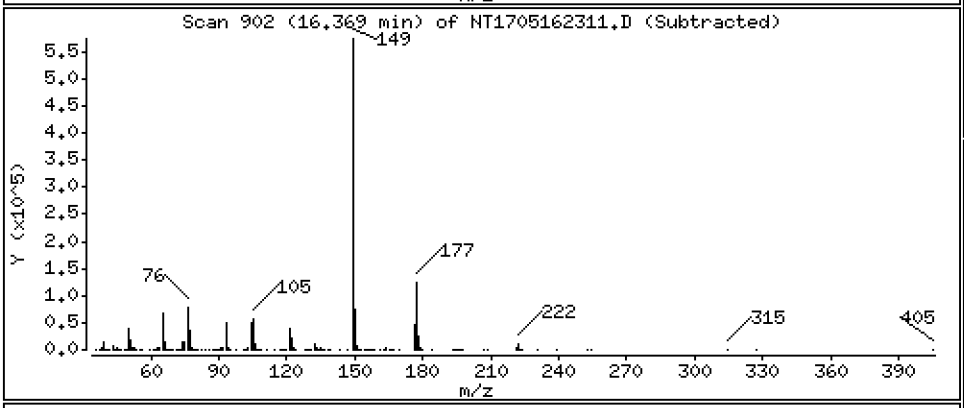
Column diameter: 0.25

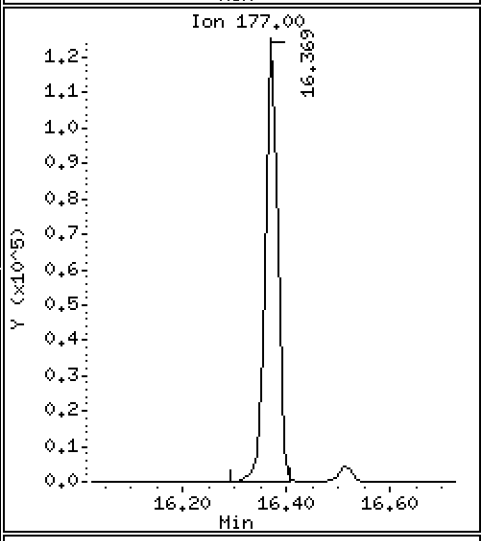
50 Diethylphthalate

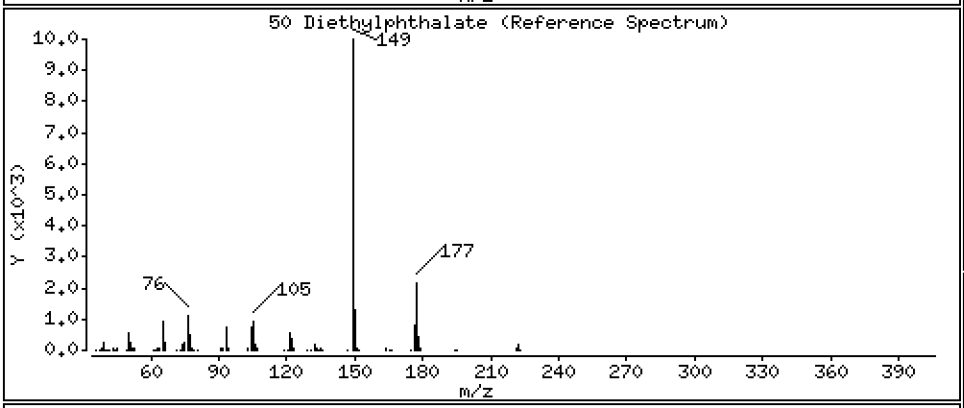
Concentration: 5.494 ug/mL

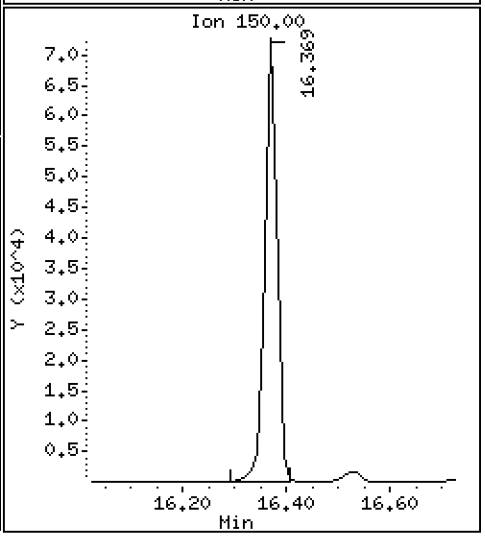


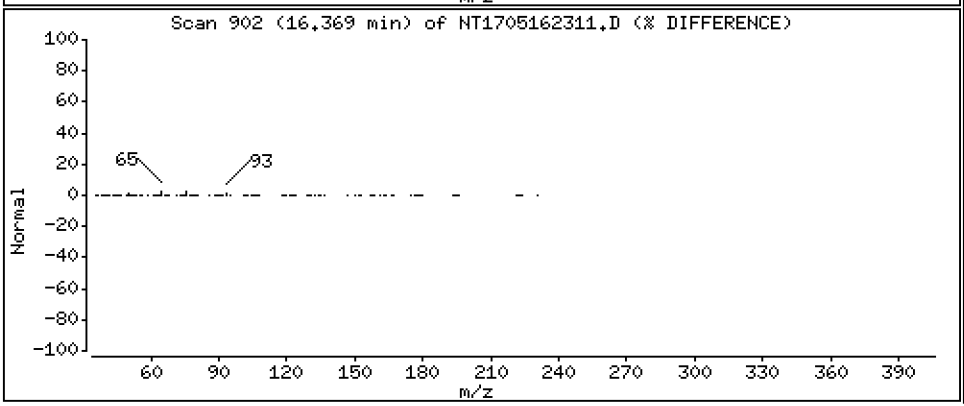












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

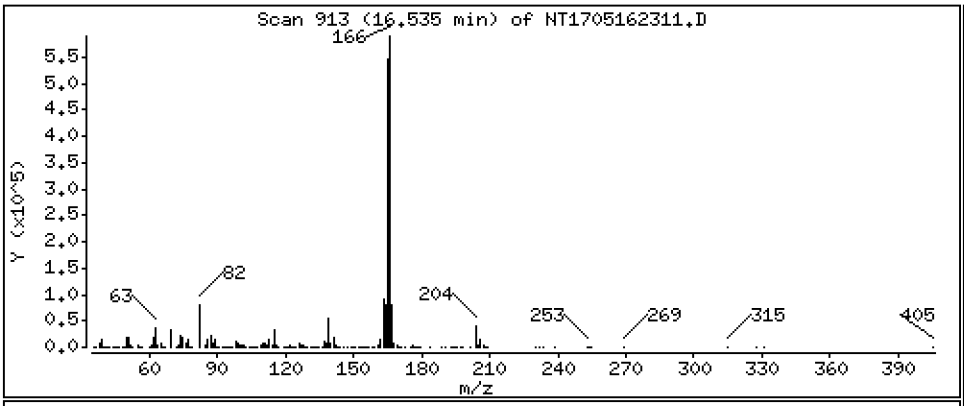
Operator: JGR

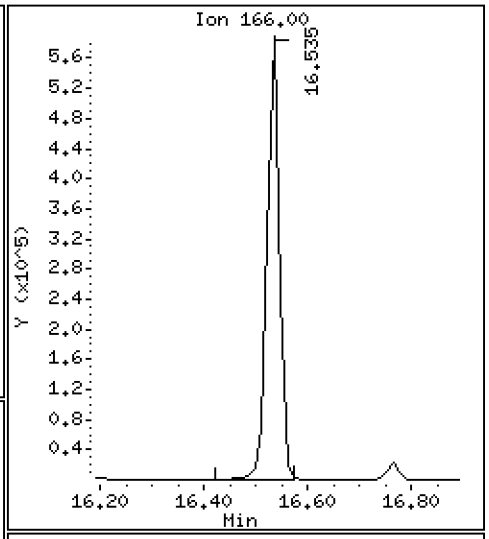
Column phase: ZB-5msi

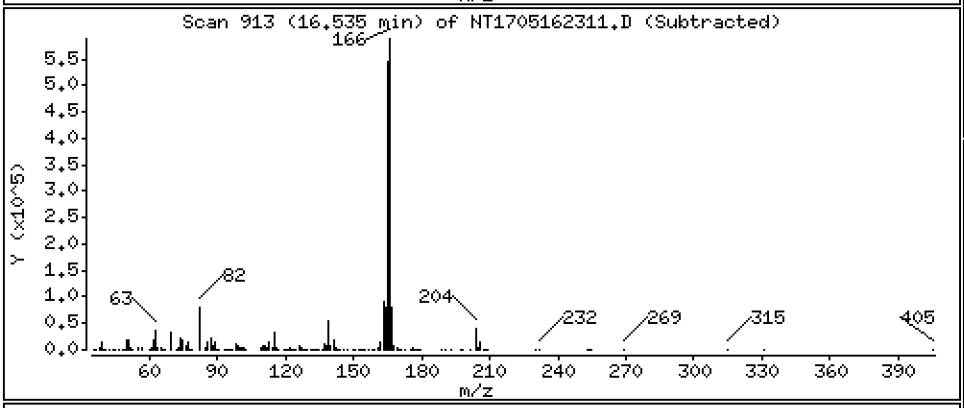
Column diameter: 0.25

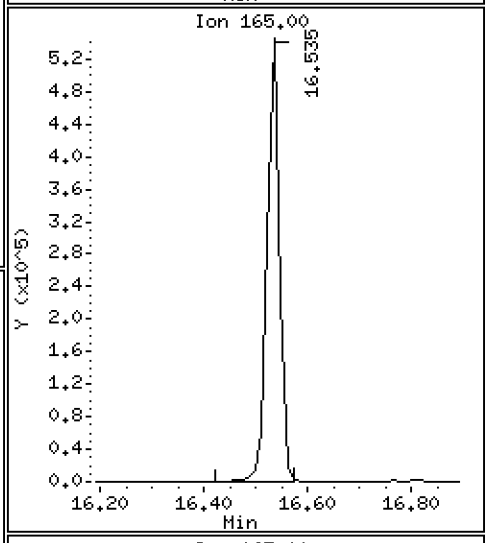
49 Fluorene

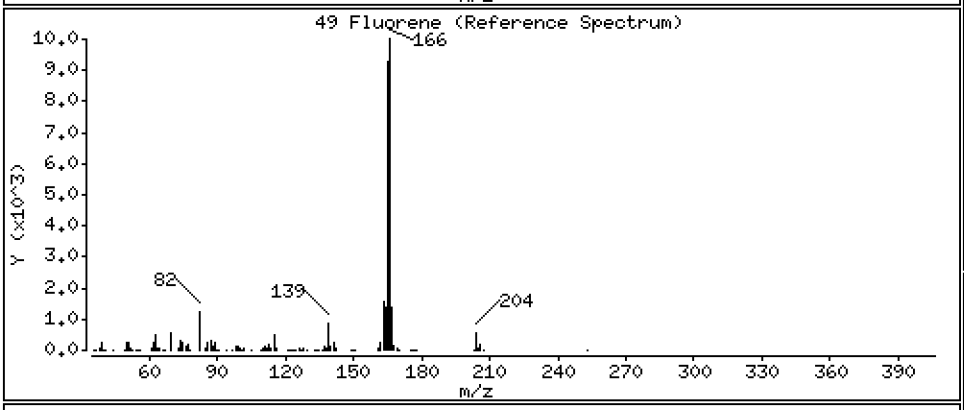
Concentration: 5.398 ug/mL

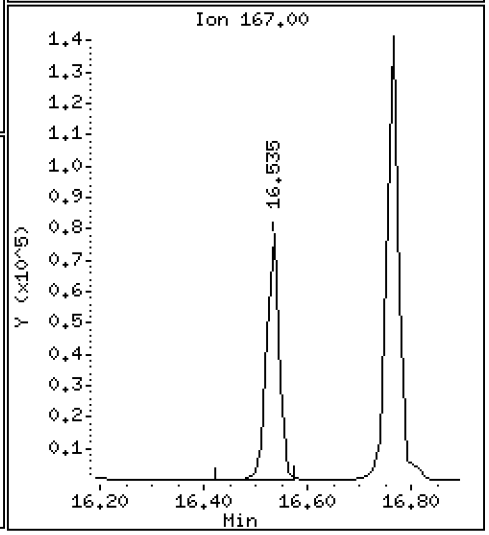


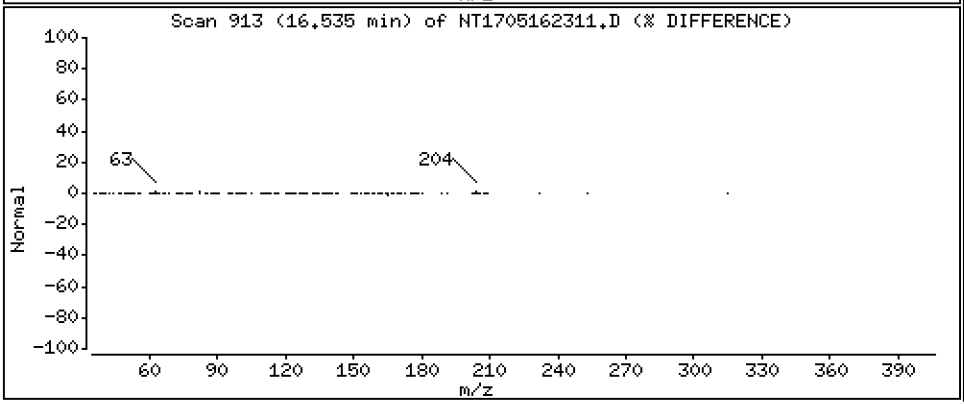












Date : 17-MAY-2023 00:29

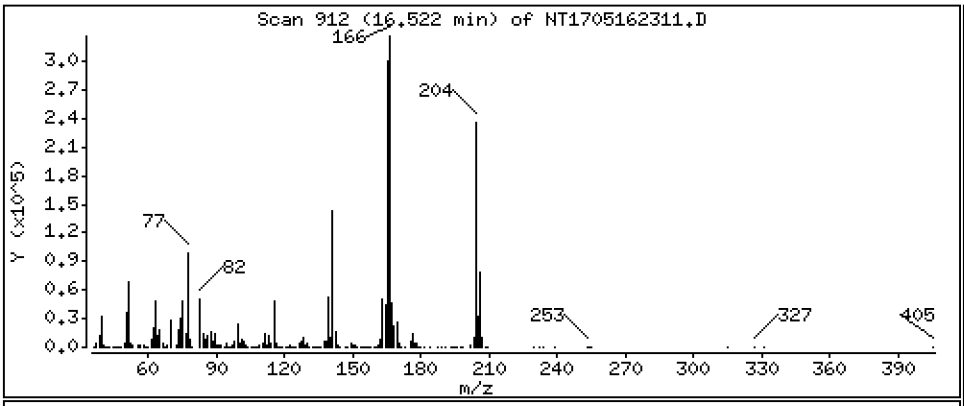
Client ID: Instrument: nt17.i

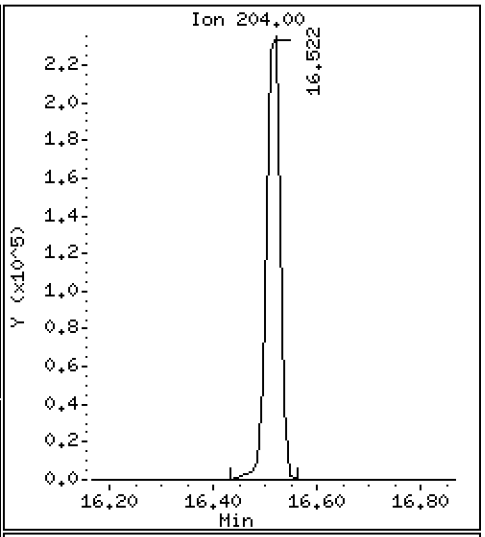
Sample Info: SLE0338-SCV1

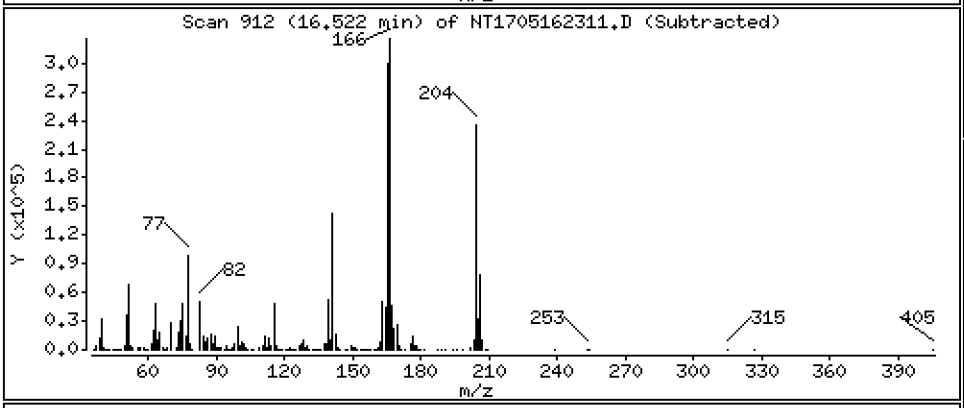
Operator: JGR

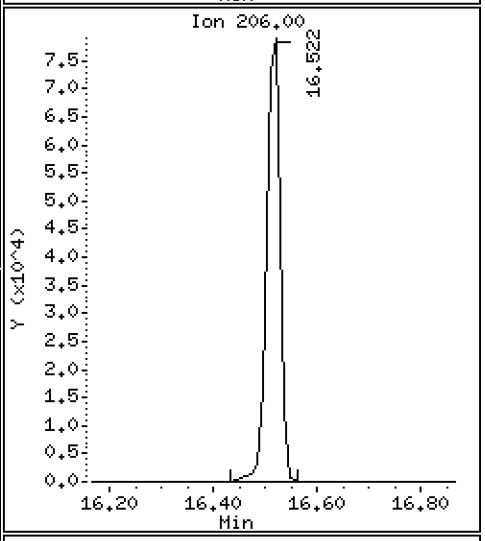
Column phase: ZB-5msi Column diameter: 0.25

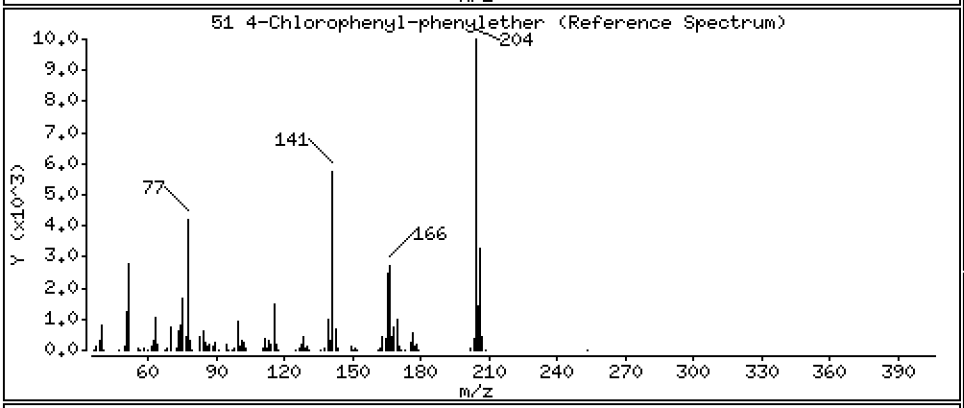
51 4-Chlorophenyl-phenylether Concentration: 5.462 ug/mL

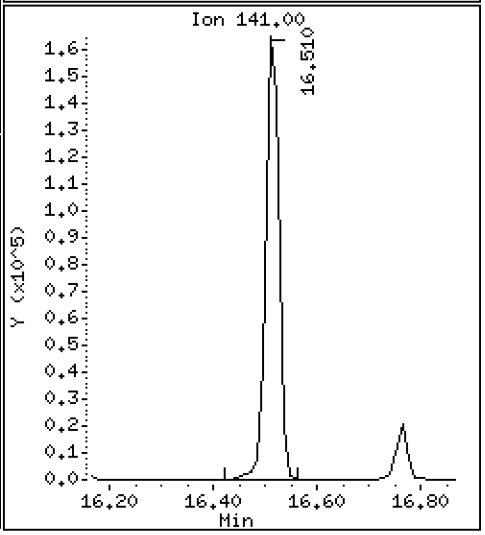


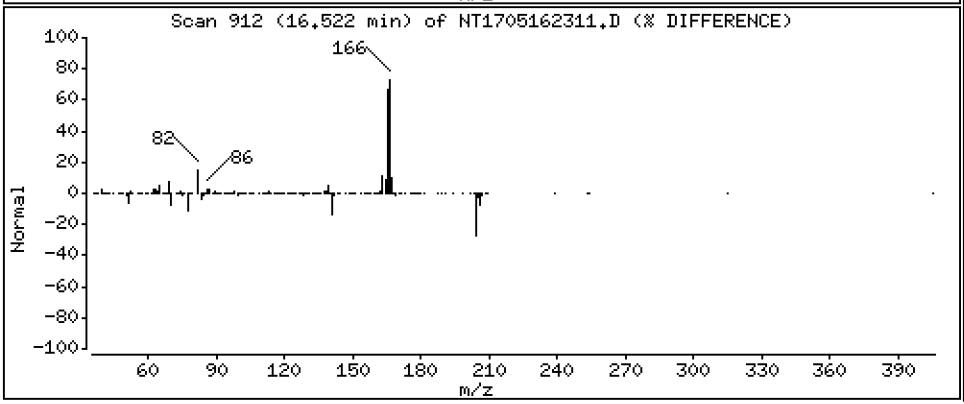












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

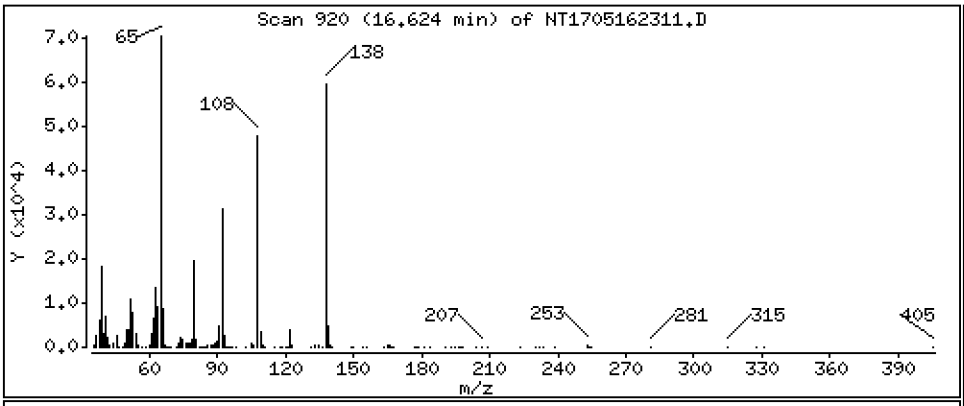
Operator: JGR

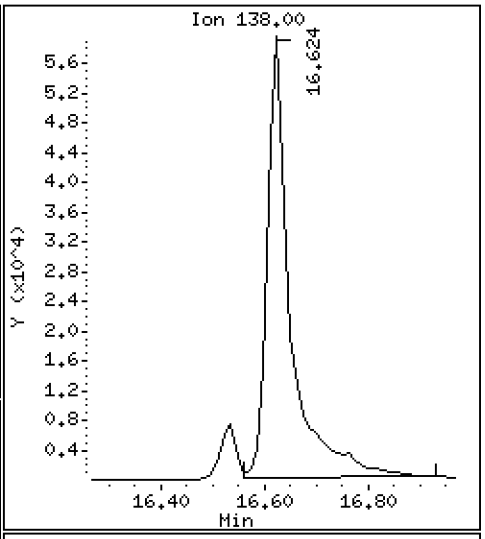
Column phase: ZB-5msi

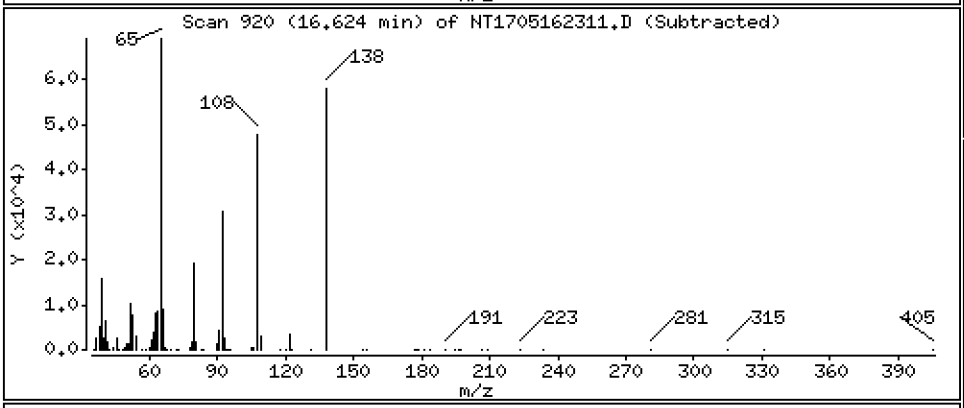
Column diameter: 0.25

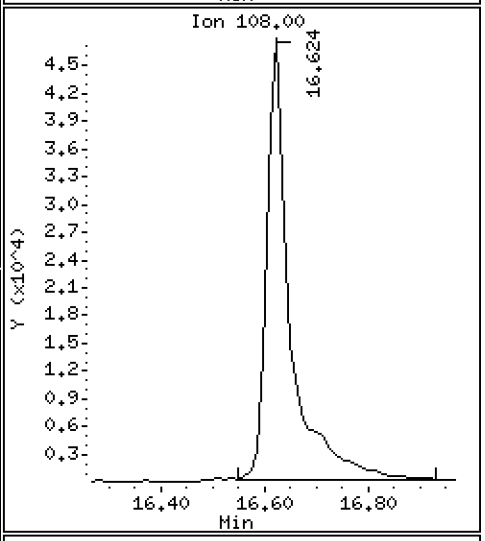
52 4-Nitroaniline

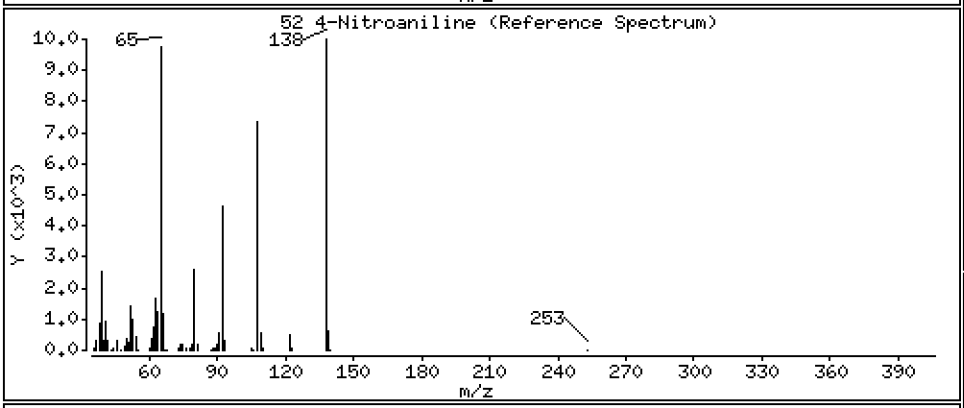
Concentration: 5.108 ug/mL

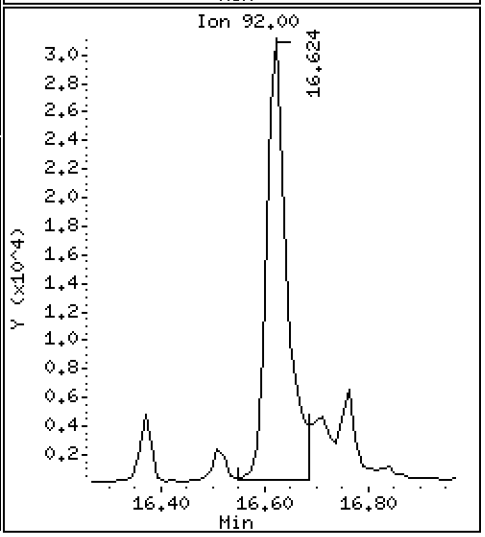


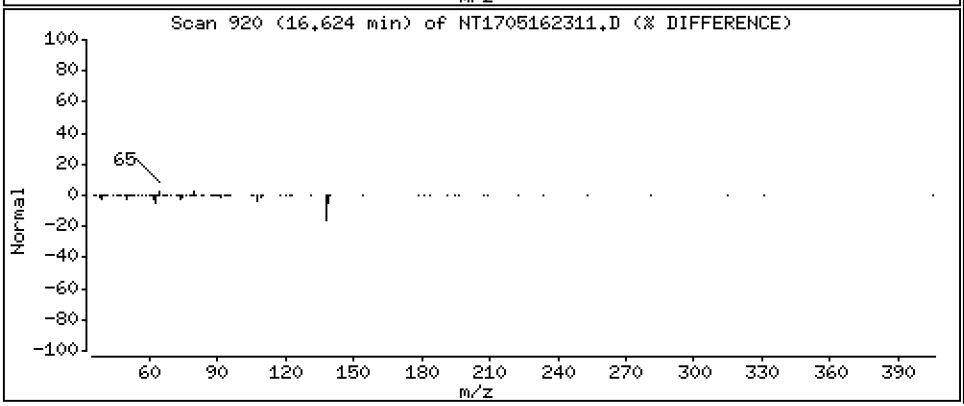












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

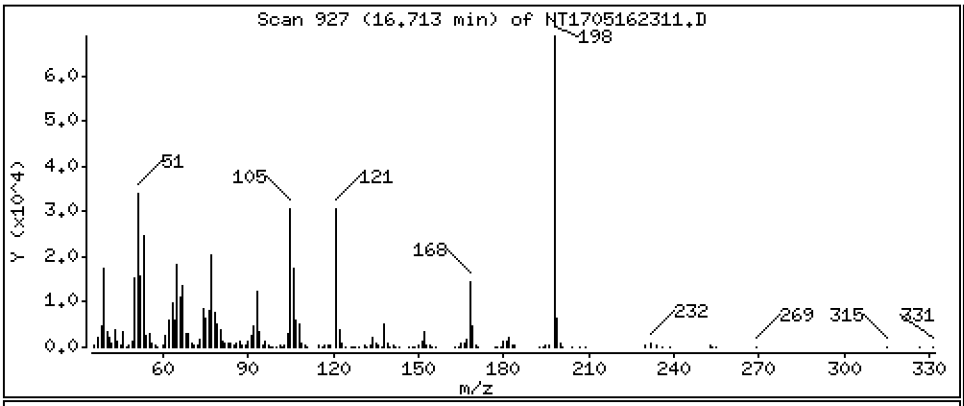
Operator: JGR

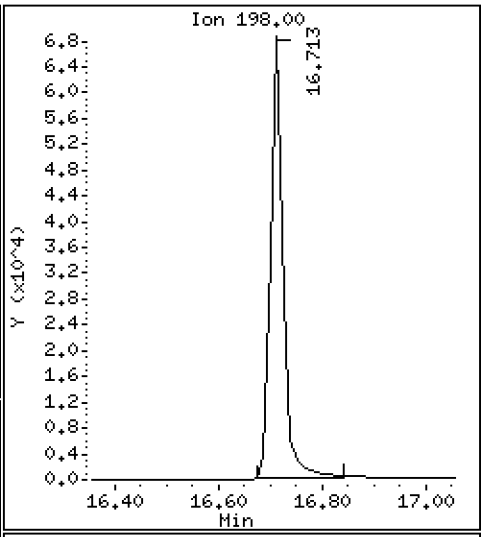
Column phase: ZB-5msi

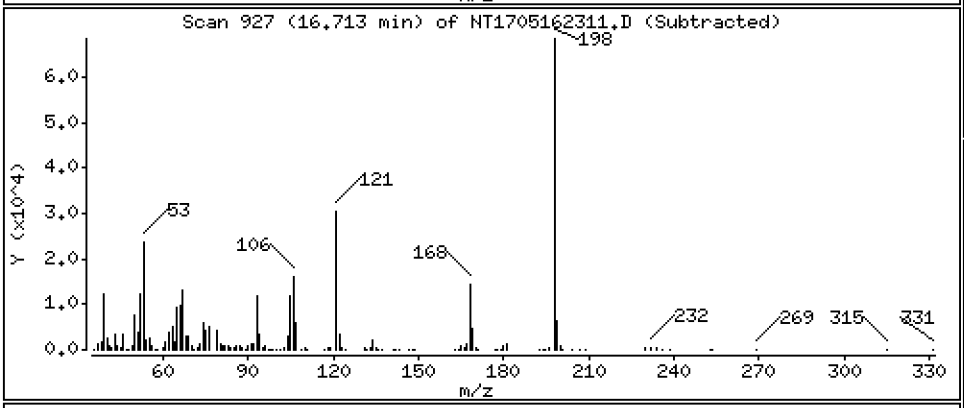
Column diameter: 0.25

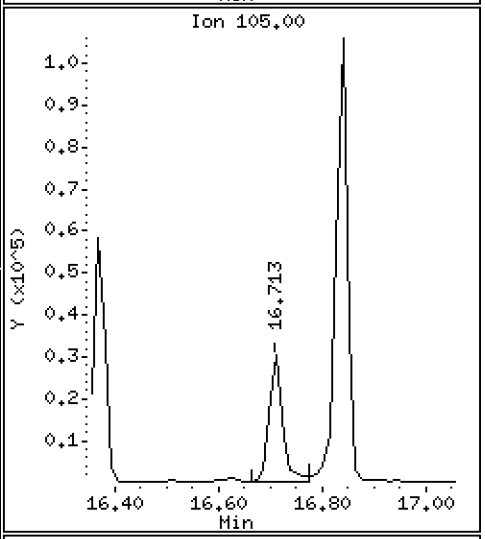
53 4,6-Dinitro-2-methylphenol

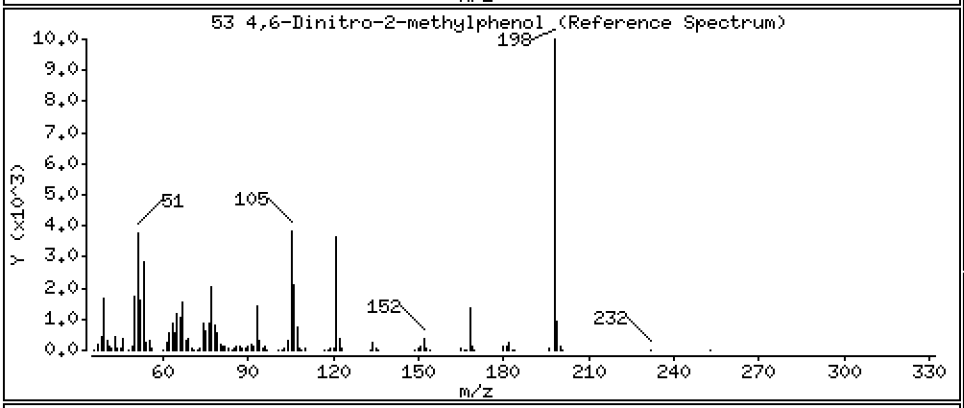
Concentration: 3.355 ug/mL

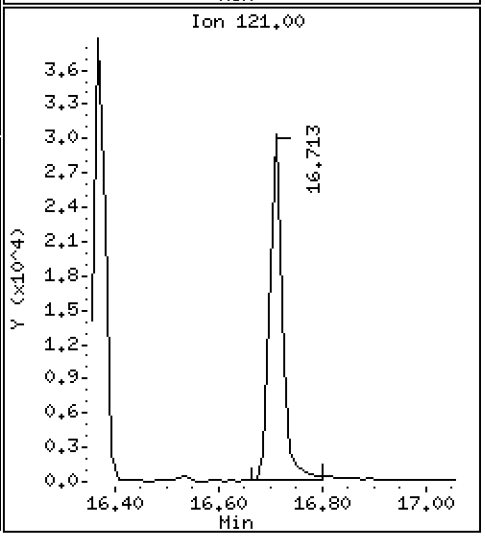


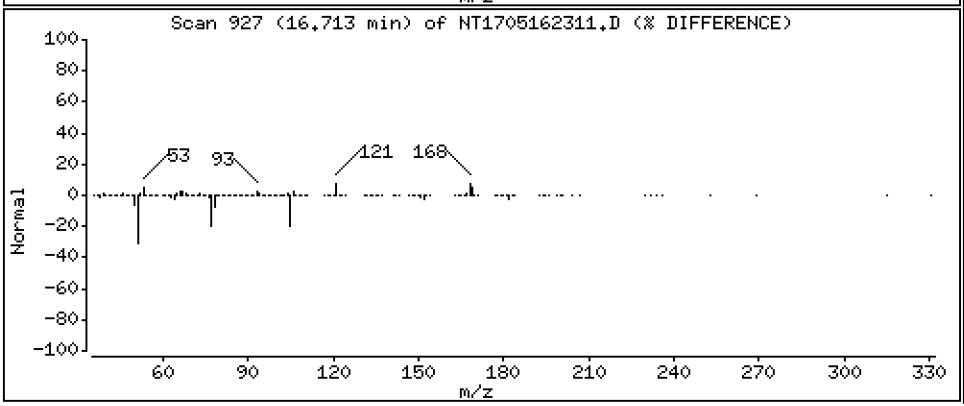












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

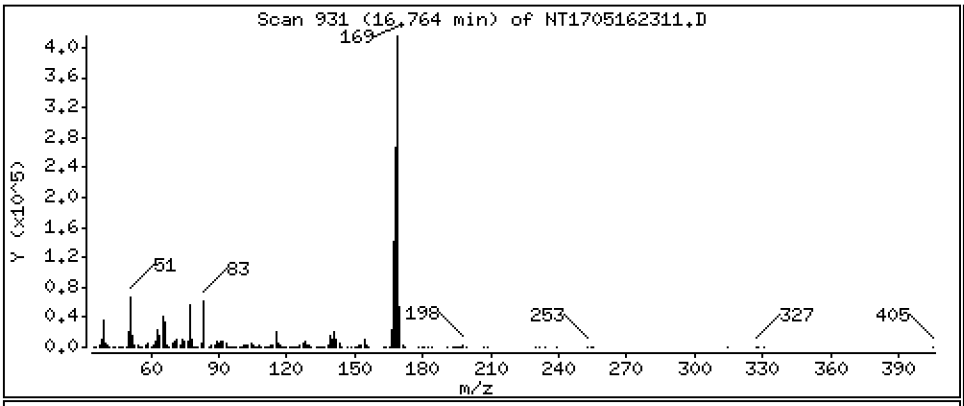
Operator: JGR

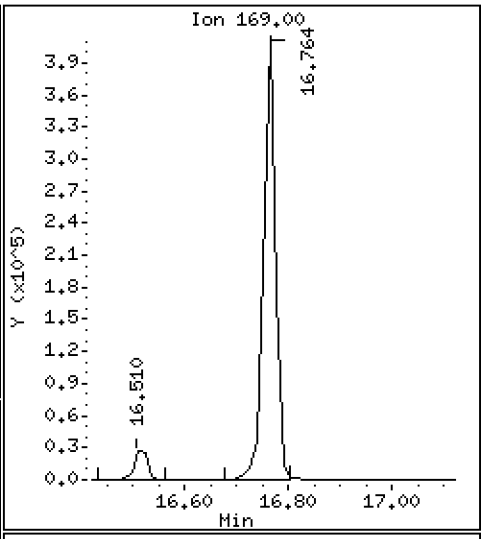
Column phase: ZB-5msi

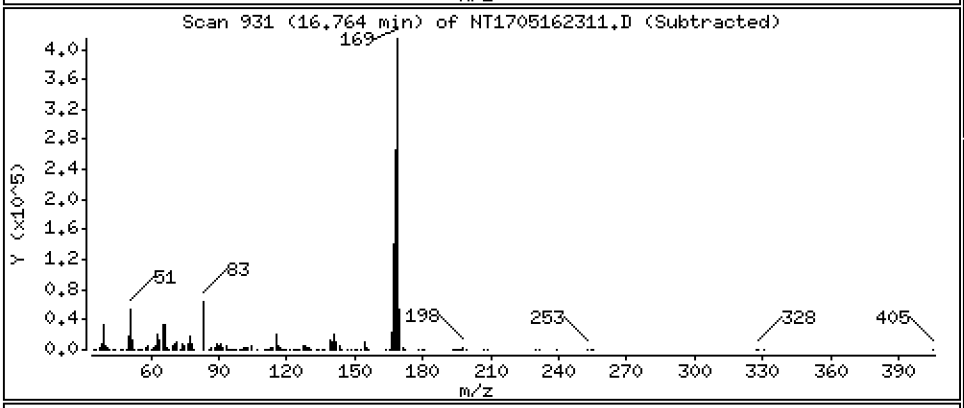
Column diameter: 0.25

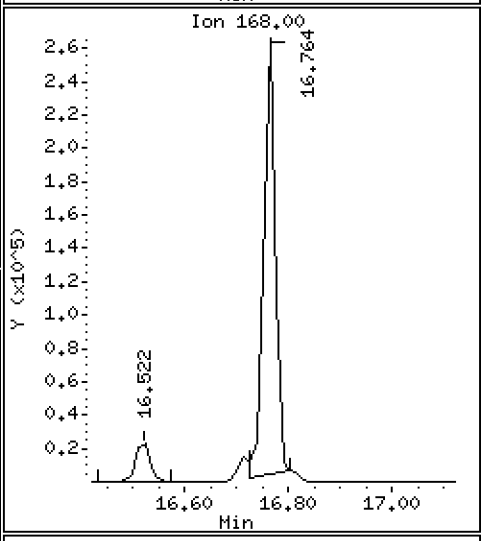
54 N-Nitrosodiphenylamine

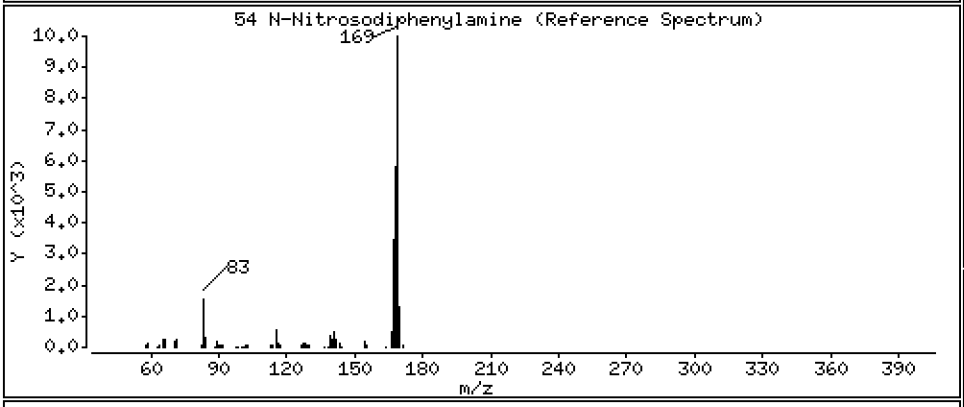
Concentration: 5.470 ug/mL

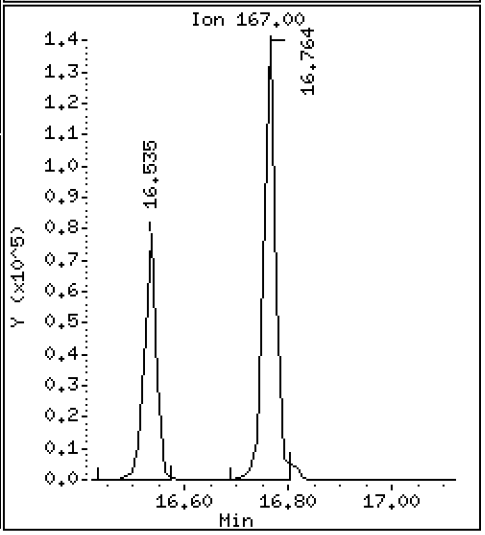


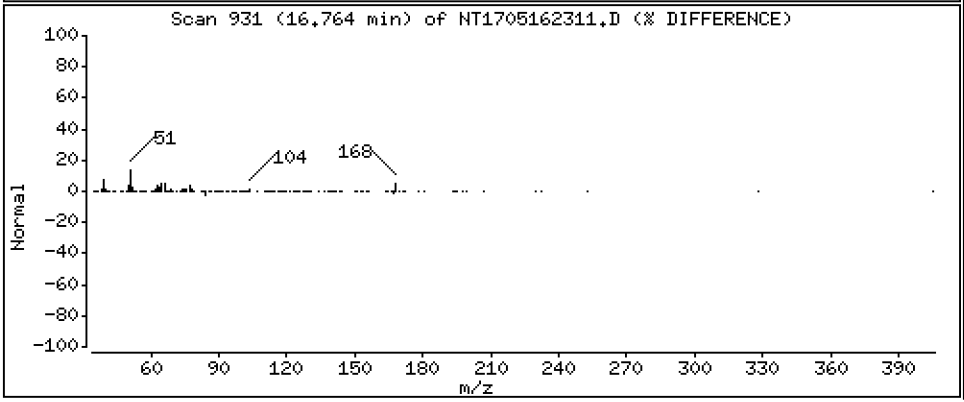












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

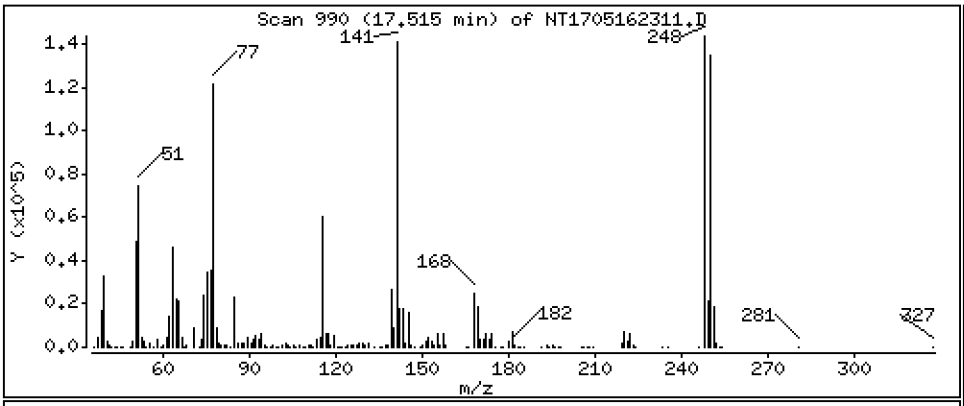
Operator: JGR

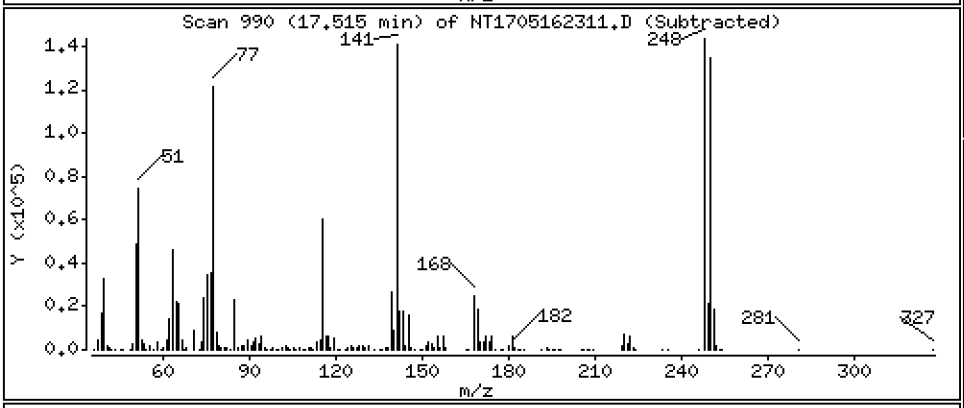
Column phase: ZB-5msi

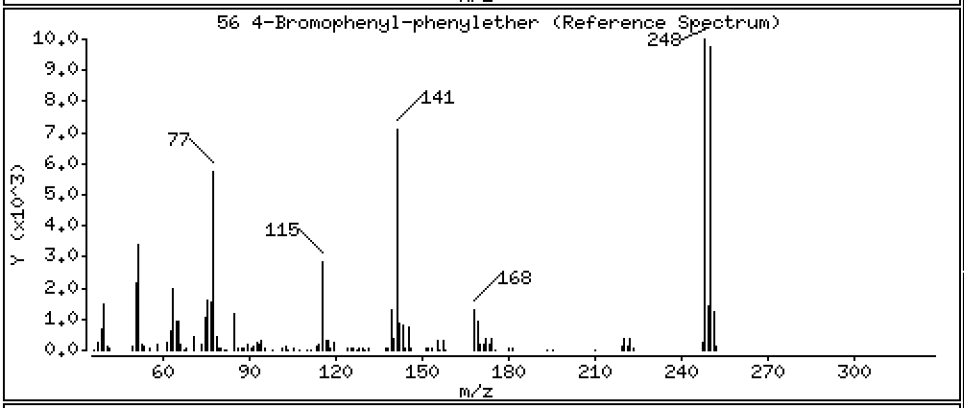
Column diameter: 0.25

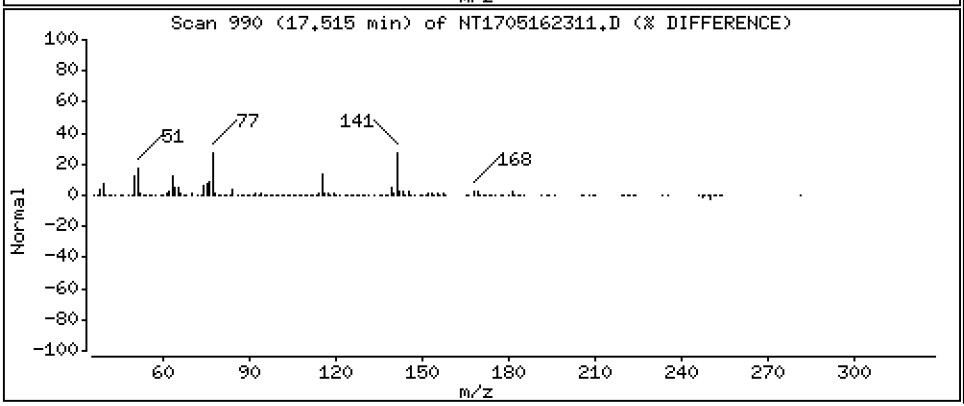
56 4-Bromophenyl-phenylether

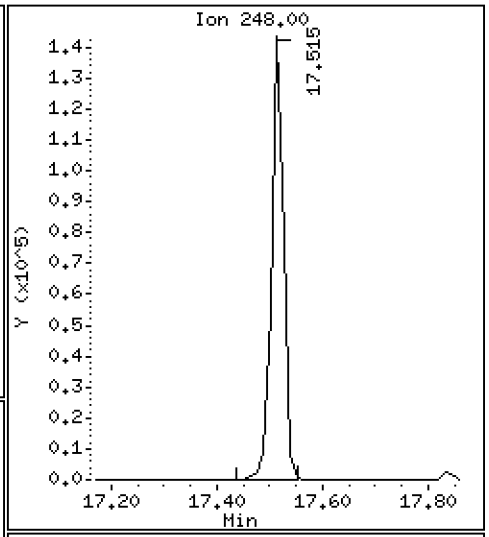
Concentration: 5.420 ug/mL

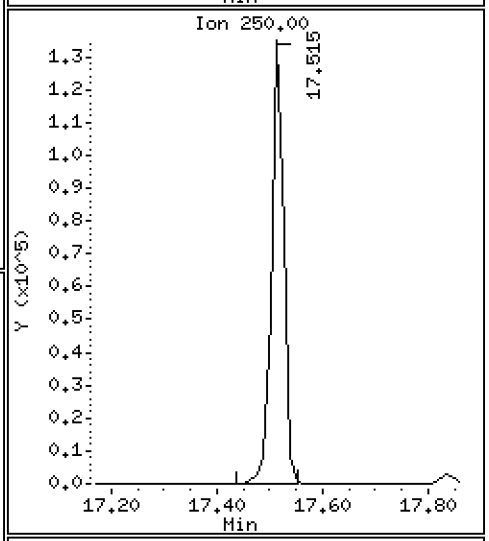


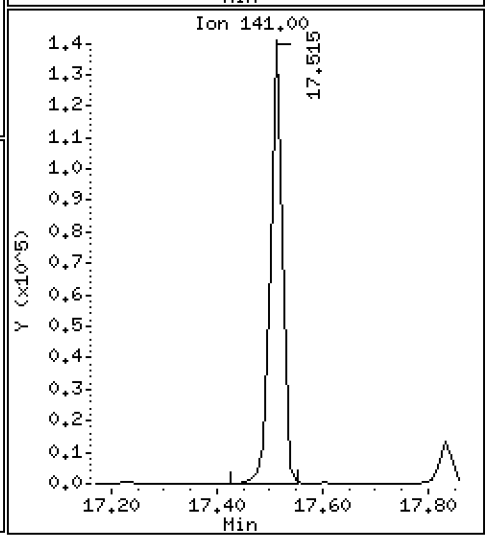












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

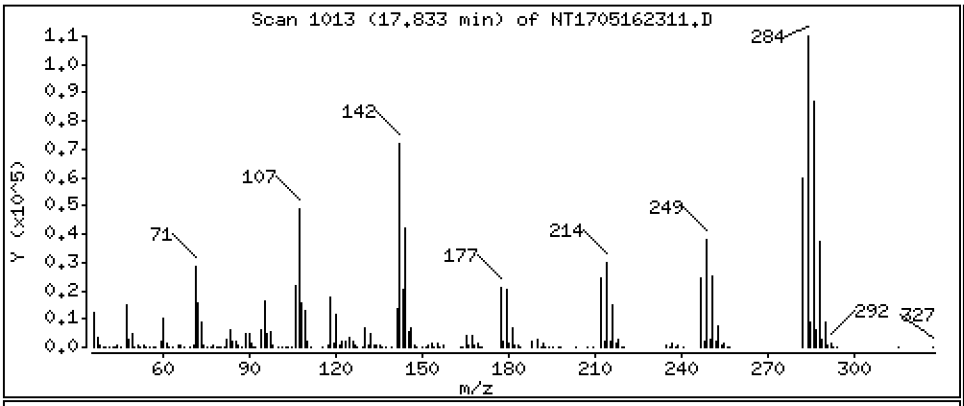
Operator: JGR

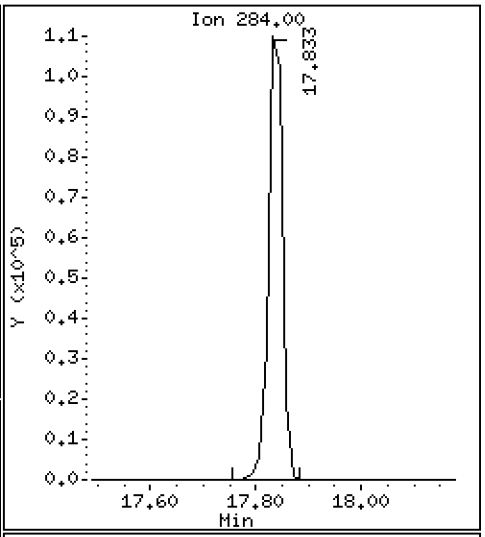
Column phase: ZB-5msi

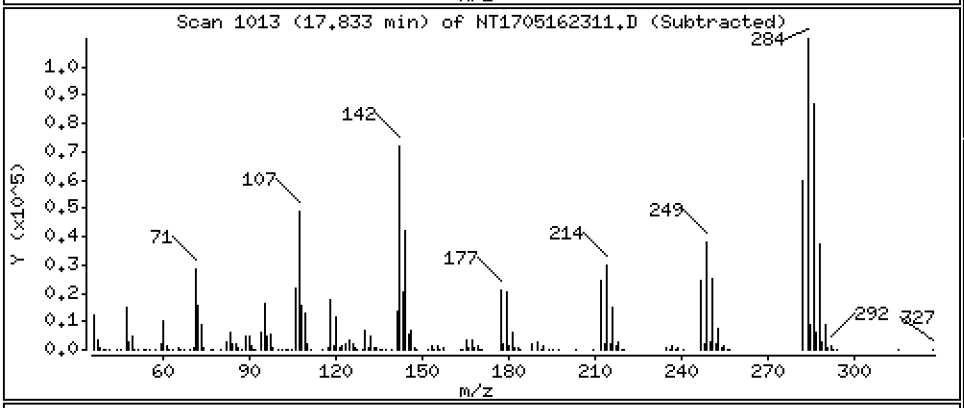
Column diameter: 0.25

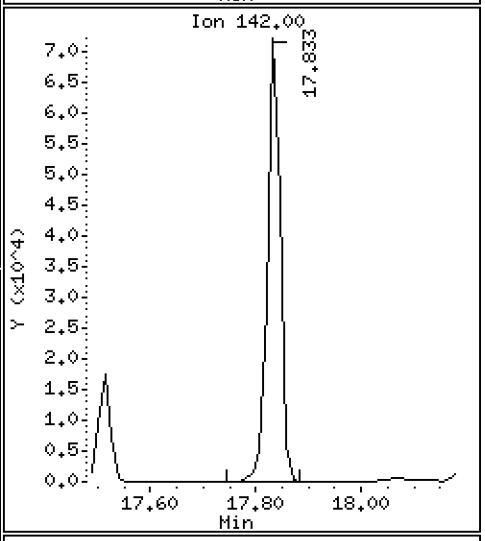
57 Hexachlorobenzene

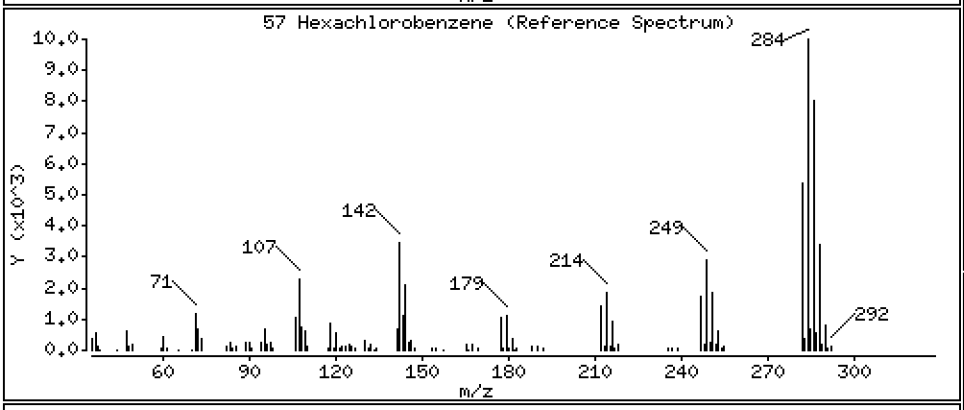
Concentration: 4.913 ug/mL

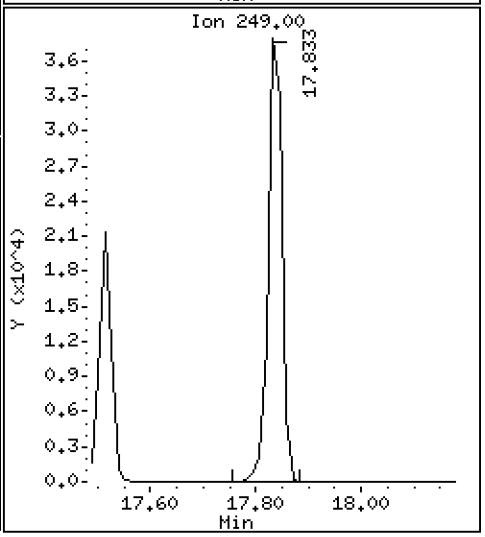


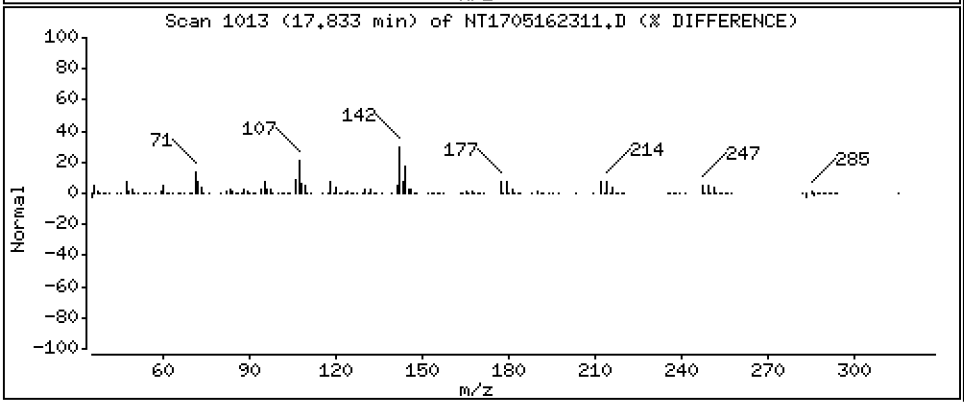












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

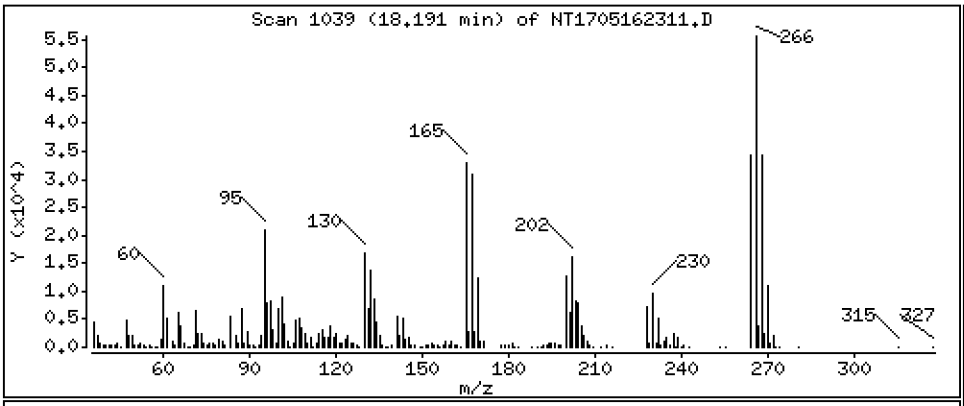
Operator: JGR

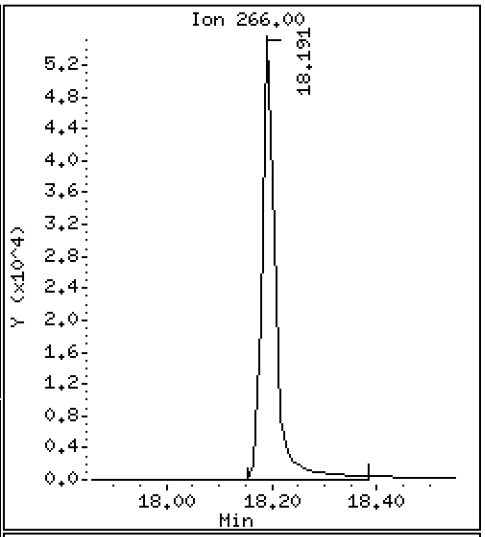
Column phase: ZB-5msi

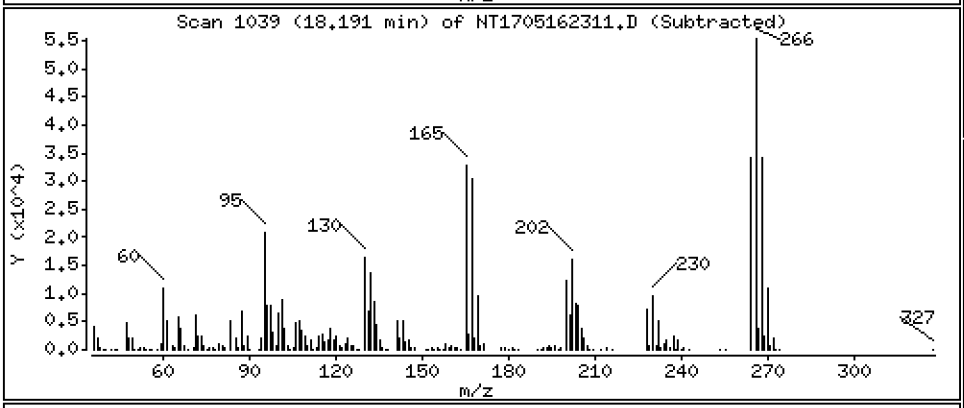
Column diameter: 0.25

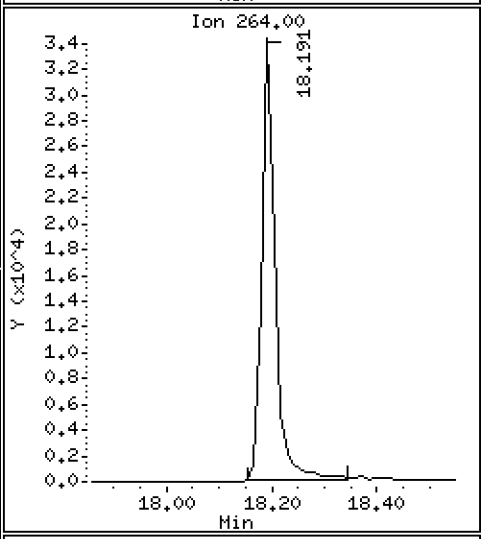
58 Pentachlorophenol

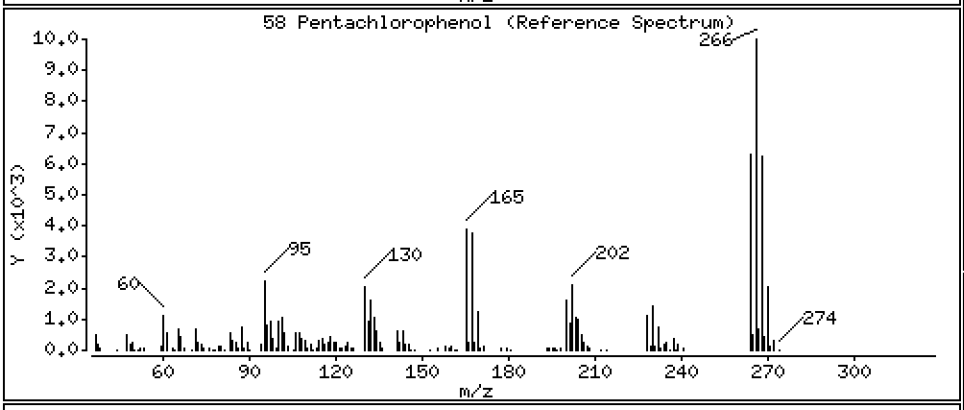
Concentration: 3.943 ug/mL

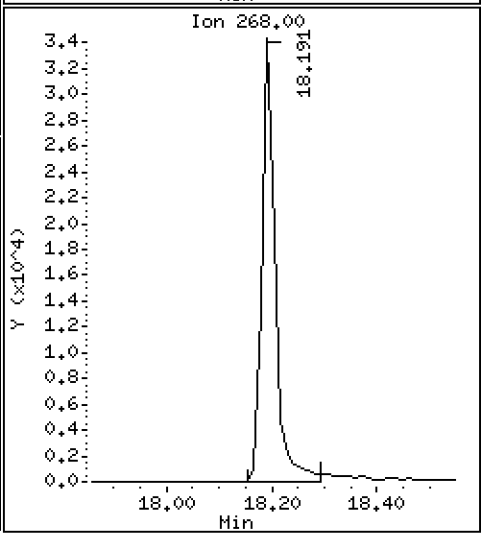


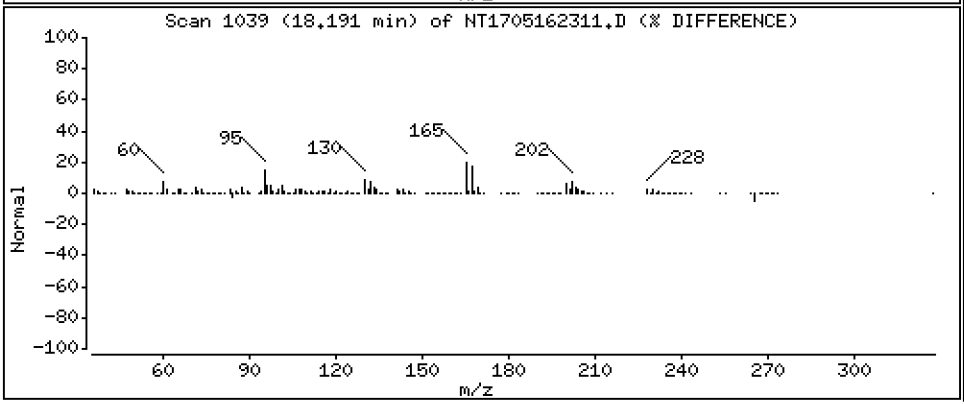












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

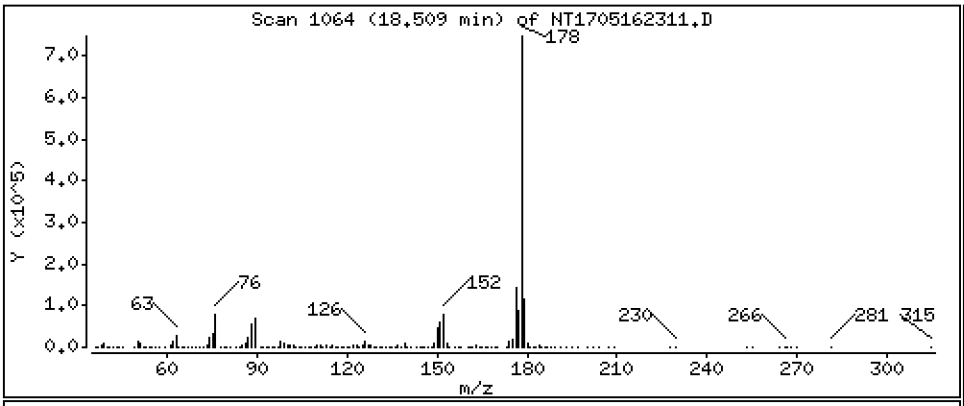
Operator: JGR

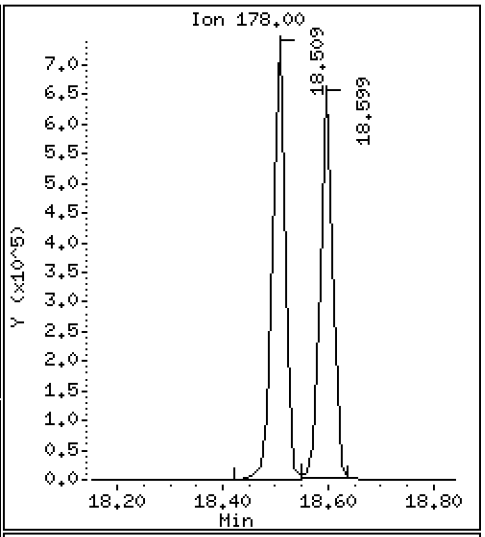
Column phase: ZB-5msi

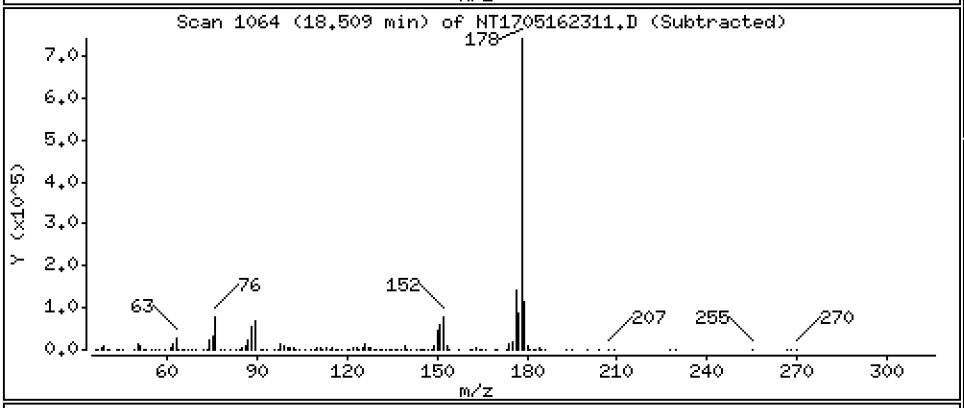
Column diameter: 0.25

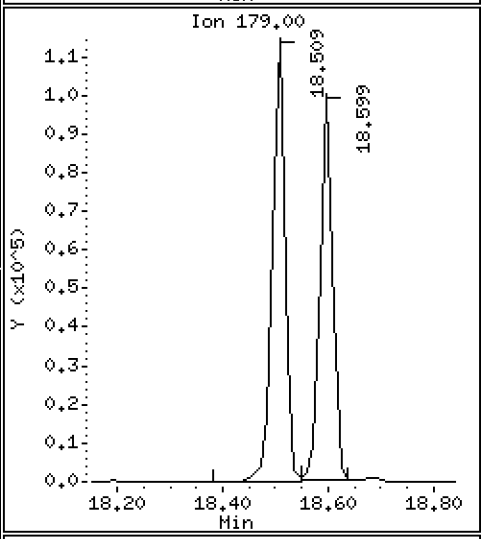
60 Phenanthrene

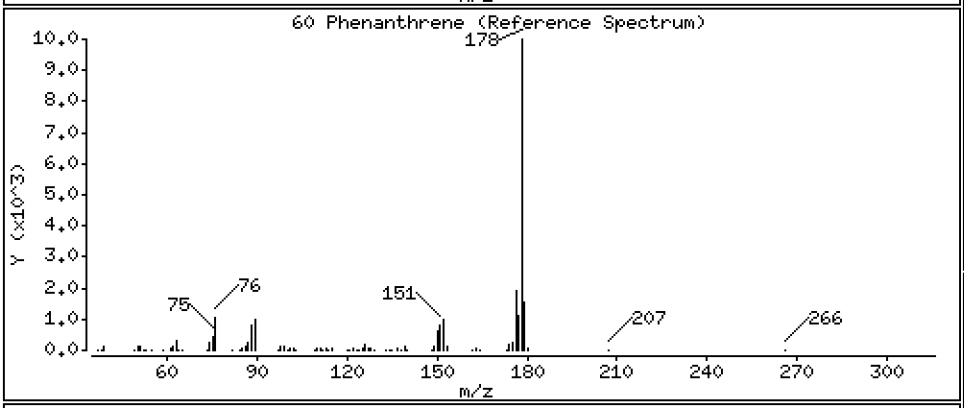
Concentration: 5.039 ug/mL

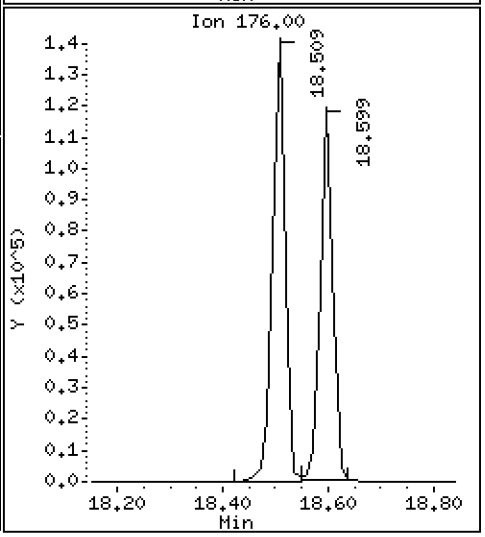


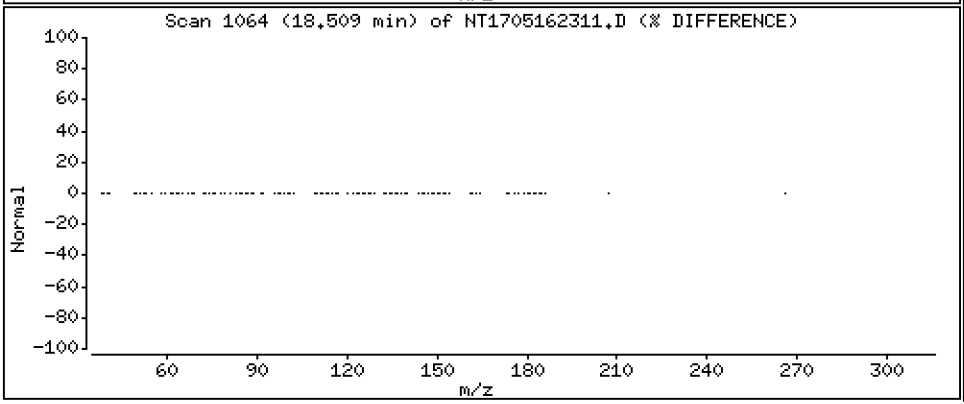












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

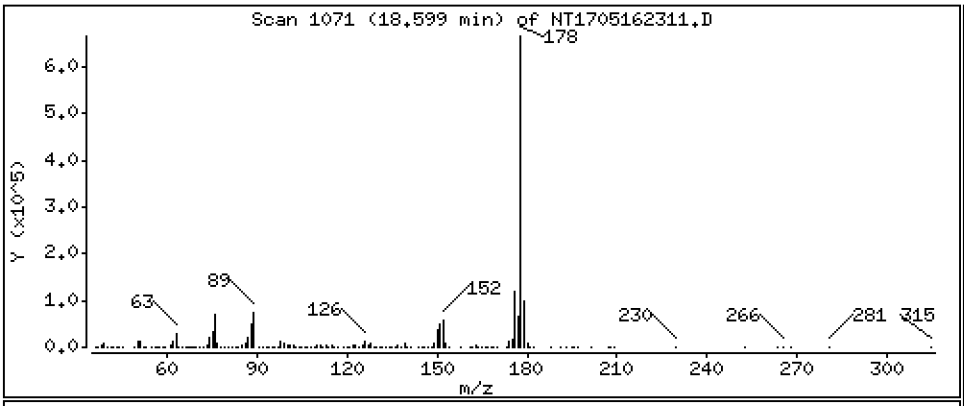
Operator: JGR

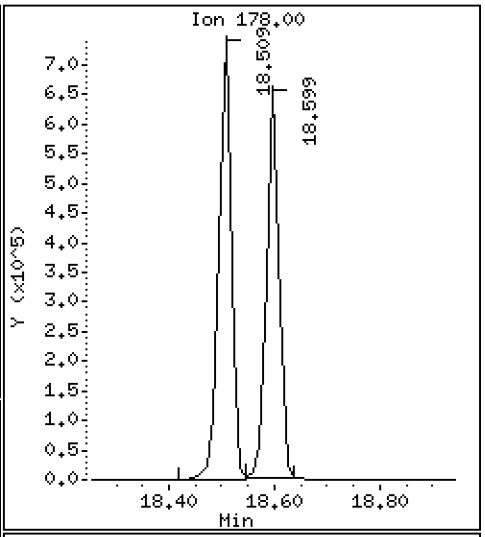
Column phase: ZB-5msi

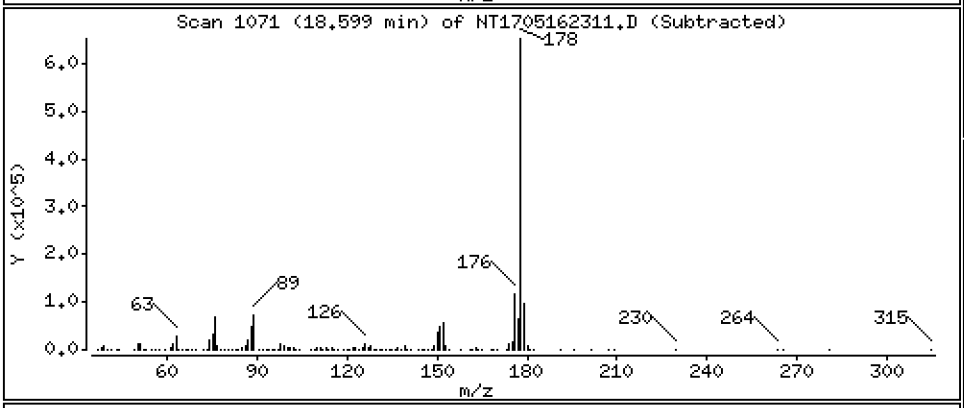
Column diameter: 0.25

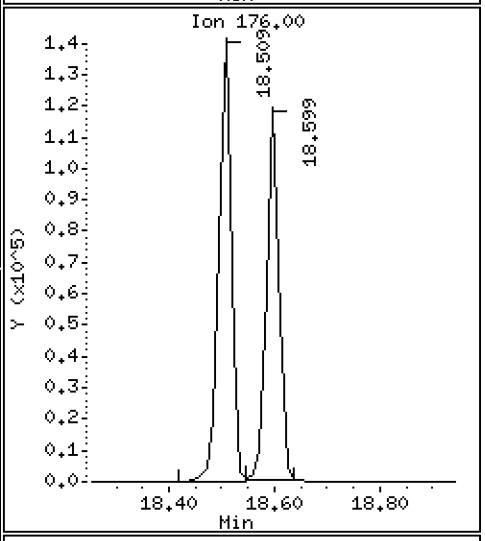
61 Anthracene

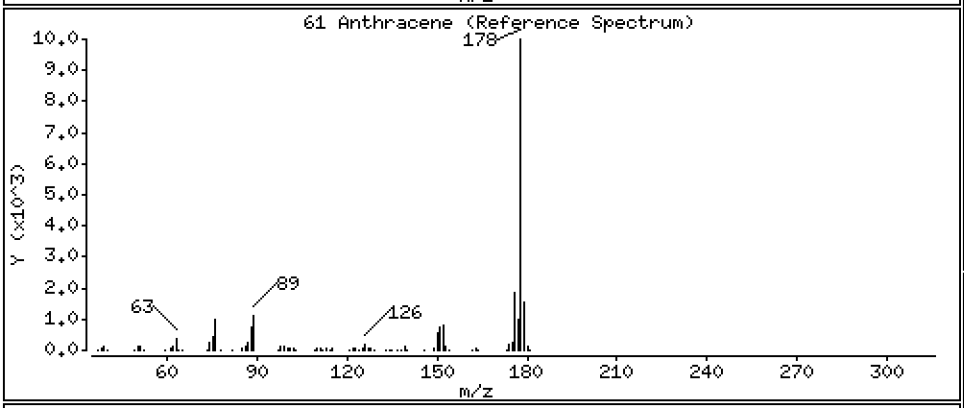
Concentration: 4.530 ug/mL

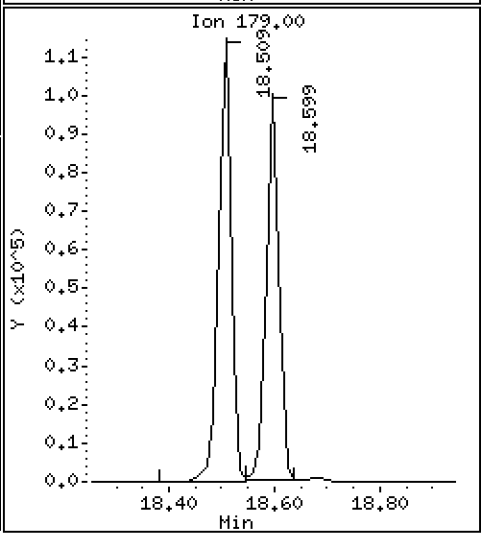


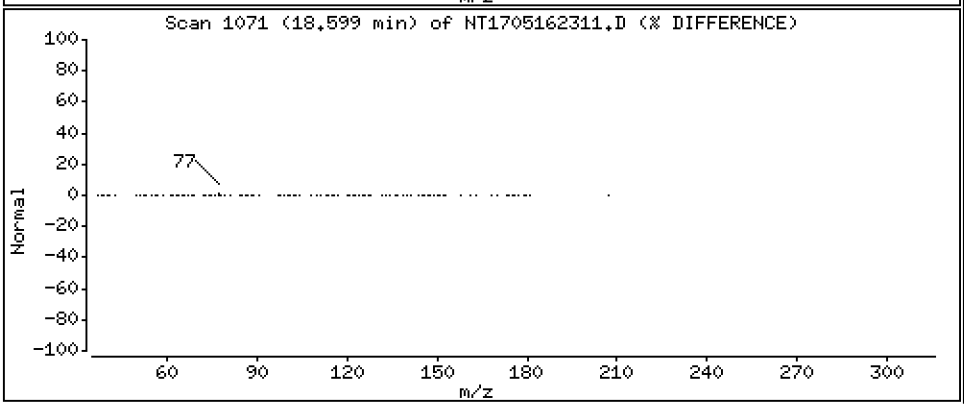












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

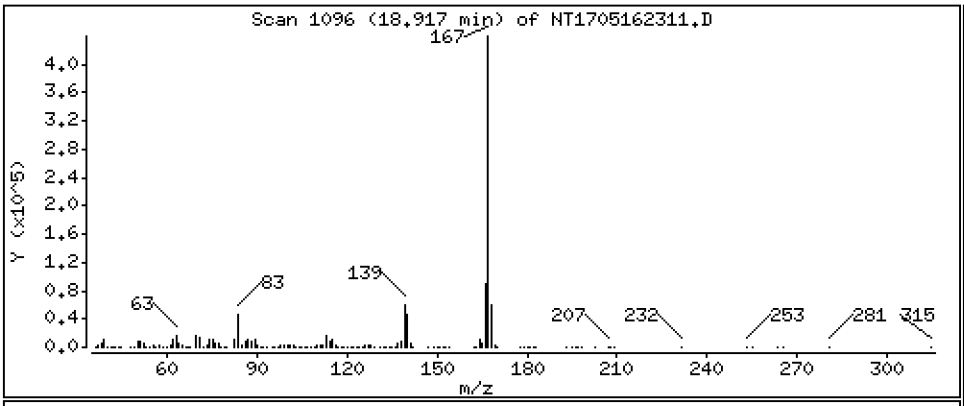
Operator: JGR

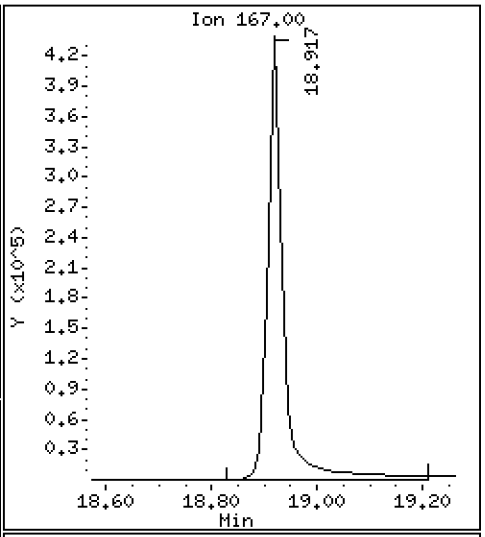
Column phase: ZB-5msi

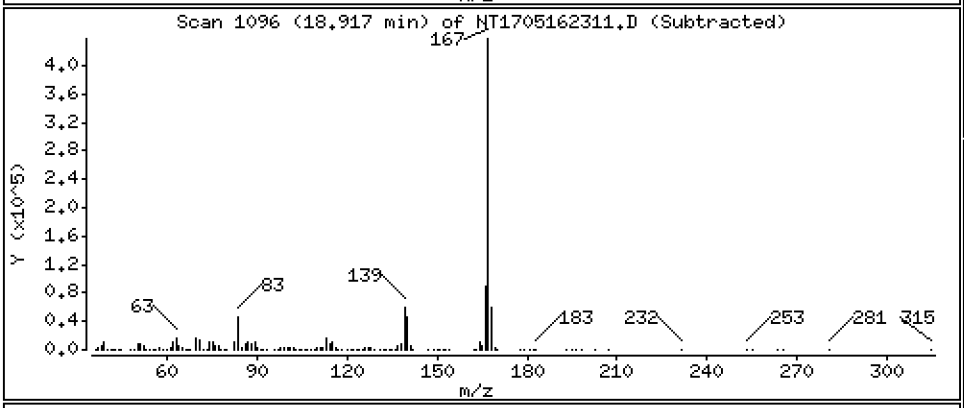
Column diameter: 0.25

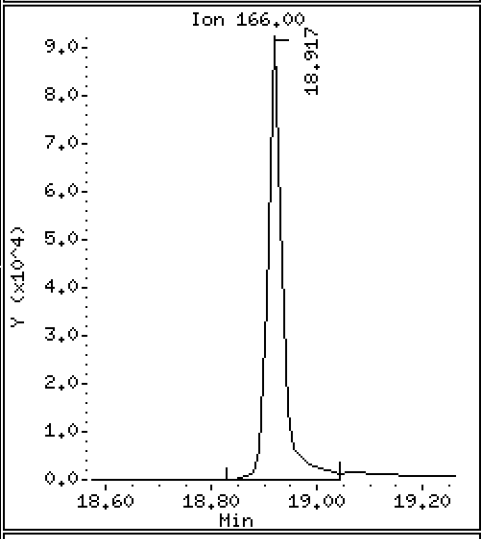
62 Carbazole

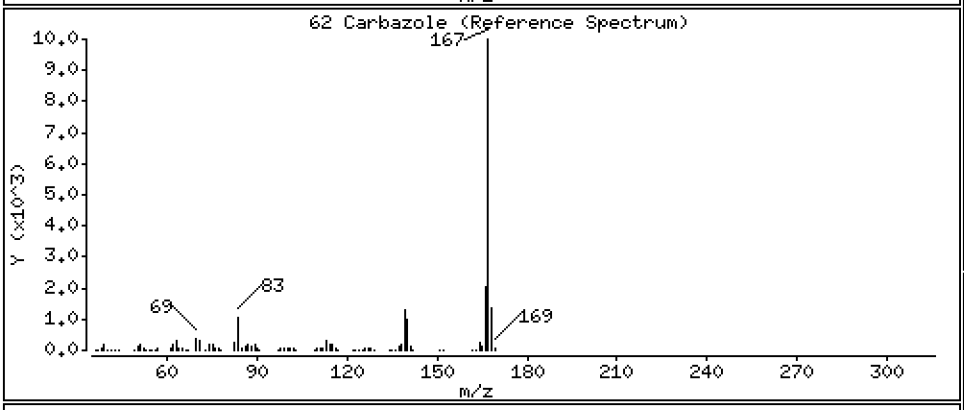
Concentration: 5.938 ug/mL

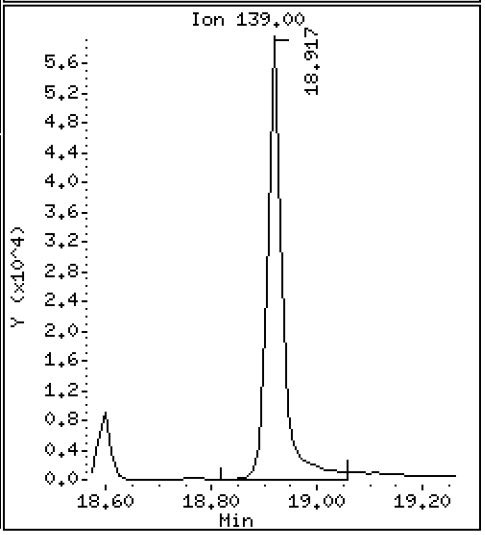


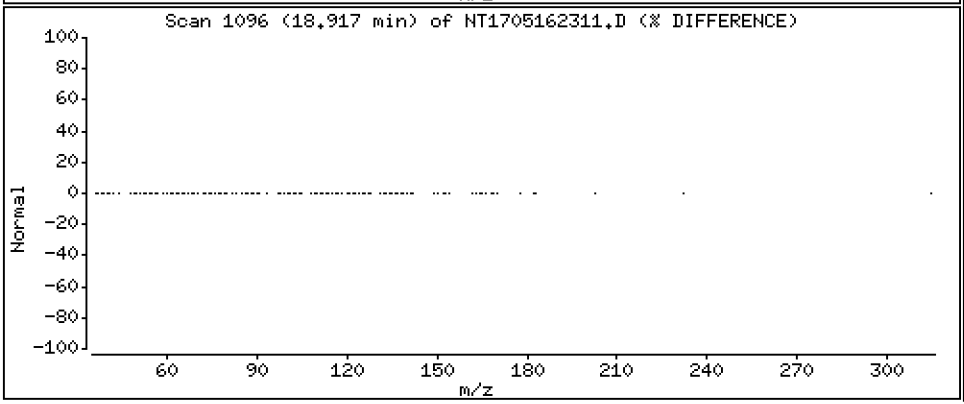












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

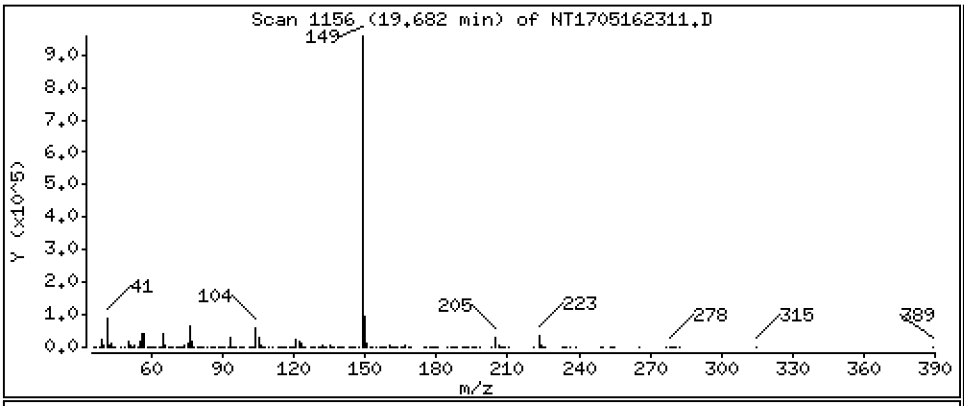
Operator: JGR

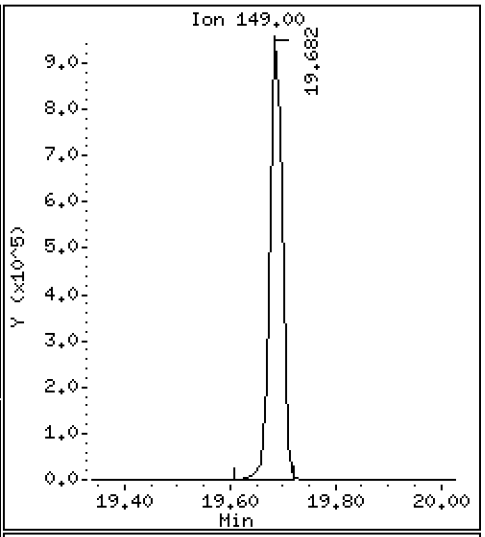
Column phase: ZB-5msi

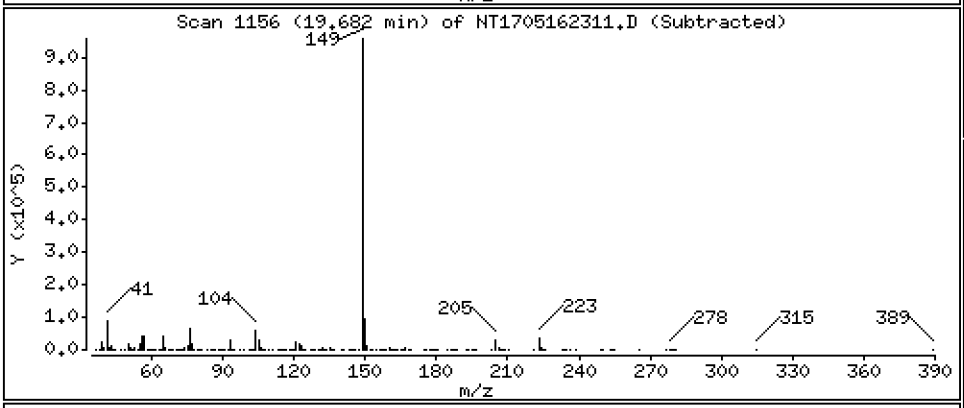
Column diameter: 0.25

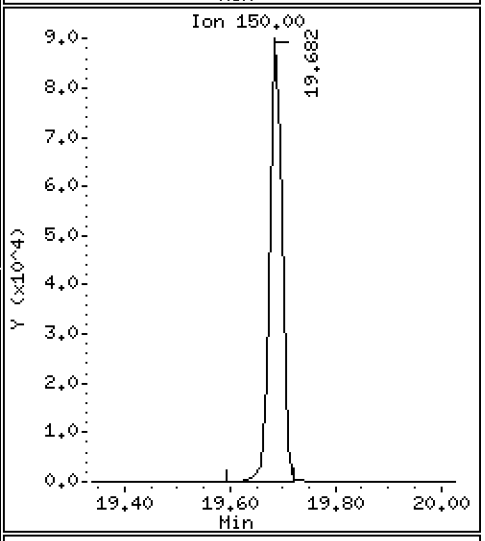
63 Di-n-butylphthalate

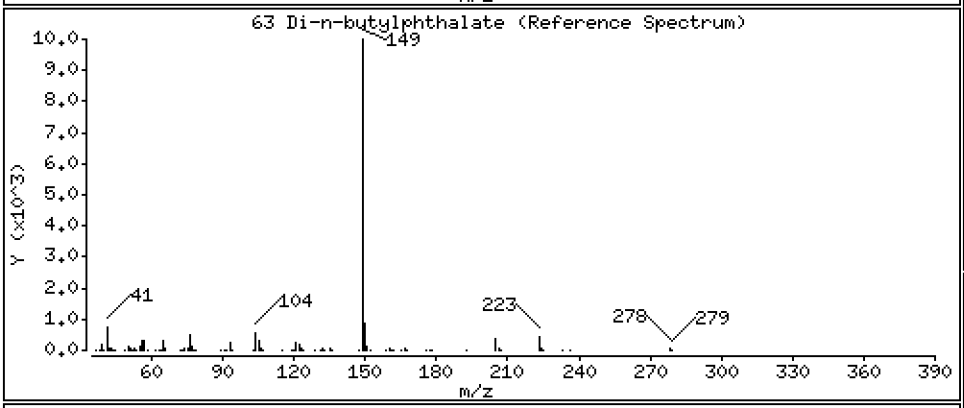
Concentration: 5.642 ug/mL

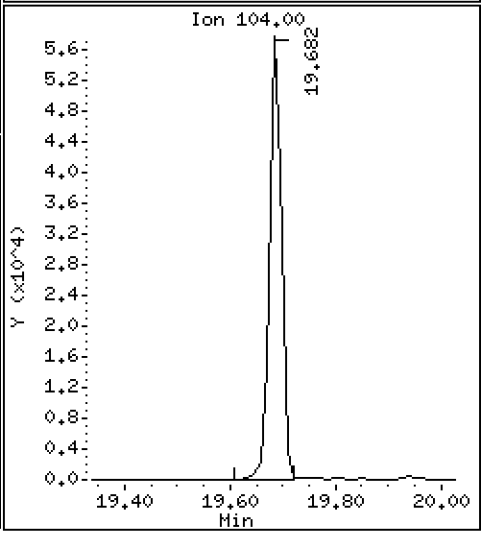


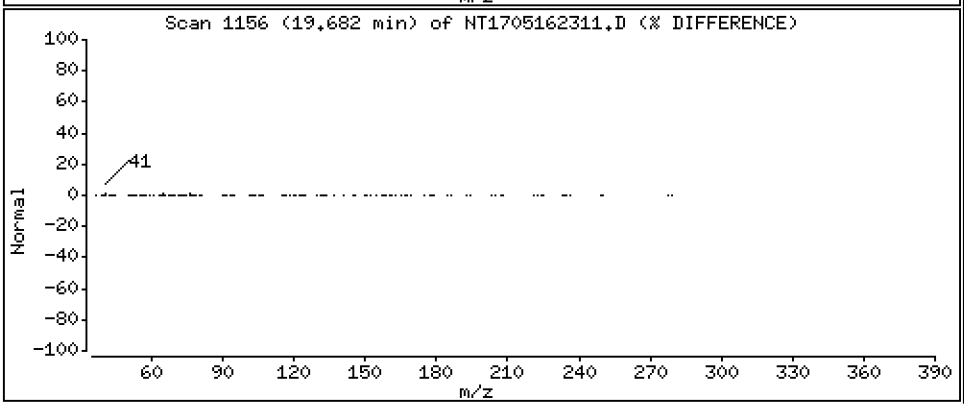












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

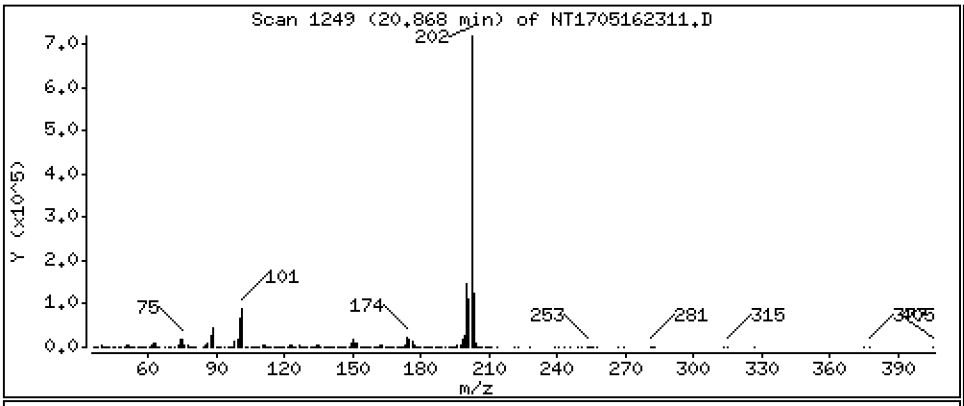
Operator: JGR

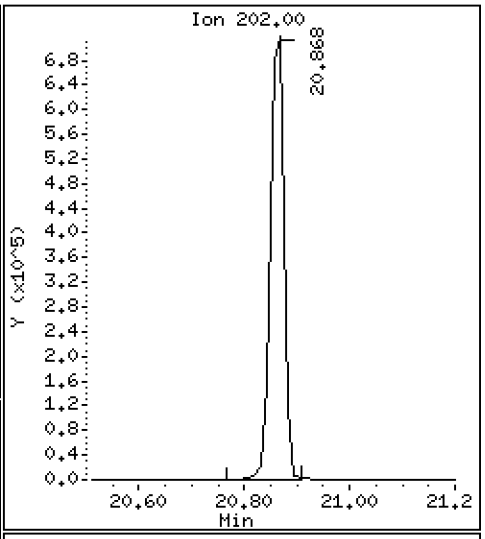
Column phase: ZB-5msi

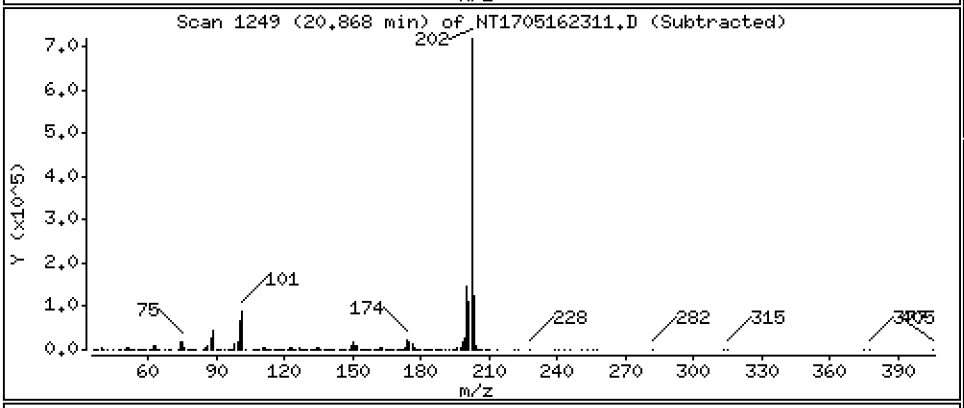
Column diameter: 0.25

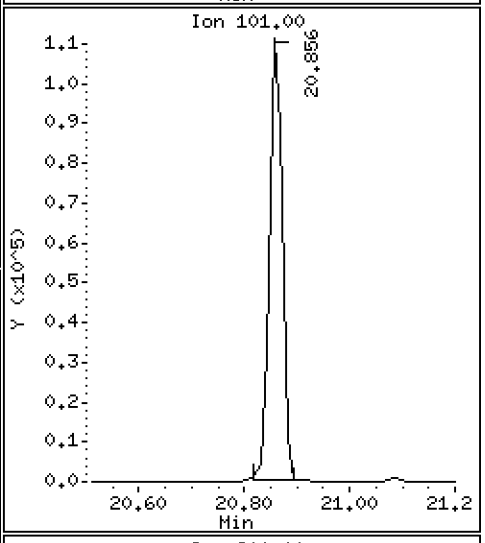
64 Fluoranthene

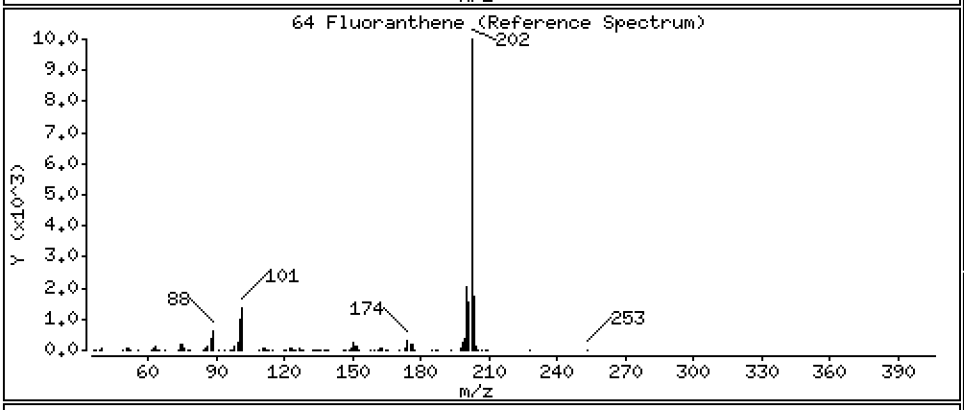
Concentration: 5.467 ug/mL

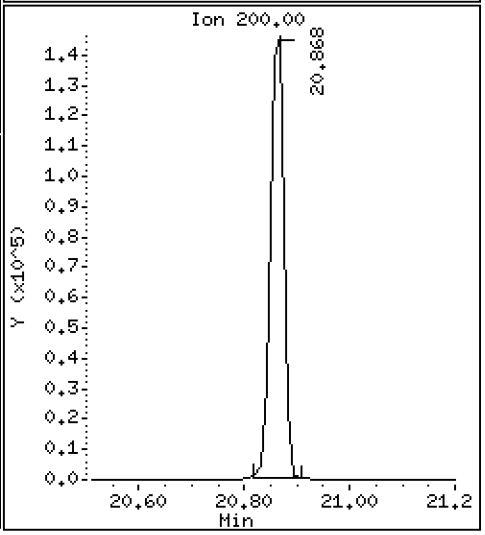


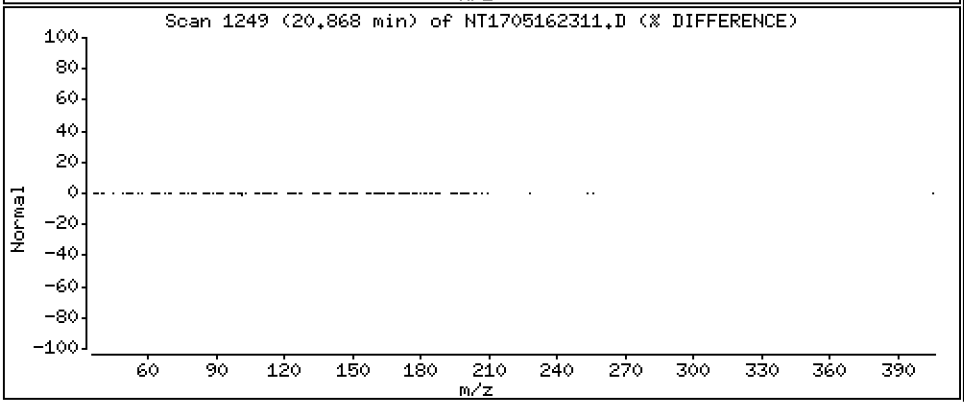












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

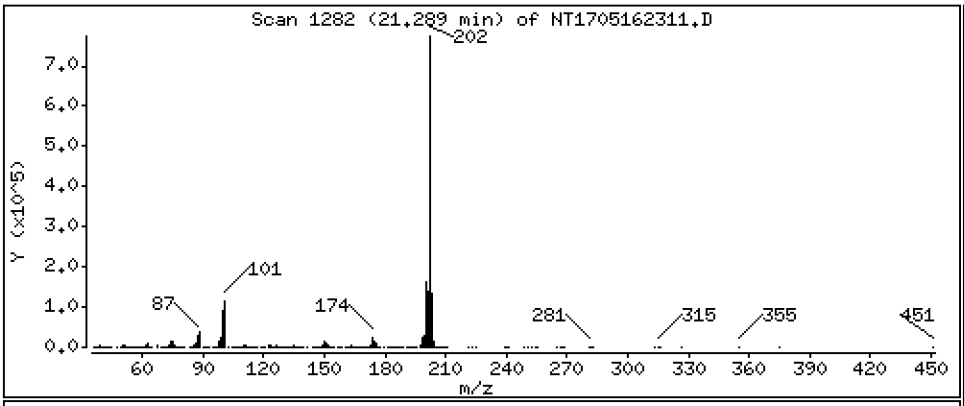
Operator: JGR

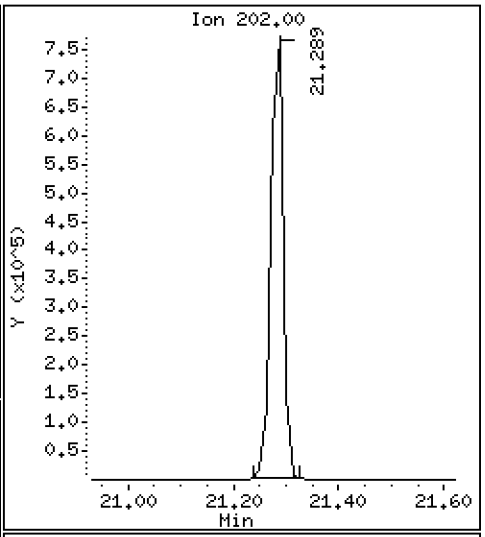
Column phase: ZB-5msi

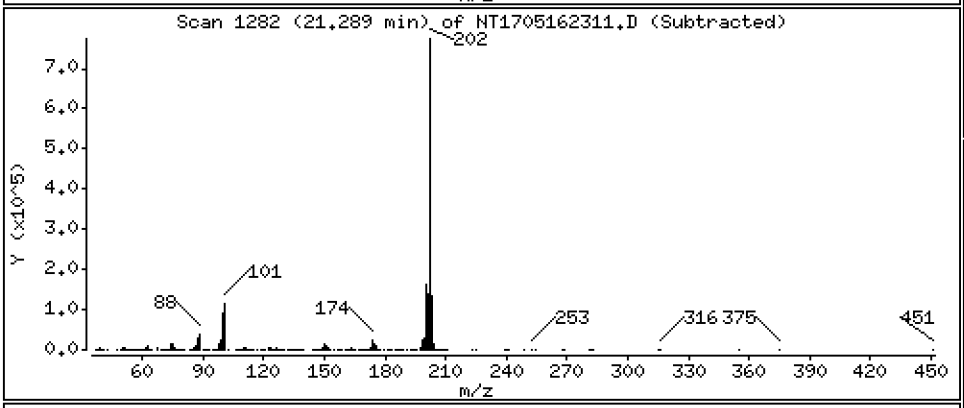
Column diameter: 0.25

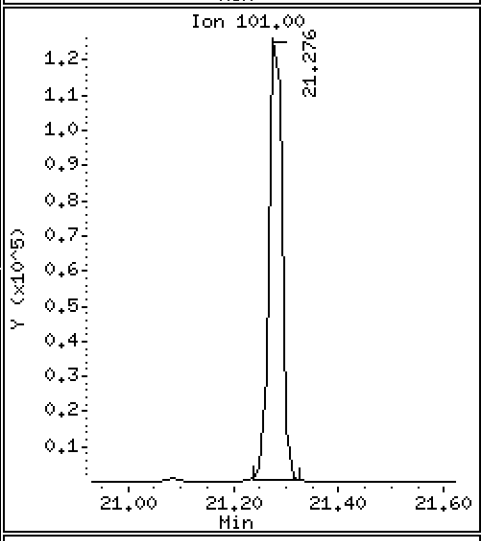
65 Pyrene

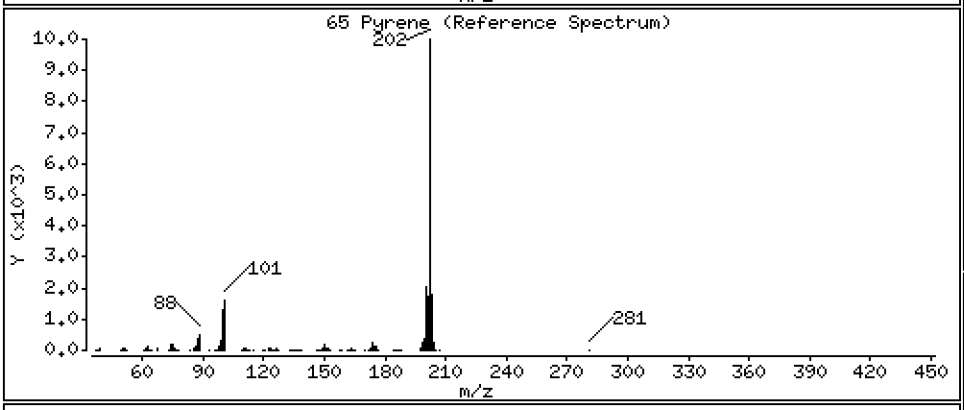
Concentration: 5.265 ug/mL

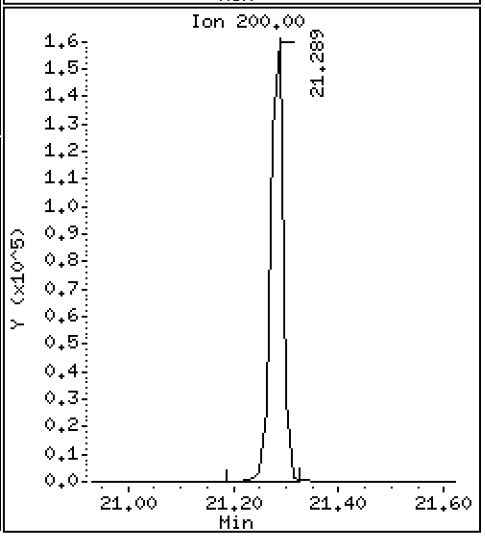


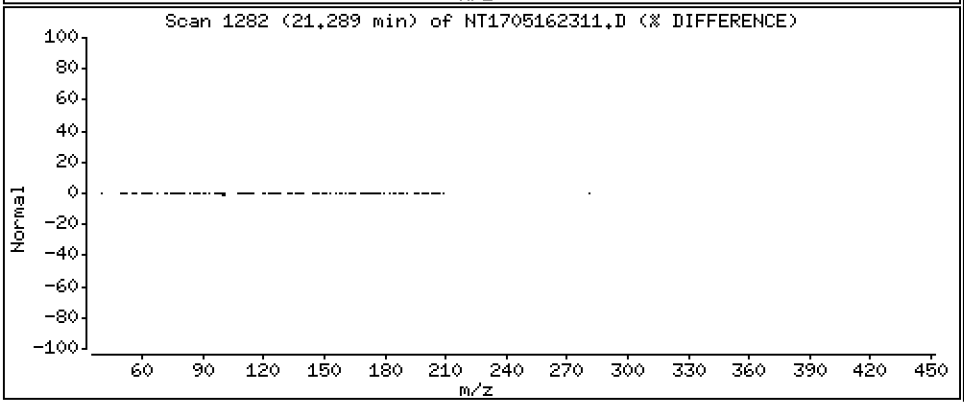












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

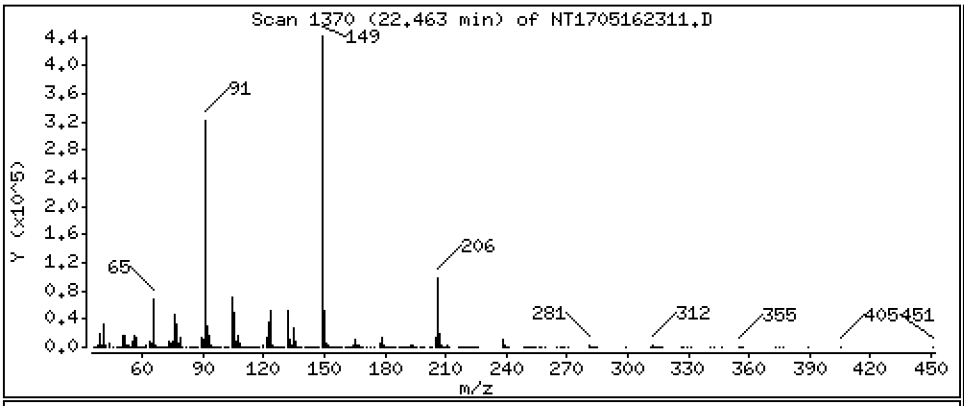
Operator: JGR

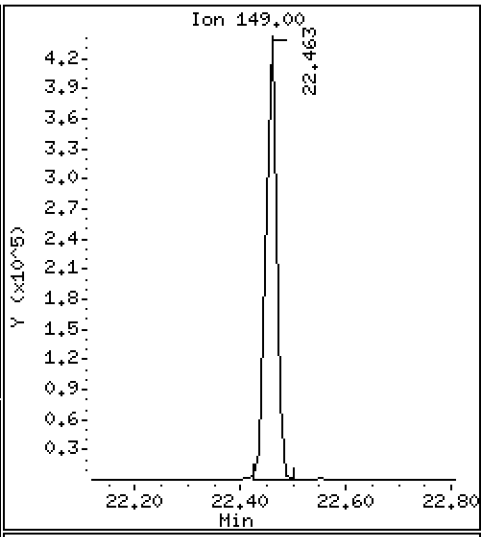
Column phase: ZB-5msi

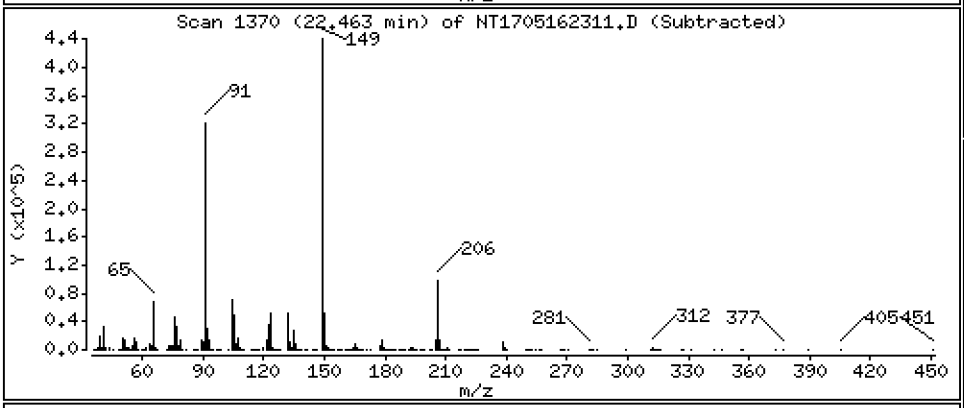
Column diameter: 0.25

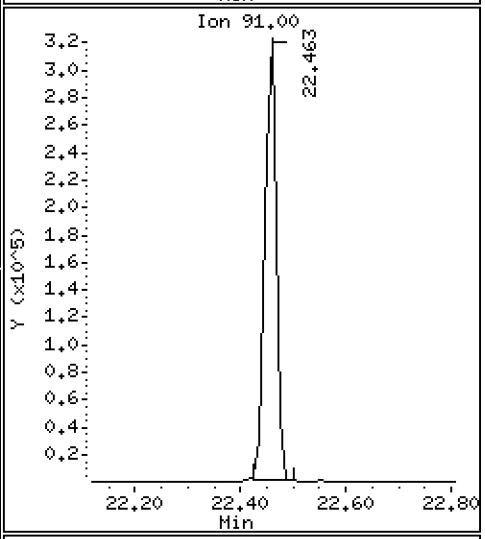
67 Butylbenzylphthalate

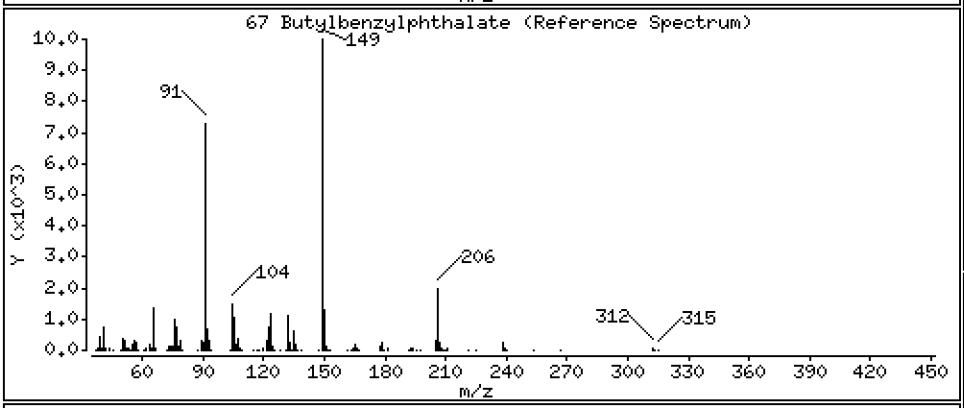
Concentration: 5.825 ug/mL

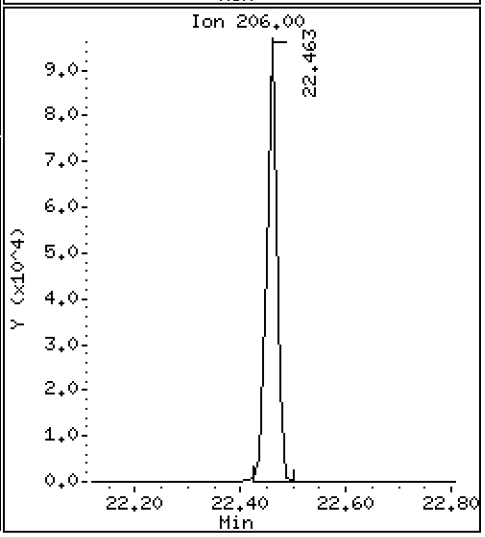


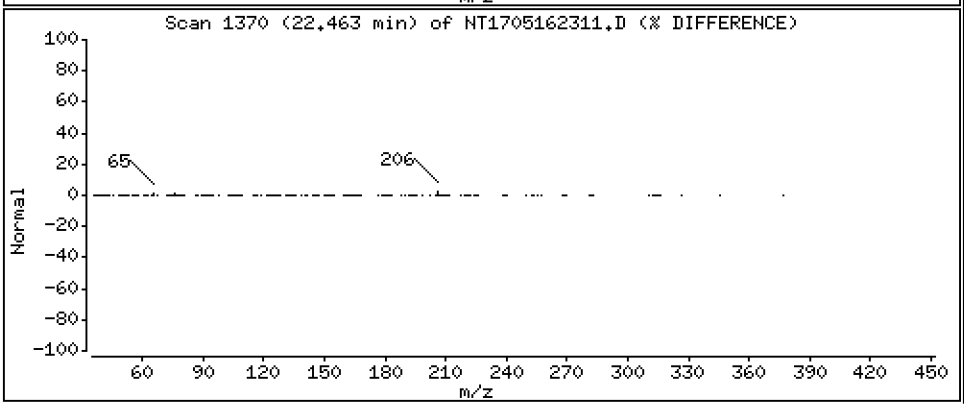












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

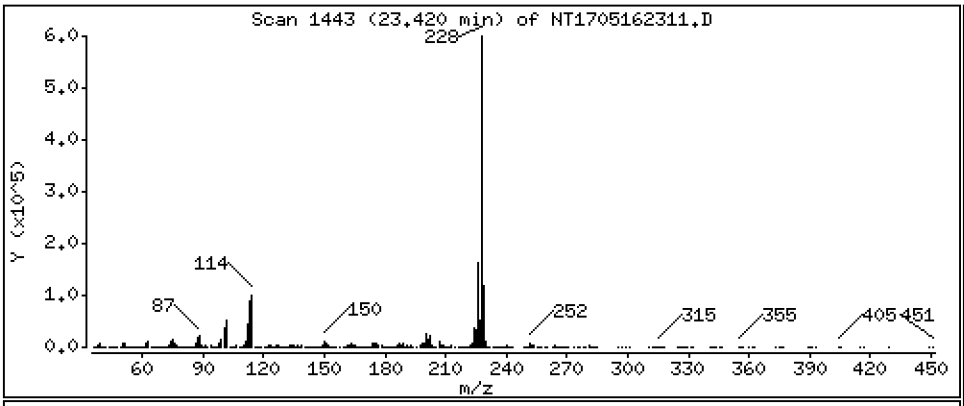
Operator: JGR

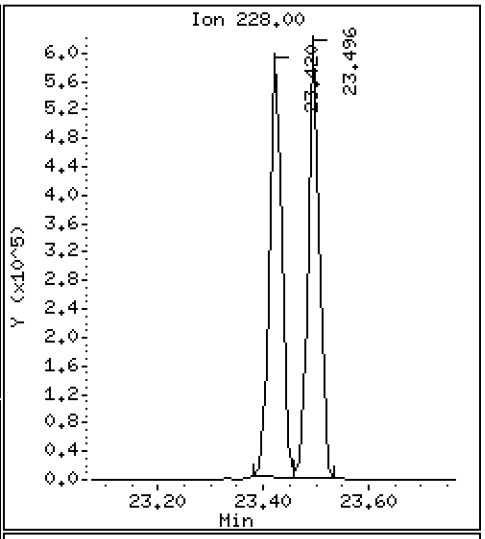
Column phase: ZB-5msi

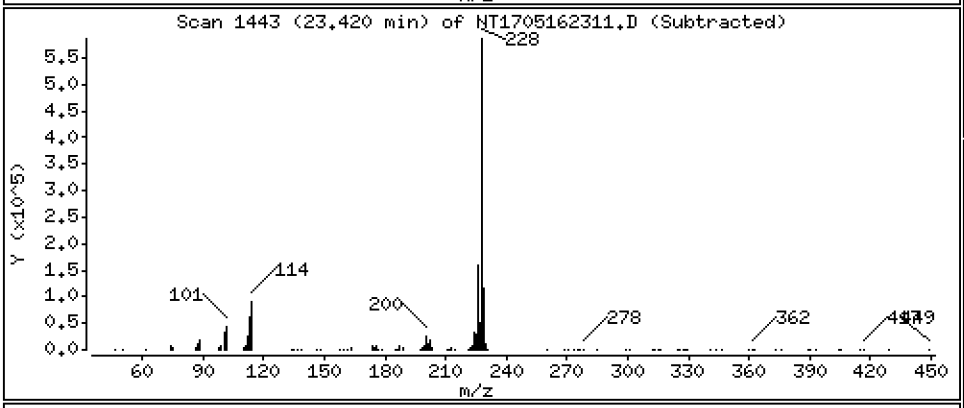
Column diameter: 0.25

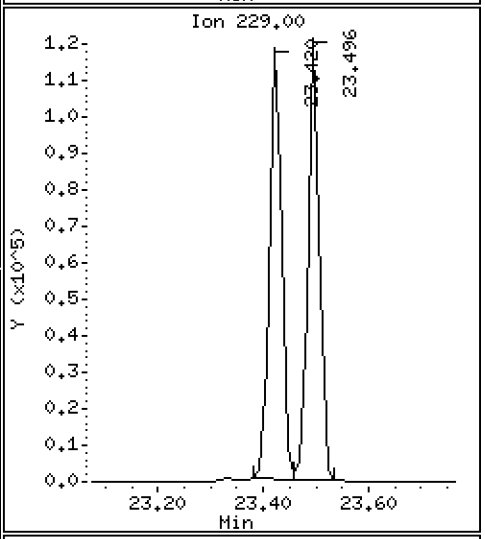
68 Benzo(a)anthracene

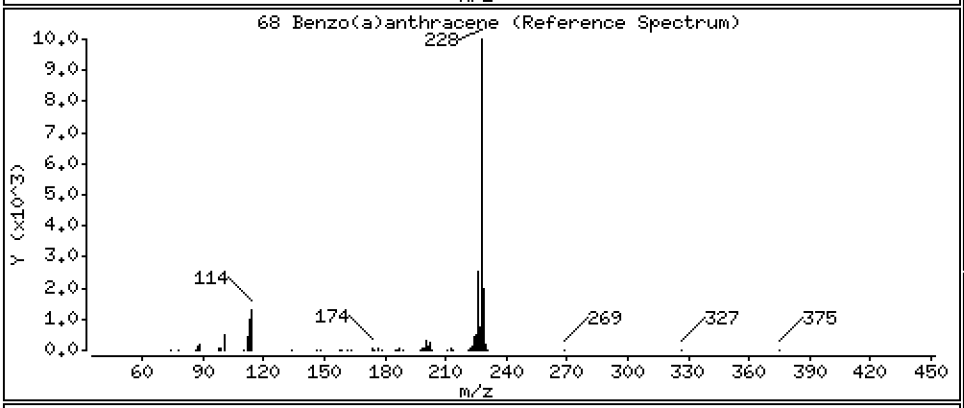
Concentration: 5.064 ug/mL

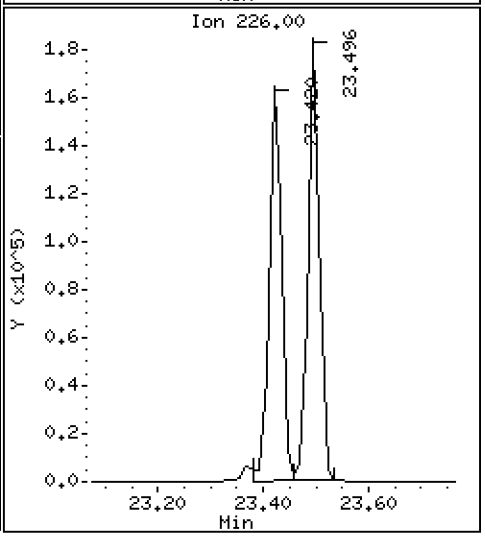


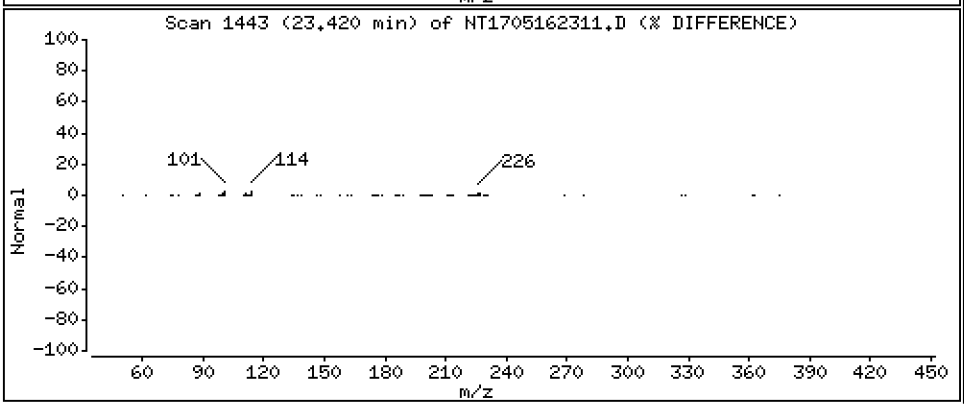












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

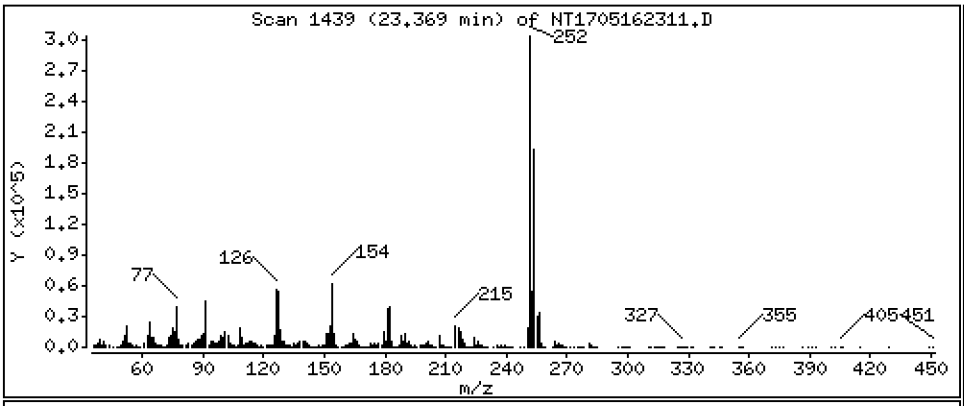
Operator: JGR

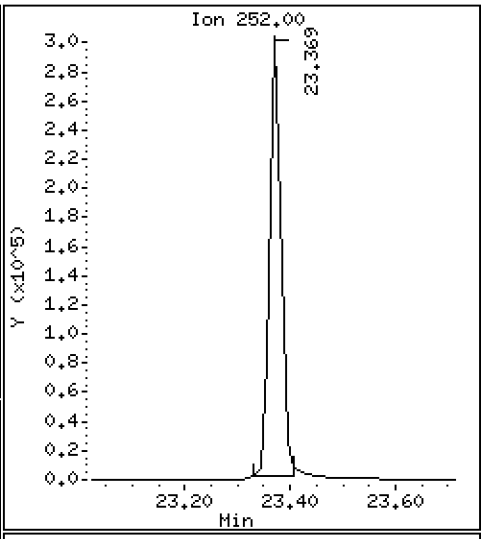
Column phase: ZB-5msi

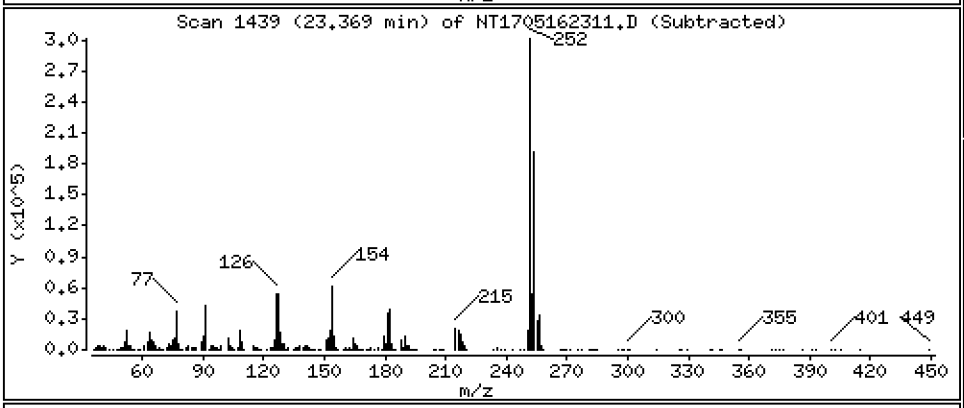
Column diameter: 0.25

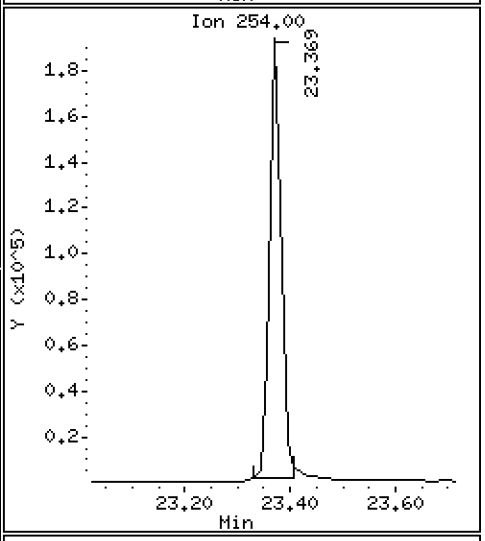
70 3,3'-Dichlorobenzidine

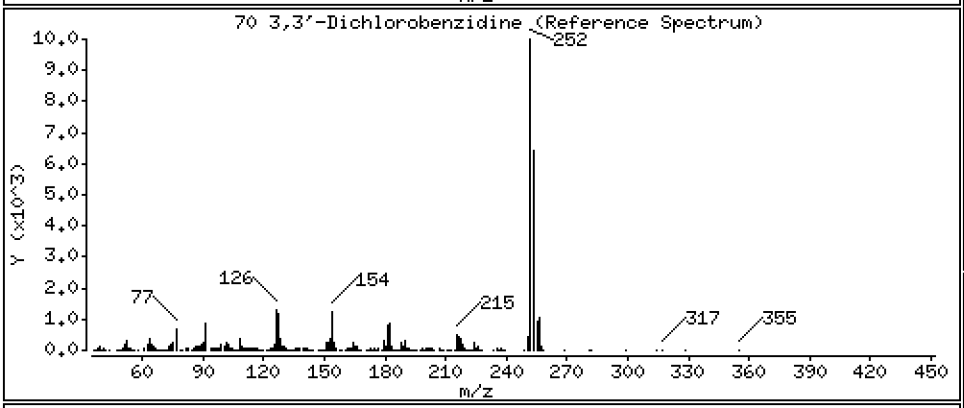
Concentration: 11.99 ug/mL

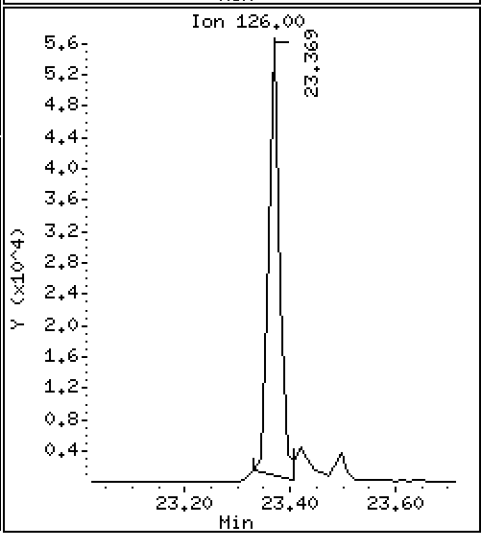


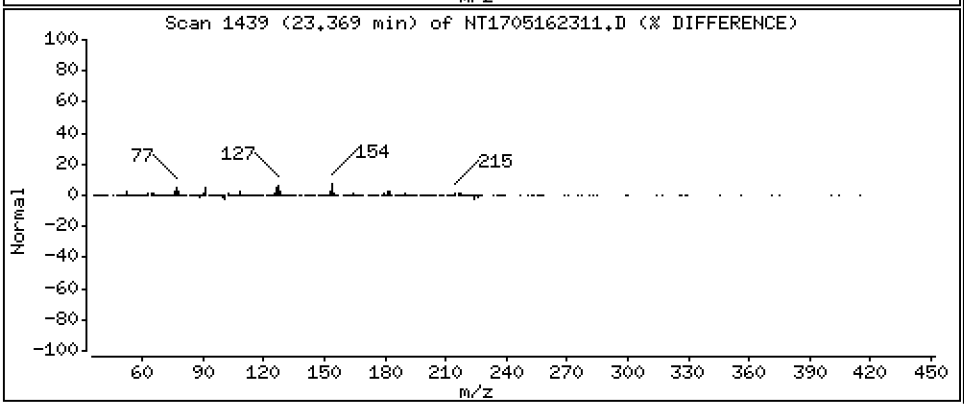












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

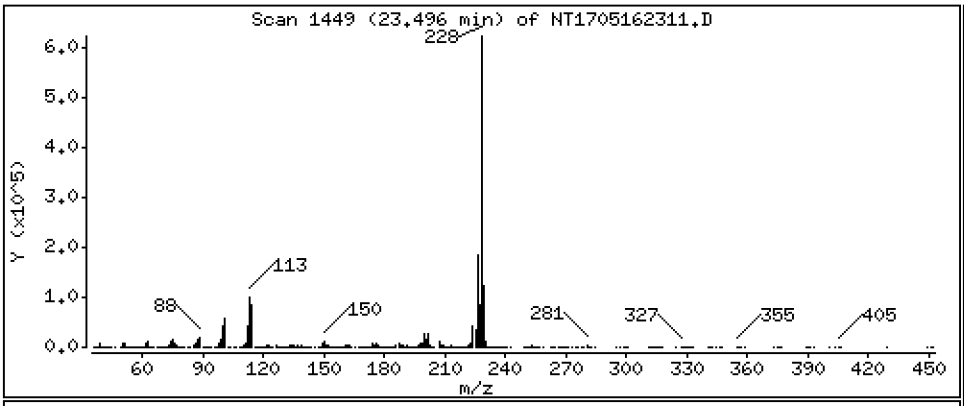
Operator: JGR

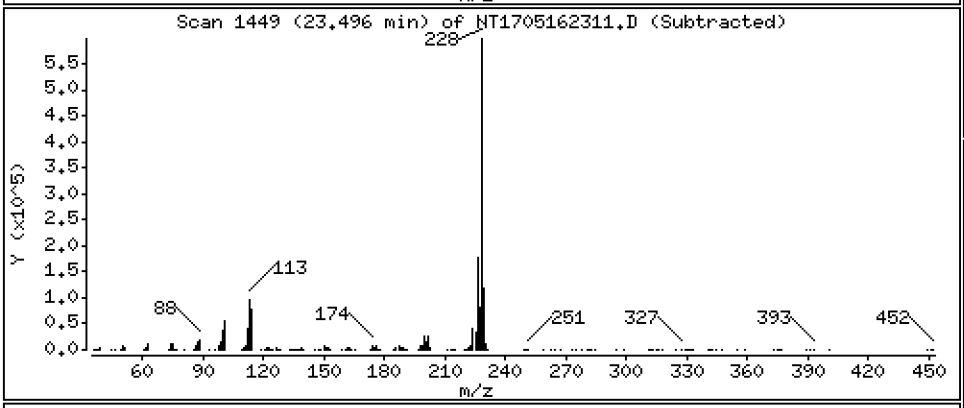
Column phase: ZB-5msi

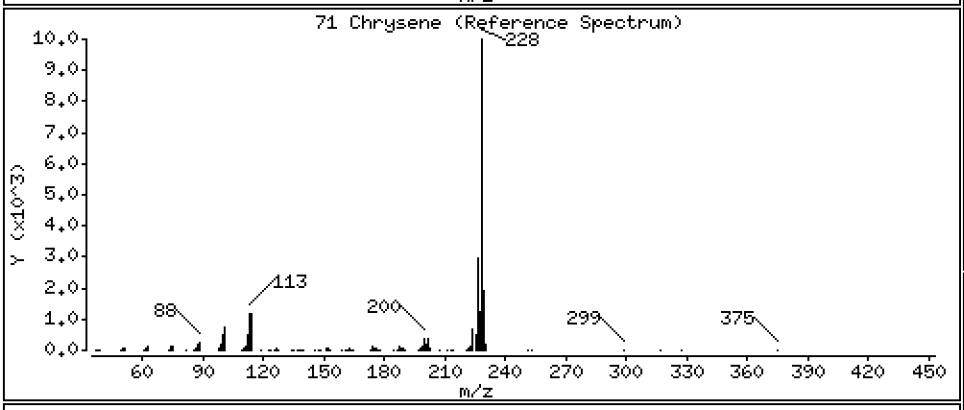
Column diameter: 0.25

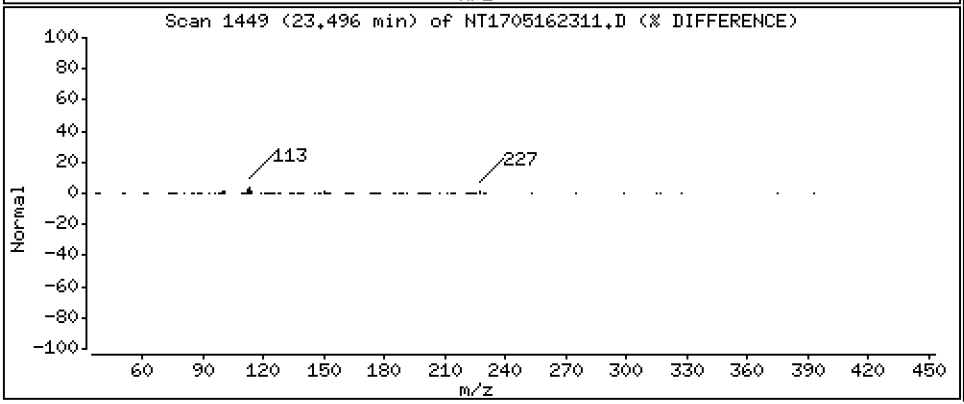
71 Chrysene

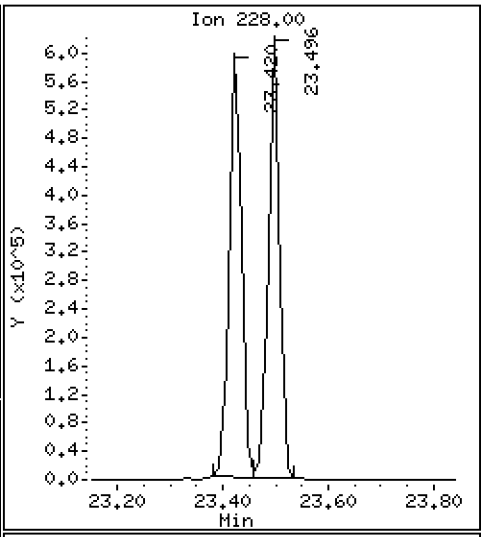
Concentration: 5.018 ug/mL

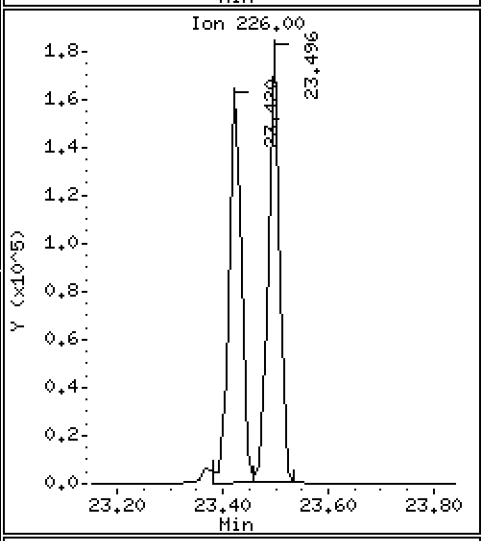


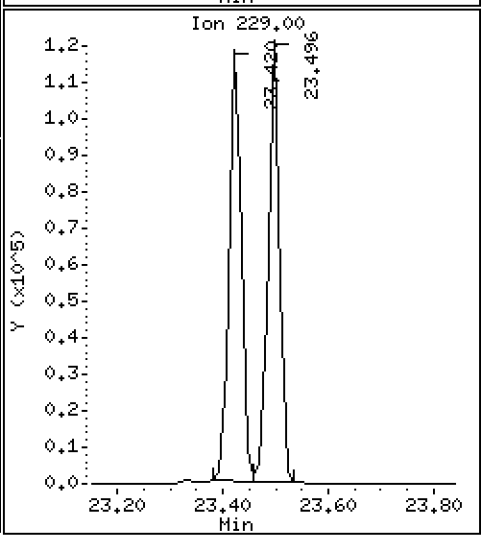












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

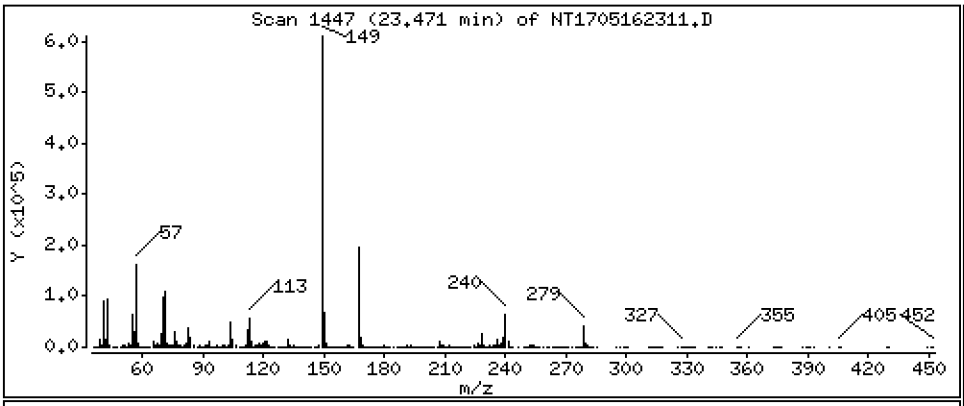
Operator: JGR

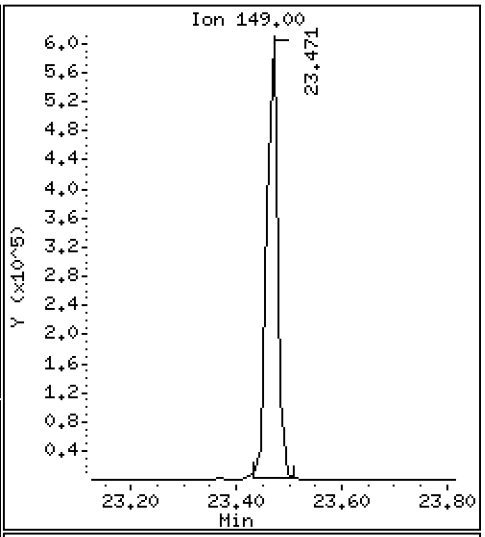
Column phase: ZB-5msi

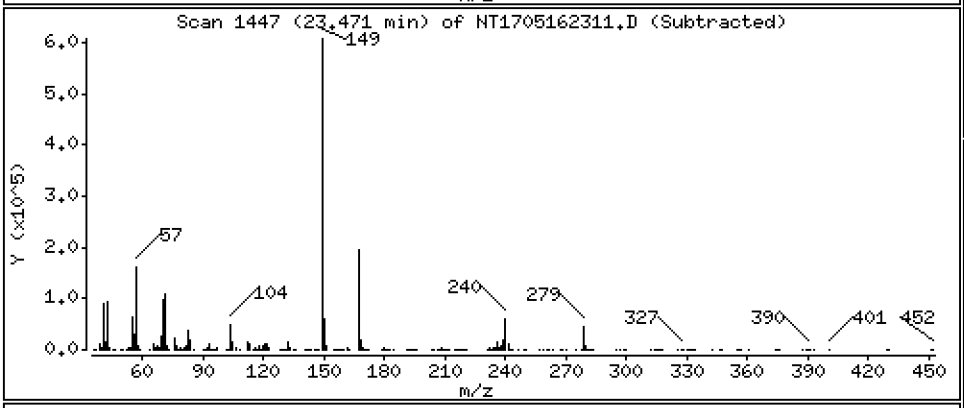
Column diameter: 0.25

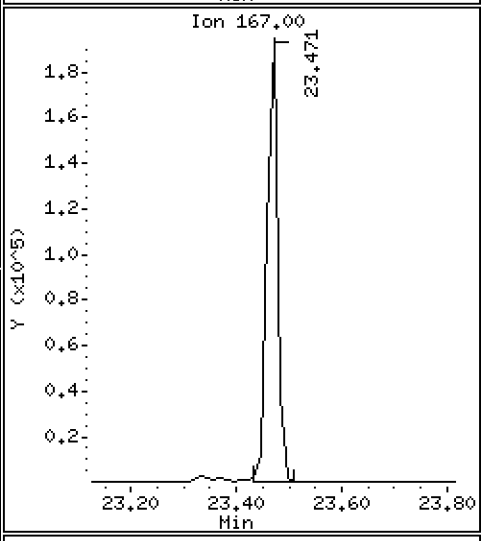
72 bis(2-Ethylhexyl)phthalate

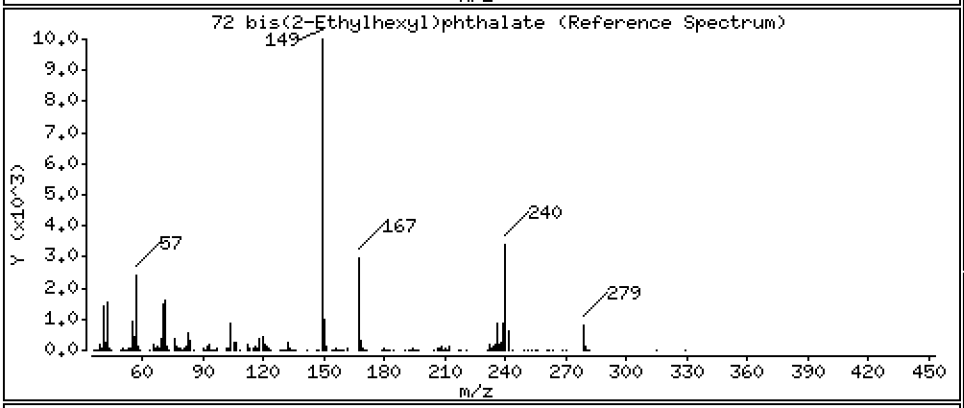
Concentration: 5.792 ug/mL

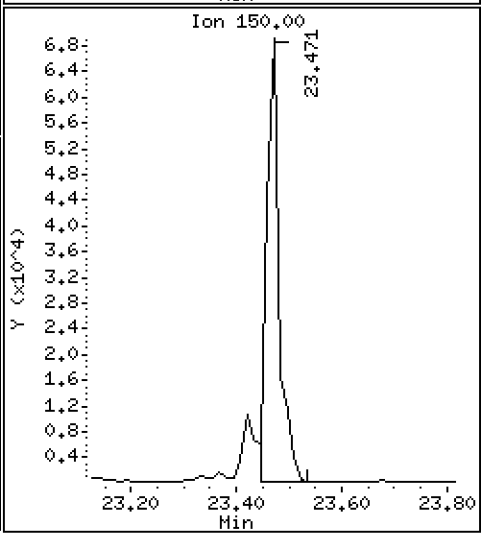


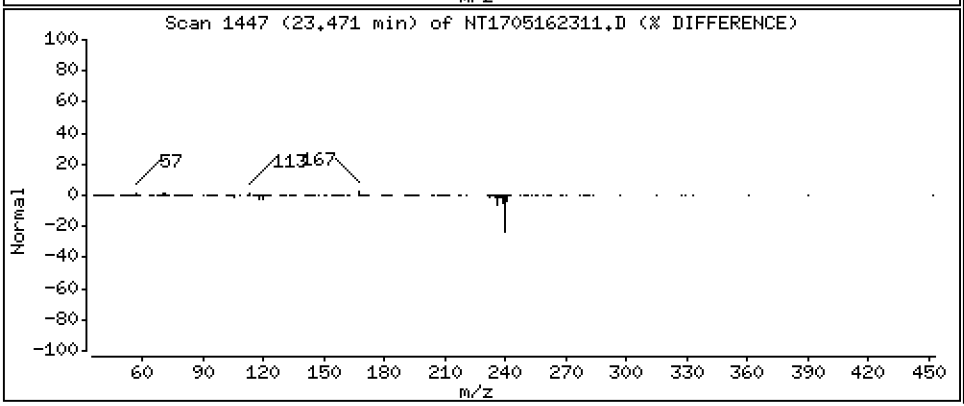












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

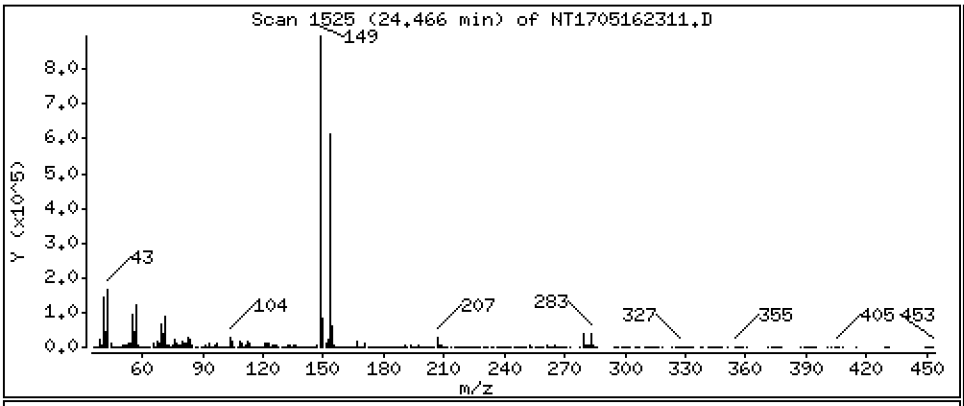
Operator: JGR

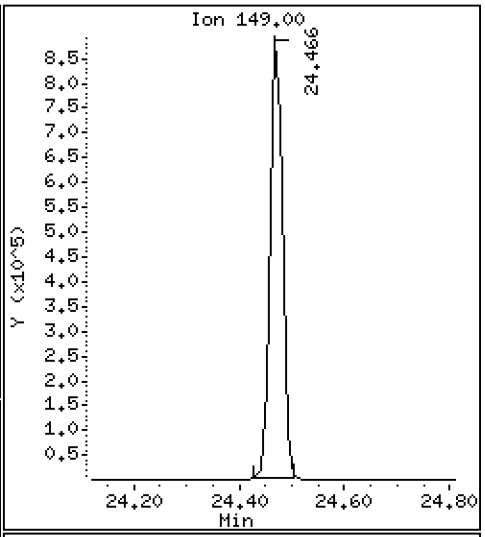
Column phase: ZB-5msi

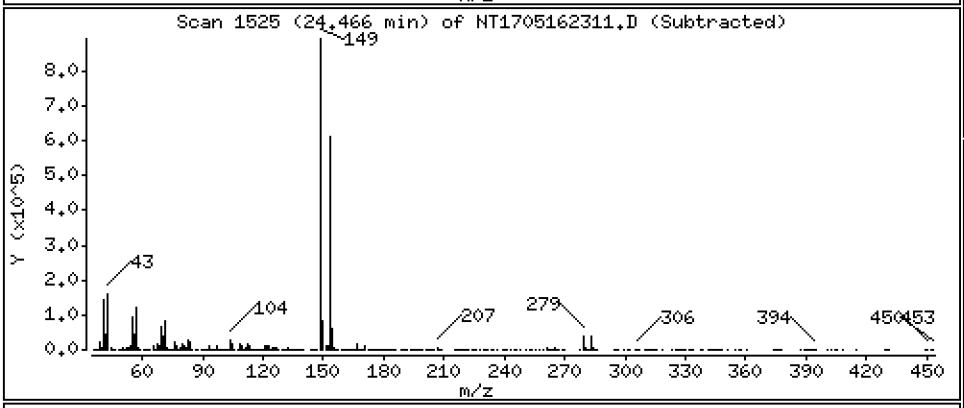
Column diameter: 0.25

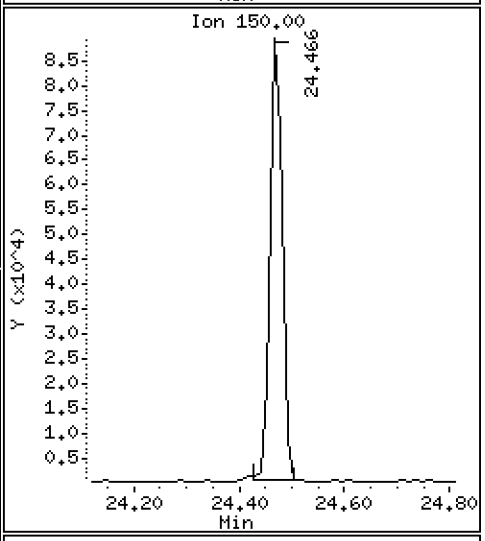
73 Di-n-octylphthalate

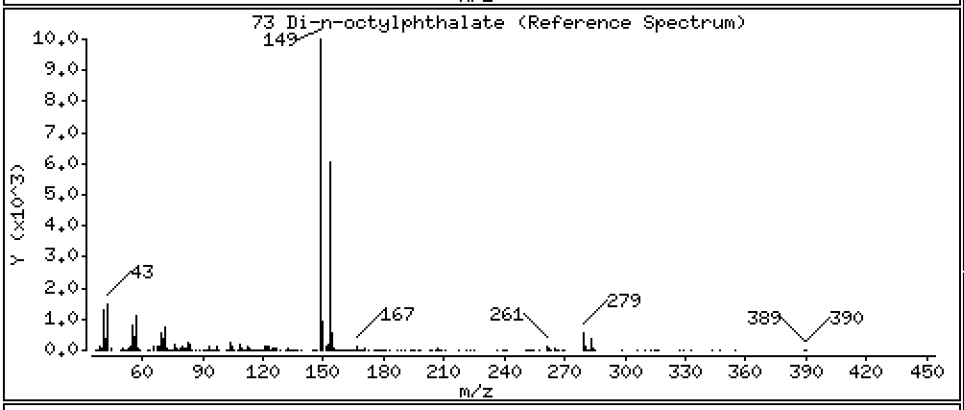
Concentration: 5.482 ug/mL

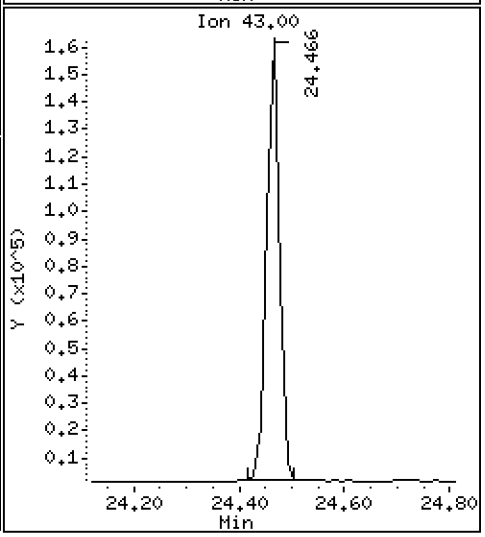


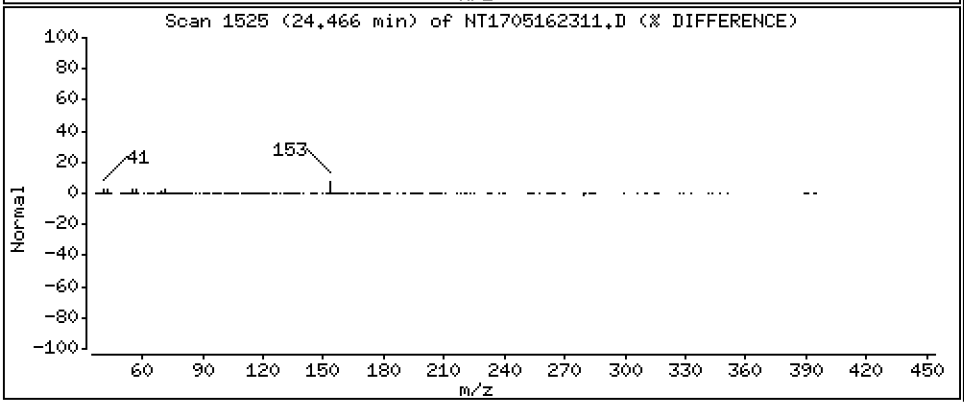












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

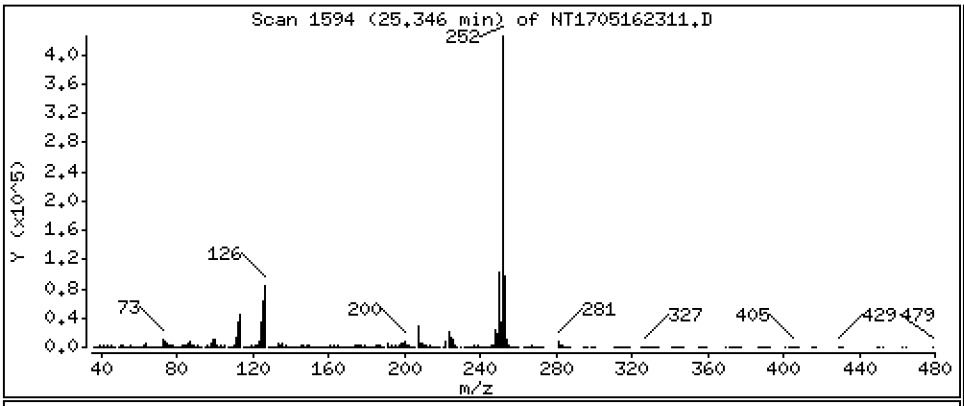
Operator: JGR

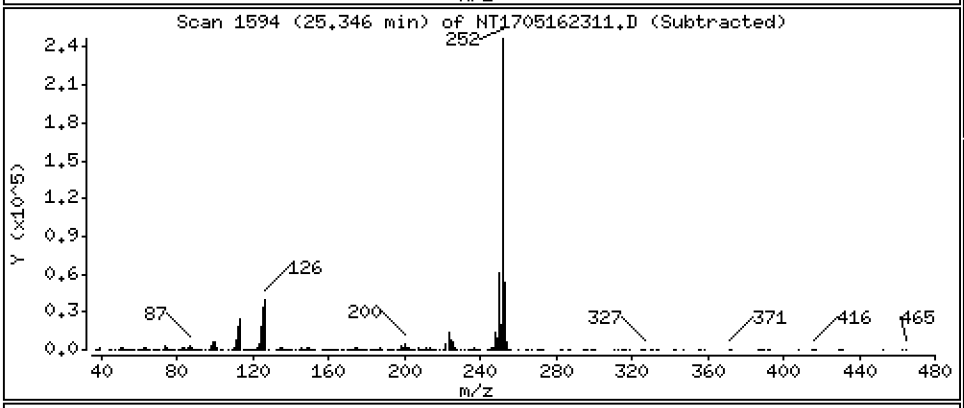
Column phase: ZB-5msi

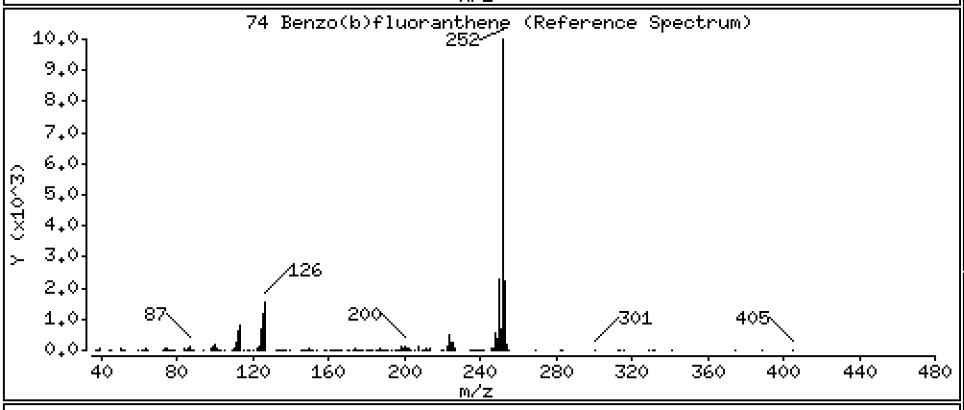
Column diameter: 0.25

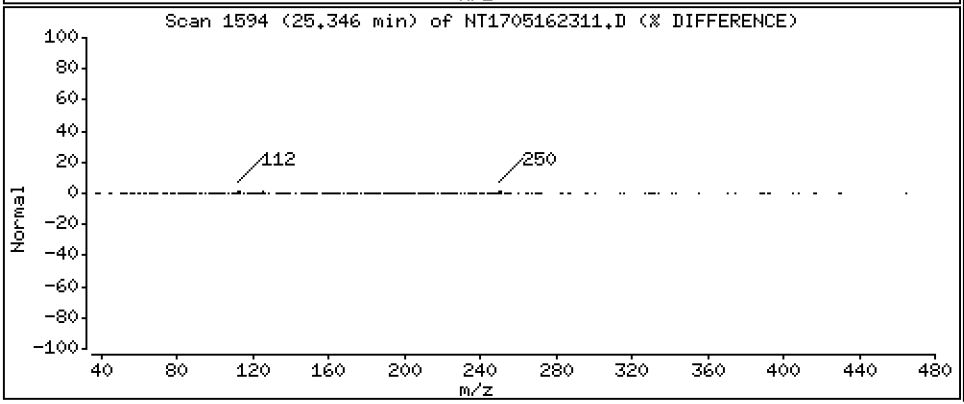
74 Benzo(b)fluoranthene

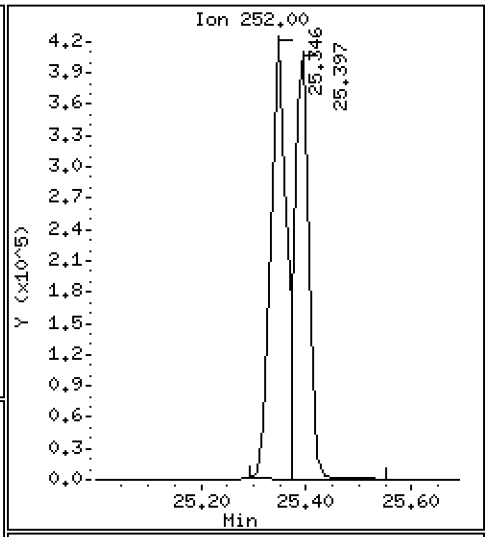
Concentration: 4.912 ug/mL

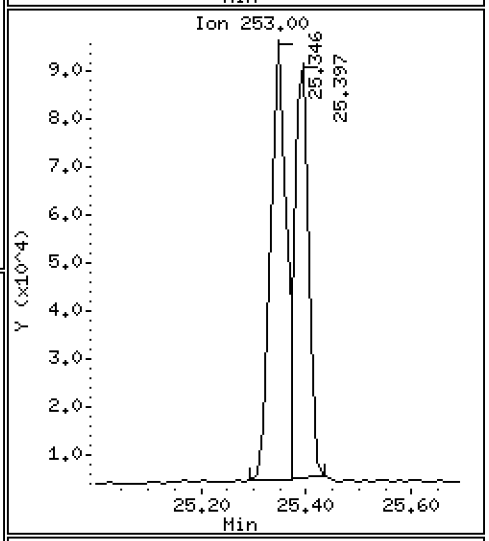


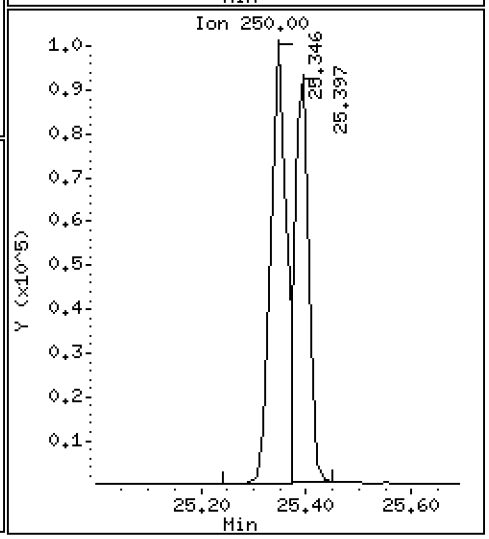












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

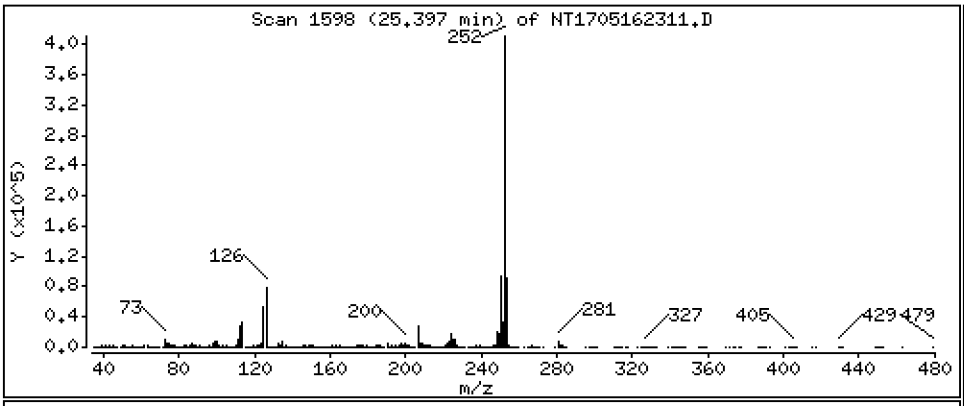
Operator: JGR

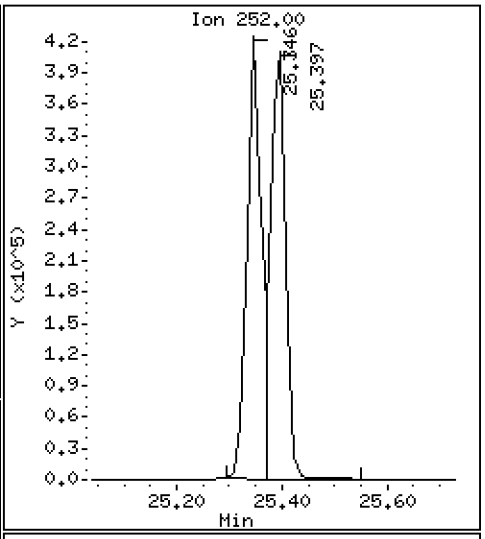
Column phase: ZB-5msi

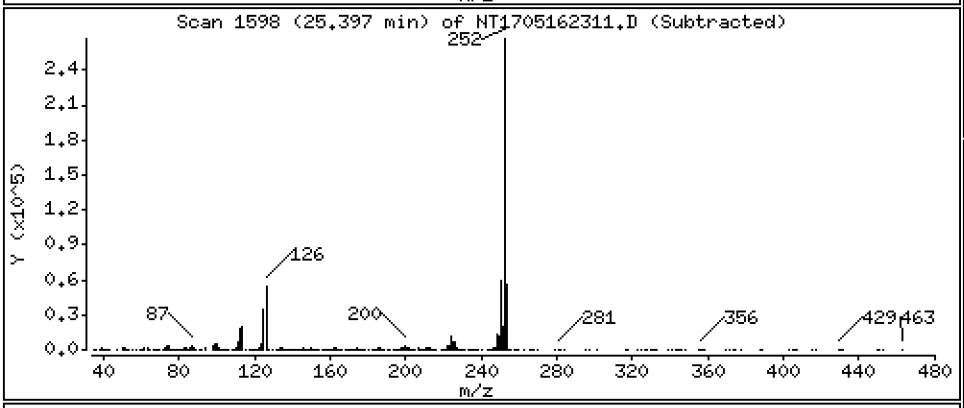
Column diameter: 0.25

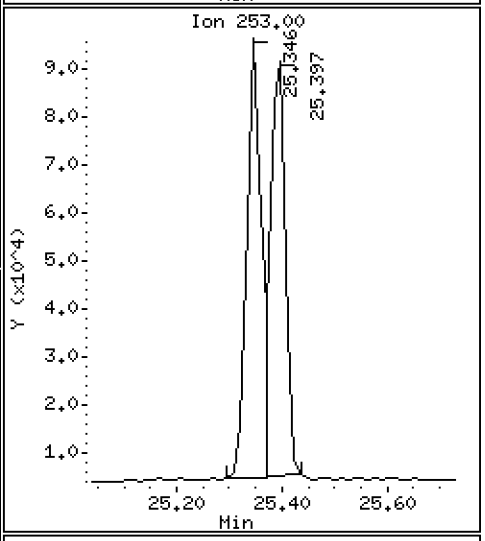
75 Benzo(k)fluoranthene

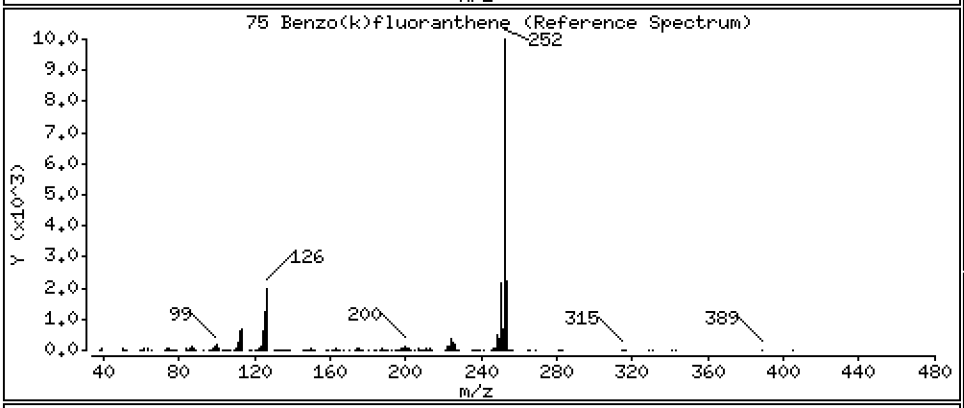
Concentration: 4.965 ug/mL

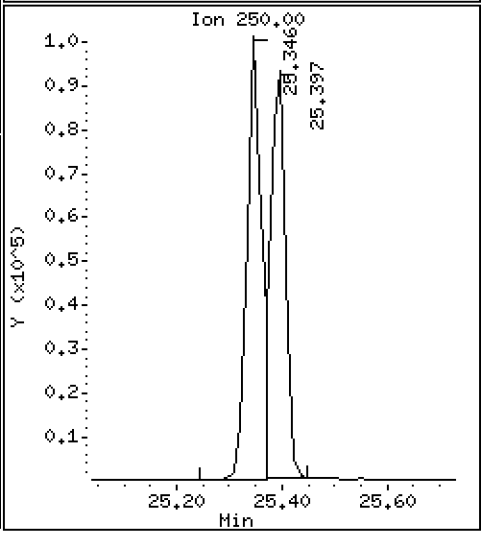


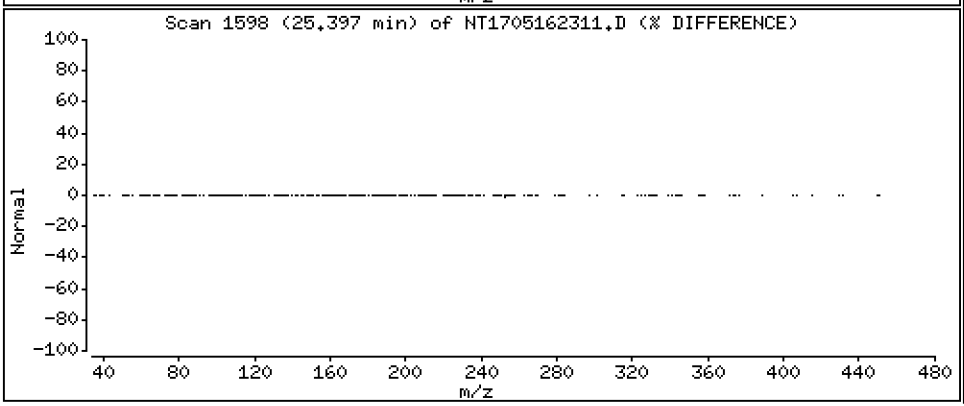












Date : 17-MAY-2023 00:29

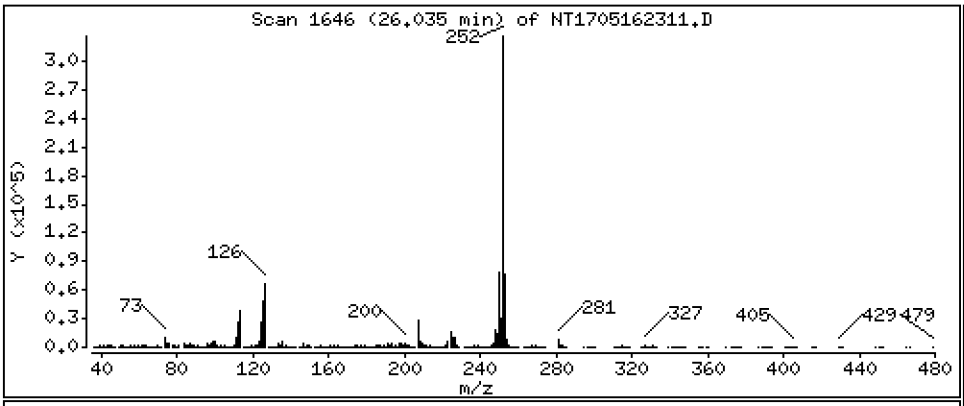
Client ID: Instrument: nt17.i

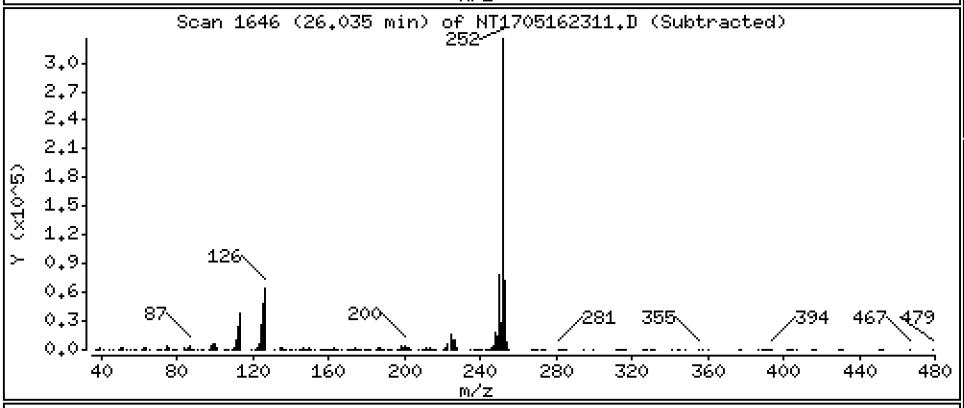
Sample Info: SLE0338-SCV1

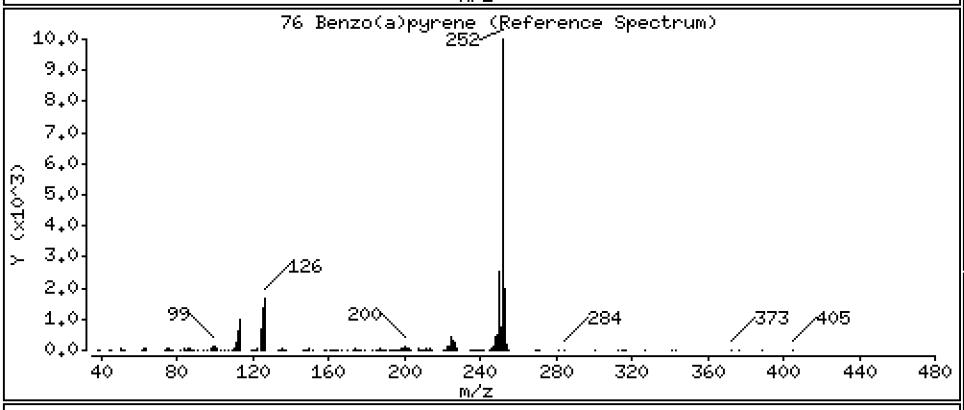
Operator: JGR

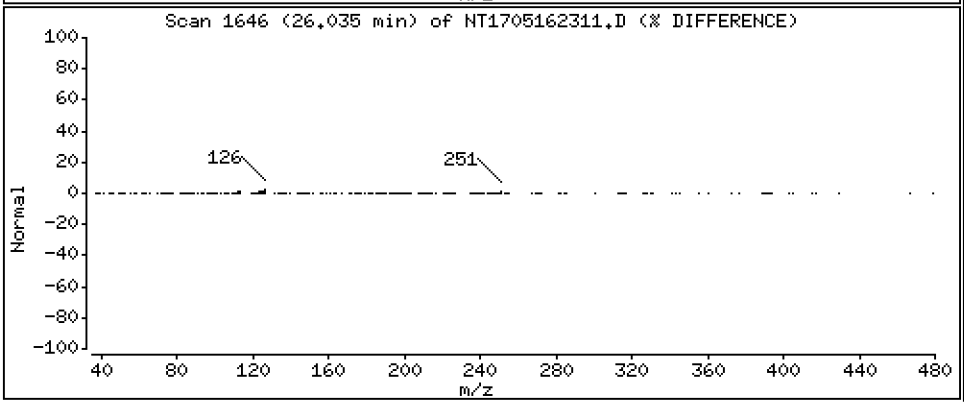
Column phase: ZB-5msi Column diameter: 0.25

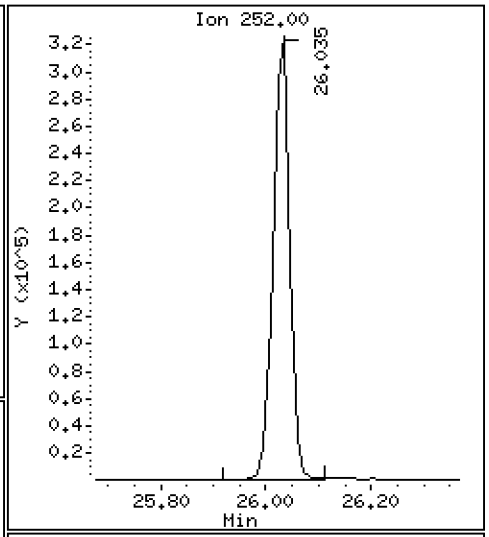
76 Benzo(a)pyrene Concentration: 5.172 ug/mL

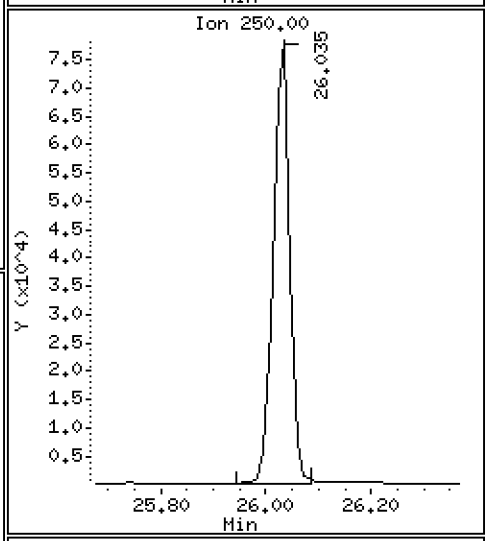


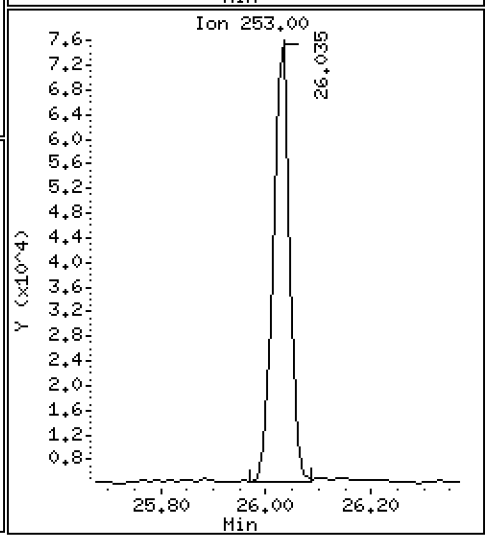












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

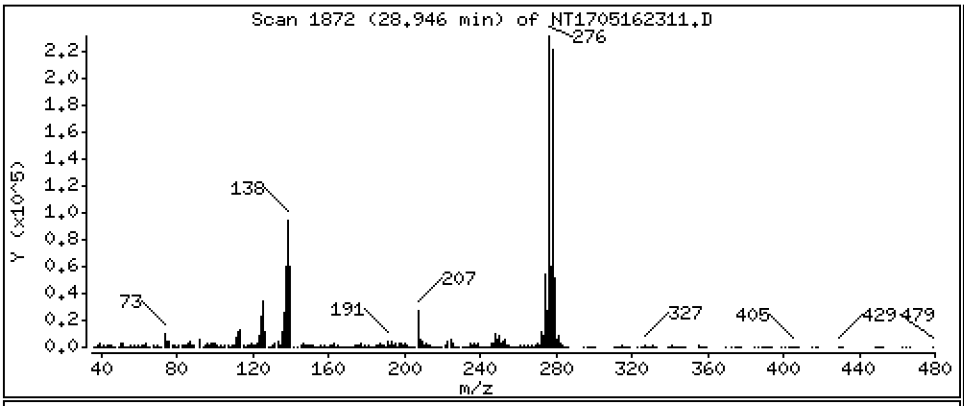
Operator: JGR

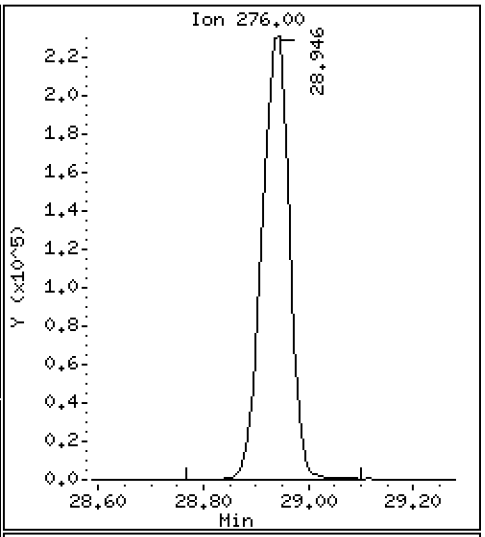
Column phase: ZB-5msi

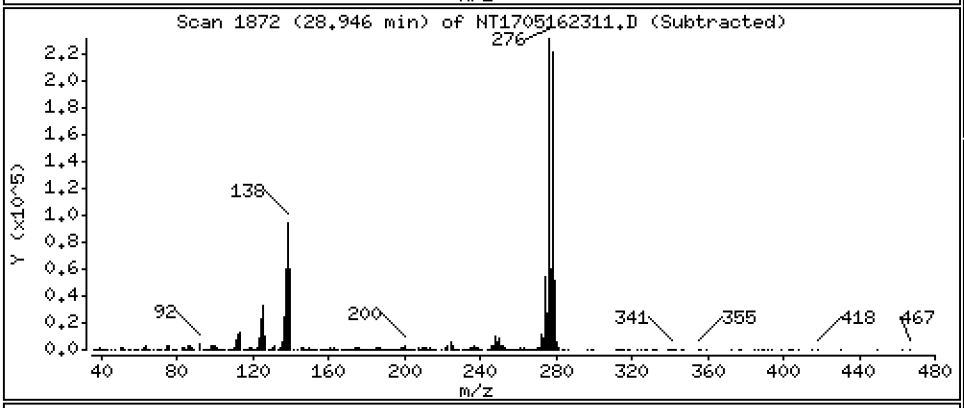
Column diameter: 0.25

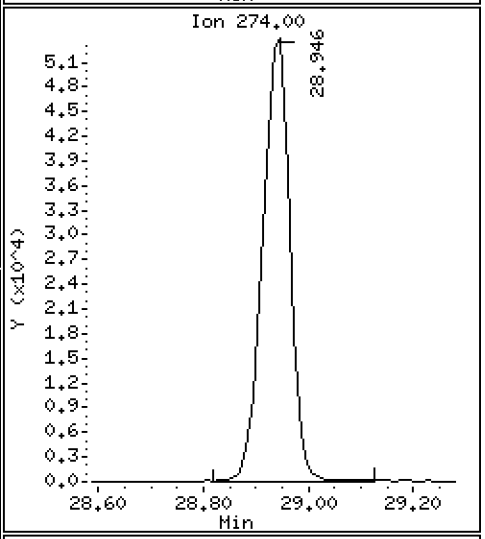
78 Indeno(1,2,3-cd)pyrene

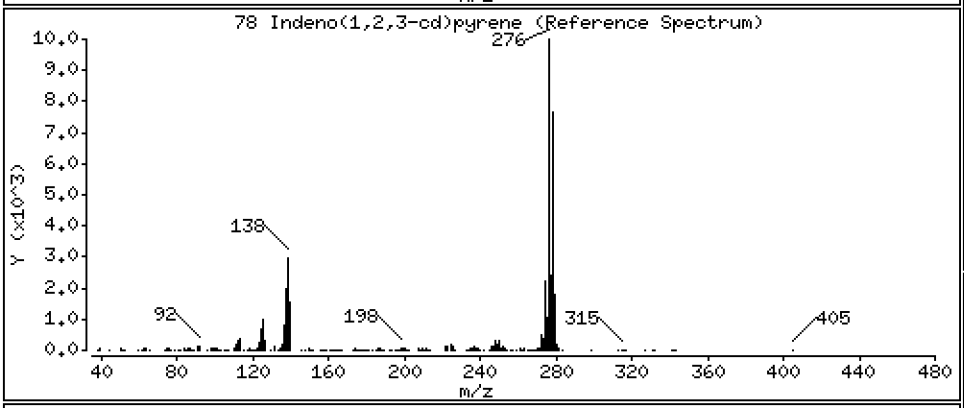
Concentration: 5.029 ug/mL

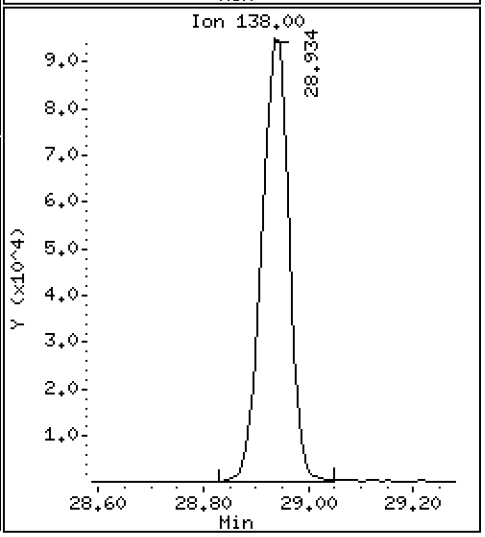


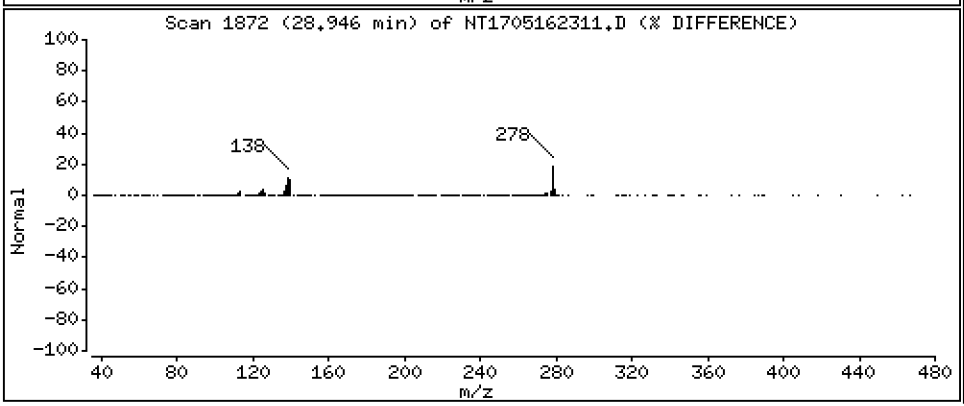












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

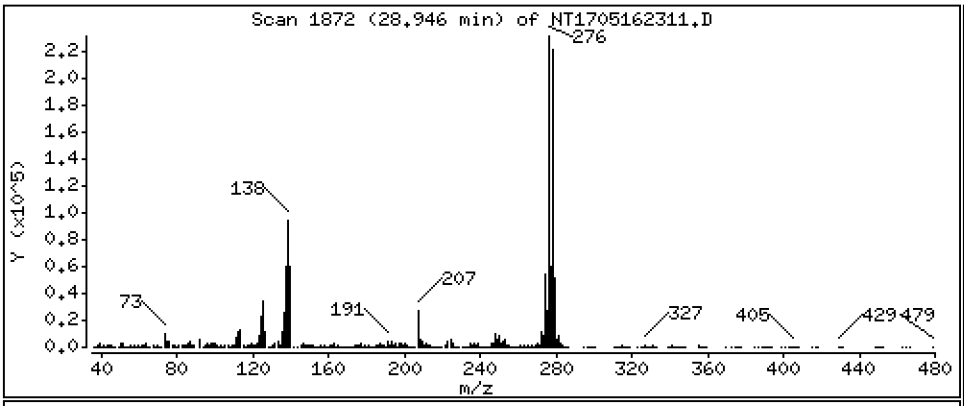
Operator: JGR

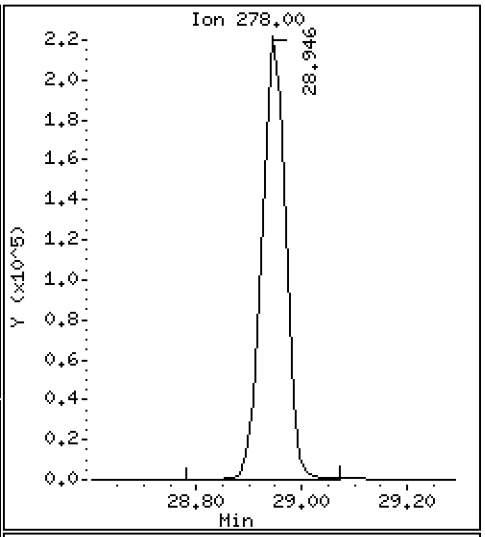
Column phase: ZB-5msi

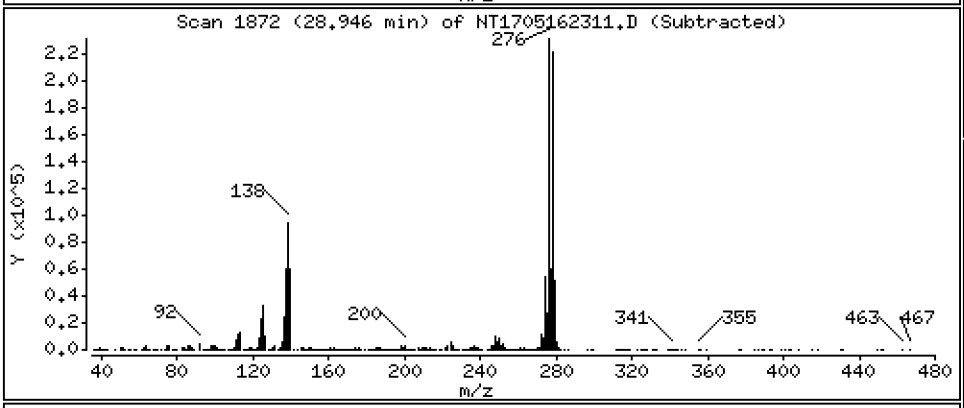
Column diameter: 0.25

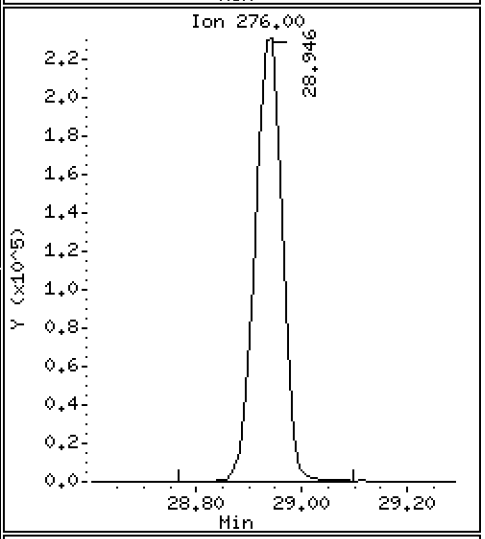
79 Dibenzo(a,h)anthracene

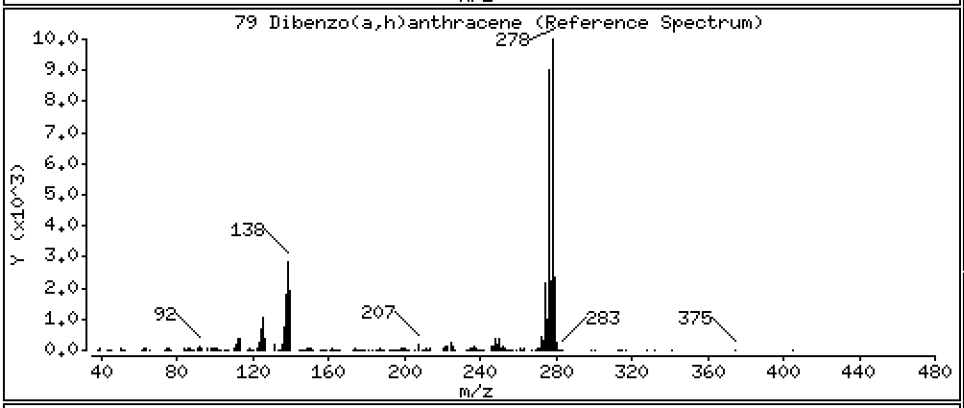
Concentration: 4.970 ug/mL

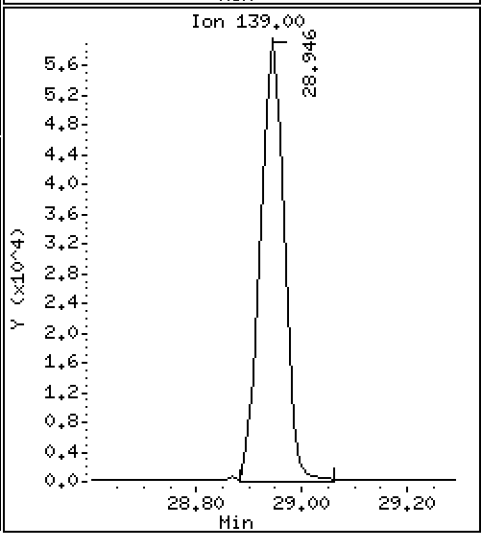


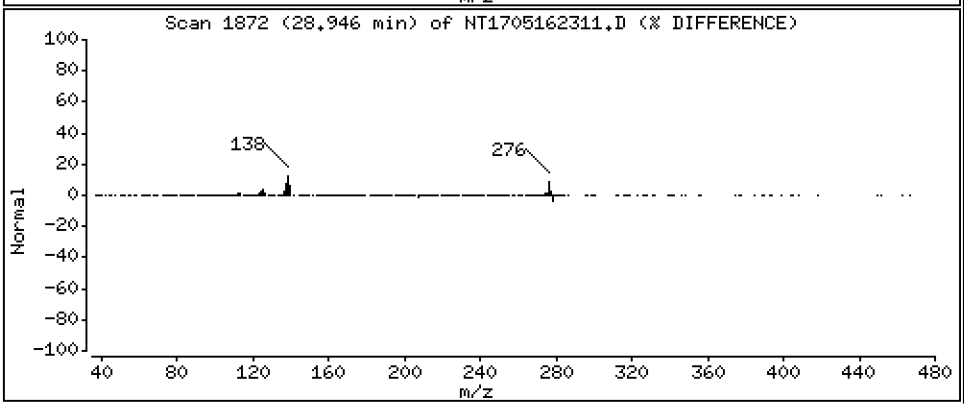












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

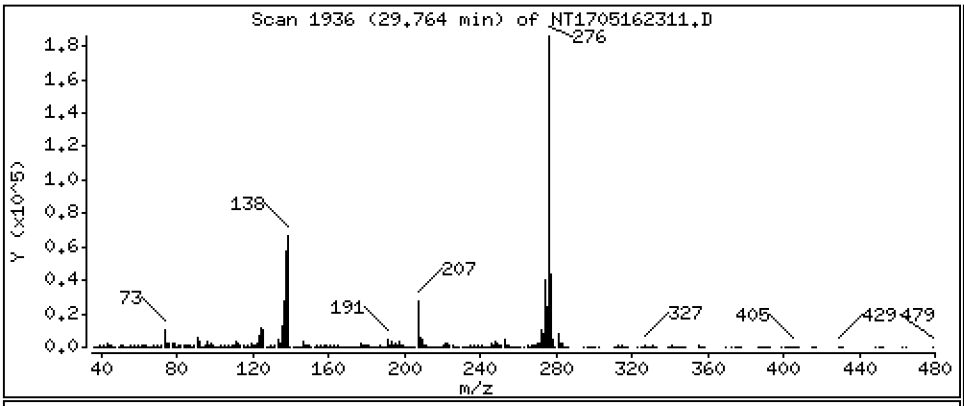
Operator: JGR

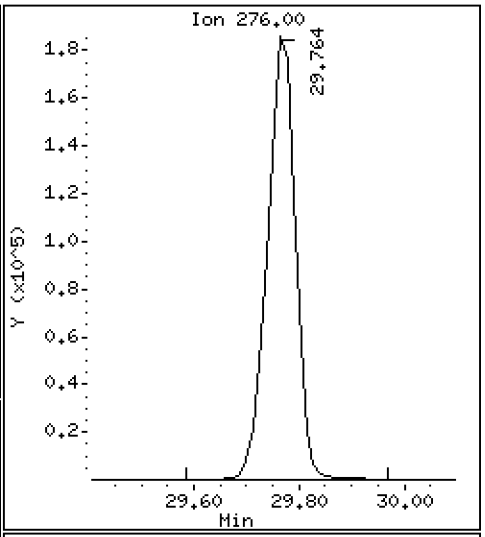
Column phase: ZB-5msi

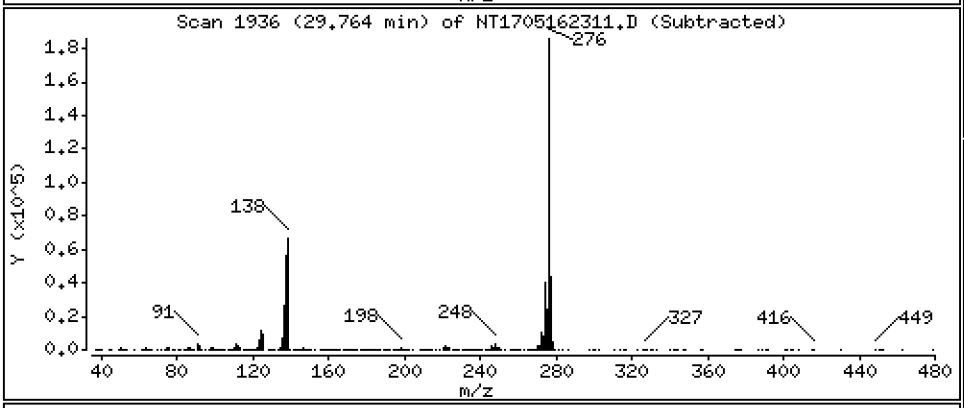
Column diameter: 0.25

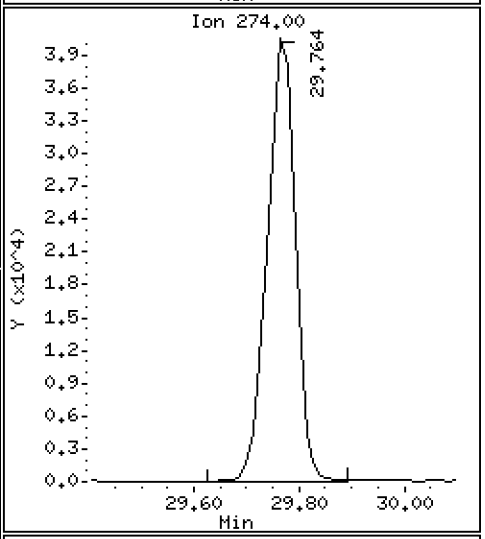
80 Benzo(g,h,i)perylene

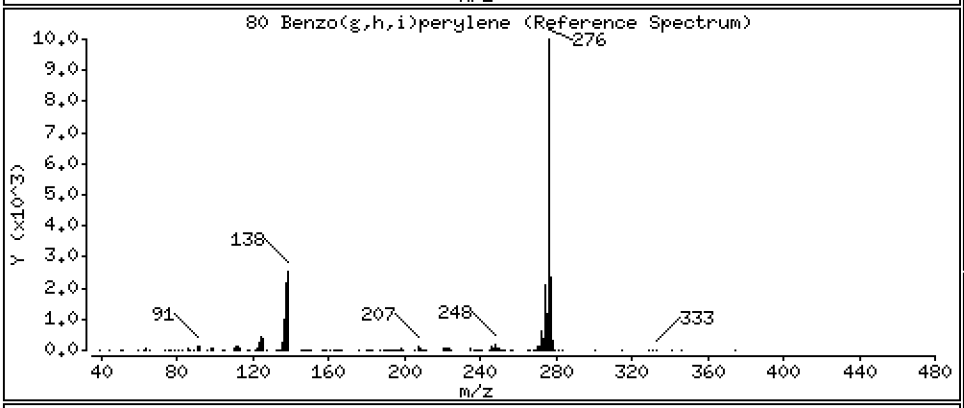
Concentration: 5.054 ug/mL

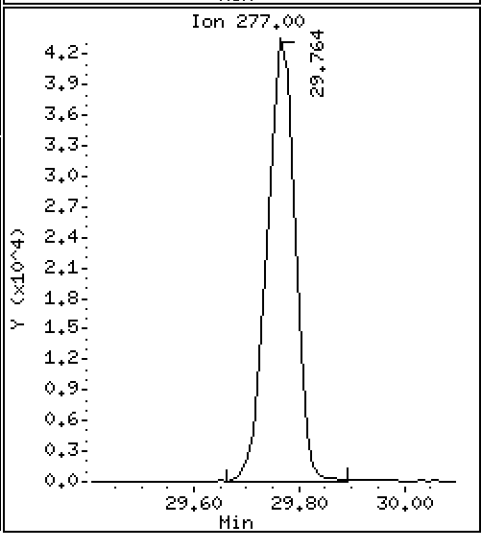


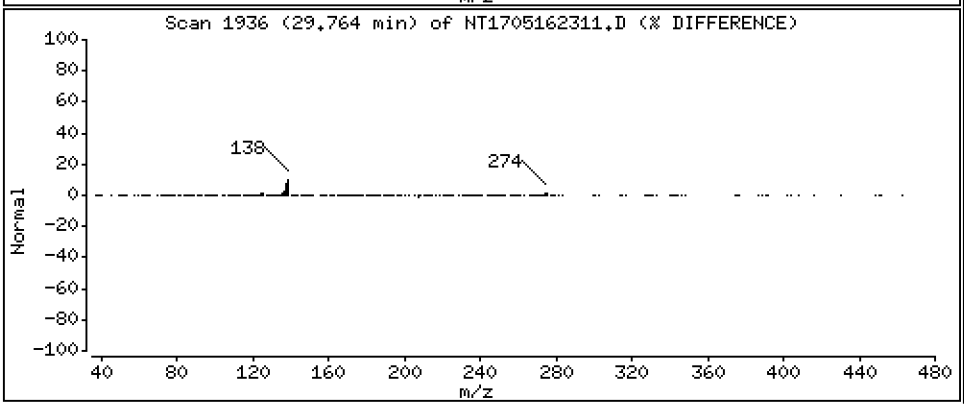












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

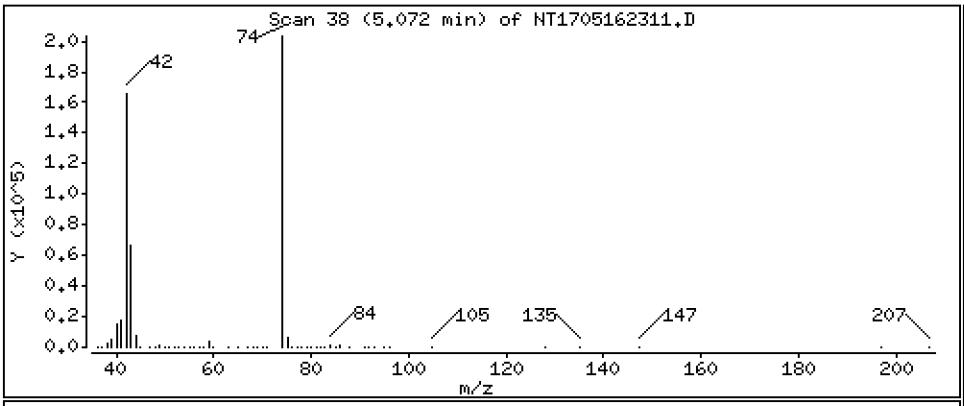
Operator: JGR

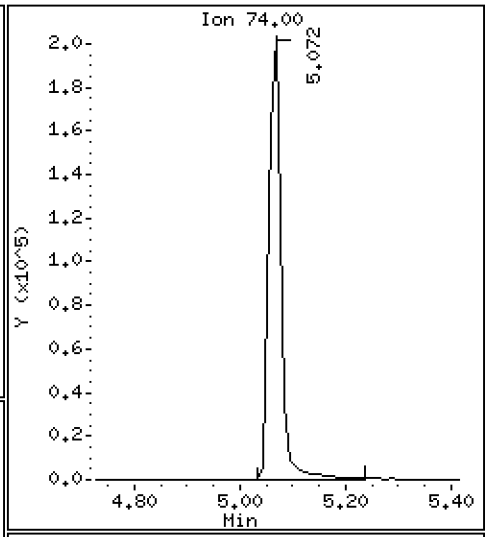
Column phase: ZB-5msi

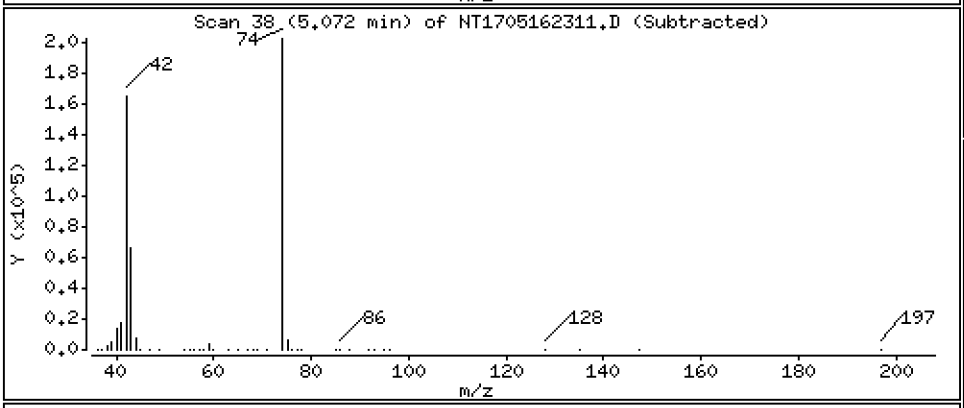
Column diameter: 0.25

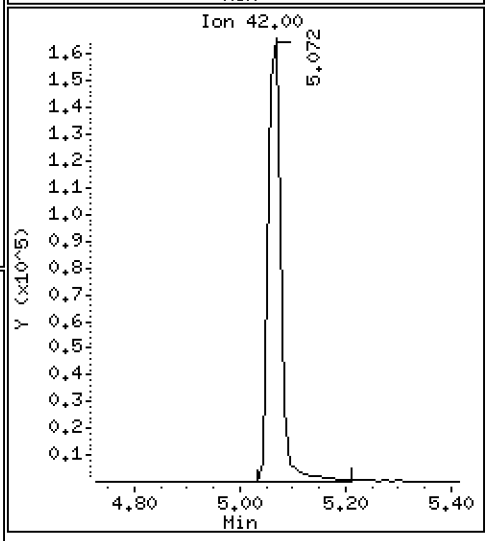
90 N-Nitrosodimethylamine

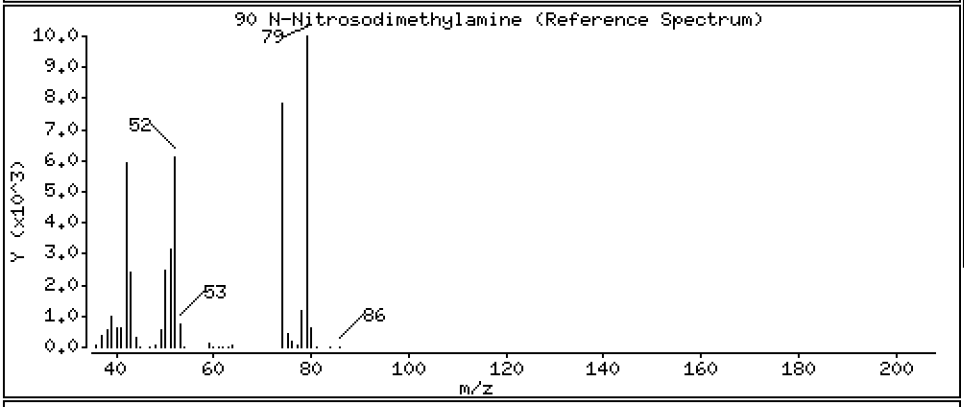
Concentration: 5.767 ug/mL

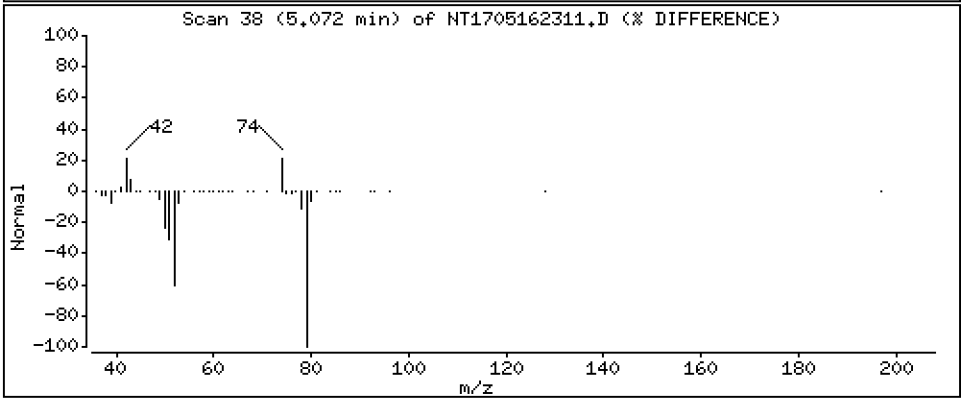












Date : 17-MAY-2023 00:29

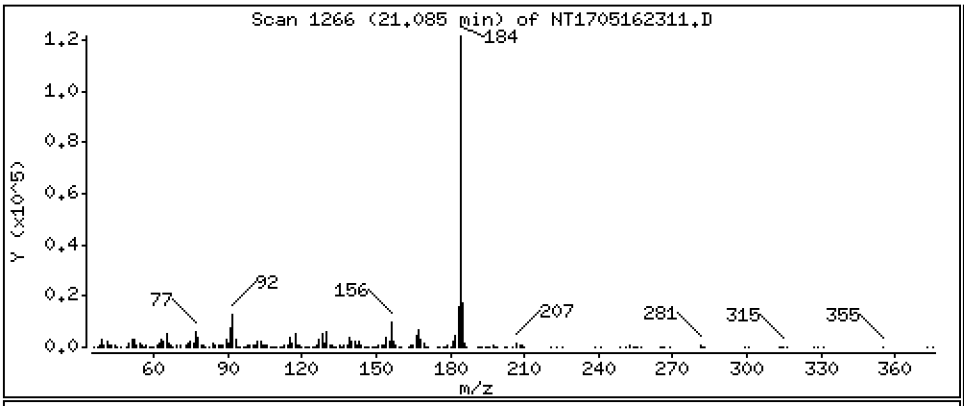
Client ID: Instrument: nt17.i

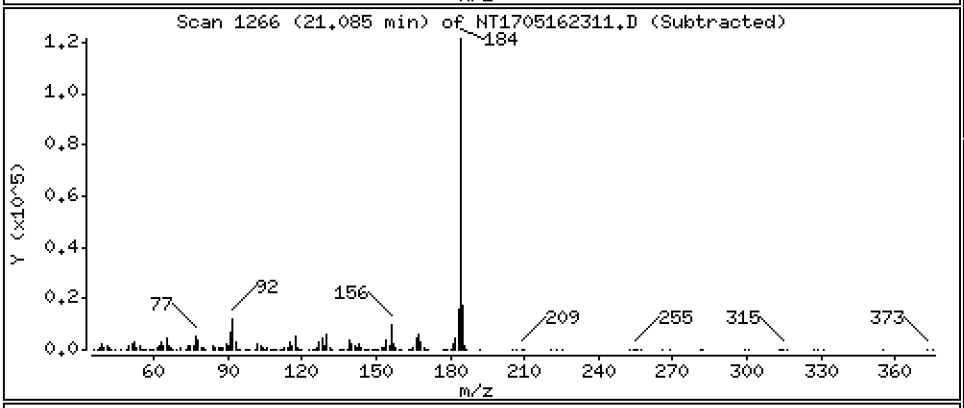
Sample Info: SLE0338-SCV1

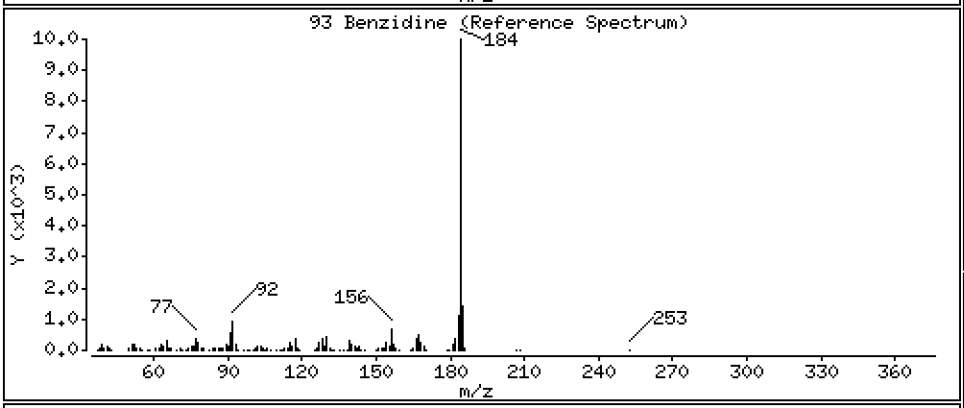
Operator: JGR

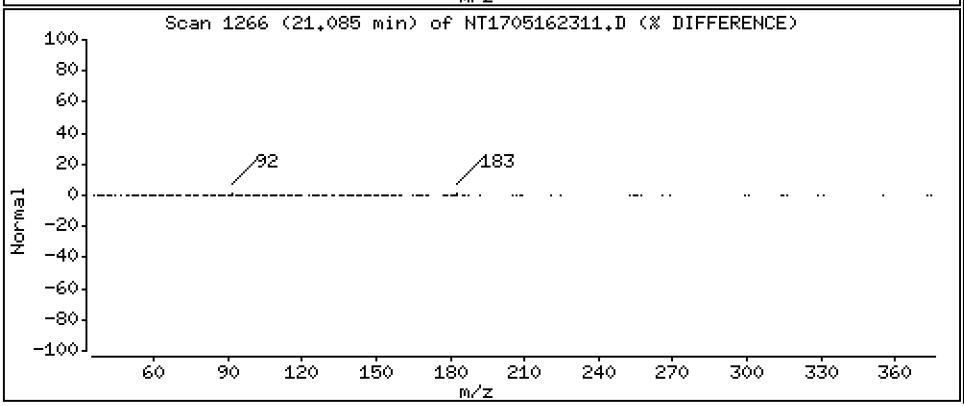
Column phase: ZB-5msi Column diameter: 0.25

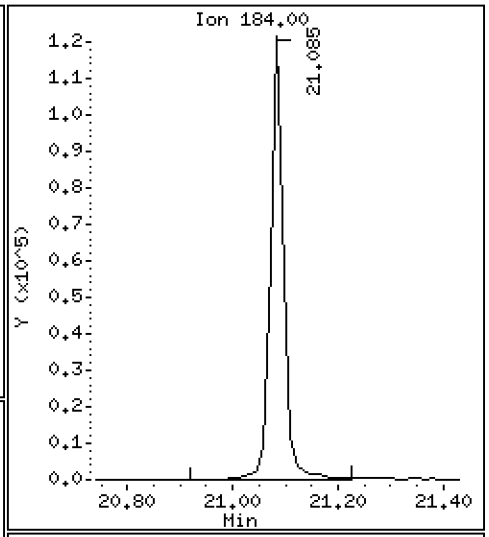
93 Benzidine Concentration: 3.457 ug/mL

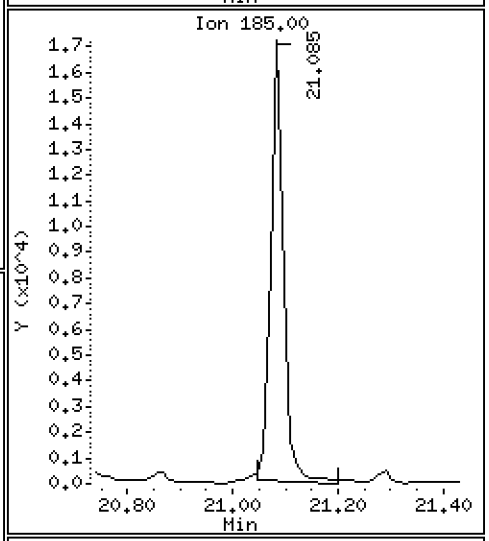


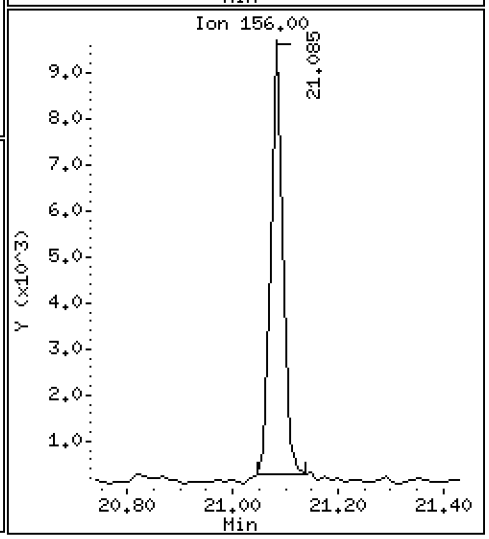












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

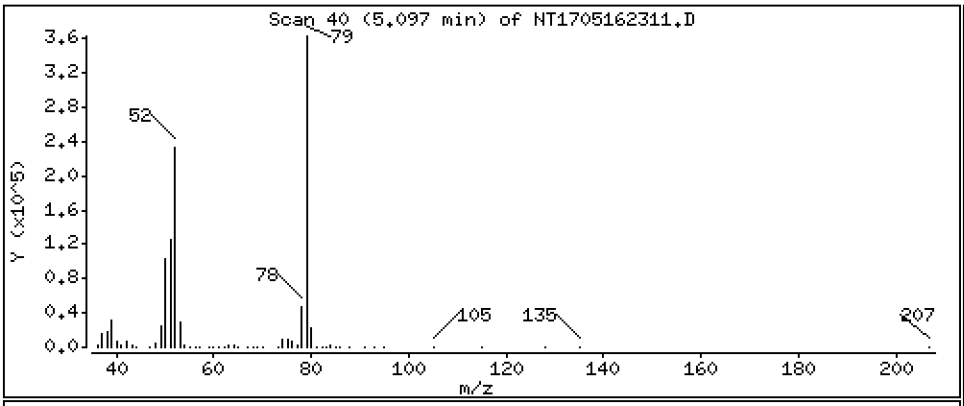
Operator: JGR

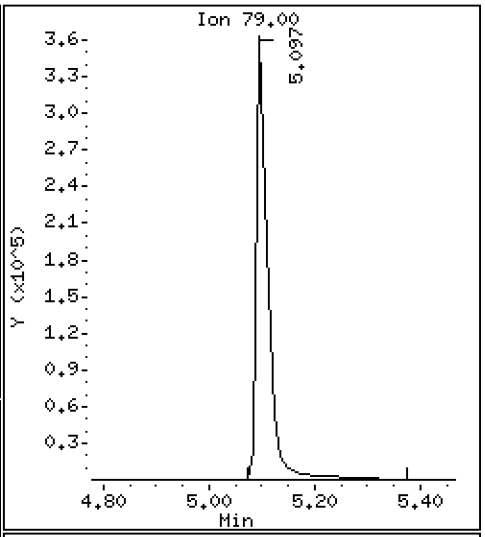
Column phase: ZB-5msi

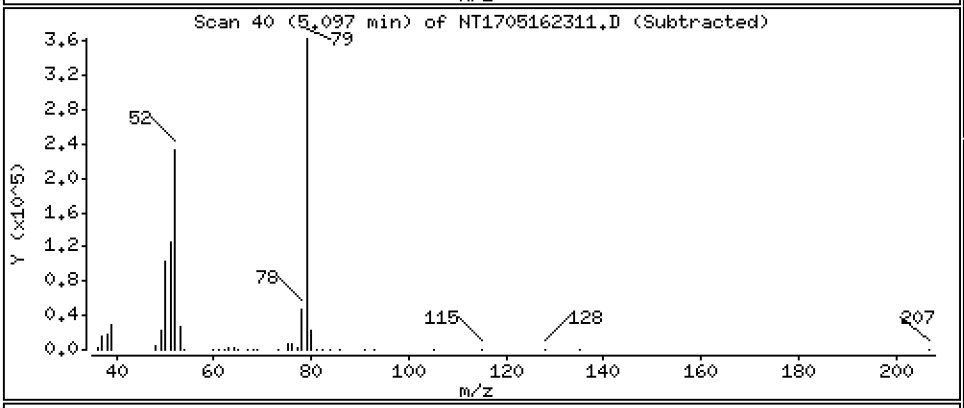
Column diameter: 0.25

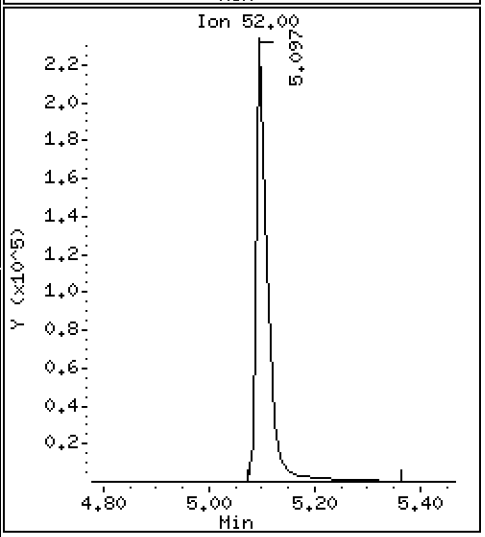
103 Pyridine

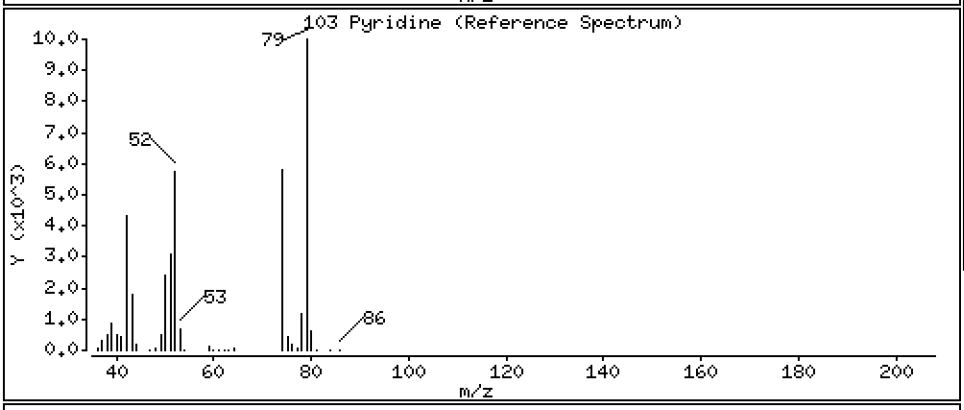
Concentration: 5.811 ug/mL

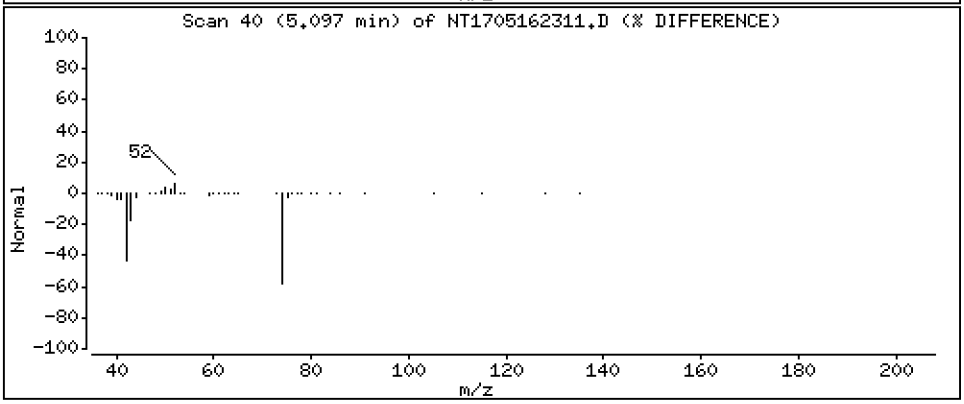












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

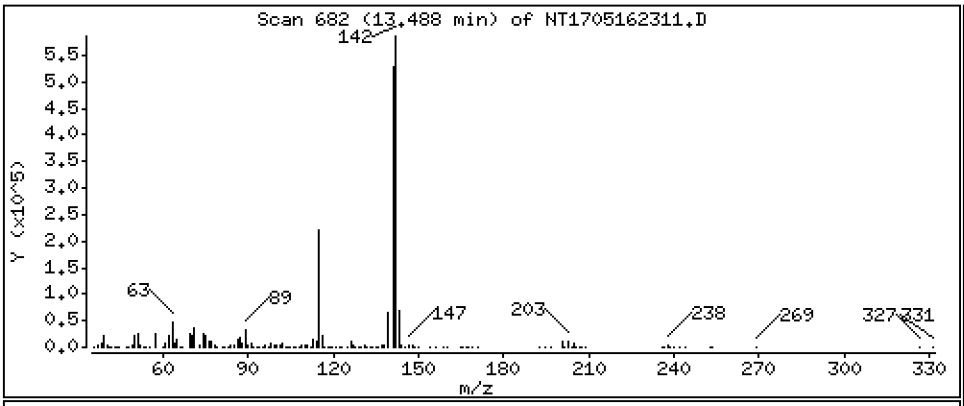
Operator: JGR

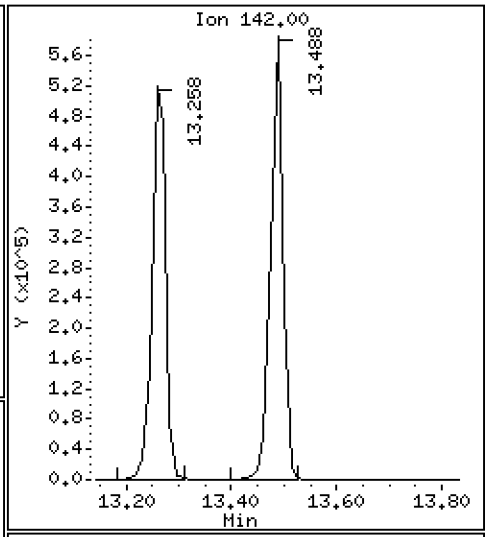
Column phase: ZB-5msi

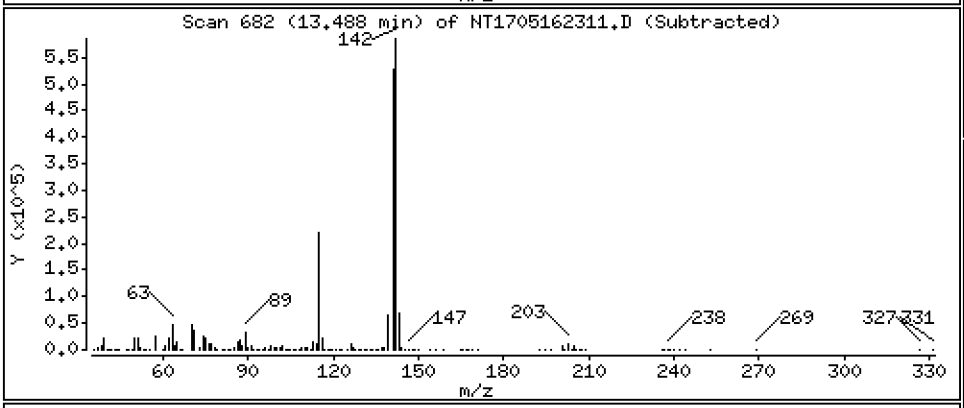
Column diameter: 0.25

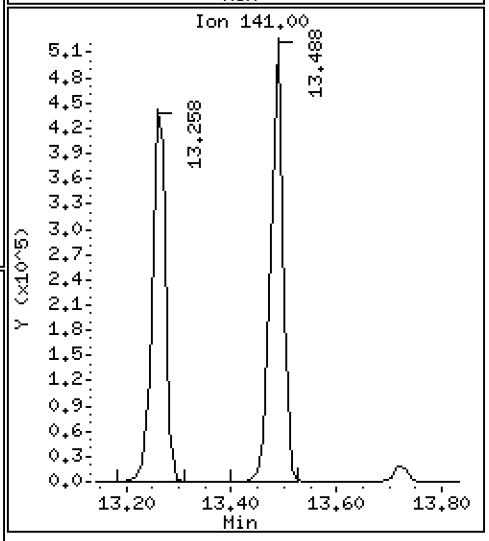
105 1-methylnaphthalene

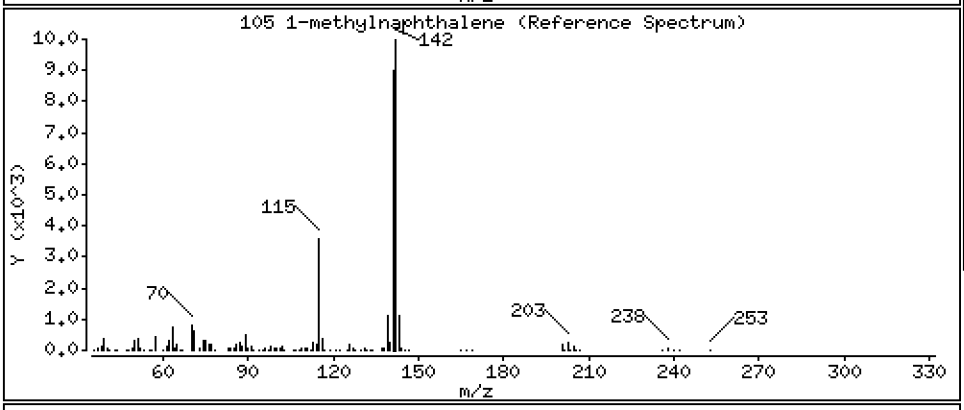
Concentration: 5.250 ug/mL

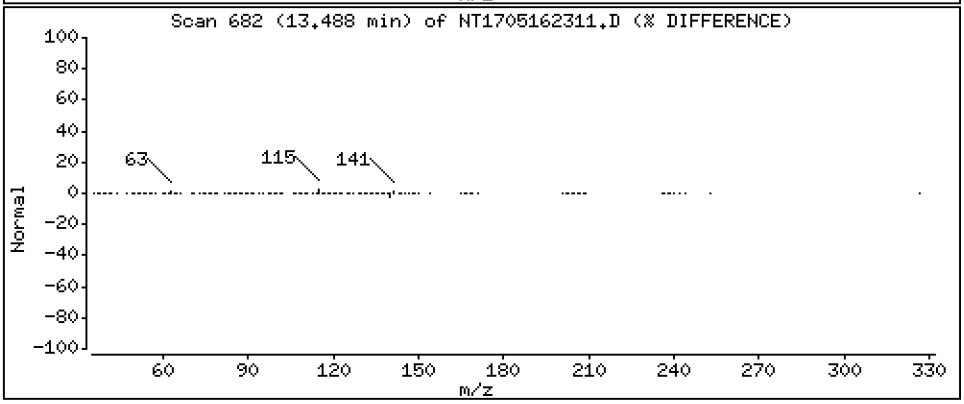












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

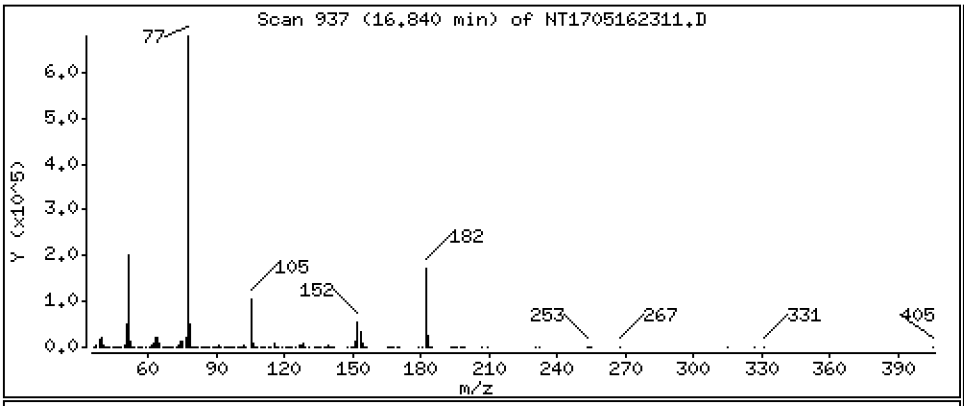
Operator: JGR

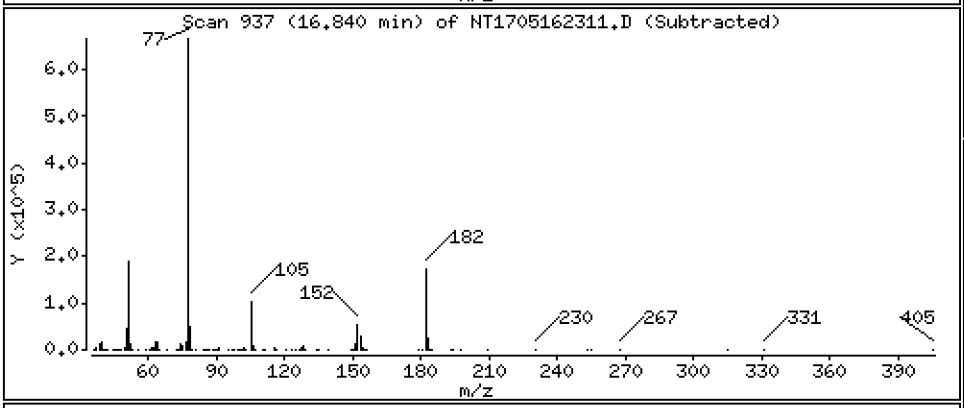
Column phase: ZB-5msi

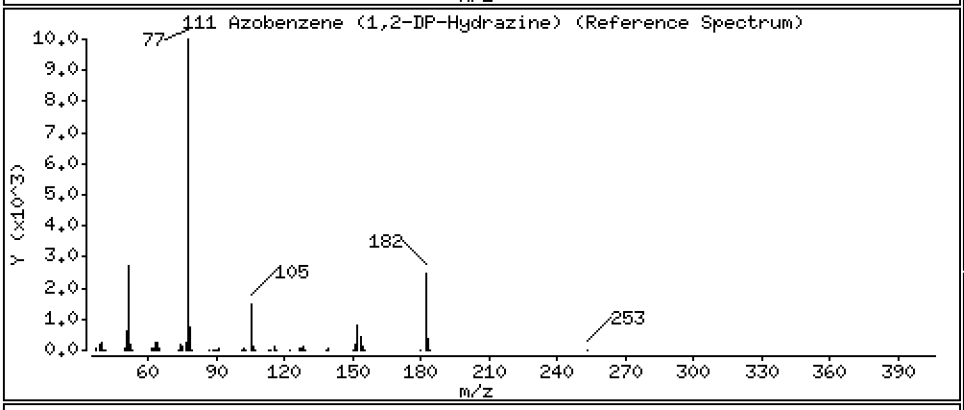
Column diameter: 0.25

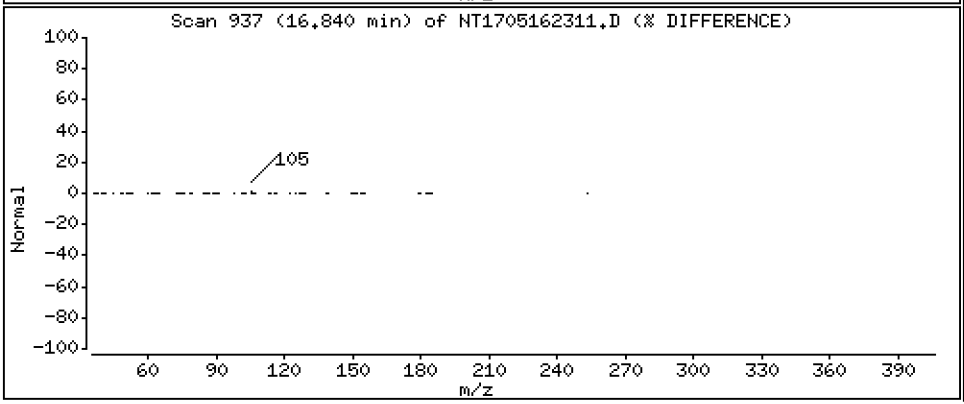
111 Azobenzene (1,2-DP-Hydrazine)

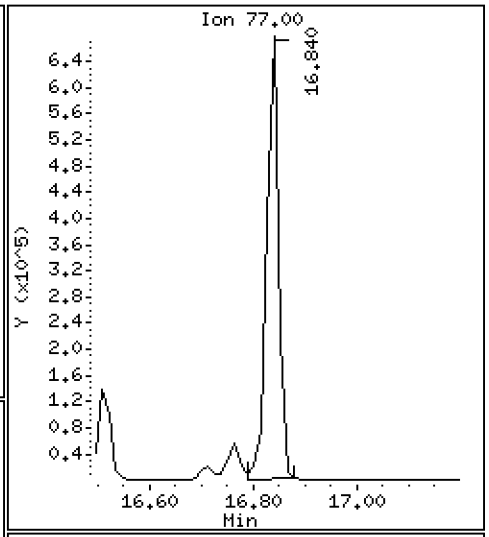
Concentration: 5.338 ug/mL

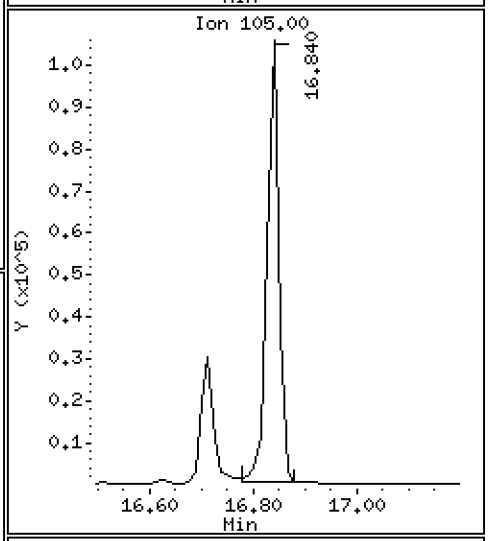


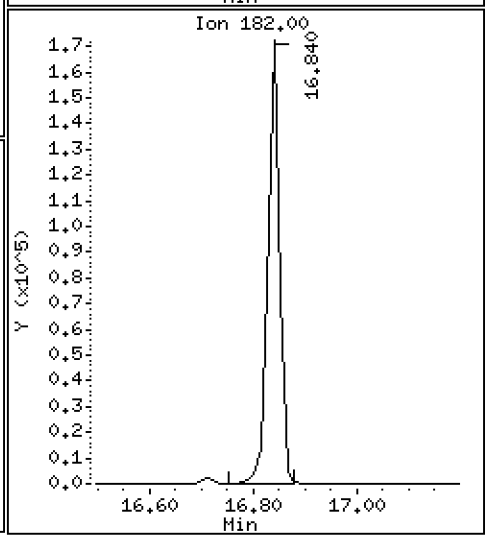












Date : 17-MAY-2023 00:29

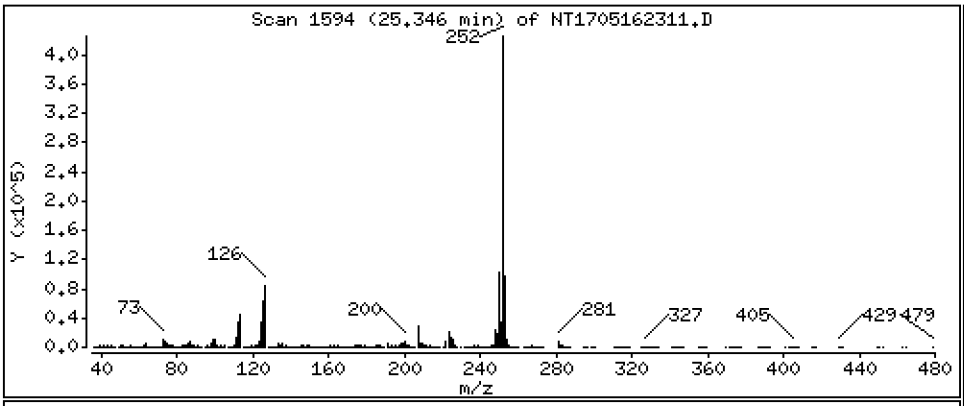
Client ID: Instrument: nt17.i

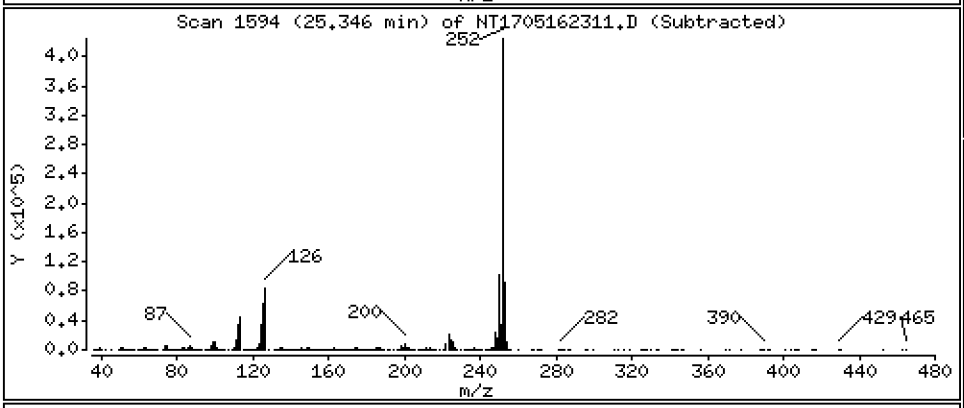
Sample Info: SLE0338-SCV1

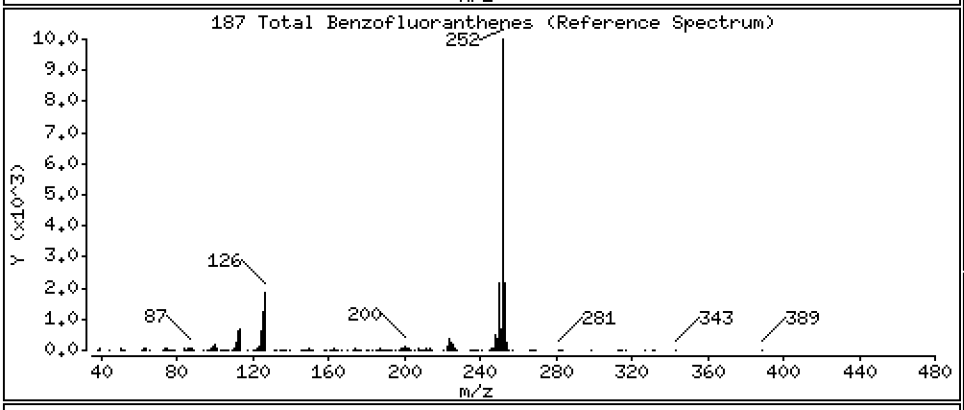
Operator: JGR

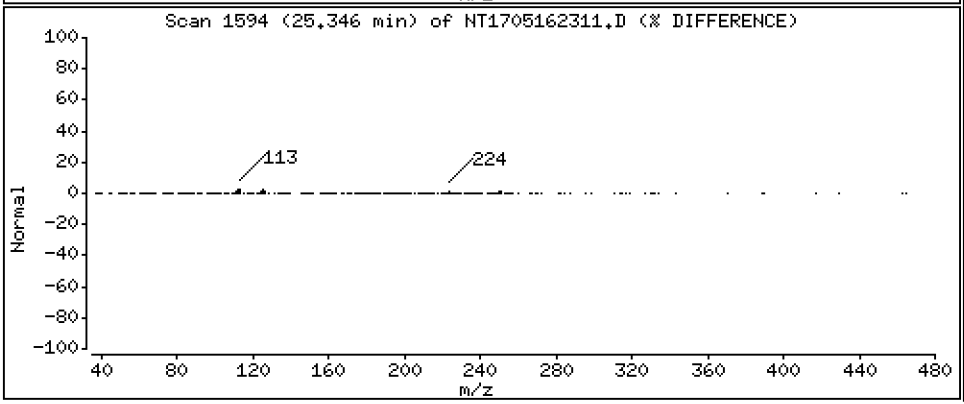
Column phase: ZB-5msi Column diameter: 0.25

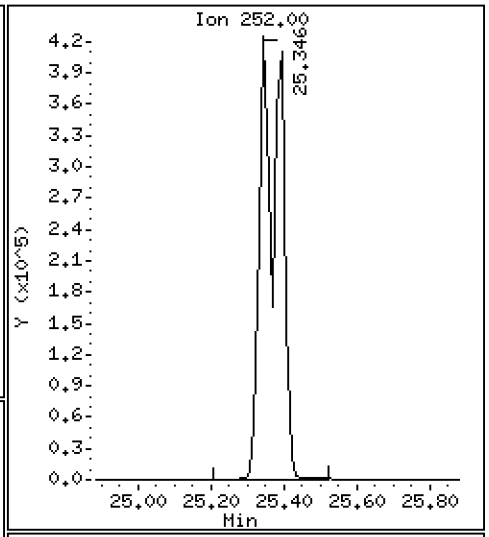
187 Total Benzofluoranthenes Concentration: 10.02 ug/mL

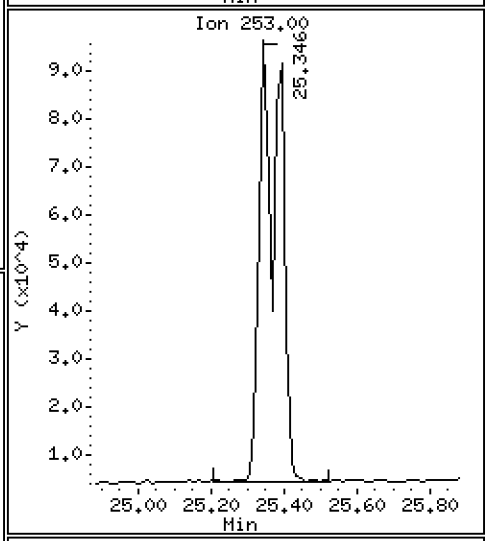


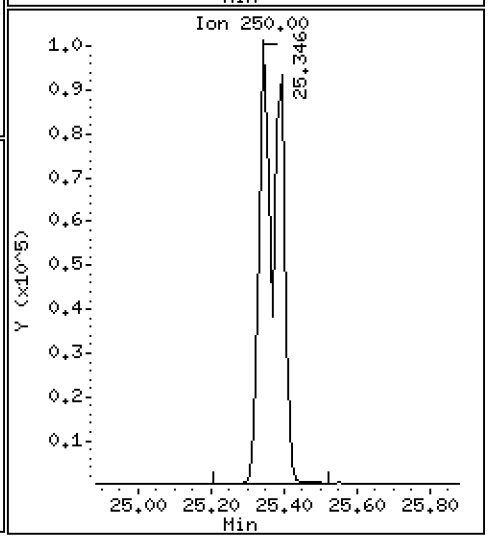












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

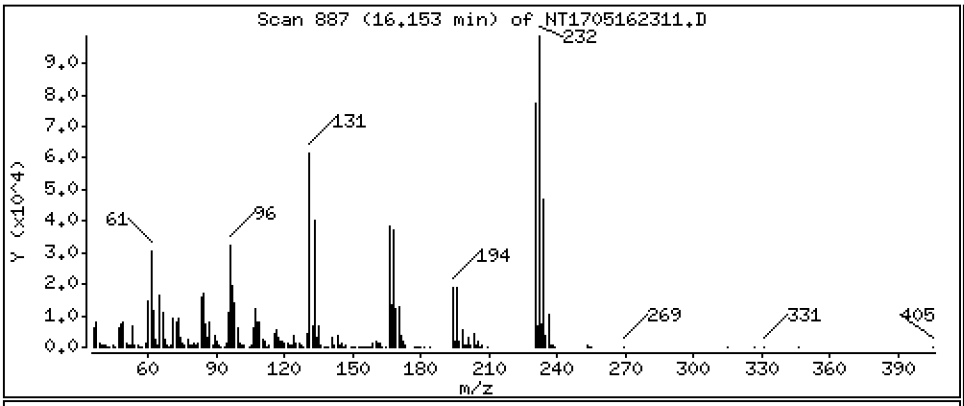
Operator: JGR

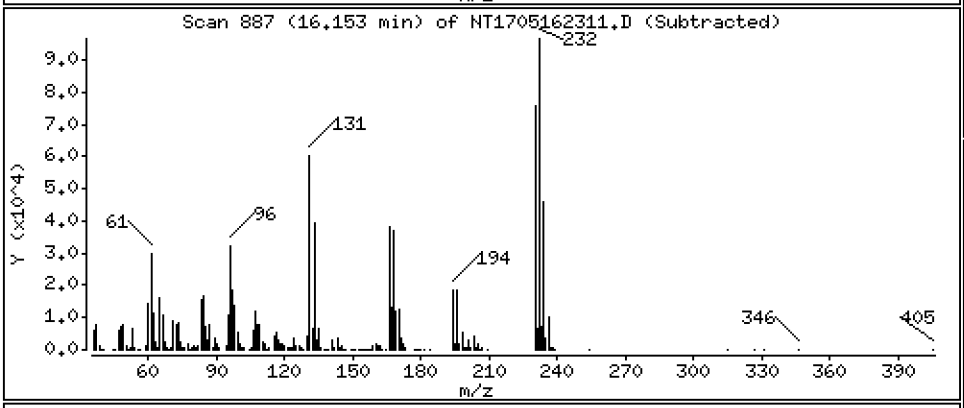
Column phase: ZB-5msi

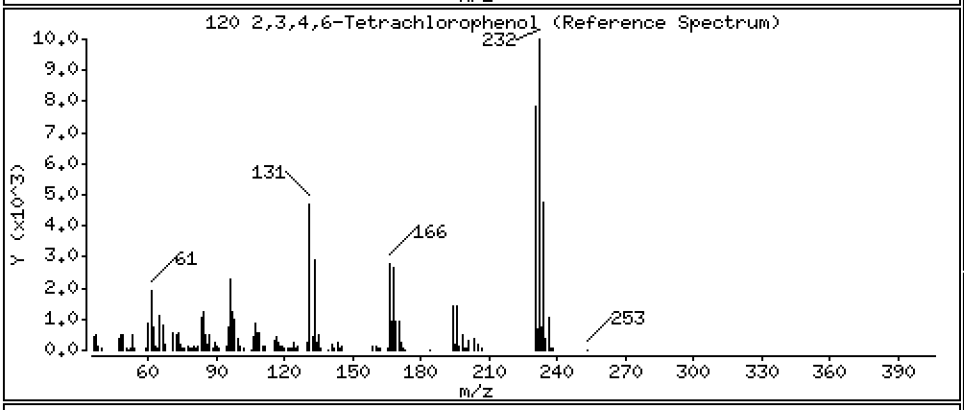
Column diameter: 0.25

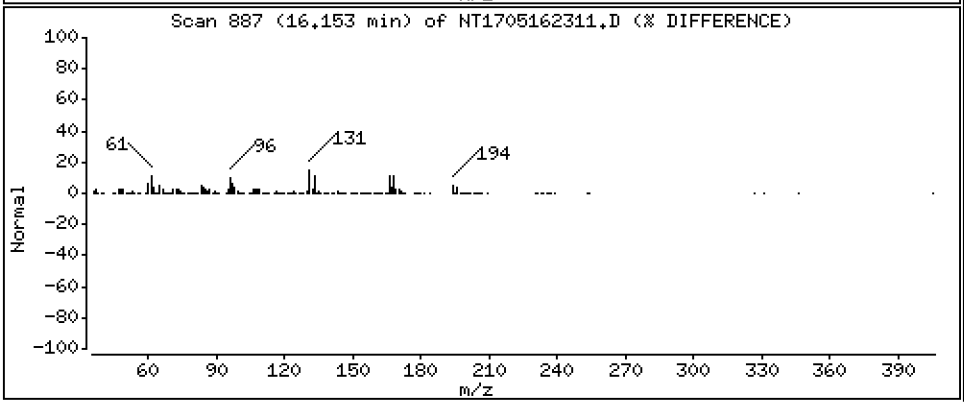
120 2,3,4,6-Tetrachlorophenol

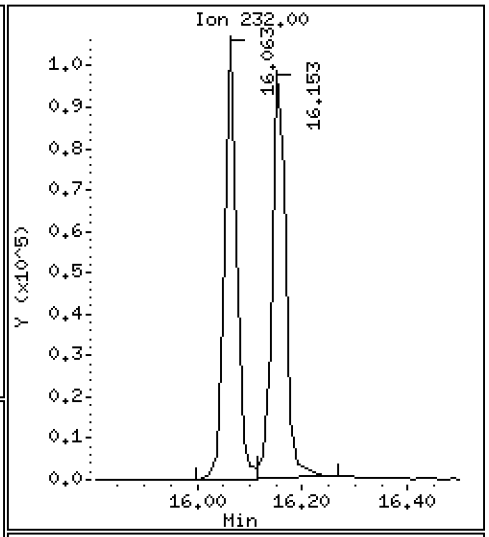
Concentration: 3.283 ug/mL

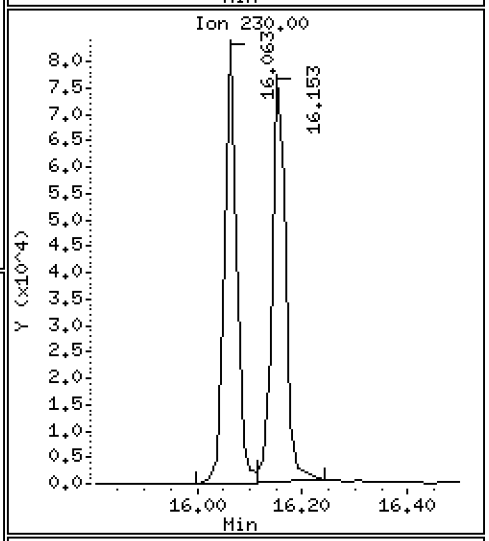


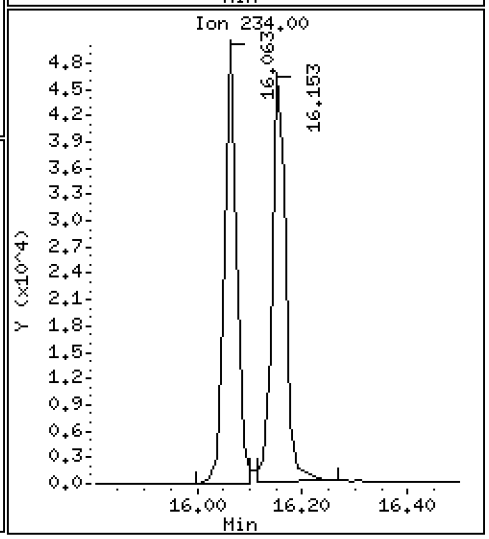












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D
Lab Smp Id: SLE0338-SCV1
Inj Date : 17-MAY-2023 00:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$ 1	2-Fluorophenol	112	Compound Not Detected.					
$ 2	Phenol-d5	99	Compound Not Detected.					
3	Phenol	94	8.740	8.740	(0.933)	588001	4.82293	4.823
$ 5	2-Chlorophenol-d4	132	Compound Not Detected.					
4	Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	494651	5.56554	5.566
6	2-Chlorophenol	128	9.033	9.033	(0.965)	539006	5.29416	5.294
7	1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	548081	5.31911	5.319
* 8	1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	265705	4.00000	
9	1,4-Dichlorobenzene	146	9.390	9.391	(1.003)	521173	5.07146	5.071
$ 10	1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
12	1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	507921	5.25771	5.258
11	Benzyl alcohol	108	9.633	9.633	(1.029)	299374	5.27414	5.274
14	2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.060)	168255	6.17916	6.179
13	2-Methylphenol	108	9.850	9.851	(1.052)	378927	4.22901	4.229
17	Hexachloroethane	117	10.336	10.336	(1.104)	222748	5.41856	5.419
16	N-Nitroso-di-n-propylamine	70	10.183	10.170	(1.087)	378231	5.51734	5.517
15	4-Methylphenol	108	10.119	10.119	(1.080)	425231	4.66096	4.661
$ 18	Nitrobenzene-d5	82	Compound Not Detected.					
19	Nitrobenzene	77	10.489	10.489	(0.886)	558517	5.32891	5.329
20	Isophorone	82	10.924	10.924	(0.922)	996054	6.94254	6.943
21	2-Nitrophenol	139	11.115	11.115	(0.939)	247403	4.89866	4.899
22	2,4-Dimethylphenol	107	11.153	11.154	(0.942)	371455	3.78811	3.788
23	Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.958)	547968	6.23185	6.232
24	Benzoic acid	105	11.332	11.333	(0.957)	445958	6.76086	6.761
25	2,4-Dichlorophenol	162	11.562	11.562	(0.976)	370930	4.70748	4.707
26	1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	503147	5.87937	5.879
* 27	Naphthalene-d8	136	11.842	11.830	(1.000)	965231	4.00000	
28	Naphthalene	128	11.881	11.881	(1.003)	1361438	5.12904	5.129
29	4-Chloroaniline	127	11.995	11.995	(1.013)	469527	4.48751	4.488
30	Hexachlorobutadiene	225	12.225	12.225	(1.032)	222159	5.24062	5.241
31	4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	413906	4.87847	4.878
32	2-Methylnaphthalene	142	13.258	13.258	(1.120)	955574	5.02794	5.028
33	Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	201170	4.21896	4.219

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	257193	4.79376	4.794
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	274739	4.83728	4.837
$	36	2-Fluorobiphenyl	172	Compound Not Detected.					
	37	2-Chloronaphthalene	162	14.252	14.253	(0.923)	885085	5.40065	5.401
	38	2-Nitroaniline	65	14.507	14.508	(0.940)	297267	5.35584	5.356
	39	Dimethylphthalate	163	14.928	14.929	(0.967)	955980	5.41824	5.418
	40	Acenaphthylene	152	15.120	15.120	(0.979)	1374665	5.28203	5.282
	41	2,6-Dinitrotoluene	165	15.069	15.069	(0.976)	223225	5.40390	5.404
*	42	Acenaphthene-d10	164	15.438	15.426	(1.000)	512787	4.00000	
	43	3-Nitroaniline	138	15.362	15.349	(0.995)	197758	5.16887	5.169
	44	Acenaphthene	153	15.502	15.502	(1.004)	859485	5.28316	5.283
	45	2,4-Dinitrophenol	184	15.566	15.567	(1.008)	52944	2.11874	2.119
	46	Dibenzofuran	168	15.821	15.821	(1.025)	1172327	5.16305	5.163
	47	4-Nitrophenol	109	15.668	15.681	(1.015)	114450	4.50365	4.504
	48	2,4-Dinitrotoluene	165	15.872	15.872	(1.028)	284935	5.26937	5.269
	50	Diethylphthalate	149	16.369	16.369	(1.060)	945291	5.49374	5.494
	49	Fluorene	166	16.535	16.535	(1.071)	1165179	5.39758	5.398
	51	4-Chlorophenyl-phenylether	204	16.522	16.509	(1.070)	542088	5.46212	5.462
	52	4-Nitroaniline	138	16.624	16.611	(1.077)	184970	5.10772	5.108
	53	4,6-Dinitro-2-methylphenol	198	16.713	16.713	(0.905)	113822	3.35487	3.355
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	651392	5.46976	5.470
$	55	2,4,6-Tribromophenol	330	Compound Not Detected.					
	56	4-Bromophenyl-phenylether	248	17.514	17.515	(0.949)	226164	5.42020	5.420
	57	Hexachlorobenzene	284	17.833	17.833	(0.966)	208878	4.91276	4.913
	58	Pentachlorophenol	266	18.190	18.203	(0.985)	98895	3.94337	3.943
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	850147	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.003)	1250084	5.03943	5.039
	61	Anthracene	178	18.598	18.598	(1.008)	1054910	4.52965	4.530
	62	Carbazole	167	18.917	18.918	(1.025)	896606	5.93842	5.938
	63	Di-n-butylphthalate	149	19.682	19.682	(1.066)	1586517	5.64164	5.642
	64	Fluoranthene	202	20.868	20.855	(0.890)	1308113	5.46710	5.467
	65	Pyrene	202	21.289	21.276	(0.908)	1277121	5.26528	5.265
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	632335	5.82476	5.825
	68	Benzo(a)anthracene	228	23.419	23.419	(0.998)	953848	5.06413	5.064
*	69	Chrysene-d12	240	23.457	23.445	(1.000)	511511	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.996)	459041	11.9948	11.99
	71	Chrysene	228	23.496	23.496	(1.002)	889381	5.01800	5.018
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	875291	5.79218	5.792
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1044471	4.00000	
	73	Di-n-octylphthalate	149	24.465	24.465	(1.000)	1451463	5.48238	5.482
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	887996	4.91157	4.912
	75	Benzo(k)fluoranthene	252	25.396	25.384	(0.971)	848094	4.96504	4.965(H)
	76	Benzo(a)pyrene	252	26.034	26.022	(0.996)	736579	5.17185	5.172
*	77	Perylene-d12	264	26.149	26.149	(1.000)	456008	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.946	28.933	(1.107)	830811	5.02922	5.029
	79	Dibenzo(a,h)anthracene	278	28.946	28.946	(1.107)	689006	4.96953	4.970
	80	Benzo(g,h,i)perylene	276	29.764	29.751	(1.138)	689189	5.05448	5.054
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	334608	5.76731	5.767
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	21.085	21.085	(0.899)	208933	3.45722	3.457
	103	Pyridine	79	5.097	5.122	(0.544)	534742	5.81084	5.811
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	925646	5.25003	5.250
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.091)	1072104	5.33771	5.338

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.345	25.384	(0.969)	1625913	10.0183	10.02
120 2,3,4,6-Tetrachlorophenol	232	16.152	16.152	(1.046)	210743	3.28296	3.283

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162311.D
Lab Smp Id: SLE0338-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	265705	-7.45
27 Naphthalene-d8	1056758	528379	2113516	965231	-8.66
42 Acenaphthene-d10	587510	293755	1175020	512787	-12.72
59 Phenanthrene-d10	933575	466788	1867150	850147	-8.94
69 Chrysene-d12	576570	288285	1153140	511511	-11.28
134 Di-n-octylphthala	1181651	590826	2363302	1044471	-11.61
77 Perylene-d12	491359	245680	982718	456008	-7.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.15	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162311.D

Lab ID: SLE0338-SCV1
nt17.i, ABN.m, 17-MAY-2023 00:29

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

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.008	0.000	1.0083	2,4-Dinitrophenol

RRT check based on Ccal File: NT1705162308.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00065
Laboratory ID: SLE0338-SCV1
Sequence: SLE0338
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	5.0000	4.8	-3.5	20.00
bis(2-chloroethyl) ether	5.0000	5.6	11.3	20.00
2-Chlorophenol	5.0000	5.3	5.9	20.00
1,3-Dichlorobenzene	5.0000	5.3	6.4	20.00
1,4-Dichlorobenzene	5.0000	5.1	1.4	20.00
1,2-Dichlorobenzene	5.0000	5.3	5.2	20.00
Benzyl Alcohol	5.0000	5.3	5.5	20.00
2,2'-Oxybis(1-chloropropane)	5.0000	6.2	23.6	20.00
2-Methylphenol	5.0000	4.2	-15.4	20.00
Hexachloroethane	5.0000	5.4	8.4	20.00
N-Nitroso-di-n-Propylamine	5.0000	5.5	10.3	20.00
4-Methylphenol	5.0000	4.7	-6.8	20.00
Nitrobenzene	5.0000	5.3	6.6	20.00
Isophorone	5.0000	6.9	38.9	20.00
2-Nitrophenol	5.0000	4.9	-2.0	20.00
2,4-Dimethylphenol	5.0000	3.8	-24.2	20.00
Bis(2-Chloroethoxy)methane	5.0000	6.2	24.6	20.00
2,4-Dichlorophenol	5.0000	4.7	-5.9	20.00
1,2,4-Trichlorobenzene	5.0000	5.9	17.6	20.00
Naphthalene	5.0000	5.1	2.6	20.00
Benzoic acid	10.000	6.8	-32.4	20.00
4-Chloroaniline	5.0000	4.5	-10.2	20.00
Hexachlorobutadiene	5.0000	5.2	4.8	20.00
4-Chloro-3-Methylphenol	5.0000	4.9	-2.4	20.00
2-Methylnaphthalene	5.0000	5.0	0.6	20.00
Hexachlorocyclopentadiene	5.0000	4.2	-15.6	20.00
2,4,6-Trichlorophenol	5.0000	4.8	-4.1	20.00
2,4,5-Trichlorophenol	5.0000	4.8	-3.3	20.00
2-Chloronaphthalene	5.0000	5.4	8.0	20.00
2-Nitroaniline	5.0000	5.4	7.1	20.00
Acenaphthylene	5.0000	5.3	5.6	20.00
Dimethylphthalate	5.0000	5.4	8.4	20.00

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00065
Laboratory ID: SLE0338-SCV1
Sequence: SLE0338
Standard ID: K010066

2,6-Dinitrotoluene	5.0000	5.4	8.1	20.00
Acenaphthene	5.0000	5.3	5.7	20.00
3-Nitroaniline	5.0000	5.2	3.4	20.00
2,4-Dinitrophenol	5.0000	2.1	-57.6	20.00
Dibenzofuran	5.0000	5.2	3.3	20.00
4-Nitrophenol	5.0000	4.5	-9.9	20.00
2,4-Dinitrotoluene	5.0000	5.3	5.4	20.00
Fluorene	5.0000	5.4	8.0	20.00
4-Chlorophenylphenyl ether	5.0000	5.5	9.2	20.00
Diethyl phthalate	5.0000	5.5	9.9	20.00
4-Nitroaniline	5.0000	5.1	2.2	20.00
4,6-Dinitro-2-methylphenol	5.0000	3.4	-32.9	20.00
N-Nitrosodiphenylamine	5.0000	5.5	9.4	20.00
4-Bromophenyl phenyl ether	5.0000	5.4	8.4	20.00
Hexachlorobenzene	5.0000	4.9	-1.7	20.00
Pentachlorophenol	5.0000	3.9	-21.1	20.00
Phenanthrene	5.0000	5.0	0.8	20.00
Anthracene	5.0000	4.5	-9.4	20.00
Carbazole	5.0000	5.9	18.8	20.00
Di-n-Butylphthalate	5.0000	5.6	12.8	20.00
Fluoranthene	5.0000	5.5	9.3	20.00
Pyrene	5.0000	5.3	5.3	20.00
Butylbenzylphthalate	5.0000	5.8	16.5	20.00
Benzo(a)anthracene	5.0000	5.1	1.3	20.00
3,3'-Dichlorobenzidine	10.000	12.0	19.9	20.00
Chrysene	5.0000	5.0	0.4	20.00
bis(2-Ethylhexyl)phthalate	5.0000	5.8	15.8	20.00
Di-n-Octylphthalate	5.0000	5.5	9.6	20.00
Benzofluoranthenes, Total	10.000	10.0	0.2	20.00
Benzo(a)pyrene	5.0000	5.2	3.4	20.00
Indeno(1,2,3-cd)pyrene	5.0000	5.0	0.6	20.00
Dibenzo(a,h)anthracene	5.0000	5.0	-0.6	20.00
Benzo(g,h,i)perylene	5.0000	5.1	1.1	20.00
1-Methylnaphthalene	5.0000	5.3	5.0	20.00

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

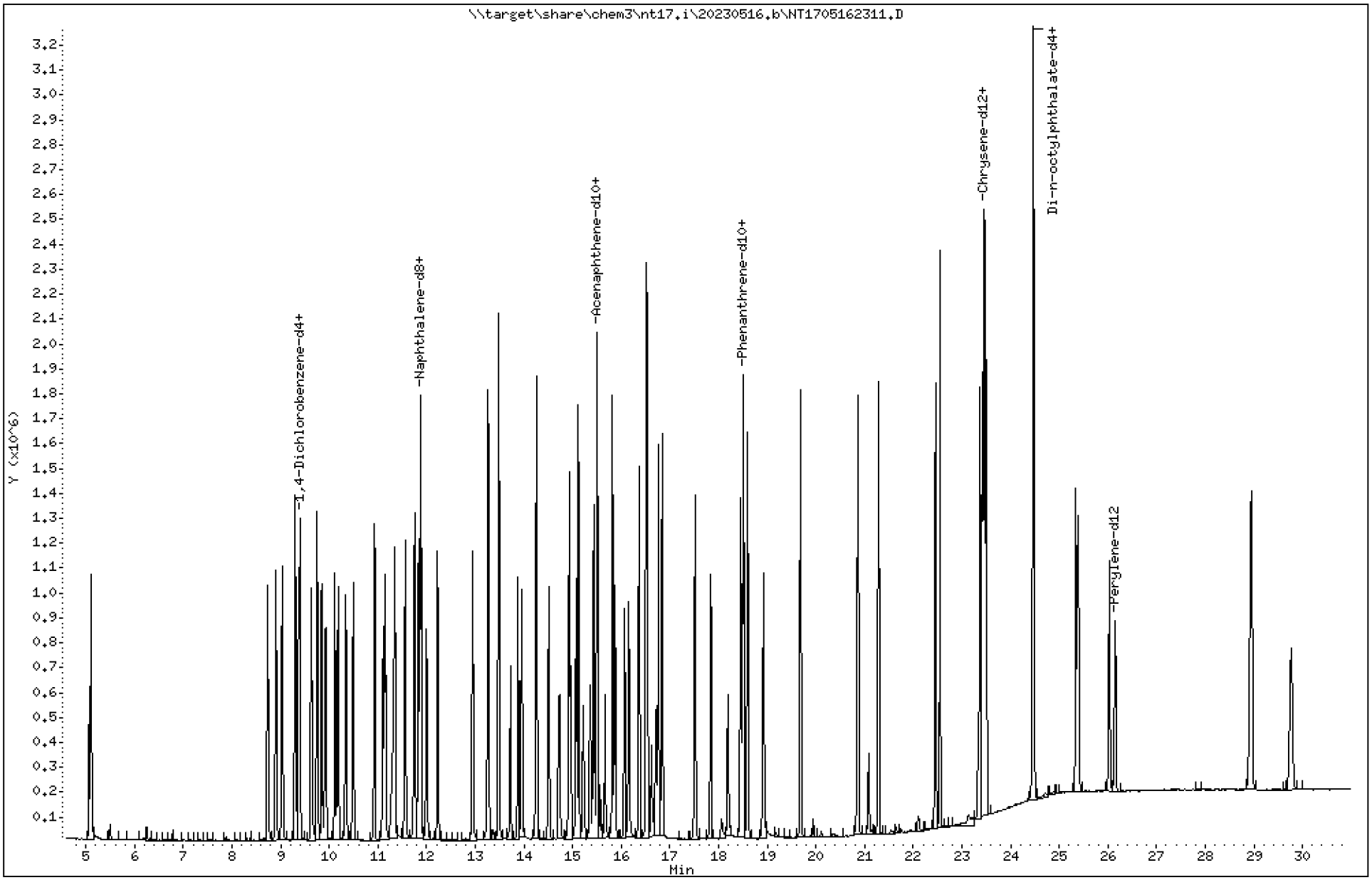
Sample Info: SLE0338-SCV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

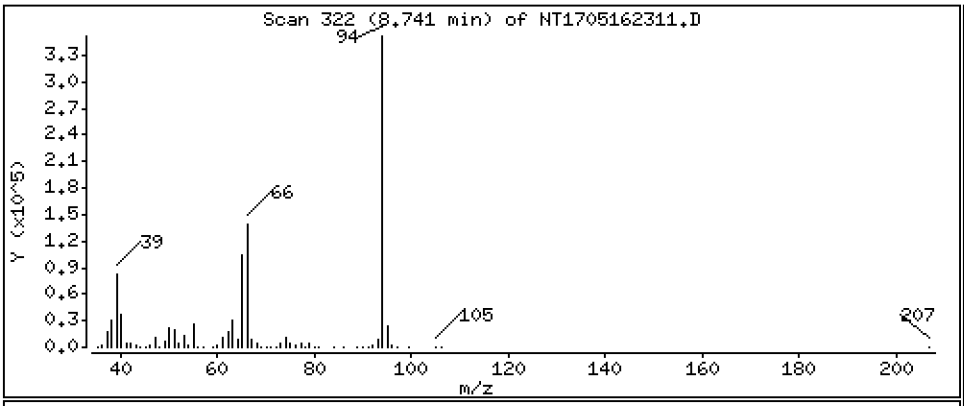
Operator: JGR

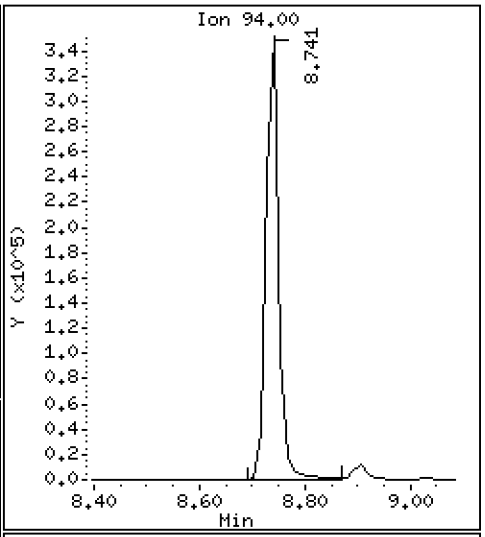
Column phase: ZB-5msi

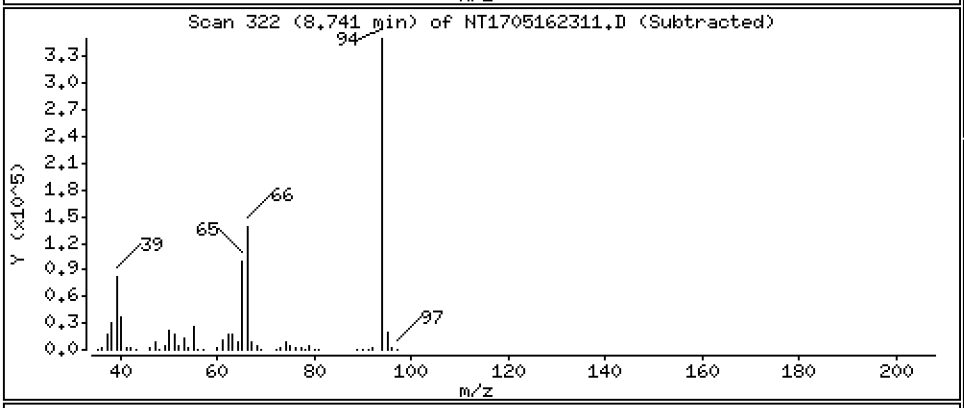
Column diameter: 0.25

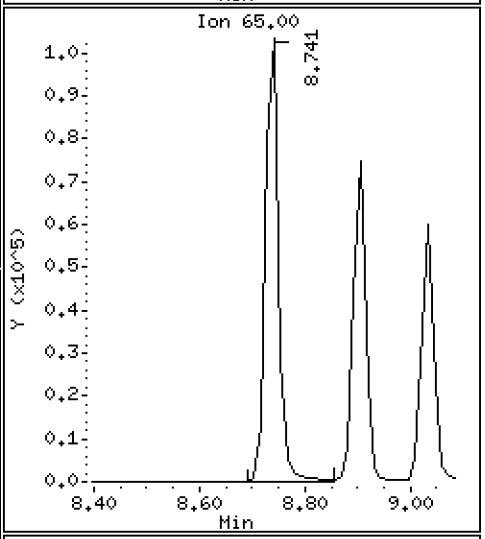
3 Phenol

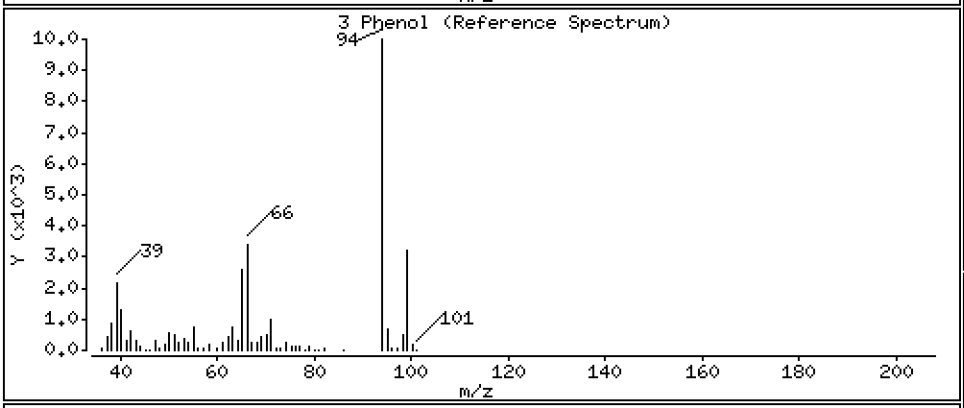
Concentration: 4.823 ug/mL

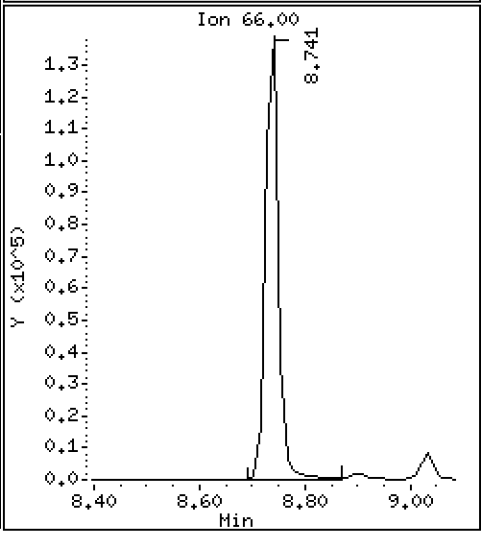


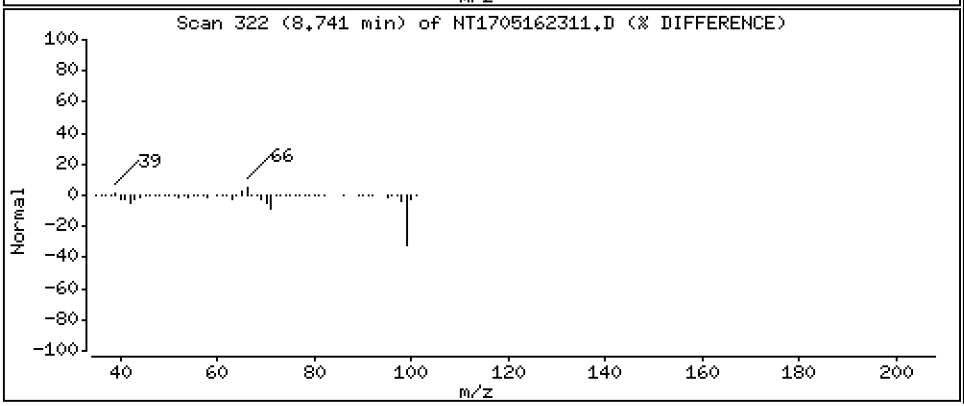












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

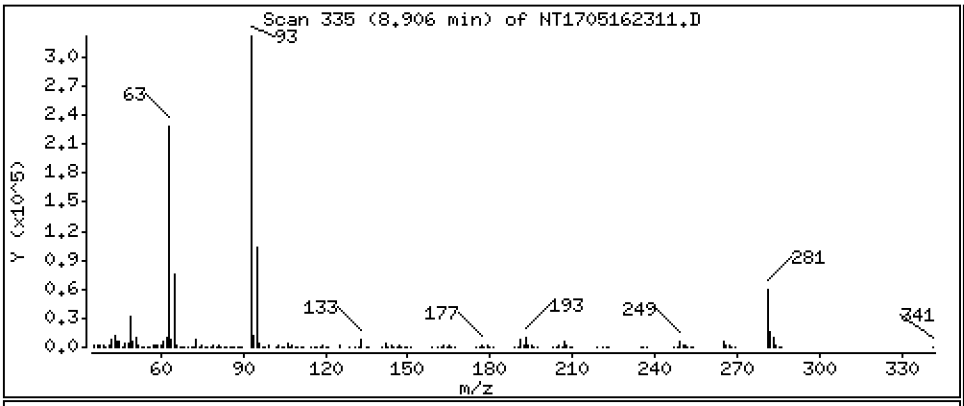
Operator: JGR

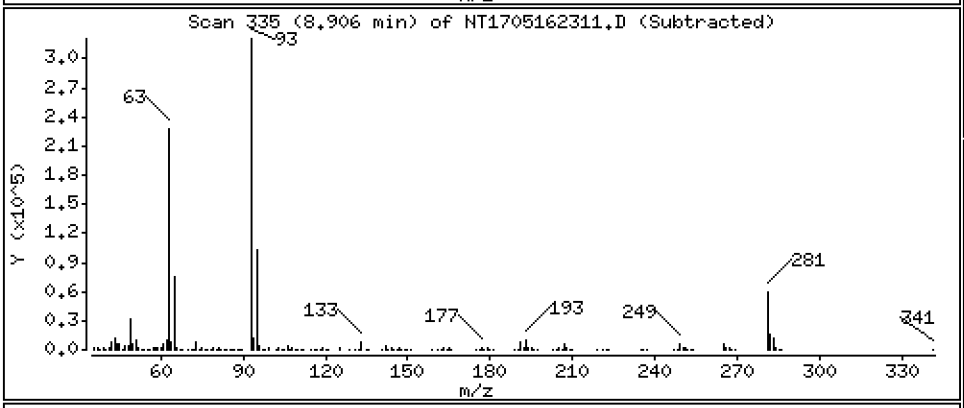
Column phase: ZB-5msi

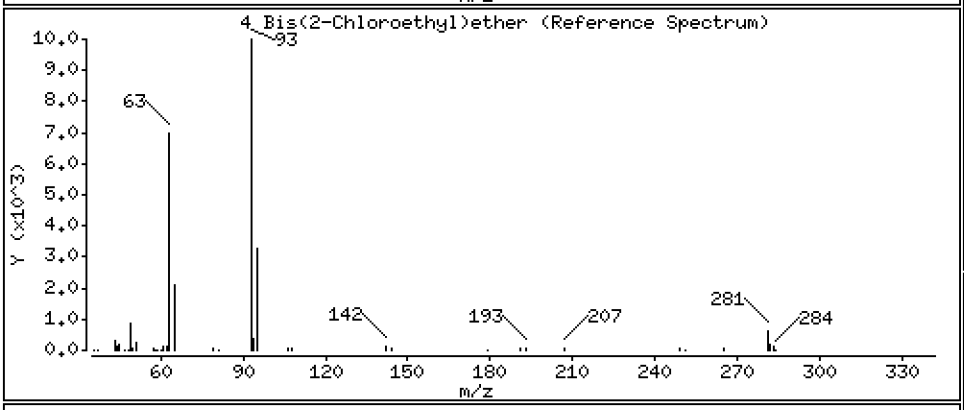
Column diameter: 0.25

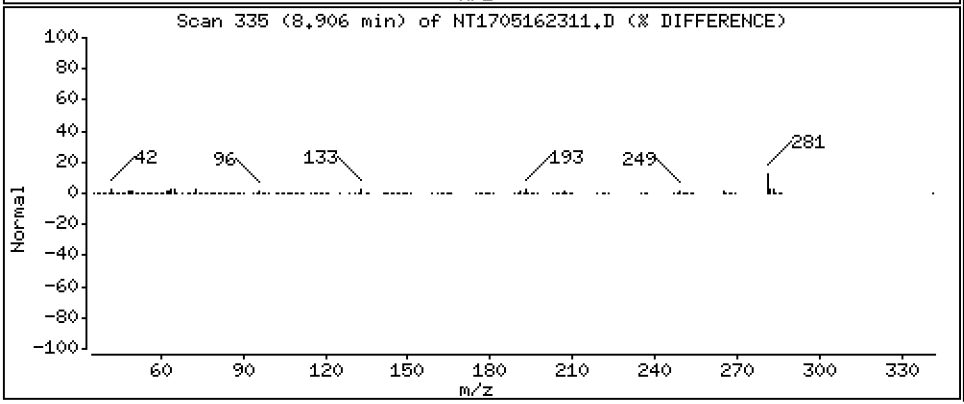
4 Bis(2-Chloroethyl)ether

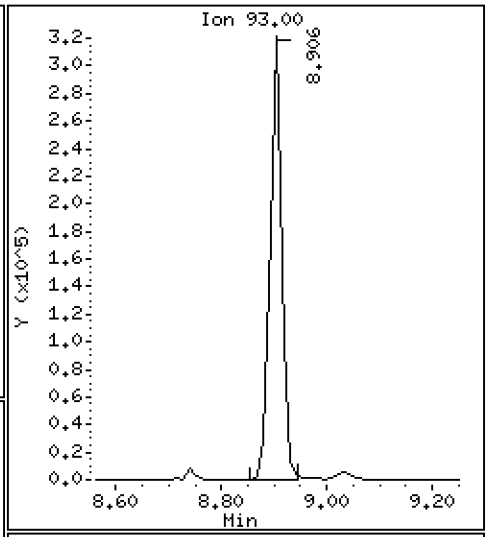
Concentration: 5.566 ug/mL

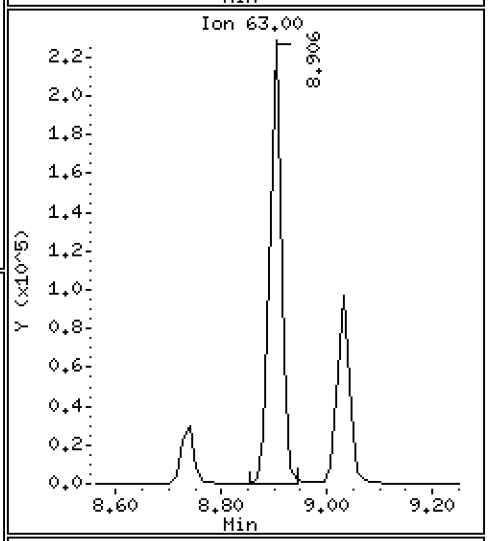


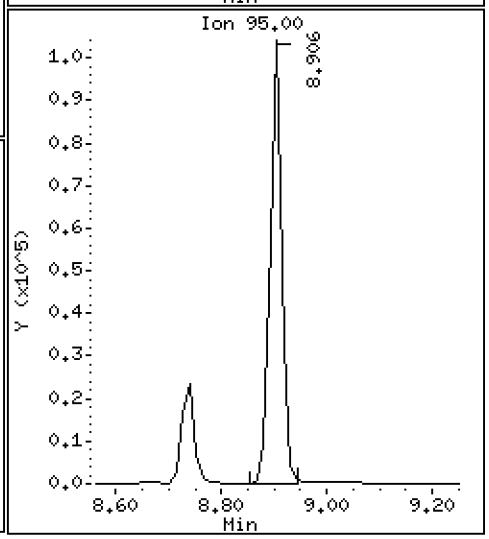












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

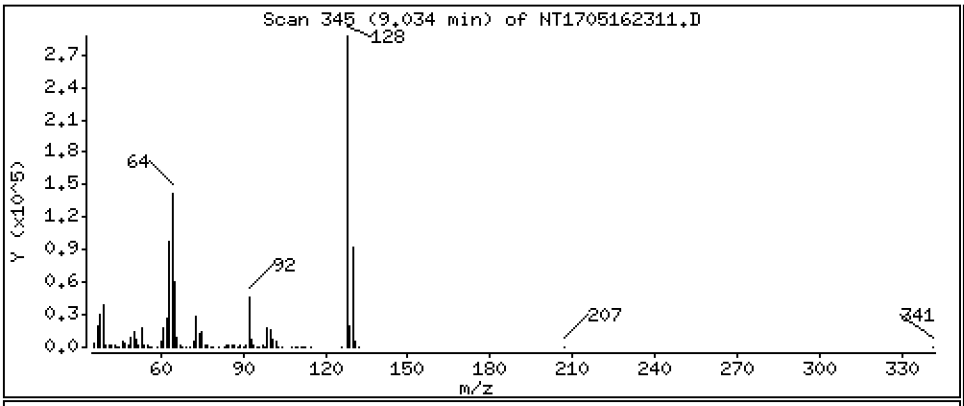
Operator: JGR

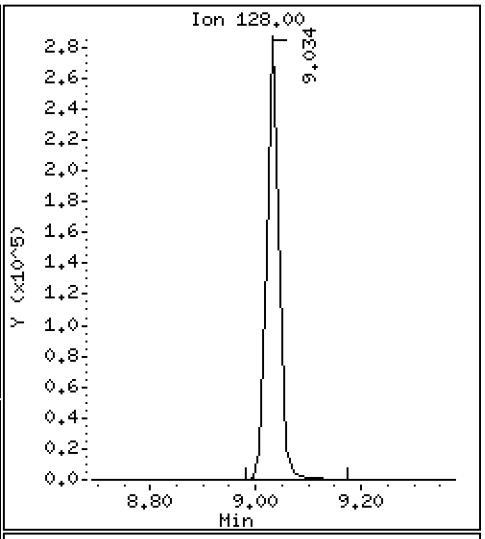
Column phase: ZB-5msi

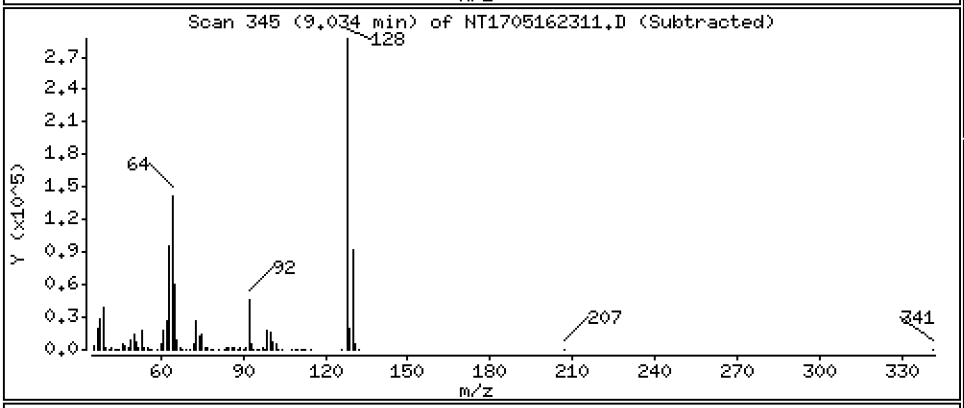
Column diameter: 0.25

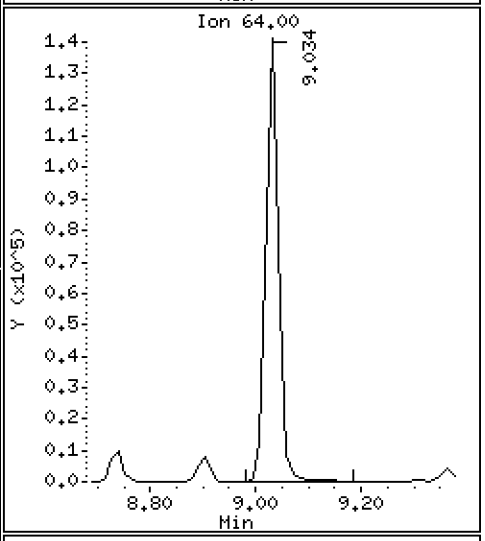
6 2-Chlorophenol

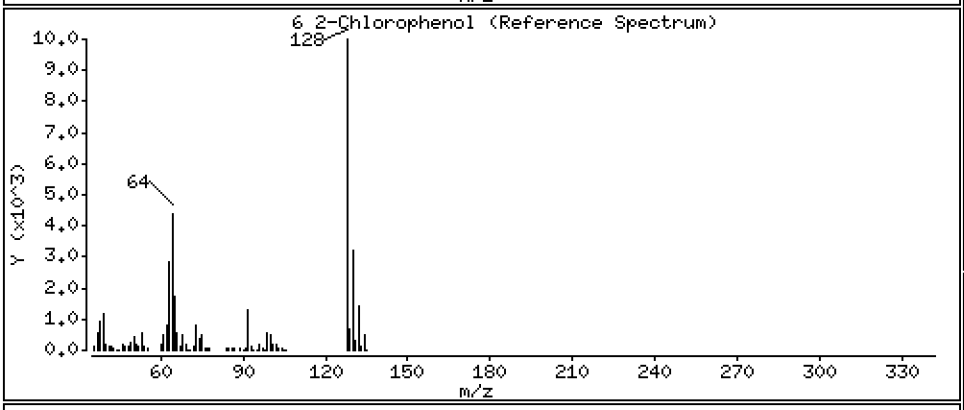
Concentration: 5.294 ug/mL

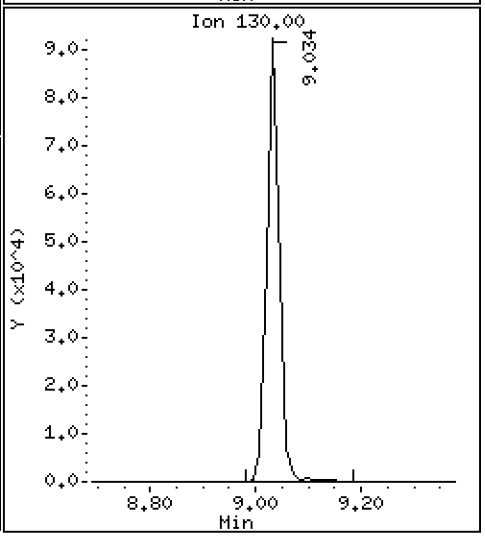


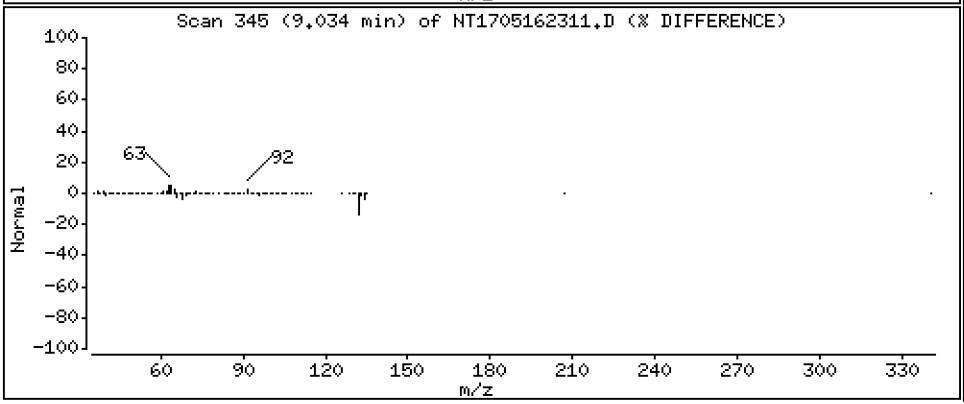












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

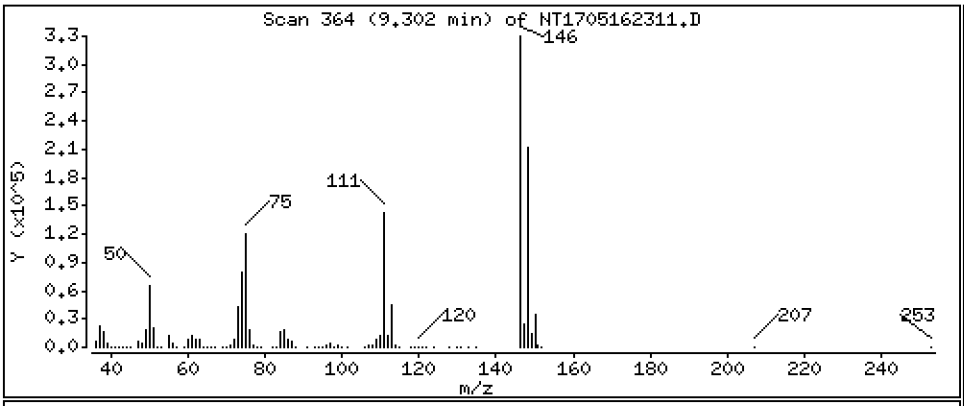
Operator: JGR

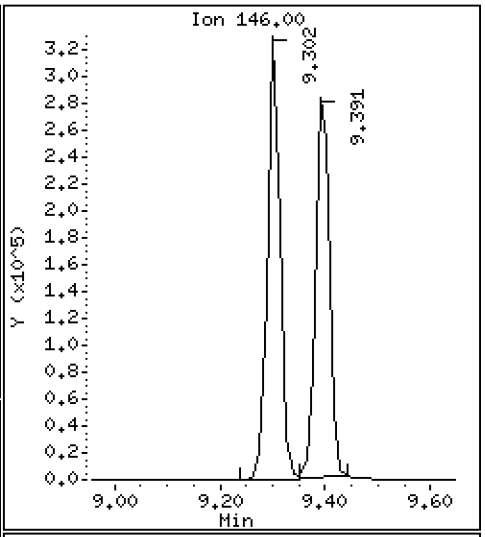
Column phase: ZB-5msi

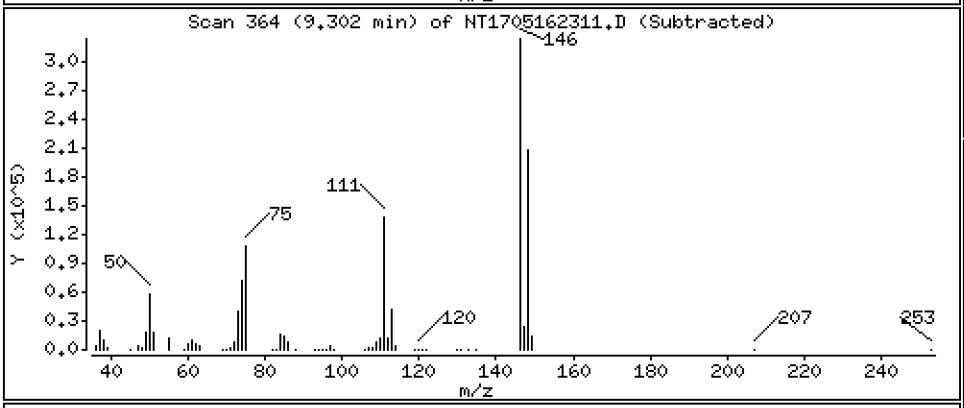
Column diameter: 0.25

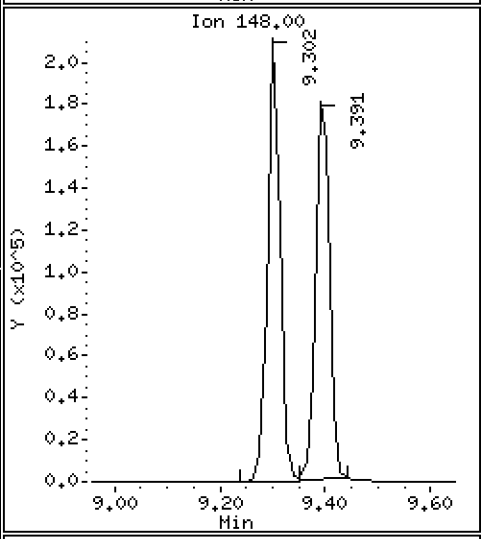
7 1,3-Dichlorobenzene

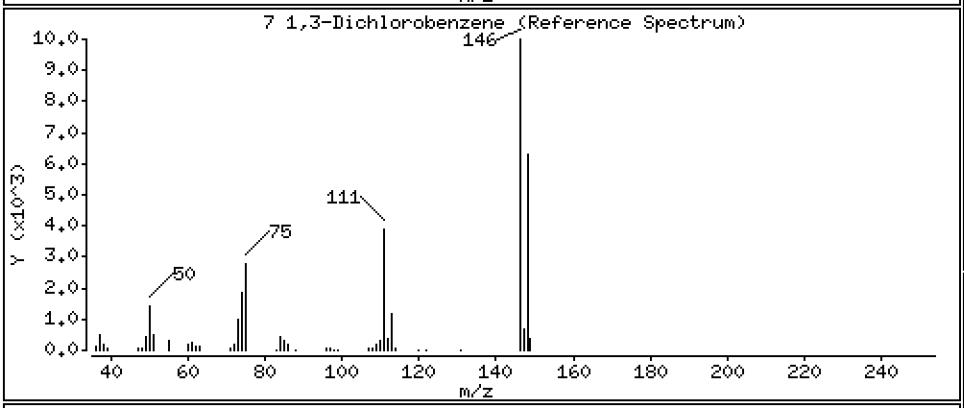
Concentration: 5.319 ug/mL

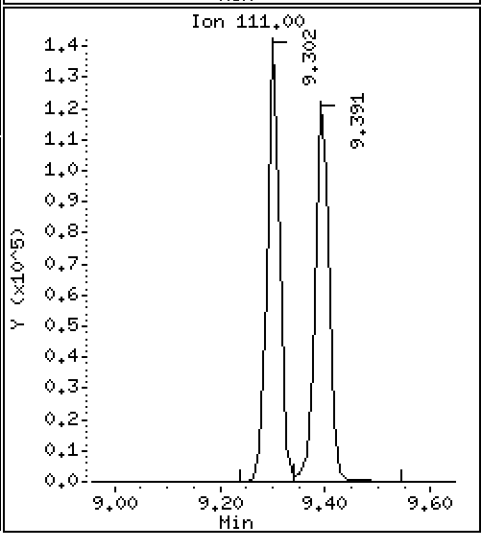


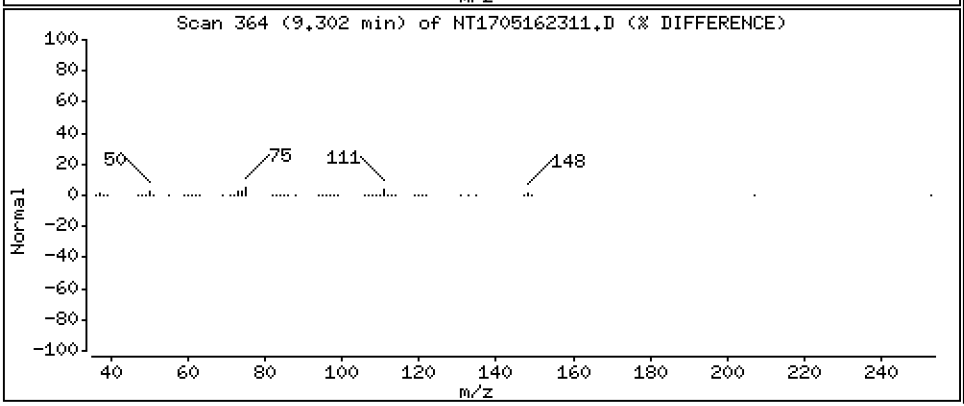












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

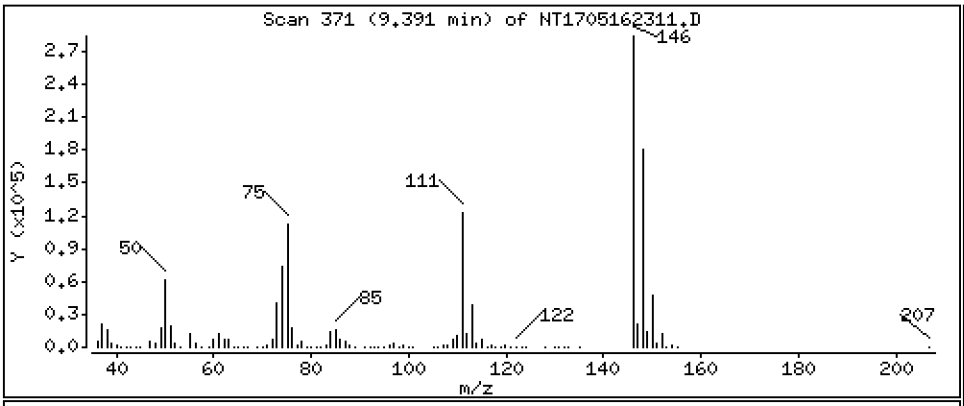
Operator: JGR

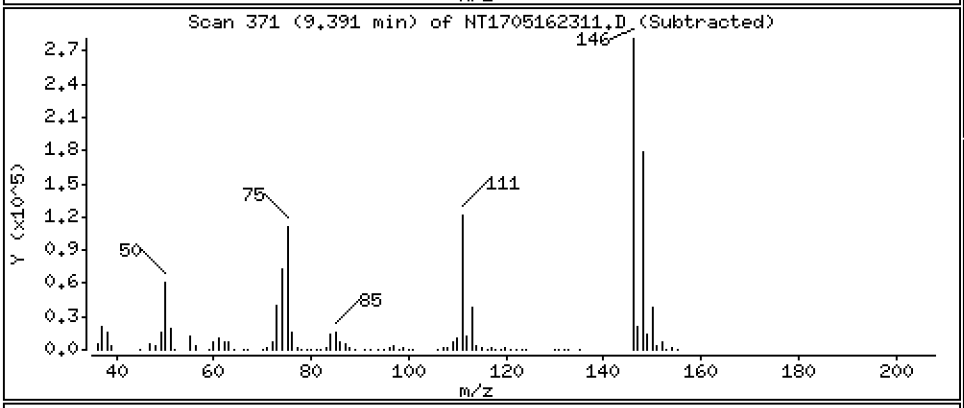
Column phase: ZB-5msi

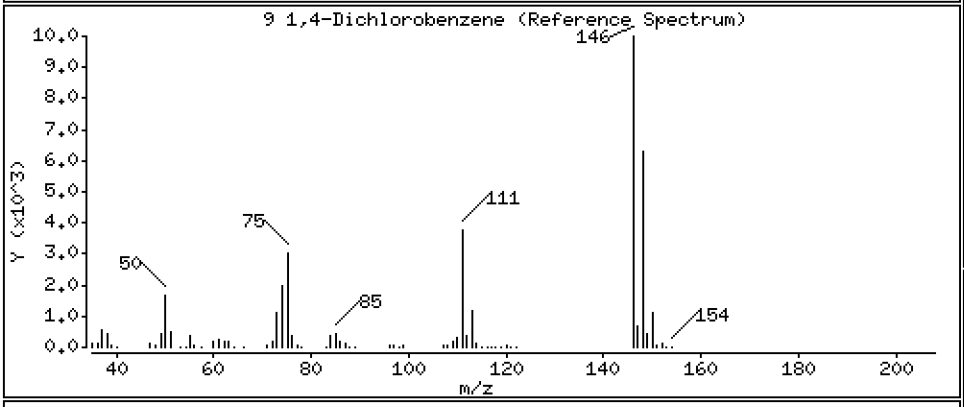
Column diameter: 0.25

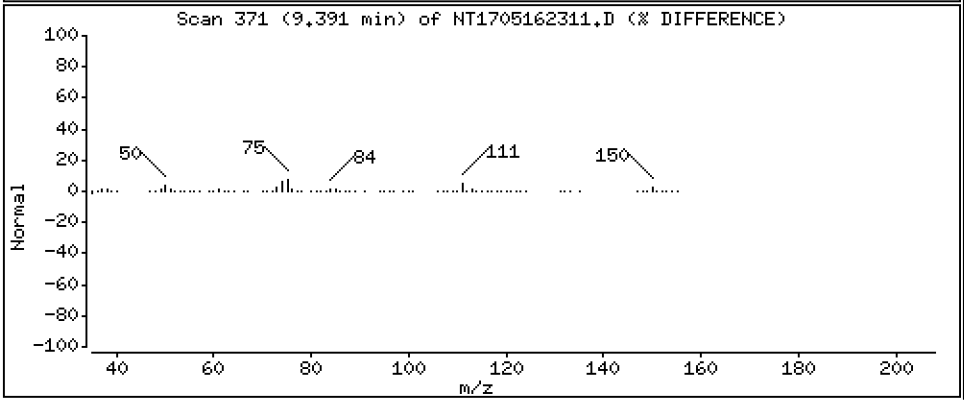
9 1,4-Dichlorobenzene

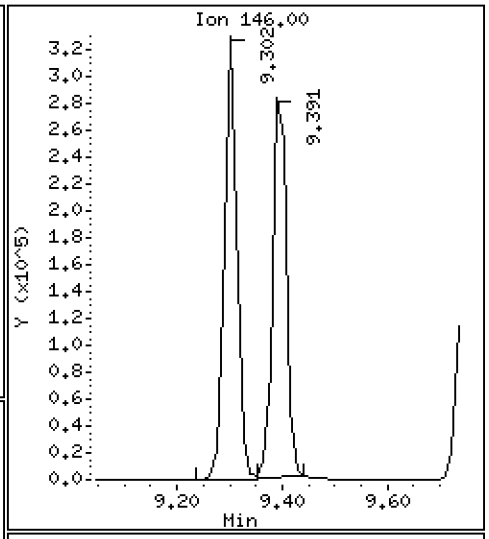
Concentration: 5.071 ug/mL

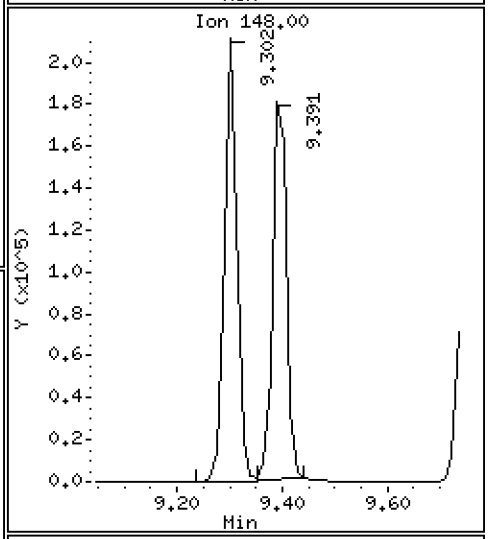


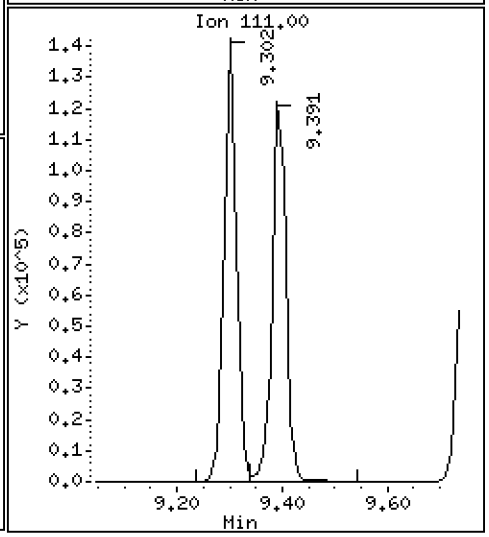












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

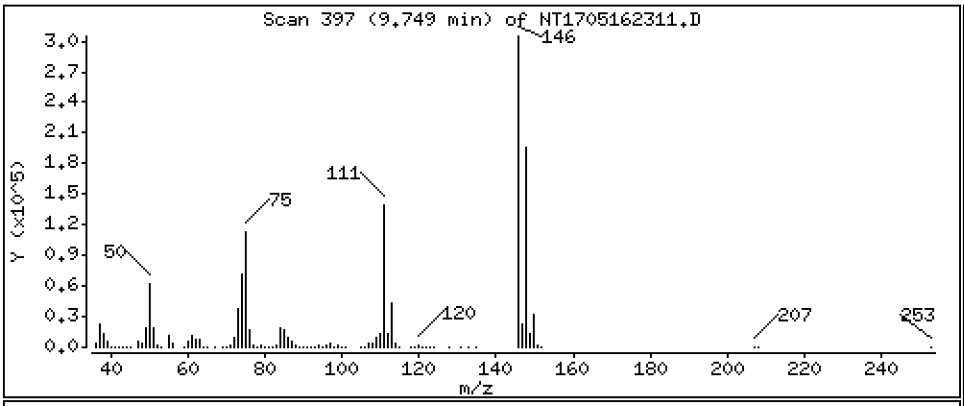
Operator: JGR

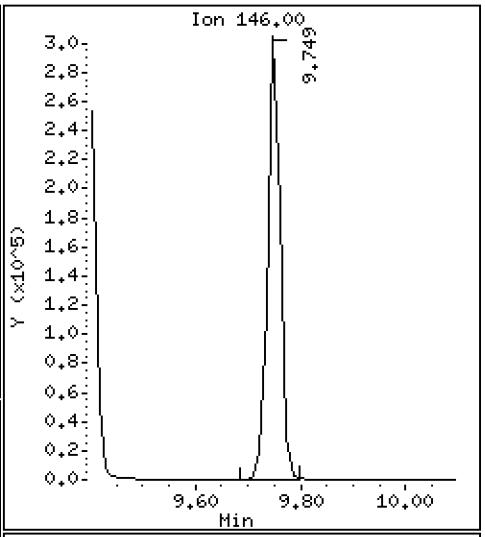
Column phase: ZB-5msi

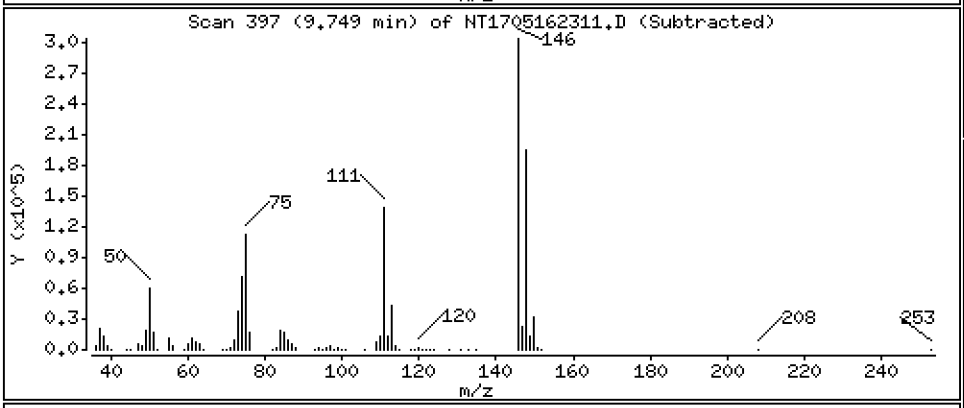
Column diameter: 0.25

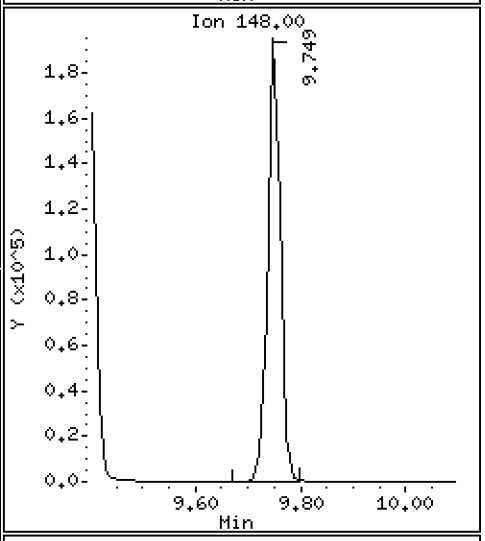
12 1,2-Dichlorobenzene

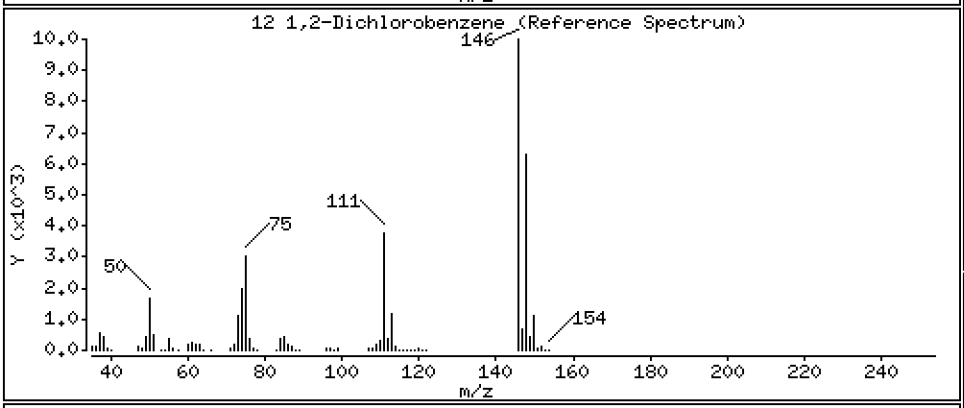
Concentration: 5.258 ug/mL

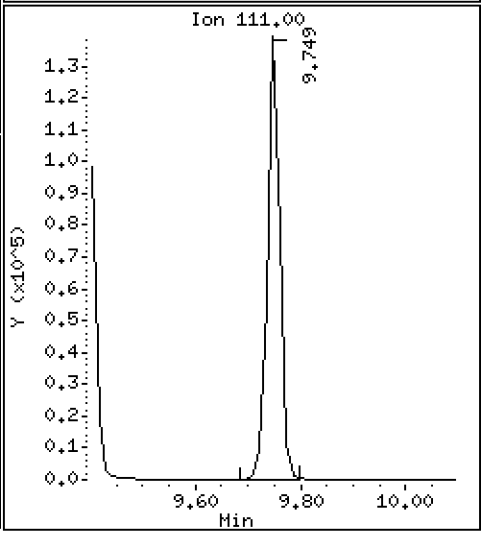


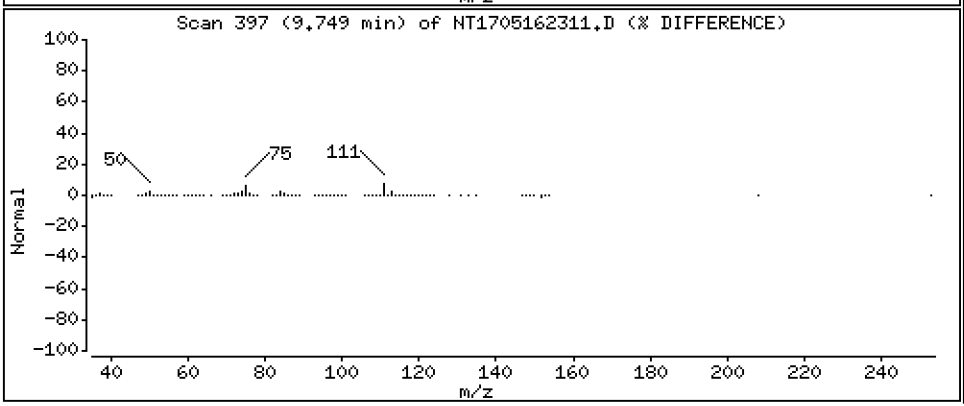












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

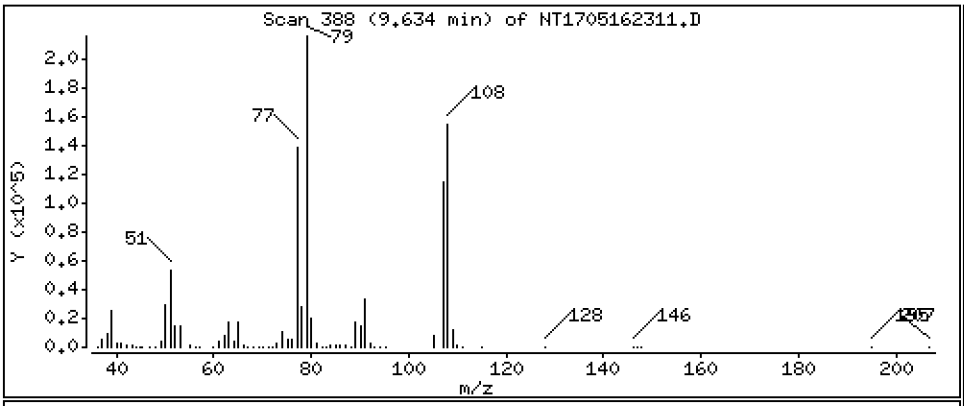
Operator: JGR

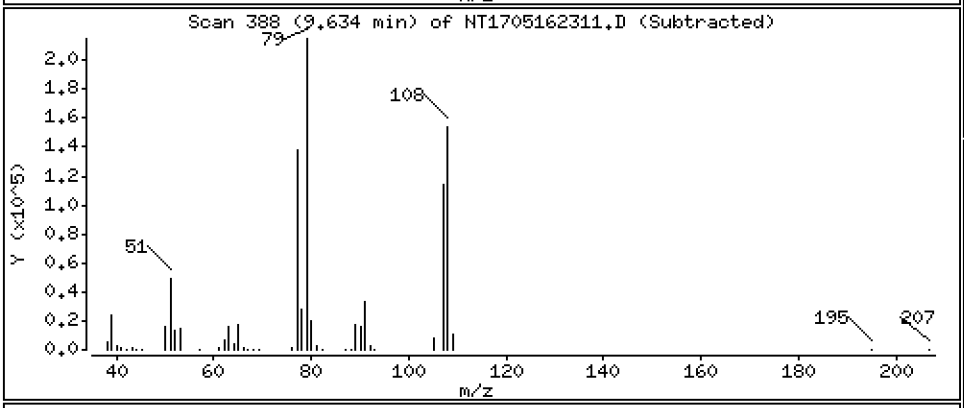
Column phase: ZB-5msi

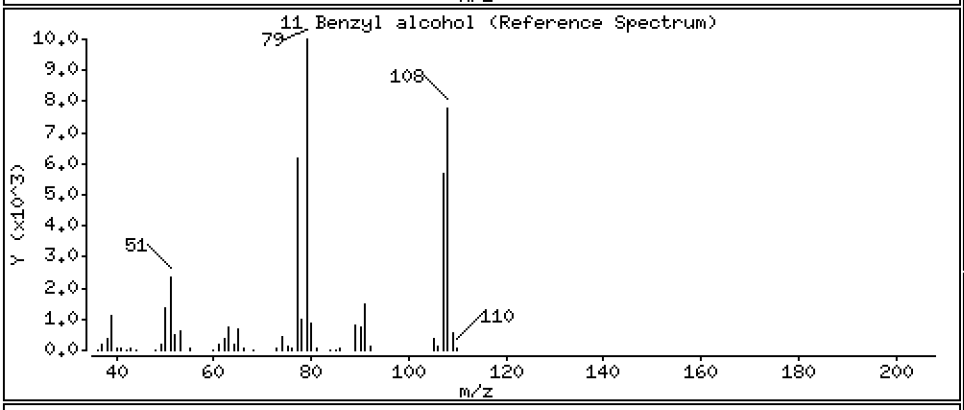
Column diameter: 0.25

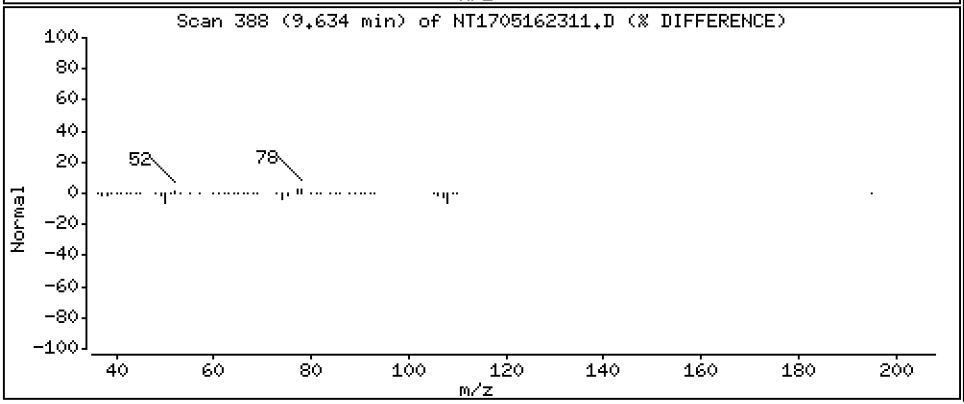
11 Benzyl alcohol

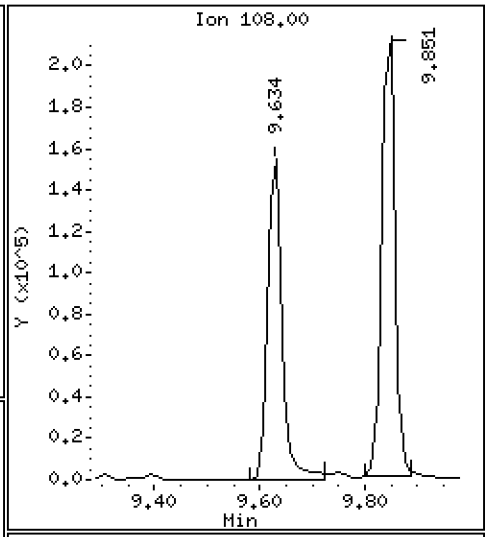
Concentration: 5.274 ug/mL

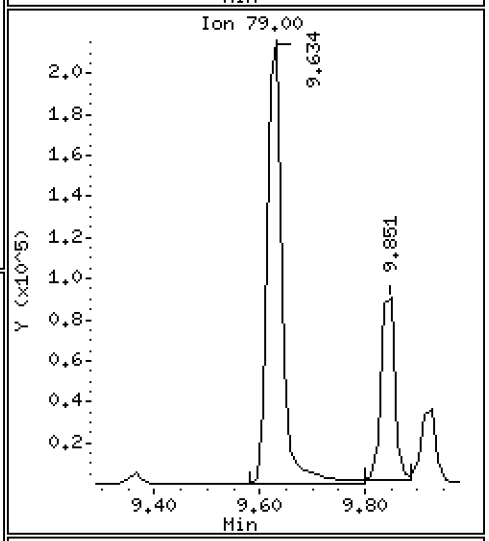


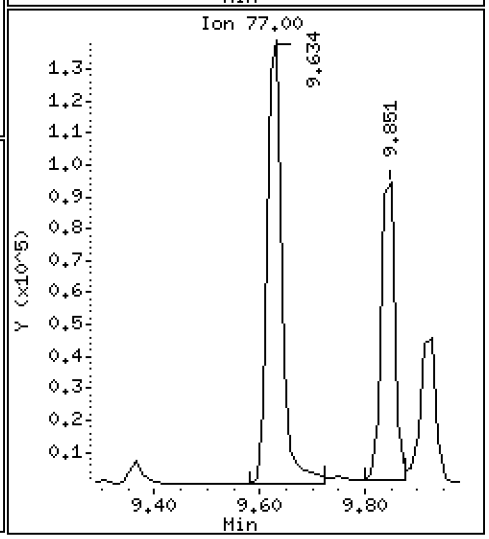












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

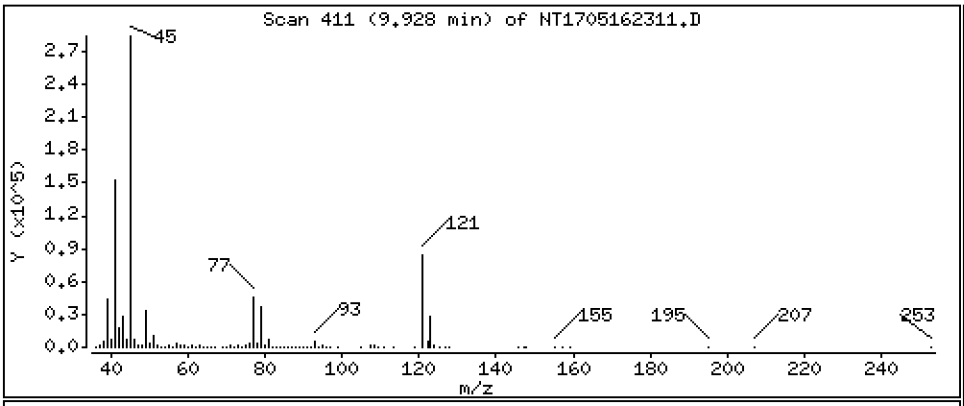
Operator: JGR

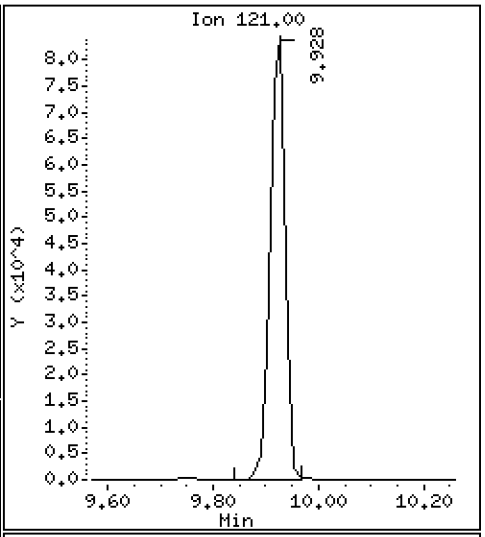
Column phase: ZB-5msi

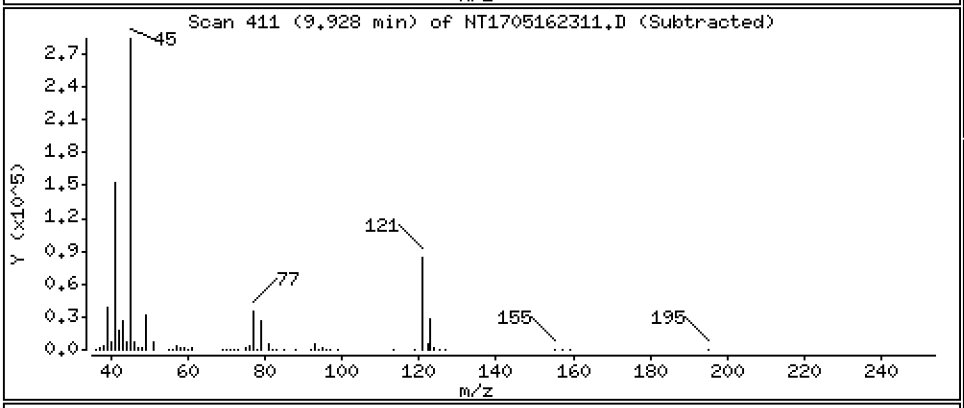
Column diameter: 0.25

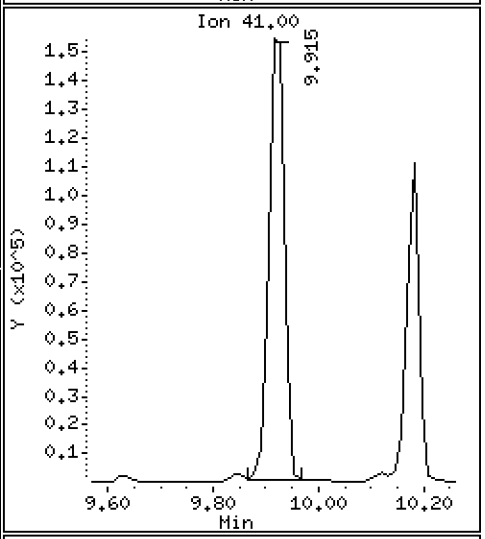
14 2,2'-oxybis(1-Chloropropane)

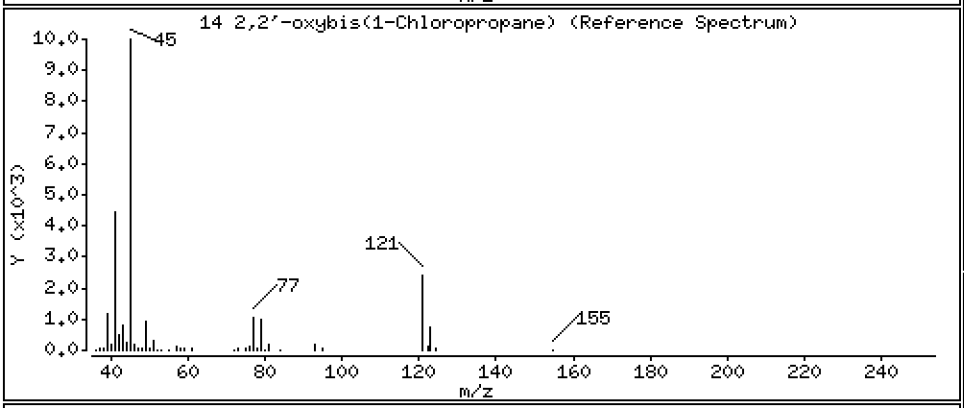
Concentration: 6.179 ug/mL

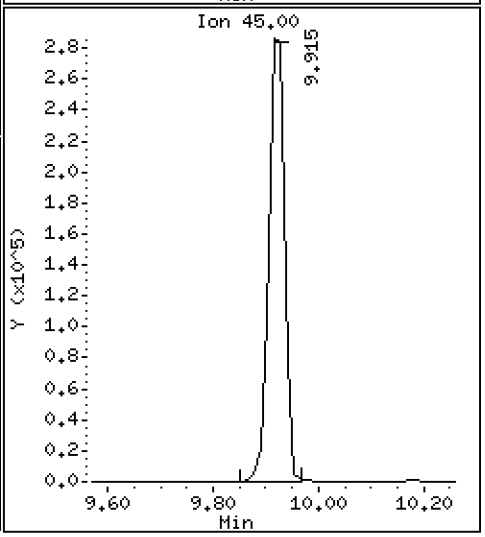


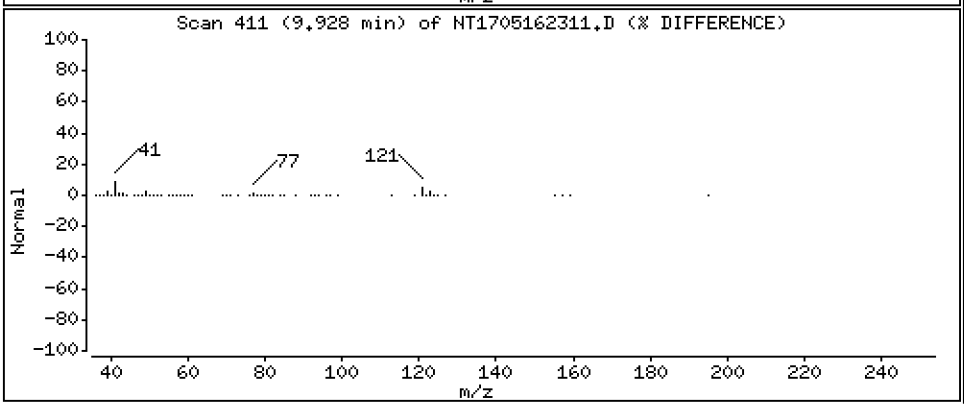












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

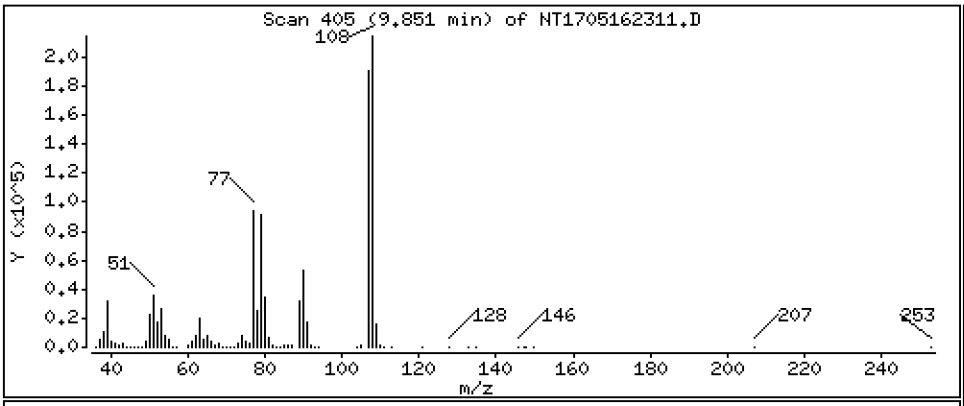
Operator: JGR

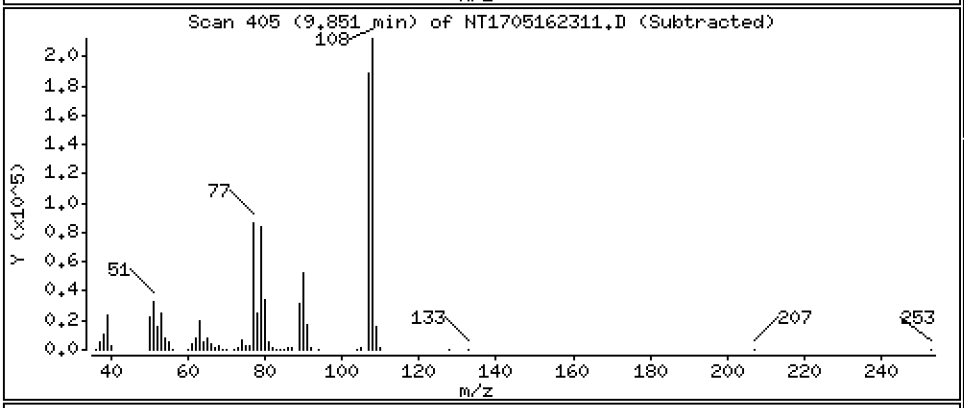
Column phase: ZB-5msi

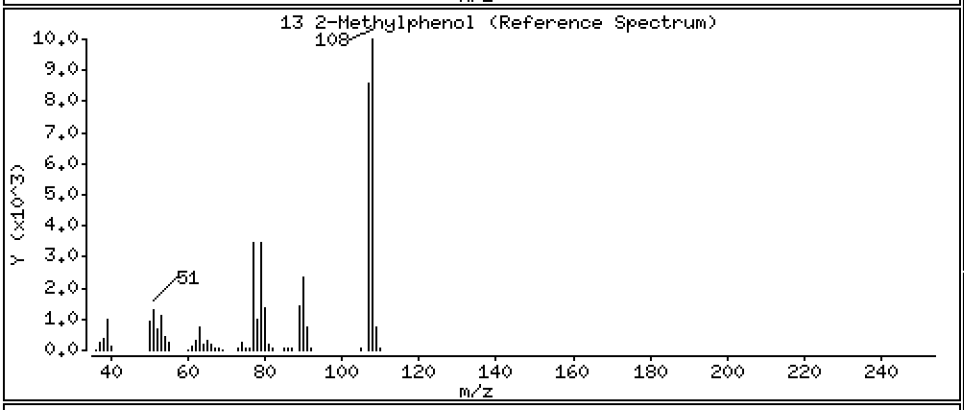
Column diameter: 0.25

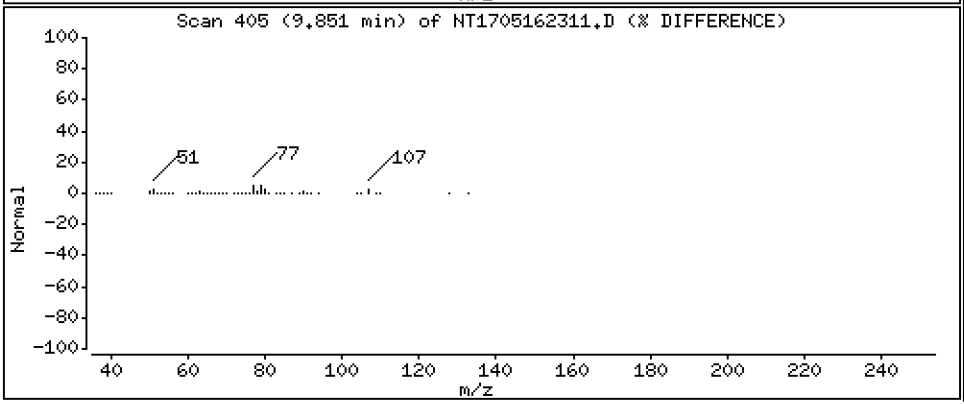
13 2-Methylphenol

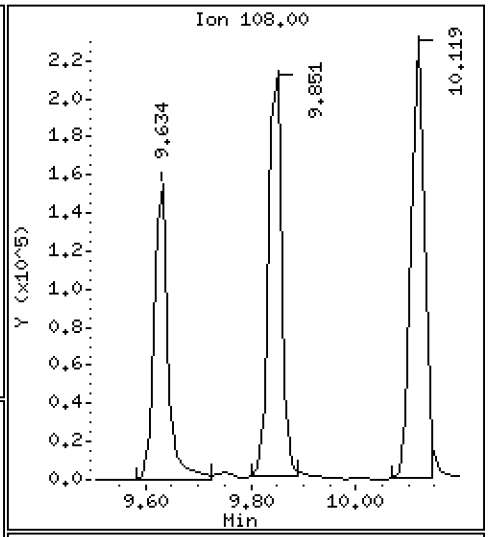
Concentration: 4.229 ug/mL

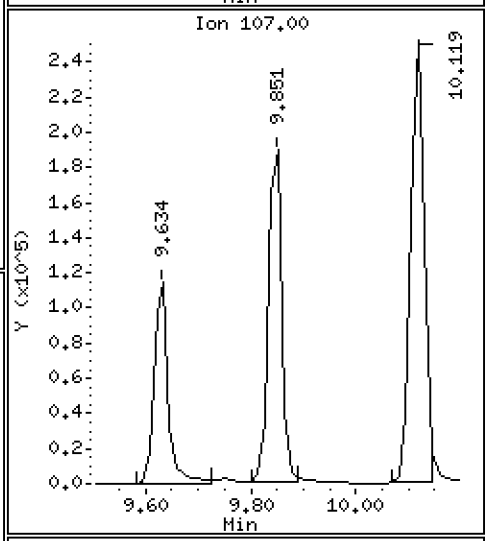


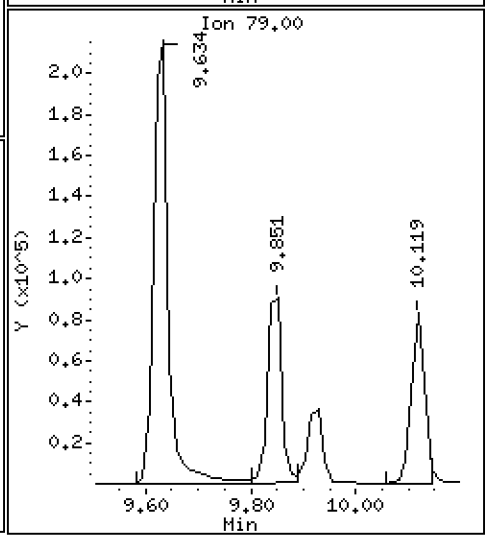












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

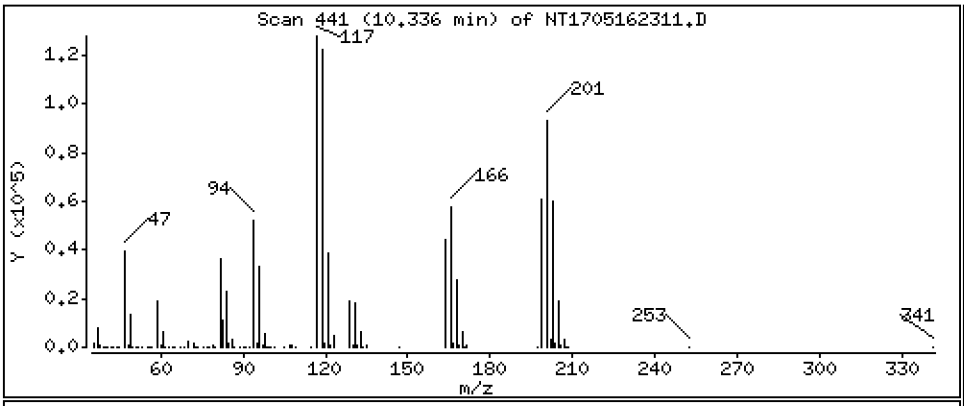
Operator: JGR

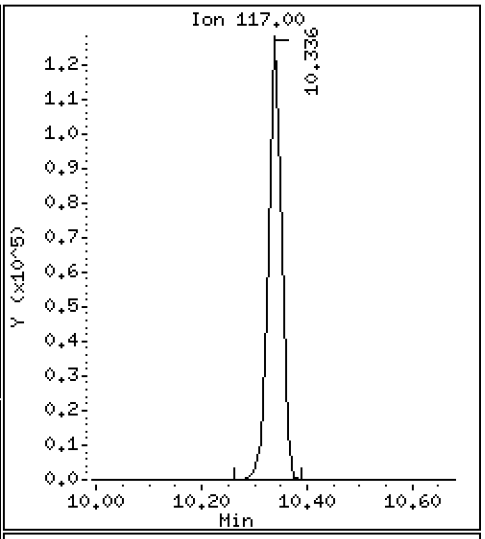
Column phase: ZB-5msi

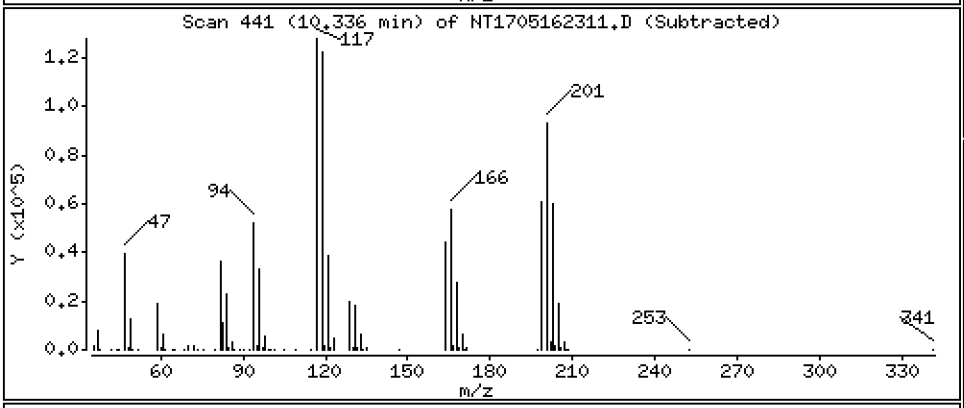
Column diameter: 0.25

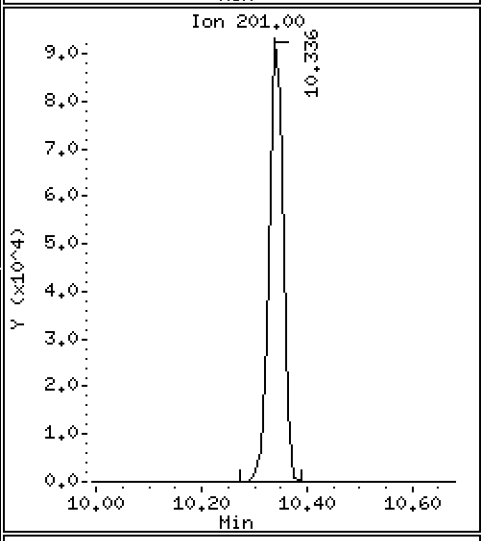
17 Hexachloroethane

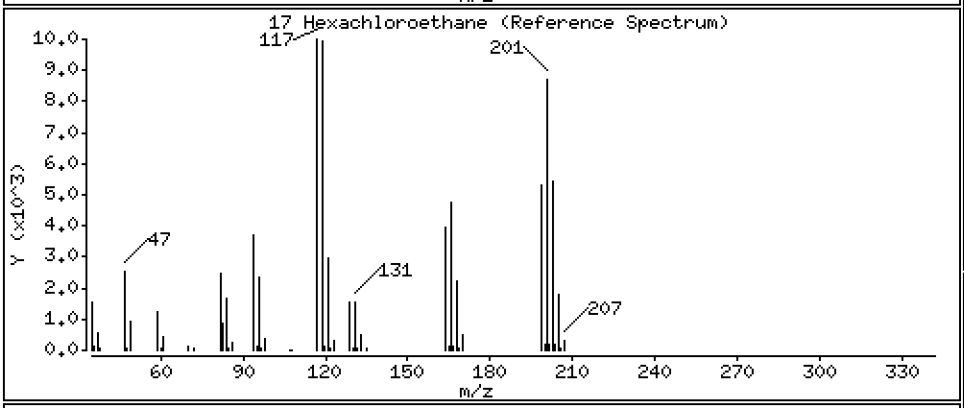
Concentration: 5.419 ug/mL

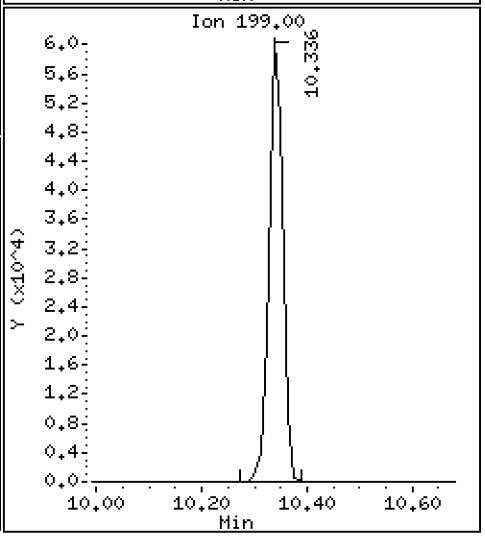


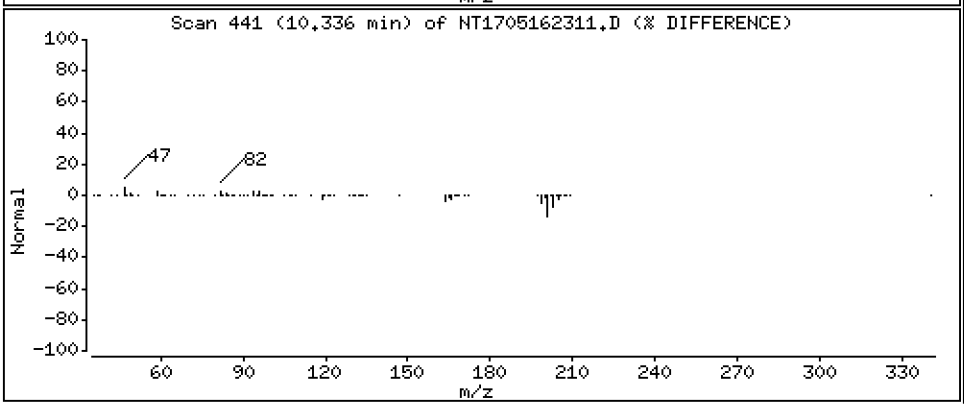












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

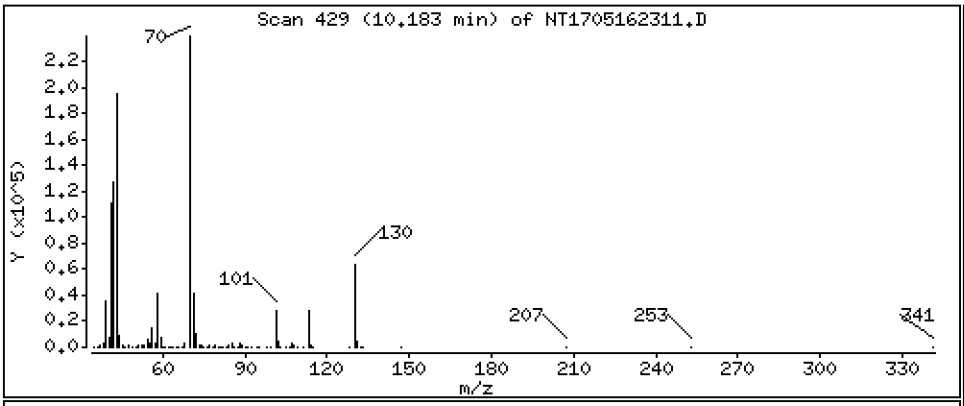
Operator: JGR

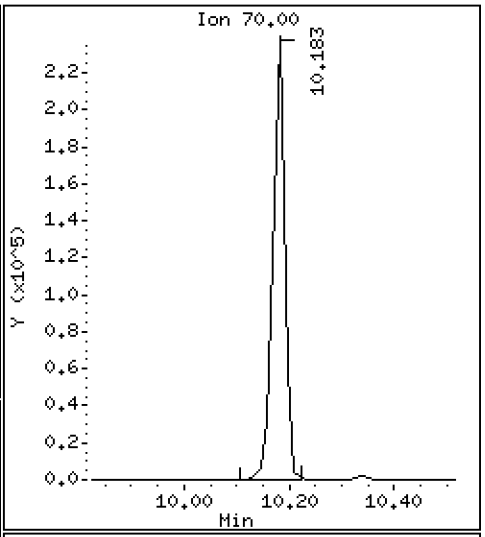
Column phase: ZB-5msi

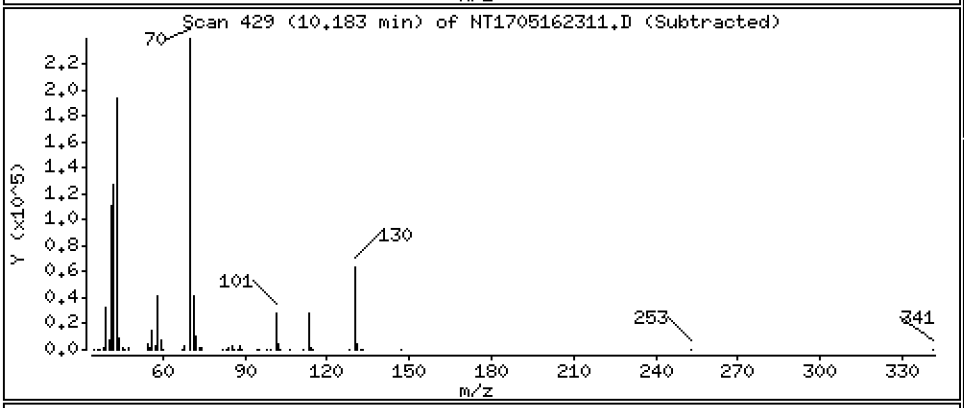
Column diameter: 0.25

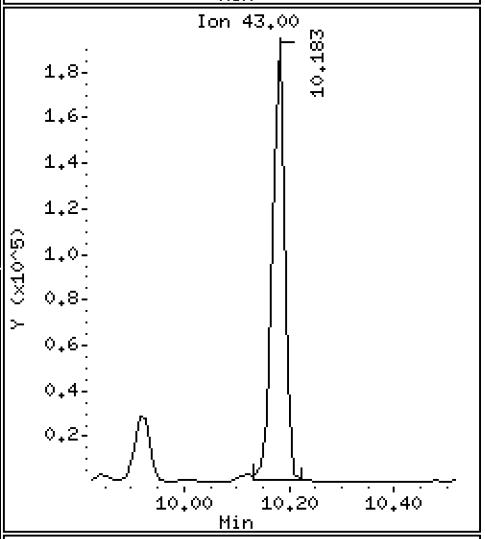
16 N-Nitroso-di-n-propylamine

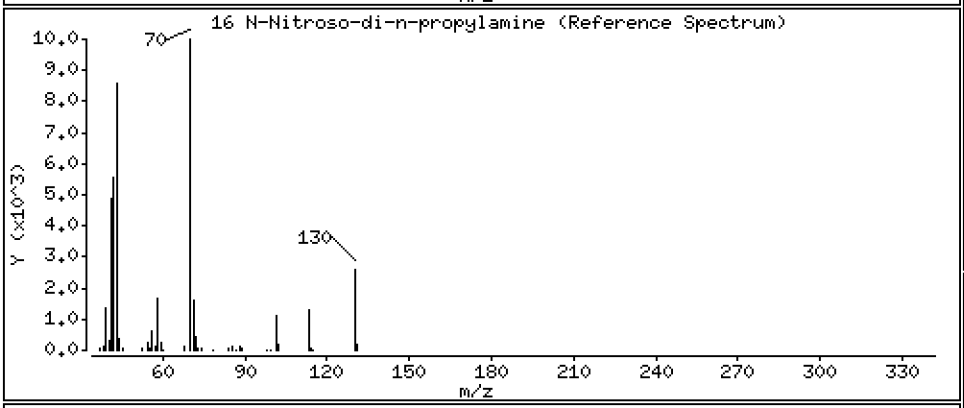
Concentration: 5.517 ug/mL

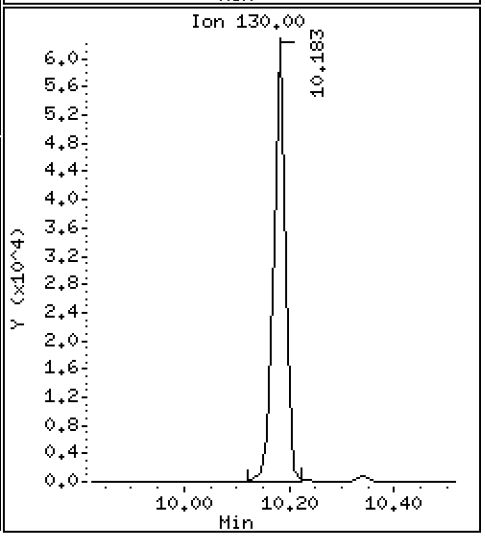


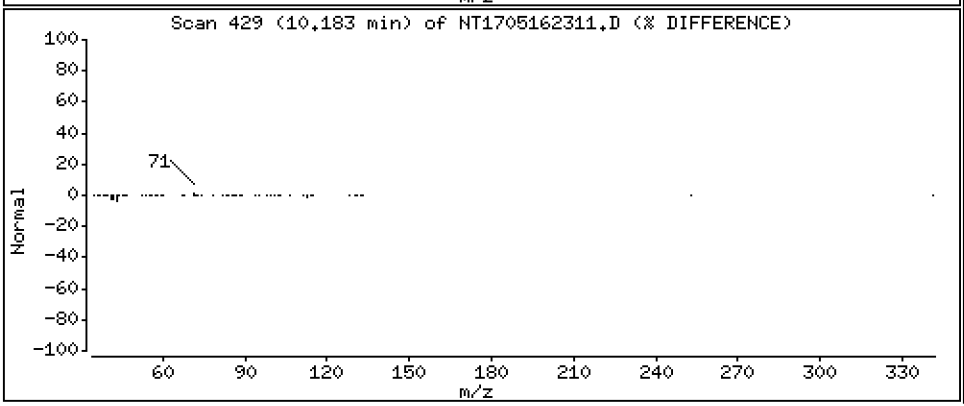












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

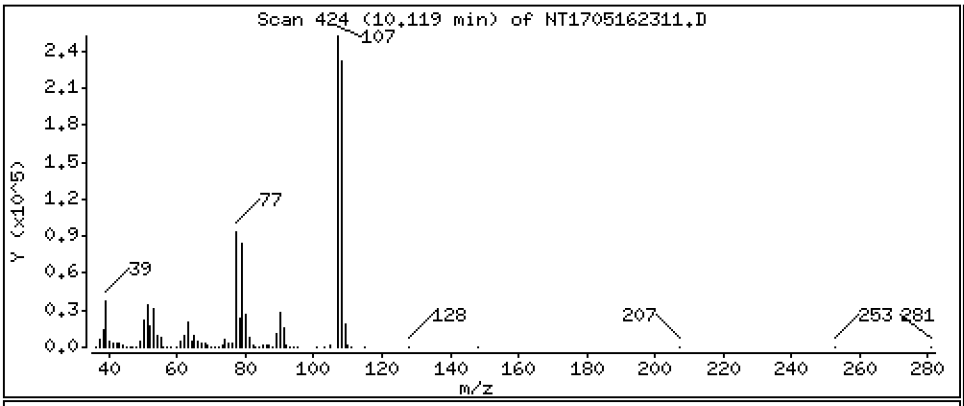
Operator: JGR

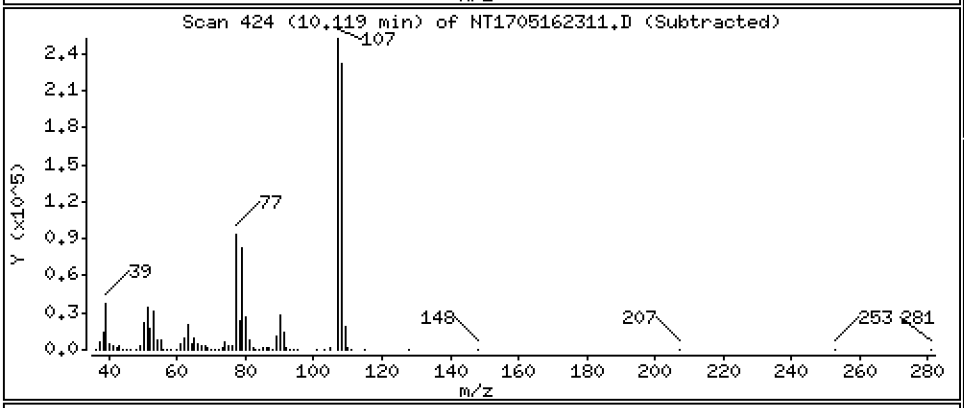
Column phase: ZB-5msi

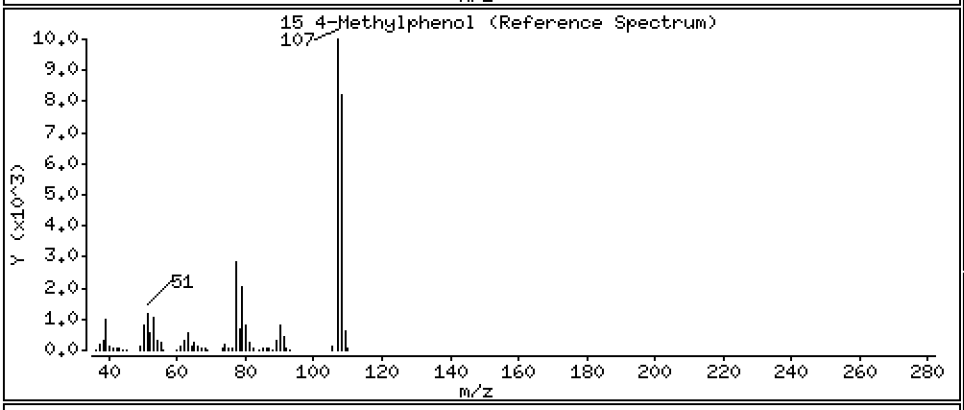
Column diameter: 0.25

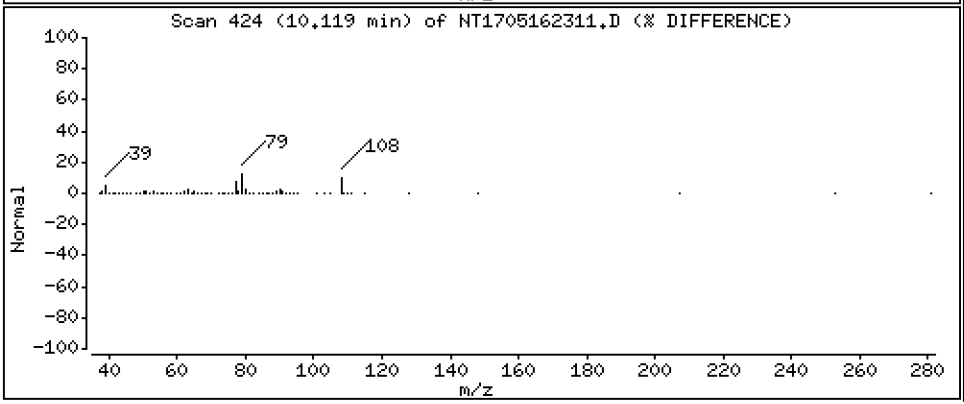
15 4-Methylphenol

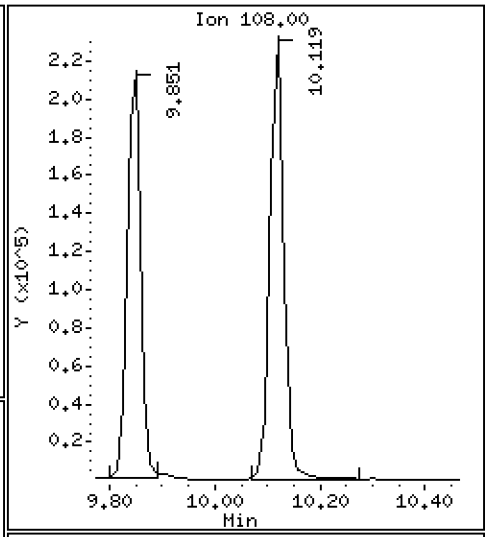
Concentration: 4.661 ug/mL

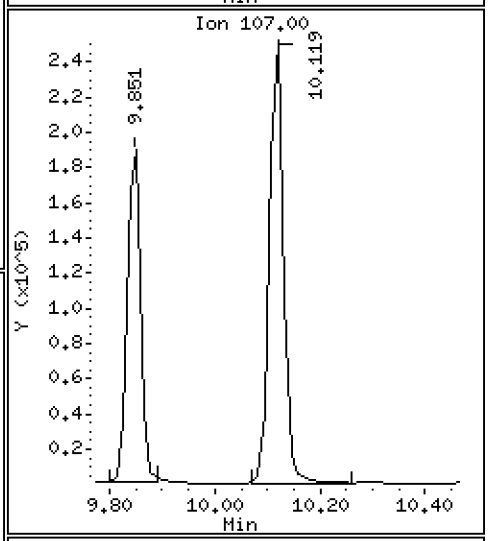


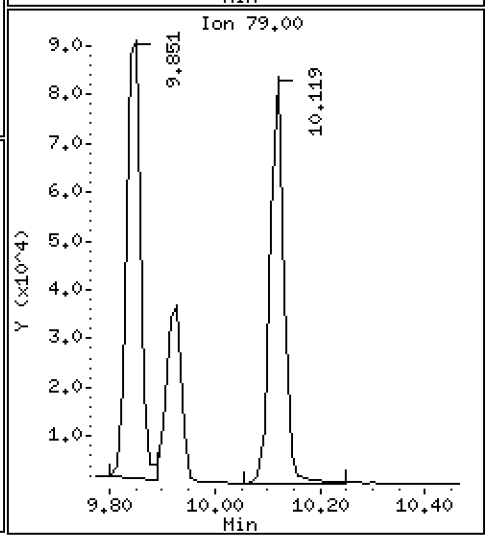












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

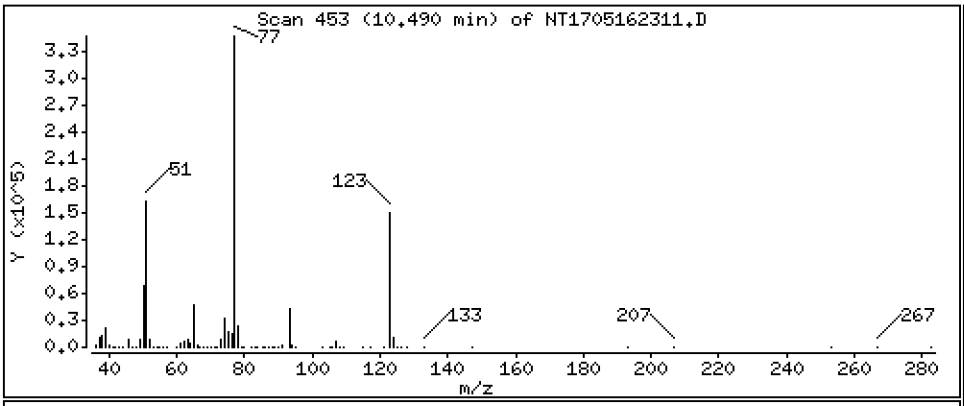
Operator: JGR

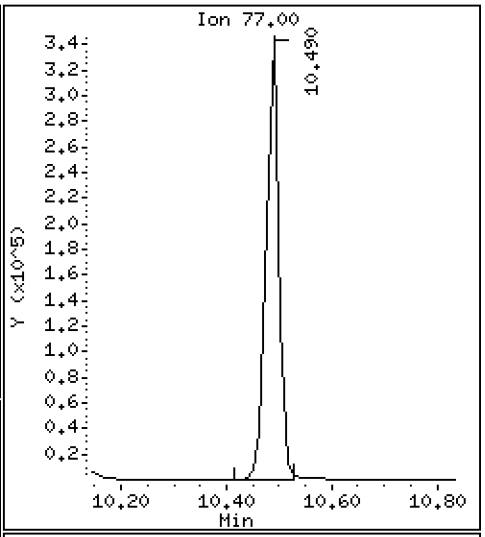
Column phase: ZB-5msi

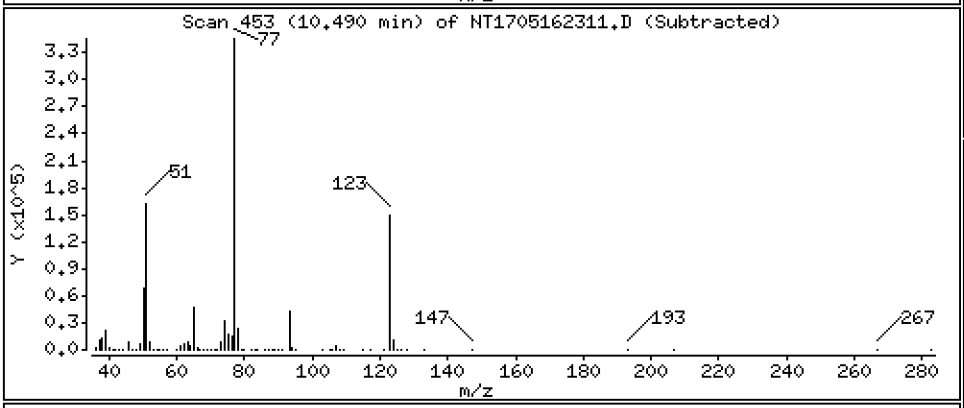
Column diameter: 0.25

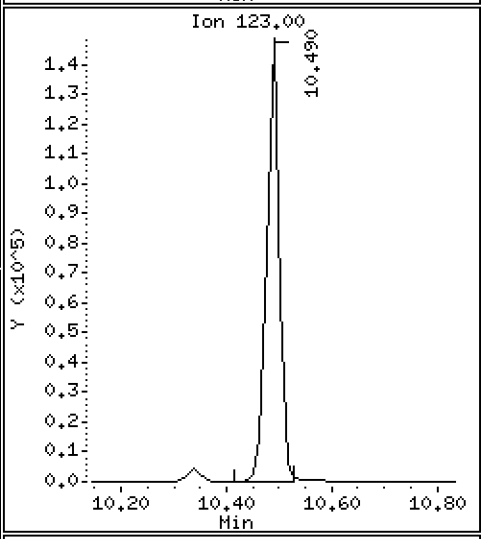
19 Nitrobenzene

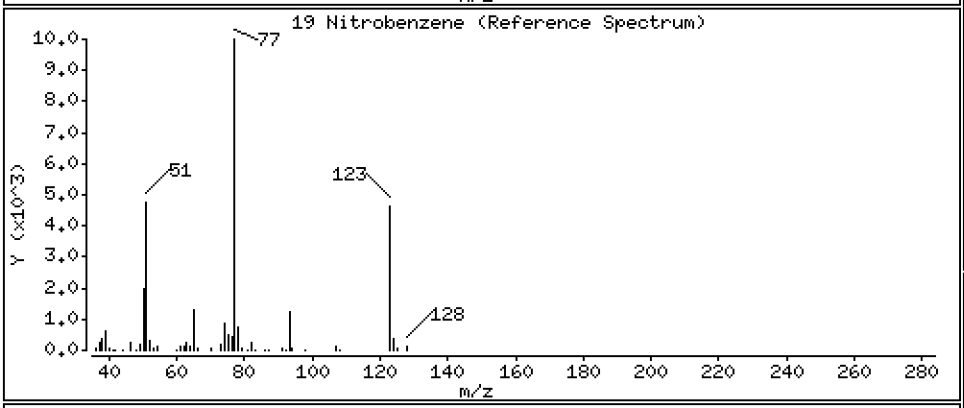
Concentration: 5.329 ug/mL

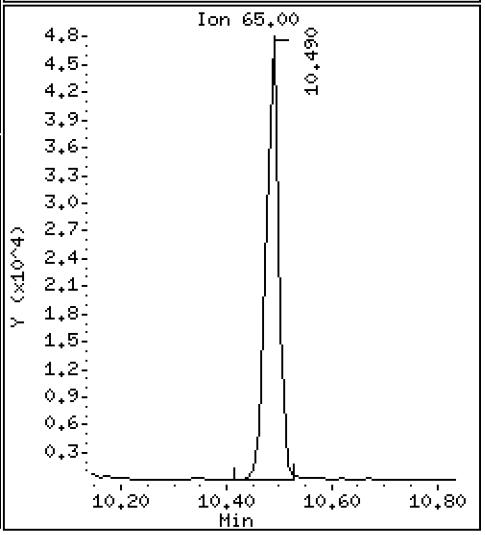


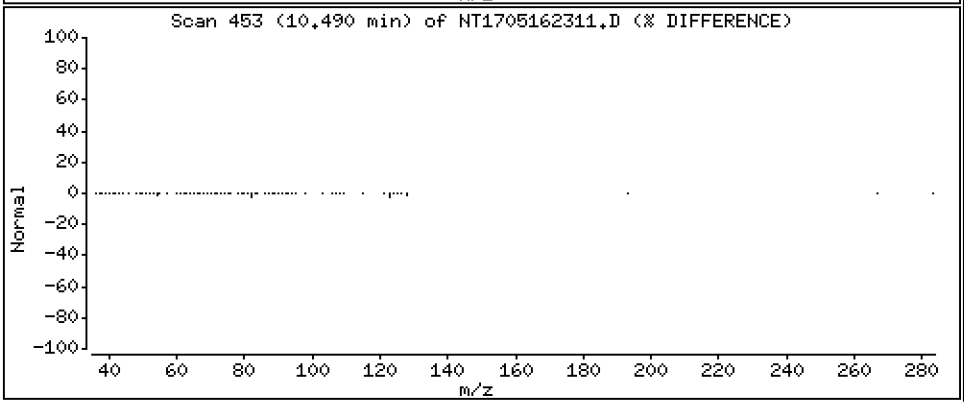












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

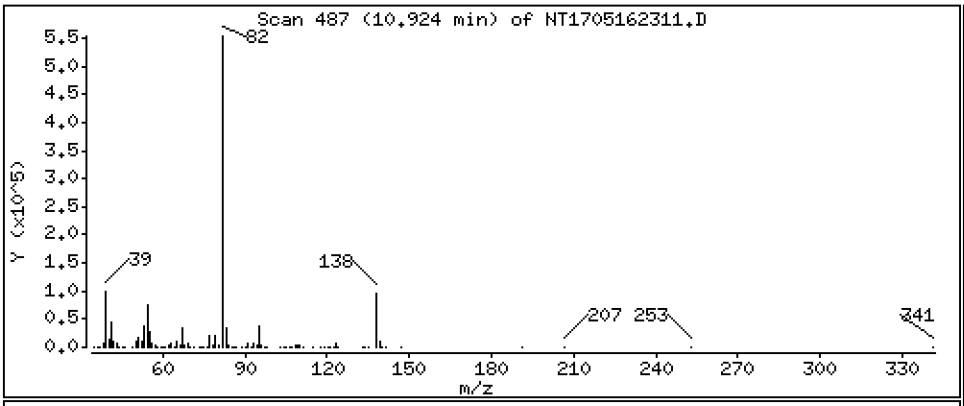
Operator: JGR

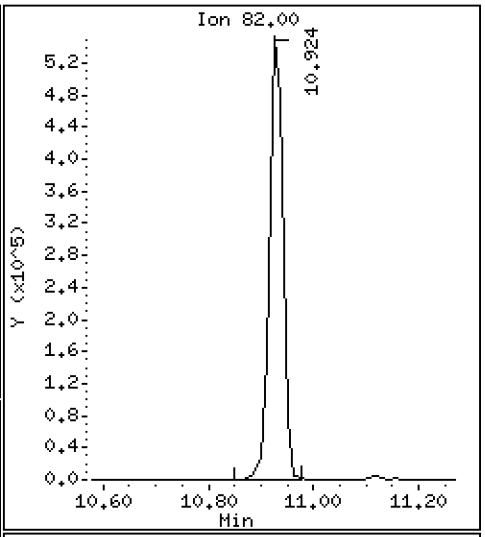
Column phase: ZB-5msi

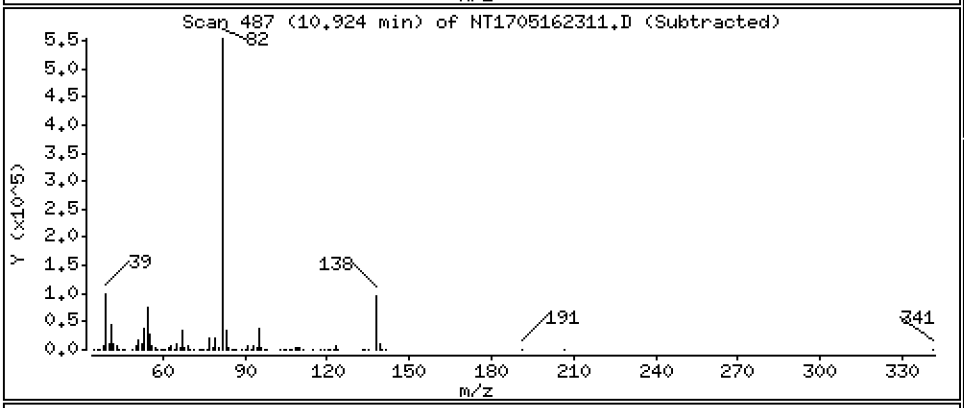
Column diameter: 0.25

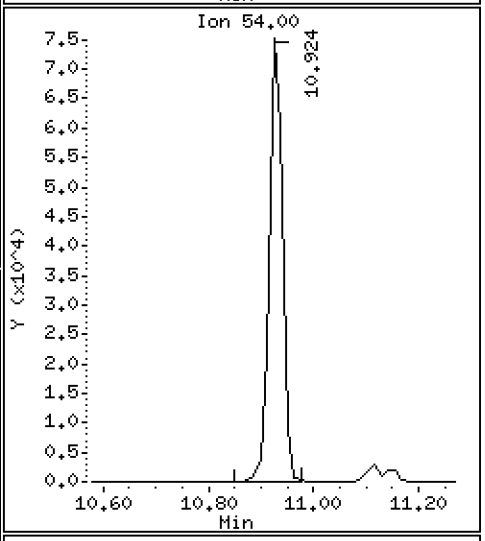
20 Isophorone

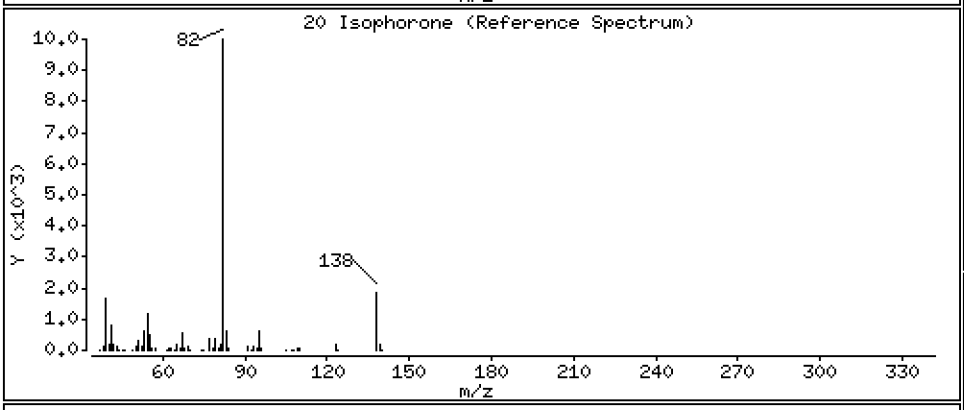
Concentration: 6.943 ug/mL

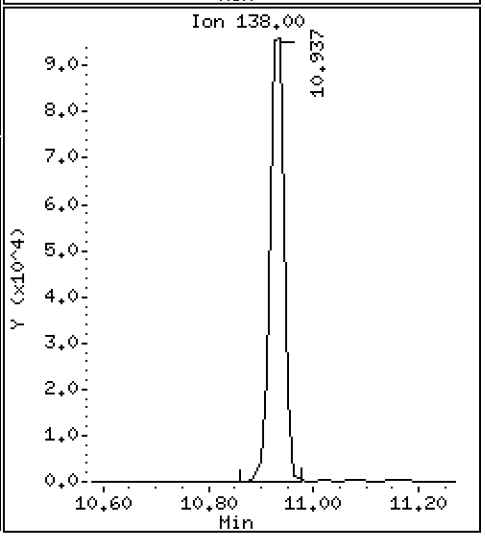


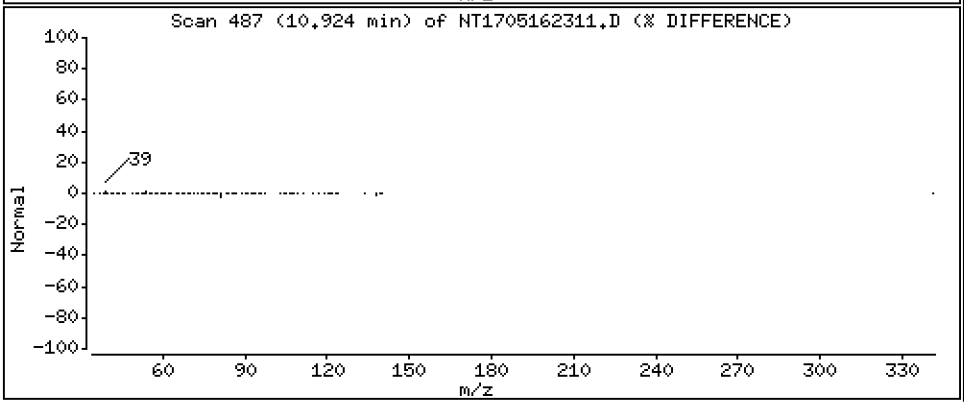












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

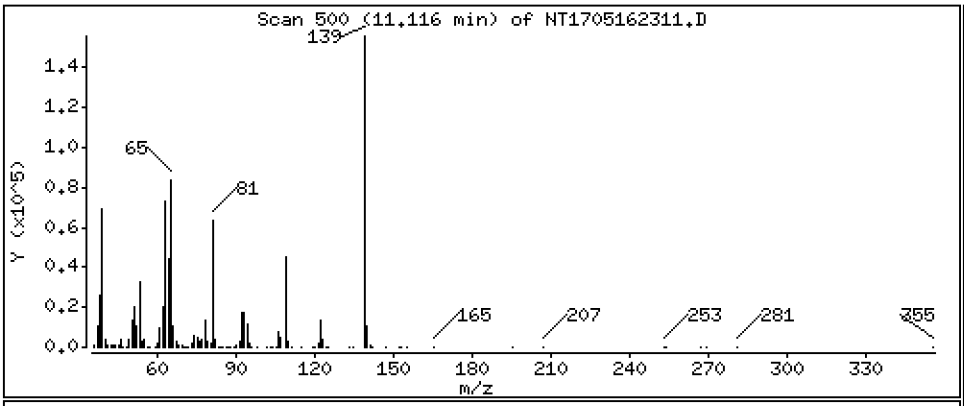
Operator: JGR

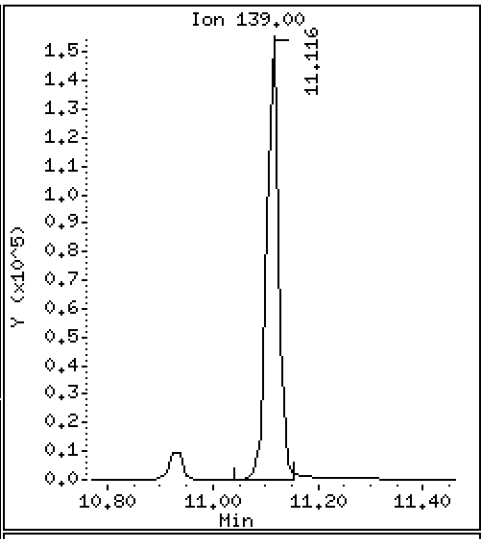
Column phase: ZB-5msi

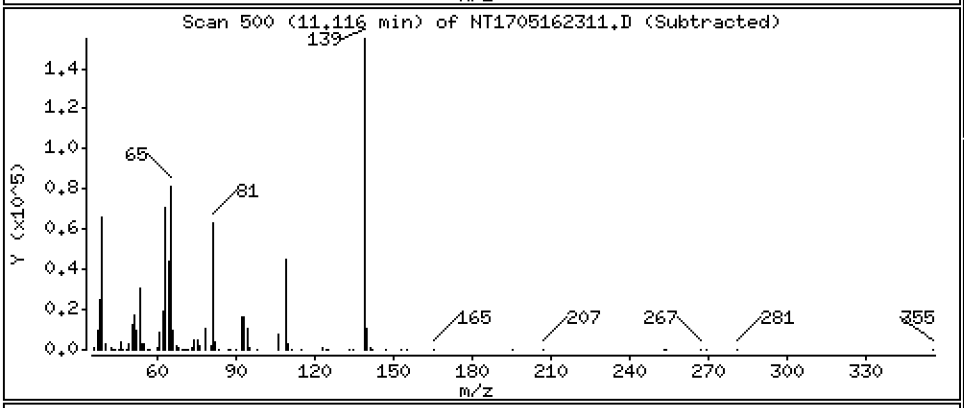
Column diameter: 0.25

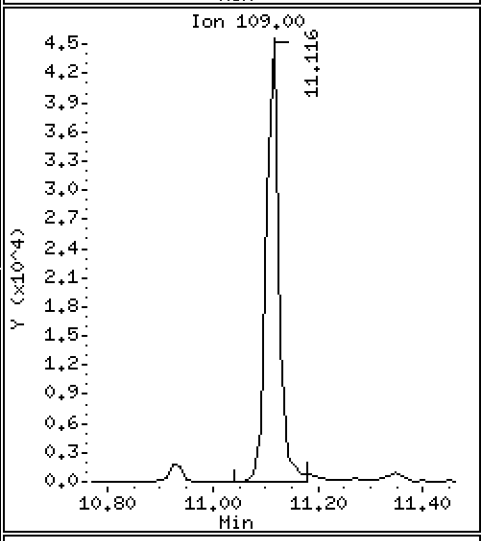
21 2-Nitrophenol

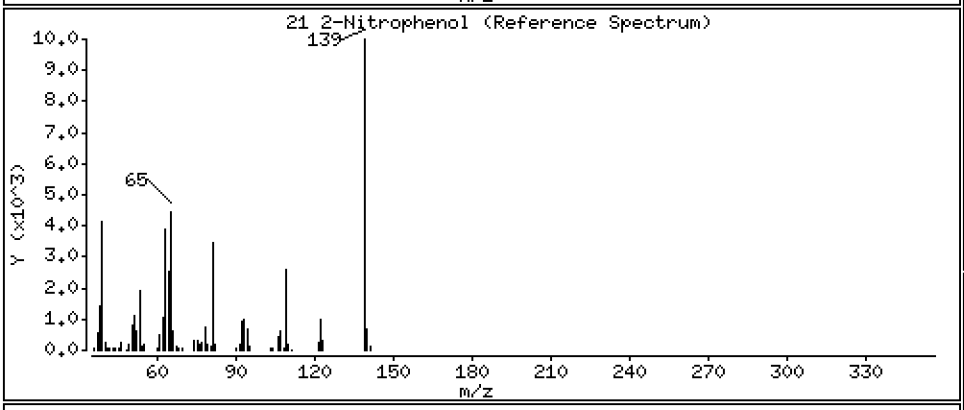
Concentration: 4.899 ug/mL

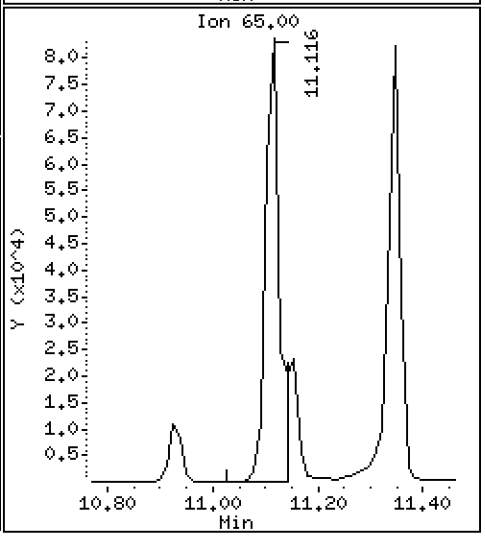


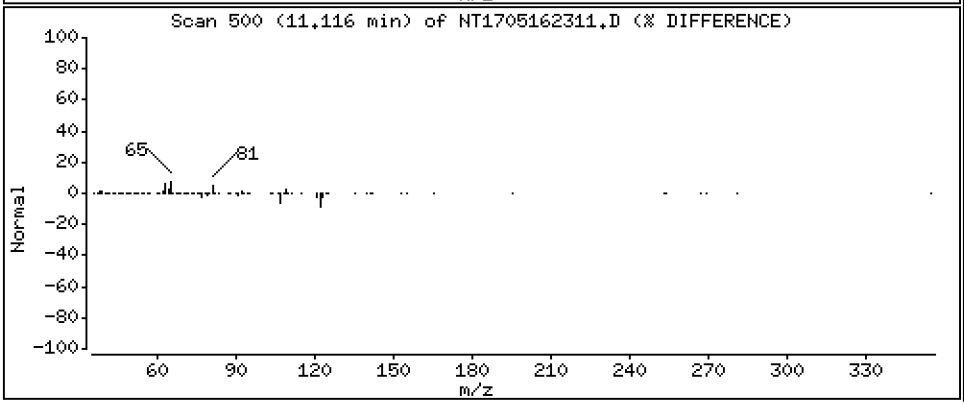












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

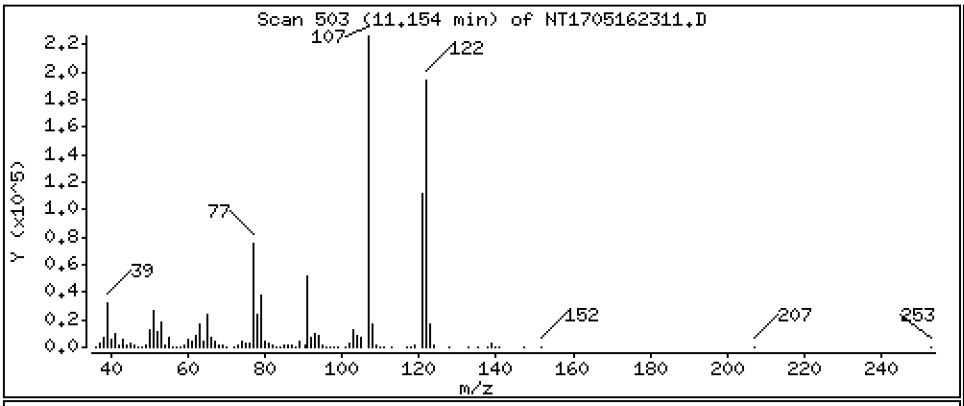
Operator: JGR

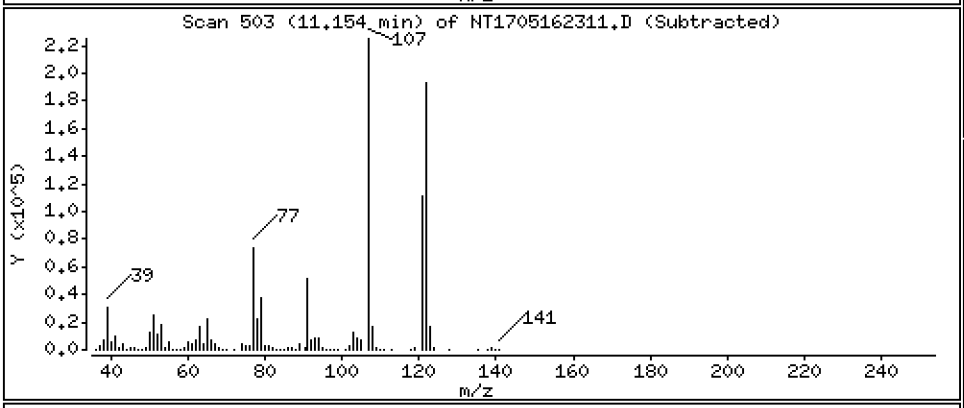
Column phase: ZB-5msi

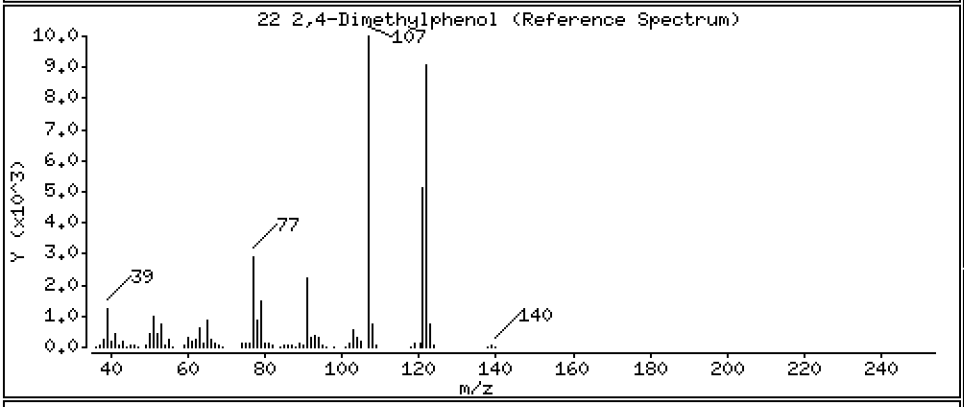
Column diameter: 0.25

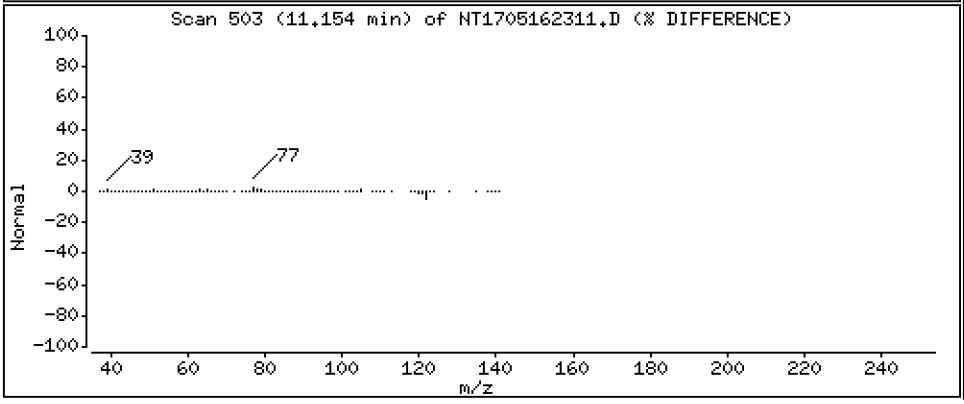
22 2,4-Dimethylphenol

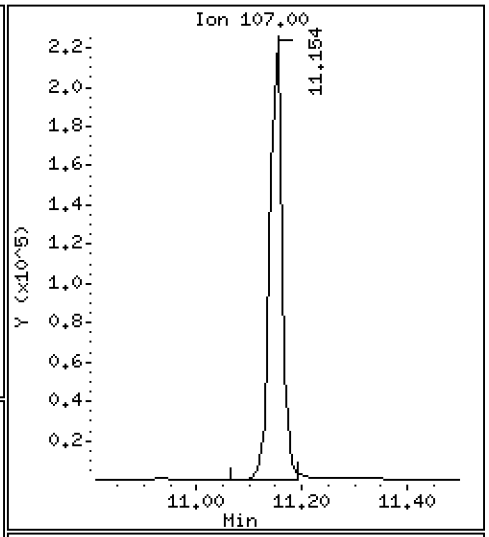
Concentration: 3.788 ug/mL

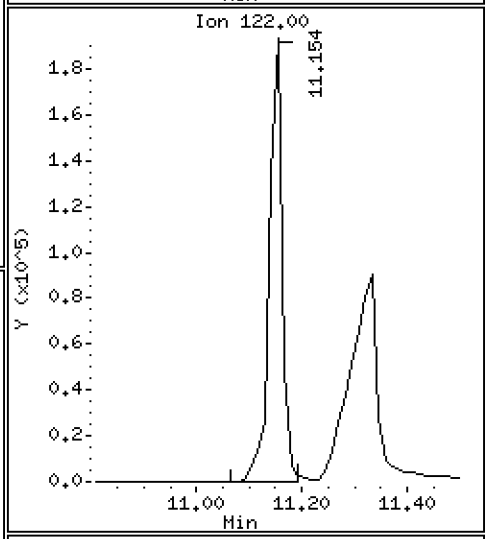


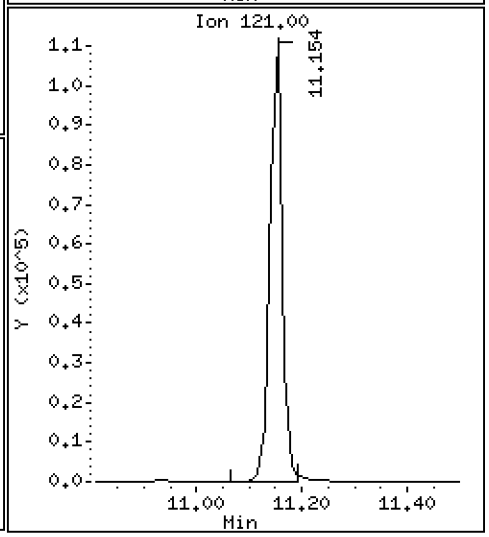












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

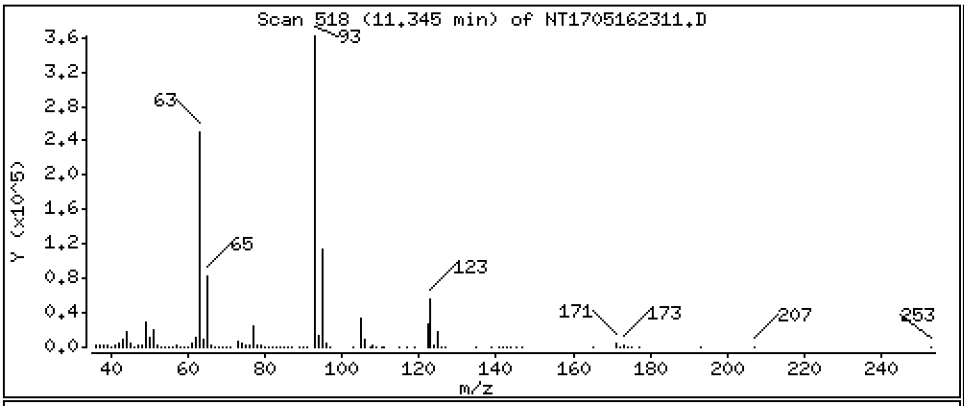
Operator: JGR

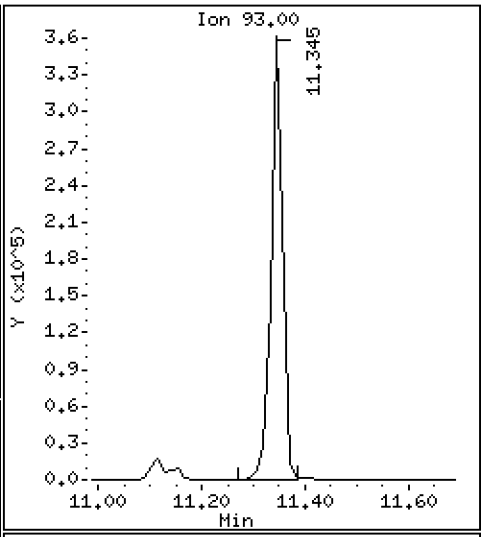
Column phase: ZB-5msi

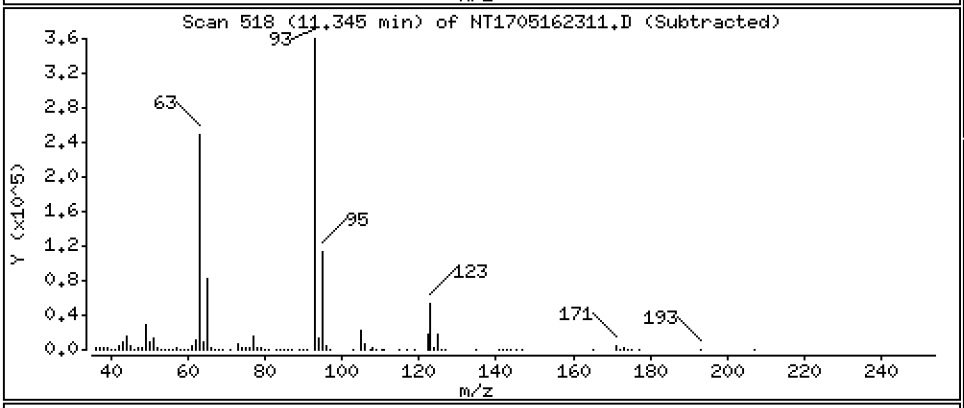
Column diameter: 0.25

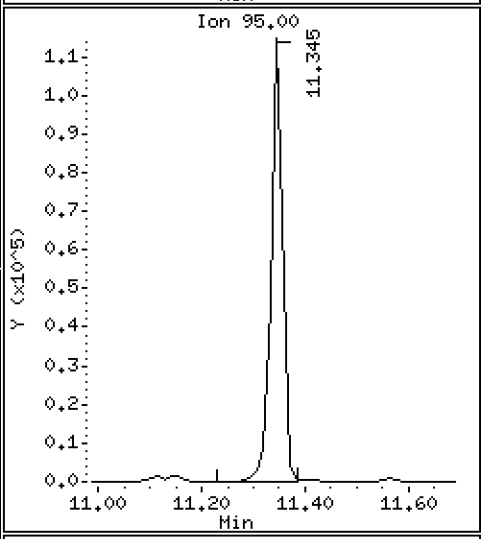
23 Bis(2-Chloroethoxy)methane

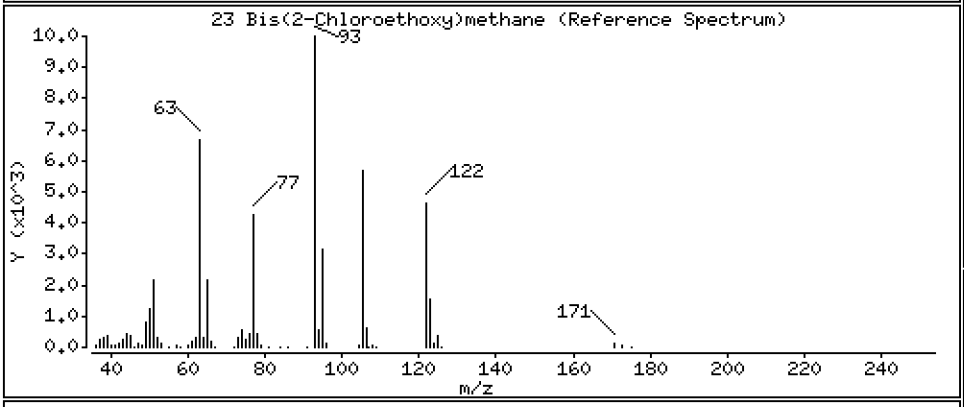
Concentration: 6.232 ug/mL

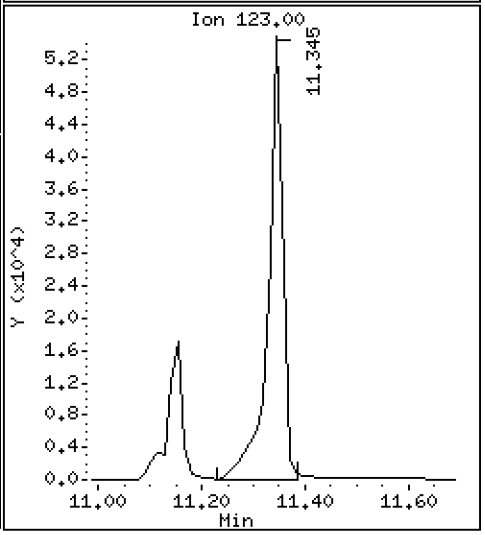


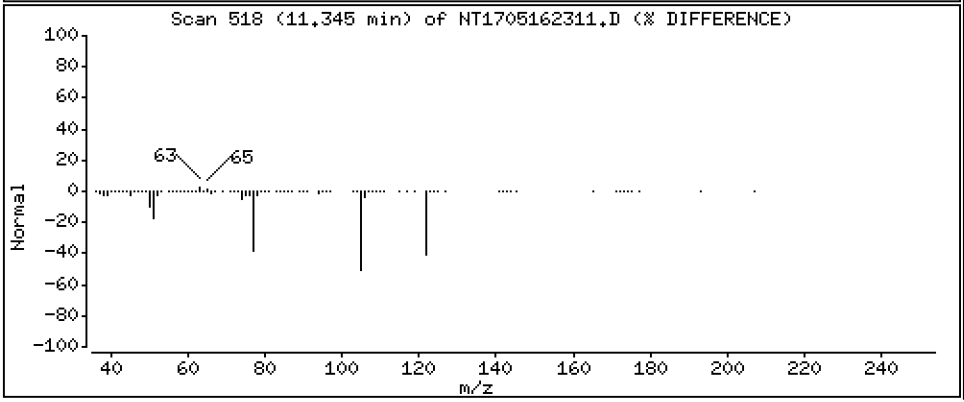












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

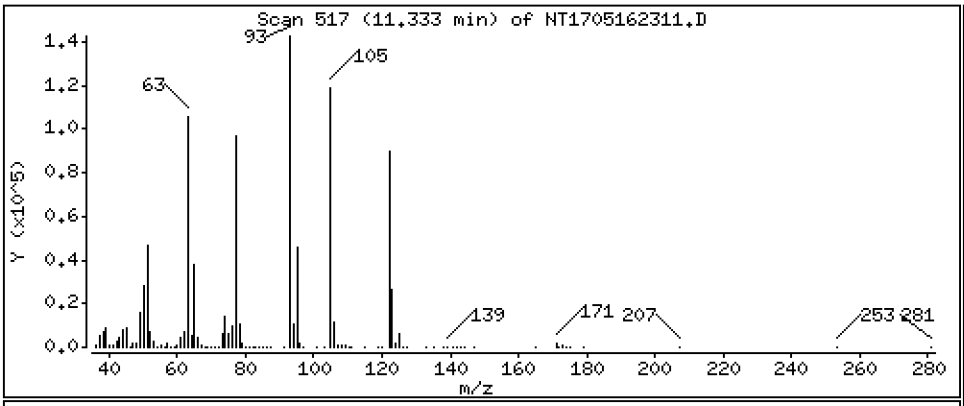
Operator: JGR

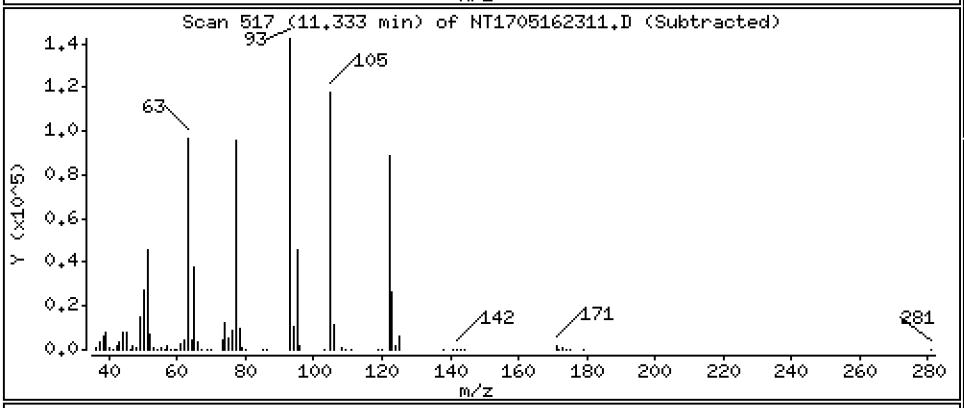
Column phase: ZB-5msi

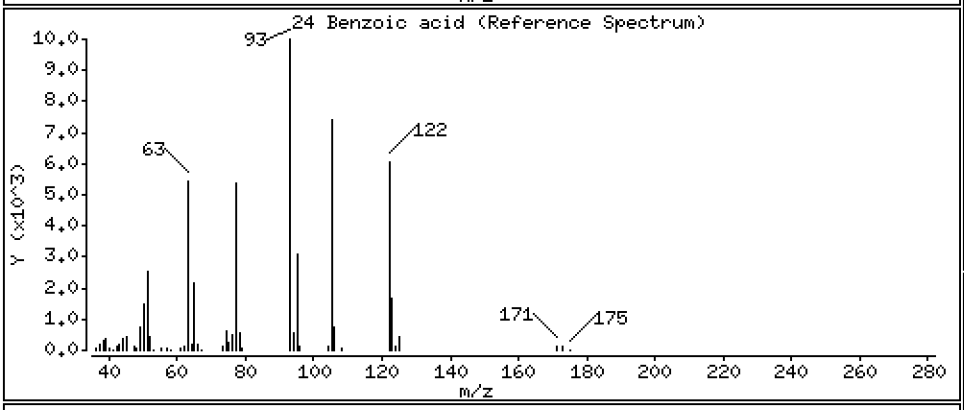
Column diameter: 0.25

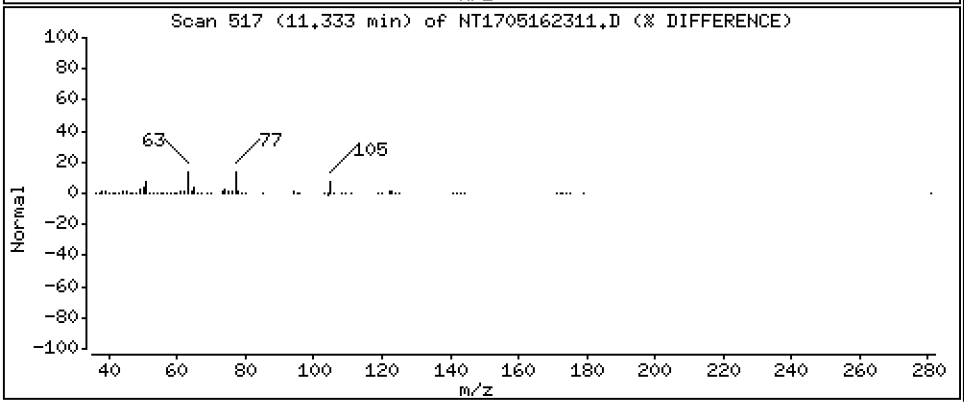
24 Benzoic acid

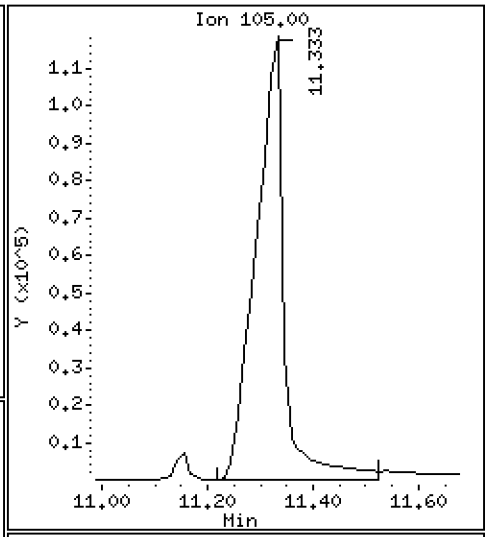
Concentration: 6.761 ug/mL

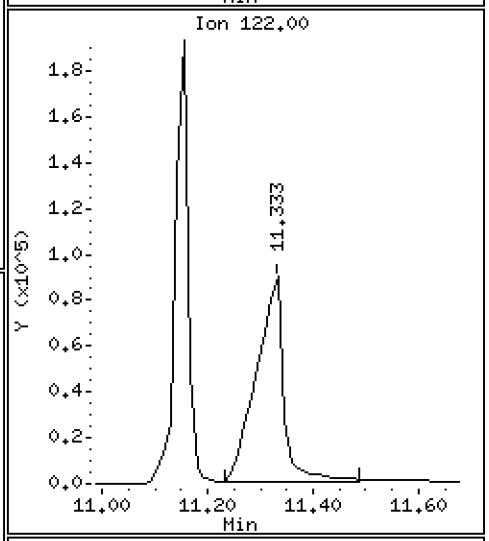


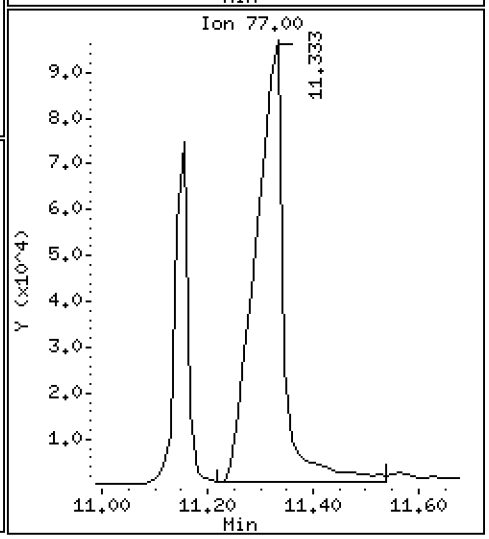












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

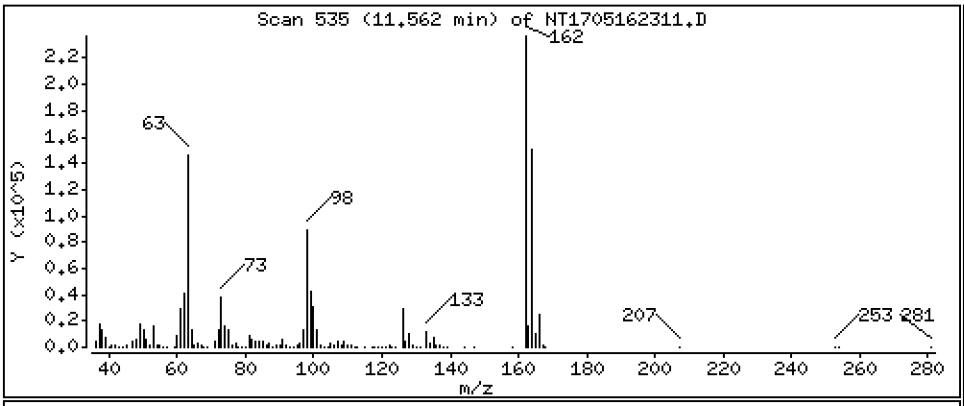
Operator: JGR

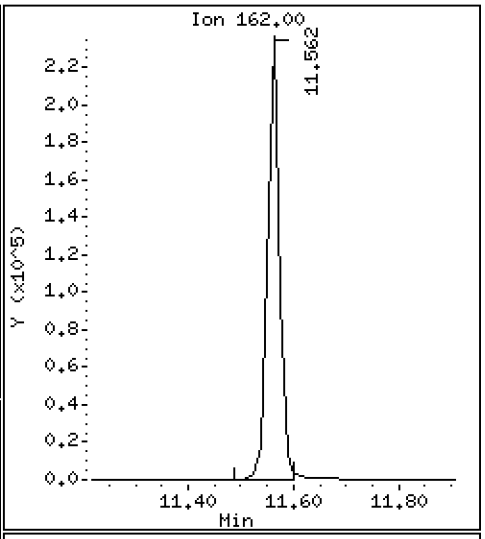
Column phase: ZB-5msi

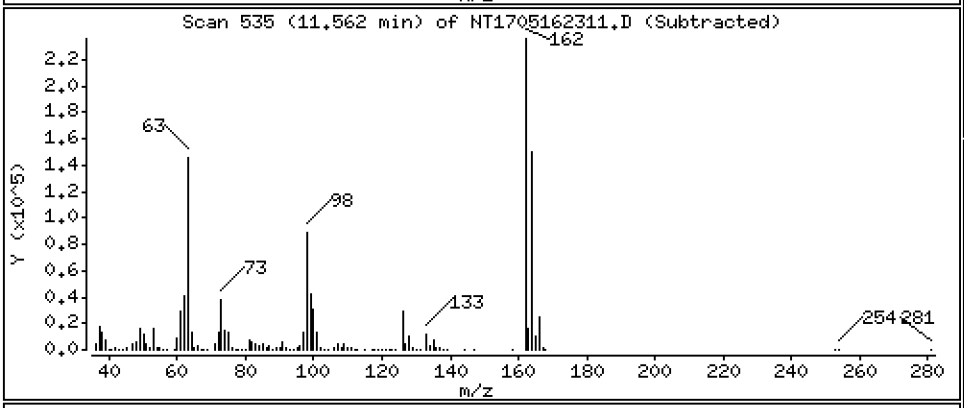
Column diameter: 0.25

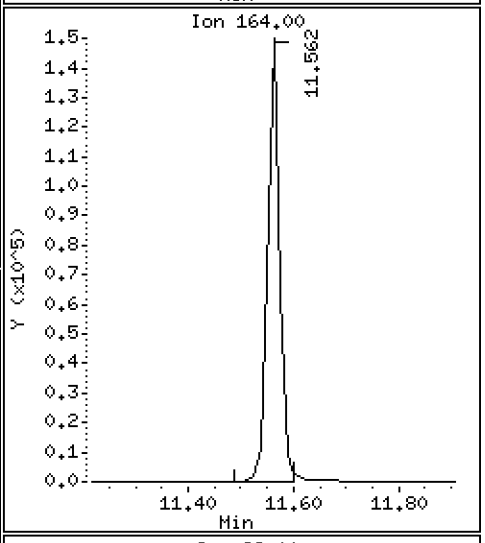
25 2,4-Dichlorophenol

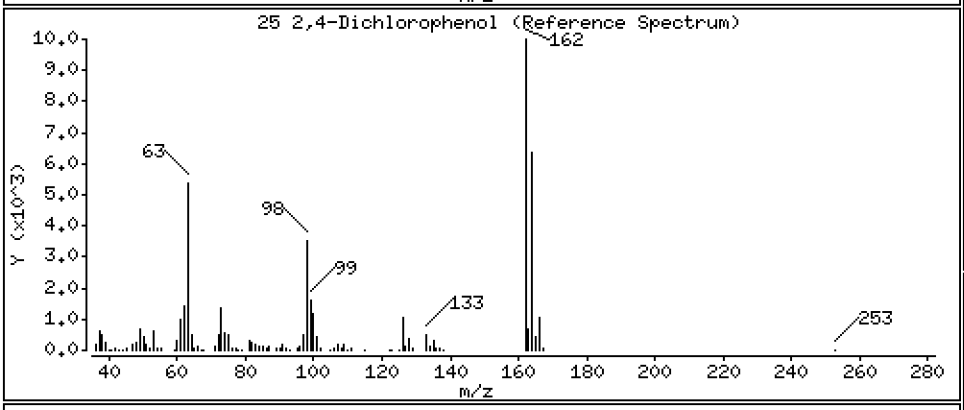
Concentration: 4.707 ug/mL

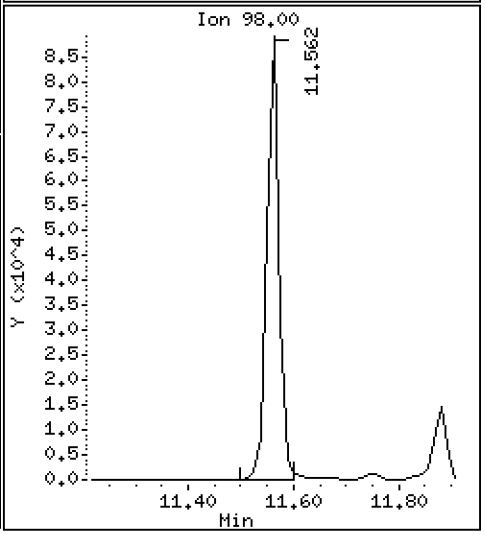


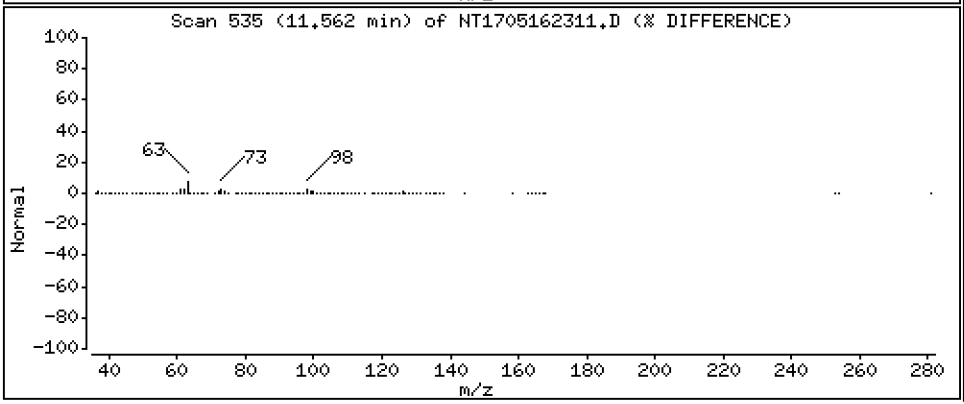












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

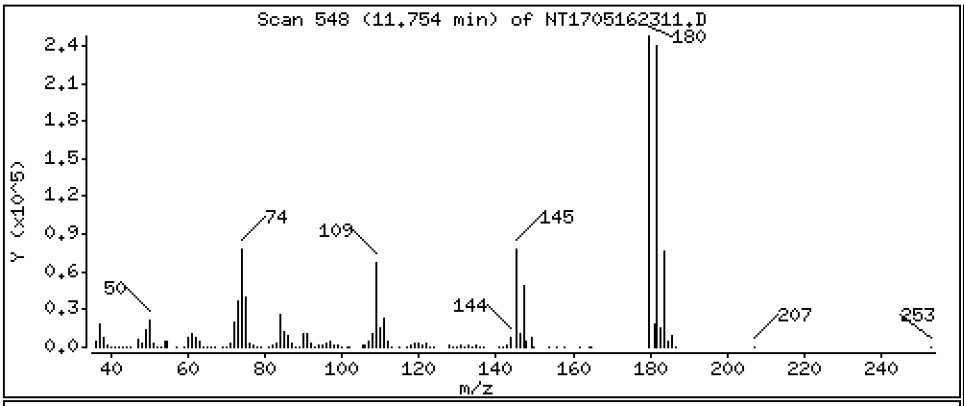
Operator: JGR

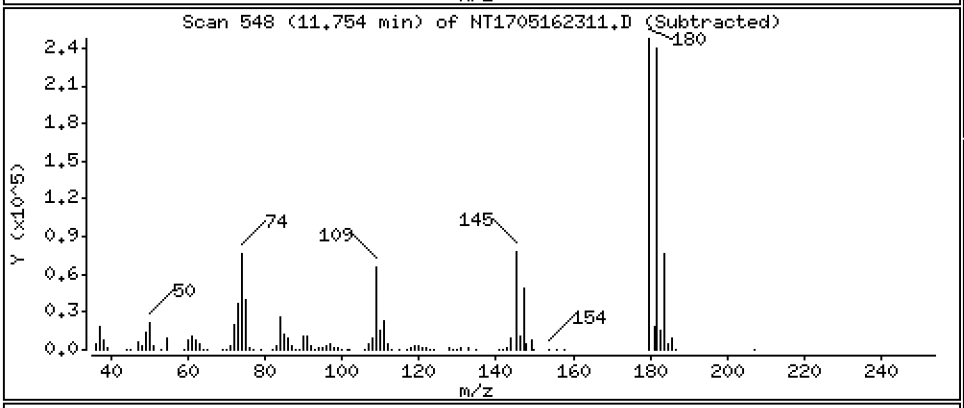
Column phase: ZB-5msi

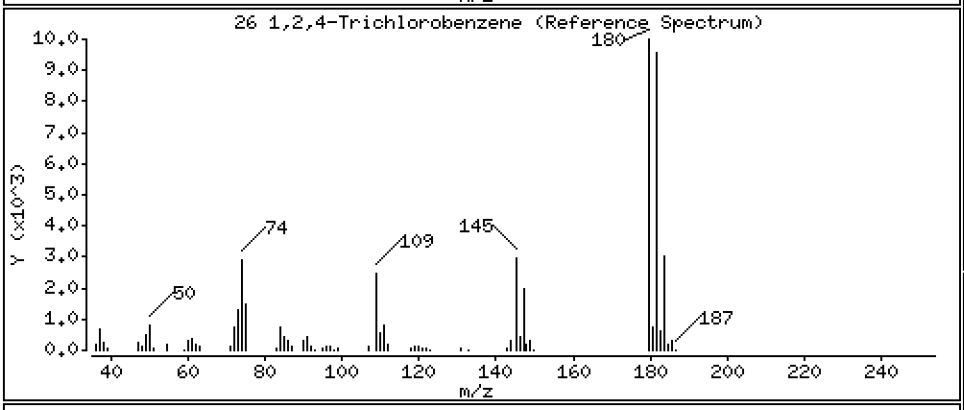
Column diameter: 0.25

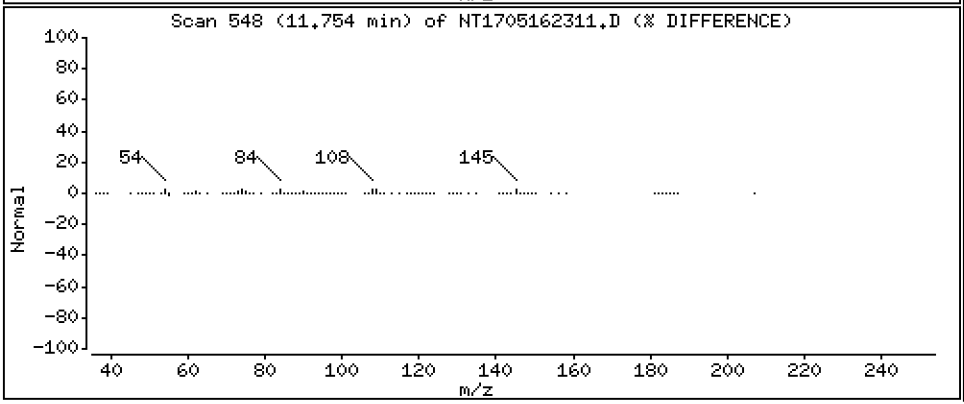
26 1,2,4-Trichlorobenzene

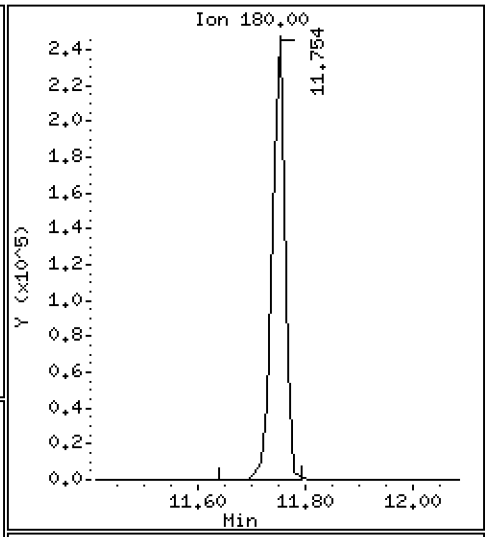
Concentration: 5.879 ug/mL

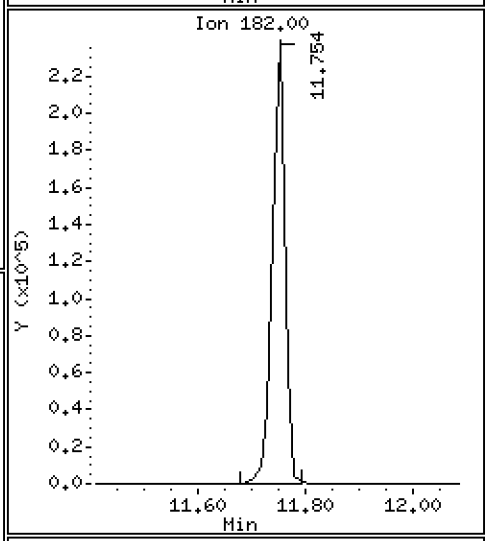


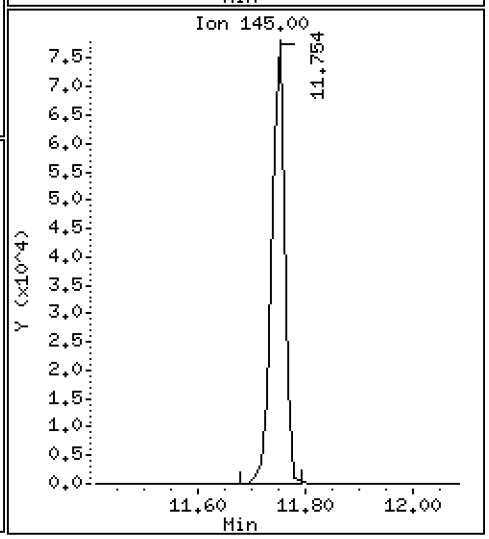












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

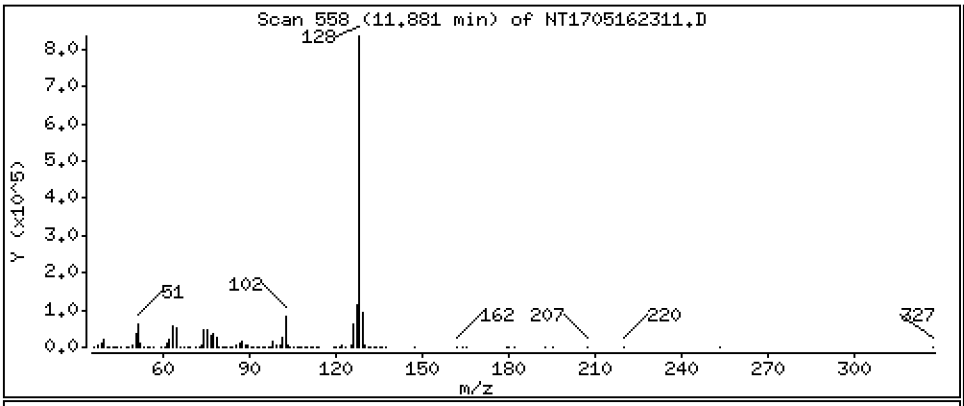
Operator: JGR

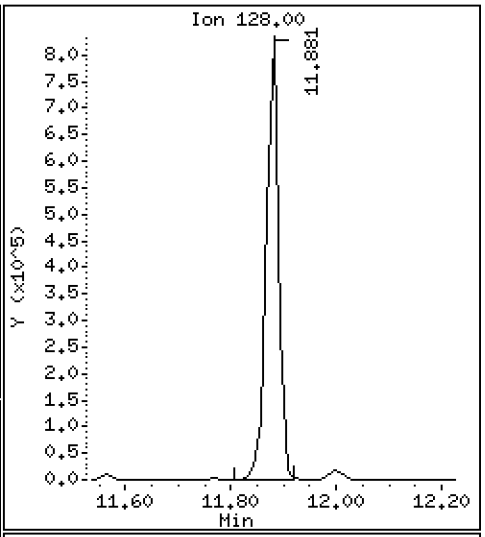
Column phase: ZB-5msi

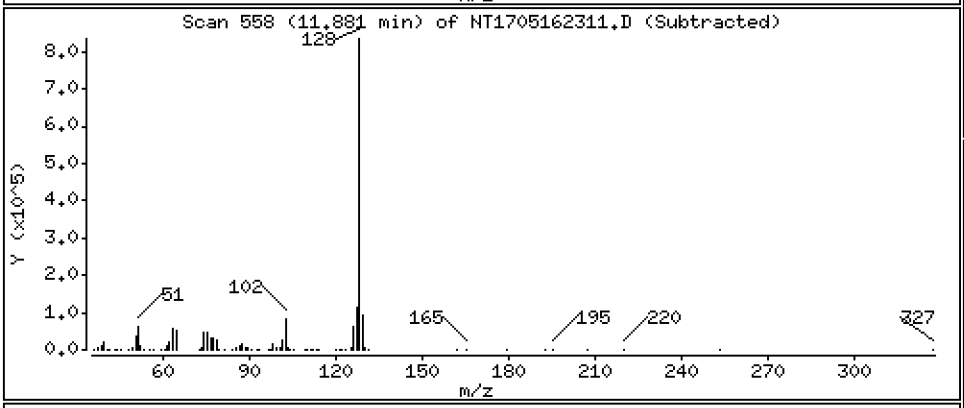
Column diameter: 0.25

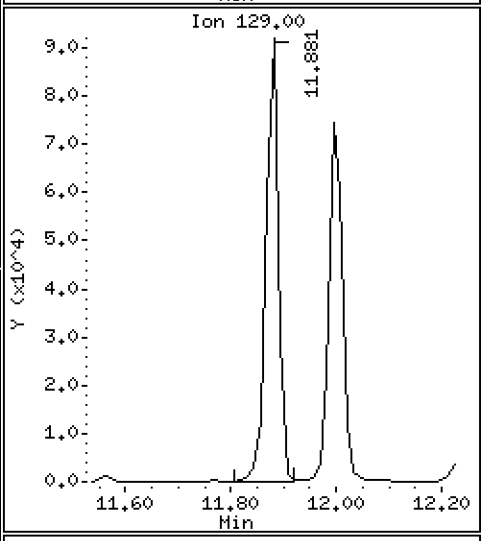
28 Naphthalene

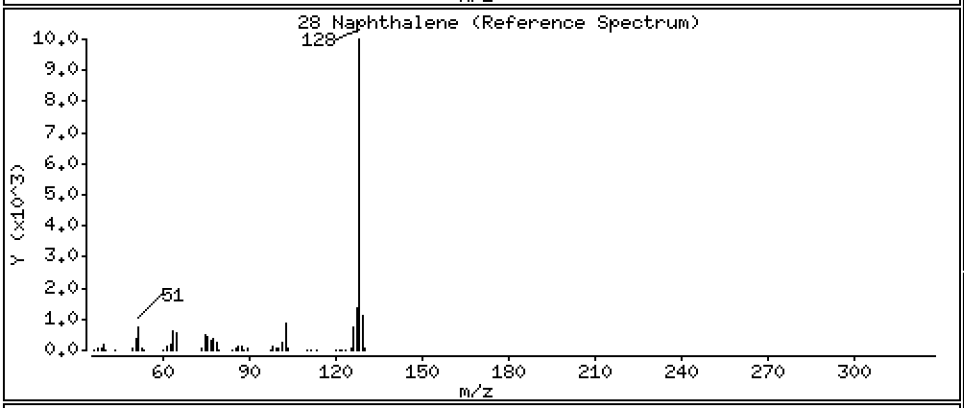
Concentration: 5.129 ug/mL

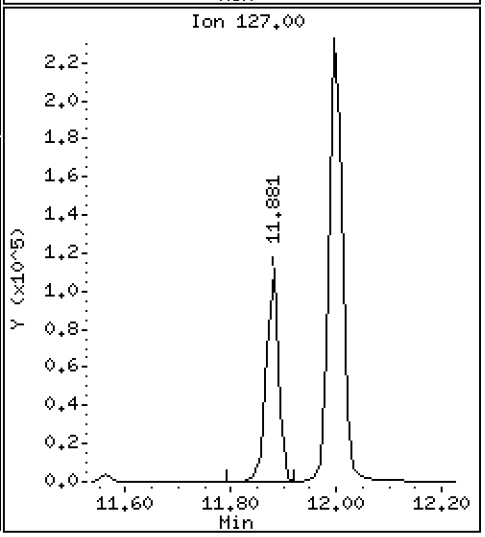


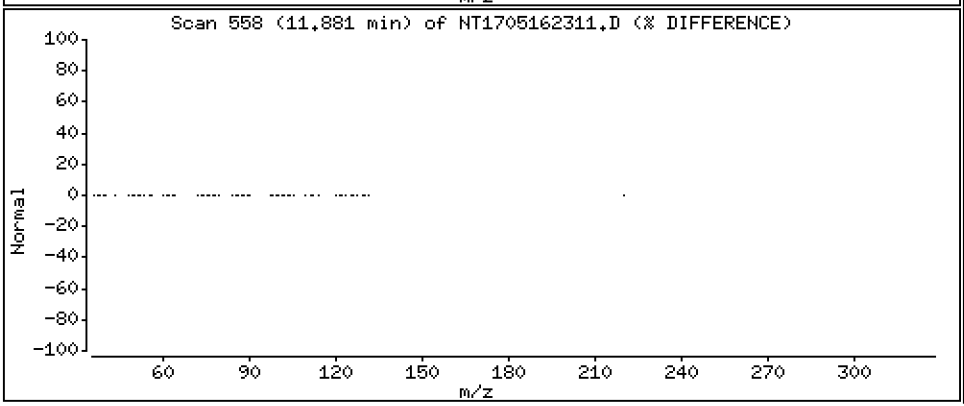












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

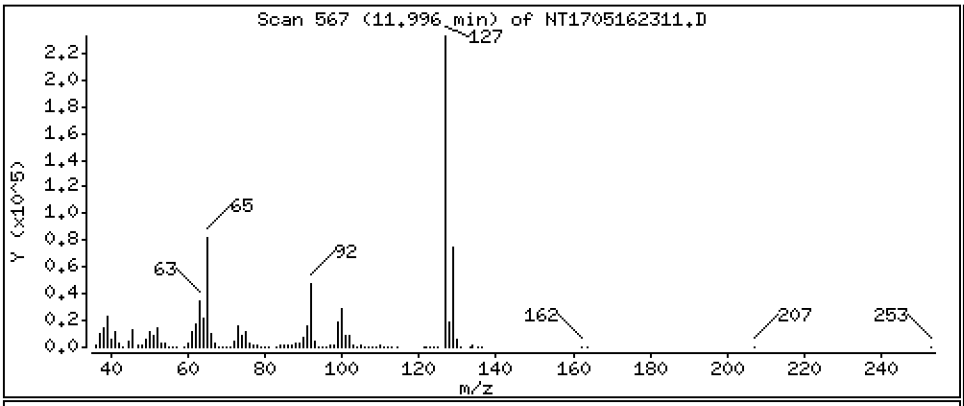
Operator: JGR

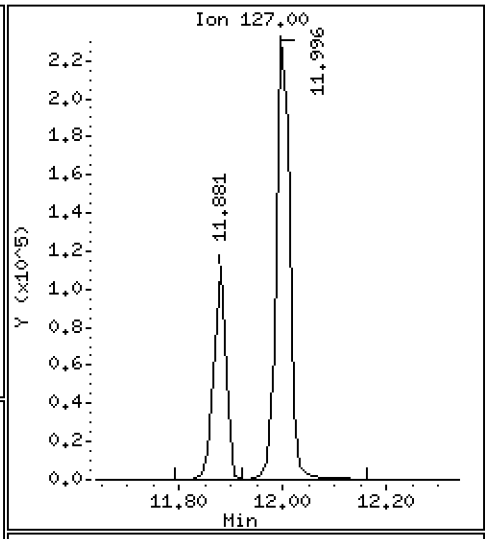
Column phase: ZB-5msi

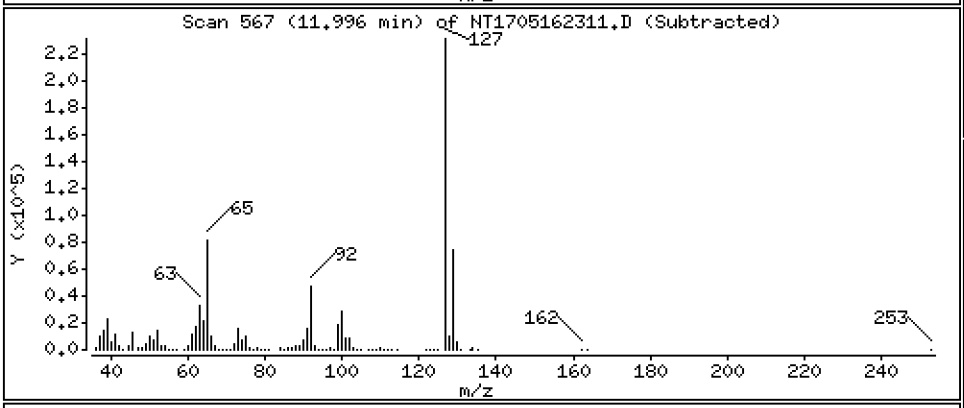
Column diameter: 0.25

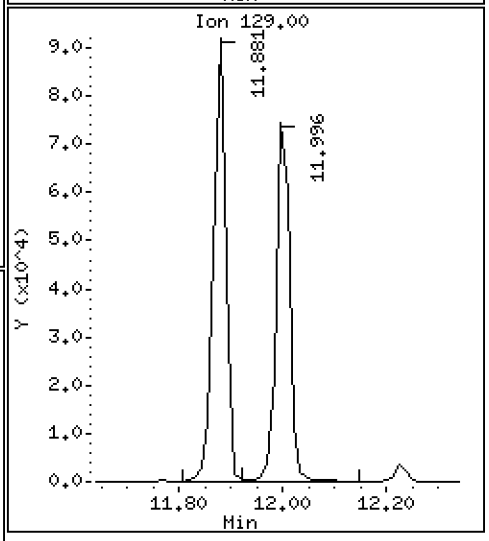
29 4-Chloroaniline

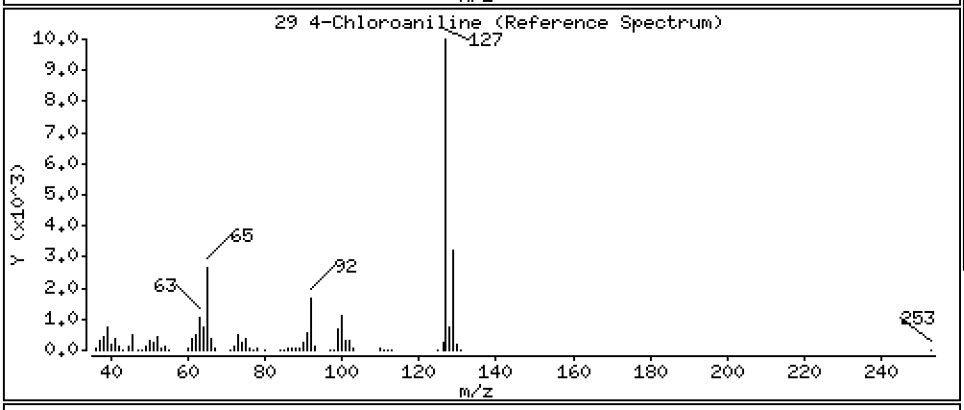
Concentration: 4.488 ug/mL

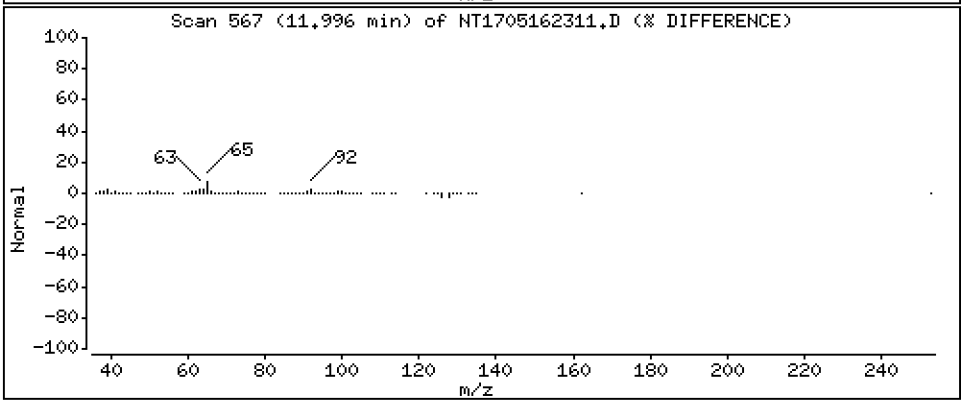












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

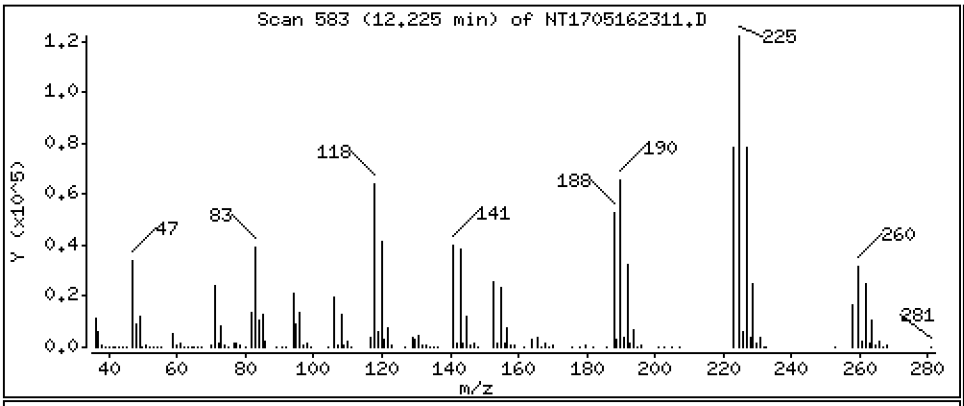
Operator: JGR

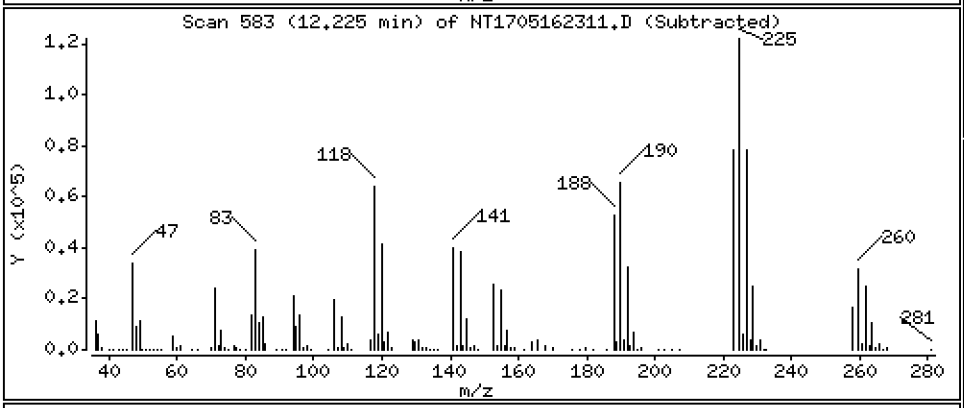
Column phase: ZB-5msi

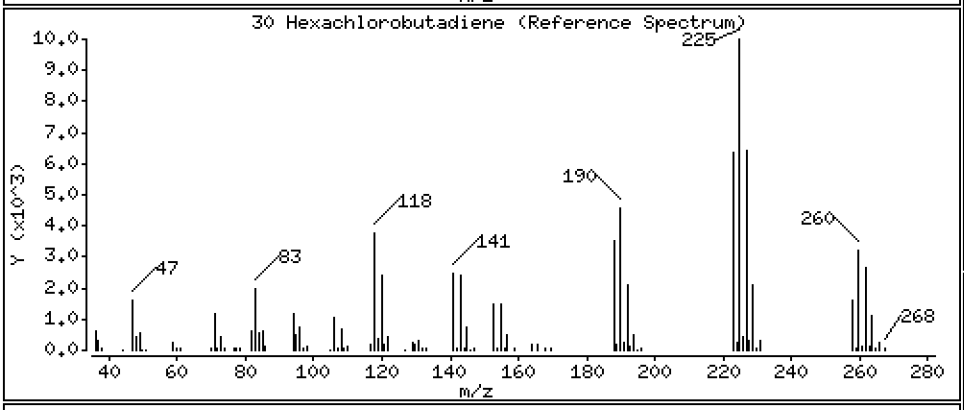
Column diameter: 0.25

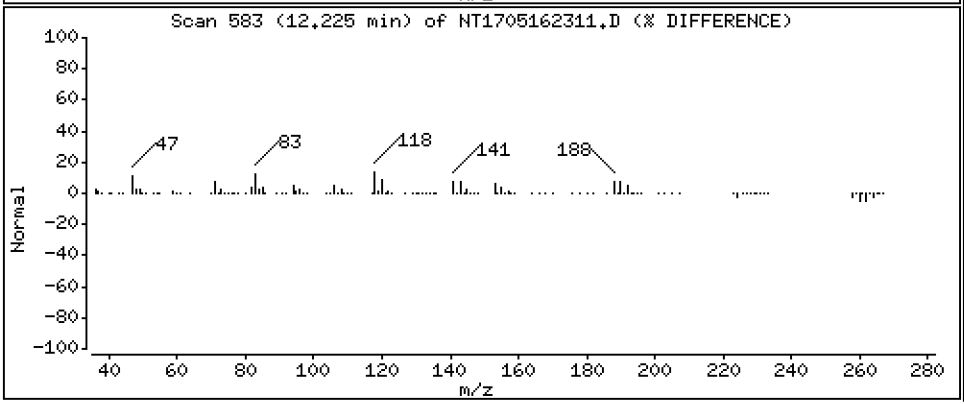
30 Hexachlorobutadiene

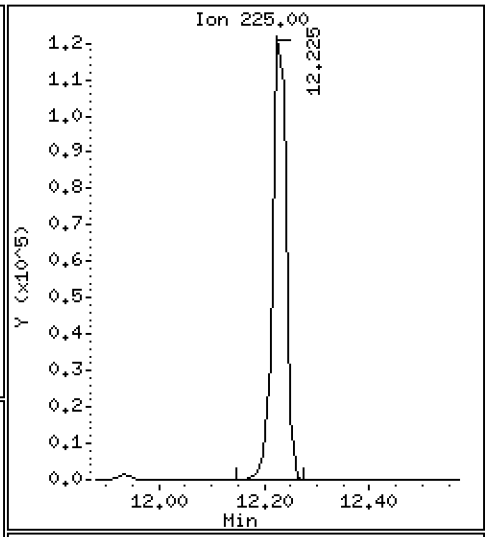
Concentration: 5.241 ug/mL

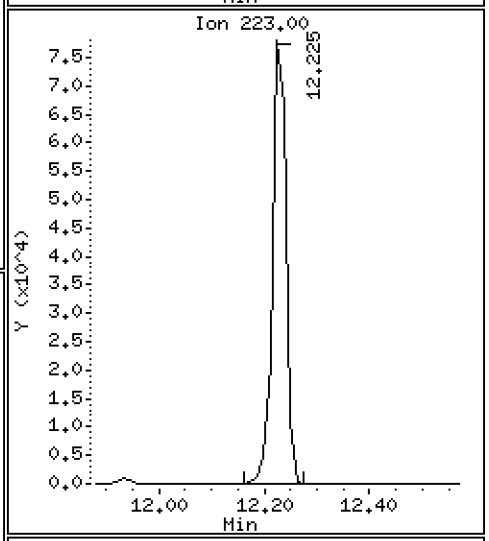


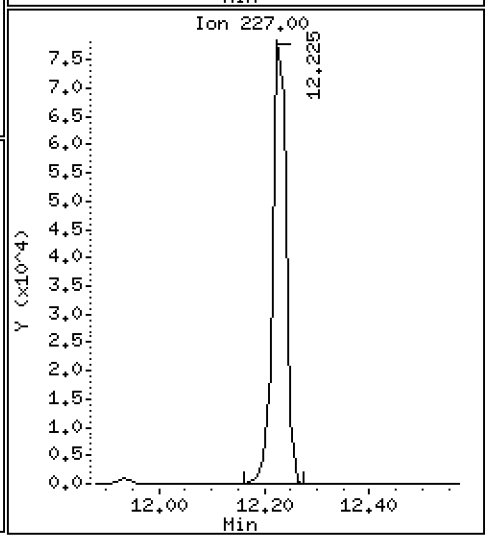












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

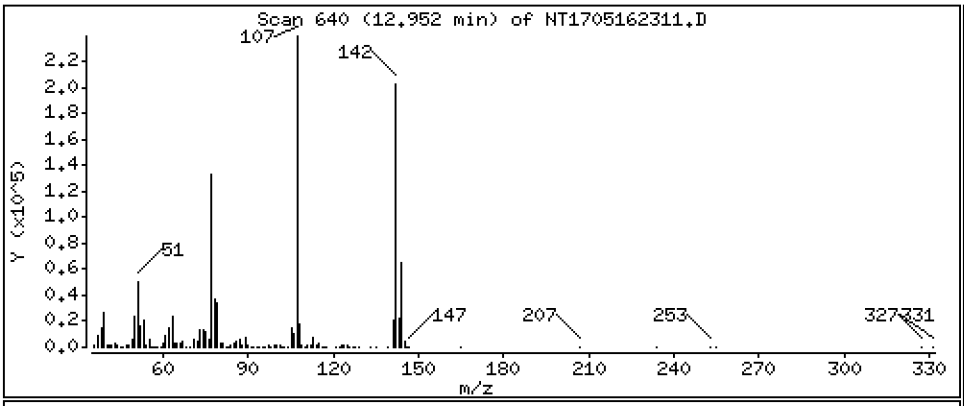
Operator: JGR

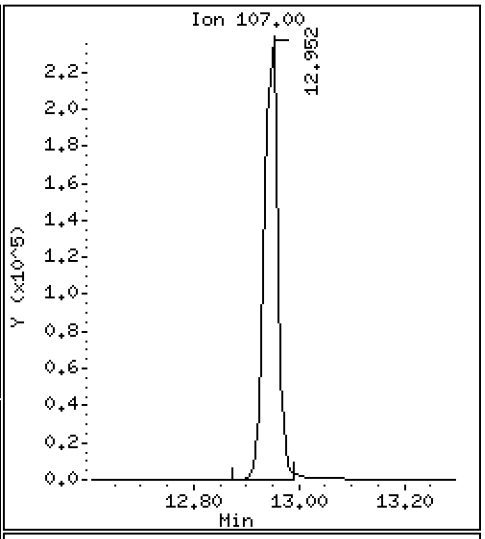
Column phase: ZB-5msi

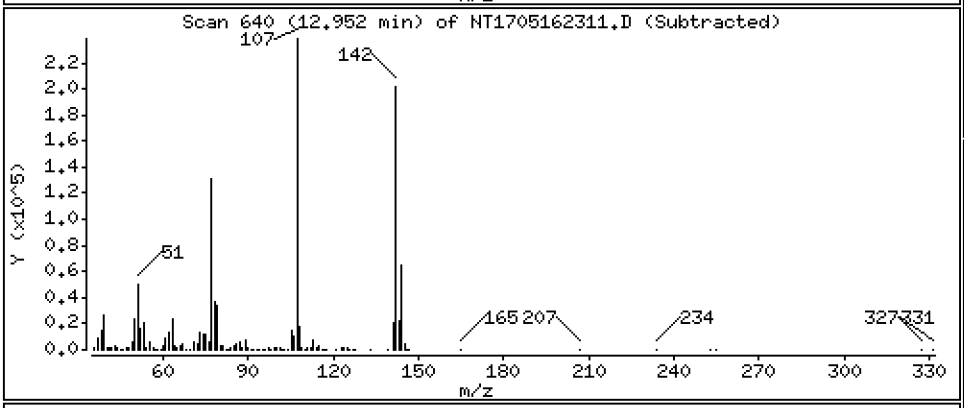
Column diameter: 0.25

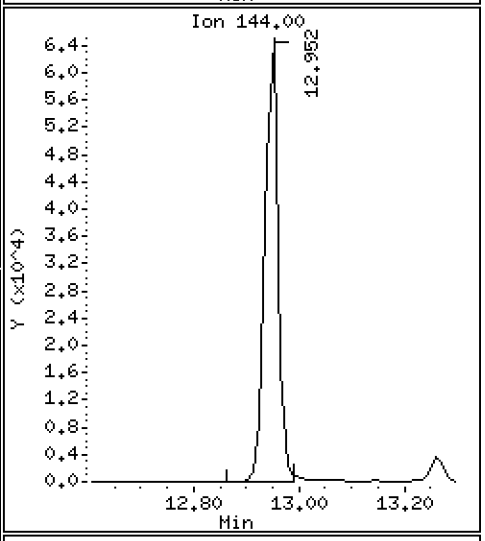
31 4-Chloro-3-methylphenol

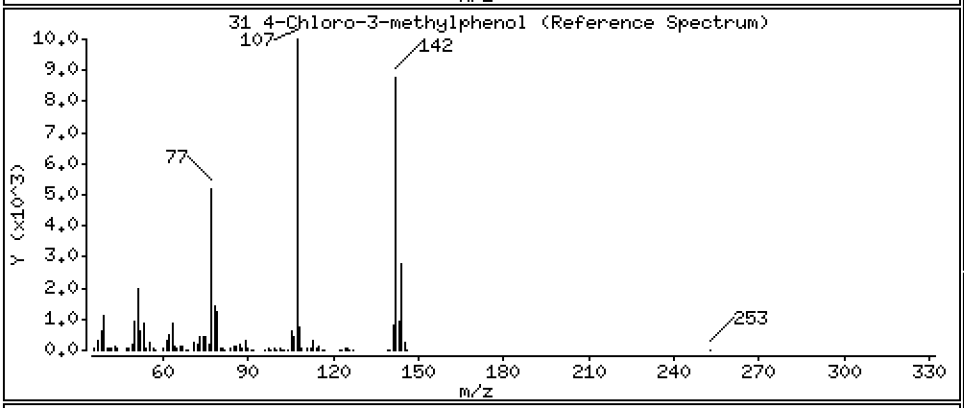
Concentration: 4.878 ug/mL

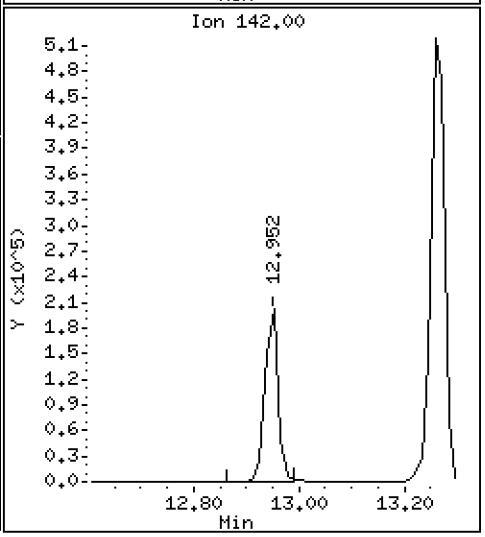


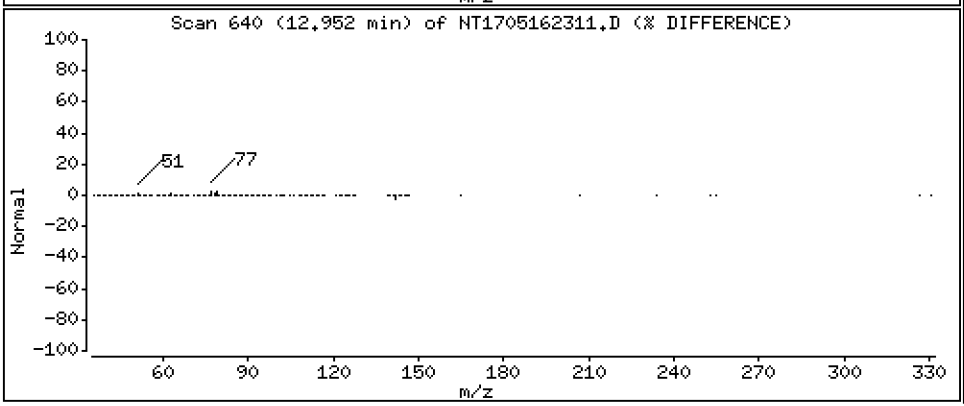












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

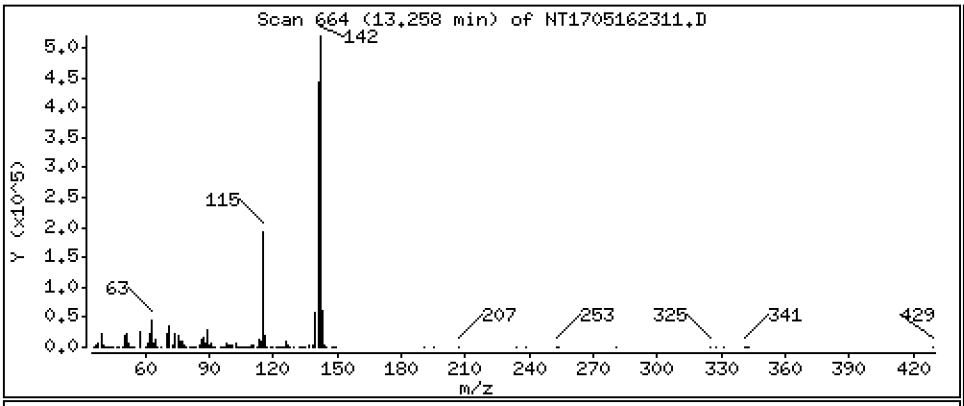
Operator: JGR

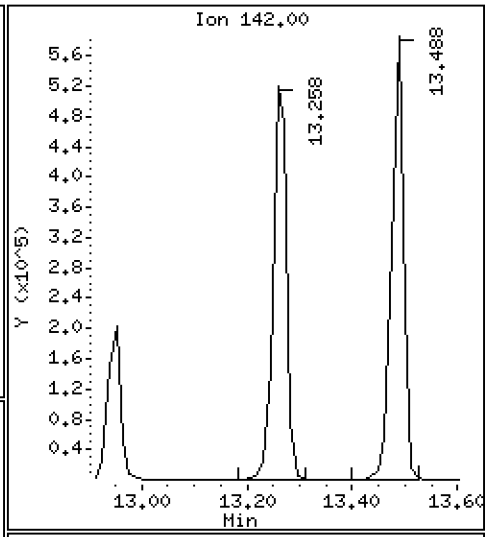
Column phase: ZB-5msi

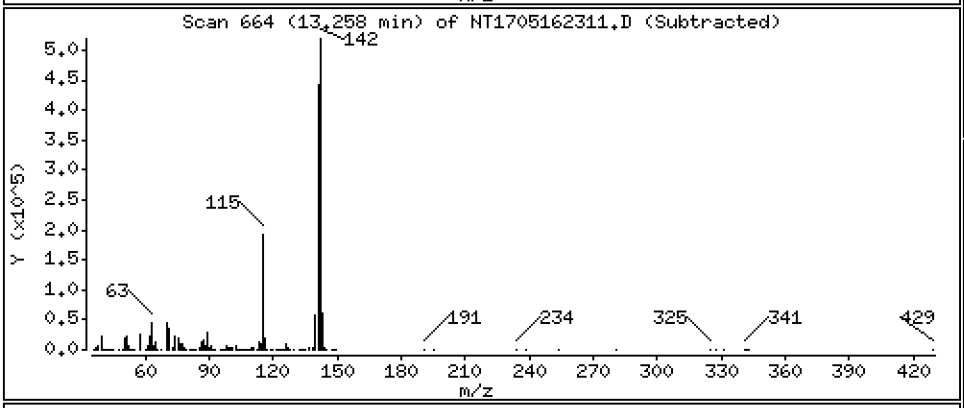
Column diameter: 0.25

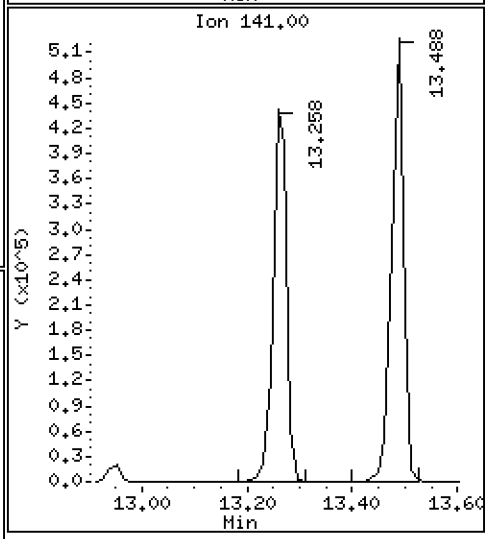
32 2-Methylnaphthalene

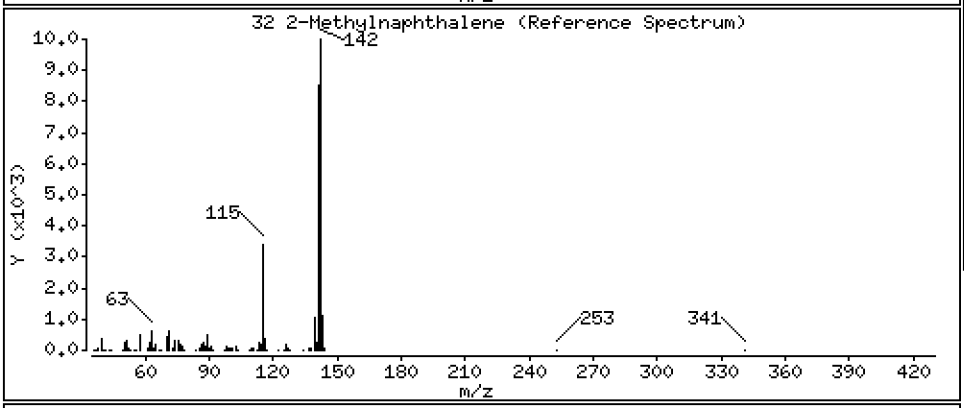
Concentration: 5.028 ug/mL

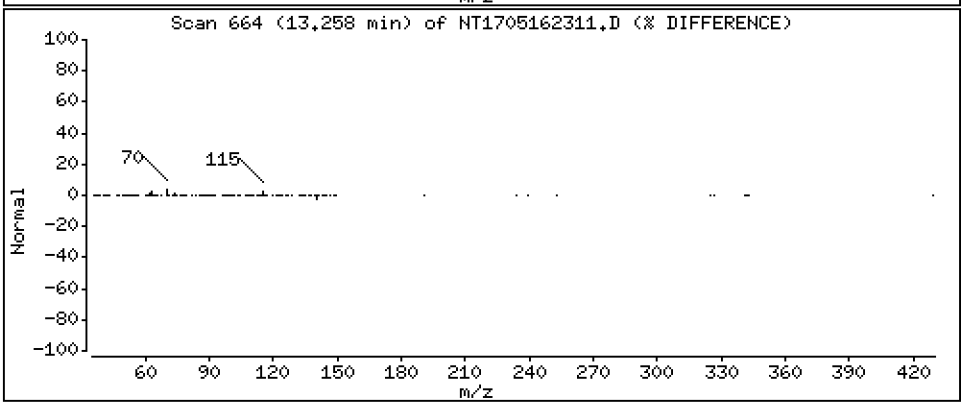












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

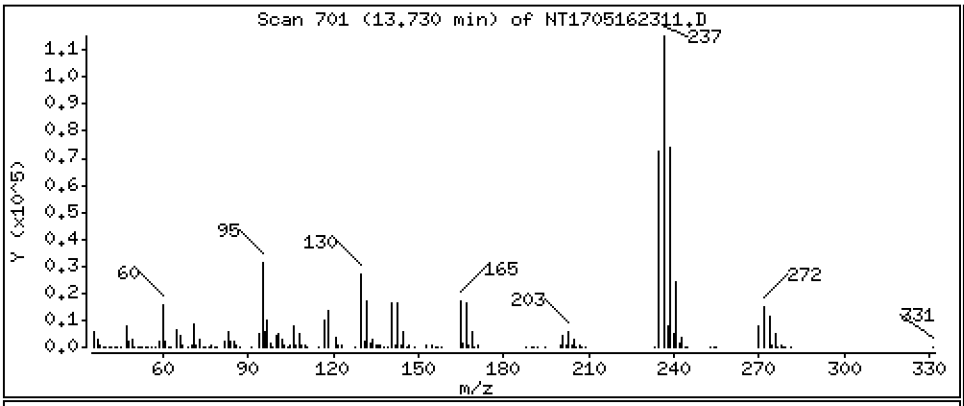
Operator: JGR

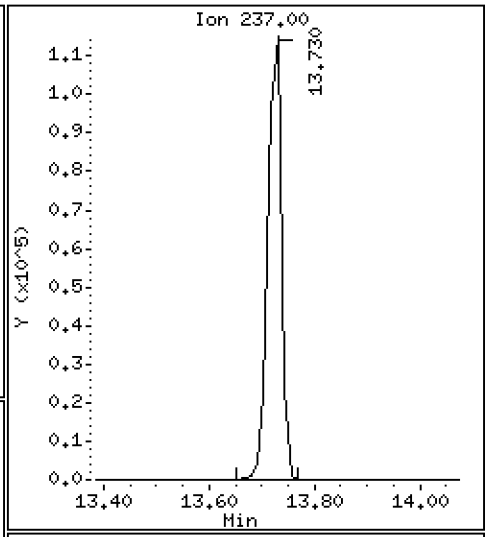
Column phase: ZB-5msi

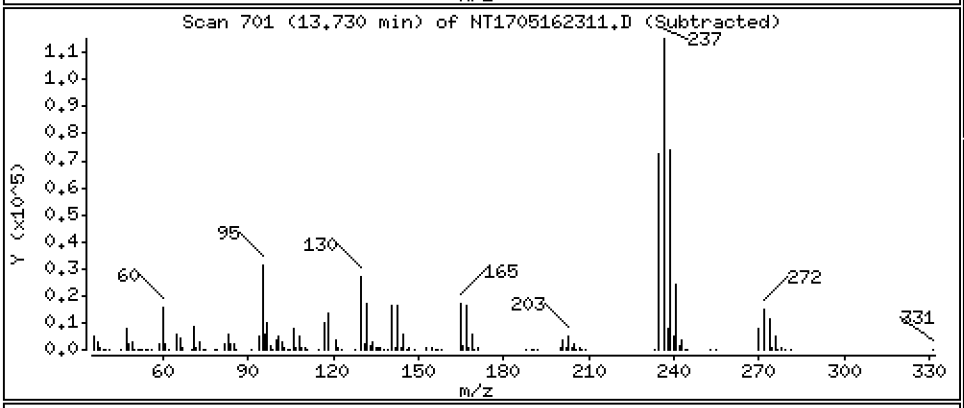
Column diameter: 0.25

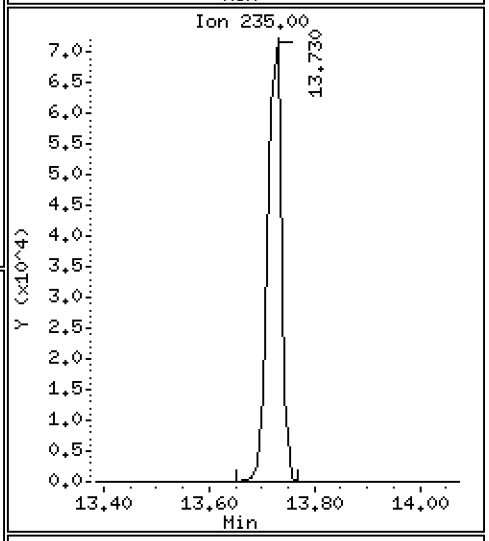
33 Hexachlorocyclopentadiene

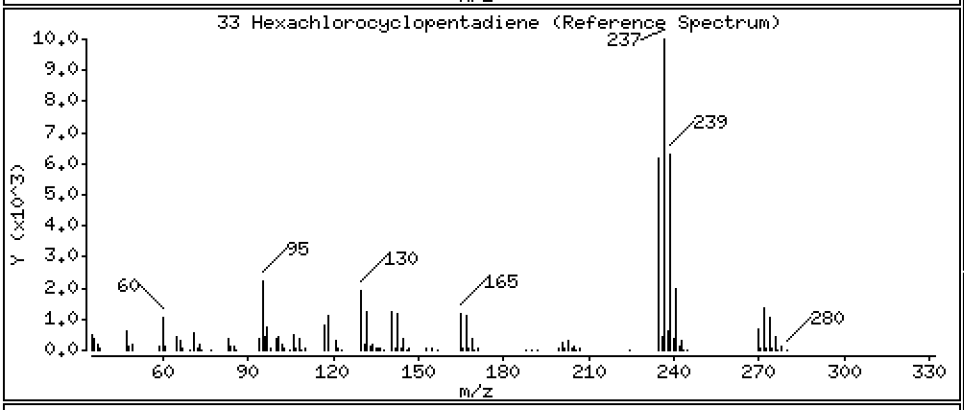
Concentration: 4.219 ug/mL

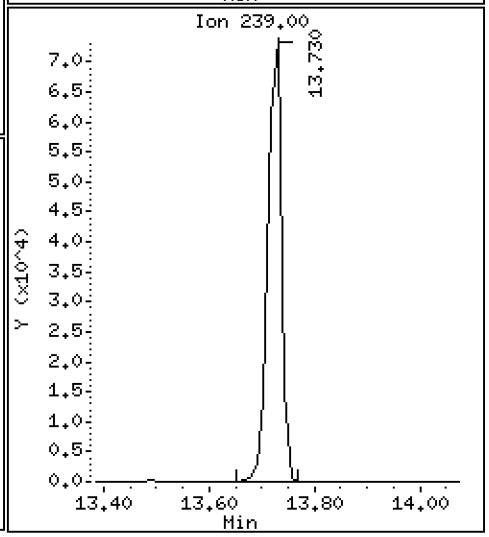


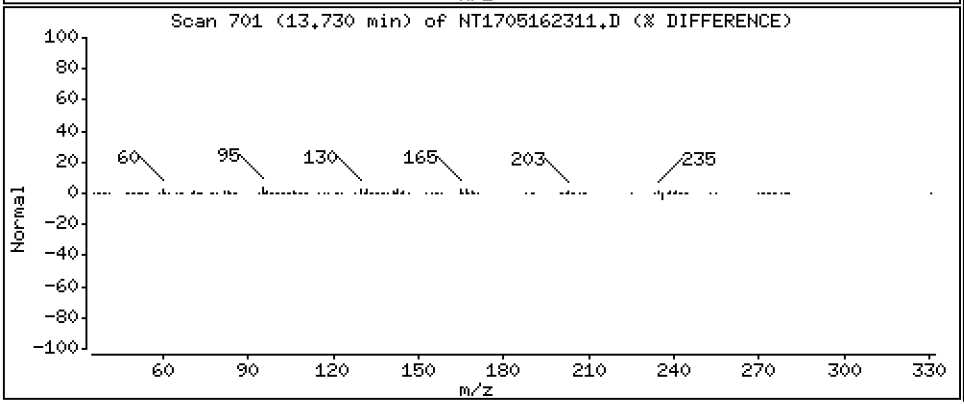












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

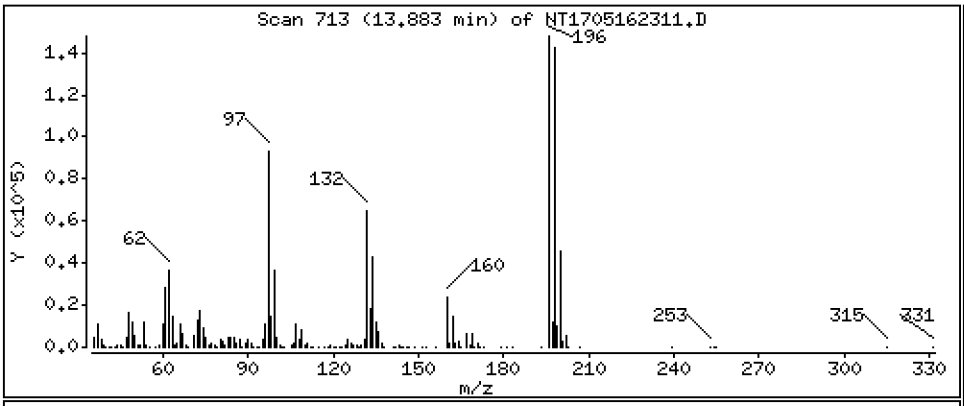
Operator: JGR

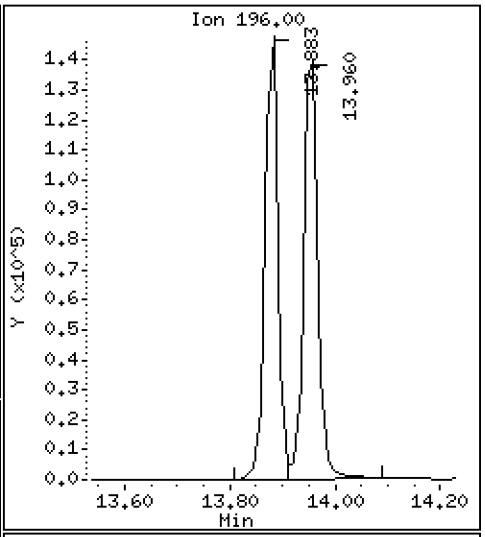
Column phase: ZB-5msi

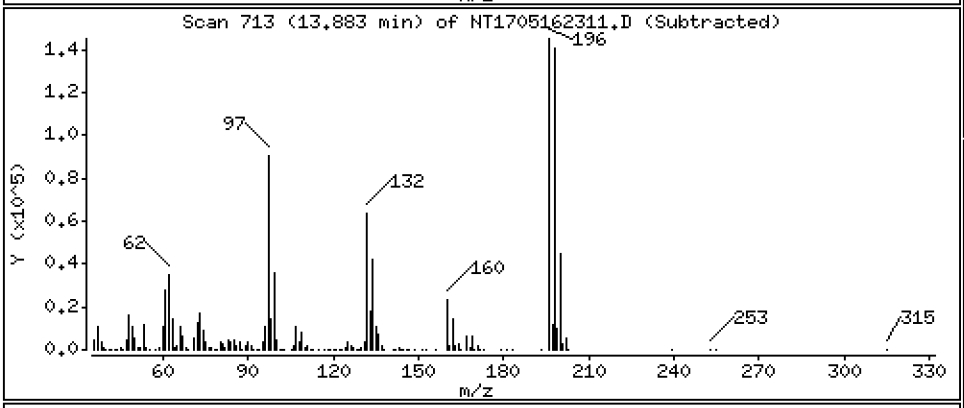
Column diameter: 0.25

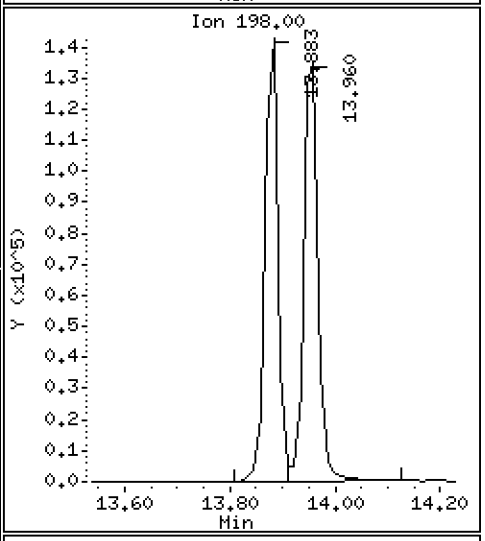
34 2,4,6-Trichlorophenol

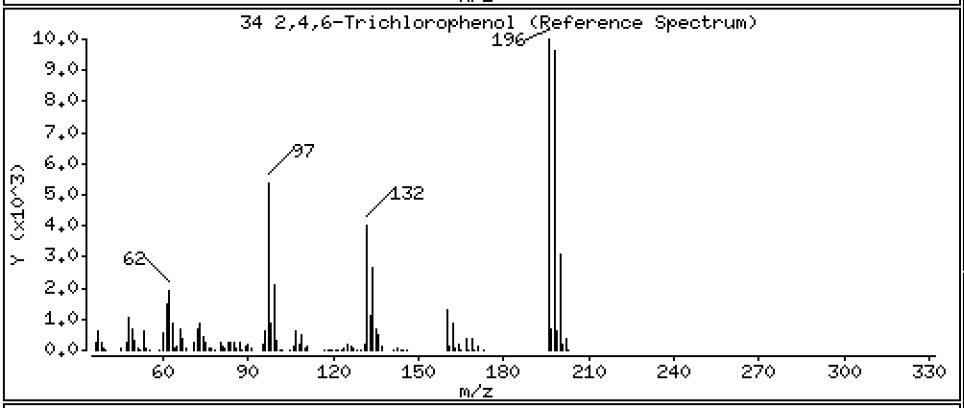
Concentration: 4.794 ug/mL

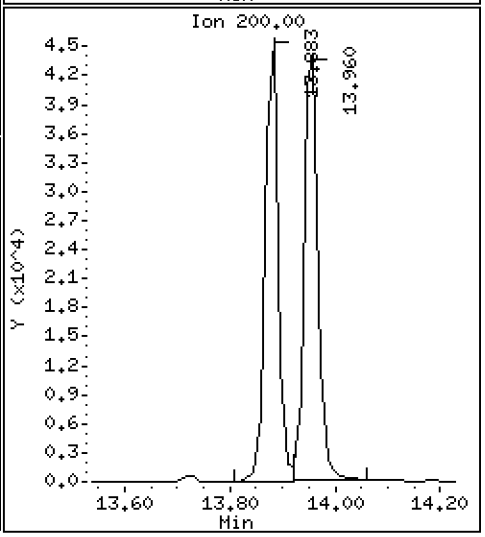


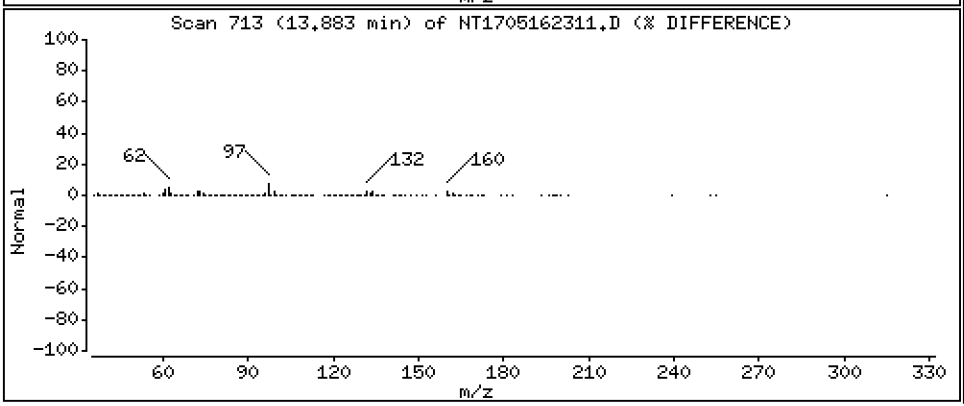












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

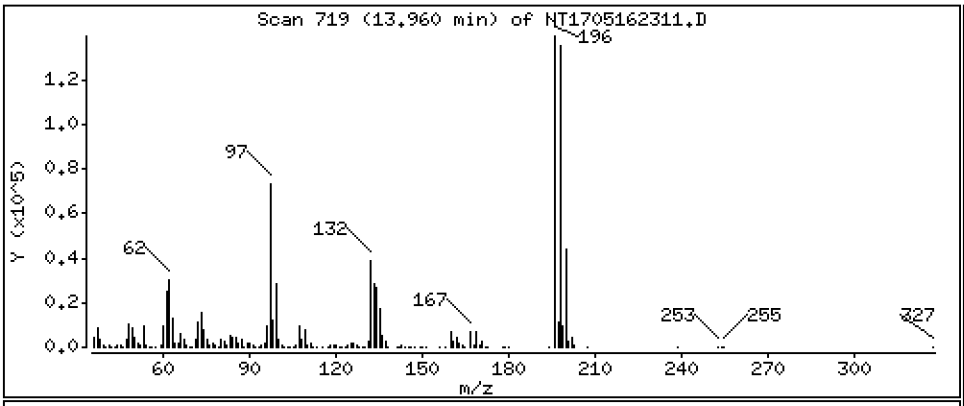
Operator: JGR

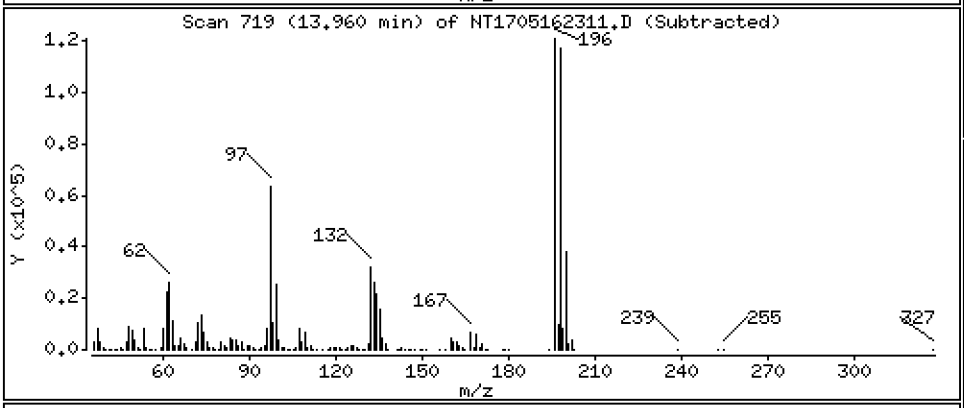
Column phase: ZB-5msi

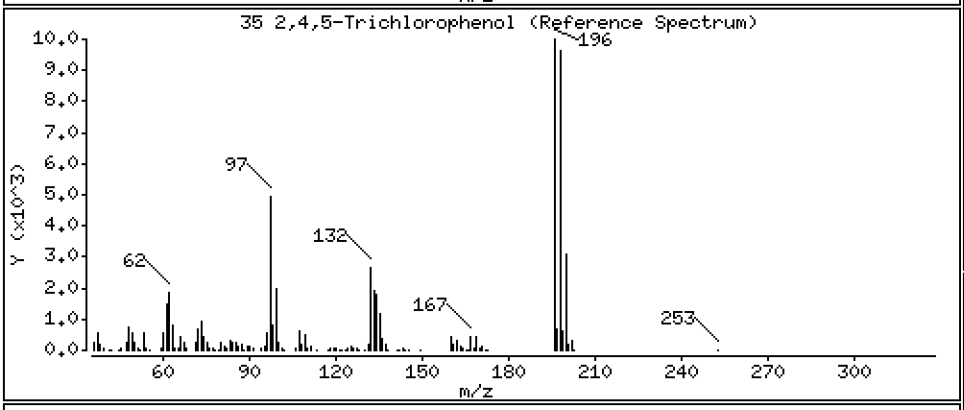
Column diameter: 0.25

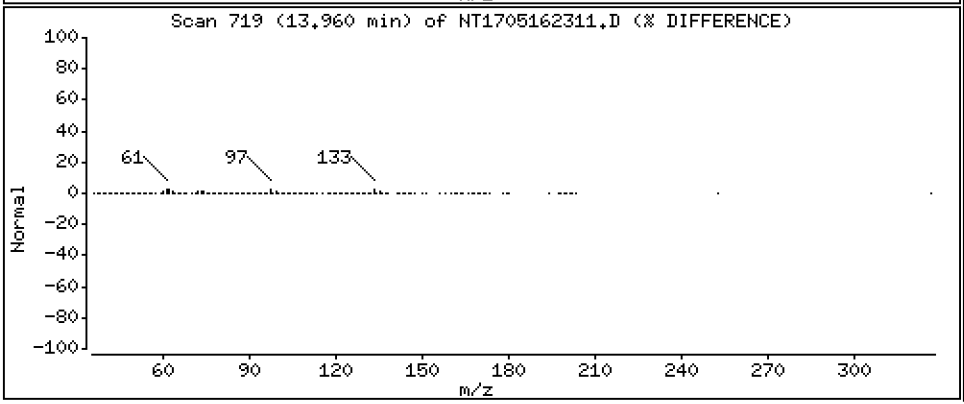
35 2,4,5-Trichlorophenol

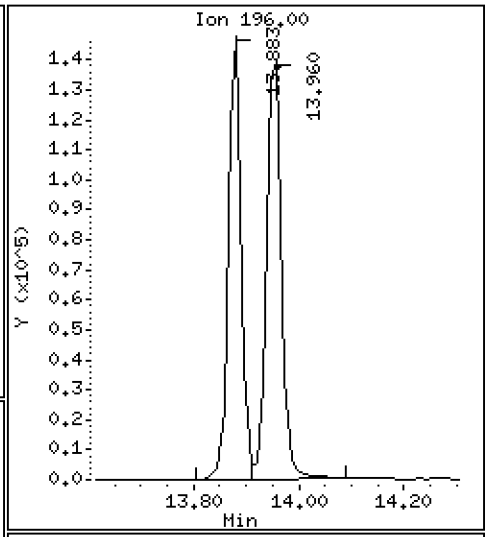
Concentration: 4.837 ug/mL

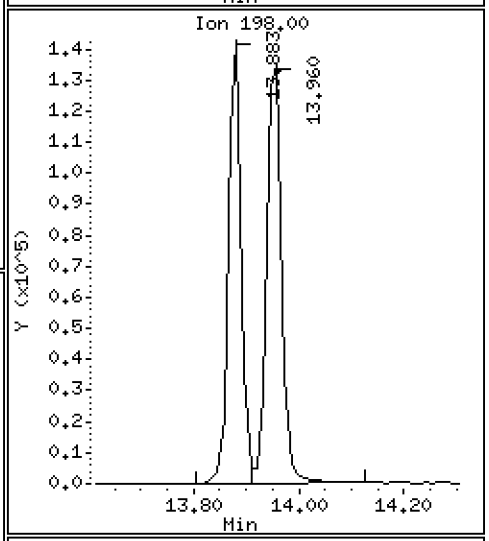


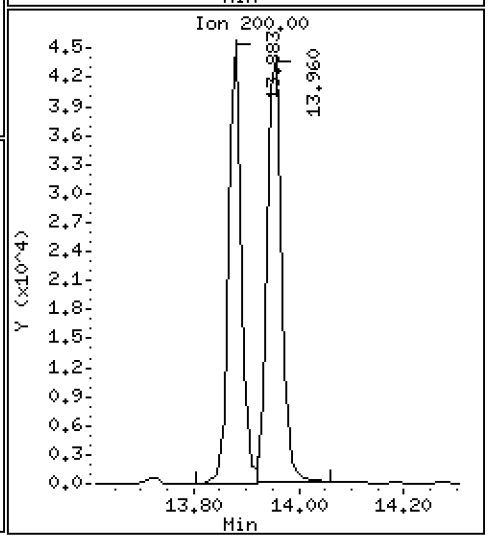












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

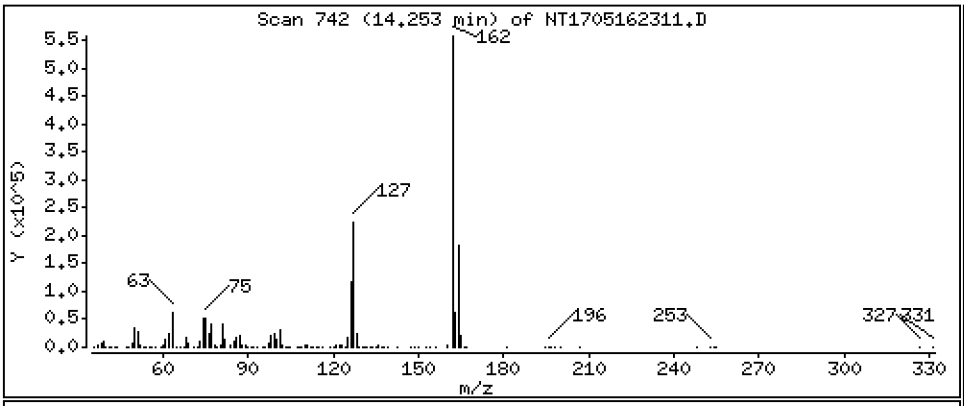
Operator: JGR

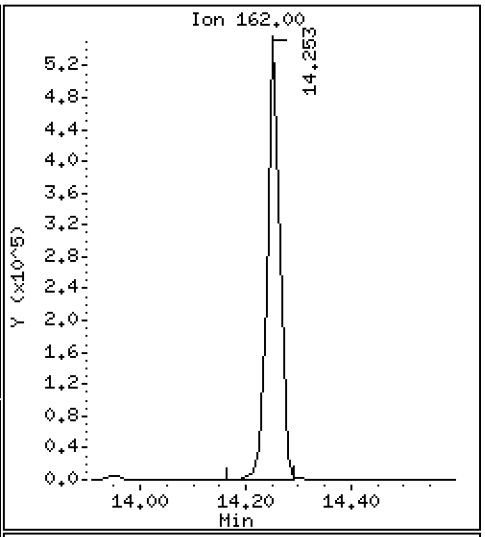
Column phase: ZB-5msi

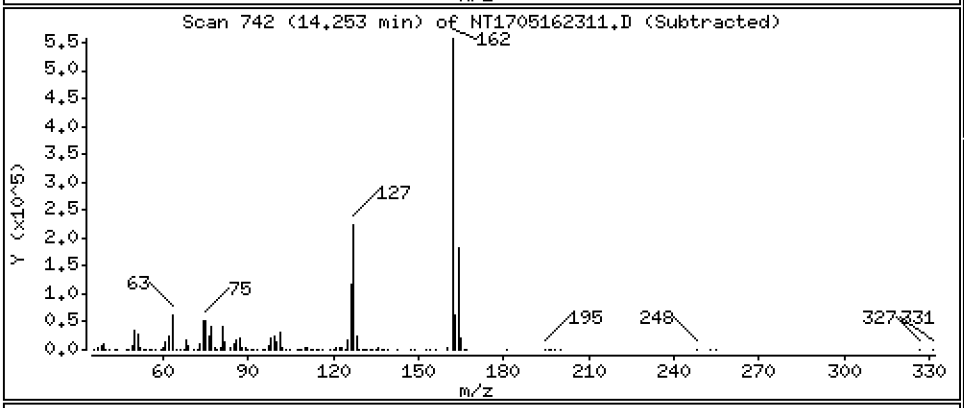
Column diameter: 0.25

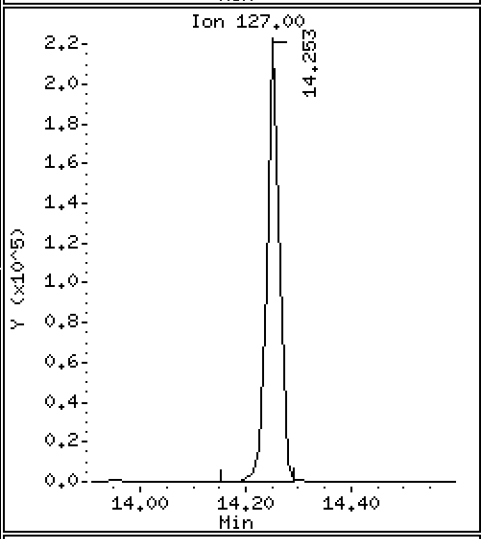
37 2-Chloronaphthalene

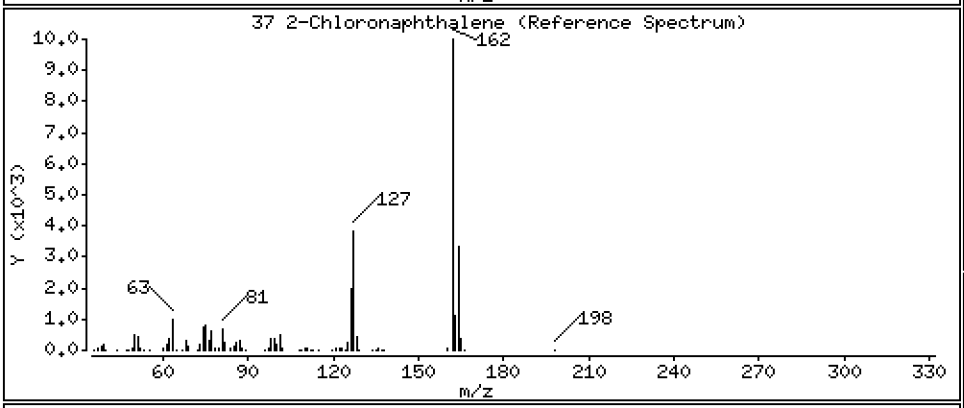
Concentration: 5.401 ug/mL

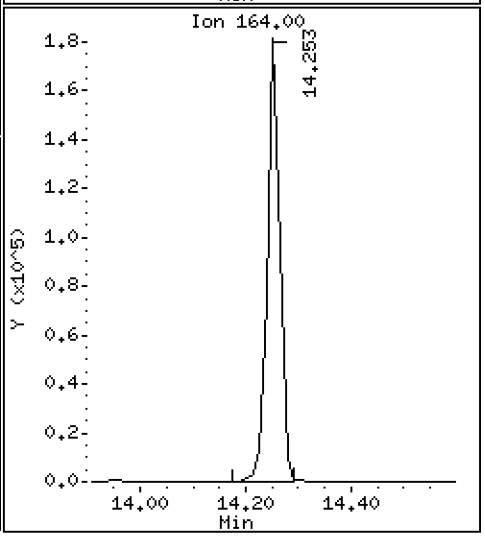


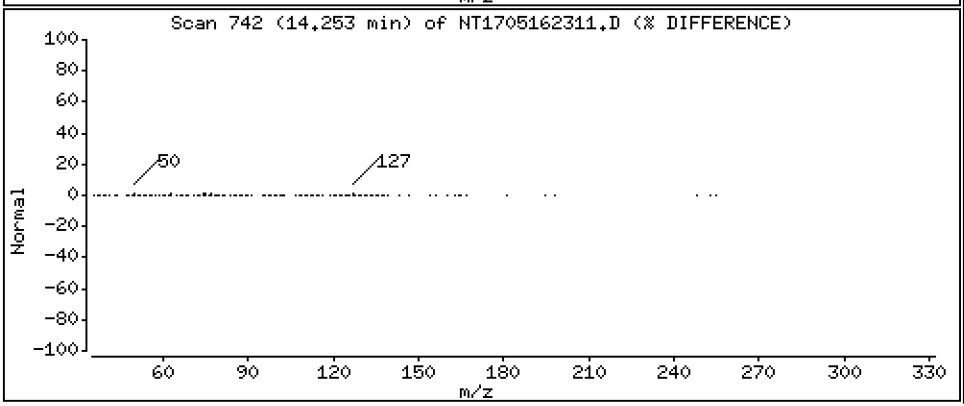












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

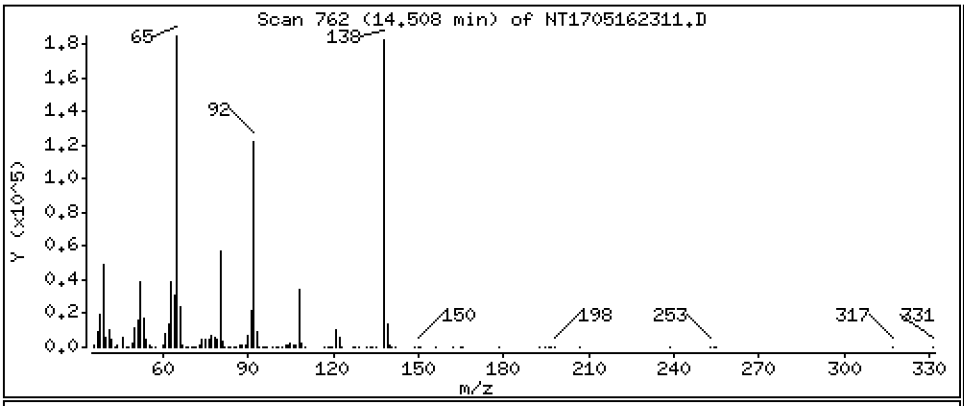
Operator: JGR

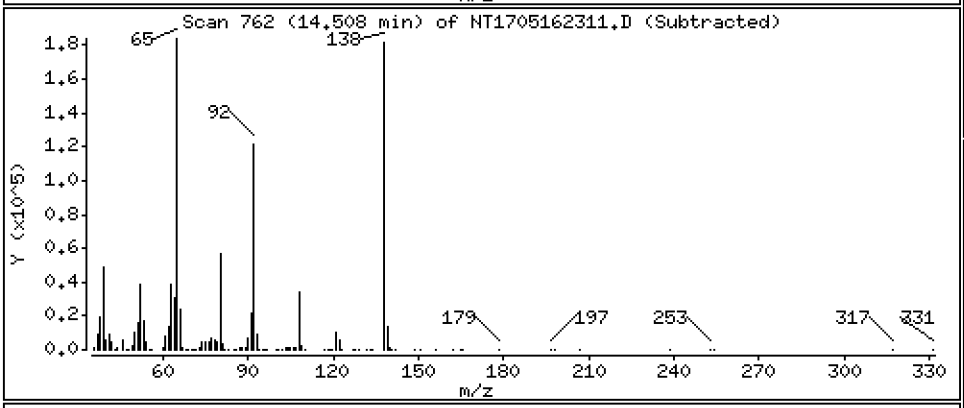
Column phase: ZB-5msi

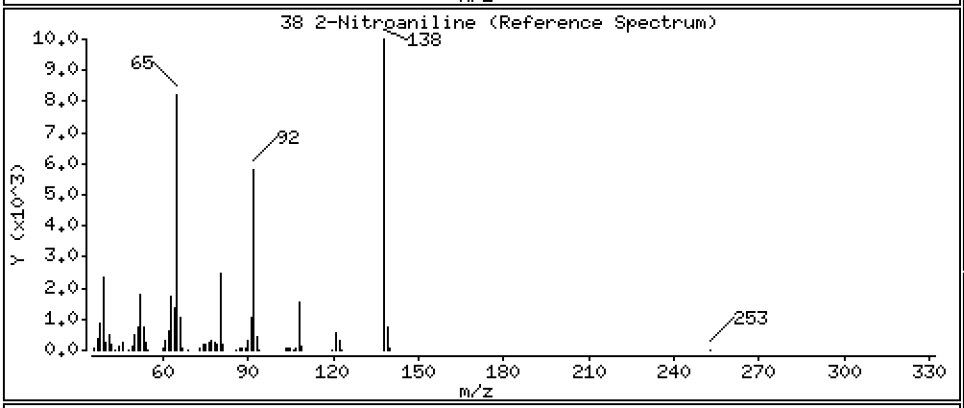
Column diameter: 0.25

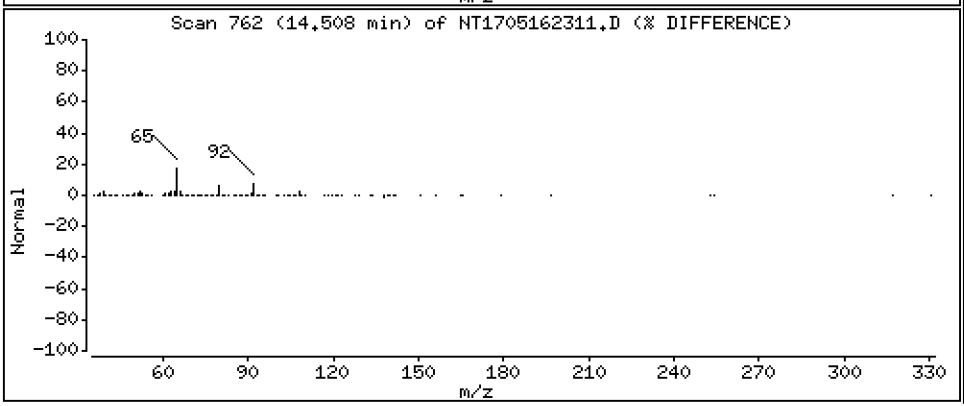
38 2-Nitroaniline

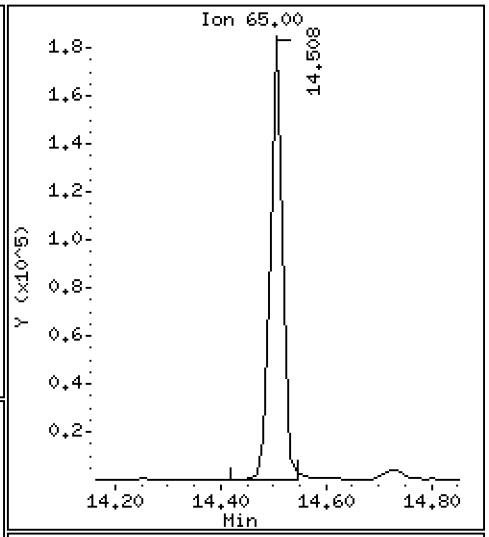
Concentration: 5.356 ug/mL

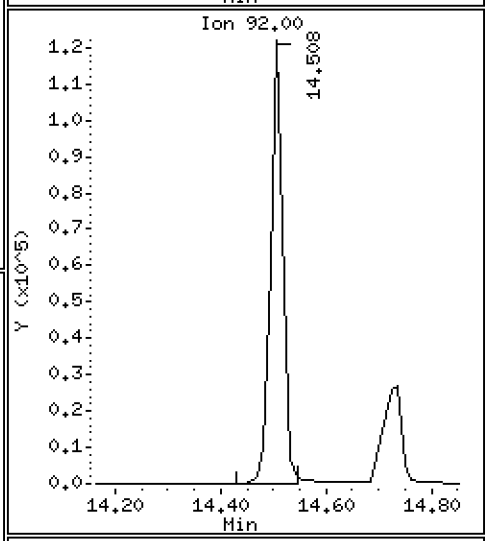


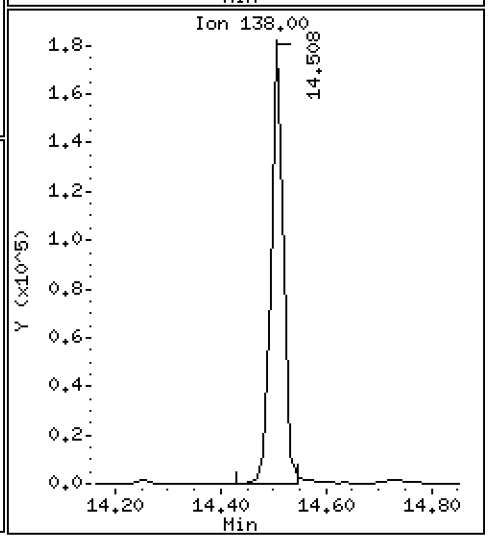












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

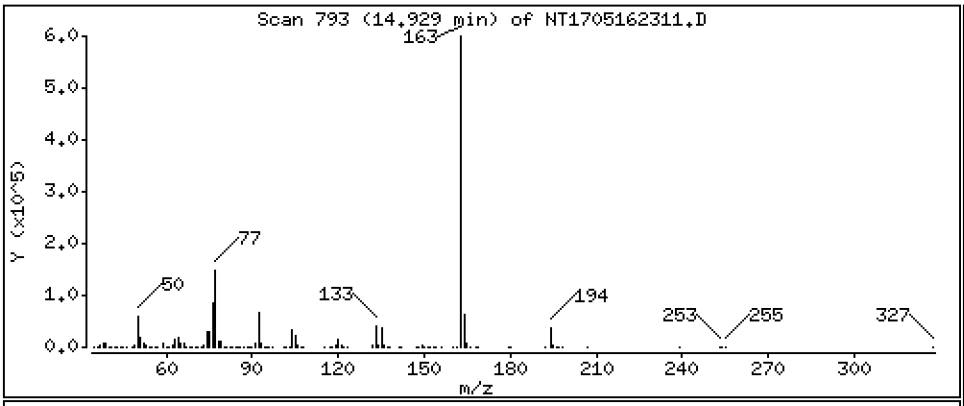
Operator: JGR

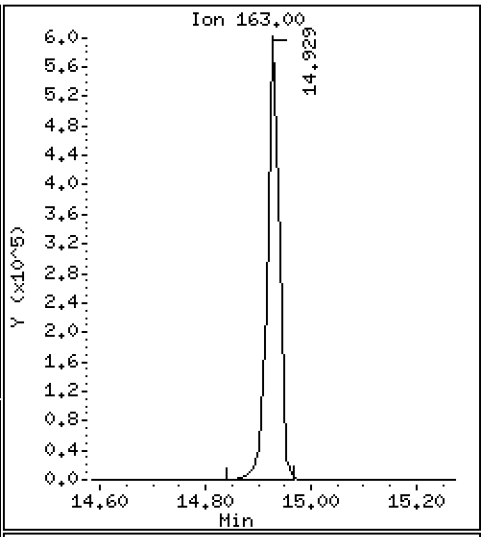
Column phase: ZB-5msi

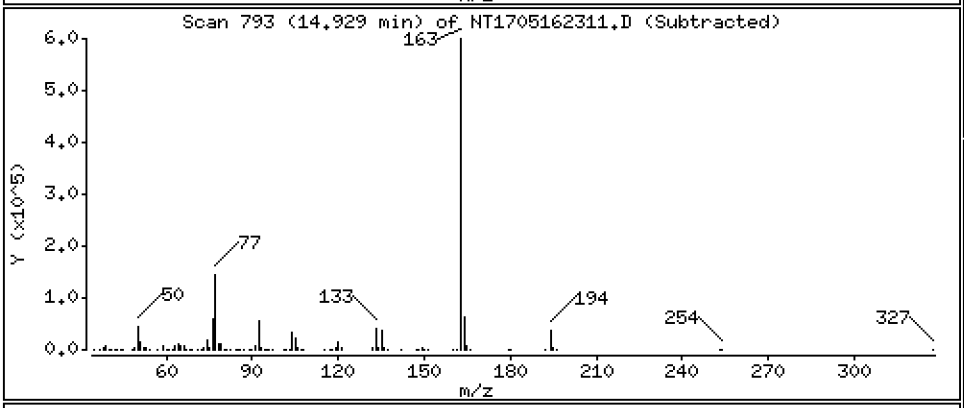
Column diameter: 0.25

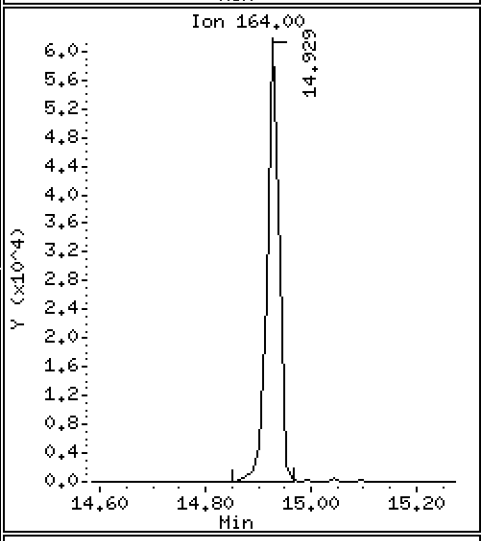
39 Dimethylphthalate

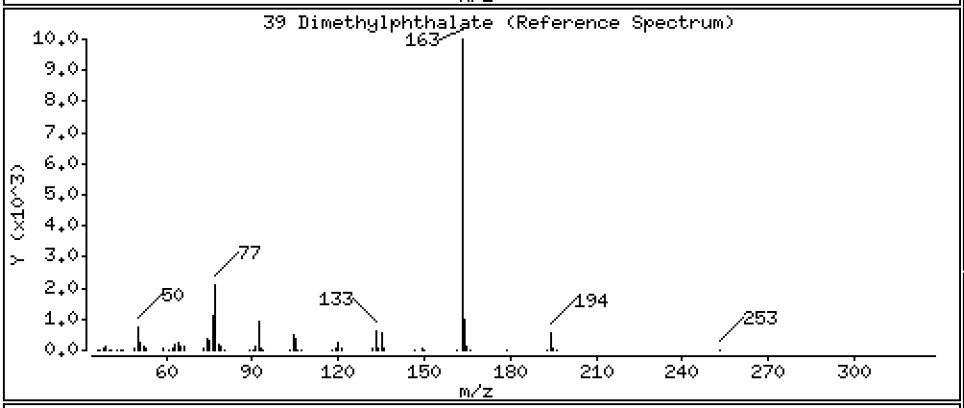
Concentration: 5.418 ug/mL

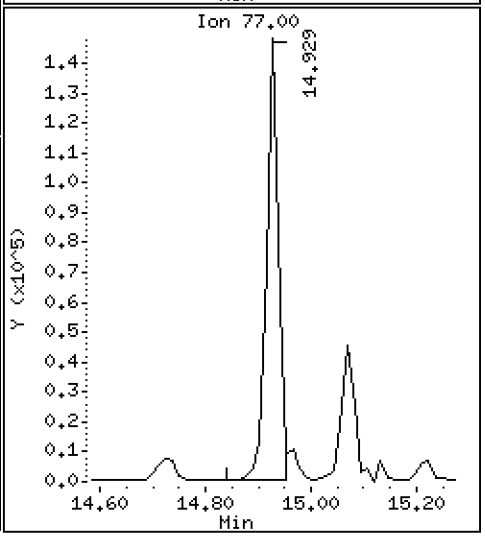


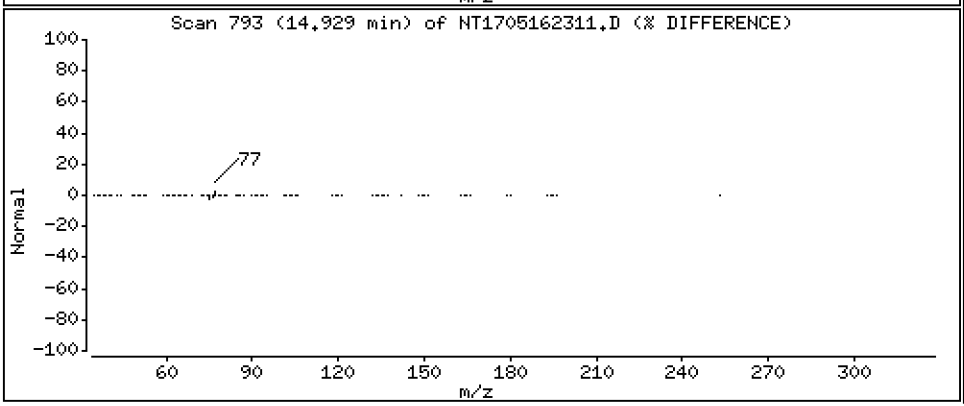












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

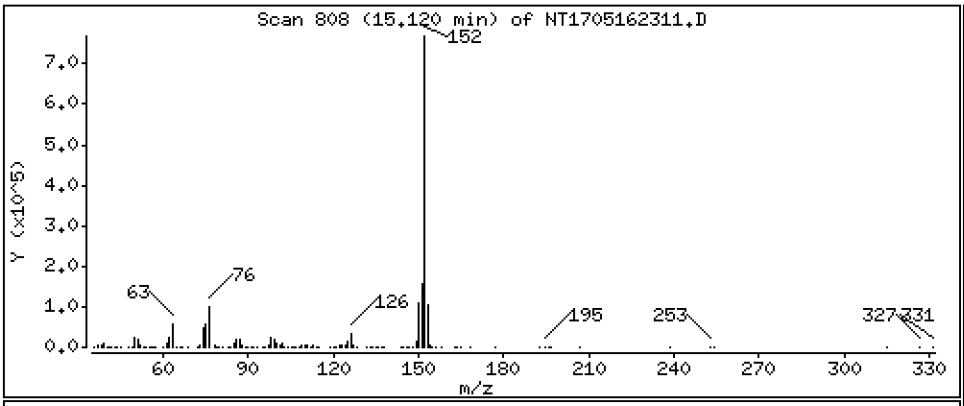
Operator: JGR

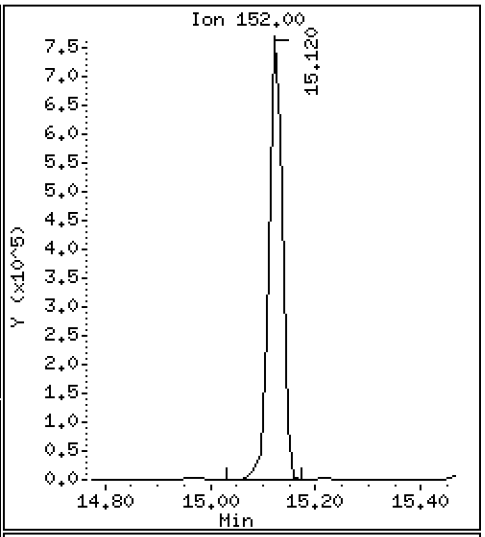
Column phase: ZB-5msi

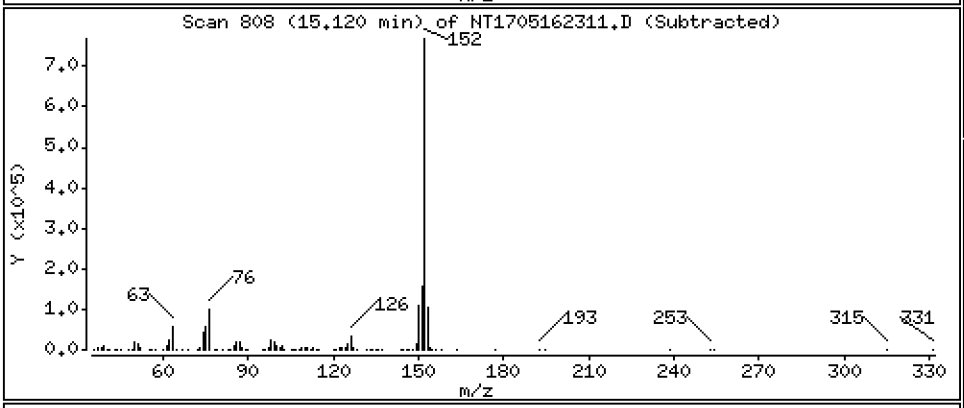
Column diameter: 0.25

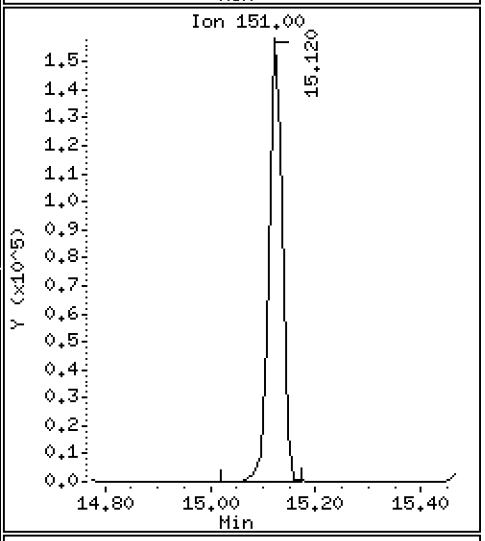
40 Acenaphthylene

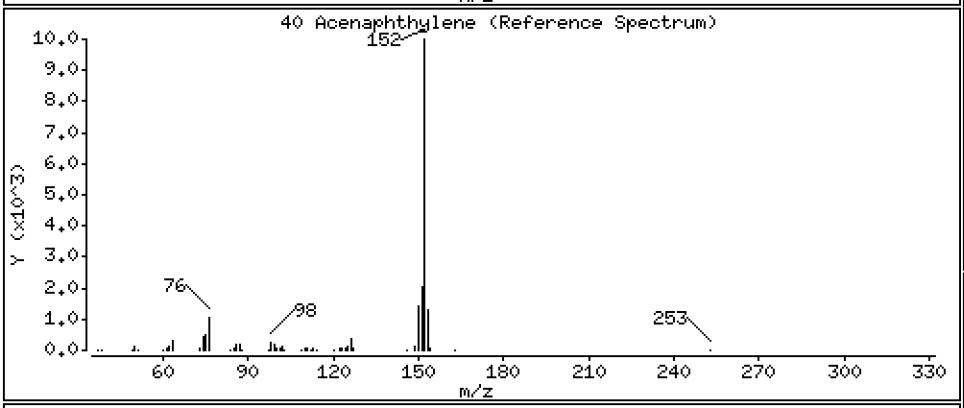
Concentration: 5.282 ug/mL

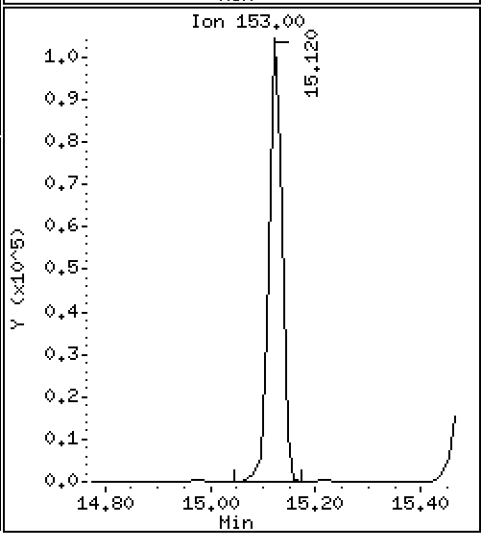


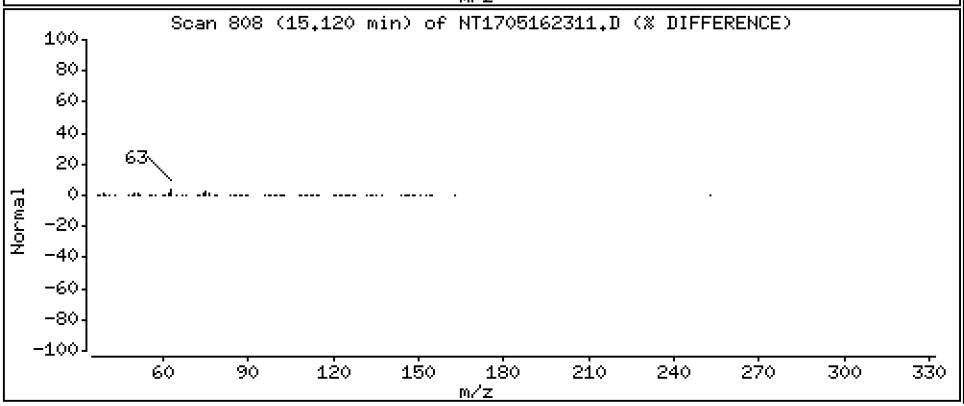












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

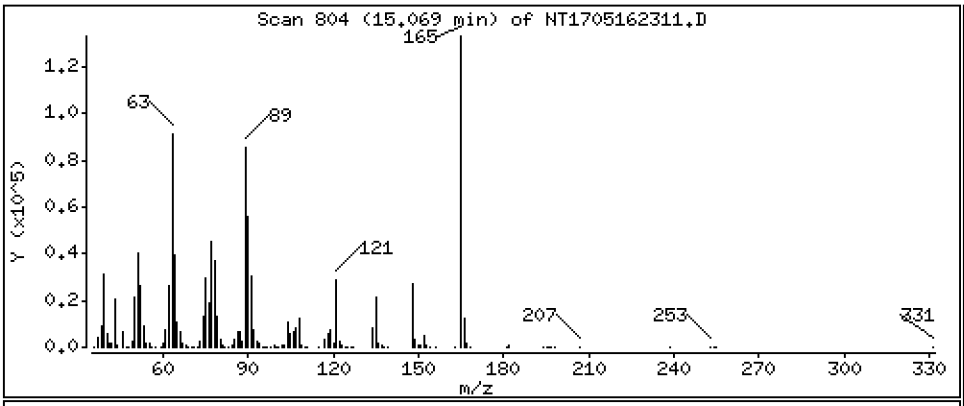
Operator: JGR

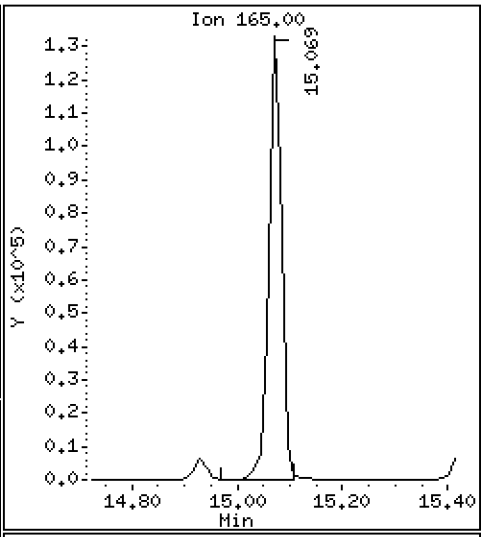
Column phase: ZB-5msi

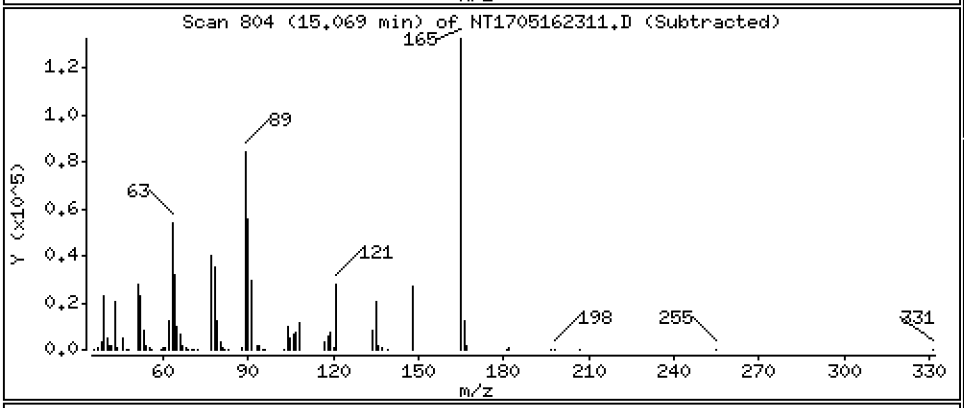
Column diameter: 0.25

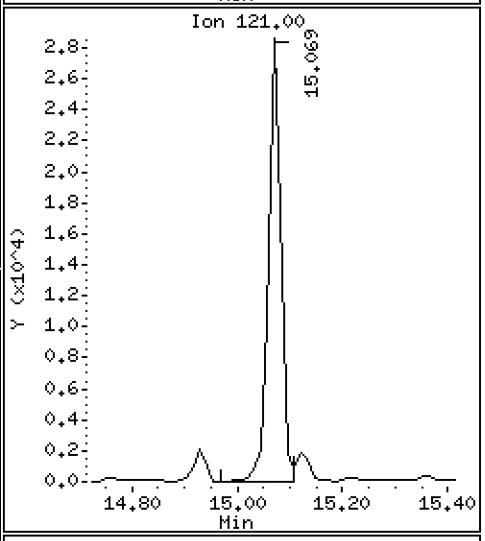
41 2,6-Dinitrotoluene

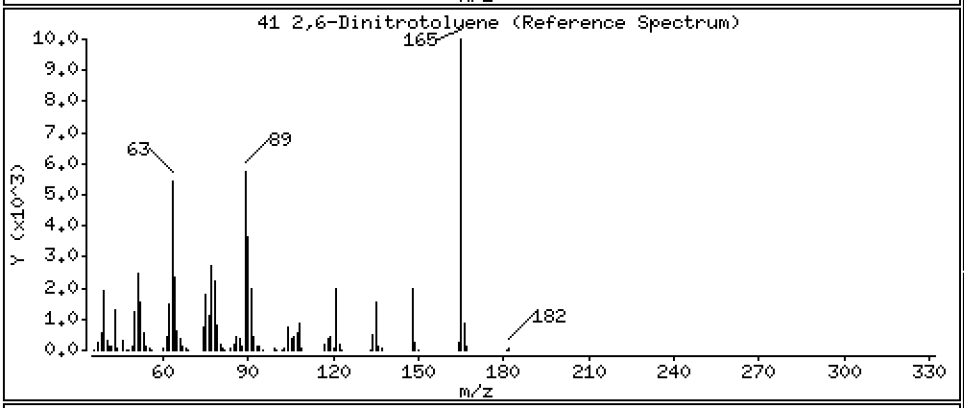
Concentration: 5.404 ug/mL

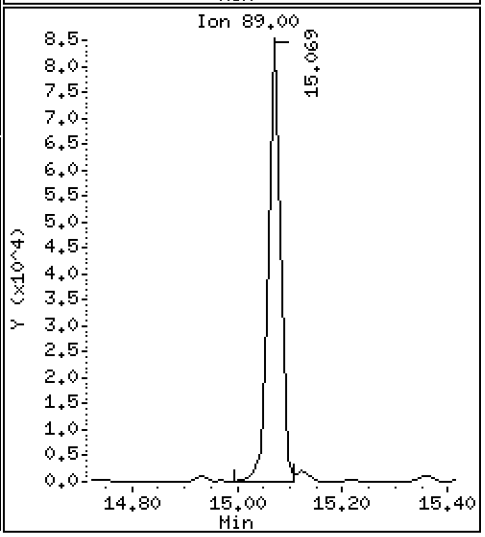


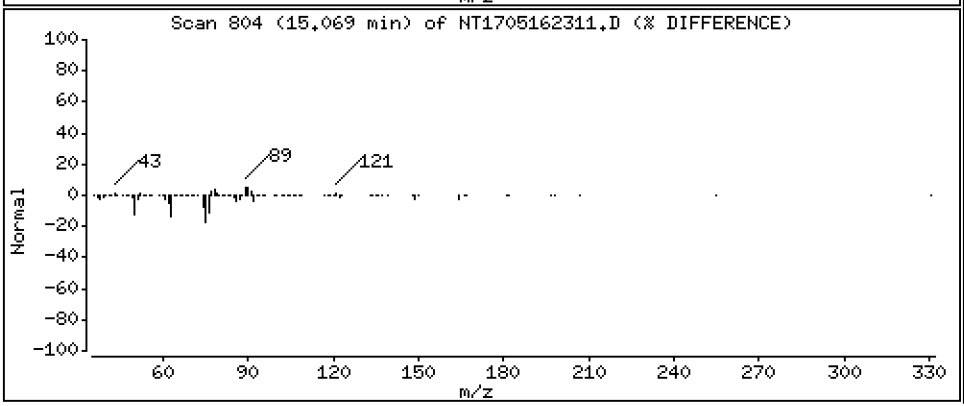












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

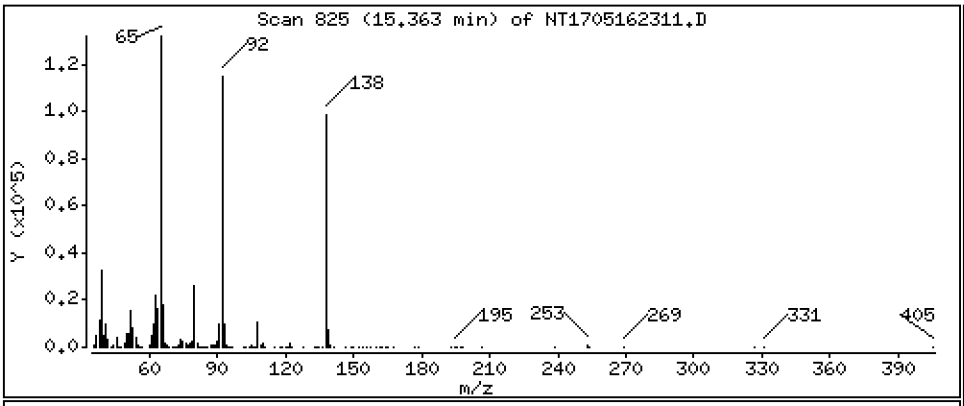
Operator: JGR

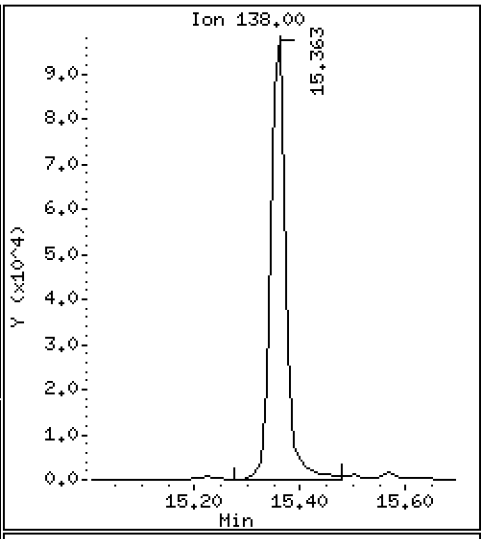
Column phase: ZB-5msi

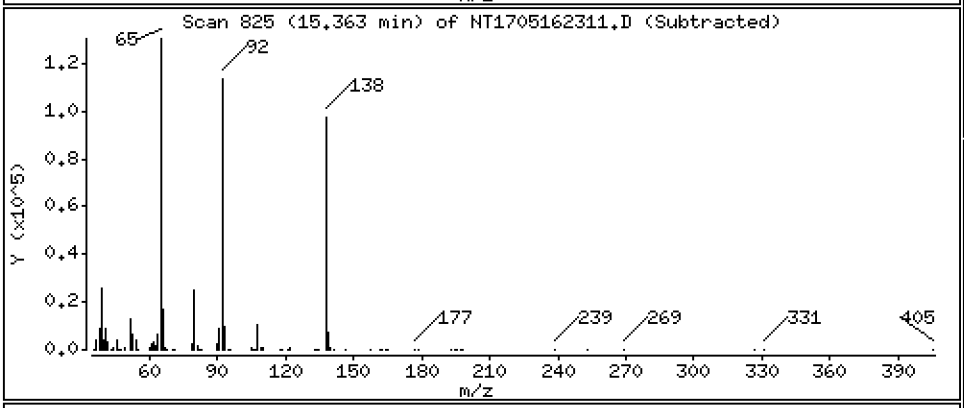
Column diameter: 0.25

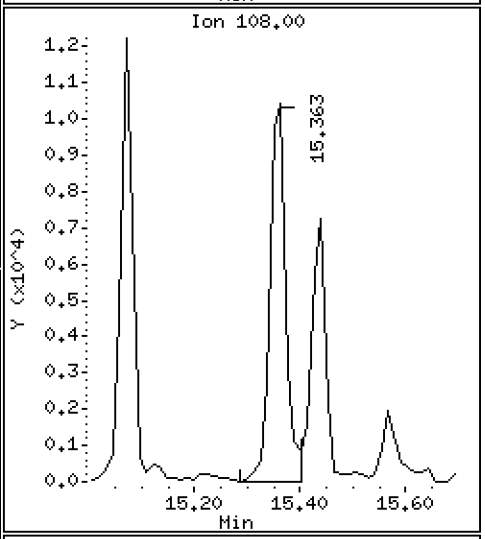
43 3-Nitroaniline

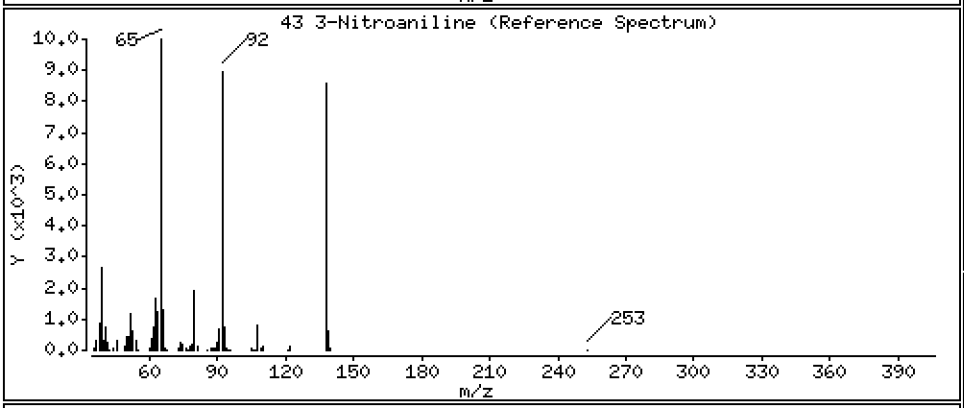
Concentration: 5.169 ug/mL

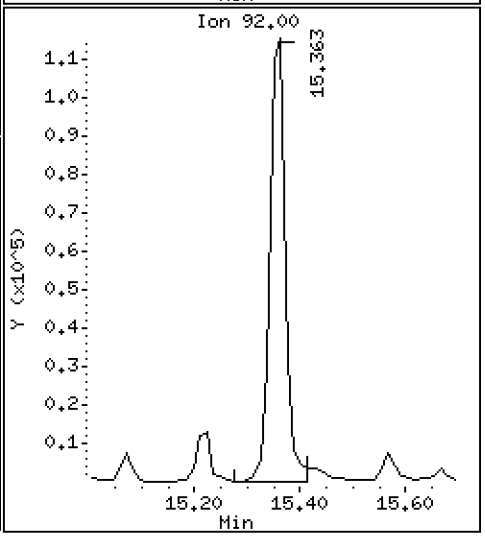


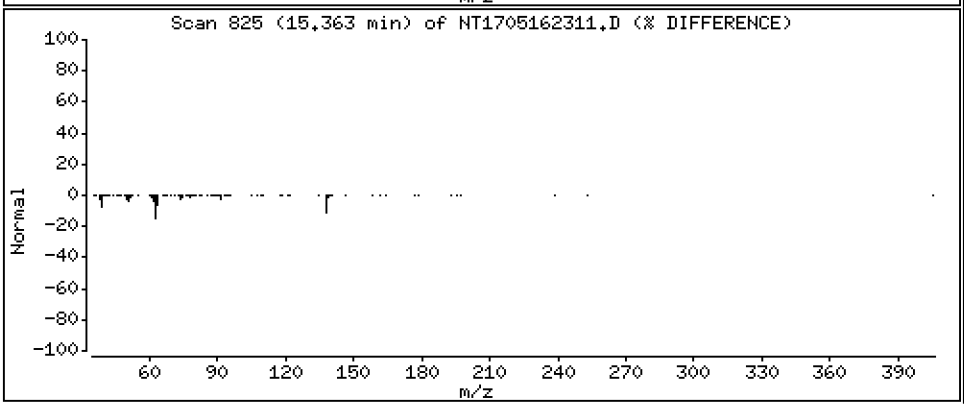












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

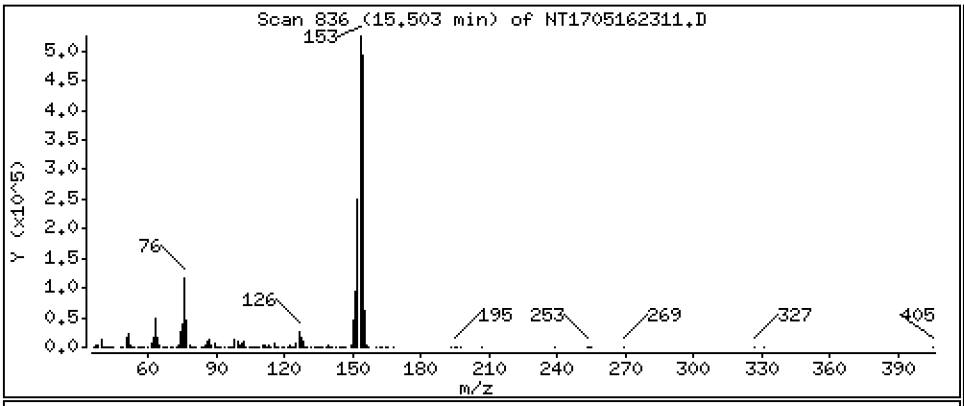
Operator: JGR

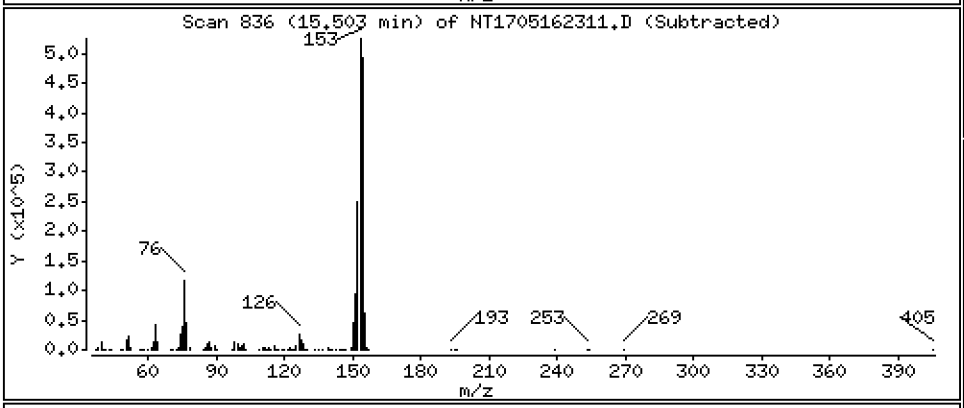
Column phase: ZB-5msi

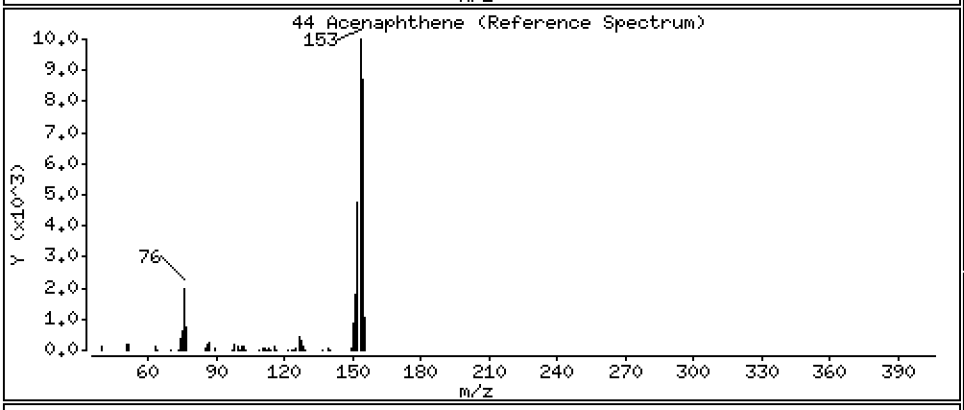
Column diameter: 0.25

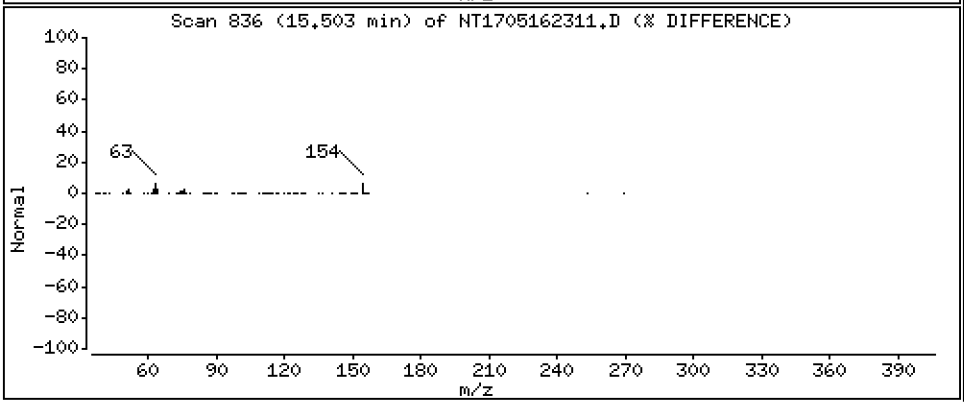
44 Acenaphthene

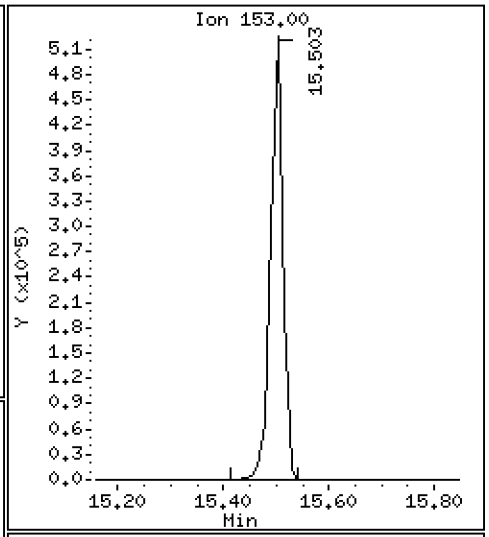
Concentration: 5.283 ug/mL

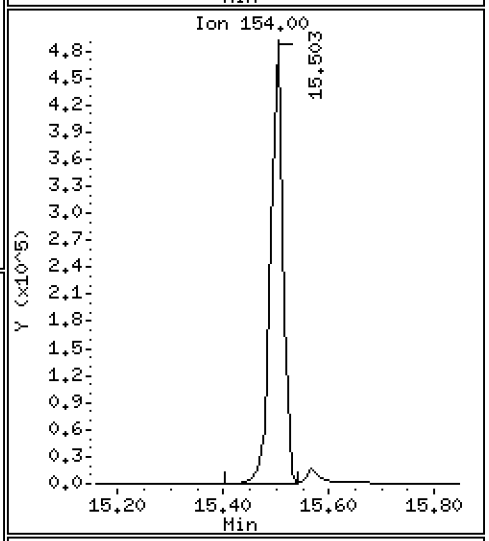


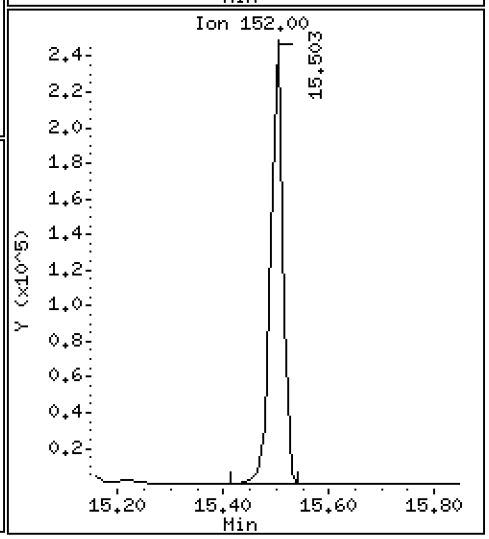












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

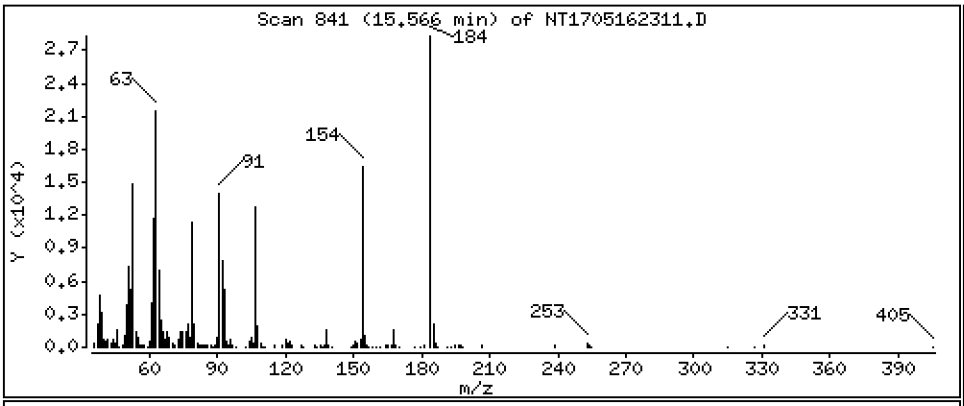
Operator: JGR

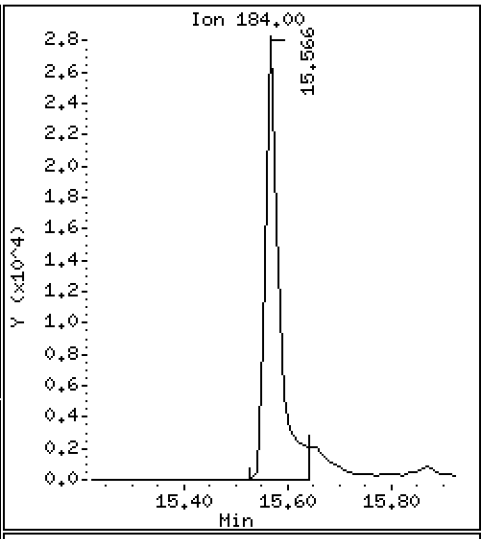
Column phase: ZB-5msi

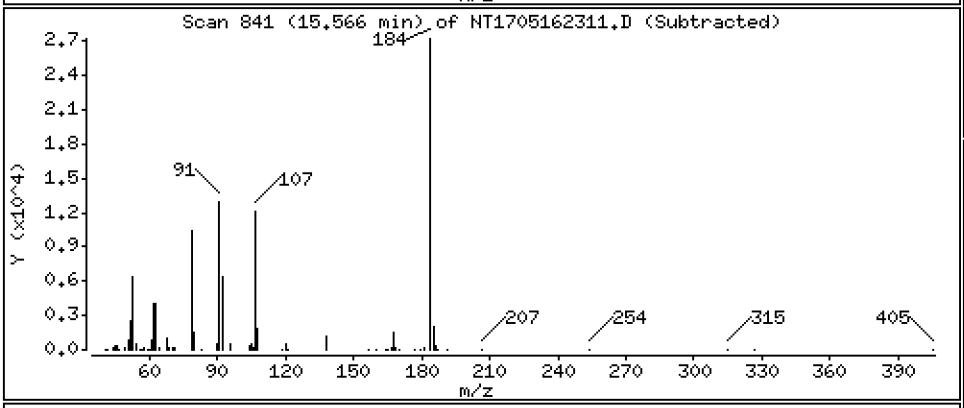
Column diameter: 0.25

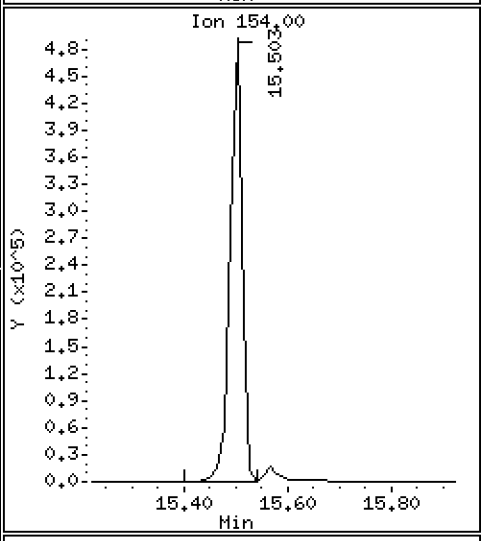
45 2,4-Dinitrophenol

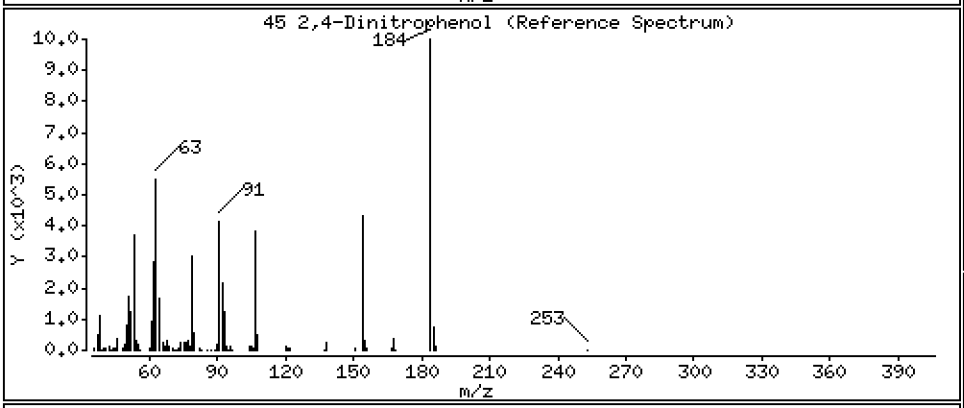
Concentration: 2.119 ug/mL

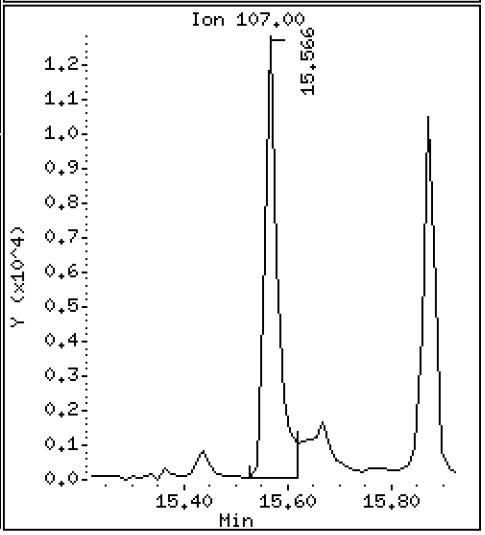


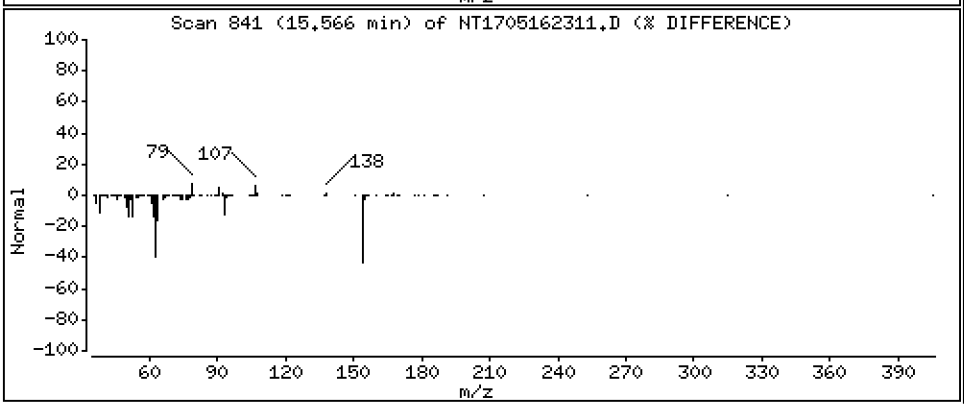












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

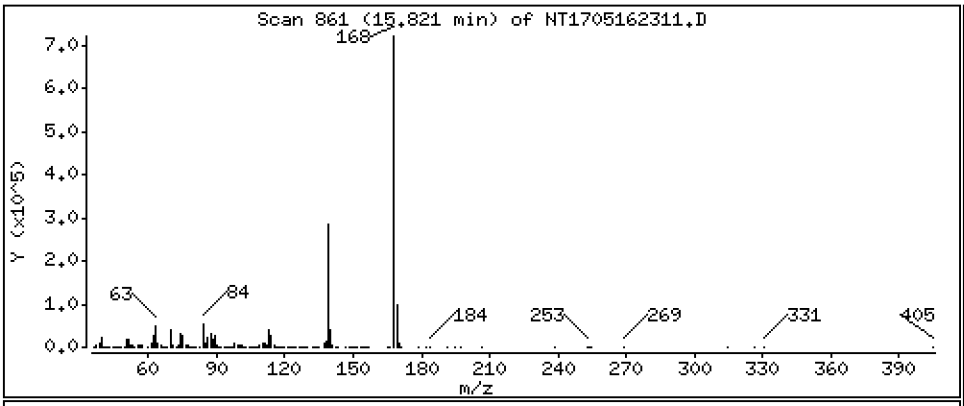
Operator: JGR

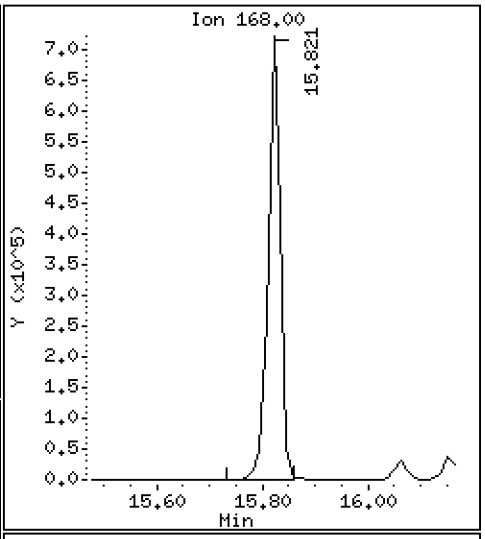
Column phase: ZB-5msi

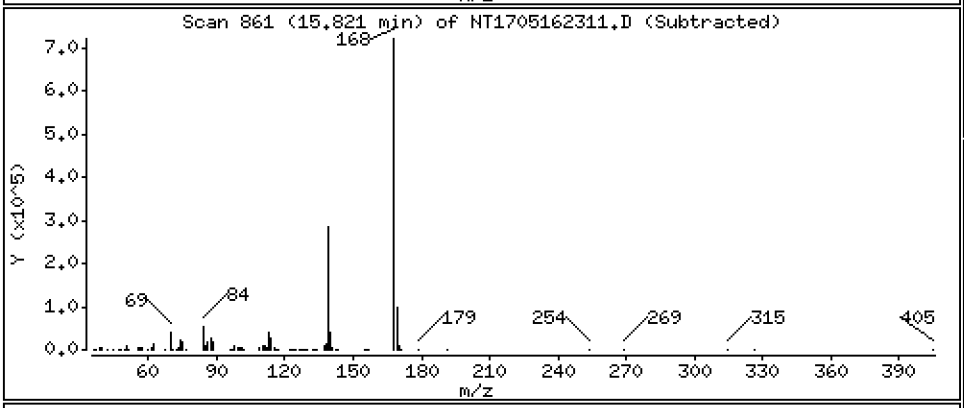
Column diameter: 0.25

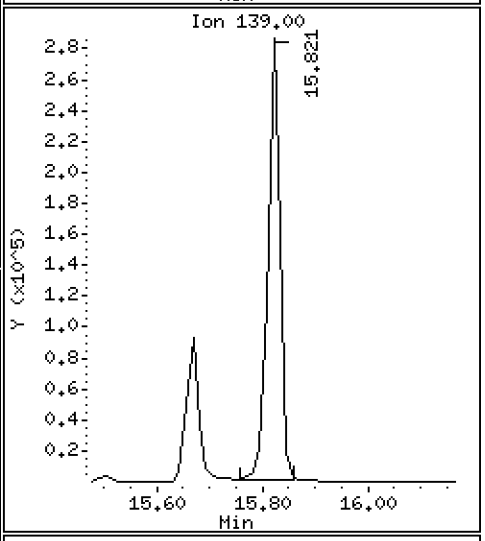
46 Dibenzofuran

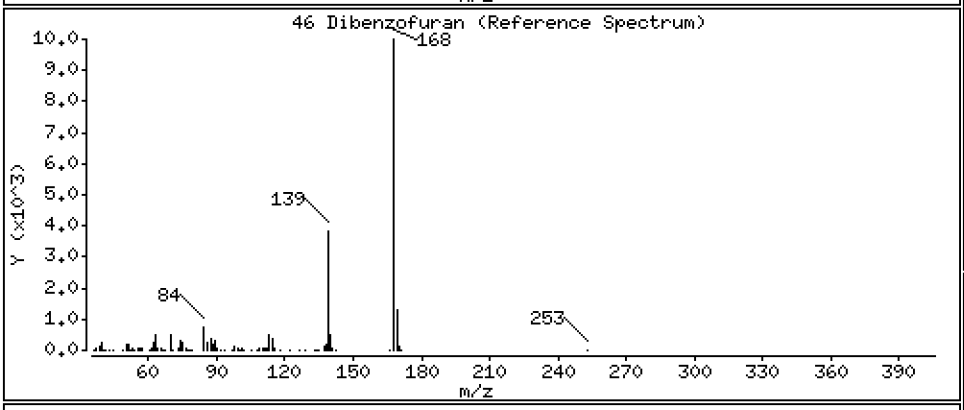
Concentration: 5.163 ug/mL

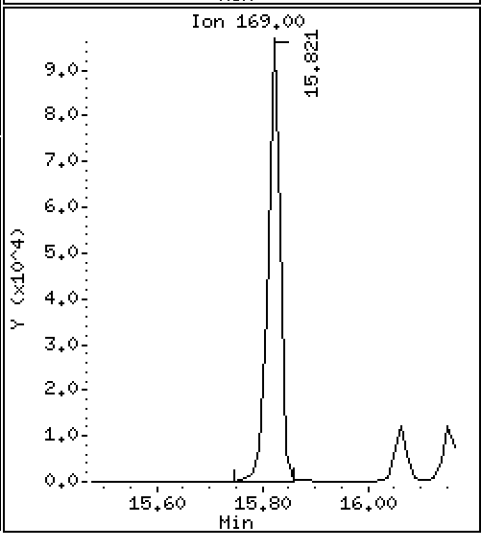


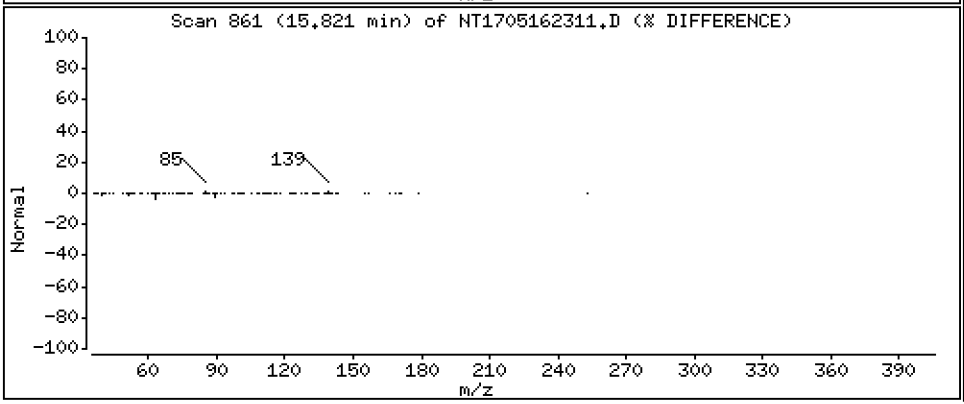












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

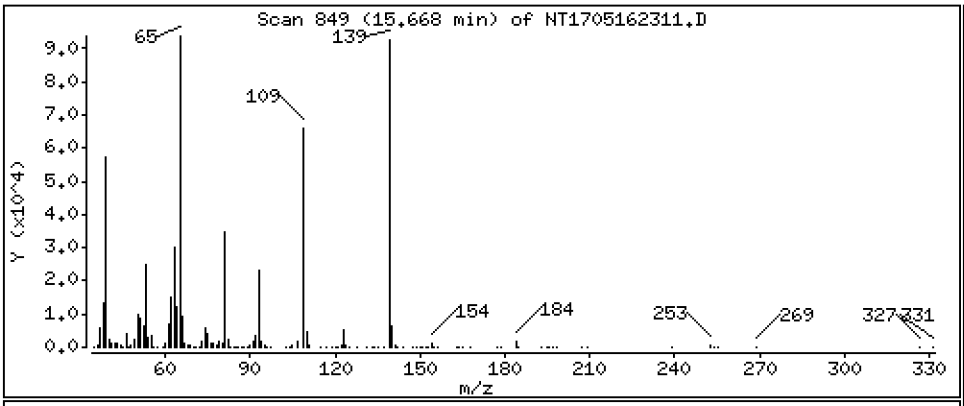
Operator: JGR

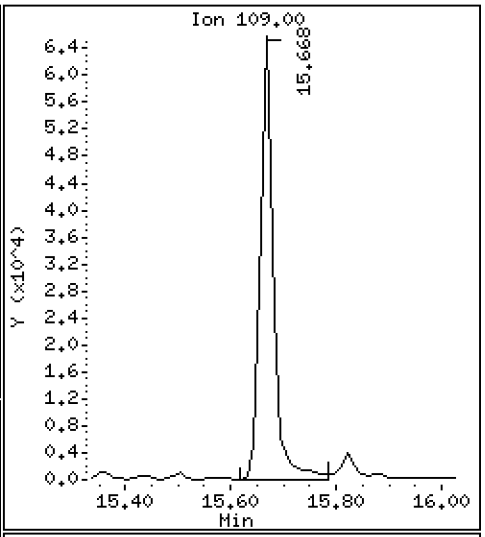
Column phase: ZB-5msi

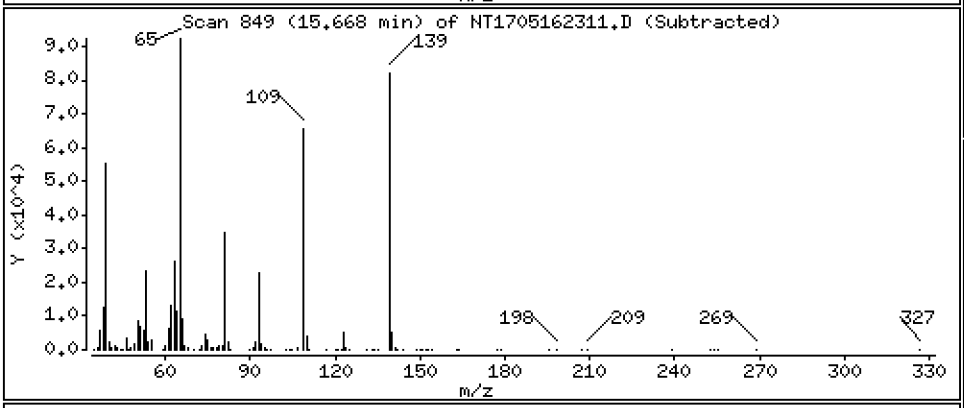
Column diameter: 0.25

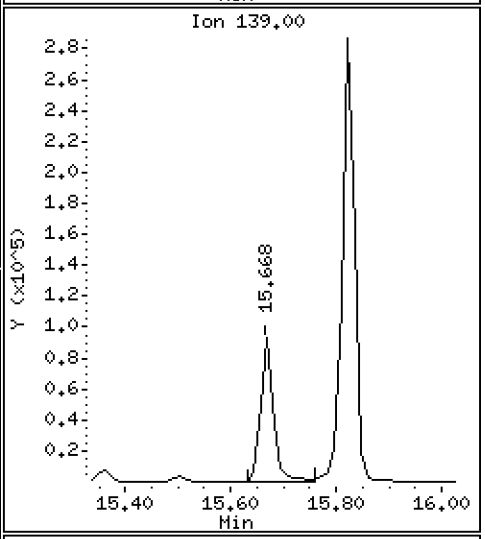
47 4-Nitrophenol

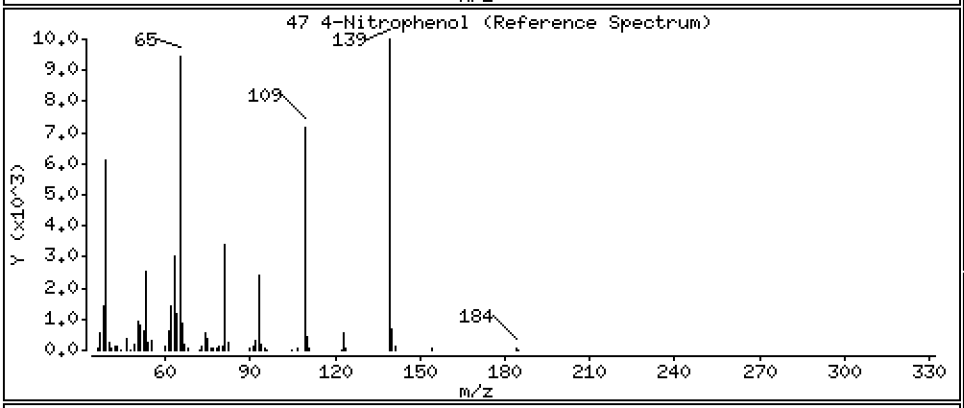
Concentration: 4.504 ug/mL

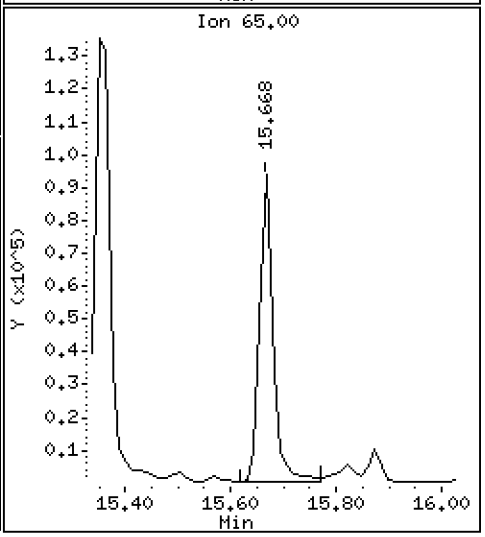


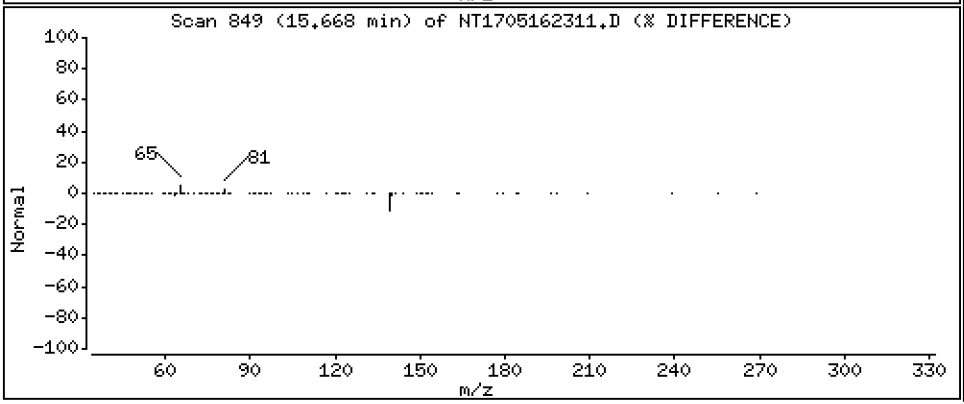












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

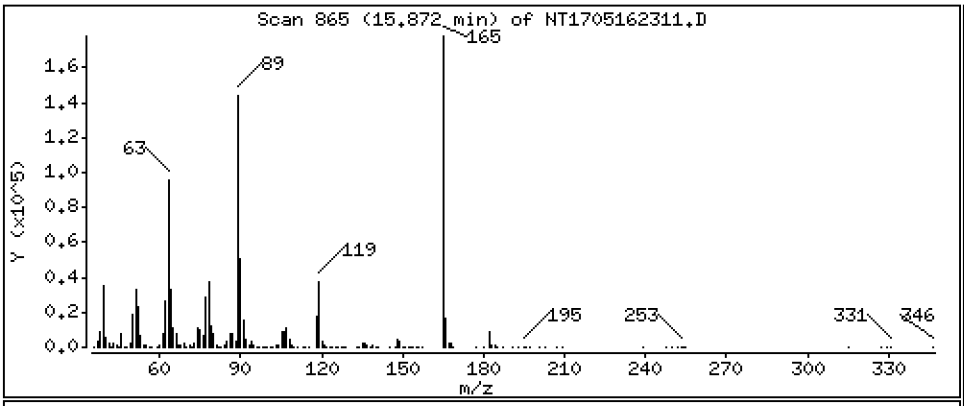
Operator: JGR

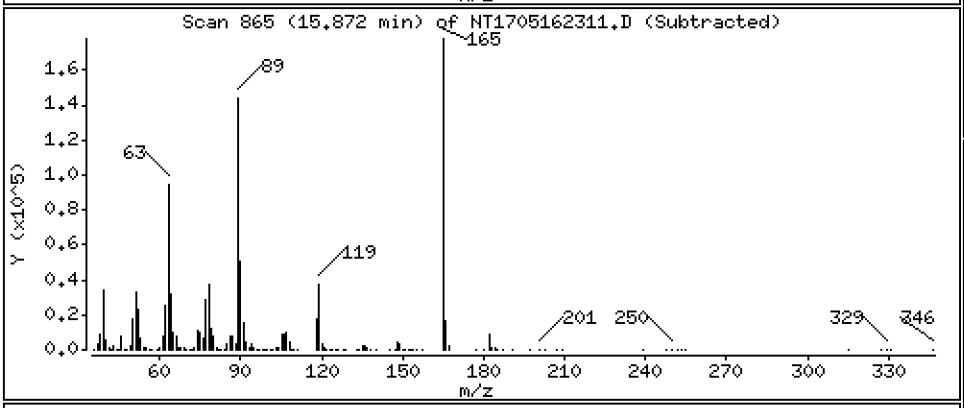
Column phase: ZB-5msi

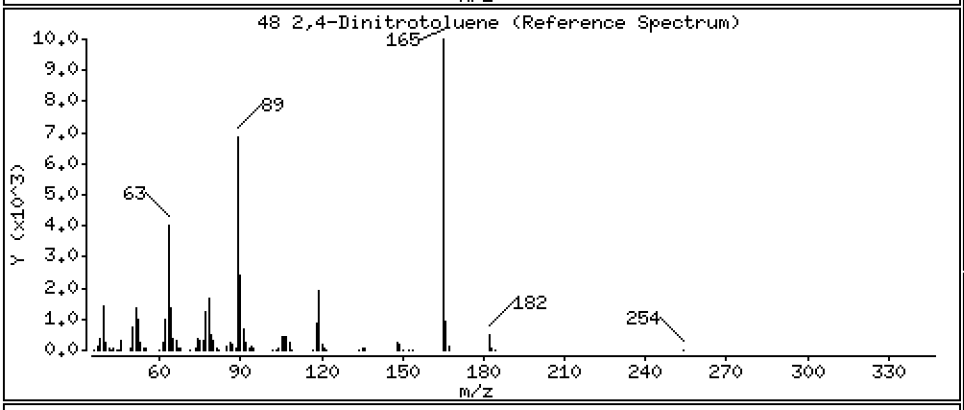
Column diameter: 0.25

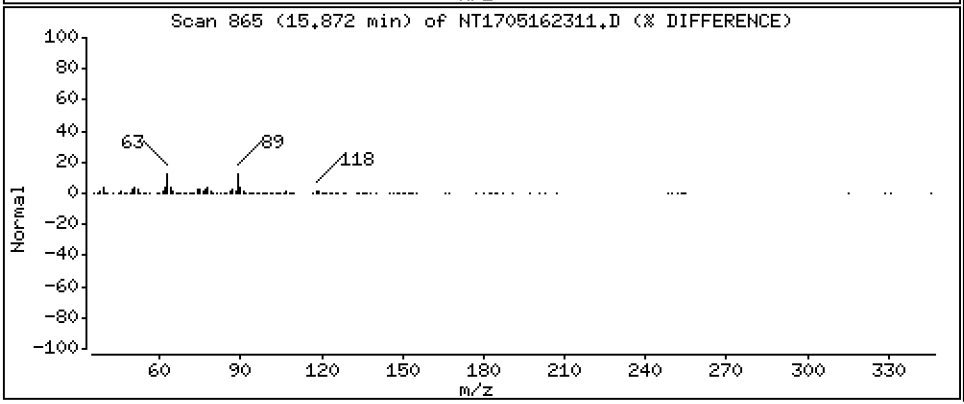
48 2,4-Dinitrotoluene

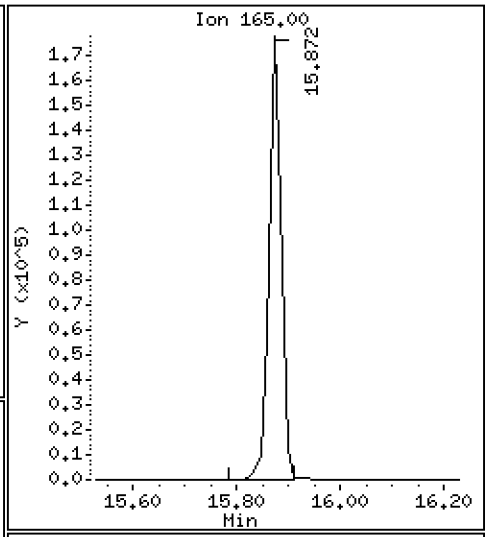
Concentration: 5.269 ug/mL

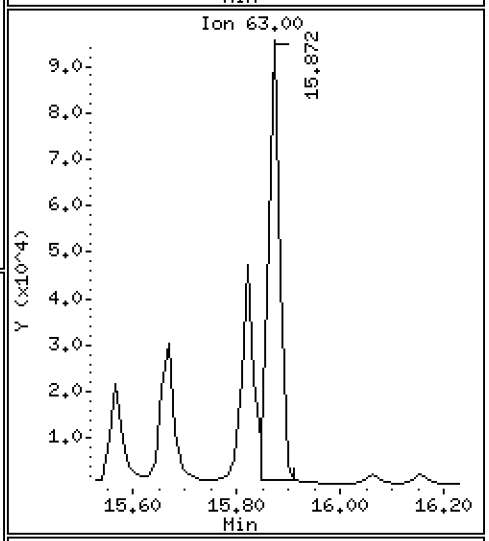


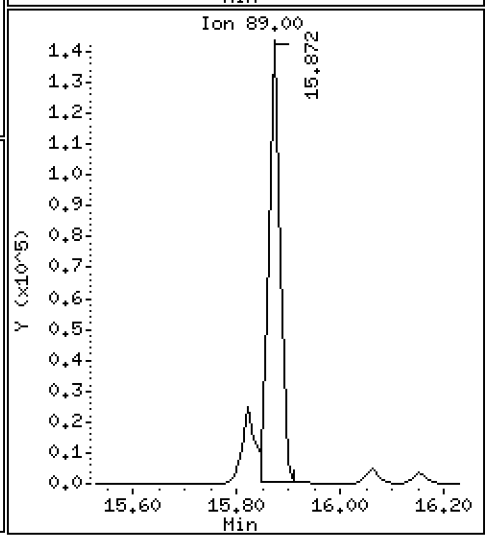












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

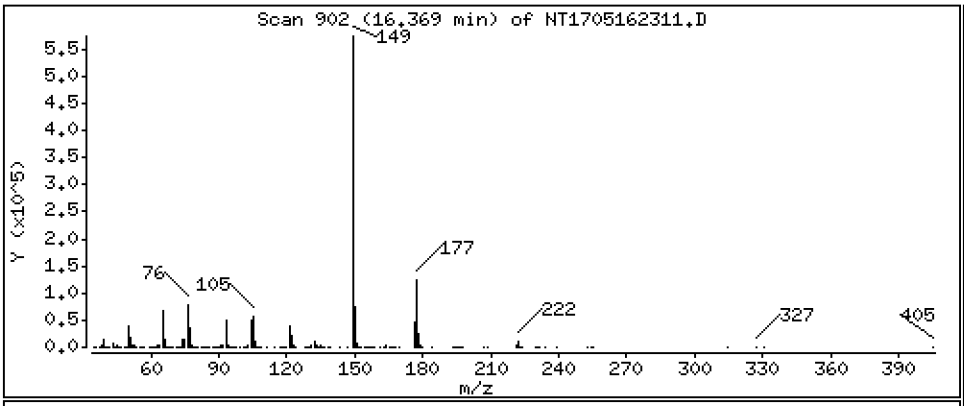
Operator: JGR

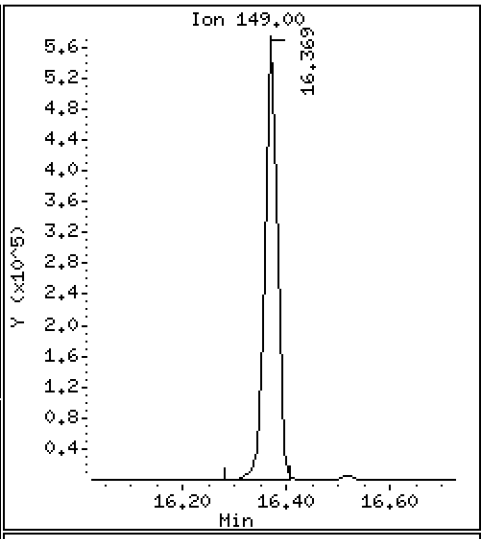
Column phase: ZB-5msi

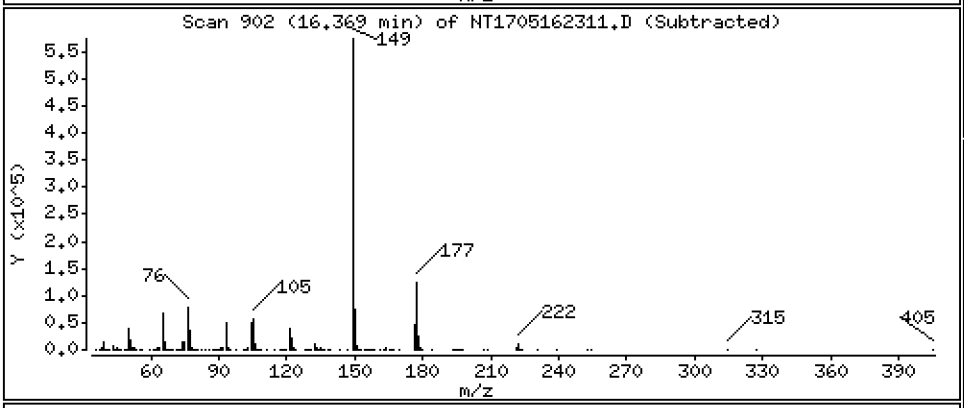
Column diameter: 0.25

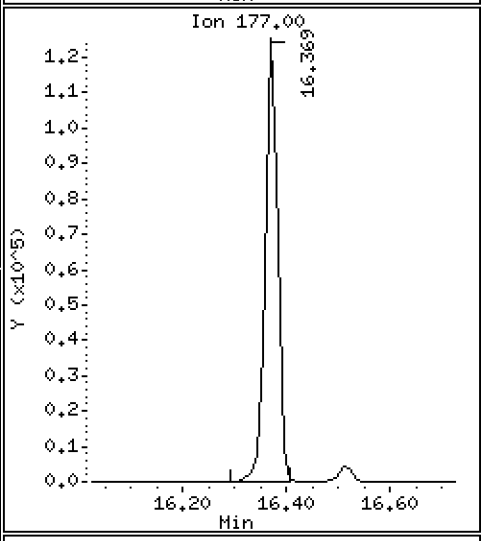
50 Diethylphthalate

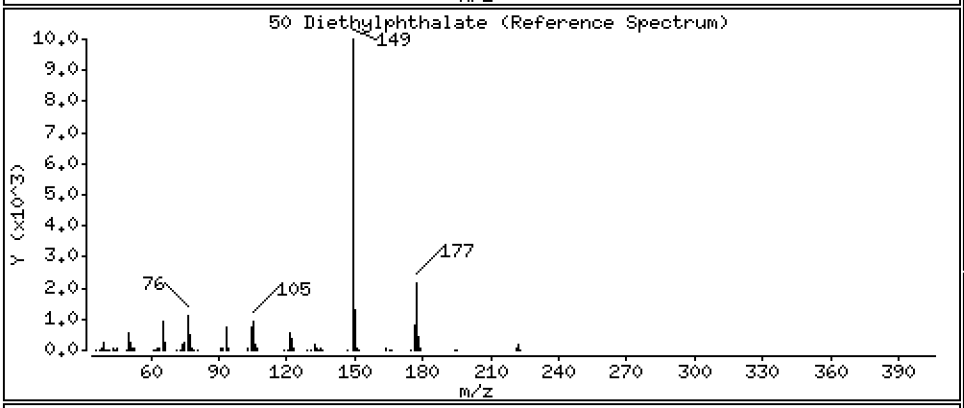
Concentration: 5.494 ug/mL

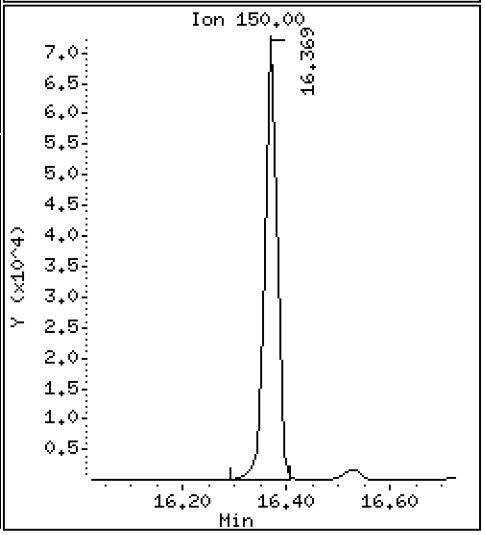


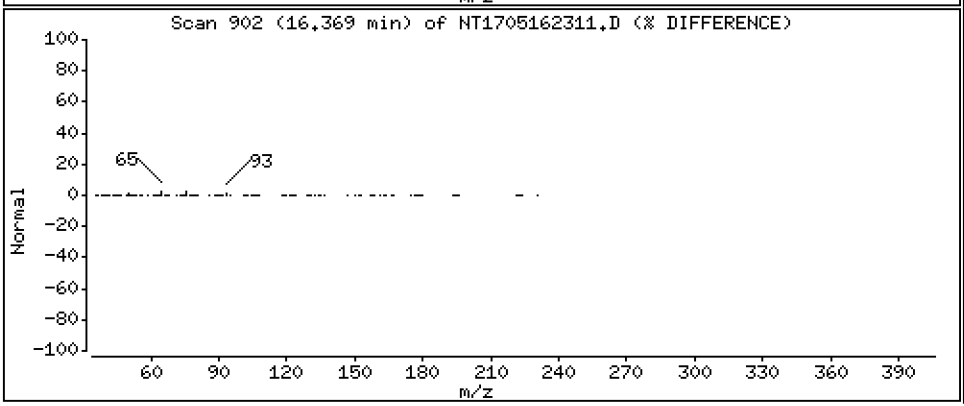












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

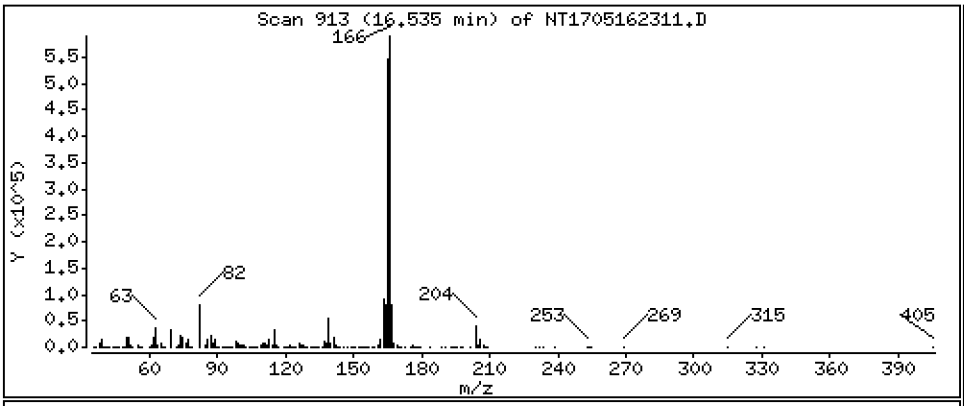
Operator: JGR

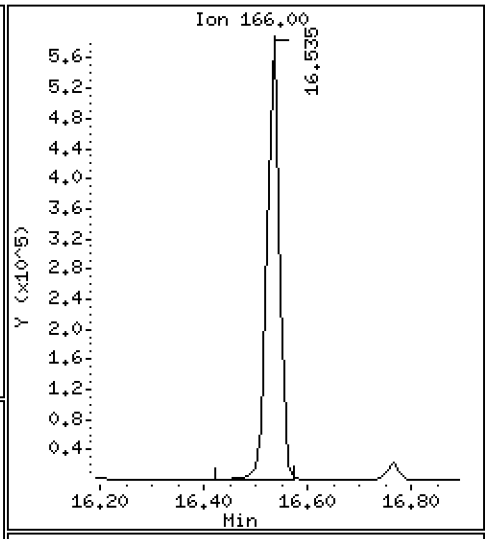
Column phase: ZB-5msi

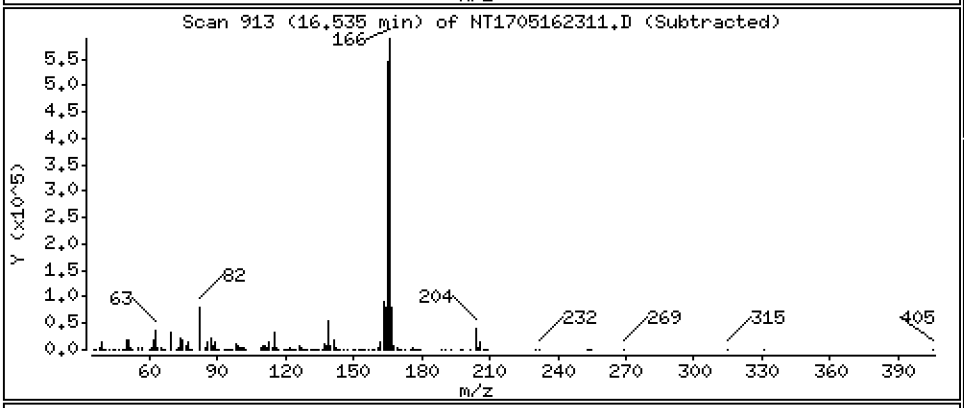
Column diameter: 0.25

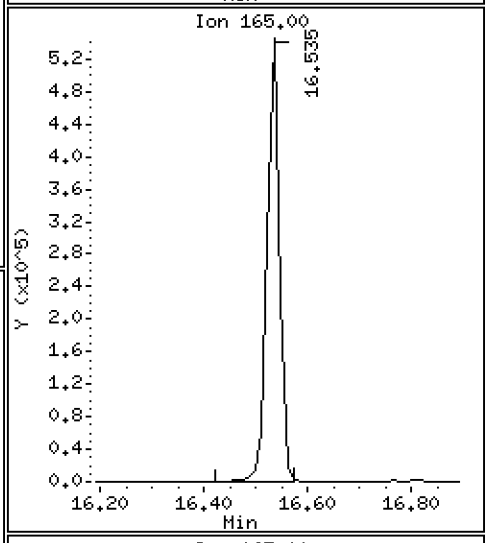
49 Fluorene

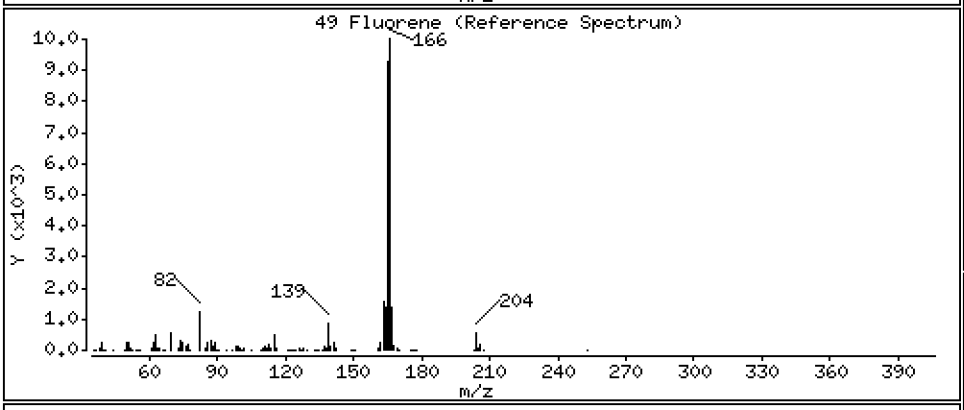
Concentration: 5.398 ug/mL

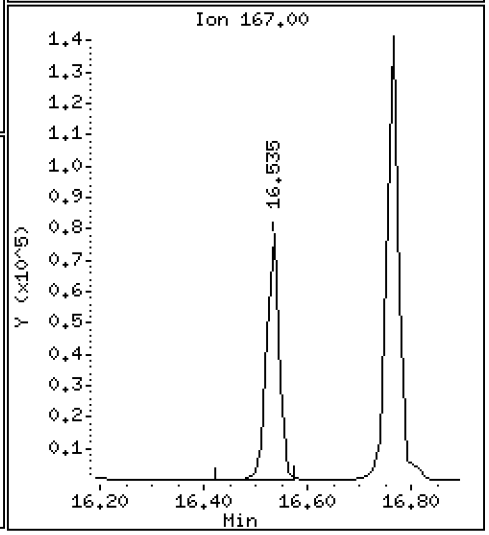


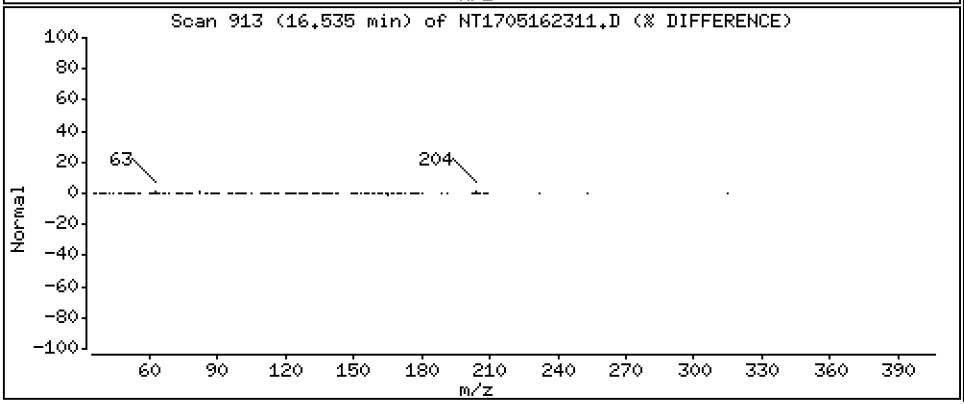












Date : 17-MAY-2023 00:29

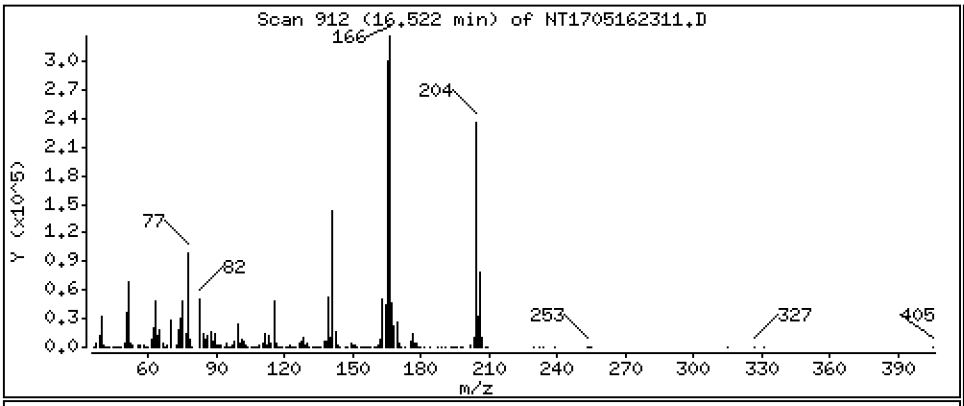
Client ID: Instrument: nt17.i

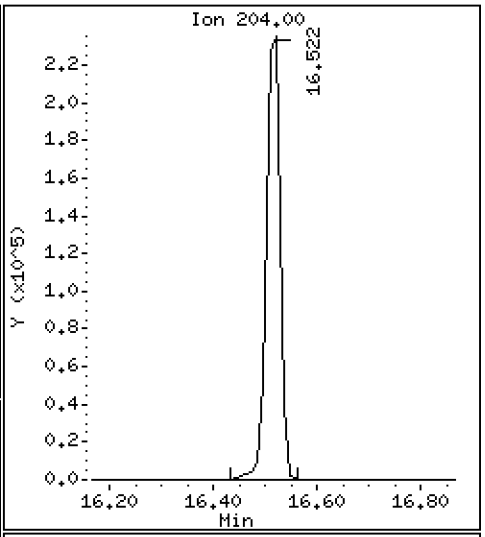
Sample Info: SLE0338-SCV1

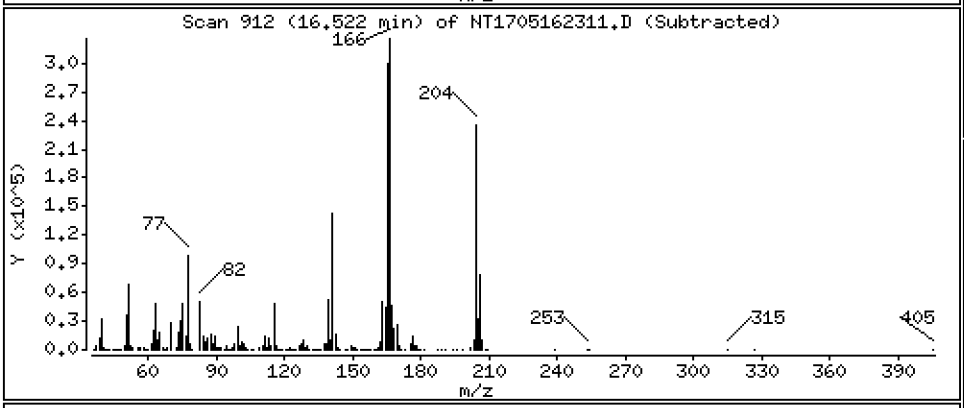
Operator: JGR

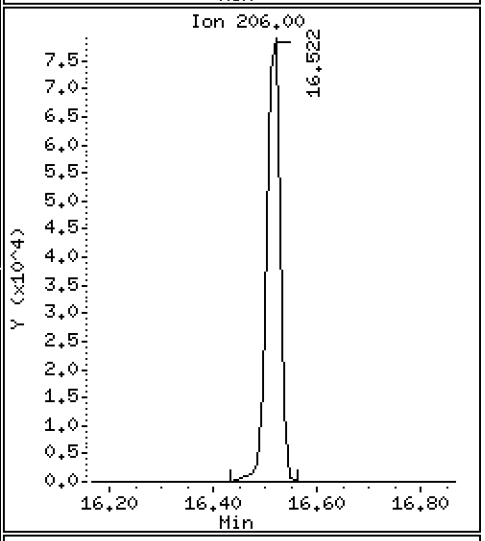
Column phase: ZB-5msi Column diameter: 0.25

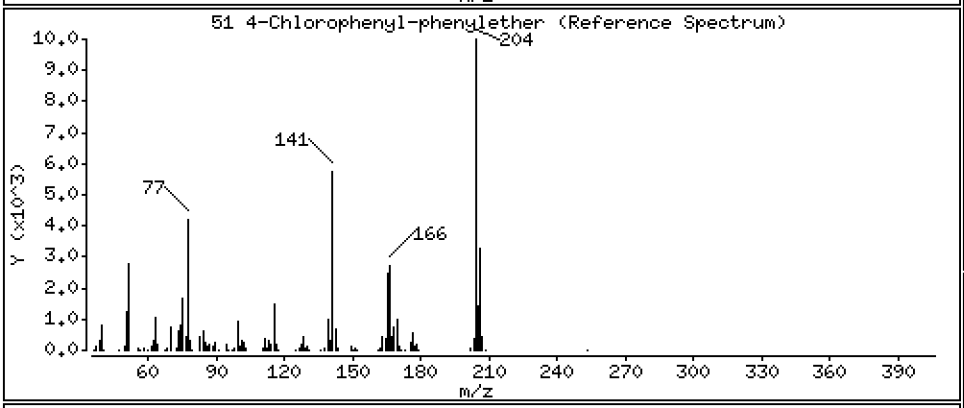
51 4-Chlorophenyl-phenylether Concentration: 5.462 ug/mL

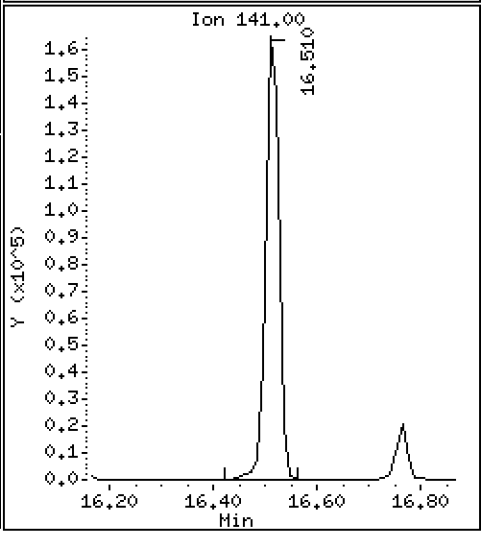


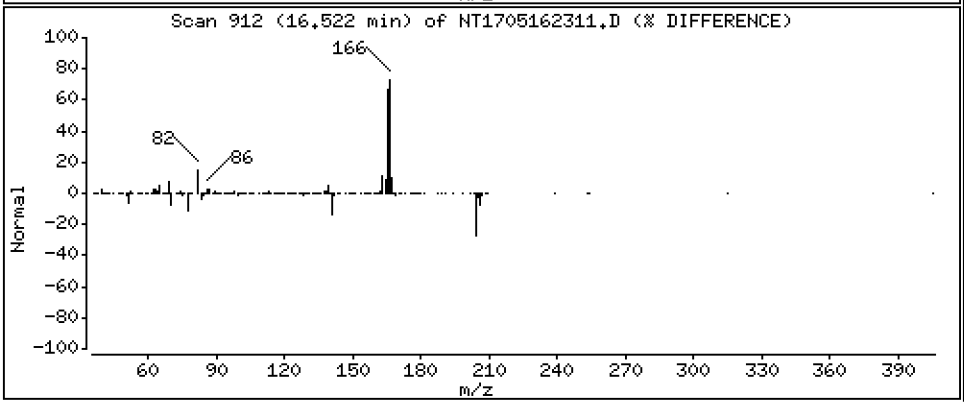












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

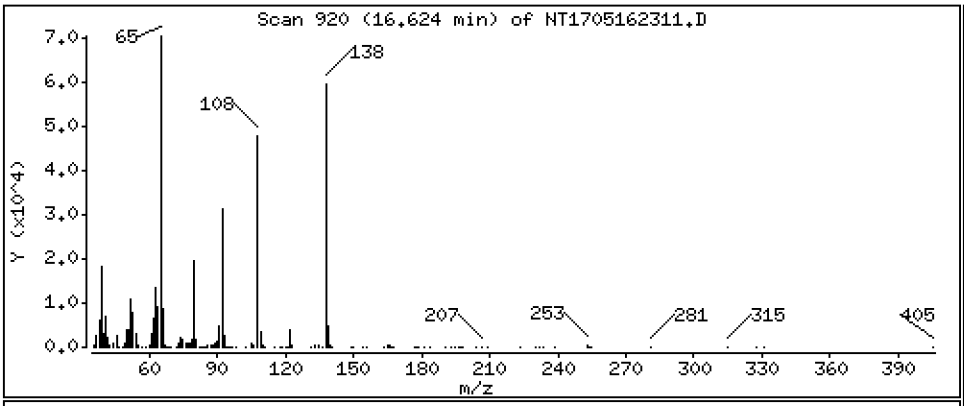
Operator: JGR

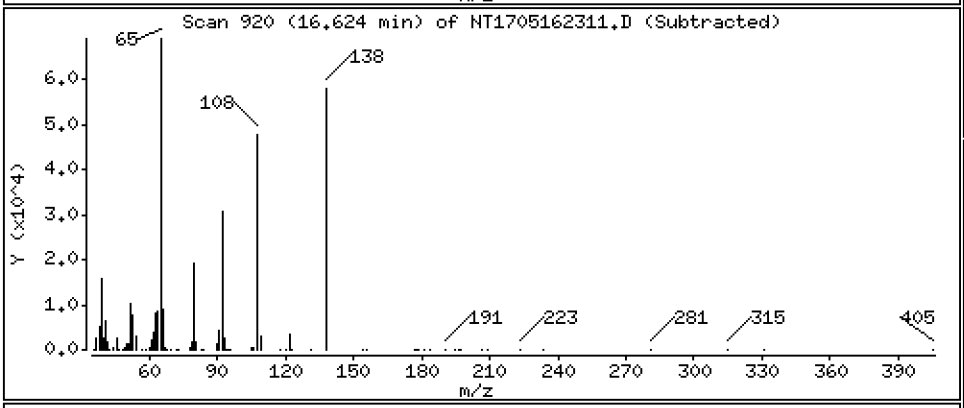
Column phase: ZB-5msi

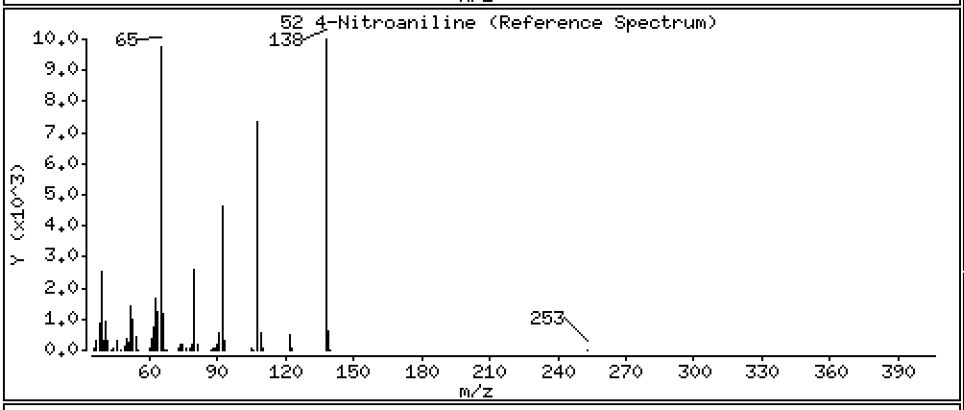
Column diameter: 0.25

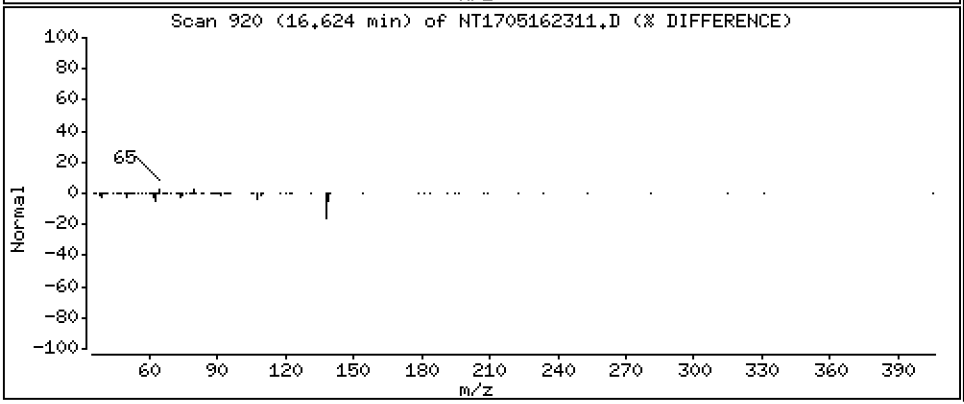
52 4-Nitroaniline

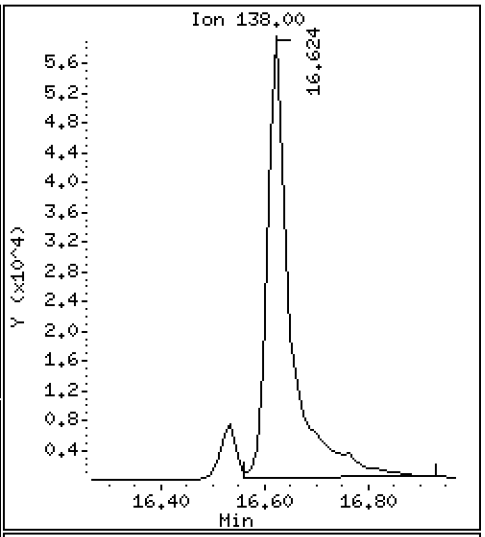
Concentration: 5.108 ug/mL

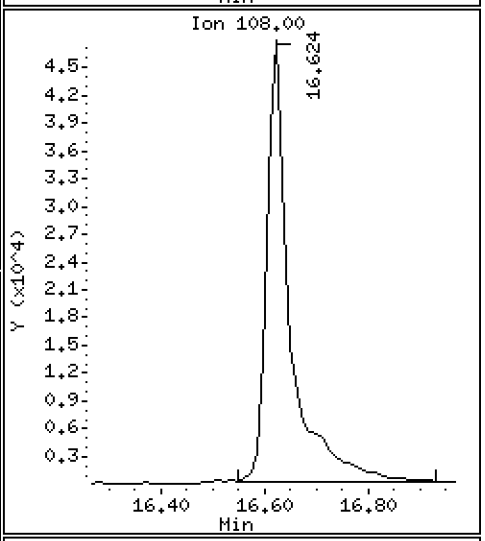


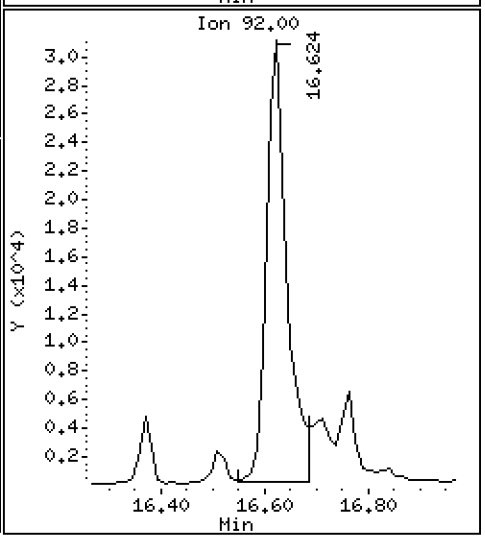












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

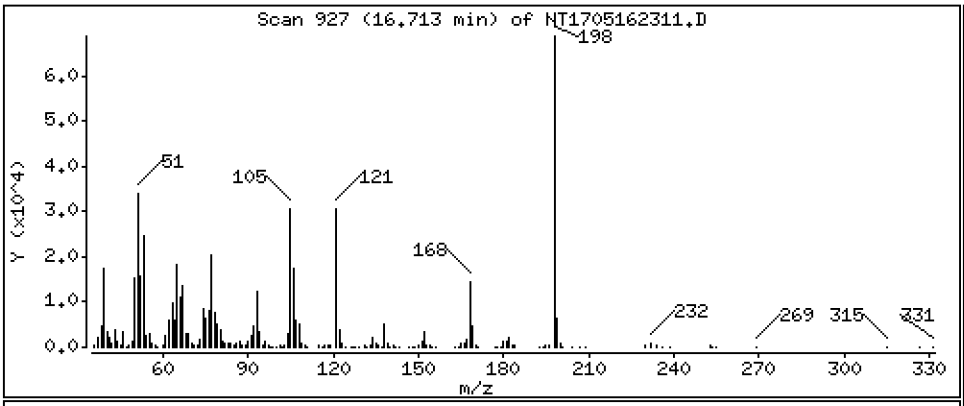
Operator: JGR

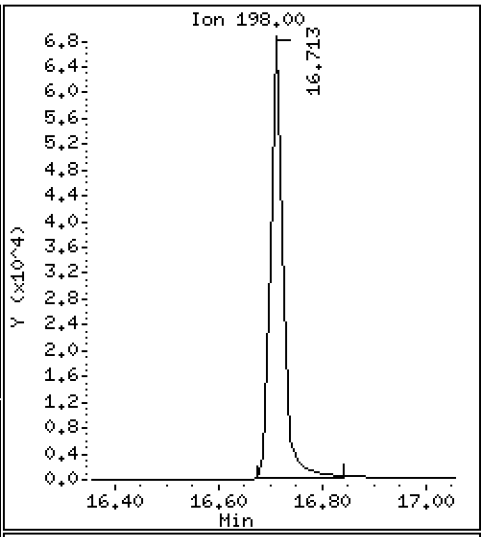
Column phase: ZB-5msi

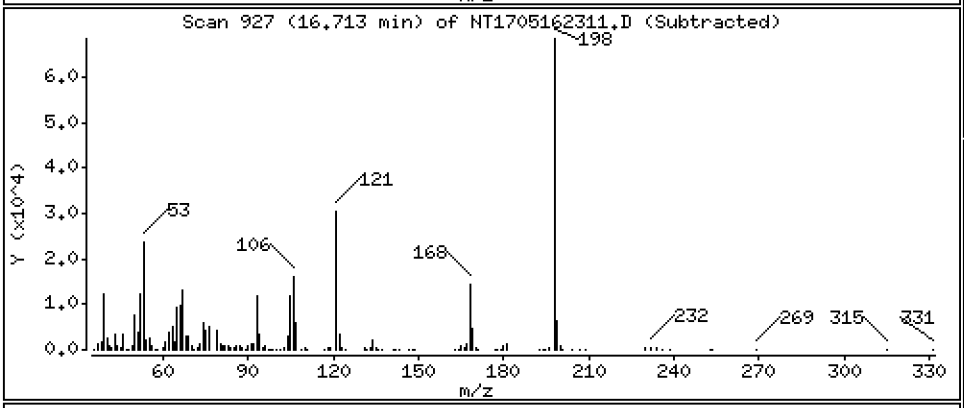
Column diameter: 0.25

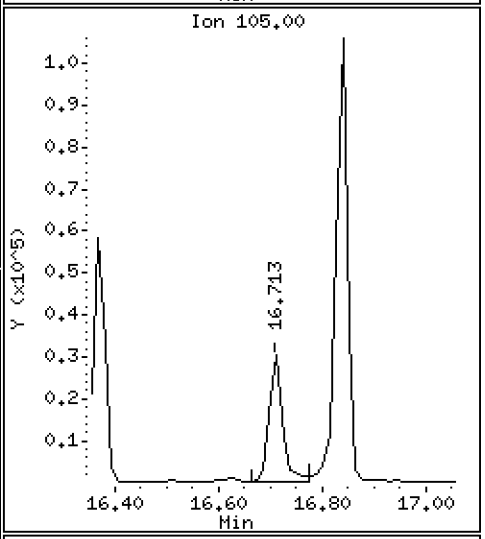
53 4,6-Dinitro-2-methylphenol

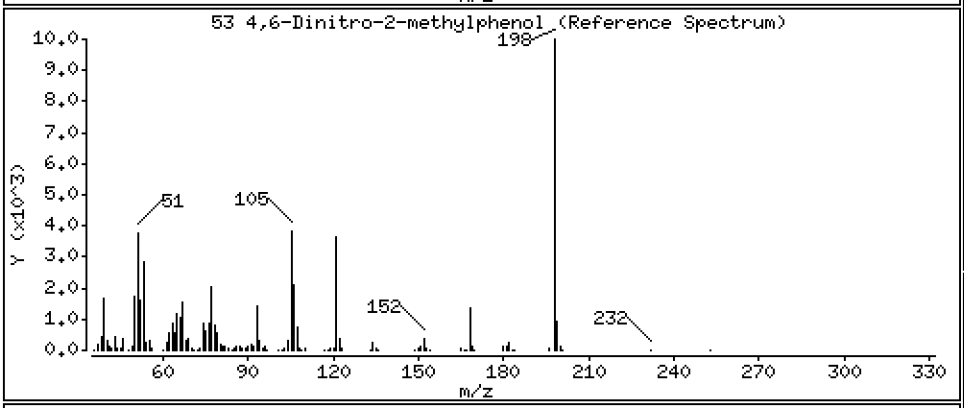
Concentration: 3.355 ug/mL

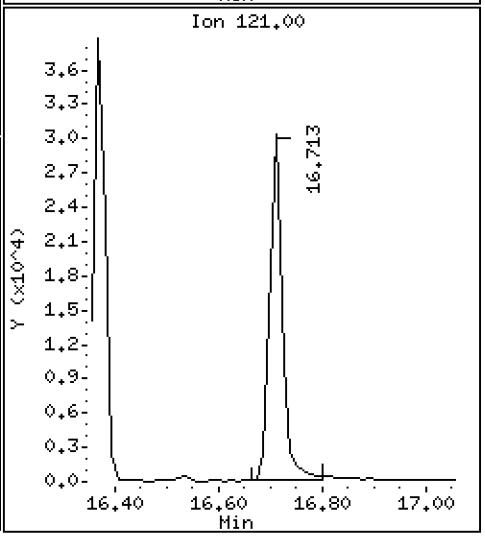


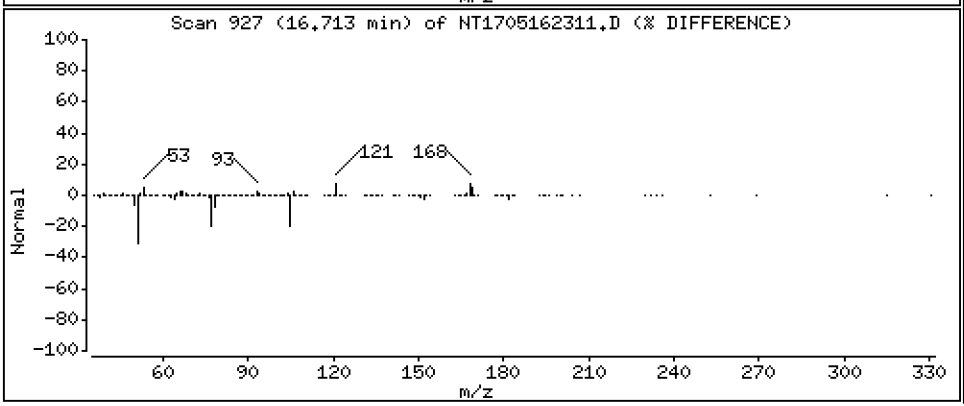












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

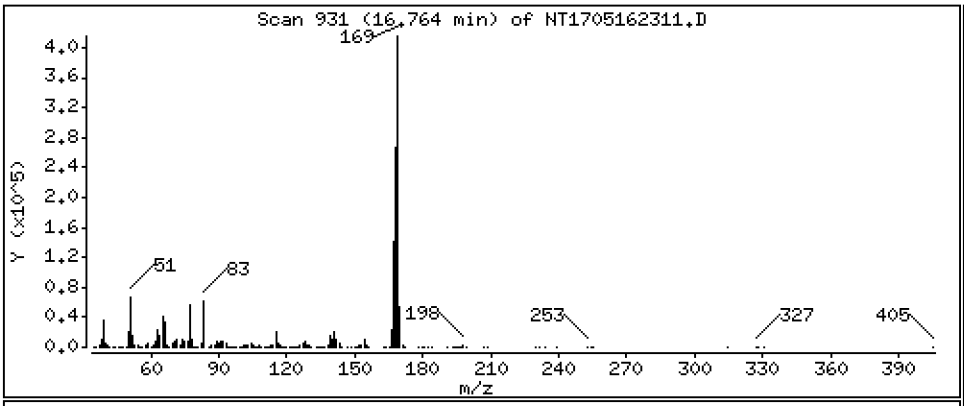
Operator: JGR

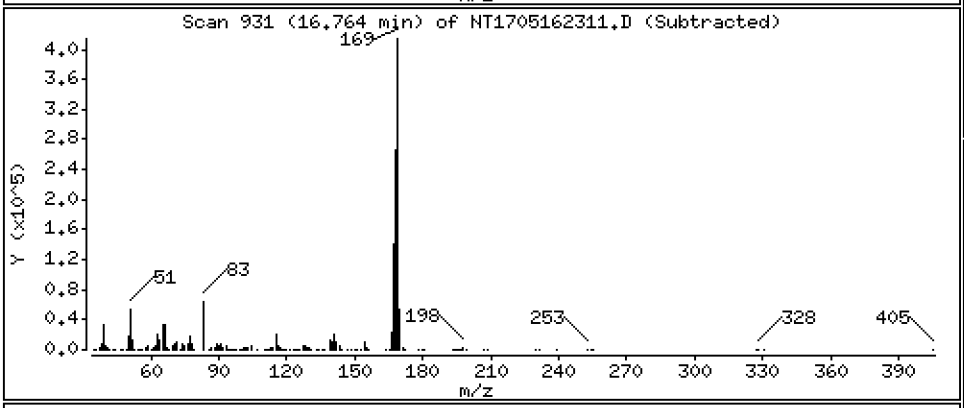
Column phase: ZB-5msi

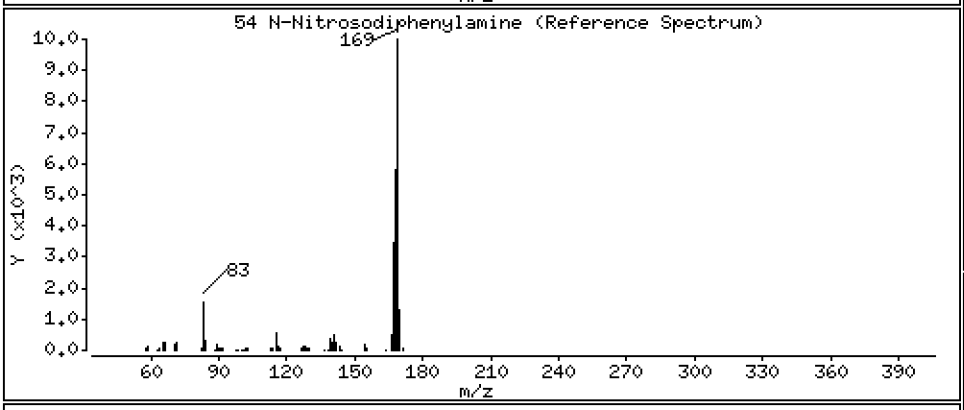
Column diameter: 0.25

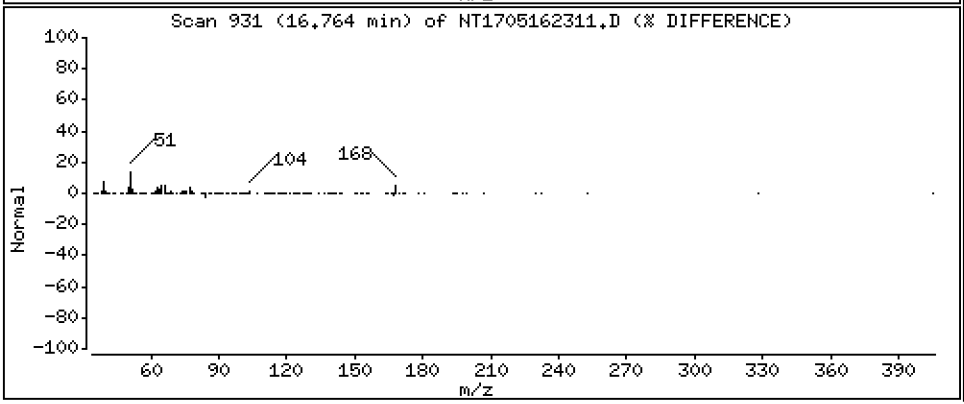
54 N-Nitrosodiphenylamine

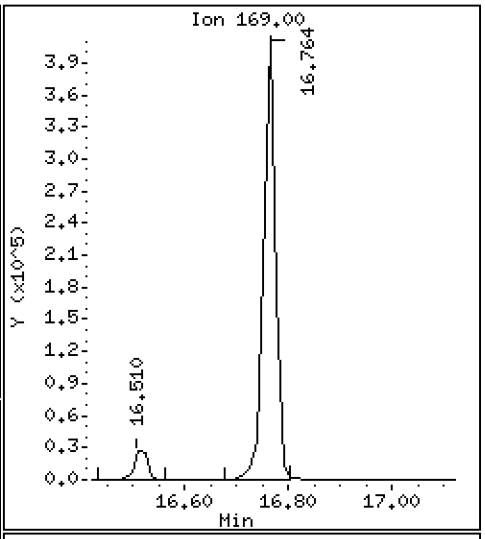
Concentration: 5.470 ug/mL

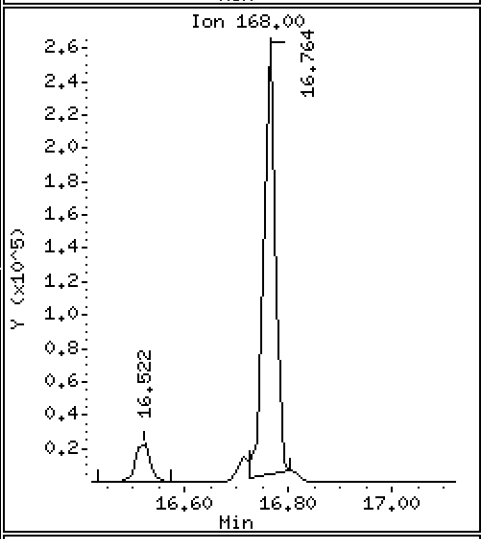


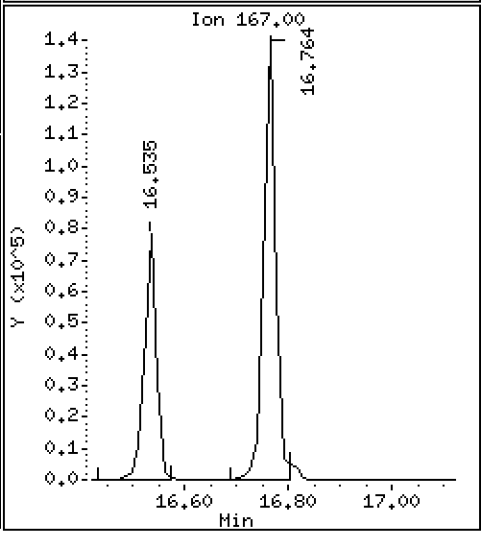












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

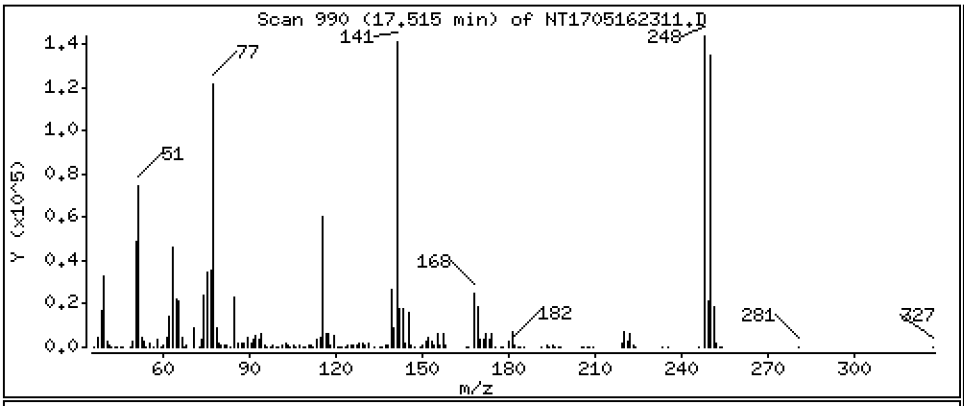
Operator: JGR

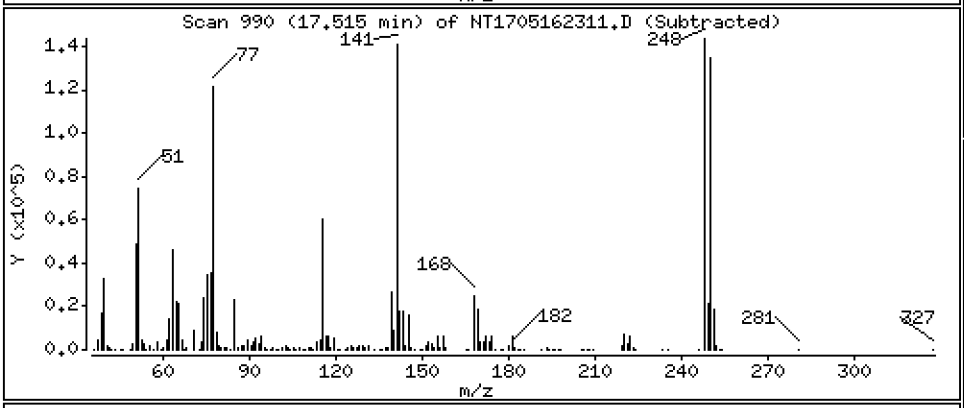
Column phase: ZB-5msi

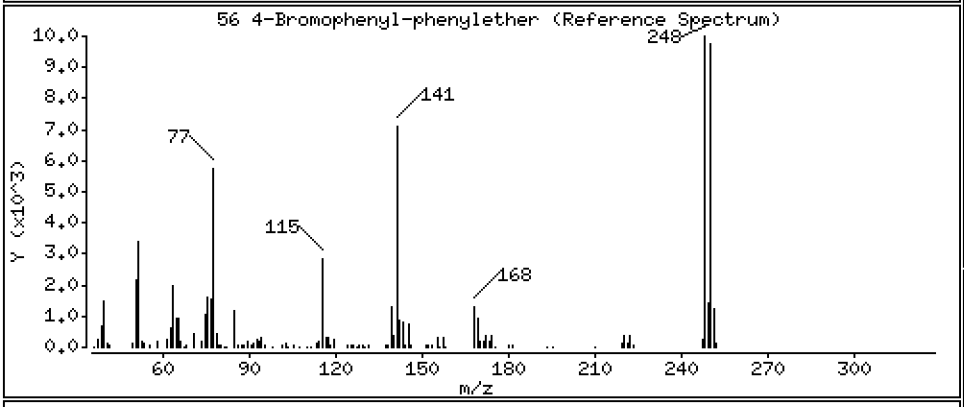
Column diameter: 0.25

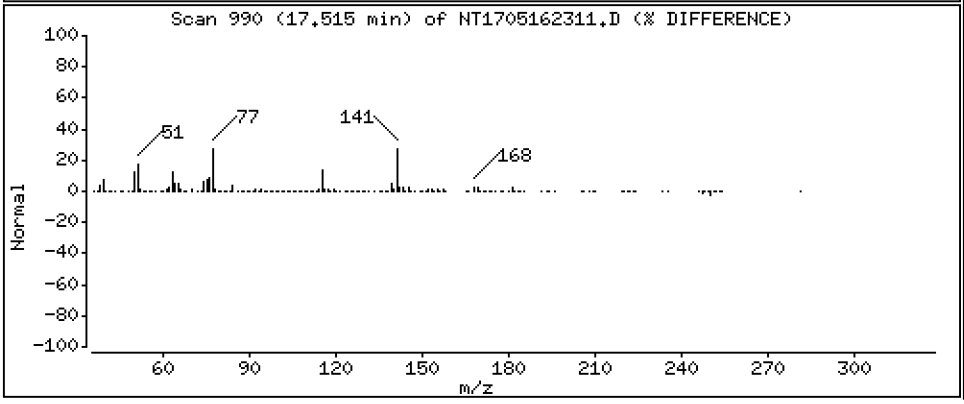
56 4-Bromophenyl-phenylether

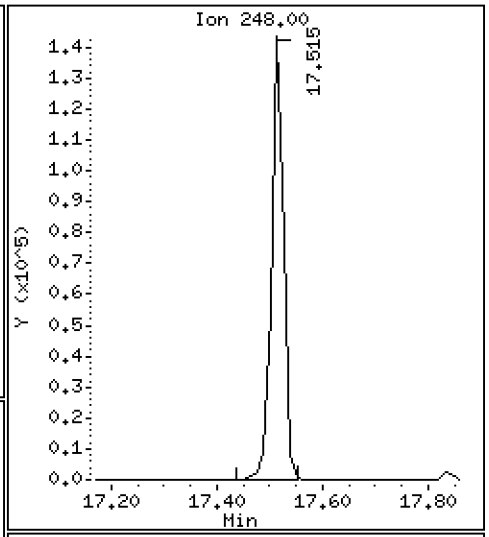
Concentration: 5.420 ug/mL

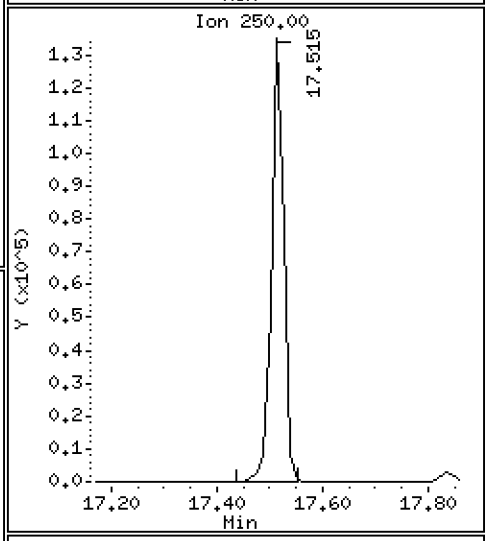


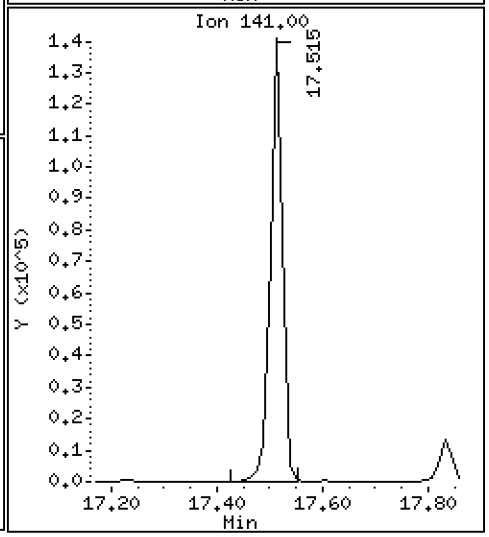












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

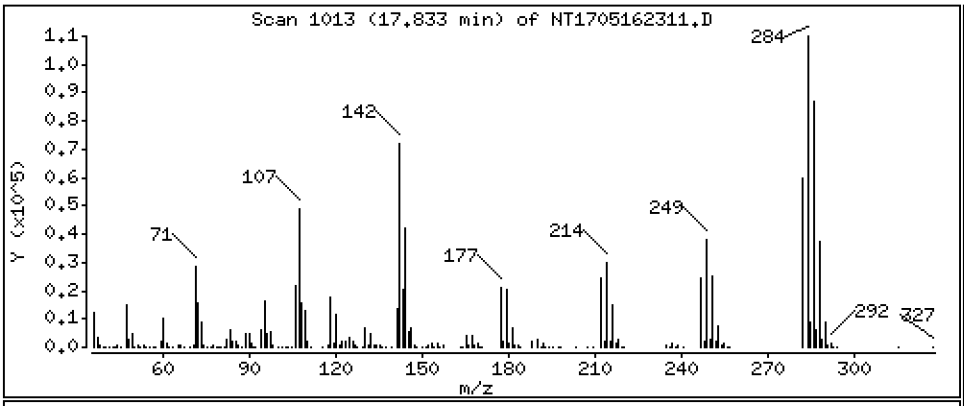
Operator: JGR

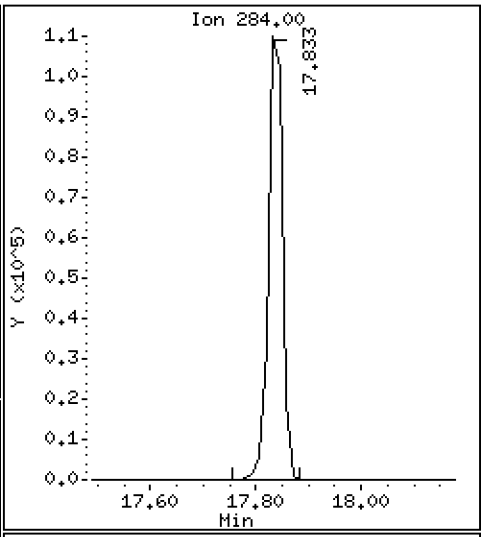
Column phase: ZB-5msi

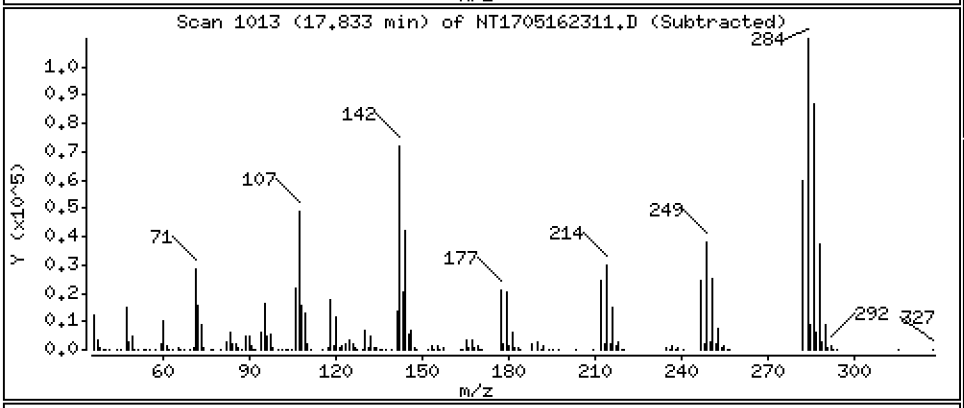
Column diameter: 0.25

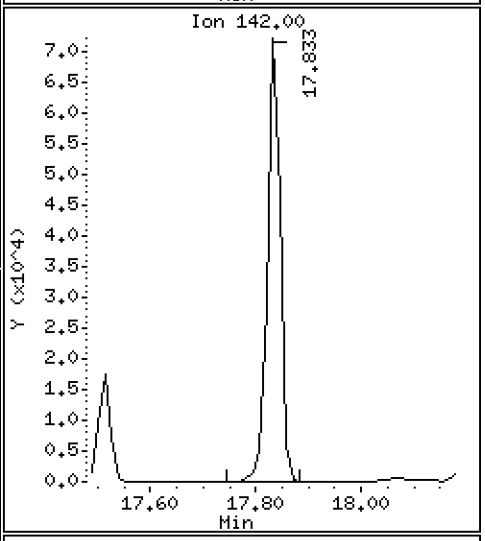
57 Hexachlorobenzene

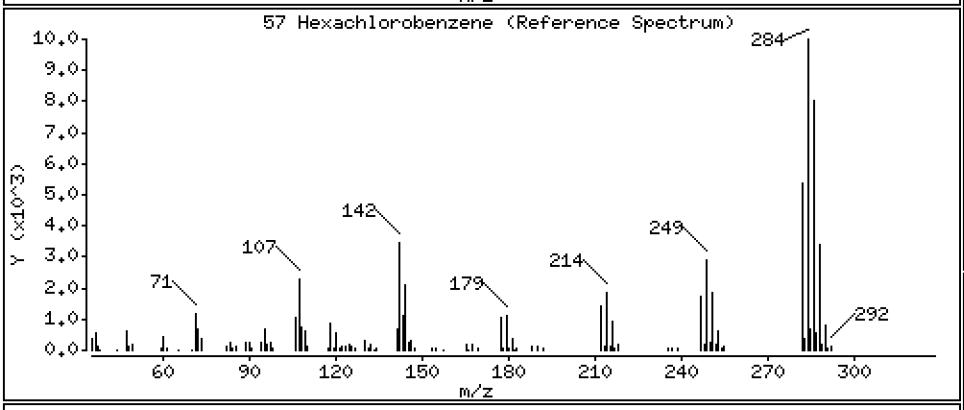
Concentration: 4.913 ug/mL

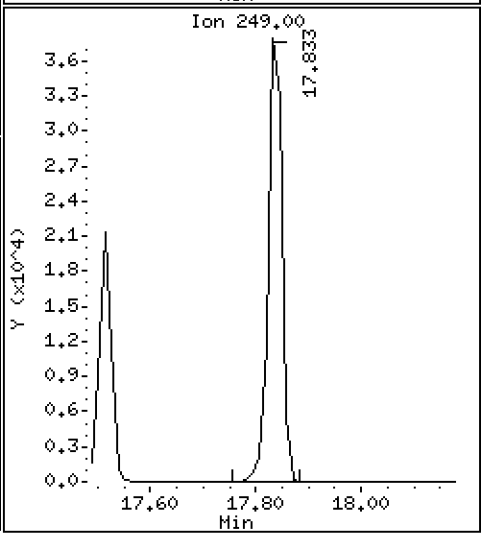


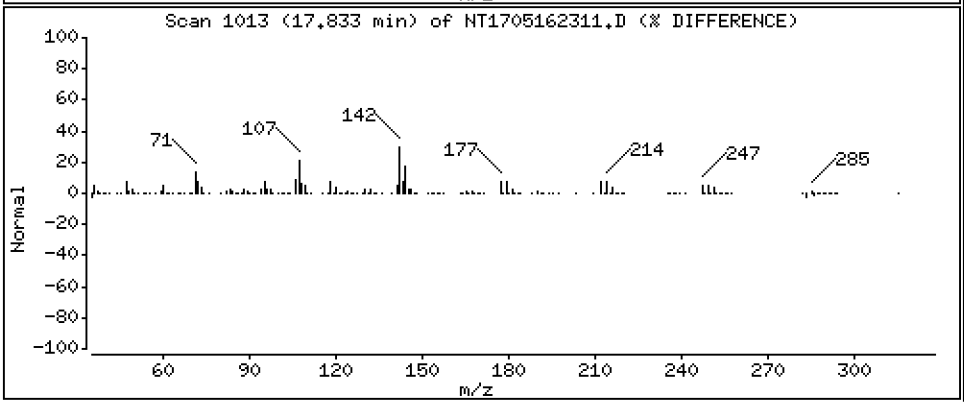












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

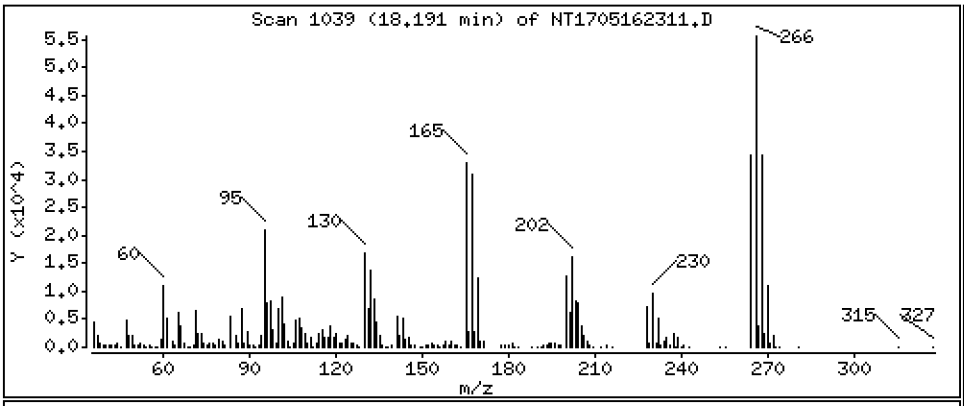
Operator: JGR

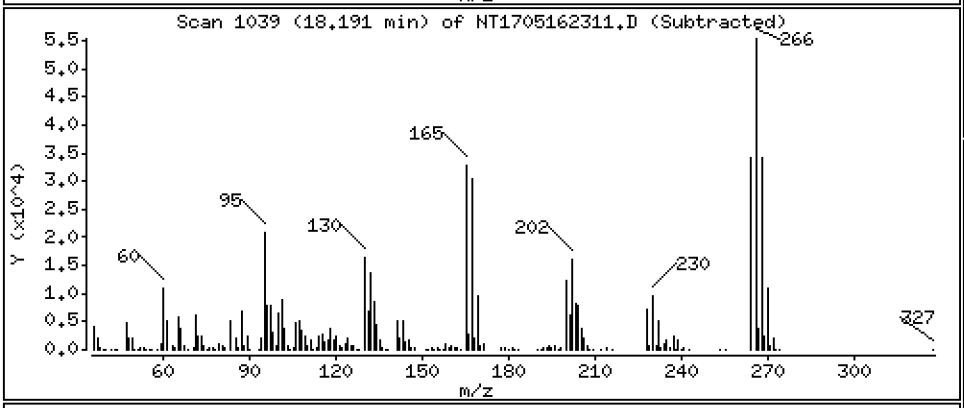
Column phase: ZB-5msi

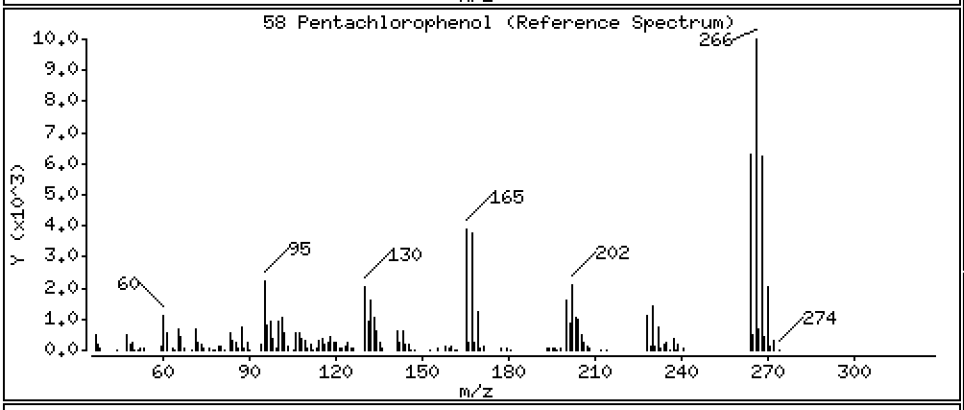
Column diameter: 0.25

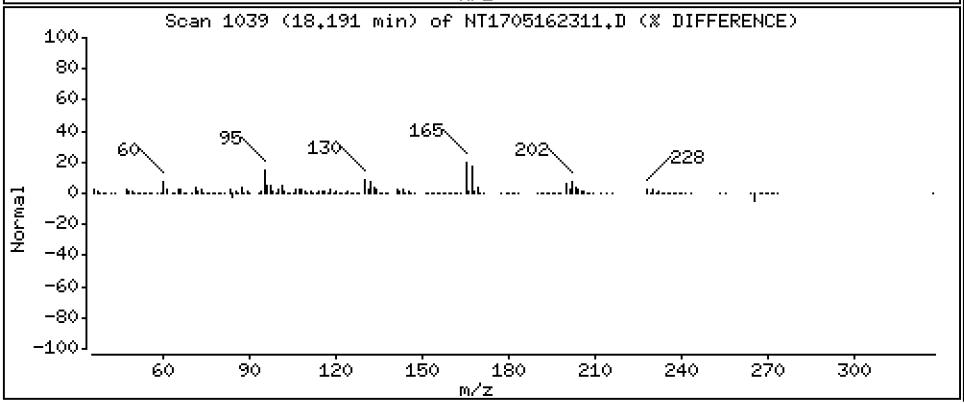
58 Pentachlorophenol

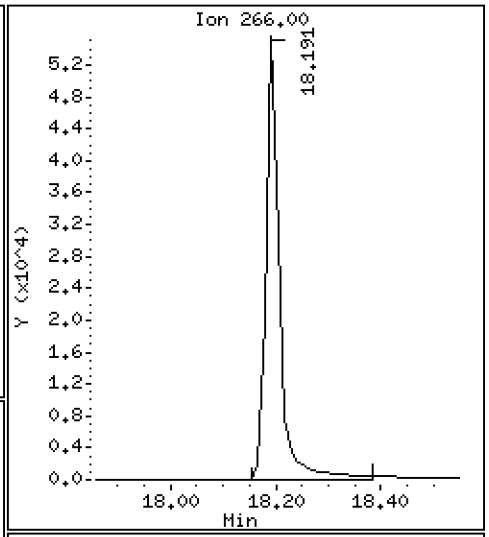
Concentration: 3.943 ug/mL

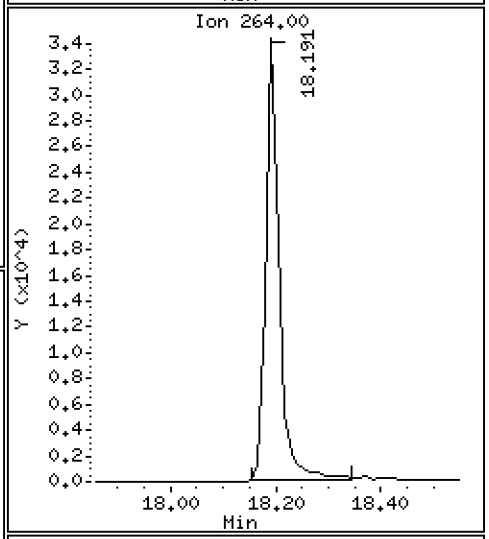


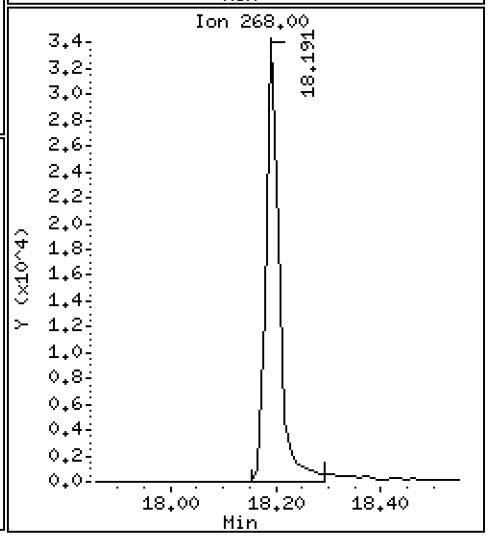












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

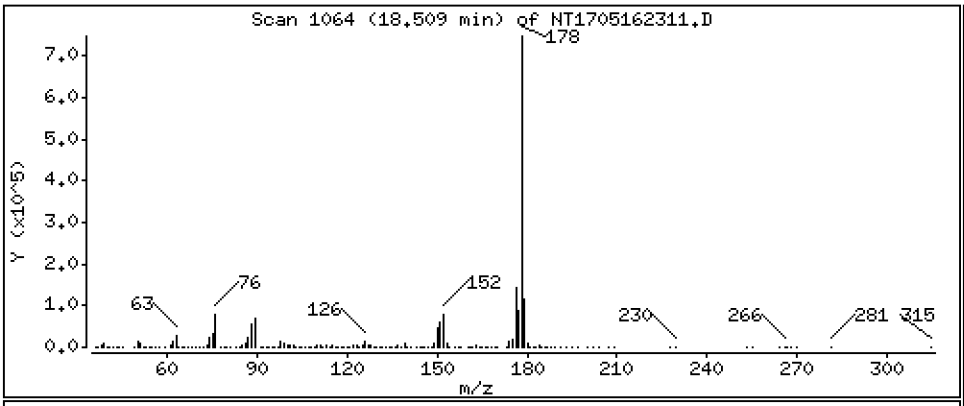
Operator: JGR

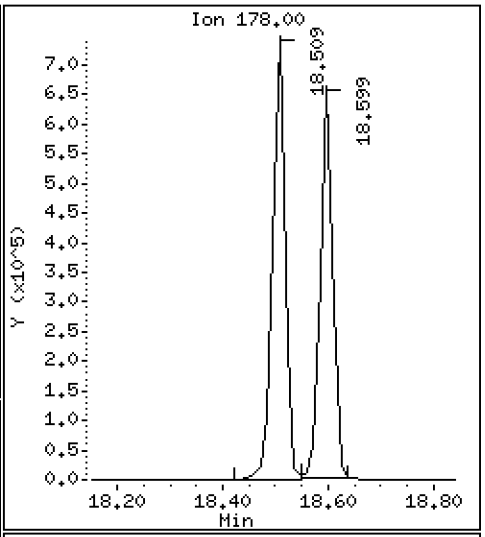
Column phase: ZB-5msi

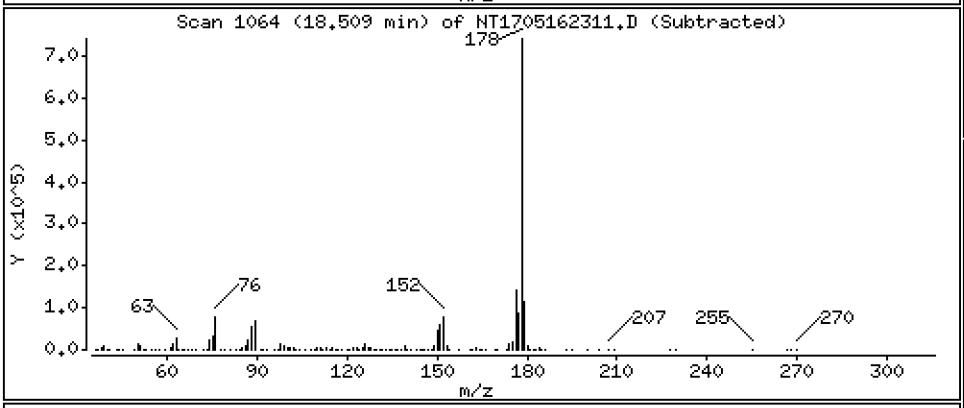
Column diameter: 0.25

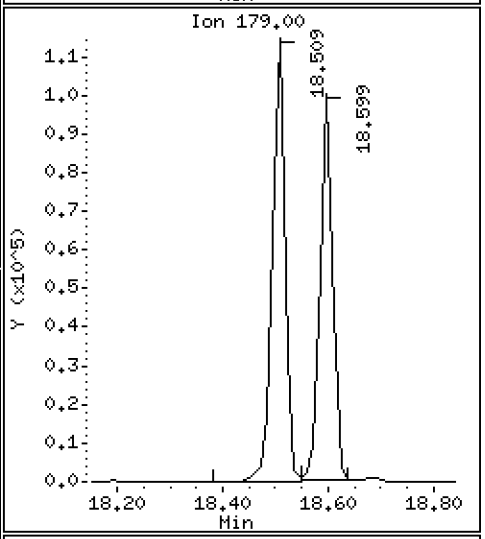
60 Phenanthrene

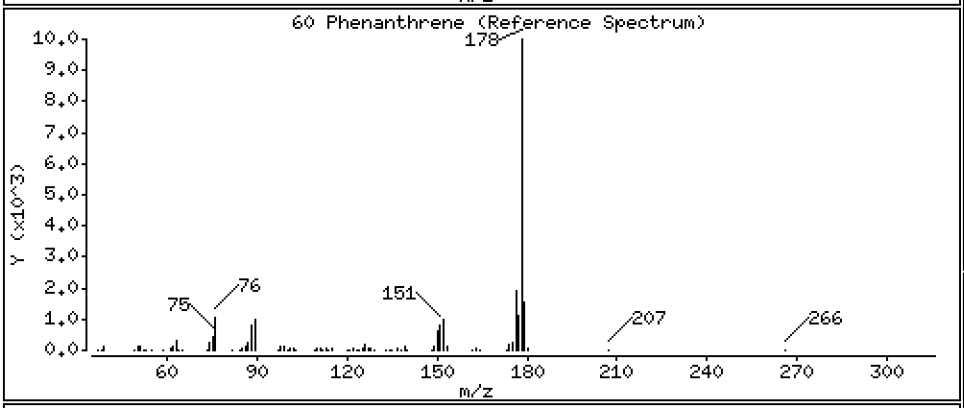
Concentration: 5.039 ug/mL

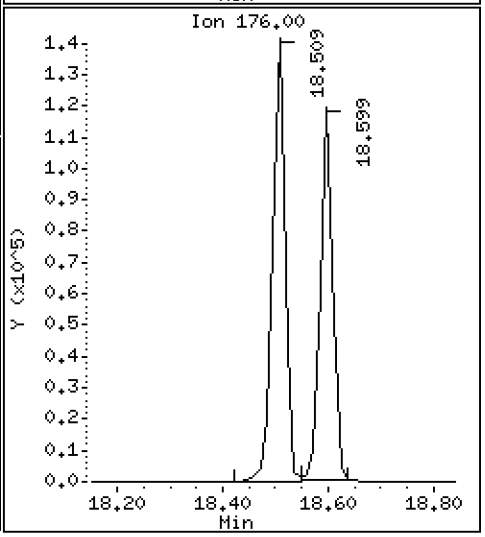


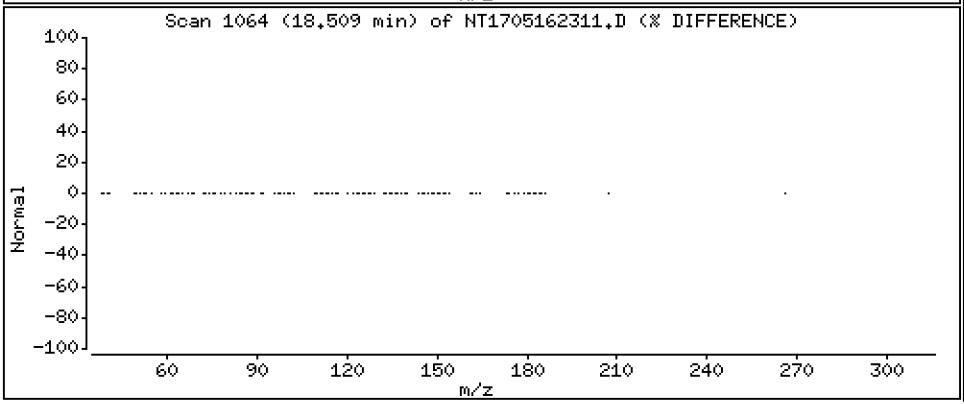












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

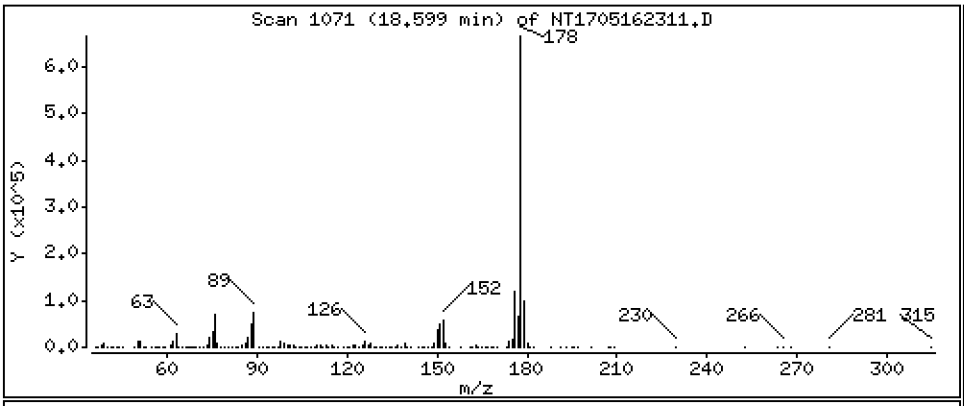
Operator: JGR

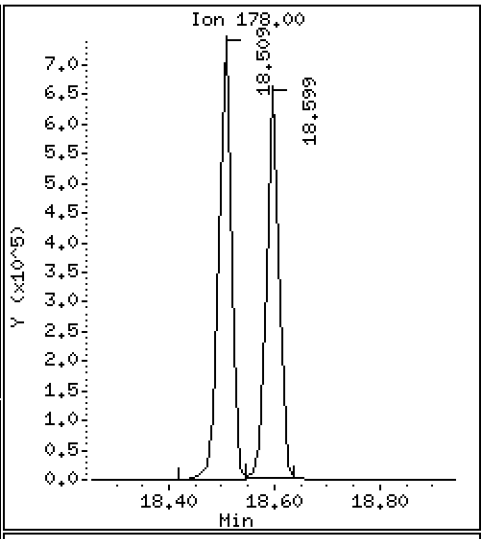
Column phase: ZB-5msi

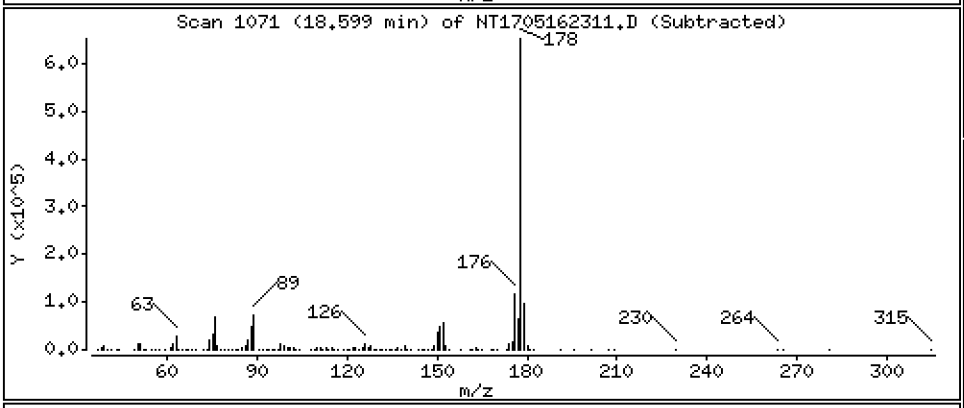
Column diameter: 0.25

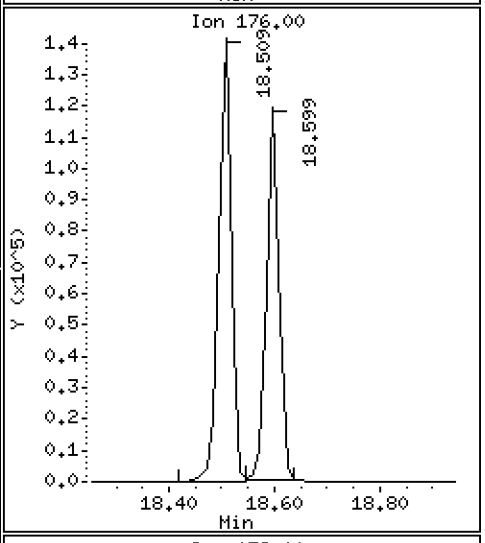
61 Anthracene

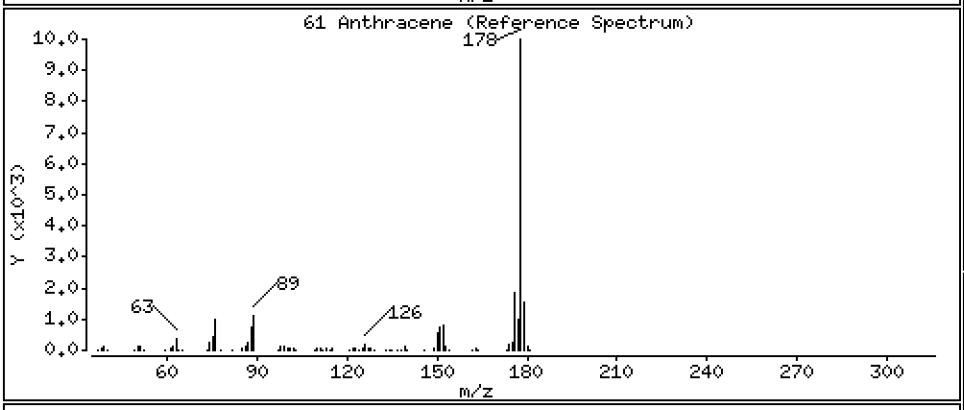
Concentration: 4.530 ug/mL

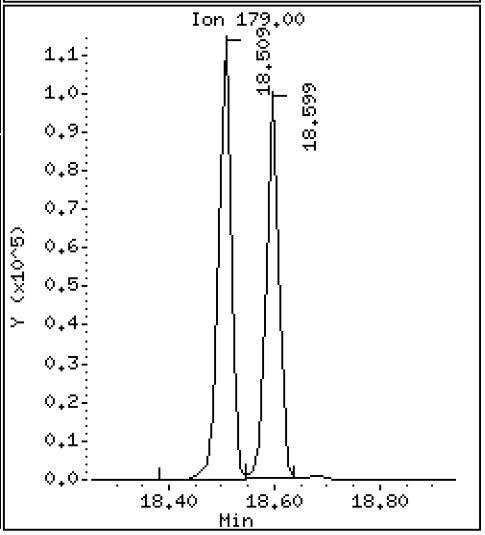


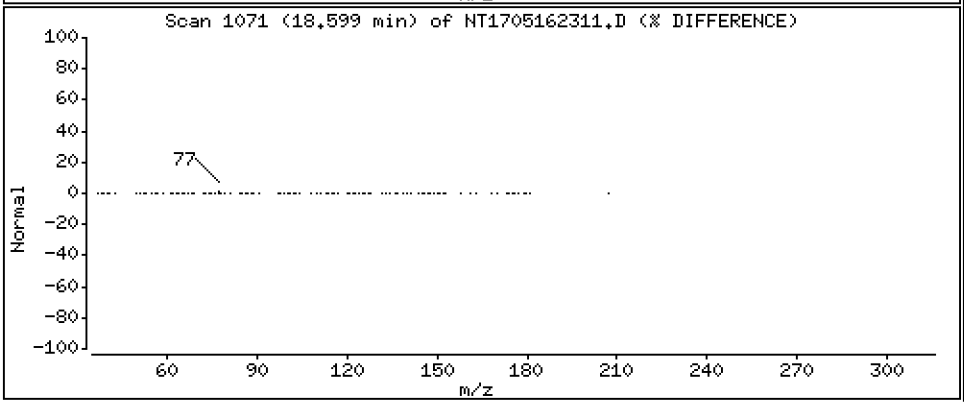












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

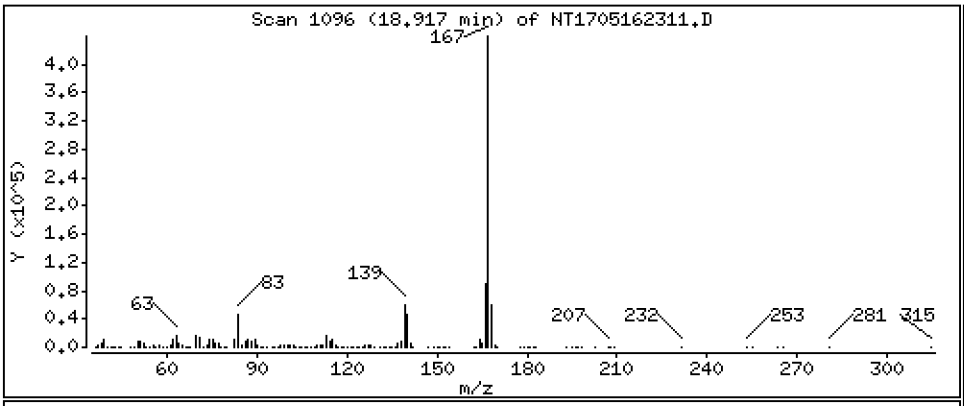
Operator: JGR

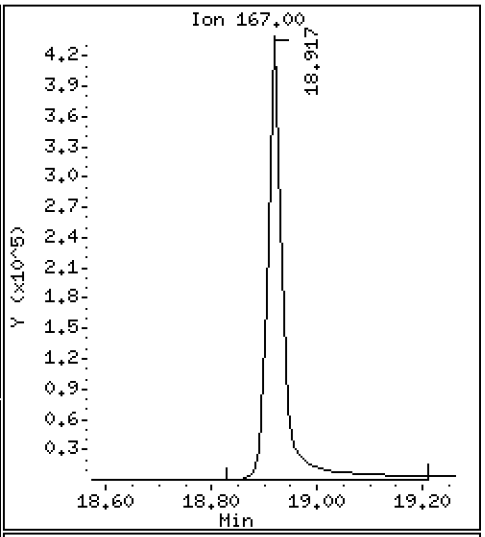
Column phase: ZB-5msi

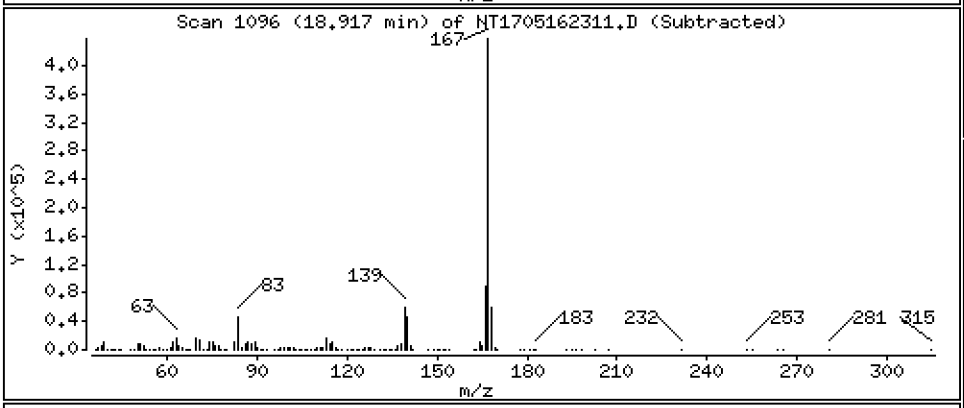
Column diameter: 0.25

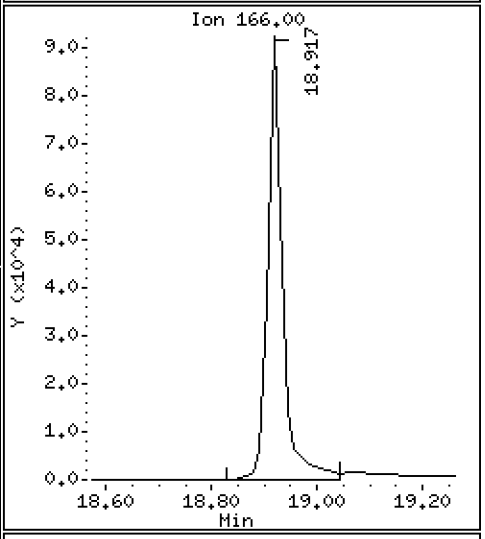
62 Carbazole

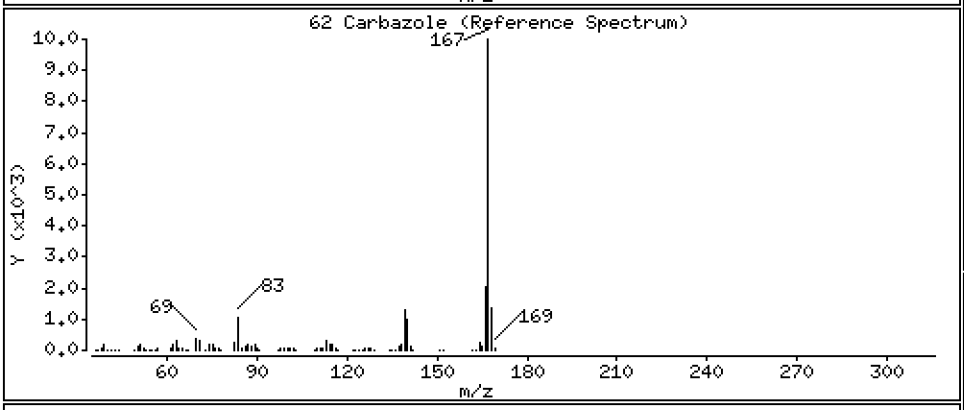
Concentration: 5.938 ug/mL

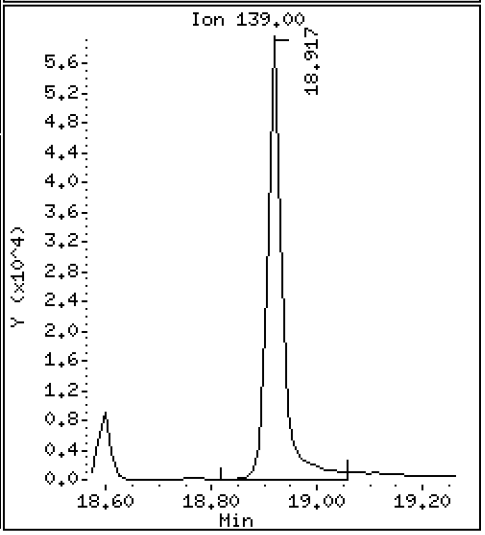


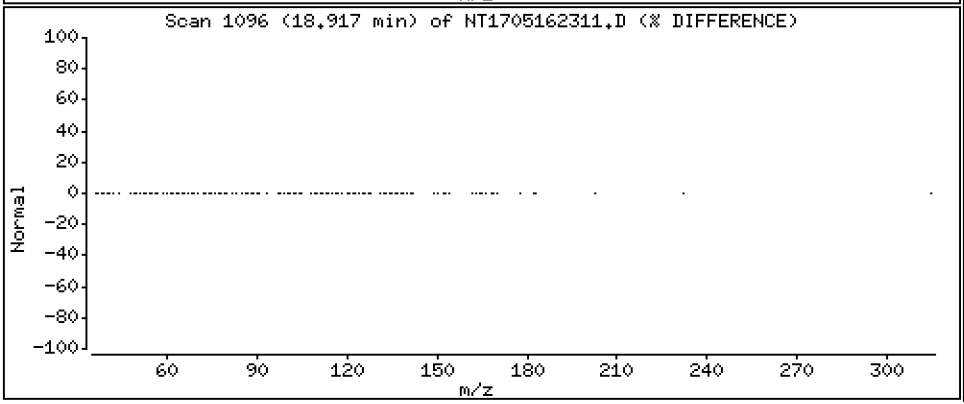












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

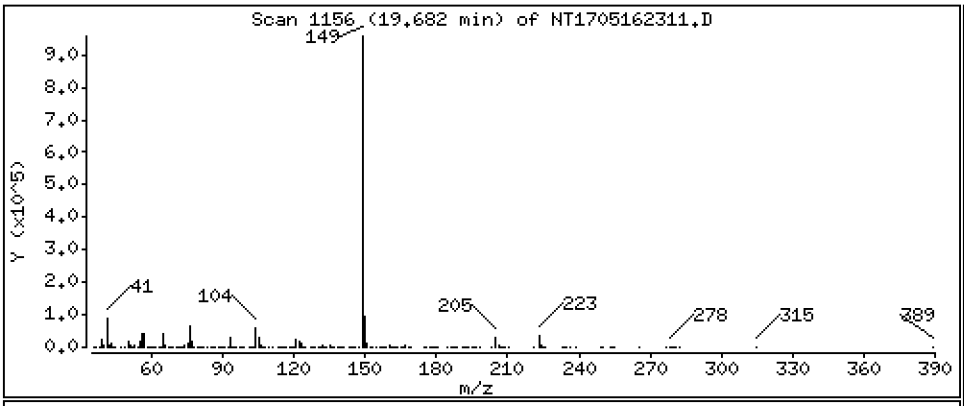
Operator: JGR

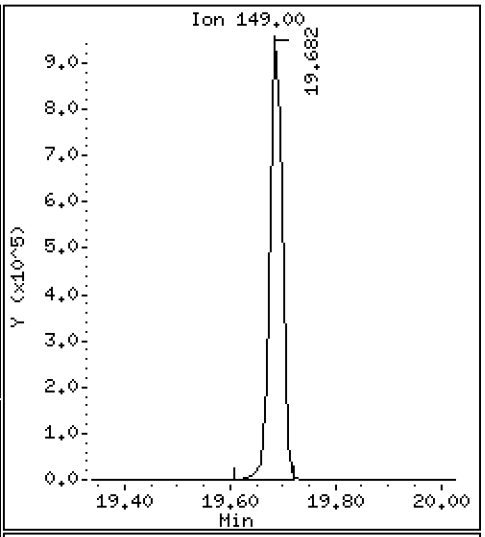
Column phase: ZB-5msi

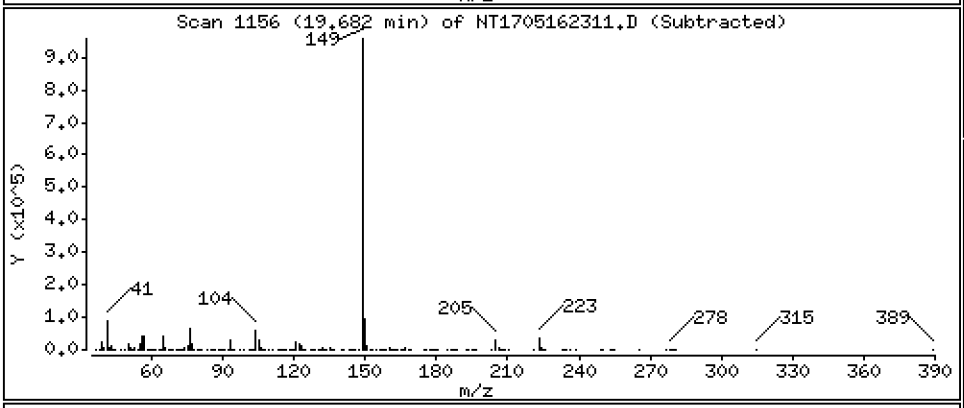
Column diameter: 0.25

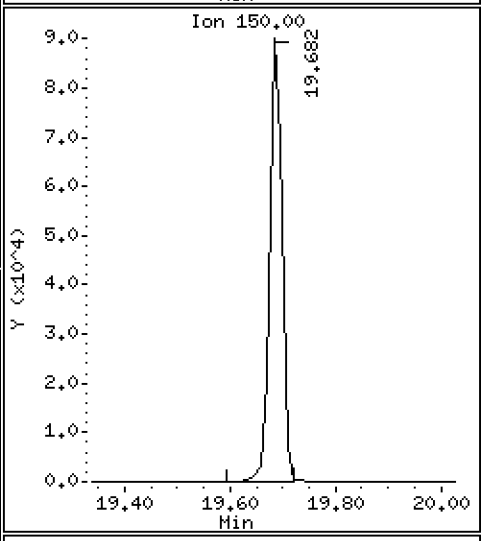
63 Di-n-butylphthalate

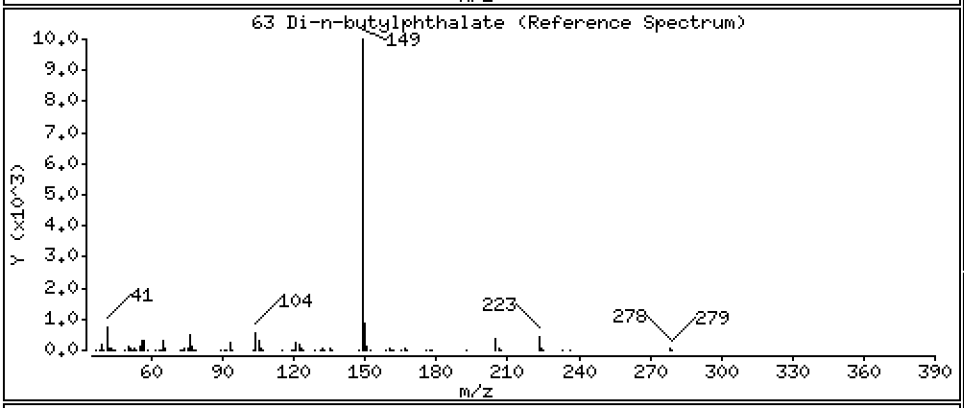
Concentration: 5.642 ug/mL

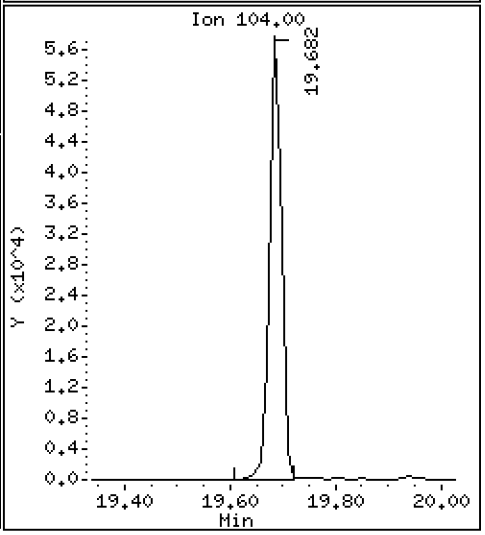


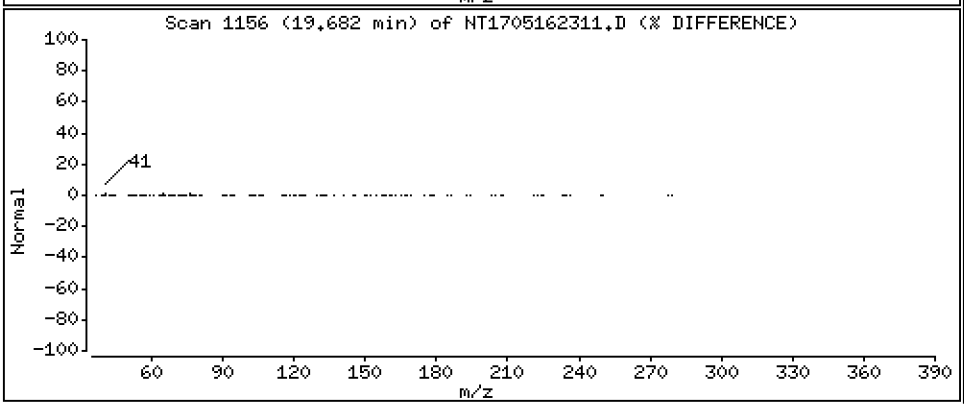












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

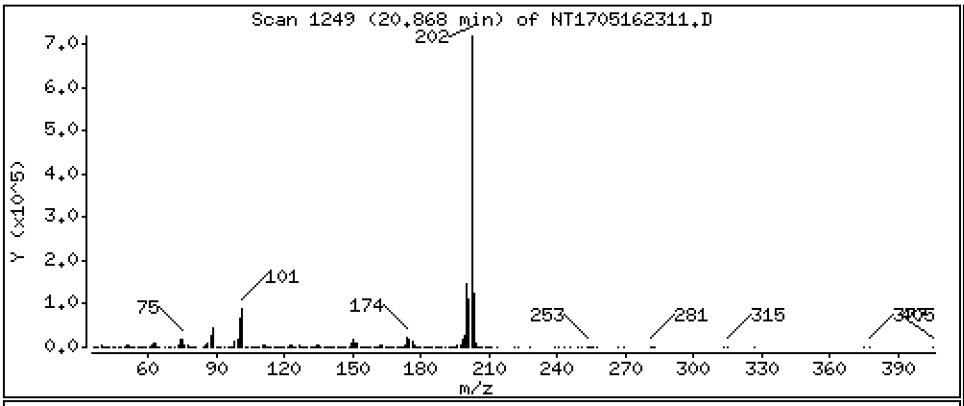
Operator: JGR

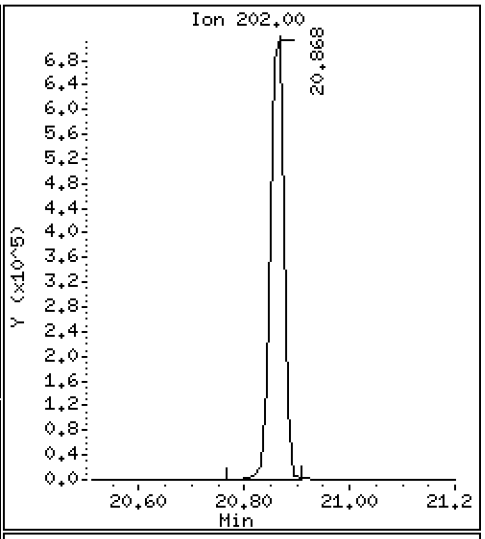
Column phase: ZB-5msi

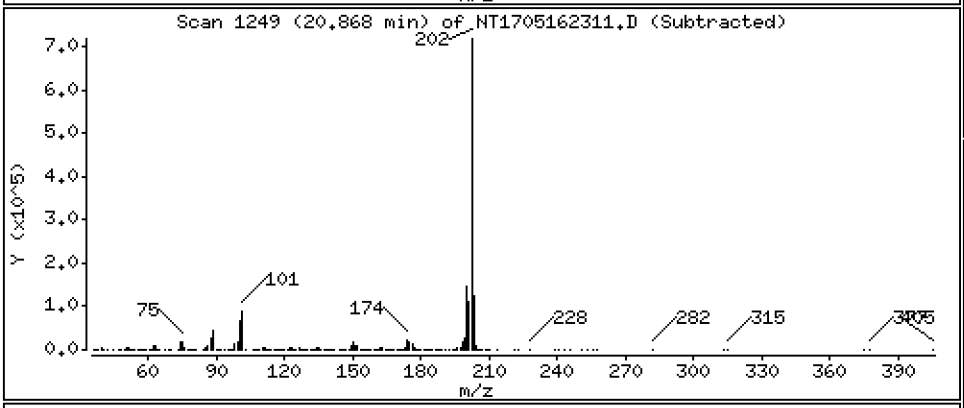
Column diameter: 0.25

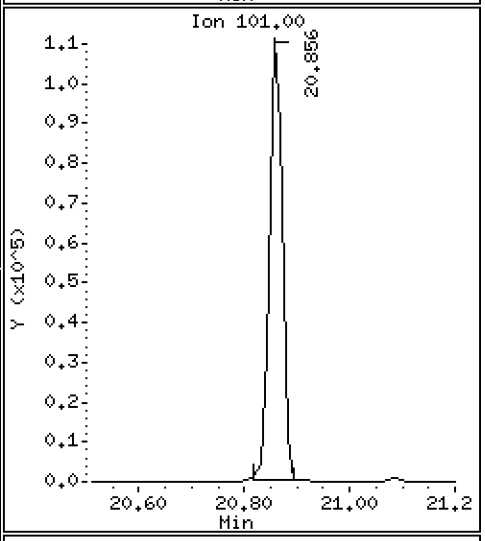
64 Fluoranthene

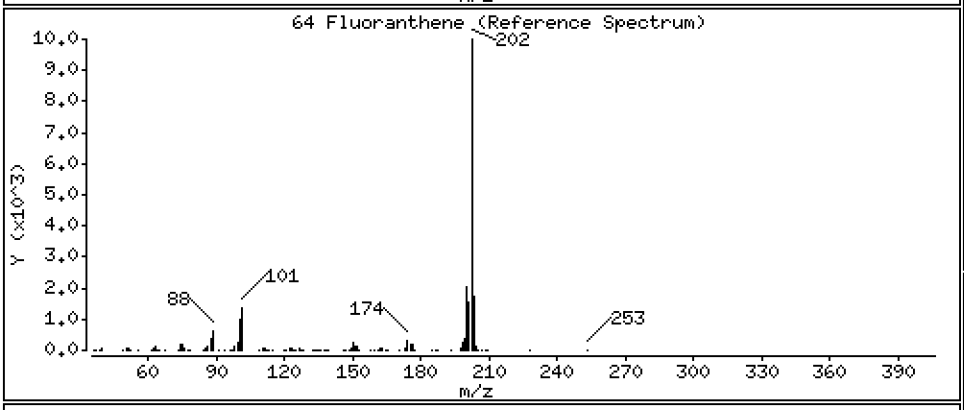
Concentration: 5.467 ug/mL

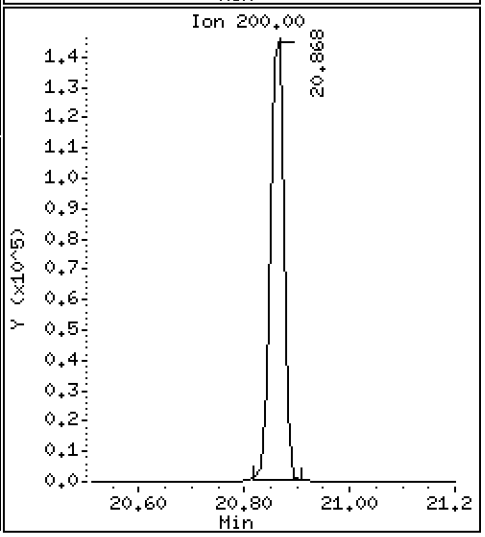


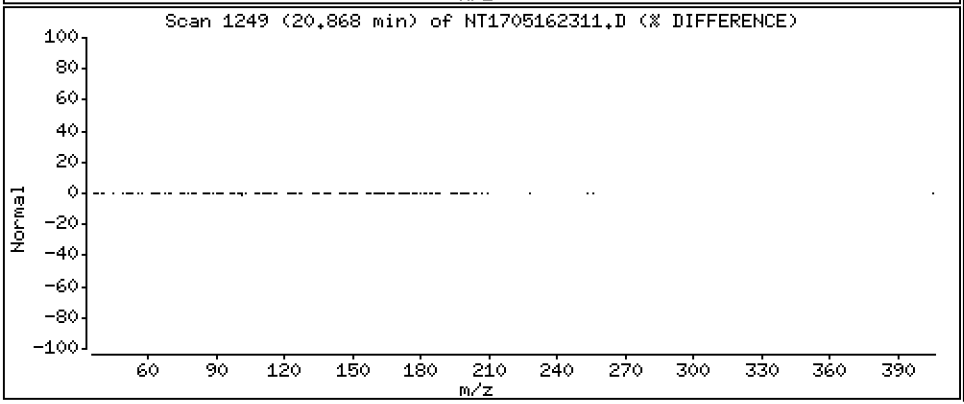












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

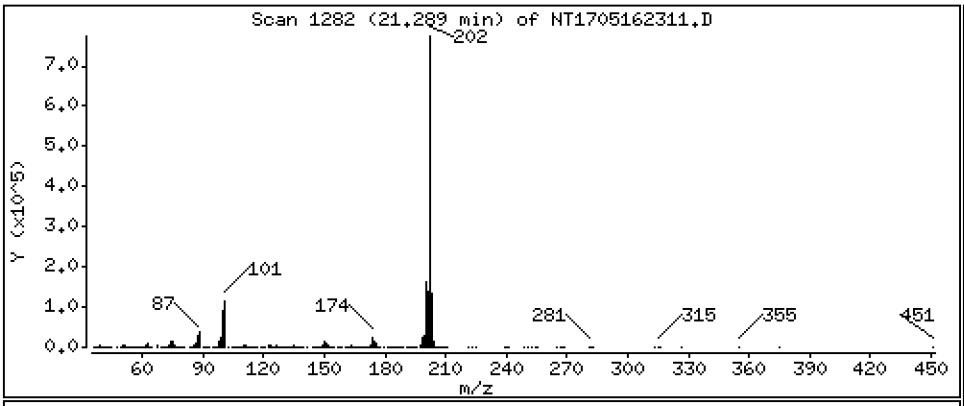
Operator: JGR

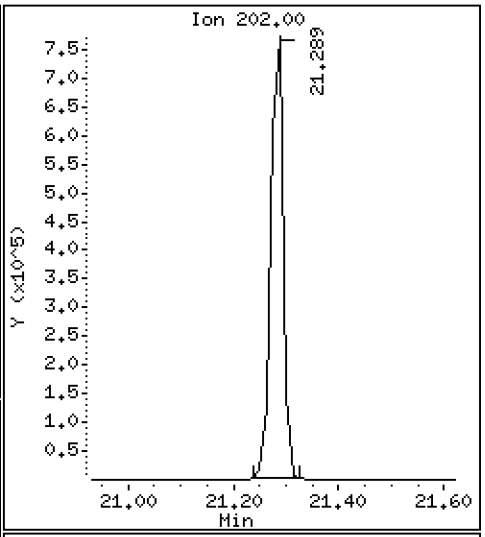
Column phase: ZB-5msi

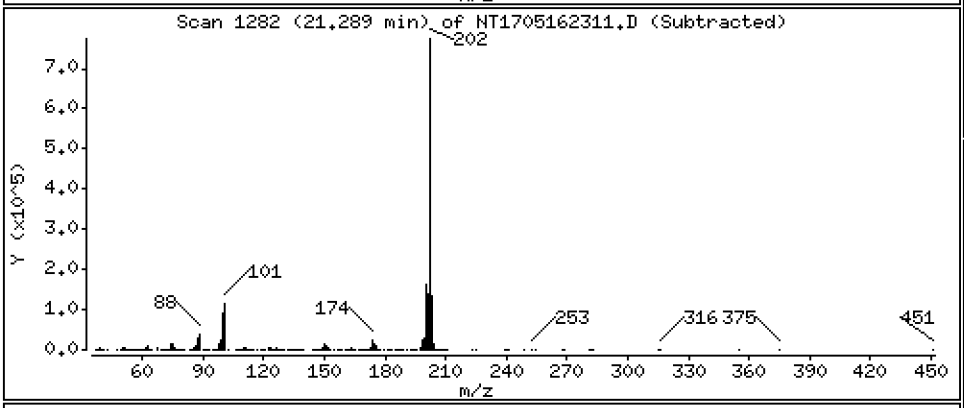
Column diameter: 0.25

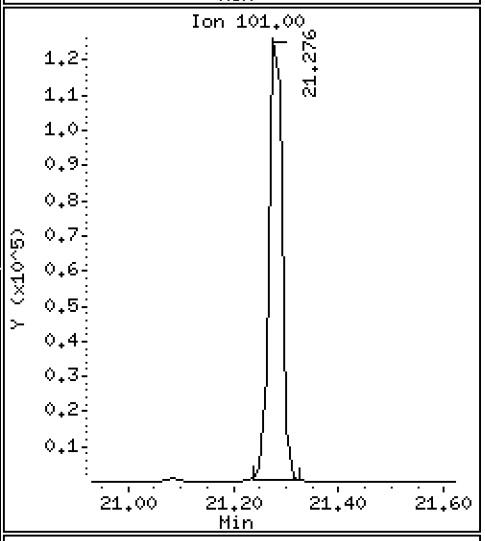
65 Pyrene

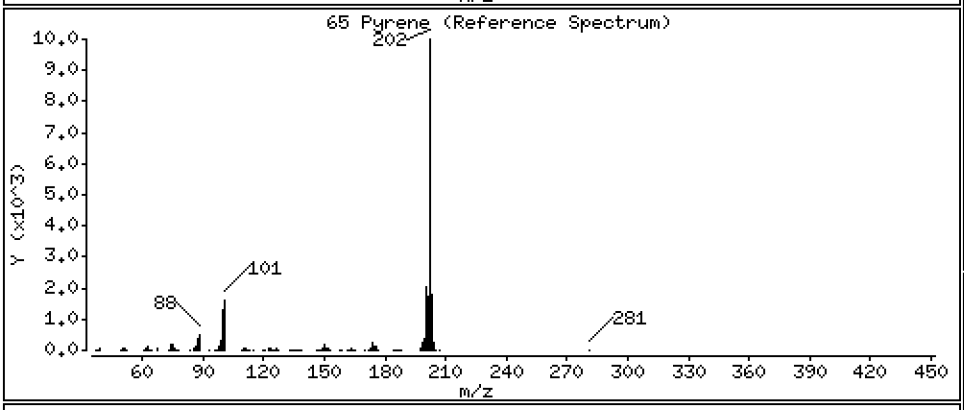
Concentration: 5.265 ug/mL

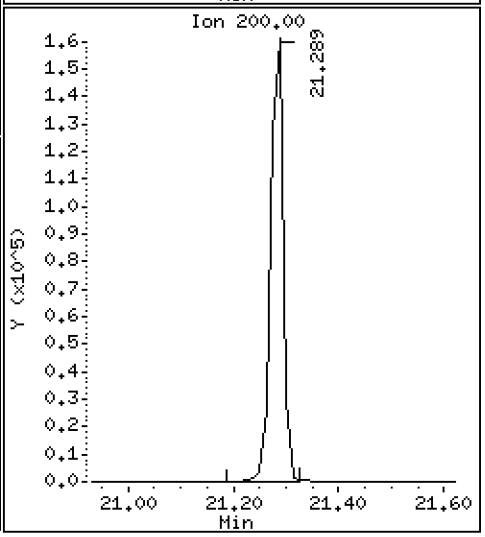


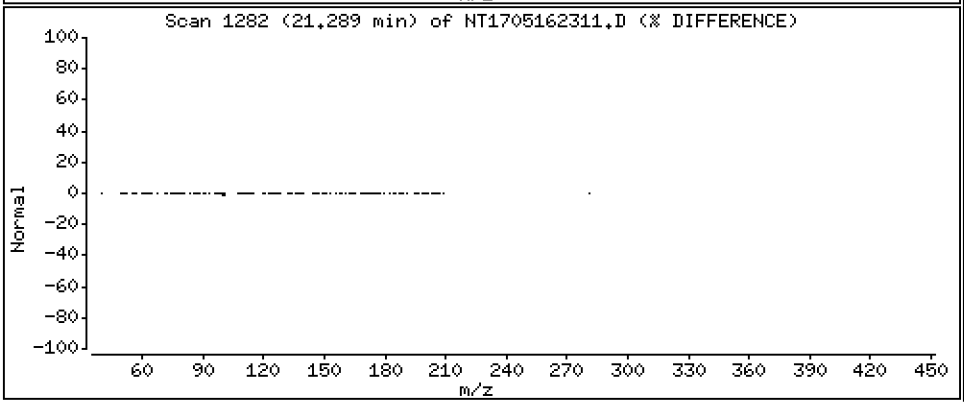












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

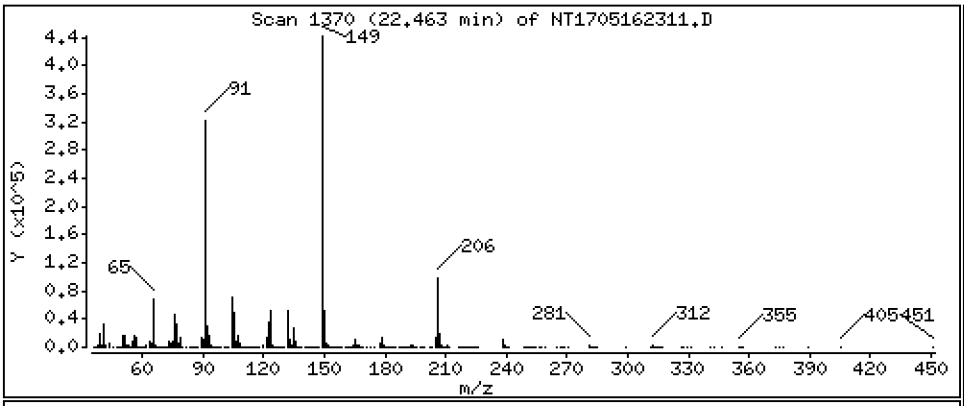
Operator: JGR

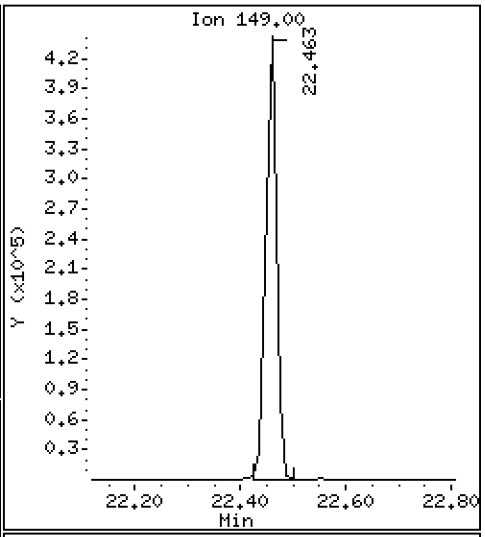
Column phase: ZB-5msi

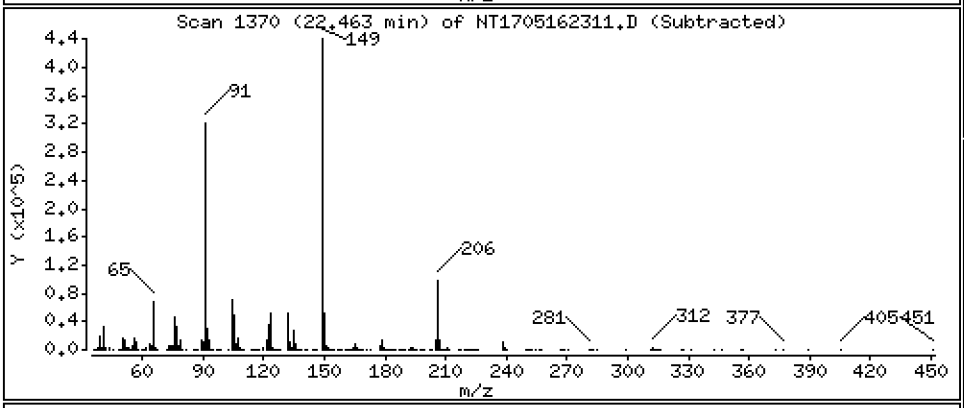
Column diameter: 0.25

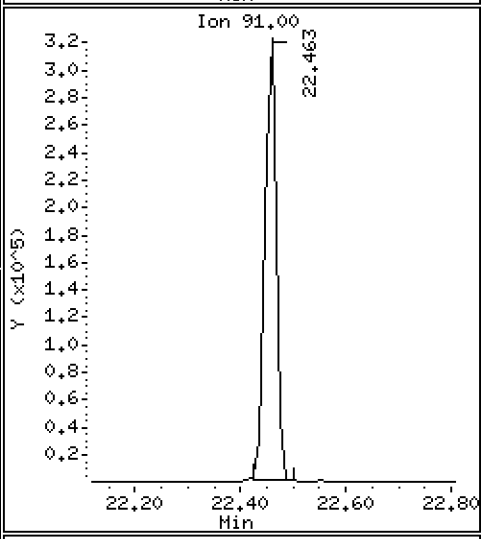
67 Butylbenzylphthalate

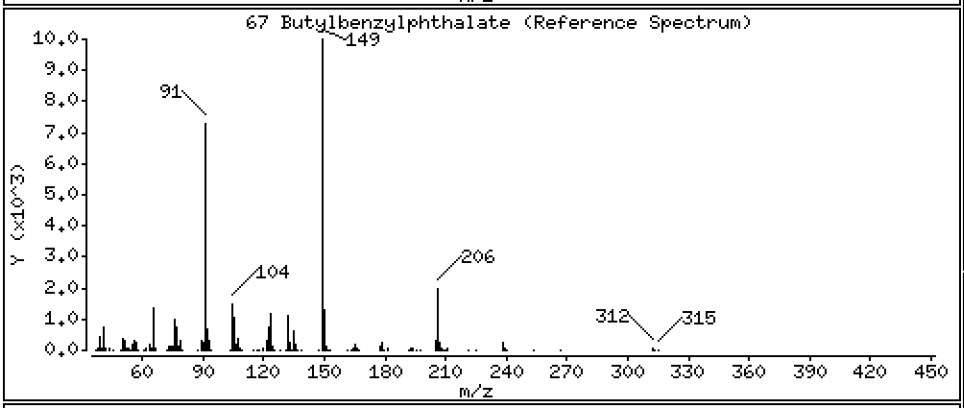
Concentration: 5.825 ug/mL

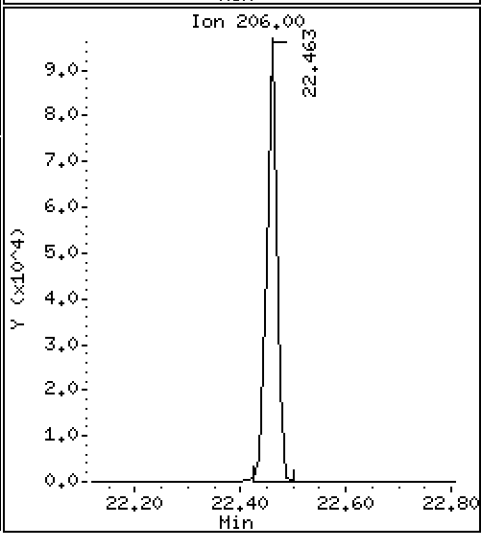


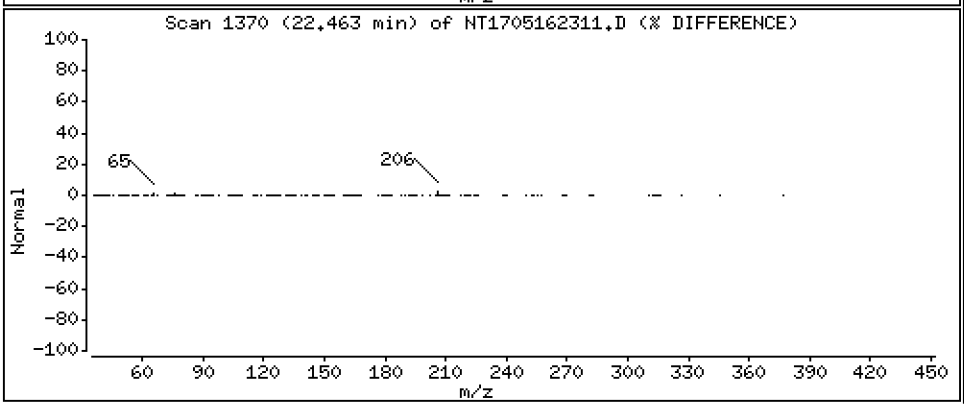












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

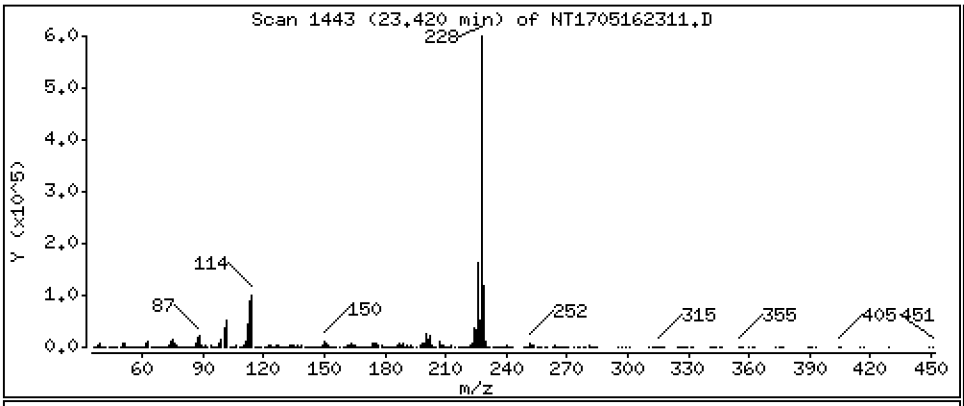
Operator: JGR

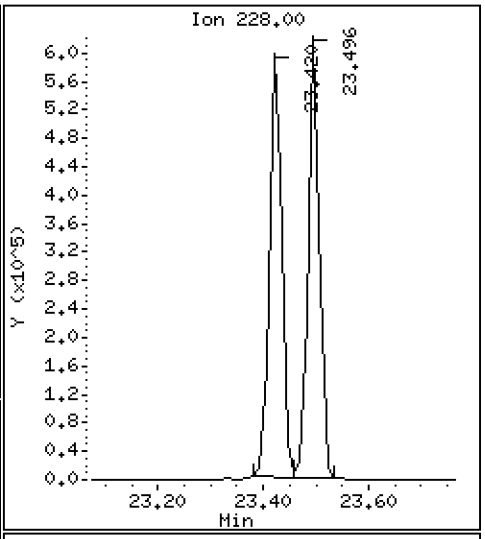
Column phase: ZB-5msi

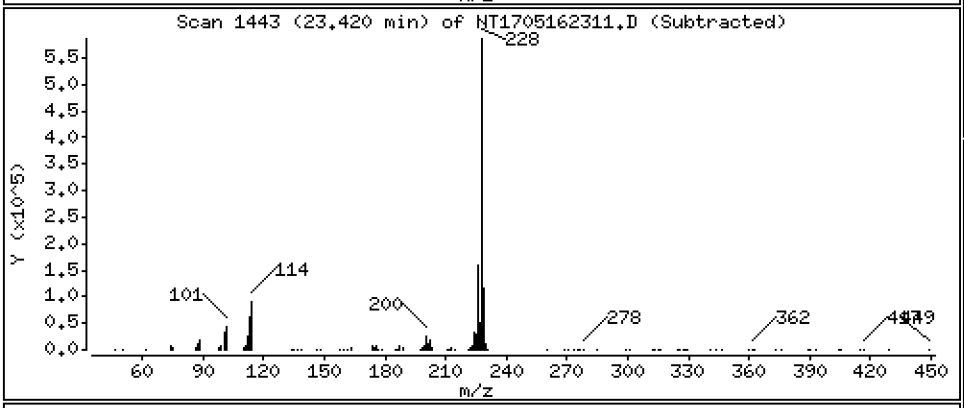
Column diameter: 0.25

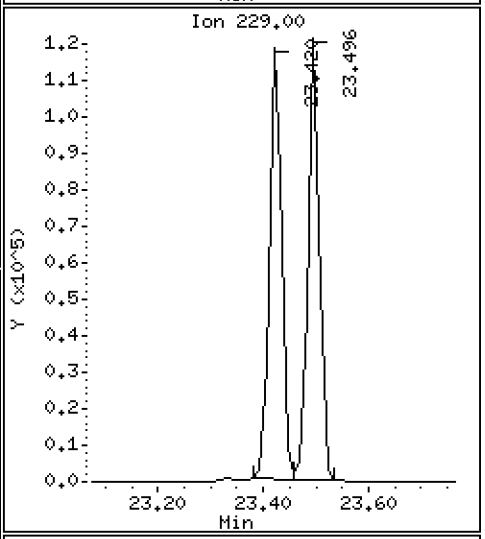
68 Benzo(a)anthracene

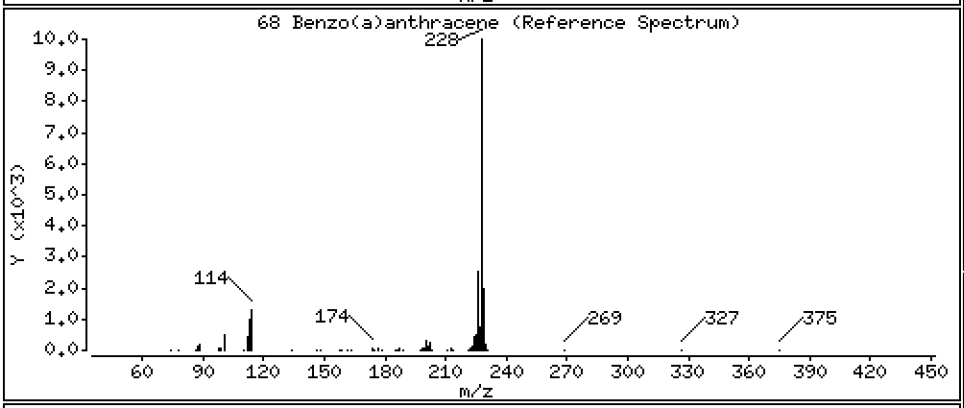
Concentration: 5.064 ug/mL

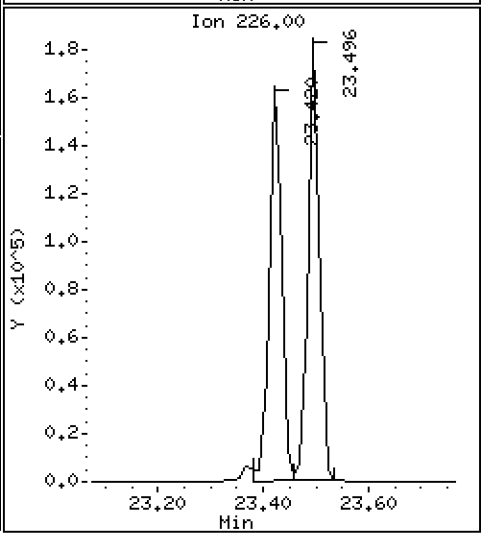


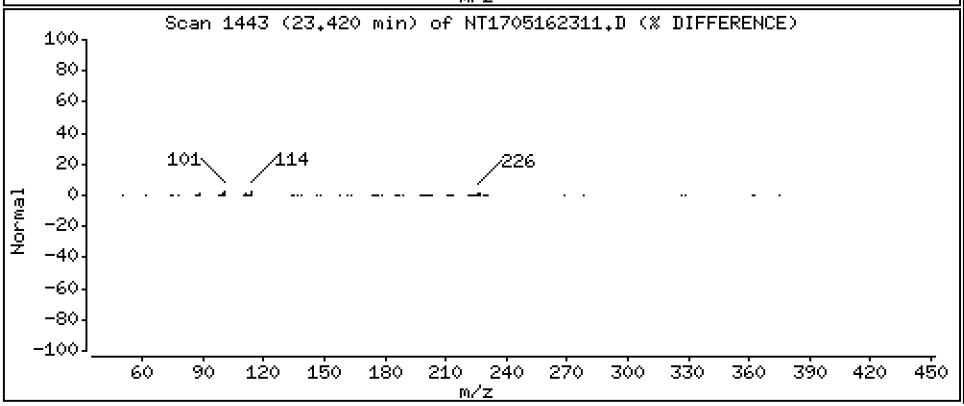












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

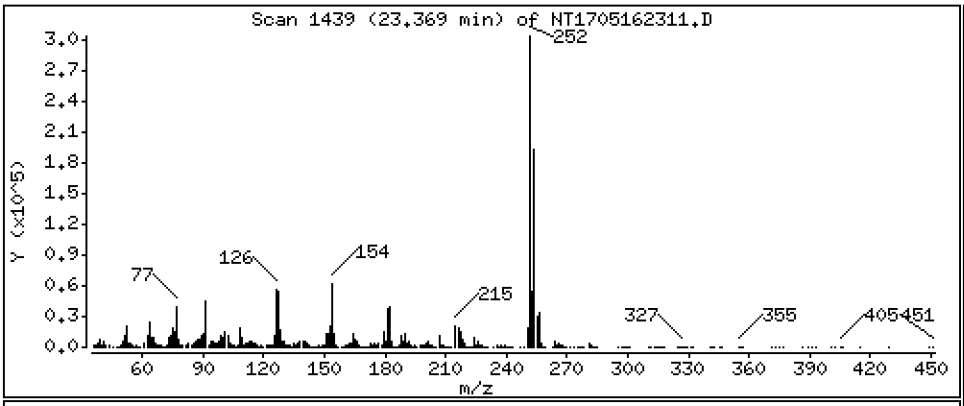
Operator: JGR

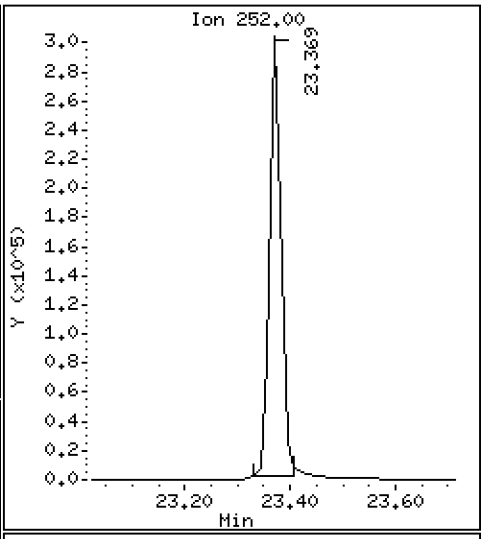
Column phase: ZB-5msi

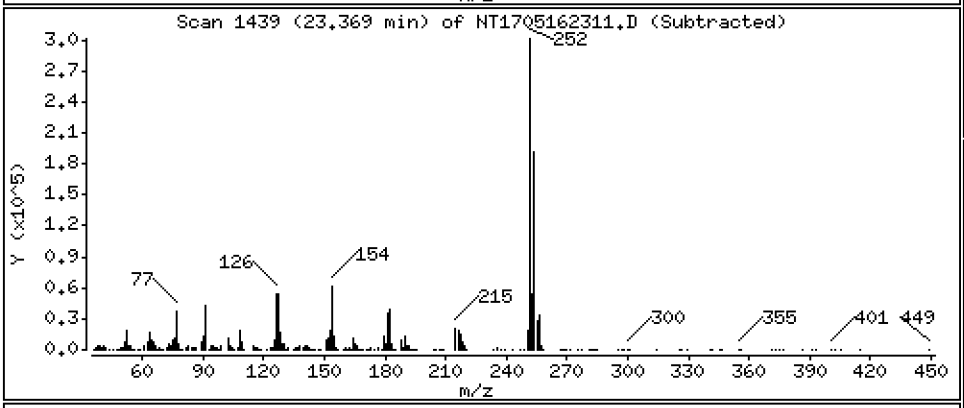
Column diameter: 0.25

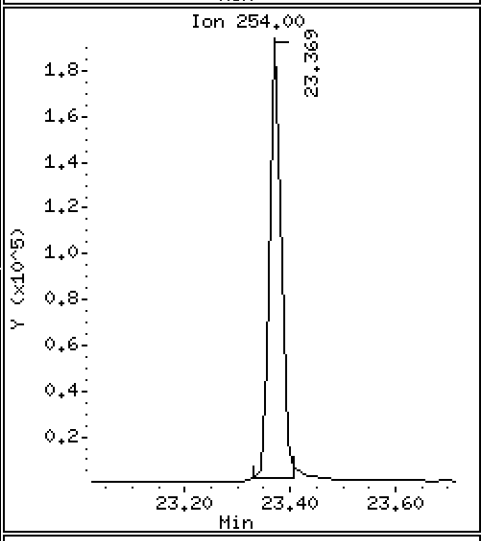
70 3,3'-Dichlorobenzidine

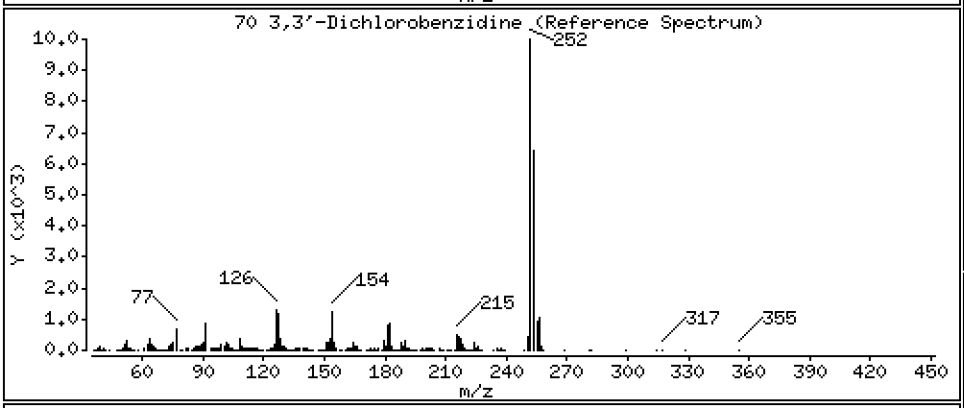
Concentration: 11.99 ug/mL

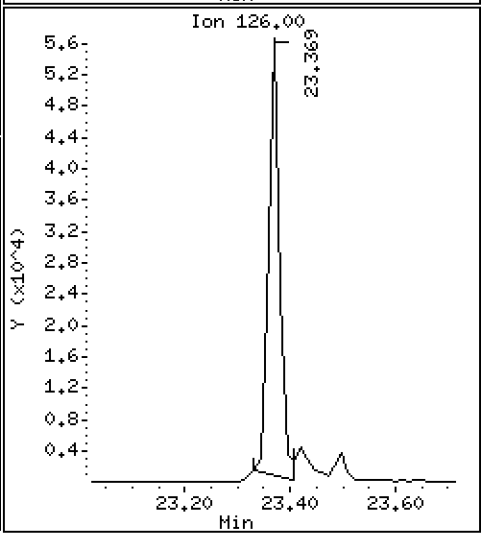


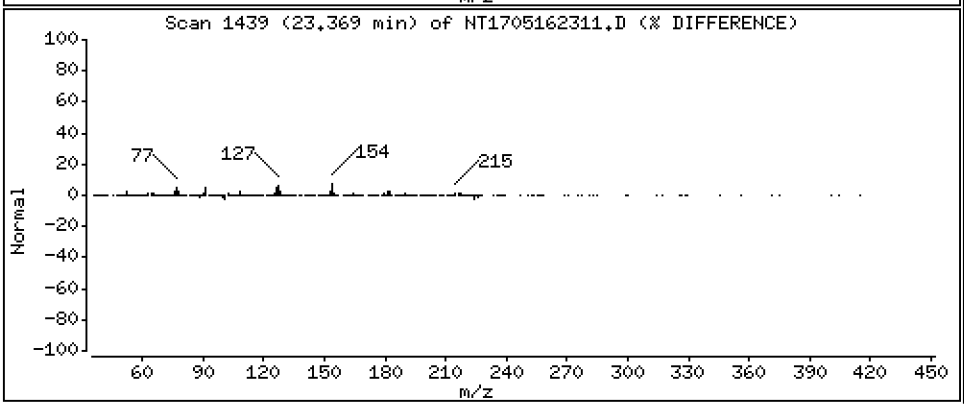












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

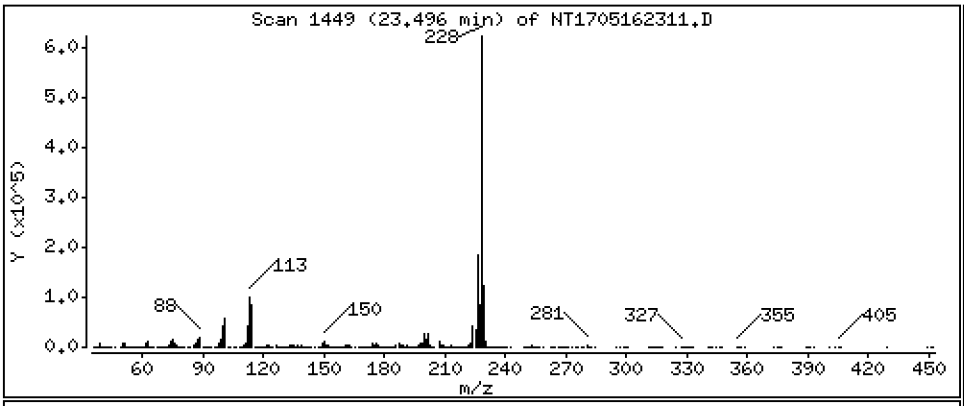
Operator: JGR

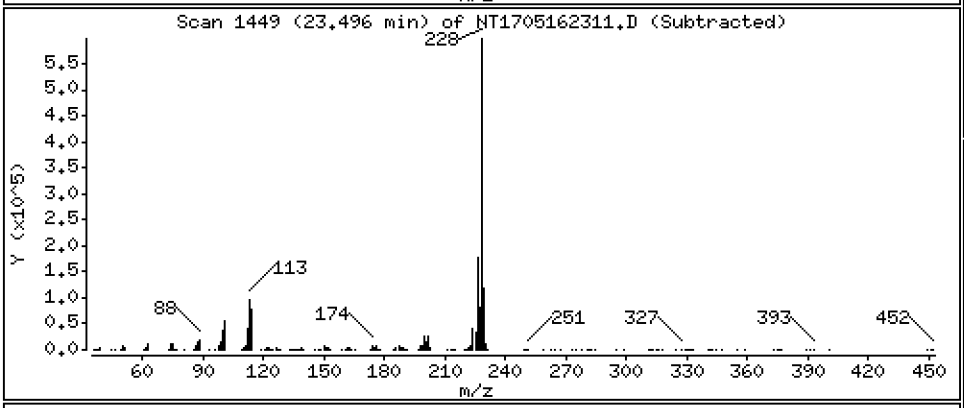
Column phase: ZB-5msi

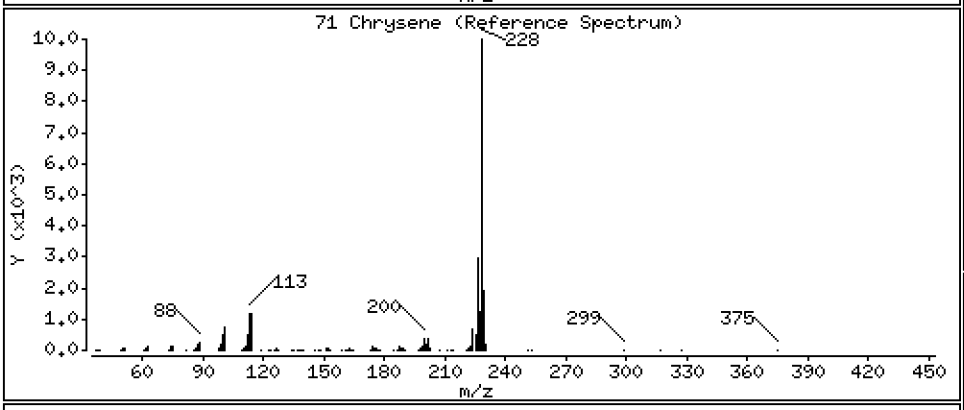
Column diameter: 0.25

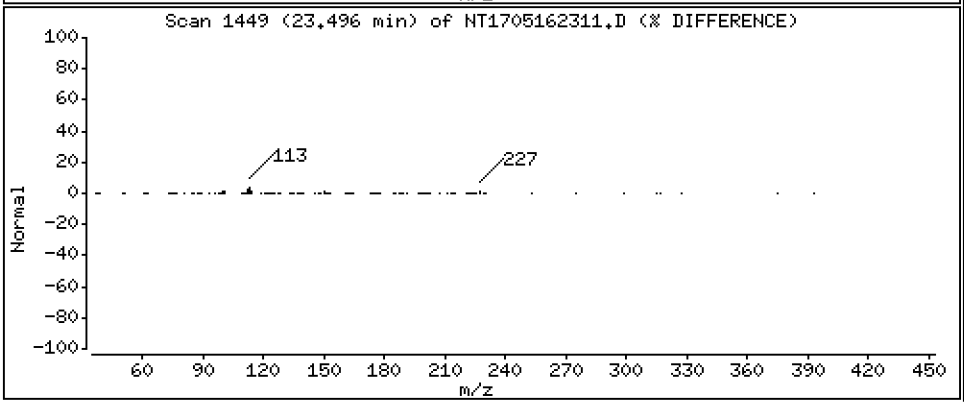
71 Chrysene

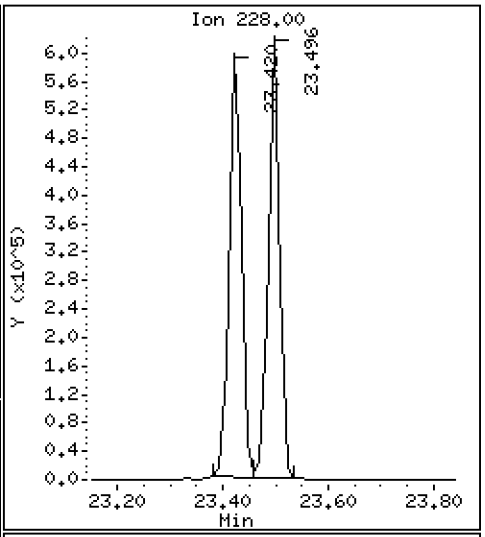
Concentration: 5.018 ug/mL

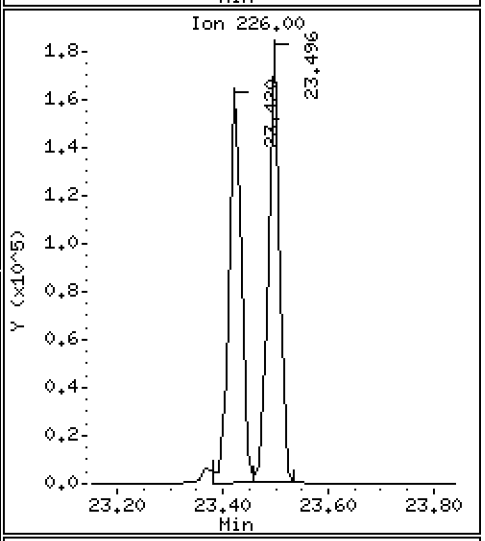


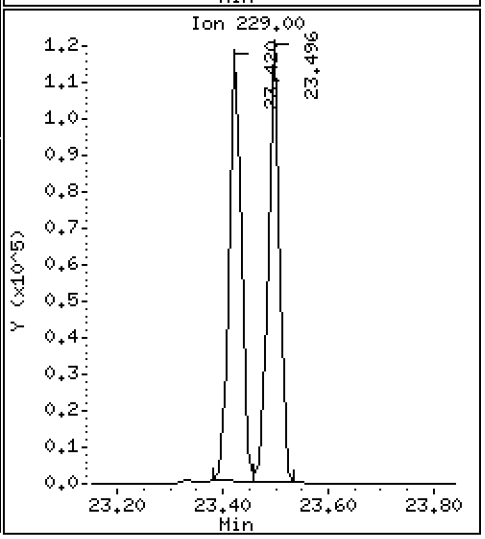












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

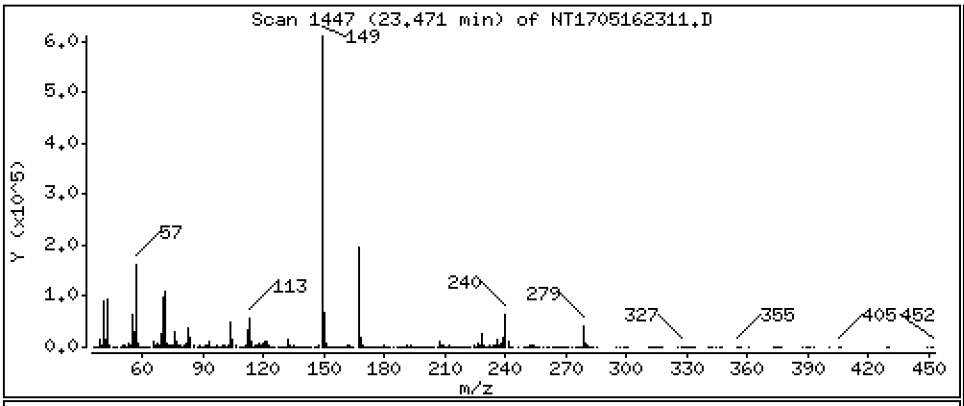
Operator: JGR

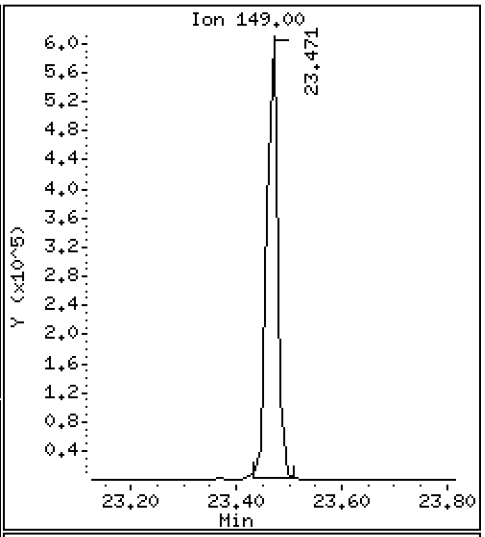
Column phase: ZB-5msi

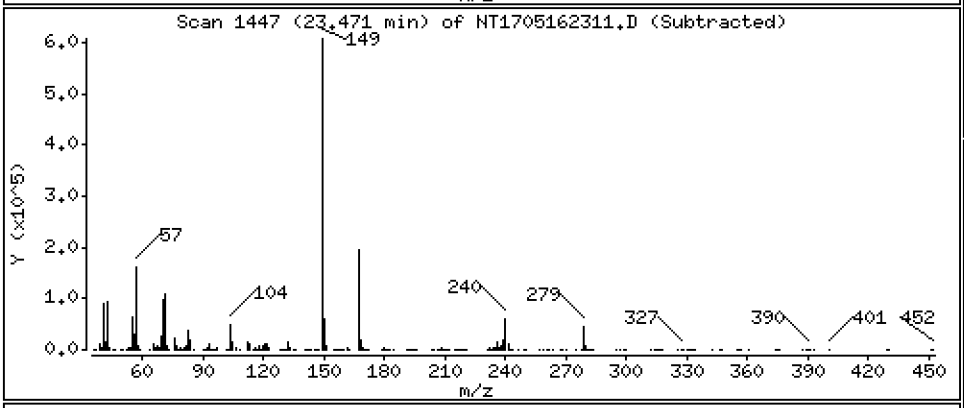
Column diameter: 0.25

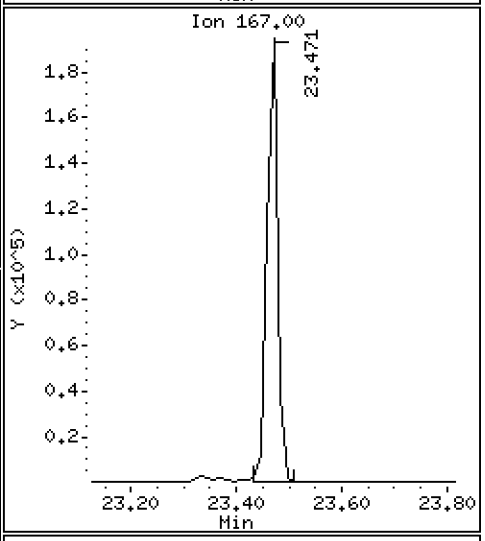
72 bis(2-Ethylhexyl)phthalate

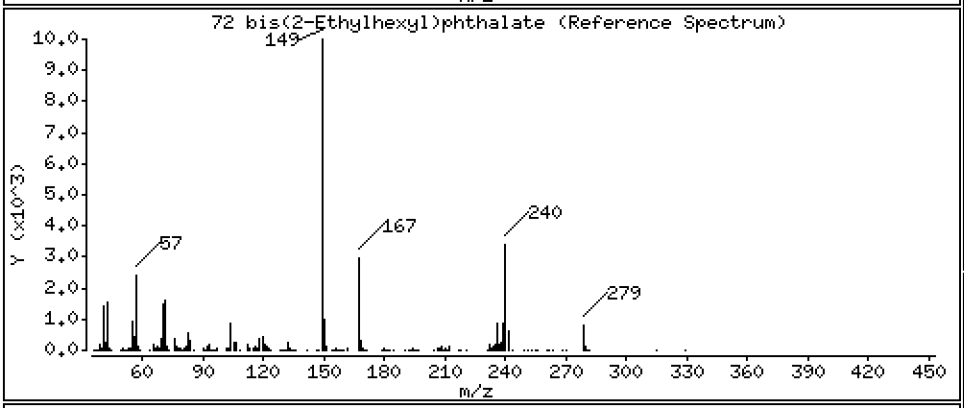
Concentration: 5.792 ug/mL

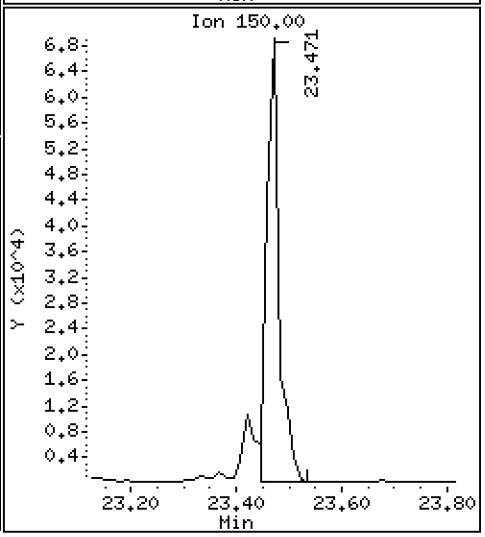


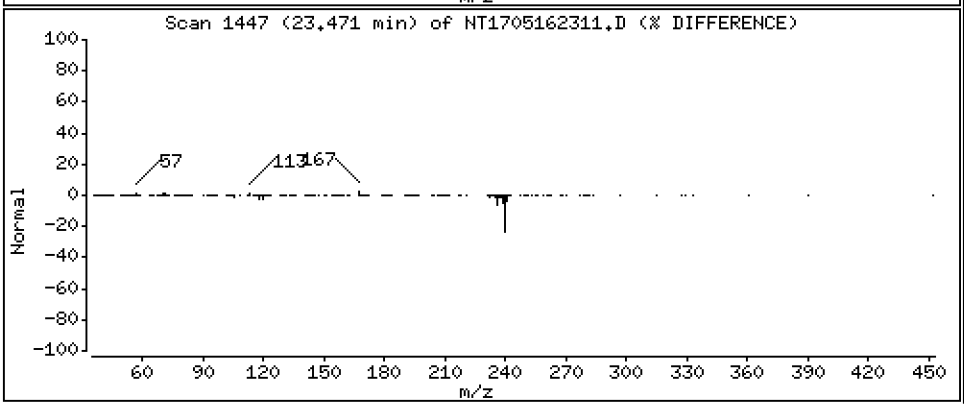












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

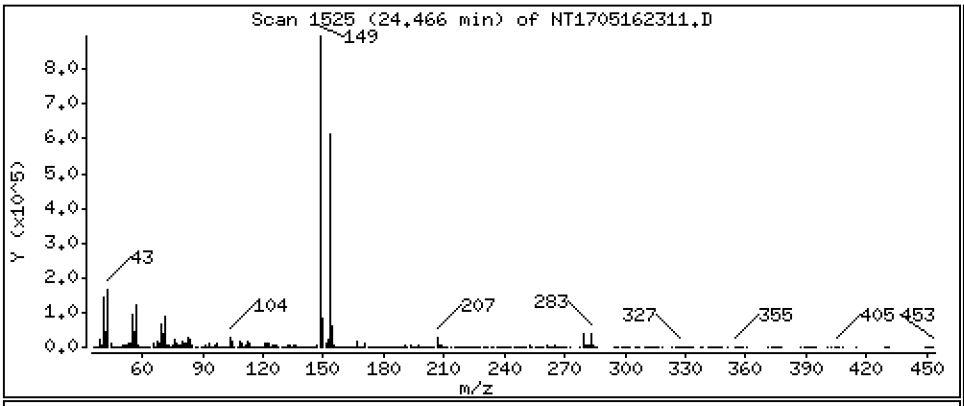
Operator: JGR

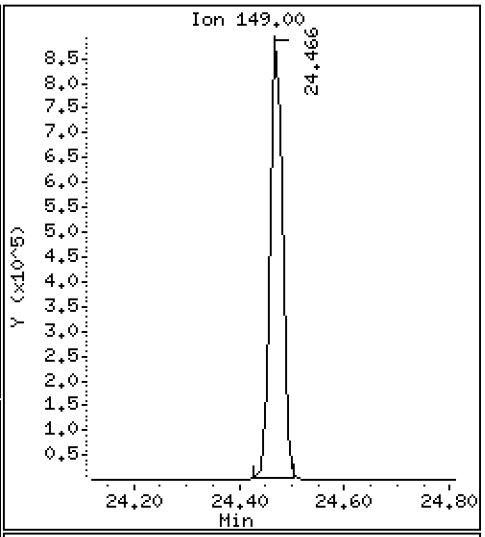
Column phase: ZB-5msi

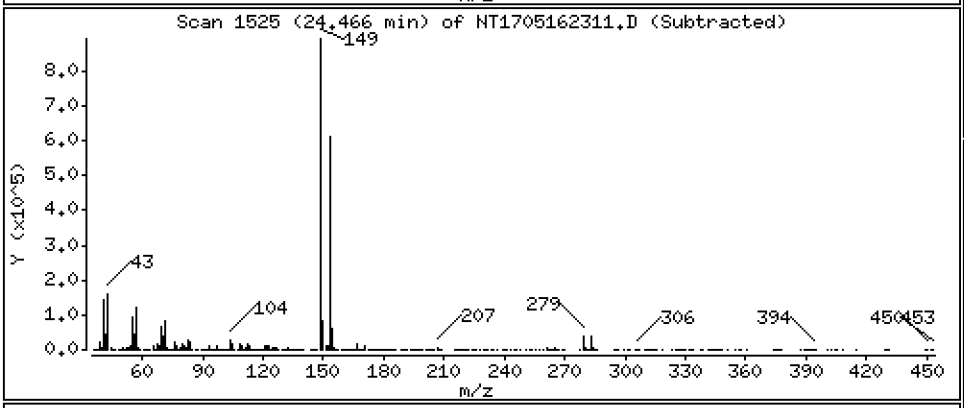
Column diameter: 0.25

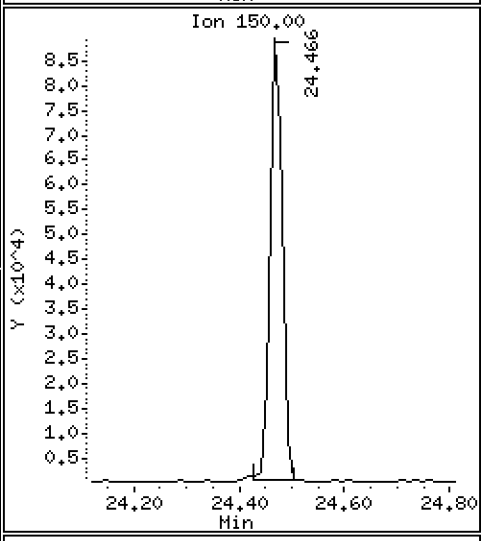
73 Di-n-octylphthalate

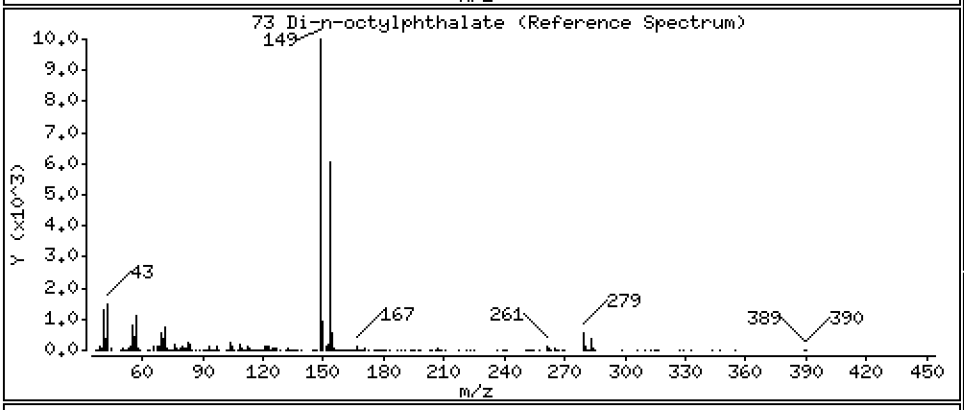
Concentration: 5.482 ug/mL

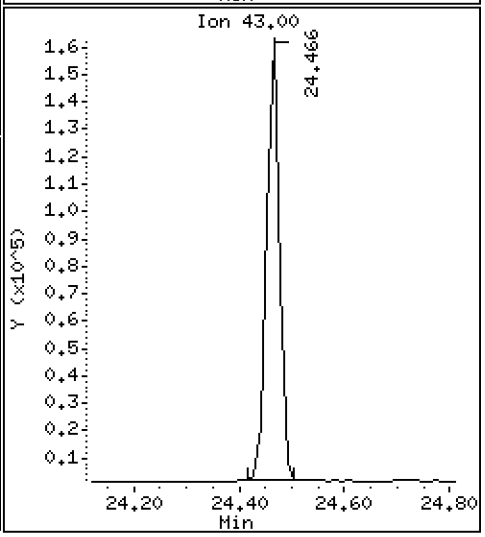


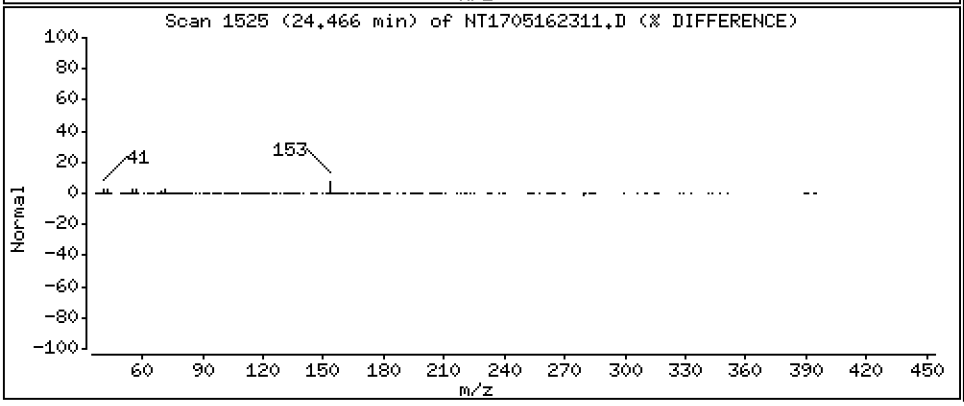












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

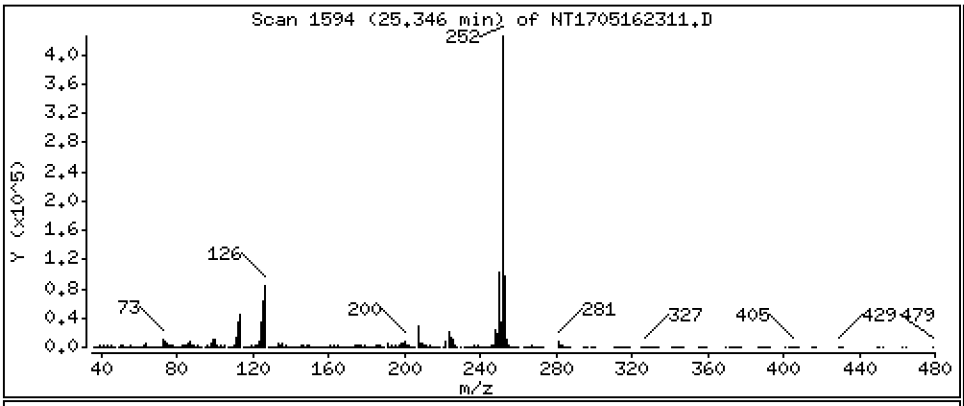
Operator: JGR

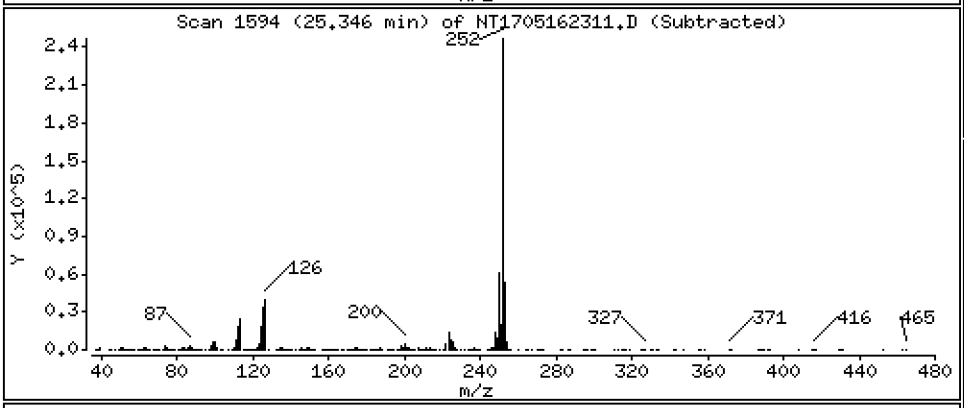
Column phase: ZB-5msi

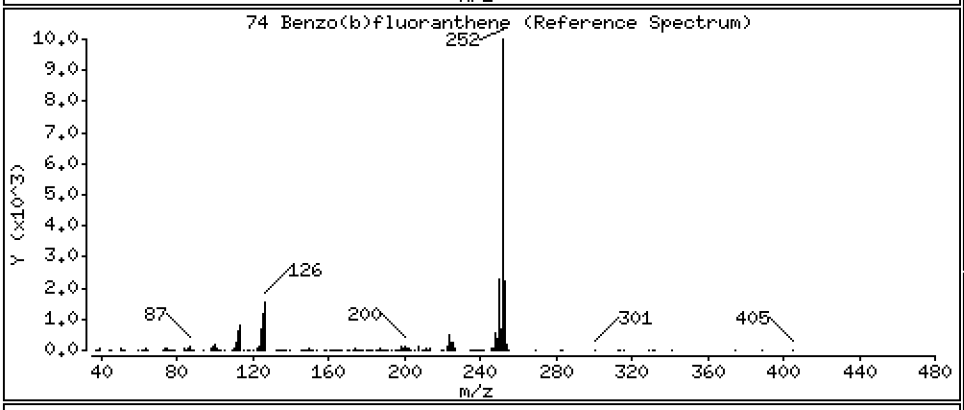
Column diameter: 0.25

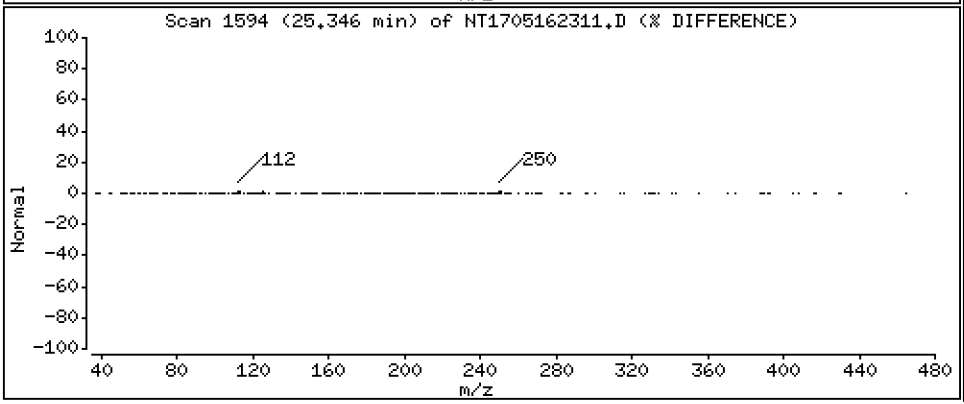
74 Benzo(b)fluoranthene

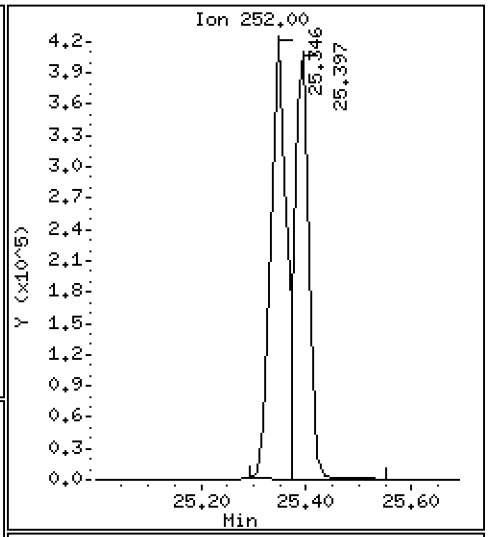
Concentration: 4.912 ug/mL

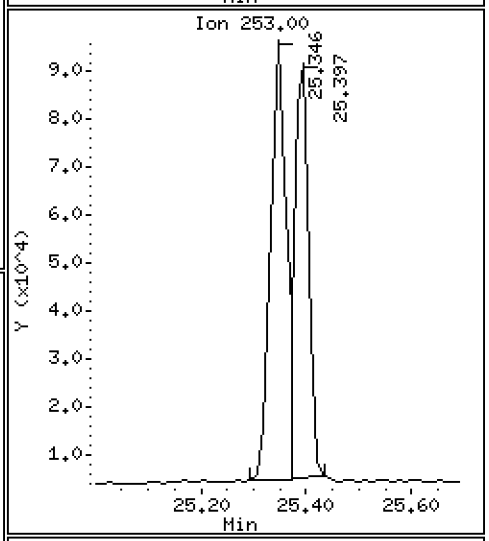


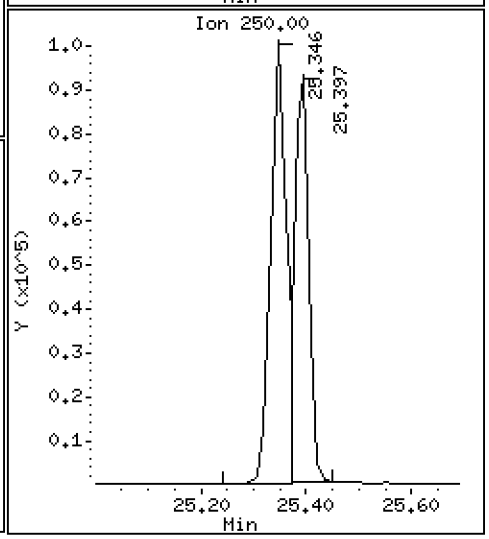












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

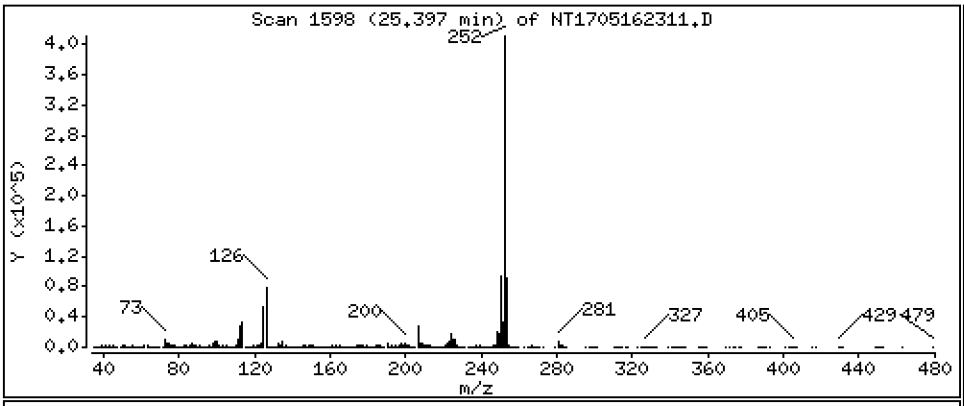
Operator: JGR

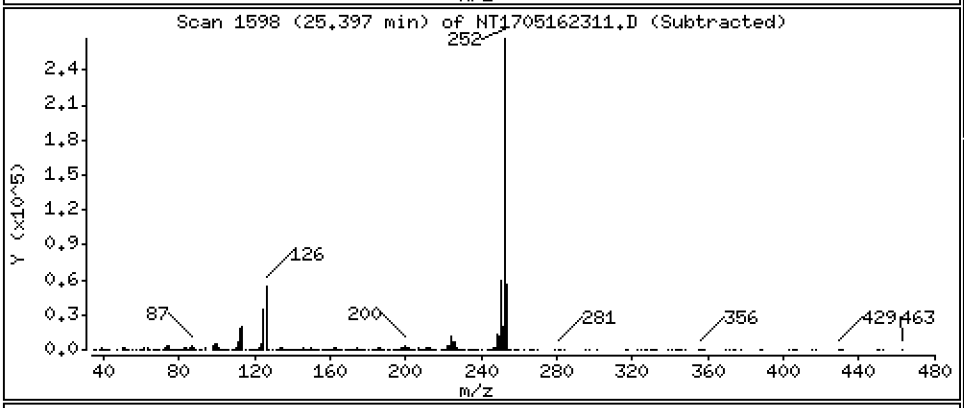
Column phase: ZB-5msi

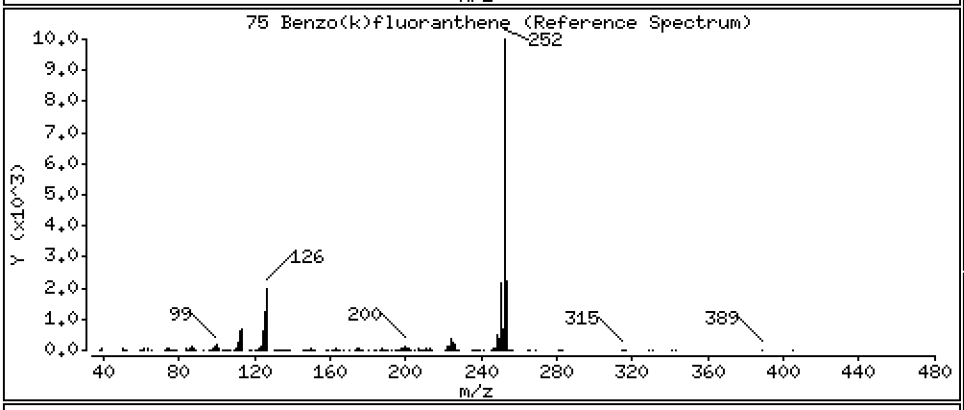
Column diameter: 0.25

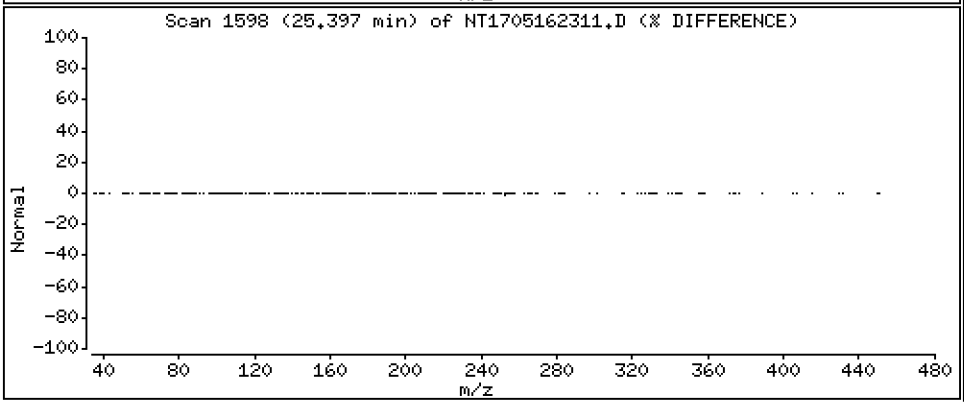
75 Benzo(k)fluoranthene

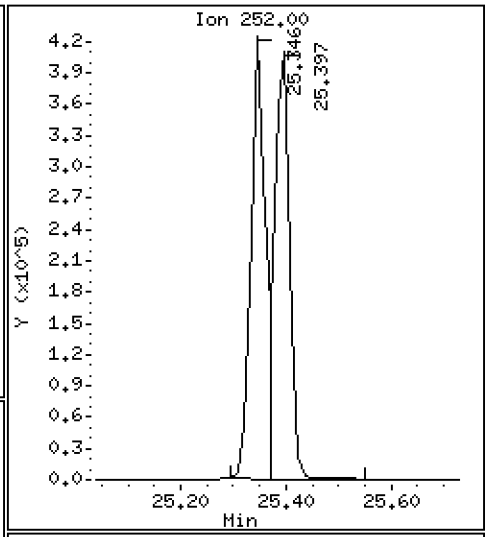
Concentration: 4.965 ug/mL

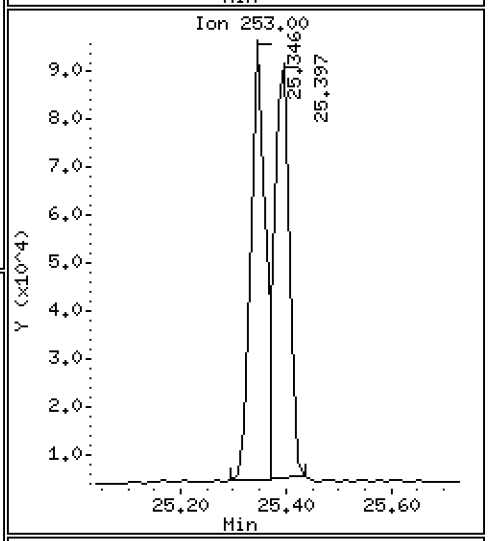


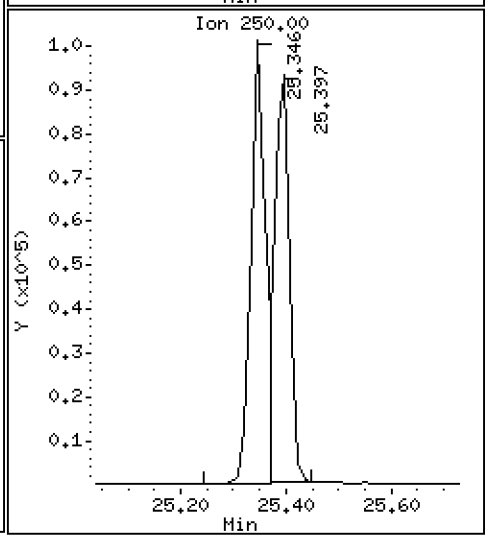












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

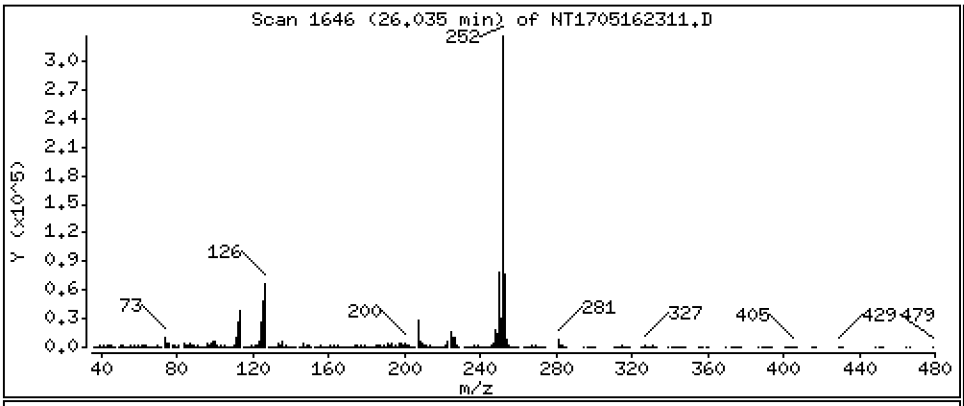
Operator: JGR

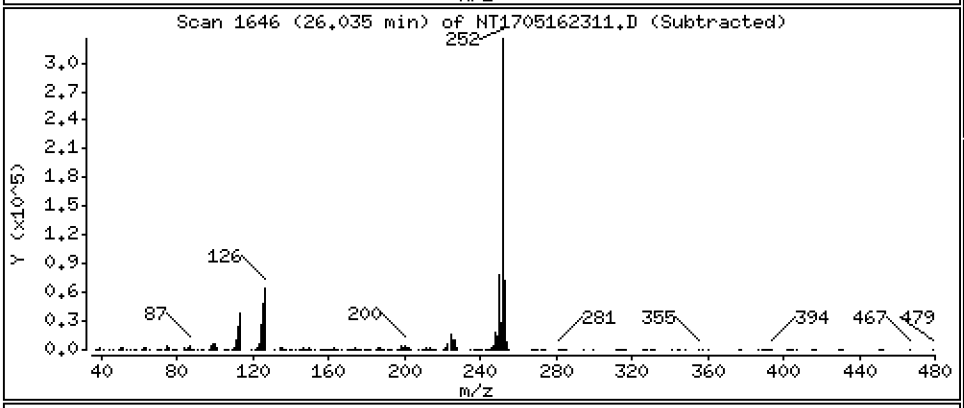
Column phase: ZB-5msi

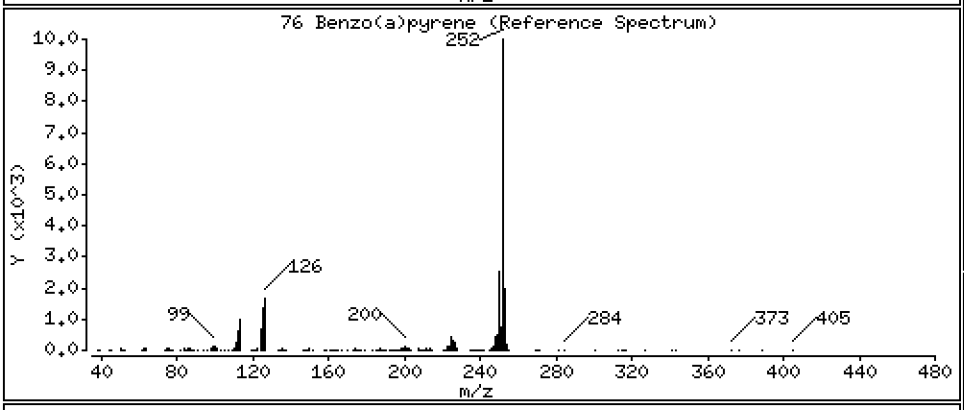
Column diameter: 0.25

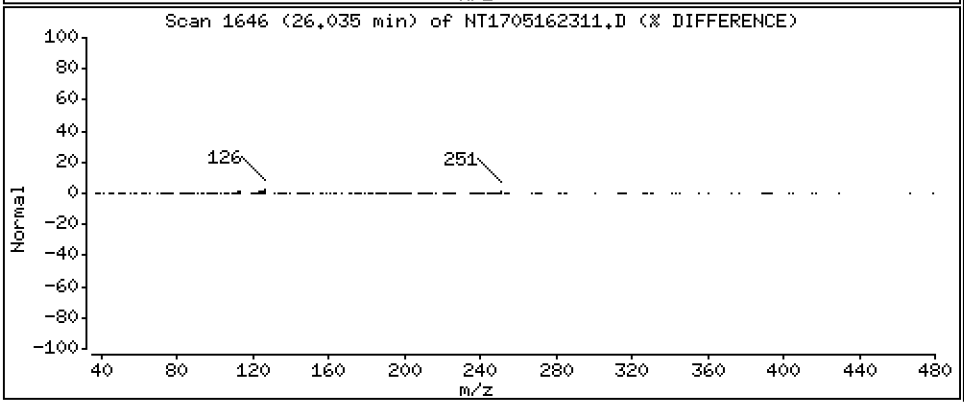
76 Benzo(a)pyrene

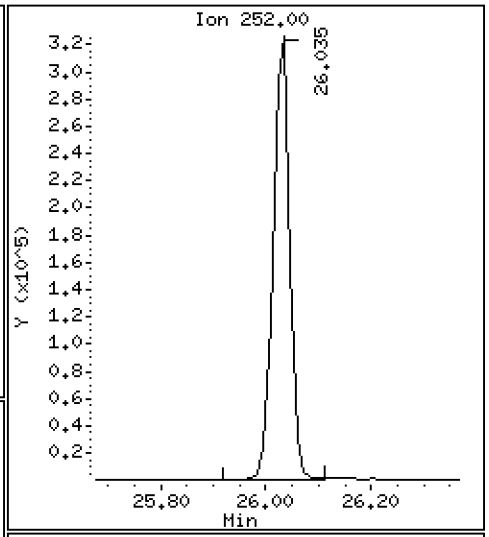
Concentration: 5.172 ug/mL

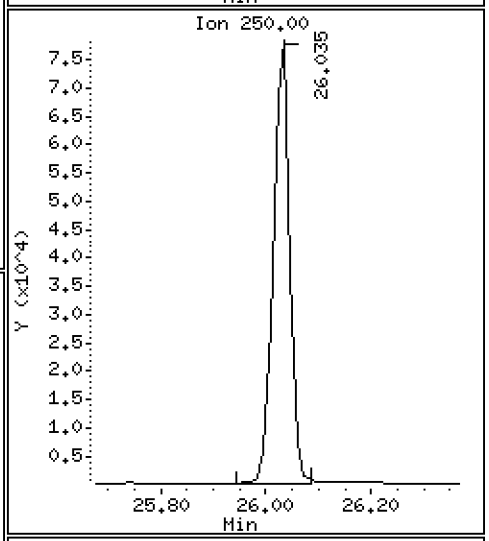


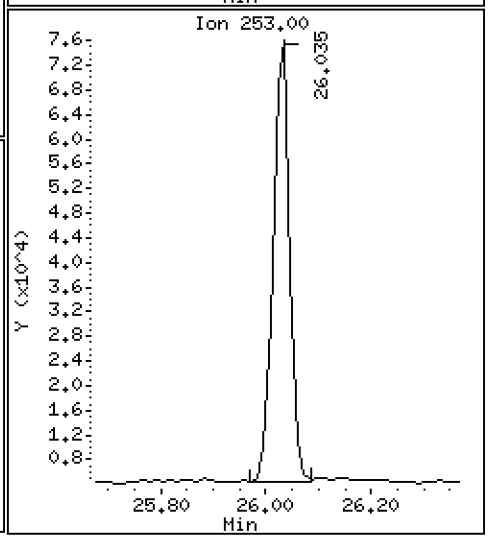












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

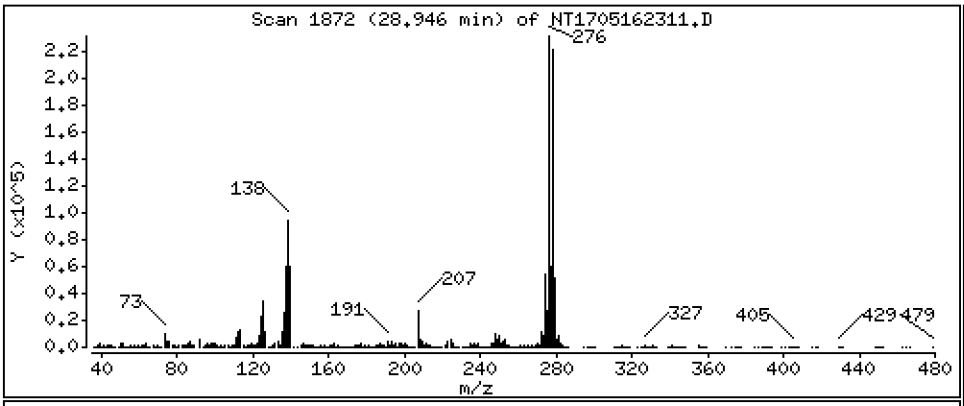
Operator: JGR

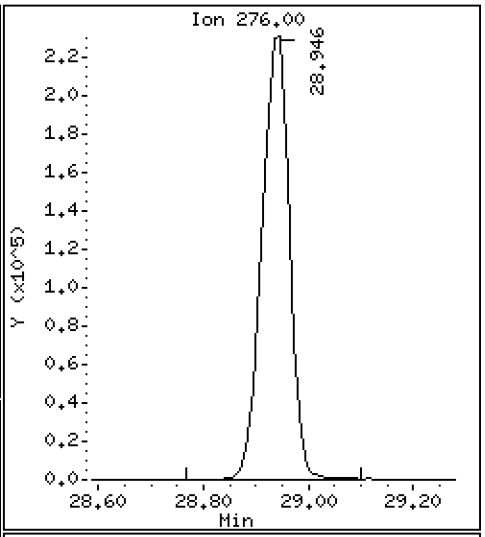
Column phase: ZB-5msi

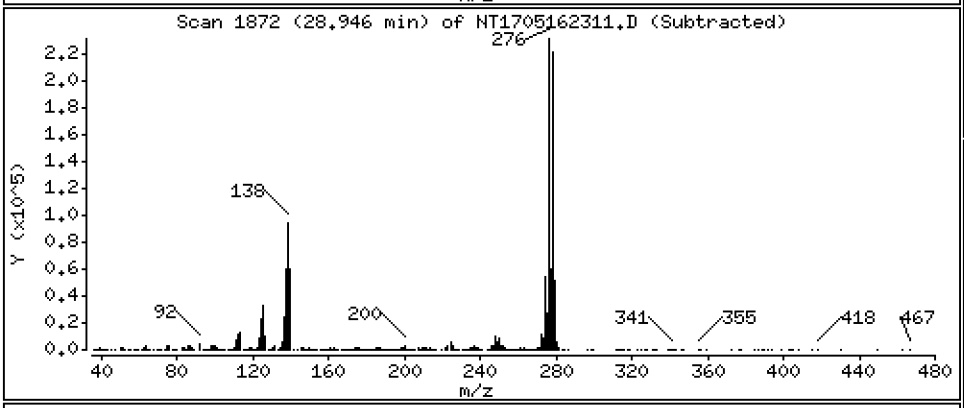
Column diameter: 0.25

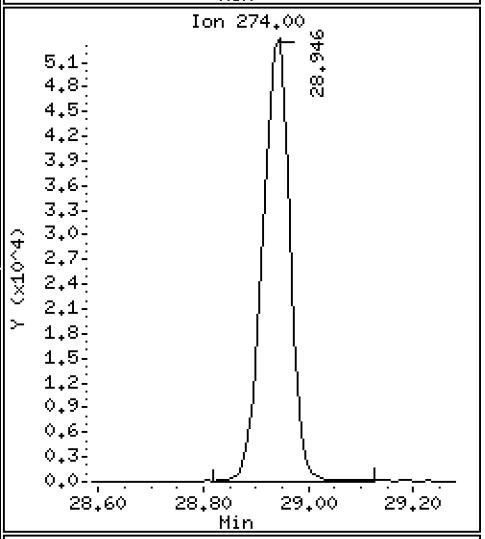
78 Indeno(1,2,3-cd)pyrene

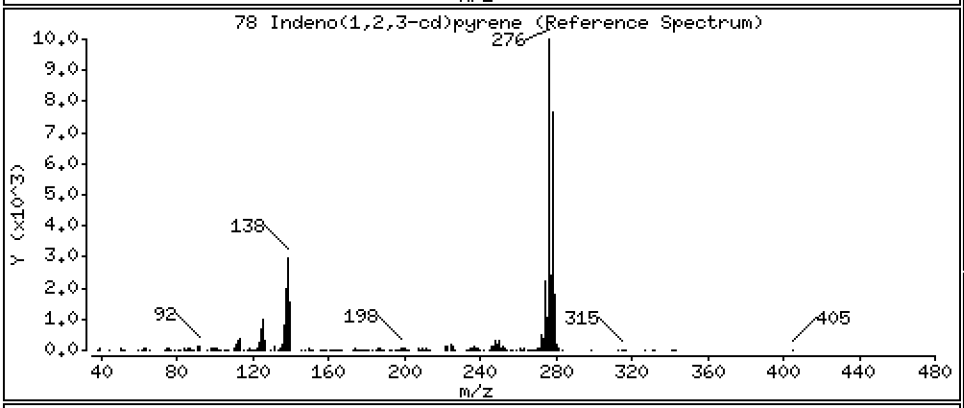
Concentration: 5.029 ug/mL

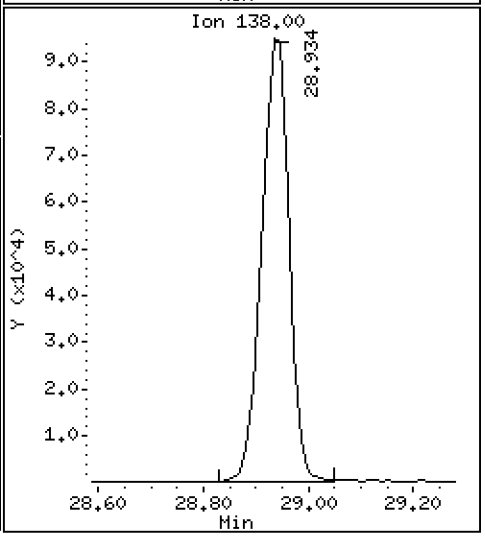


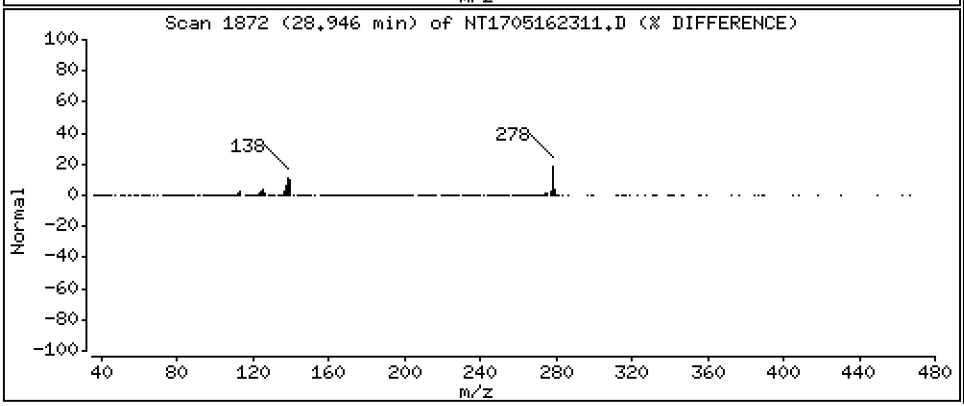












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

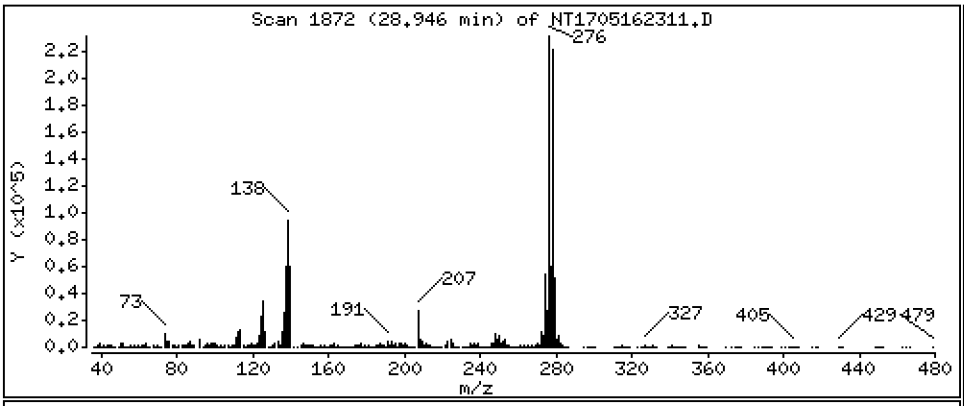
Operator: JGR

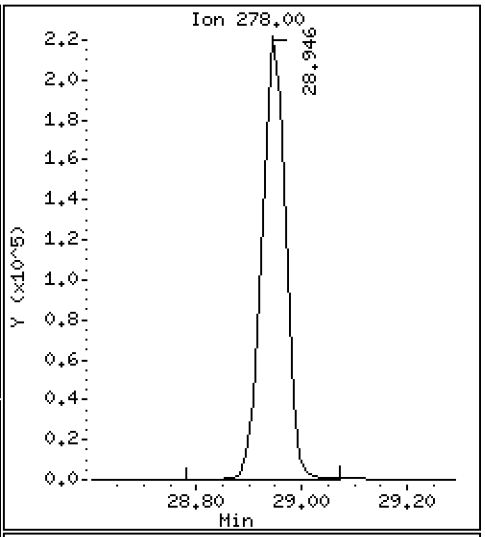
Column phase: ZB-5msi

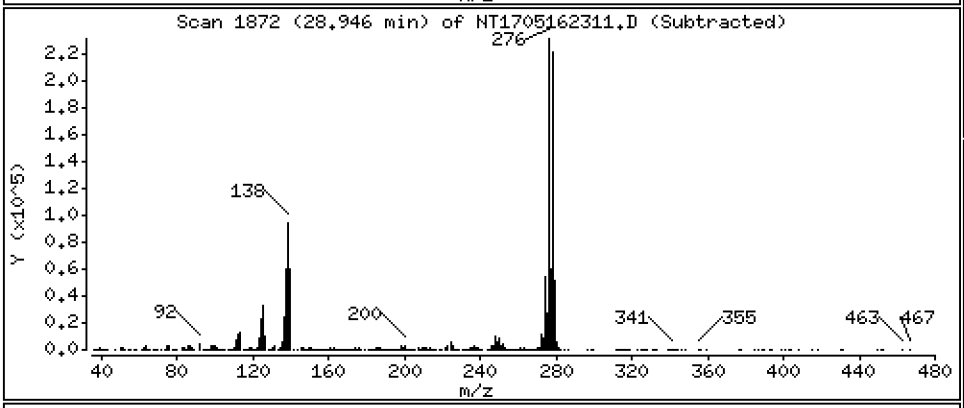
Column diameter: 0.25

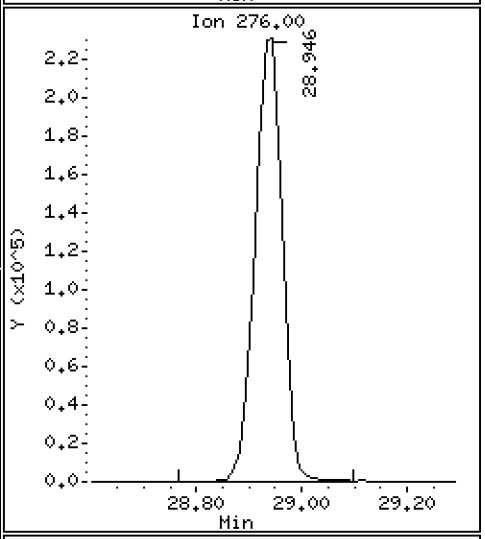
79 Dibenzo(a,h)anthracene

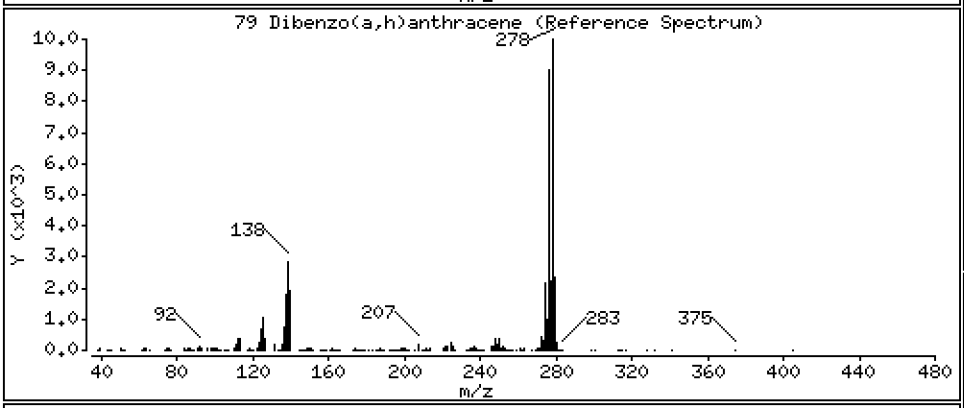
Concentration: 4.970 ug/mL

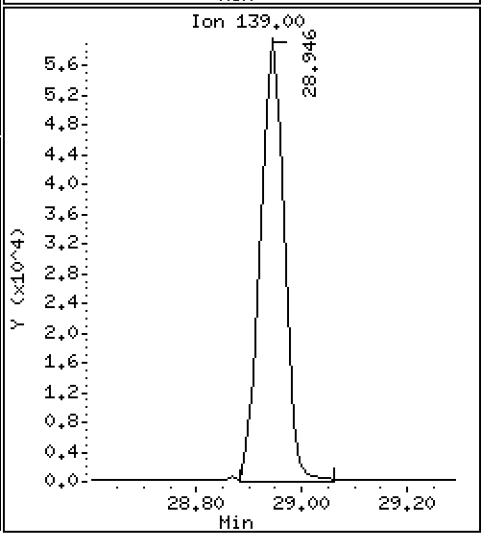


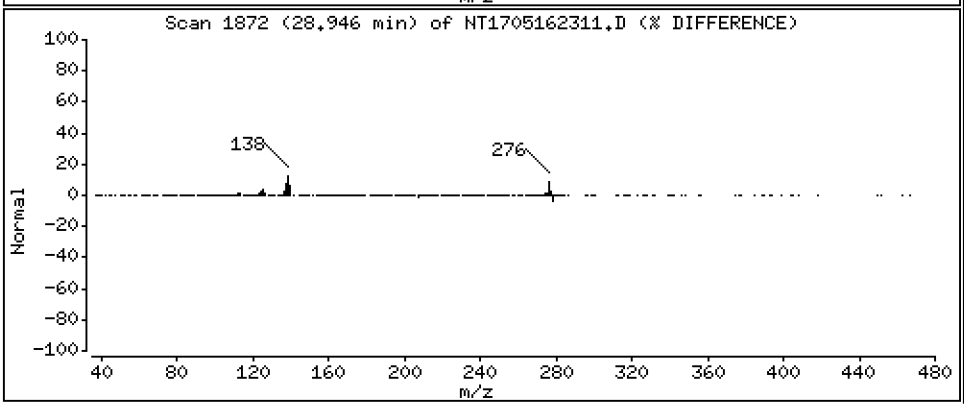












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

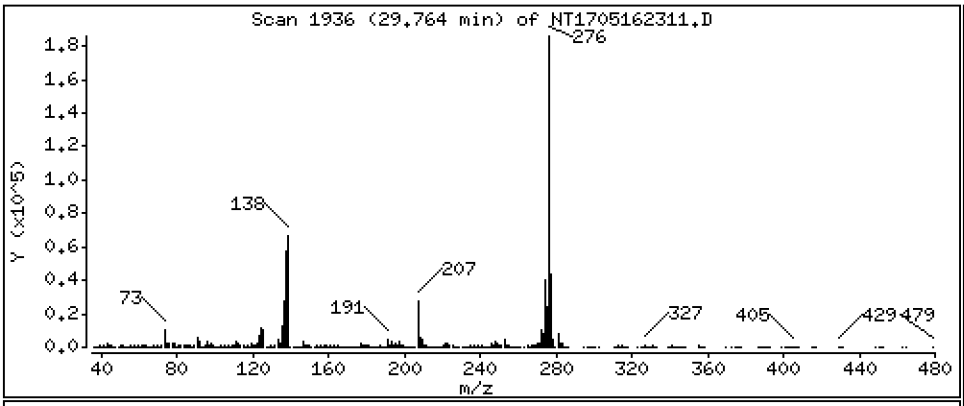
Operator: JGR

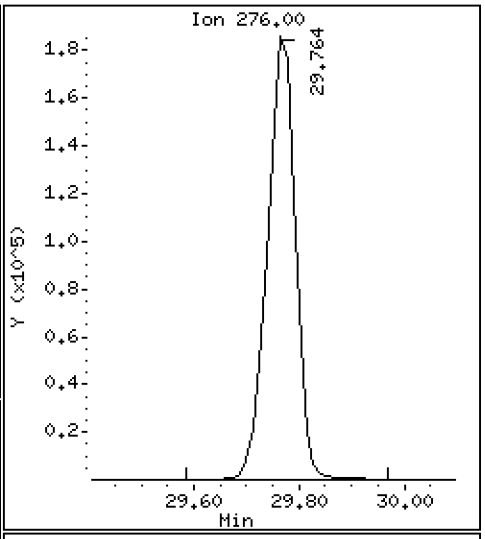
Column phase: ZB-5msi

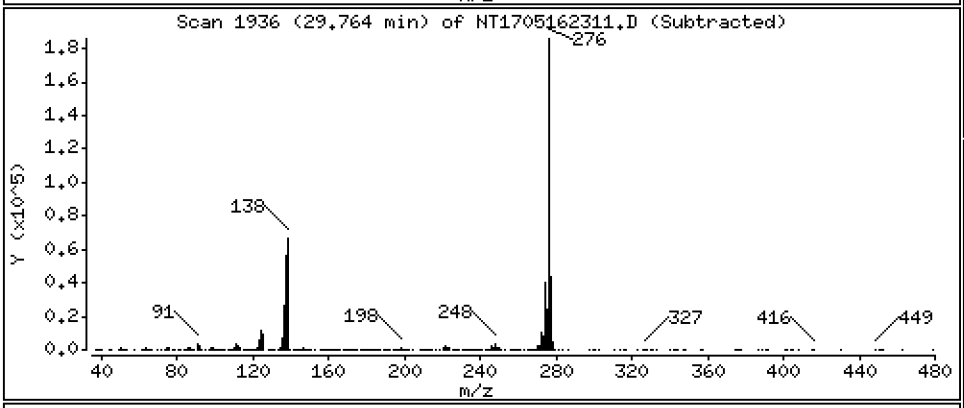
Column diameter: 0.25

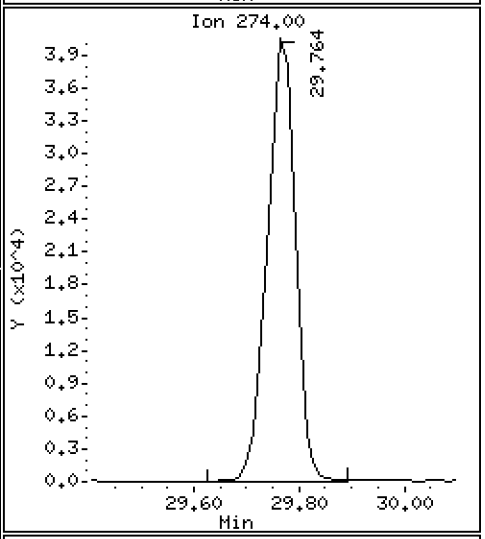
80 Benzo(g,h,i)perylene

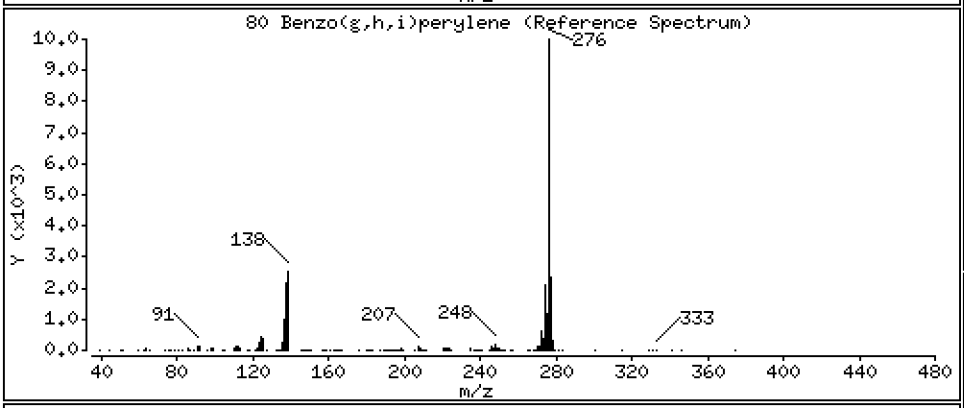
Concentration: 5.054 ug/mL

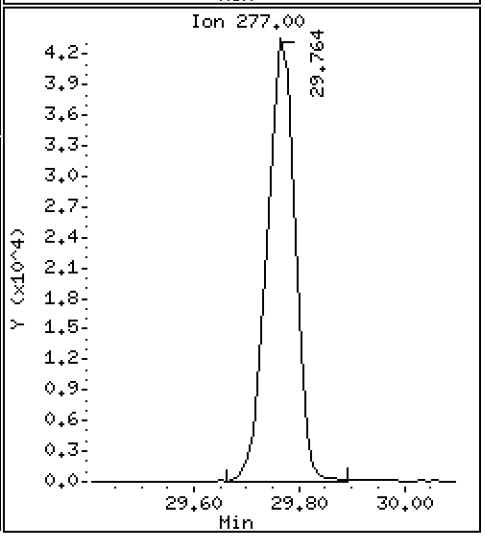


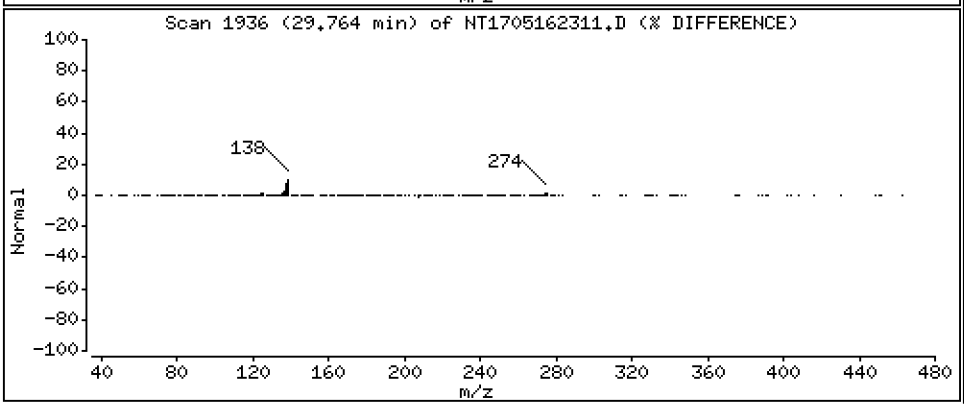












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

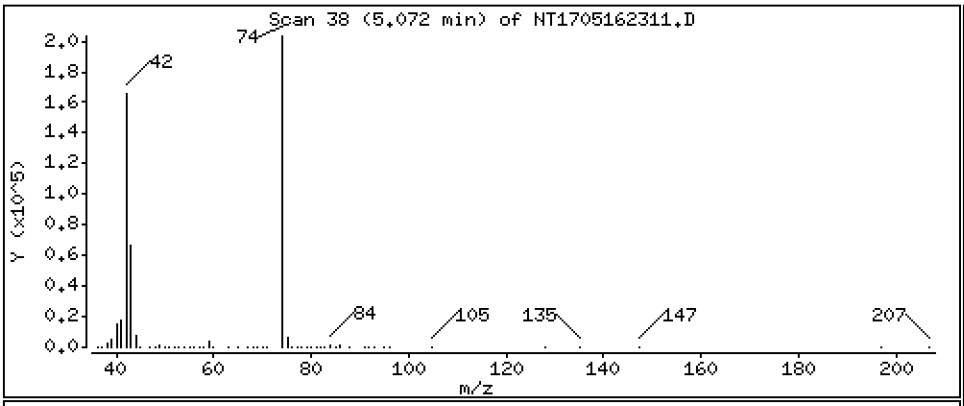
Operator: JGR

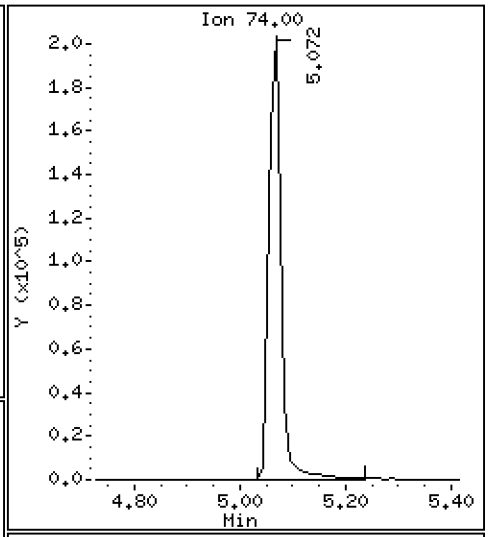
Column phase: ZB-5msi

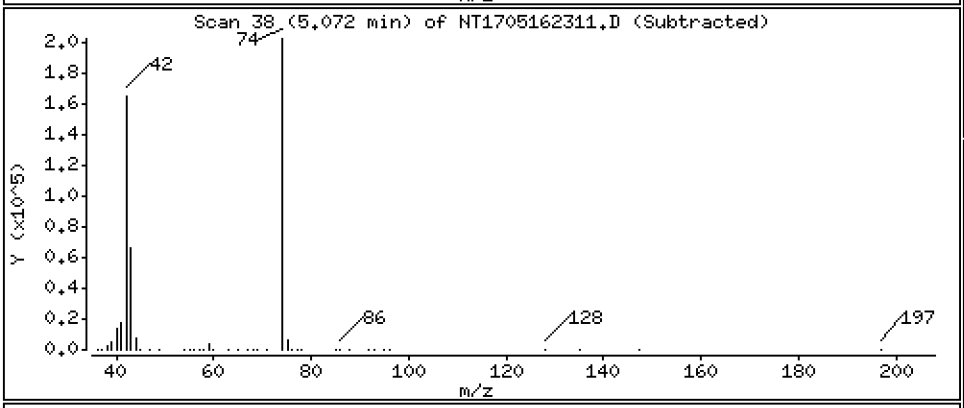
Column diameter: 0.25

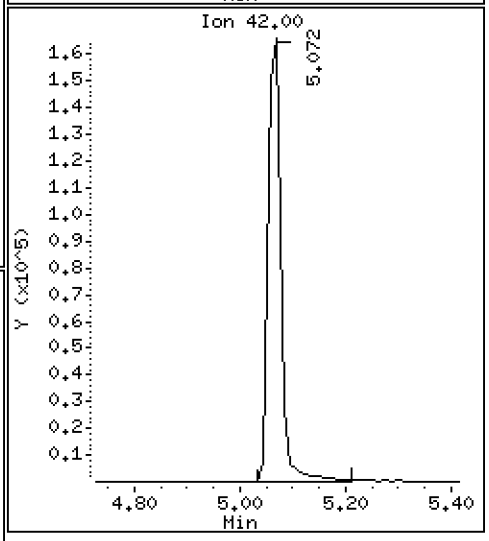
90 N-Nitrosodimethylamine

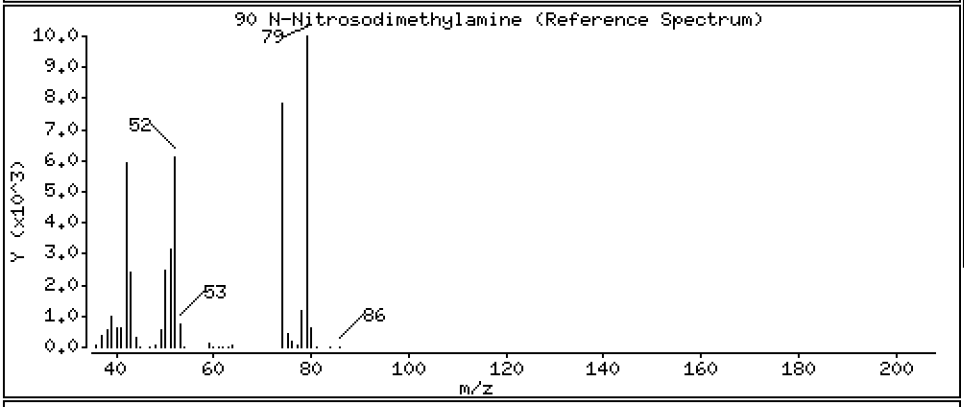
Concentration: 5.767 ug/mL

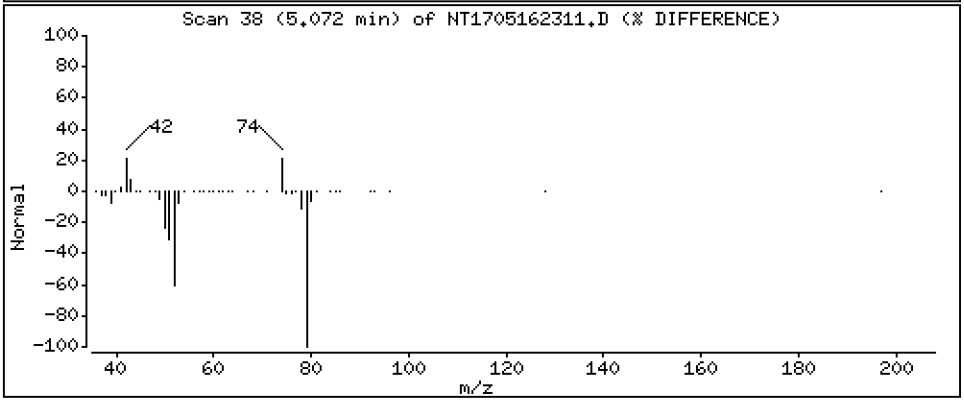












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

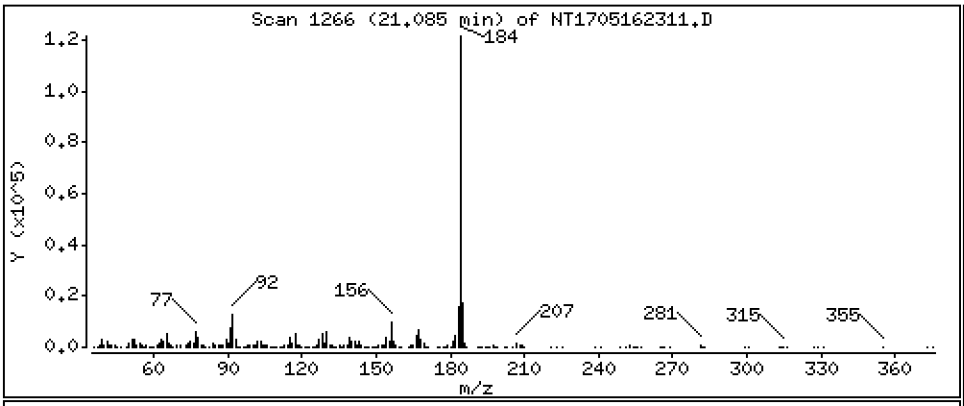
Operator: JGR

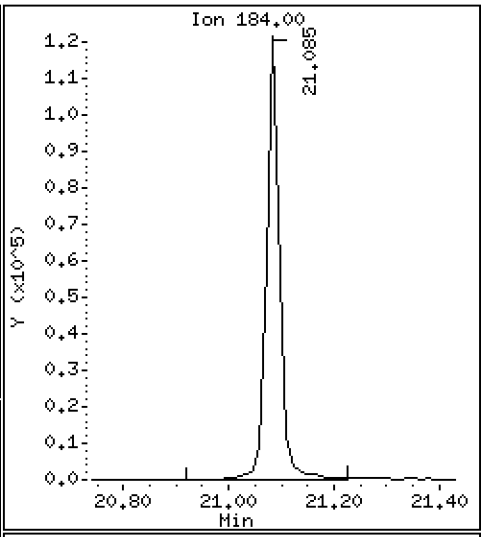
Column phase: ZB-5msi

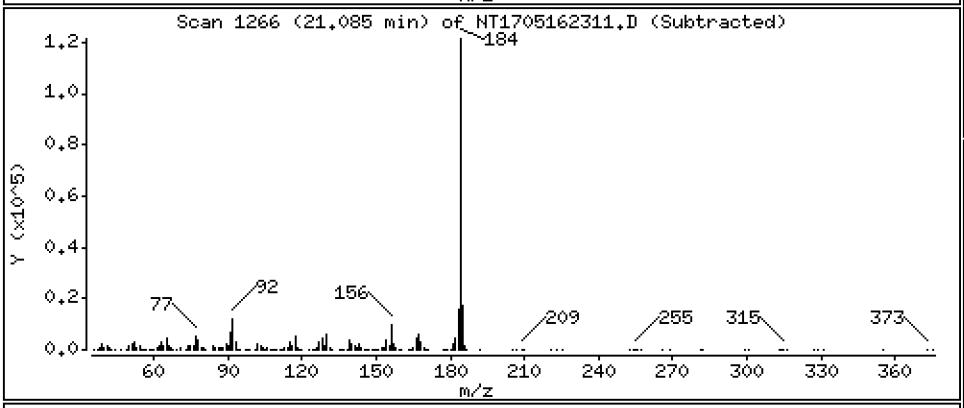
Column diameter: 0.25

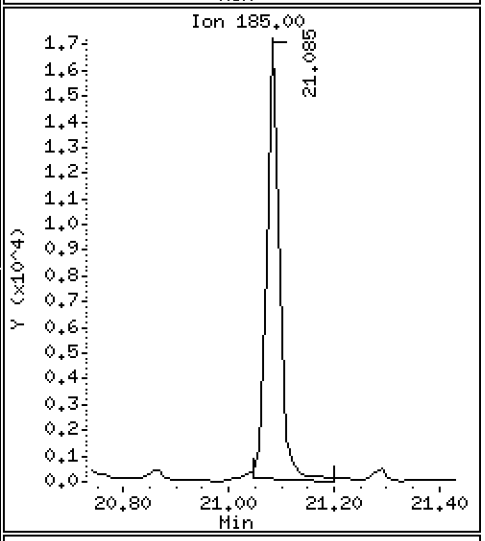
93 Benzidine

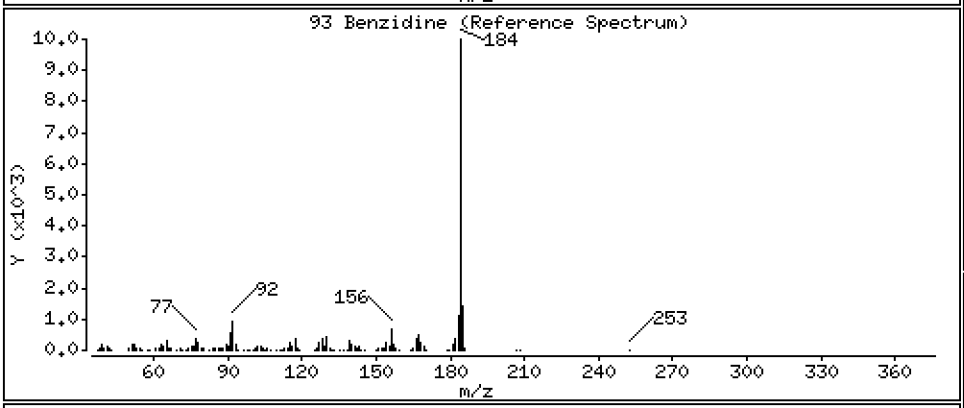
Concentration: 3.457 ug/mL

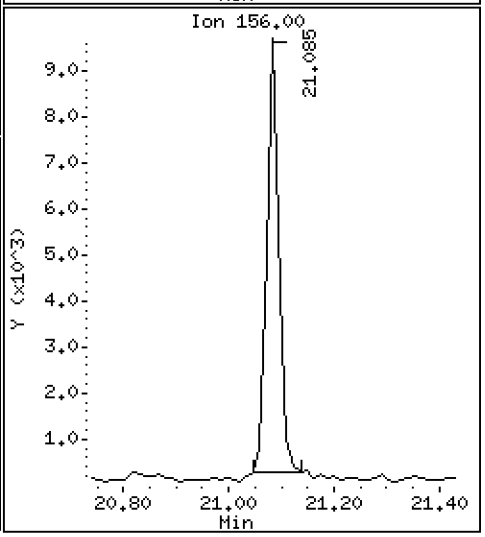


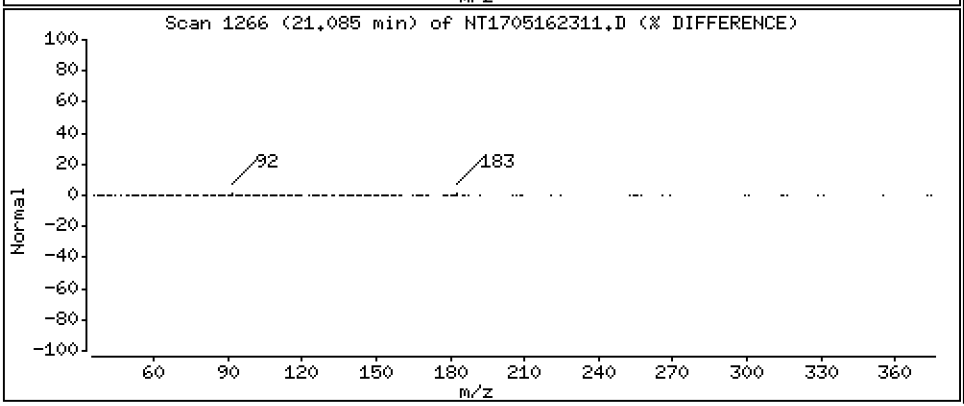












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

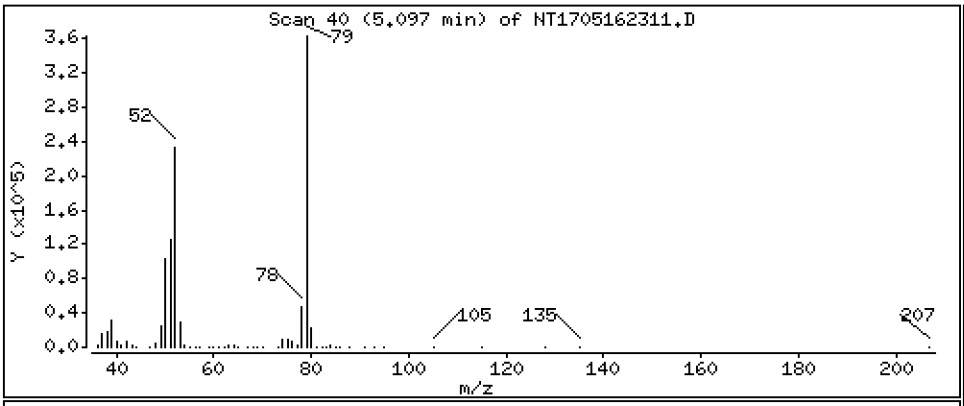
Operator: JGR

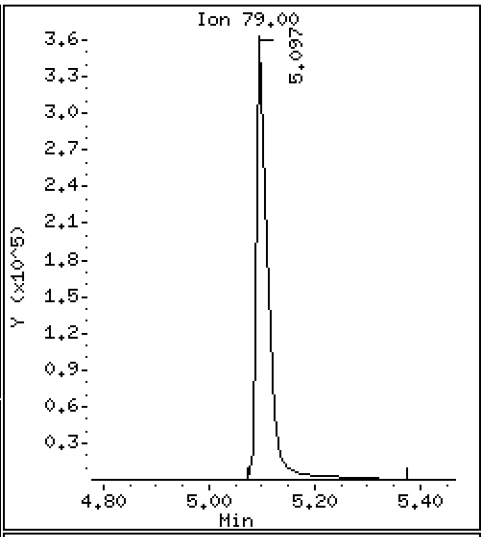
Column phase: ZB-5msi

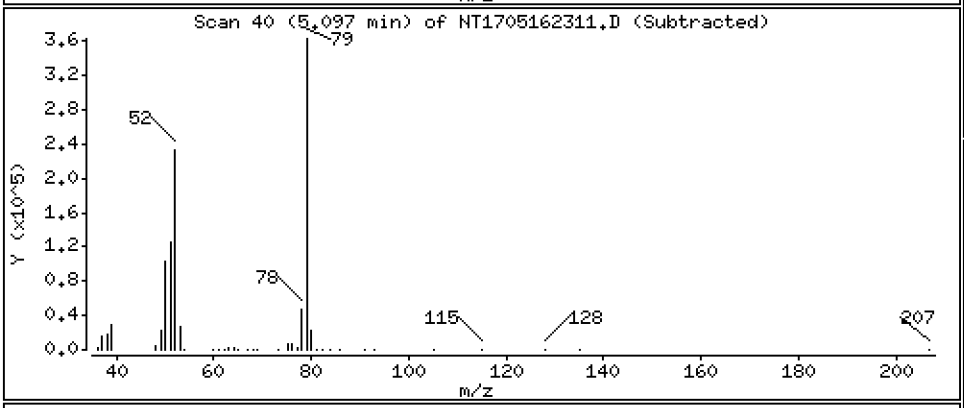
Column diameter: 0.25

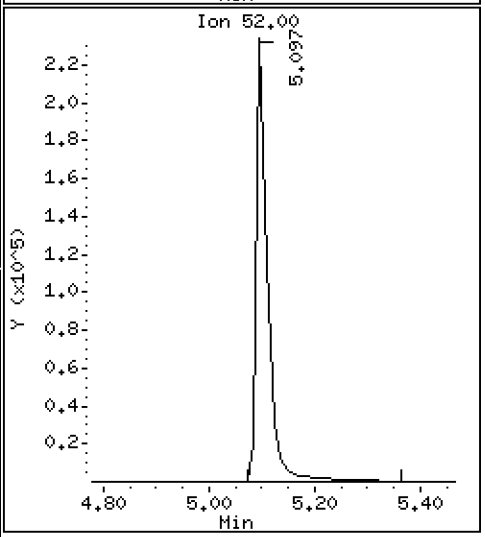
103 Pyridine

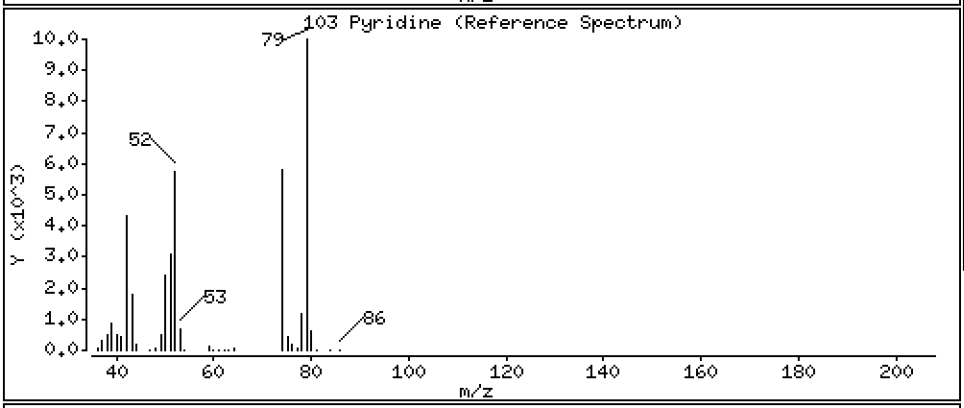
Concentration: 5.811 ug/mL

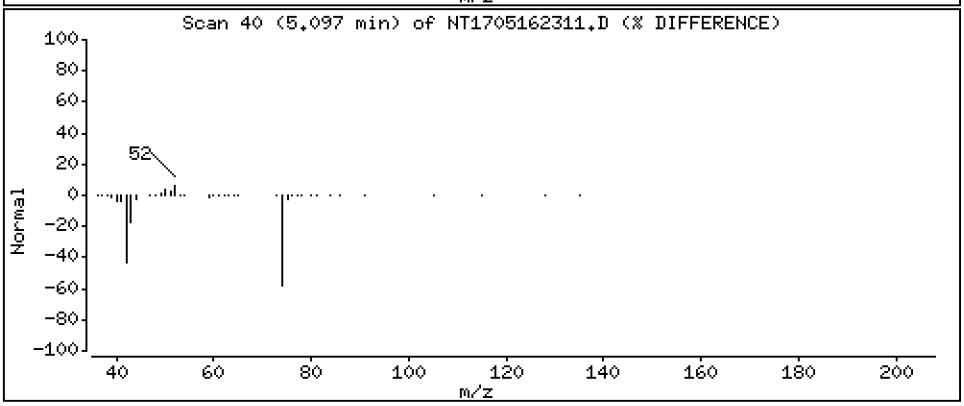












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

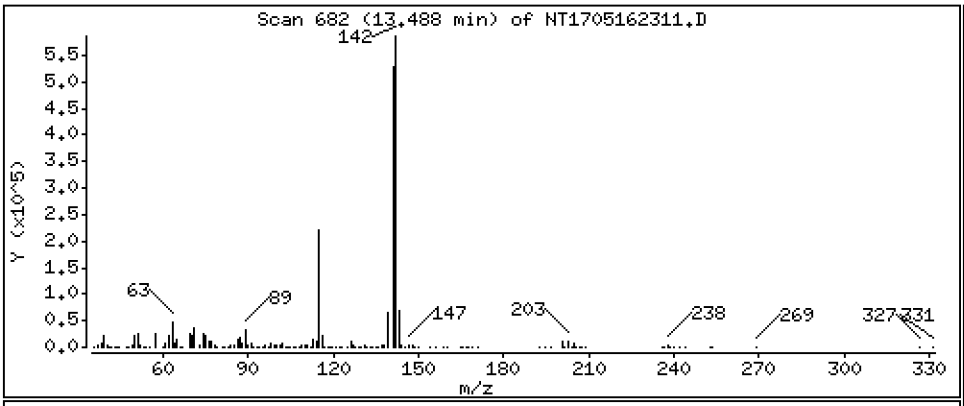
Operator: JGR

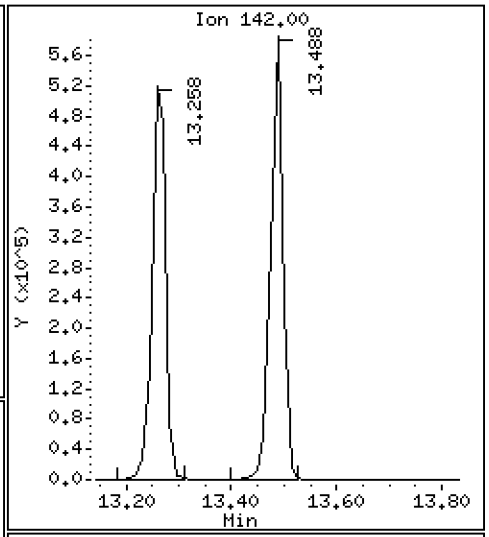
Column phase: ZB-5msi

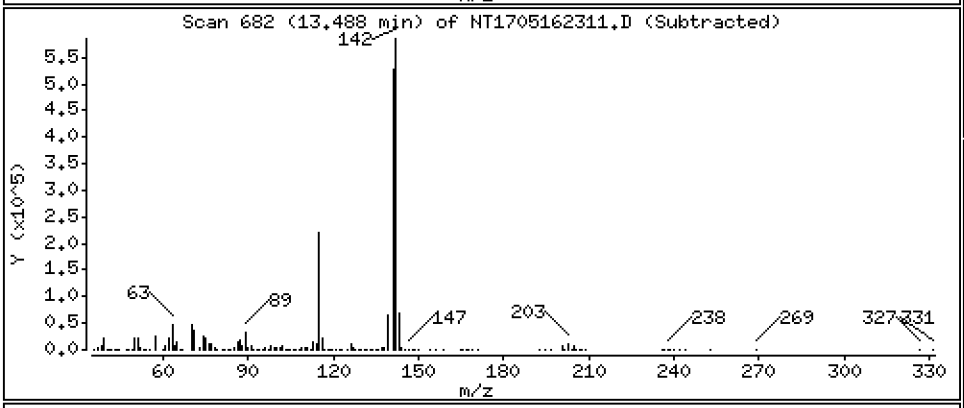
Column diameter: 0.25

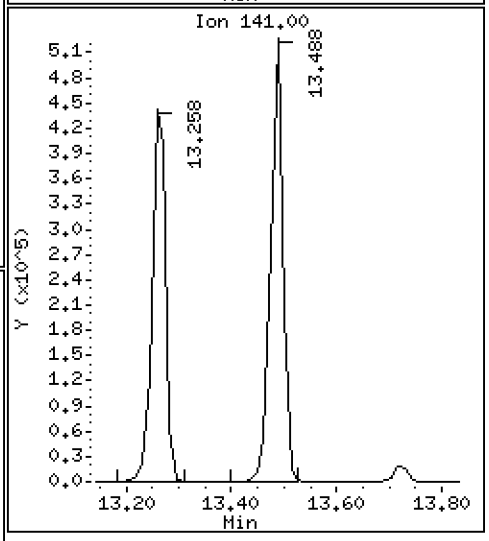
105 1-methylnaphthalene

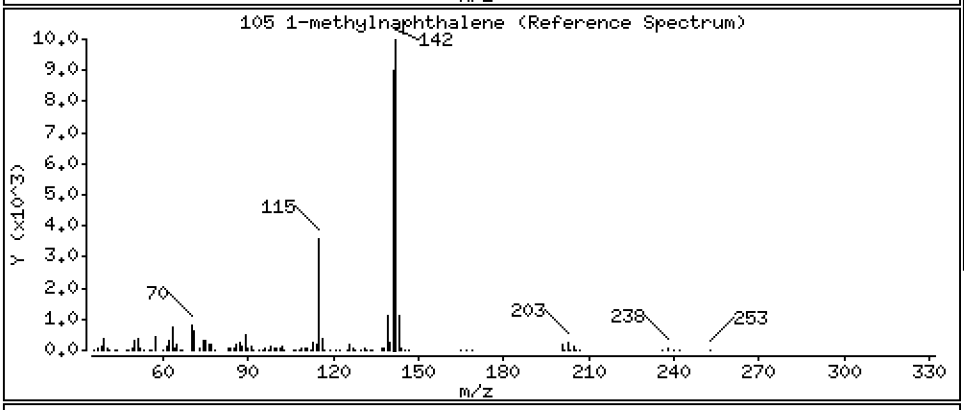
Concentration: 5.250 ug/mL

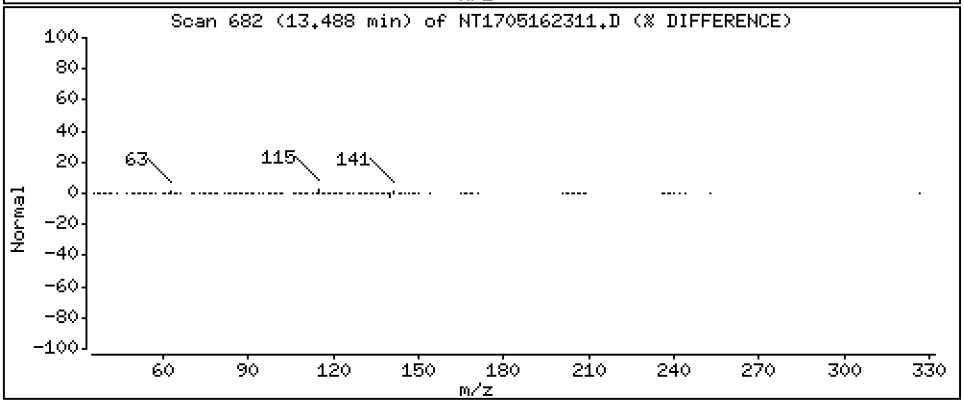












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

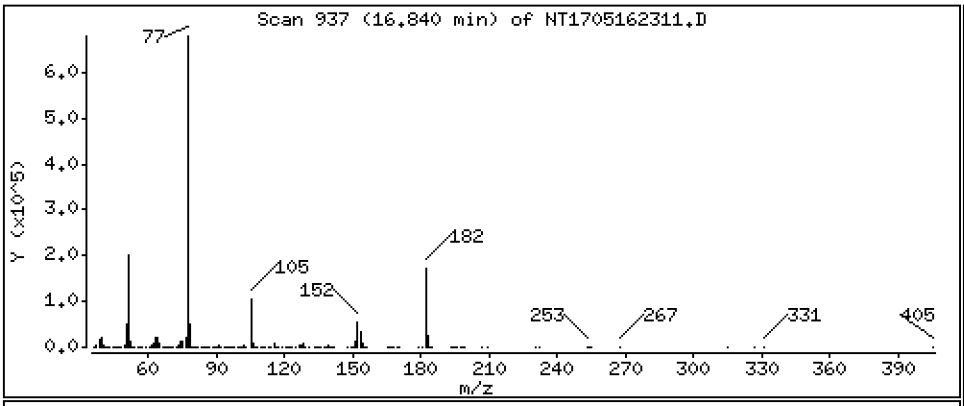
Operator: JGR

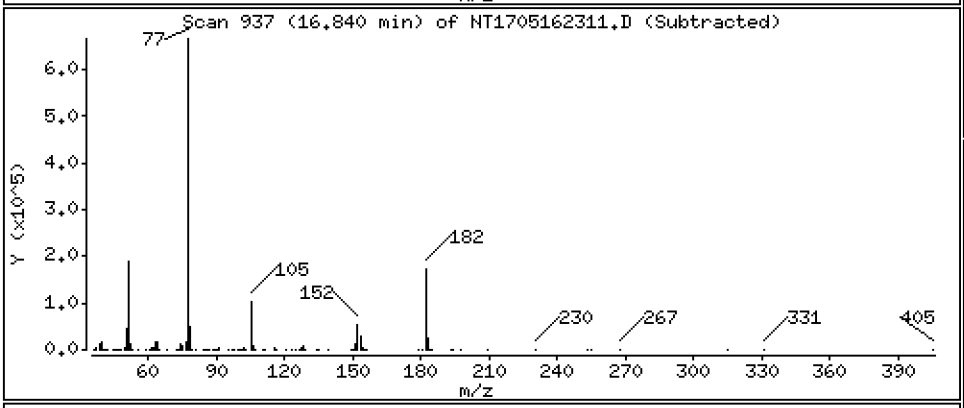
Column phase: ZB-5msi

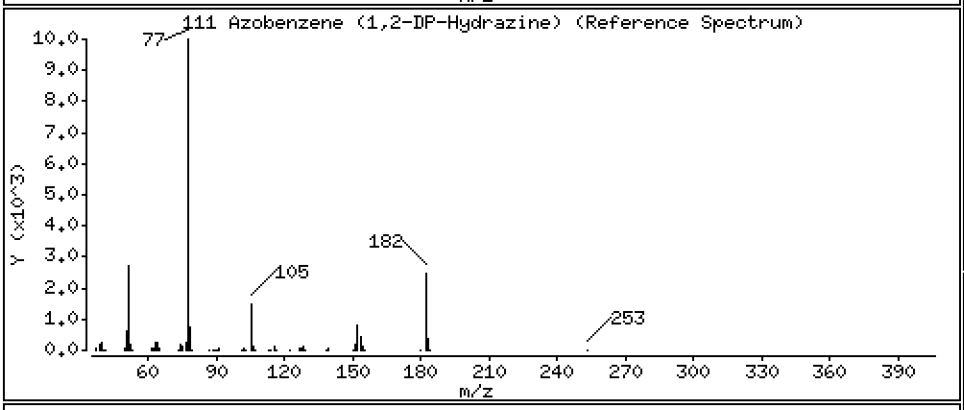
Column diameter: 0.25

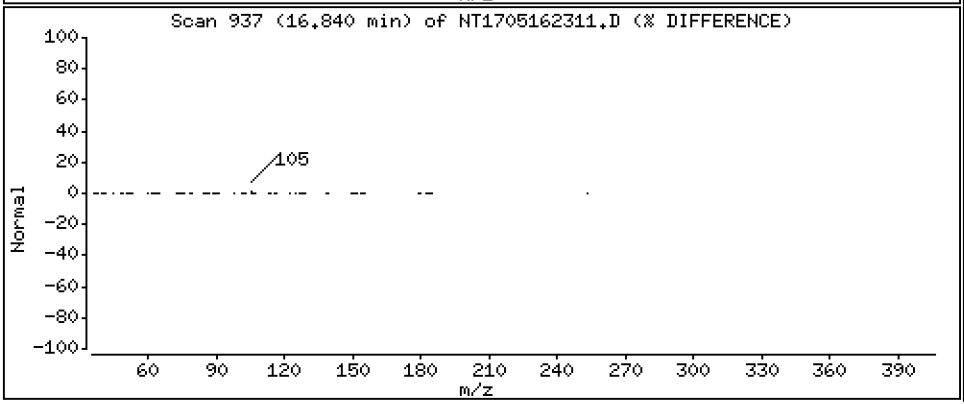
111 Azobenzene (1,2-DP-Hydrazine)

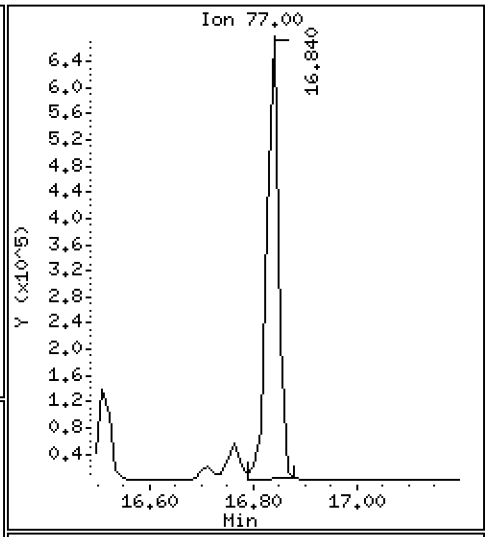
Concentration: 5.338 ug/mL

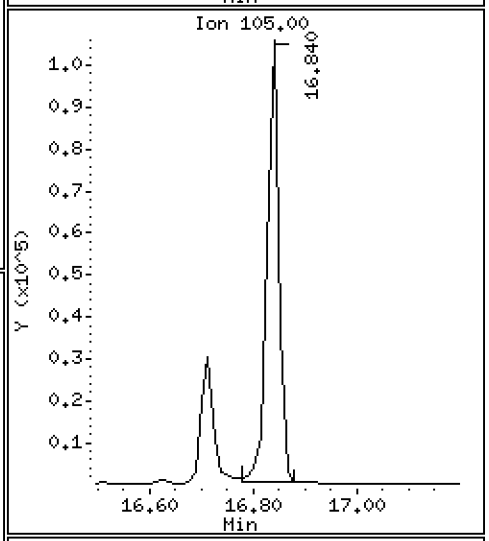


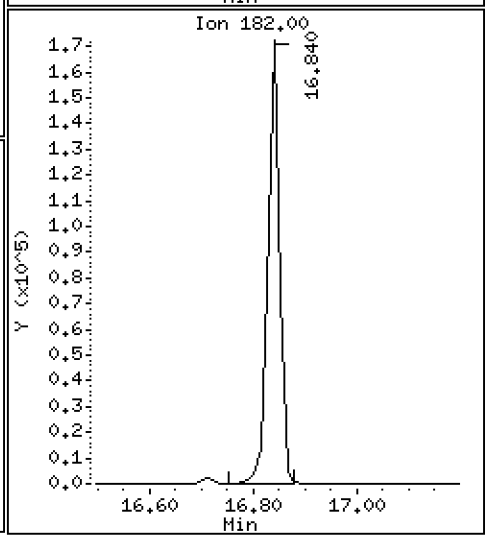












Date : 17-MAY-2023 00:29

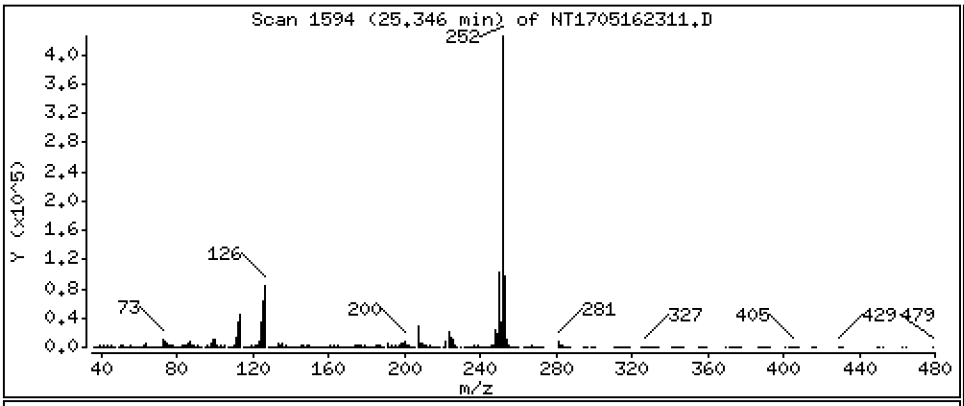
Client ID: Instrument: nt17.i

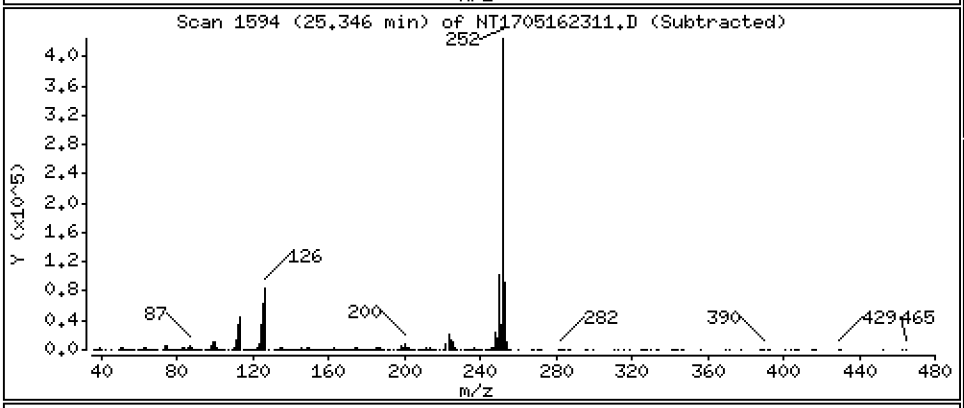
Sample Info: SLE0338-SCV1

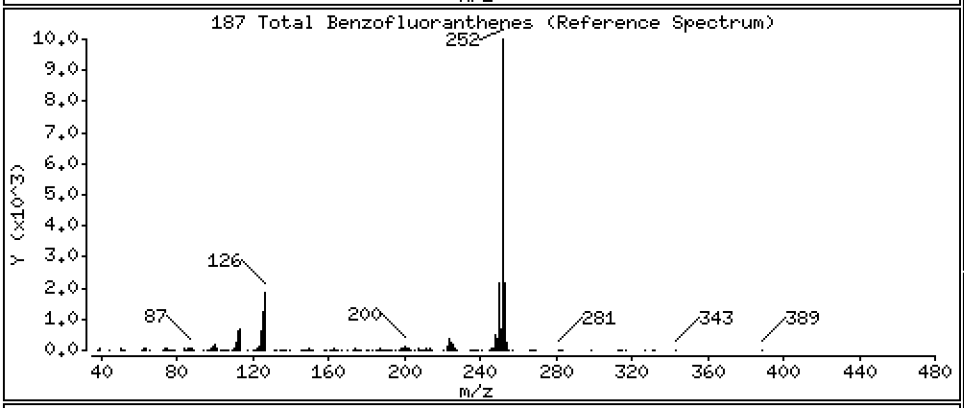
Operator: JGR

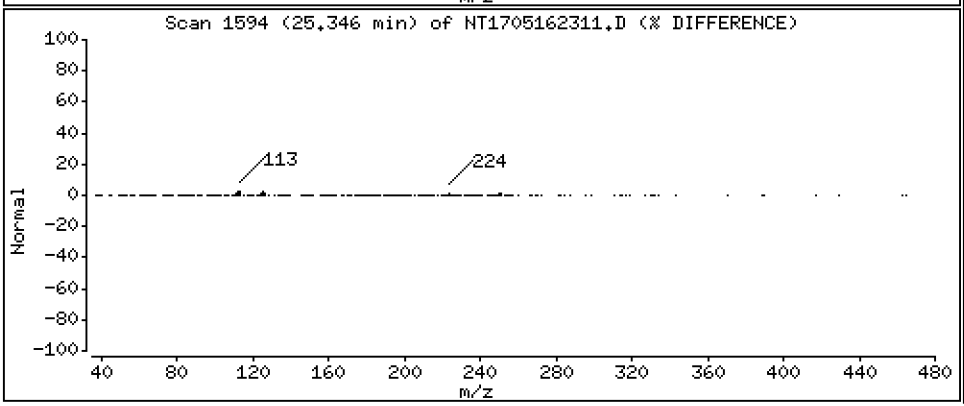
Column phase: ZB-5msi Column diameter: 0.25

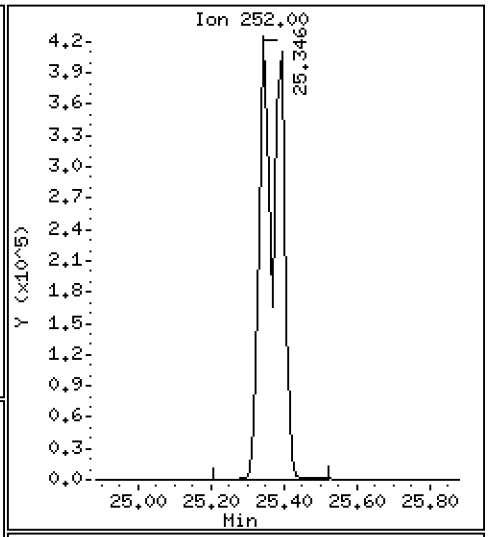
187 Total Benzofluoranthenes Concentration: 10.02 ug/mL

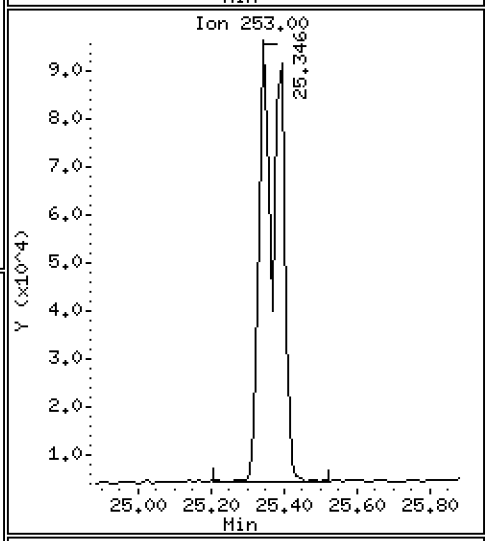


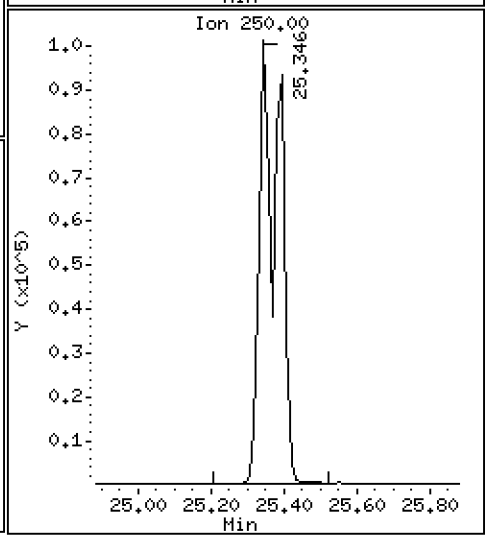












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

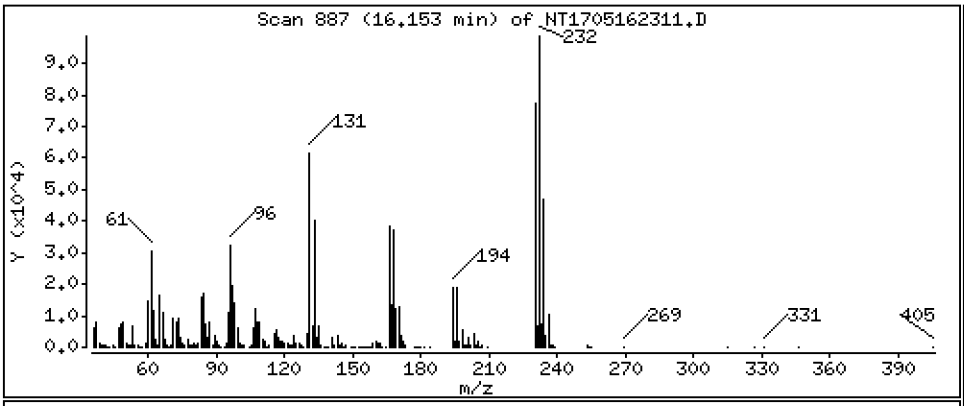
Operator: JGR

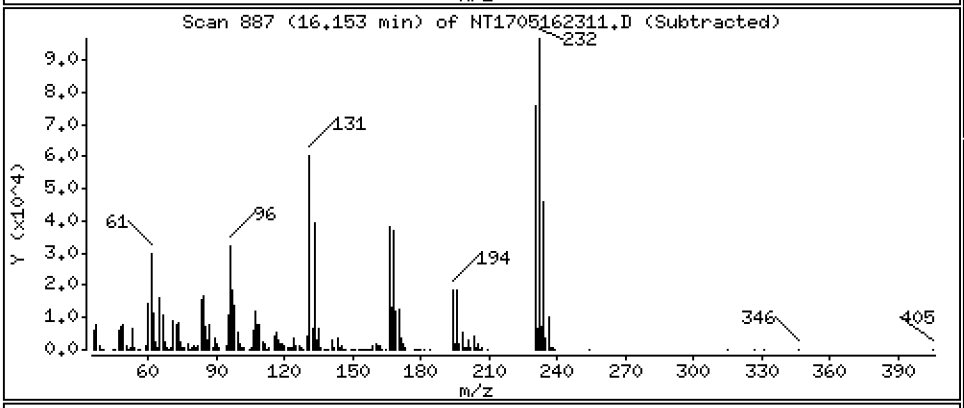
Column phase: ZB-5msi

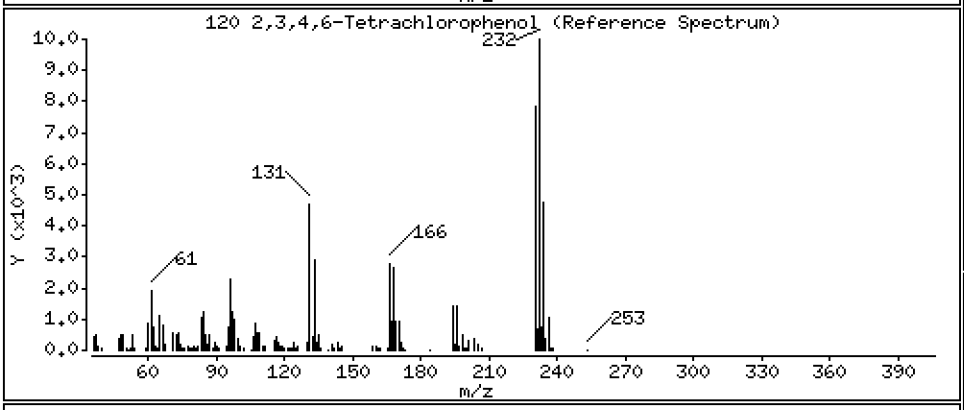
Column diameter: 0.25

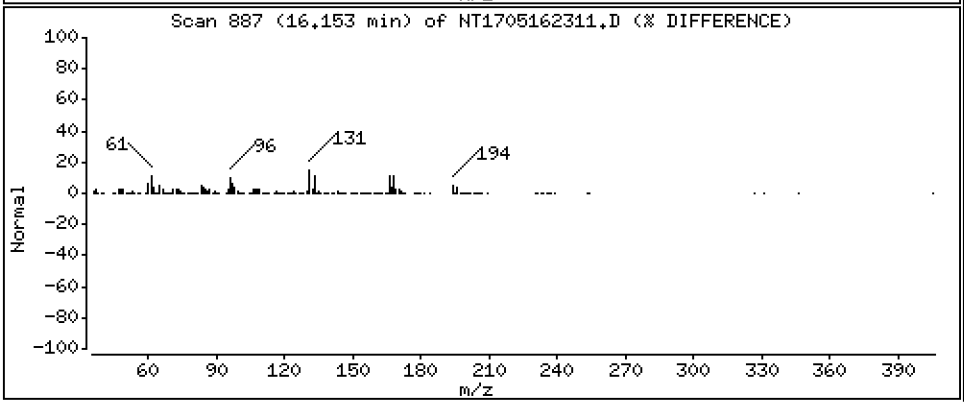
120 2,3,4,6-Tetrachlorophenol

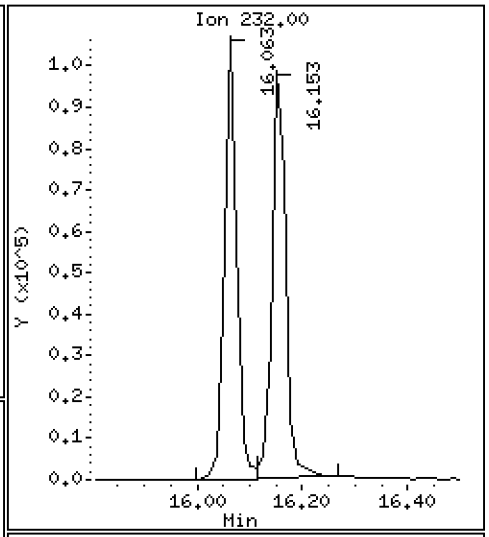
Concentration: 3.283 ug/mL

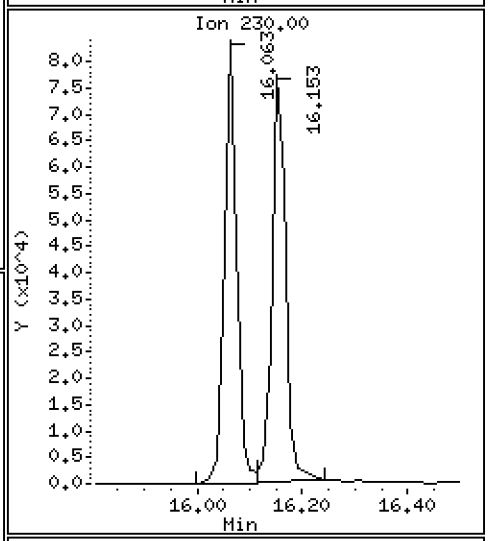


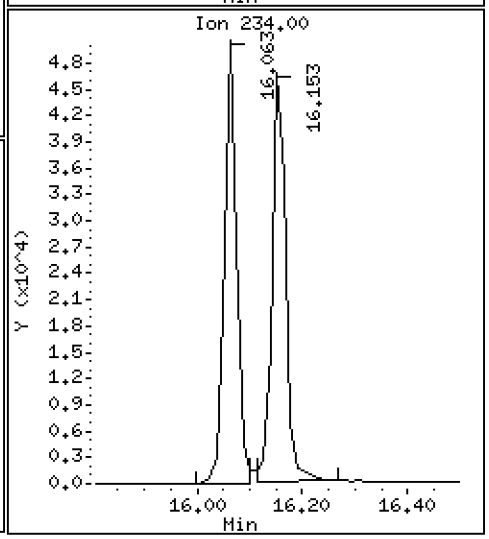












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D
Lab Smp Id: SLE0338-SCV1
Inj Date : 17-MAY-2023 00:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	Compound Not Detected.					
	3 Phenol	94	8.740	8.740	(0.933)	588001	4.82293	4.823
$	5 2-Chlorophenol-d4	132	Compound Not Detected.					
	4 Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	494651	5.56554	5.566
	6 2-Chlorophenol	128	9.033	9.033	(0.965)	539006	5.29416	5.294
	7 1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	548081	5.31911	5.319
*	8 1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	265705	4.00000	
	9 1,4-Dichlorobenzene	146	9.390	9.391	(1.003)	521173	5.07146	5.071
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	507921	5.25771	5.258
	11 Benzyl alcohol	108	9.633	9.633	(1.029)	299374	5.27414	5.274
	14 2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.060)	168255	6.17916	6.179
	13 2-Methylphenol	108	9.850	9.851	(1.052)	378927	4.22901	4.229
	17 Hexachloroethane	117	10.336	10.336	(1.104)	222748	5.41856	5.419
	16 N-Nitroso-di-n-propylamine	70	10.183	10.170	(1.087)	378231	5.51734	5.517
	15 4-Methylphenol	108	10.119	10.119	(1.080)	425231	4.66096	4.661
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	10.489	10.489	(0.886)	558517	5.32891	5.329
	20 Isophorone	82	10.924	10.924	(0.922)	996054	6.94254	6.943
	21 2-Nitrophenol	139	11.115	11.115	(0.939)	247403	4.89866	4.899
	22 2,4-Dimethylphenol	107	11.153	11.154	(0.942)	371455	3.78811	3.788
	23 Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.958)	547968	6.23185	6.232
	24 Benzoic acid	105	11.332	11.333	(0.957)	445958	6.76086	6.761
	25 2,4-Dichlorophenol	162	11.562	11.562	(0.976)	370930	4.70748	4.707
	26 1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	503147	5.87937	5.879
*	27 Naphthalene-d8	136	11.842	11.830	(1.000)	965231	4.00000	
	28 Naphthalene	128	11.881	11.881	(1.003)	1361438	5.12904	5.129
	29 4-Chloroaniline	127	11.995	11.995	(1.013)	469527	4.48751	4.488
	30 Hexachlorobutadiene	225	12.225	12.225	(1.032)	222159	5.24062	5.241
	31 4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	413906	4.87847	4.878
	32 2-Methylnaphthalene	142	13.258	13.258	(1.120)	955574	5.02794	5.028
	33 Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	201170	4.21896	4.219

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	257193	4.79376	4.794
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	274739	4.83728	4.837
$	36	2-Fluorobiphenyl	172	Compound Not Detected.					
	37	2-Chloronaphthalene	162	14.252	14.253	(0.923)	885085	5.40065	5.401
	38	2-Nitroaniline	65	14.507	14.508	(0.940)	297267	5.35584	5.356
	39	Dimethylphthalate	163	14.928	14.929	(0.967)	955980	5.41824	5.418
	40	Acenaphthylene	152	15.120	15.120	(0.979)	1374665	5.28203	5.282
	41	2,6-Dinitrotoluene	165	15.069	15.069	(0.976)	223225	5.40390	5.404
*	42	Acenaphthene-d10	164	15.438	15.426	(1.000)	512787	4.00000	
	43	3-Nitroaniline	138	15.362	15.349	(0.995)	197758	5.16887	5.169
	44	Acenaphthene	153	15.502	15.502	(1.004)	859485	5.28316	5.283
	45	2,4-Dinitrophenol	184	15.566	15.567	(1.008)	52944	2.11874	2.119
	46	Dibenzofuran	168	15.821	15.821	(1.025)	1172327	5.16305	5.163
	47	4-Nitrophenol	109	15.668	15.681	(1.015)	114450	4.50365	4.504
	48	2,4-Dinitrotoluene	165	15.872	15.872	(1.028)	284935	5.26937	5.269
	50	Diethylphthalate	149	16.369	16.369	(1.060)	945291	5.49374	5.494
	49	Fluorene	166	16.535	16.535	(1.071)	1165179	5.39758	5.398
	51	4-Chlorophenyl-phenylether	204	16.522	16.509	(1.070)	542088	5.46212	5.462
	52	4-Nitroaniline	138	16.624	16.611	(1.077)	184970	5.10772	5.108
	53	4,6-Dinitro-2-methylphenol	198	16.713	16.713	(0.905)	113822	3.35487	3.355
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	651392	5.46976	5.470
$	55	2,4,6-Tribromophenol	330	Compound Not Detected.					
	56	4-Bromophenyl-phenylether	248	17.514	17.515	(0.949)	226164	5.42020	5.420
	57	Hexachlorobenzene	284	17.833	17.833	(0.966)	208878	4.91276	4.913
	58	Pentachlorophenol	266	18.190	18.203	(0.985)	98895	3.94337	3.943
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	850147	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.003)	1250084	5.03943	5.039
	61	Anthracene	178	18.598	18.598	(1.008)	1054910	4.52965	4.530
	62	Carbazole	167	18.917	18.918	(1.025)	896606	5.93842	5.938
	63	Di-n-butylphthalate	149	19.682	19.682	(1.066)	1586517	5.64164	5.642
	64	Fluoranthene	202	20.868	20.855	(0.890)	1308113	5.46710	5.467
	65	Pyrene	202	21.289	21.276	(0.908)	1277121	5.26528	5.265
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	632335	5.82476	5.825
	68	Benzo(a)anthracene	228	23.419	23.419	(0.998)	953848	5.06413	5.064
*	69	Chrysene-d12	240	23.457	23.445	(1.000)	511511	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.996)	459041	11.9948	11.99
	71	Chrysene	228	23.496	23.496	(1.002)	889381	5.01800	5.018
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	875291	5.79218	5.792
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1044471	4.00000	
	73	Di-n-octylphthalate	149	24.465	24.465	(1.000)	1451463	5.48238	5.482
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	887996	4.91157	4.912
	75	Benzo(k)fluoranthene	252	25.396	25.384	(0.971)	848094	4.96504	4.965(H)
	76	Benzo(a)pyrene	252	26.034	26.022	(0.996)	736579	5.17185	5.172
*	77	Perylene-d12	264	26.149	26.149	(1.000)	456008	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.946	28.933	(1.107)	830811	5.02922	5.029
	79	Dibenzo(a,h)anthracene	278	28.946	28.946	(1.107)	689006	4.96953	4.970
	80	Benzo(g,h,i)perylene	276	29.764	29.751	(1.138)	689189	5.05448	5.054
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	334608	5.76731	5.767
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	21.085	21.085	(0.899)	208933	3.45722	3.457
	103	Pyridine	79	5.097	5.122	(0.544)	534742	5.81084	5.811
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	925646	5.25003	5.250
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.091)	1072104	5.33771	5.338

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.345	25.384	(0.969)	1625913	10.0183	10.02
120 2,3,4,6-Tetrachlorophenol	232	16.152	16.152	(1.046)	210743	3.28296	3.283

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162311.D
Lab Smp Id: SLE0338-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	265705	-7.45
27 Naphthalene-d8	1056758	528379	2113516	965231	-8.66
42 Acenaphthene-d10	587510	293755	1175020	512787	-12.72
59 Phenanthrene-d10	933575	466788	1867150	850147	-8.94
69 Chrysene-d12	576570	288285	1153140	511511	-11.28
134 Di-n-octylphthala	1181651	590826	2363302	1044471	-11.61
77 Perylene-d12	491359	245680	982718	456008	-7.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.15	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162311.D

Lab ID: SLE0338-SCV1
nt17.i, ABN.m, 17-MAY-2023 00:29

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

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.008	0.000	1.0083	2,4-Dinitrophenol

RRT check based on Ccal File: NT1705162308.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

LOW-CONCENTRATION CALIBRATION VERIFICATION

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00065
Laboratory ID: SLE0434-LCV1
Sequence: SLE0434
Standard ID: L005946

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	-0.8	50.00
Benzyl Alcohol	0.20000	0.2	-20.7	50.00
4-Methylphenol	0.20000	0.2	-6.6	50.00
Naphthalene	0.20000	0.2	-1.2	50.00
2-Methylnaphthalene	0.20000	0.2	-6.3	50.00
Acenaphthylene	0.20000	0.2	3.6	50.00
Dibenzofuran	0.20000	0.2	-1.0	50.00
Fluorene	0.20000	0.2	12.0	50.00
Phenanthrene	0.20000	0.2	1.7	50.00
Anthracene	0.20000	0.2	-7.5	50.00
Fluoranthene	0.20000	0.2	-2.6	50.00
Pyrene	0.20000	0.2	1.8	50.00
Butylbenzylphthalate	0.20000	0.2	-2.8	50.00
Benzo(a)anthracene	0.20000	0.2	8.3	50.00
Chrysene	0.20000	0.2	4.8	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.2	-6.1	50.00
Benzofluoranthenes, Total	0.40000	0.4	-0.9	50.00
Benzo(a)pyrene	0.20000	0.2	2.0	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.2	-1.1	50.00
Dibenzo(a,h)anthracene	0.20000	0.2	-2.2	50.00
Benzo(g,h,i)perylene	0.20000	0.2	-2.1	50.00
2-Fluorophenol	0.30000	0.276	-8.1	50.00
Phenol-d5	0.30000	0.282	-6.1	50.00
2-Chlorophenol-d4	0.30000	0.296	-1.3	50.00
1,2-Dichlorobenzene-d4	0.20000	0.218	8.8	50.00
Nitrobenzene-d5	0.20000	0.186	-7.1	50.00
2-Fluorobiphenyl	0.20000	0.204	2.1	50.00
2,4,6-Tribromophenol	0.30000	0.243	-19.2	50.00
p-Terphenyl-d14	0.20000	0.208	3.8	50.00

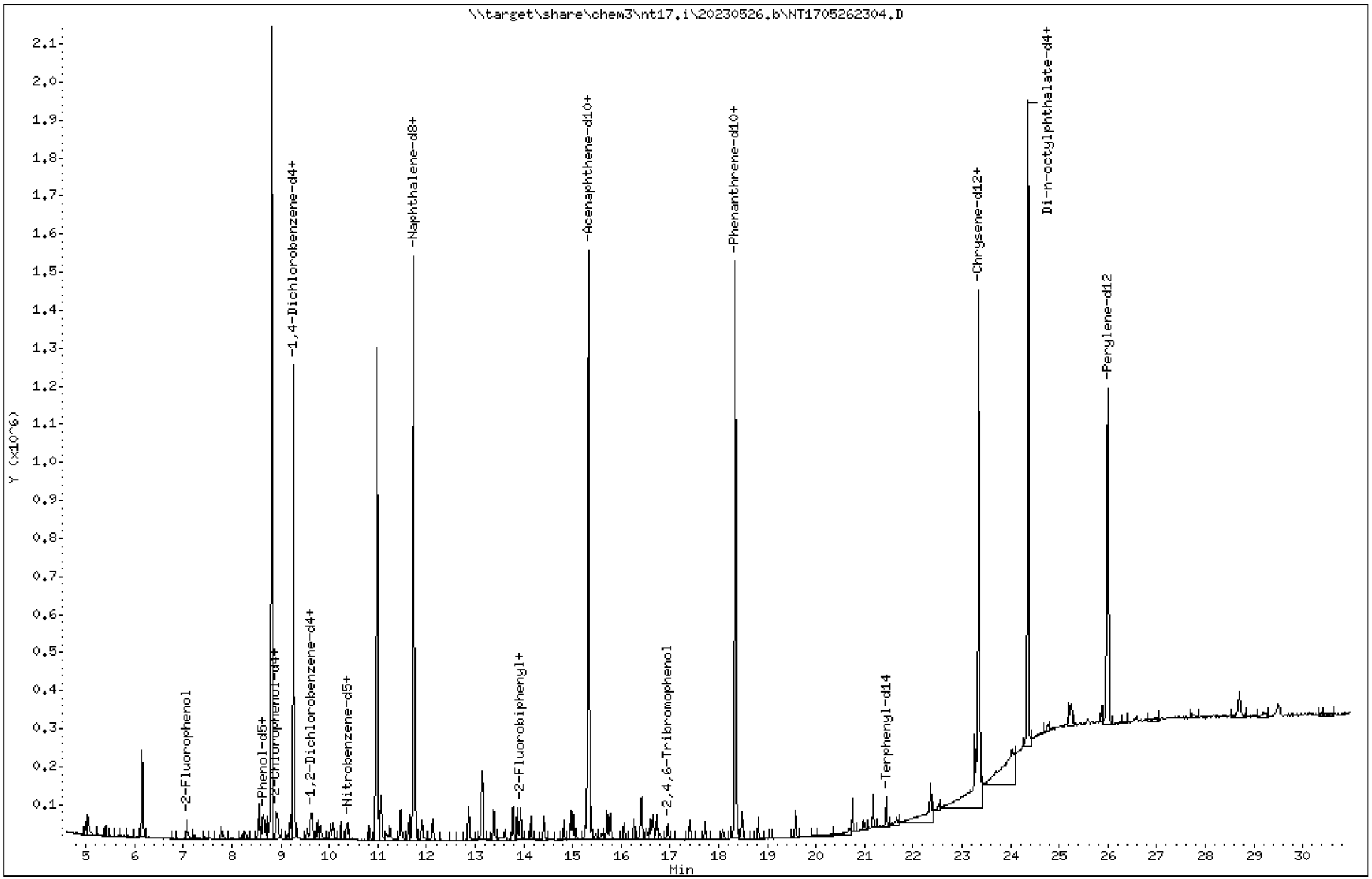
LOW-CONCENTRATION CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00065
Laboratory ID: SLE0434-LCV1
Sequence: SLE0434
Standard ID: L005946

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D
Date : 26-MAY-2023 14:31
Client ID:
Sample Info: SLE0434-LCV1

Instrument: nt17.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

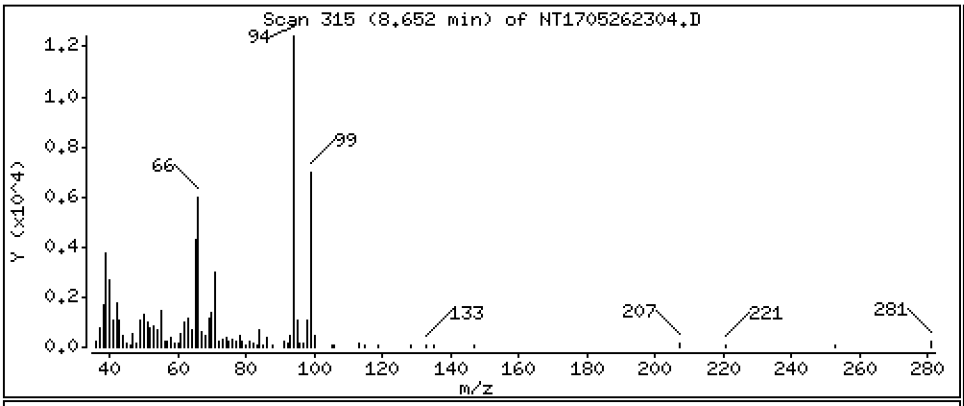
Operator: VTS

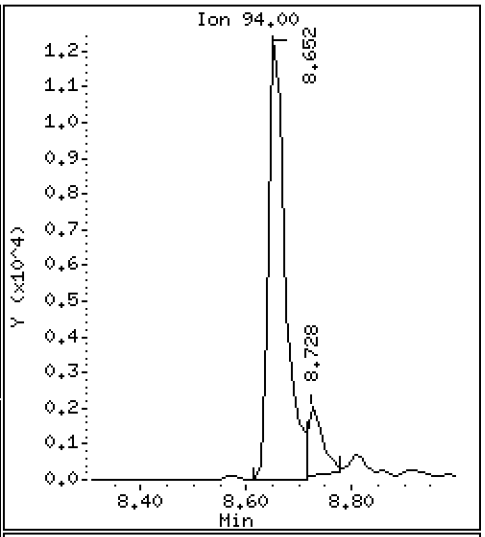
Column phase: ZB-5msi

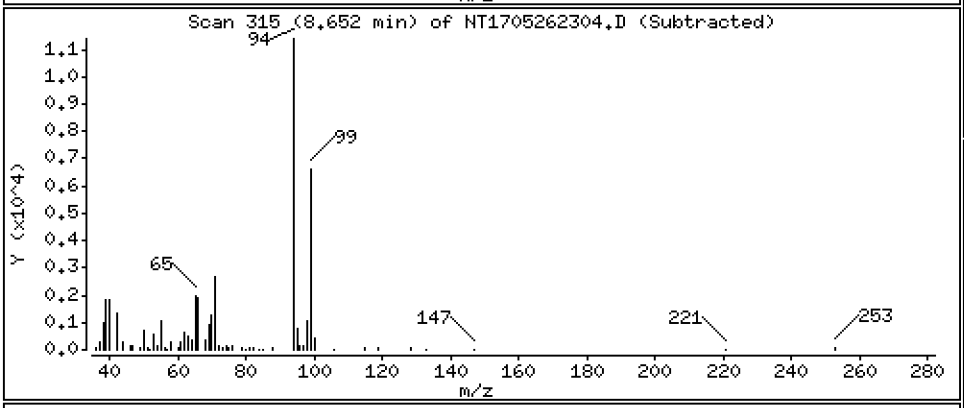
Column diameter: 0.25

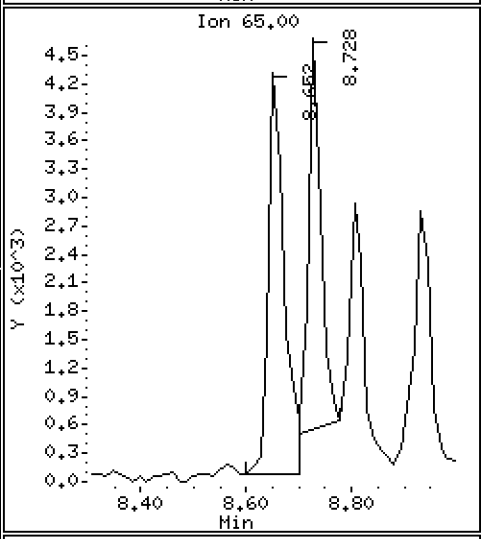
3 Phenol

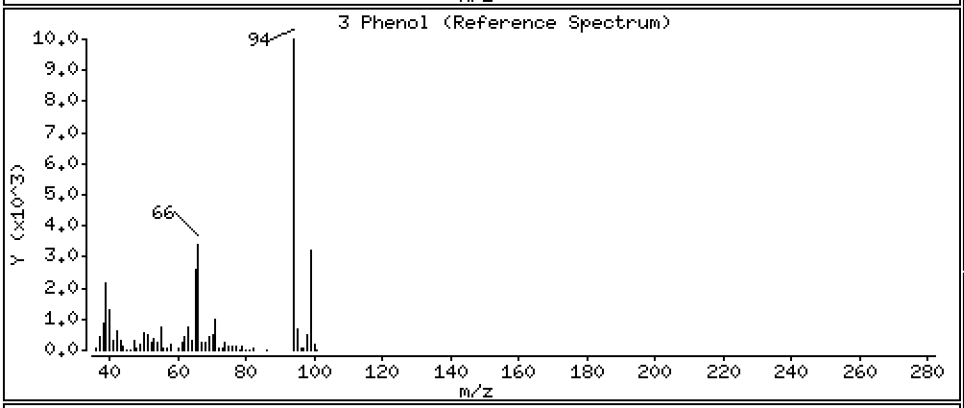
Concentration: 0.1983 ug/mL

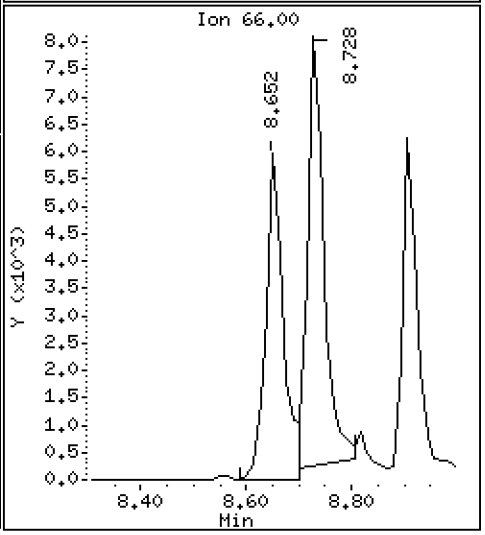


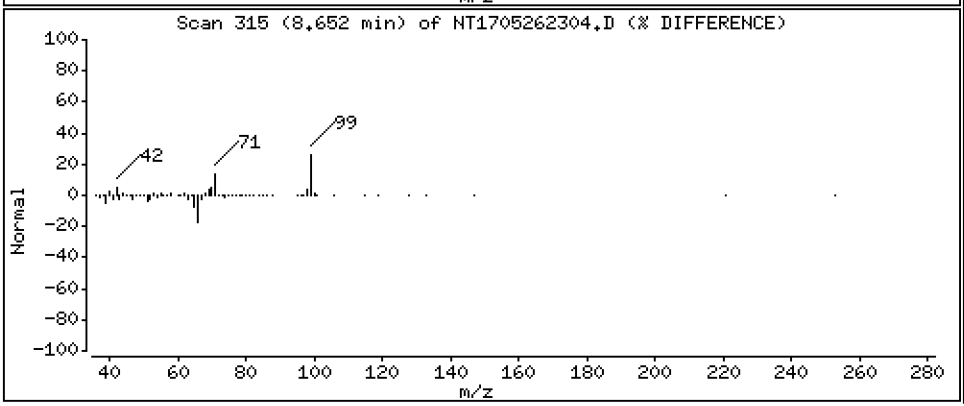












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

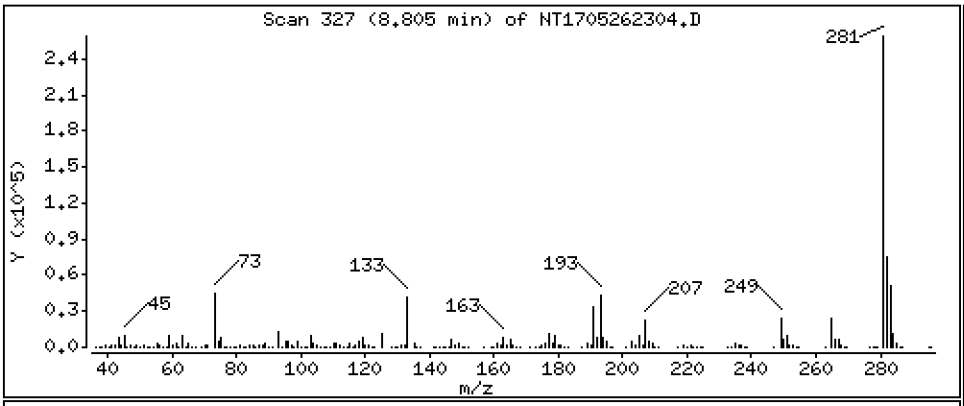
Operator: VTS

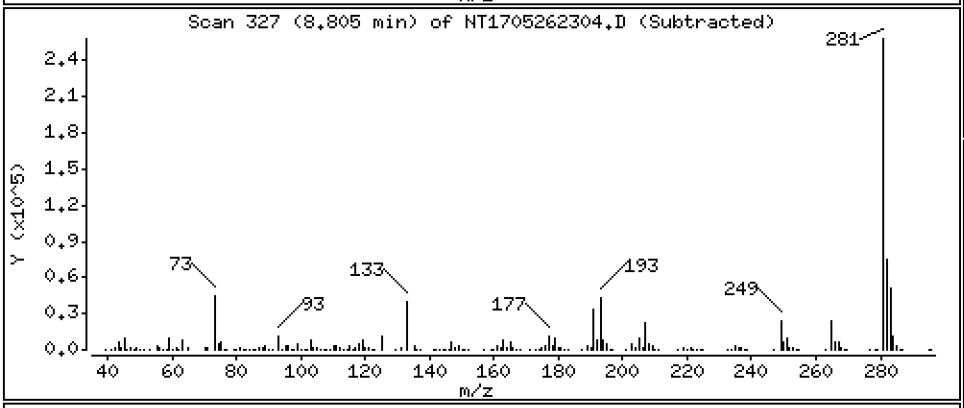
Column phase: ZB-5msi

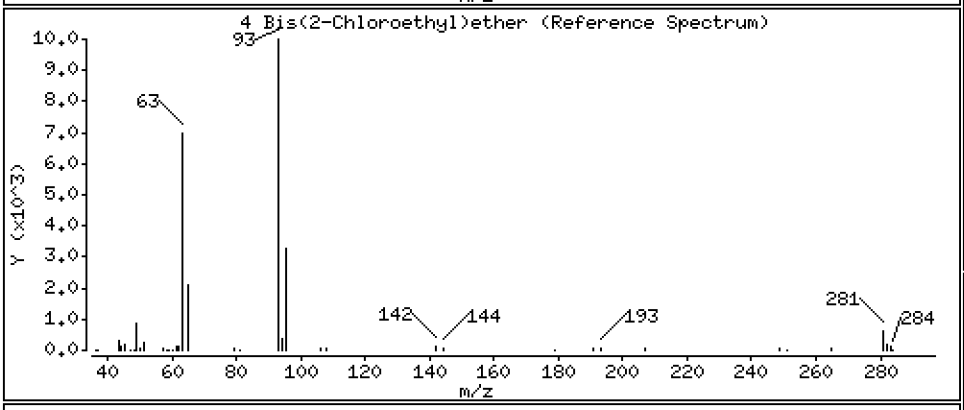
Column diameter: 0.25

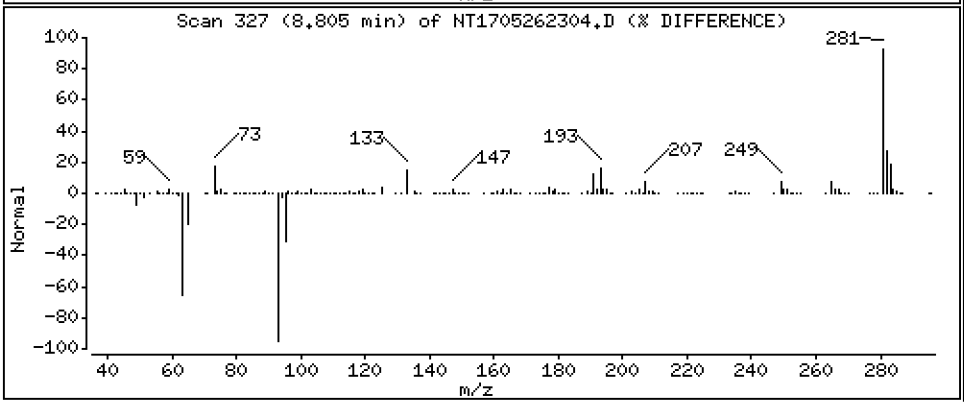
4 Bis(2-Chloroethyl)ether

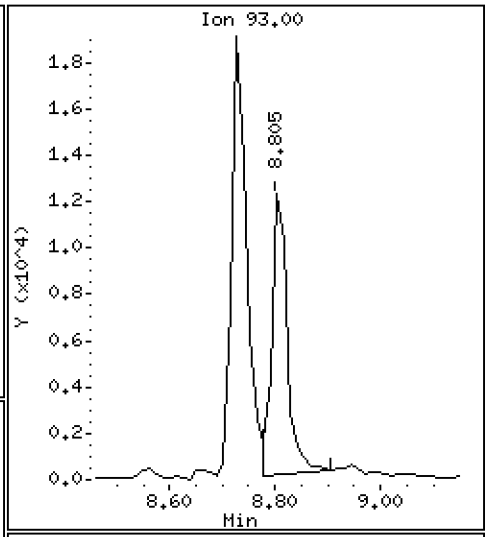
Concentration: 0.2369 ug/mL

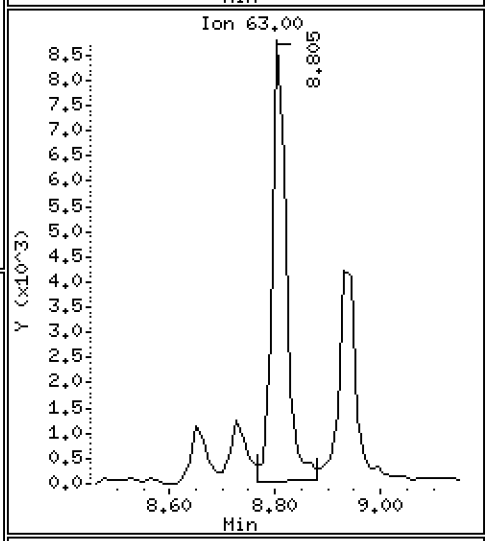


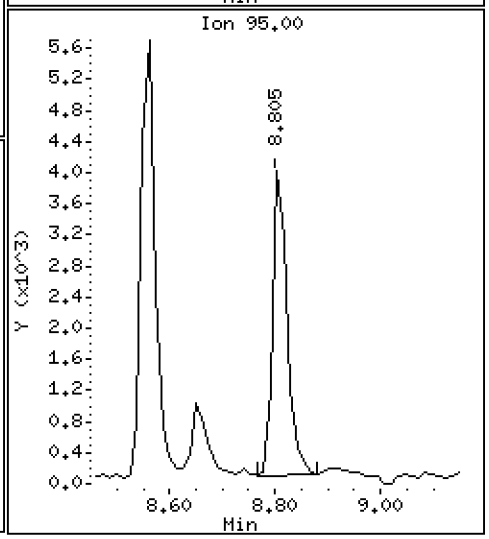












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

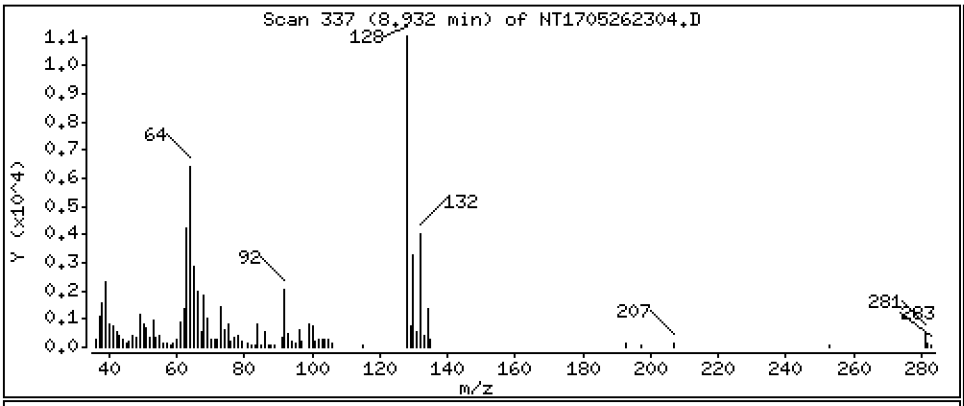
Operator: VTS

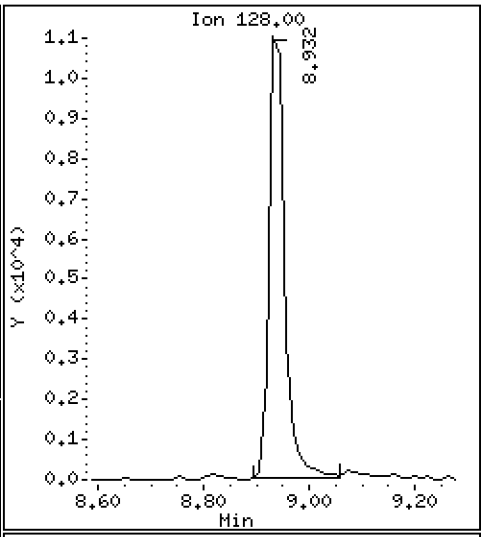
Column phase: ZB-5msi

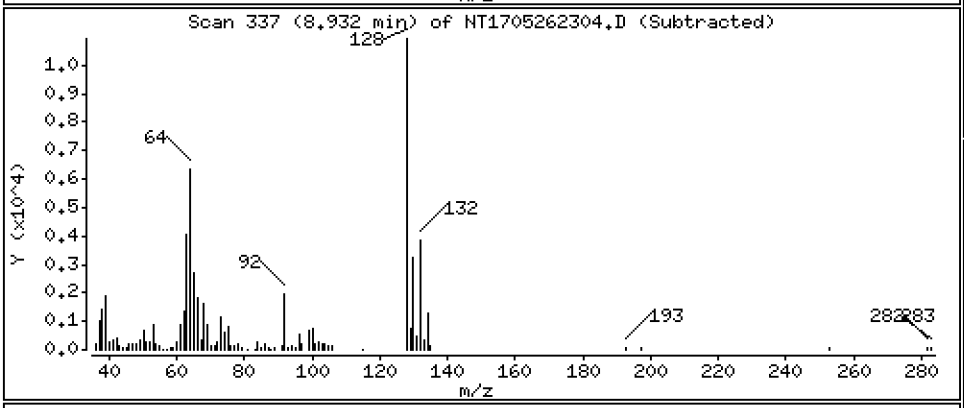
Column diameter: 0.25

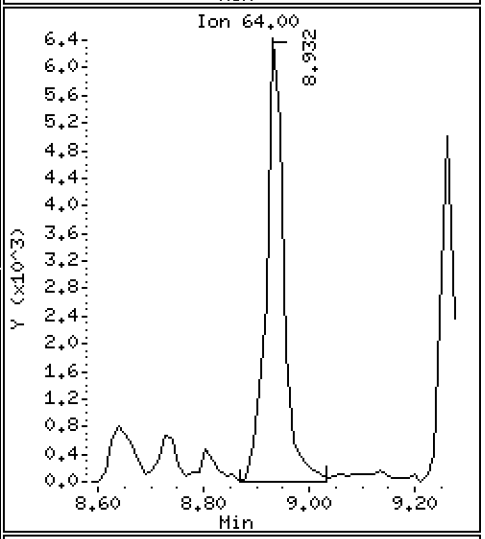
6 2-Chlorophenol

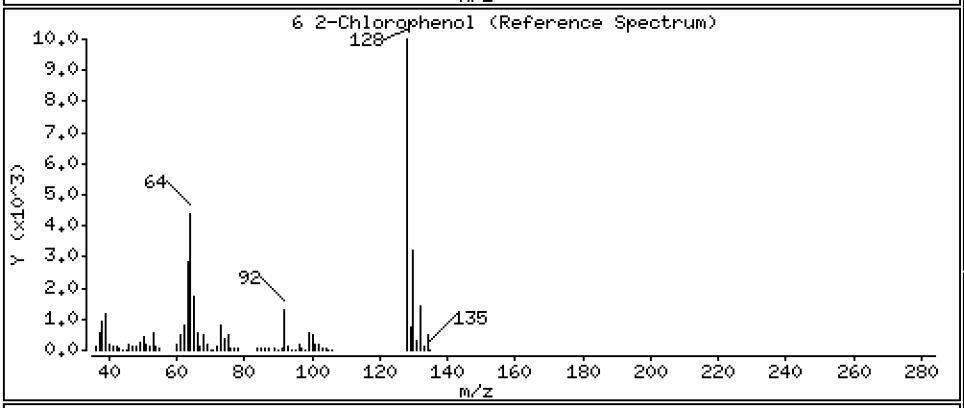
Concentration: 0.1888 ug/mL

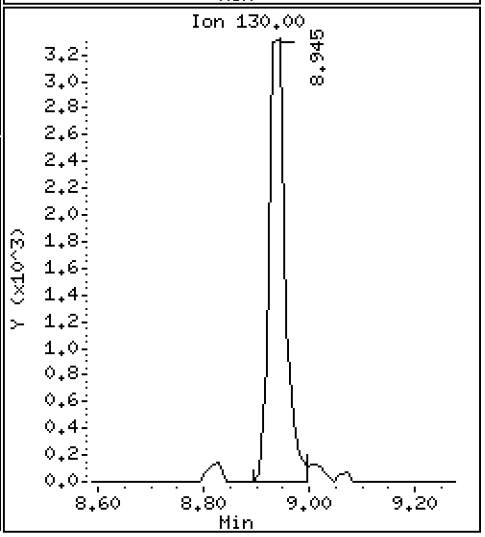


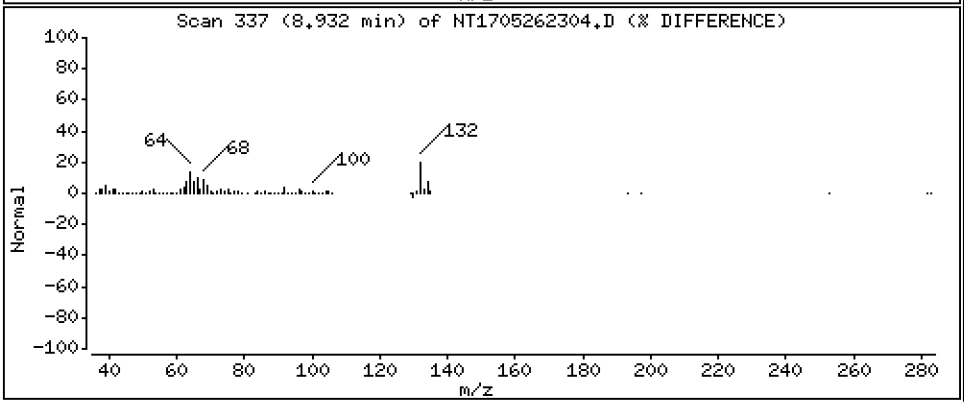












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

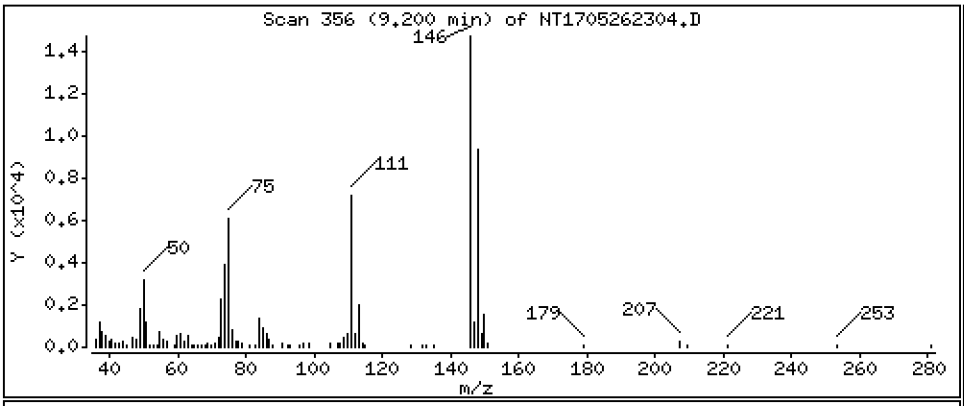
Operator: VTS

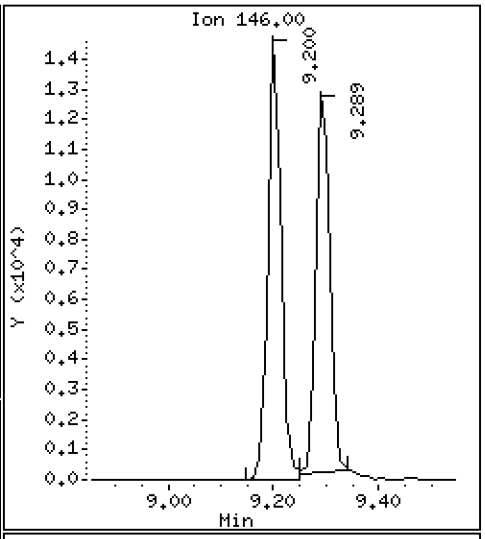
Column phase: ZB-5msi

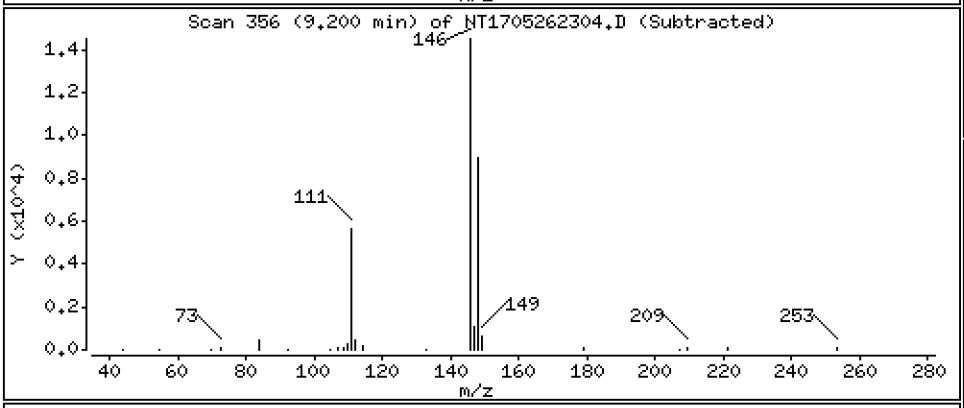
Column diameter: 0.25

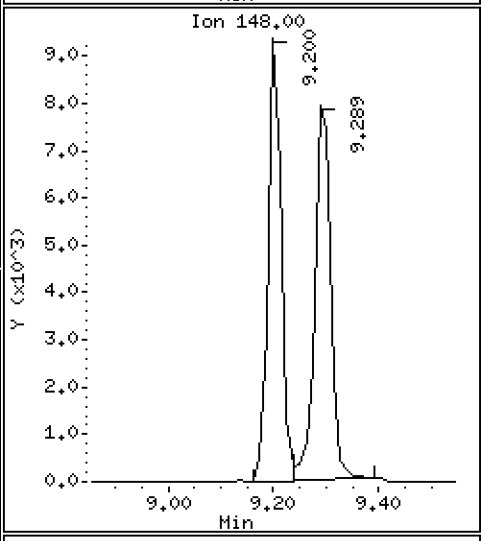
7 1,3-Dichlorobenzene

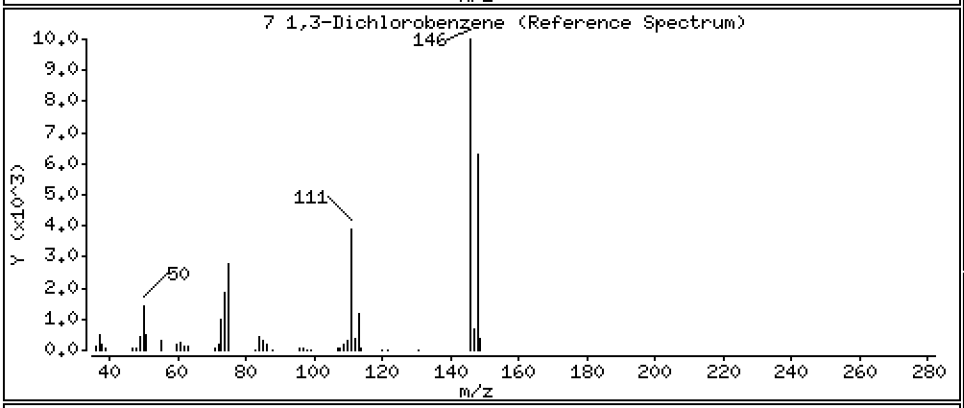
Concentration: 0.2088 ug/mL

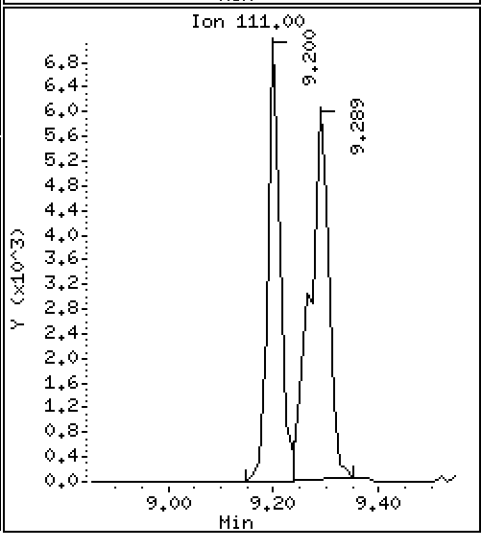


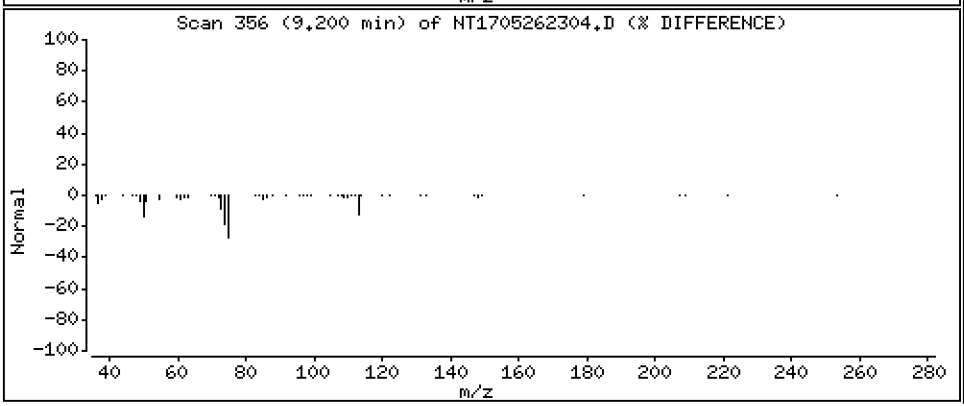












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

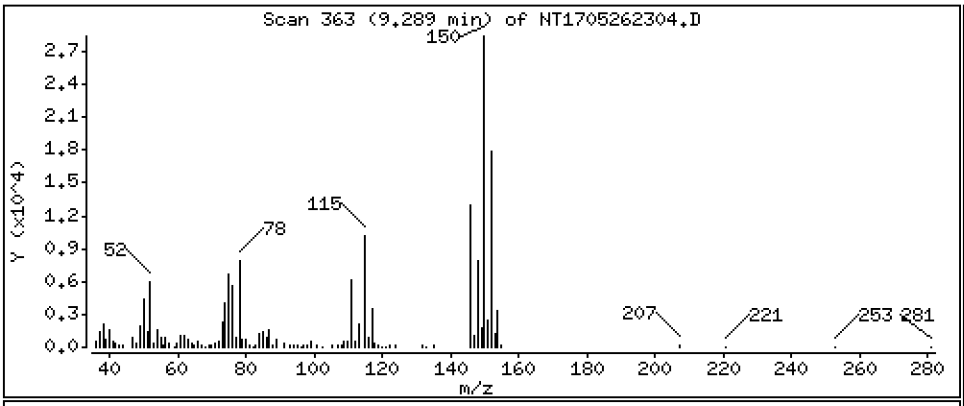
Operator: VTS

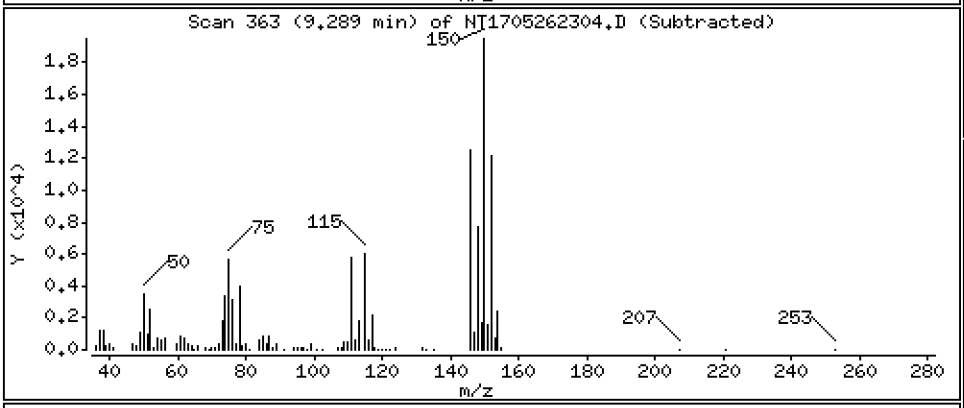
Column phase: ZB-5msi

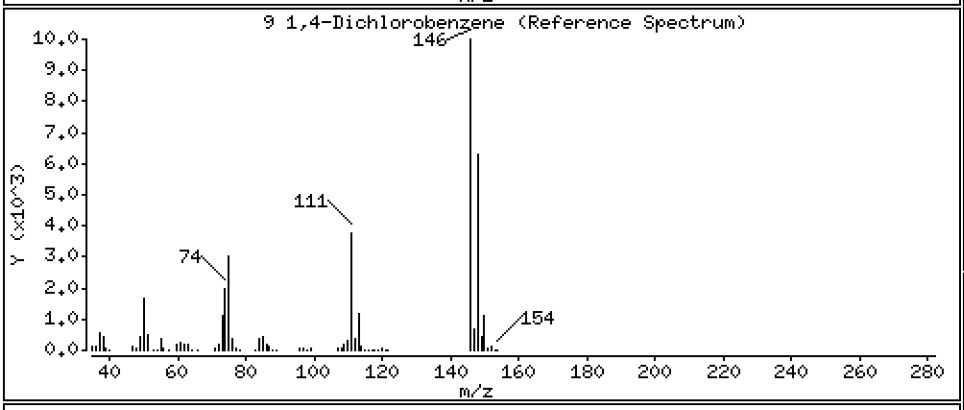
Column diameter: 0.25

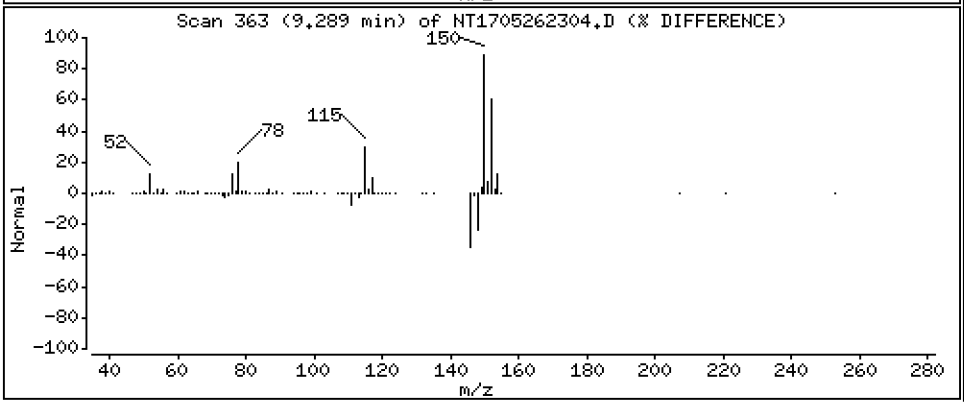
9 1,4-Dichlorobenzene

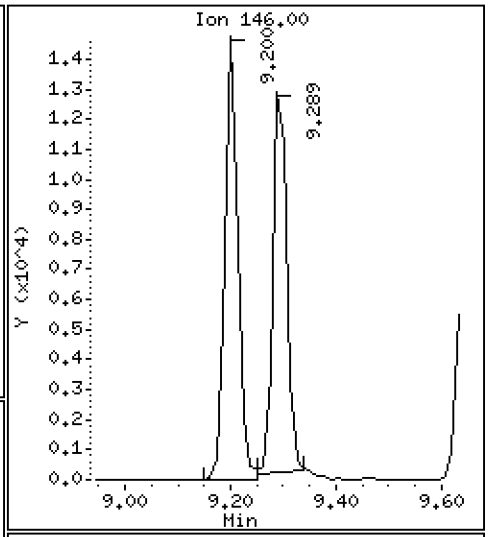
Concentration: 0.1906 ug/mL

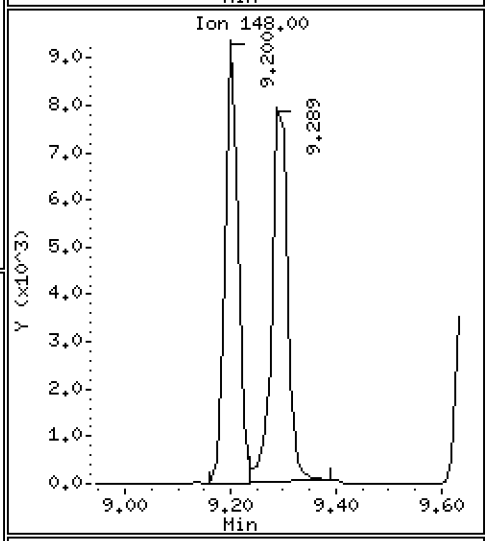


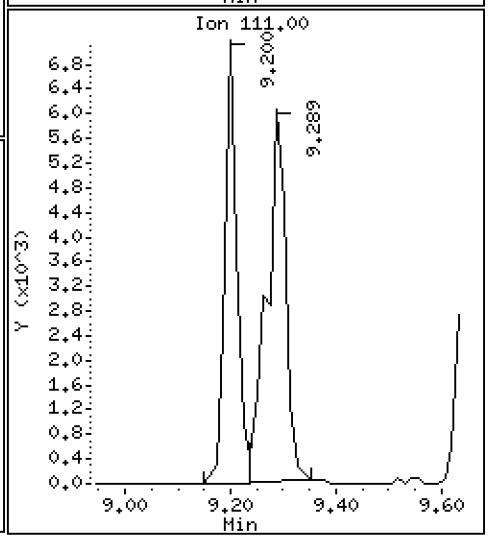












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

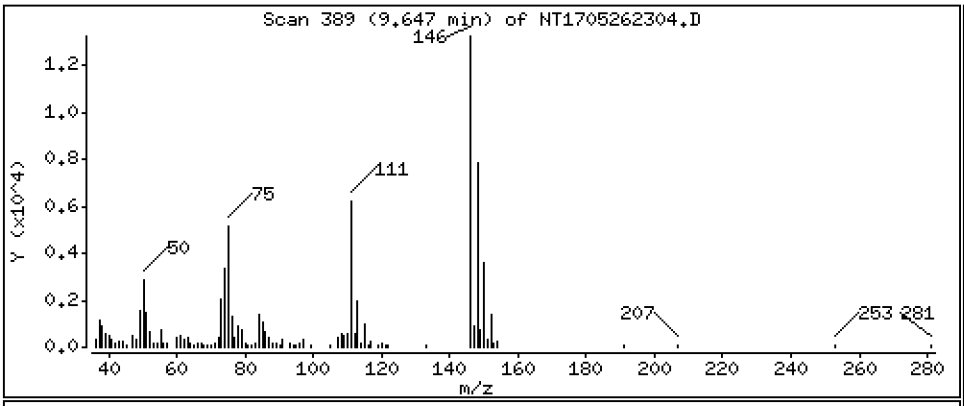
Operator: VTS

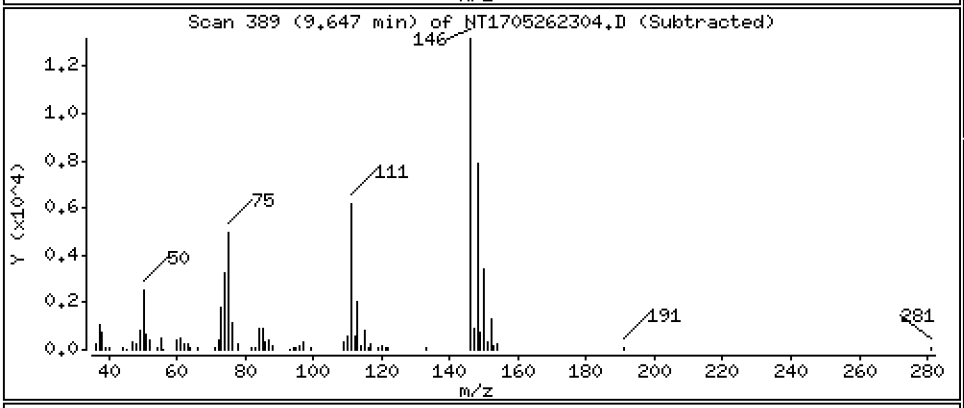
Column phase: ZB-5msi

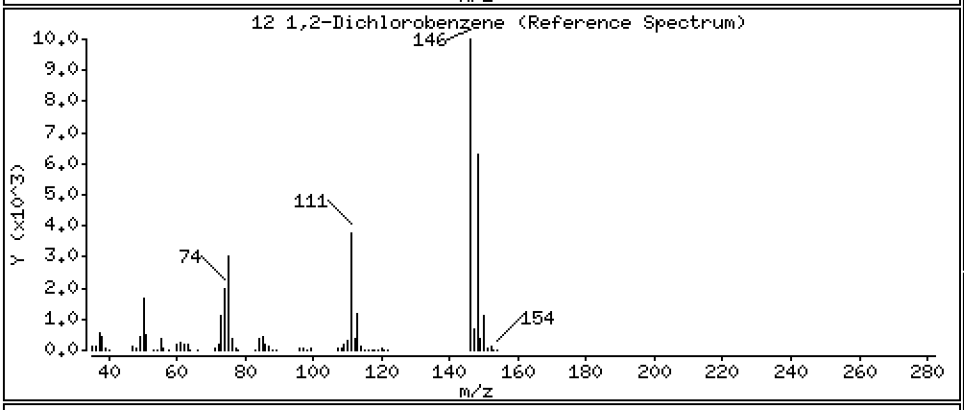
Column diameter: 0.25

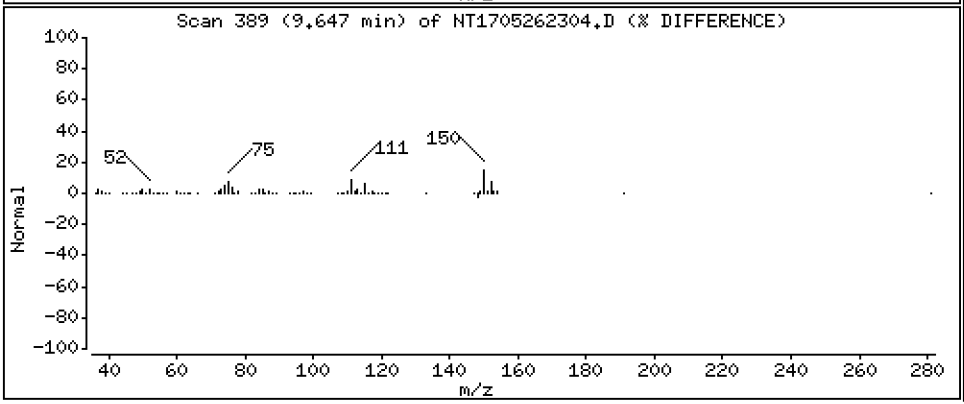
12 1,2-Dichlorobenzene

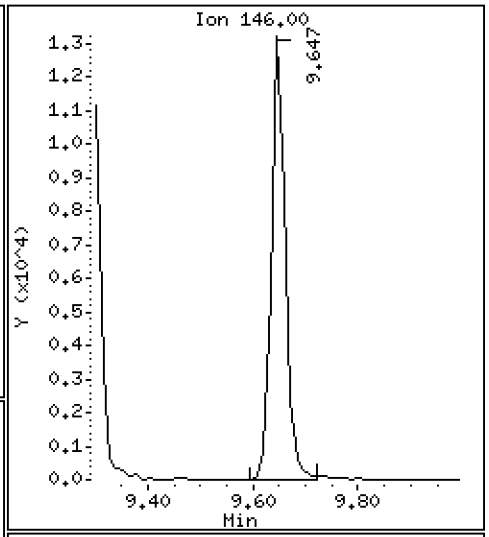
Concentration: 0.2120 ug/mL

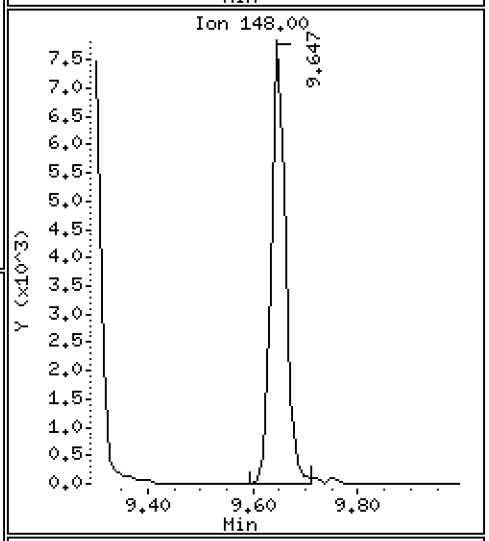


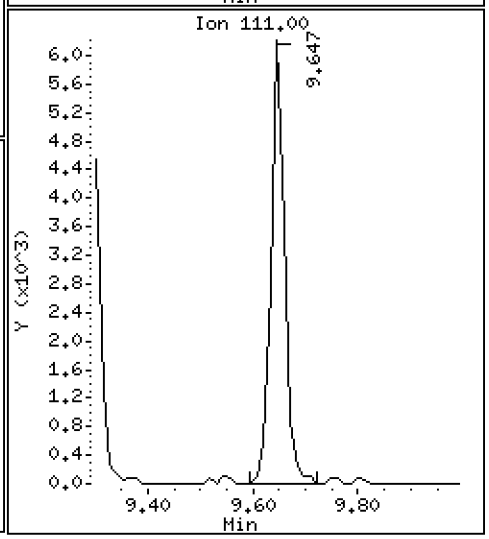












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

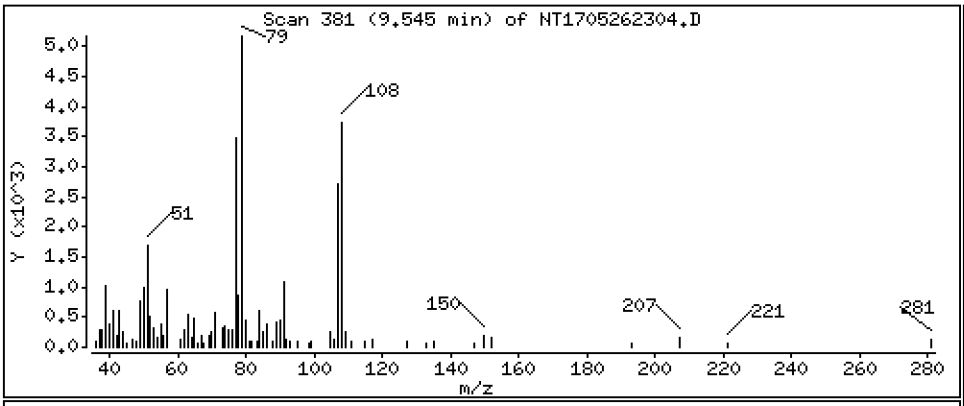
Operator: VTS

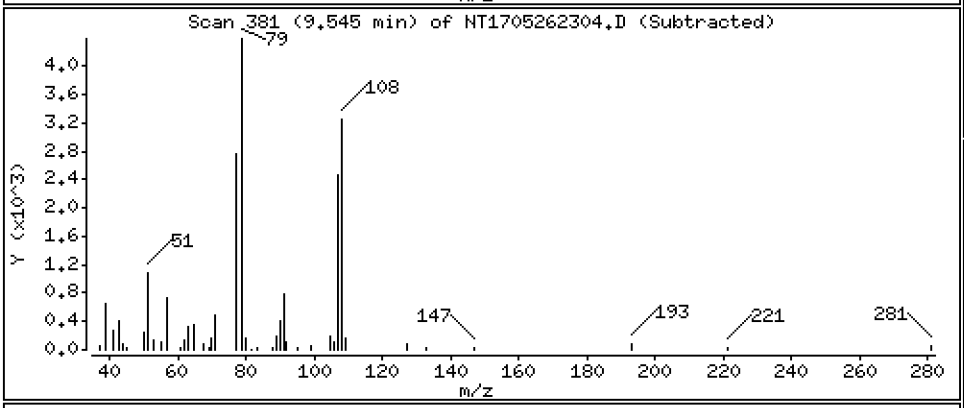
Column phase: ZB-5msi

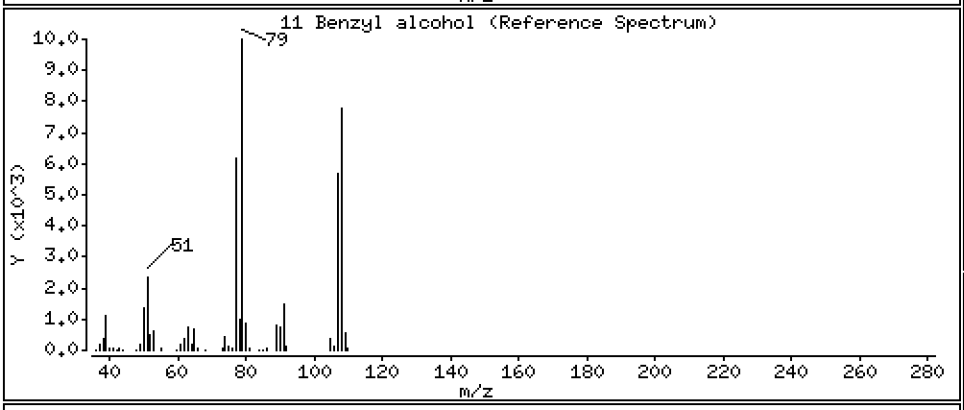
Column diameter: 0.25

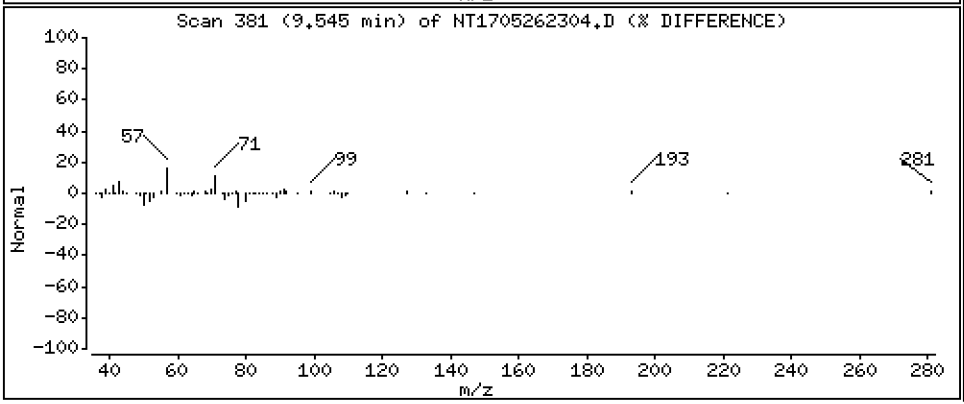
11 Benzyl alcohol

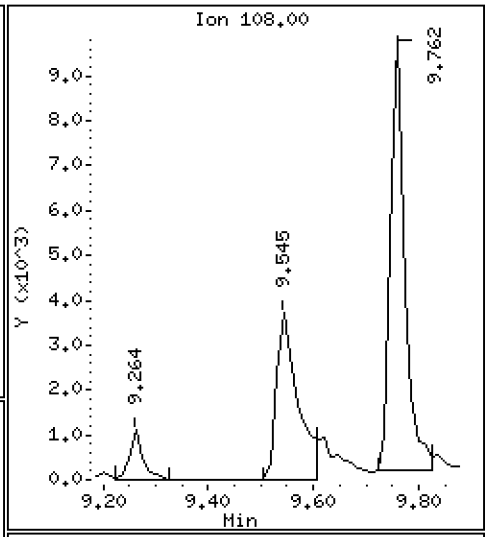
Concentration: 0.1586 ug/mL

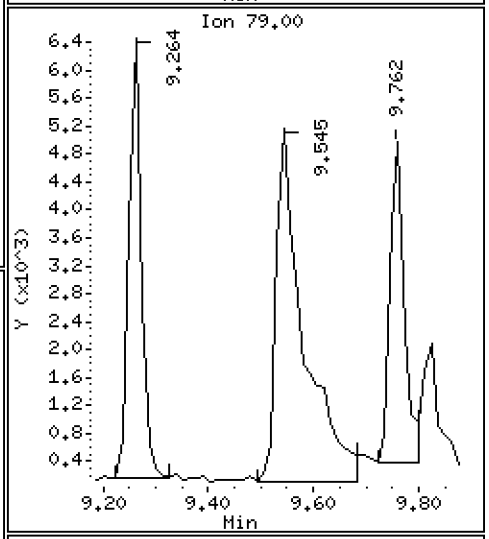


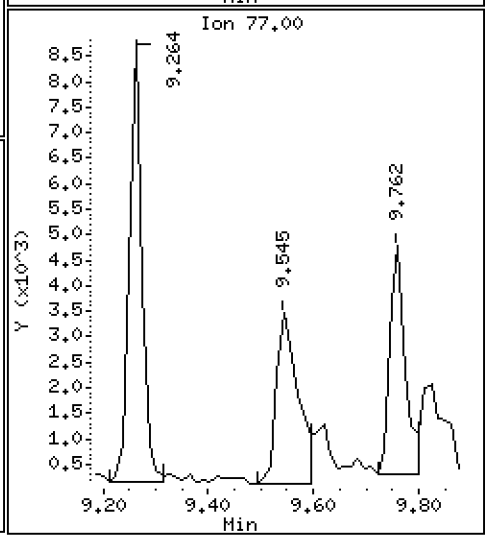












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

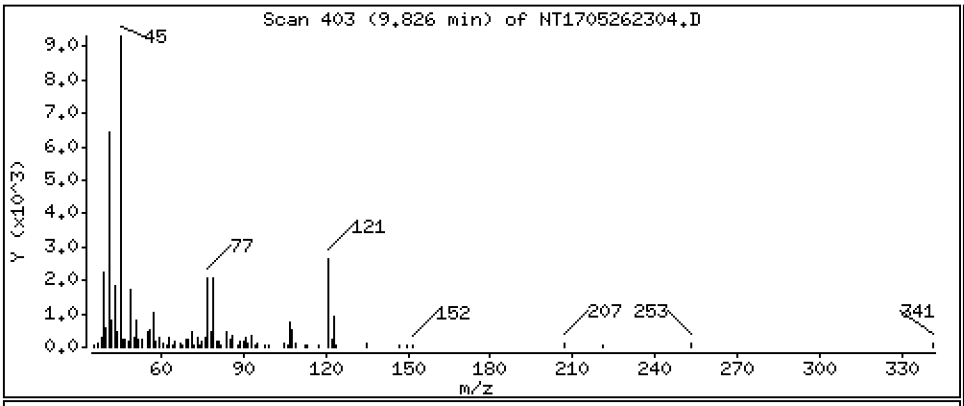
Operator: VTS

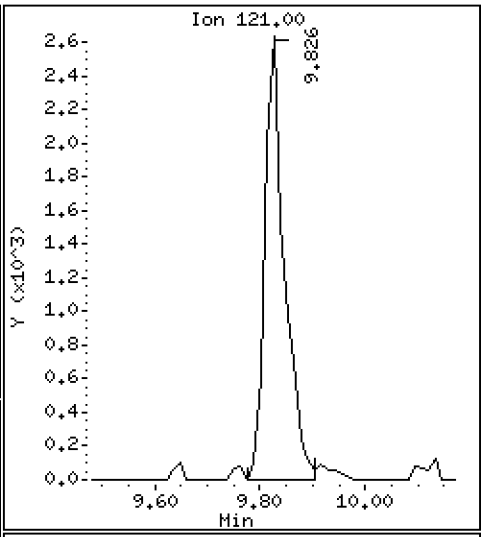
Column phase: ZB-5msi

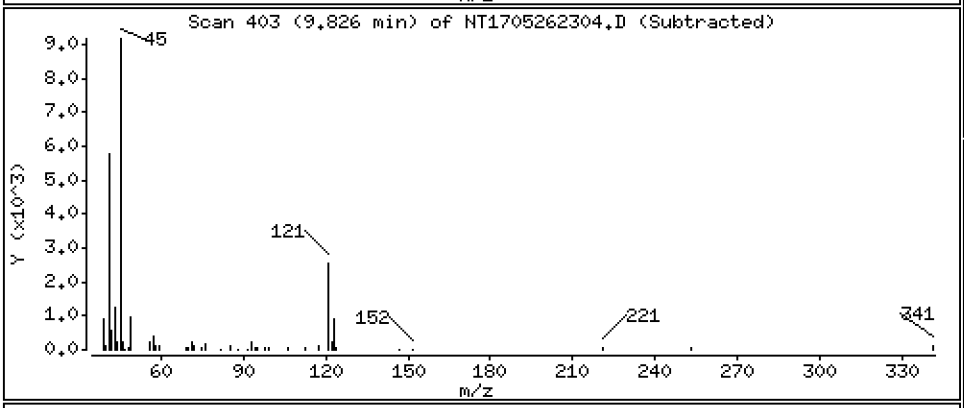
Column diameter: 0.25

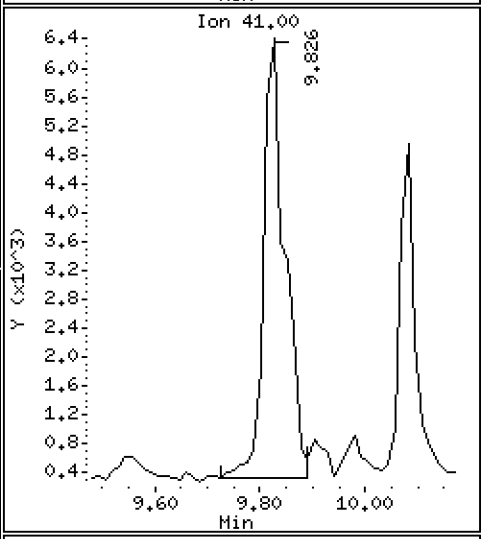
14 2,2'-oxybis(1-Chloropropane)

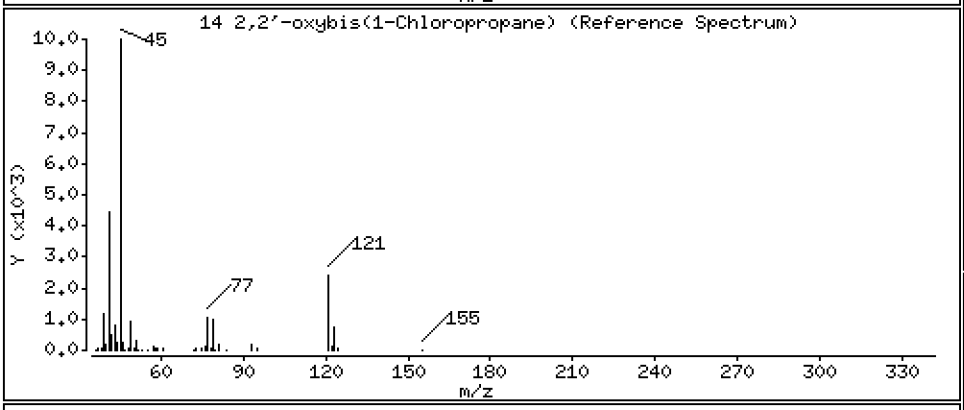
Concentration: 0.2123 ug/mL

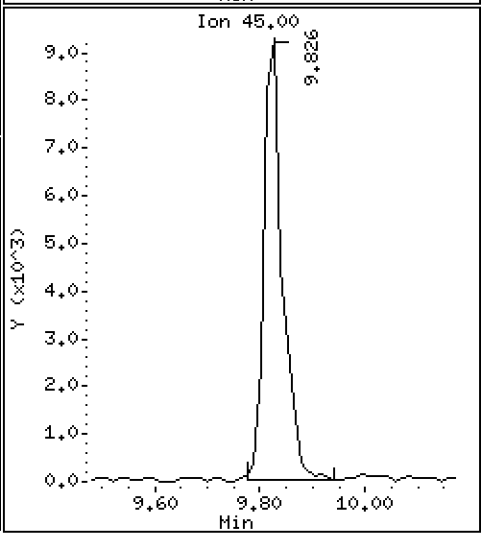


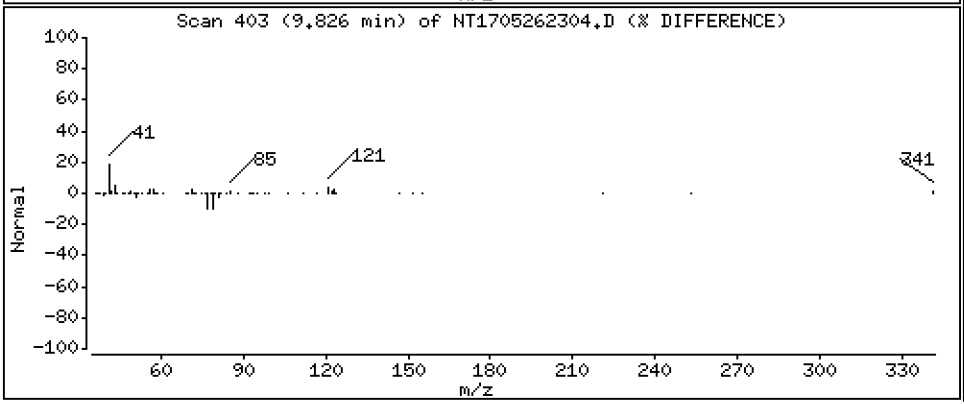












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

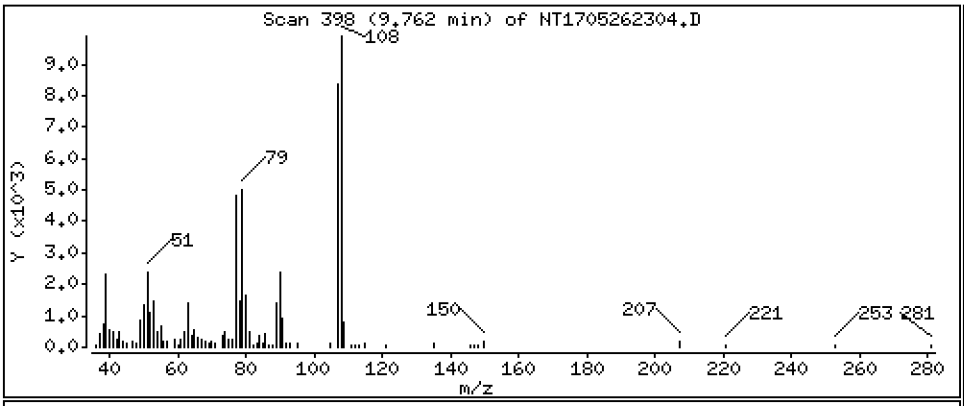
Operator: VTS

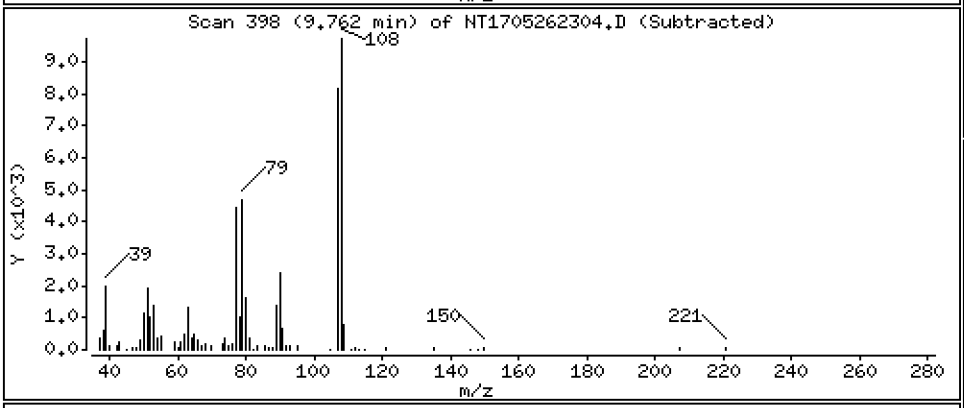
Column phase: ZB-5msi

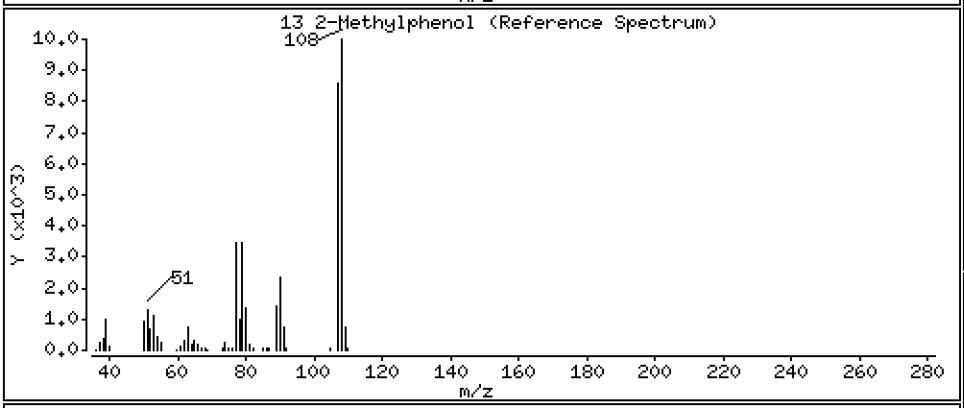
Column diameter: 0.25

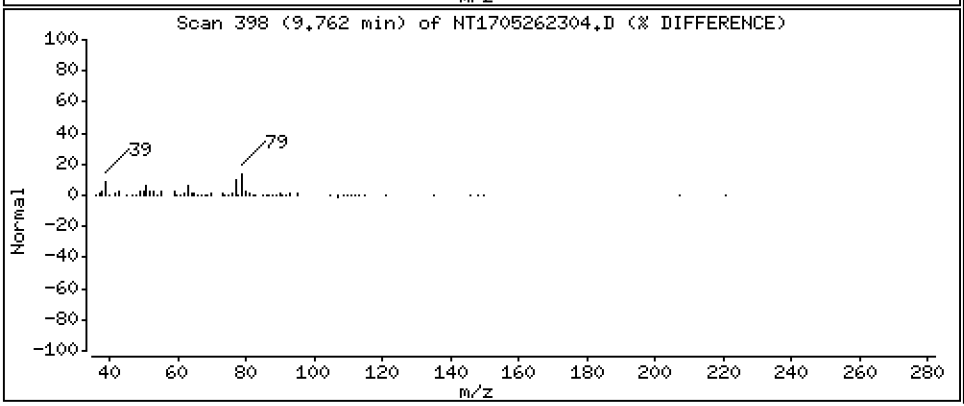
13 2-Methylphenol

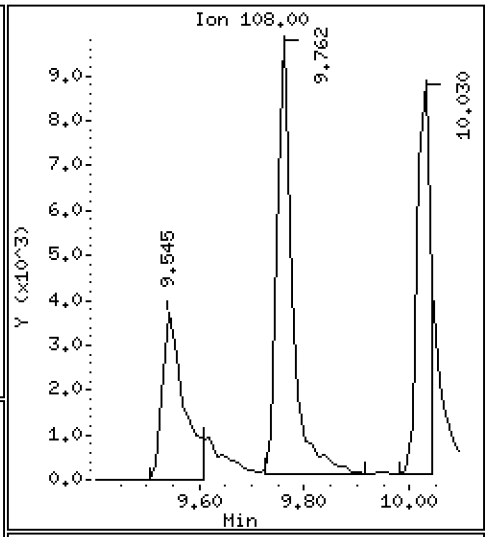
Concentration: 0.1868 ug/mL

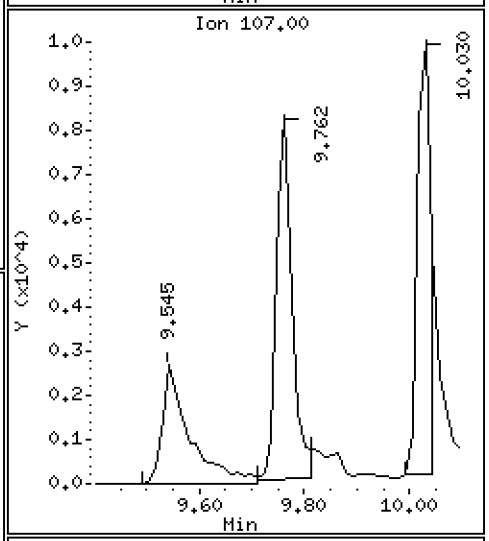


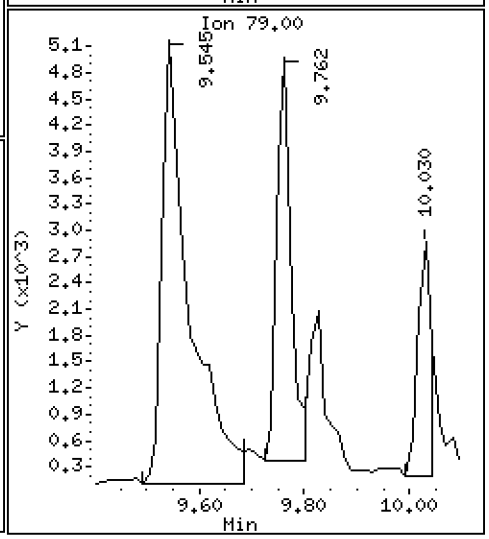












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

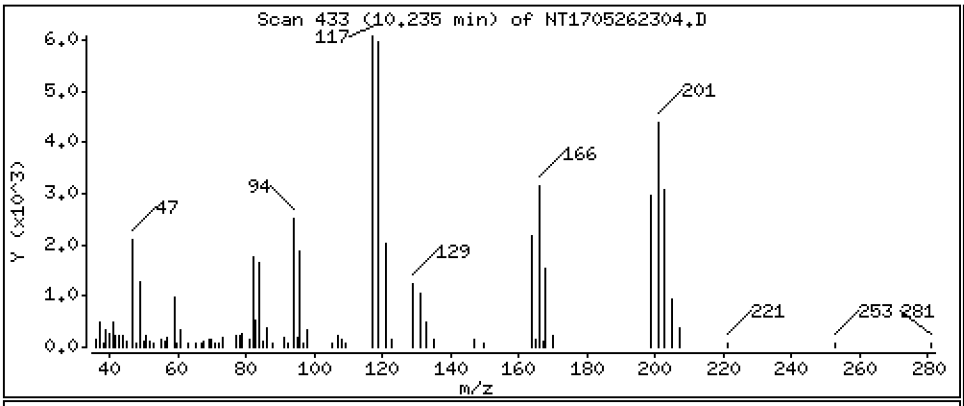
Operator: VTS

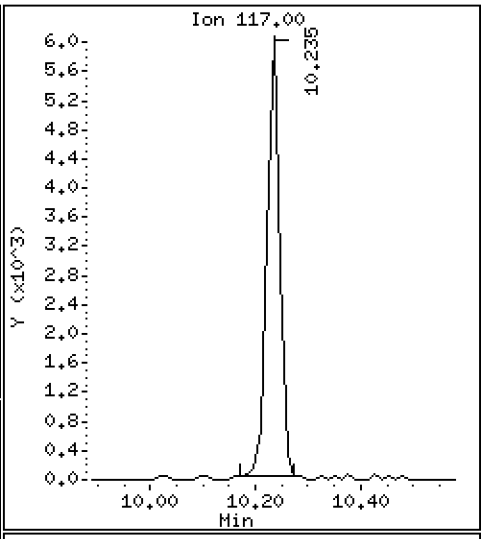
Column phase: ZB-5msi

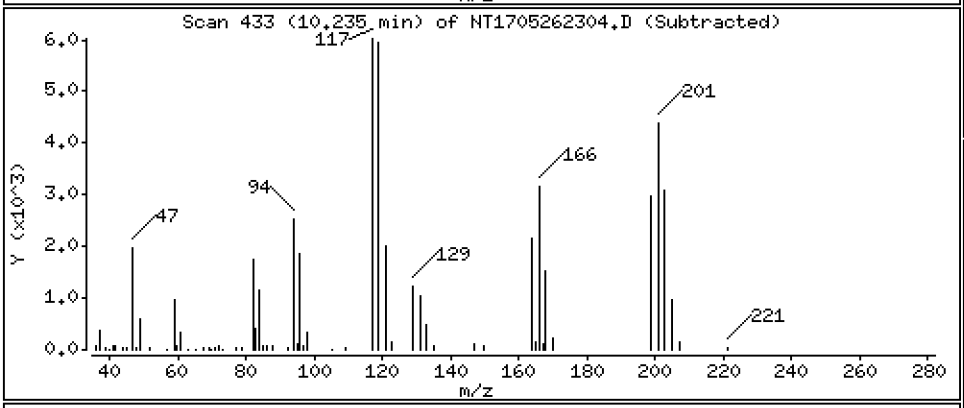
Column diameter: 0.25

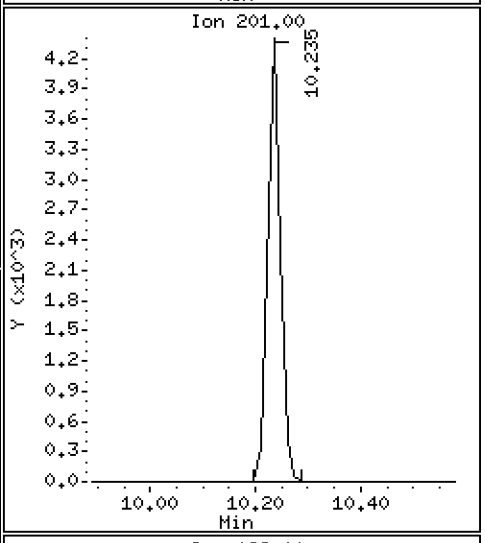
17 Hexachloroethane

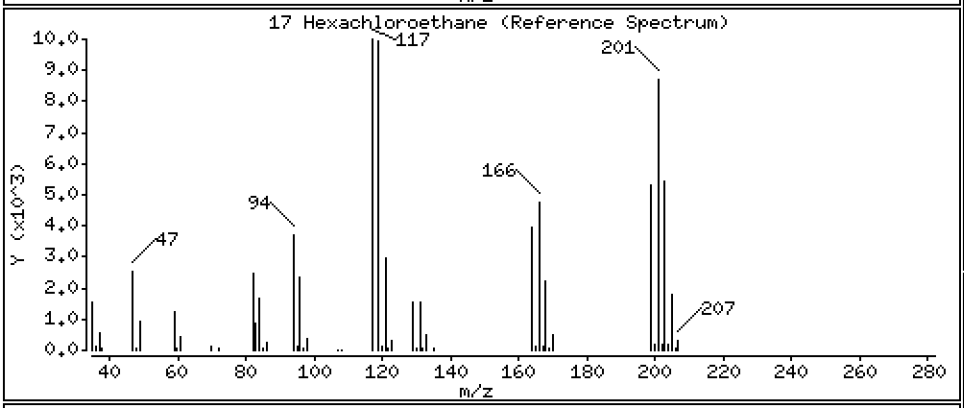
Concentration: 0.2061 ug/mL

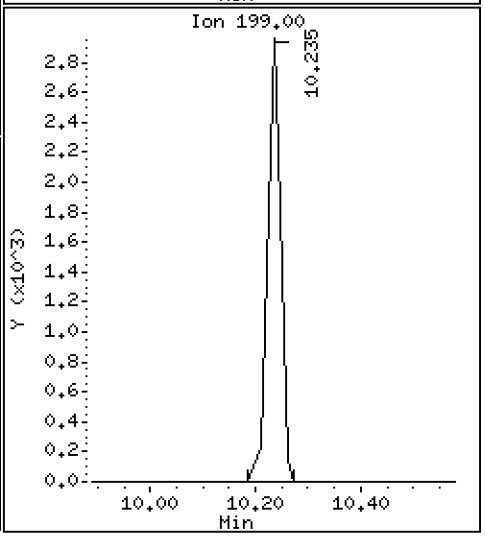


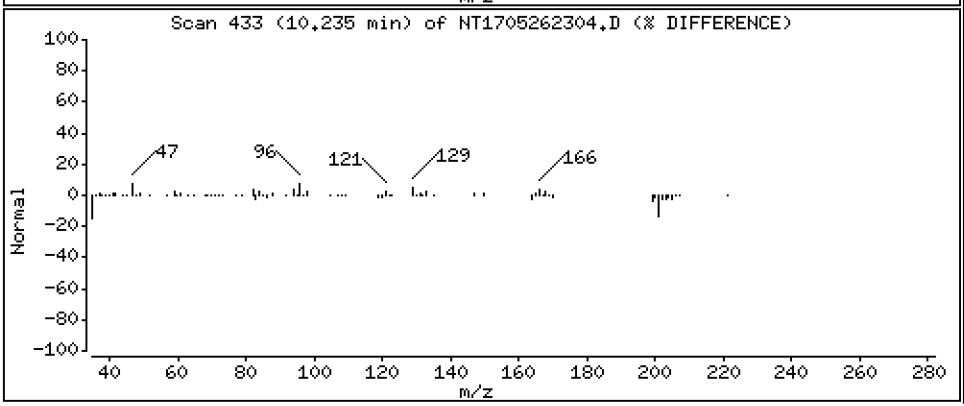












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

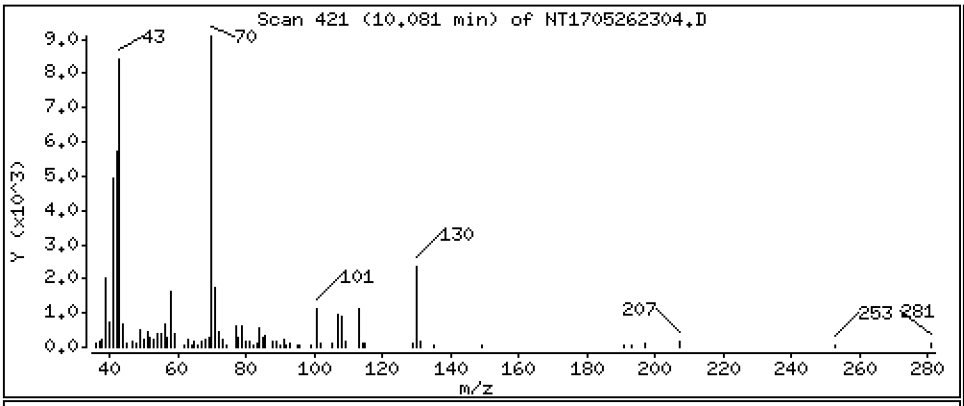
Operator: VTS

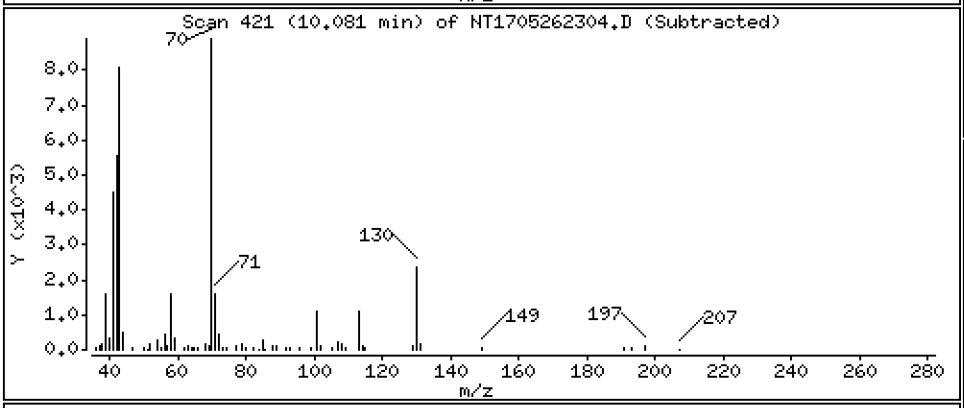
Column phase: ZB-5msi

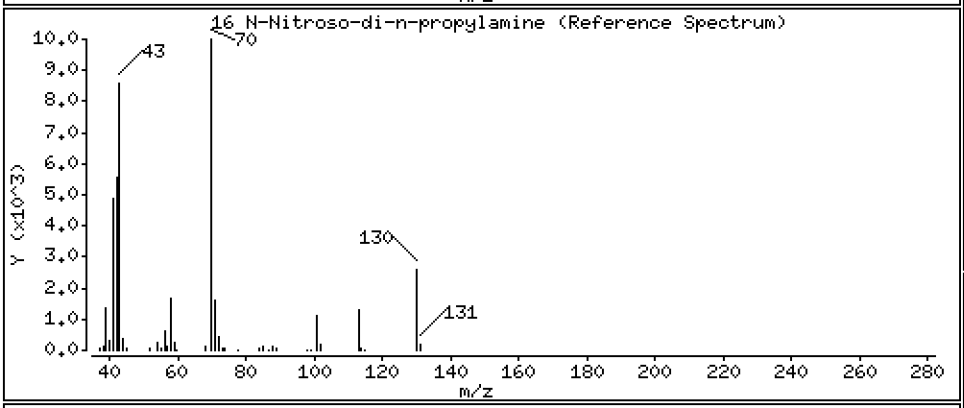
Column diameter: 0.25

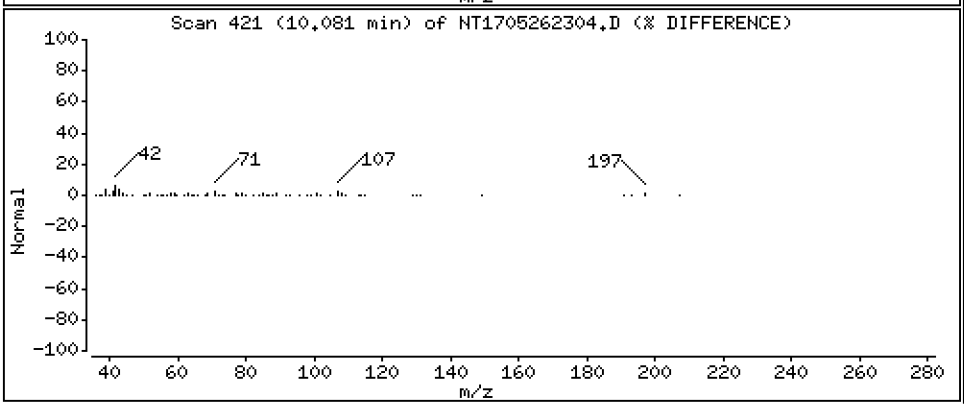
16 N-Nitroso-di-n-propylamine

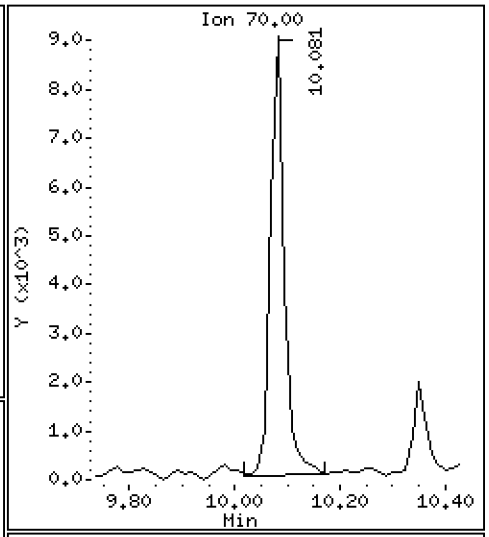
Concentration: 0.2032 ug/mL

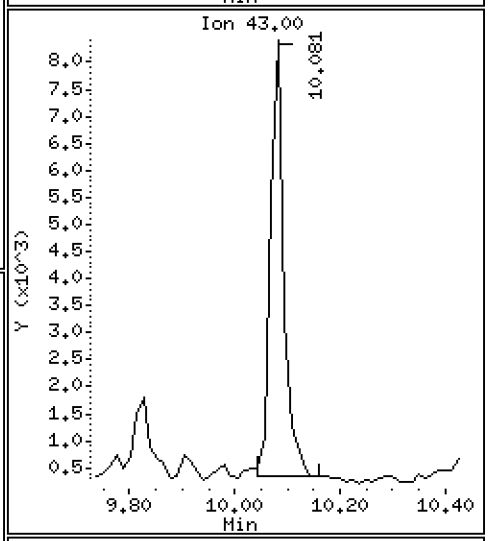


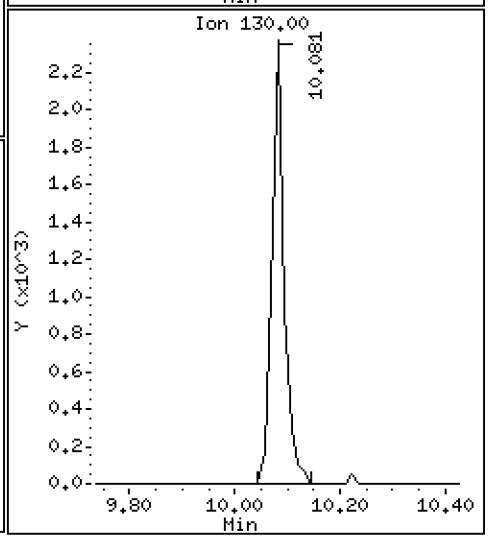












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

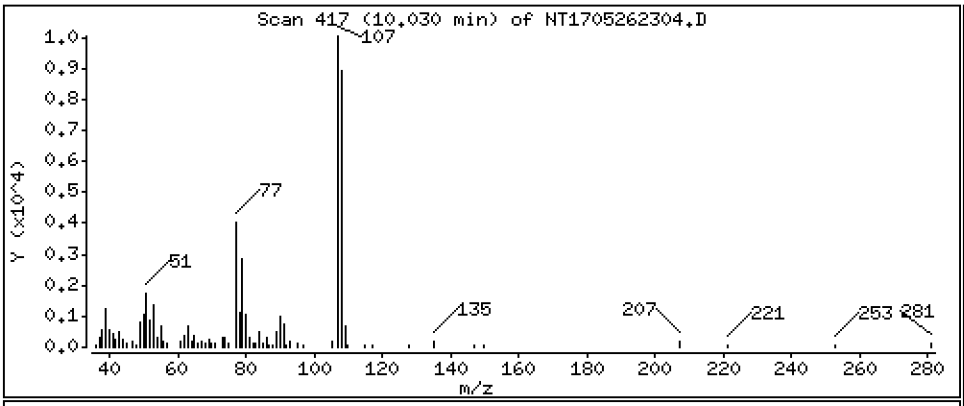
Operator: VTS

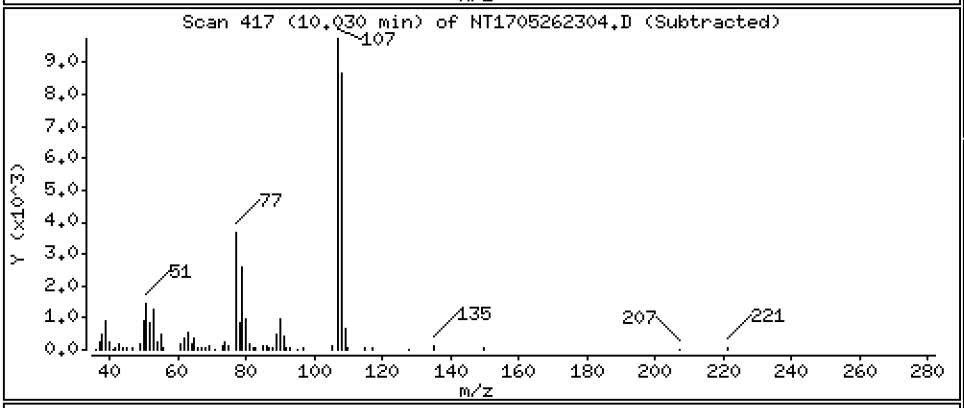
Column phase: ZB-5msi

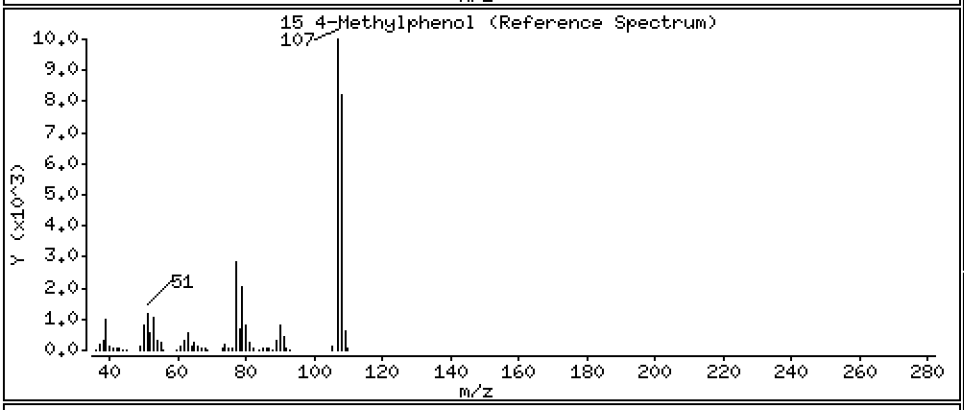
Column diameter: 0.25

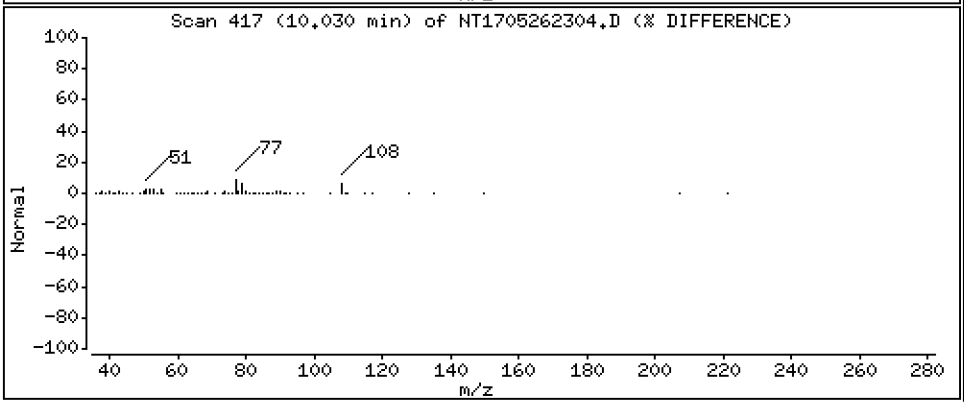
15 4-Methylphenol

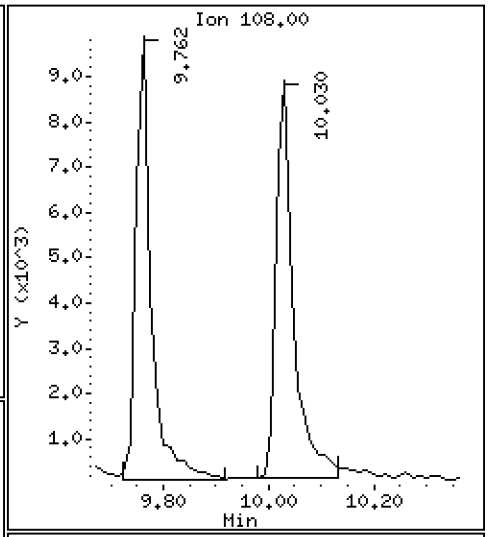
Concentration: 0.1869 ug/mL

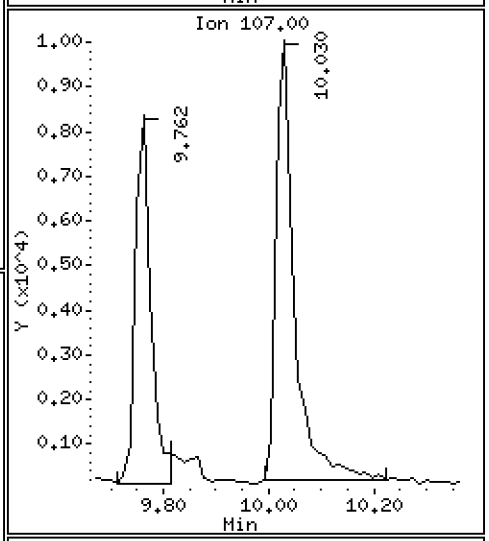


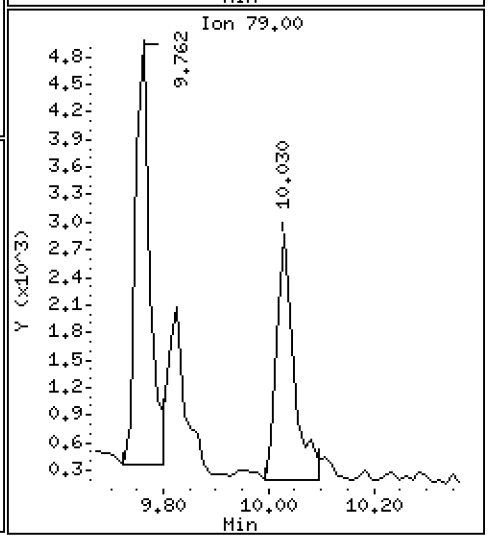












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

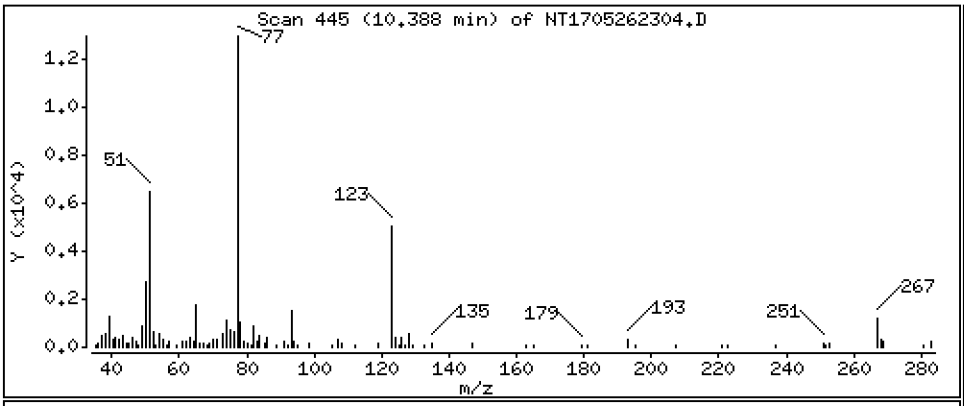
Operator: VTS

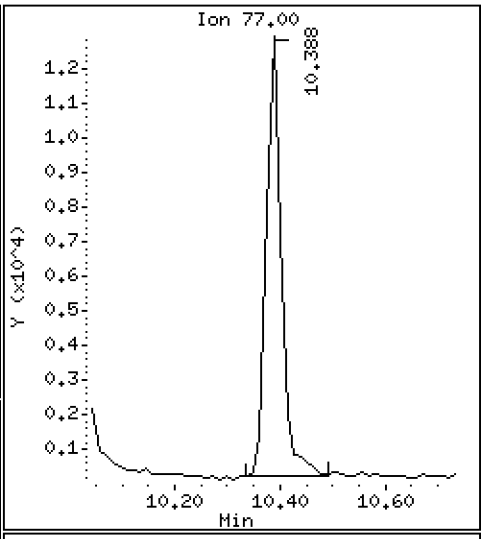
Column phase: ZB-5msi

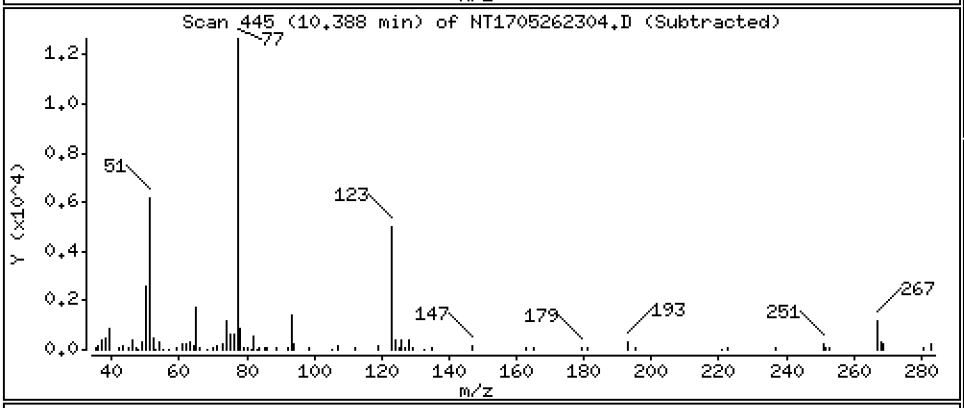
Column diameter: 0.25

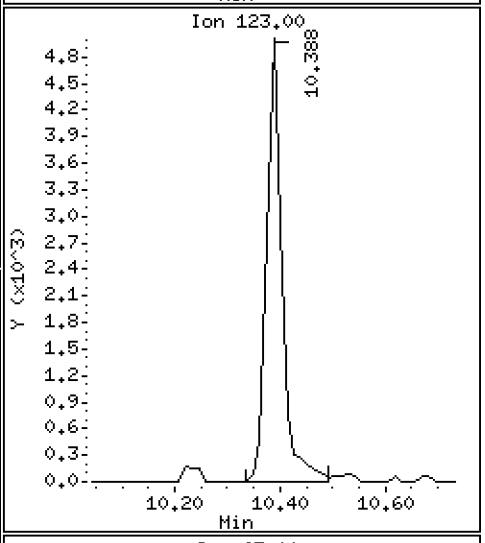
19 Nitrobenzene

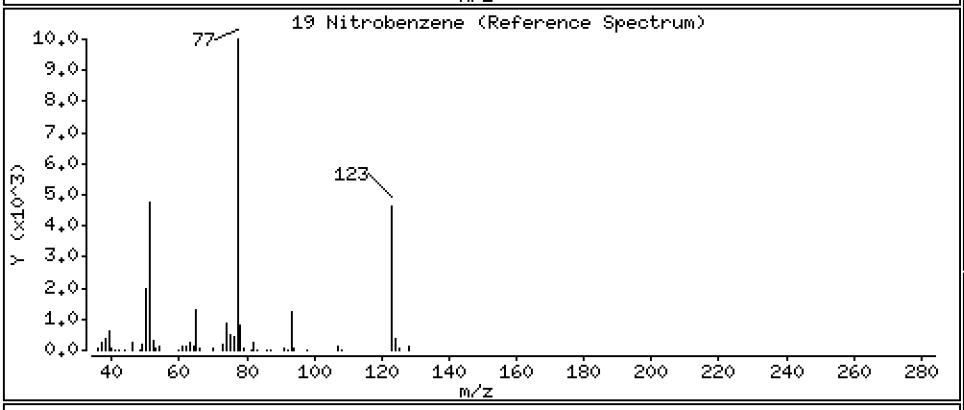
Concentration: 0.1974 ug/mL

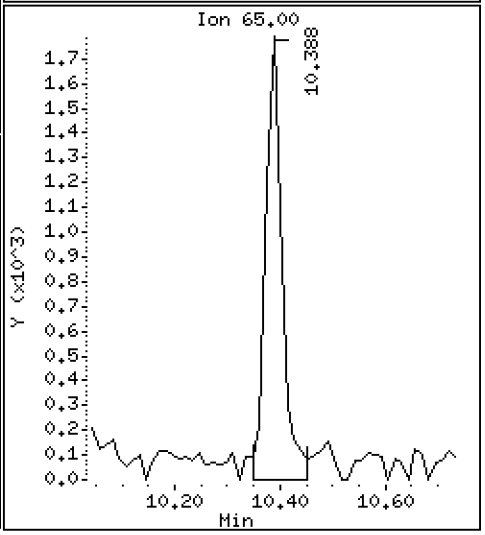


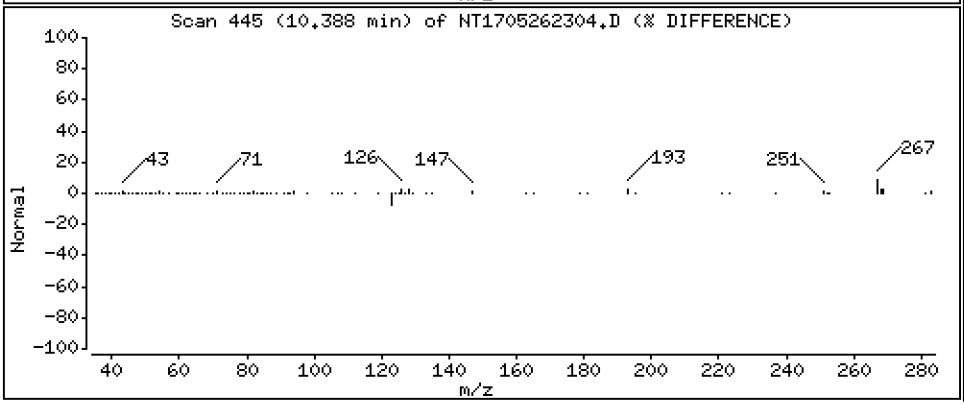












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

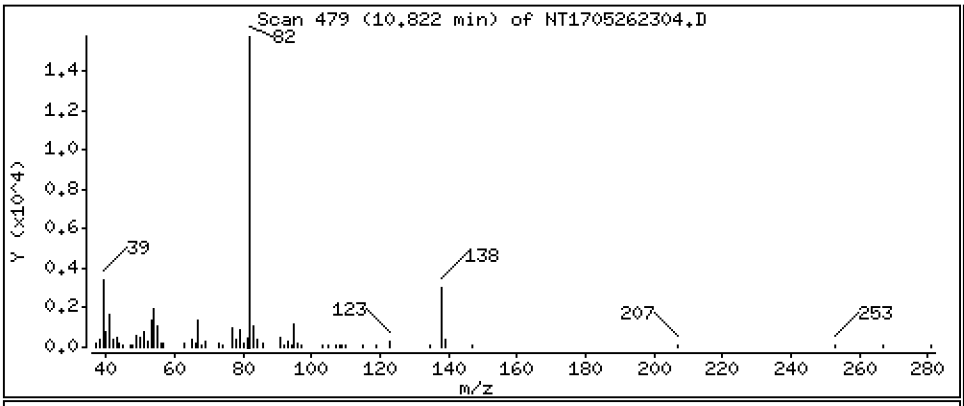
Operator: VTS

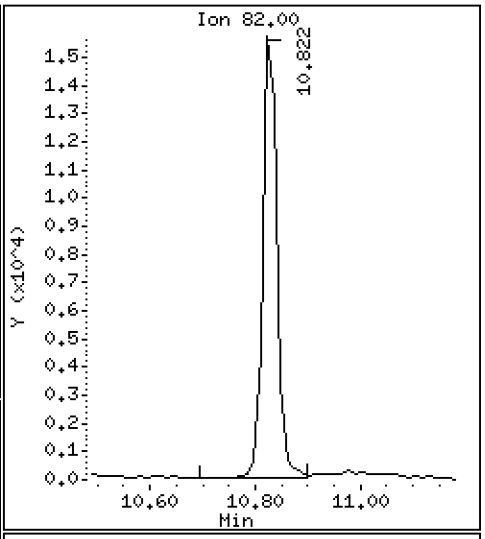
Column phase: ZB-5msi

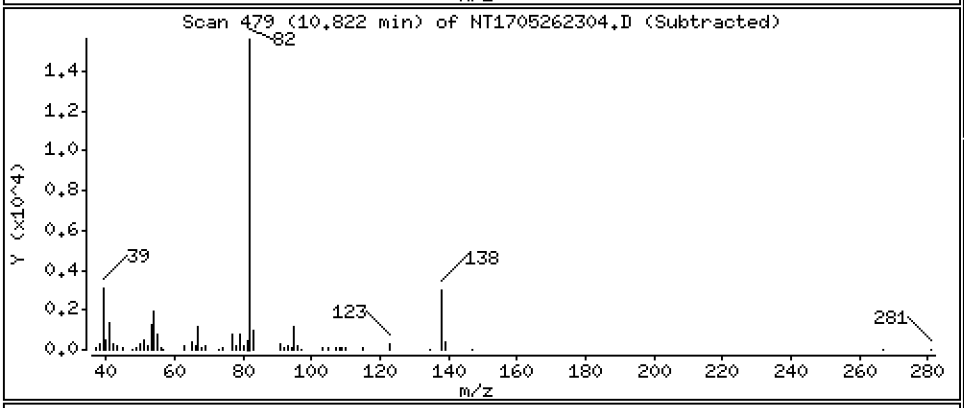
Column diameter: 0.25

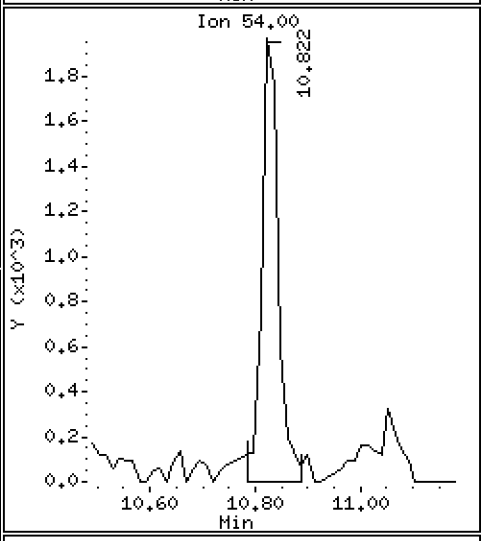
20 Isophorone

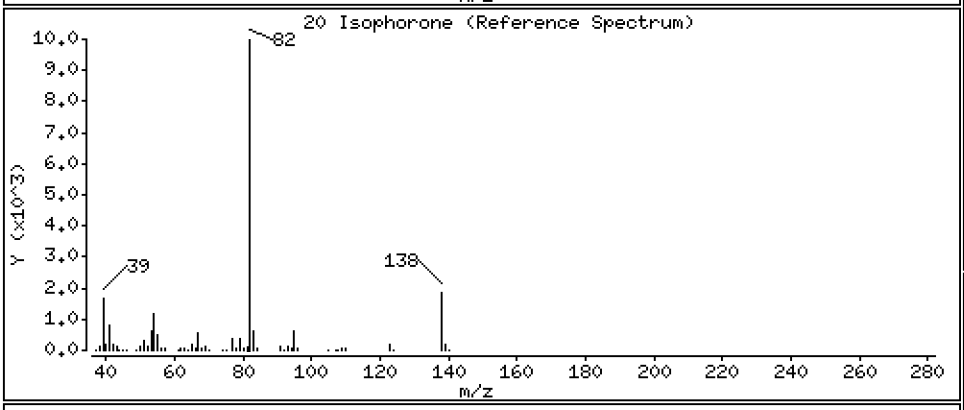
Concentration: 0.1762 ug/mL

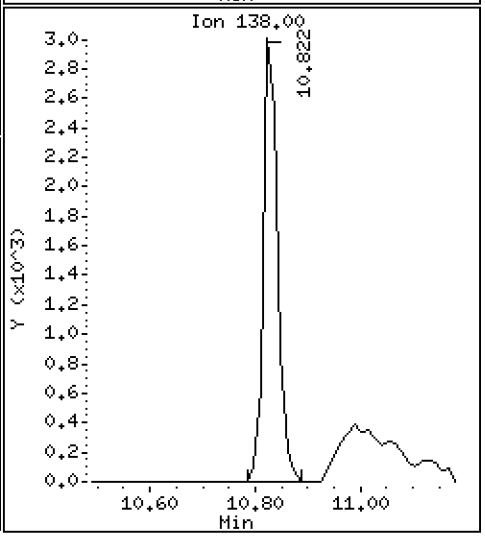


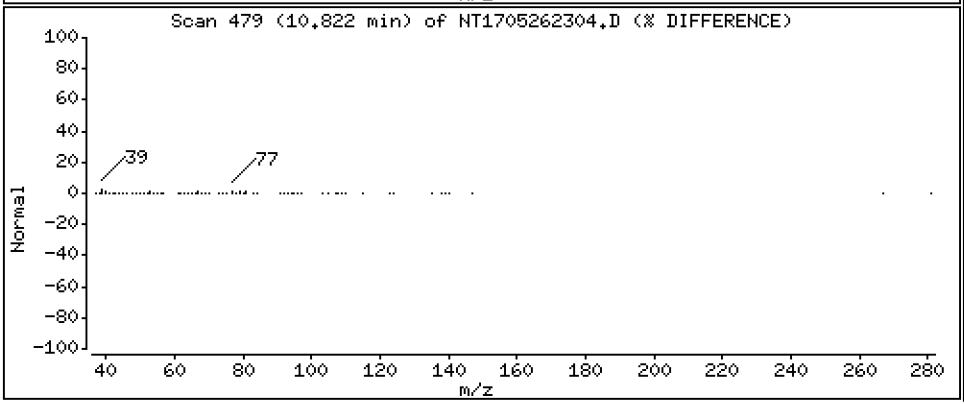












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

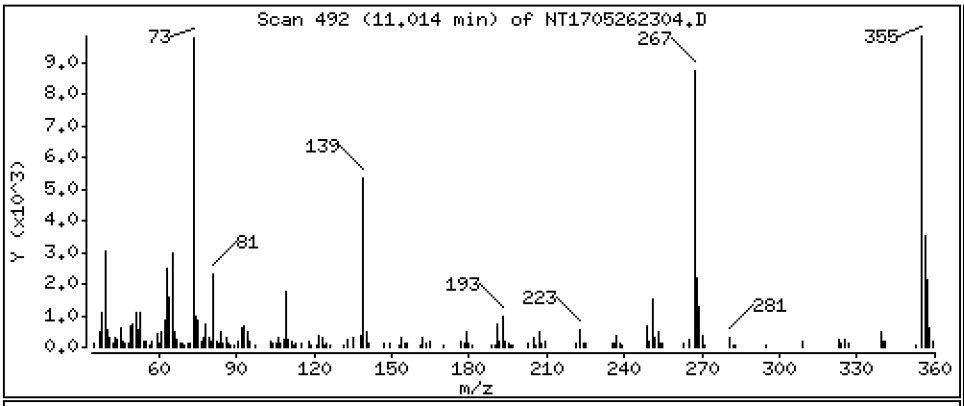
Operator: VTS

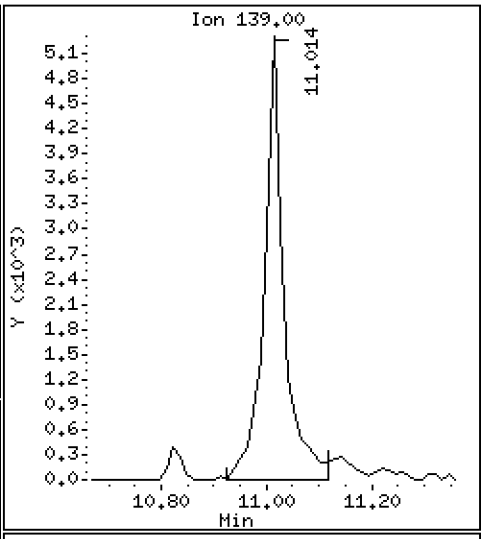
Column phase: ZB-5msi

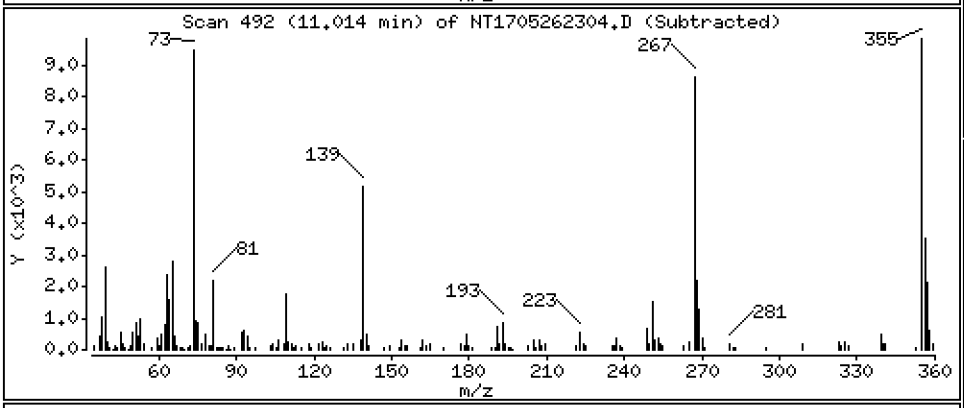
Column diameter: 0.25

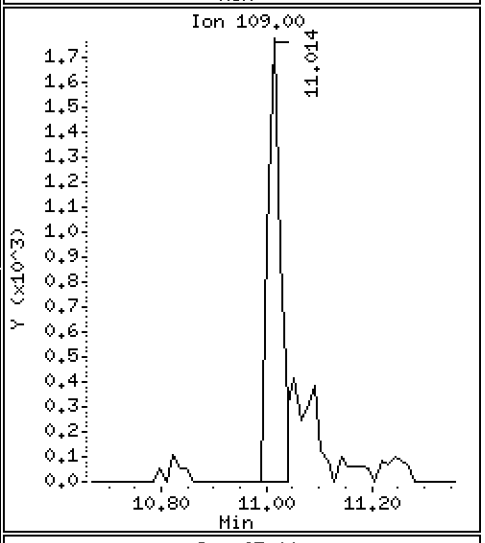
21 2-Nitrophenol

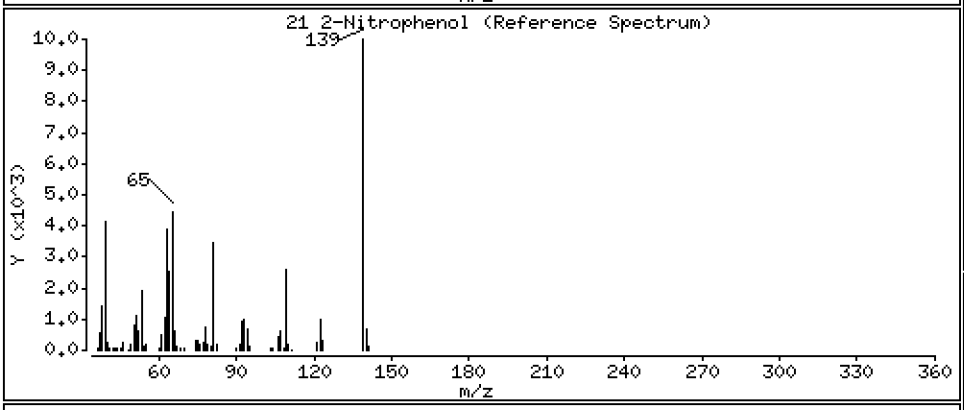
Concentration: 0.2610 ug/mL

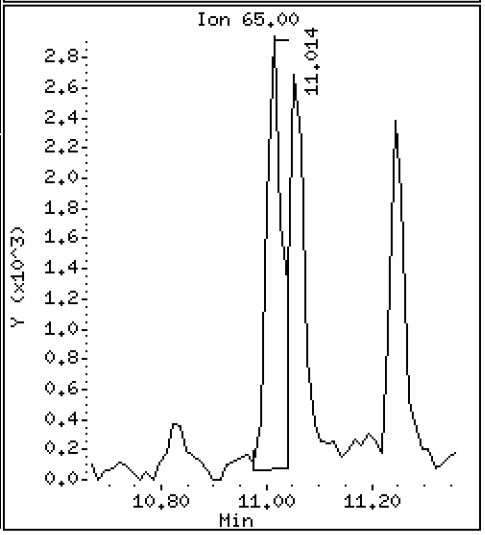


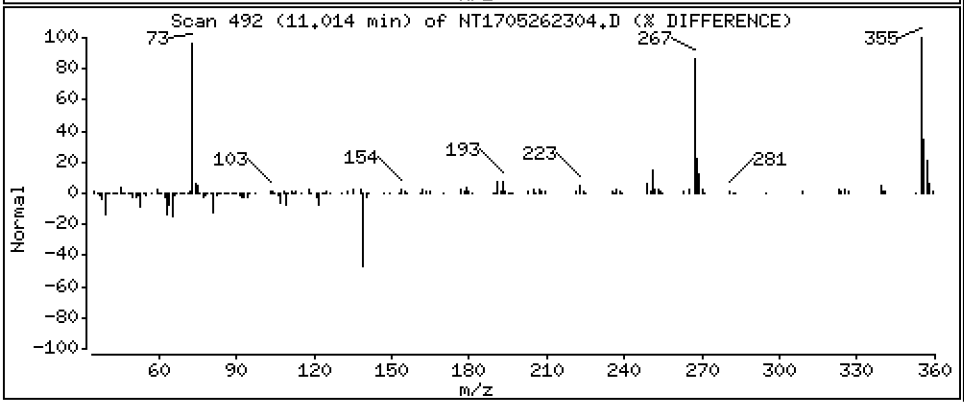












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

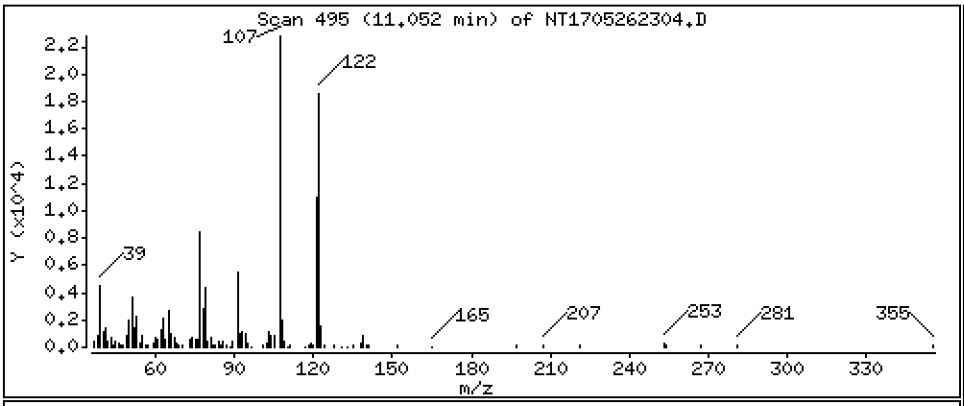
Operator: VTS

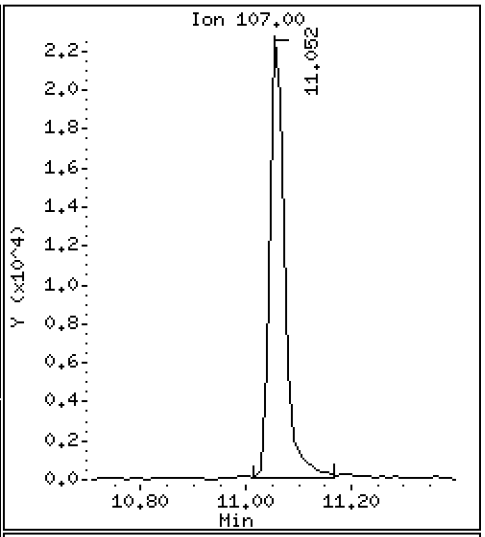
Column phase: ZB-5msi

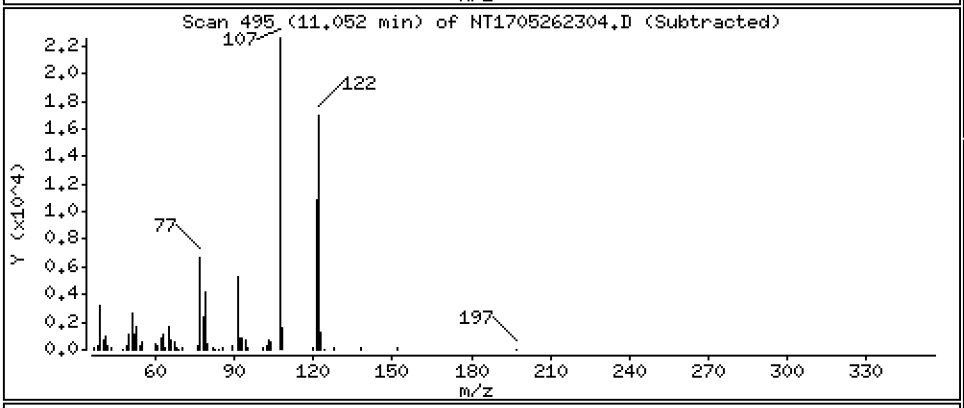
Column diameter: 0.25

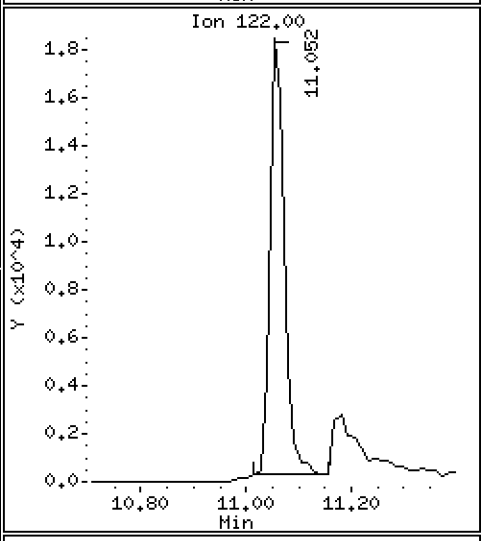
22 2,4-Dimethylphenol

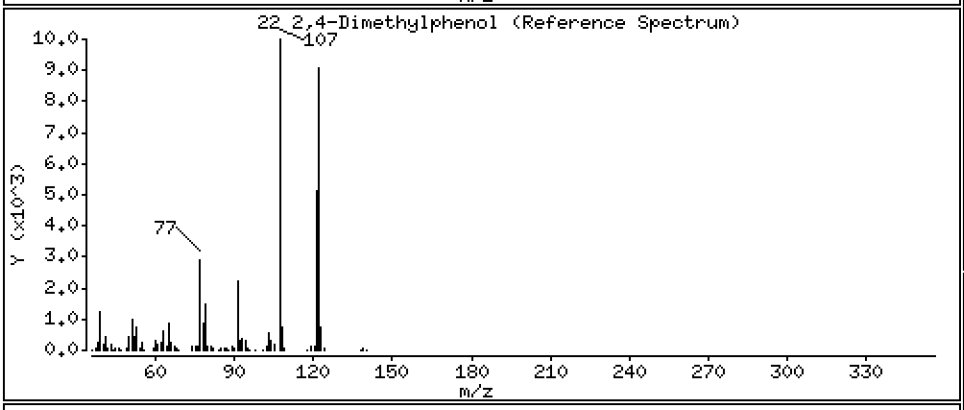
Concentration: 0.3870 ug/mL

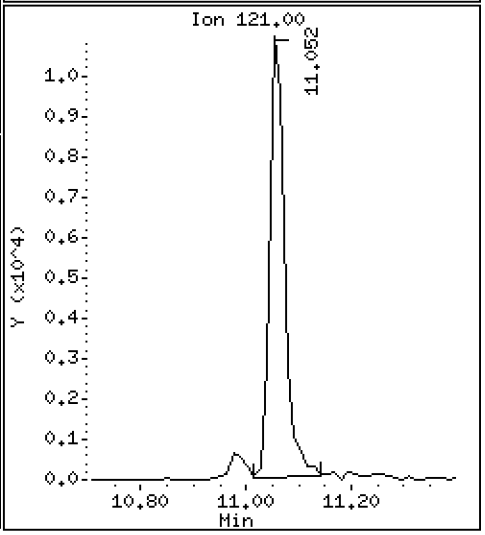


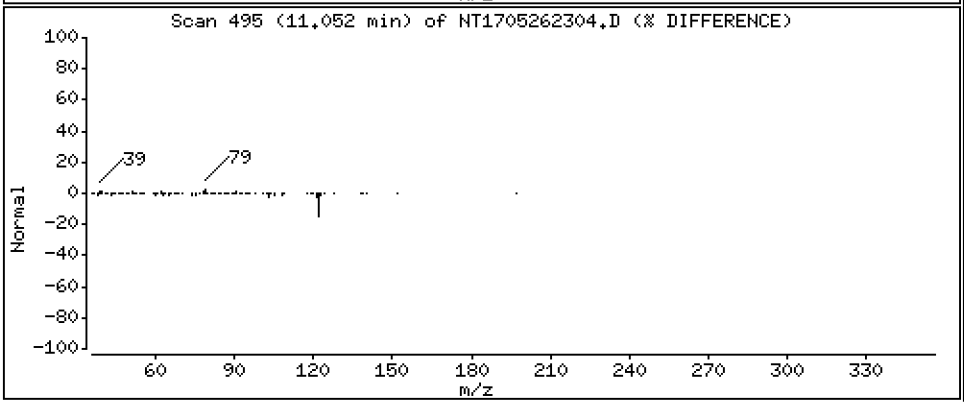












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

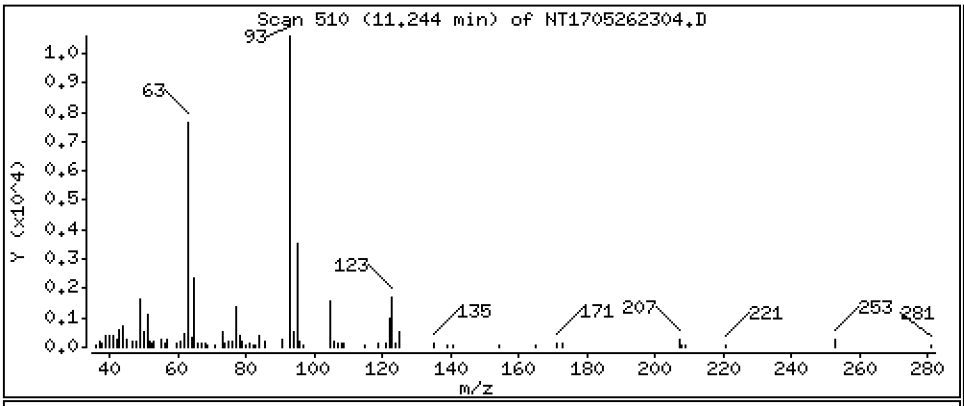
Operator: VTS

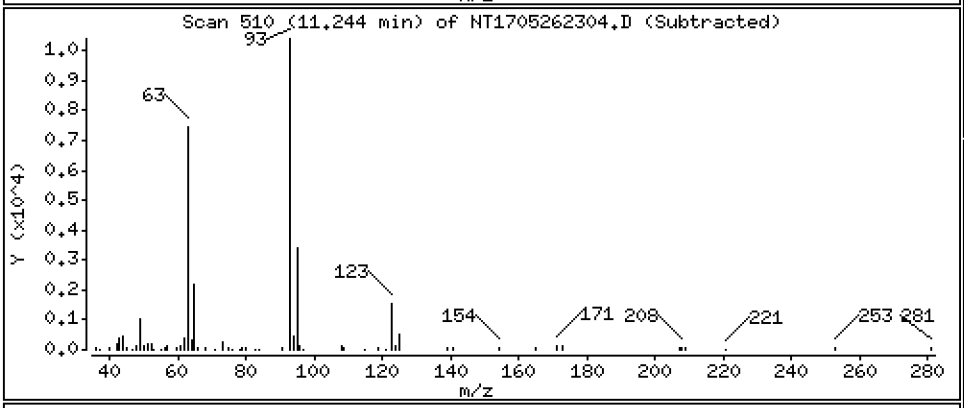
Column phase: ZB-5msi

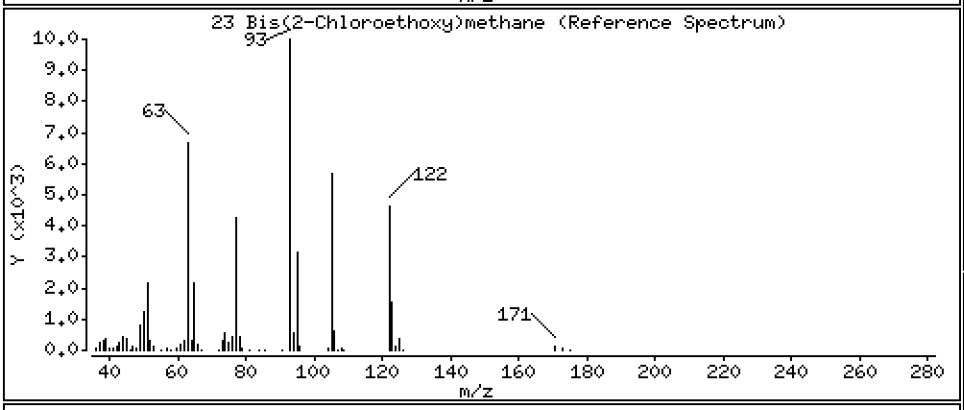
Column diameter: 0.25

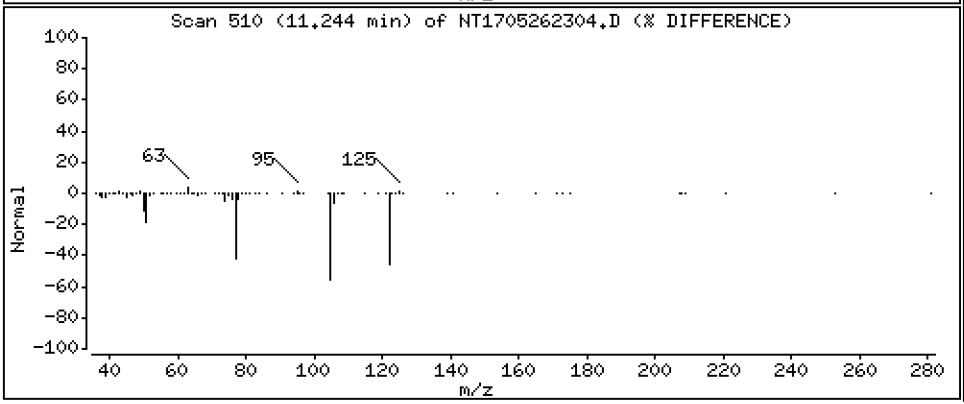
23 Bis(2-Chloroethoxy)methane

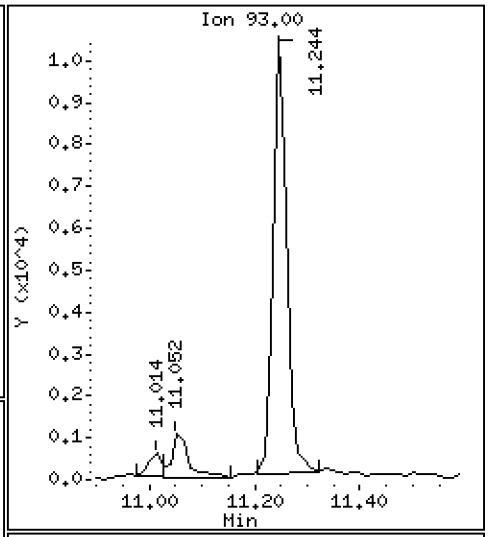
Concentration: 0.1790 ug/mL

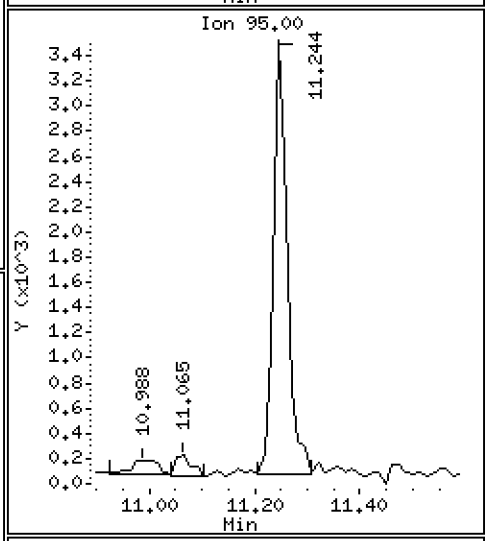


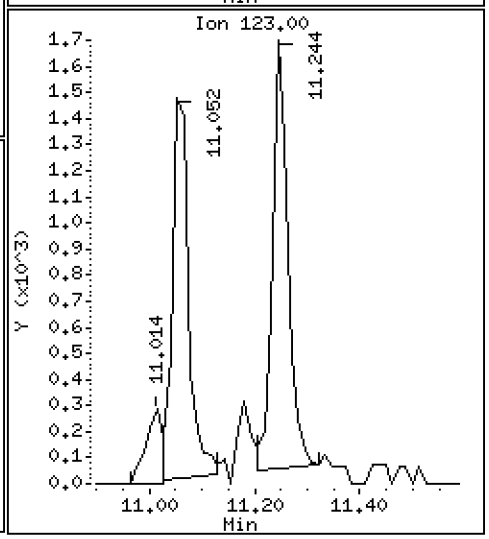












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

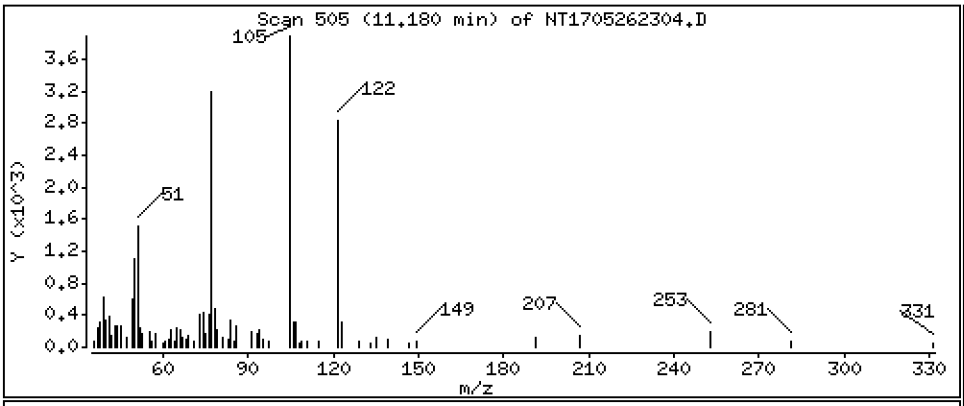
Operator: VTS

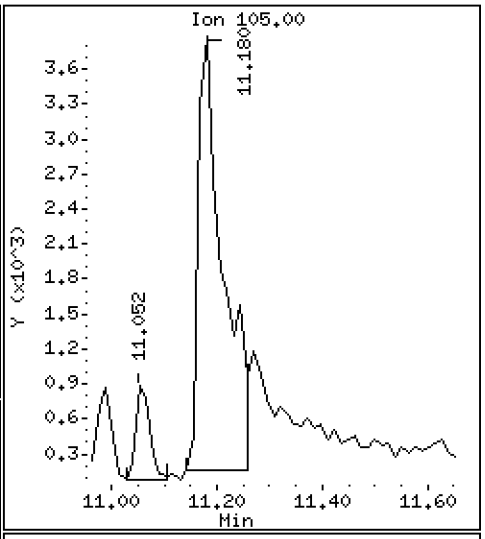
Column phase: ZB-5msi

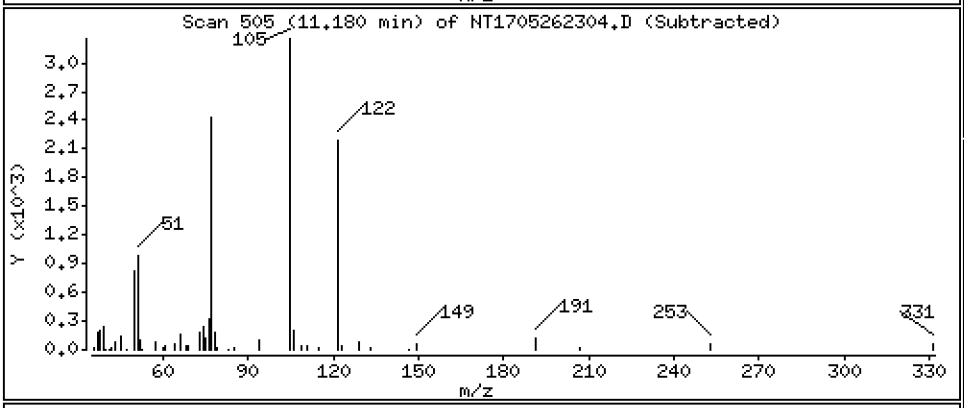
Column diameter: 0.25

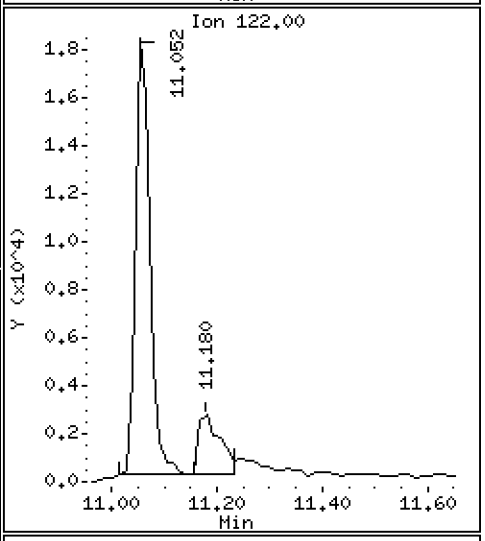
24 Benzoic acid

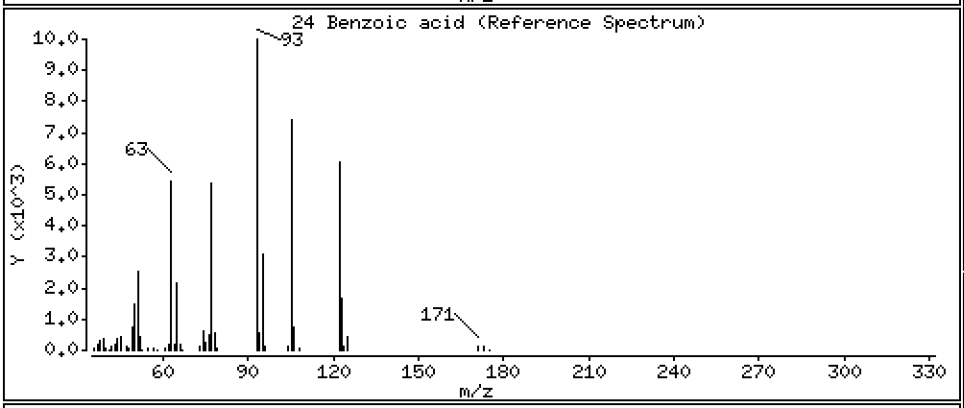
Concentration: 0.1600 ug/mL

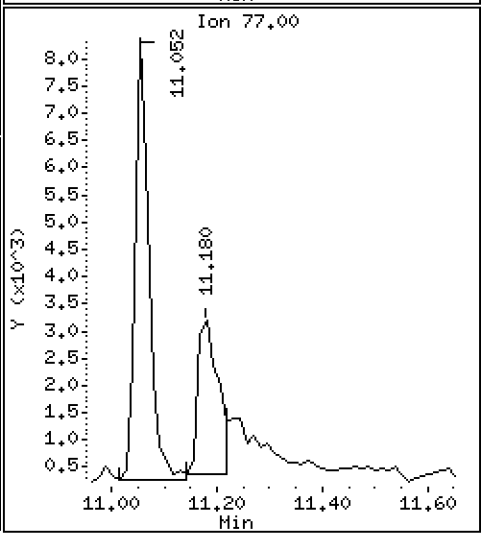


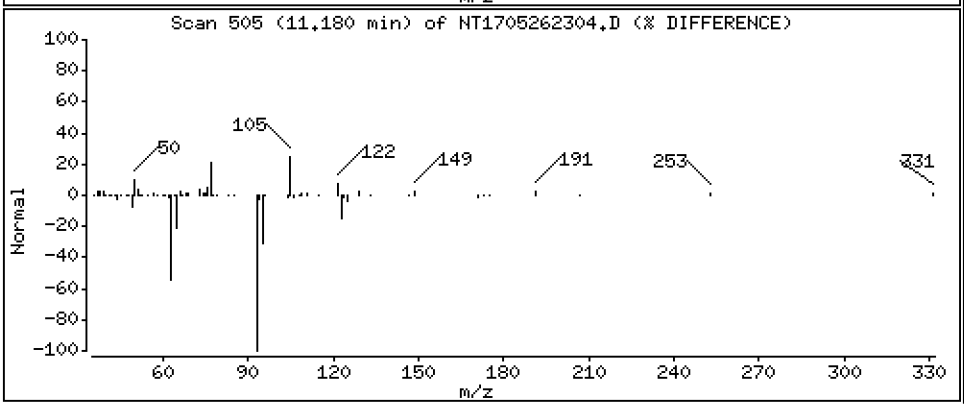












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

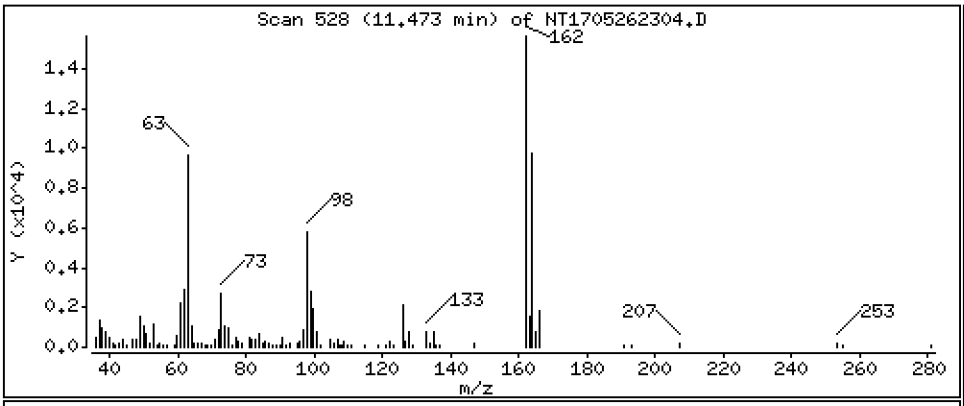
Operator: VTS

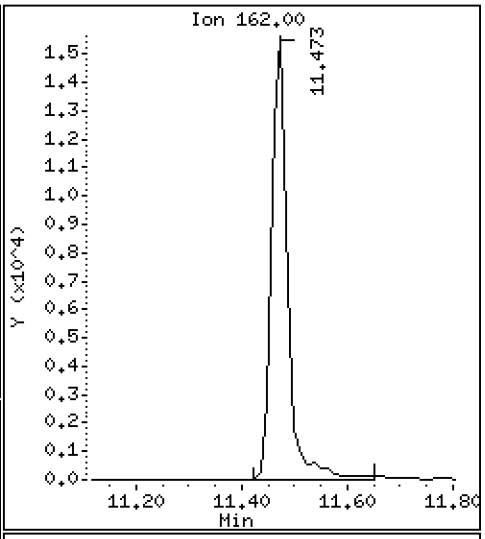
Column phase: ZB-5msi

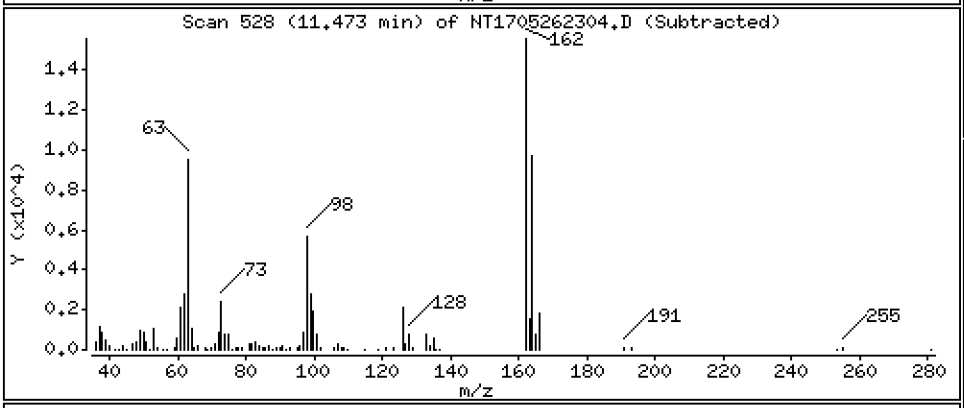
Column diameter: 0.25

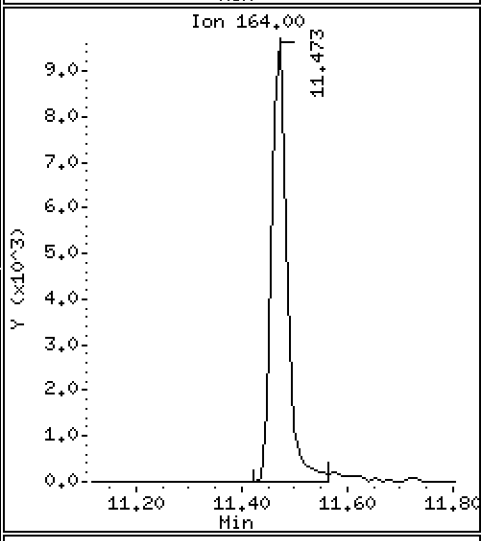
25 2,4-Dichlorophenol

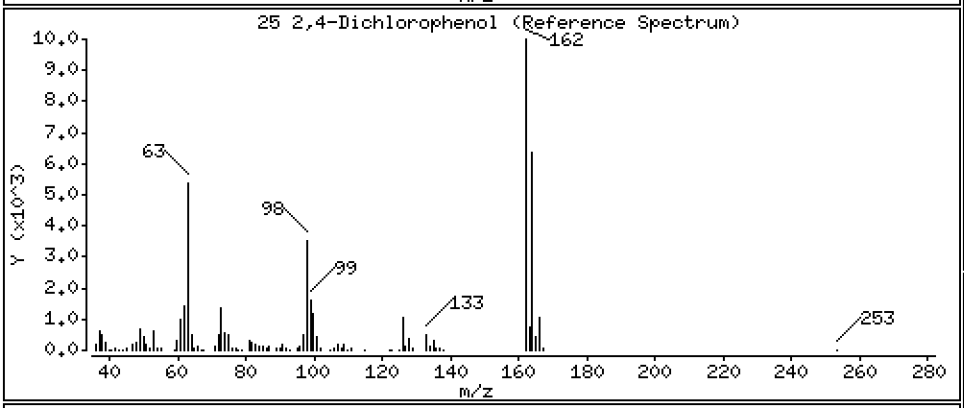
Concentration: 0.4023 ug/mL

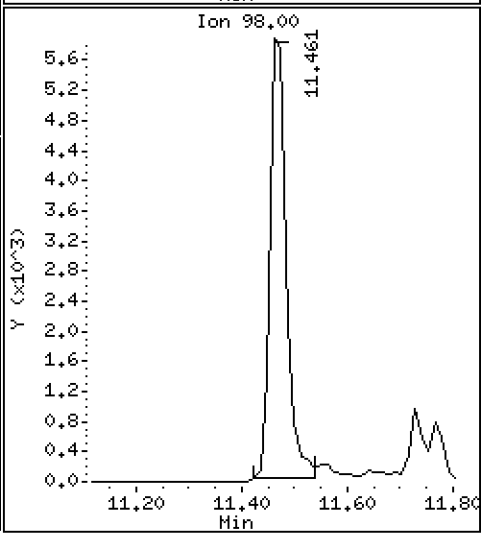


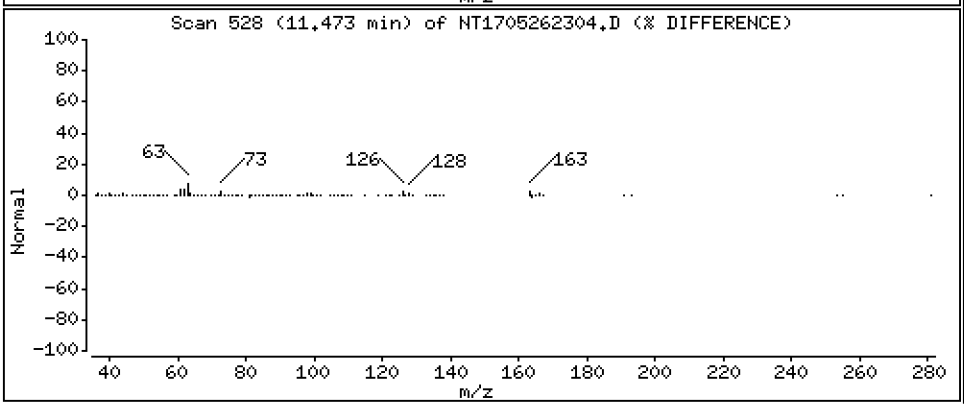












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

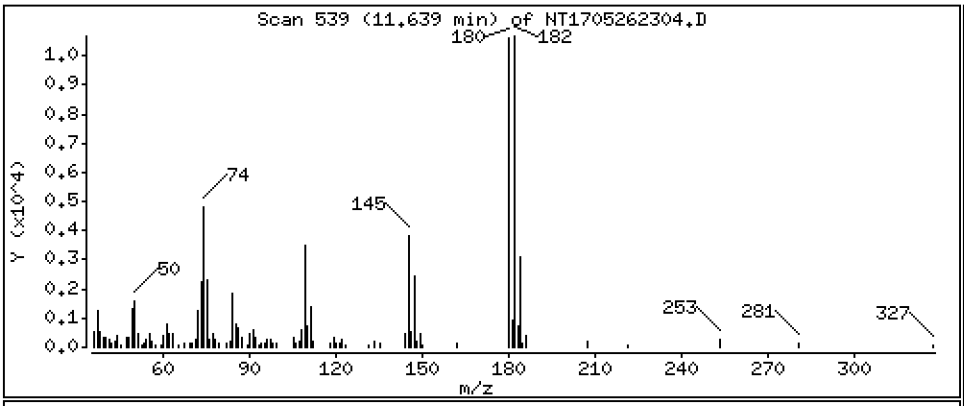
Operator: VTS

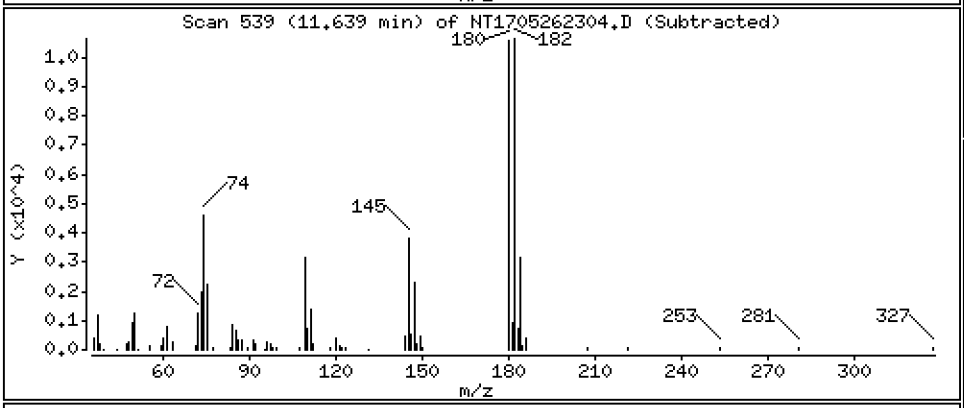
Column phase: ZB-5msi

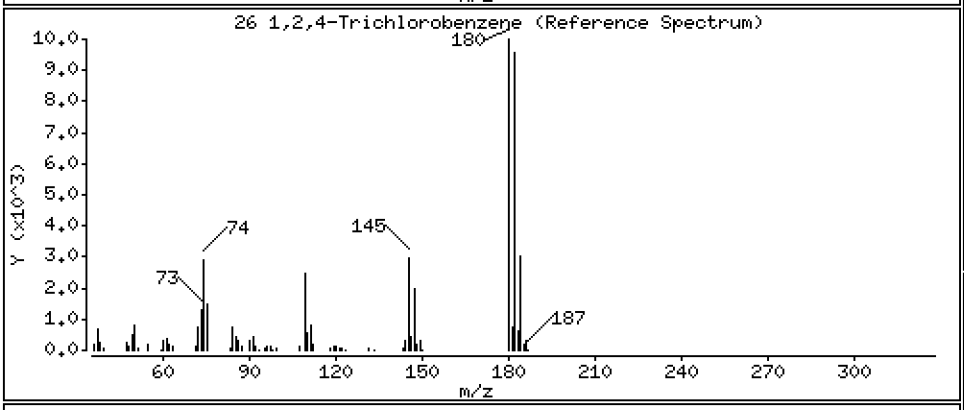
Column diameter: 0.25

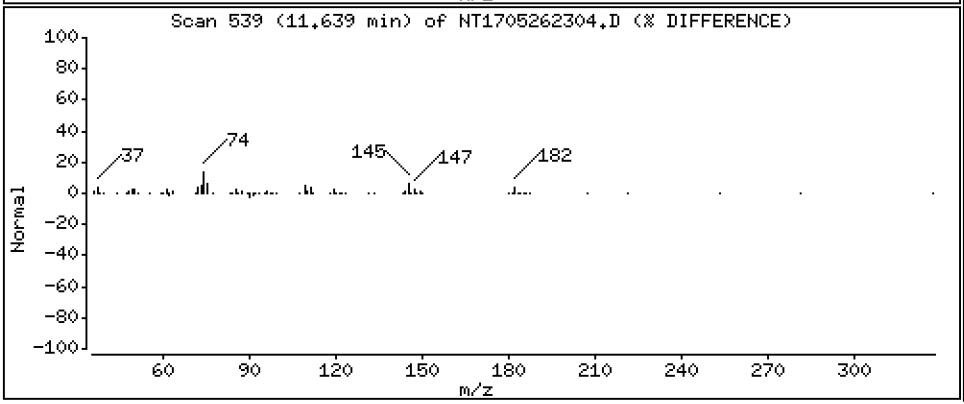
26 1,2,4-Trichlorobenzene

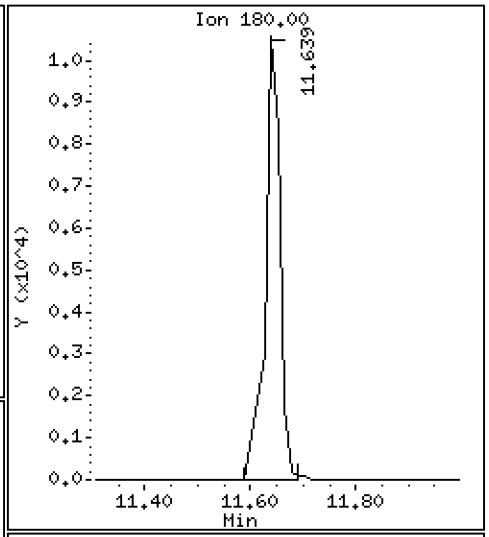
Concentration: 0.2404 ug/mL

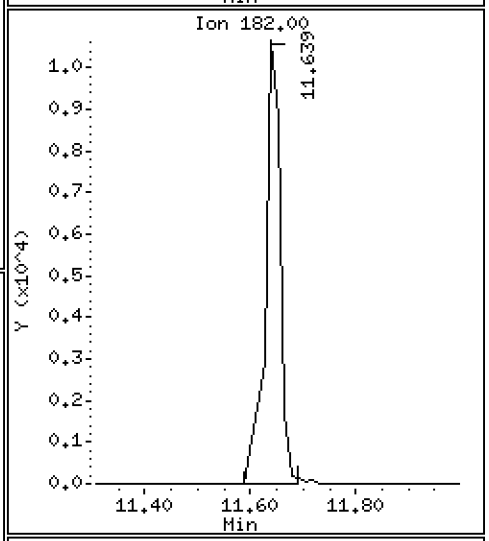


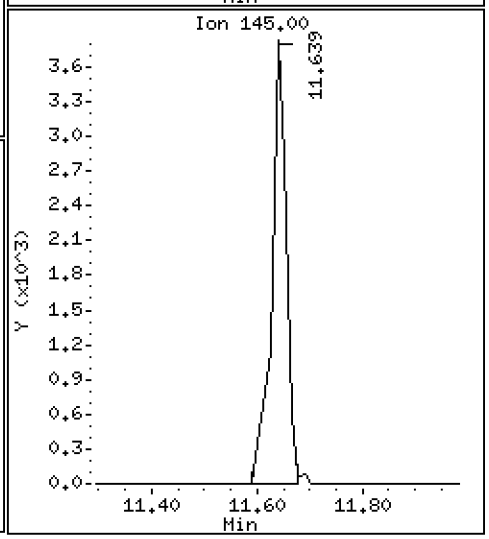












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

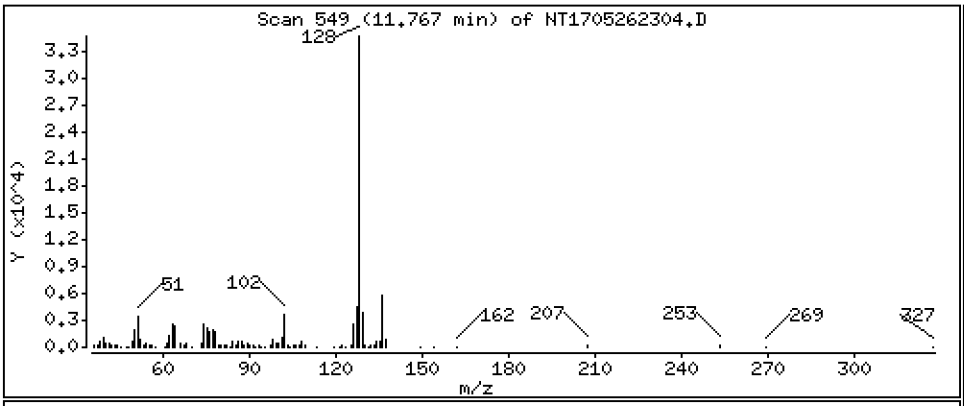
Operator: VTS

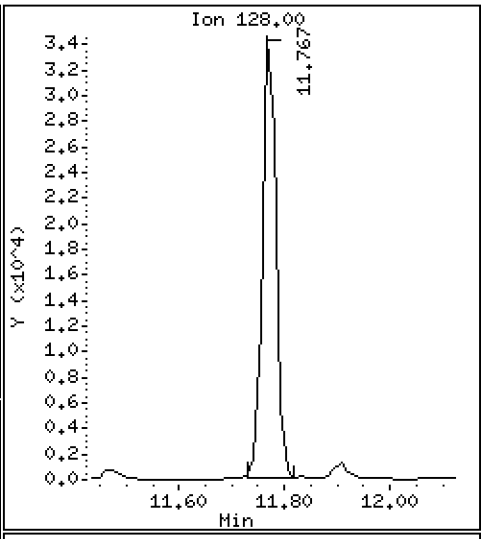
Column phase: ZB-5msi

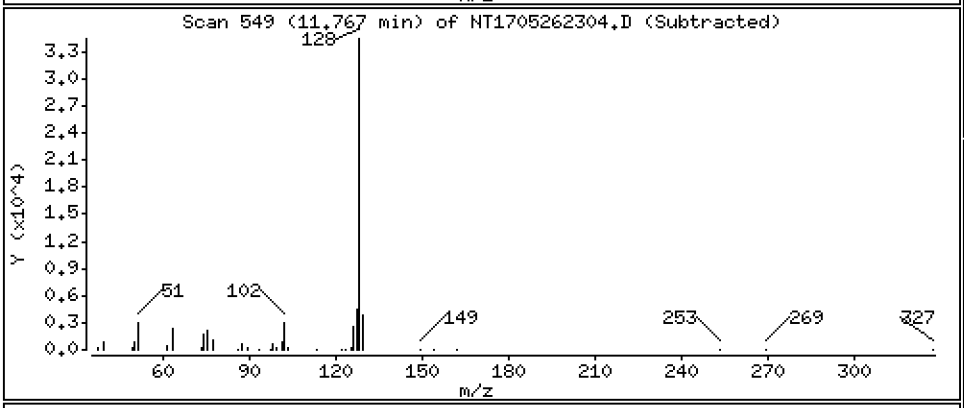
Column diameter: 0.25

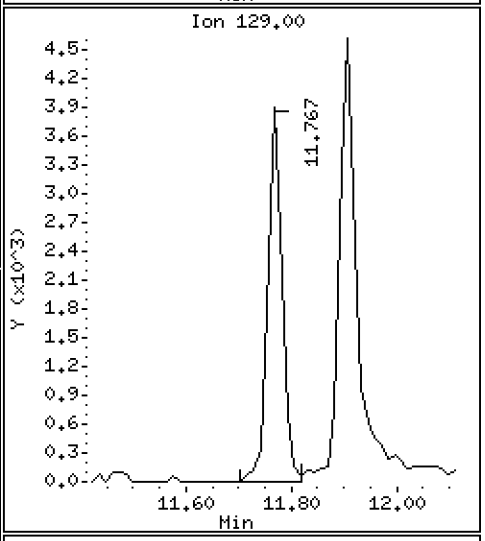
28 Naphthalene

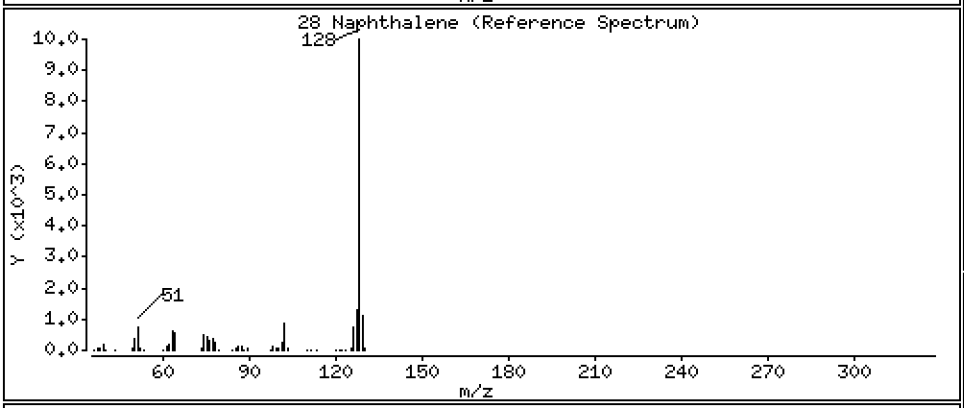
Concentration: 0.1976 ug/mL

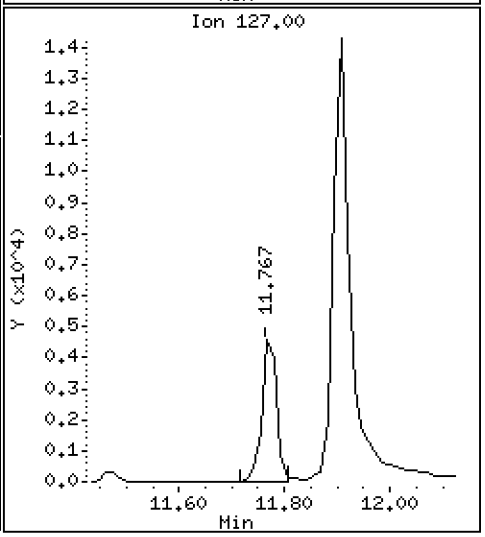


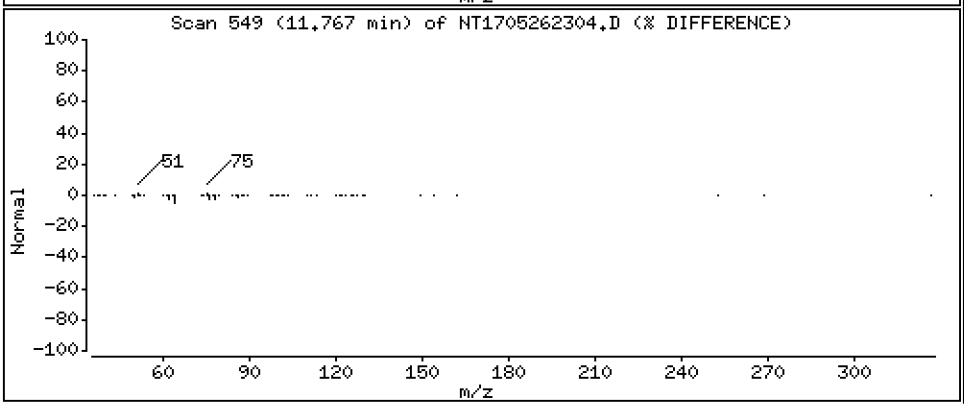












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

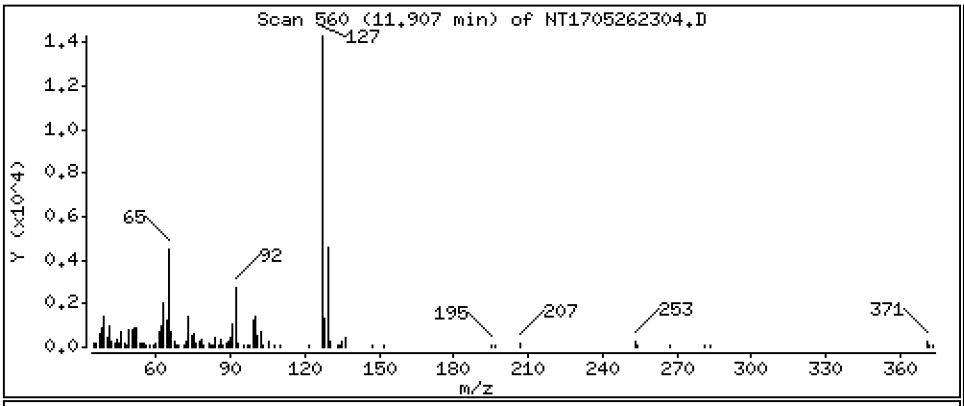
Operator: VTS

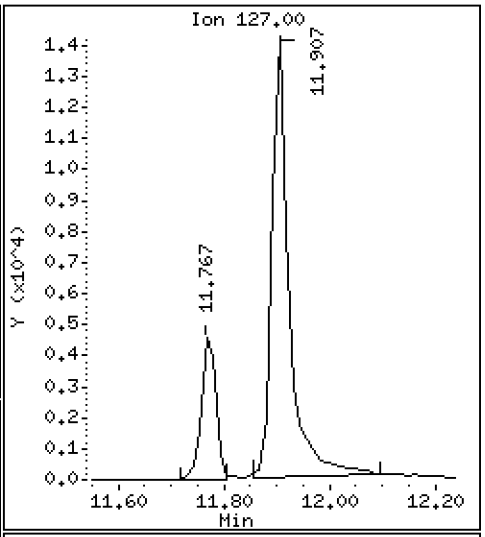
Column phase: ZB-5msi

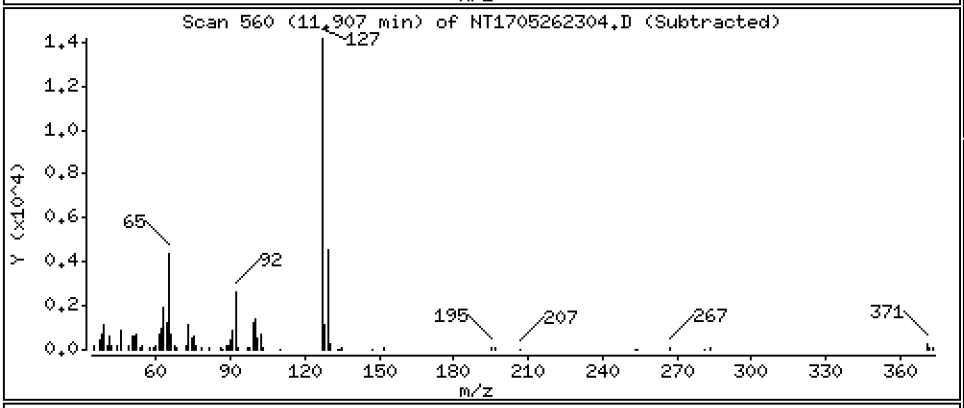
Column diameter: 0.25

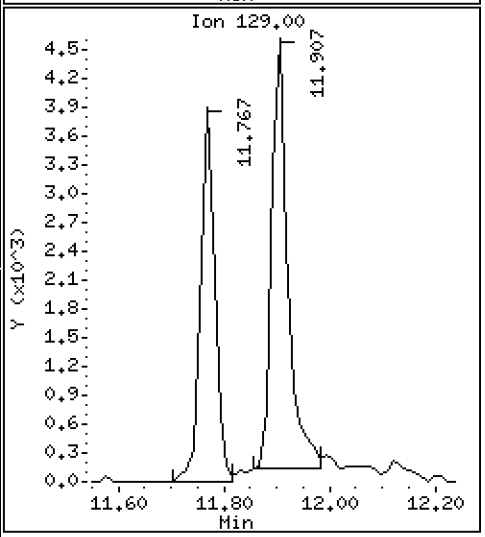
29 4-Chloroaniline

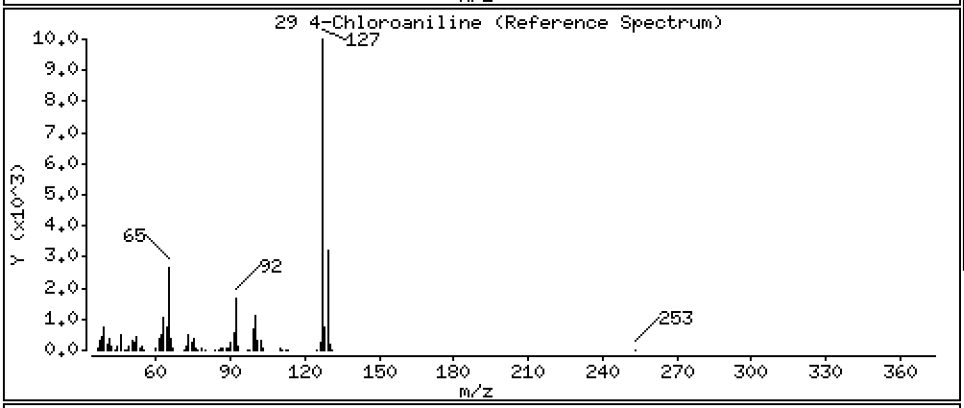
Concentration: 0.2918 ug/mL

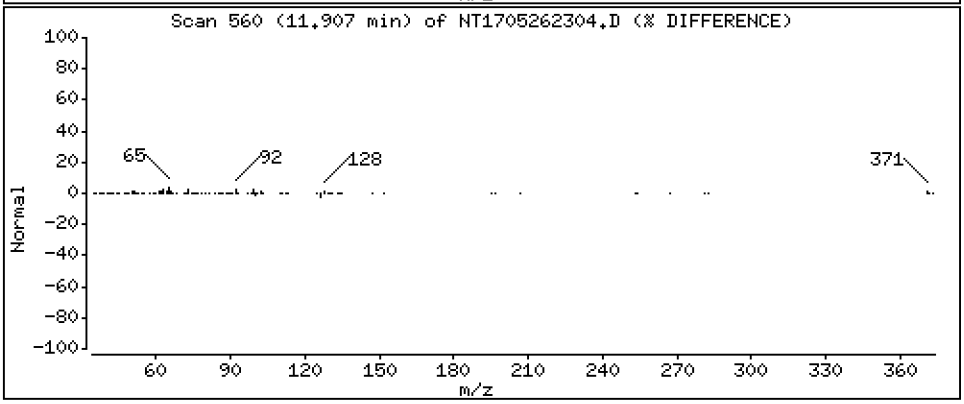












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

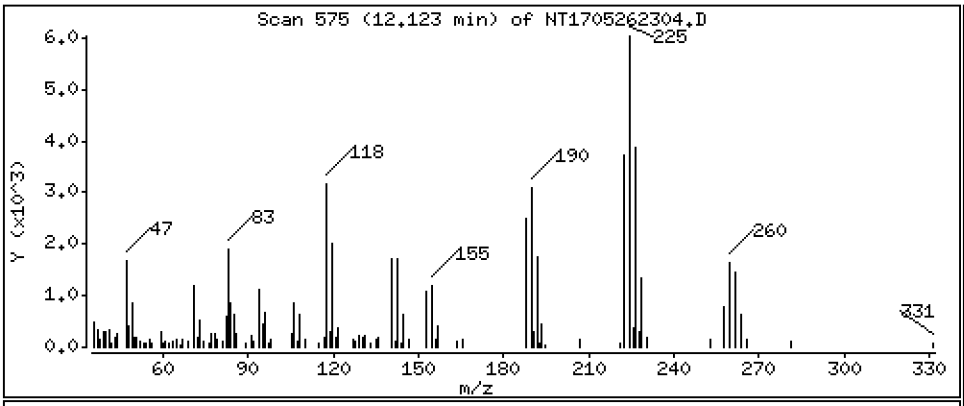
Operator: VTS

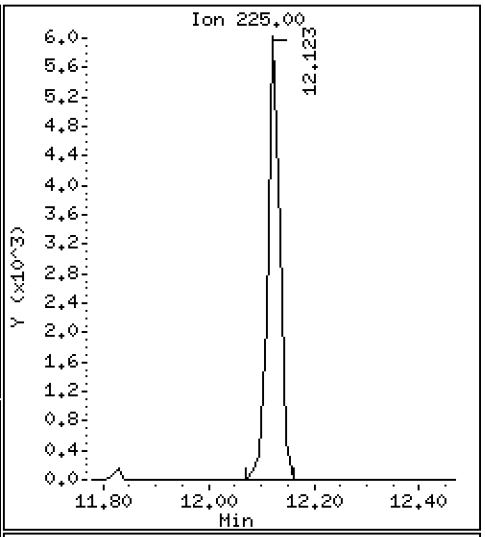
Column phase: ZB-5msi

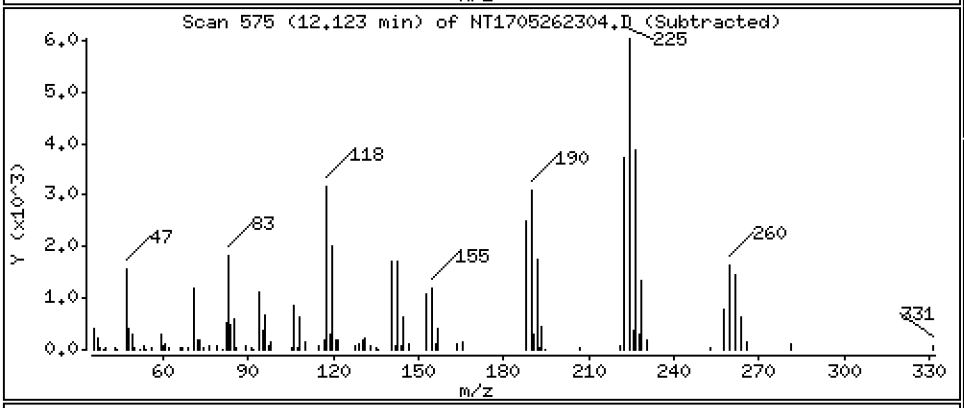
Column diameter: 0.25

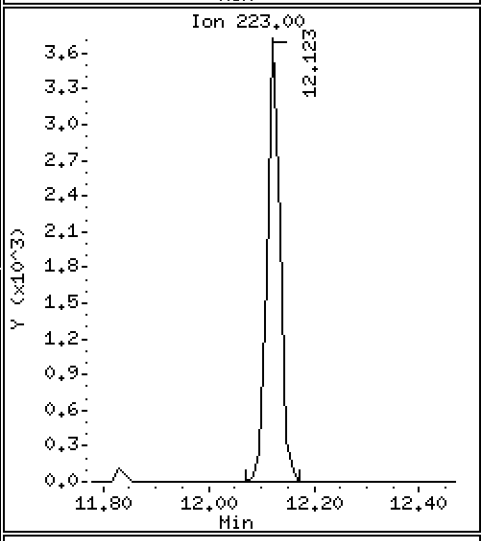
30 Hexachlorobutadiene

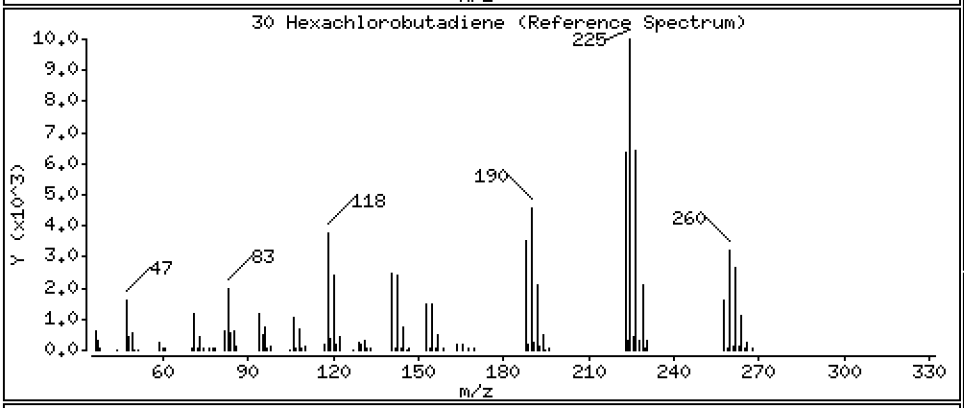
Concentration: 0.1913 ug/mL

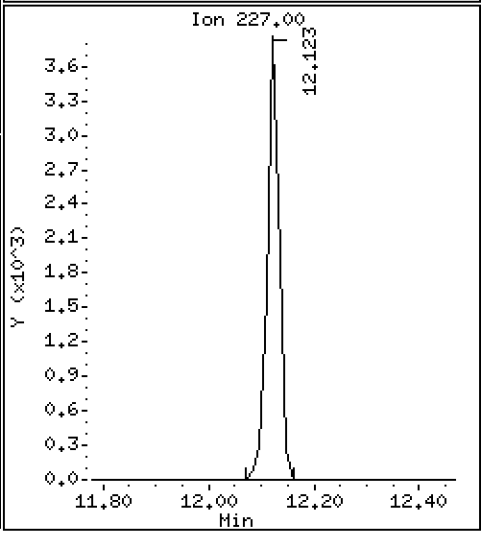


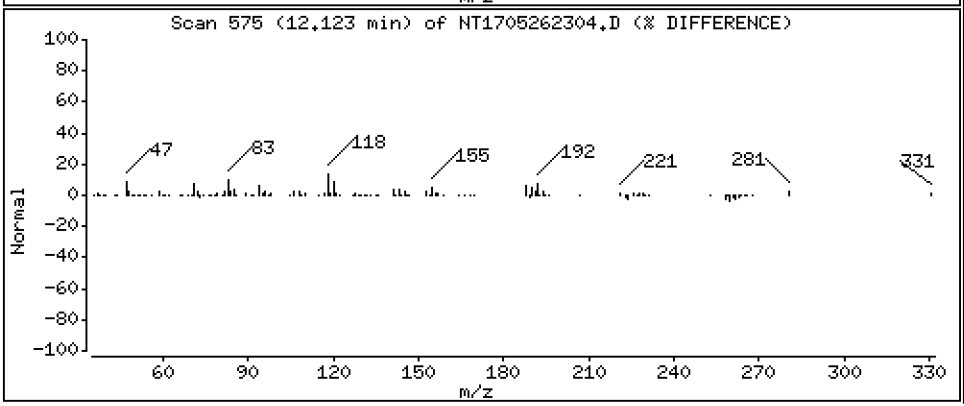












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

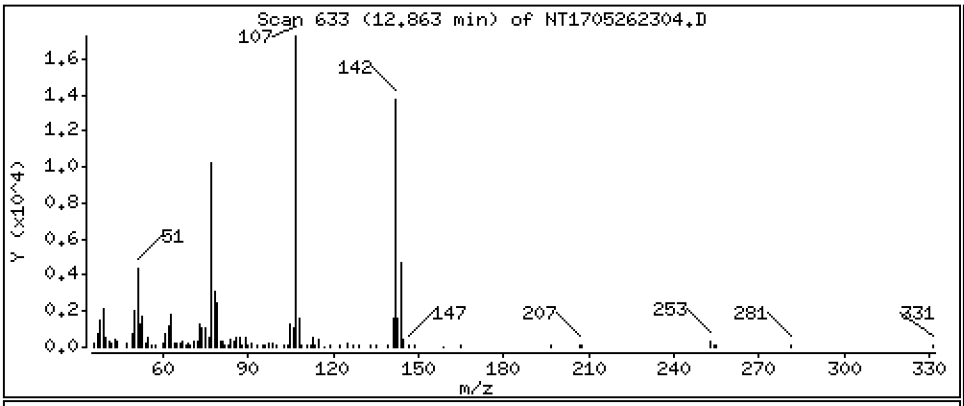
Operator: VTS

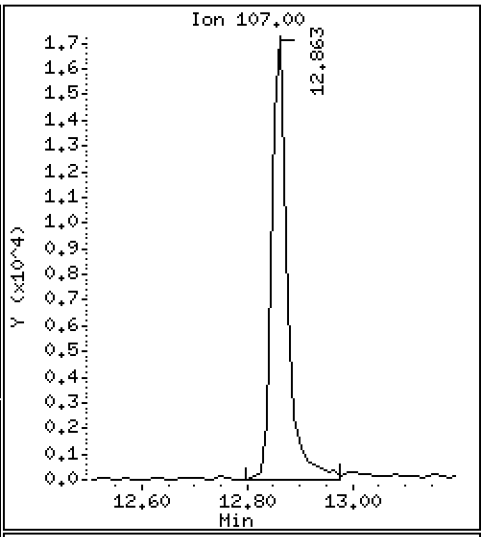
Column phase: ZB-5msi

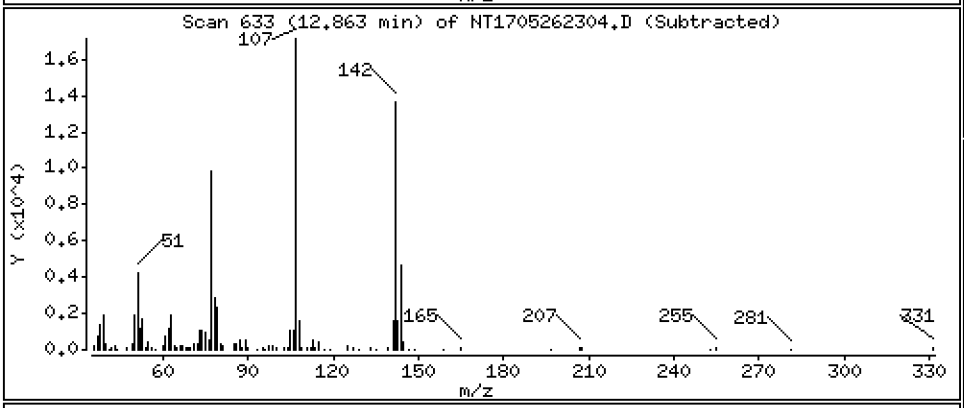
Column diameter: 0.25

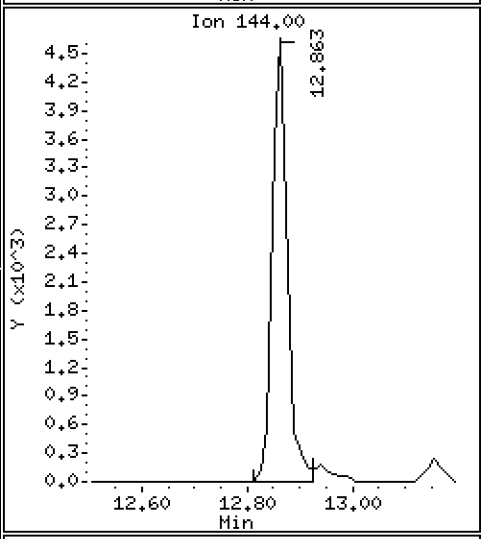
31 4-Chloro-3-methylphenol

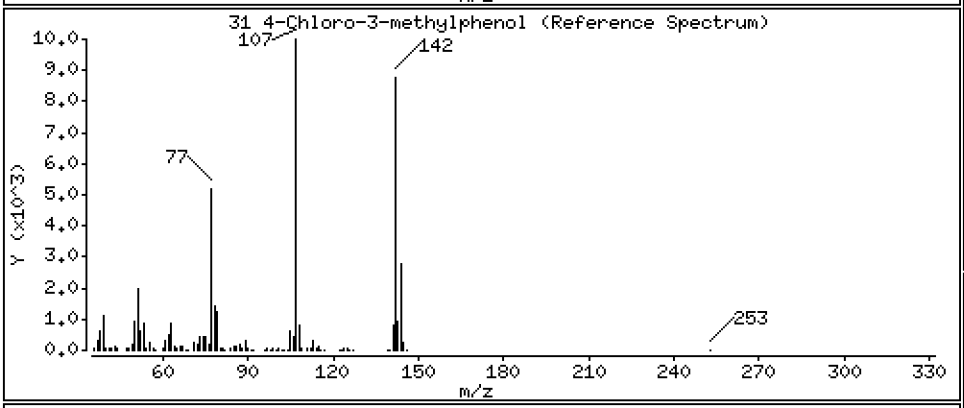
Concentration: 0.3609 ug/mL

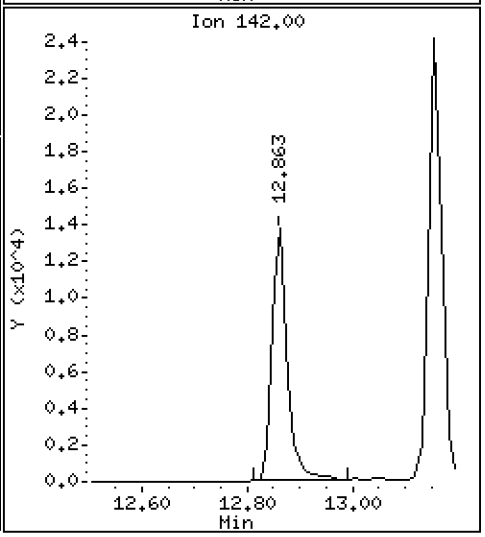


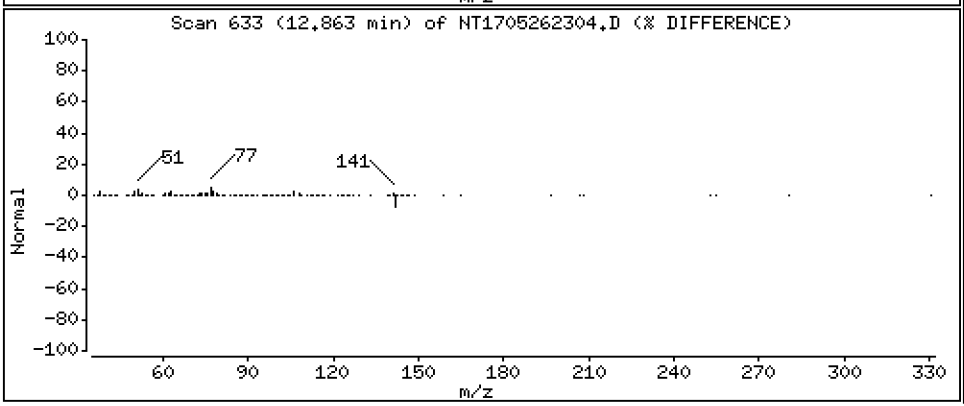












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

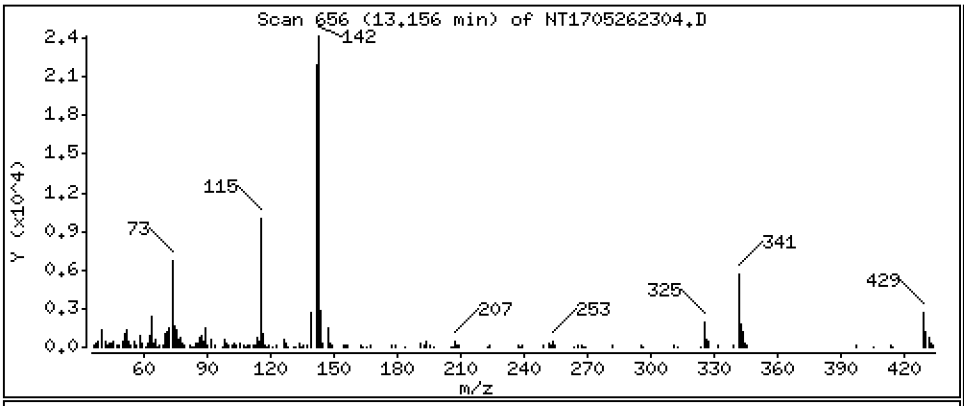
Operator: VTS

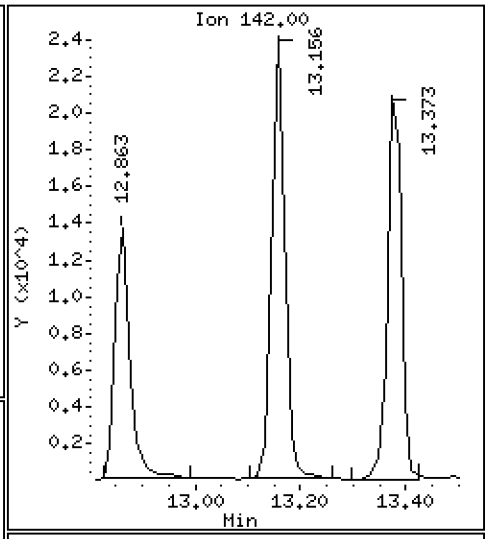
Column phase: ZB-5msi

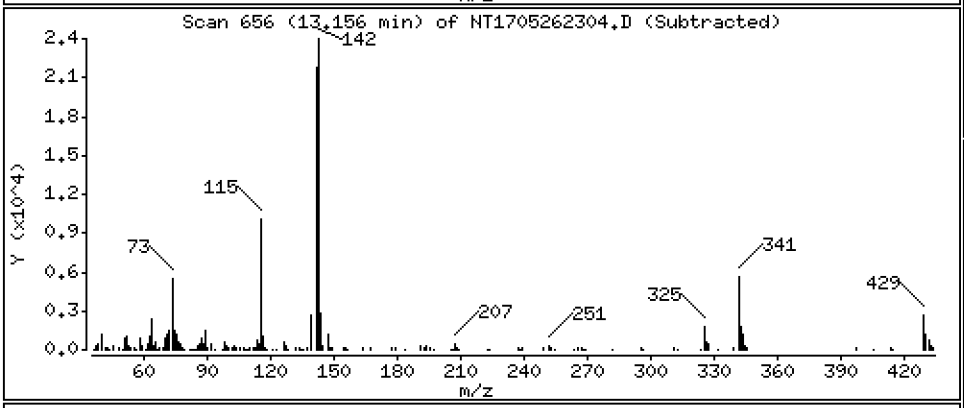
Column diameter: 0.25

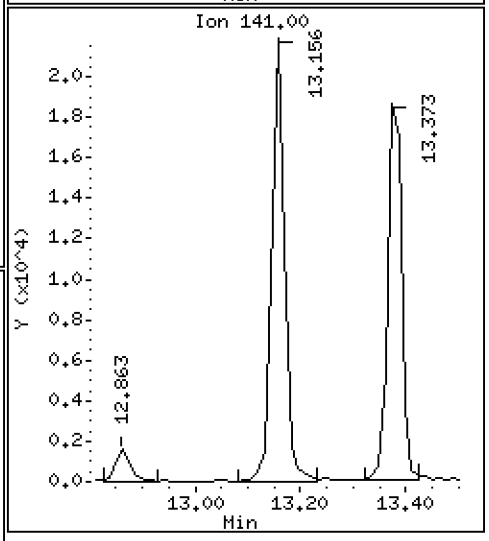
32 2-Methylnaphthalene

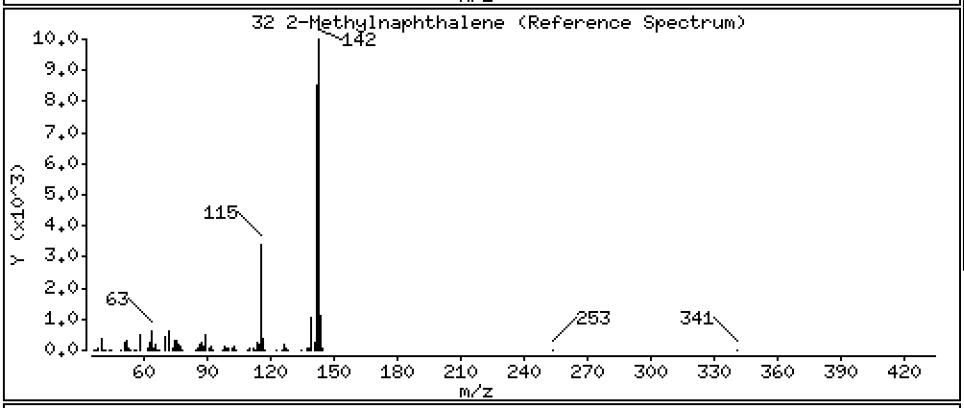
Concentration: 0.1874 ug/mL

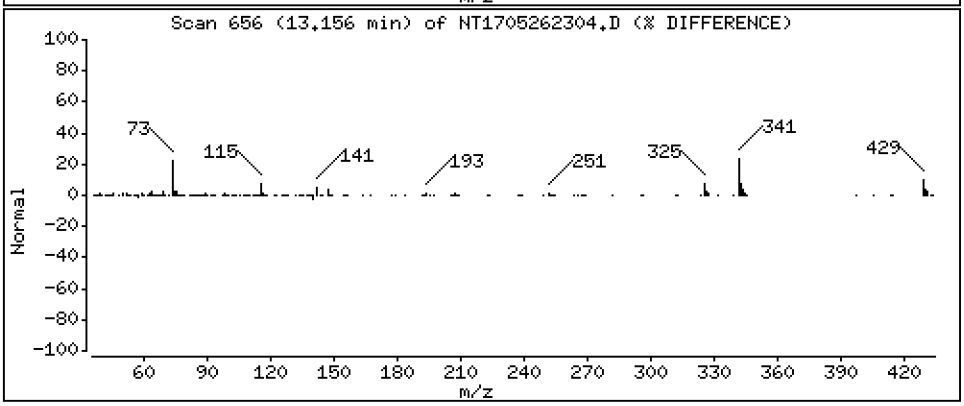












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

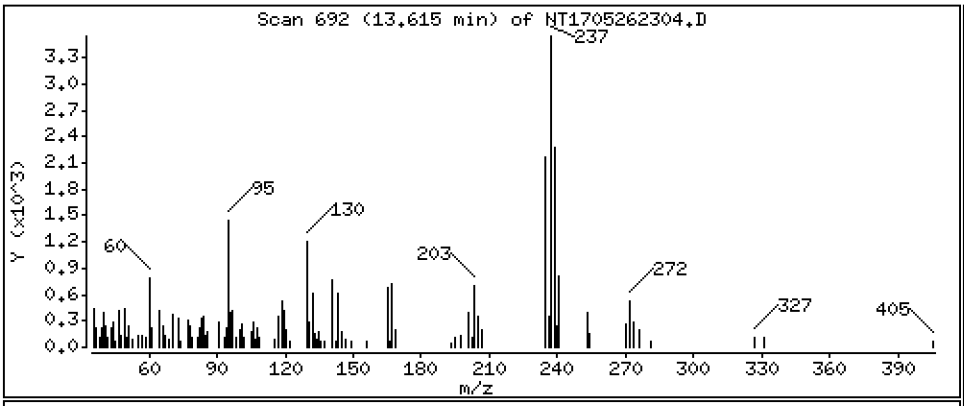
Operator: VTS

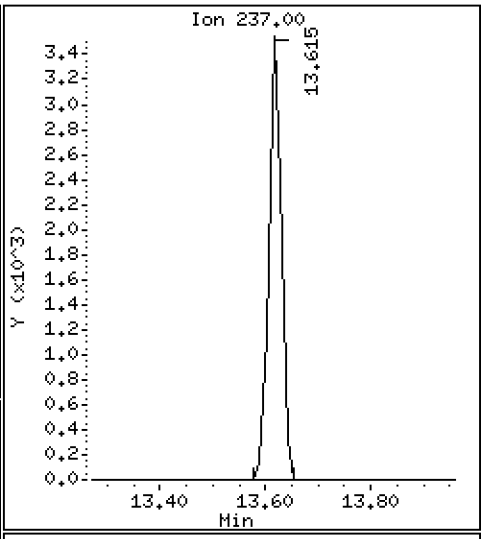
Column phase: ZB-5msi

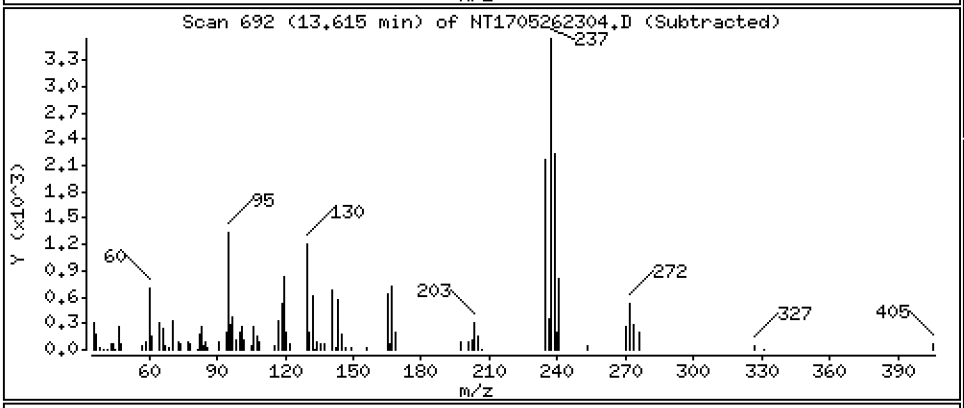
Column diameter: 0.25

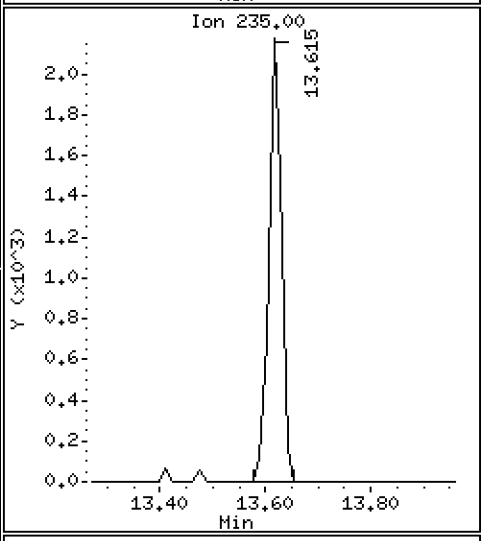
33 Hexachlorocyclopentadiene

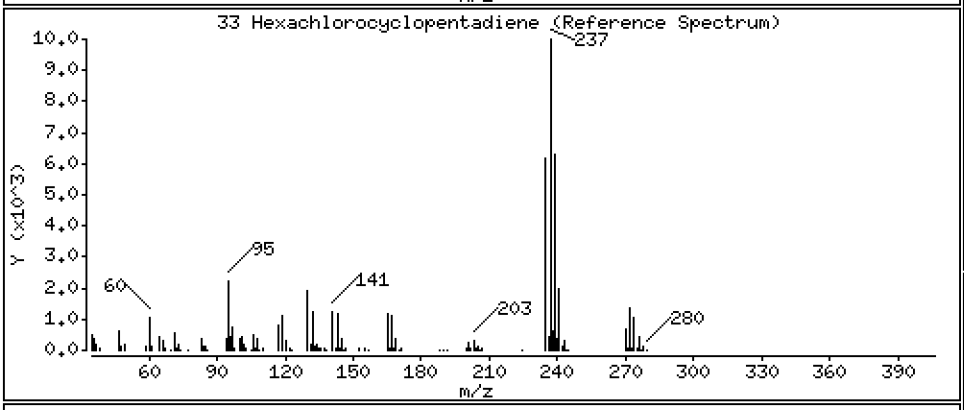
Concentration: 0.1077 ug/mL

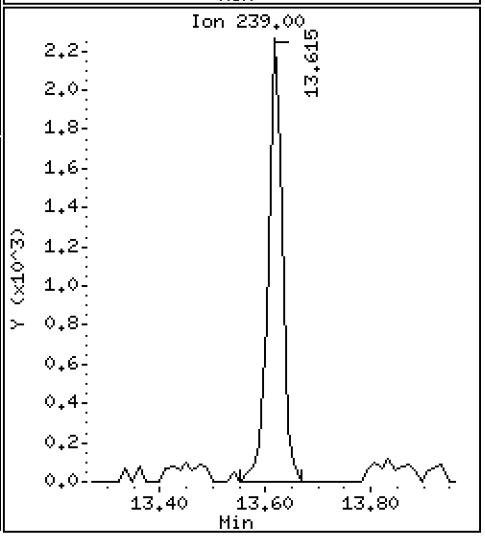


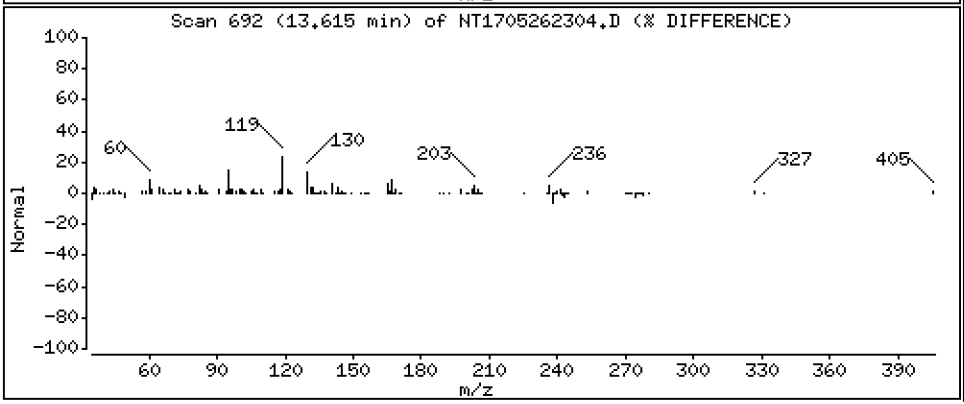












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

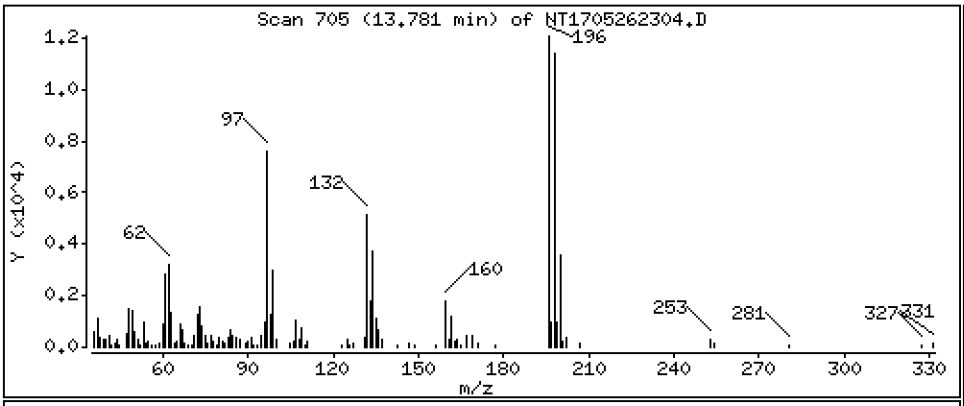
Operator: VTS

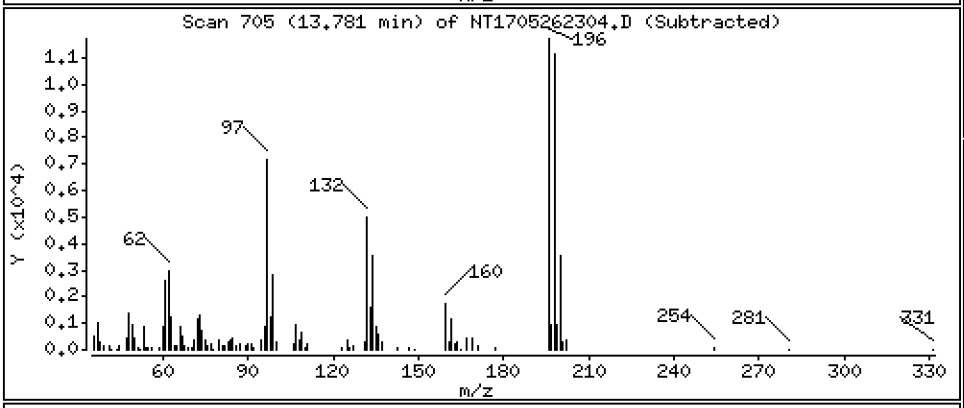
Column phase: ZB-5msi

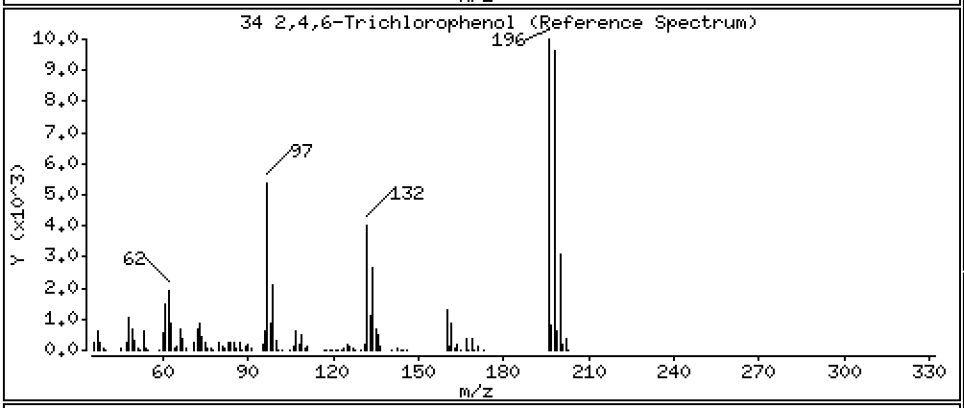
Column diameter: 0.25

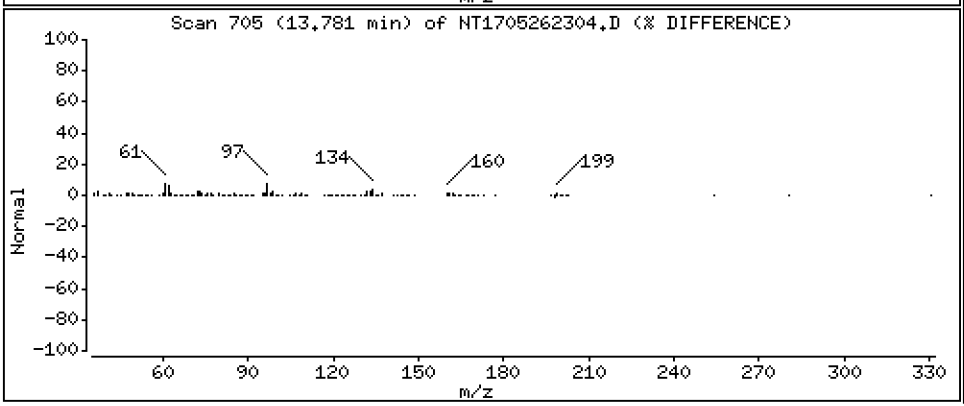
34 2,4,6-Trichlorophenol

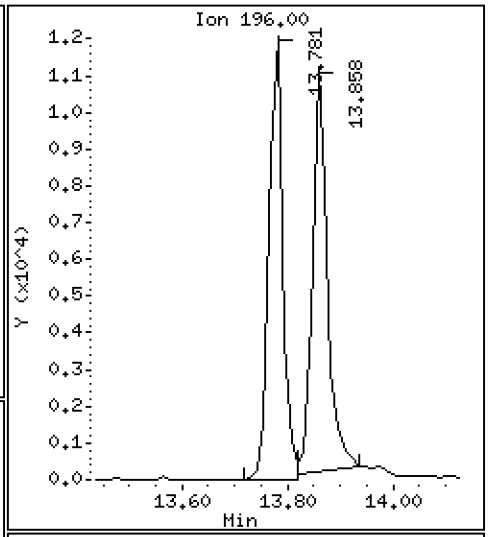
Concentration: 0.3562 ug/mL

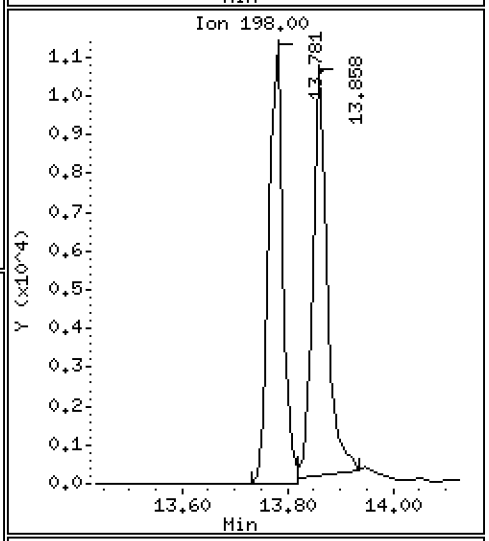


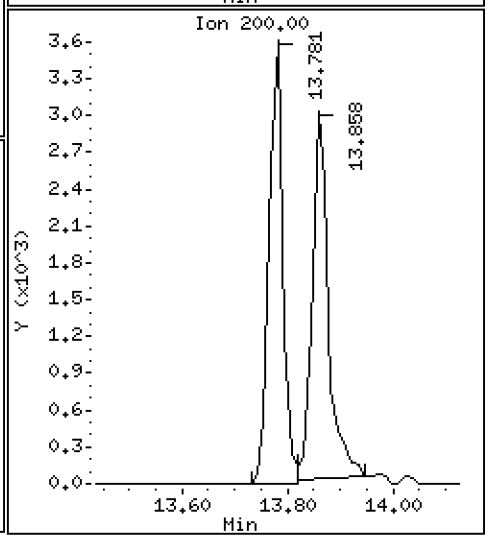












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

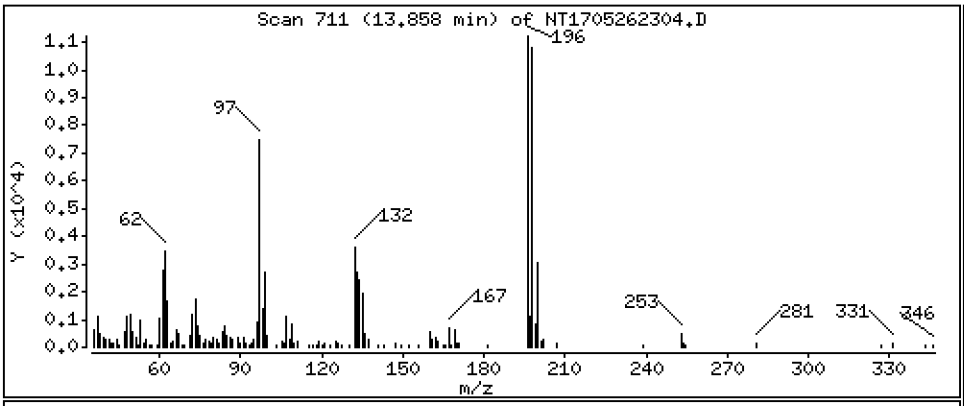
Operator: VTS

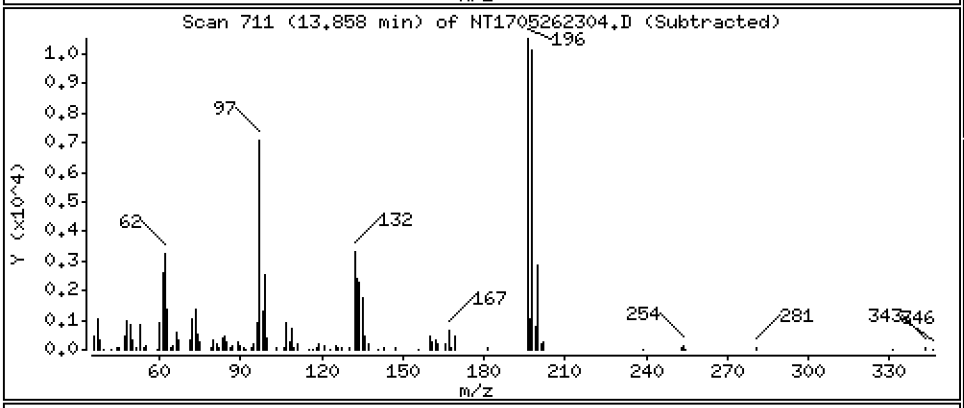
Column phase: ZB-5msi

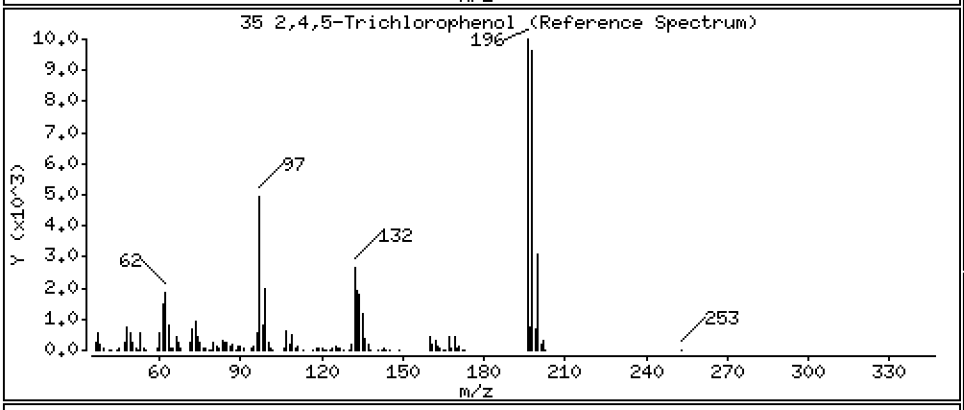
Column diameter: 0.25

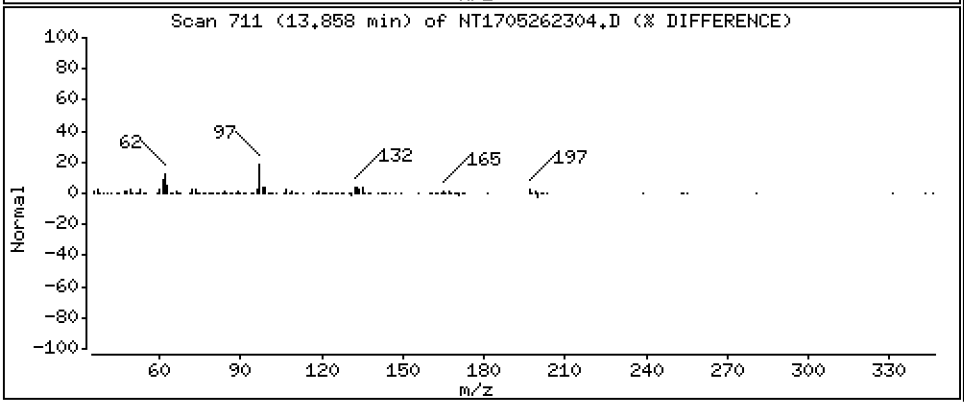
35 2,4,5-Trichlorophenol

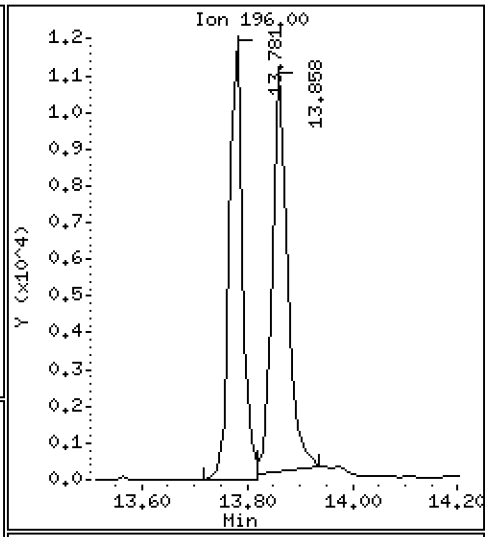
Concentration: 0.3389 ug/mL

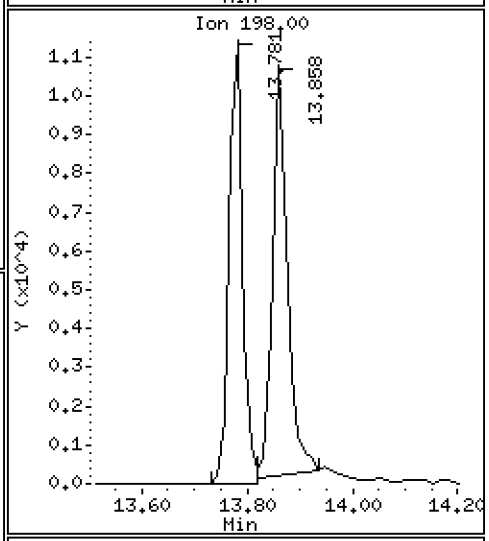


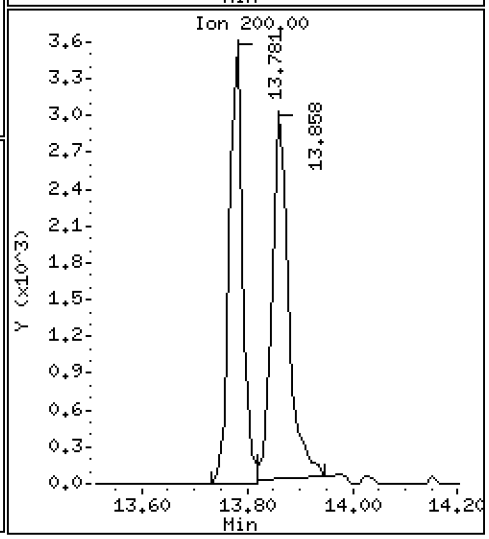












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

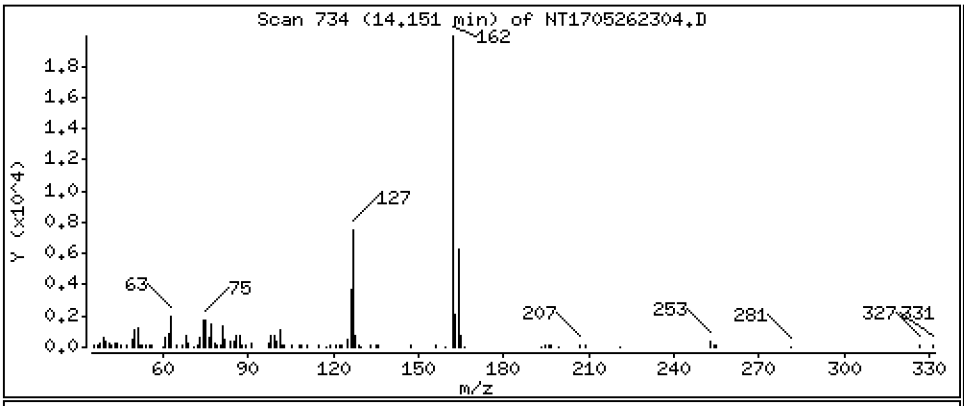
Operator: VTS

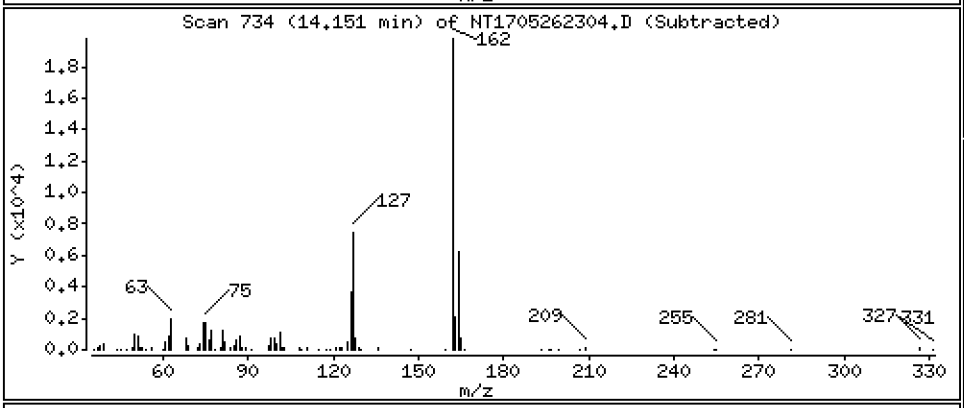
Column phase: ZB-5msi

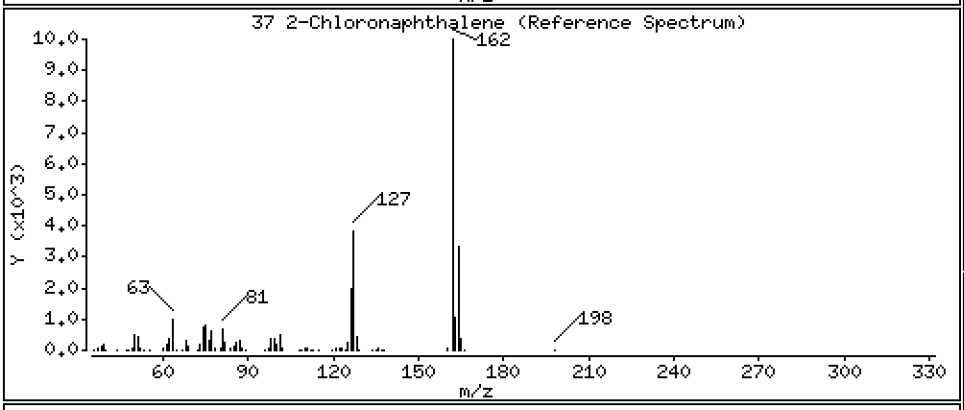
Column diameter: 0.25

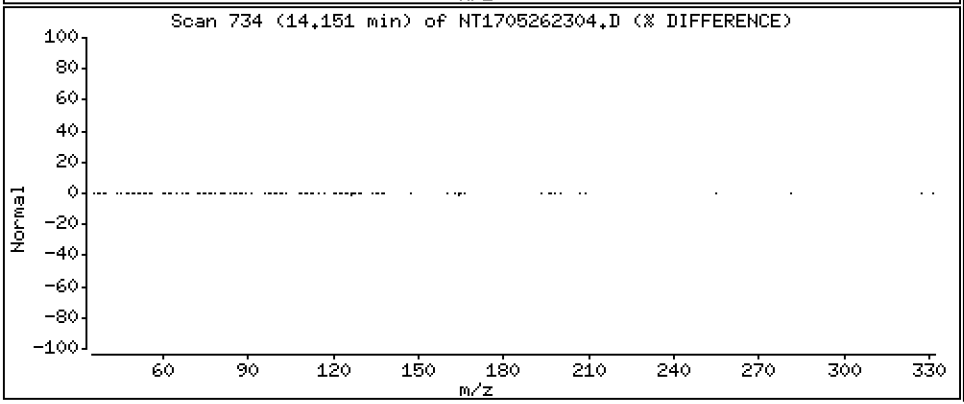
37 2-Chloronaphthalene

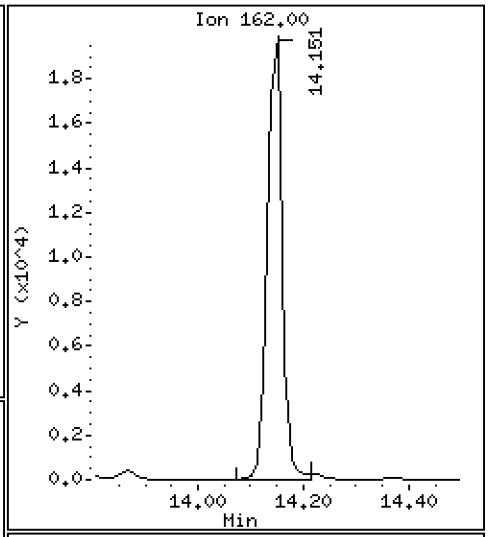
Concentration: 0.2059 ug/mL

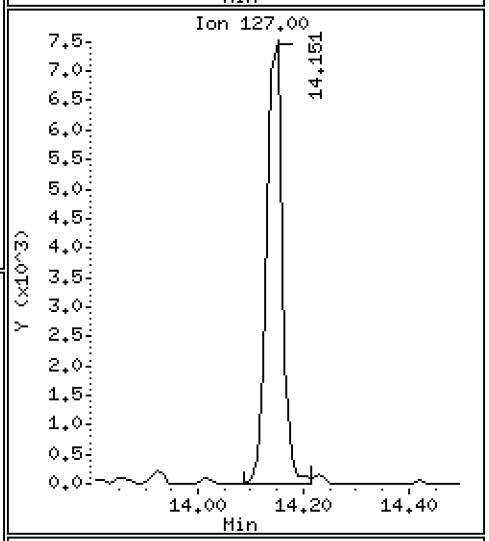


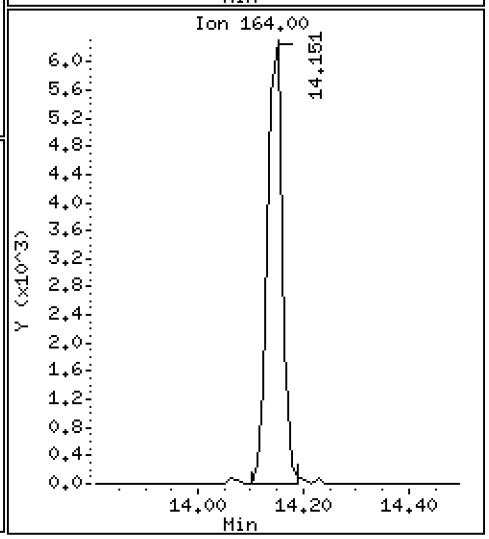












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

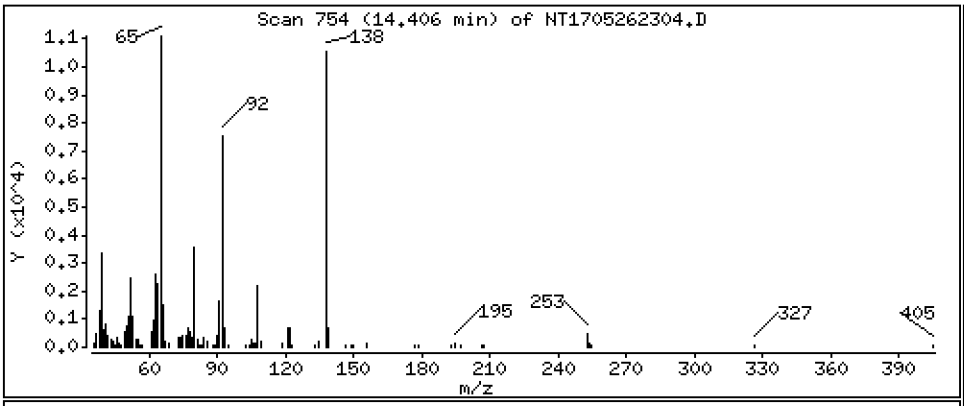
Operator: VTS

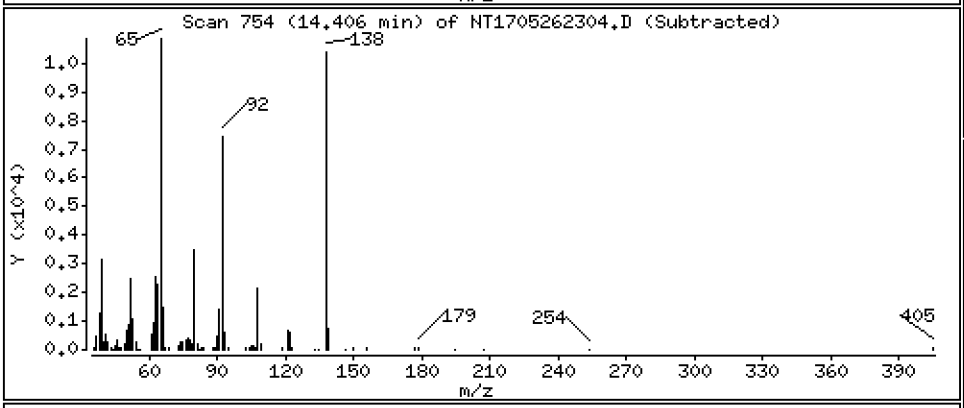
Column phase: ZB-5msi

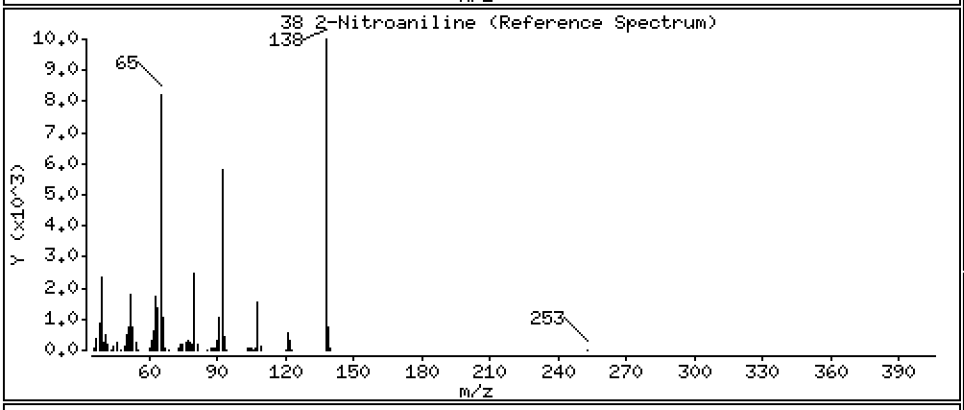
Column diameter: 0.25

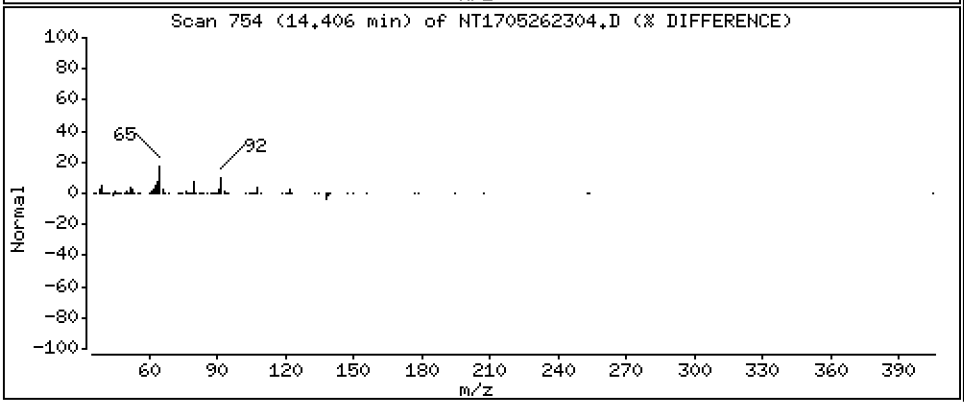
38 2-Nitroaniline

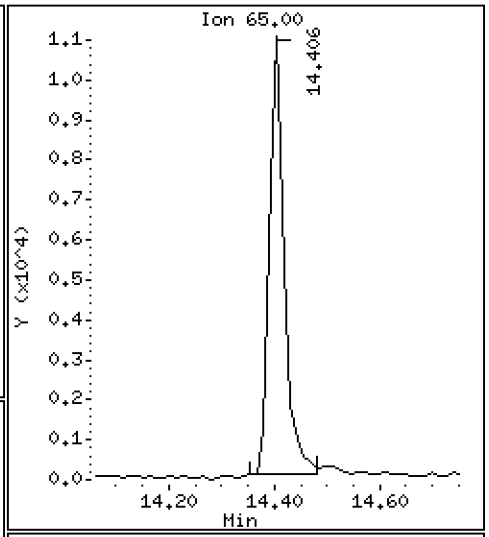
Concentration: 0.3449 ug/mL

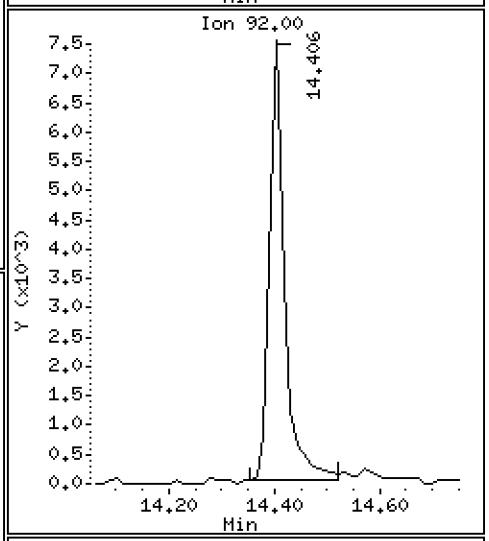


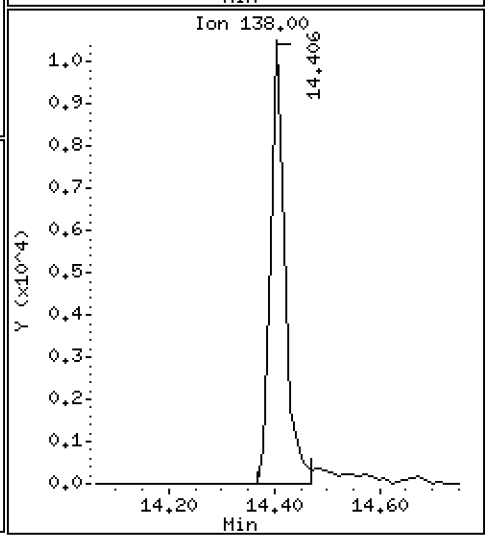












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

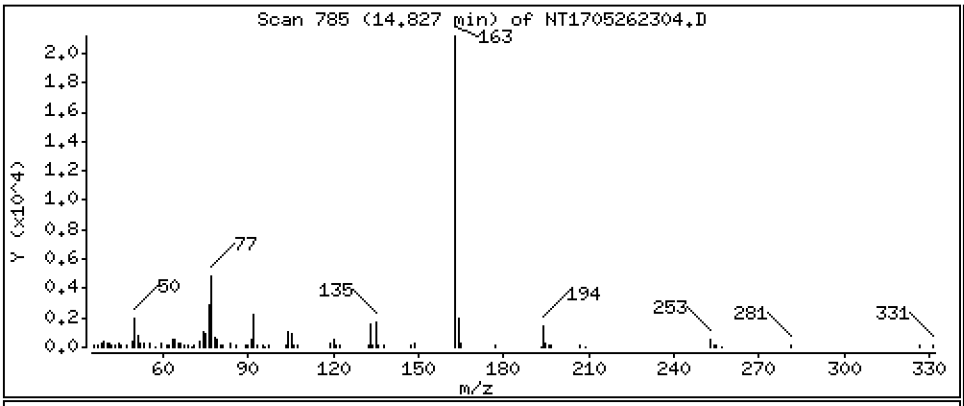
Operator: VTS

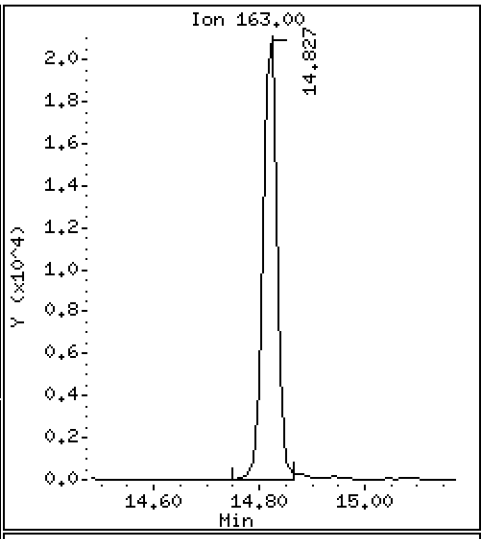
Column phase: ZB-5msi

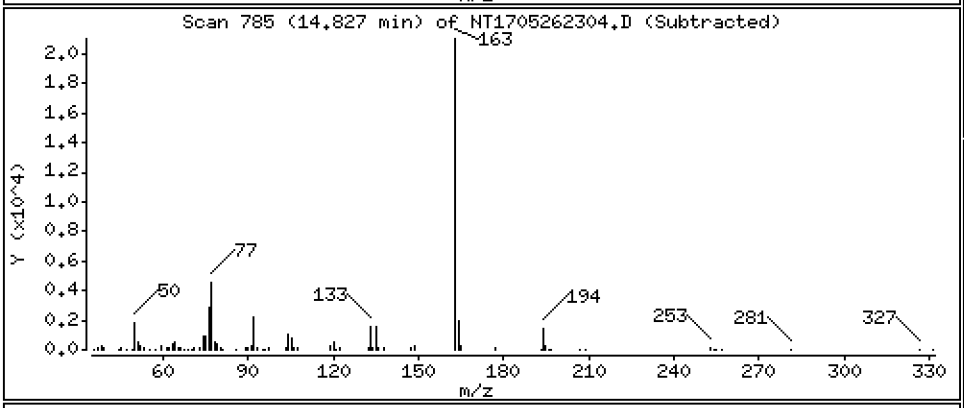
Column diameter: 0.25

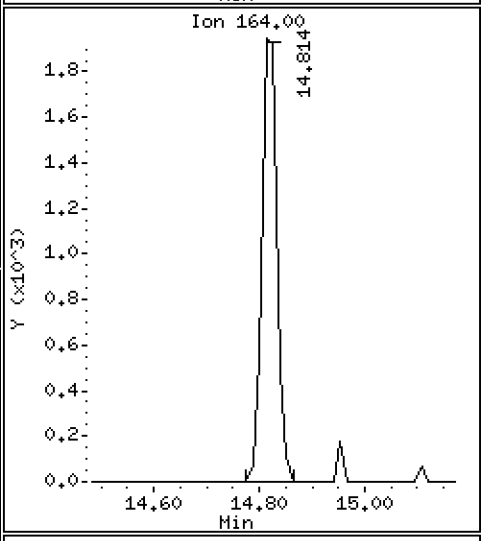
39 Dimethylphthalate

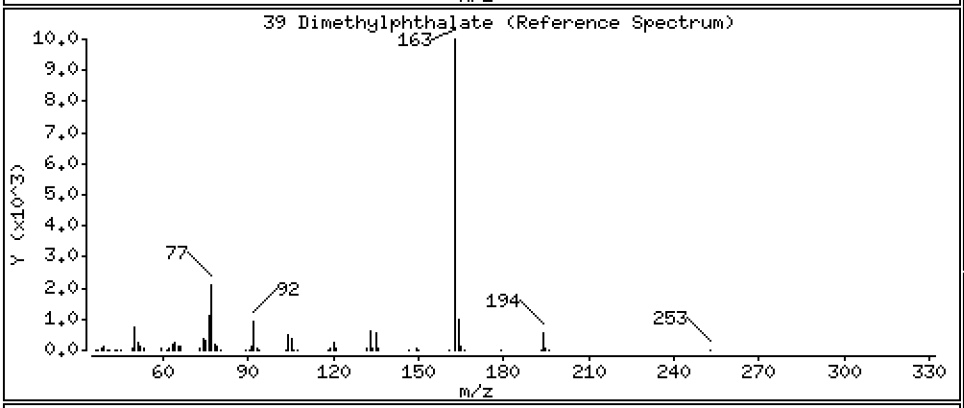
Concentration: 0.1997 ug/mL

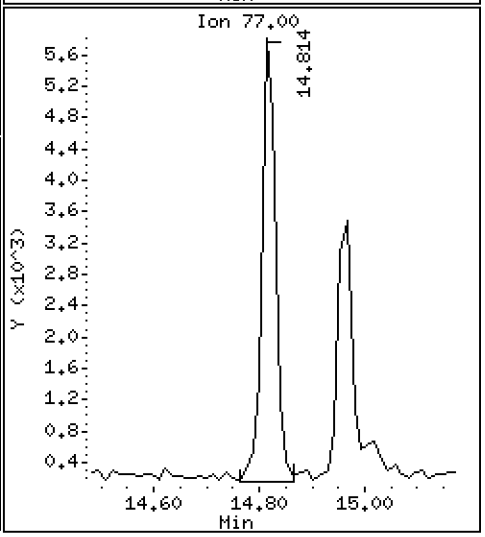


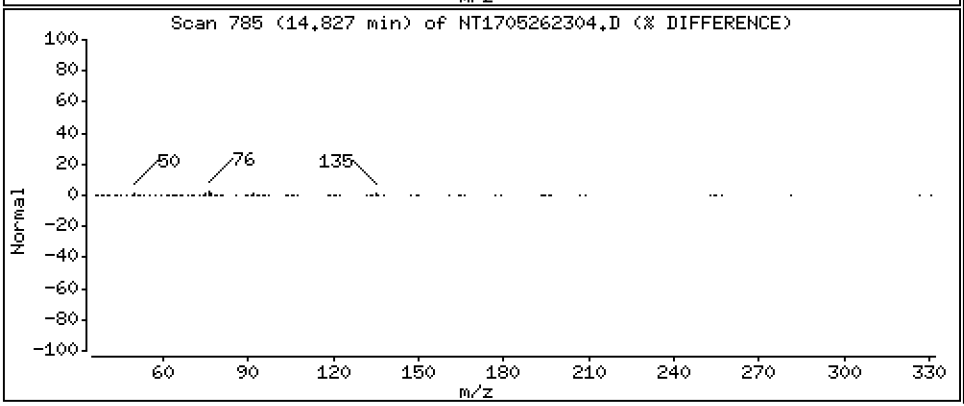












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

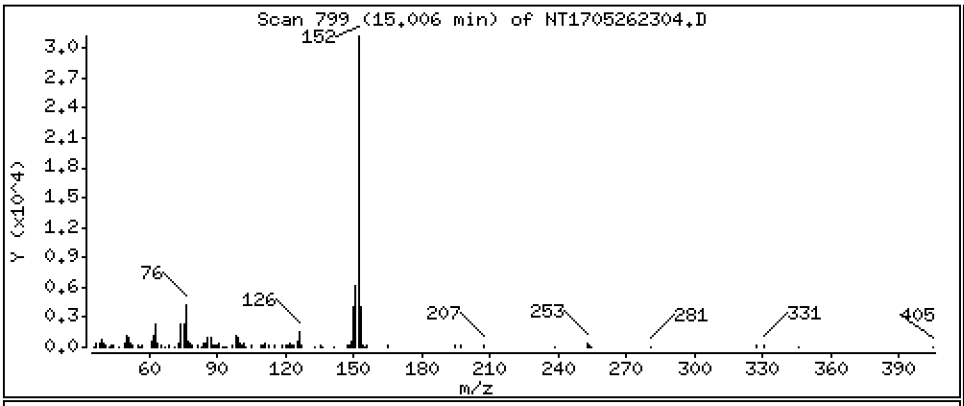
Operator: VTS

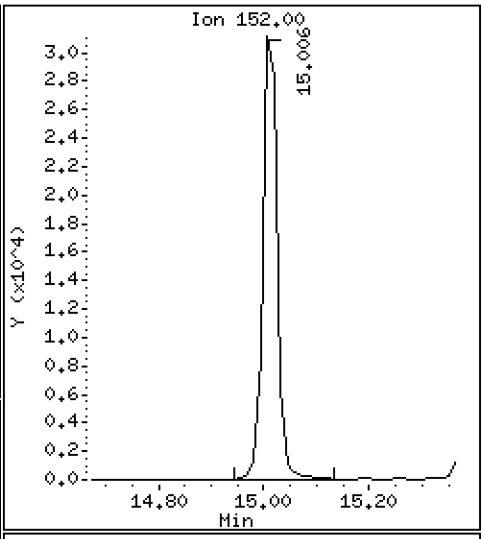
Column phase: ZB-5msi

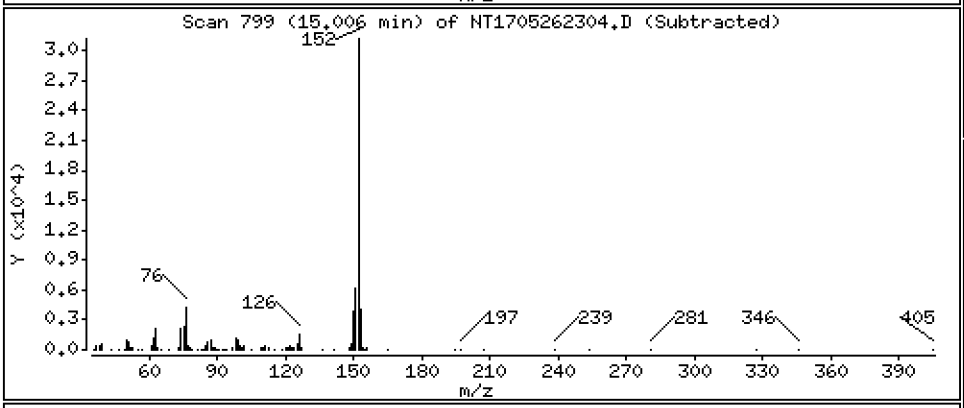
Column diameter: 0.25

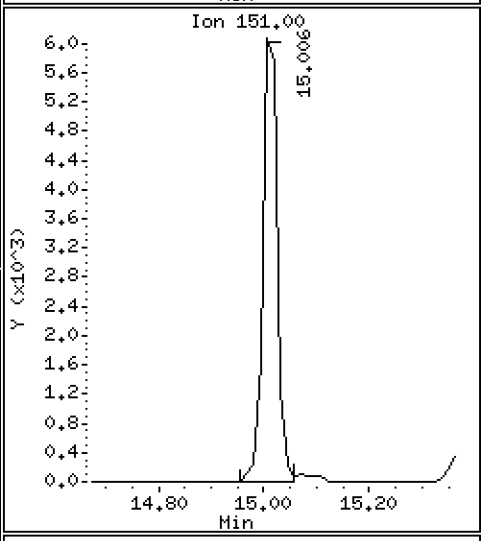
40 Acenaphthylene

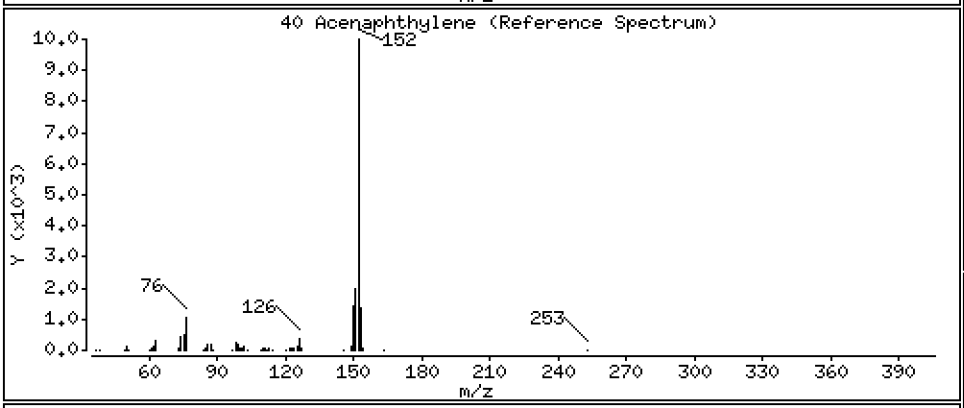
Concentration: 0.2072 ug/mL

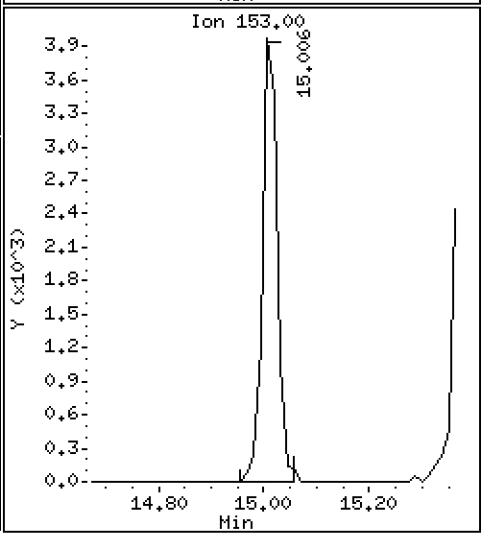


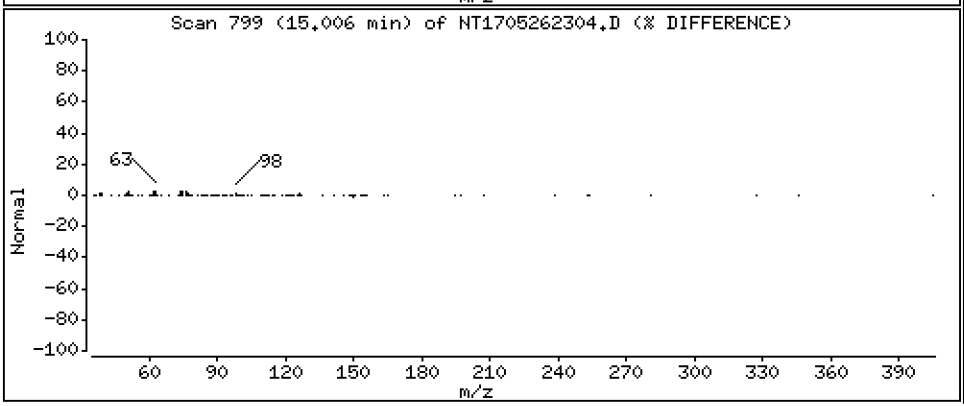












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

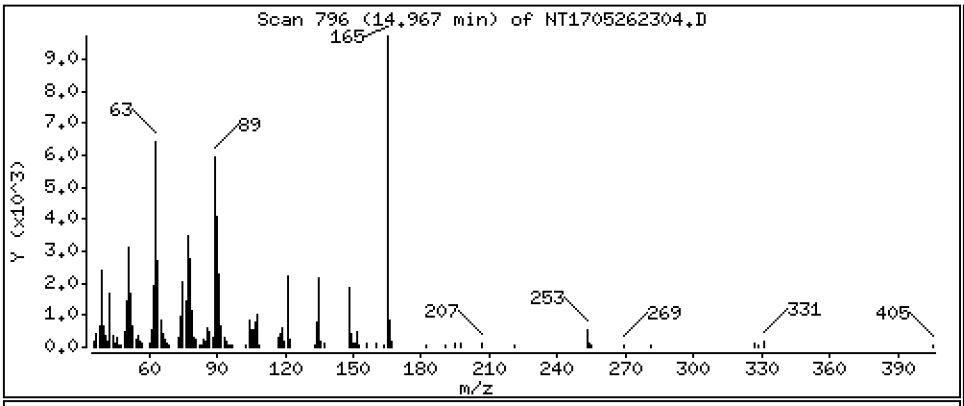
Operator: VTS

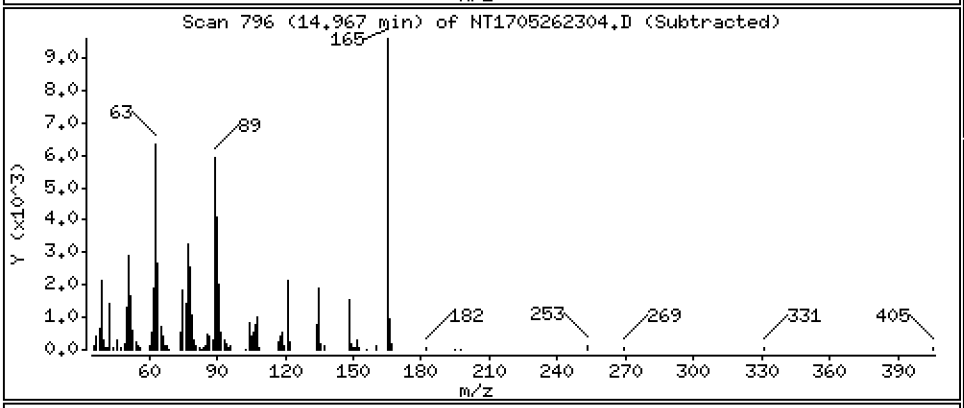
Column phase: ZB-5msi

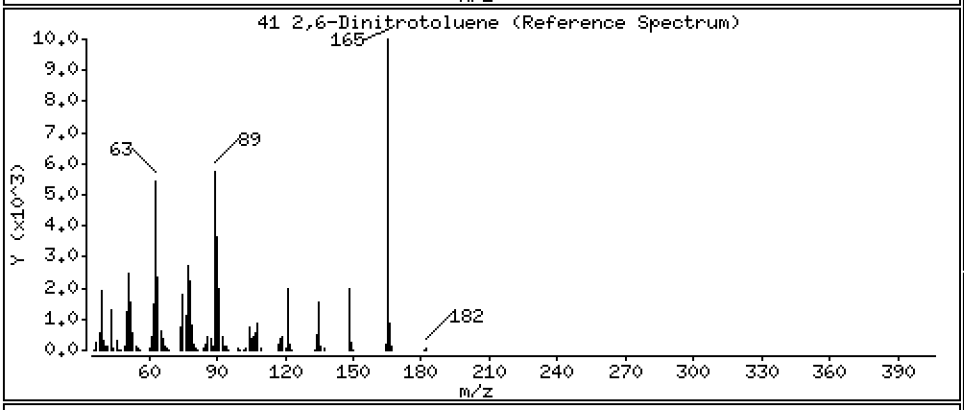
Column diameter: 0.25

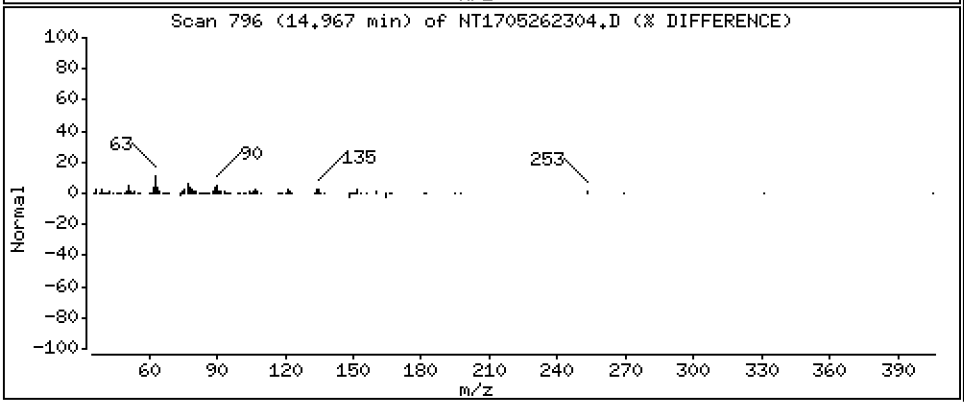
41 2,6-Dinitrotoluene

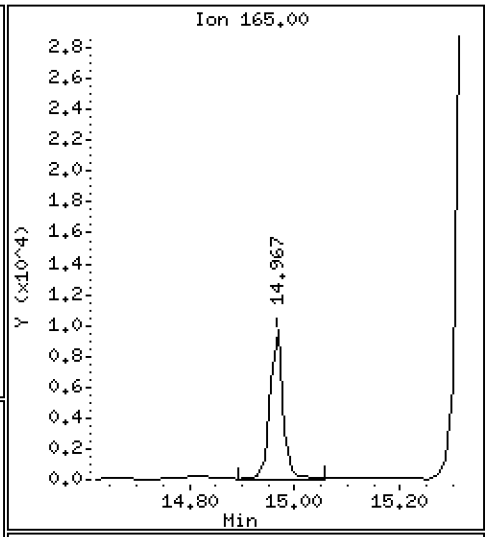
Concentration: 0.3679 ug/mL

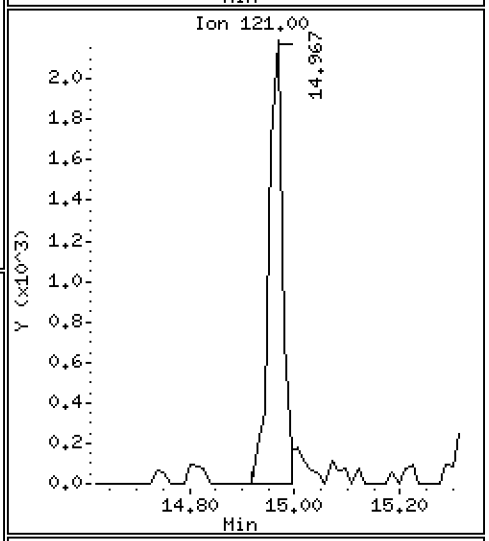


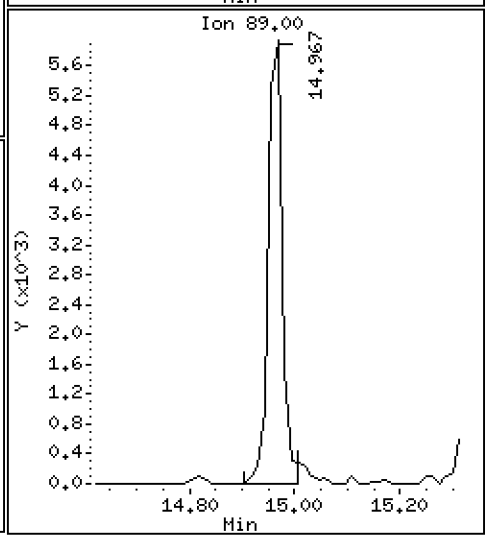












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

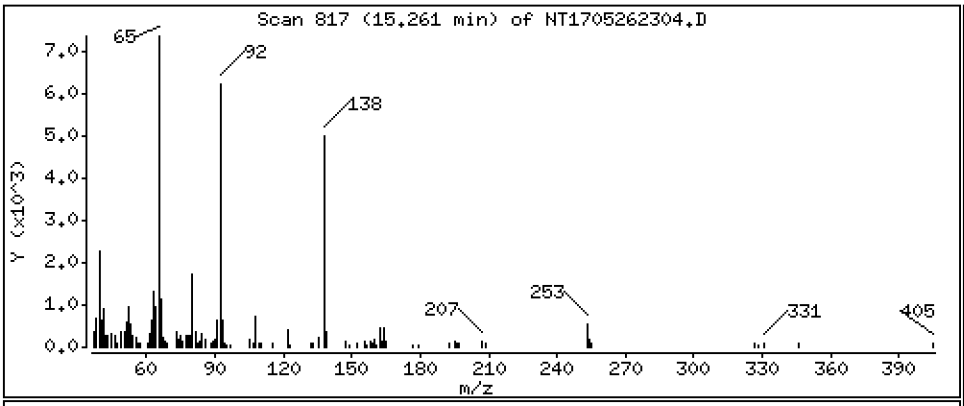
Operator: VTS

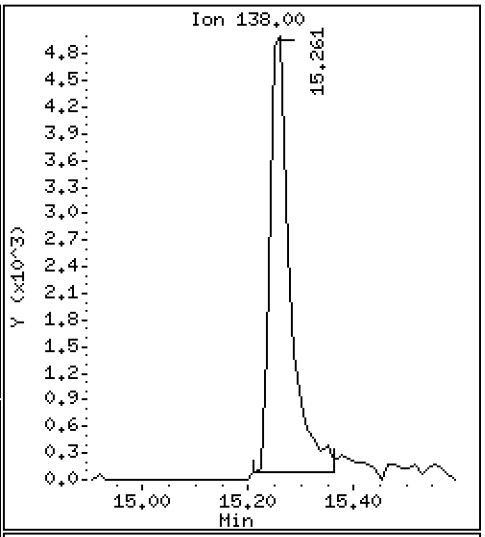
Column phase: ZB-5msi

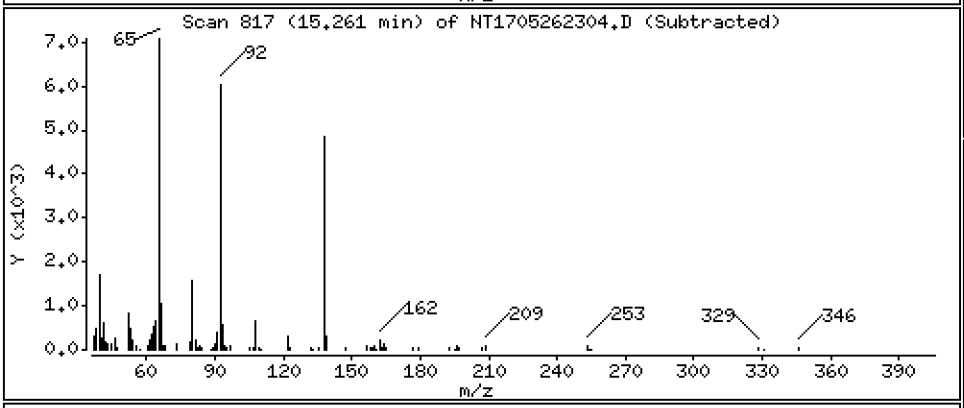
Column diameter: 0.25

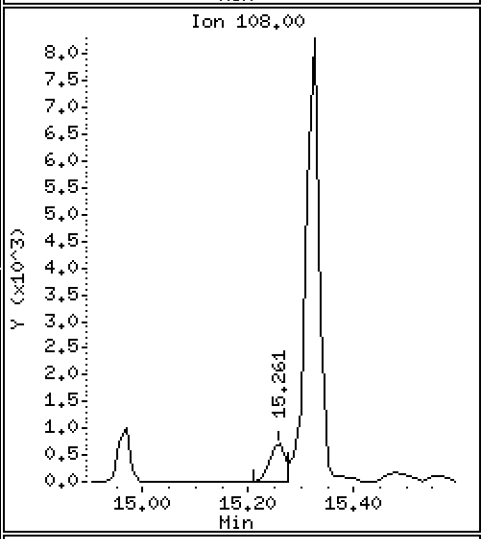
43 3-Nitroaniline

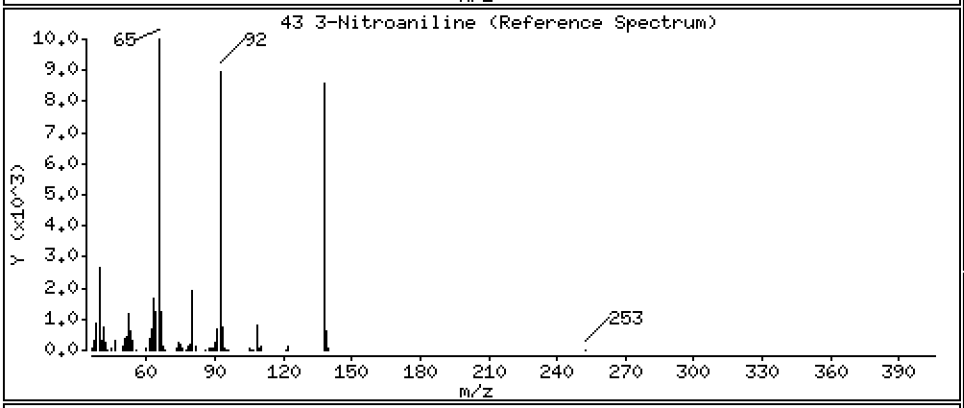
Concentration: 0.3056 ug/mL

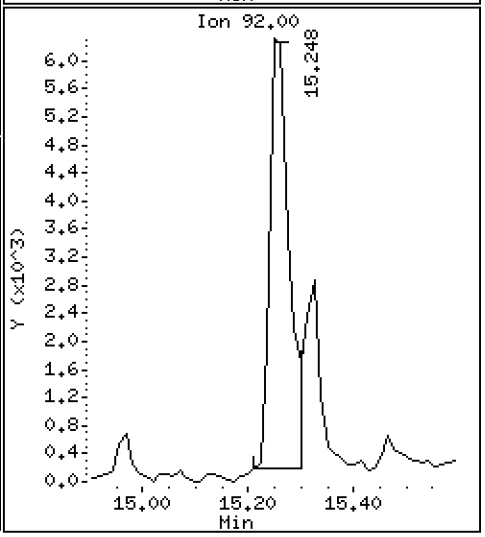


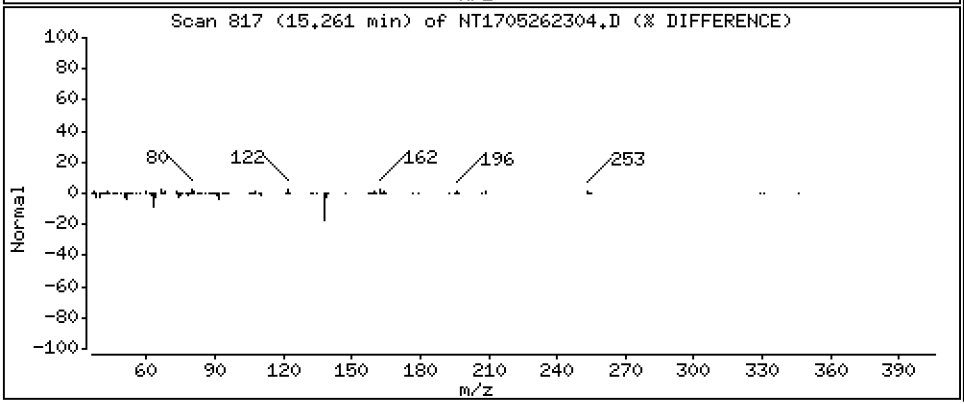












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

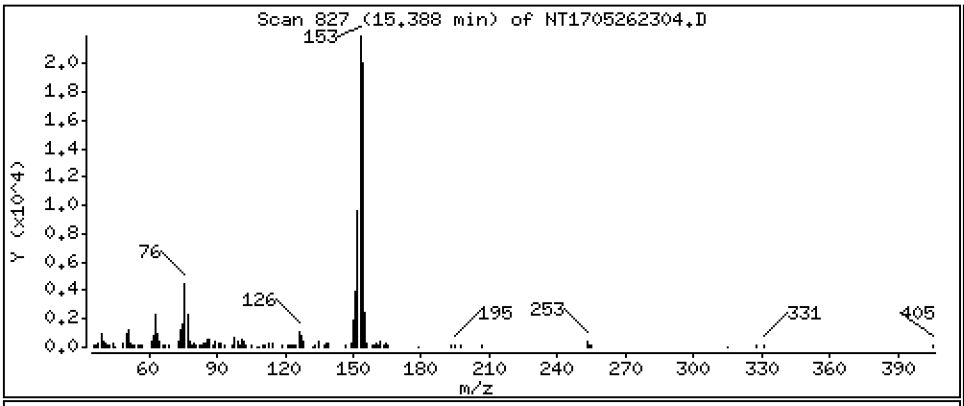
Operator: VTS

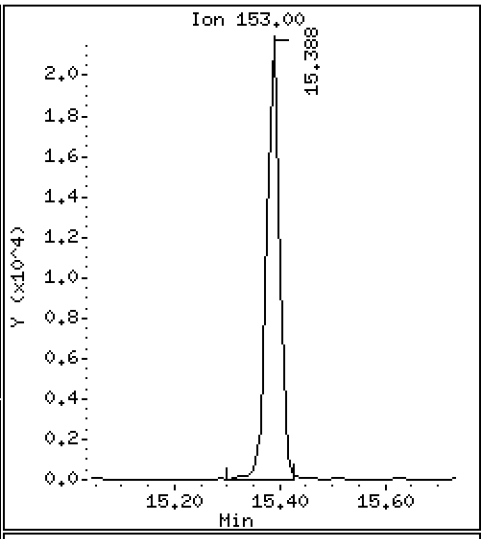
Column phase: ZB-5msi

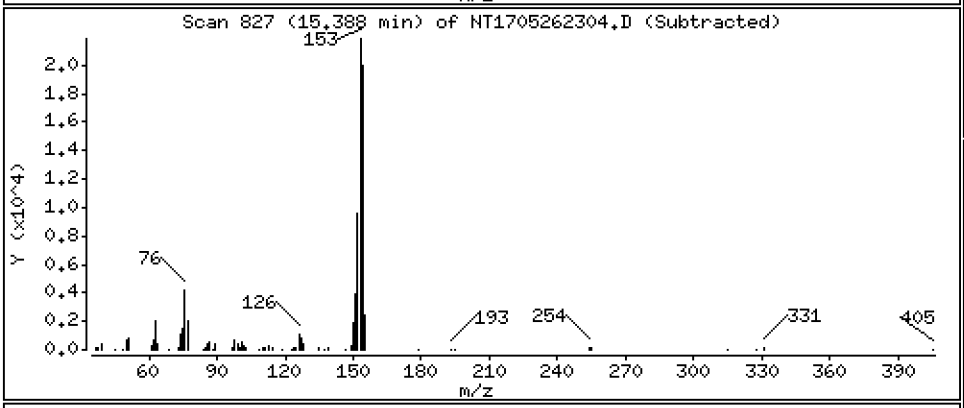
Column diameter: 0.25

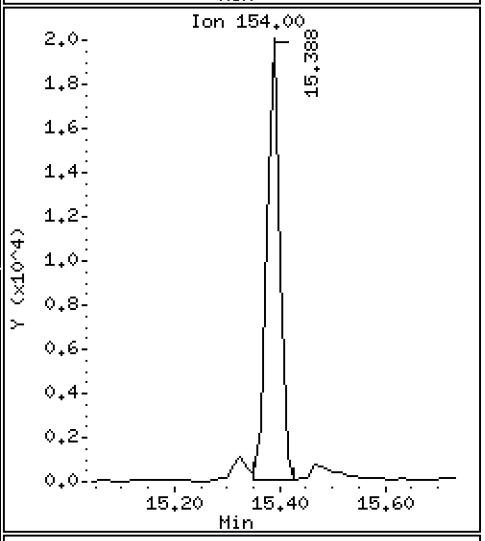
44 Acenaphthene

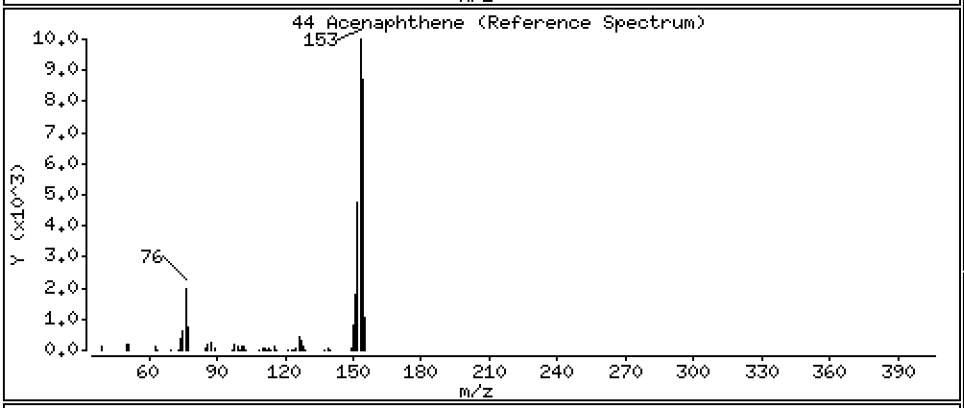
Concentration: 0.2060 ug/mL

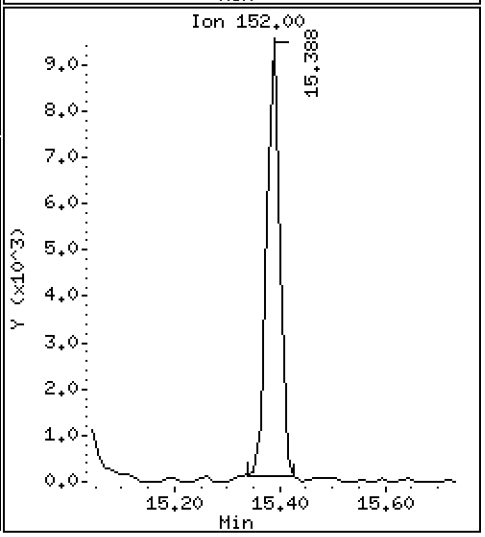


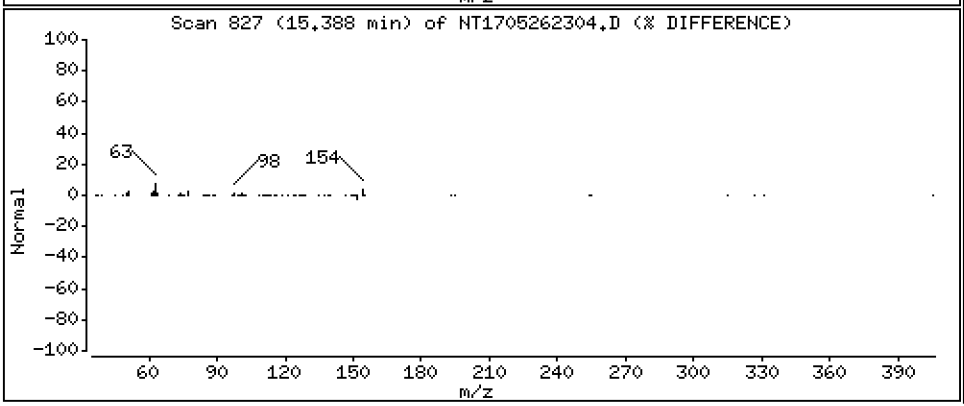












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

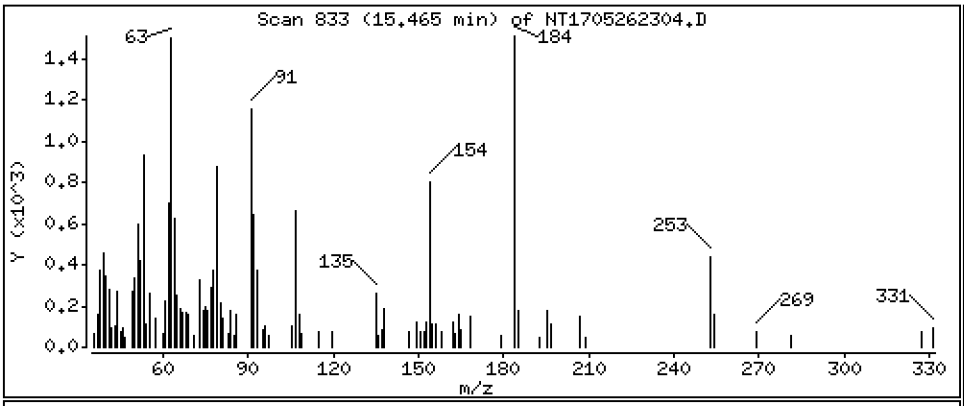
Operator: VTS

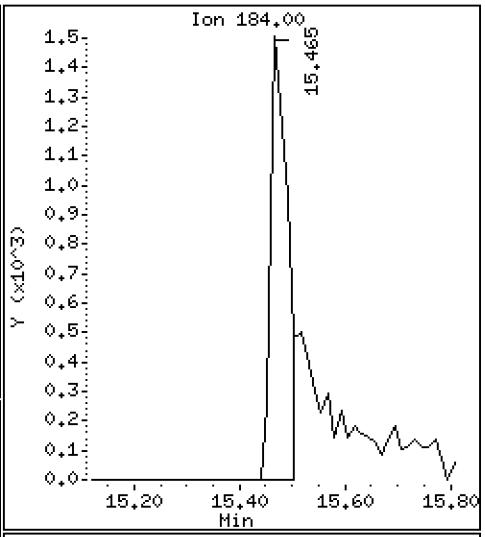
Column phase: ZB-5msi

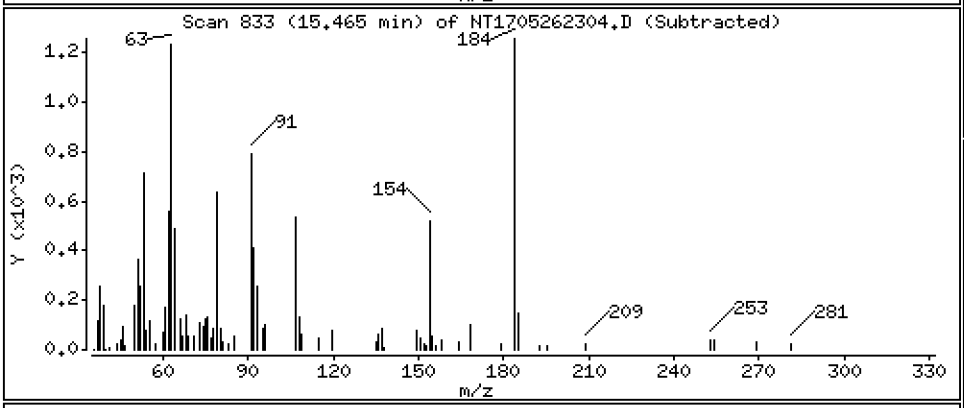
Column diameter: 0.25

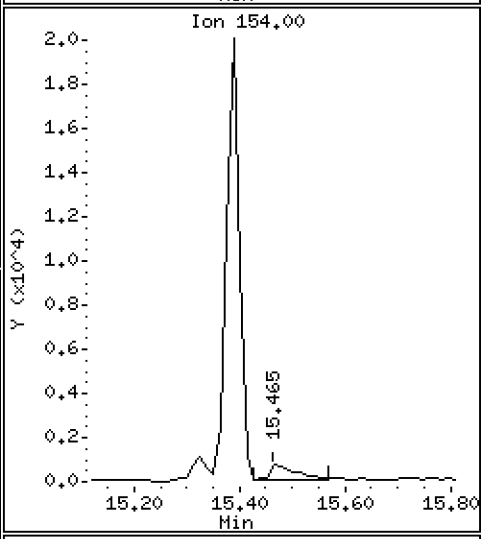
45 2,4-Dinitrophenol

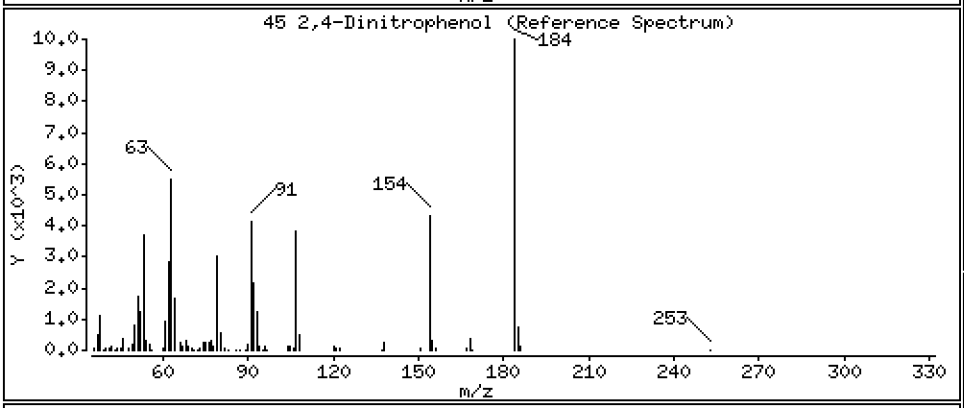
Concentration: 0.1227 ug/mL

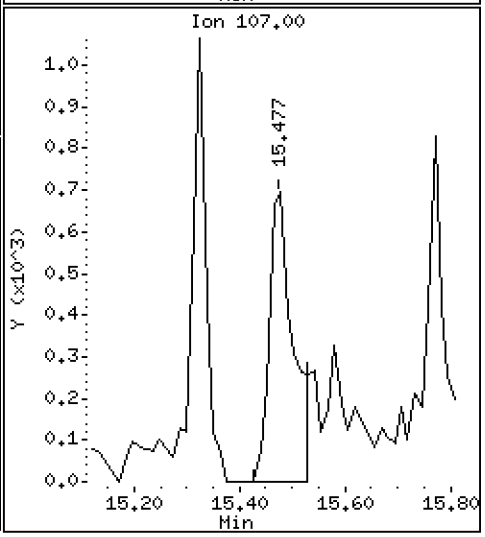


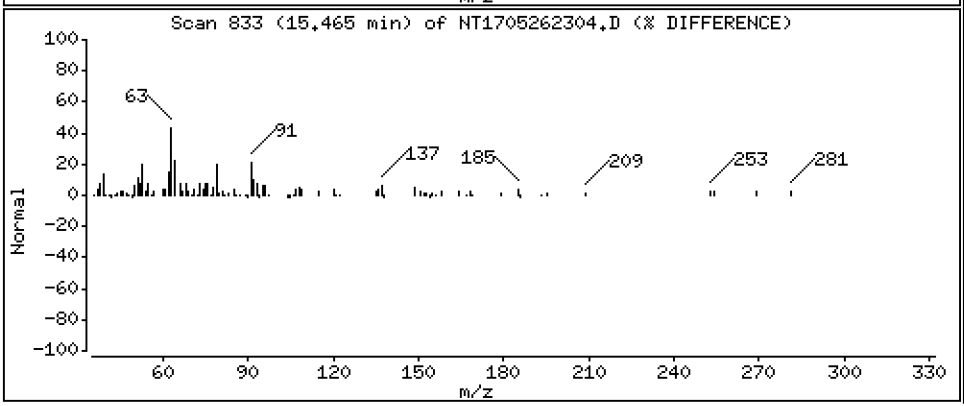












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

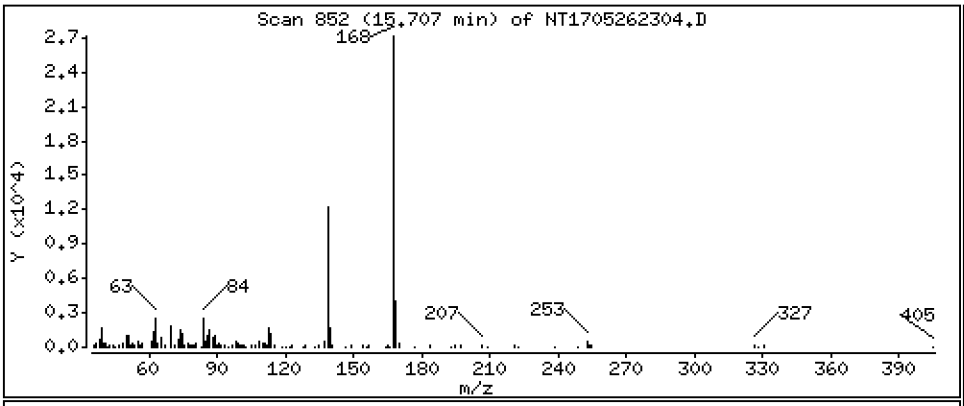
Operator: VTS

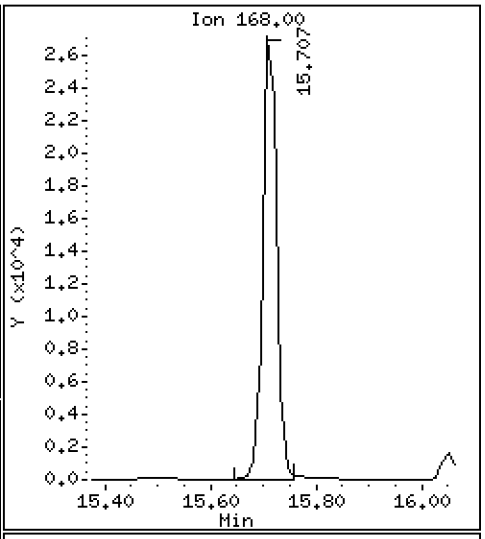
Column phase: ZB-5msi

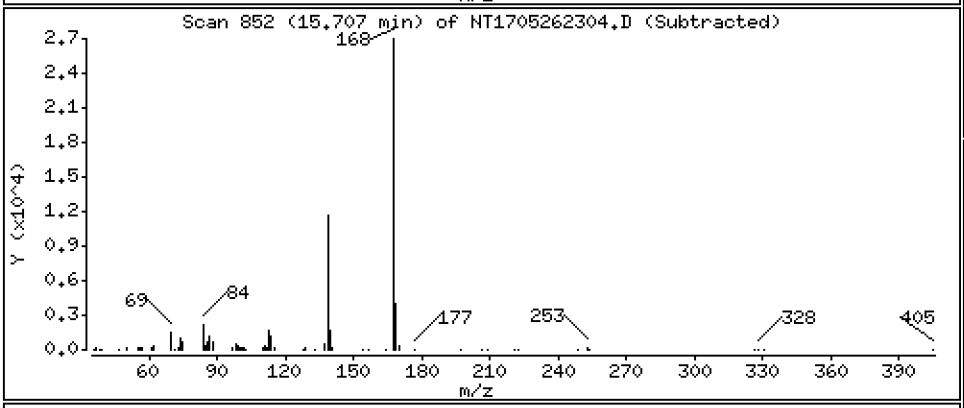
Column diameter: 0.25

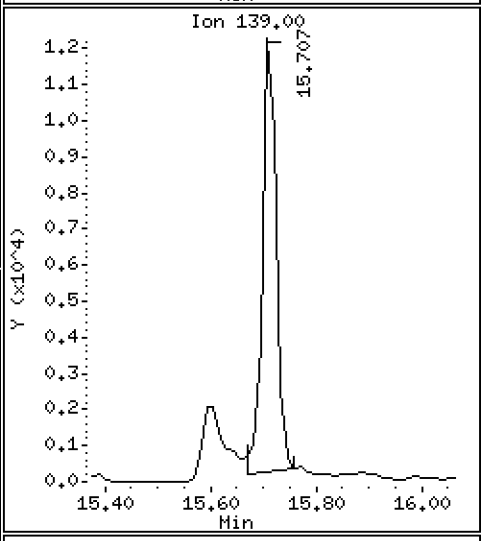
46 Dibenzofuran

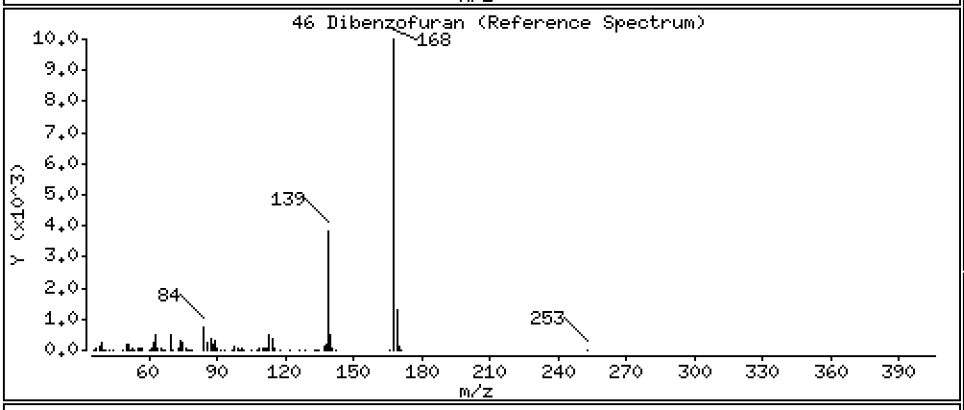
Concentration: 0.1979 ug/mL

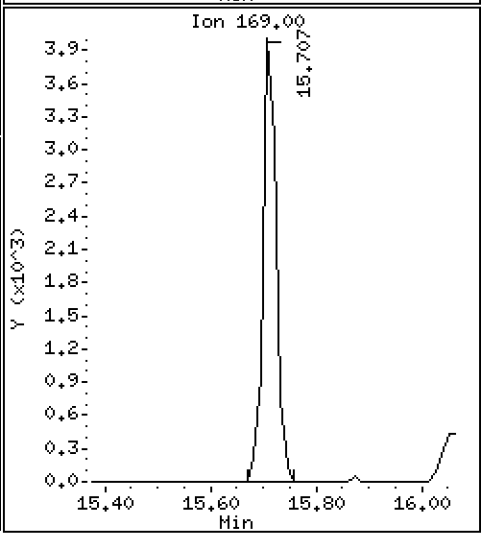


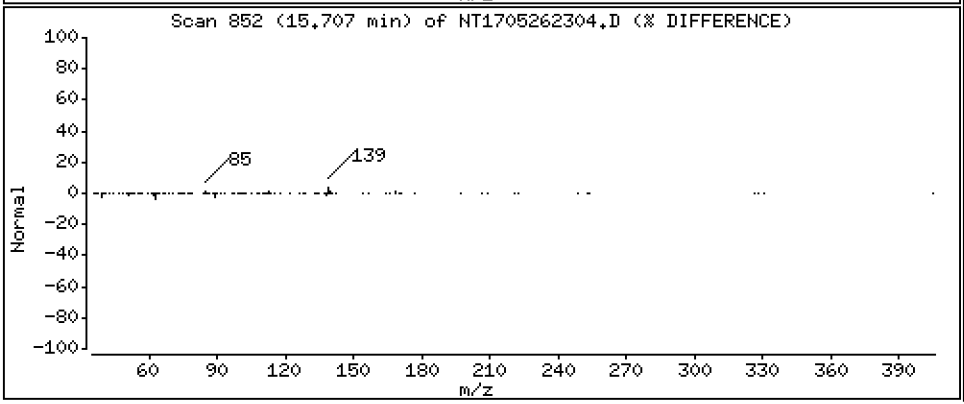












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

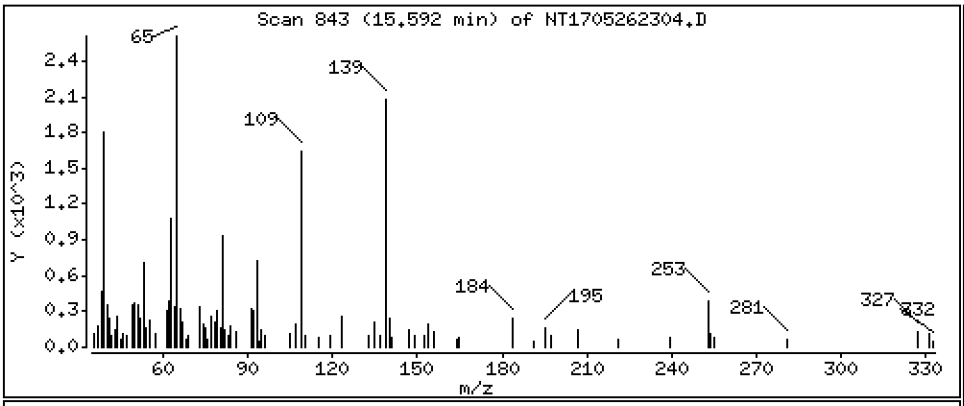
Operator: VTS

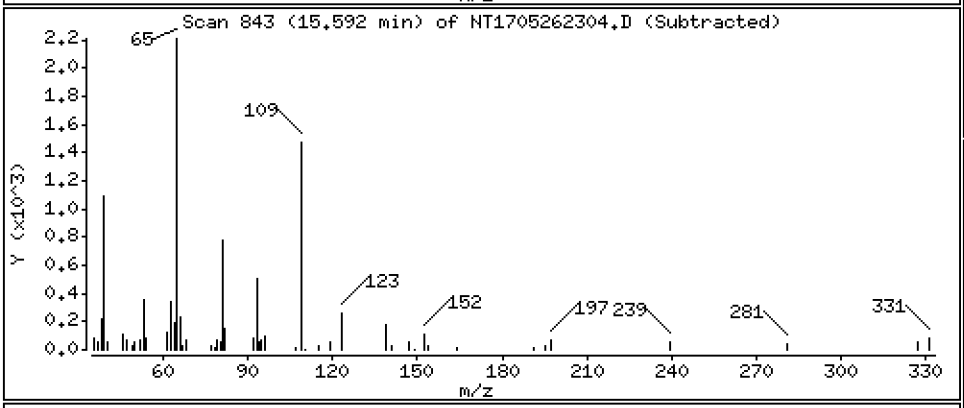
Column phase: ZB-5msi

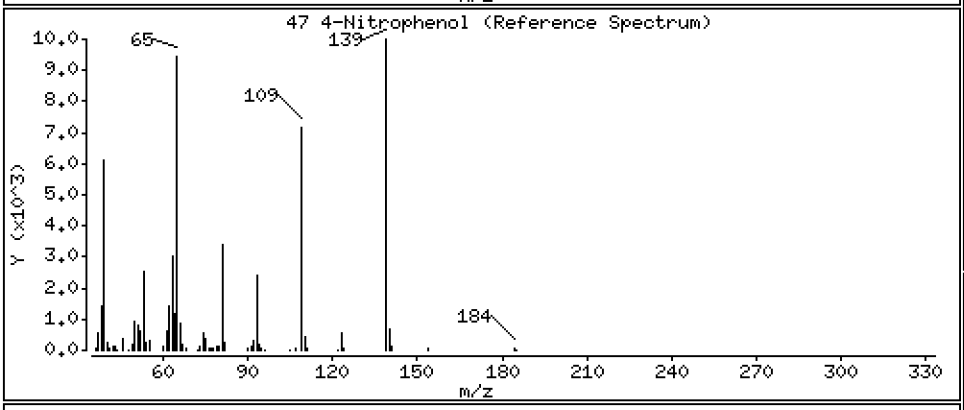
Column diameter: 0.25

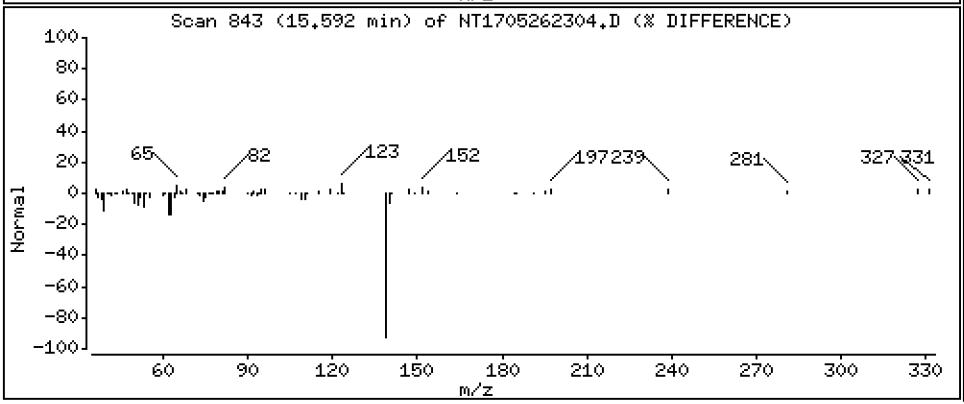
47 4-Nitrophenol

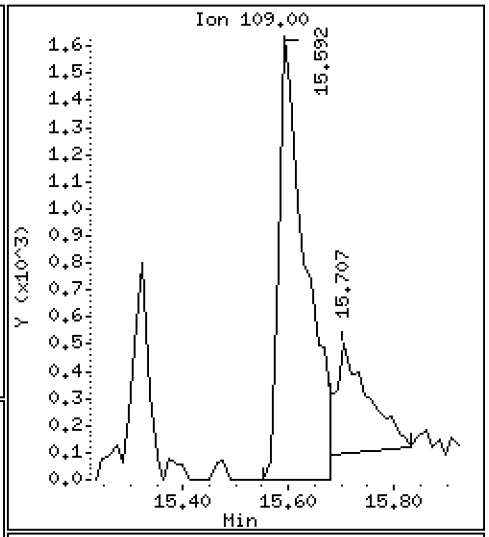
Concentration: 0.2097 ug/mL

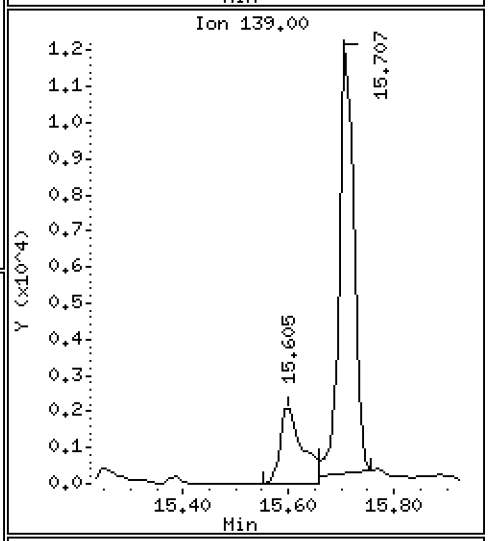


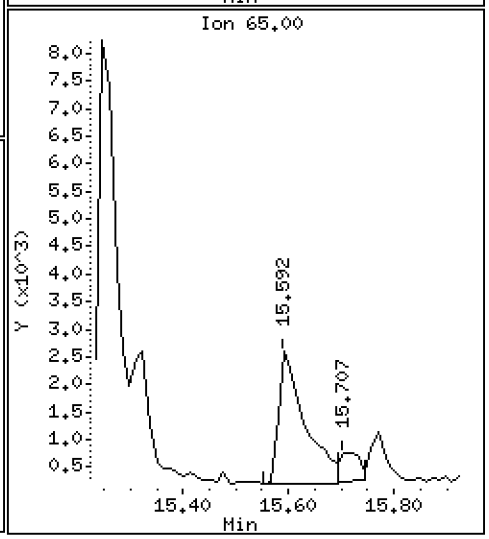












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

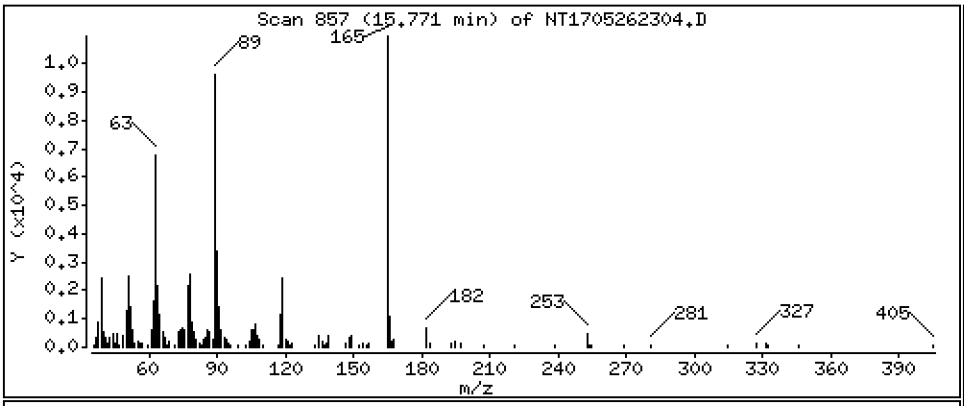
Operator: VTS

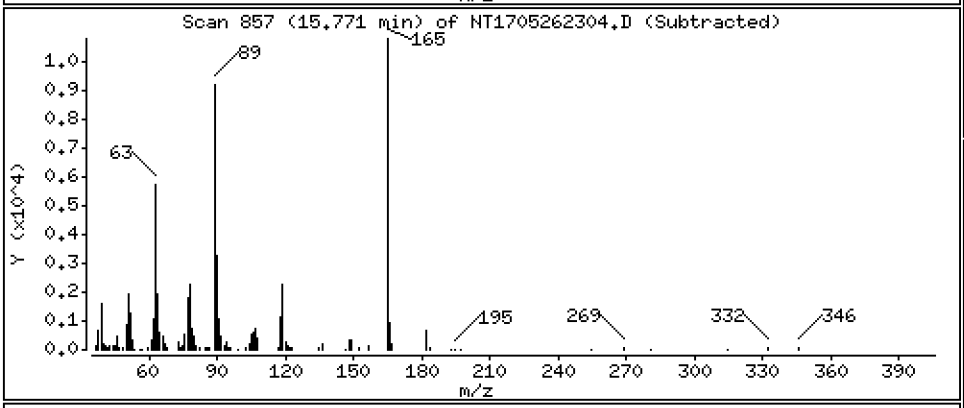
Column phase: ZB-5msi

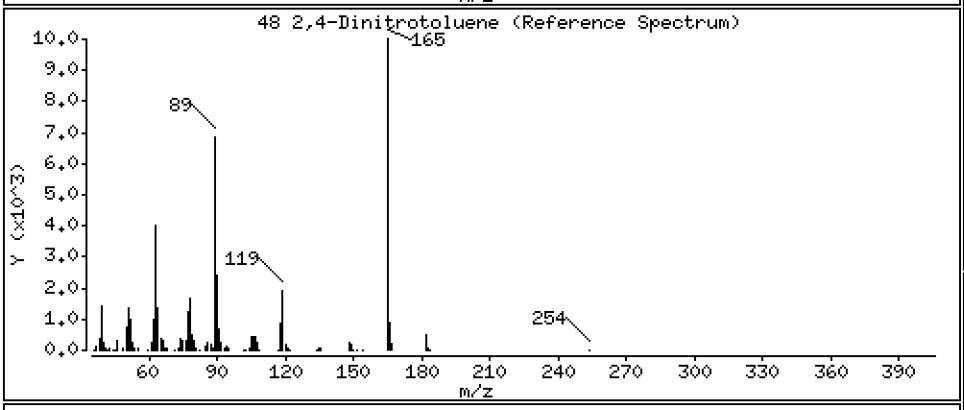
Column diameter: 0.25

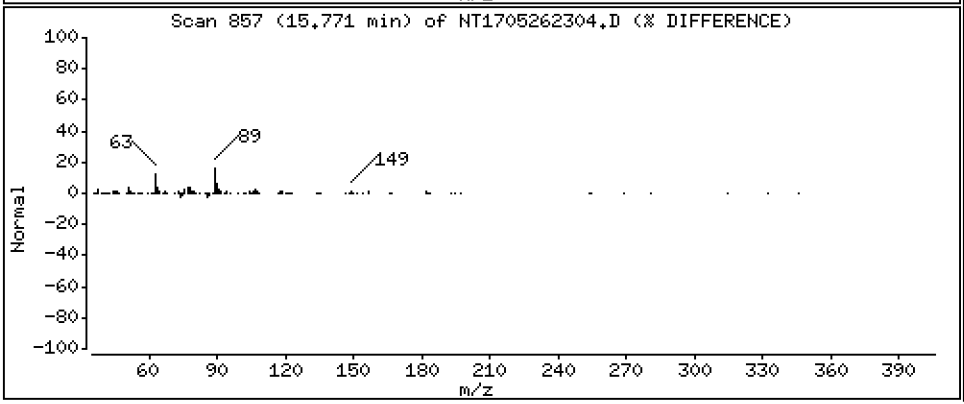
48 2,4-Dinitrotoluene

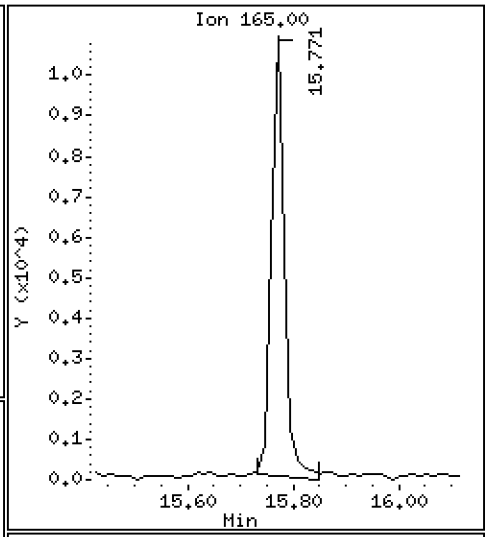
Concentration: 0.3191 ug/mL

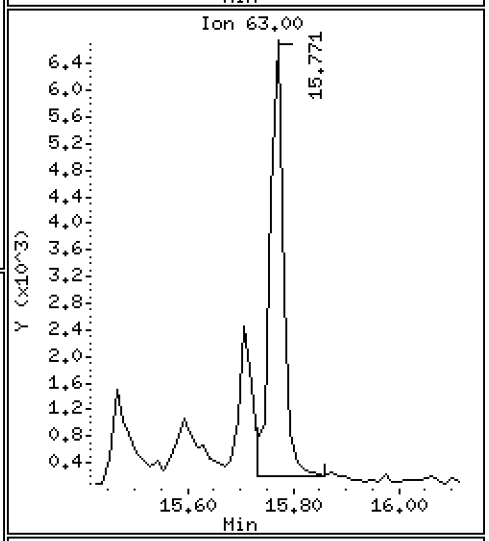


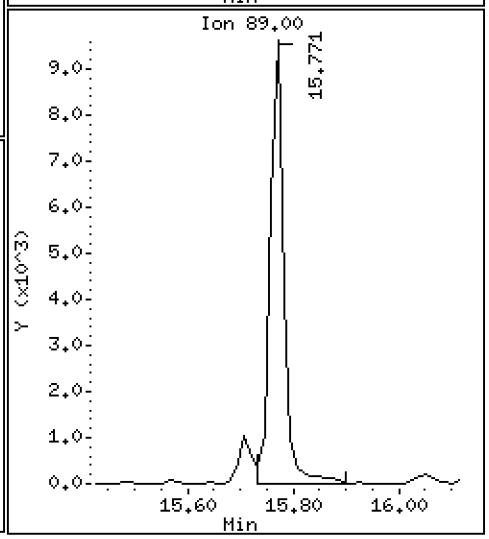












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

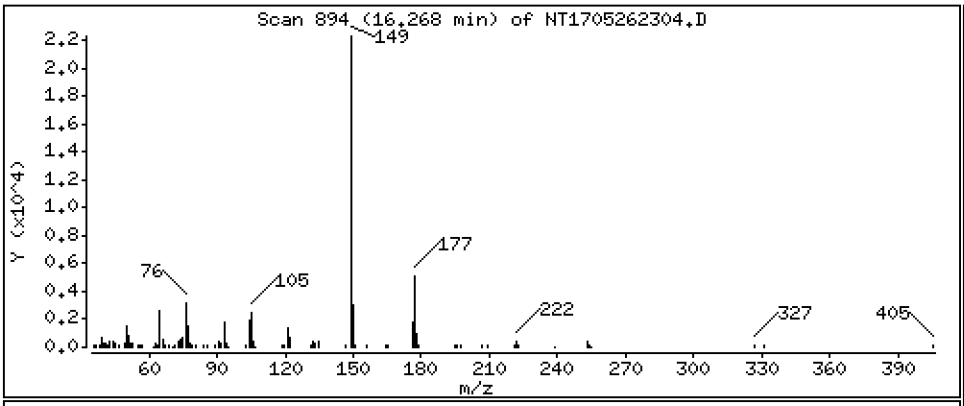
Operator: VTS

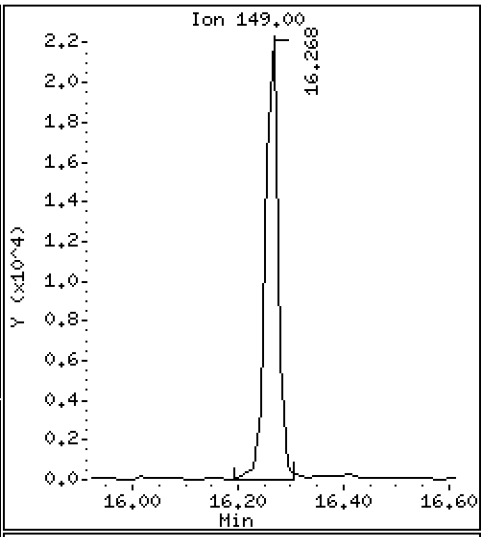
Column phase: ZB-5msi

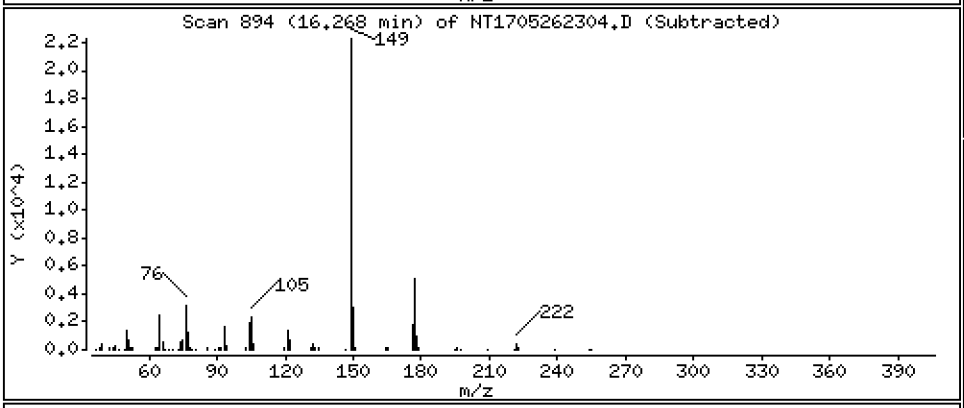
Column diameter: 0.25

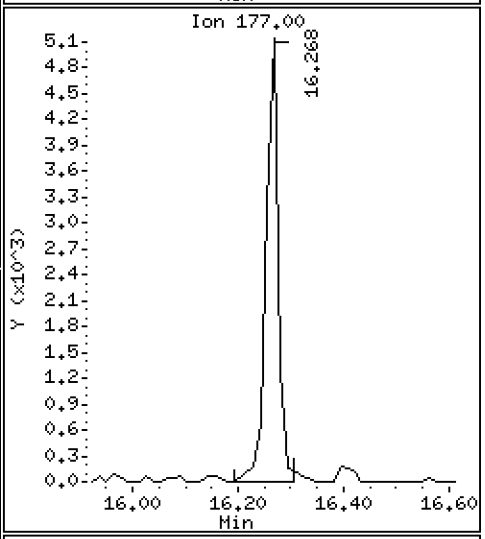
50 Diethylphthalate

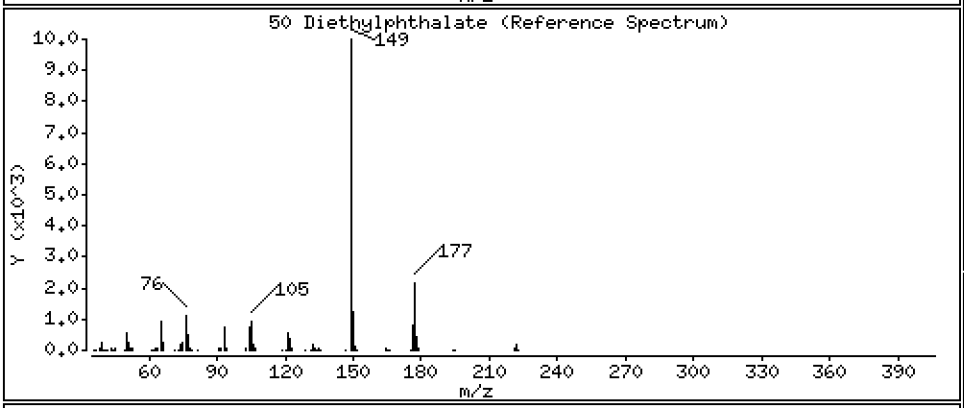
Concentration: 0.2517 ug/mL

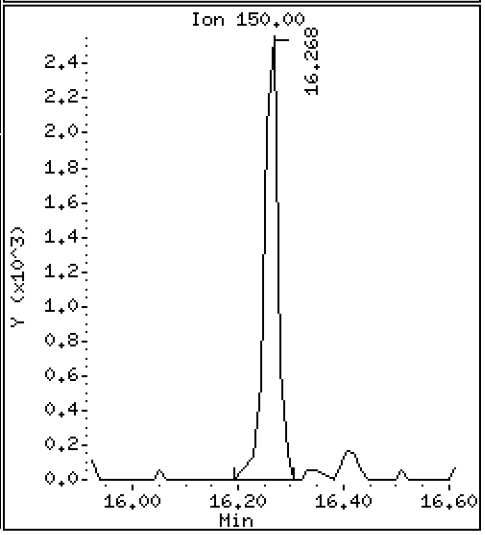


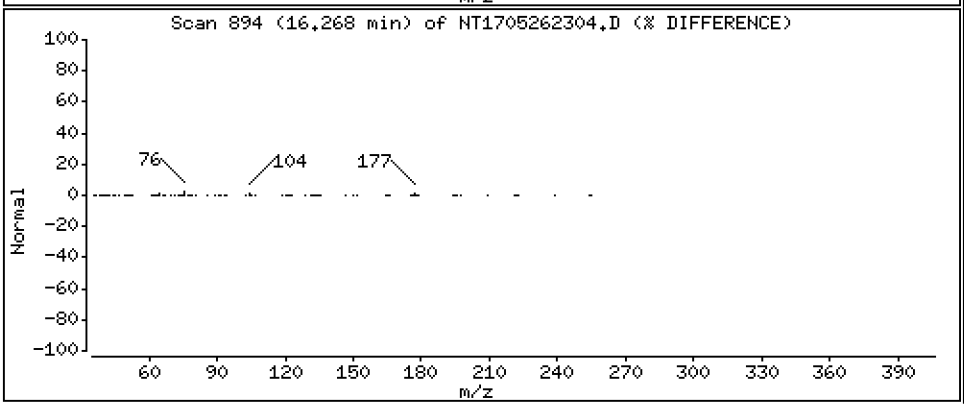












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

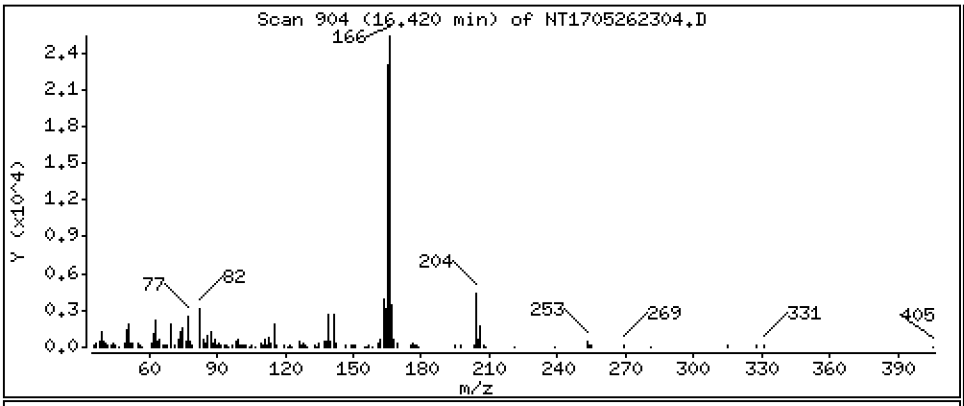
Operator: VTS

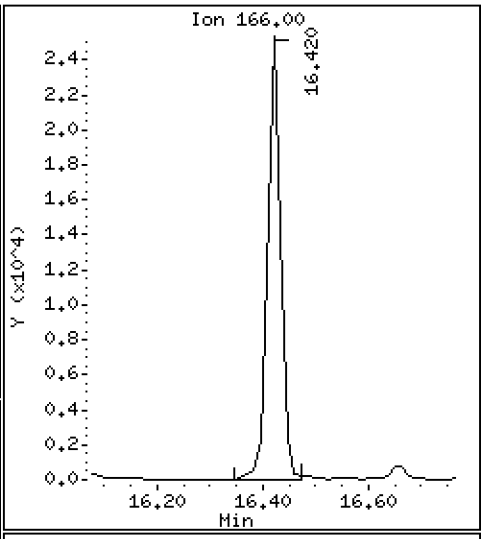
Column phase: ZB-5msi

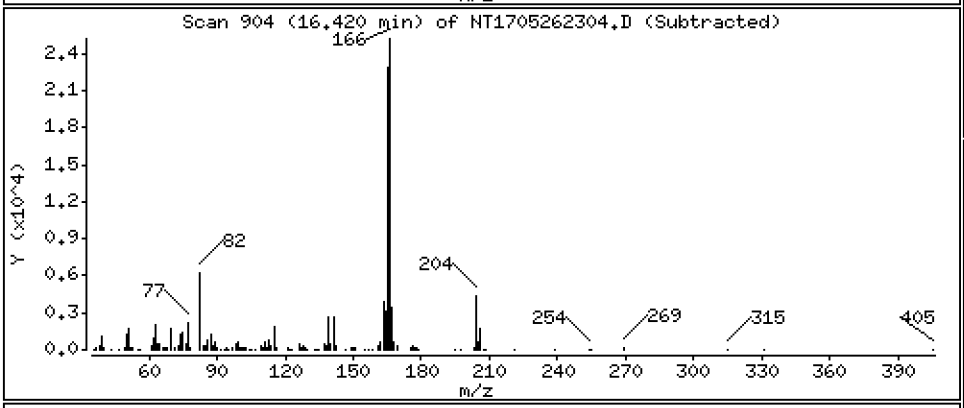
Column diameter: 0.25

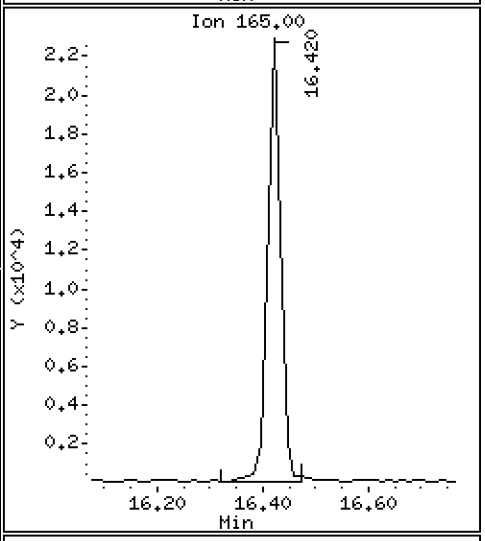
49 Fluorene

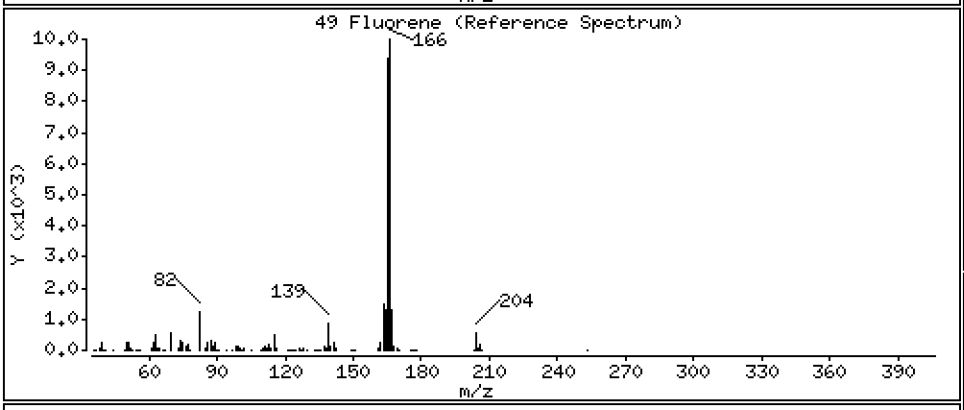
Concentration: 0.2240 ug/mL

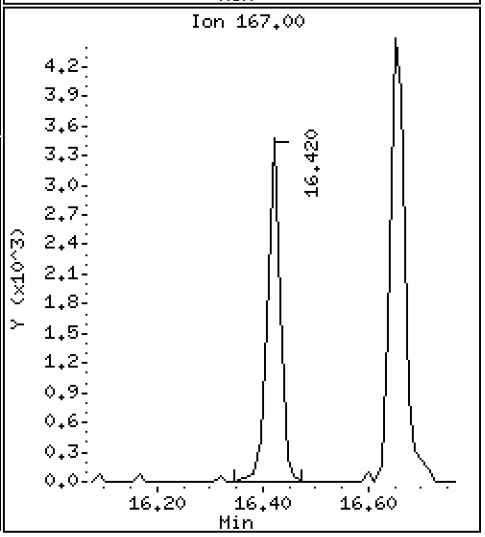


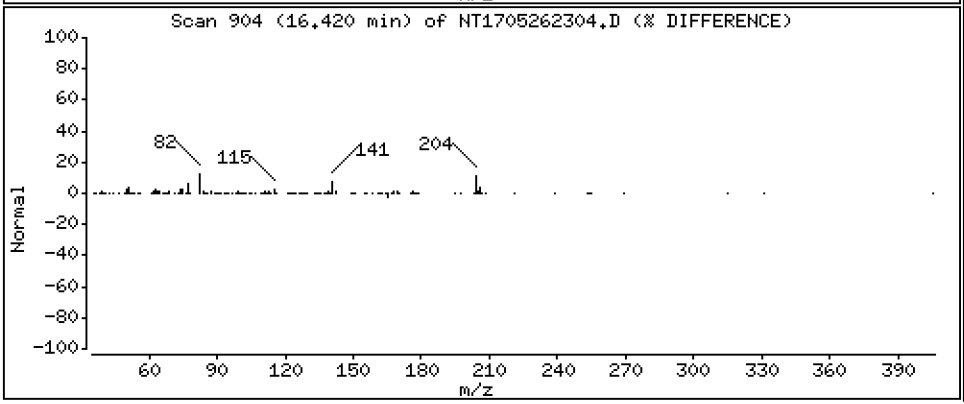












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

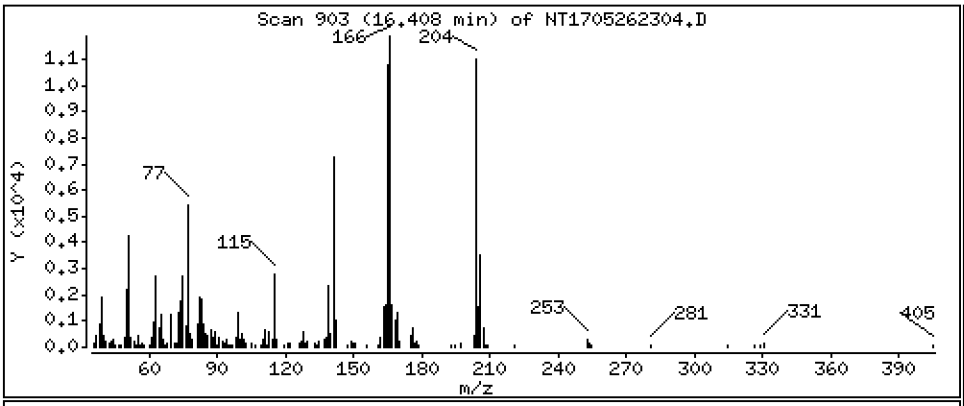
Operator: VTS

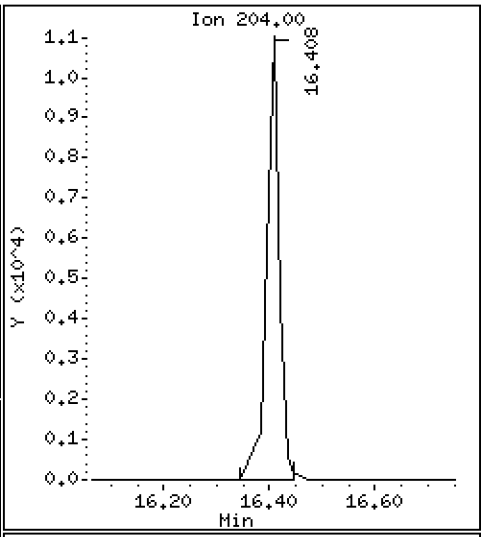
Column phase: ZB-5msi

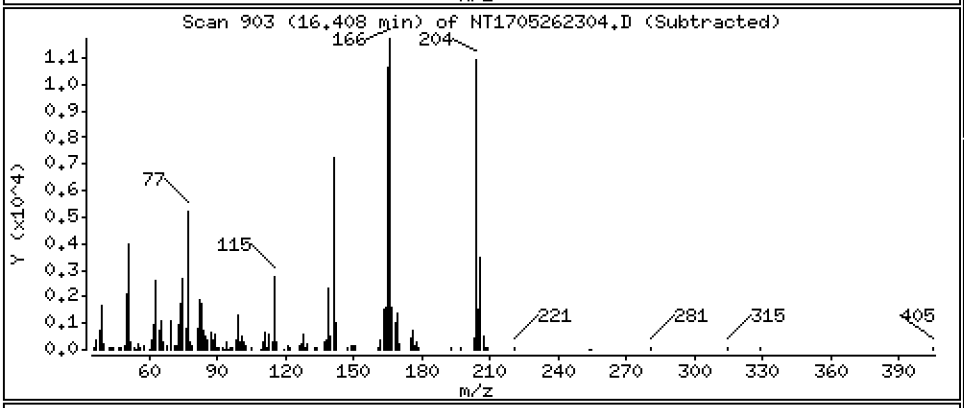
Column diameter: 0.25

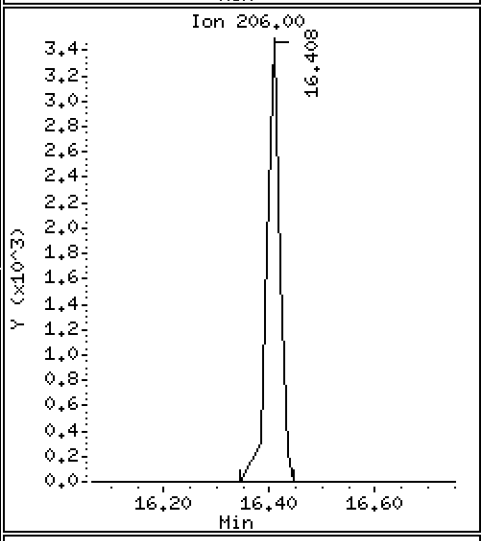
51 4-Chlorophenyl-phenylether

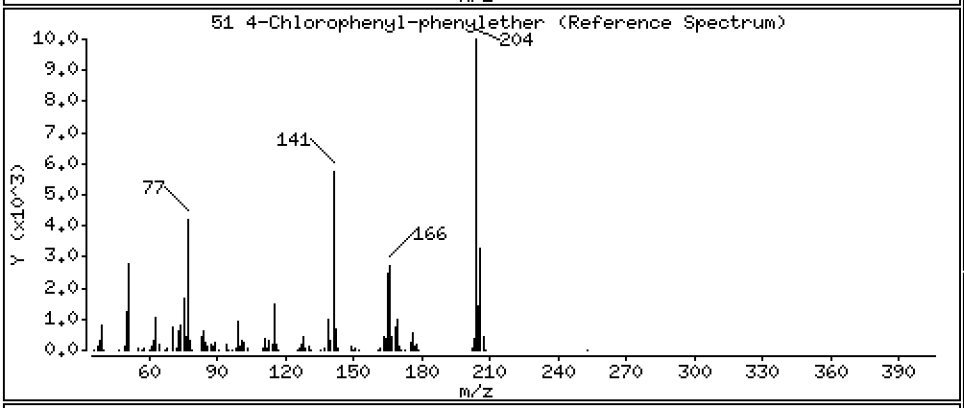
Concentration: 0.2107 ug/mL

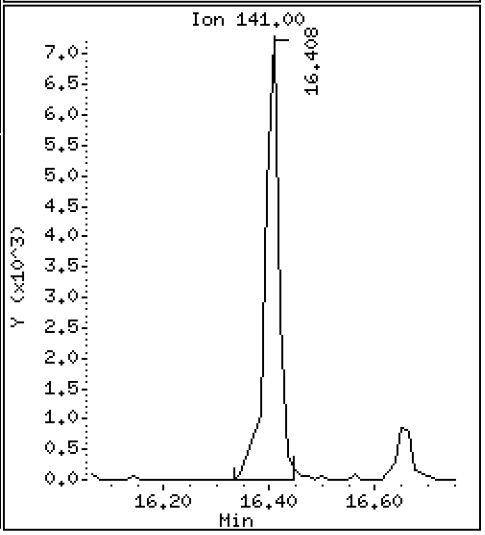


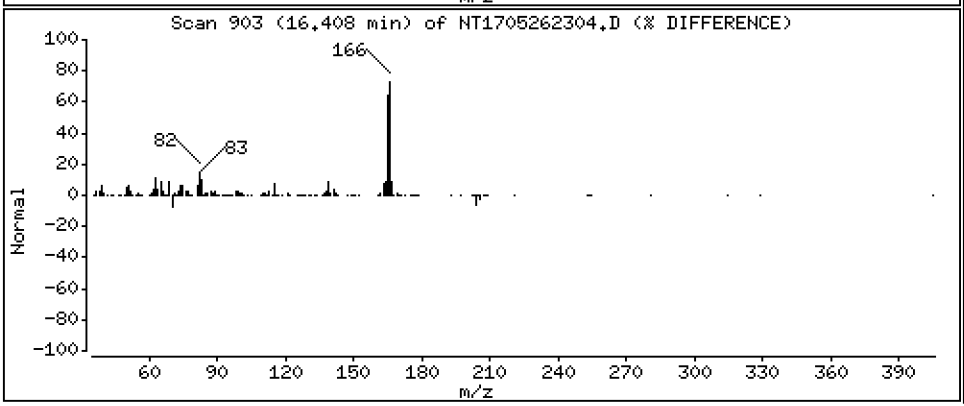












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

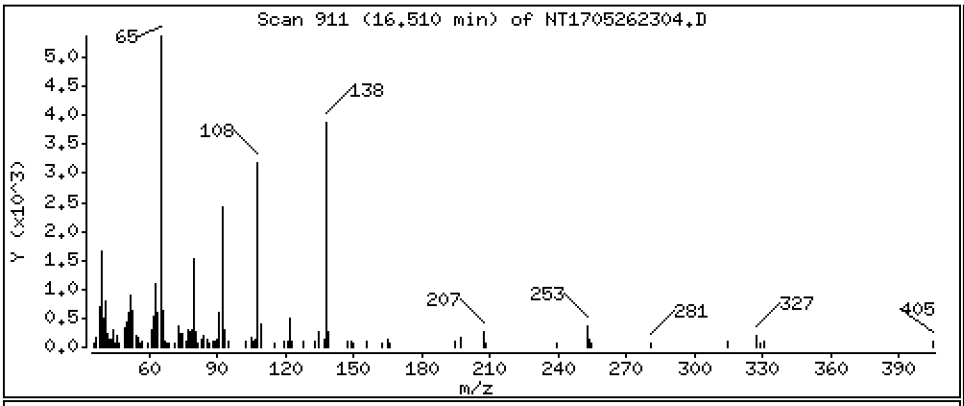
Operator: VTS

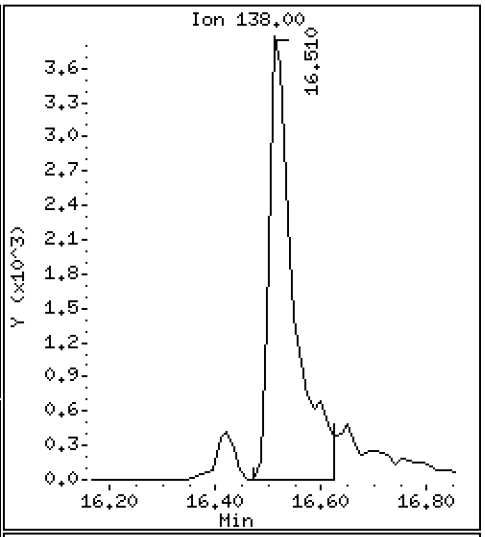
Column phase: ZB-5msi

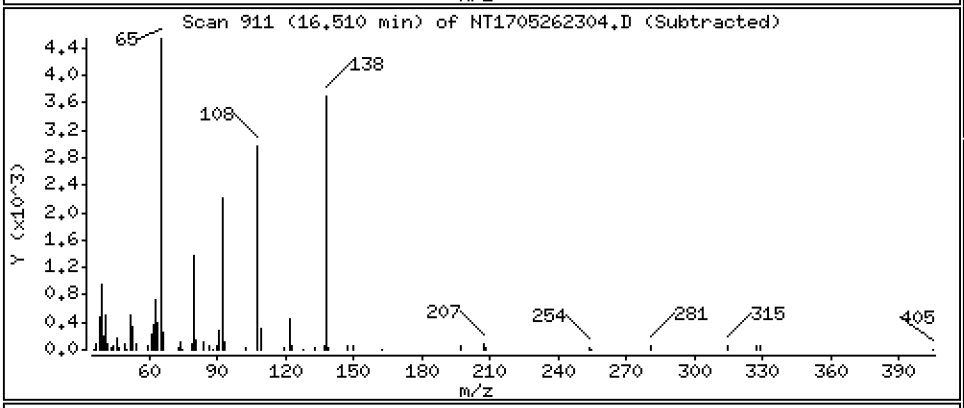
Column diameter: 0.25

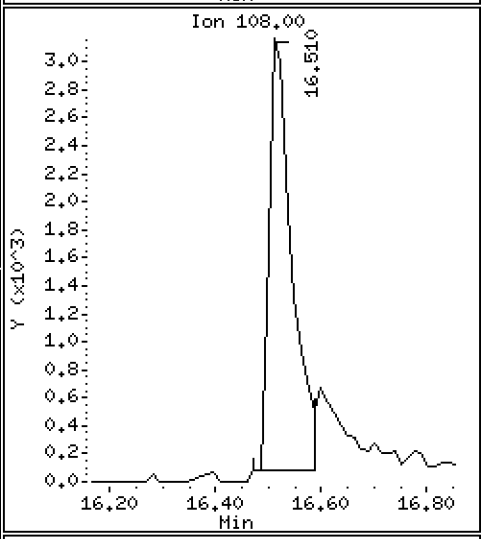
52 4-Nitroaniline

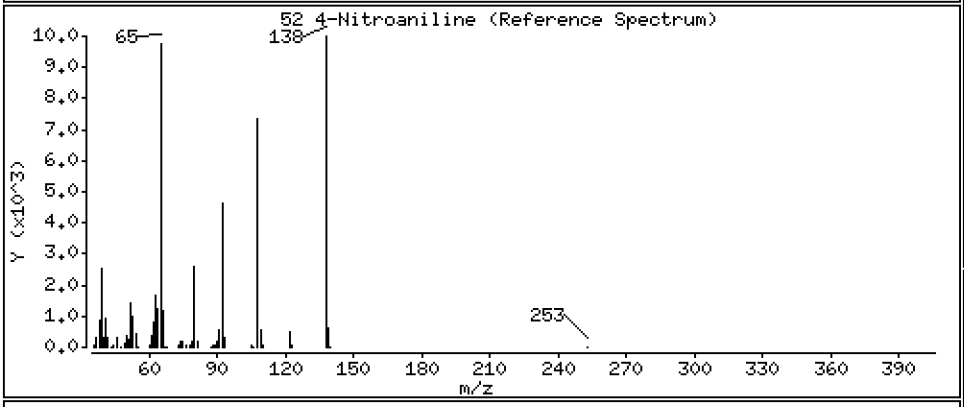
Concentration: 0.3136 ug/mL

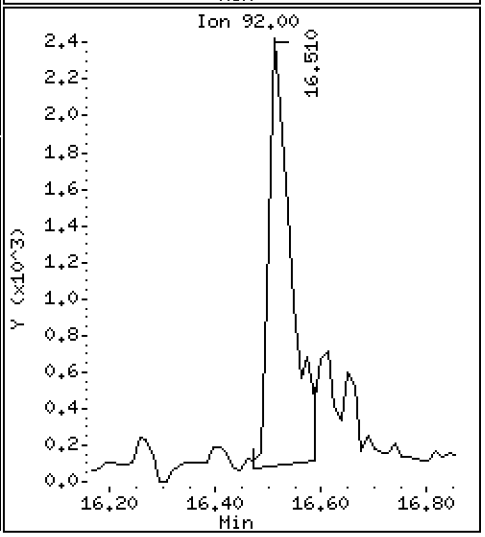


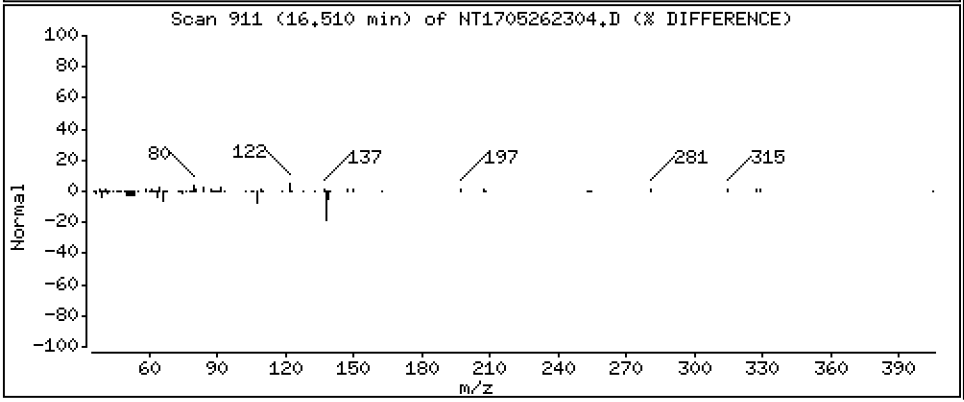












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

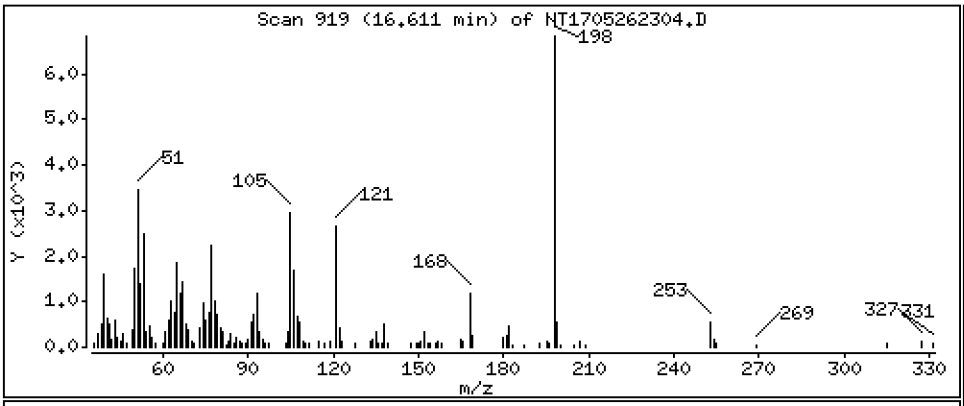
Operator: VTS

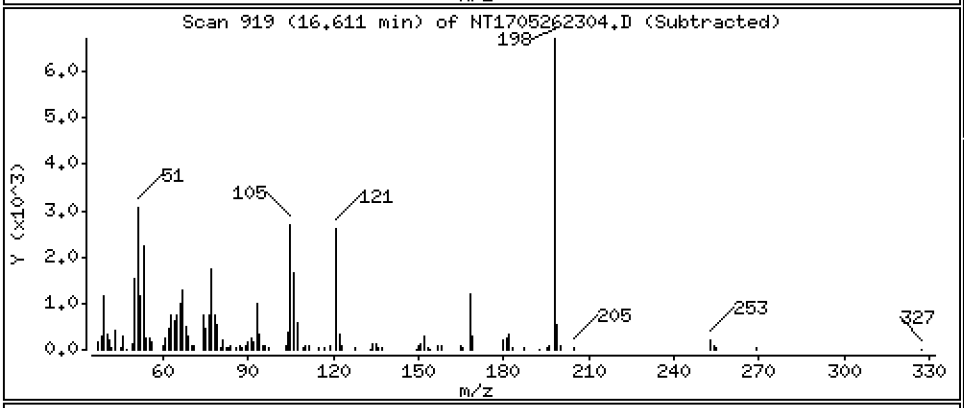
Column phase: ZB-5msi

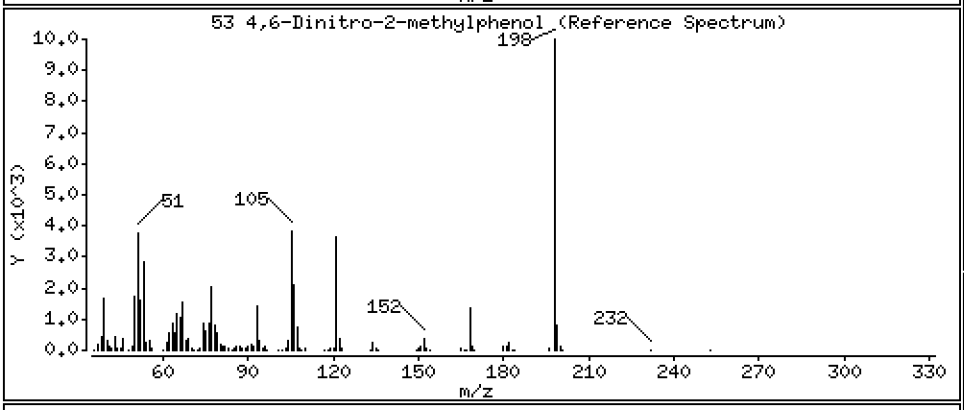
Column diameter: 0.25

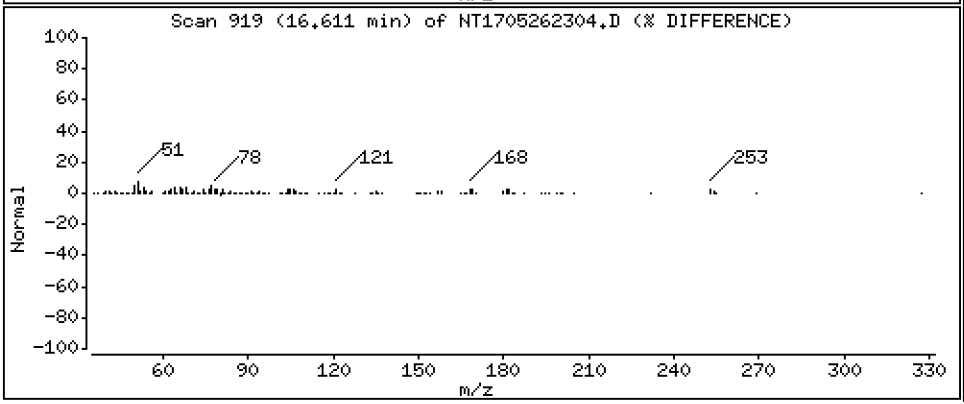
53 4,6-Dinitro-2-methylphenol

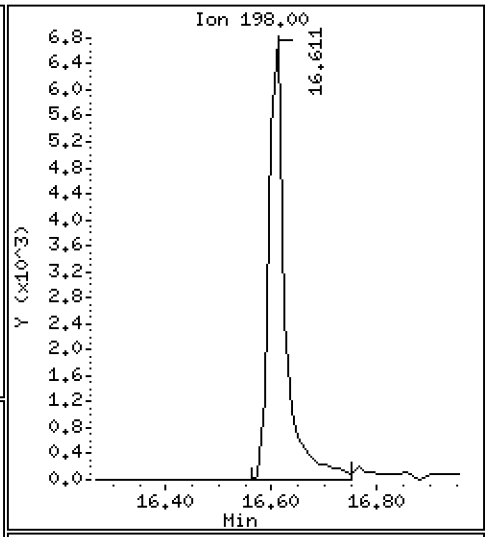
Concentration: 0.3902 ug/mL

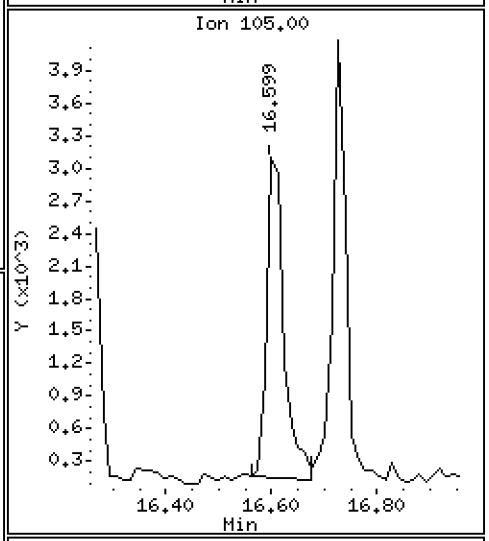


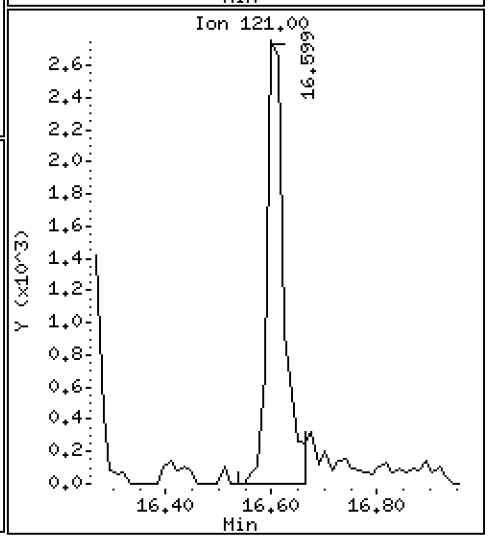












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

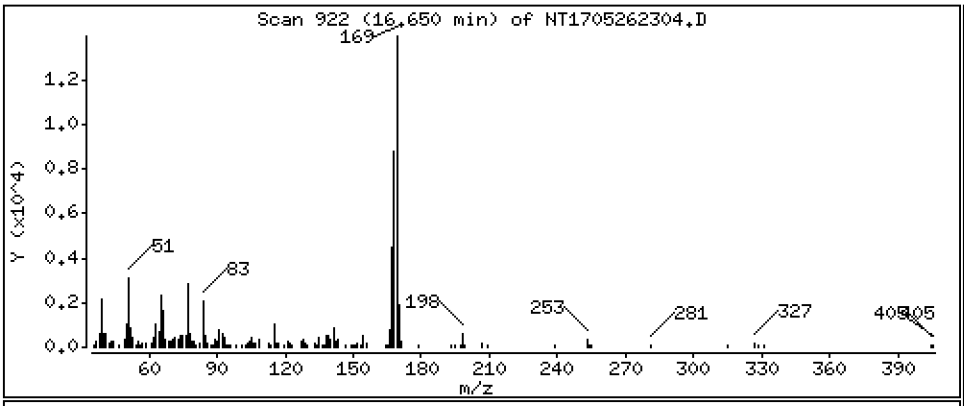
Operator: VTS

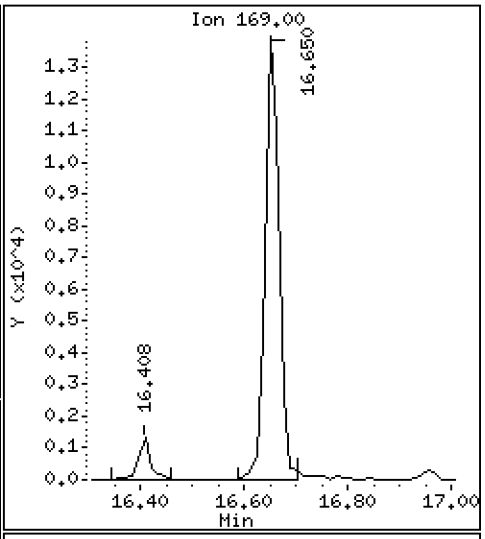
Column phase: ZB-5msi

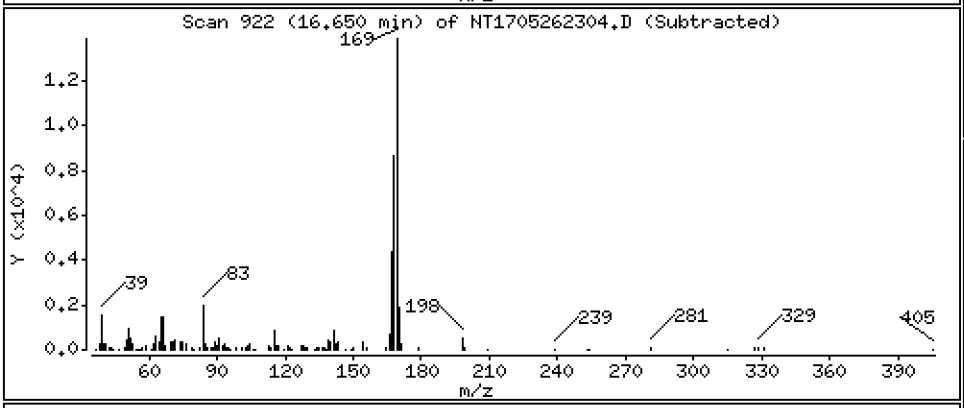
Column diameter: 0.25

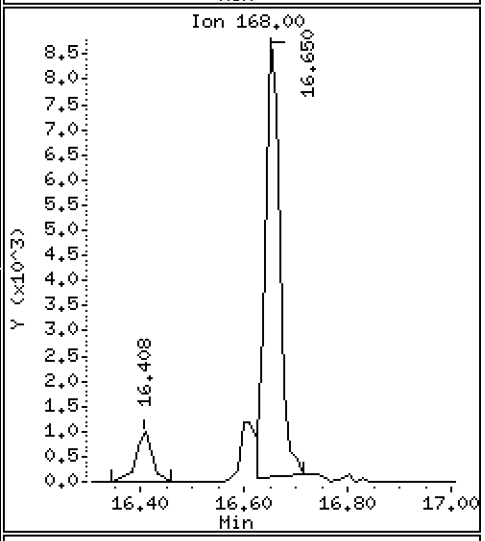
54 N-Nitrosodiphenylamine

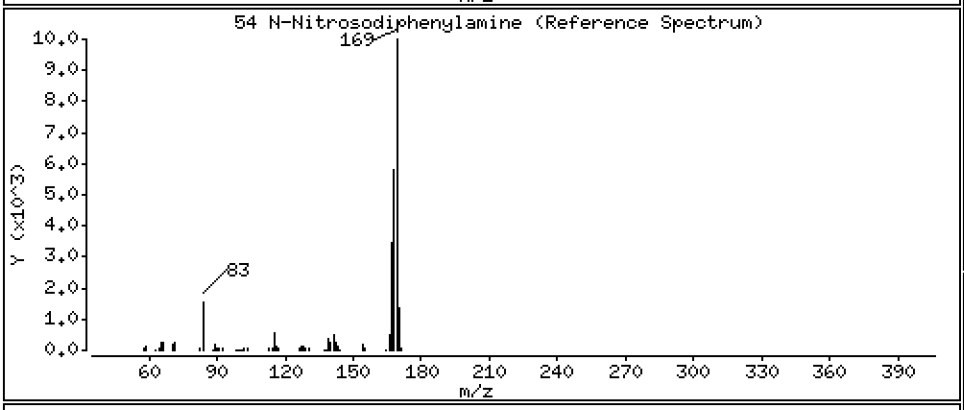
Concentration: 0.1929 ug/mL

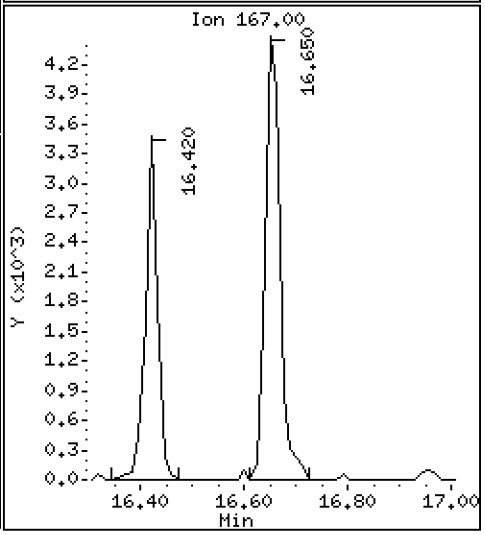


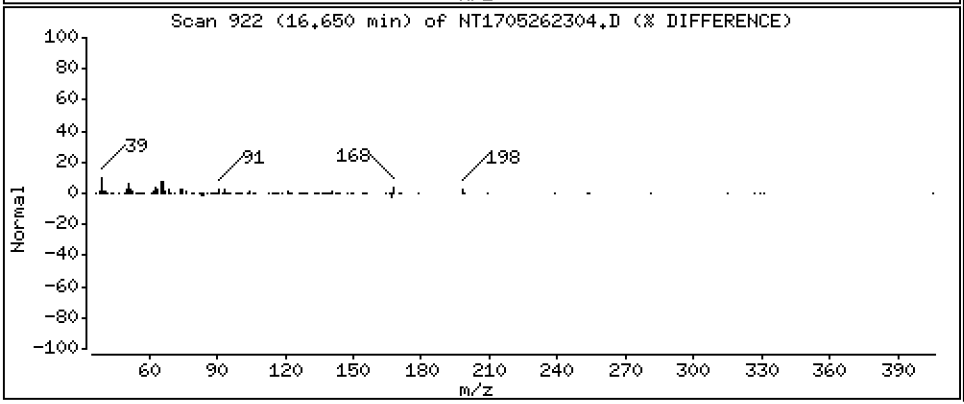












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

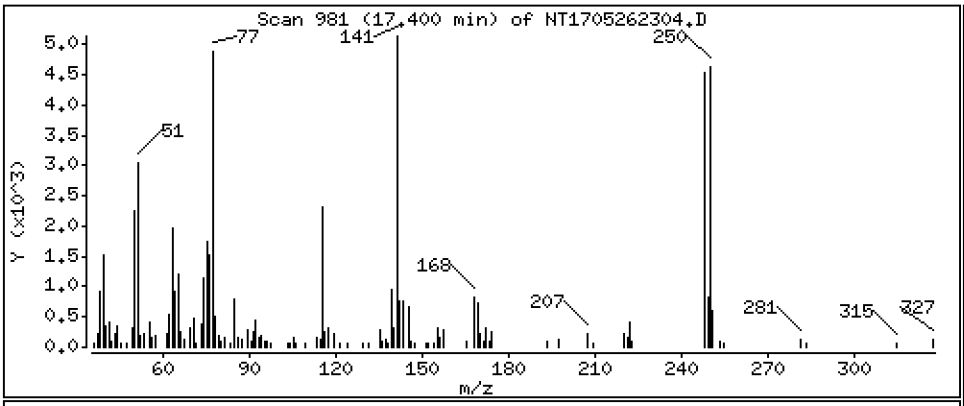
Operator: VTS

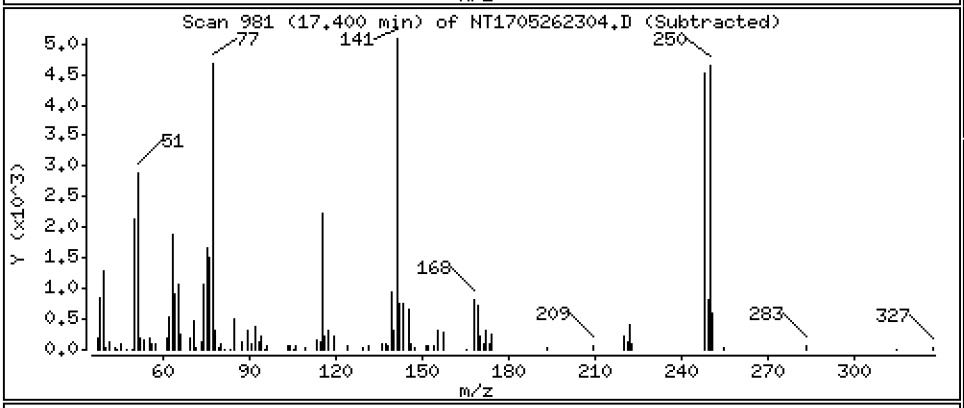
Column phase: ZB-5msi

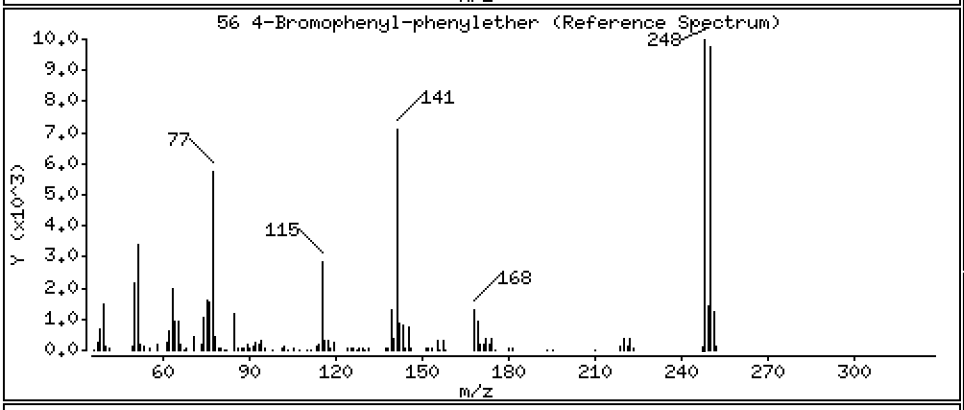
Column diameter: 0.25

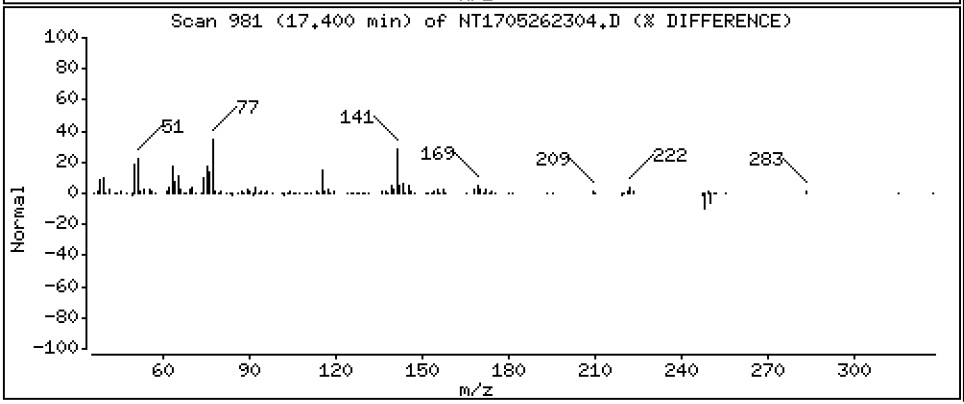
56 4-Bromophenyl-phenylether

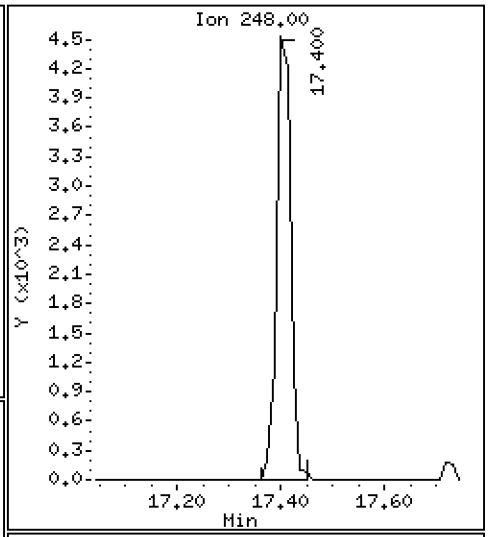
Concentration: 0.1845 ug/mL

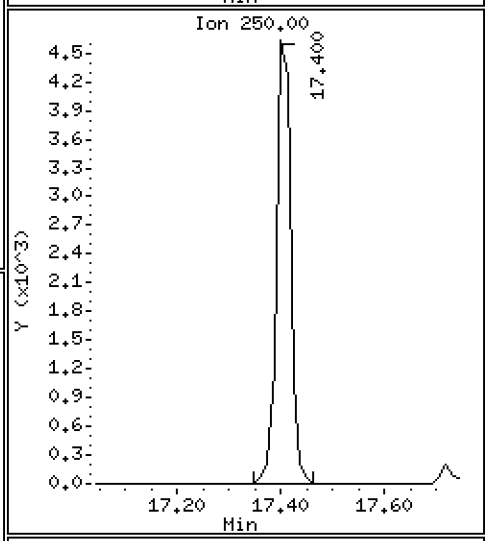


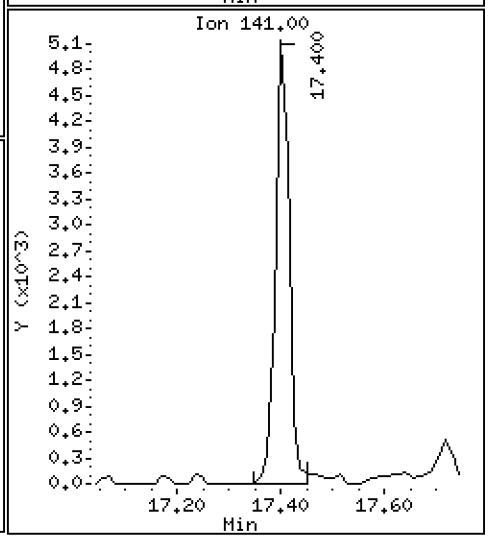












Date : 26-MAY-2023 14:31

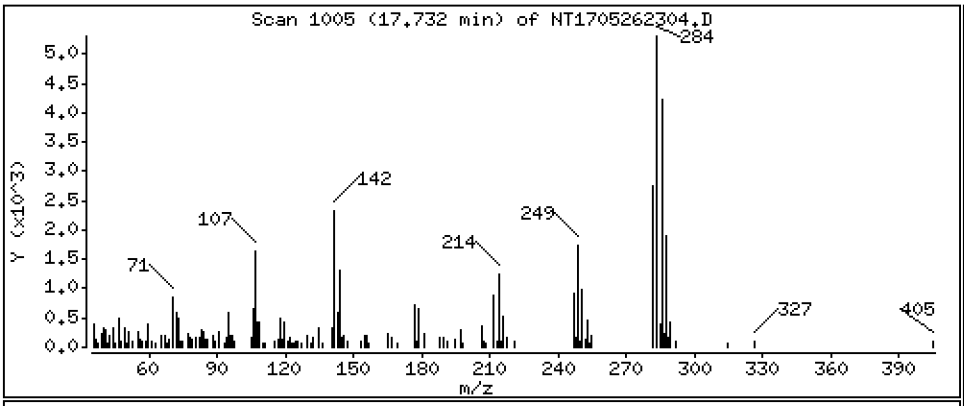
Client ID: Instrument: nt17.i

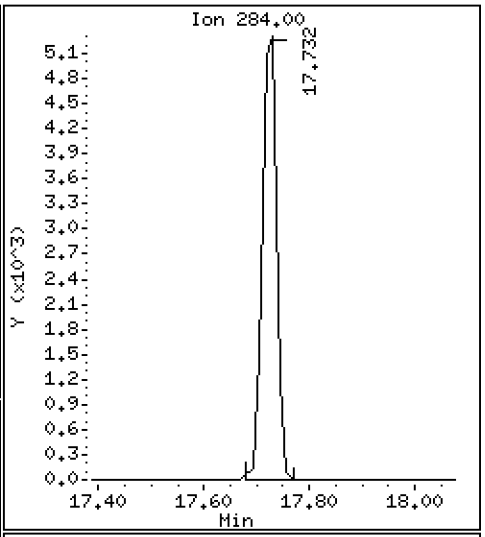
Sample Info: SLE0434-LCV1

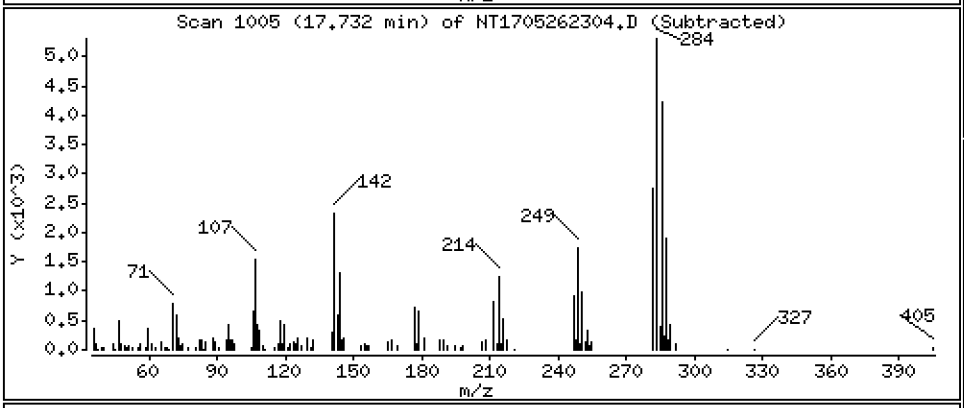
Operator: VTS

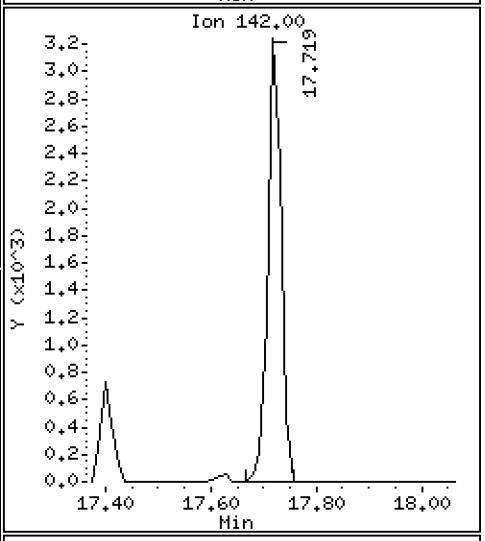
Column phase: ZB-5msi Column diameter: 0.25

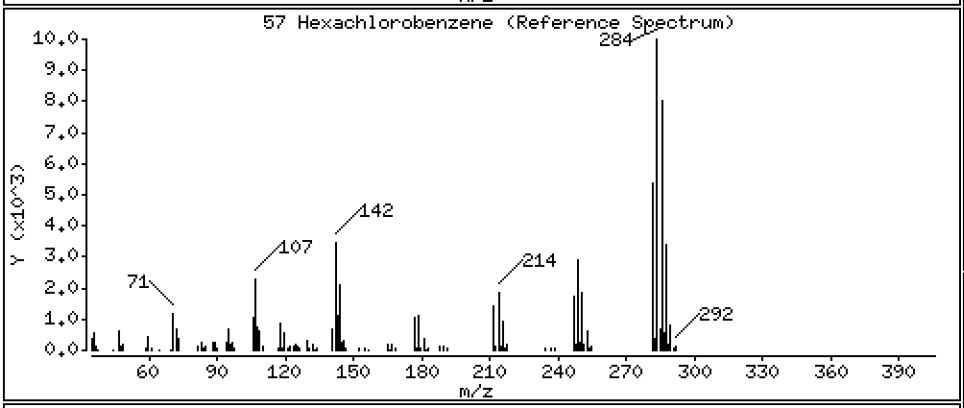
57 Hexachlorobenzene Concentration: 0.2131 ug/mL

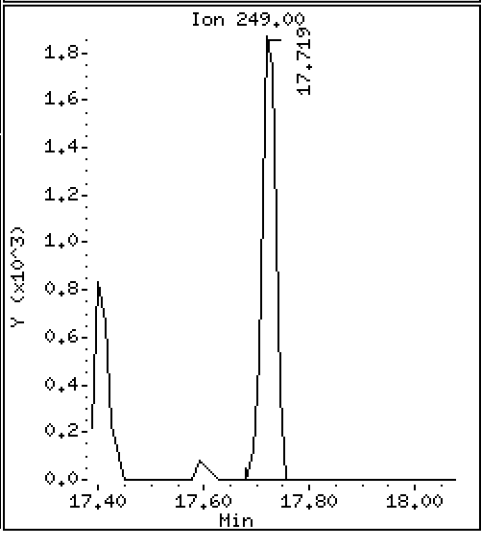


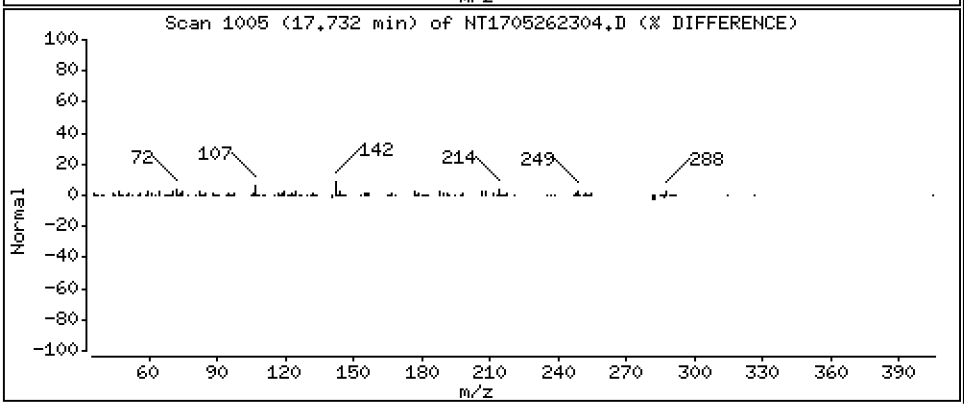












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

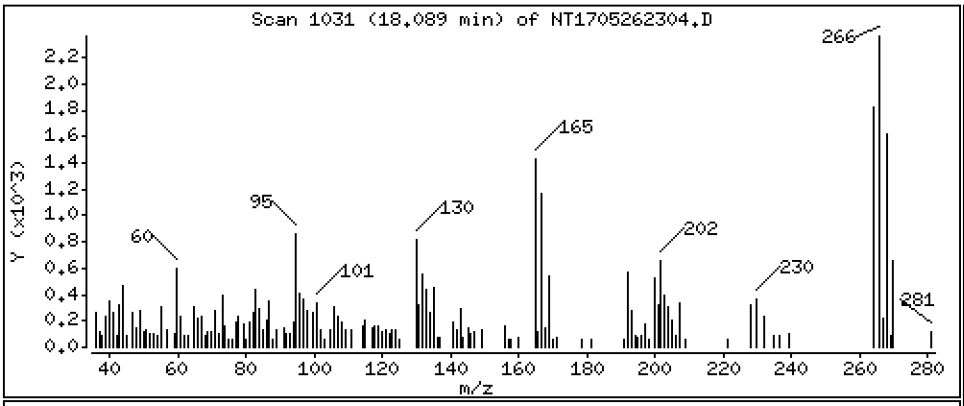
Operator: VTS

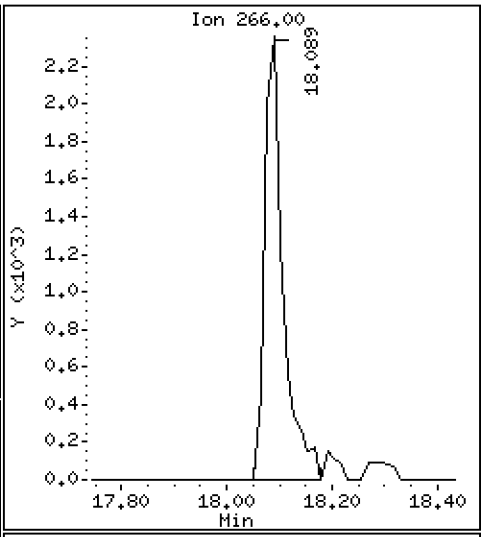
Column phase: ZB-5msi

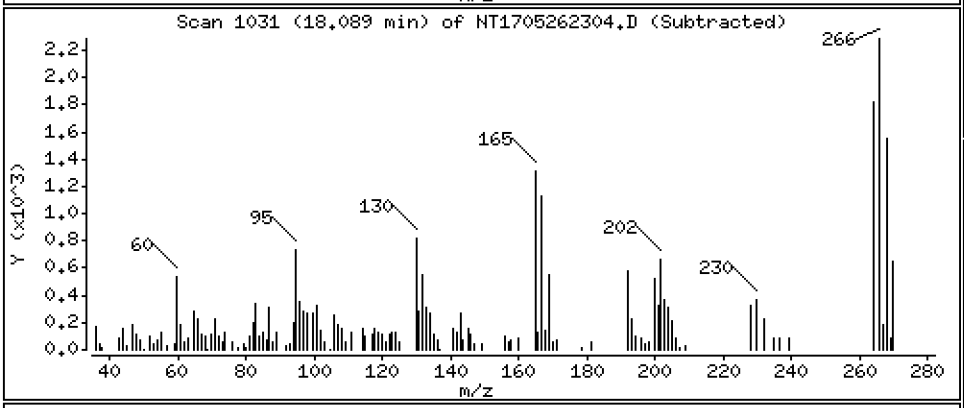
Column diameter: 0.25

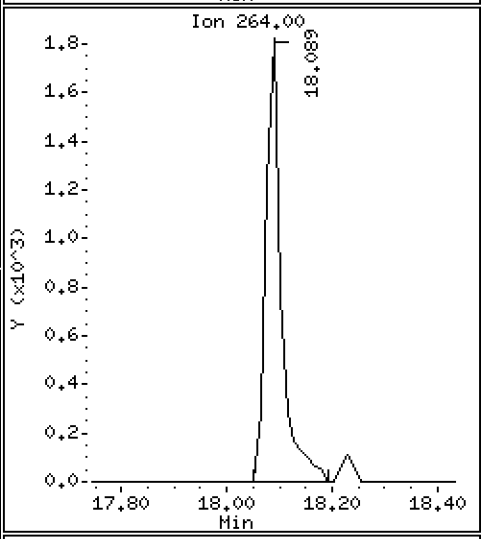
58 Pentachlorophenol

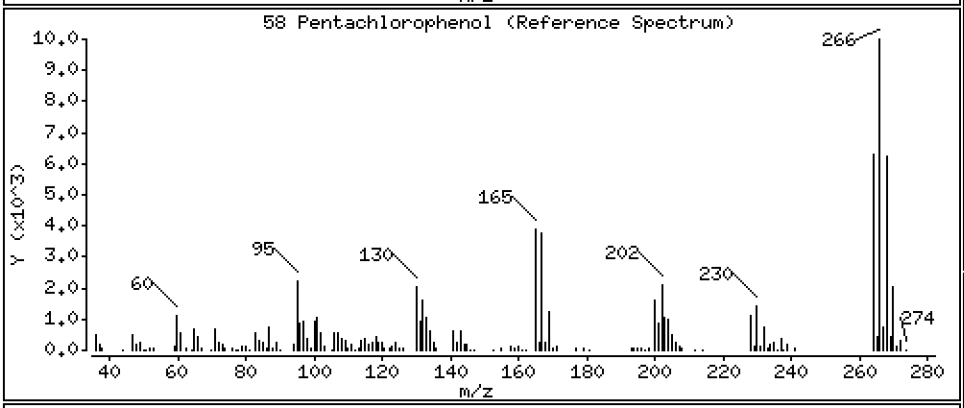
Concentration: 0.2079 ug/mL

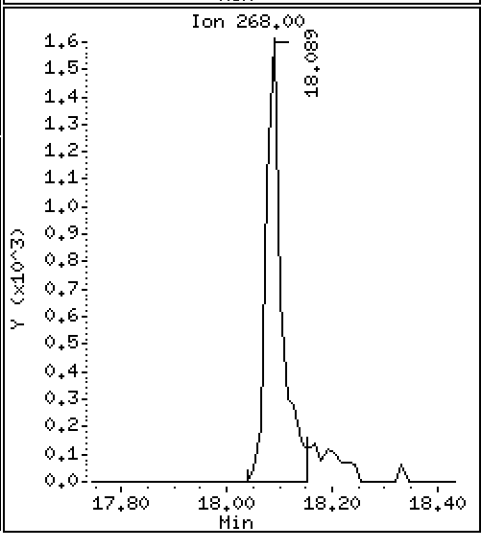


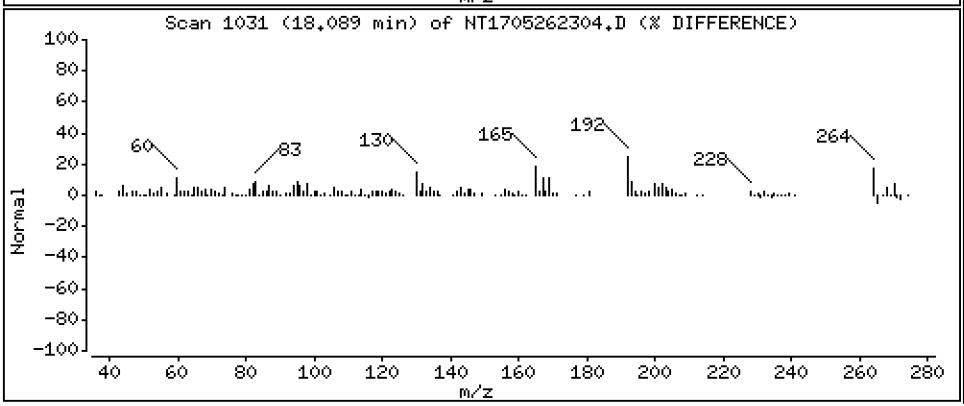












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

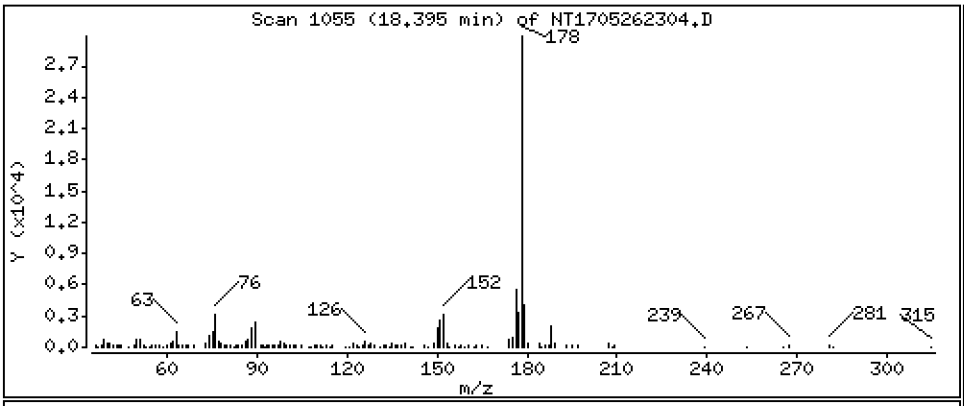
Operator: VTS

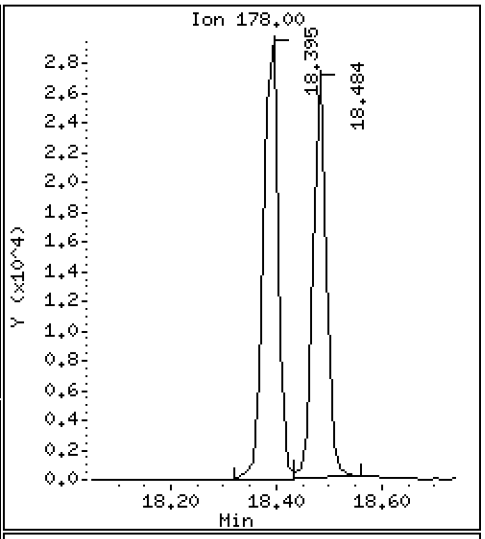
Column phase: ZB-5msi

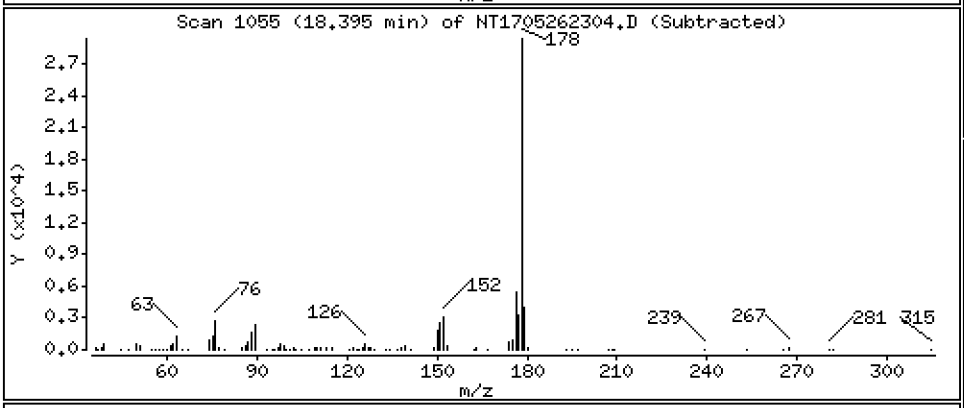
Column diameter: 0.25

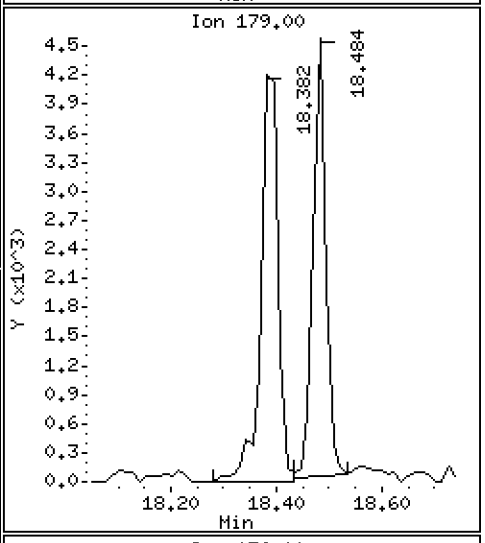
60 Phenanthrene

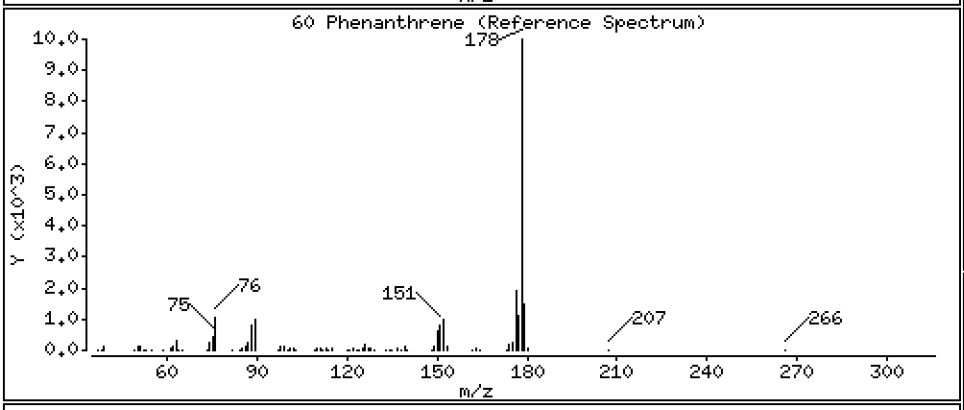
Concentration: 0.2034 ug/mL

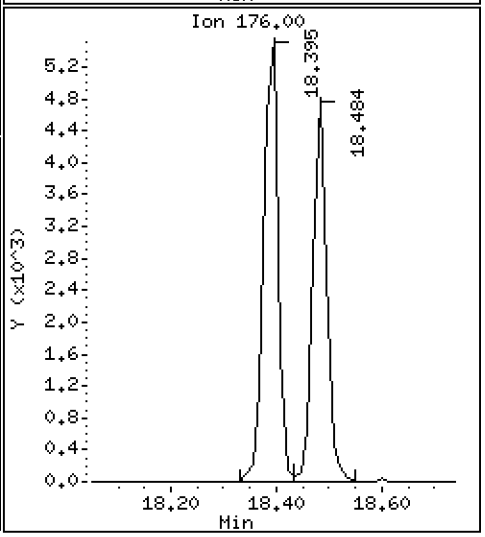


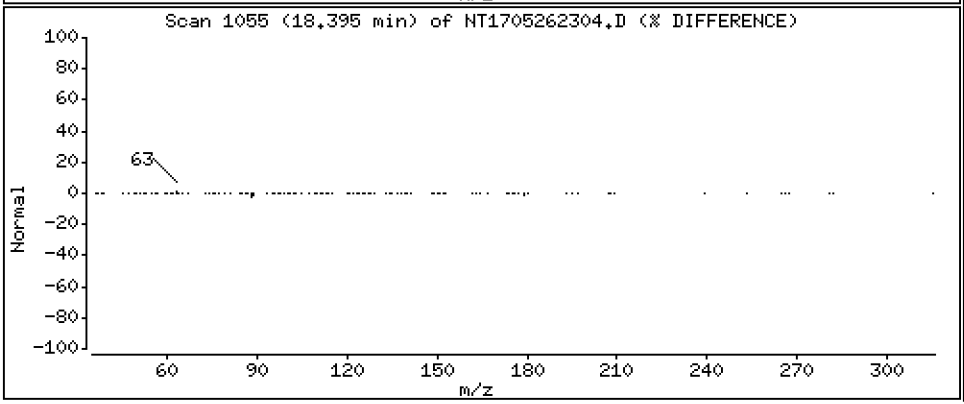












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

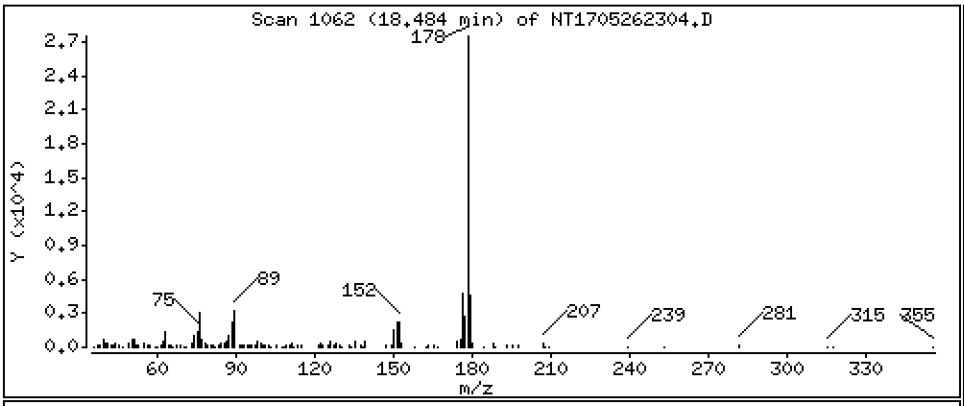
Operator: VTS

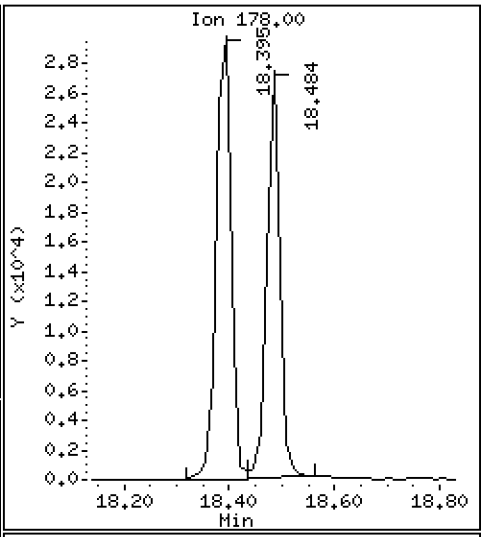
Column phase: ZB-5msi

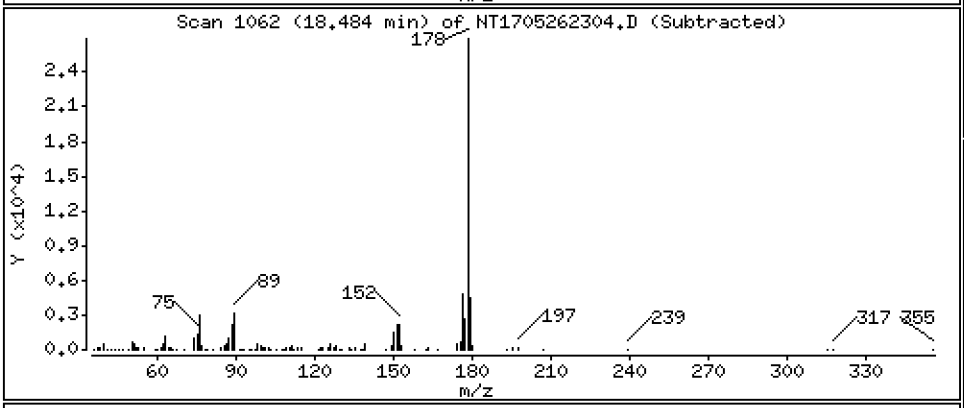
Column diameter: 0.25

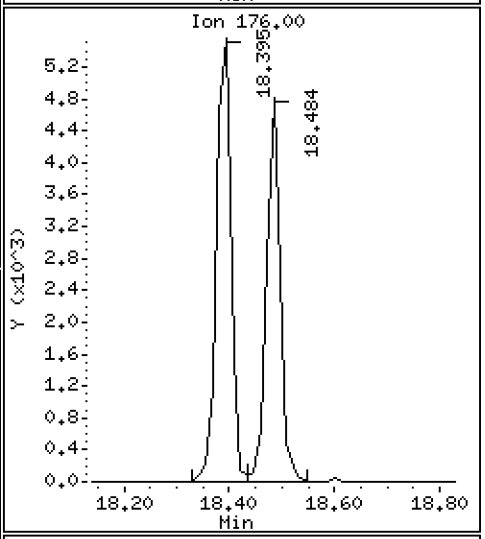
61 Anthracene

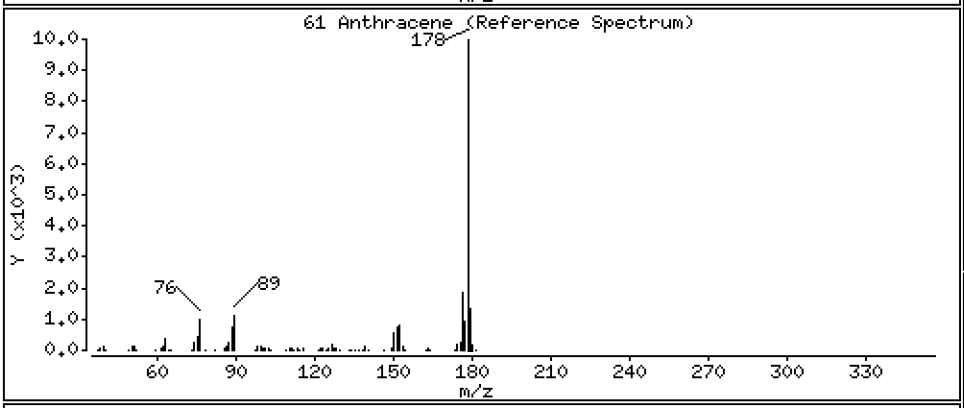
Concentration: 0.1850 ug/mL

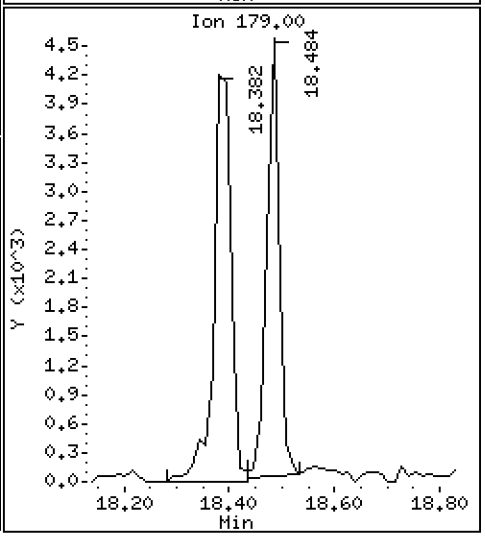


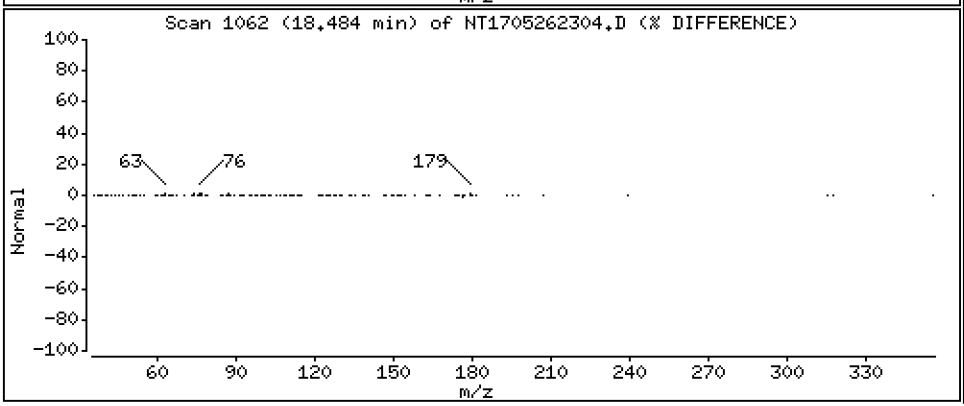












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

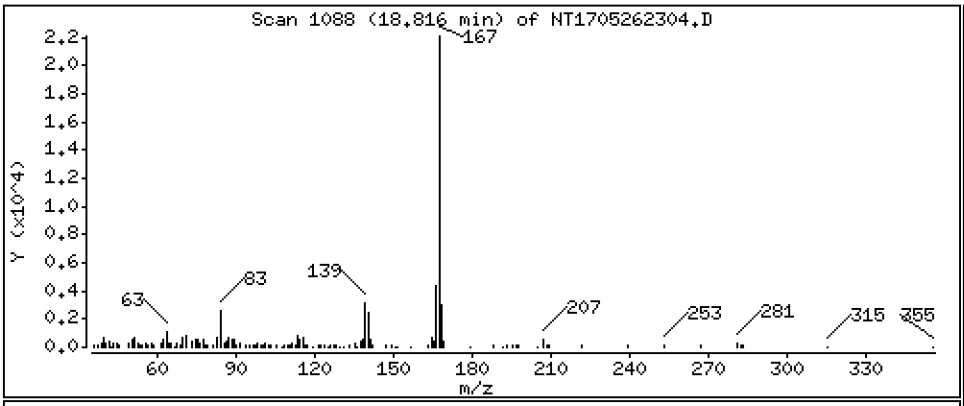
Operator: VTS

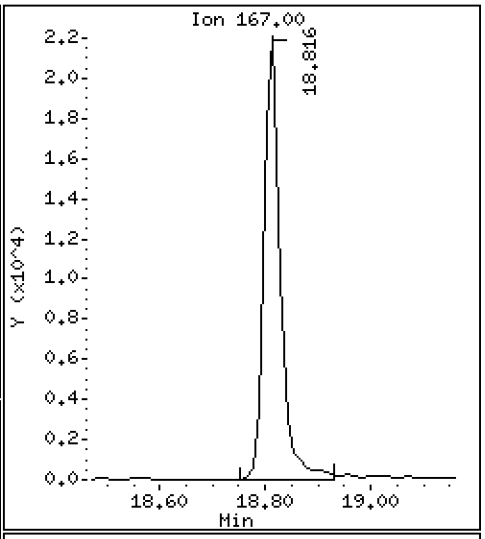
Column phase: ZB-5msi

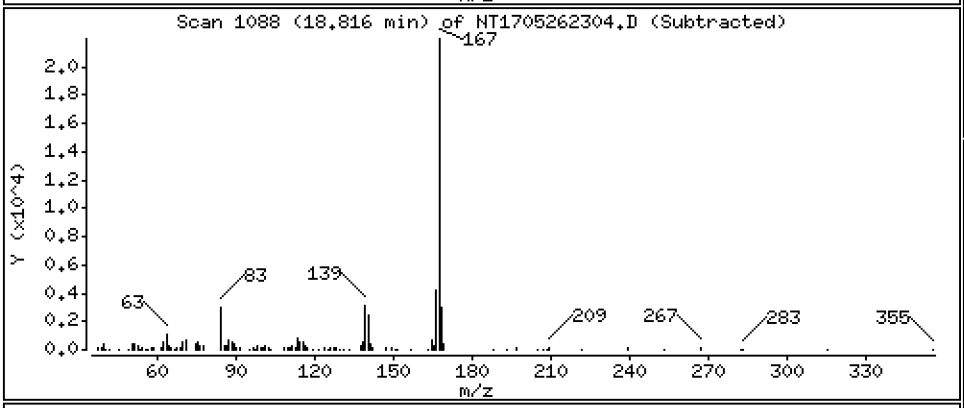
Column diameter: 0.25

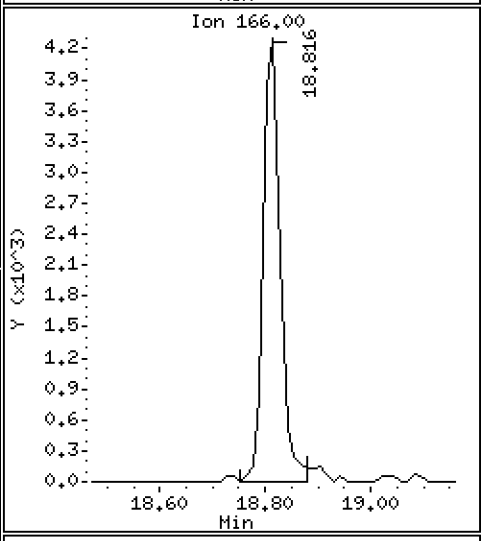
62 Carbazole

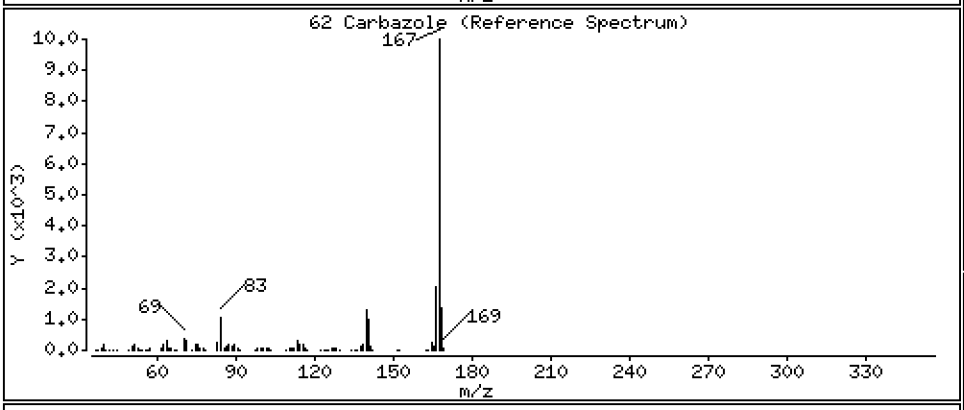
Concentration: 0.2944 ug/mL

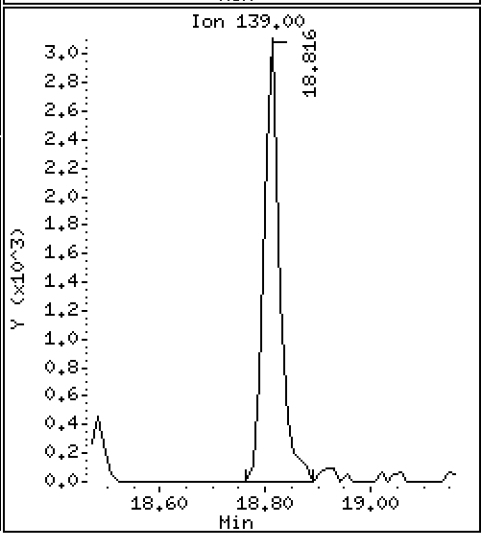


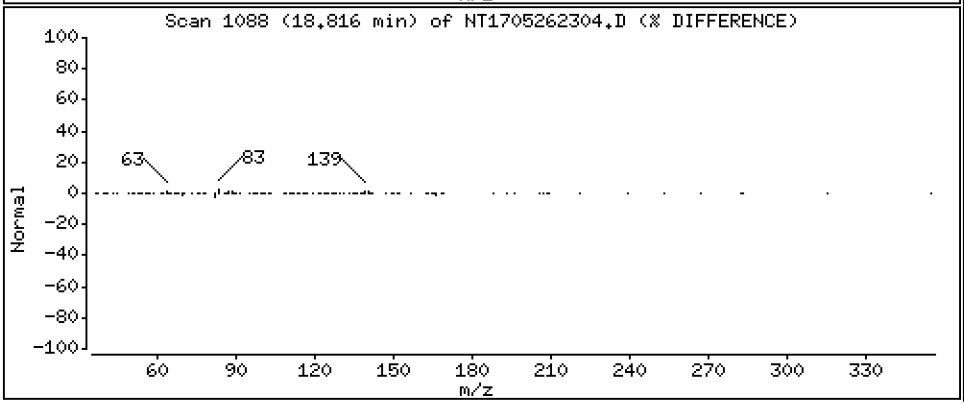












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

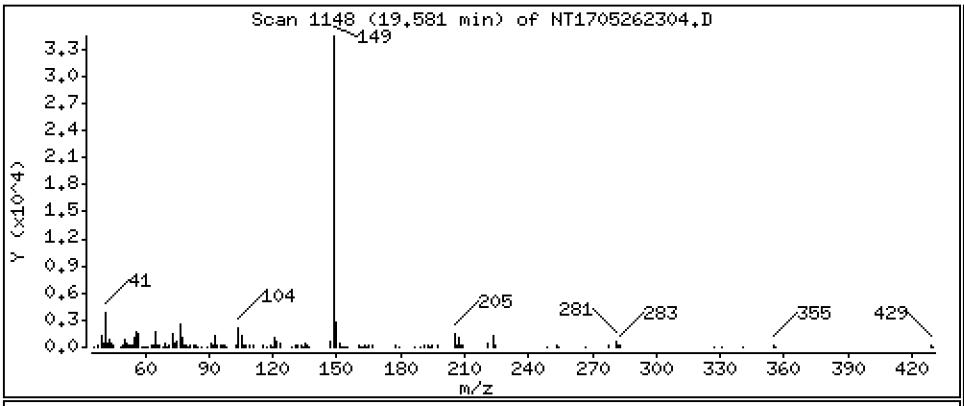
Operator: VTS

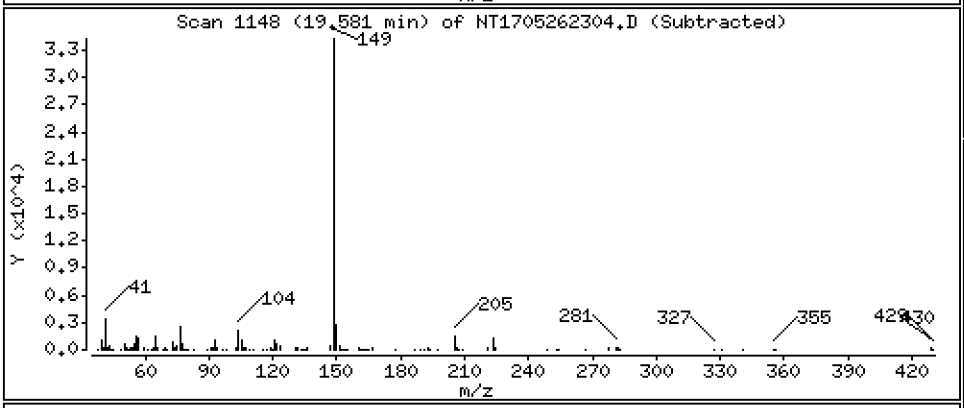
Column phase: ZB-5msi

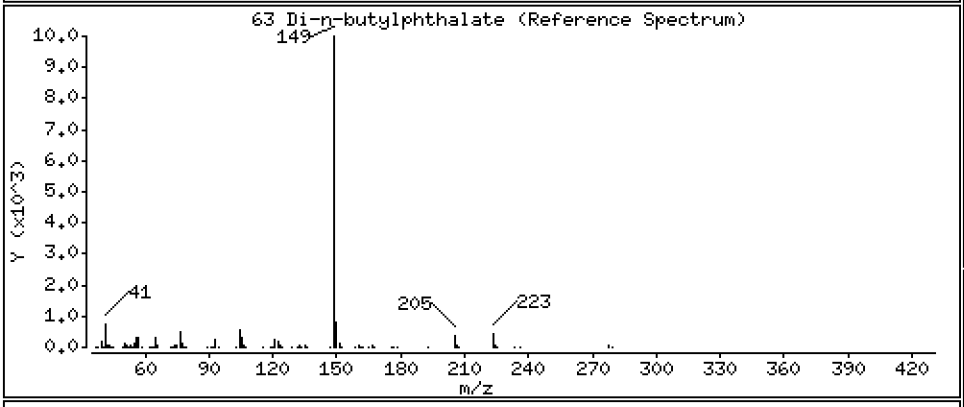
Column diameter: 0.25

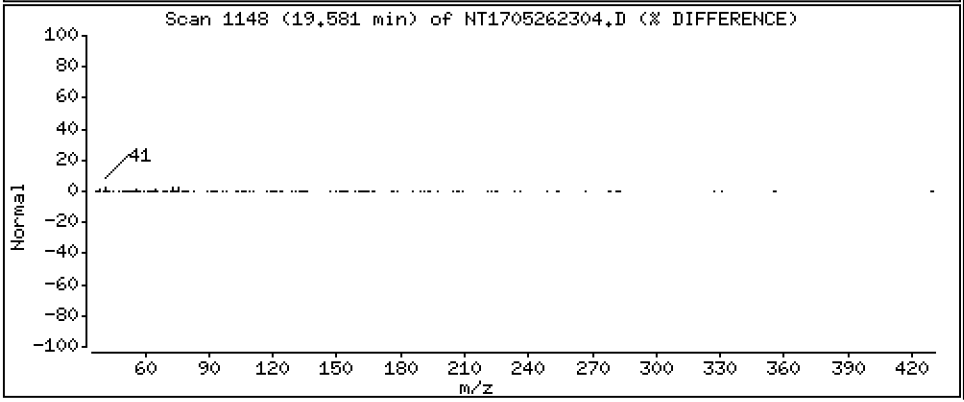
63 Di-n-butylphthalate

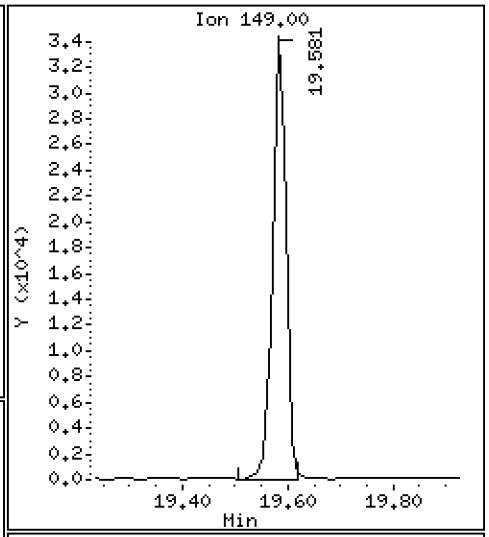
Concentration: 0.1889 ug/mL

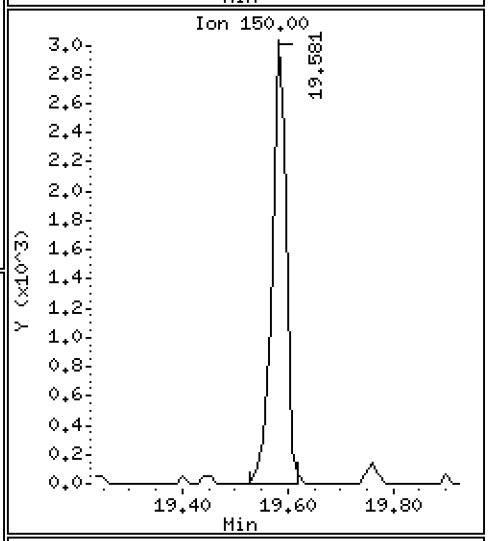


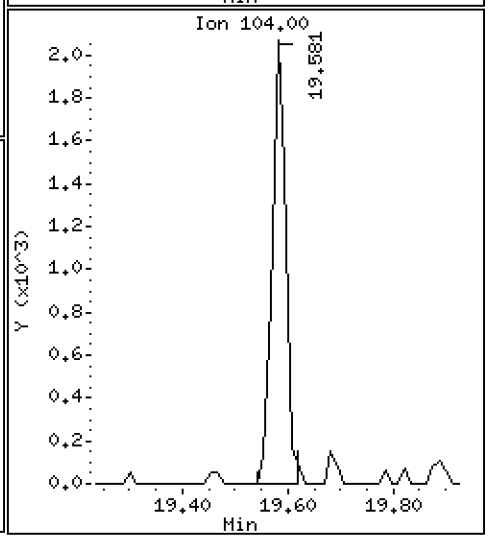












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

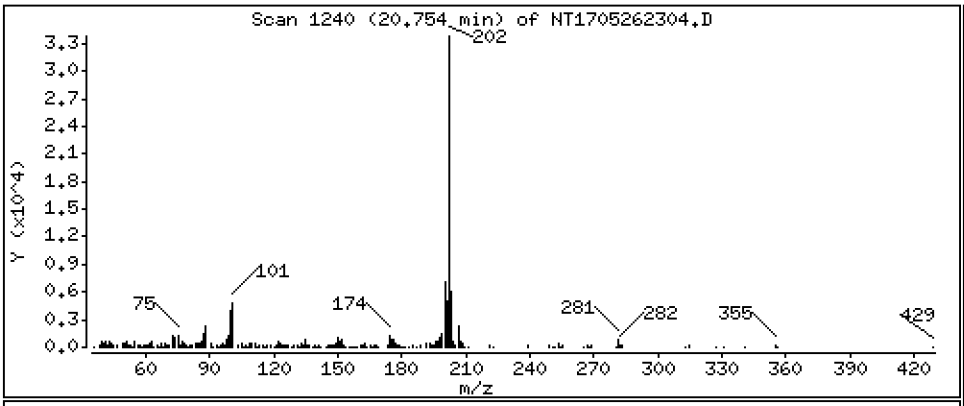
Operator: VTS

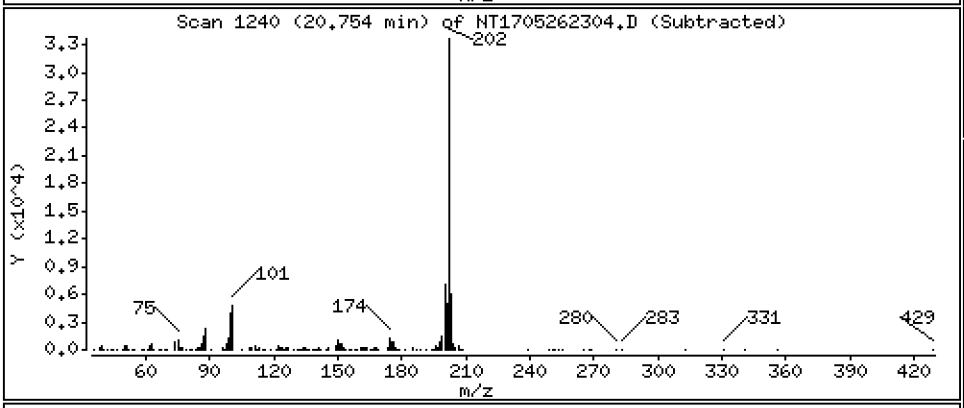
Column phase: ZB-5msi

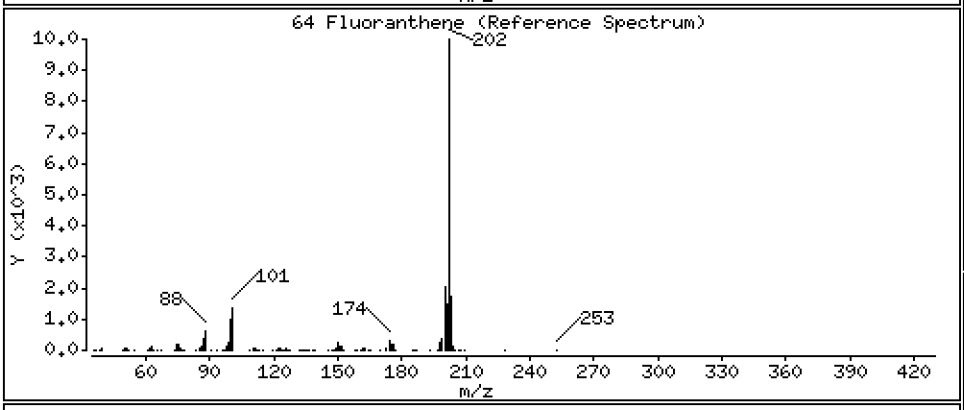
Column diameter: 0.25

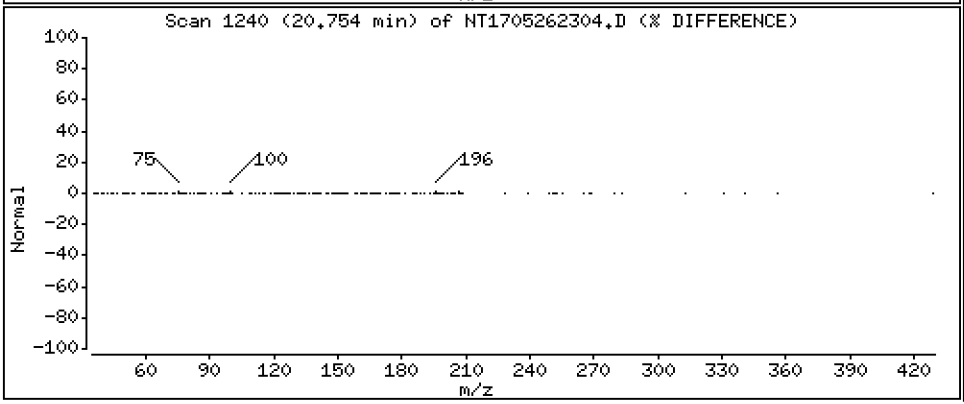
64 Fluoranthene

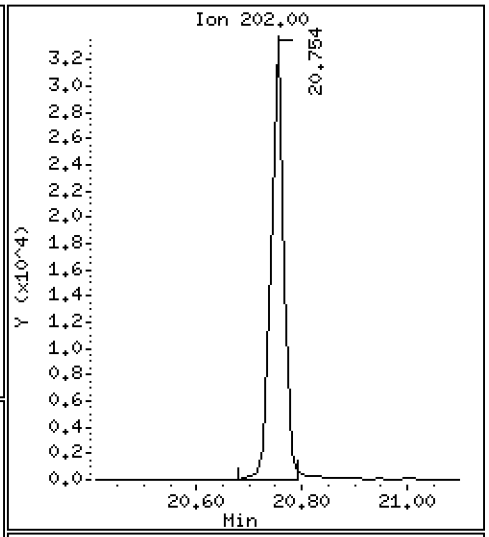
Concentration: 0.1948 ug/mL

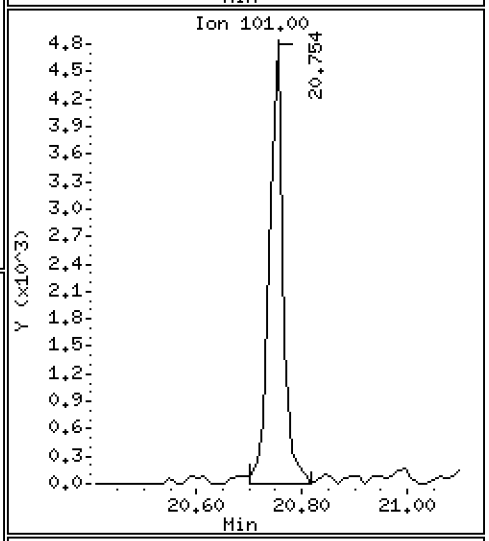


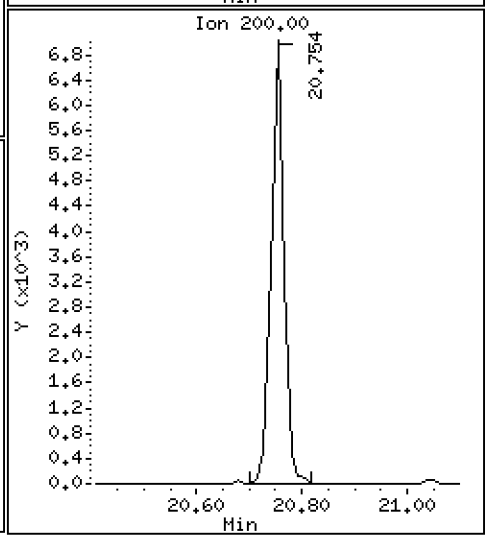












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

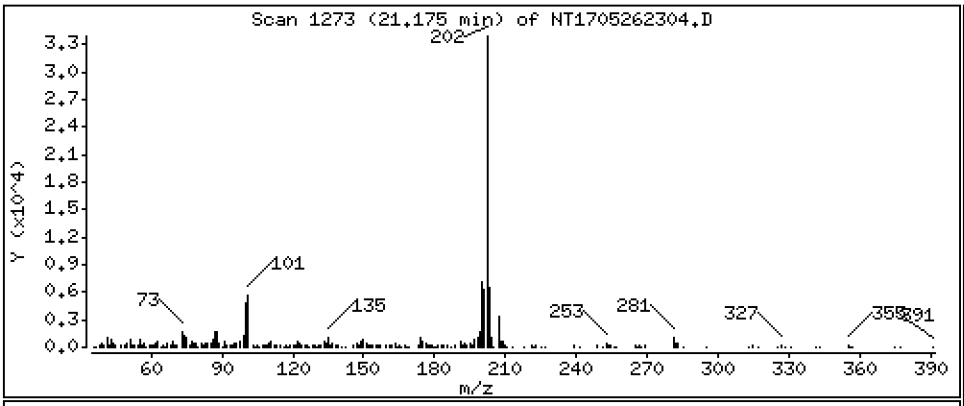
Operator: VTS

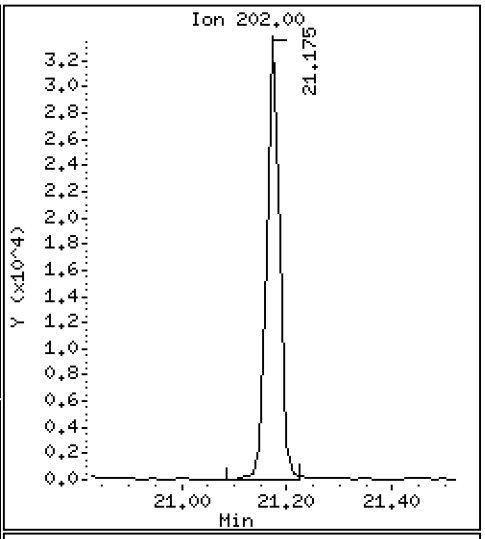
Column phase: ZB-5msi

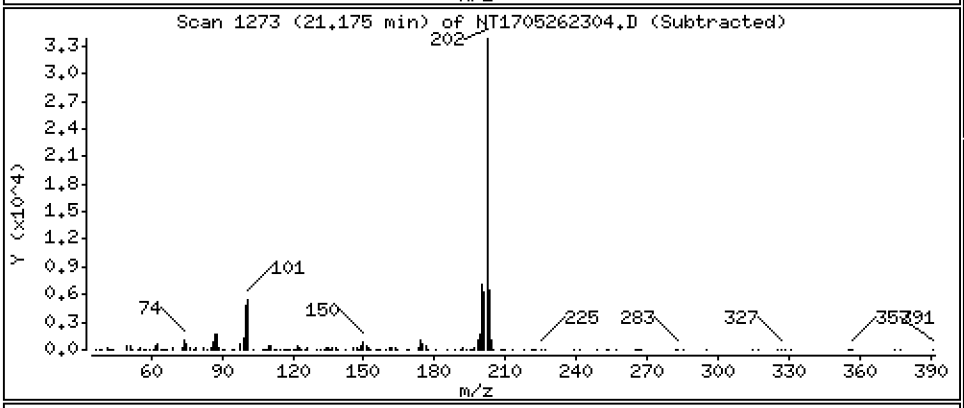
Column diameter: 0.25

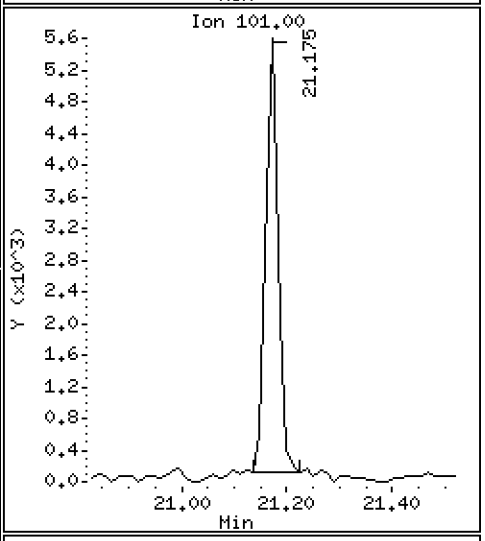
65 Pyrene

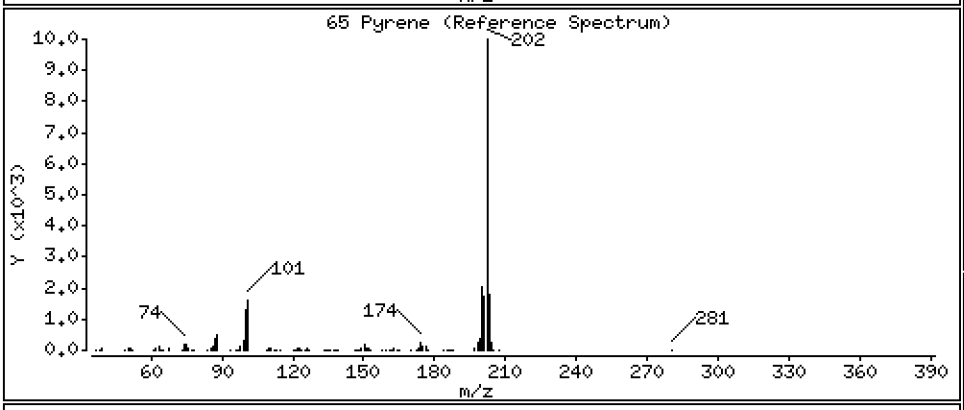
Concentration: 0.2036 ug/mL

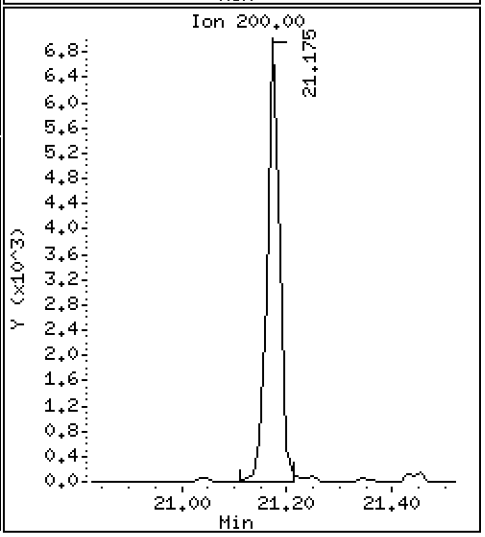


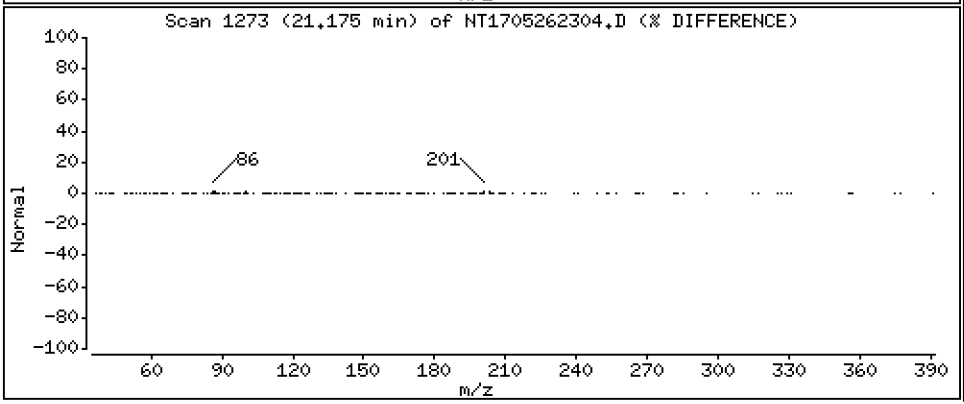












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

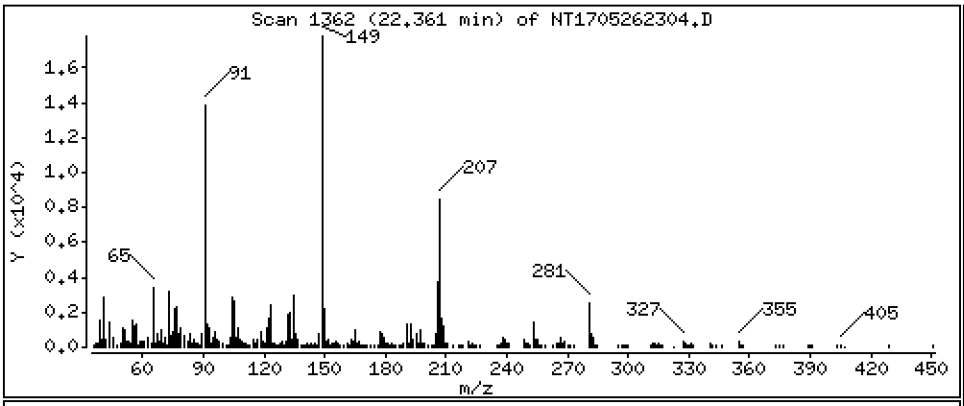
Operator: VTS

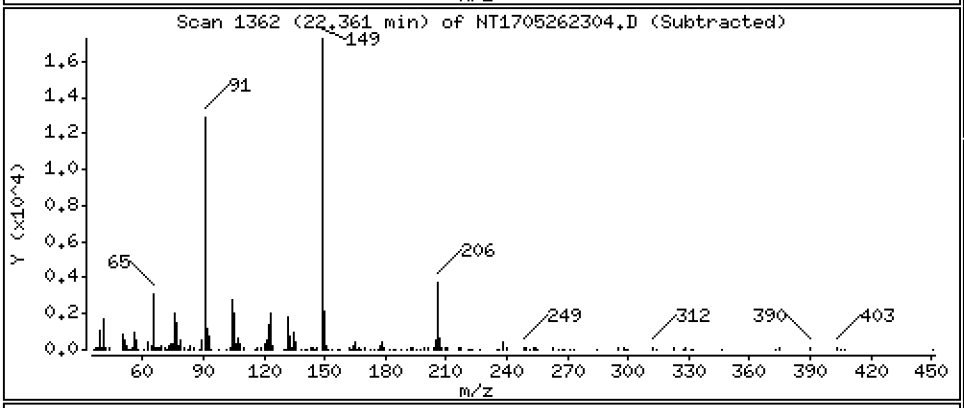
Column phase: ZB-5msi

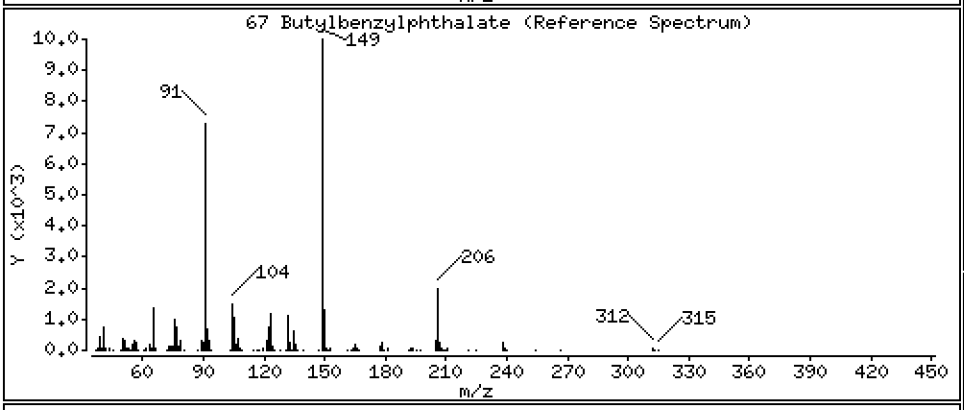
Column diameter: 0.25

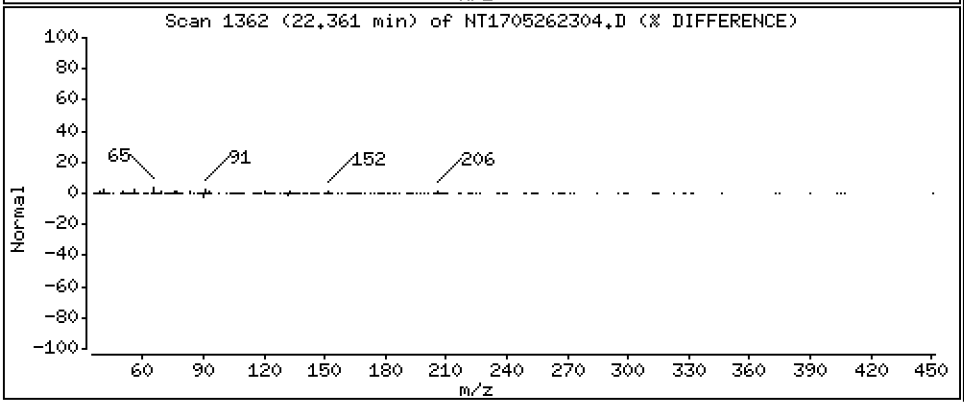
67 Butylbenzylphthalate

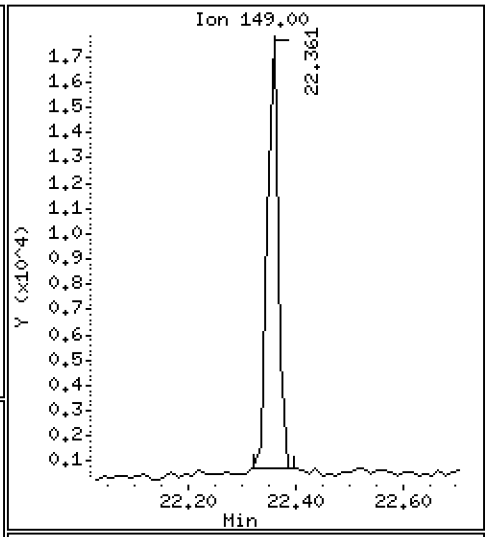
Concentration: 0.1944 ug/mL

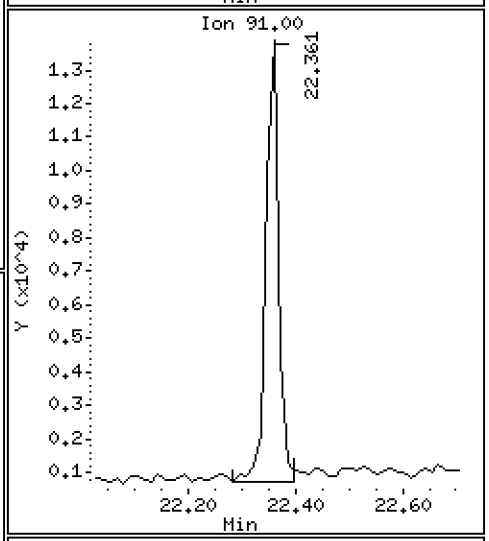


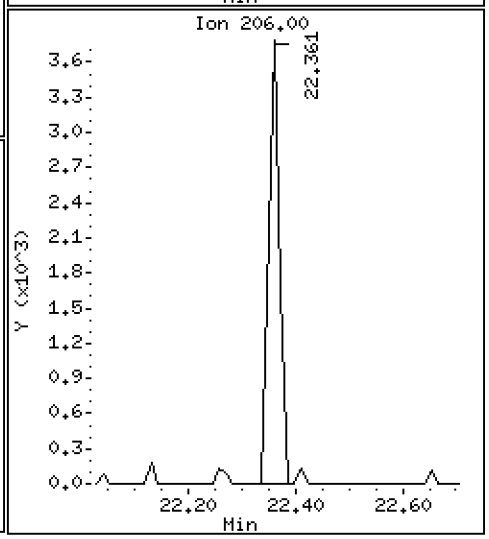












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

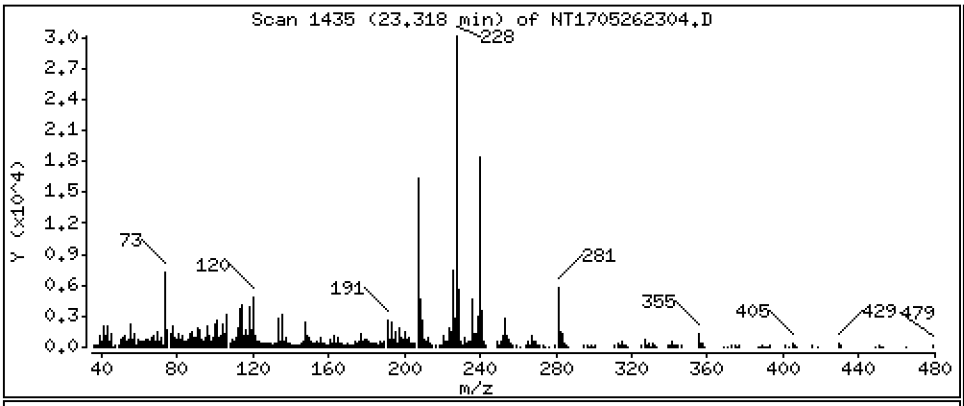
Operator: VTS

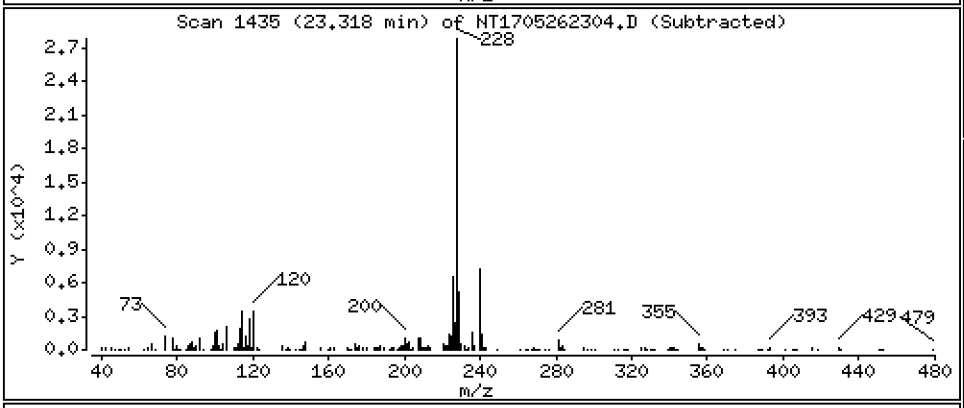
Column phase: ZB-5msi

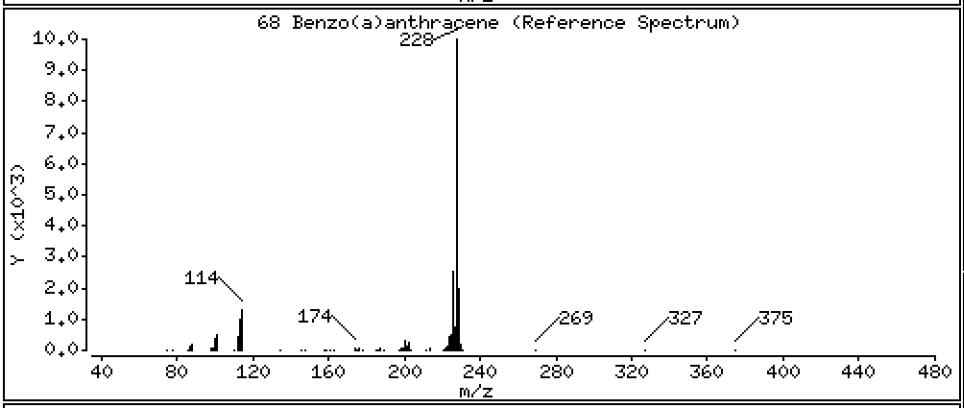
Column diameter: 0.25

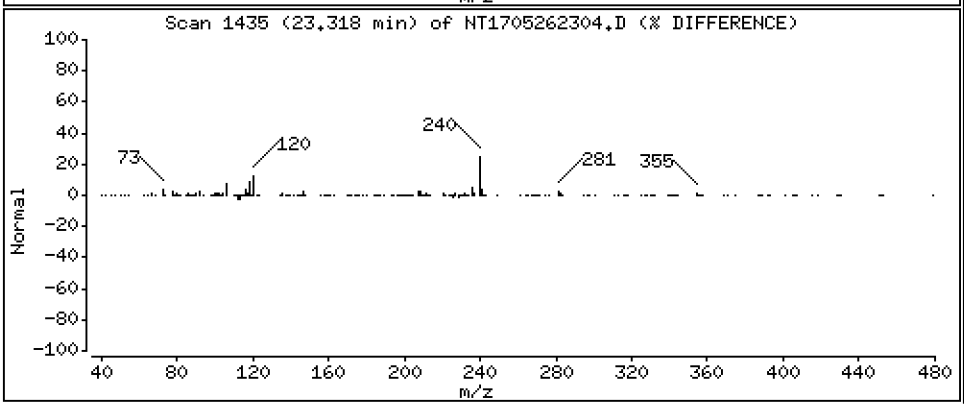
68 Benzo(a)anthracene

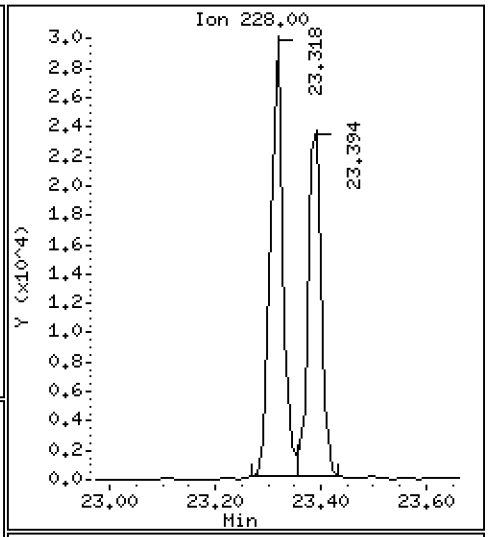
Concentration: 0.2165 ug/mL

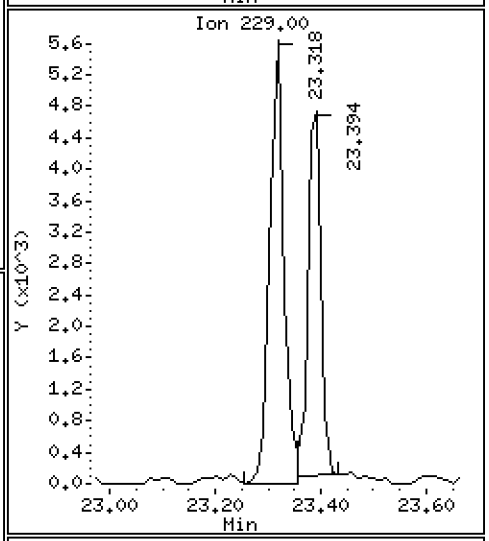


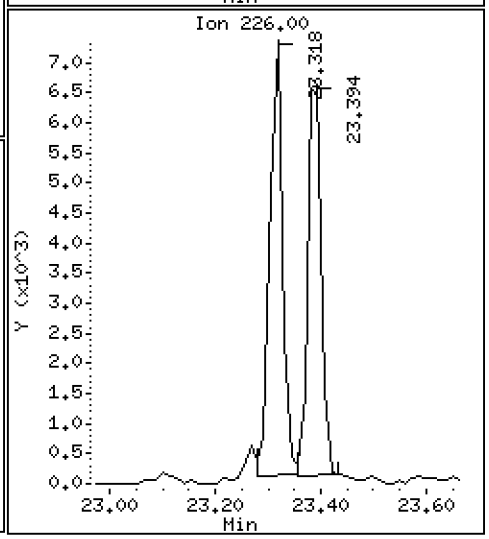












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

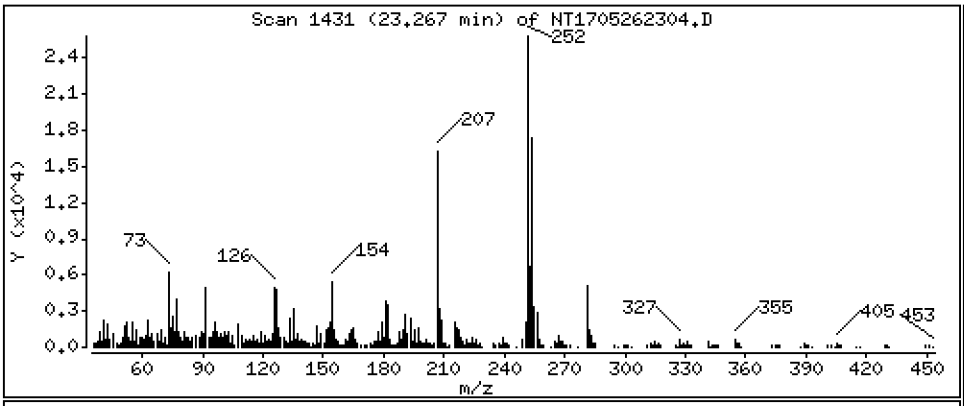
Operator: VTS

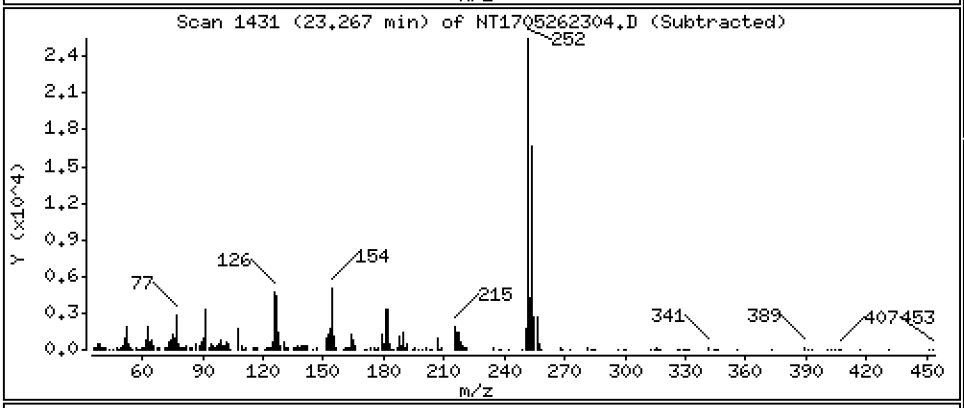
Column phase: ZB-5msi

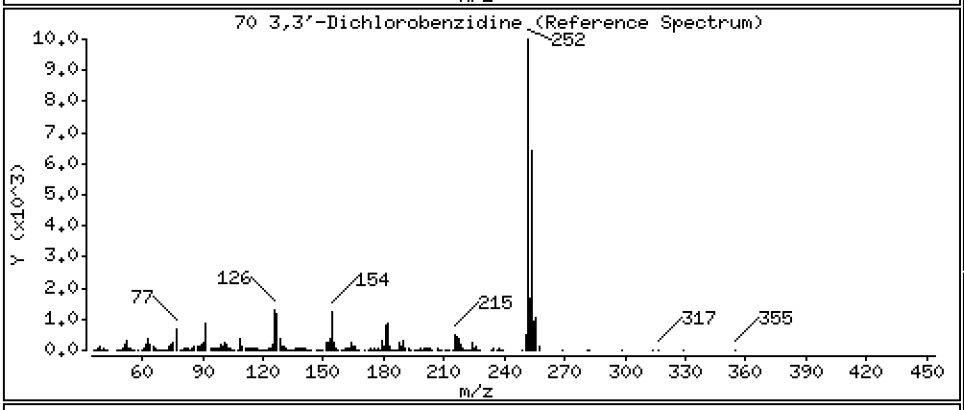
Column diameter: 0.25

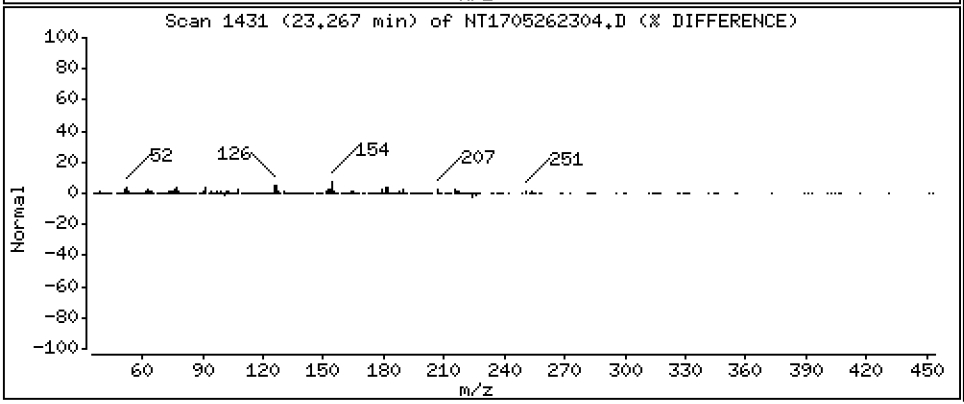
70 3,3'-Dichlorobenzidine

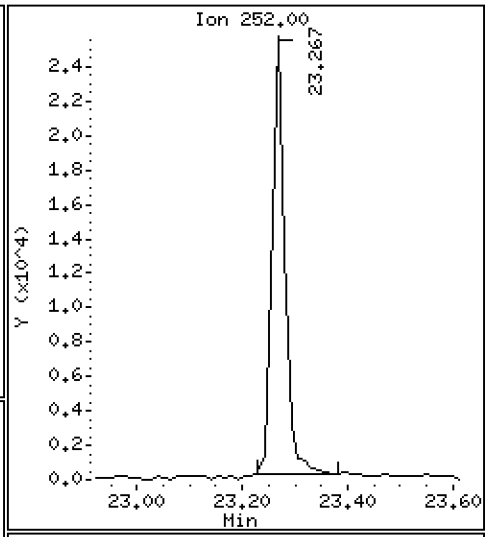
Concentration: 1.001 ug/mL

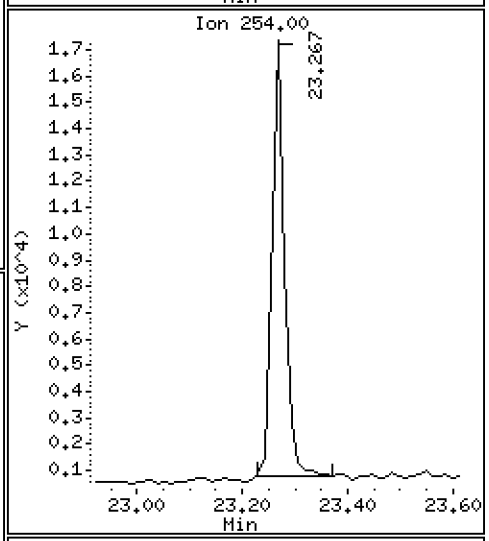


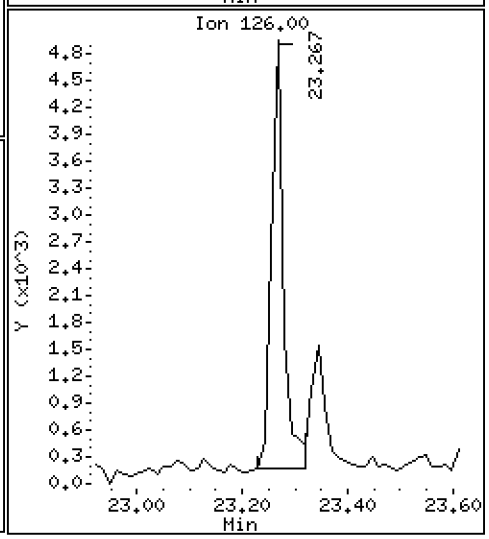












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

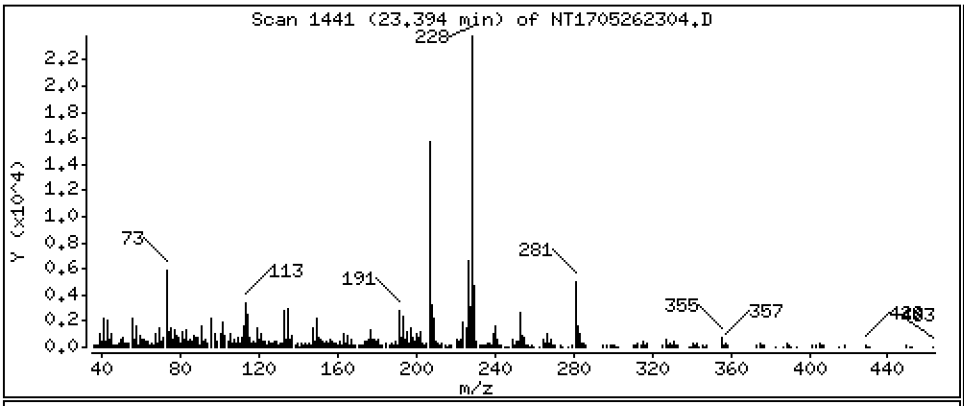
Operator: VTS

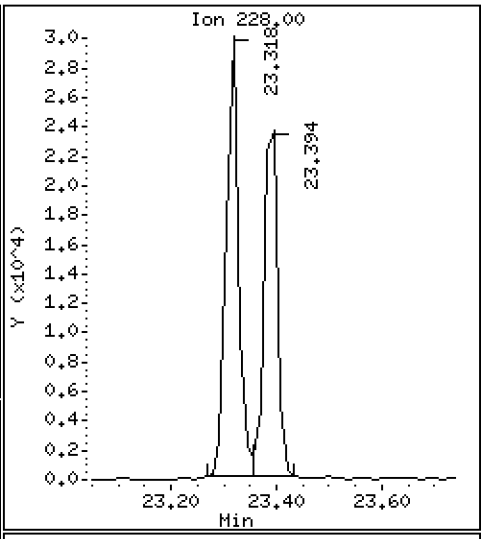
Column phase: ZB-5msi

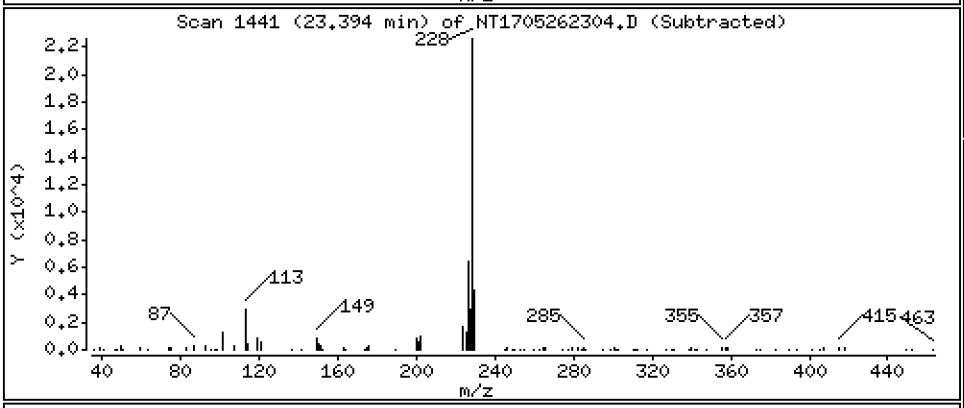
Column diameter: 0.25

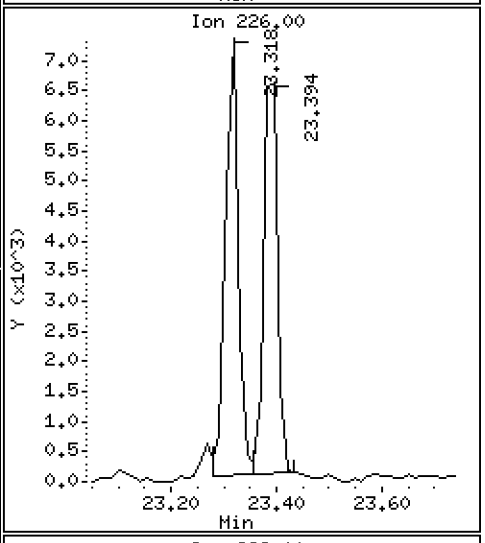
71 Chrysene

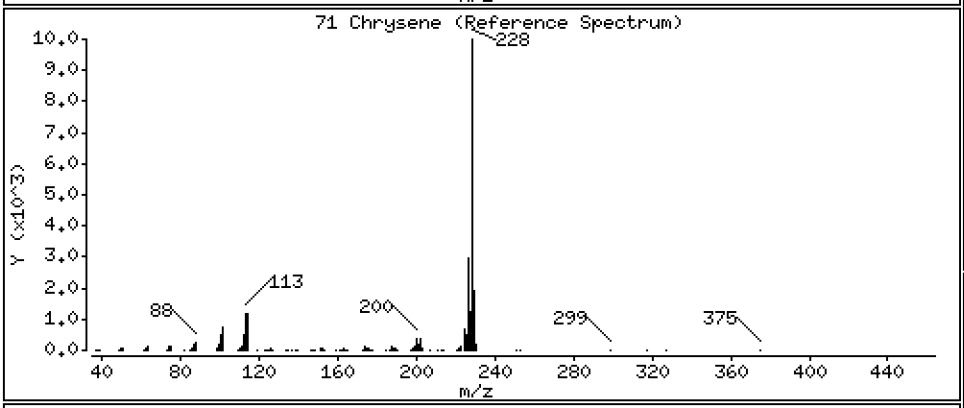
Concentration: 0.2097 ug/mL

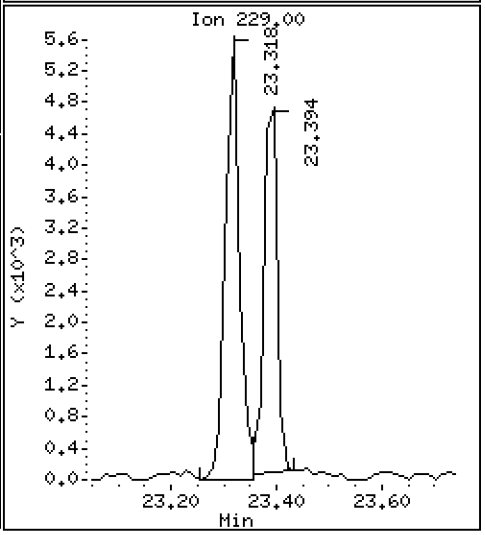


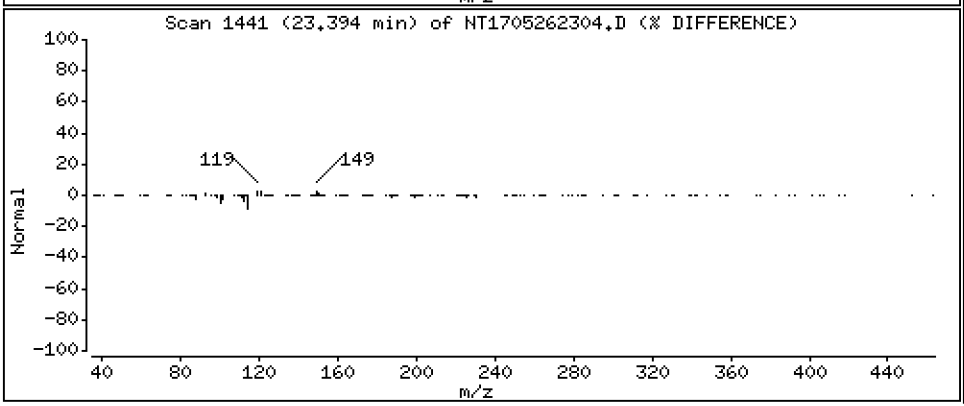












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

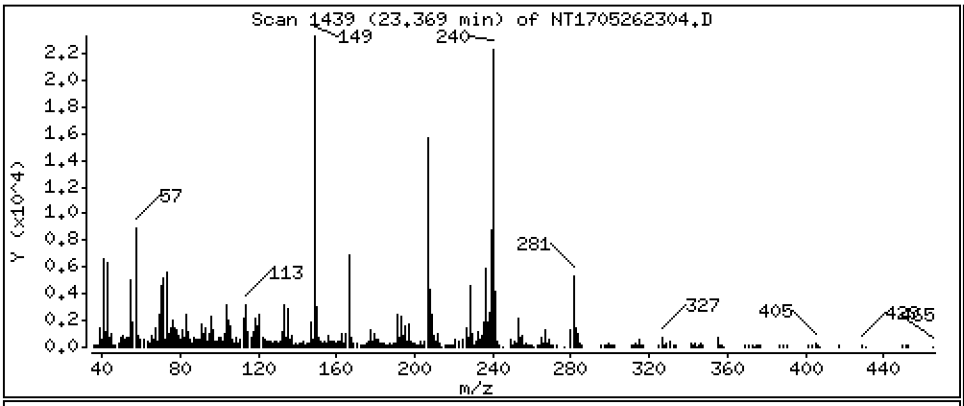
Operator: VTS

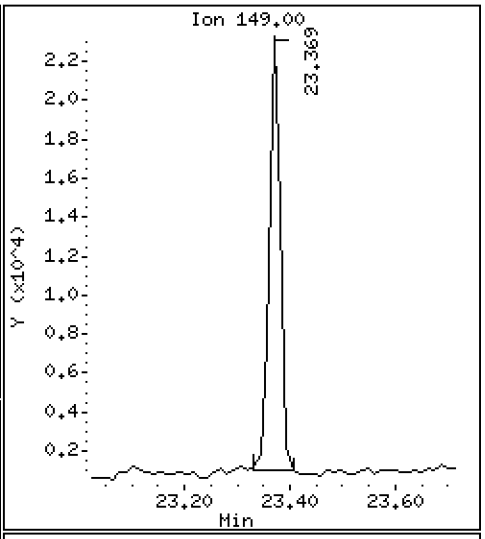
Column phase: ZB-5msi

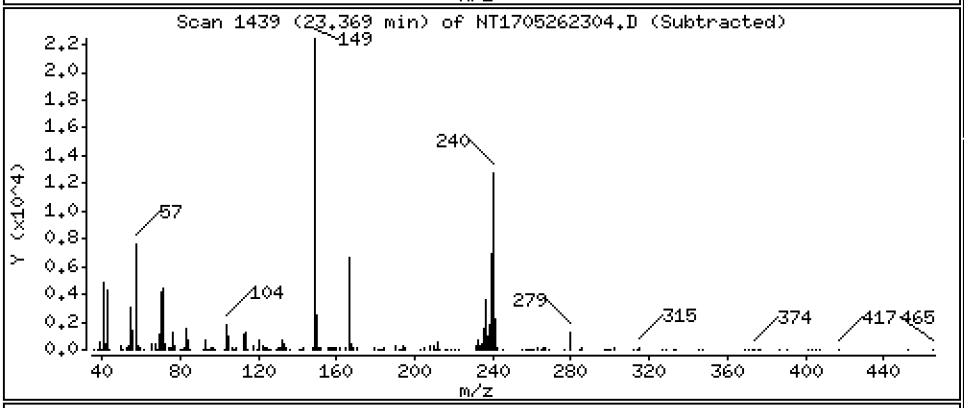
Column diameter: 0.25

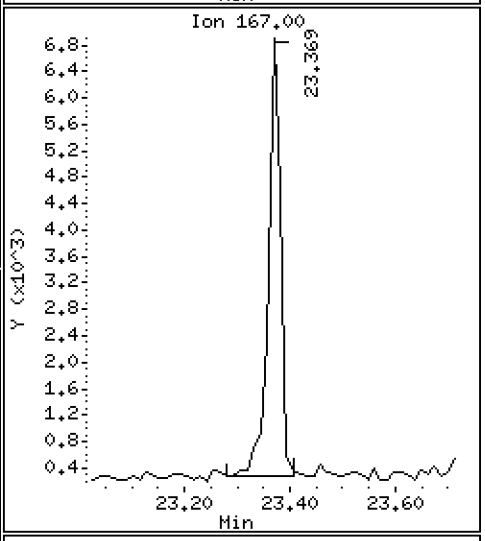
72 bis(2-Ethylhexyl)phthalate

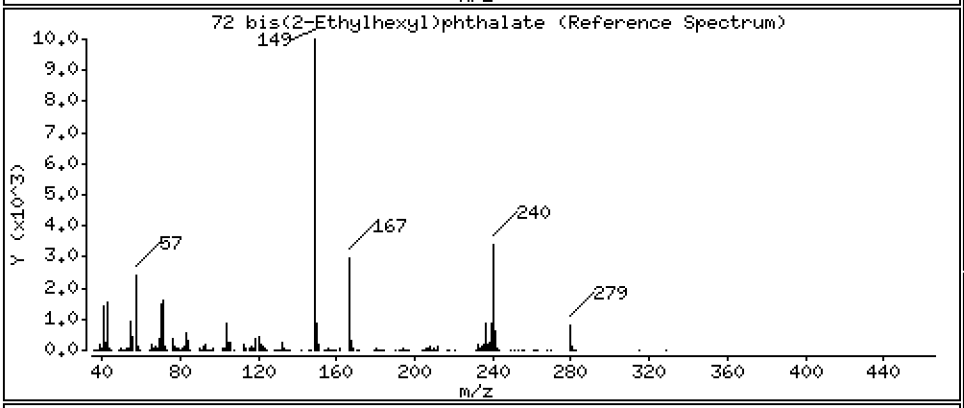
Concentration: 0.1878 ug/mL

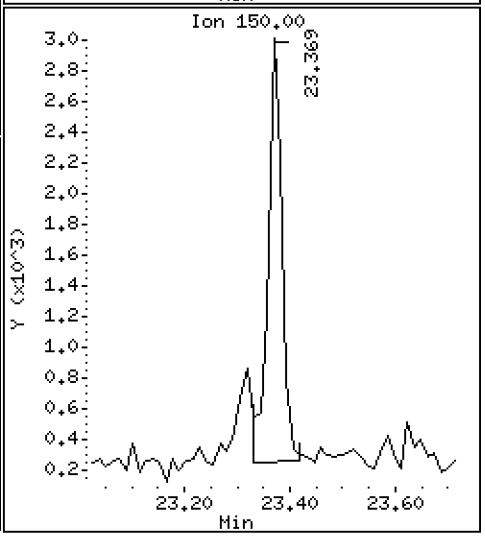


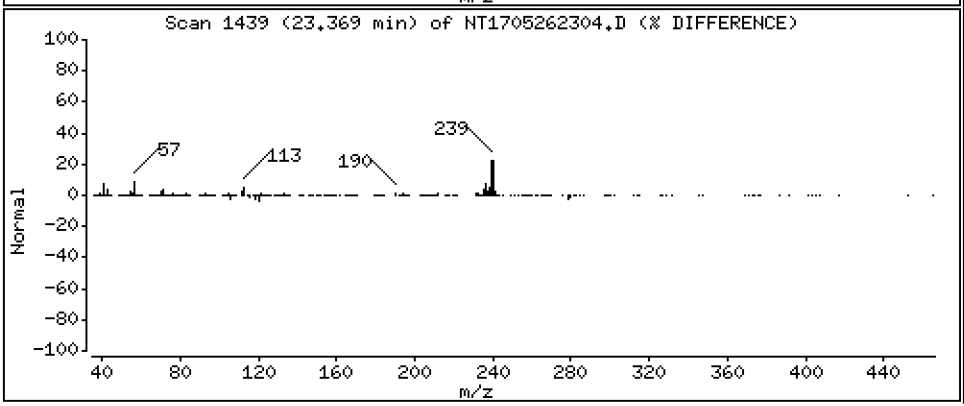












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

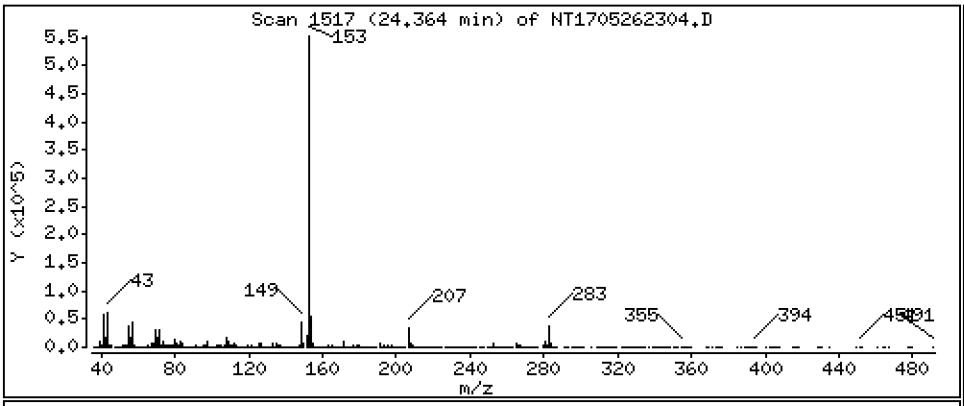
Operator: VTS

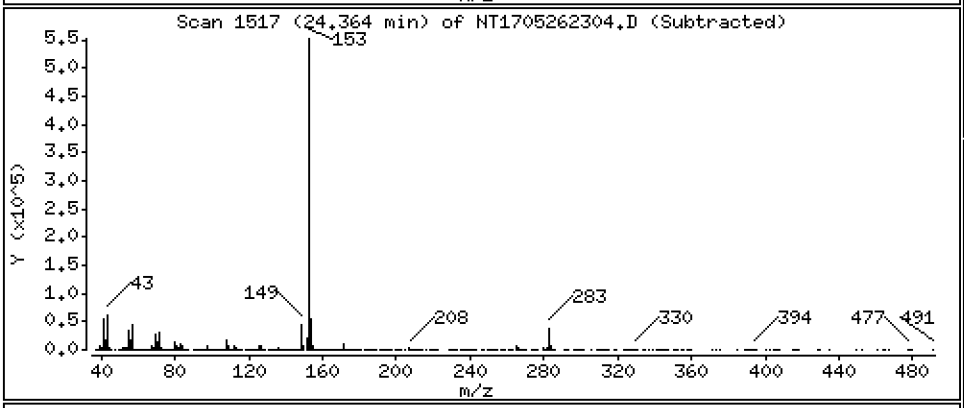
Column phase: ZB-5msi

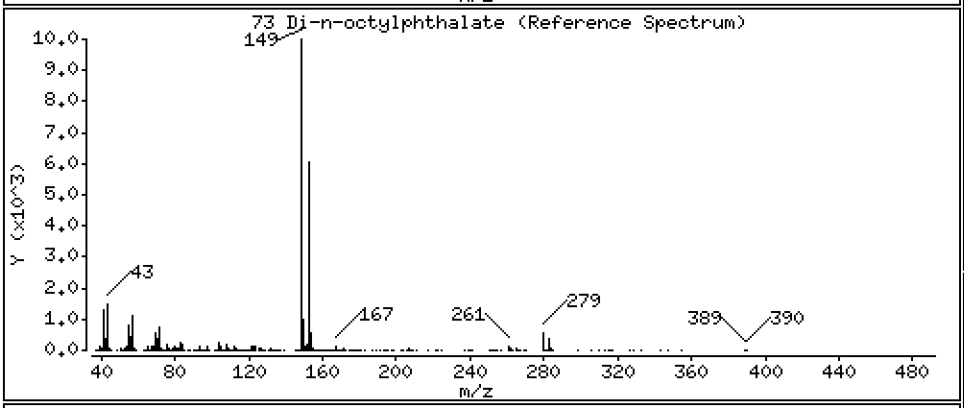
Column diameter: 0.25

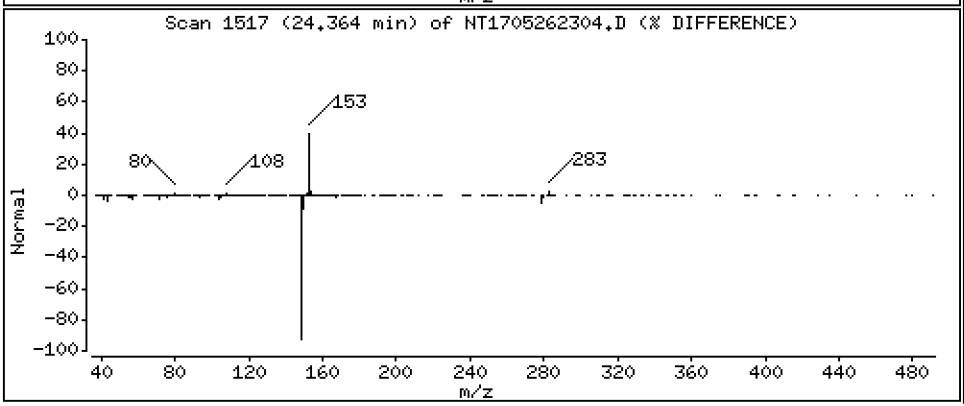
73 Di-n-octylphthalate

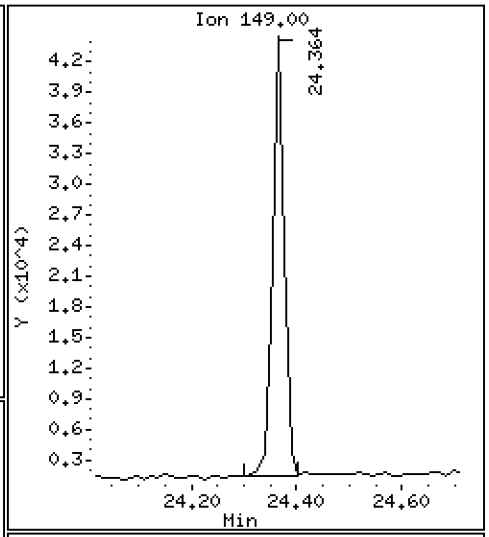
Concentration: 0.2110 ug/mL

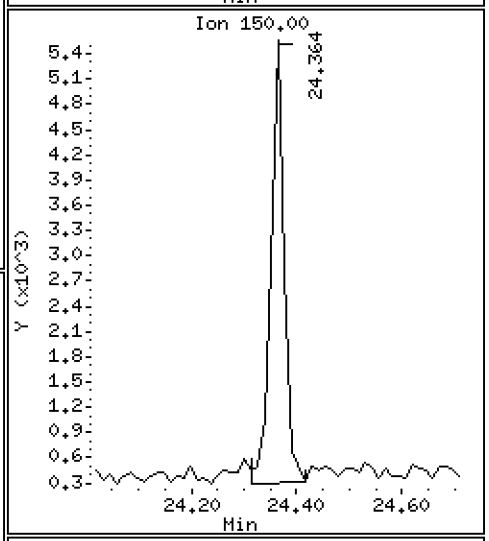


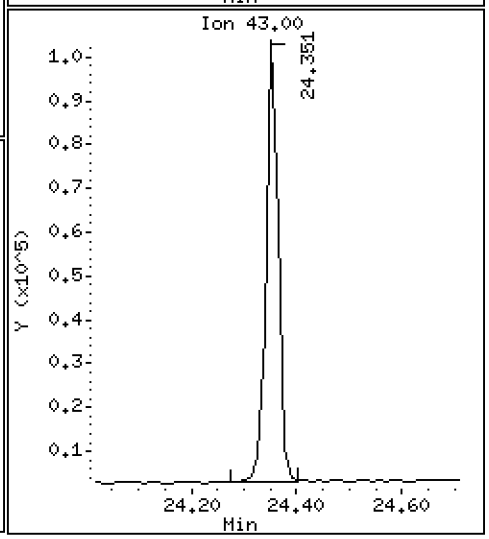












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

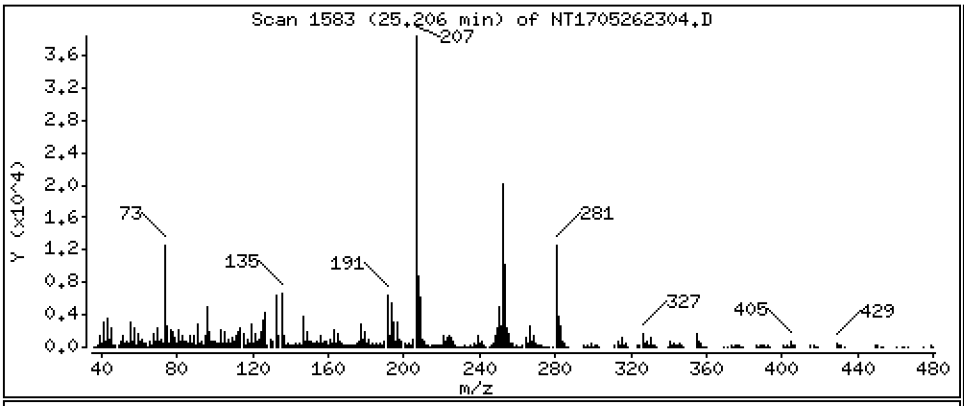
Operator: VTS

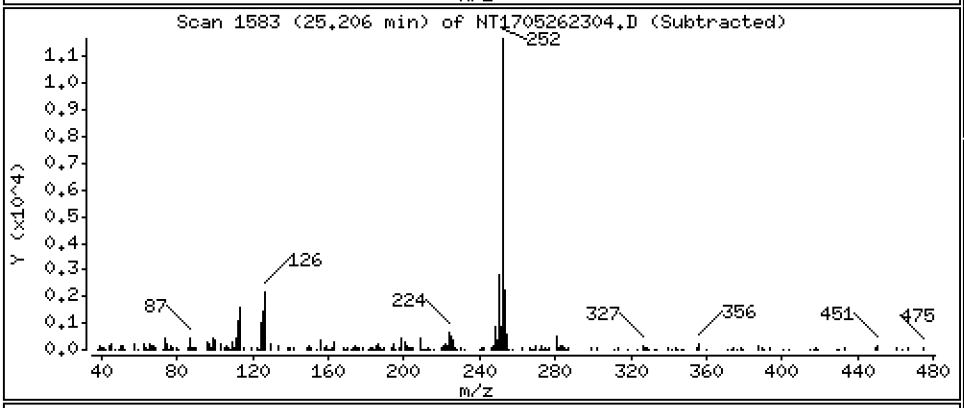
Column phase: ZB-5msi

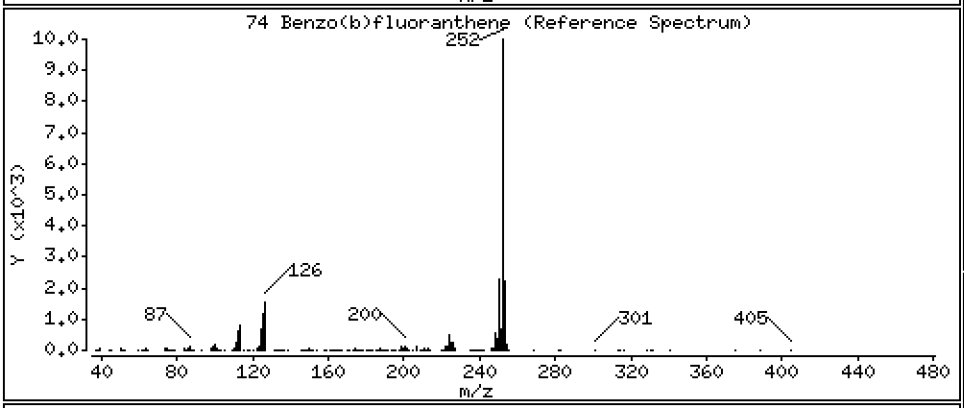
Column diameter: 0.25

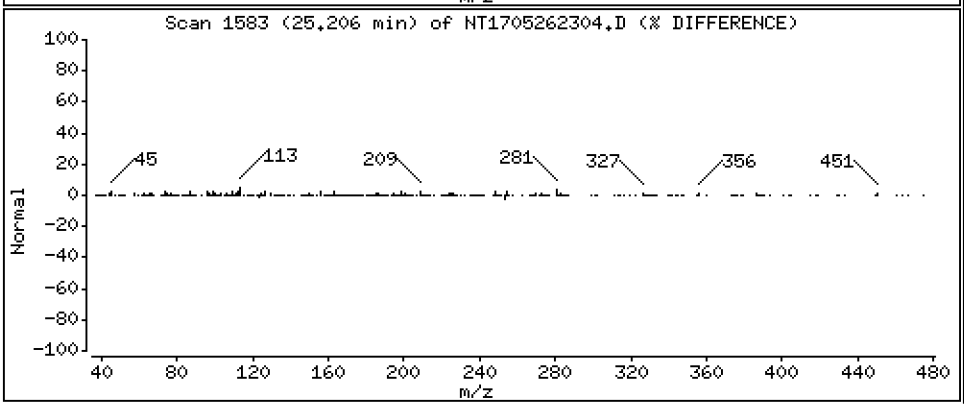
74 Benzo(b)fluoranthene

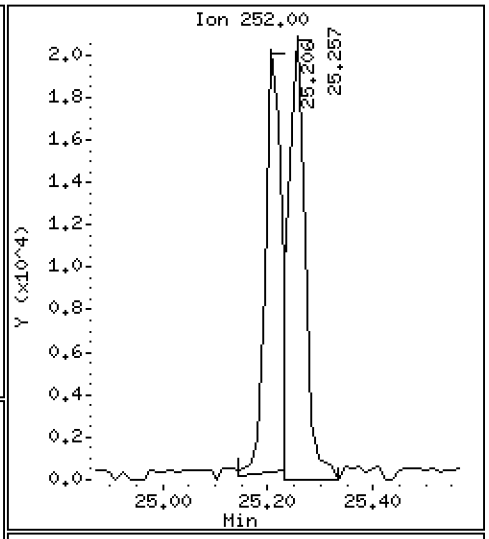
Concentration: 0.1795 ug/mL

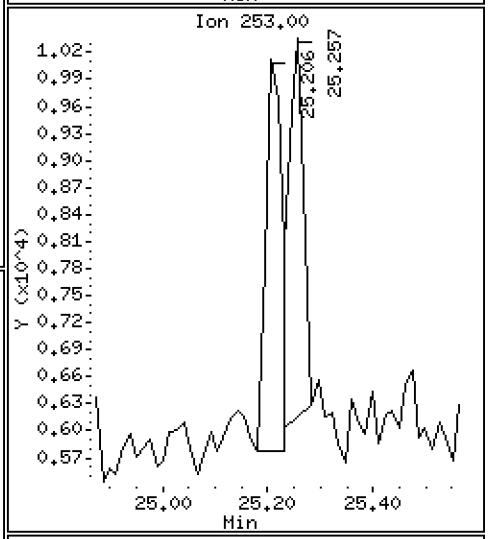


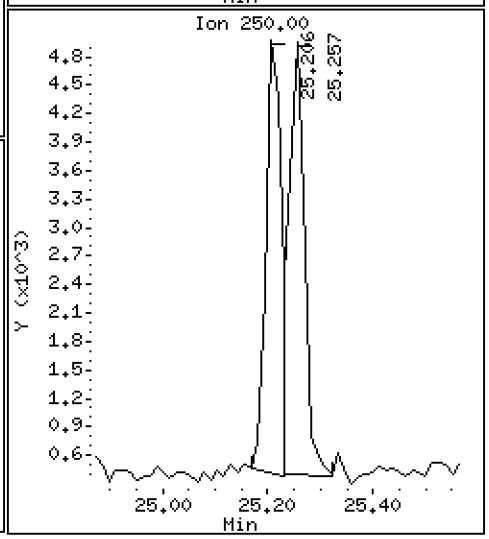












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

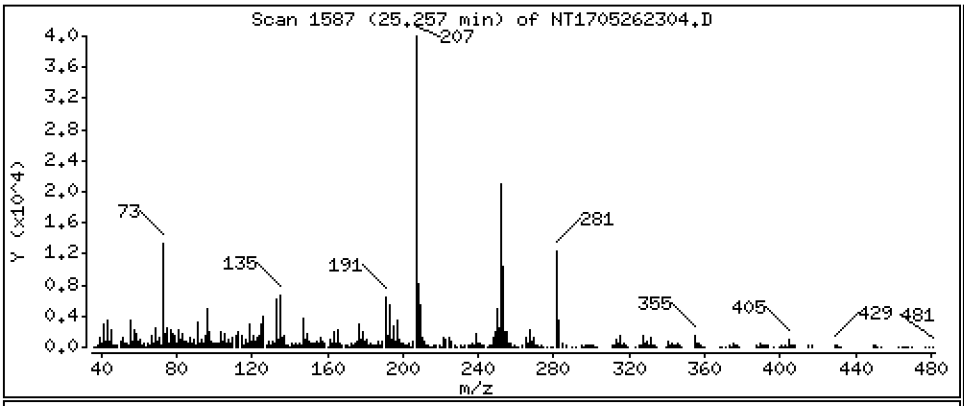
Operator: VTS

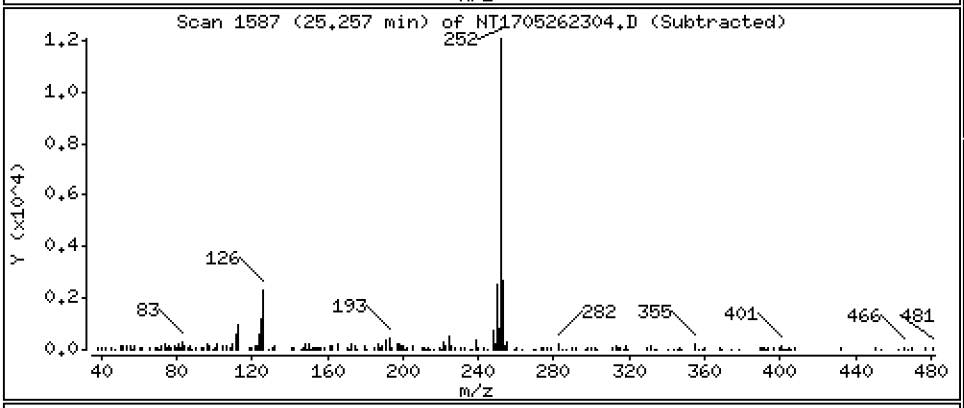
Column phase: ZB-5msi

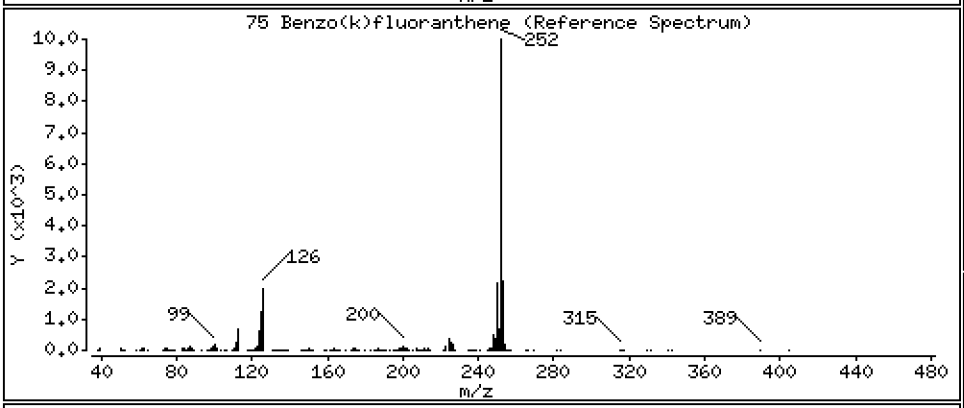
Column diameter: 0.25

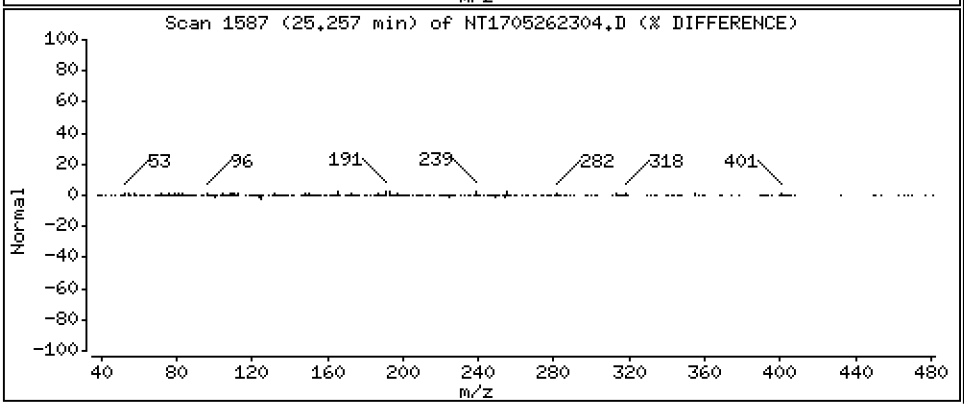
75 Benzo(k)fluoranthene

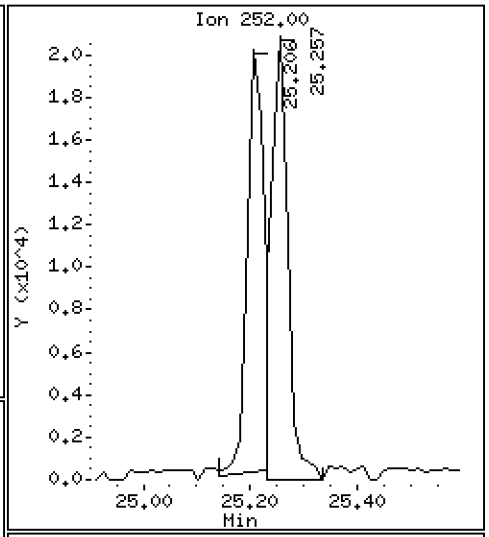
Concentration: 0.2115 ug/mL

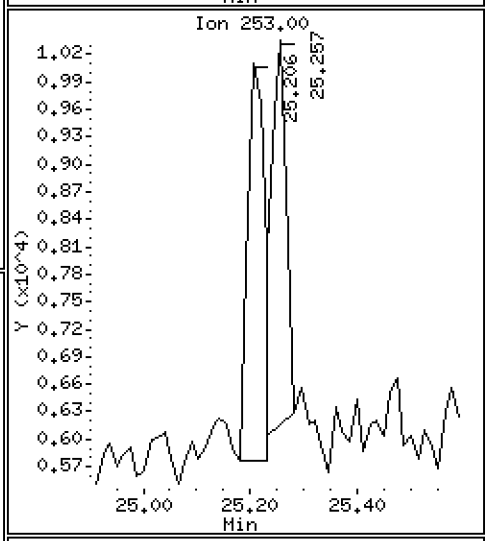


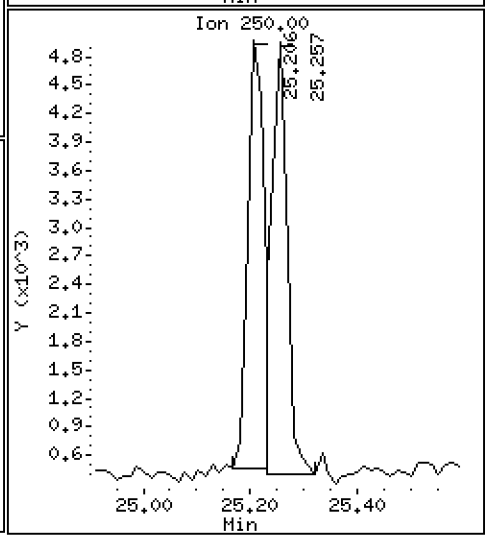












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

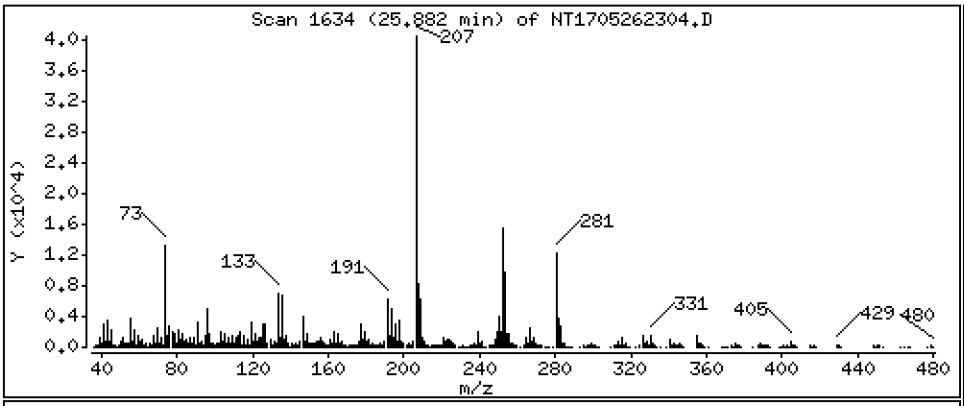
Operator: VTS

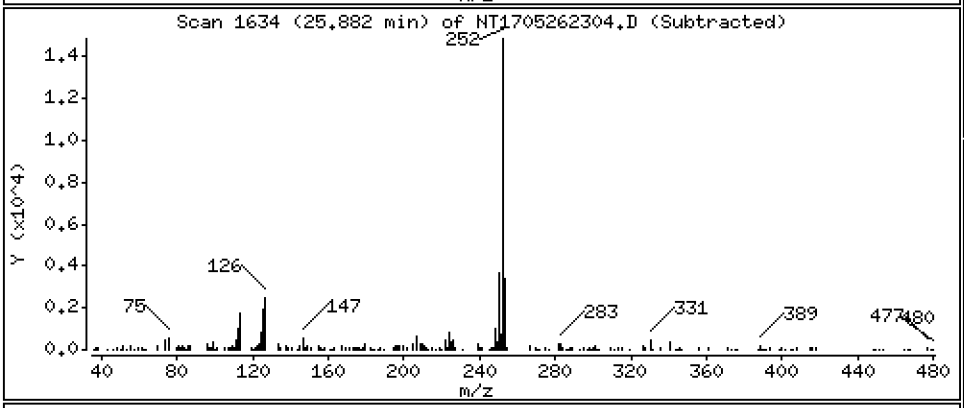
Column phase: ZB-5msi

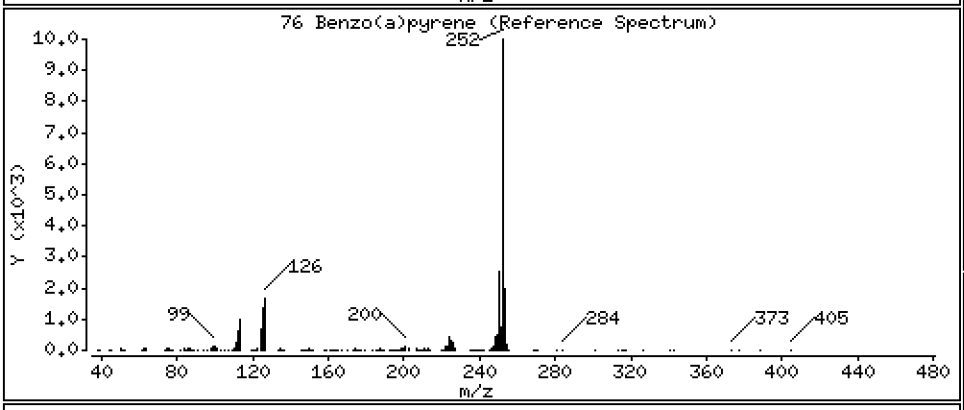
Column diameter: 0.25

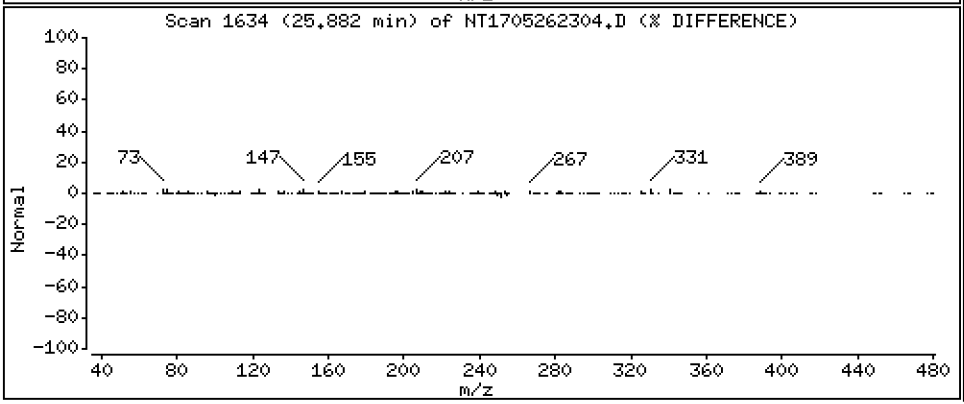
76 Benzo(a)pyrene

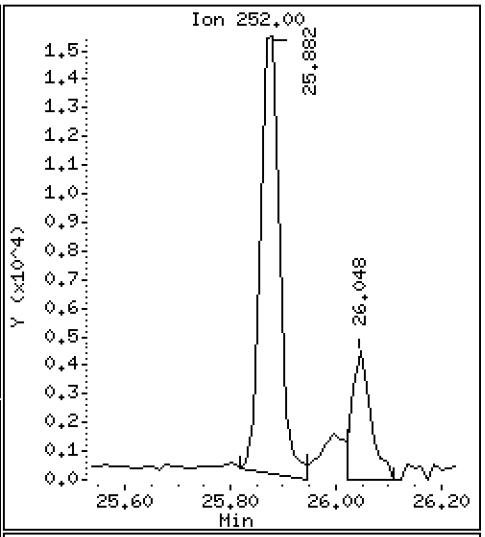
Concentration: 0.2040 ug/mL

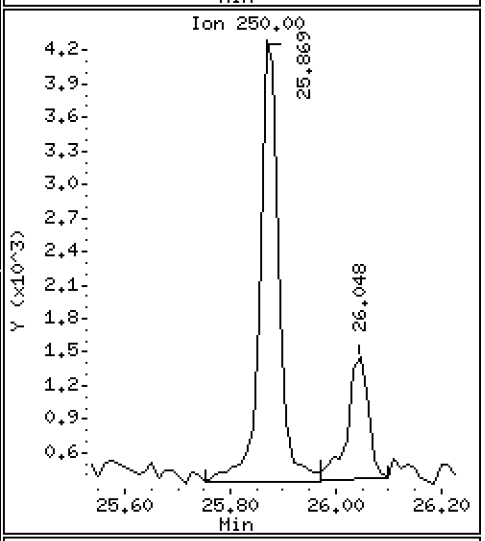


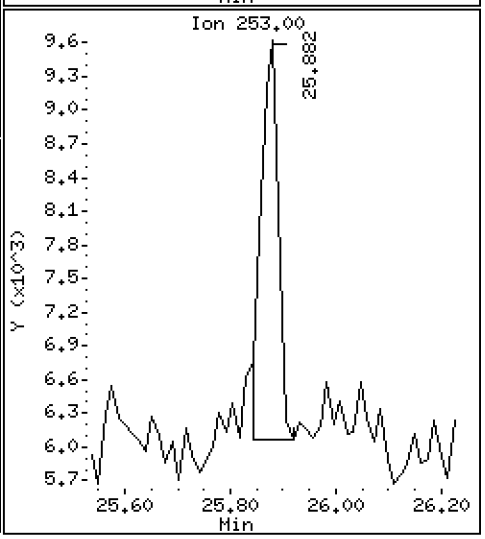












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

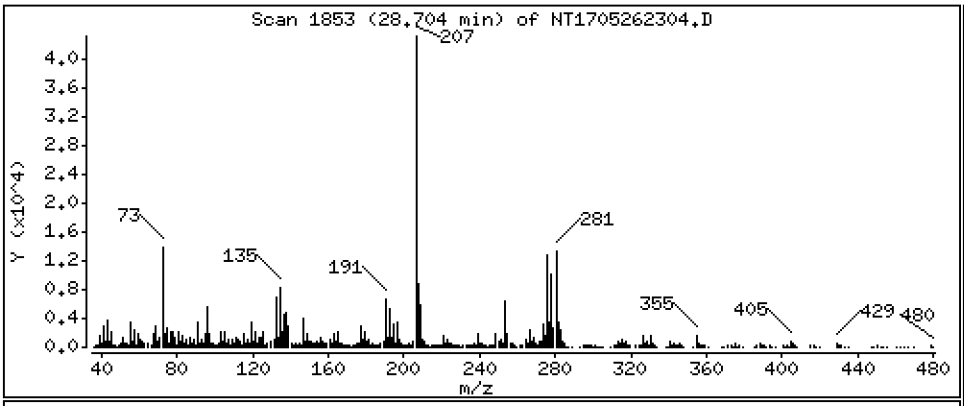
Operator: VTS

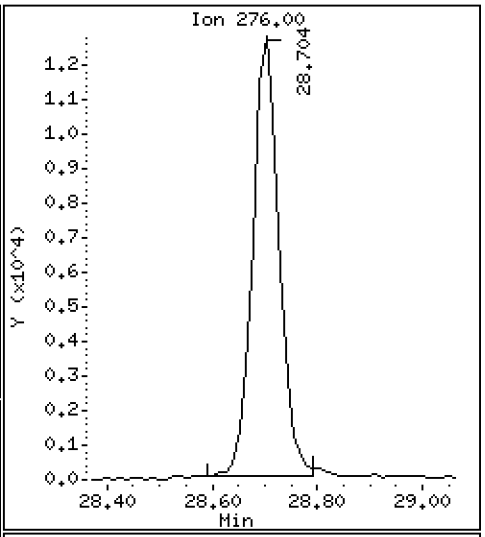
Column phase: ZB-5msi

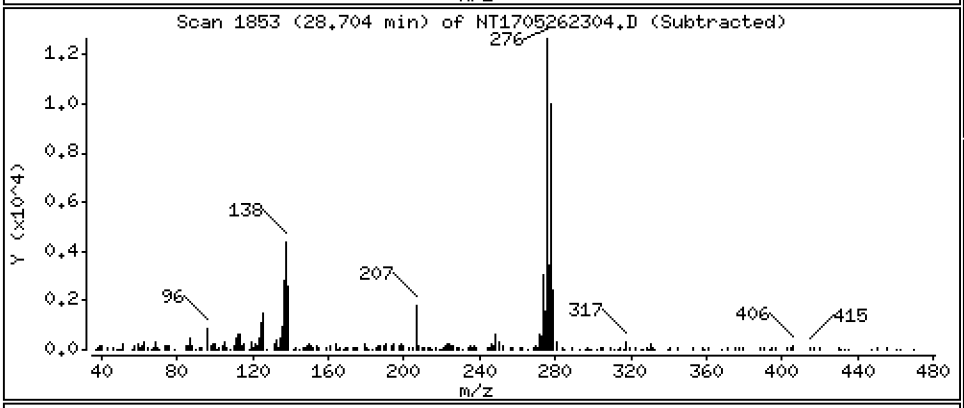
Column diameter: 0.25

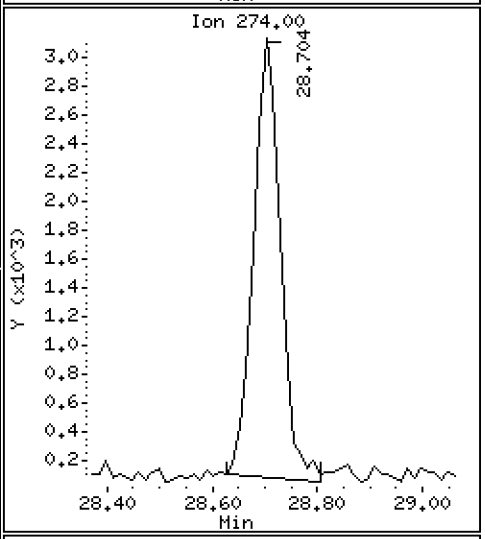
78 Indeno(1,2,3-cd)pyrene

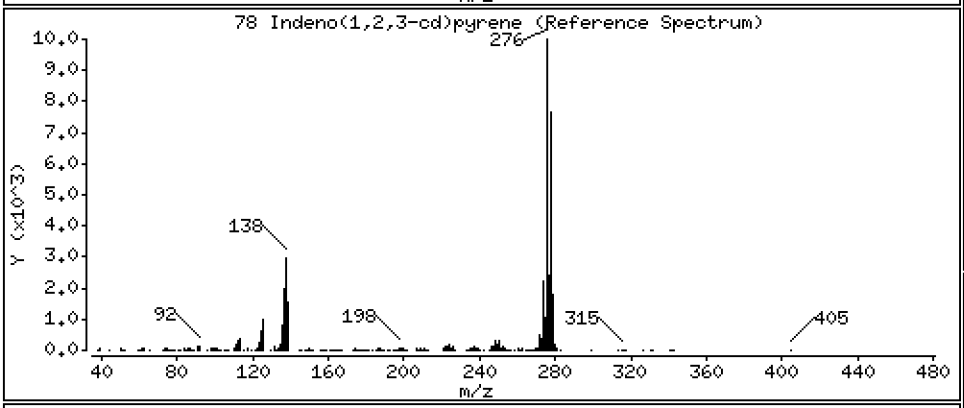
Concentration: 0.1978 ug/mL

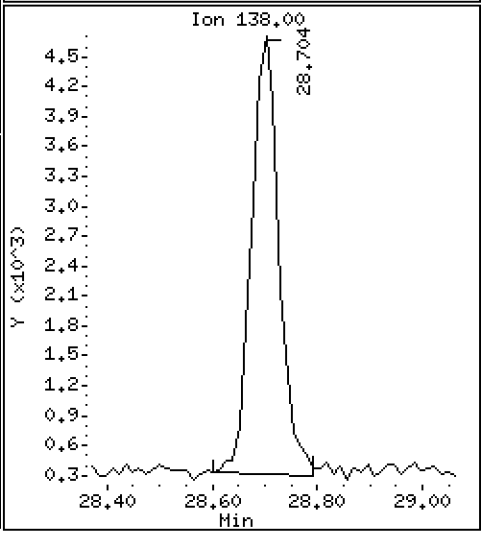


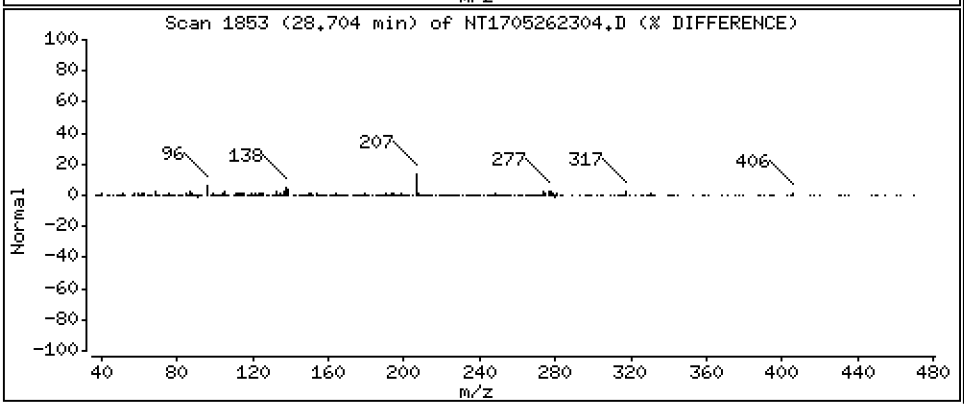












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

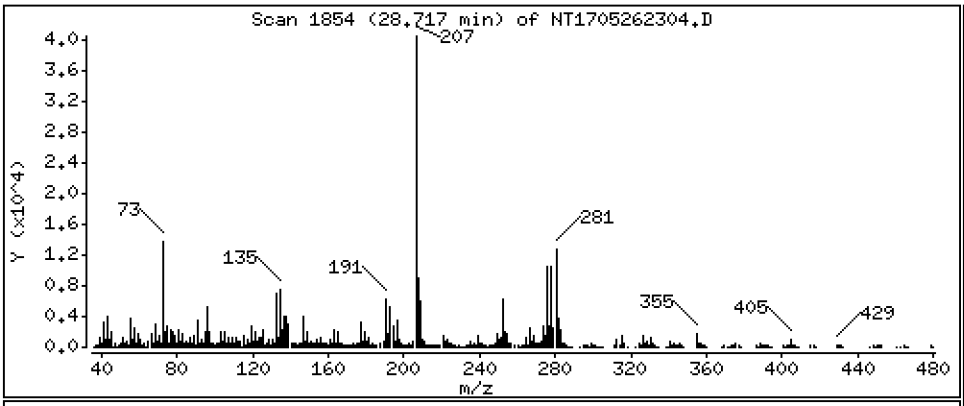
Operator: VTS

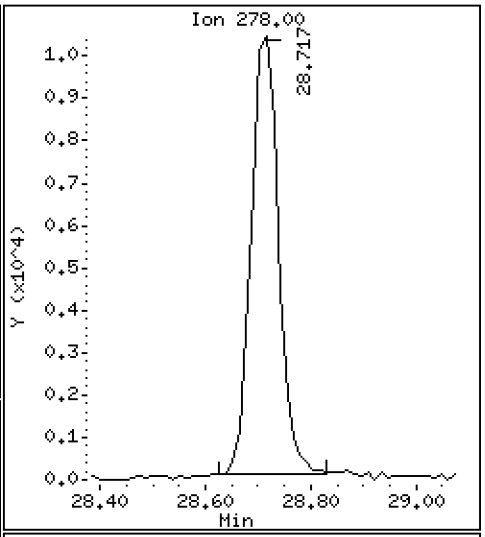
Column phase: ZB-5msi

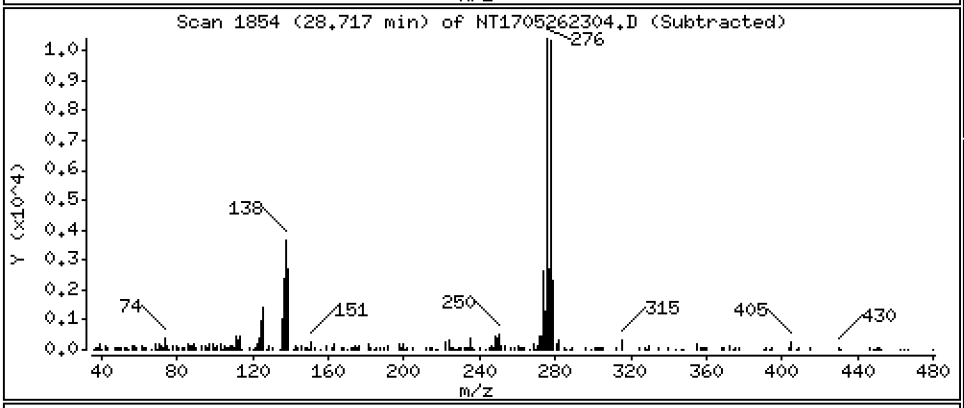
Column diameter: 0.25

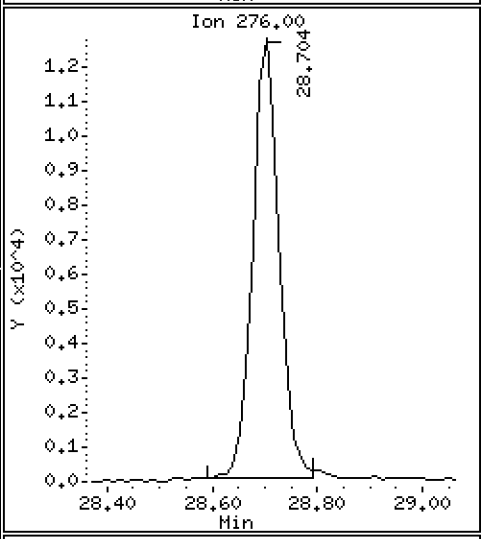
79 Dibenzo(a,h)anthracene

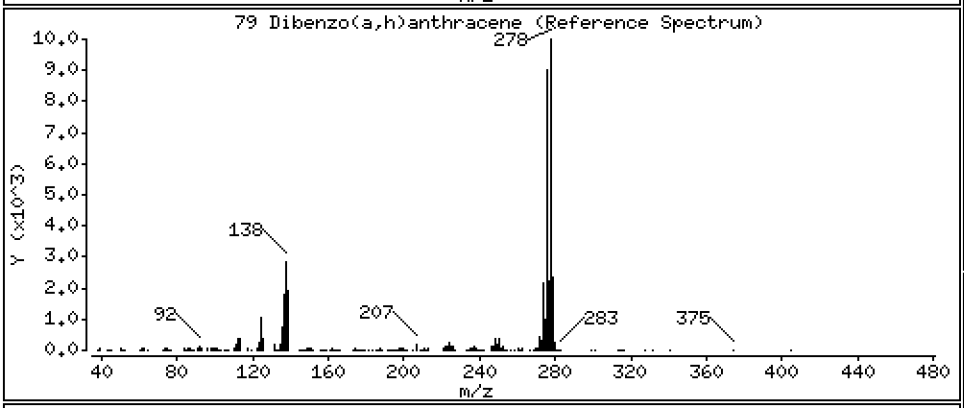
Concentration: 0.1955 ug/mL

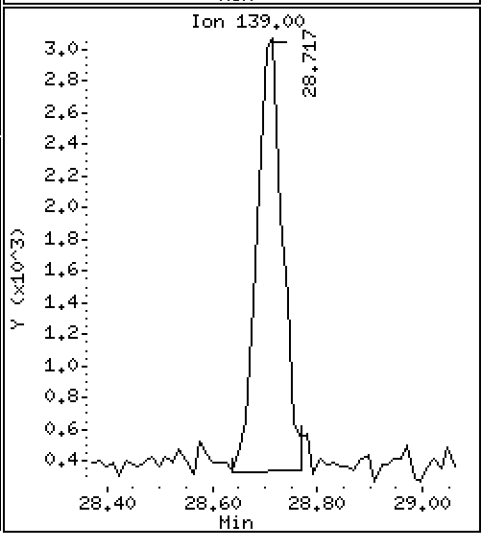


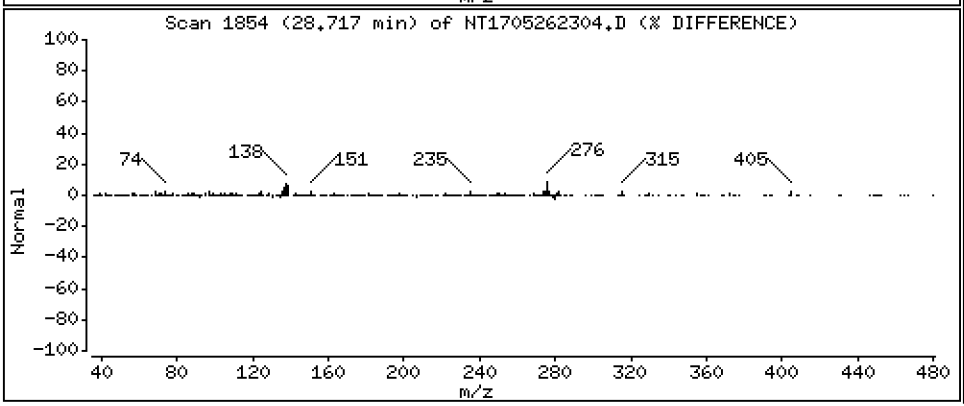












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

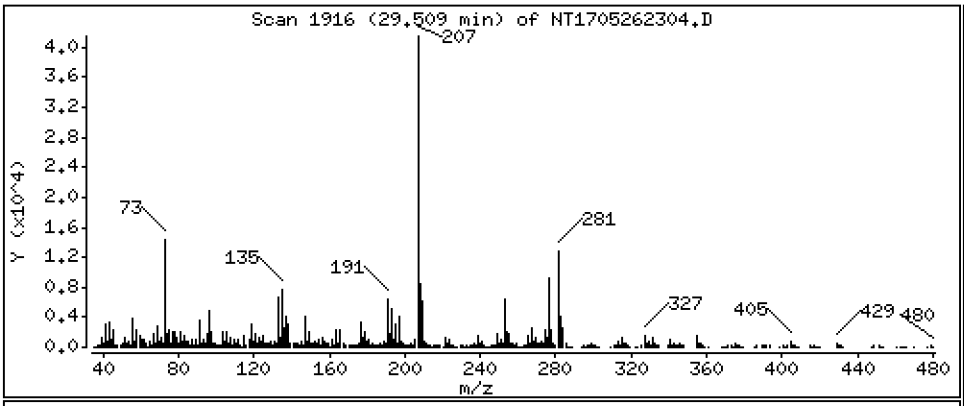
Operator: VTS

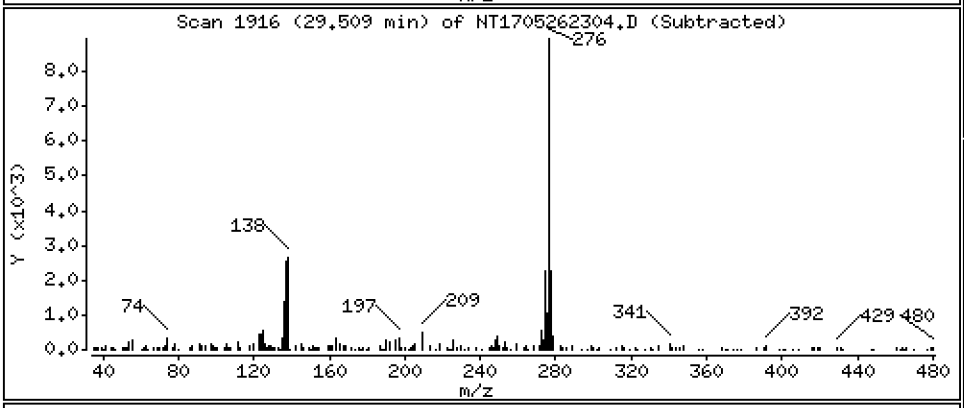
Column phase: ZB-5msi

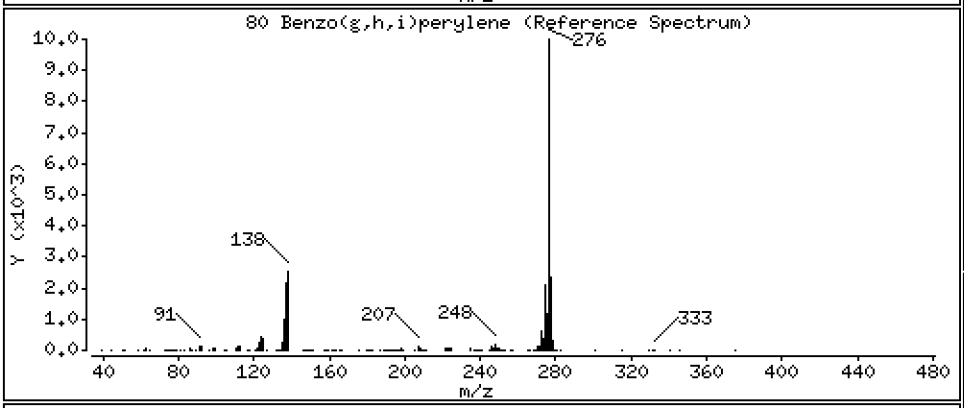
Column diameter: 0.25

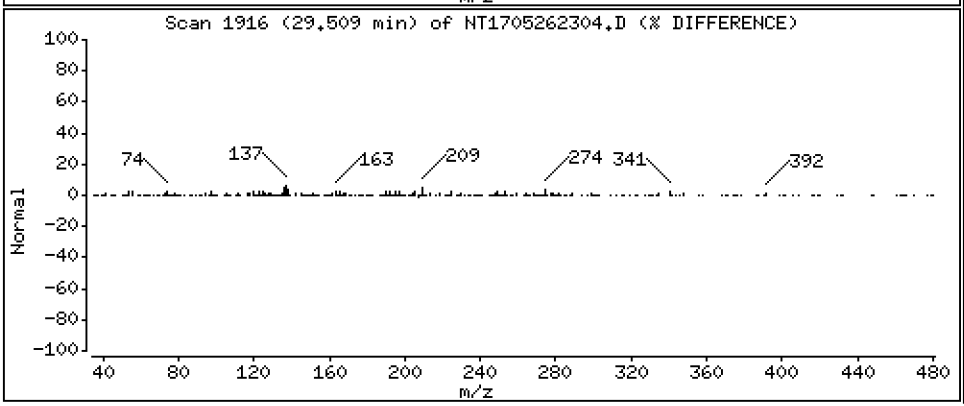
80 Benzo(g,h,i)perylene

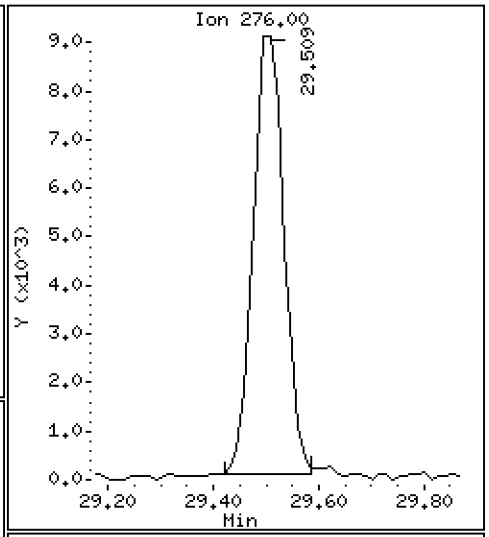
Concentration: 0.1959 ug/mL

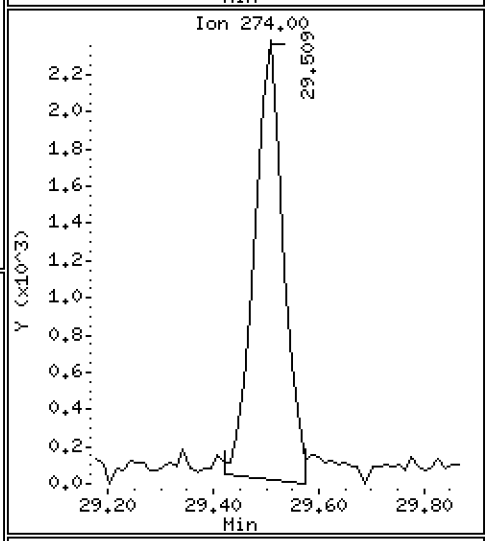


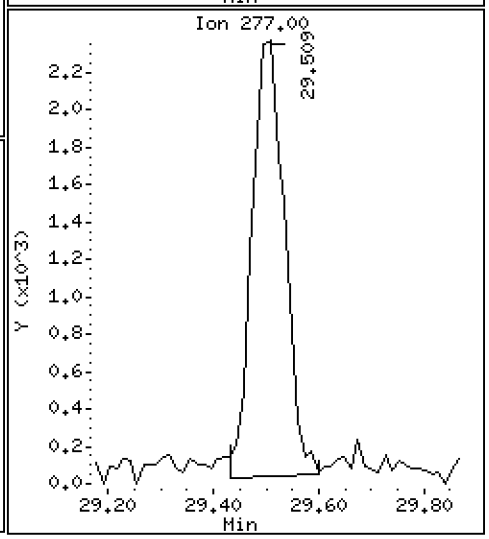












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

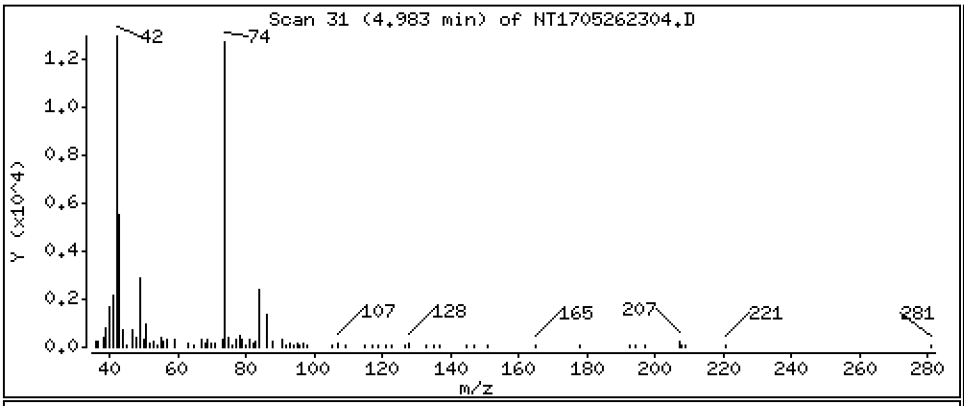
Operator: VTS

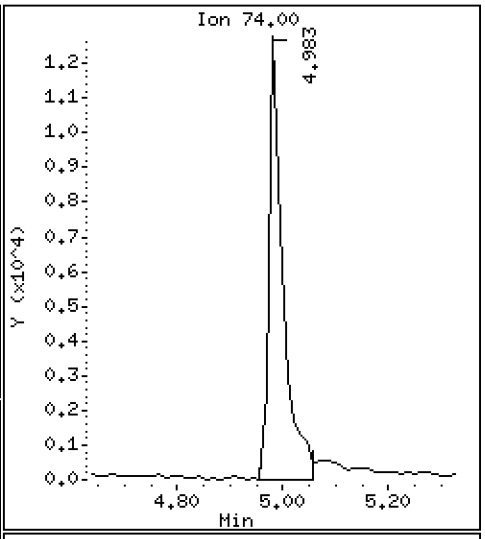
Column phase: ZB-5msi

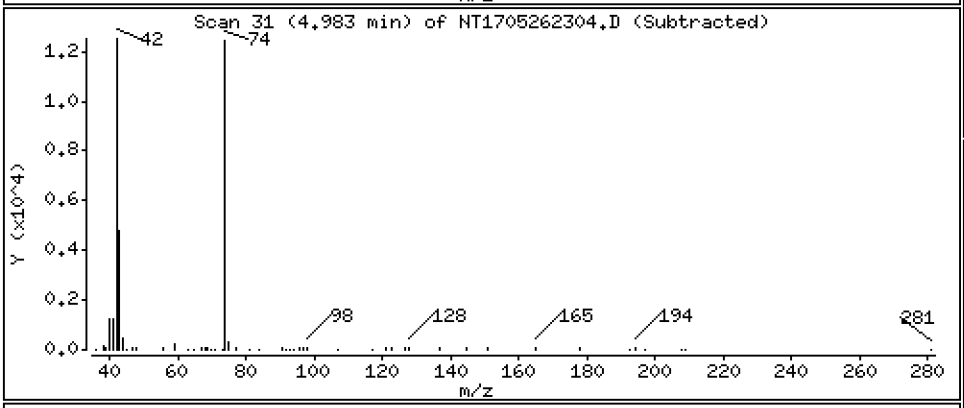
Column diameter: 0.25

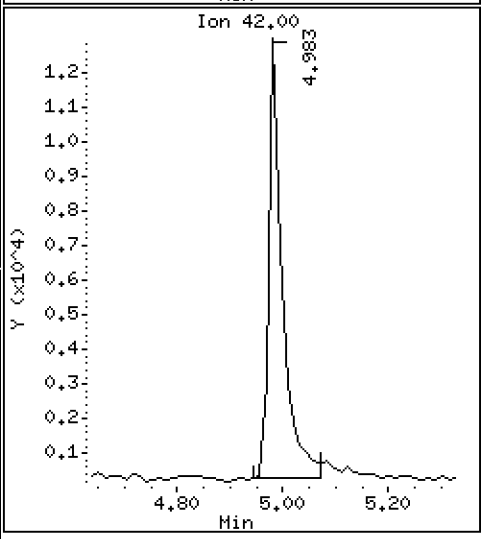
90 N-Nitrosodimethylamine

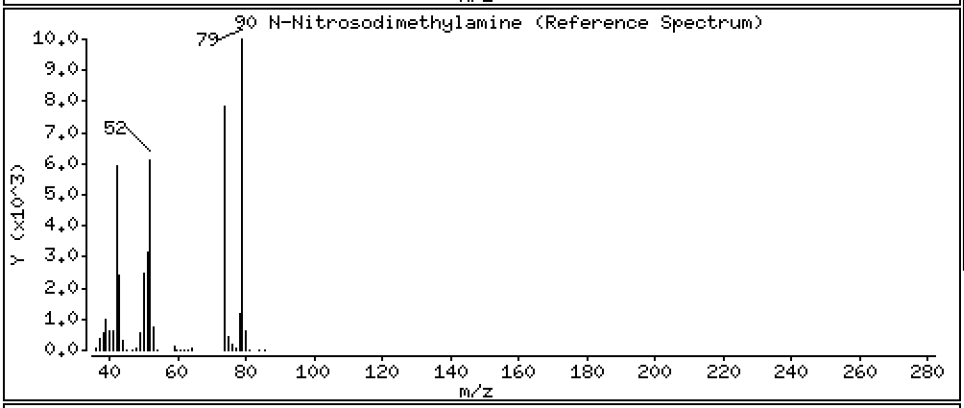
Concentration: 0.3325 ug/mL

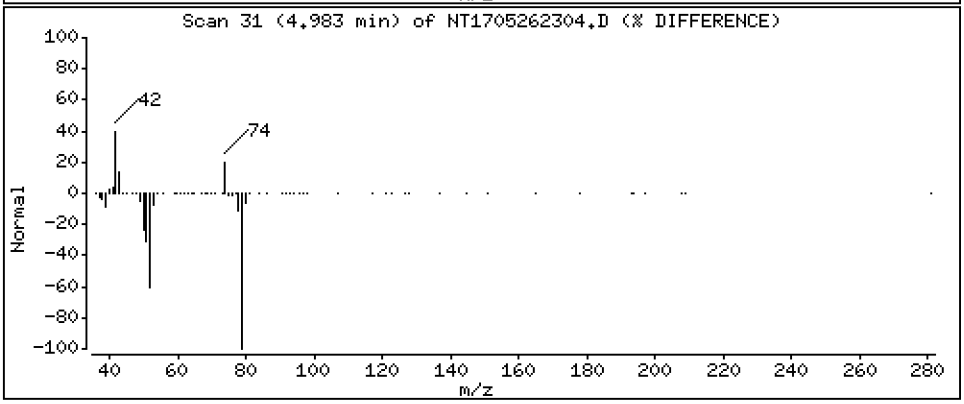












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

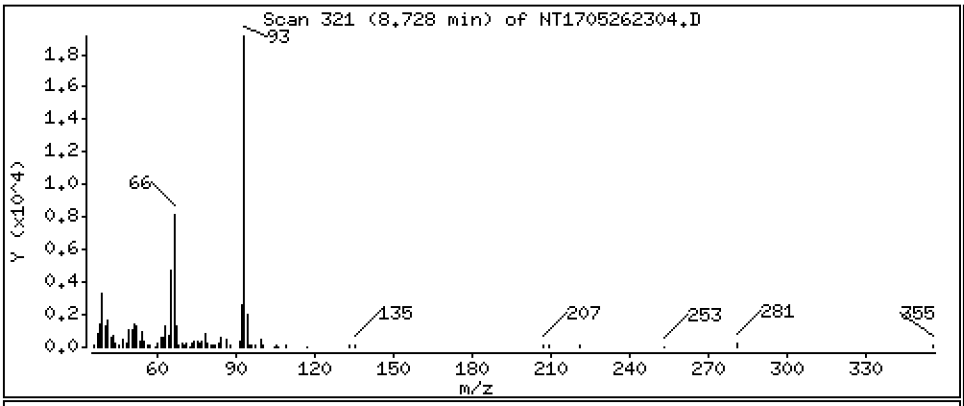
Operator: VTS

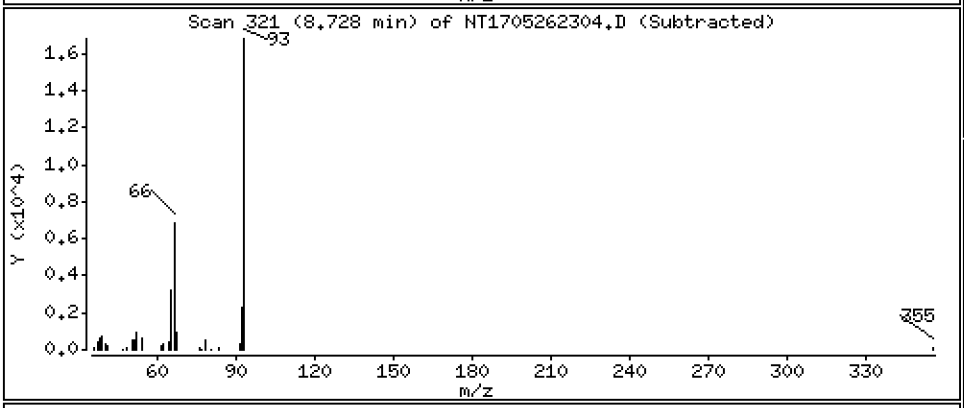
Column phase: ZB-5msi

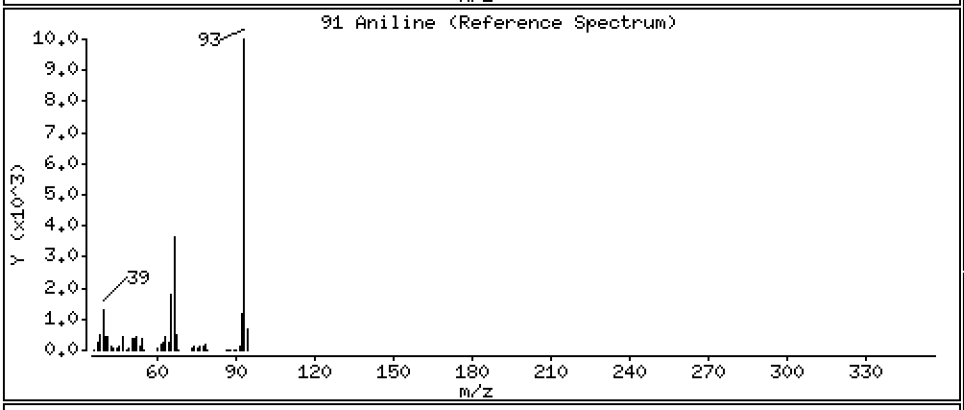
Column diameter: 0.25

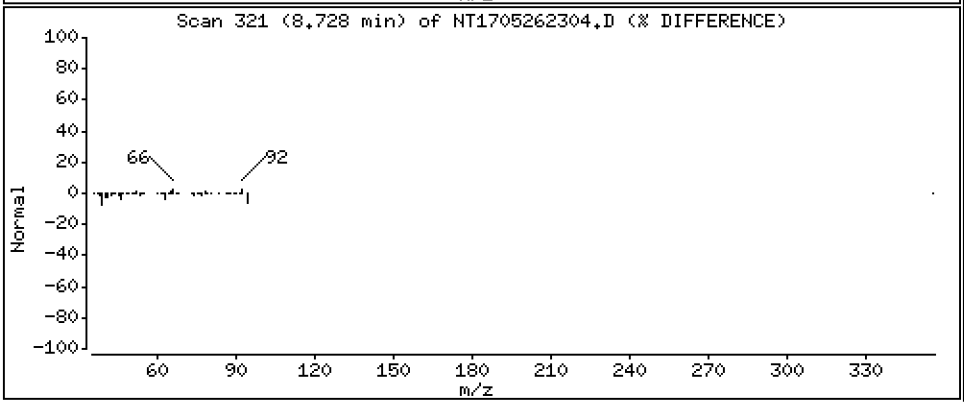
91 Aniline

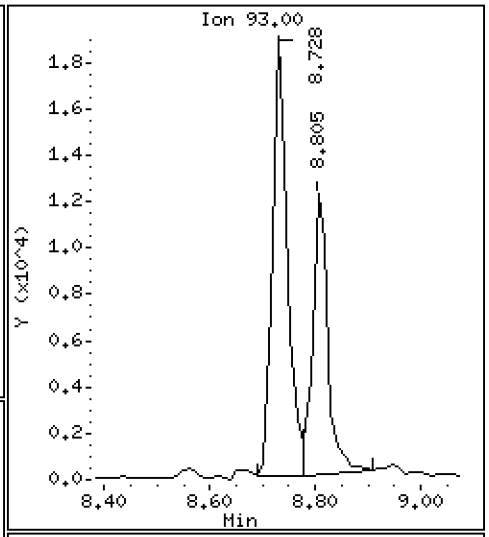
Concentration: 0.3170 ug/mL

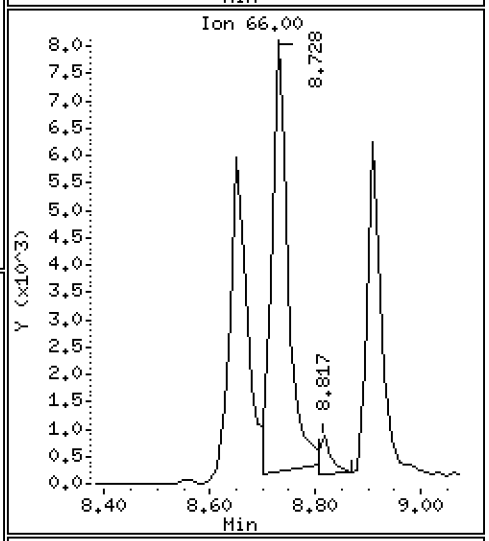


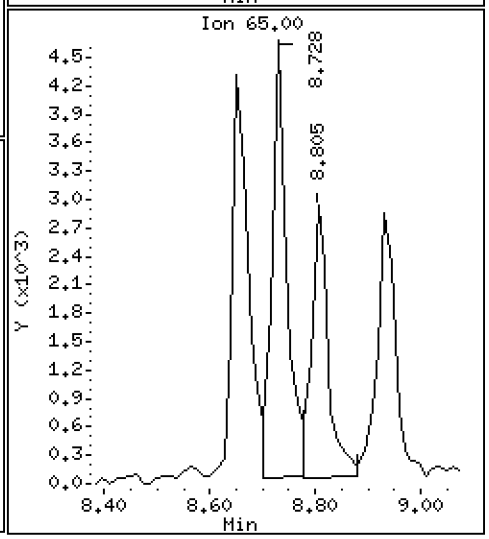












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

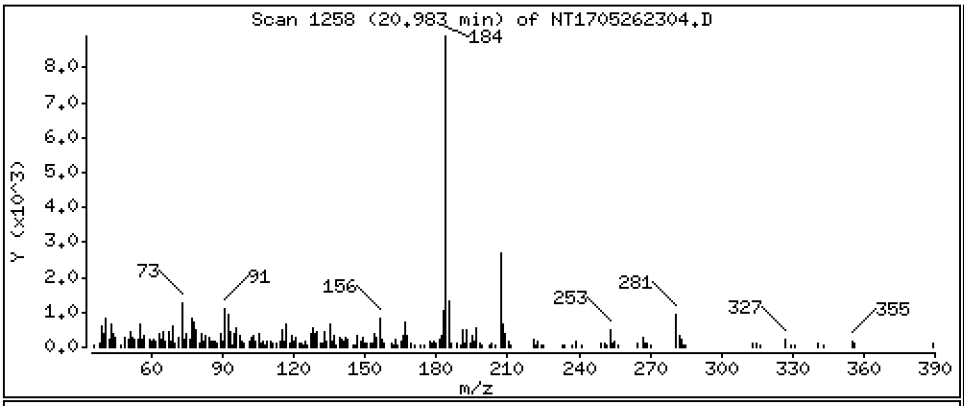
Operator: VTS

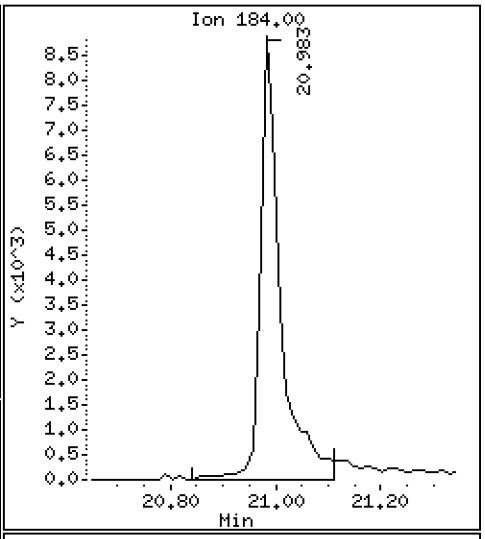
Column phase: ZB-5msi

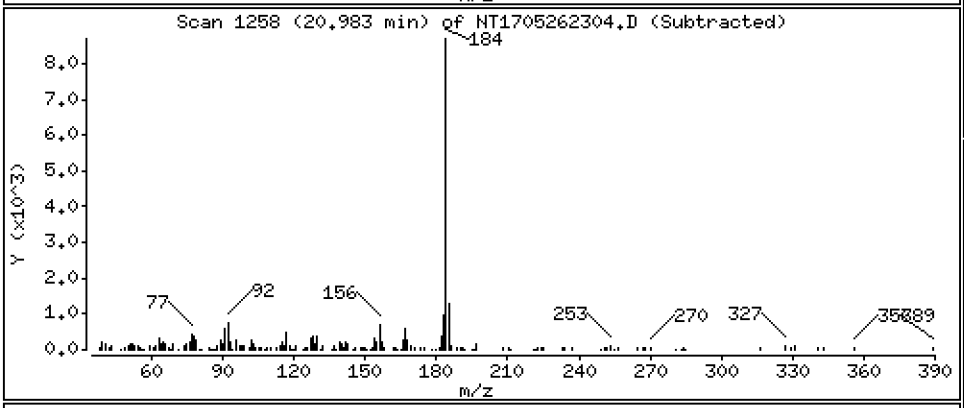
Column diameter: 0.25

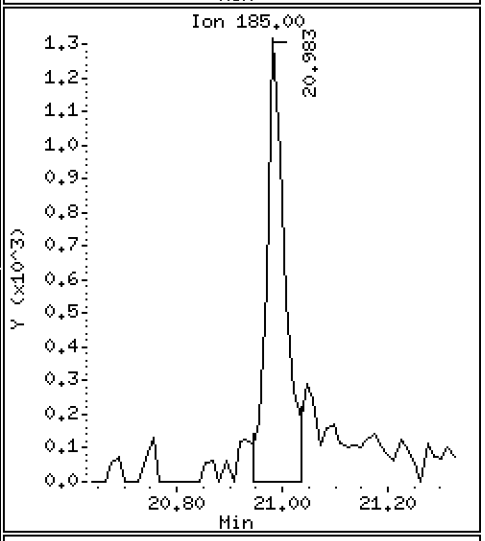
93 Benzidine

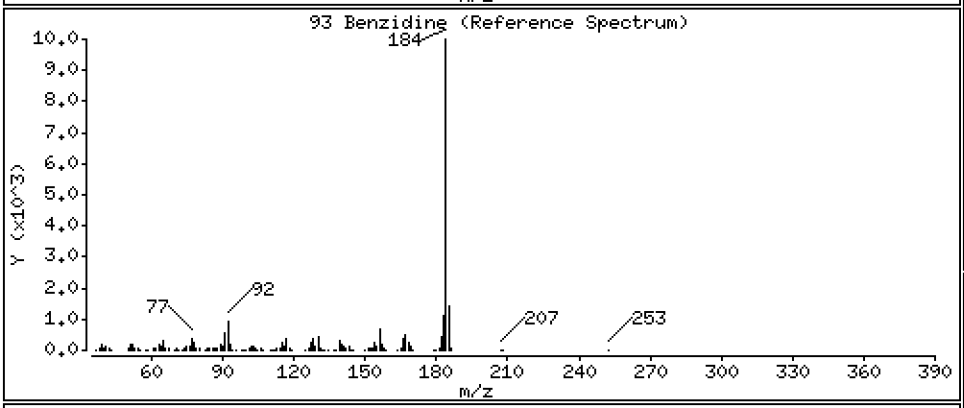
Concentration: 0.3413 ug/mL

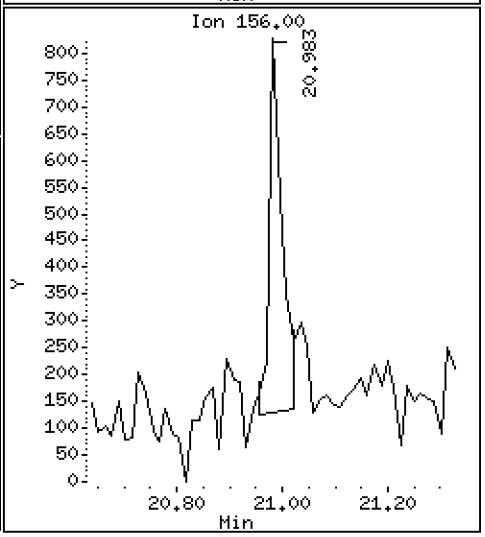


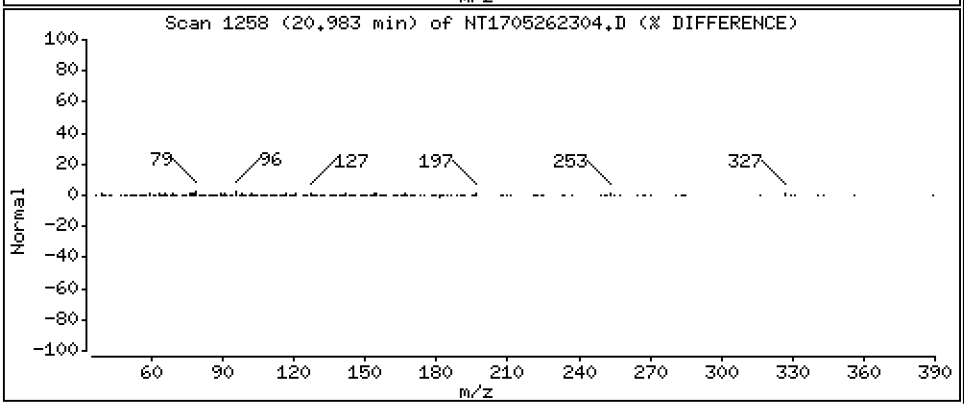












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

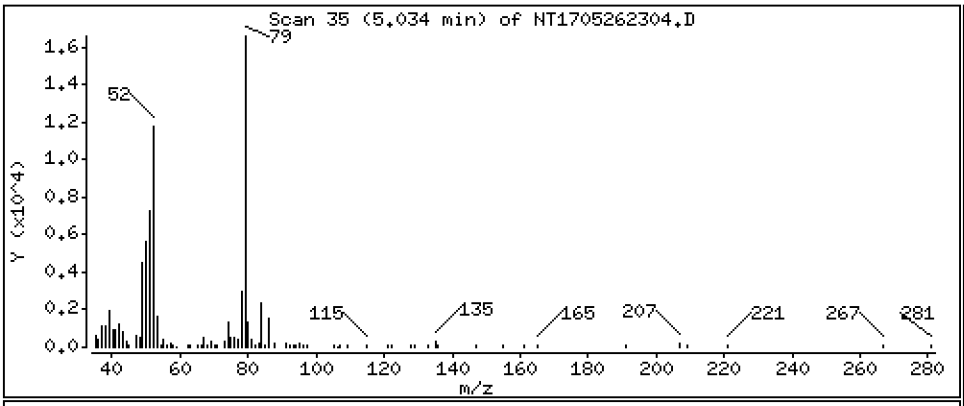
Operator: VTS

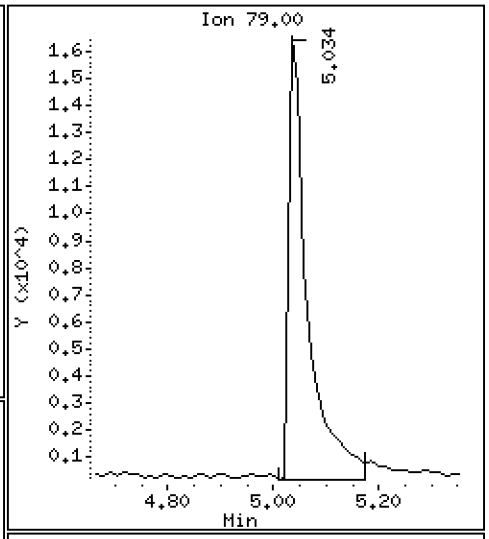
Column phase: ZB-5msi

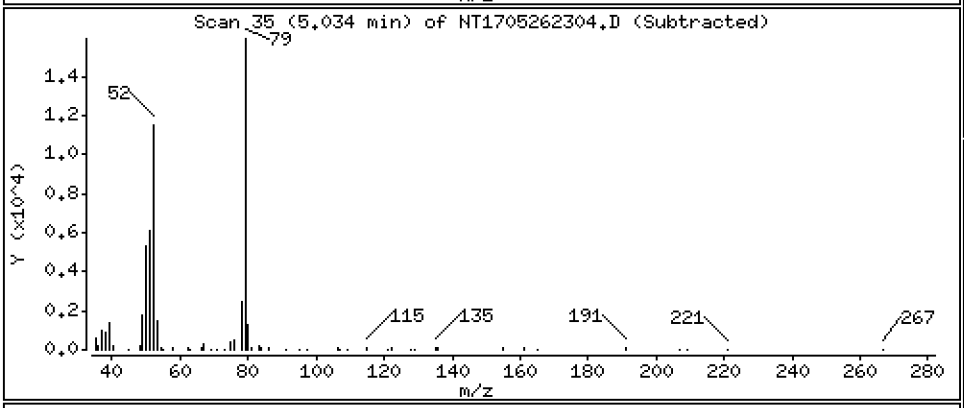
Column diameter: 0.25

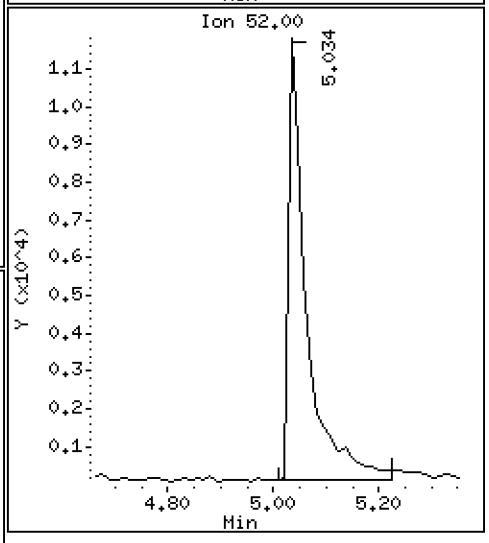
103 Pyridine

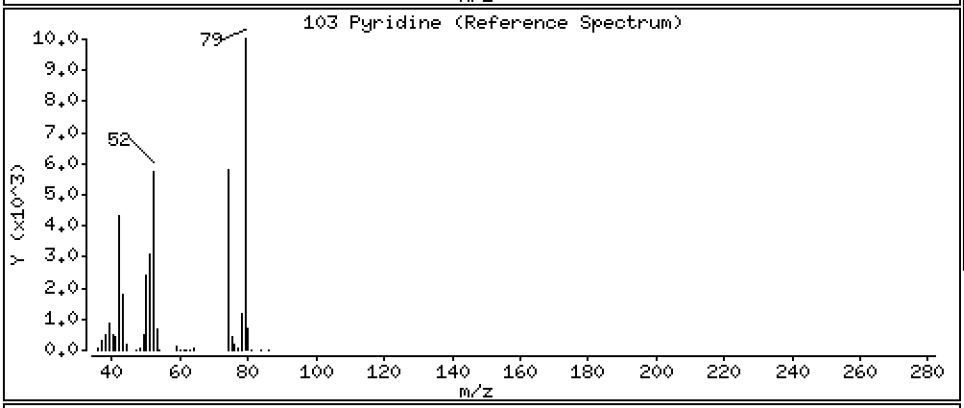
Concentration: 0.3879 ug/mL

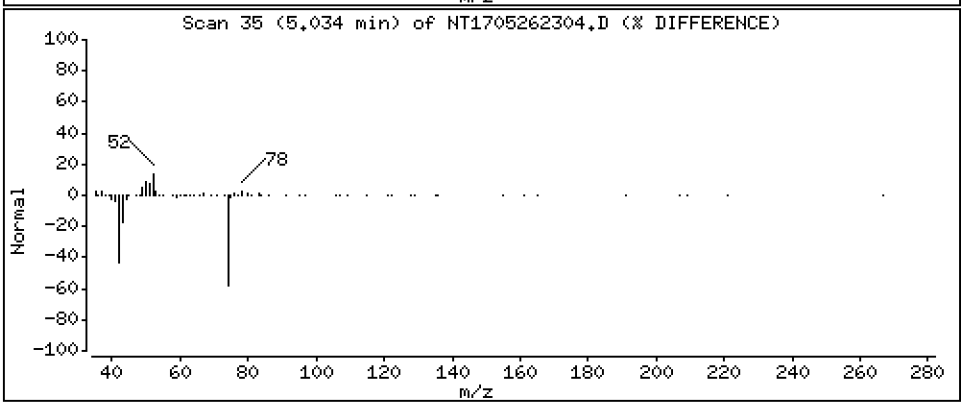












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

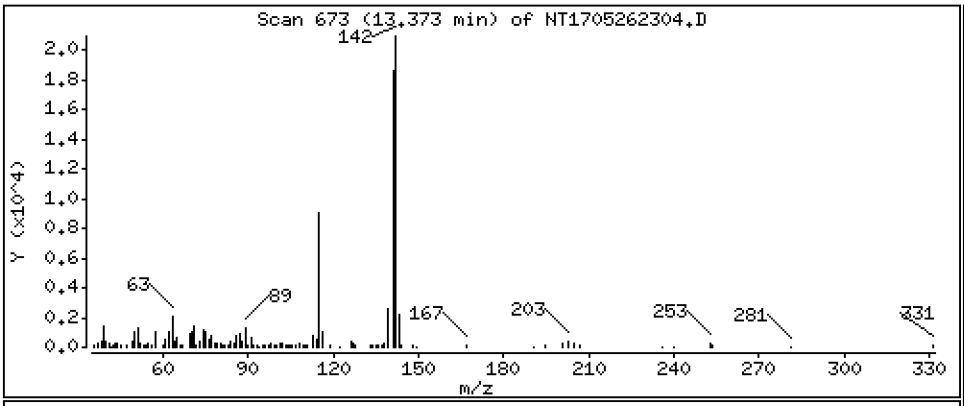
Operator: VTS

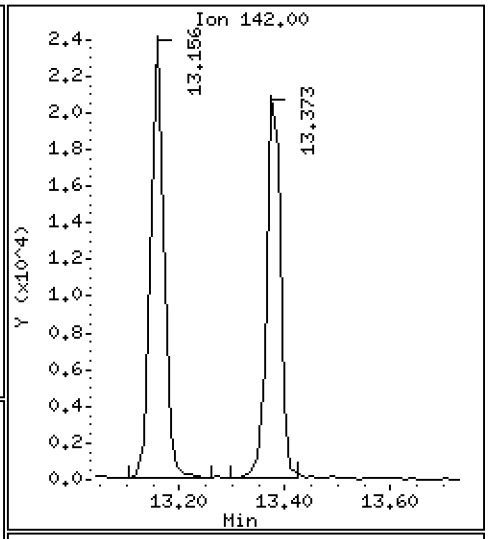
Column phase: ZB-5msi

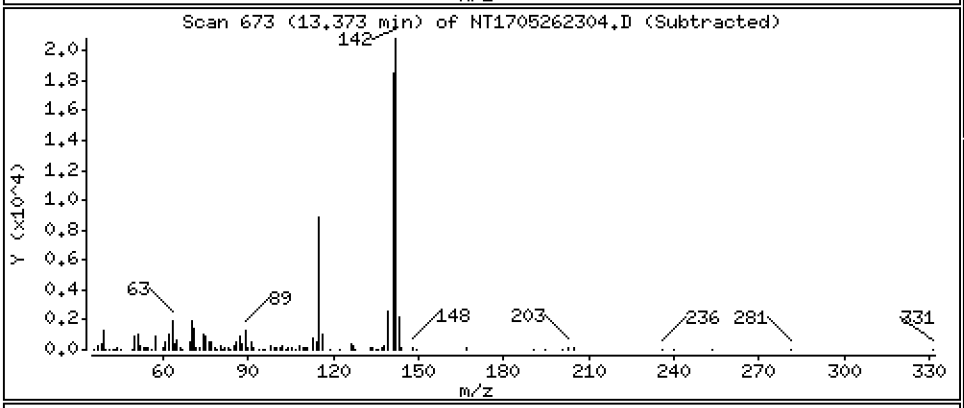
Column diameter: 0.25

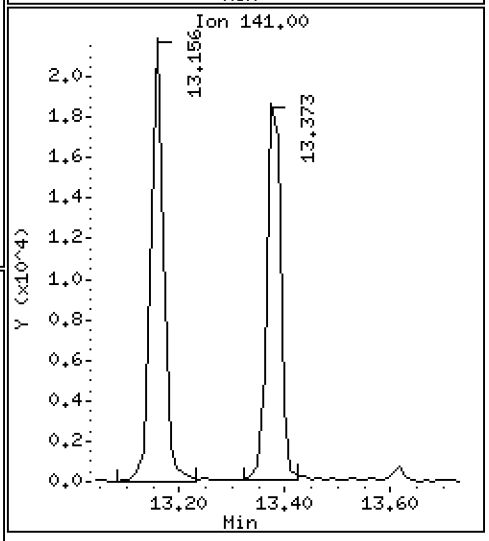
105 1-methylnaphthalene

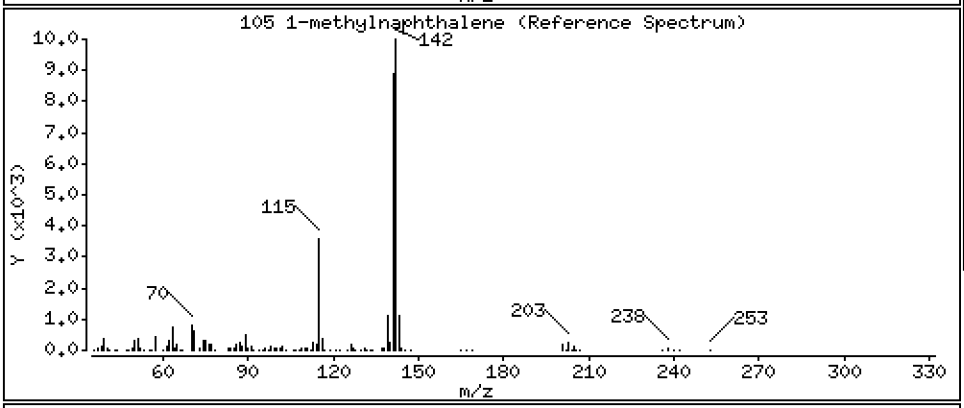
Concentration: 0.1882 ug/mL

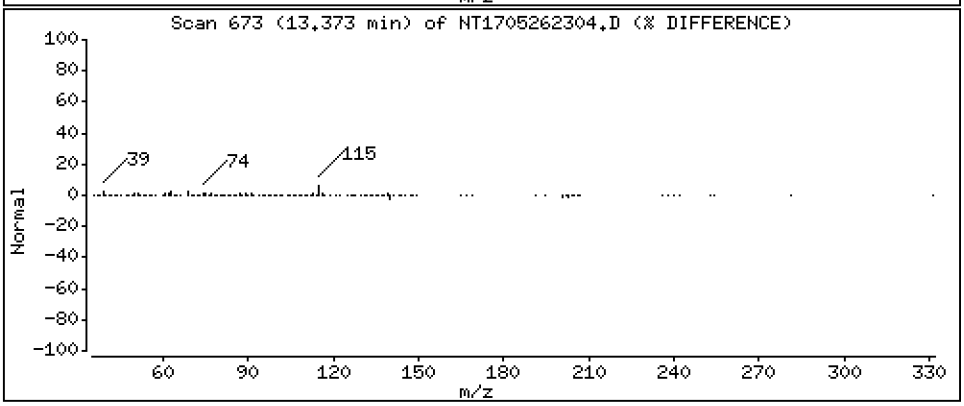












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

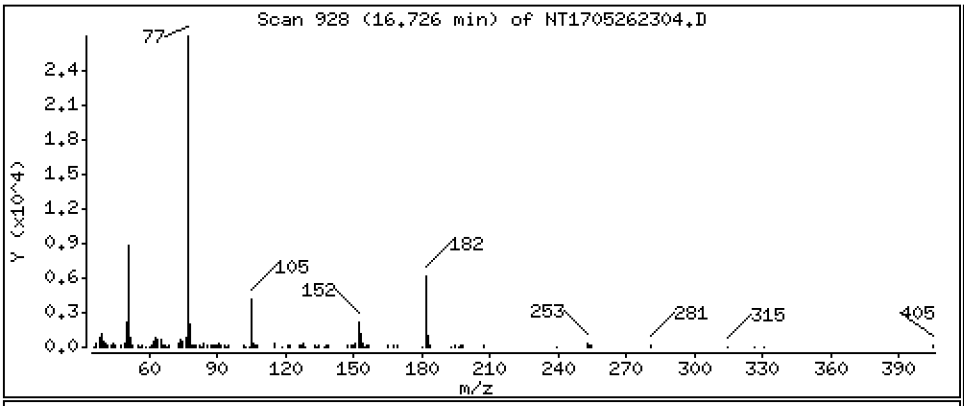
Operator: VTS

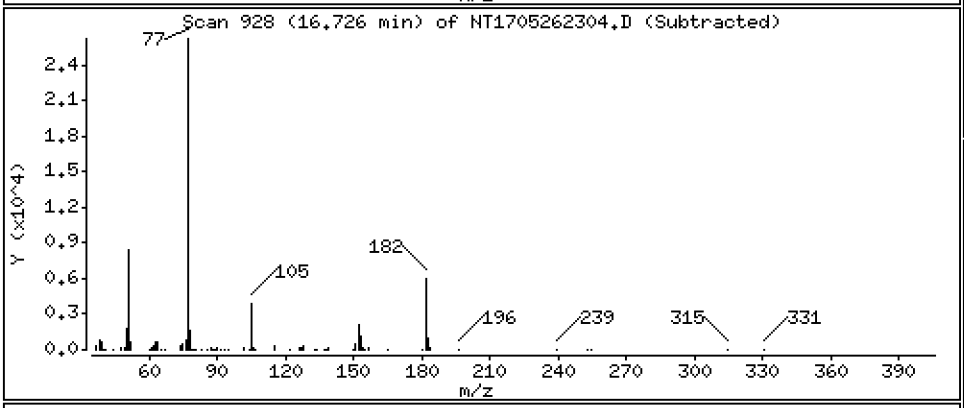
Column phase: ZB-5msi

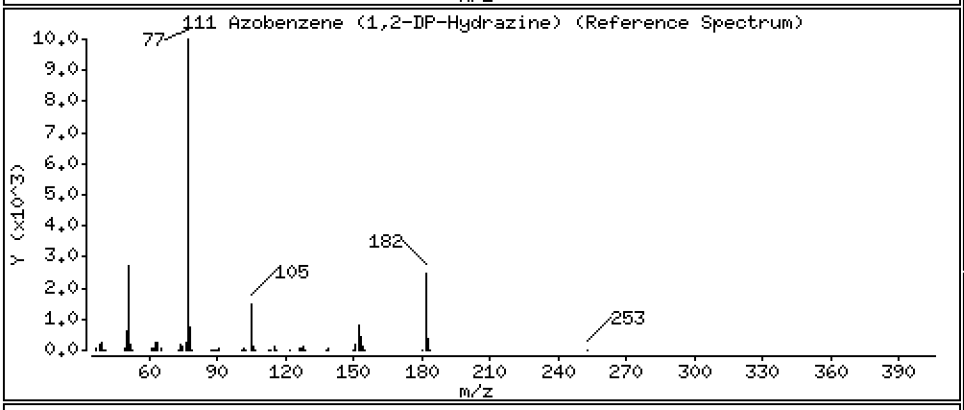
Column diameter: 0.25

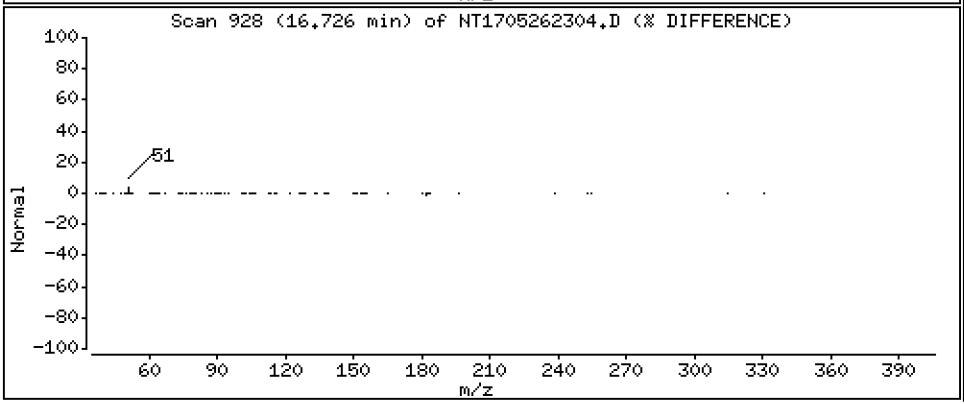
111 Azobenzene (1,2-DP-Hydrazine)

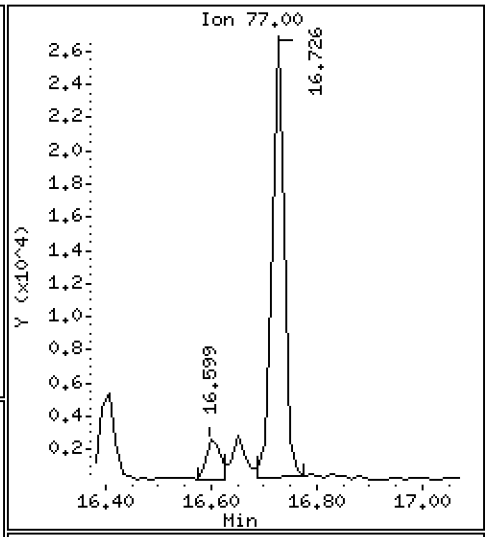
Concentration: 0.1949 ug/mL

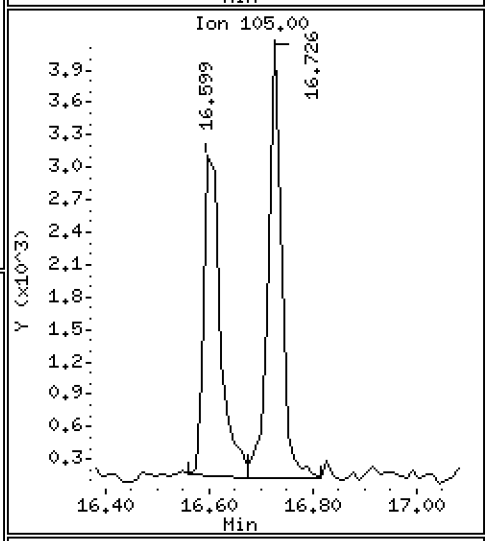


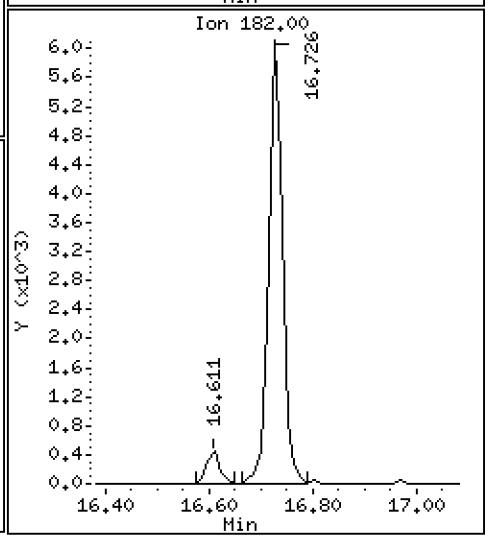












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

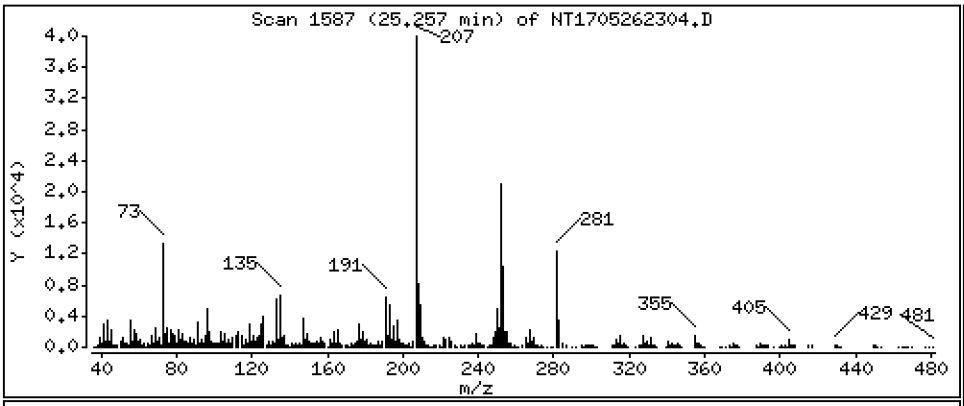
Operator: VTS

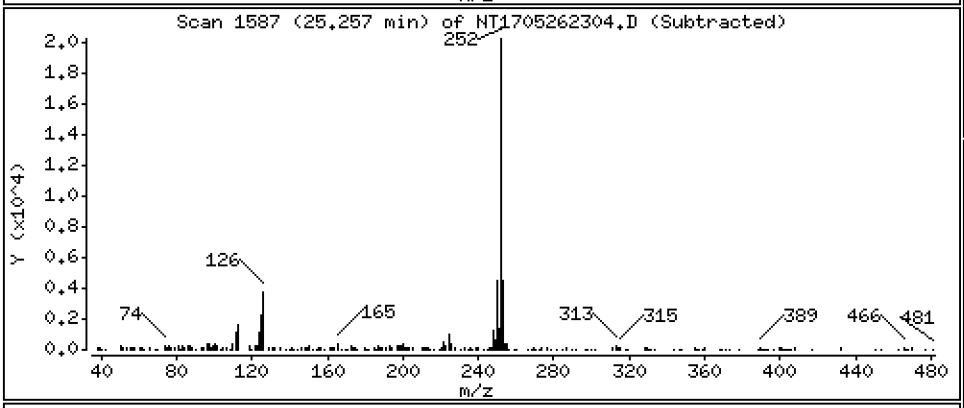
Column phase: ZB-5msi

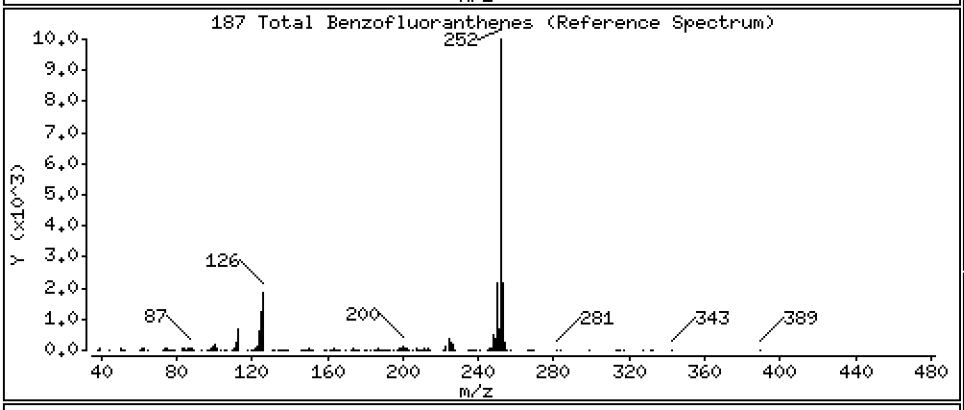
Column diameter: 0.25

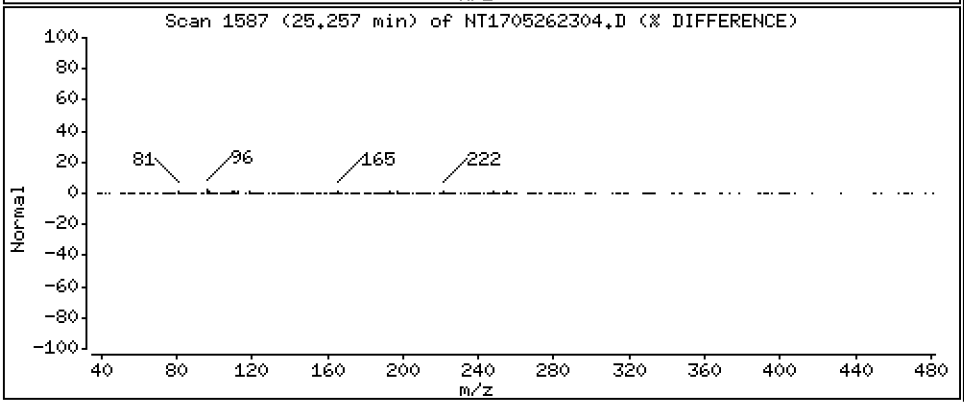
187 Total Benzofluoranthenes

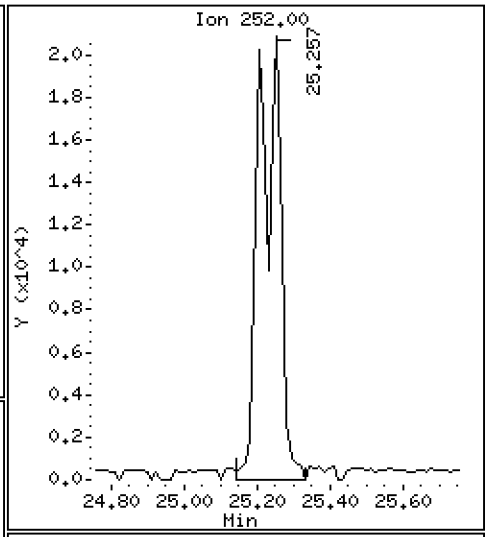
Concentration: 0.3963 ug/mL

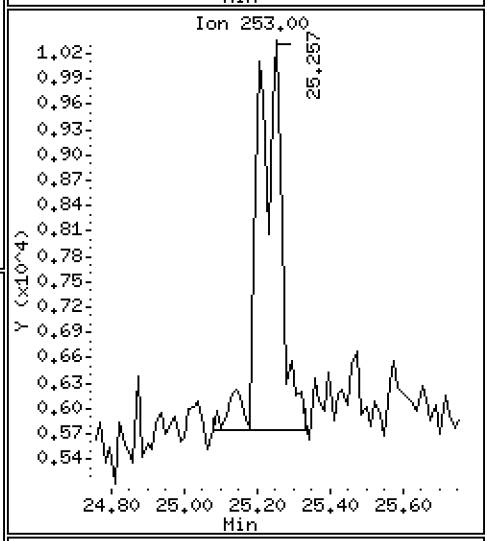


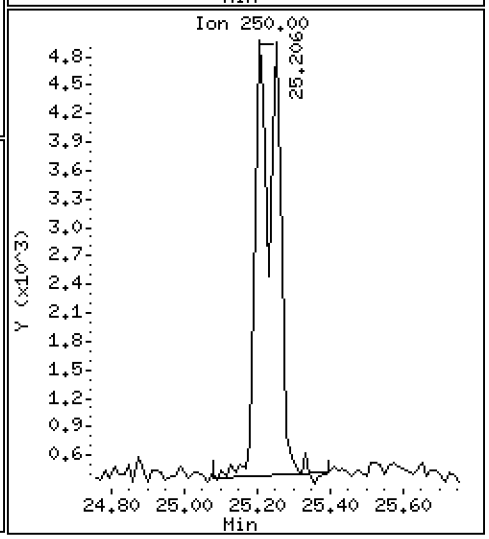












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

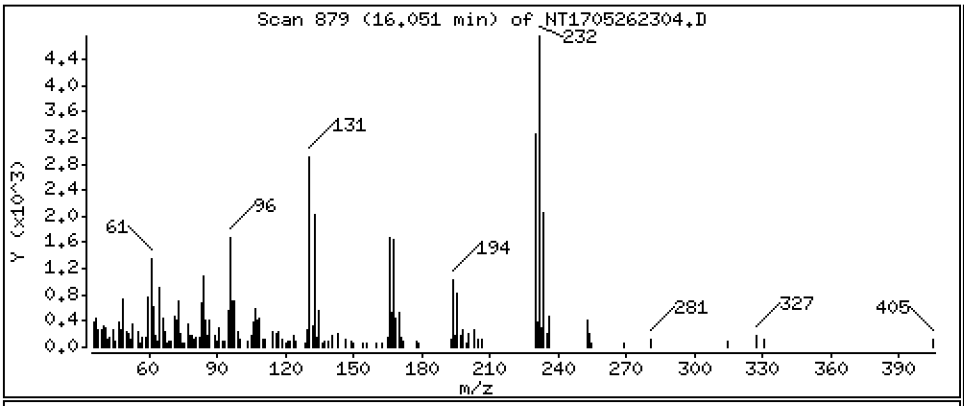
Operator: VTS

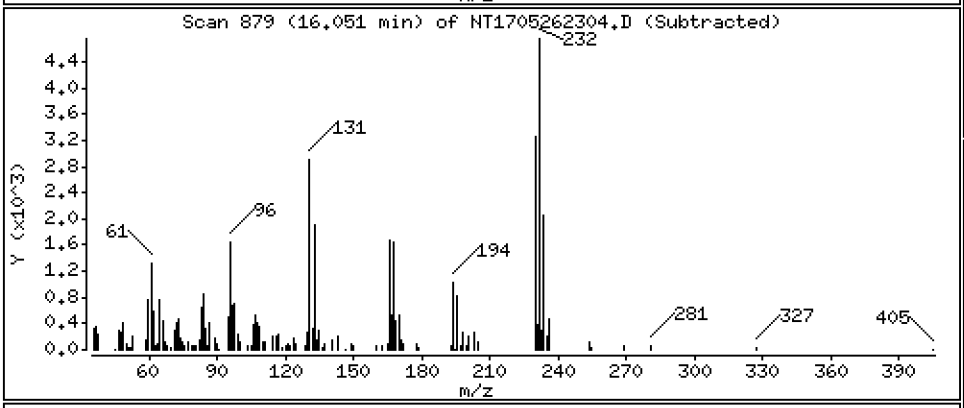
Column phase: ZB-5msi

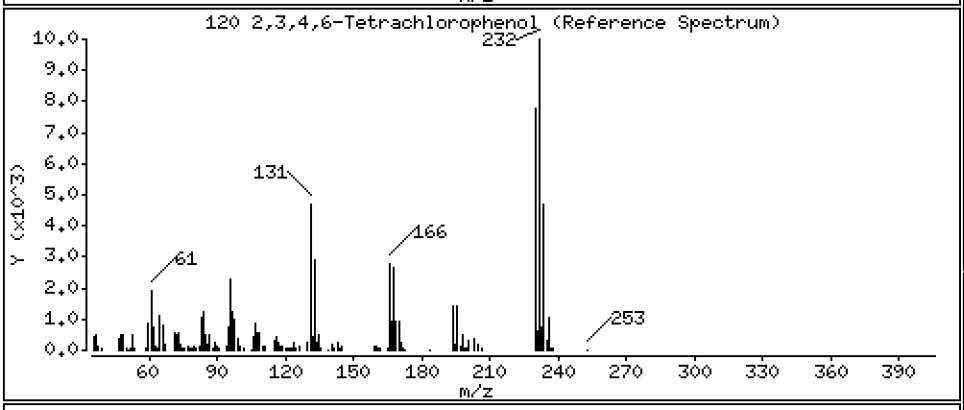
Column diameter: 0.25

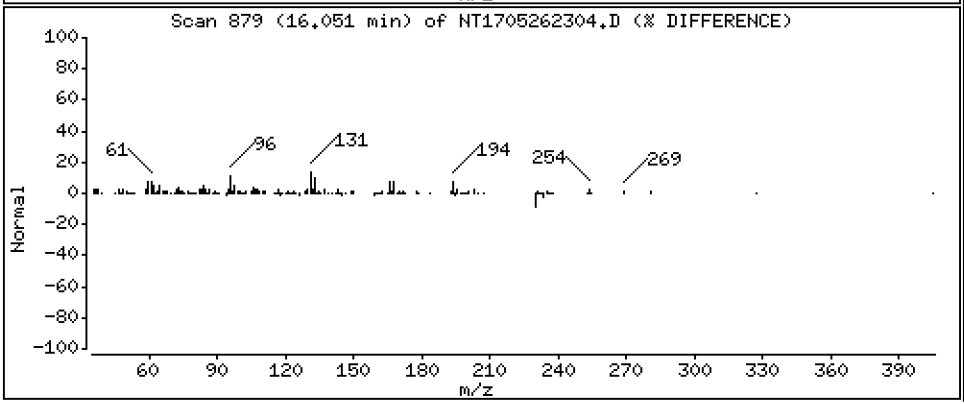
120 2,3,4,6-Tetrachlorophenol

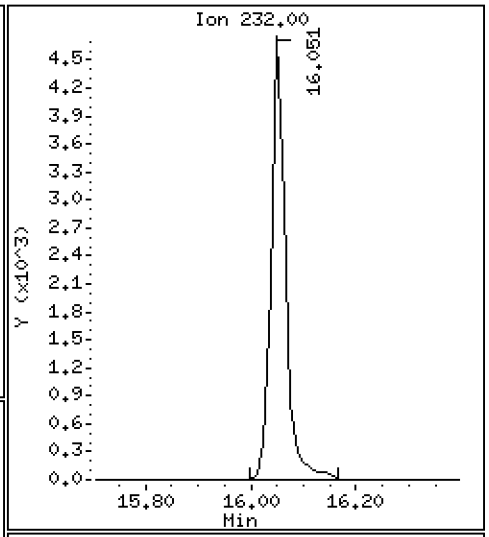
Concentration: 0.1256 ug/mL

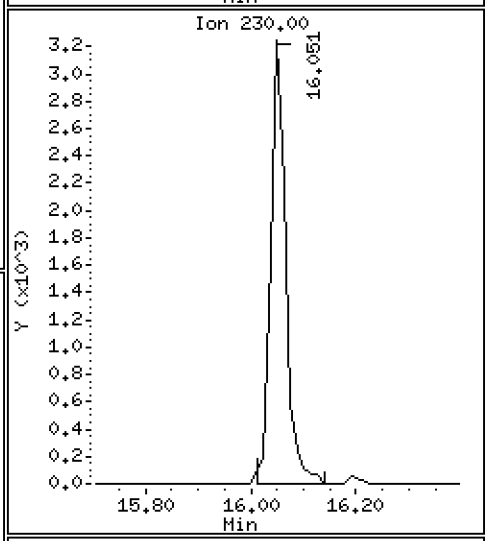


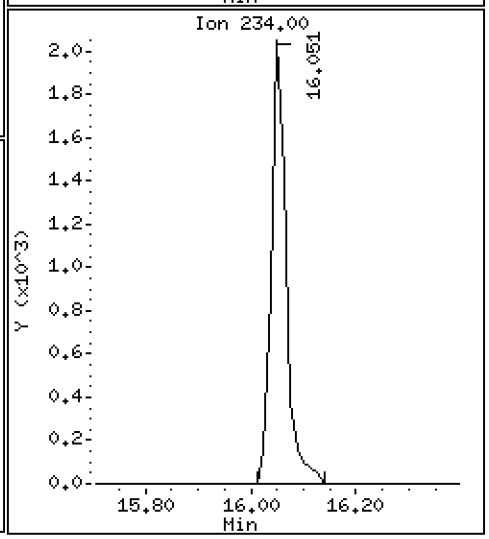












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 26-MAY-2023 14:31
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0434-LCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 12:20 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.071	7.071	(0.763)	28547	0.27558	0.2756
$	2 Phenol-d5	99	8.639	8.638	(0.933)	38625	0.28176	0.2818
	3 Phenol	94	8.651	8.651	(0.934)	28796	0.19832	0.1983
$	5 2-Chlorophenol-d4	132	8.906	8.906	(0.961)	32514	0.29610	0.2961
	4 Bis(2-Chloroethyl)ether	93	8.804	8.804	(0.950)	25073	0.23687	0.2369
	6 2-Chlorophenol	128	8.932	8.931	(0.964)	22895	0.18882	0.1888
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	25619	0.20876	0.2088
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	316449	4.00000	
	9 1,4-Dichlorobenzene	146	9.289	9.289	(1.003)	23333	0.19064	0.1906
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	16789	0.21753	0.2175
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	24388	0.21197	0.2120
	11 Benzyl alcohol	108	9.544	9.531	(1.030)	10721	0.15859	0.1586
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	6885	0.21231	0.2123
	13 2-Methylphenol	108	9.761	9.748	(1.054)	19936	0.18682	0.1868
	17 Hexachloroethane	117	10.234	10.234	(1.105)	10091	0.20611	0.2061
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	16587	0.20316	0.2032
	15 4-Methylphenol	108	10.030	10.017	(1.083)	20306	0.18688	0.1869
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	24166	0.18588	0.1859
	19 Nitrobenzene	77	10.387	10.387	(0.886)	24485	0.19739	0.1974
	20 Isophorone	82	10.822	10.834	(0.923)	29912	0.17616	0.1762
	21 2-Nitrophenol	139	11.013	11.013	(0.939)	15602	0.26103	0.2610
	22 2,4-Dimethylphenol	107	11.052	11.051	(0.942)	44914	0.38702	0.3870
	23 Bis(2-Chloroethoxy)methane	93	11.243	11.243	(0.959)	18629	0.17901	0.1790
	24 Benzoic acid	105	11.179	11.307	(0.953)	12488	0.15997	0.1600
	25 2,4-Dichlorophenol	162	11.473	11.460	(0.978)	37519	0.40233	0.4023
	26 1,2,4-Trichlorobenzene	180	11.639	11.651	(0.992)	24345	0.24037	0.2404
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1142345	4.00000	
	28 Naphthalene	128	11.766	11.779	(1.003)	62085	0.19763	0.1976
	29 4-Chloroaniline	127	11.906	11.893	(1.015)	36133	0.29180	0.2918
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	9598	0.19131	0.1913
	31 4-Chloro-3-methylphenol	107	12.863	12.850	(1.097)	36237	0.36088	0.3609
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	42144	0.18737	0.1874
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	5772	0.10773	0.1077

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.781	13.781	(0.899)	21473	0.35620	0.3562
	35	2,4,5-Trichlorophenol	196	13.857	13.857	(0.904)	21626	0.33887	0.3389
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	46372	0.20429	0.2043
	37	2-Chloronaphthalene	162	14.151	14.151	(0.923)	37913	0.20589	0.2059
	38	2-Nitroaniline	65	14.406	14.406	(0.940)	21512	0.34494	0.3449
	39	Dimethylphthalate	163	14.827	14.826	(0.968)	39581	0.19965	0.1997
	40	Acenaphthylene	152	15.005	15.018	(0.979)	60579	0.20716	0.2072
	41	2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	17075	0.36788	0.3679
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	576179	4.00000	
	43	3-Nitroaniline	138	15.260	15.247	(0.996)	13138	0.30561	0.3056
	44	Acenaphthene	153	15.388	15.388	(1.004)	37656	0.20600	0.2060
	45	2,4-Dinitrophenol	184	15.464	15.464	(1.009)	3432	0.12268	0.1227
	46	Dibenzofuran	168	15.706	15.719	(1.025)	50501	0.19794	0.1979
	47	4-Nitrophenol	109	15.592	15.579	(1.017)	5988	0.20971	0.2097
	48	2,4-Dinitrotoluene	165	15.770	15.770	(1.029)	19390	0.31913	0.3191
	50	Diethylphthalate	149	16.267	16.267	(1.062)	48659	0.25168	0.2517
	49	Fluorene	166	16.420	16.420	(1.072)	54335	0.22401	0.2240
	51	4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	23499	0.21073	0.2107
	52	4-Nitroaniline	138	16.509	16.509	(1.077)	12759	0.31356	0.3136
	53	4,6-Dinitro-2-methylphenol	198	16.611	16.611	(0.906)	14918	0.39018	0.3902
	54	N-Nitrosodiphenylamine	169	16.649	16.662	(0.908)	25891	0.19292	0.1929
$	55	2,4,6-Tribromophenol	330	16.954	16.954	(1.106)	6096	0.24255	0.2426
	56	4-Bromophenyl-phenylether	248	17.400	17.400	(0.949)	8676	0.18451	0.1845
	57	Hexachlorobenzene	284	17.731	17.731	(0.967)	10211	0.21311	0.2131
	58	Pentachlorophenol	266	18.088	18.088	(0.986)	5774	0.20787	0.2079
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	958053	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	56866	0.20342	0.2034
	61	Anthracene	178	18.484	18.483	(1.008)	48566	0.18505	0.1850
	62	Carbazole	167	18.815	18.815	(1.026)	46837	0.29440	0.2944
	63	Di-n-butylphthalate	149	19.580	19.580	(1.067)	59856	0.18887	0.1889
	64	Fluoranthene	202	20.753	20.753	(0.889)	54741	0.19478	0.1948
	65	Pyrene	202	21.174	21.174	(0.907)	58005	0.20359	0.2036
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	42042	0.20758	0.2076
	67	Butylbenzylphthalate	149	22.360	22.360	(0.958)	24792	0.19443	0.1944
	68	Benzo(a)anthracene	228	23.317	23.317	(0.999)	47901	0.21651	0.2165
*	69	Chrysene-d12	240	23.343	23.355	(1.000)	600821	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.266	23.266	(0.997)	42918	1.00137	1.001
	71	Chrysene	228	23.394	23.394	(1.002)	43650	0.20967	0.2097
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	33711	0.18777	0.1878
*	134	Di-n-octylphthalate-d4	153	24.351	24.363	(1.000)	1240881	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.363	(1.001)	66355	0.21096	0.2110
	74	Benzo(b)fluoranthene	252	25.205	25.218	(0.970)	43971	0.17947	0.1795
	75	Benzo(k)fluoranthene	252	25.256	25.256	(0.972)	48945	0.21145	0.2115
	76	Benzo(a)pyrene	252	25.881	25.881	(0.996)	39375	0.20402	0.2040
*	77	Perylene-d12	264	25.996	25.996	(1.000)	617938	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.703	28.716	(1.104)	44273	0.19777	0.1978
	79	Dibenzo(a,h)anthracene	278	28.716	28.729	(1.105)	36738	0.19554	0.1955
	80	Benzo(g,h,i)perylene	276	29.509	29.521	(1.135)	36193	0.19588	0.1959
	90	N-Nitrosodimethylamine	74	4.982	4.982	(0.538)	22974	0.33248	0.3325
	91	Aniline	93	8.728	8.728	(0.942)	38575	0.31702	0.3170
	93	Benzidine	184	20.983	20.996	(0.899)	23802	0.34129	0.3413
	103	Pyridine	79	5.033	5.007	(0.543)	42515	0.38791	0.3879
	105	1-methylnaphthalene	142	13.373	13.385	(1.140)	39278	0.18823	0.1882
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.725	16.725	(1.091)	43994	0.19494	0.1949

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.256	25.256	(0.972)	87164	0.39633	0.3963
120 2,3,4,6-Tetrachlorophenol	232	16.050	16.050	(1.047)	9060	0.12561	0.1256

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262304.D
Lab Smp Id: SLE0434-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:16
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	303517	151759	607034	316449	4.26
27 Naphthalene-d8	1140476	570238	2280952	1142345	0.16
42 Acenaphthene-d10	622461	311231	1244922	576179	-7.44
59 Phenanthrene-d10	1074054	537027	2148108	958053	-10.80
69 Chrysene-d12	723807	361904	1447614	600821	-16.99
134 Di-n-octylphthala	1524055	762028	3048110	1240881	-18.58
77 Perylene-d12	666992	333496	1333984	617938	-7.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	0.00
69 Chrysene-d12	23.36	22.86	23.86	23.34	-0.05
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.05
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262304.D

Lab ID: SLE0434-LCV1
nt17.i, ABN.m, 26-MAY-2023 14:31

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.964	-0.0109	Benzoic acid

RRT check based on Ccal File: NT1705262302.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

LOW-CONCENTRATION CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00065
Laboratory ID: SLE0434-LCV2
Sequence: SLE0434
Standard ID: L005946

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
Phenol	0.20000	0.2	-13.0	50.00
Benzyl Alcohol	0.20000	0.1	-27.7	50.00
4-Methylphenol	0.20000	0.1	-46.1	50.00
Naphthalene	0.20000	0.2	1.0	50.00
2-Methylnaphthalene	0.20000	0.2	-6.9	50.00
Acenaphthylene	0.20000	0.2	2.4	50.00
Dibenzofuran	0.20000	0.2	-2.6	50.00
Fluorene	0.20000	0.2	-12.6	50.00
Phenanthrene	0.20000	0.2	-2.6	50.00
Anthracene	0.20000	0.2	-2.5	50.00
Fluoranthene	0.20000	0.2	-12.8	50.00
Pyrene	0.20000	0.2	-8.6	50.00
Butylbenzylphthalate	0.20000	0.2	-5.1	50.00
Benzo(a)anthracene	0.20000	0.2	4.2	50.00
Chrysene	0.20000	0.2	8.6	50.00
bis(2-Ethylhexyl)phthalate	0.20000	0.2	-9.5	50.00
Benzofluoranthenes, Total	0.40000	0.4	10.1	50.00
Benzo(a)pyrene	0.20000	0.2	6.1	50.00
Indeno(1,2,3-cd)pyrene	0.20000	0.1	-36.2	50.00
Dibenzo(a,h)anthracene	0.20000	0.1	-31.1	50.00
Benzo(g,h,i)perylene	0.20000	0.1	-44.8	50.00
2-Fluorophenol	0.30000	0.247	-17.7	50.00
Phenol-d5	0.30000	0.216	-28.1	50.00
2-Chlorophenol-d4	0.30000	0.249	-17.0	50.00
1,2-Dichlorobenzene-d4	0.20000	0.180	-10.1	50.00
Nitrobenzene-d5	0.20000	0.189	-5.6	50.00
2-Fluorobiphenyl	0.20000	0.202	0.9	50.00
2,4,6-Tribromophenol	0.30000	0.237	-21.2	50.00
p-Terphenyl-d14	0.20000	0.175	-12.5	50.00

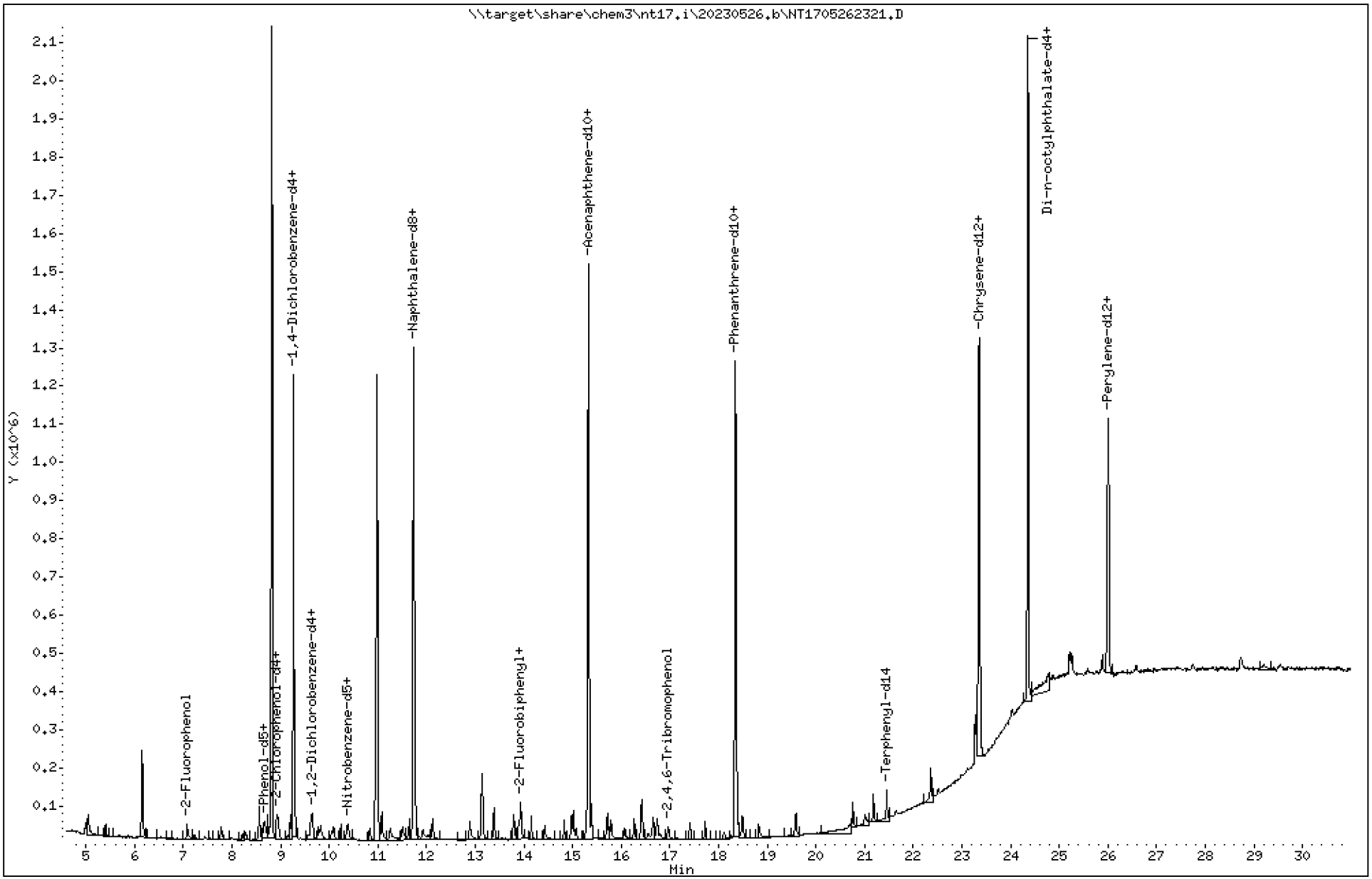
LOW-CONCENTRATION CALIBRATION VERIFICATION
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00065
Laboratory ID: SLE0434-LCV2
Sequence: SLE0434
Standard ID: L005946

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D
Date : 27-MAY-2023 01:10
Client ID:
Sample Info: SLE0434-LCV2

Instrument: nt17.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

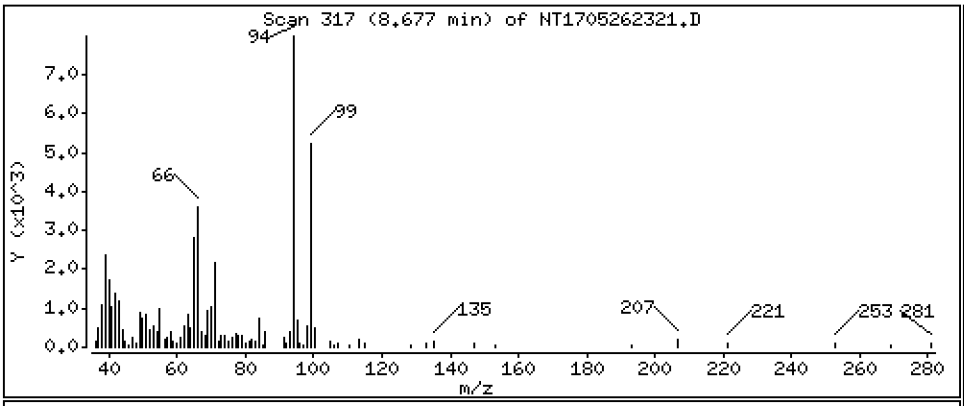
Operator: VTS

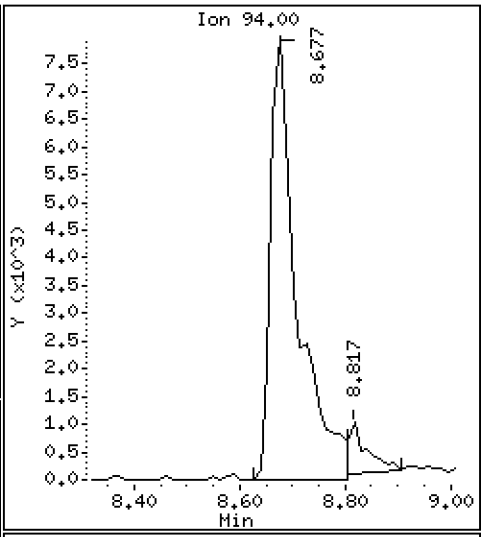
Column phase: ZB-5msi

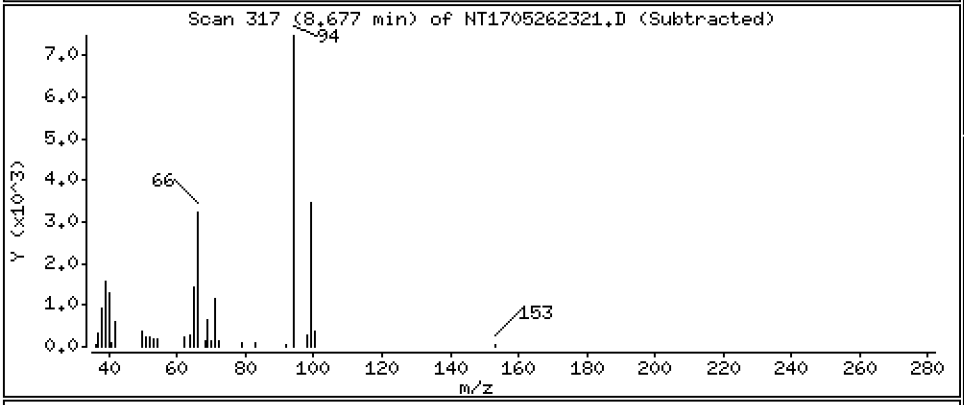
Column diameter: 0.25

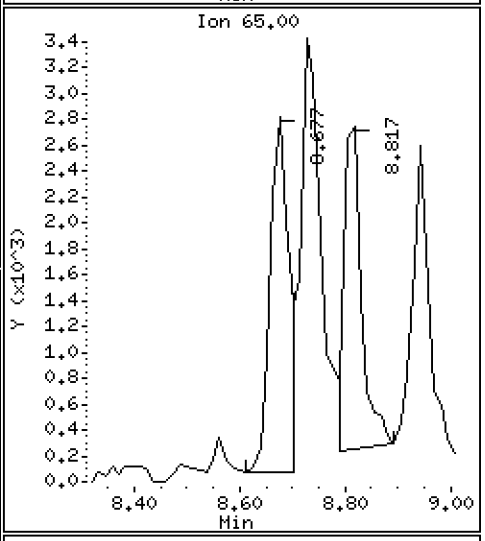
3 Phenol

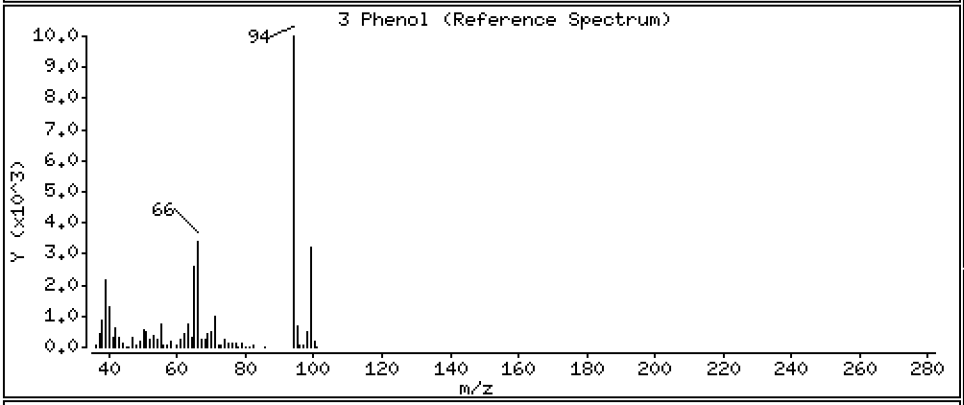
Concentration: 0.1741 ug/mL

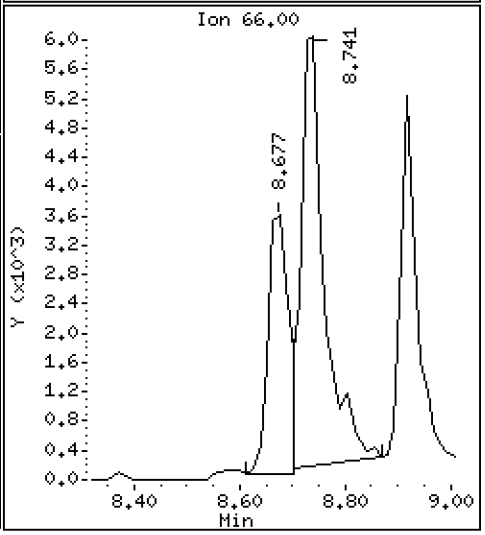


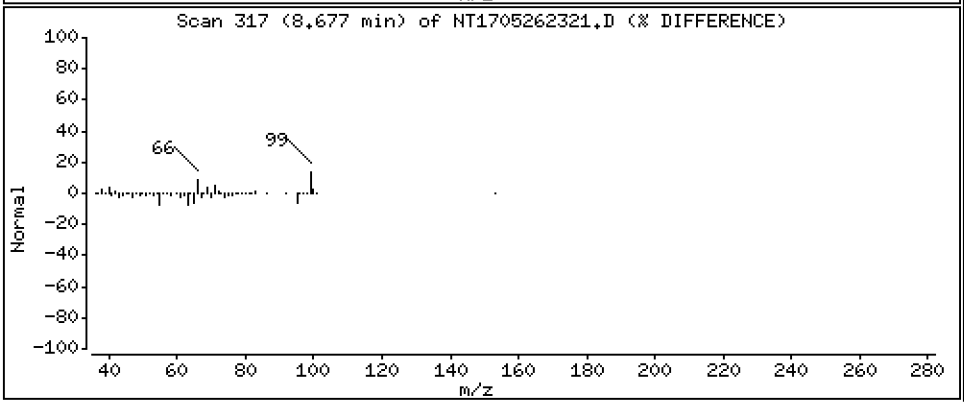












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

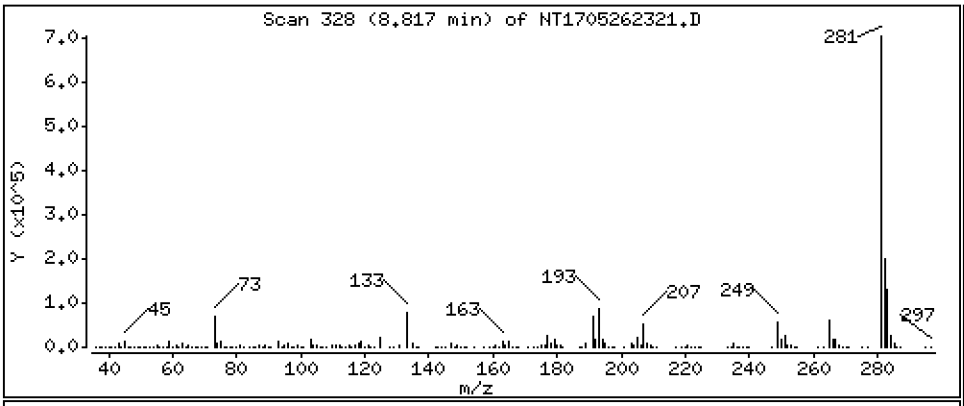
Operator: VTS

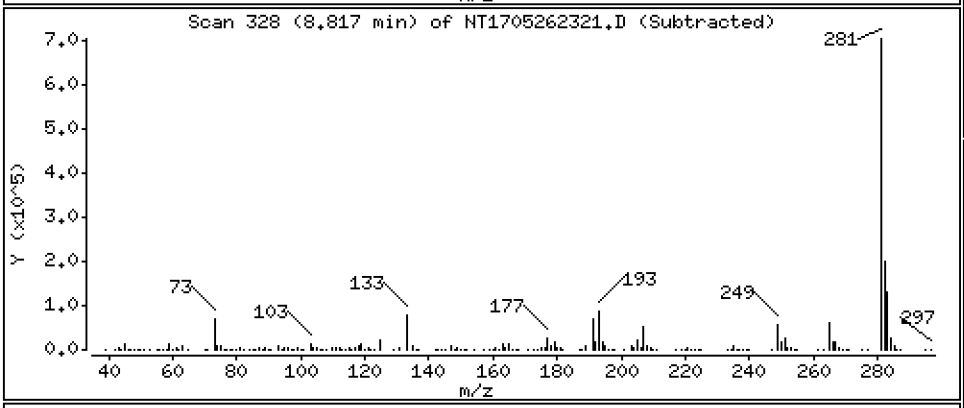
Column phase: ZB-5msi

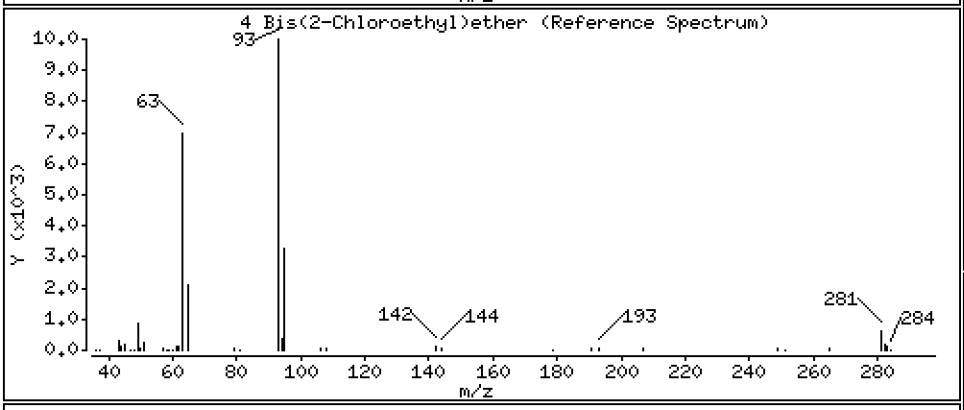
Column diameter: 0.25

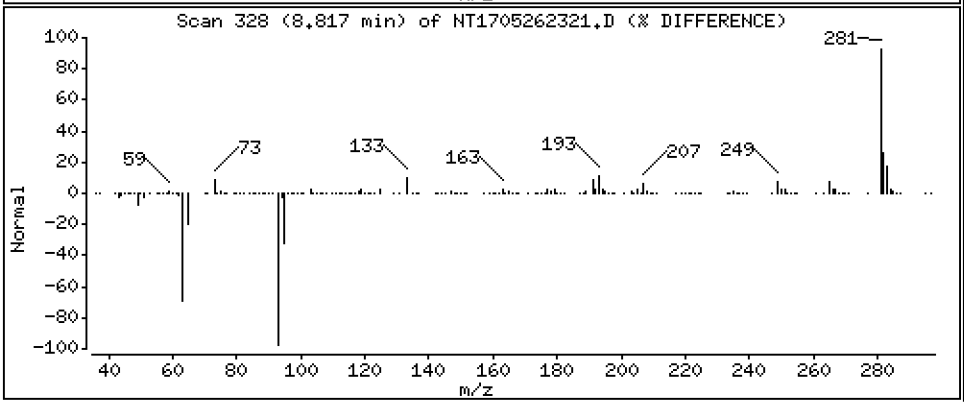
4 Bis(2-Chloroethyl)ether

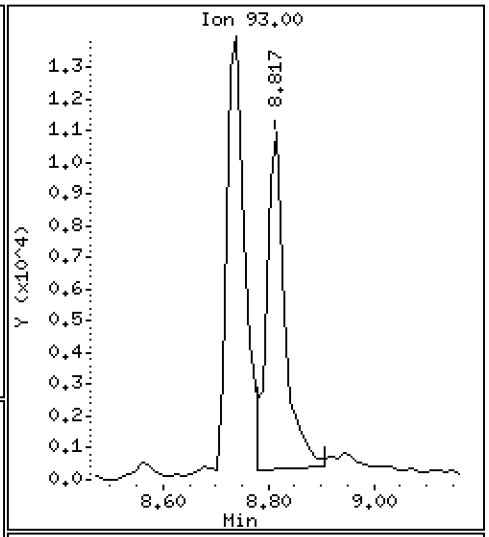
Concentration: 0.2213 ug/mL

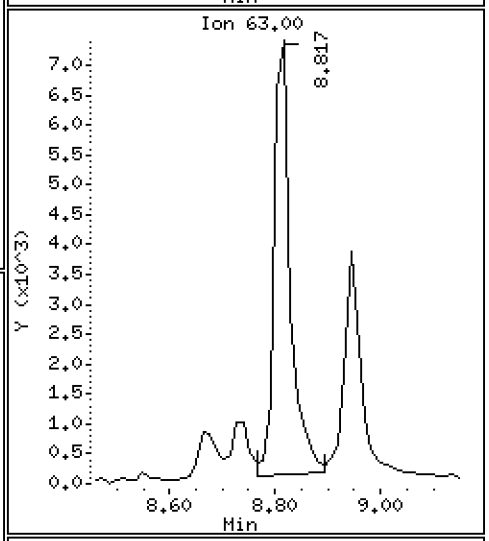


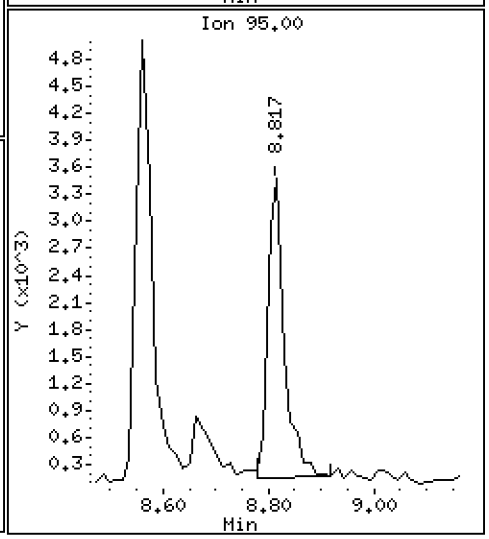












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

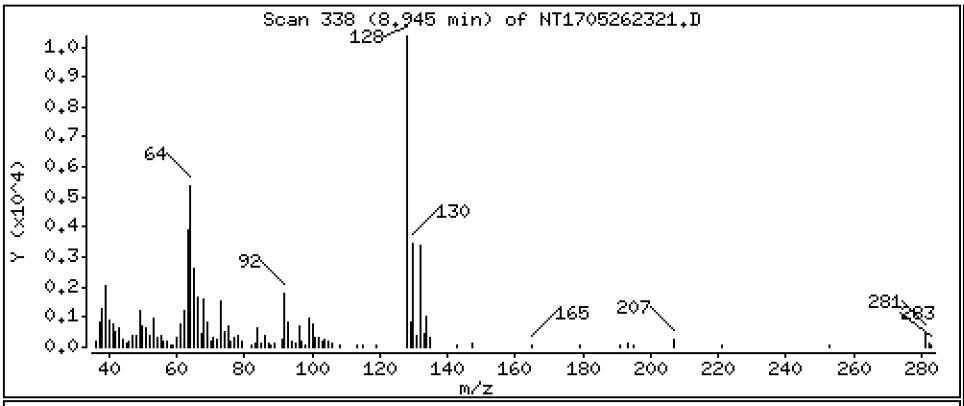
Operator: VTS

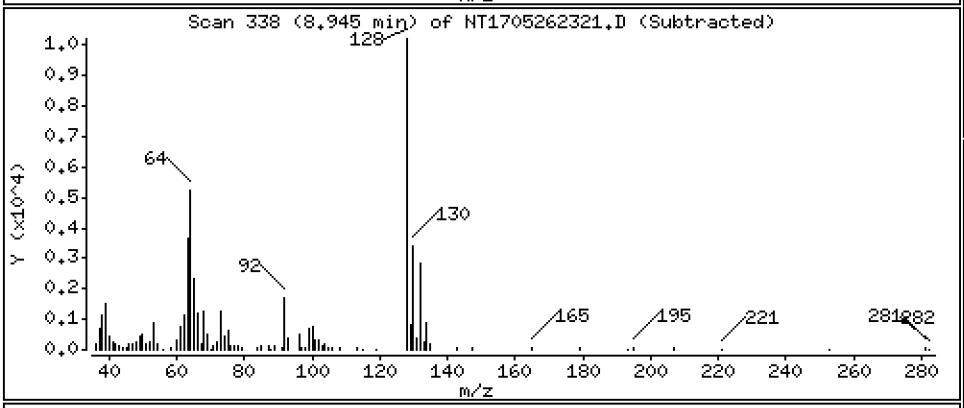
Column phase: ZB-5msi

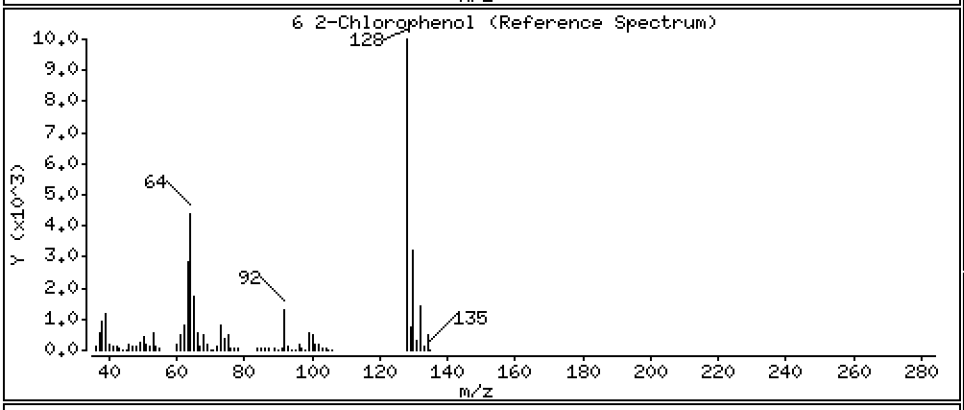
Column diameter: 0.25

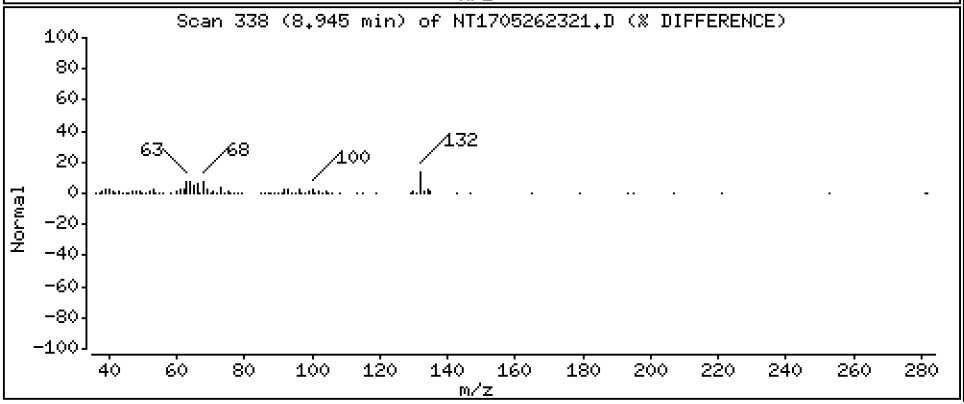
6 2-Chlorophenol

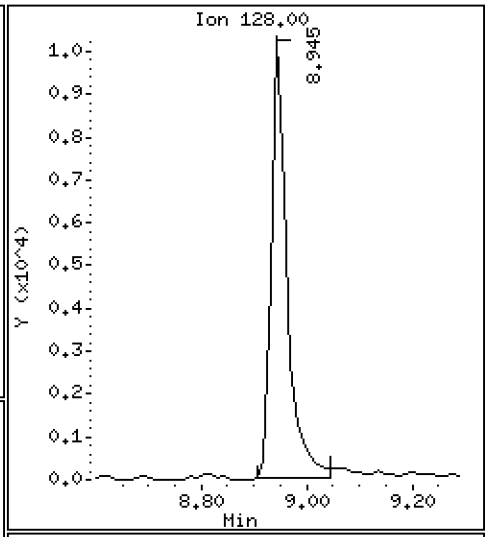
Concentration: 0.1536 ug/mL

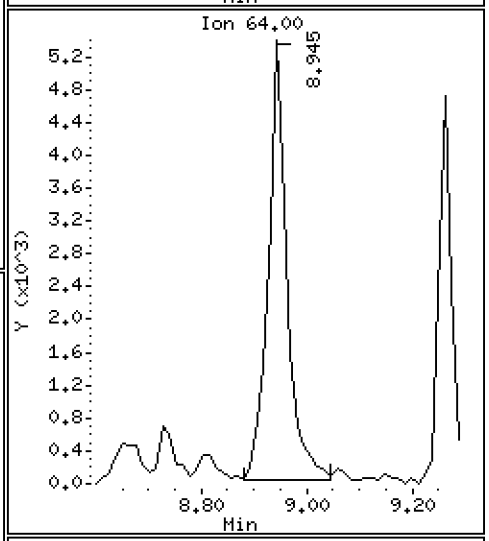


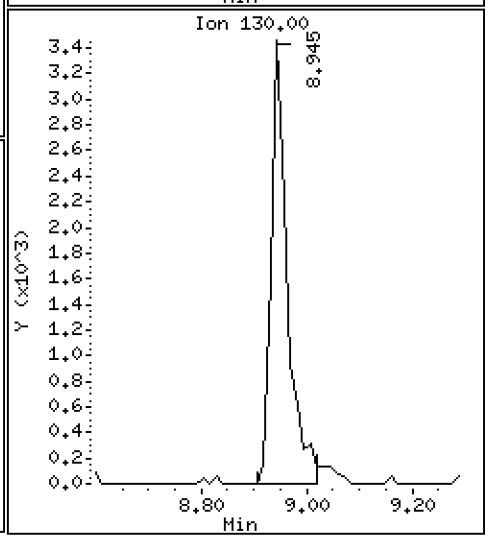












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

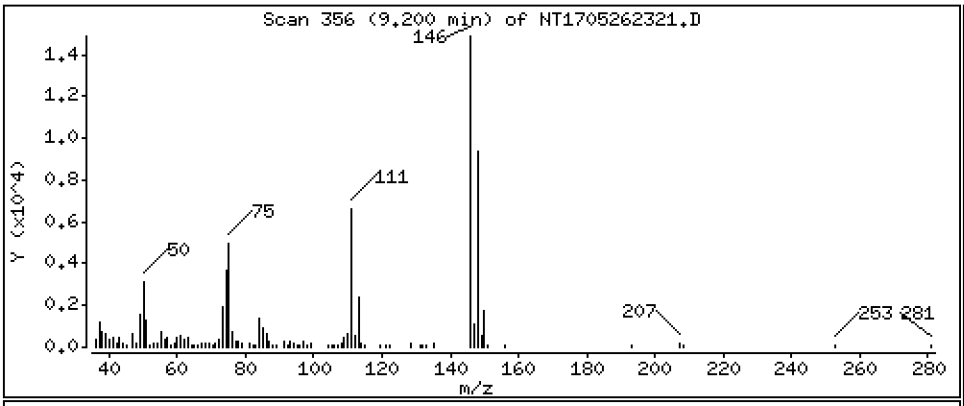
Operator: VTS

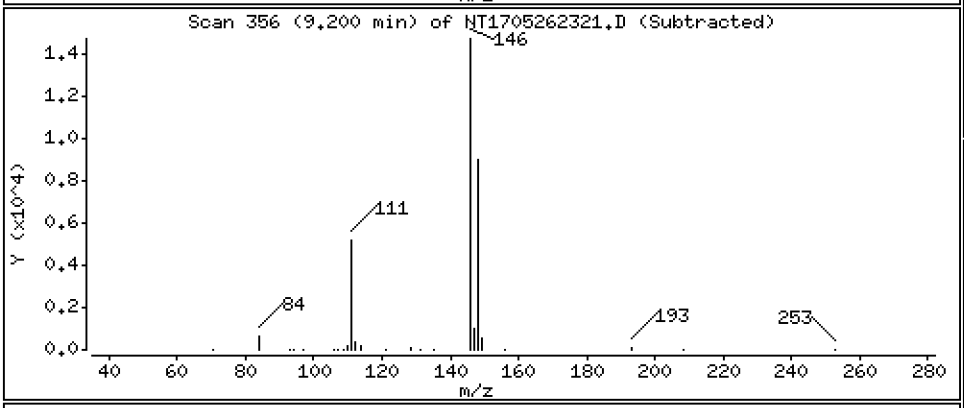
Column phase: ZB-5msi

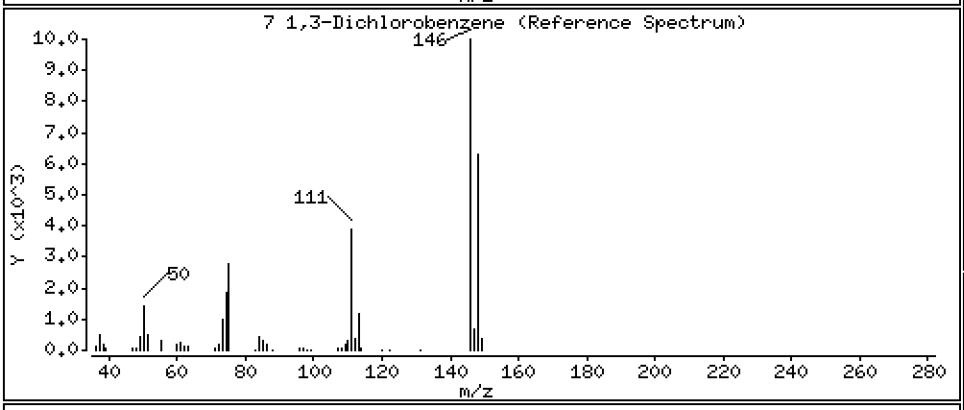
Column diameter: 0.25

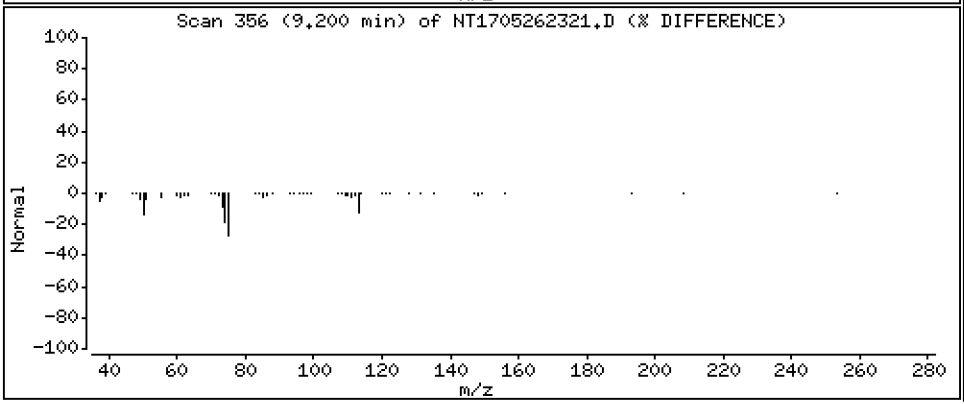
7 1,3-Dichlorobenzene

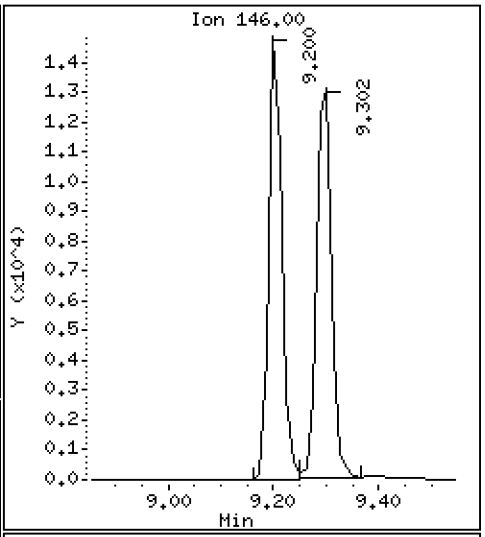
Concentration: 0.1868 ug/mL

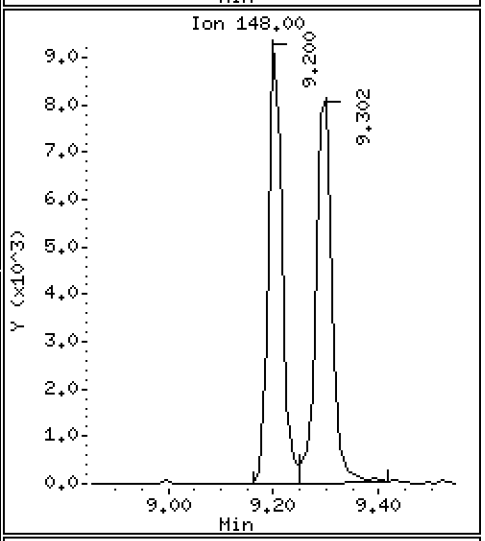


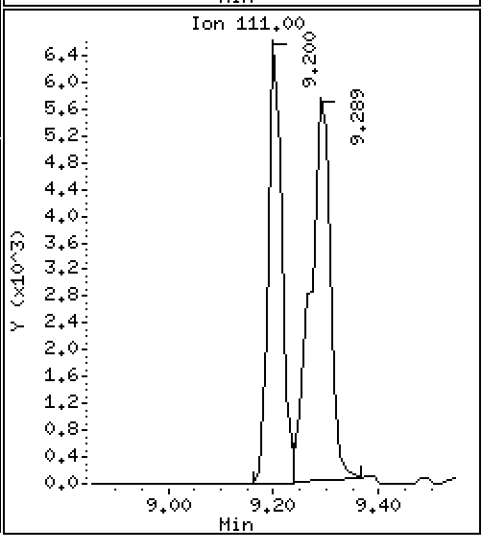












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

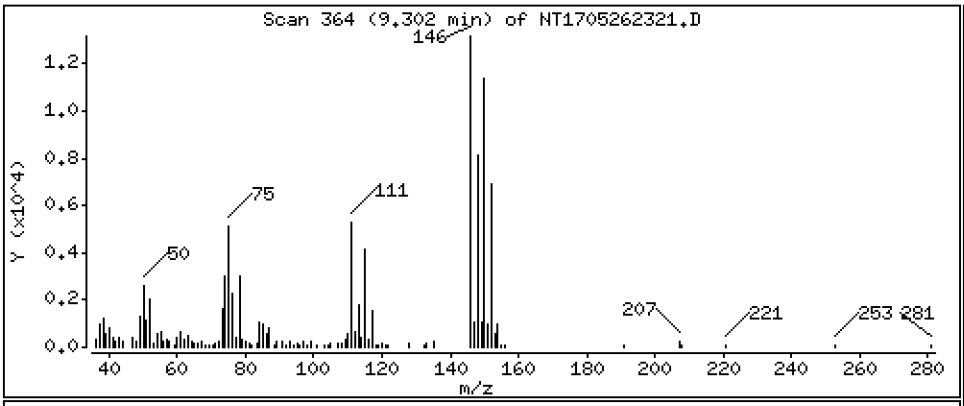
Operator: VTS

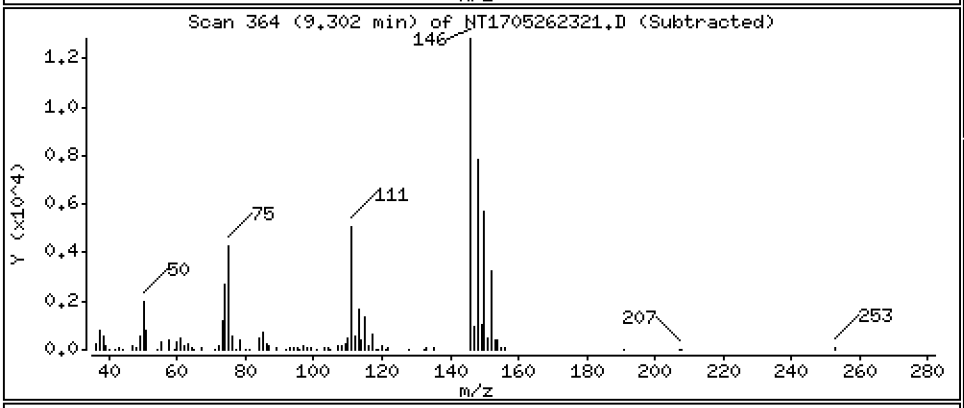
Column phase: ZB-5msi

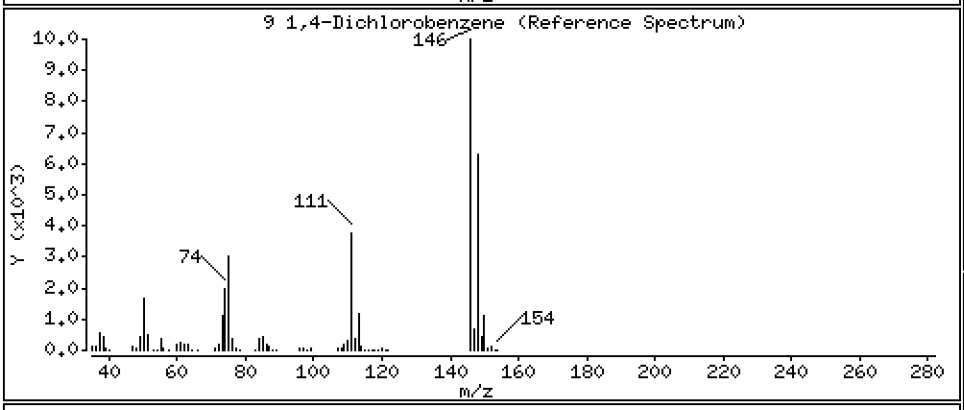
Column diameter: 0.25

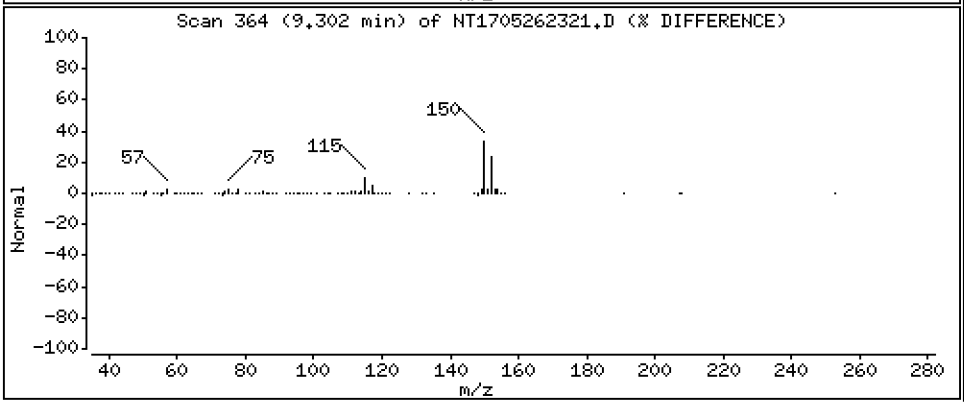
9 1,4-Dichlorobenzene

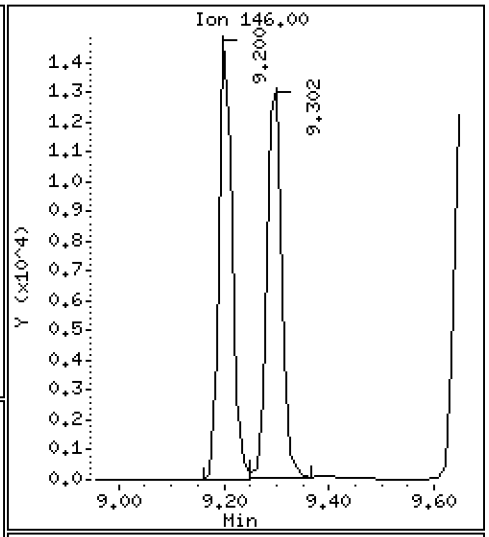
Concentration: 0.1864 ug/mL

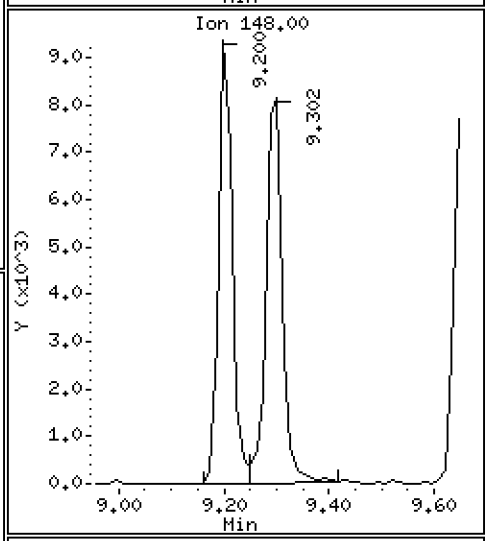


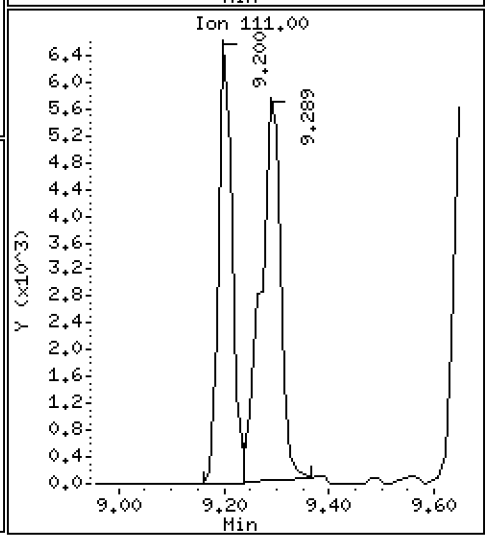












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

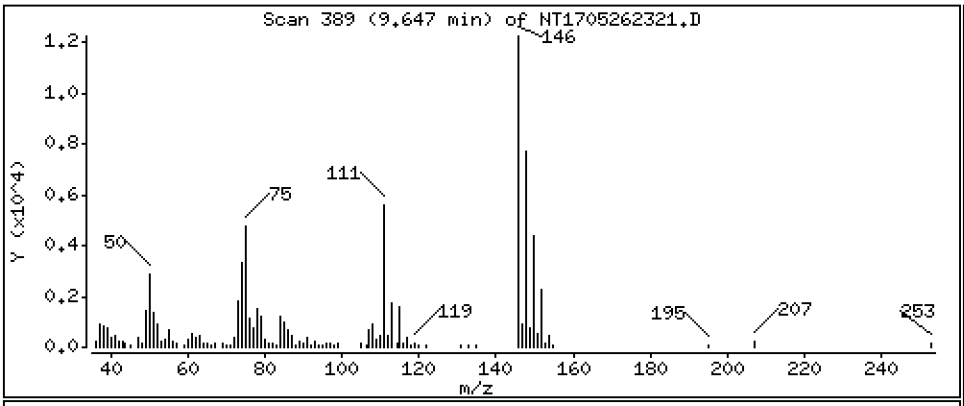
Operator: VTS

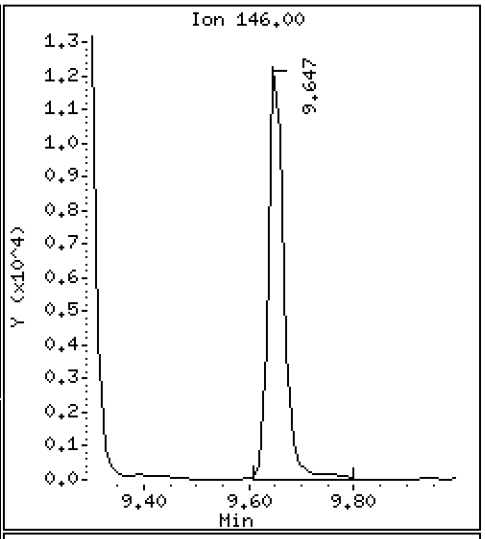
Column phase: ZB-5msi

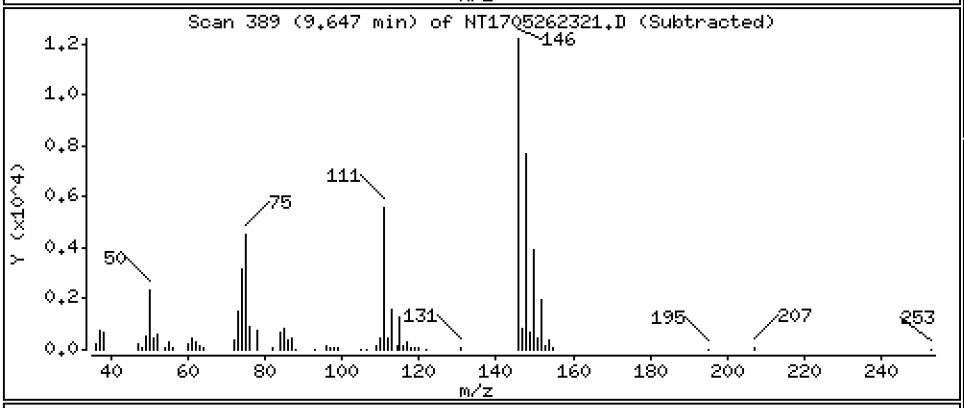
Column diameter: 0.25

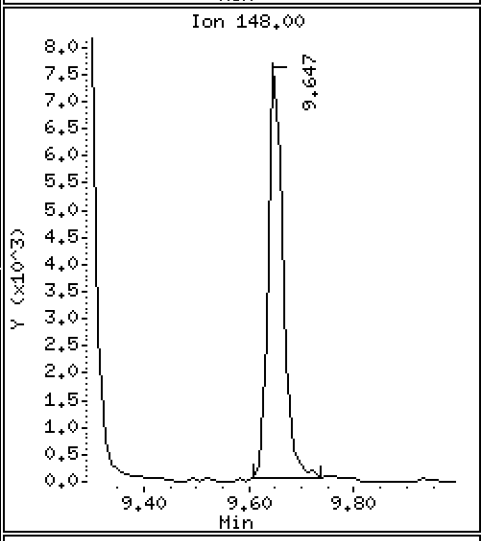
12 1,2-Dichlorobenzene

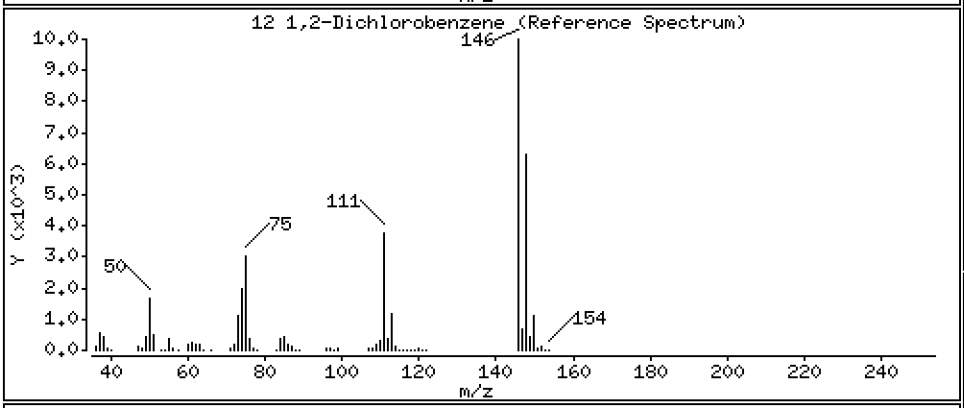
Concentration: 0.1962 ug/mL

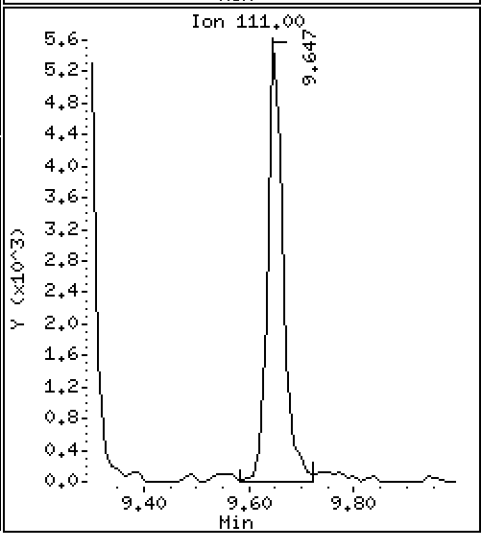


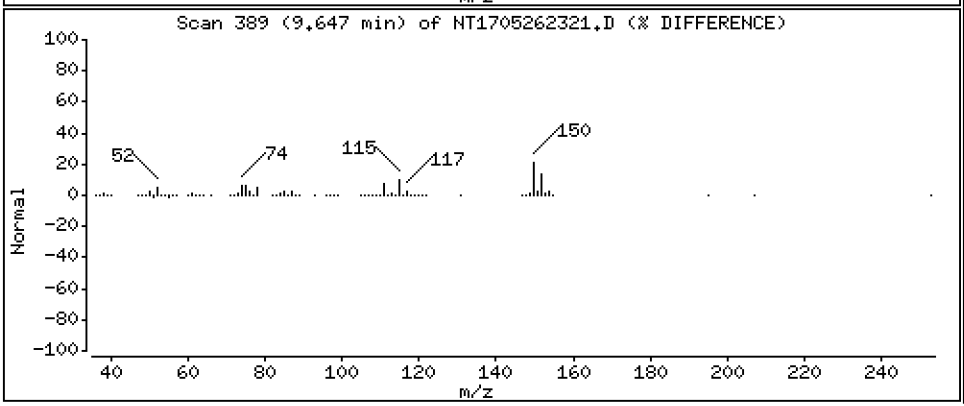












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

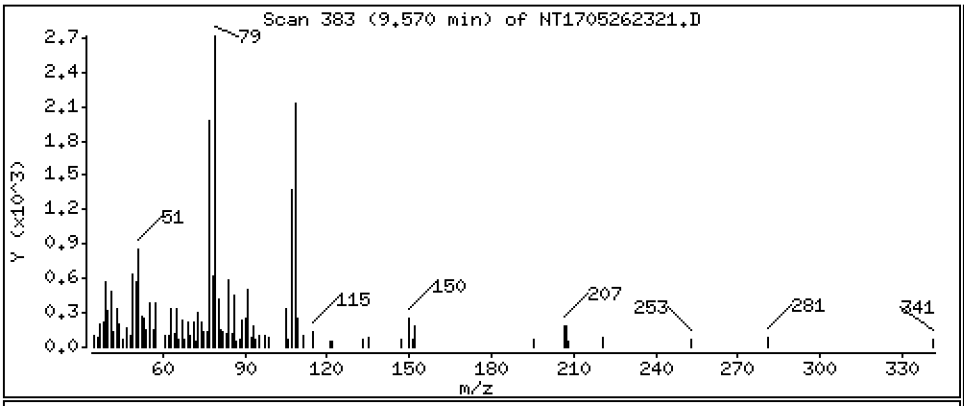
Operator: VTS

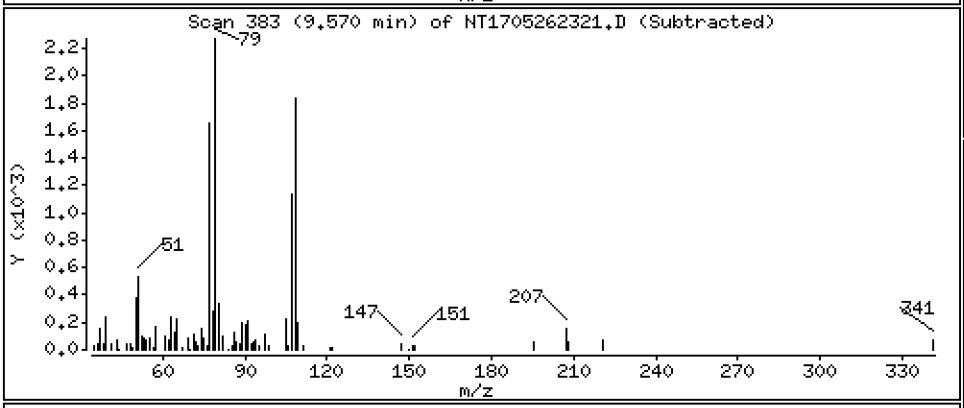
Column phase: ZB-5msi

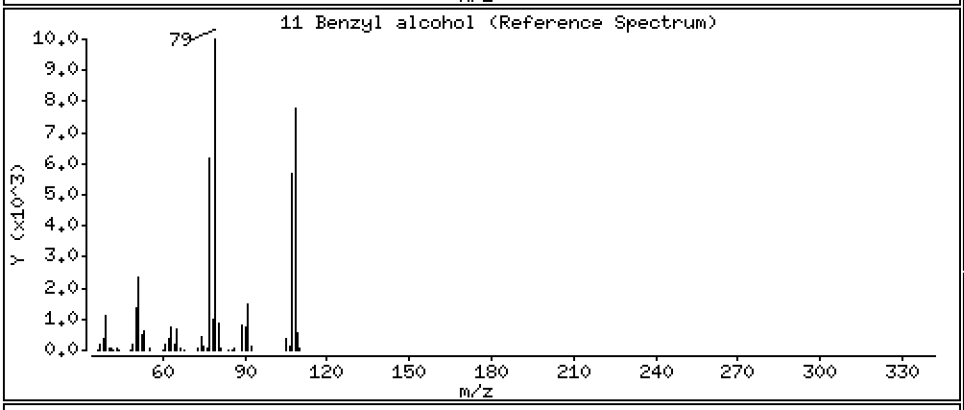
Column diameter: 0.25

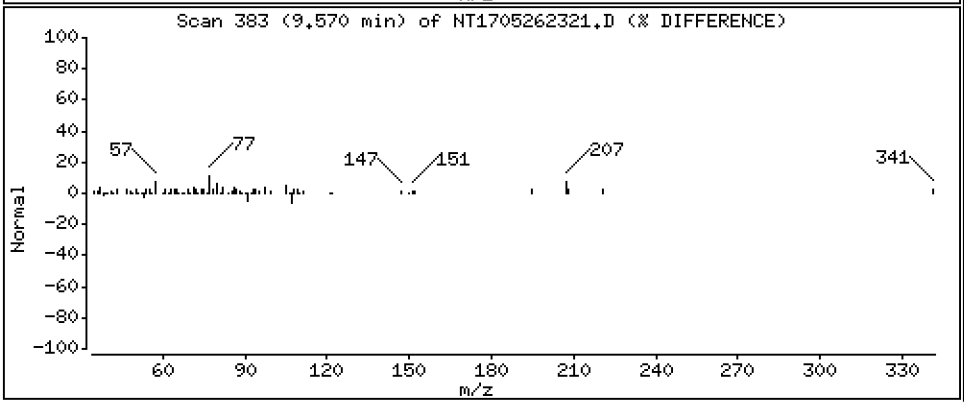
11 Benzyl alcohol

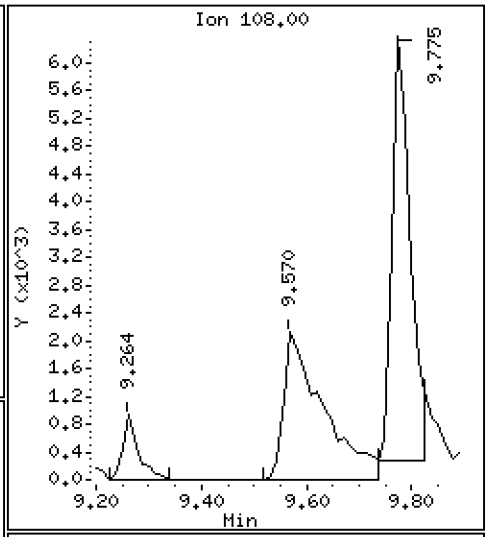
Concentration: 0.1447 ug/mL

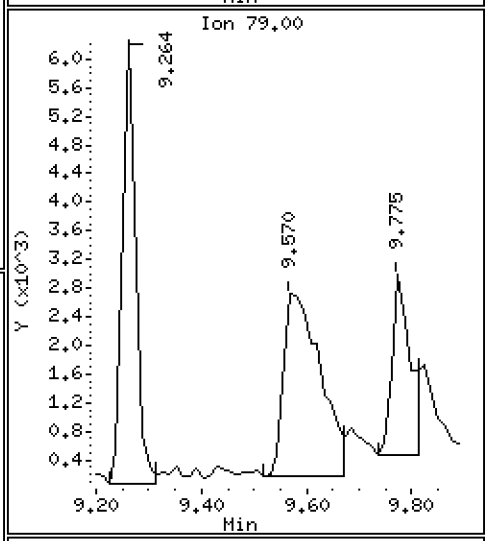


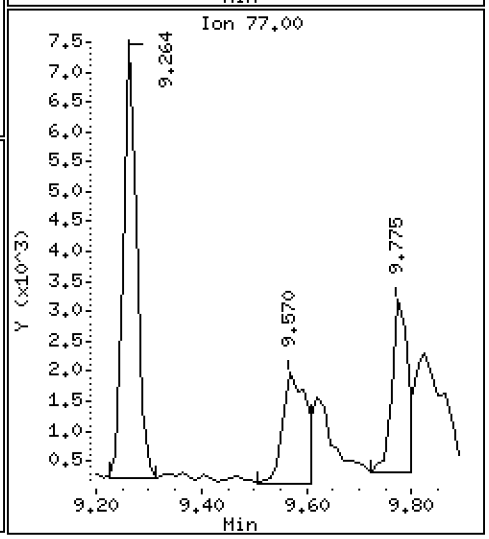












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

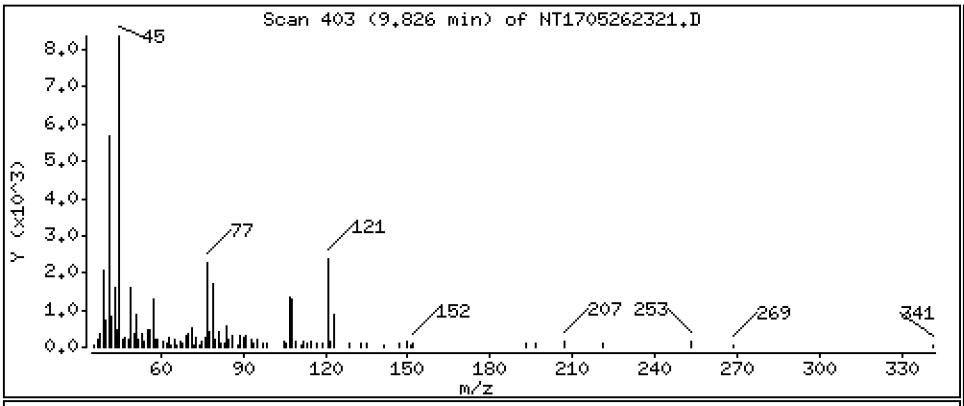
Operator: VTS

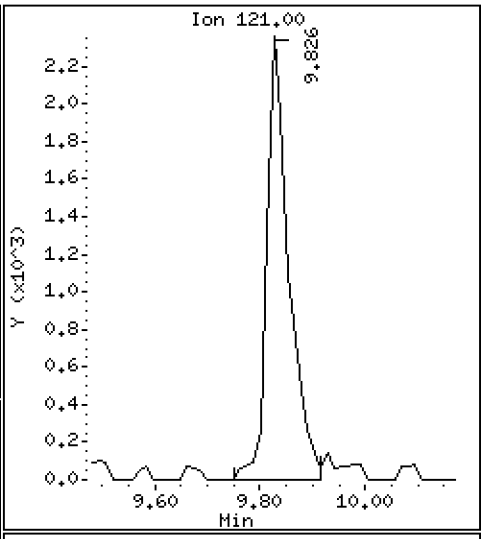
Column phase: ZB-5msi

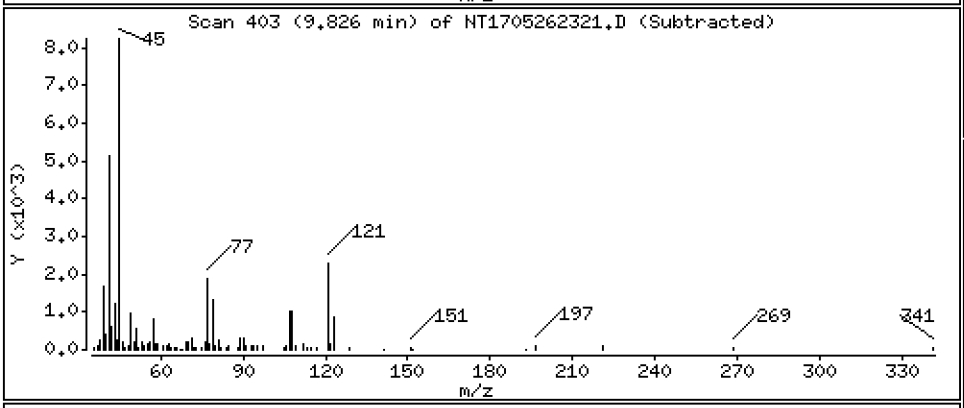
Column diameter: 0.25

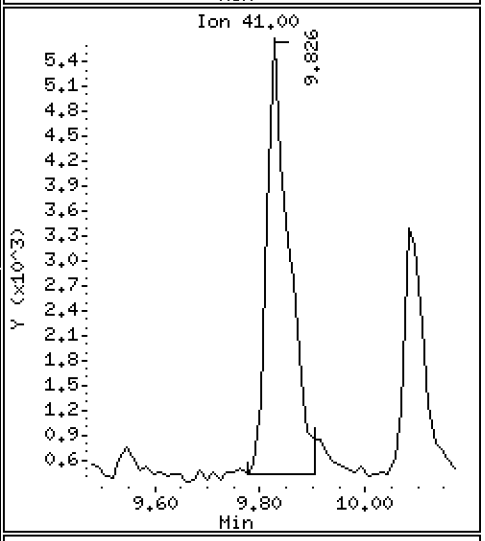
14 2,2'-oxybis(1-Chloropropane)

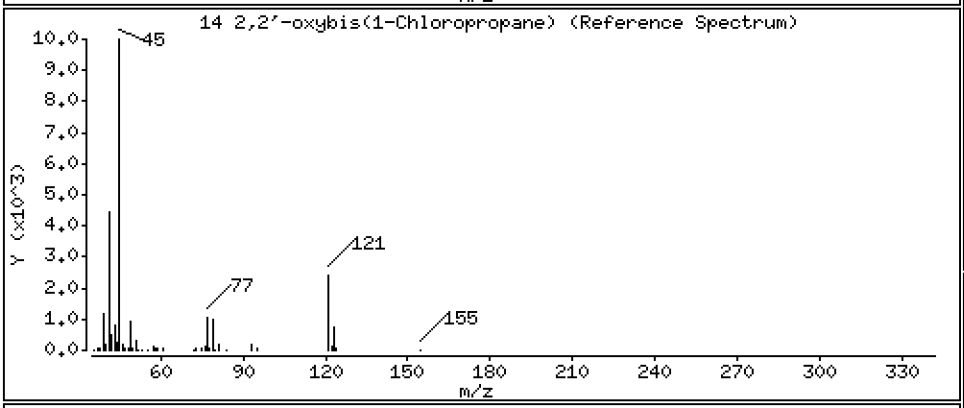
Concentration: 0.1873 ug/mL

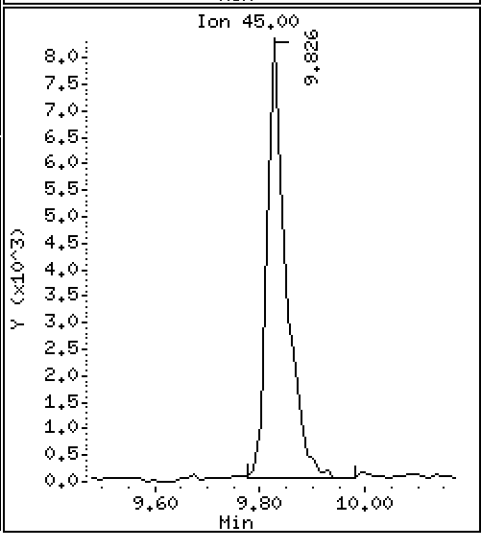


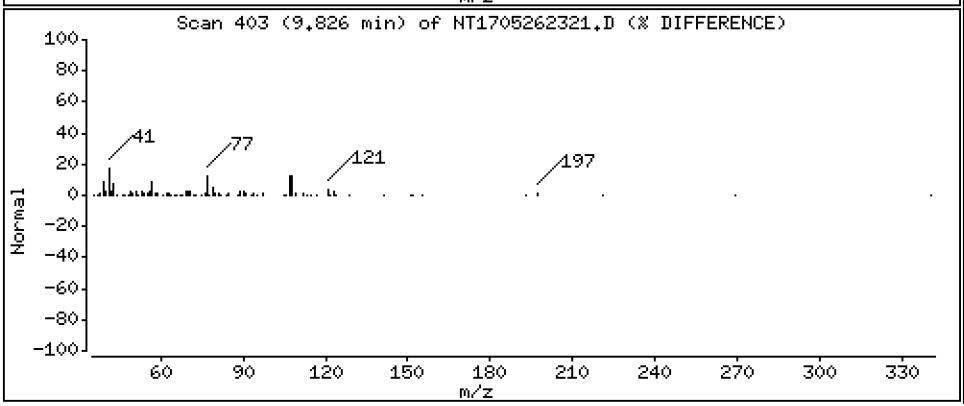












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

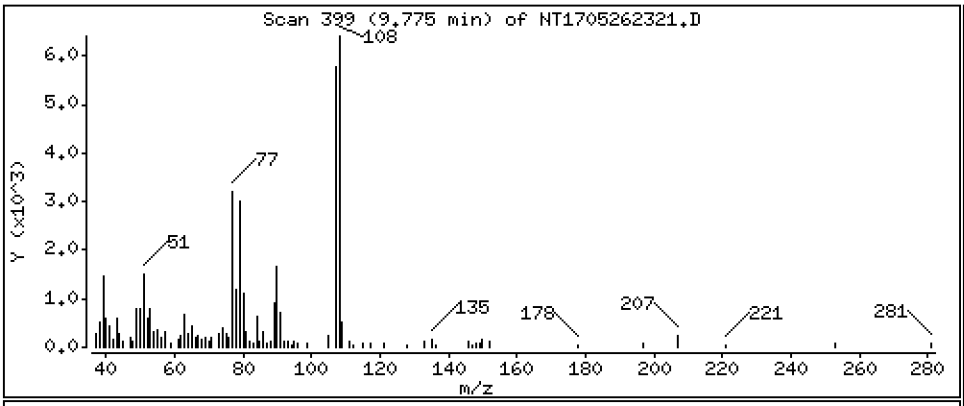
Operator: VTS

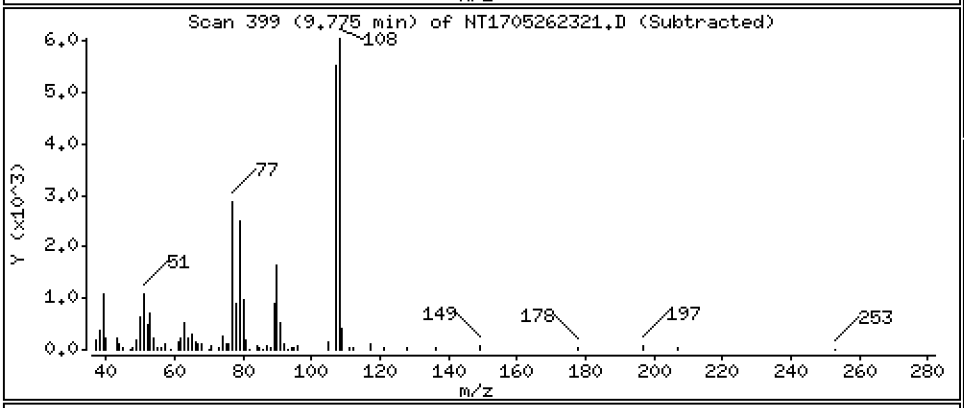
Column phase: ZB-5msi

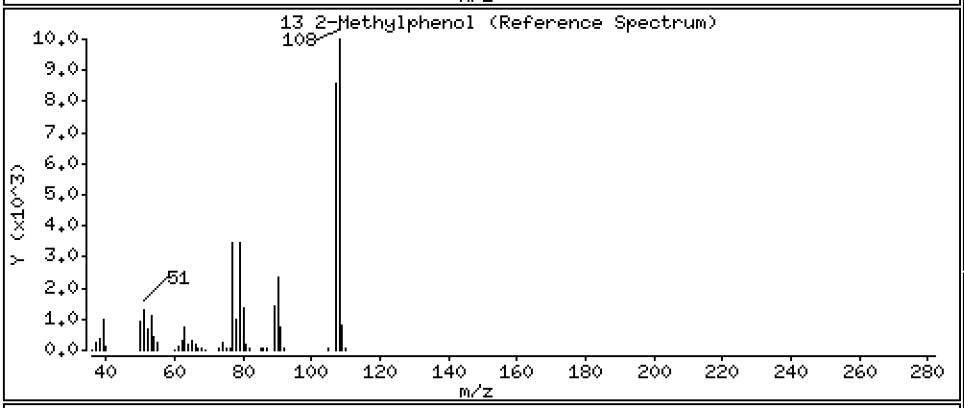
Column diameter: 0.25

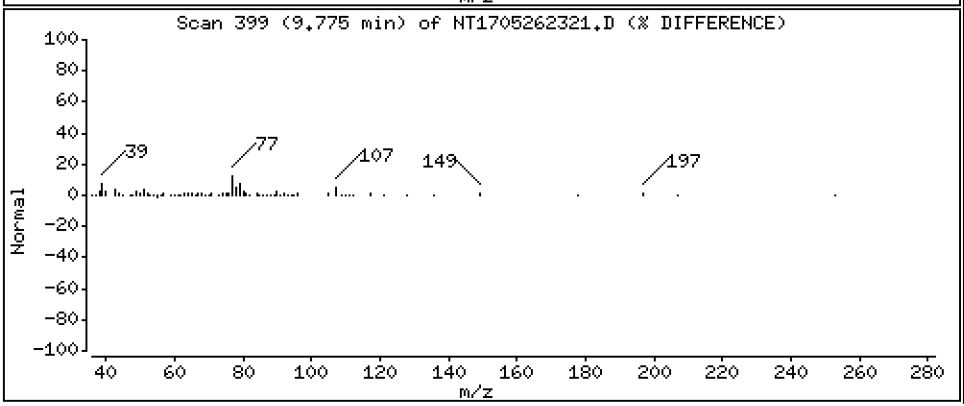
13 2-Methylphenol

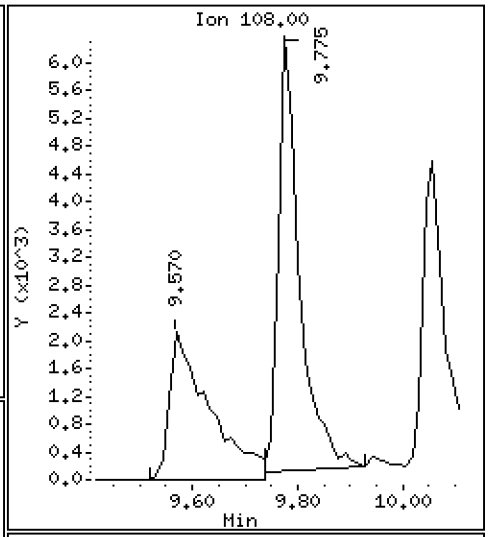
Concentration: 0.1460 ug/mL

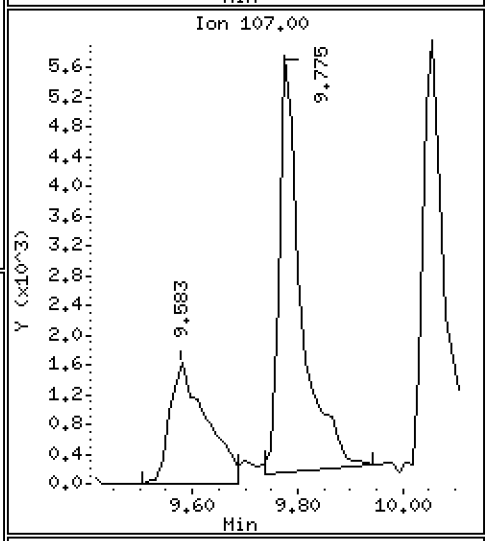


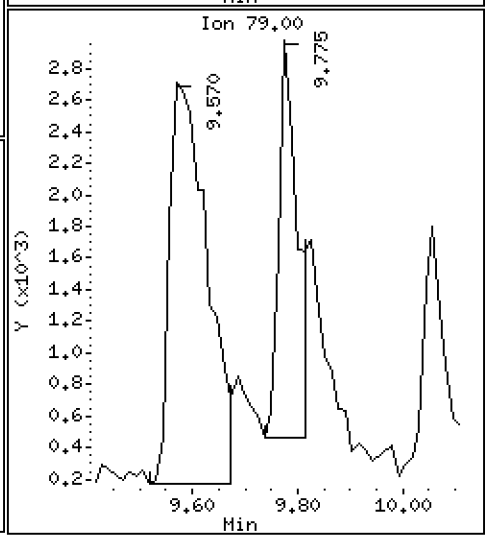












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

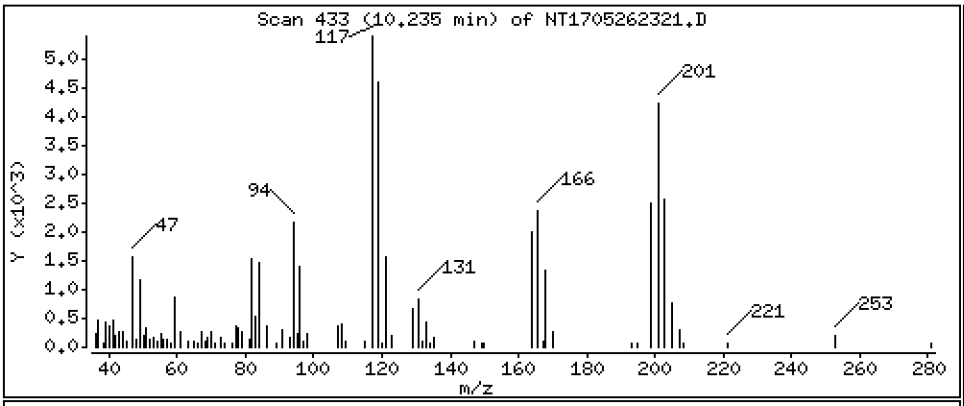
Operator: VTS

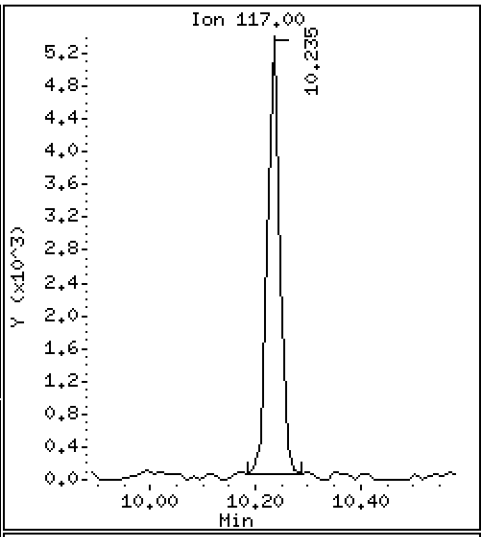
Column phase: ZB-5msi

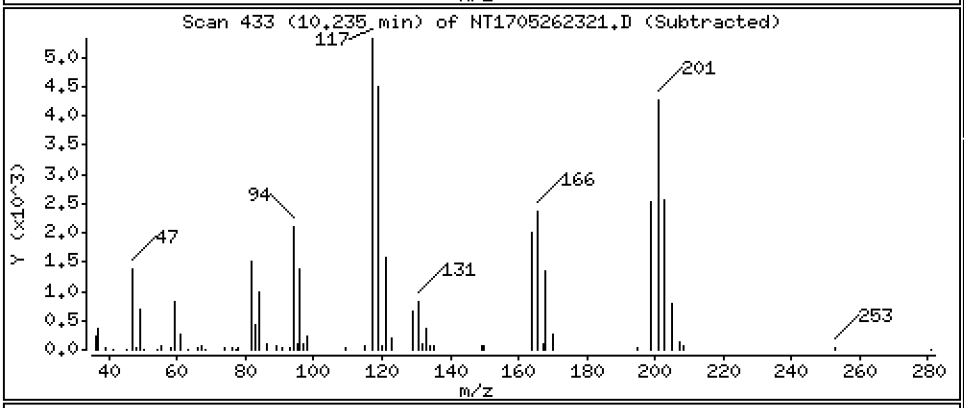
Column diameter: 0.25

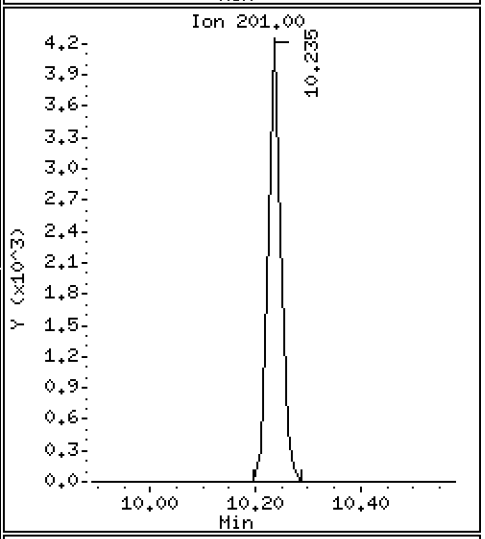
17 Hexachloroethane

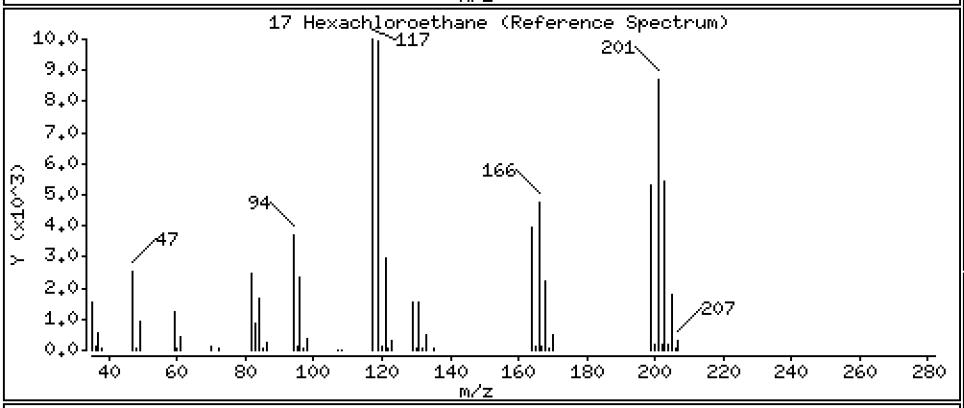
Concentration: 0.1574 ug/mL

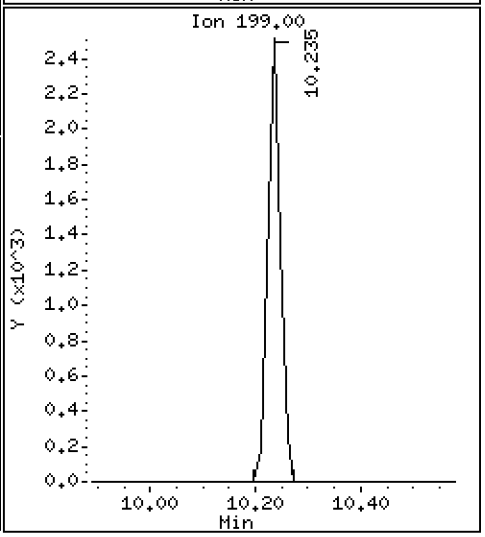


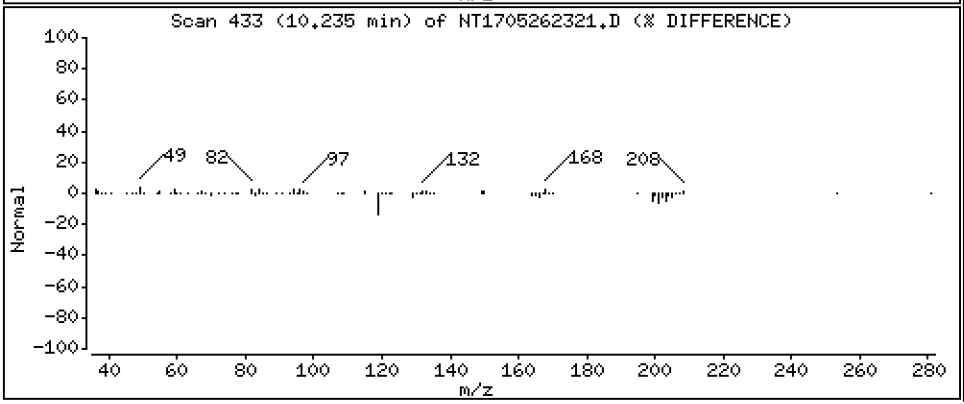












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

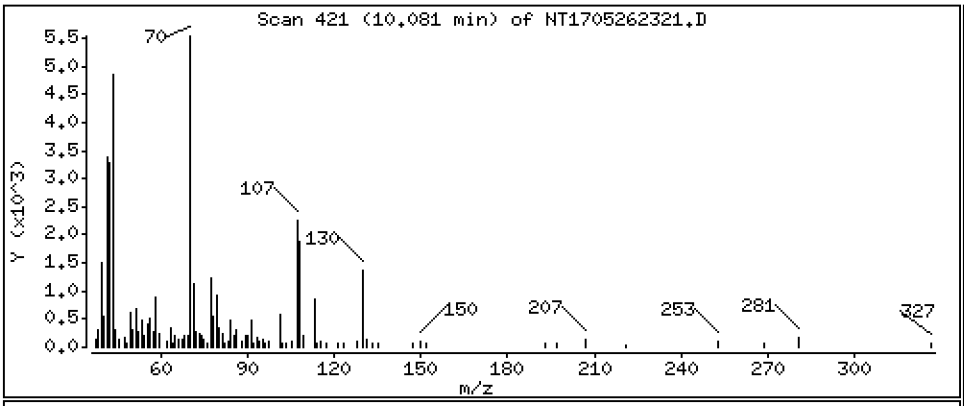
Operator: VTS

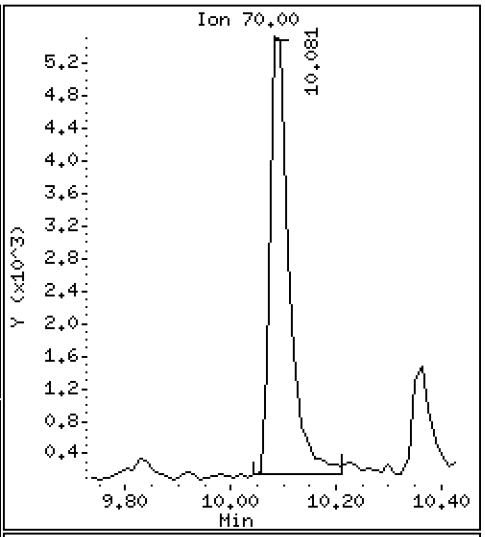
Column phase: ZB-5msi

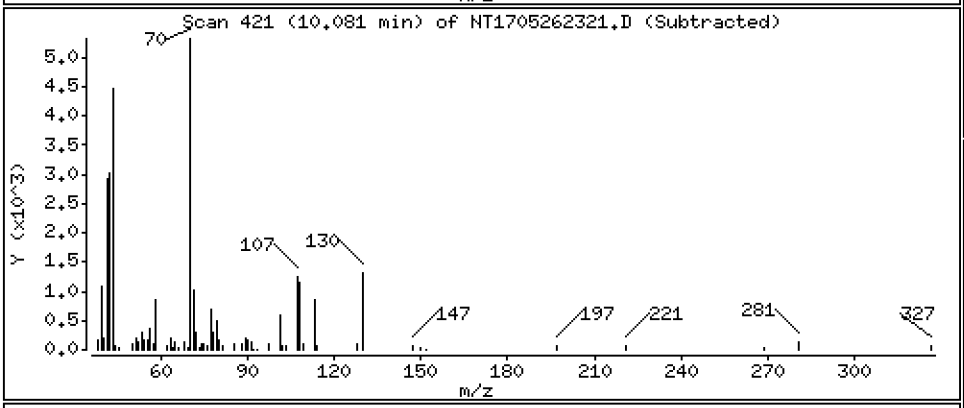
Column diameter: 0.25

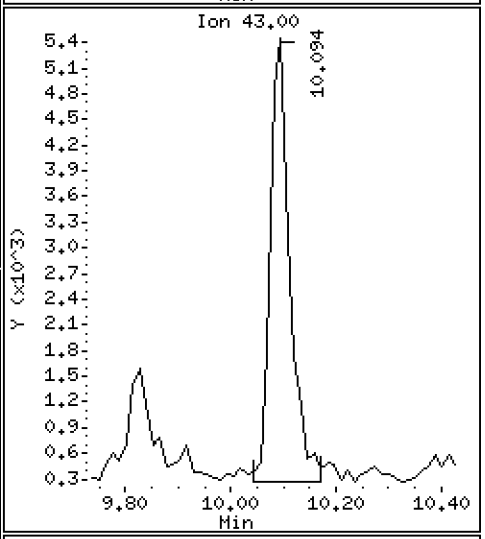
16 N-Nitroso-di-n-propylamine

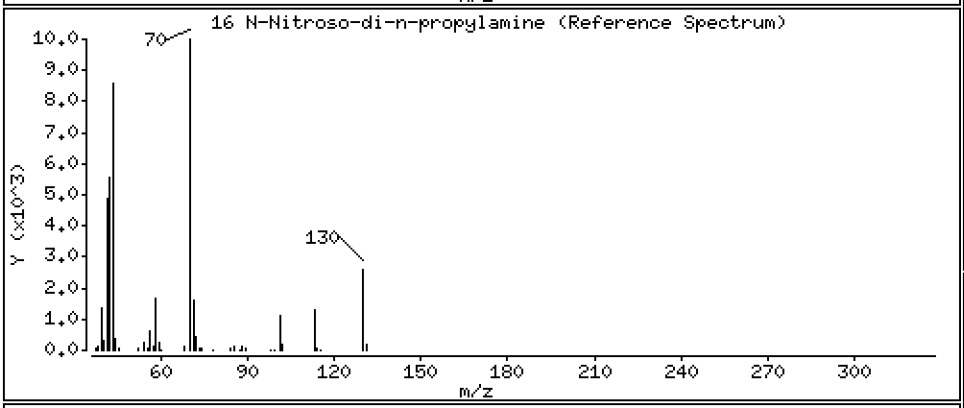
Concentration: 0.1492 ug/mL

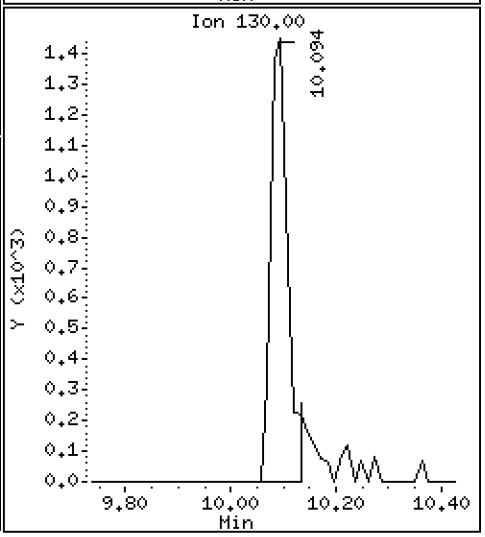


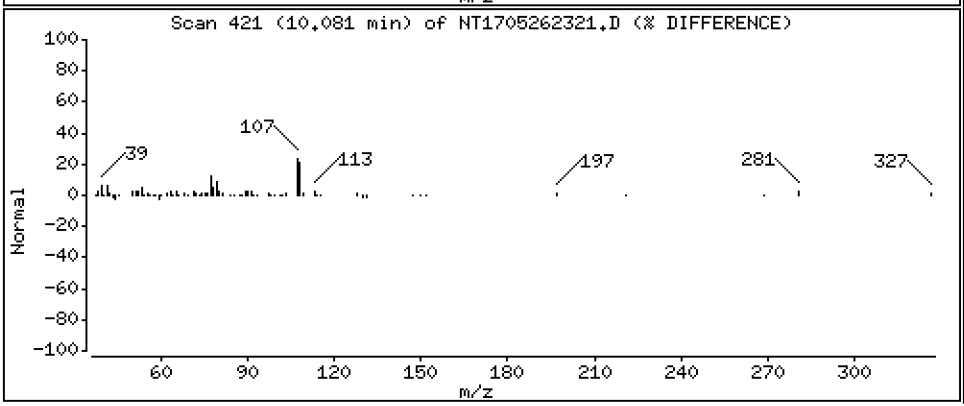












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

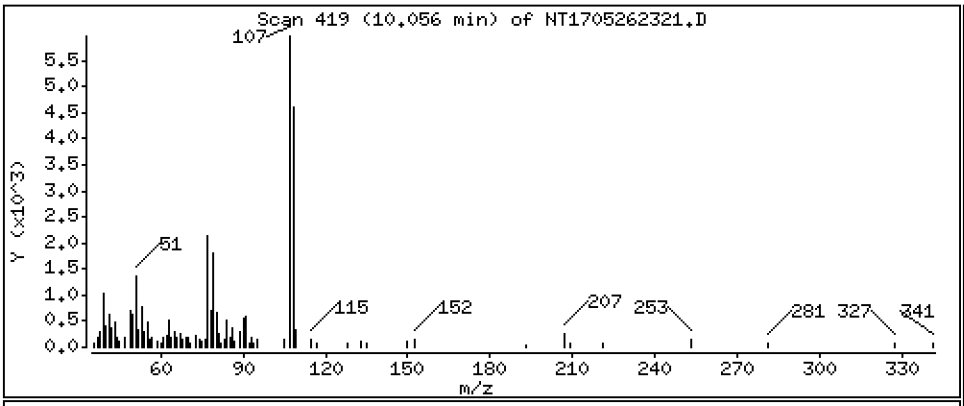
Operator: VTS

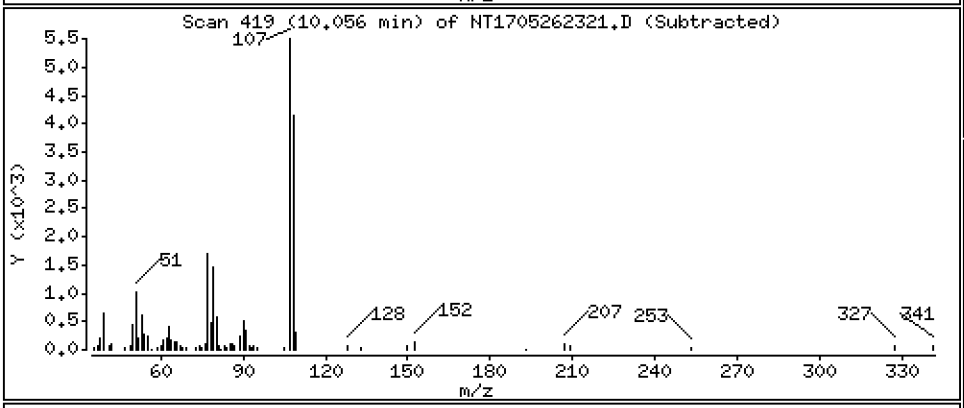
Column phase: ZB-5msi

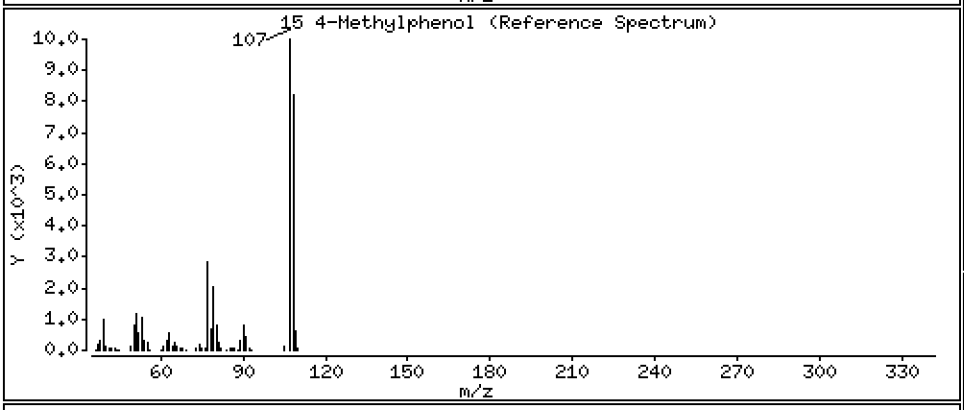
Column diameter: 0.25

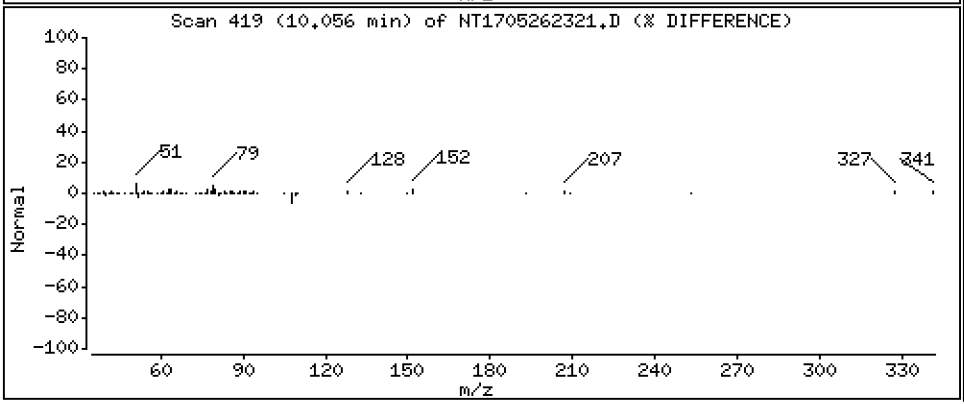
15 4-Methylphenol

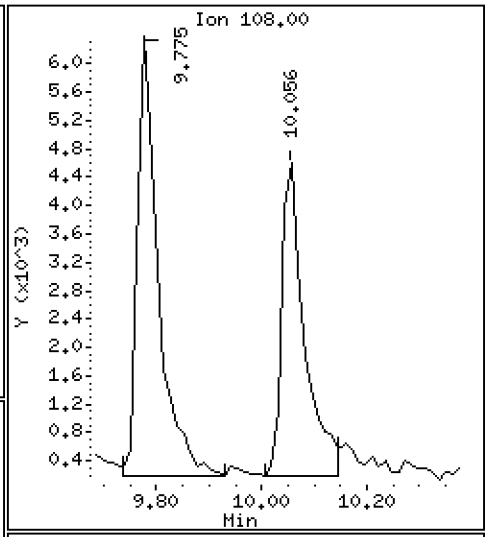
Concentration: 0.1077 ug/mL

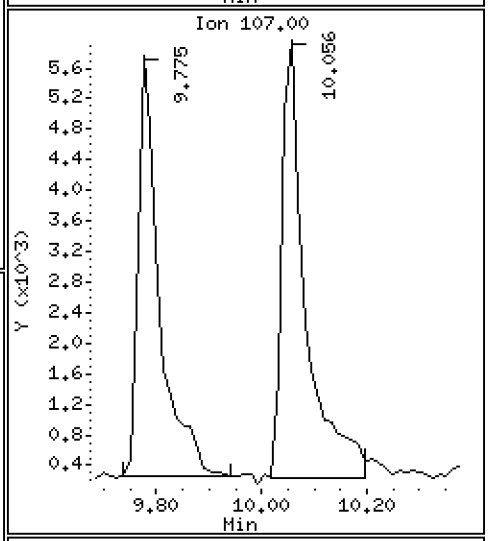


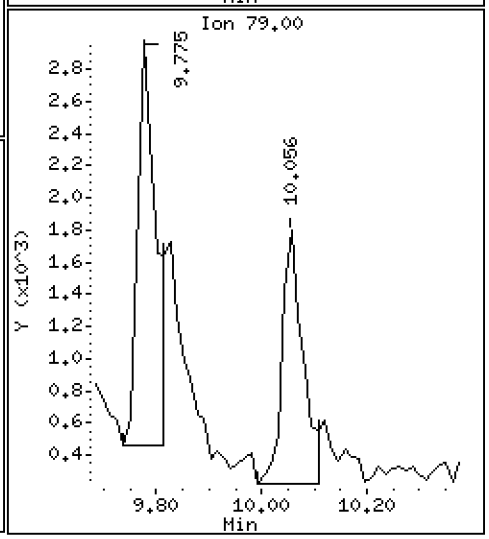












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

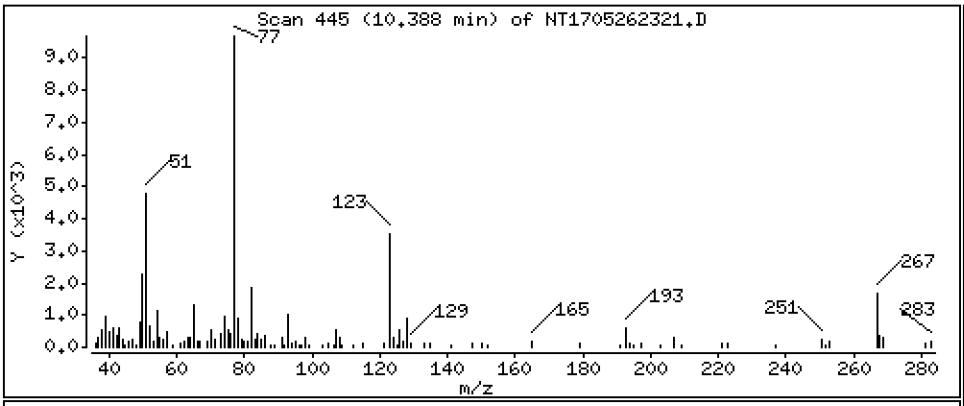
Operator: VTS

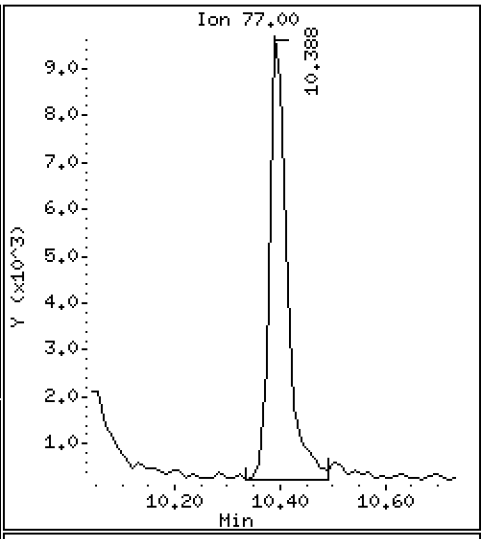
Column phase: ZB-5msi

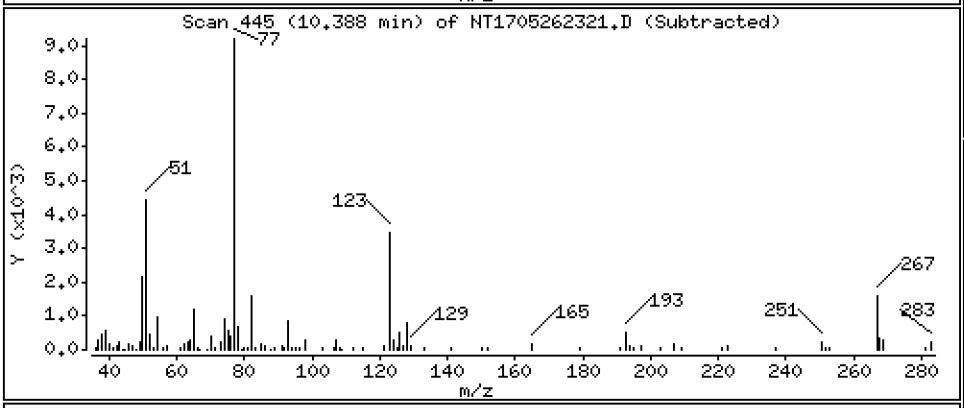
Column diameter: 0.25

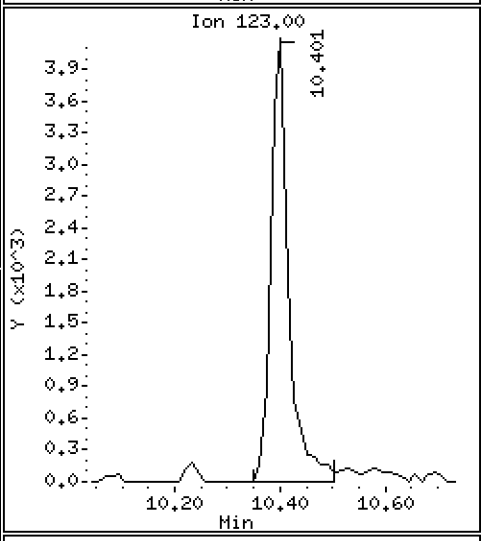
19 Nitrobenzene

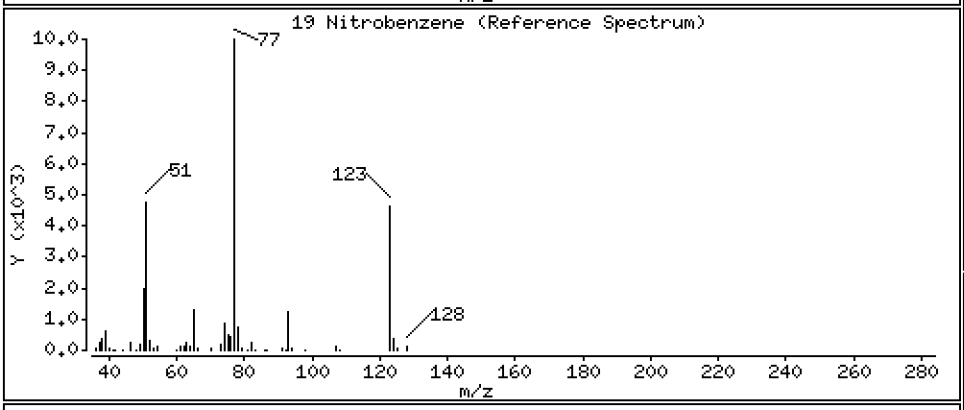
Concentration: 0.1951 ug/mL

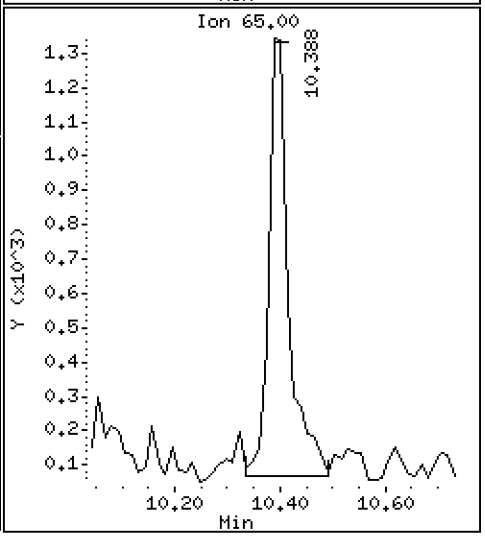


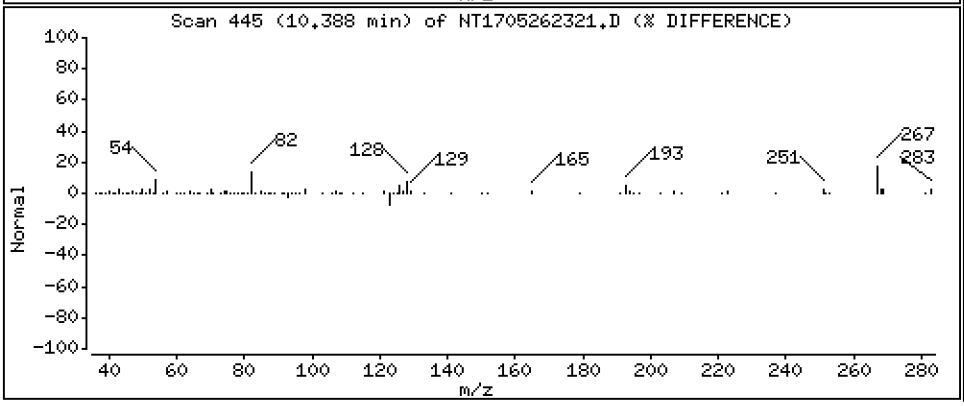












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

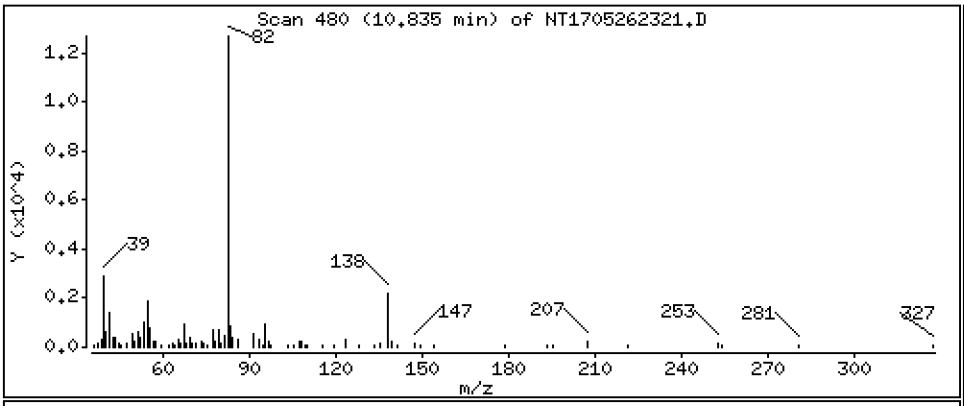
Operator: VTS

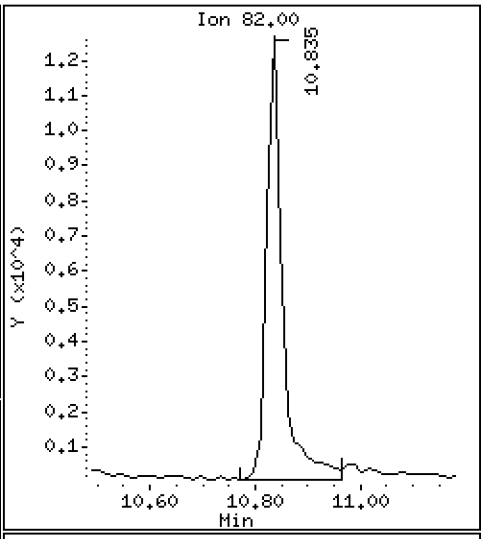
Column phase: ZB-5msi

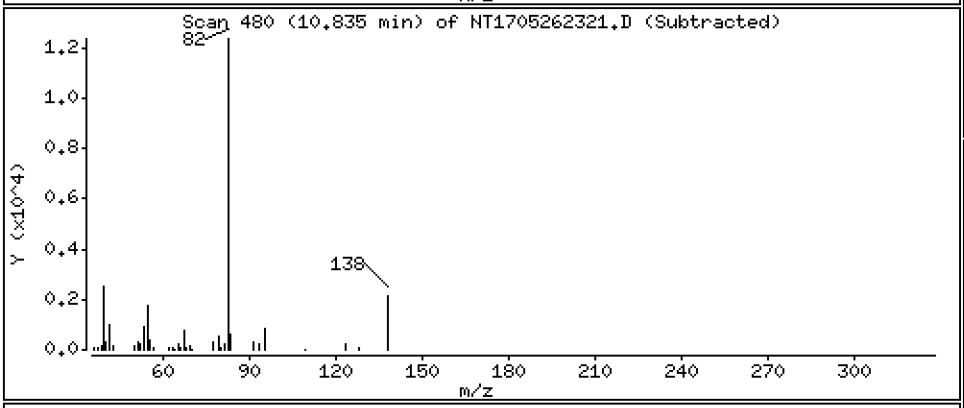
Column diameter: 0.25

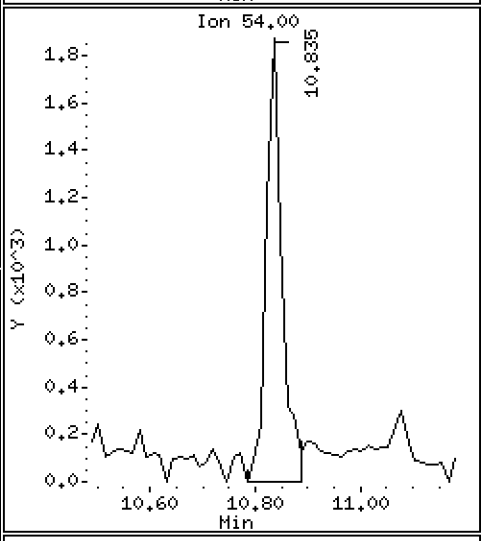
20 Isophorone

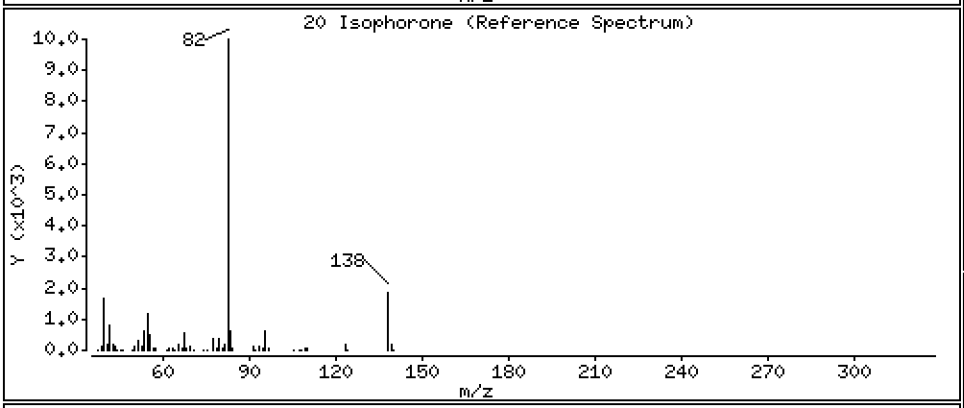
Concentration: 0.1961 ug/mL

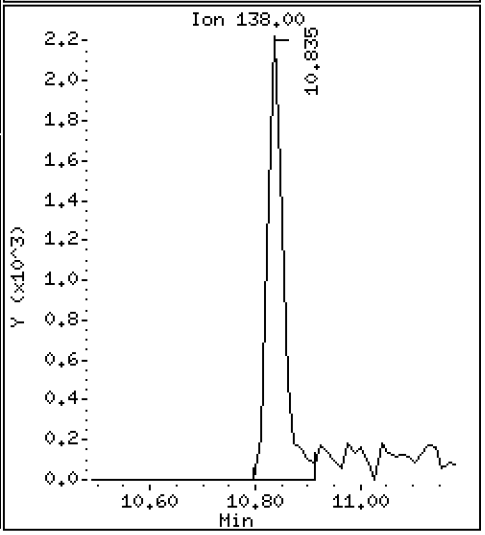


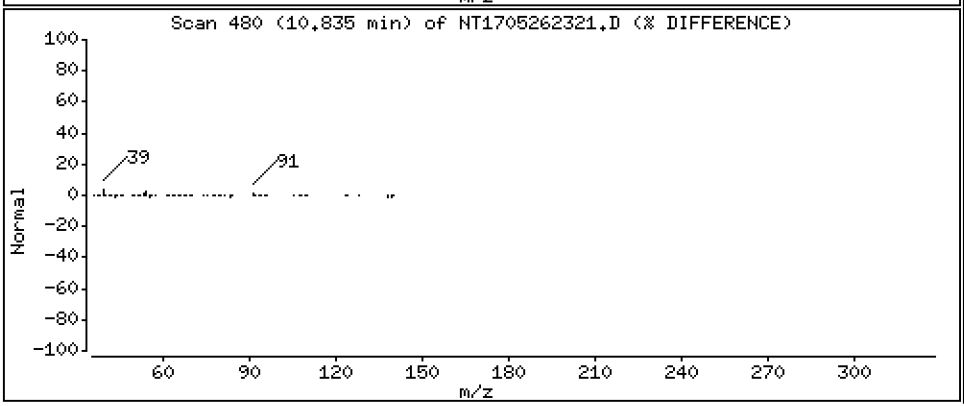












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

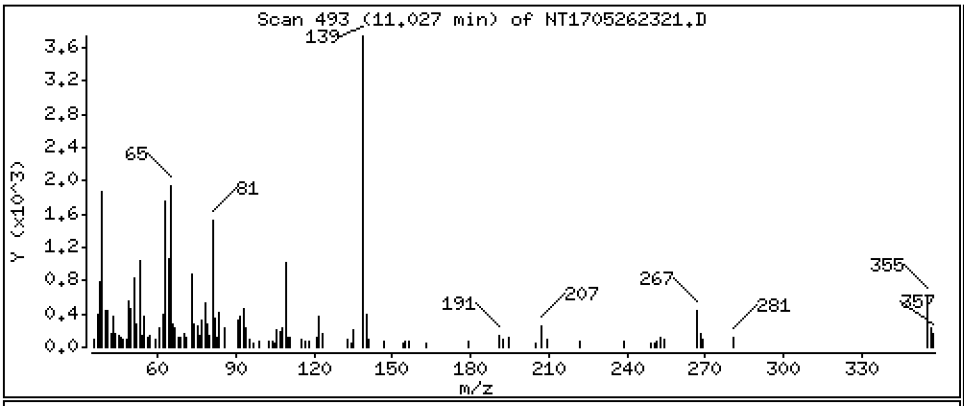
Operator: VTS

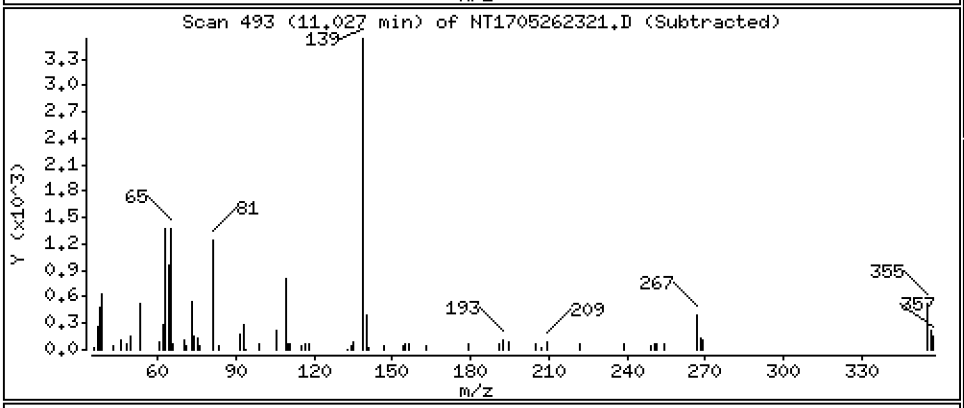
Column phase: ZB-5msi

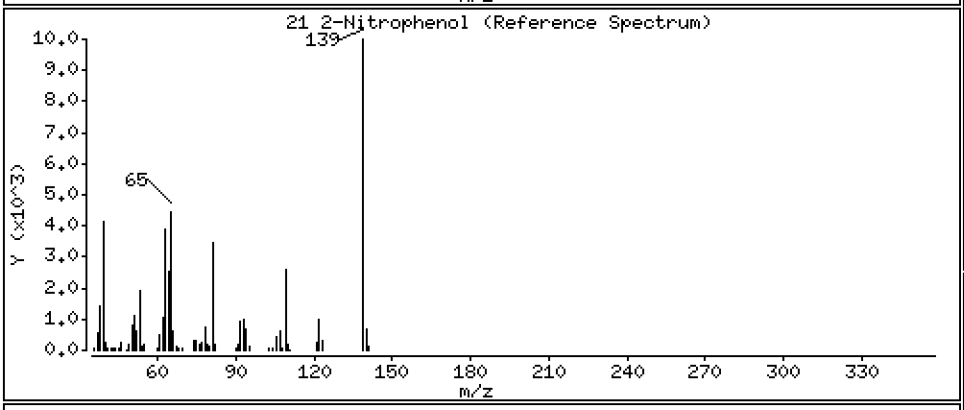
Column diameter: 0.25

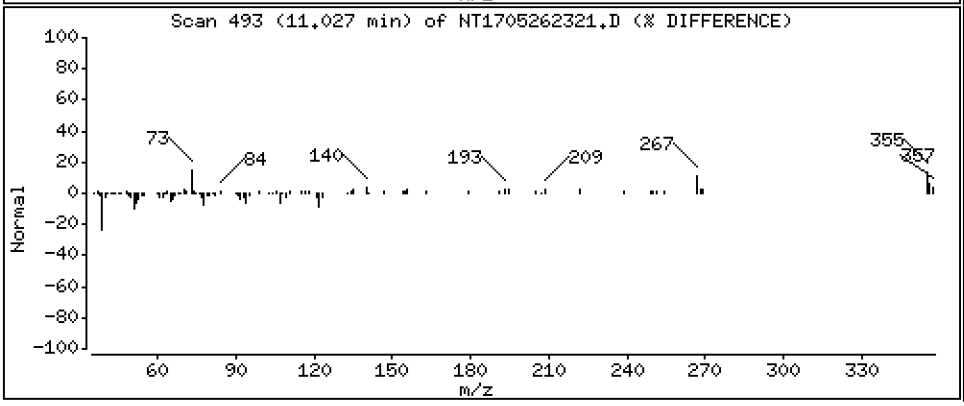
21 2-Nitrophenol

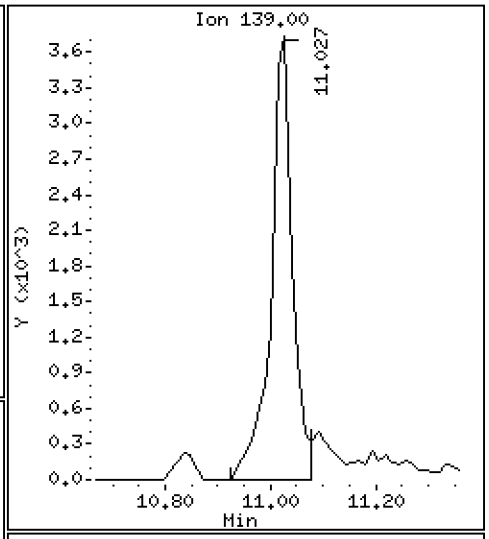
Concentration: 0.2302 ug/mL

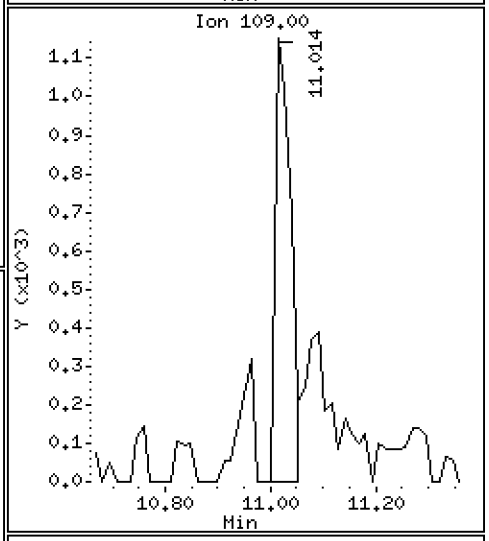


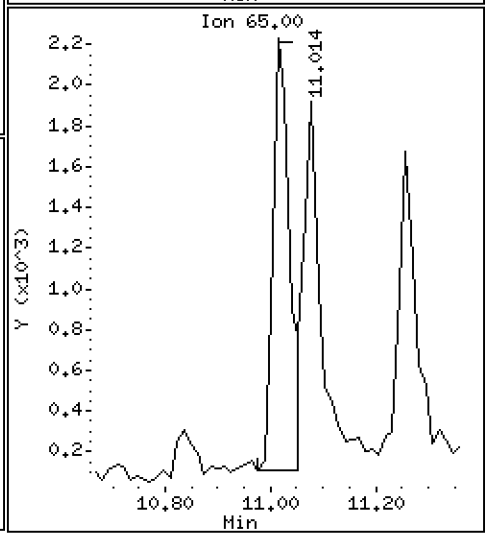












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

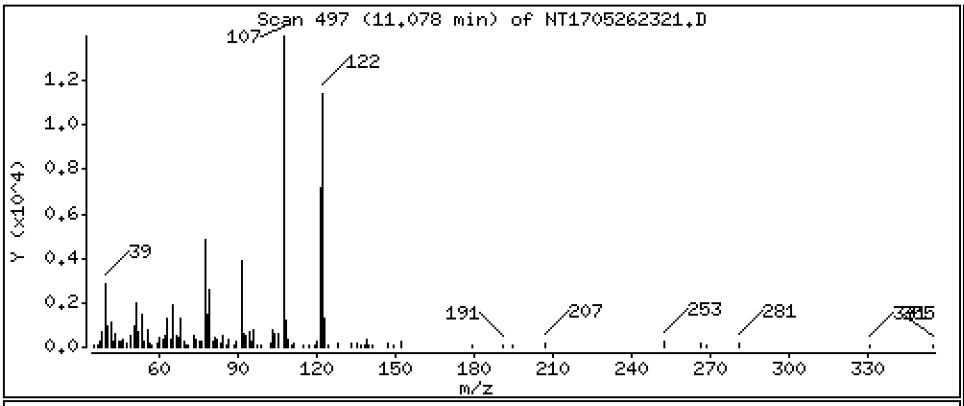
Operator: VTS

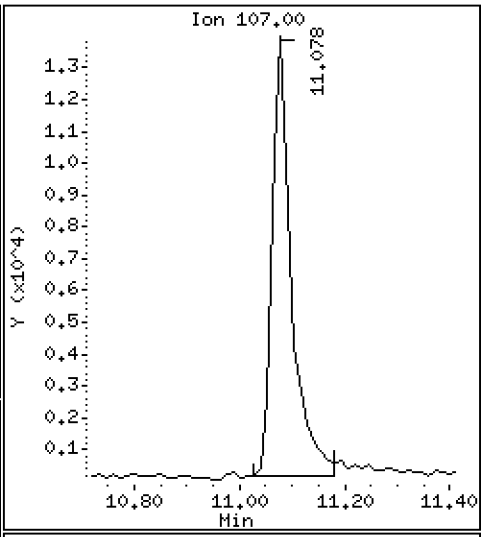
Column phase: ZB-5msi

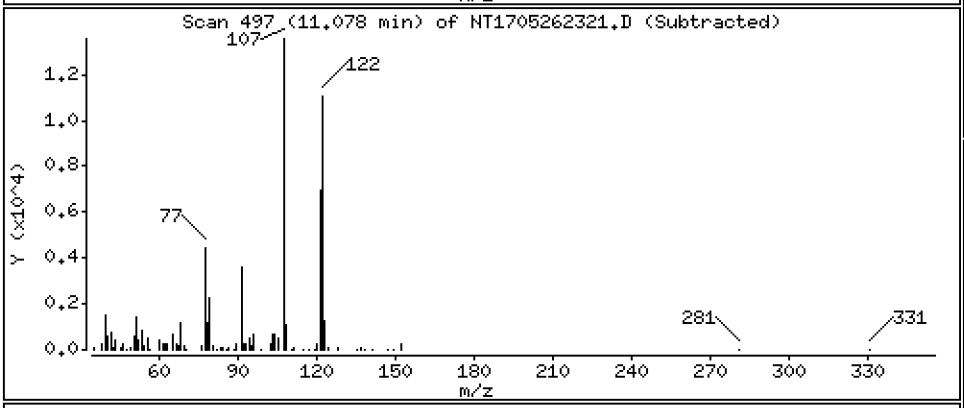
Column diameter: 0.25

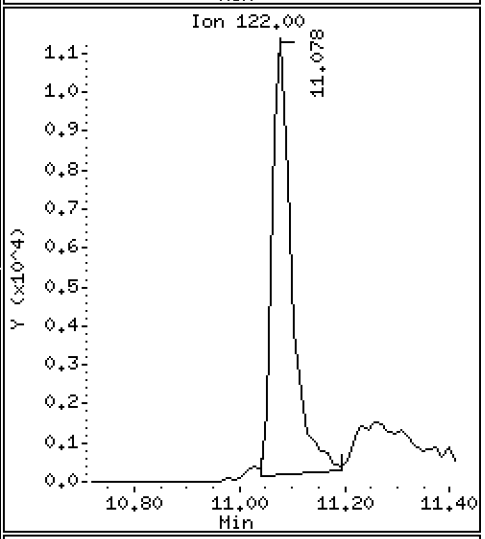
22 2,4-Dimethylphenol

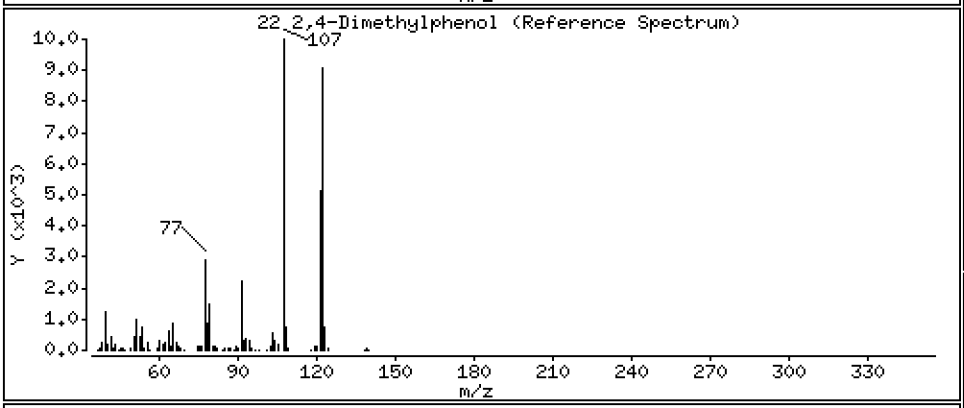
Concentration: 0.3345 ug/mL

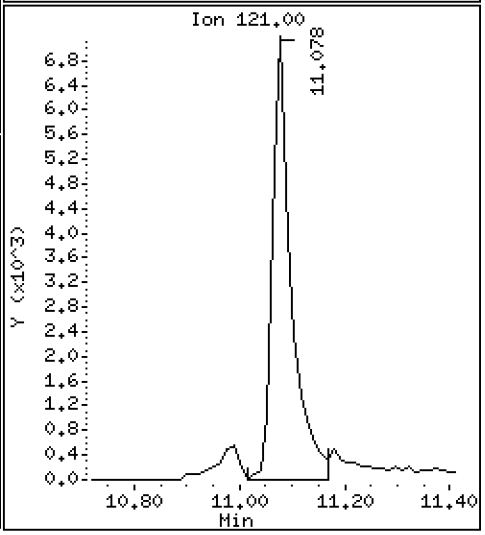


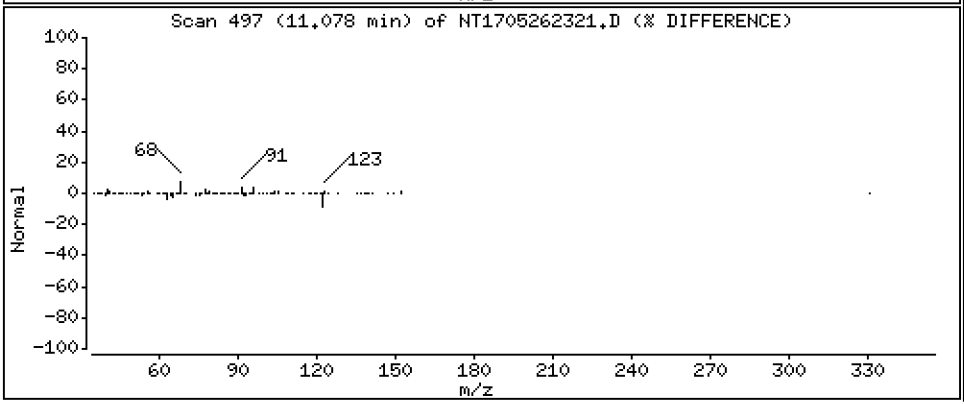












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

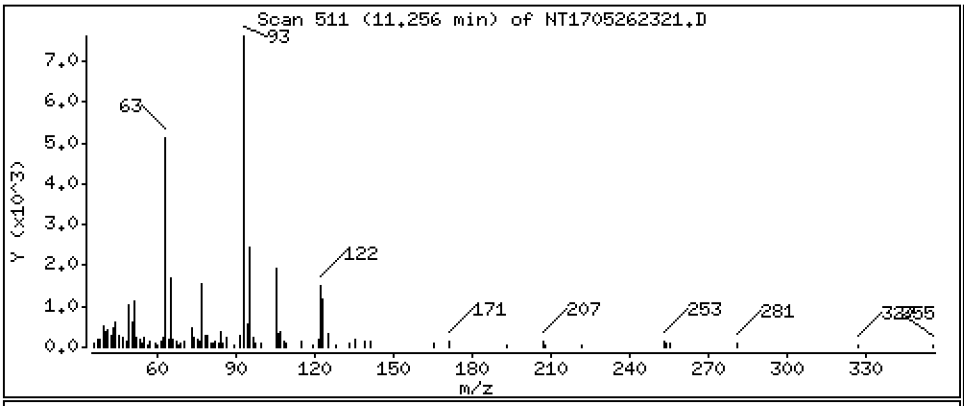
Operator: VTS

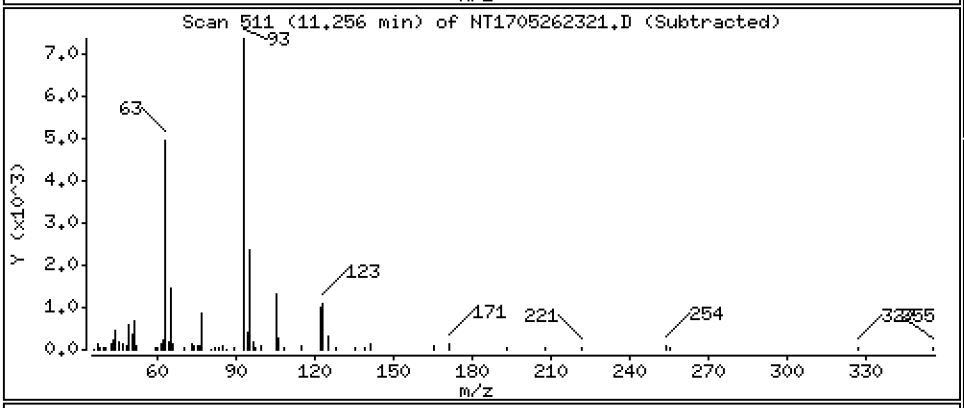
Column phase: ZB-5msi

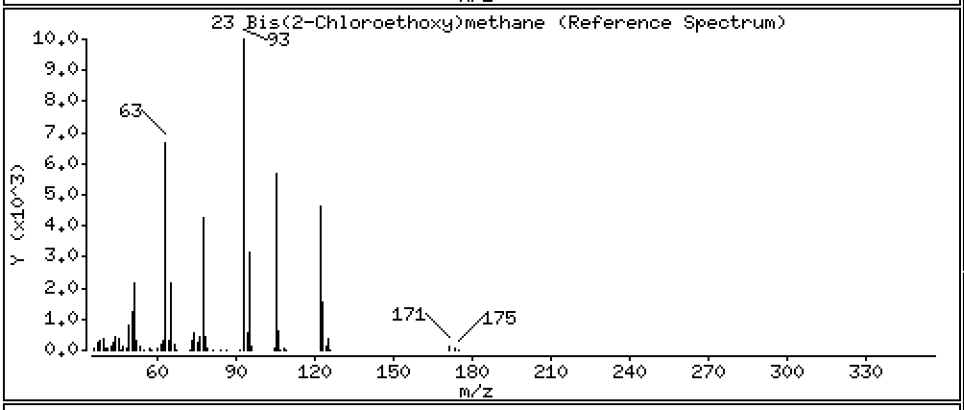
Column diameter: 0.25

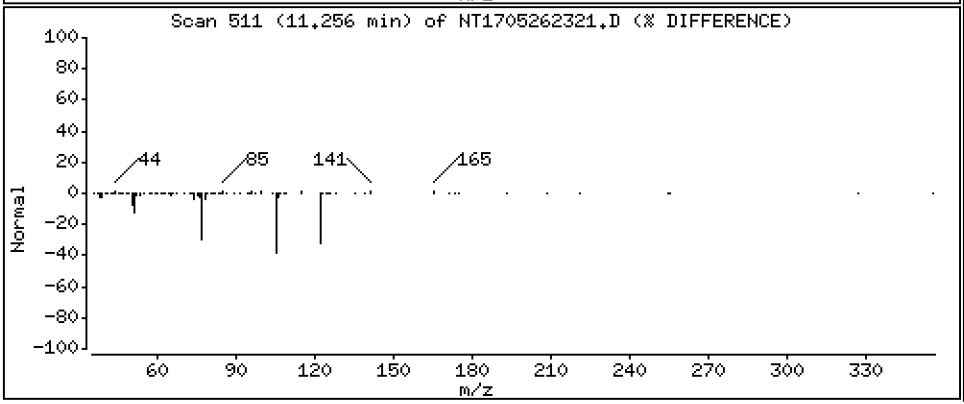
23 Bis(2-Chloroethoxy)methane

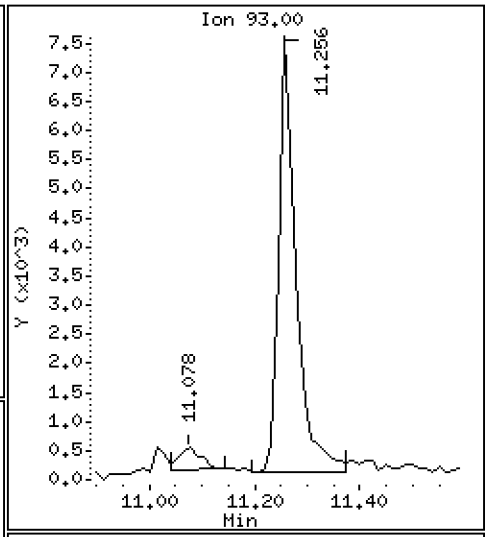
Concentration: 0.1812 ug/mL

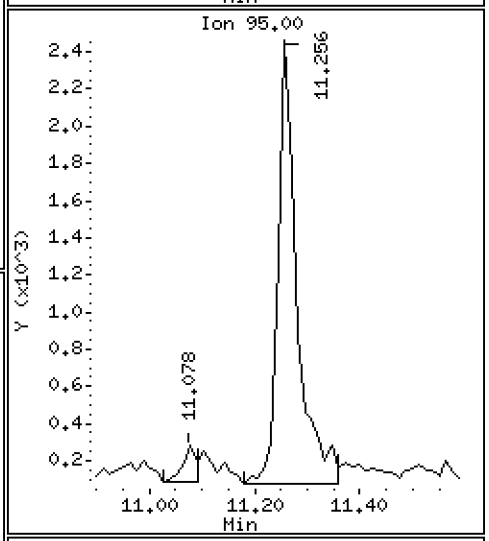


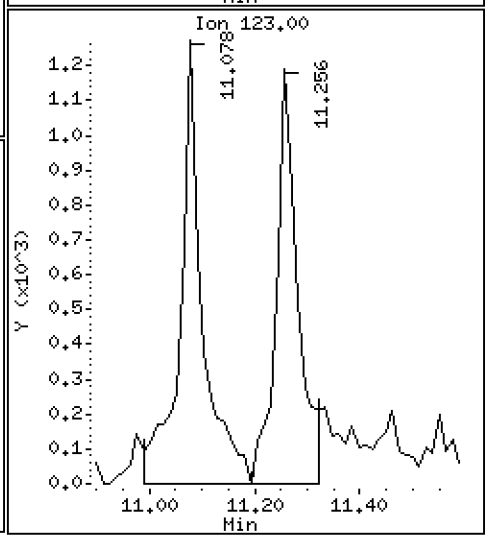












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

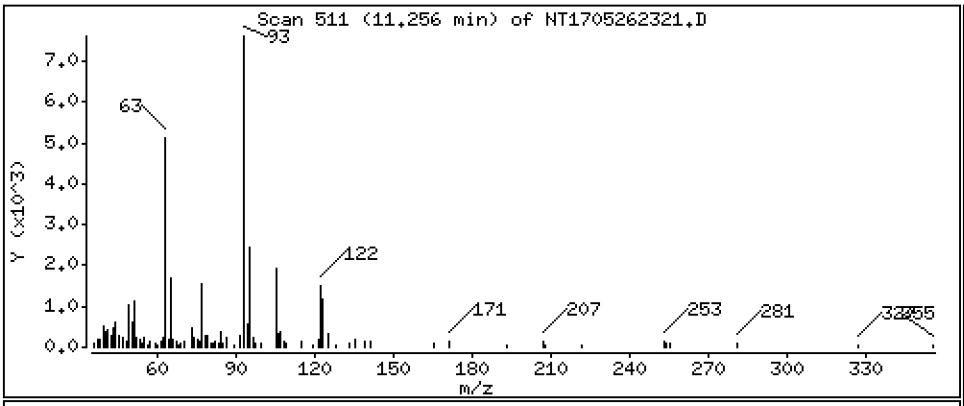
Operator: VTS

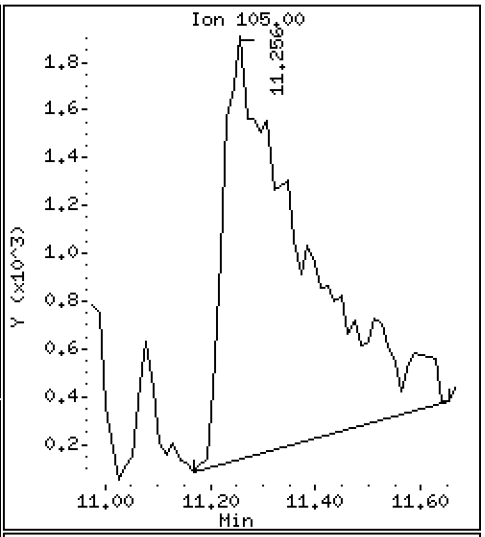
Column phase: ZB-5msi

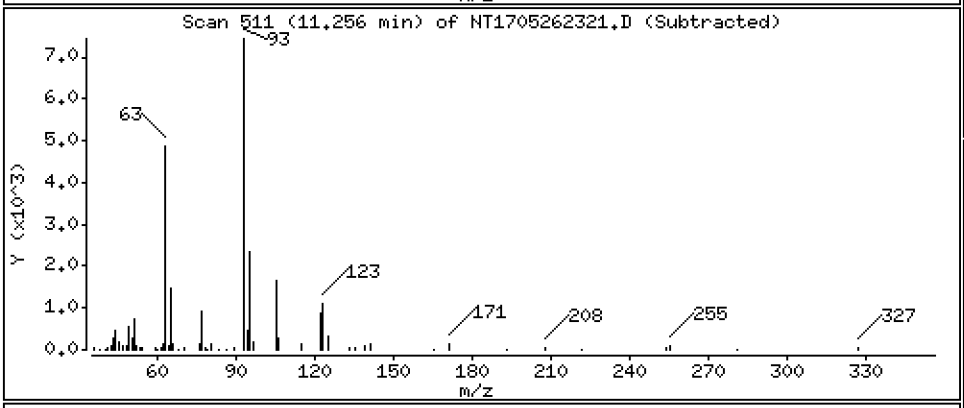
Column diameter: 0.25

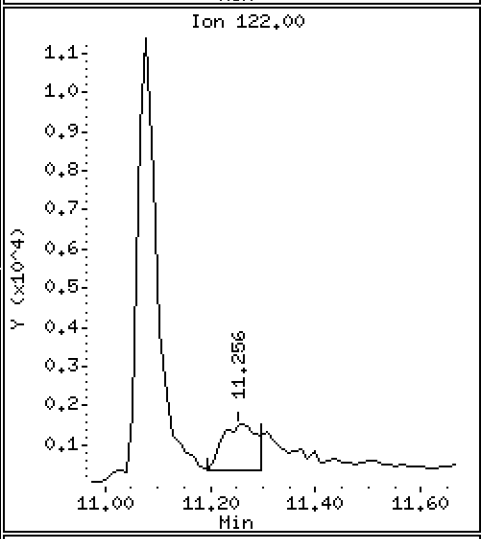
24 Benzoic acid

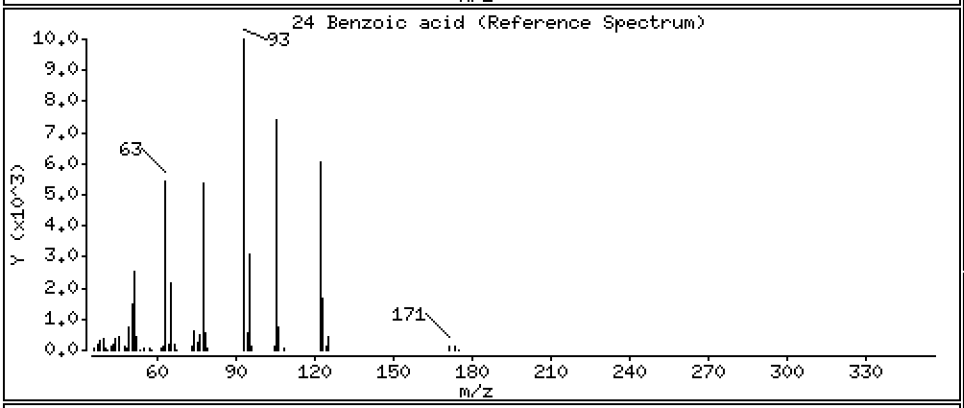
Concentration: 0.2696 ug/mL

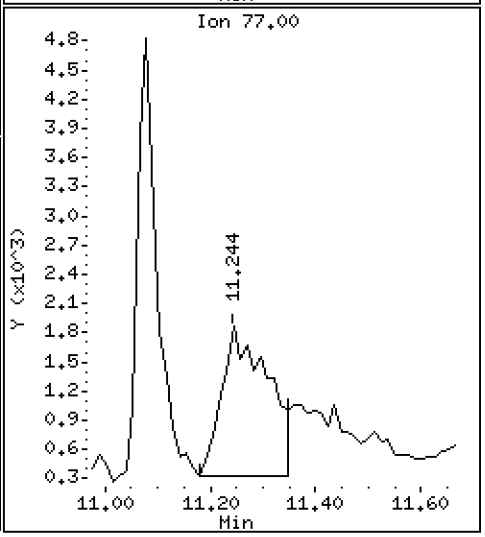


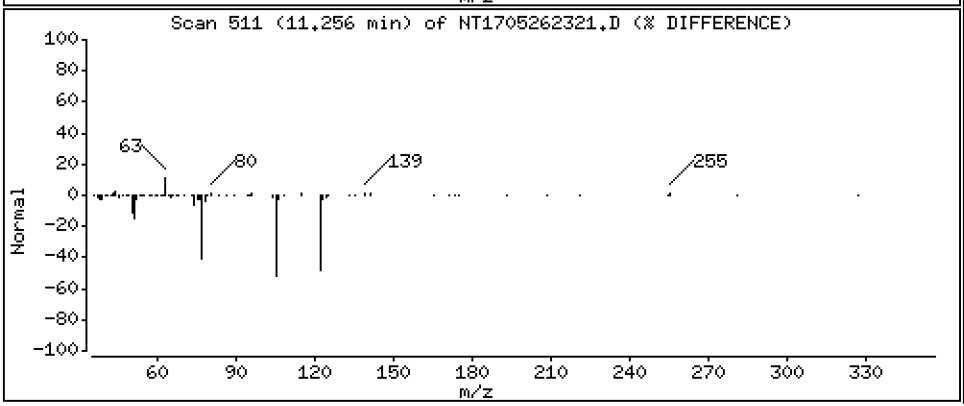












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

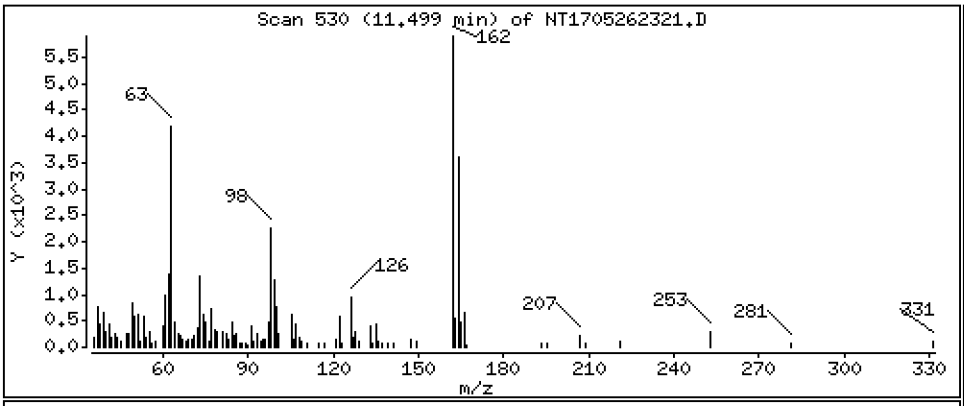
Operator: VTS

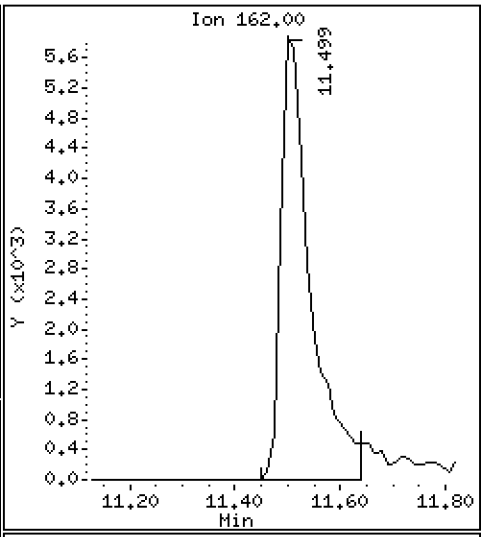
Column phase: ZB-5msi

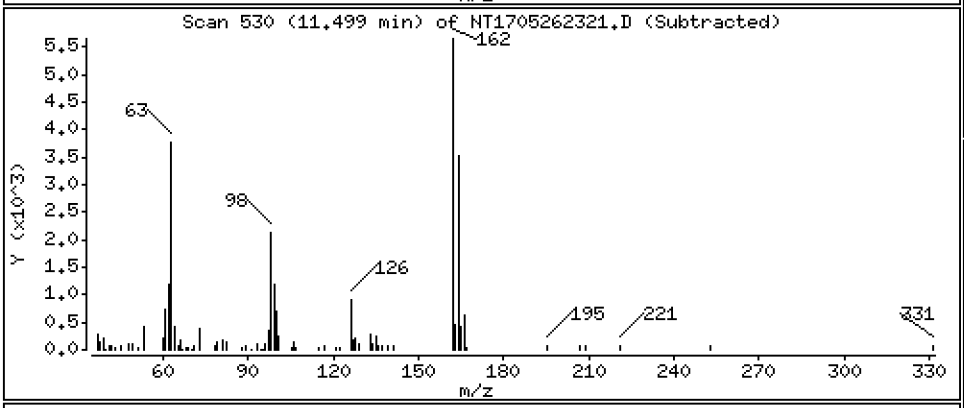
Column diameter: 0.25

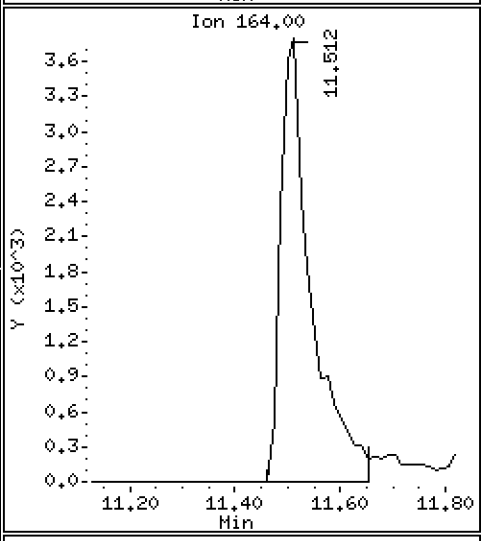
25 2,4-Dichlorophenol

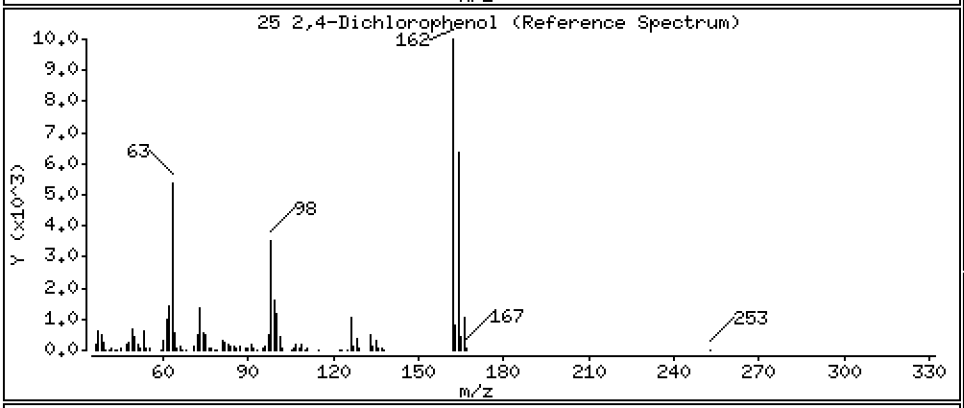
Concentration: 0.3035 ug/mL

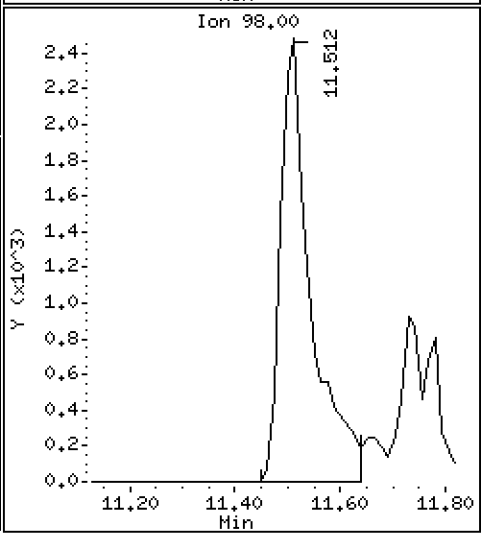


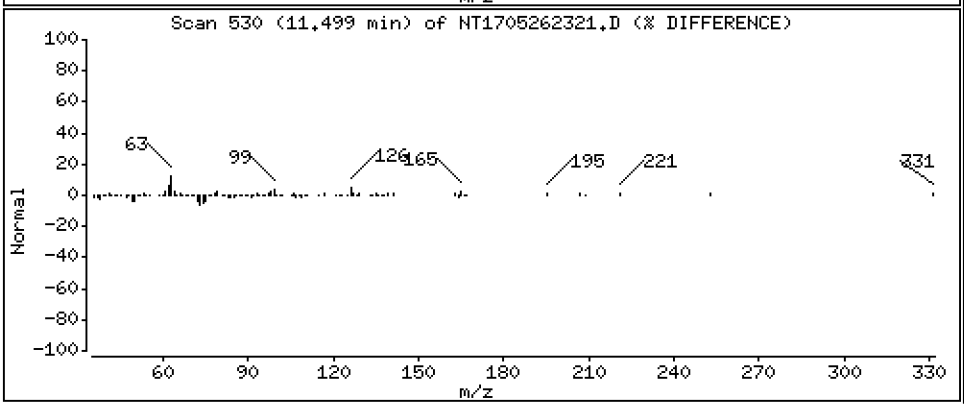












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

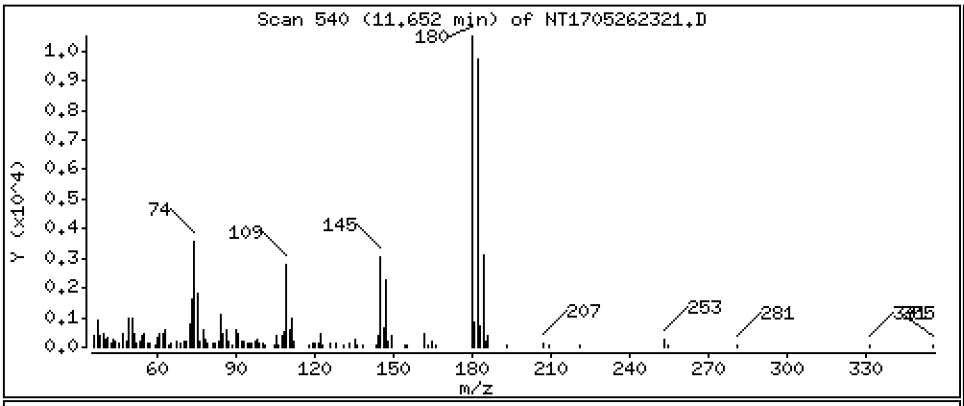
Operator: VTS

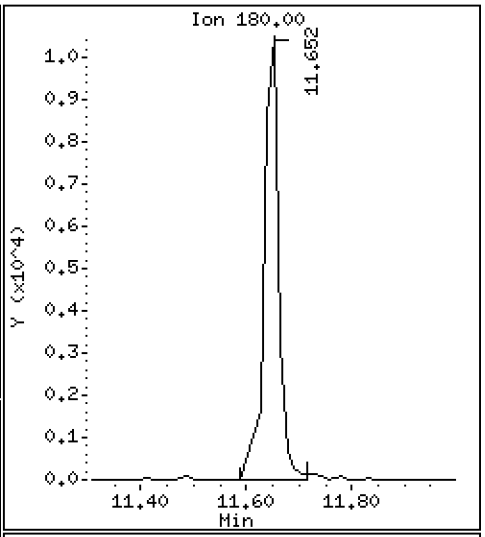
Column phase: ZB-5msi

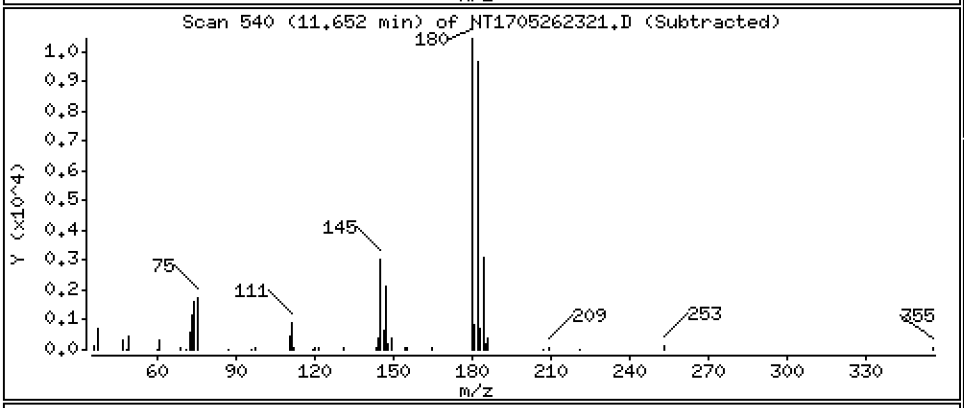
Column diameter: 0.25

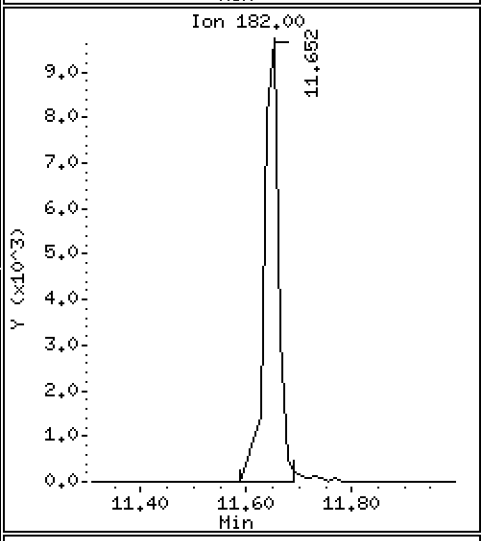
26 1,2,4-Trichlorobenzene

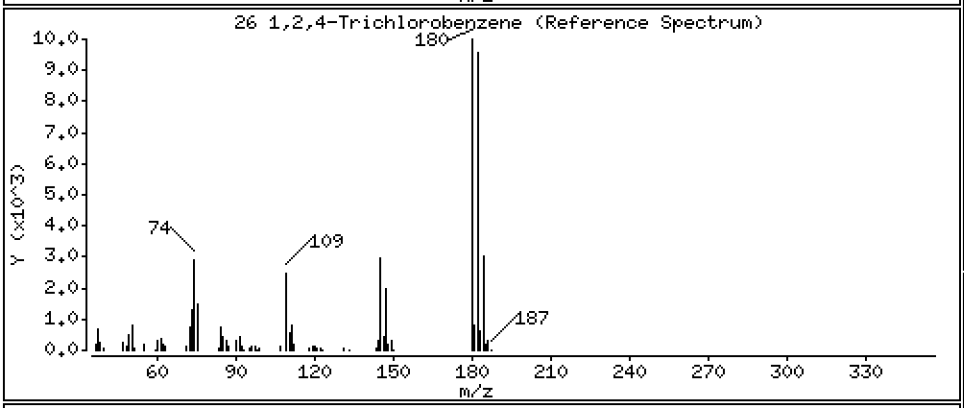
Concentration: 0.2610 ug/mL

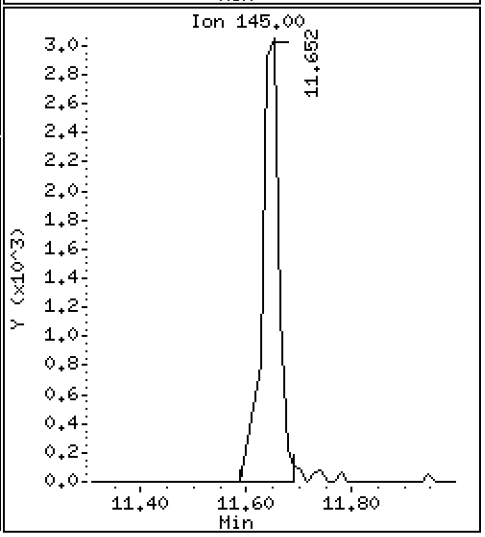


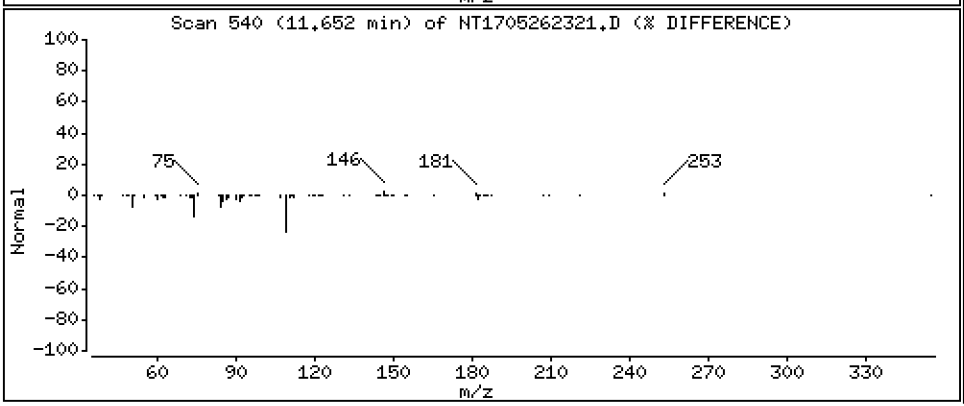












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

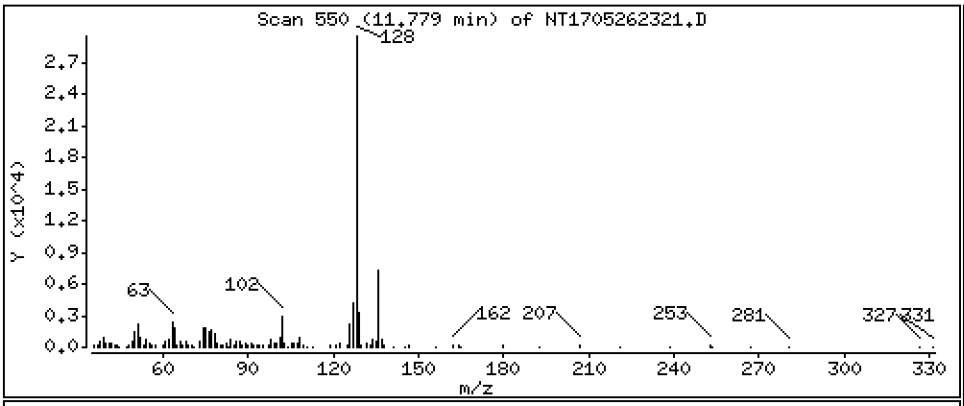
Operator: VTS

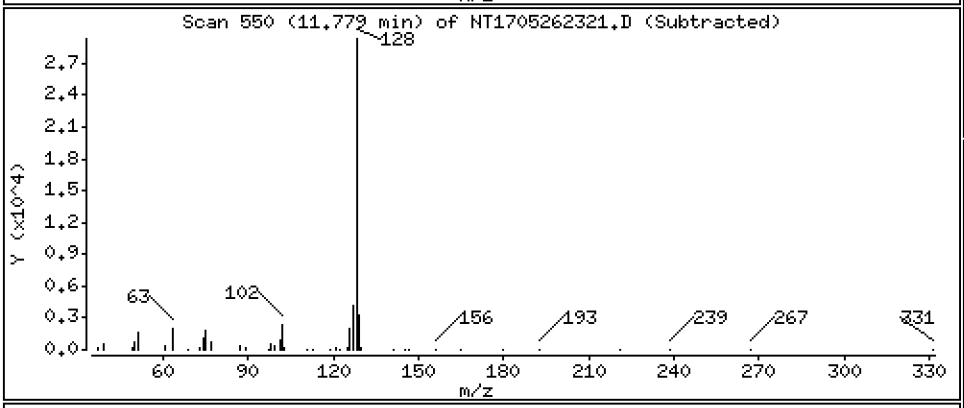
Column phase: ZB-5msi

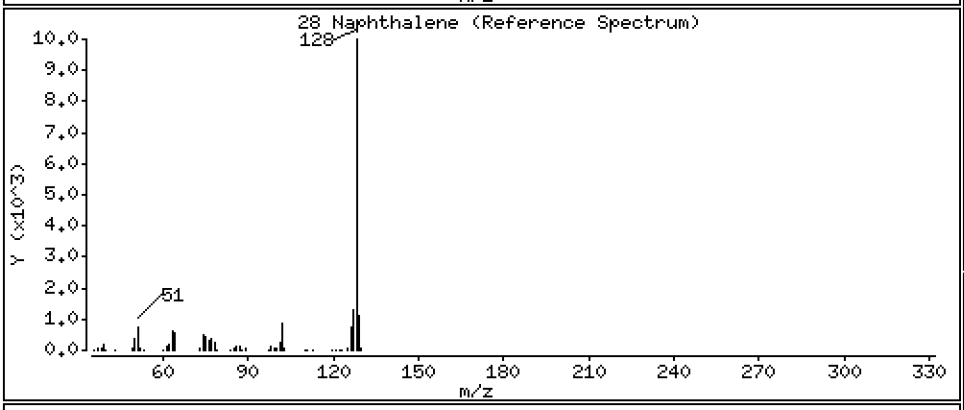
Column diameter: 0.25

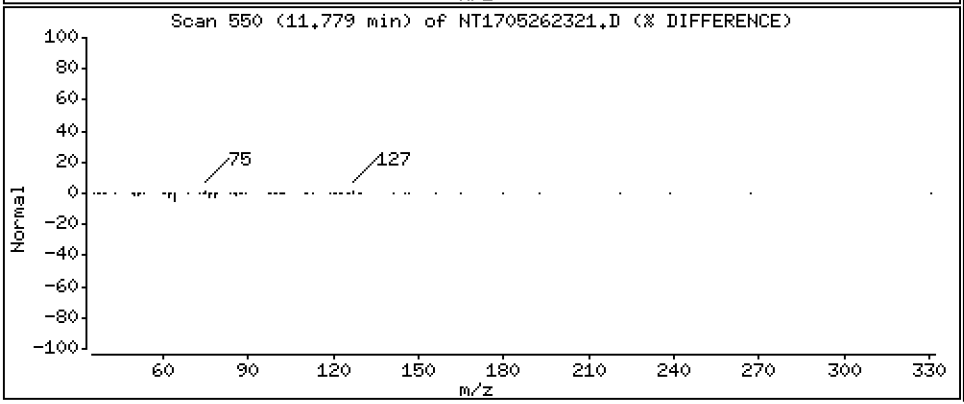
28 Naphthalene

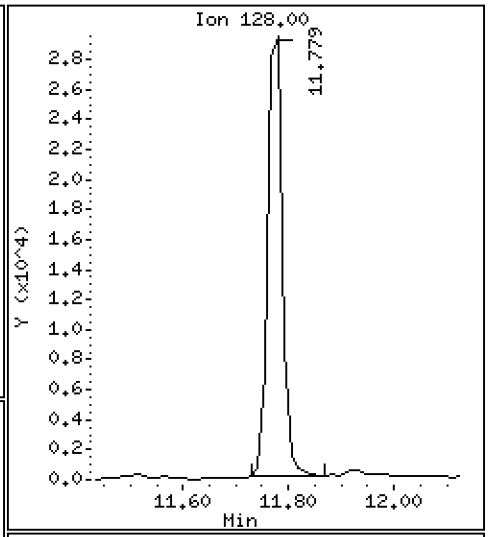
Concentration: 0.2019 ug/mL

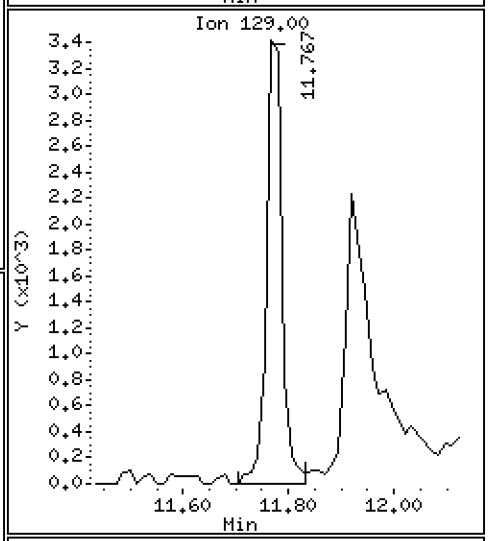


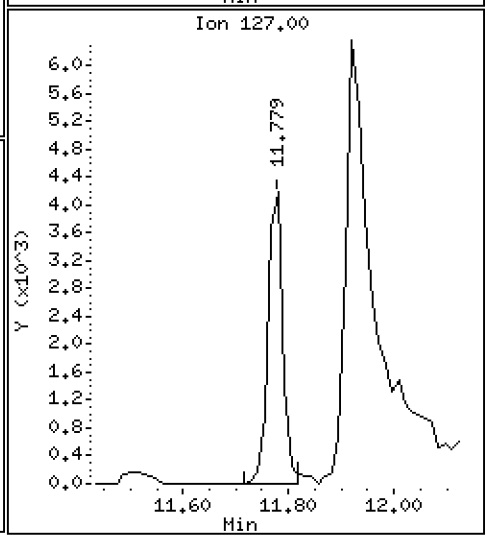












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

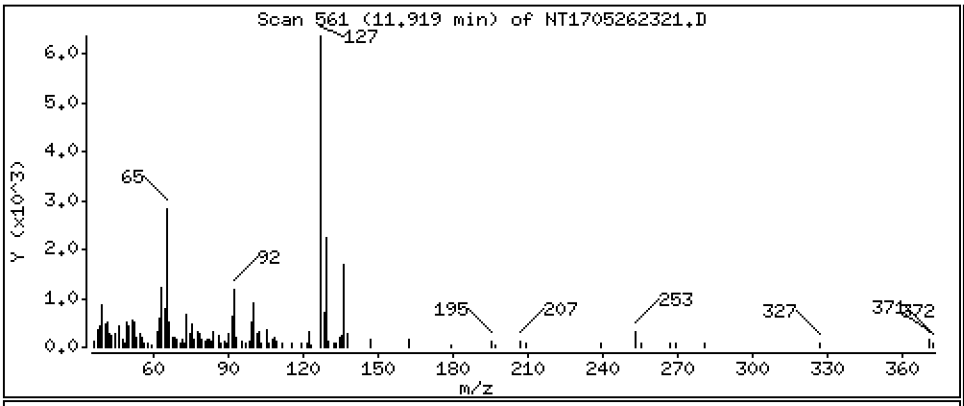
Operator: VTS

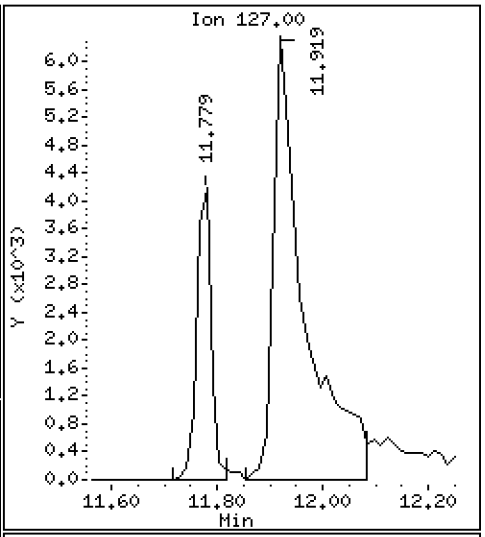
Column phase: ZB-5msi

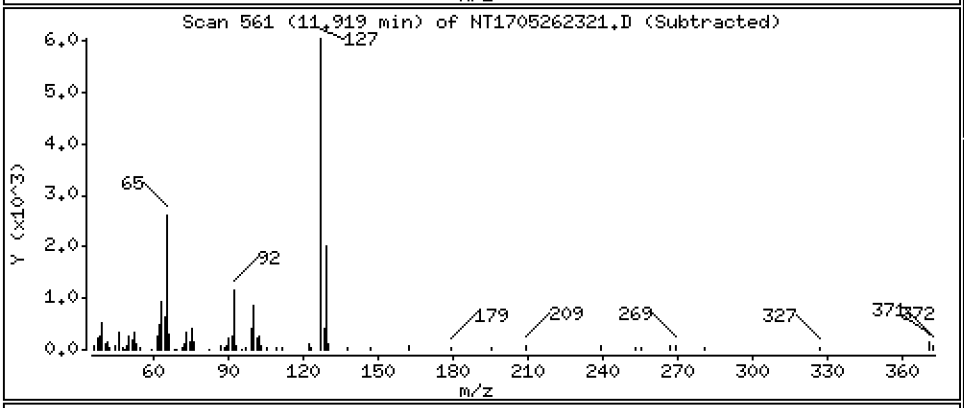
Column diameter: 0.25

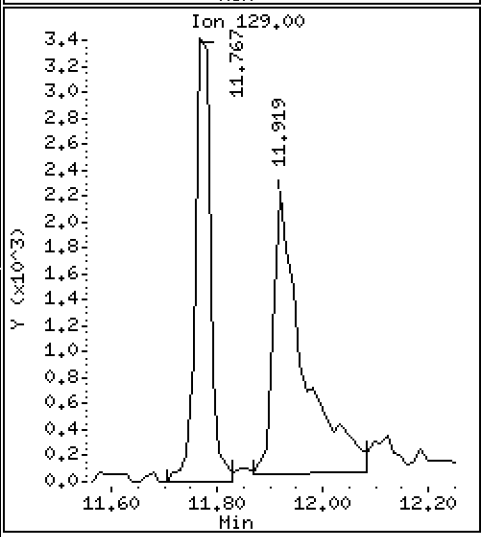
29 4-Chloroaniline

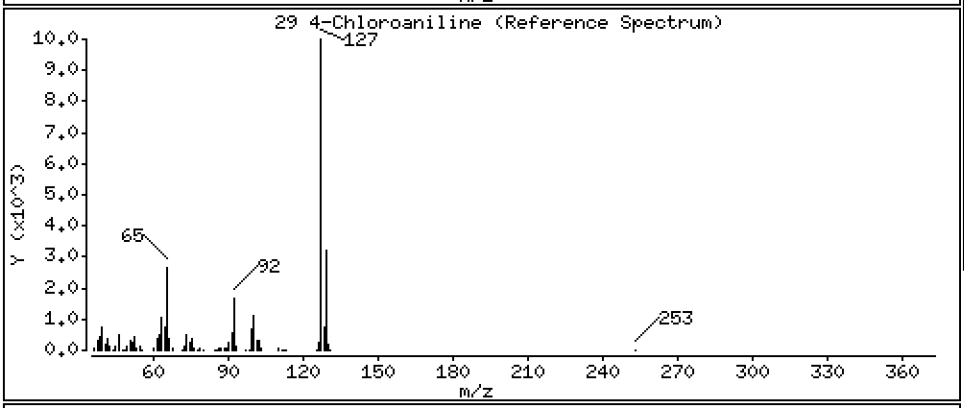
Concentration: 0.2470 ug/mL

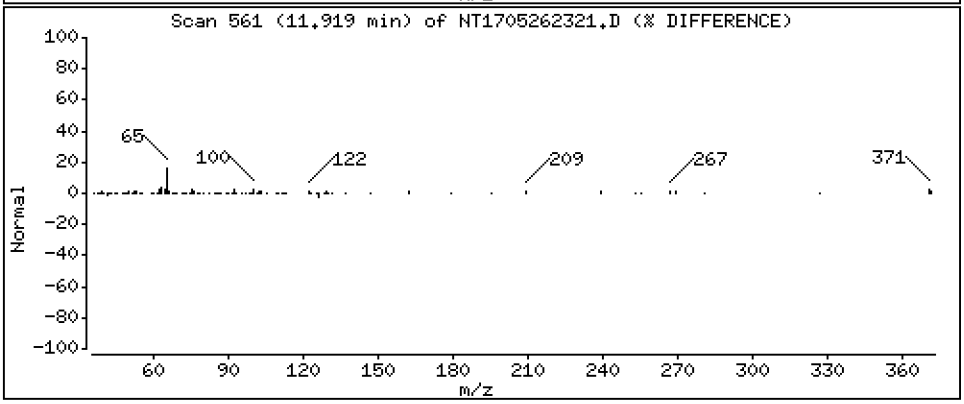












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

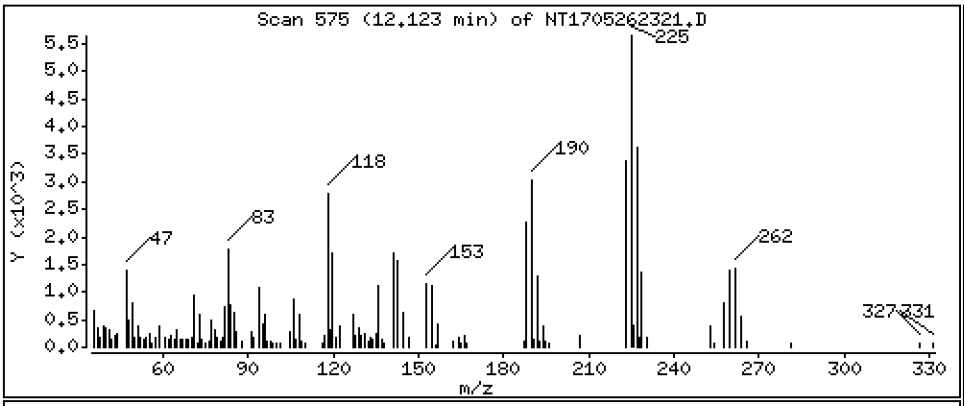
Operator: VTS

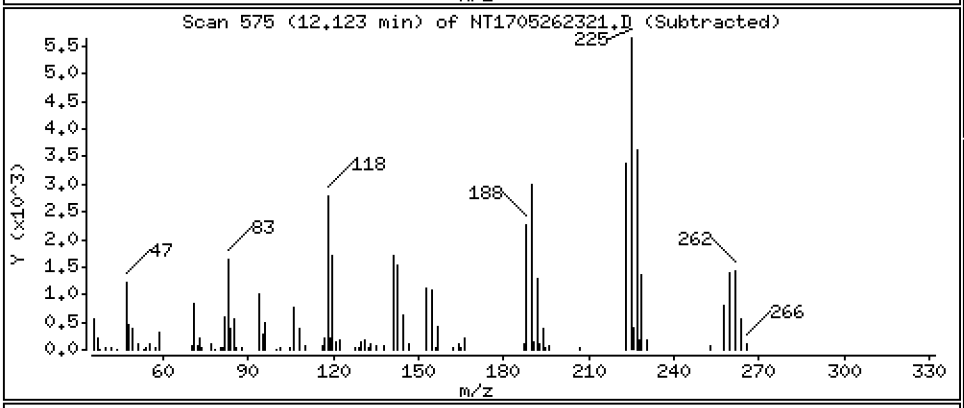
Column phase: ZB-5msi

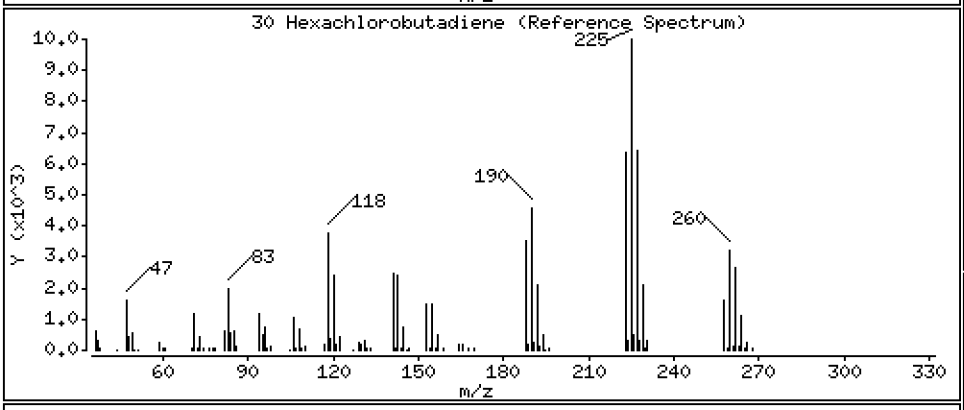
Column diameter: 0.25

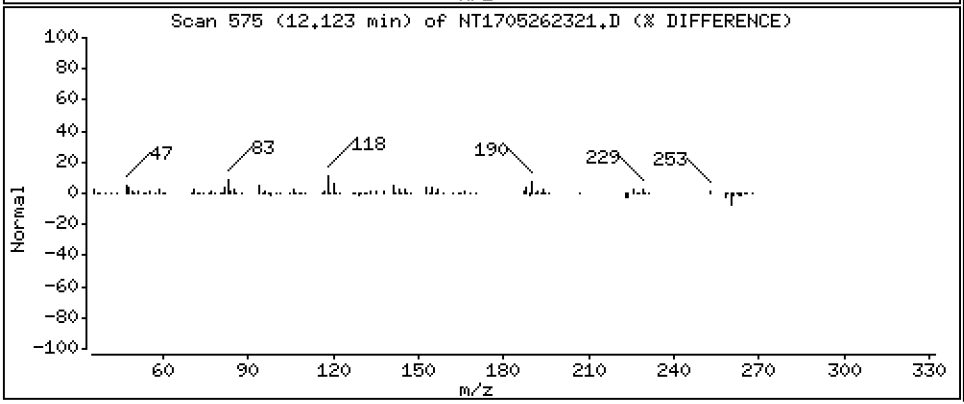
30 Hexachlorobutadiene

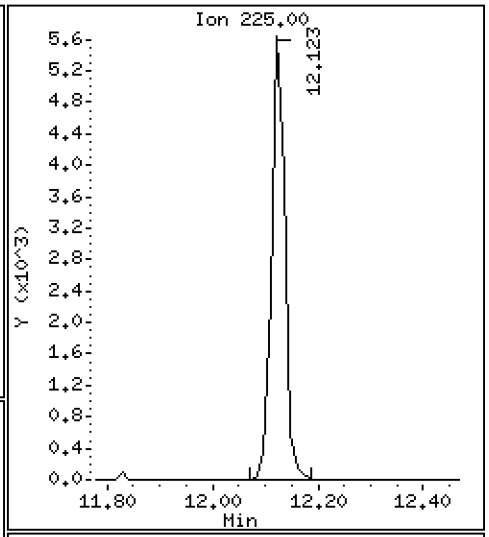
Concentration: 0.2180 ug/mL

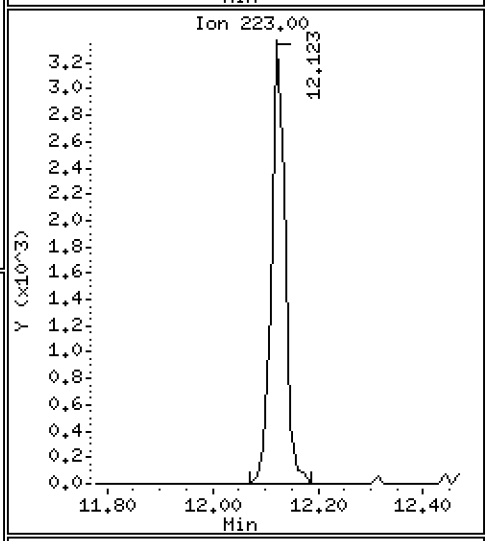


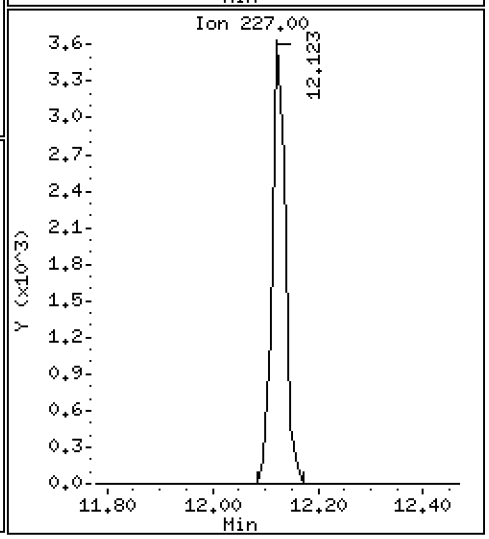












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

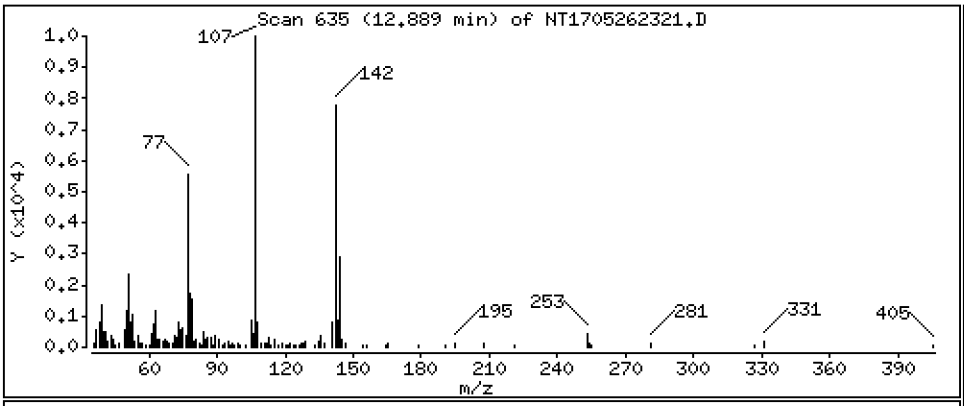
Operator: VTS

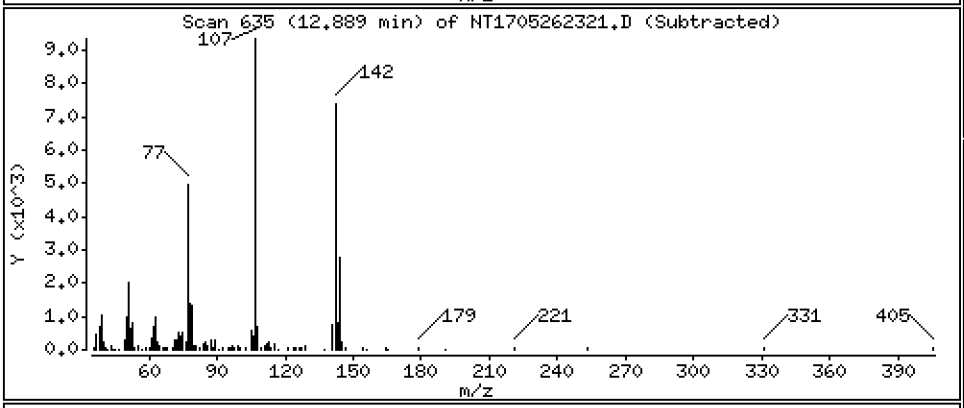
Column phase: ZB-5msi

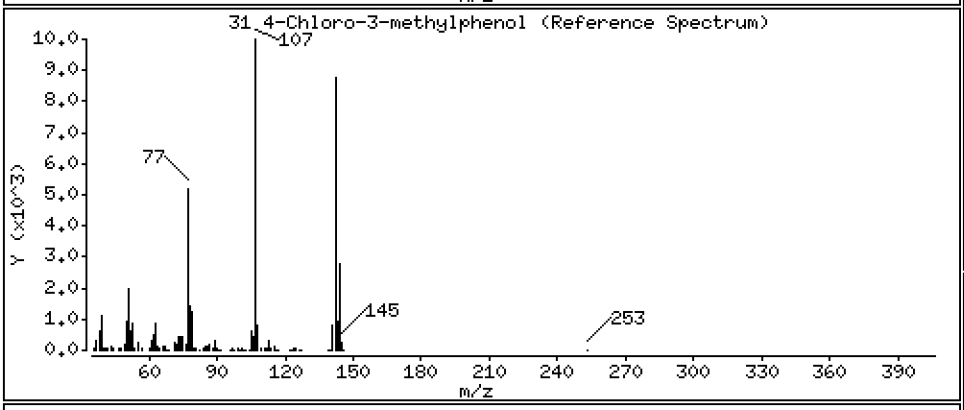
Column diameter: 0.25

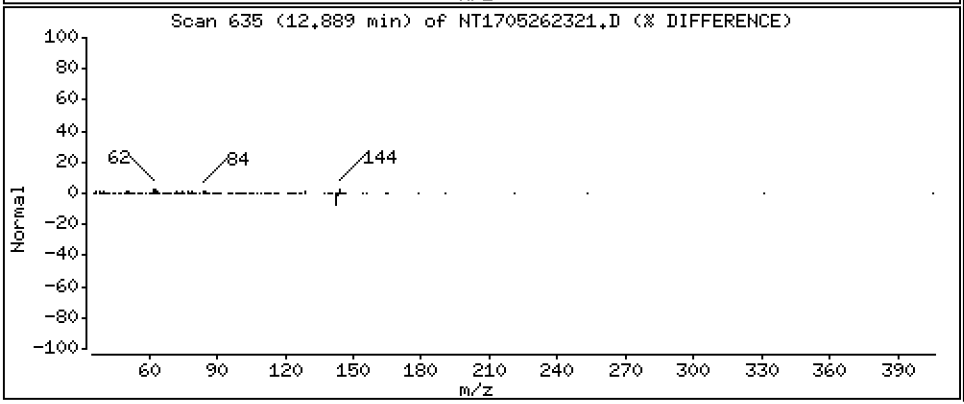
31 4-Chloro-3-methylphenol

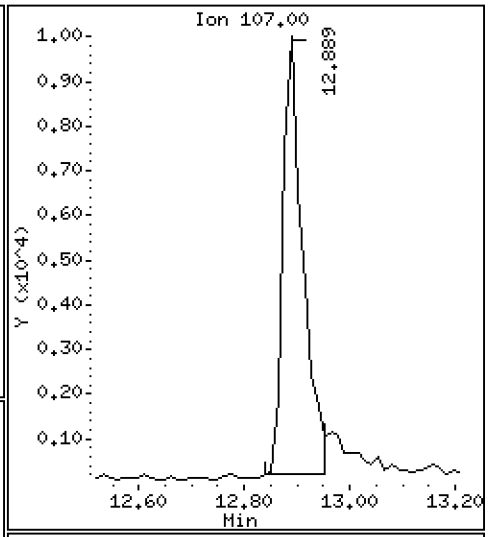
Concentration: 0.2869 ug/mL

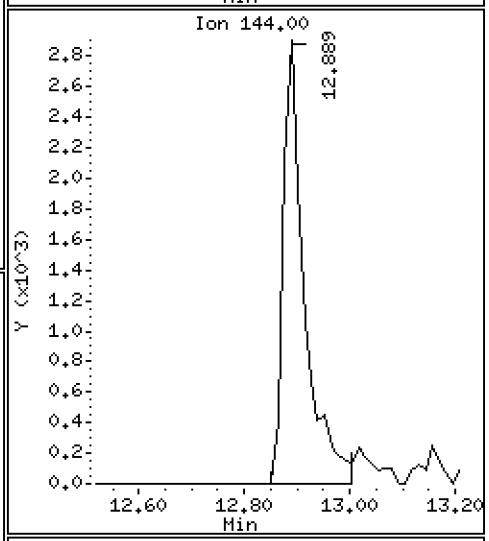


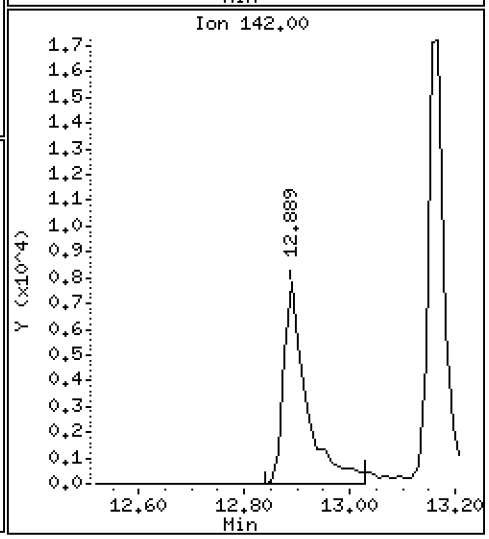












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

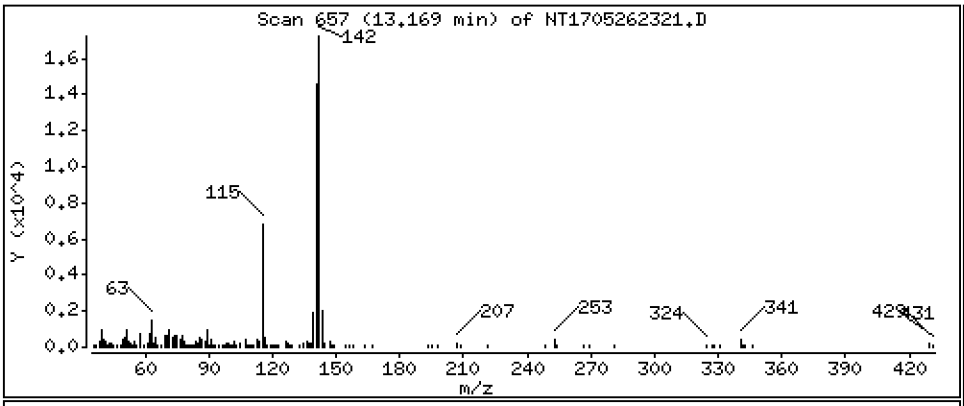
Operator: VTS

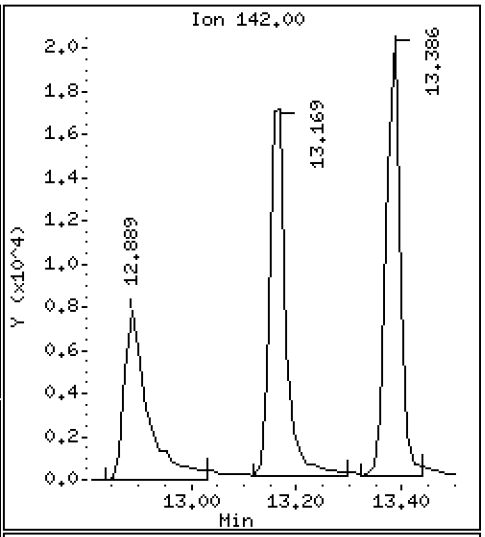
Column phase: ZB-5msi

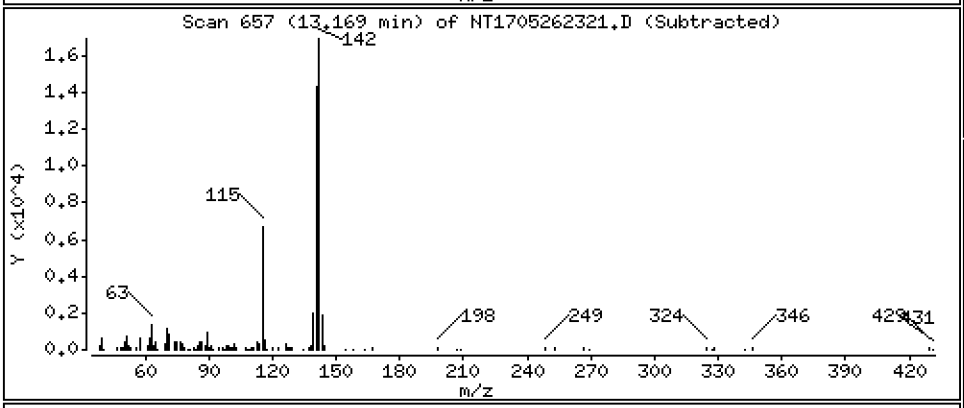
Column diameter: 0.25

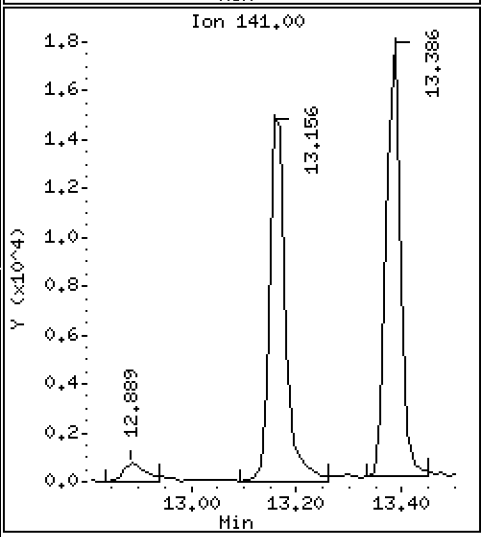
32 2-Methylnaphthalene

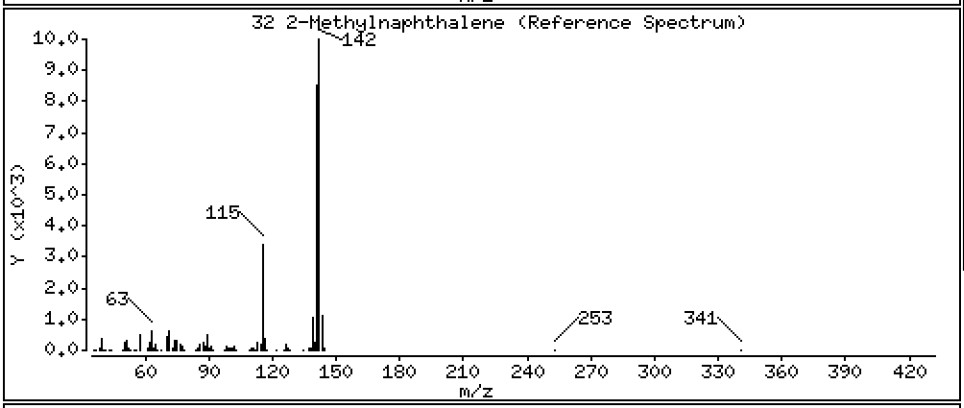
Concentration: 0.1861 ug/mL

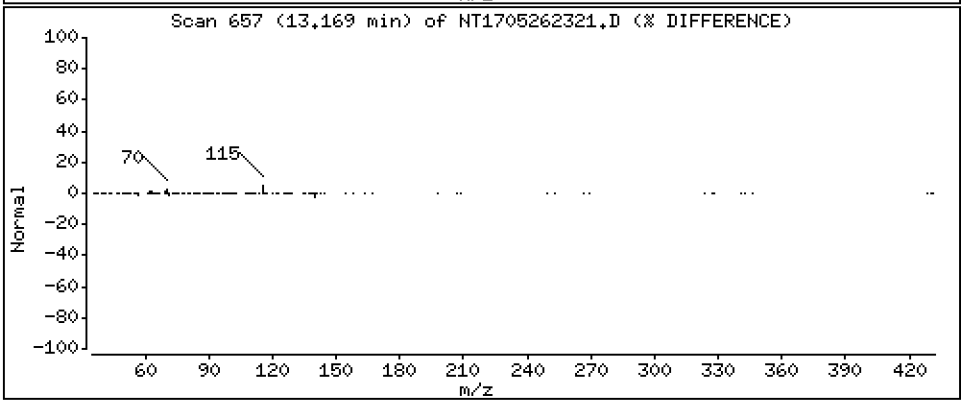












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

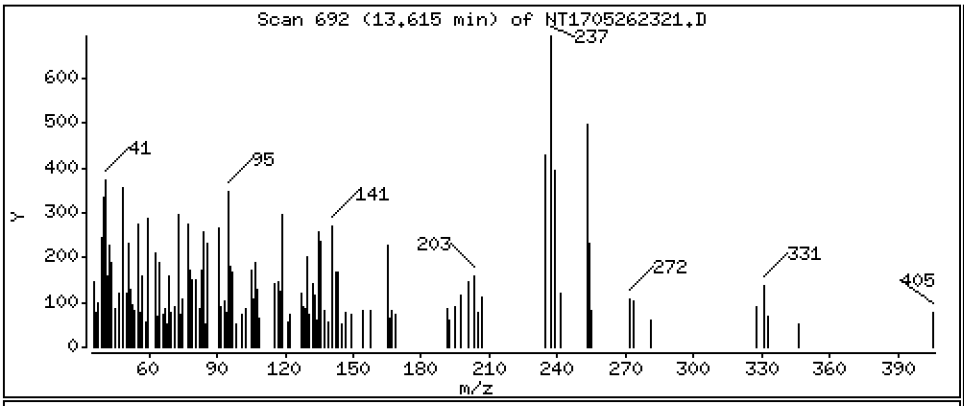
Operator: VTS

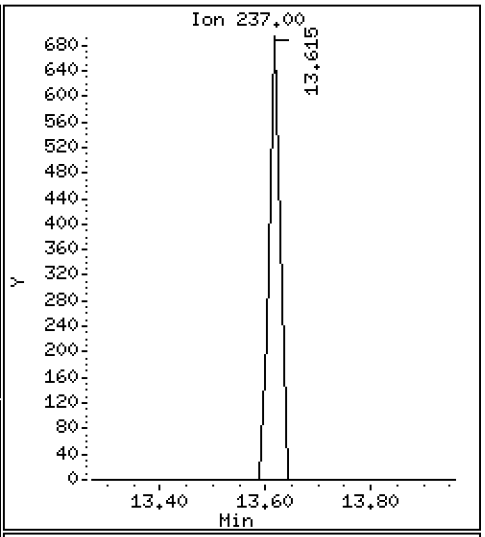
Column phase: ZB-5msi

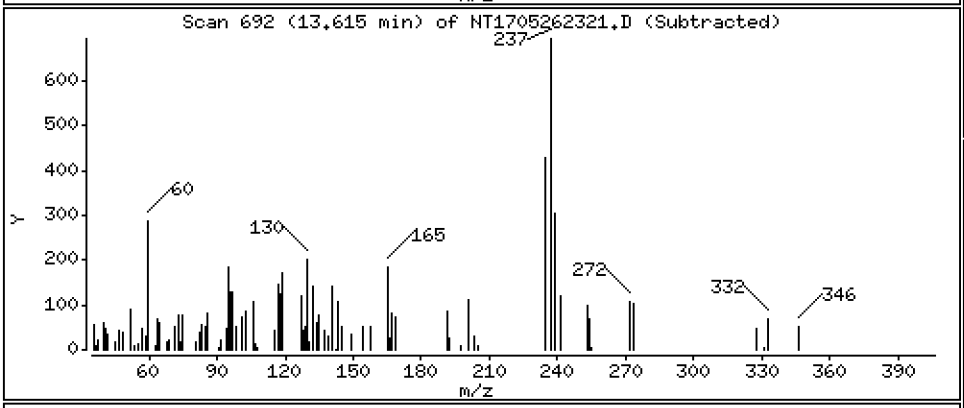
Column diameter: 0.25

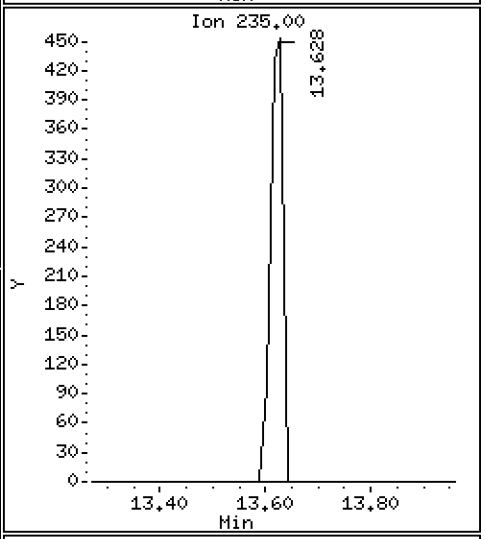
33 Hexachlorocyclopentadiene

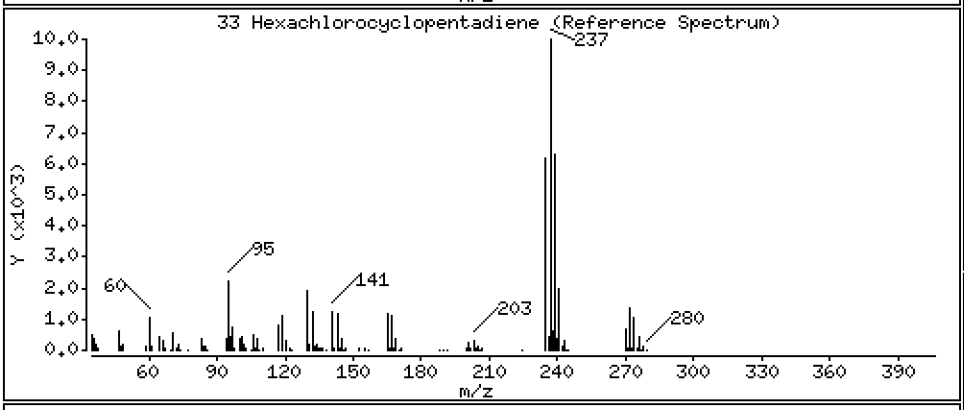
Concentration: 0.01976 ug/mL

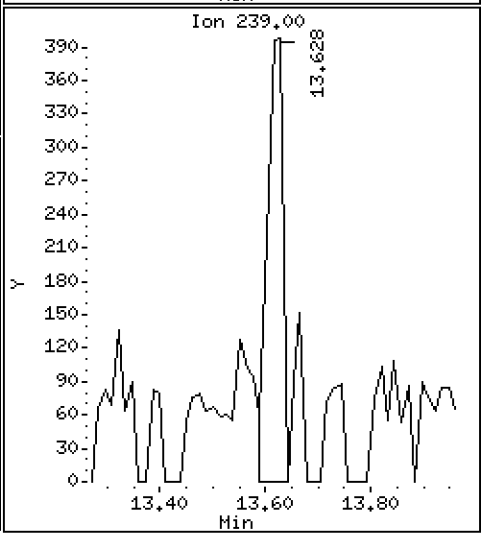


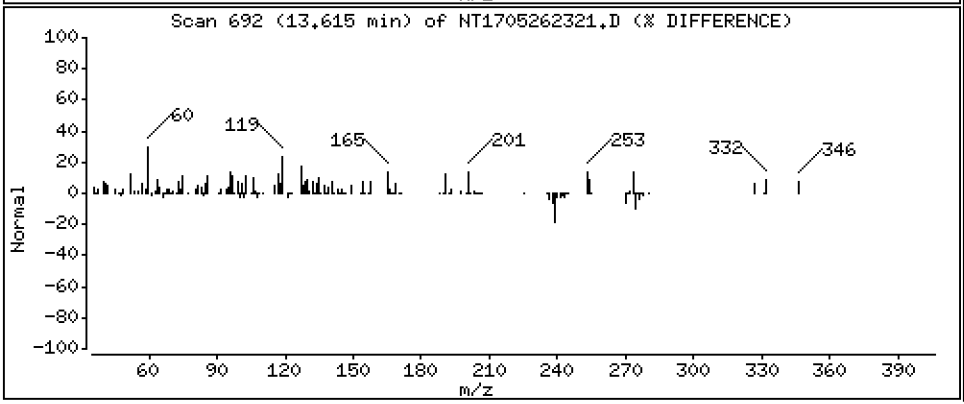












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

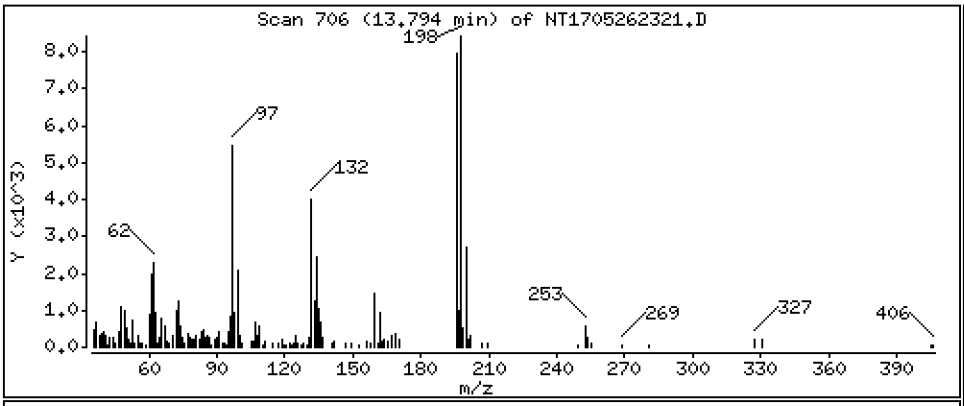
Operator: VTS

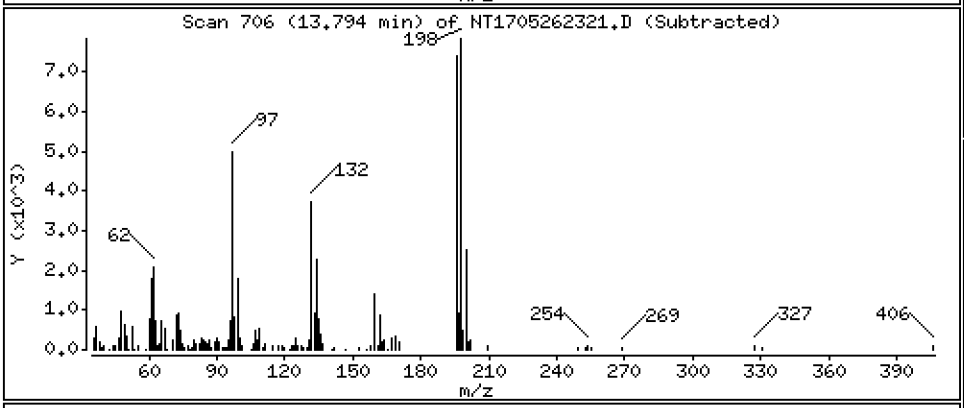
Column phase: ZB-5msi

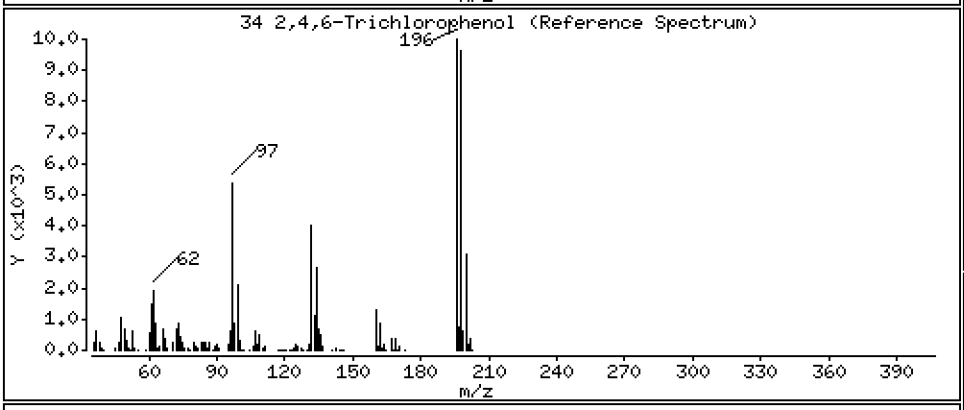
Column diameter: 0.25

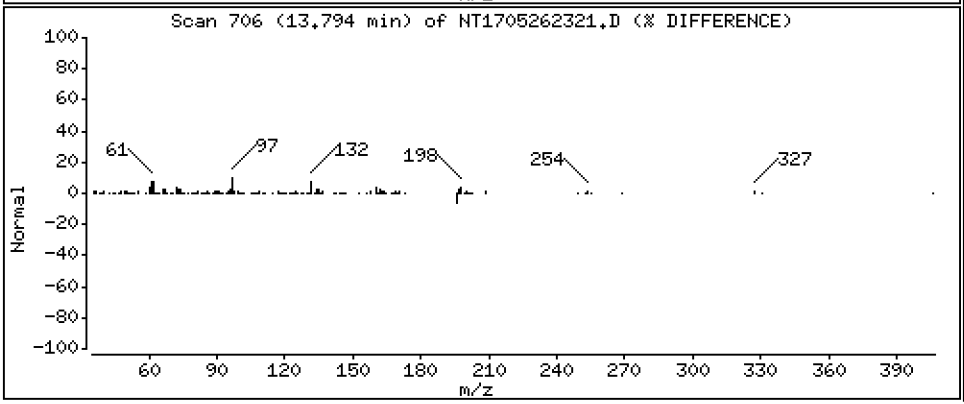
34 2,4,6-Trichlorophenol

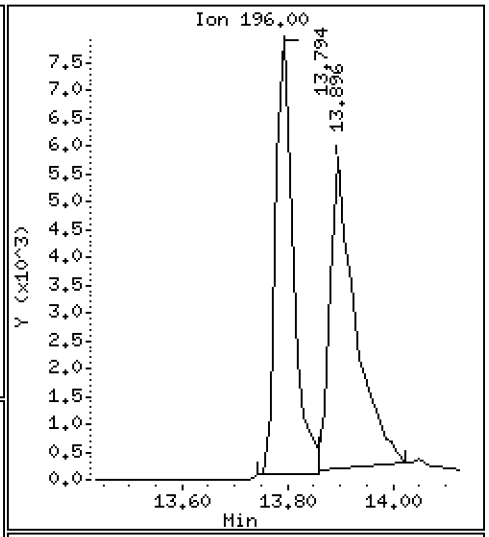
Concentration: 0.3164 ug/mL

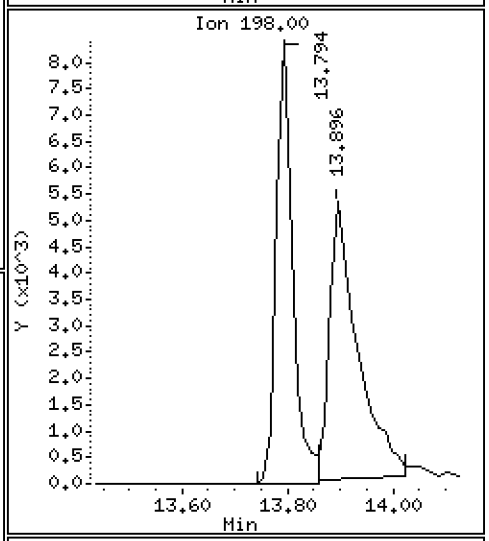


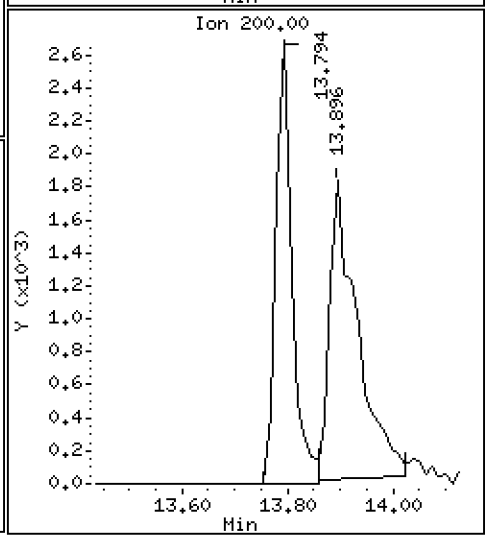












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

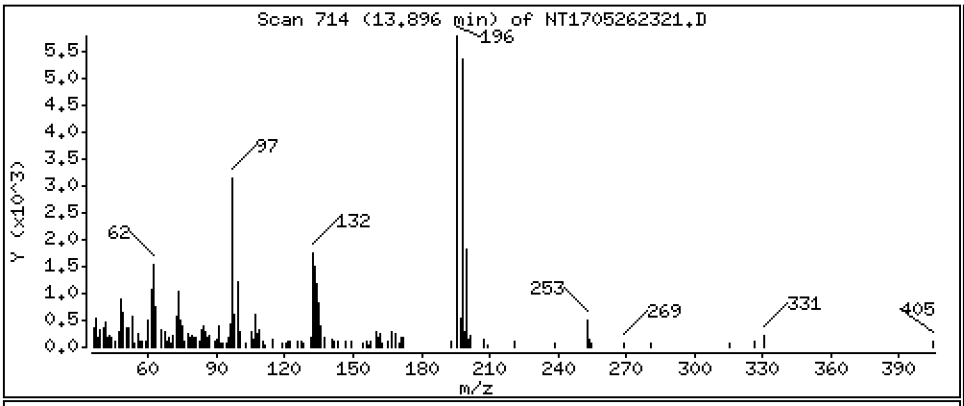
Operator: VTS

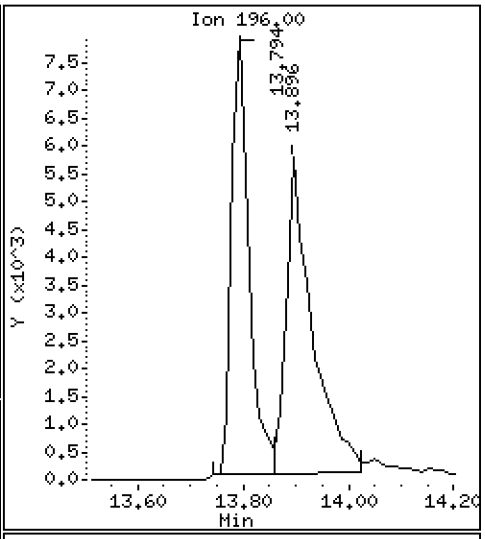
Column phase: ZB-5msi

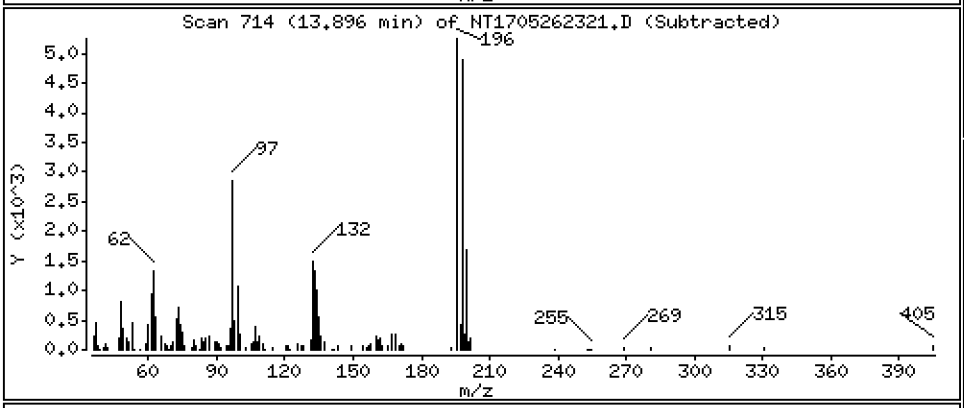
Column diameter: 0.25

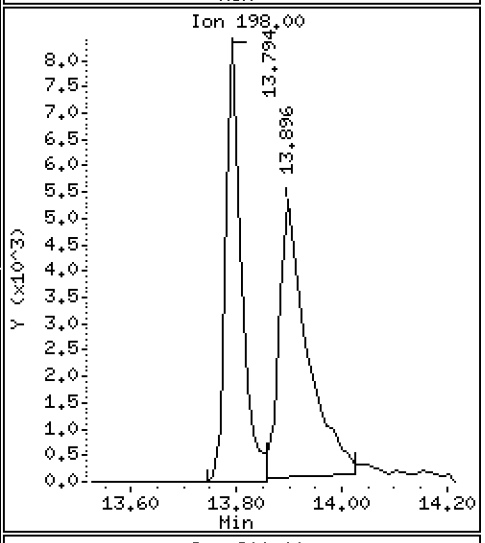
35 2,4,5-Trichlorophenol

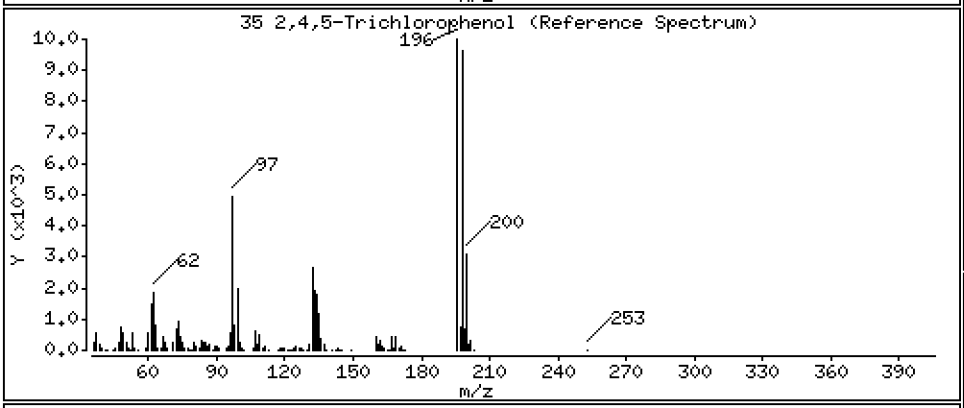
Concentration: 0.3318 ug/mL

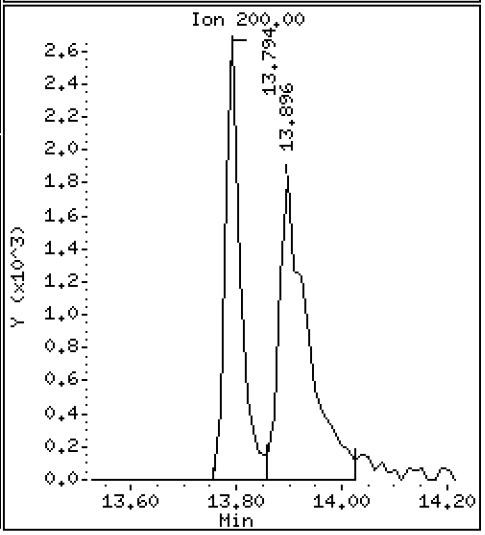


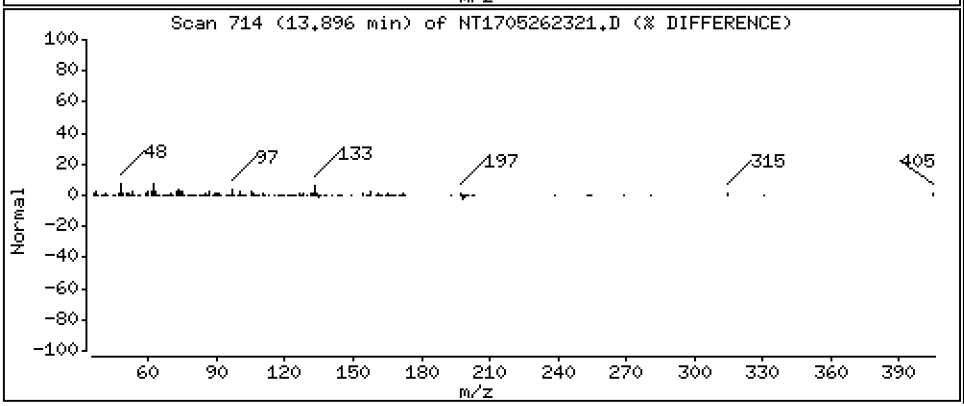












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

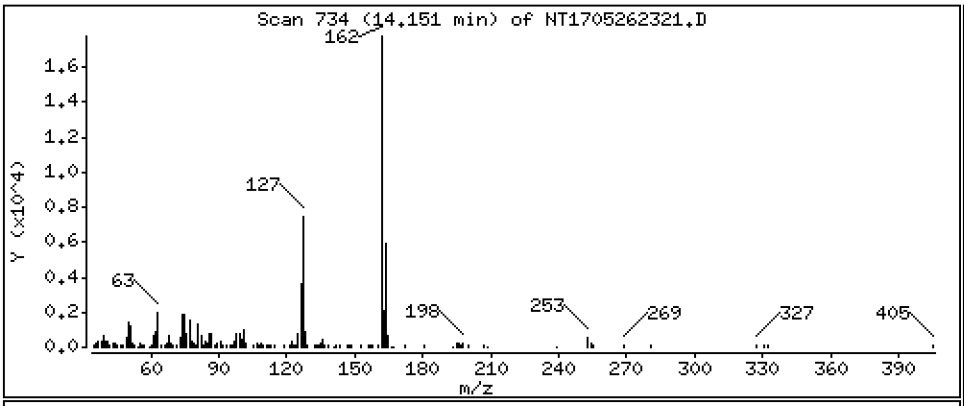
Operator: VTS

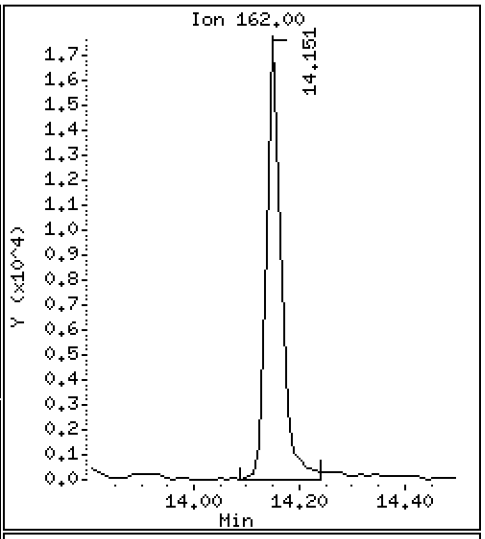
Column phase: ZB-5msi

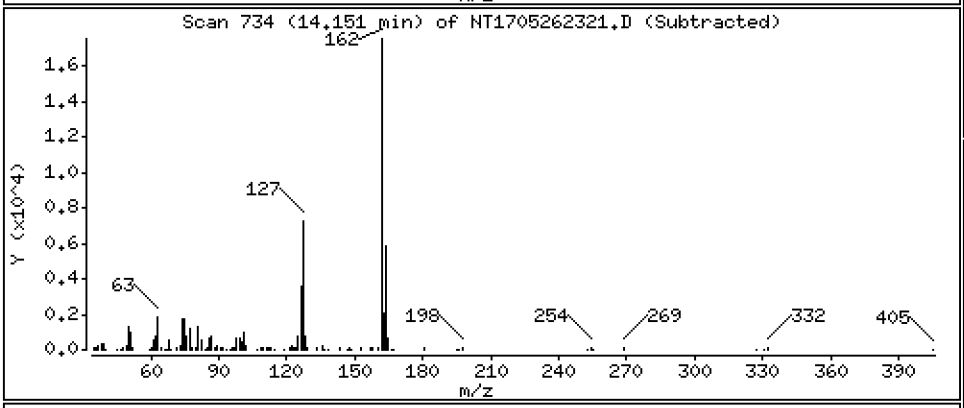
Column diameter: 0.25

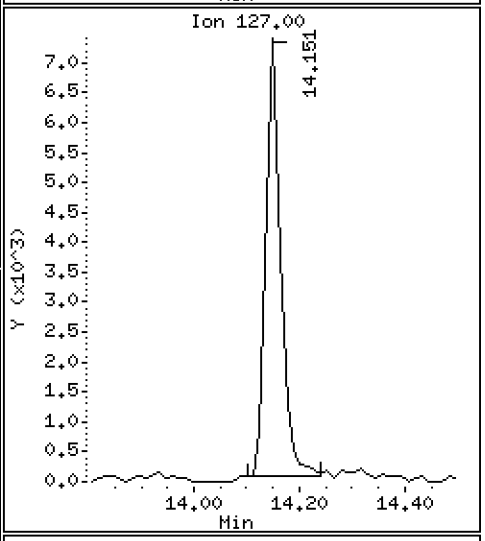
37 2-Chloronaphthalene

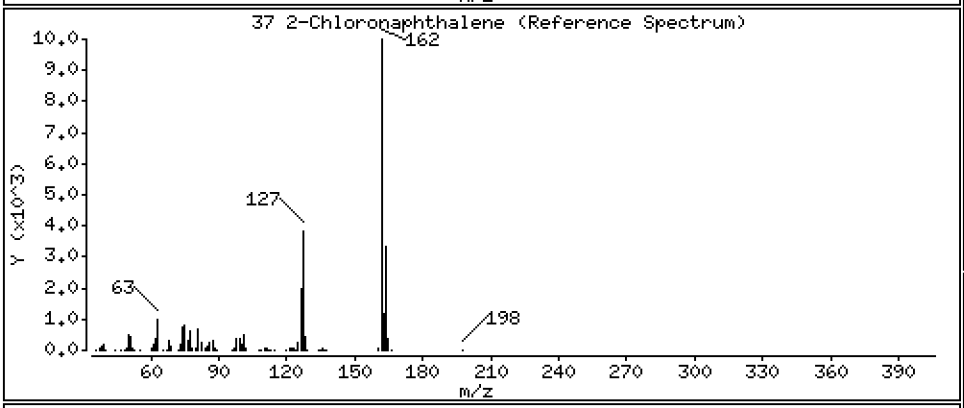
Concentration: 0.1956 ug/mL

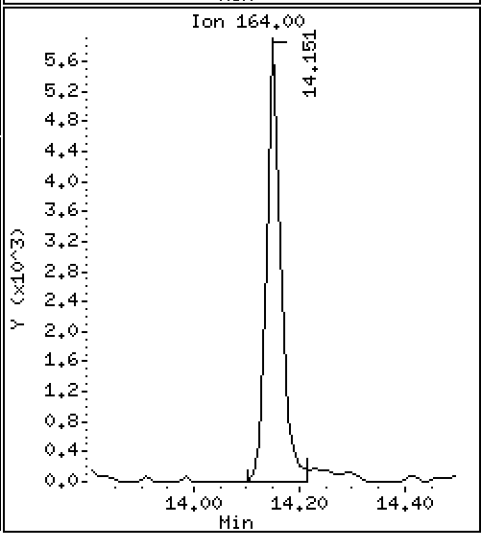


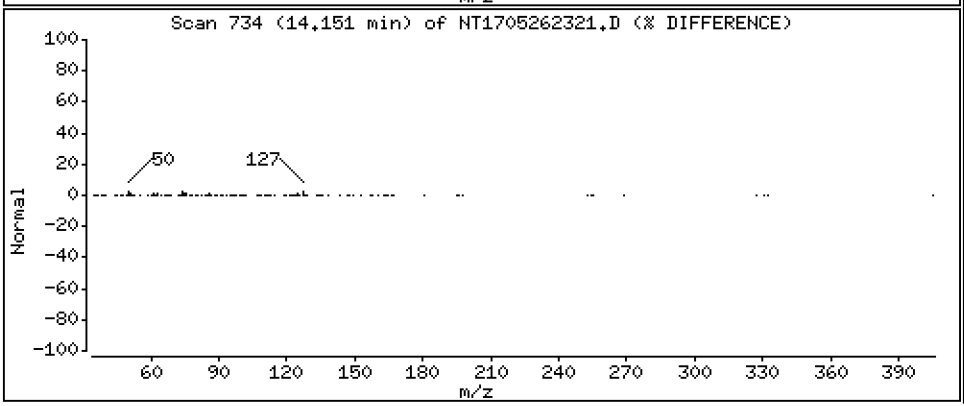












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

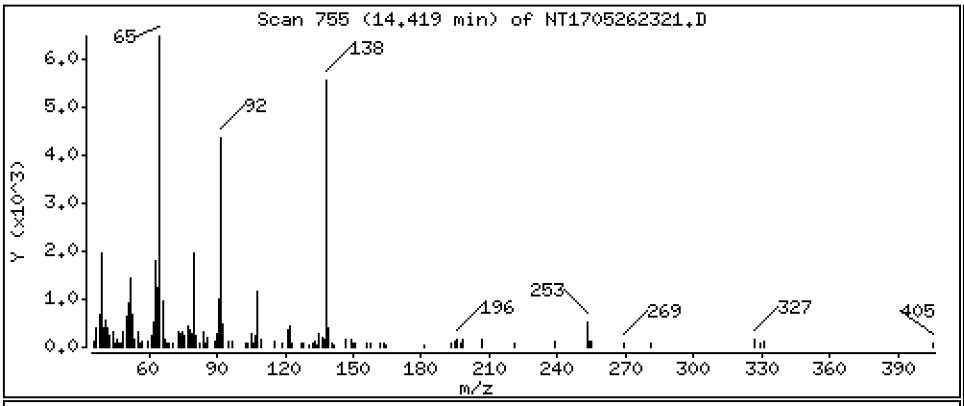
Operator: VTS

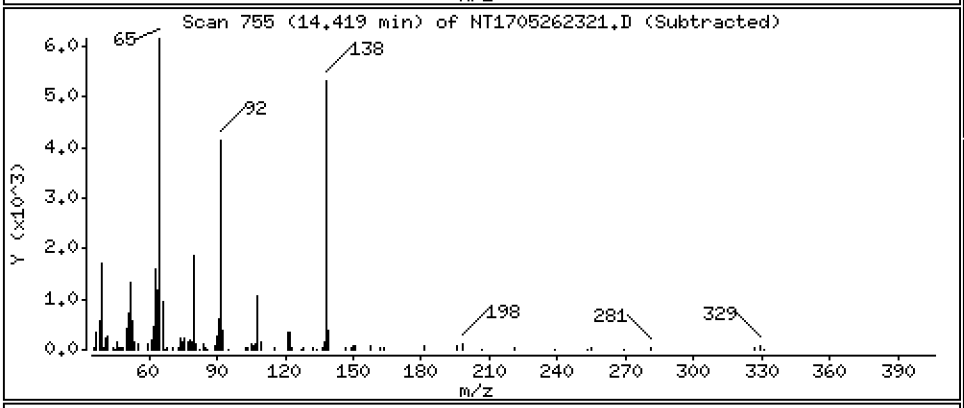
Column phase: ZB-5msi

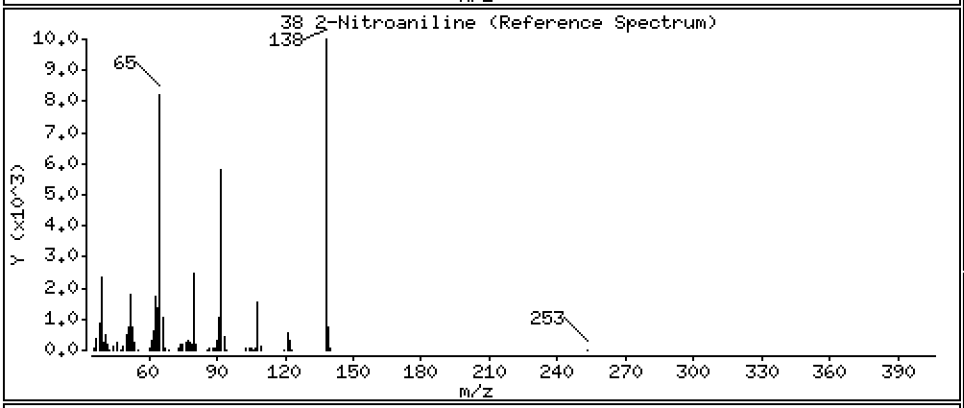
Column diameter: 0.25

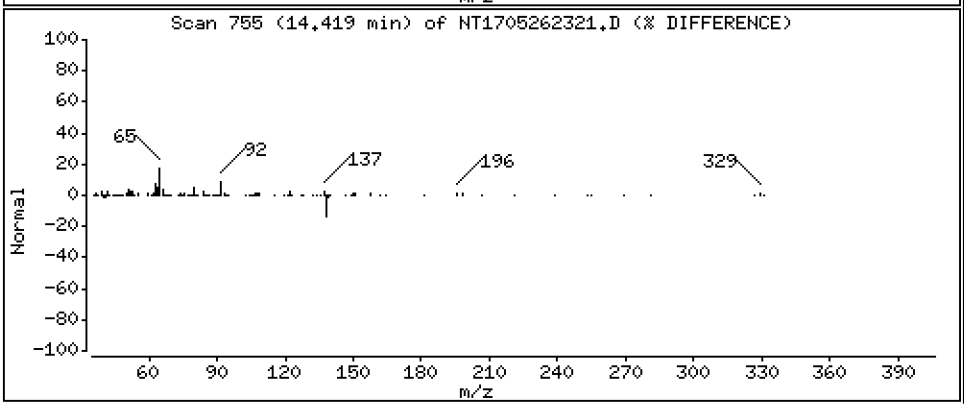
38 2-Nitroaniline

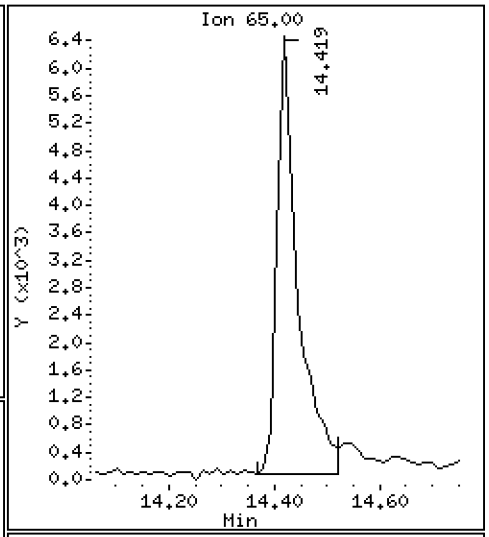
Concentration: 0.3033 ug/mL

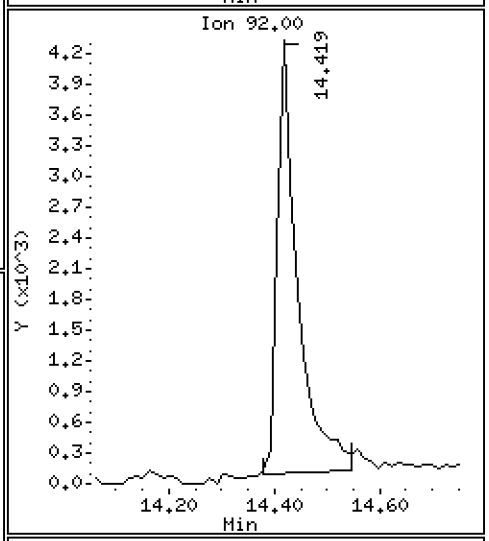


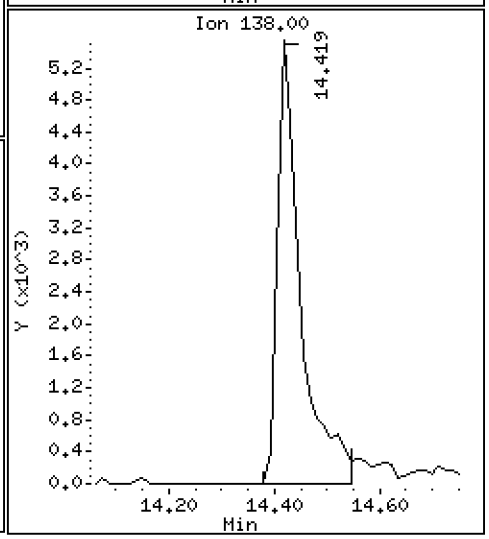












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

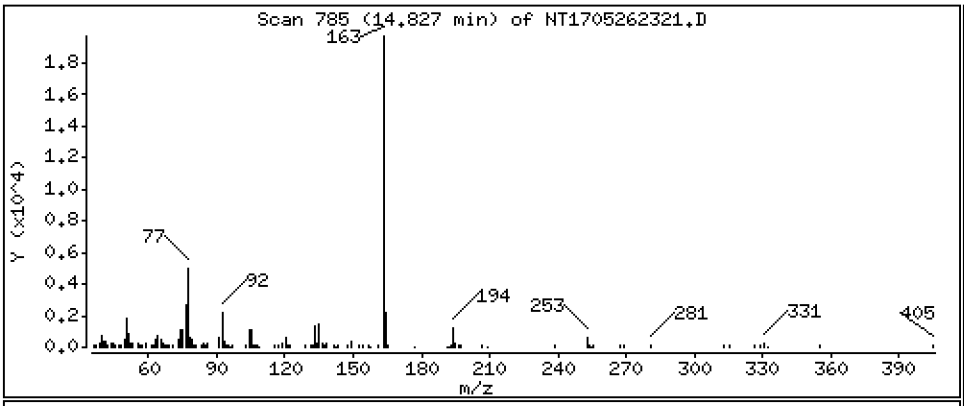
Operator: VTS

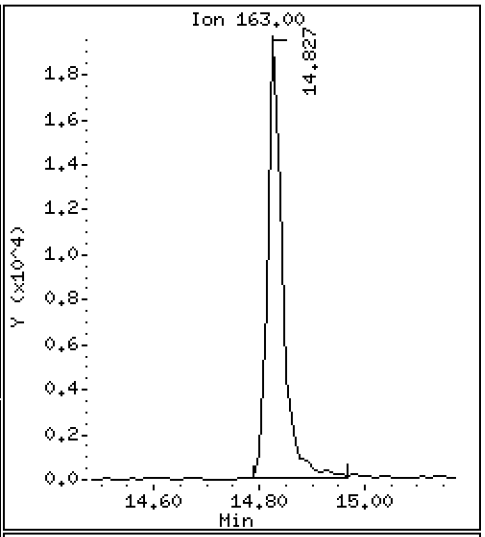
Column phase: ZB-5msi

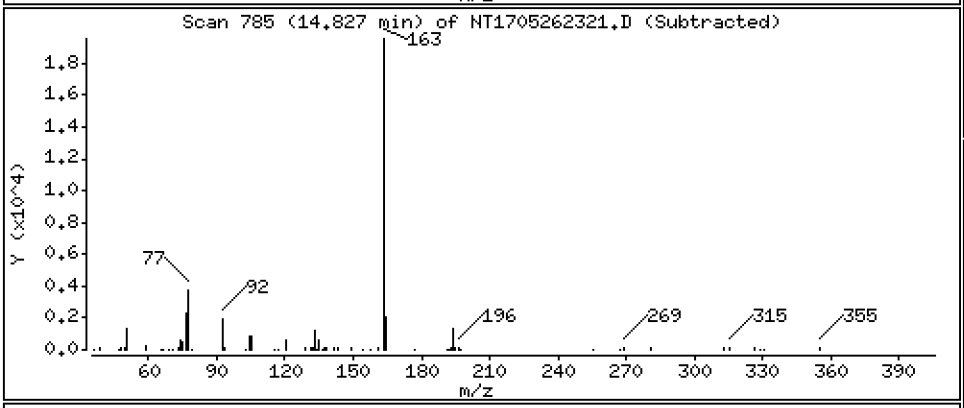
Column diameter: 0.25

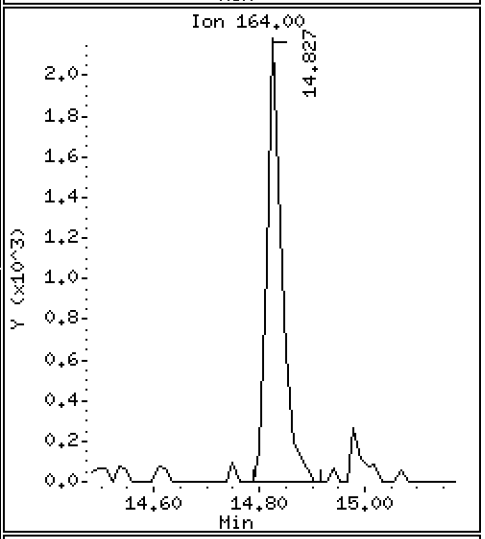
39 Dimethylphthalate

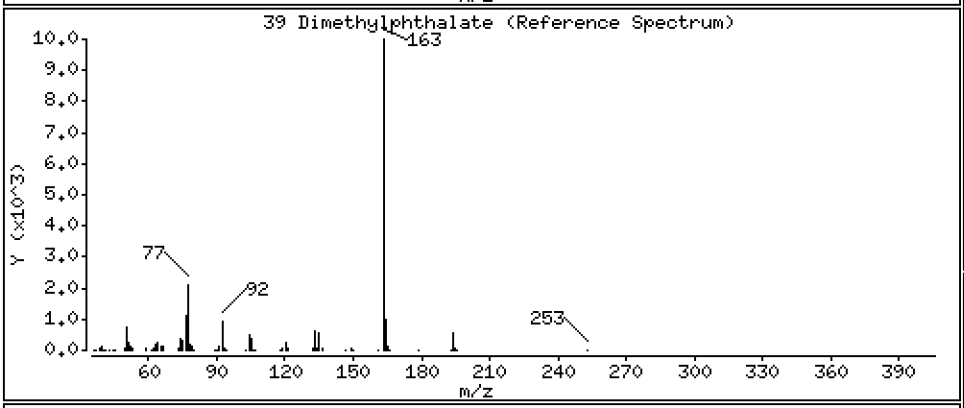
Concentration: 0.2071 ug/mL

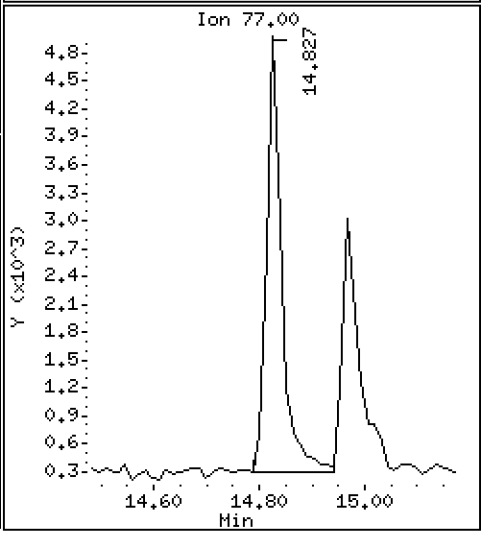


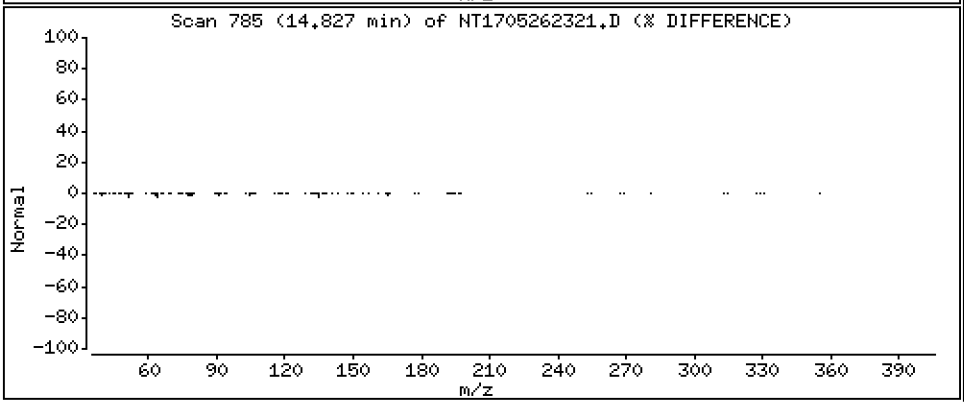












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

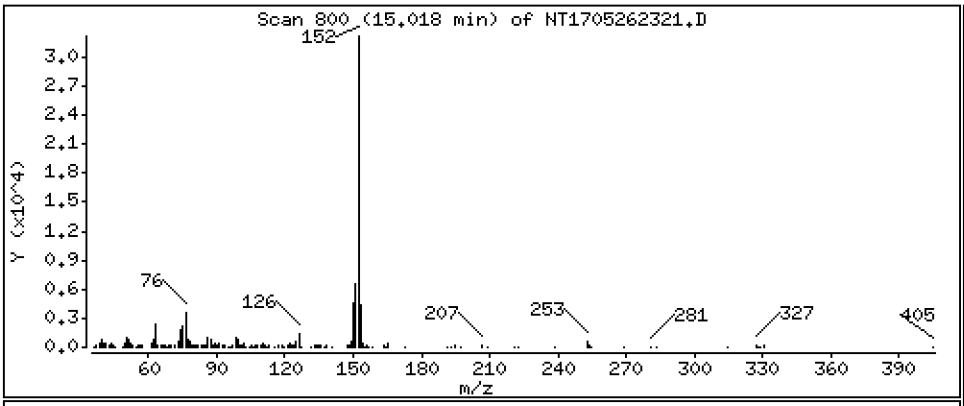
Operator: VTS

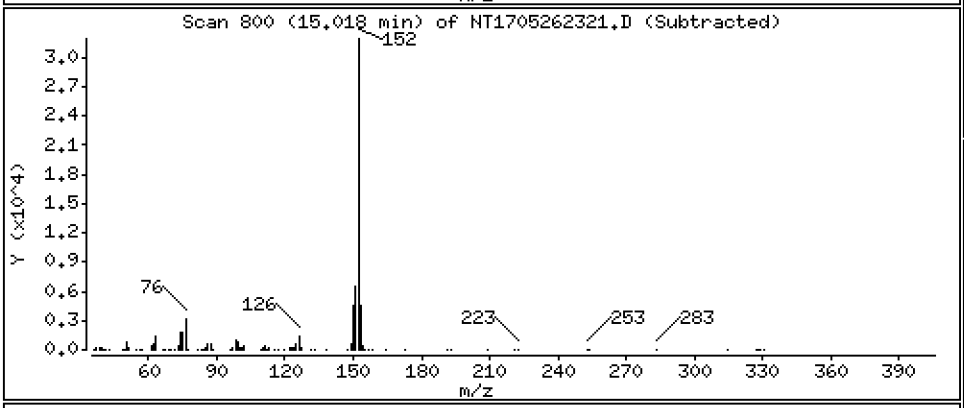
Column phase: ZB-5msi

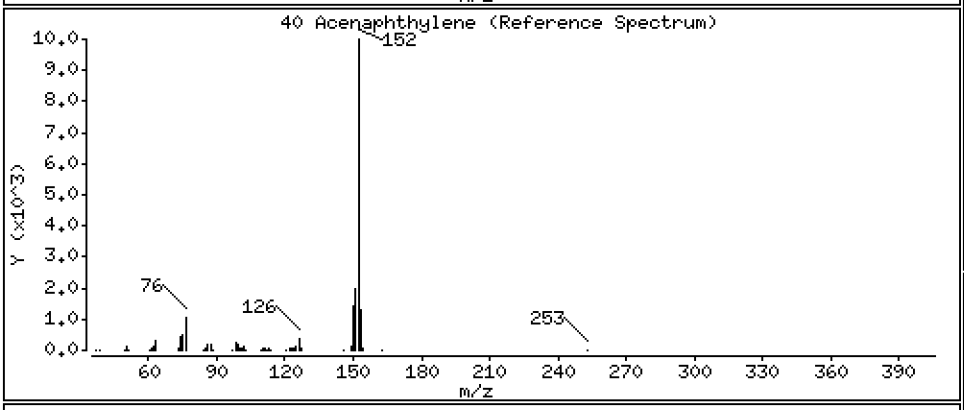
Column diameter: 0.25

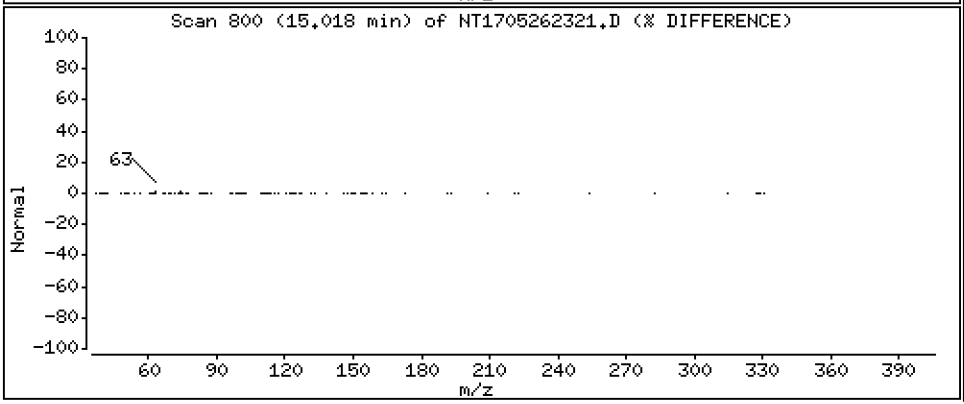
40 Acenaphthylene

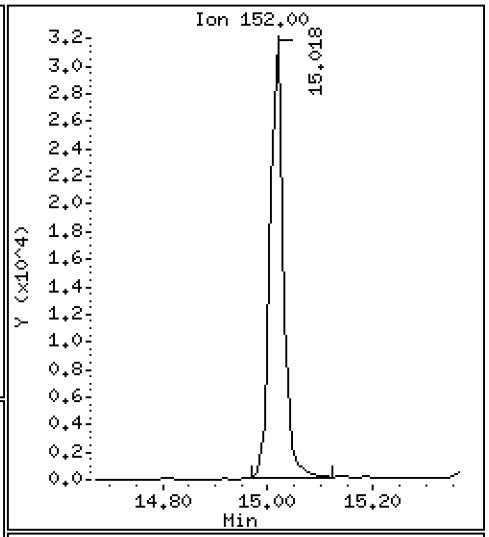
Concentration: 0.2048 ug/mL

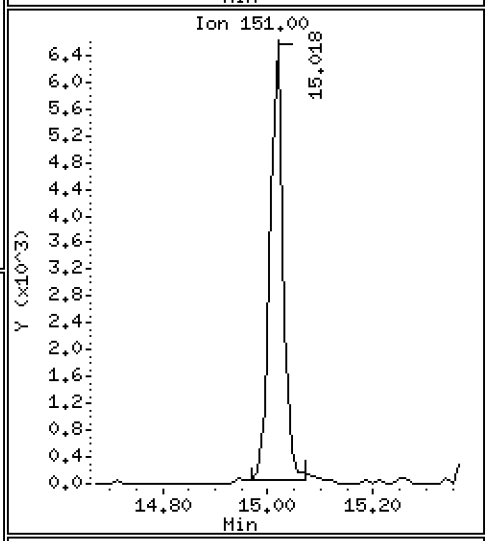


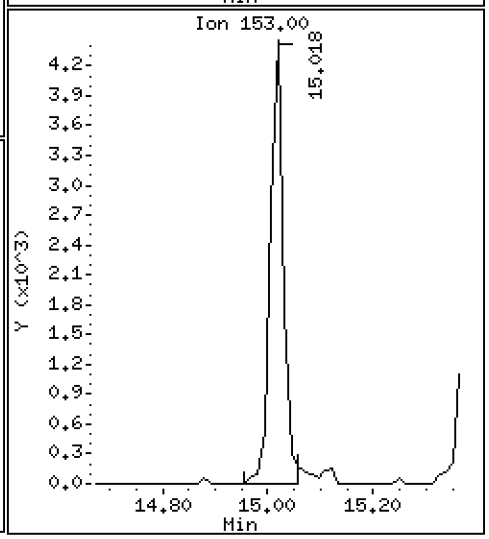












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

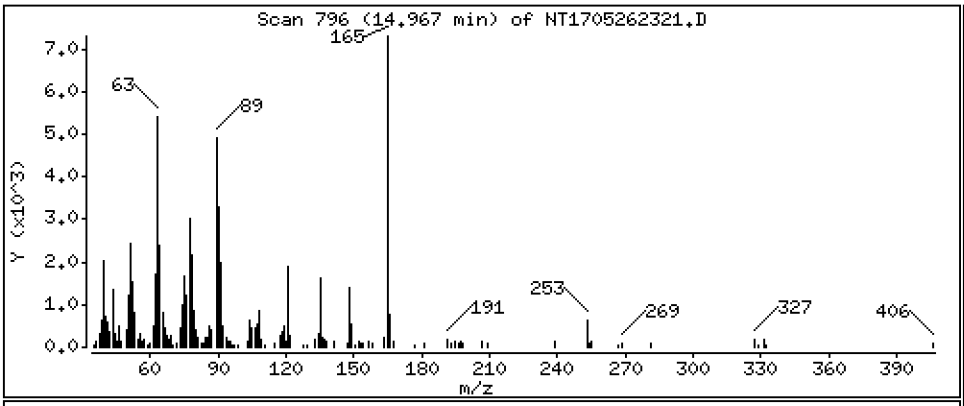
Operator: VTS

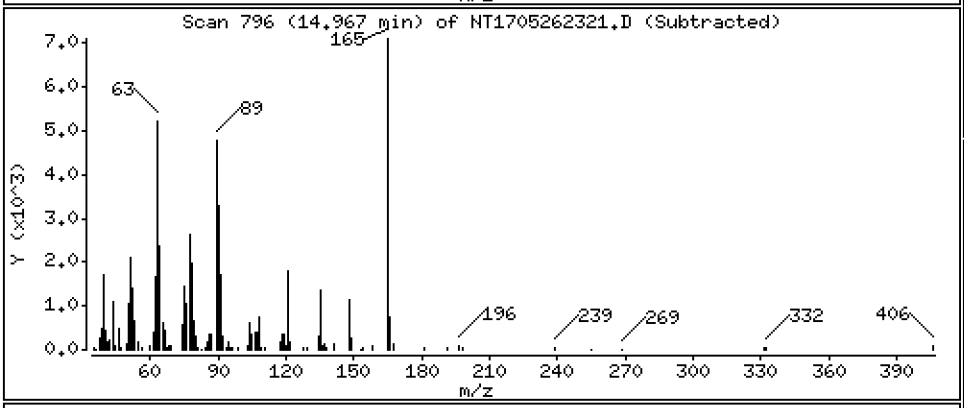
Column phase: ZB-5msi

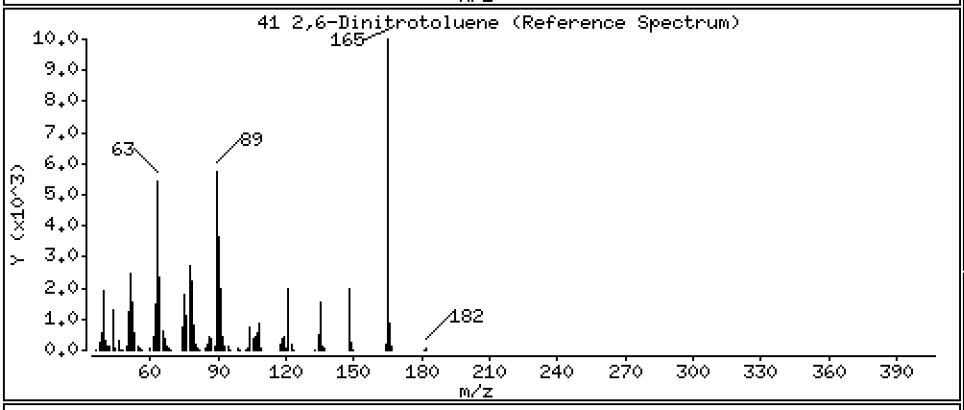
Column diameter: 0.25

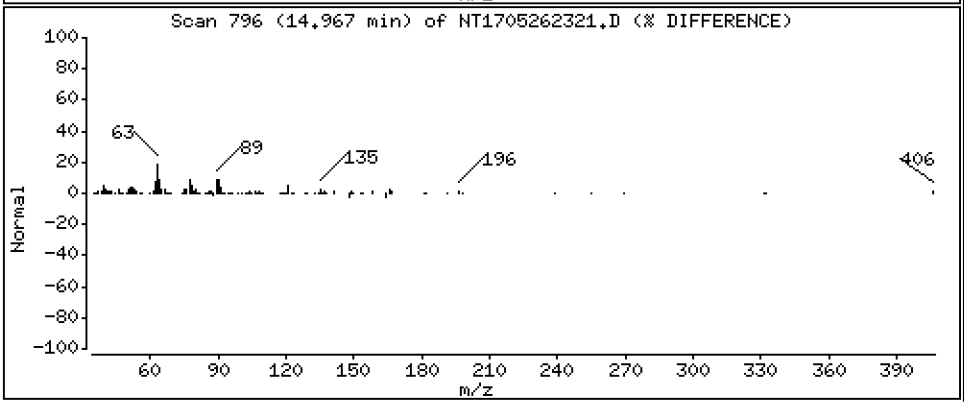
41 2,6-Dinitrotoluene

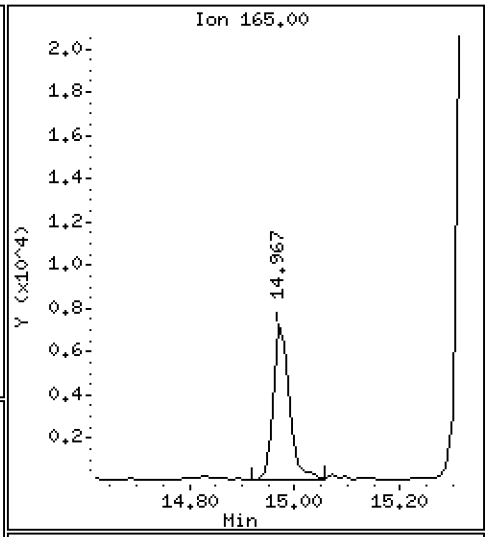
Concentration: 0.3456 ug/mL

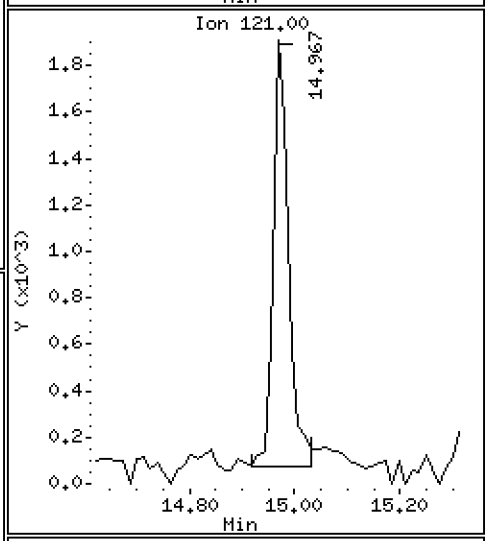


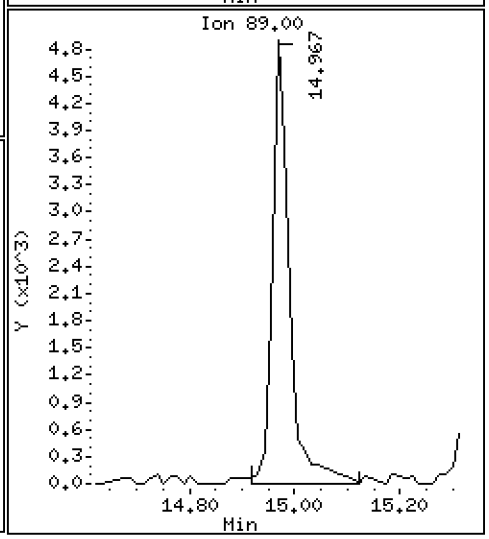












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

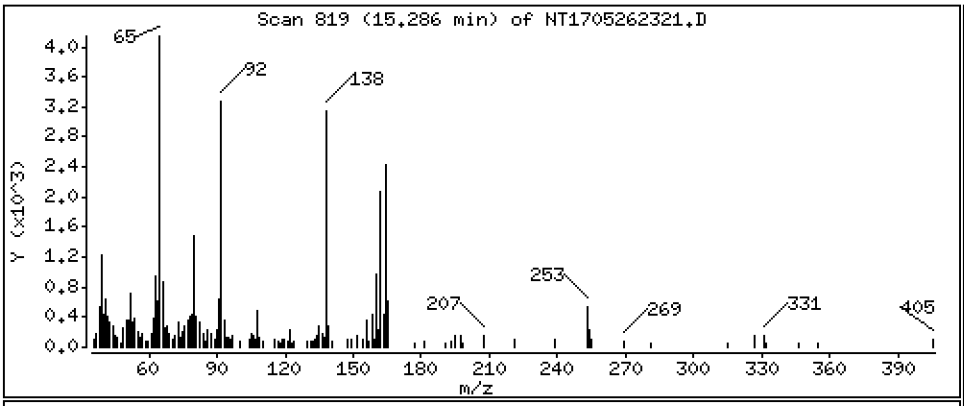
Operator: VTS

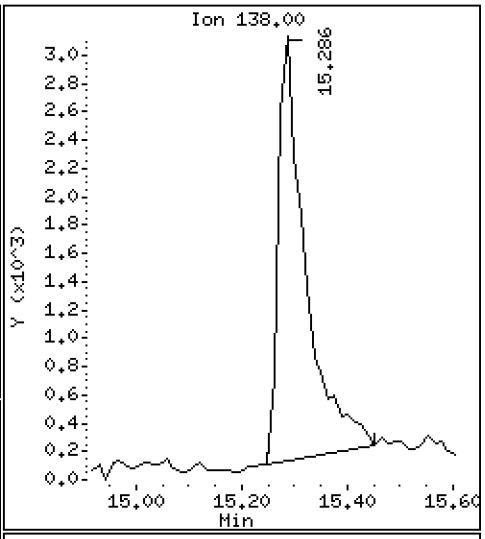
Column phase: ZB-5msi

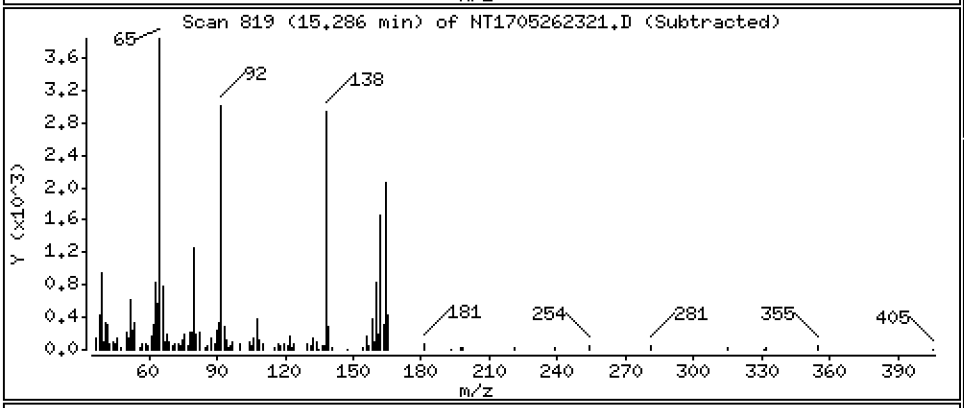
Column diameter: 0.25

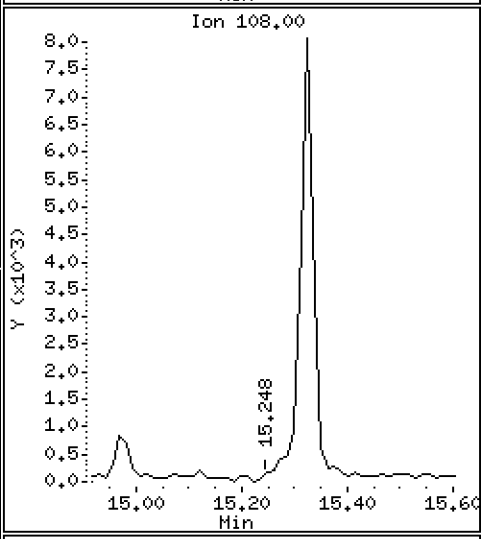
43 3-Nitroaniline

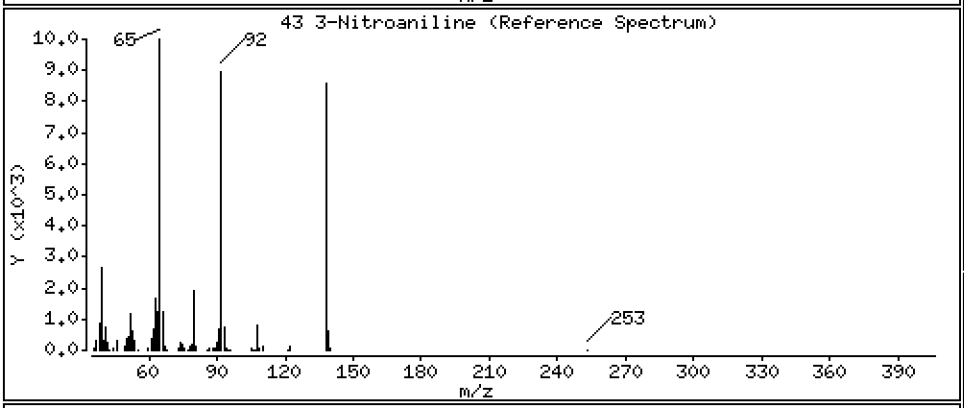
Concentration: 0.2660 ug/mL

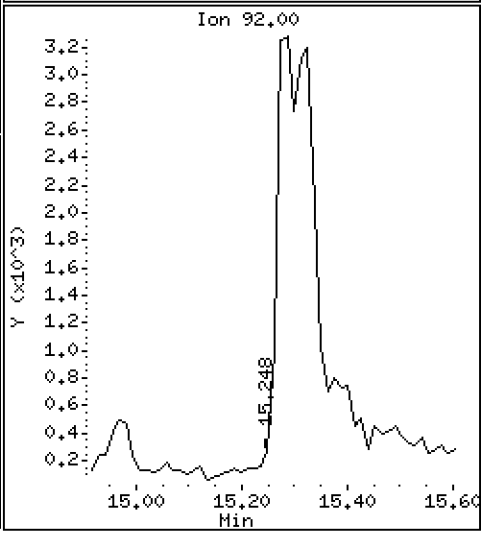


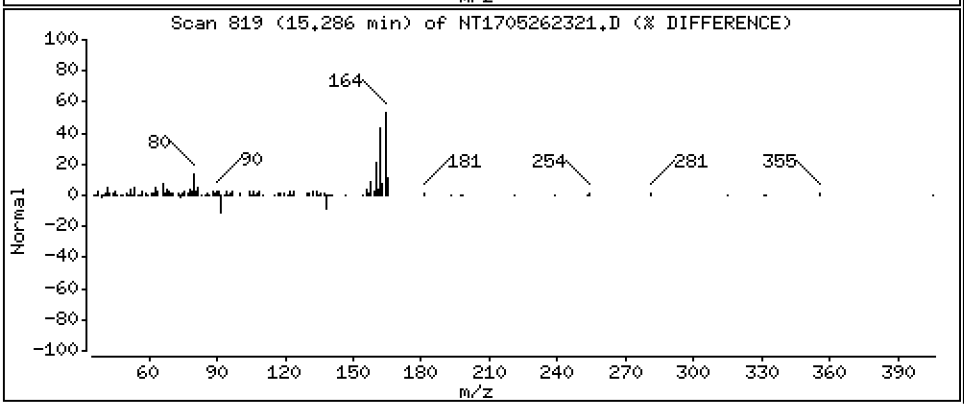












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

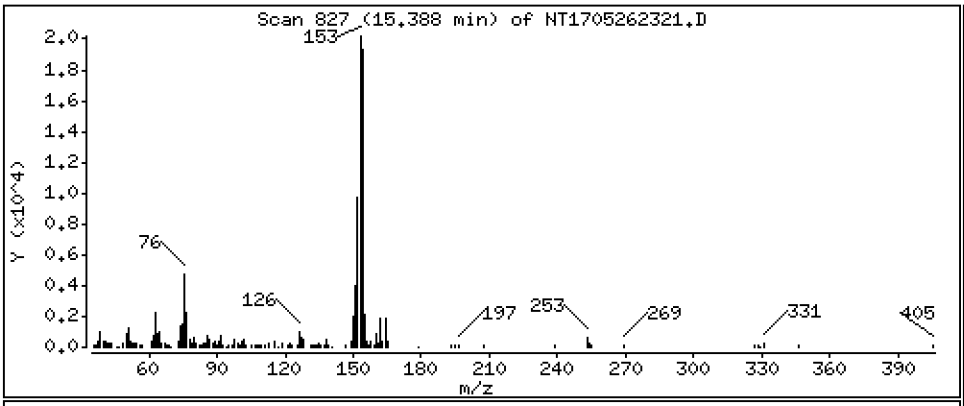
Operator: VTS

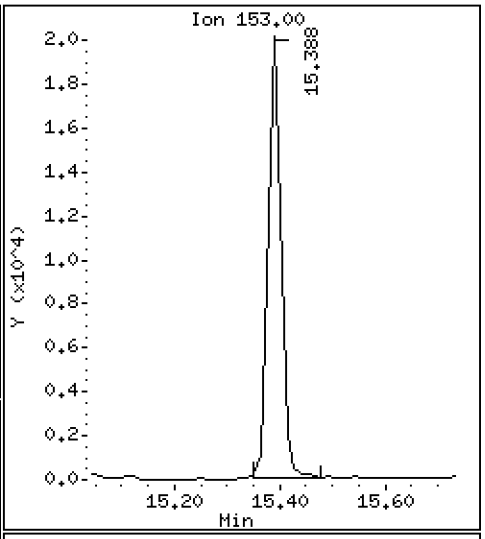
Column phase: ZB-5msi

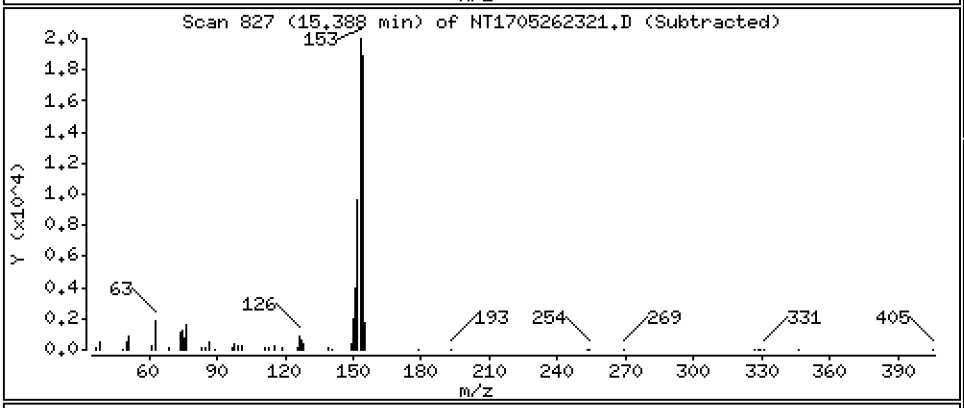
Column diameter: 0.25

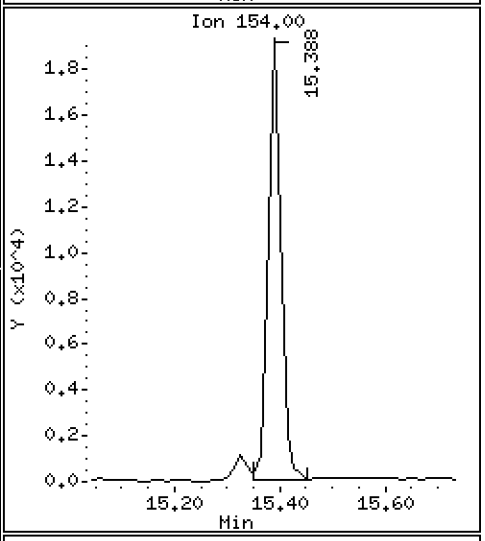
44 Acenaphthene

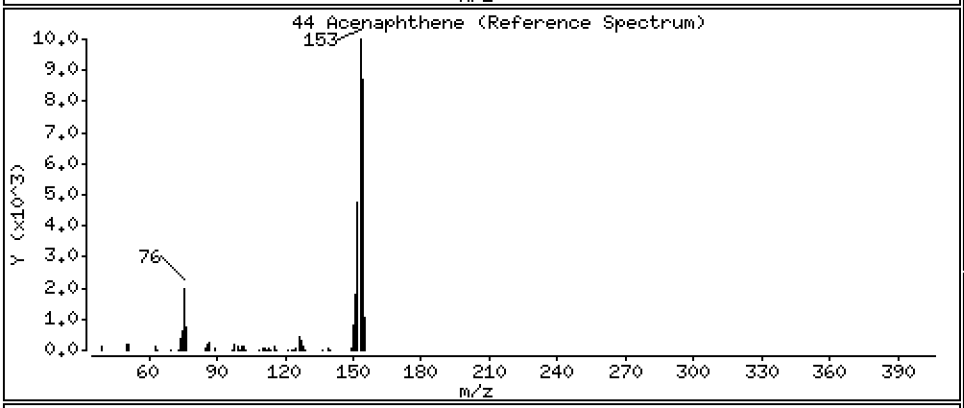
Concentration: 0.1994 ug/mL

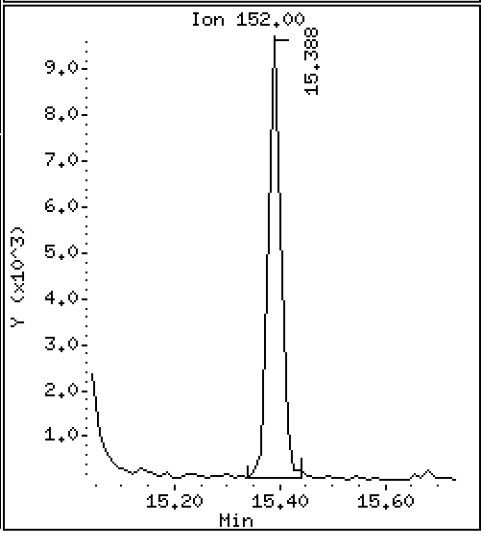


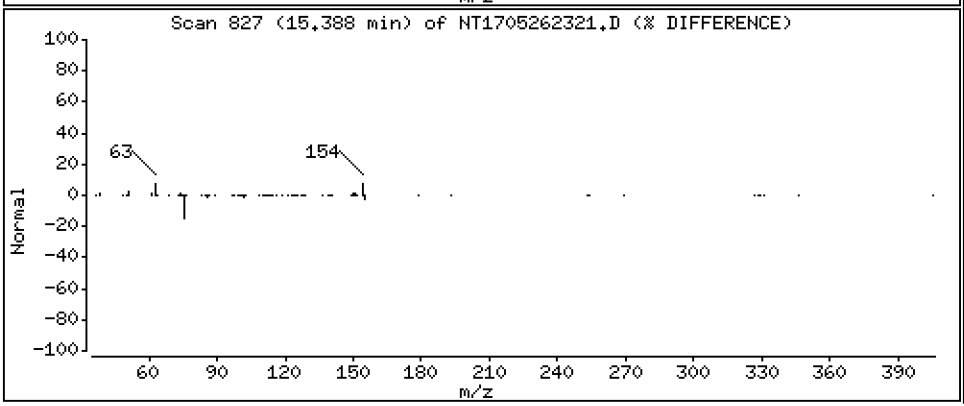












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

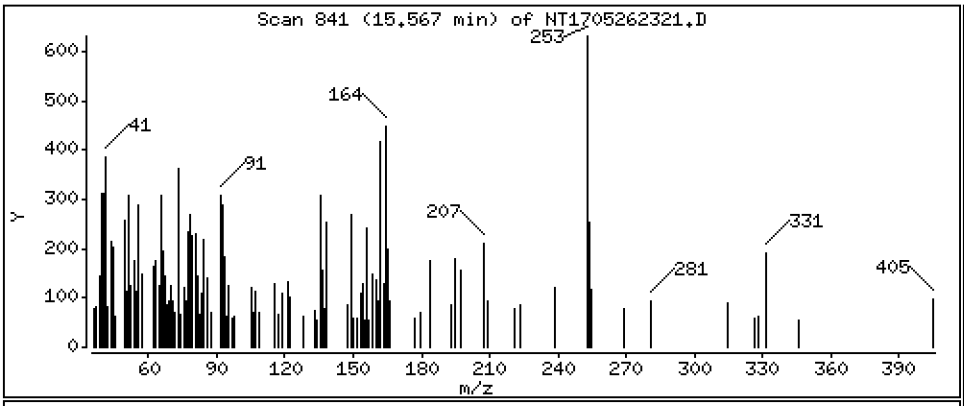
Operator: VTS

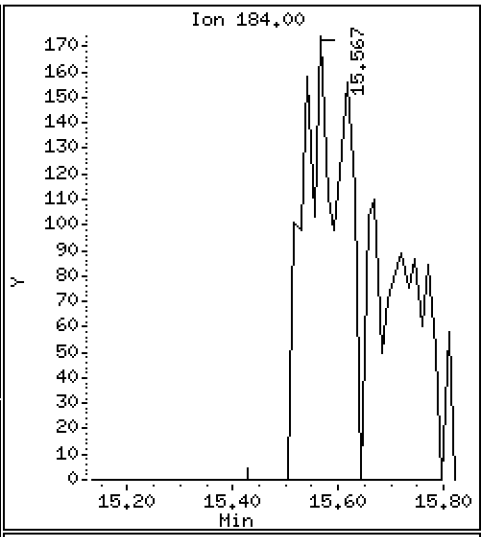
Column phase: ZB-5msi

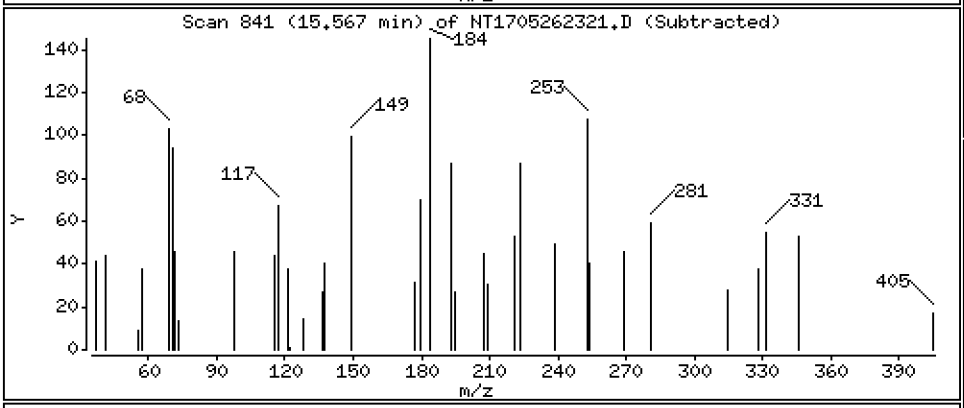
Column diameter: 0.25

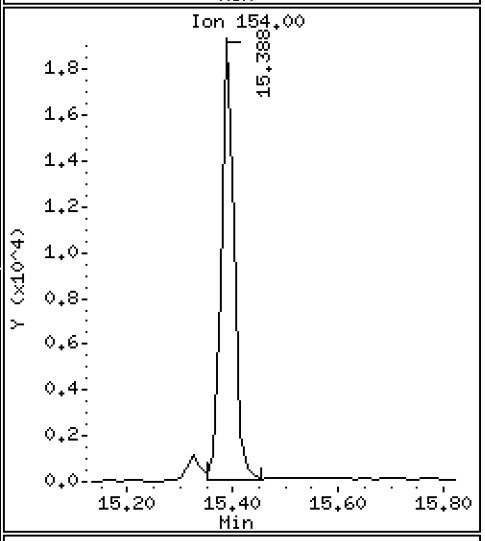
45 2,4-Dinitrophenol

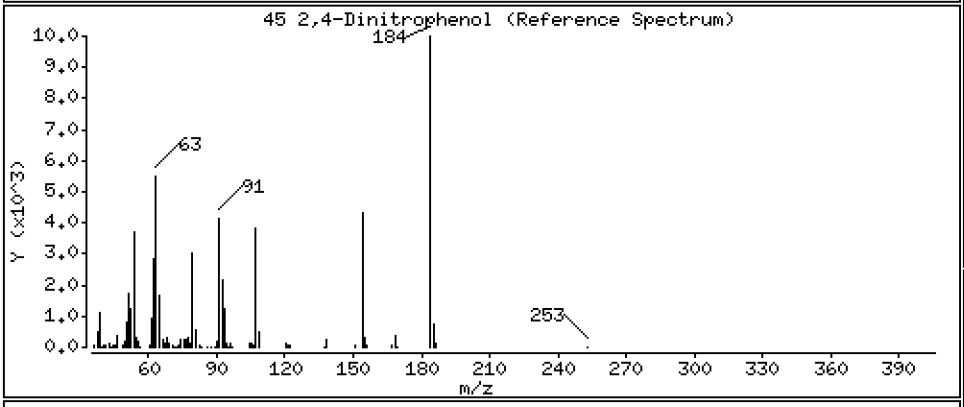
Concentration: 0.06089 ug/mL

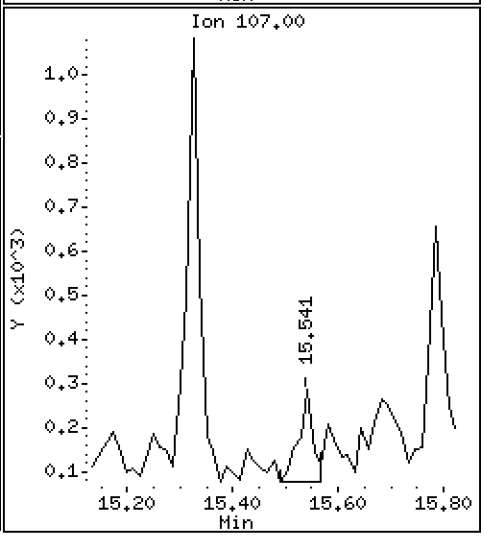


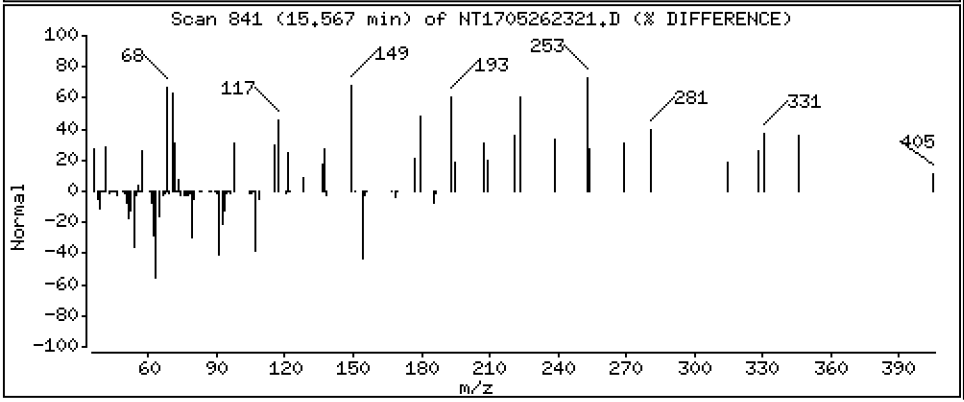












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

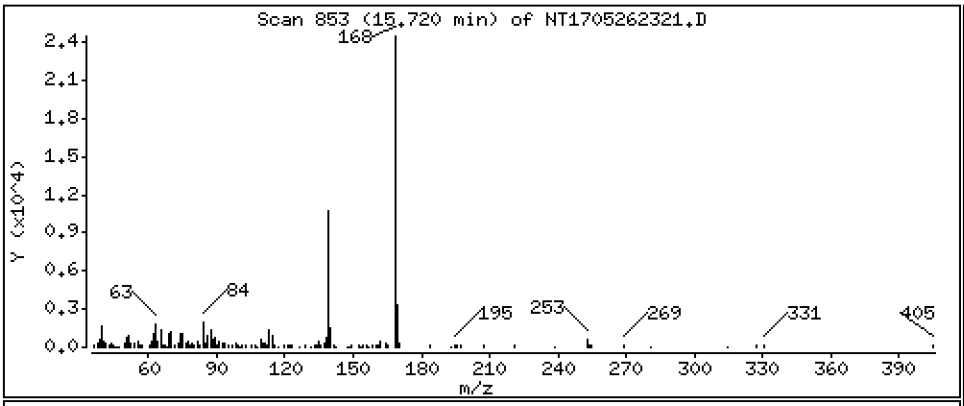
Operator: VTS

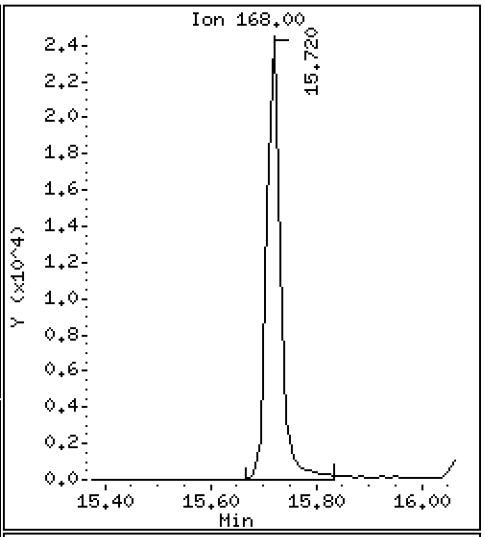
Column phase: ZB-5msi

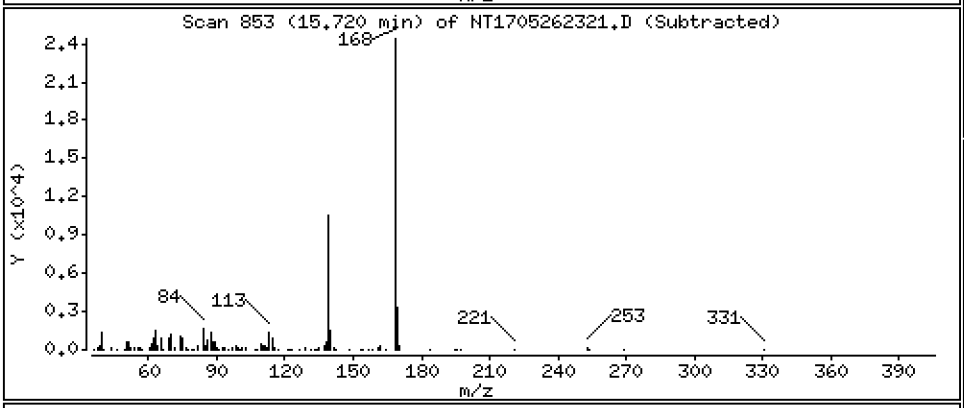
Column diameter: 0.25

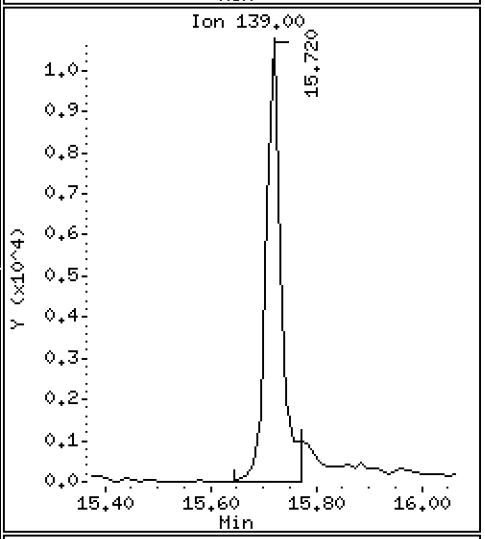
46 Dibenzofuran

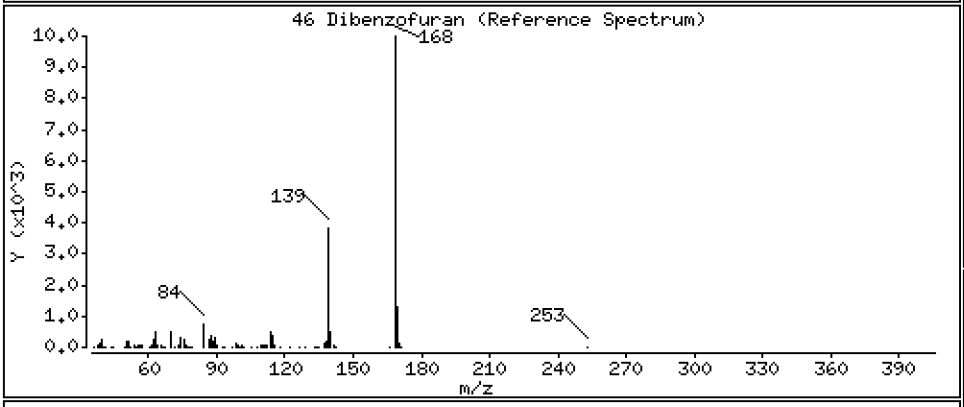
Concentration: 0.1948 ug/mL

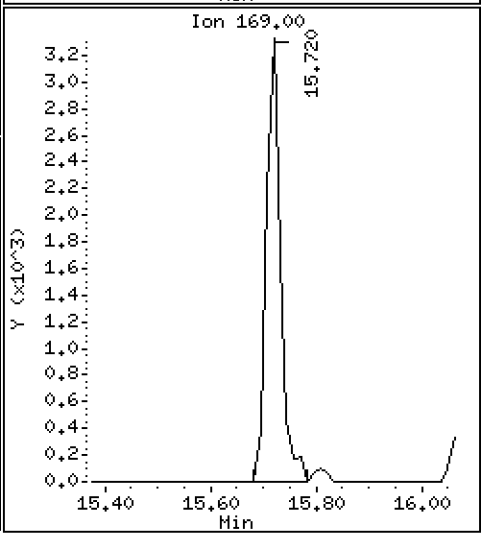


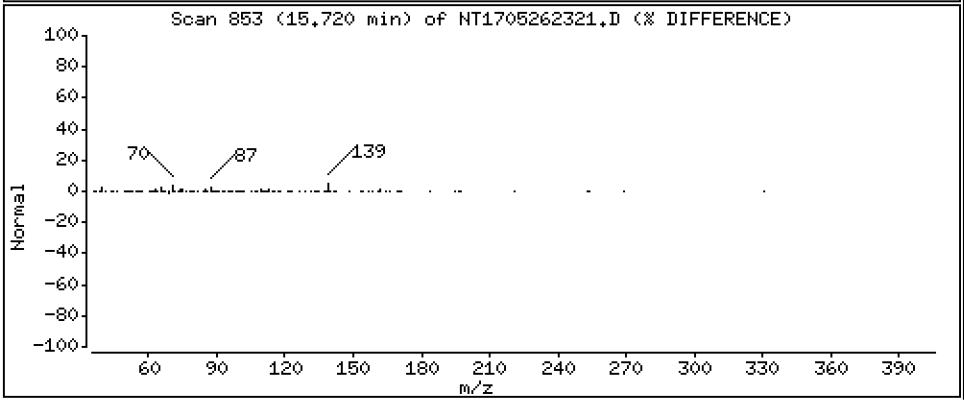












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

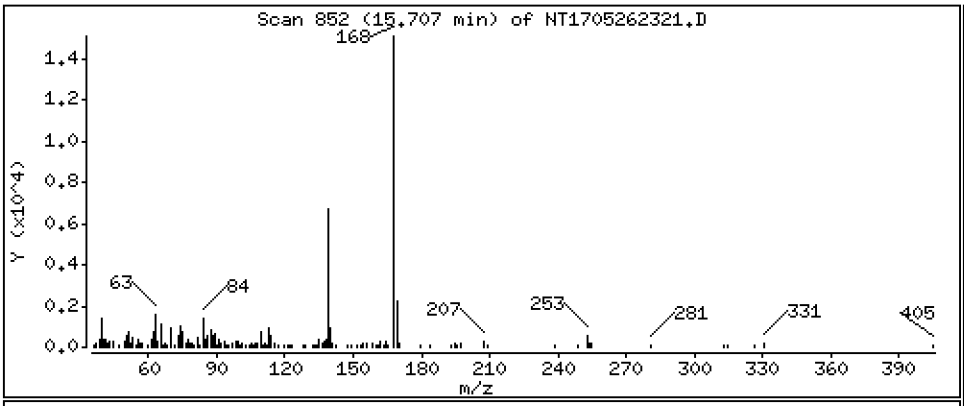
Operator: VTS

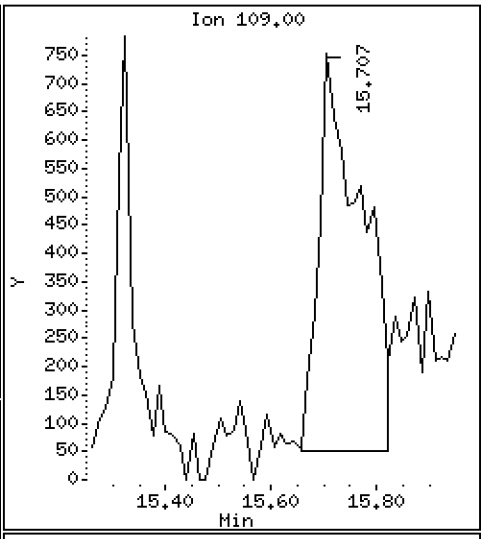
Column phase: ZB-5msi

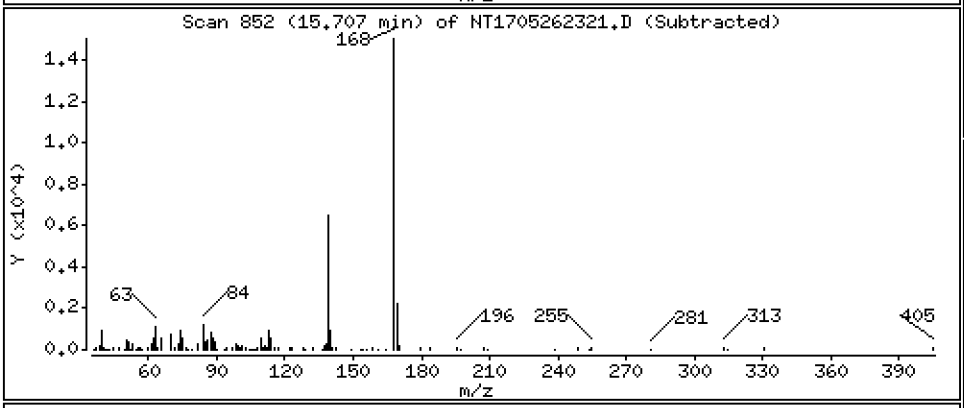
Column diameter: 0.25

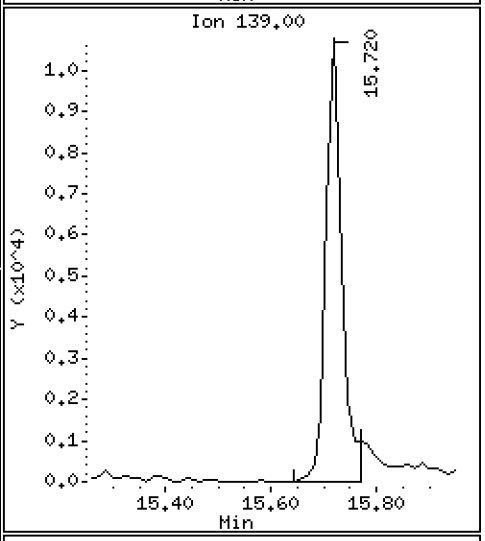
47 4-Nitrophenol

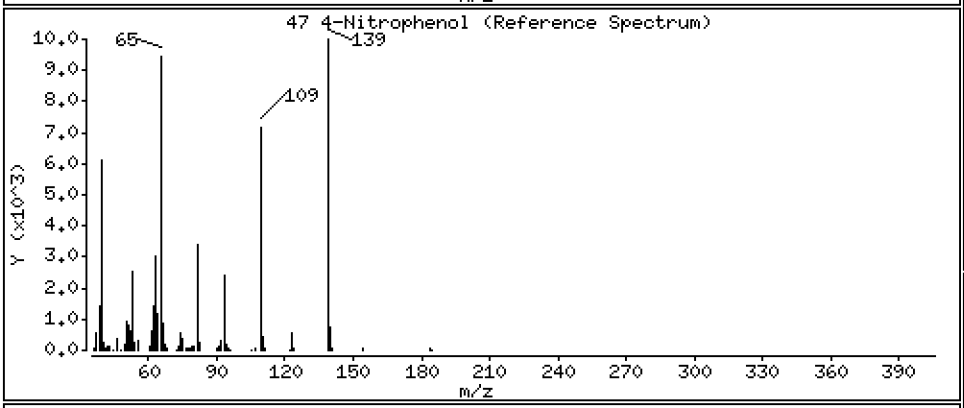
Concentration: 0.1478 ug/mL

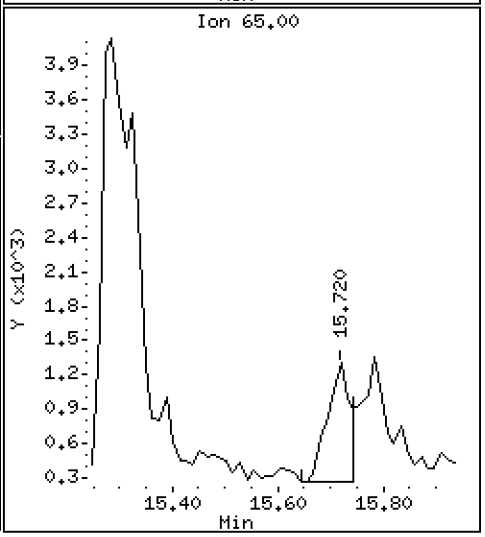


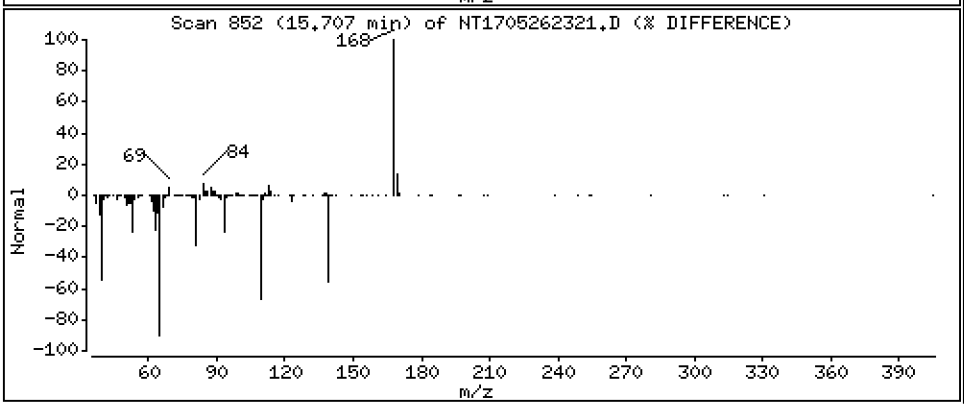












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

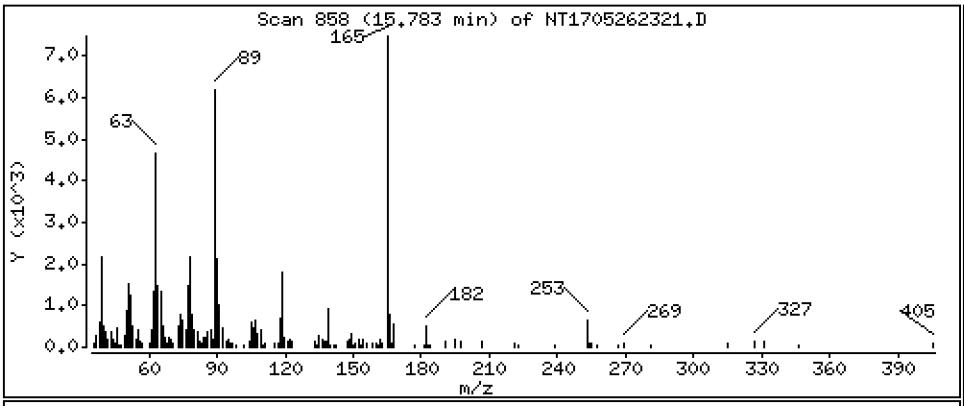
Operator: VTS

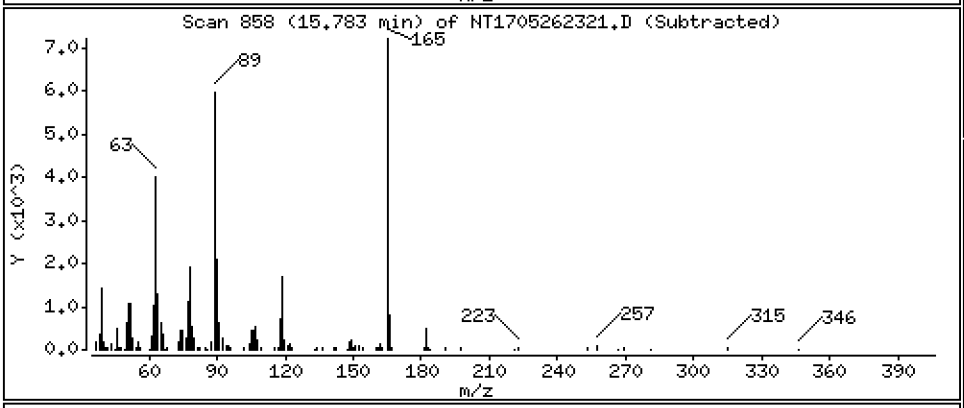
Column phase: ZB-5msi

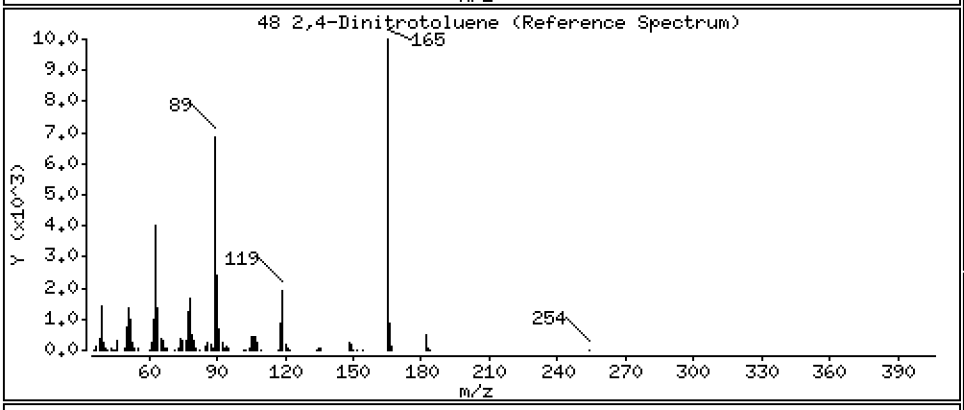
Column diameter: 0.25

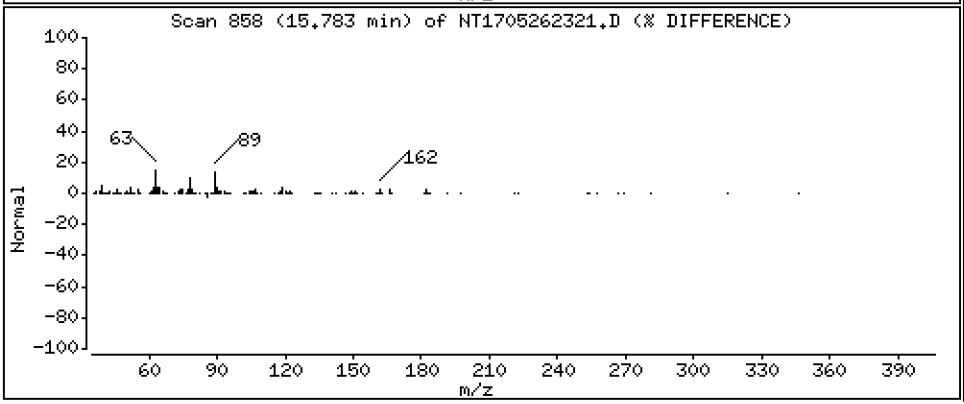
48 2,4-Dinitrotoluene

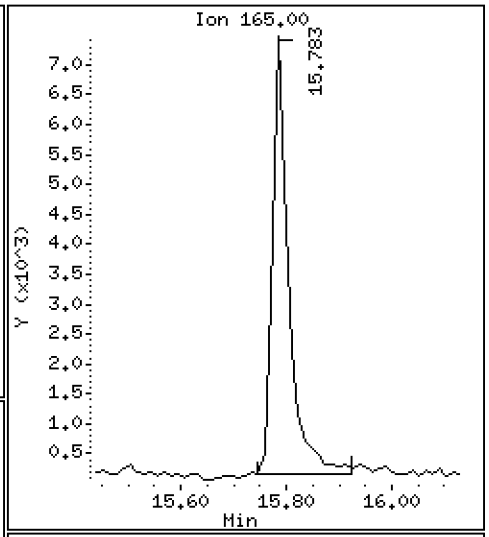
Concentration: 0.2750 ug/mL

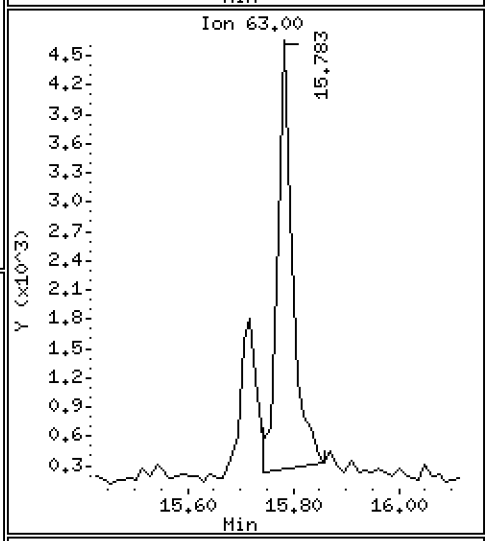


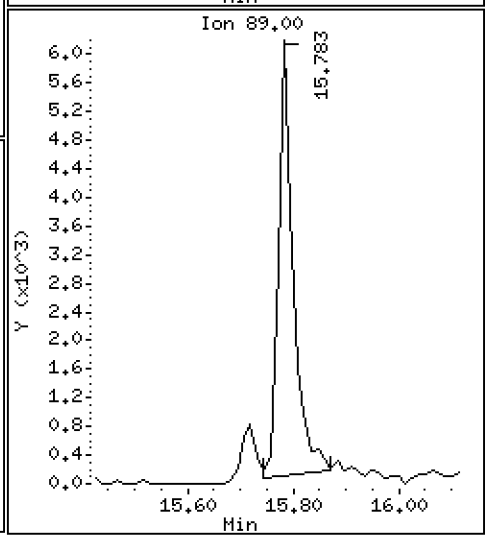












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

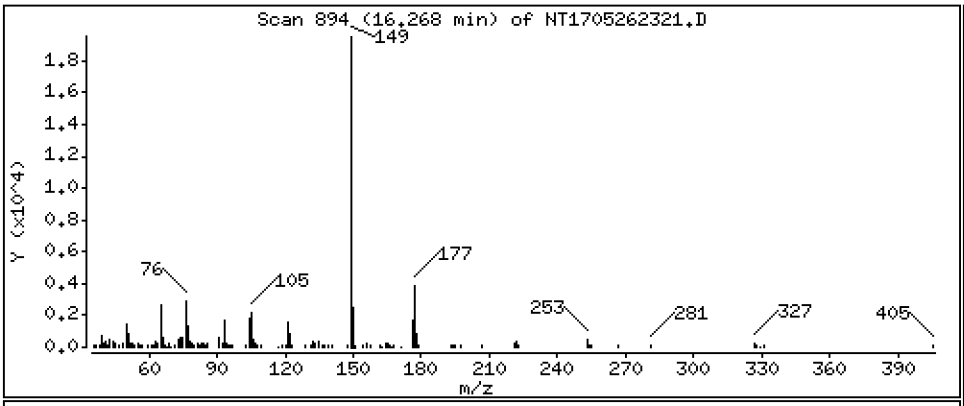
Operator: VTS

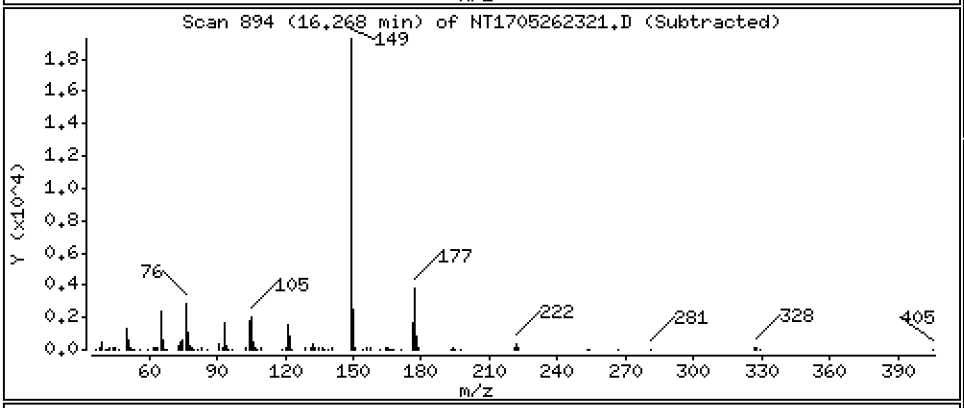
Column phase: ZB-5msi

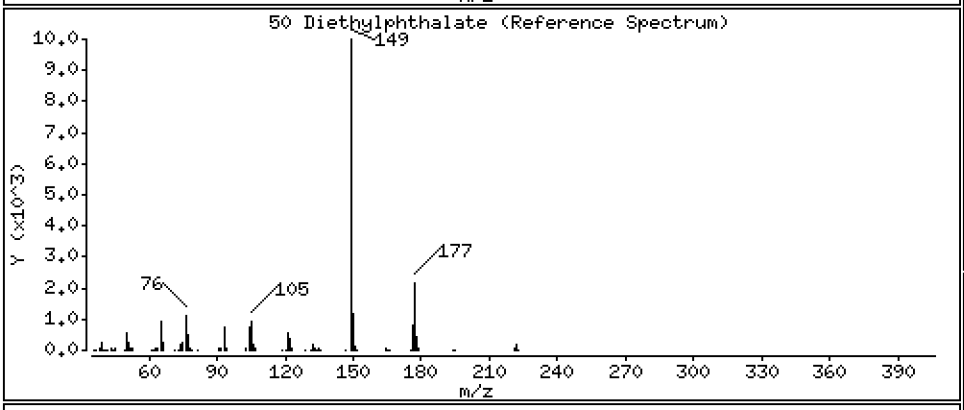
Column diameter: 0.25

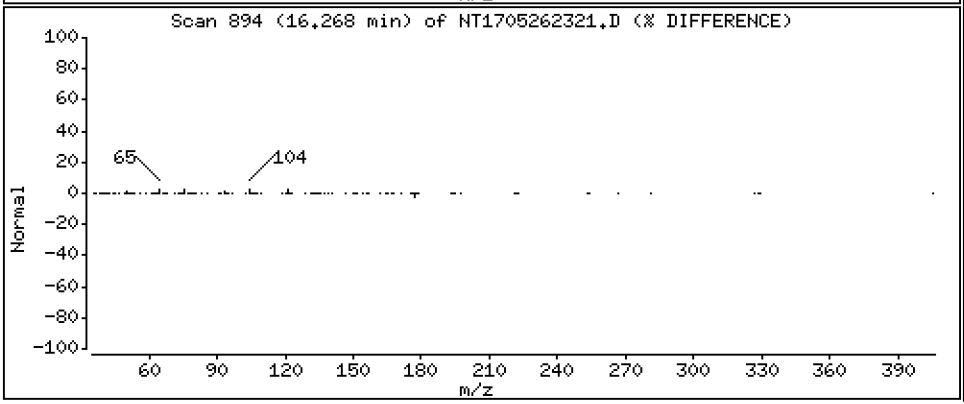
50 Diethylphthalate

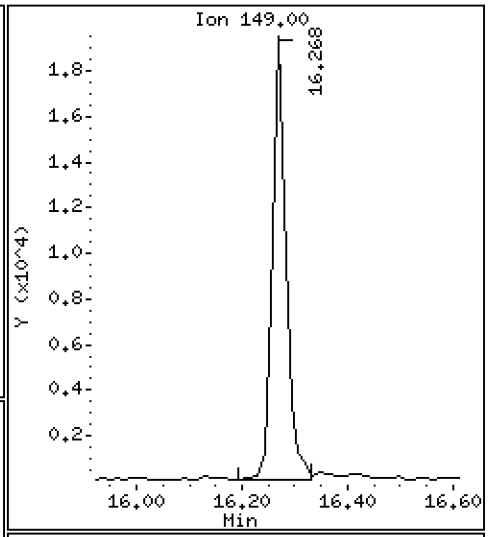
Concentration: 0.2357 ug/mL

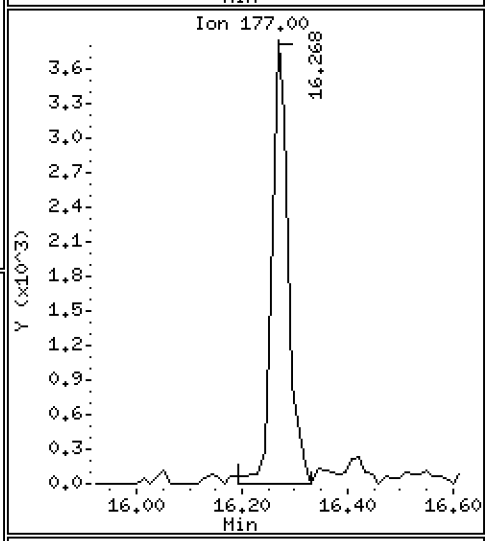


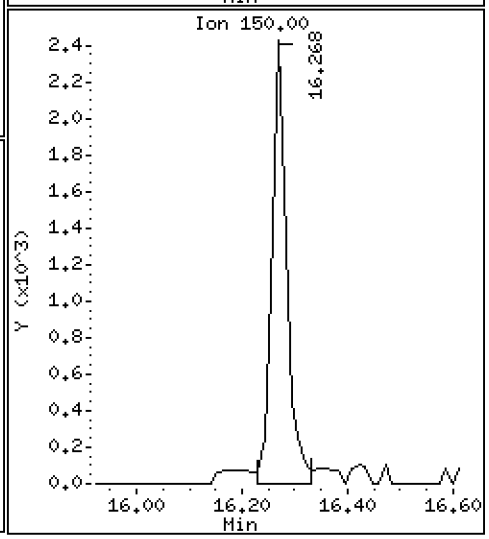












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

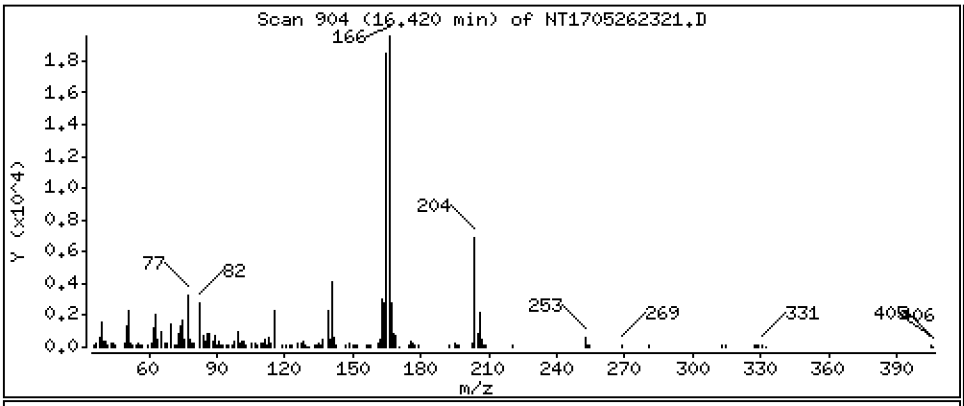
Operator: VTS

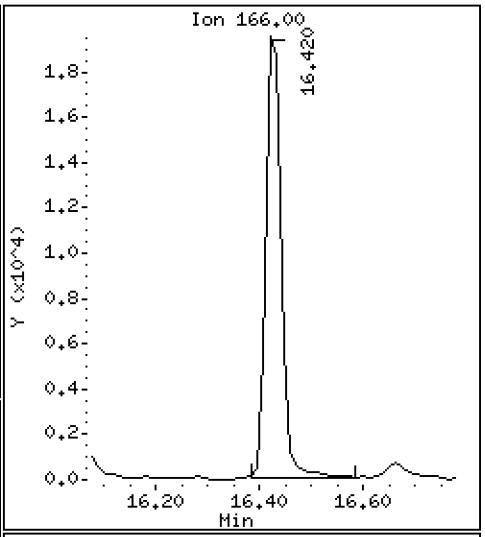
Column phase: ZB-5msi

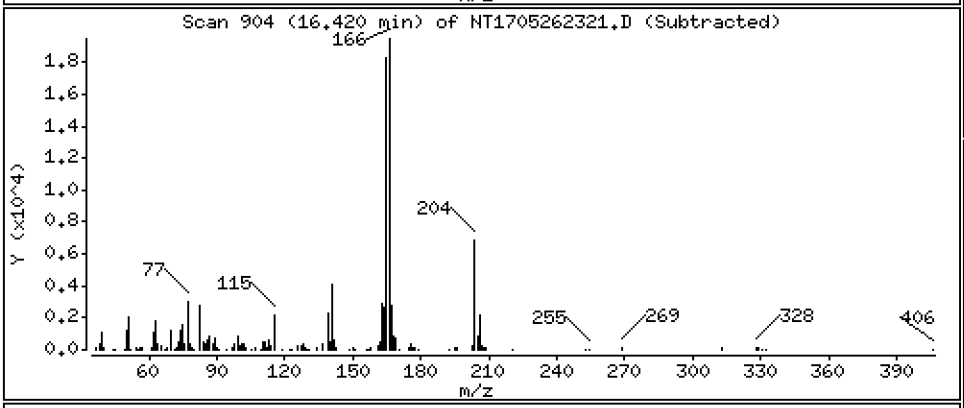
Column diameter: 0.25

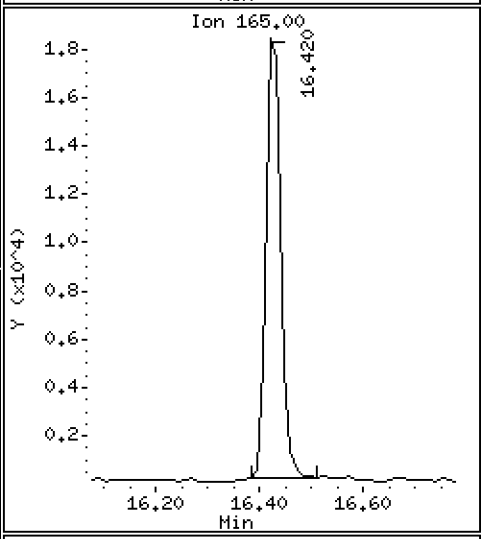
49 Fluorene

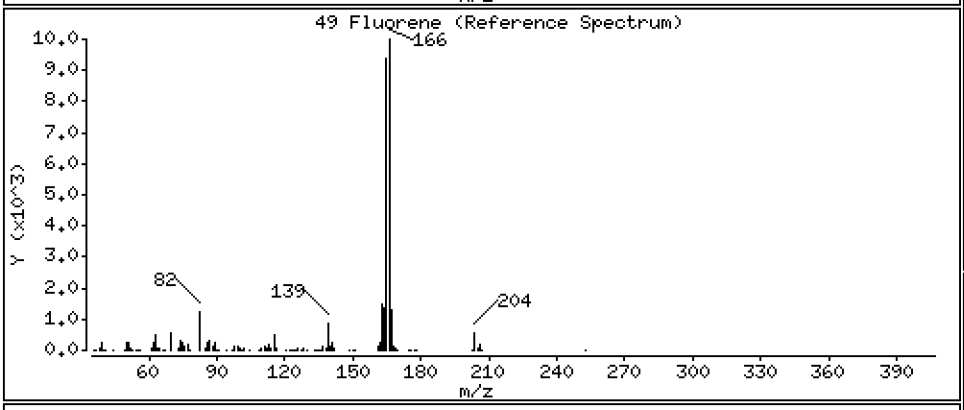
Concentration: 0.1749 ug/mL

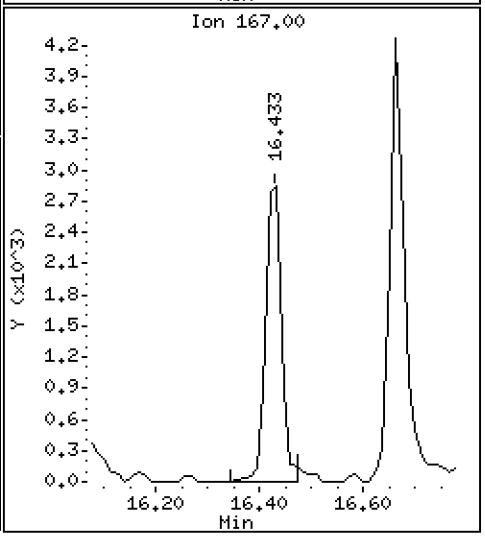


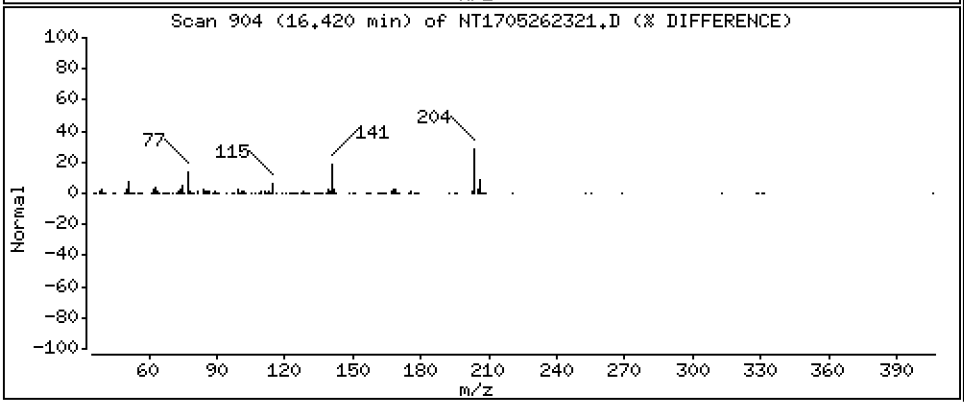












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

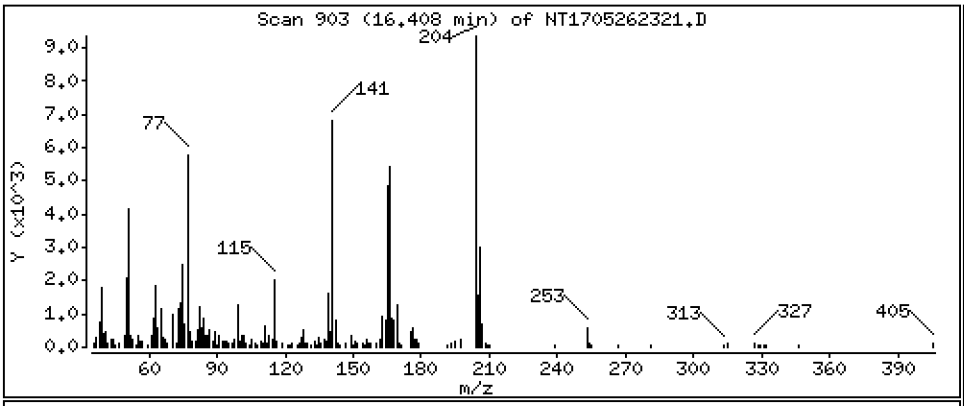
Operator: VTS

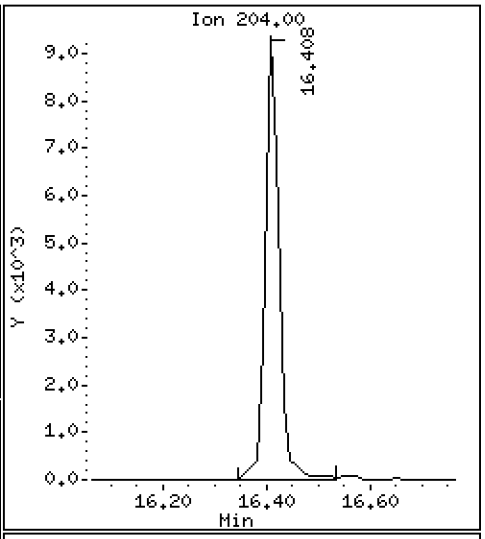
Column phase: ZB-5msi

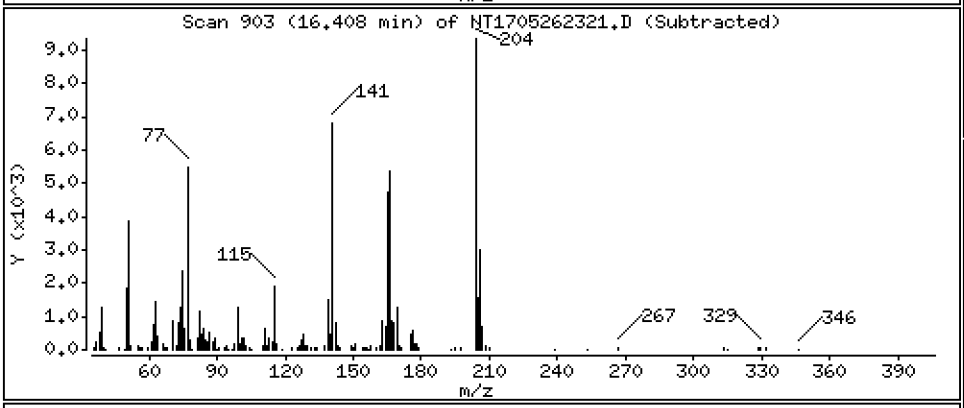
Column diameter: 0.25

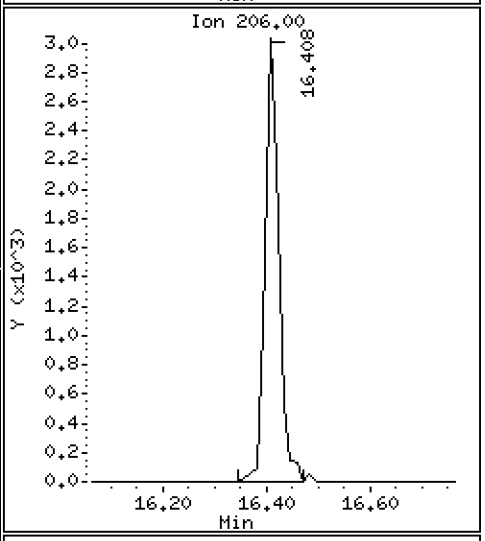
51 4-Chlorophenyl-phenylether

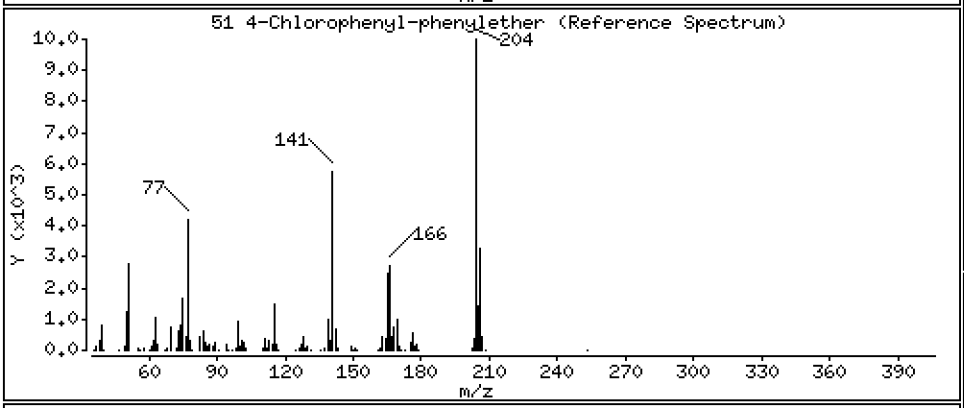
Concentration: 0.1866 ug/mL

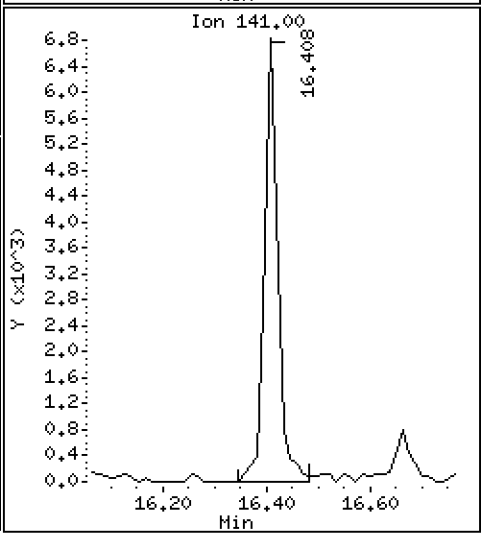


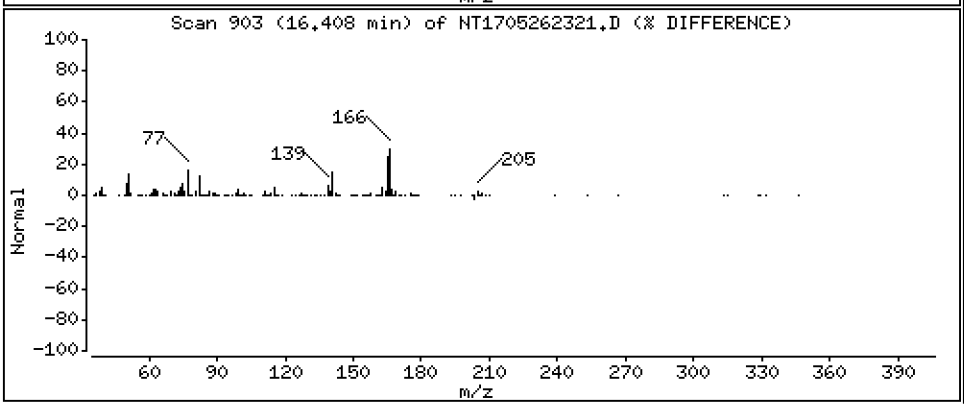












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

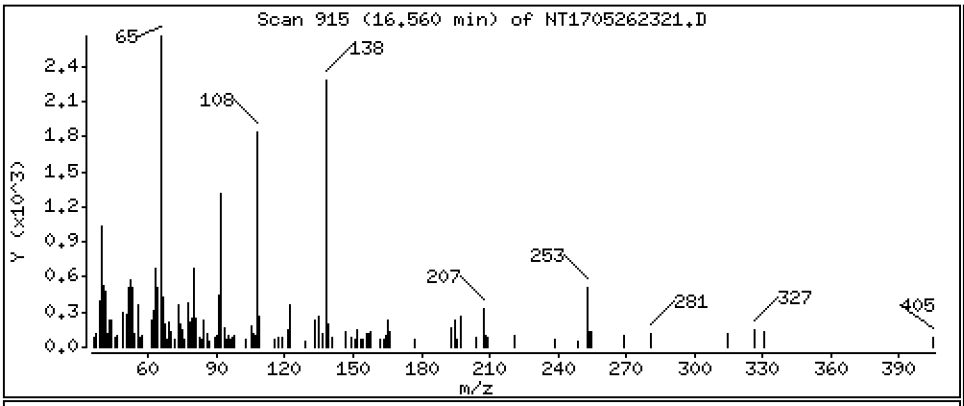
Operator: VTS

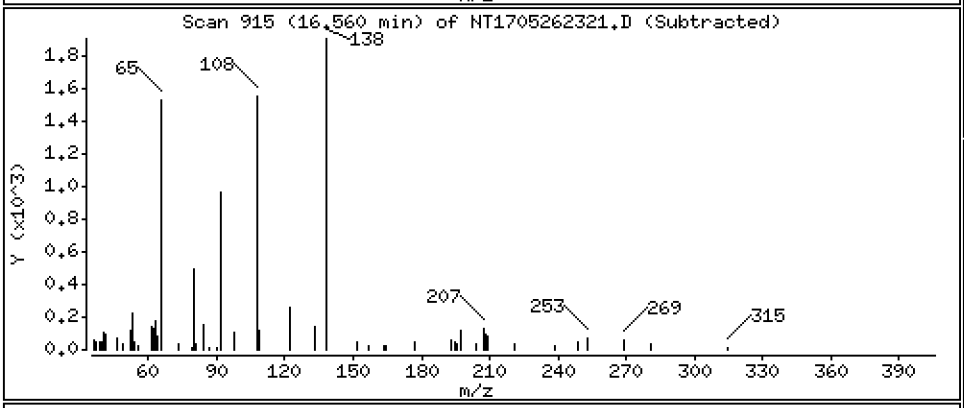
Column phase: ZB-5msi

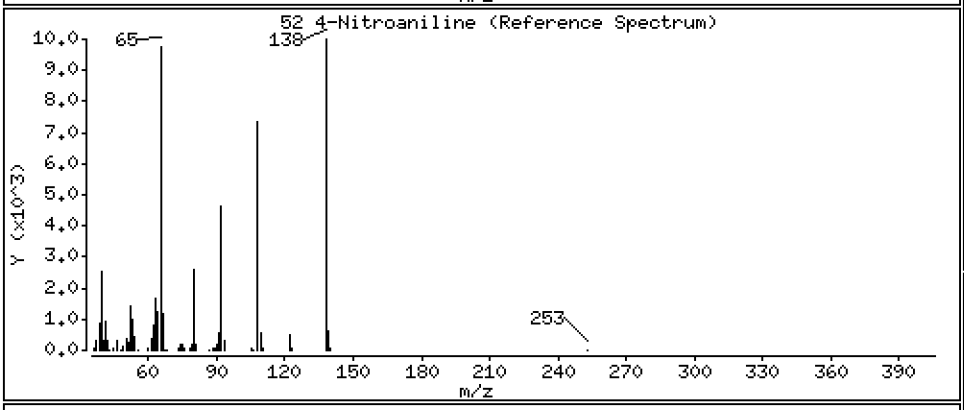
Column diameter: 0.25

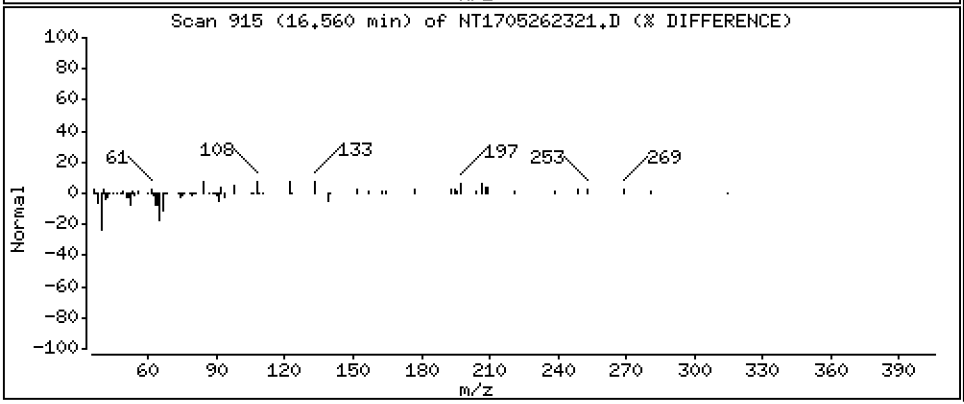
52 4-Nitroaniline

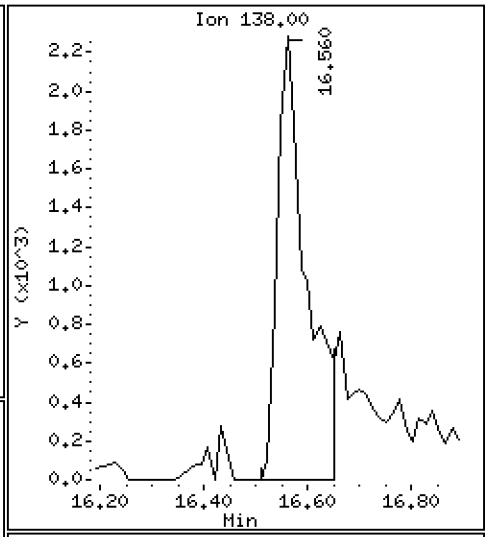
Concentration: 0.2364 ug/mL

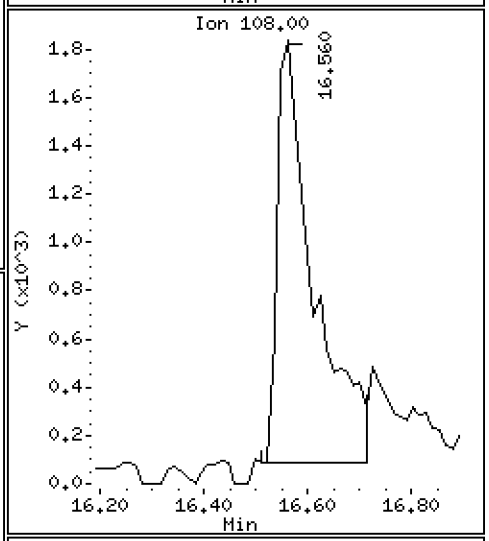


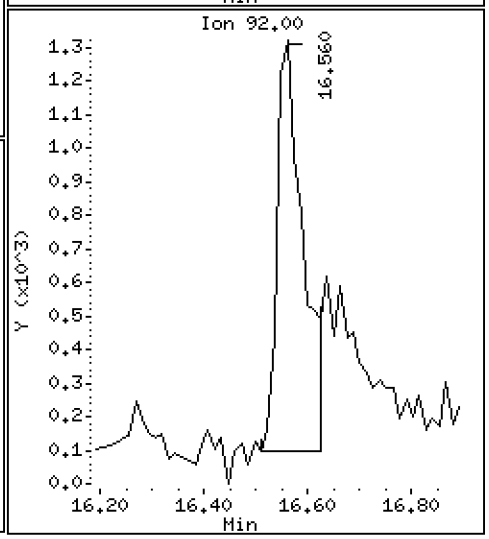












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

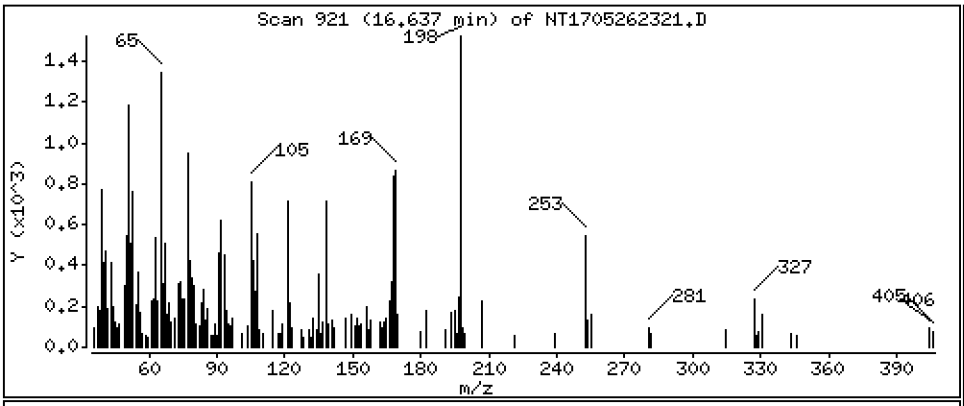
Operator: VTS

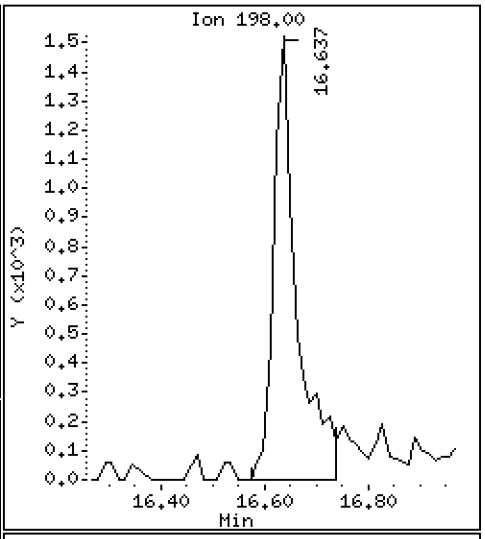
Column phase: ZB-5msi

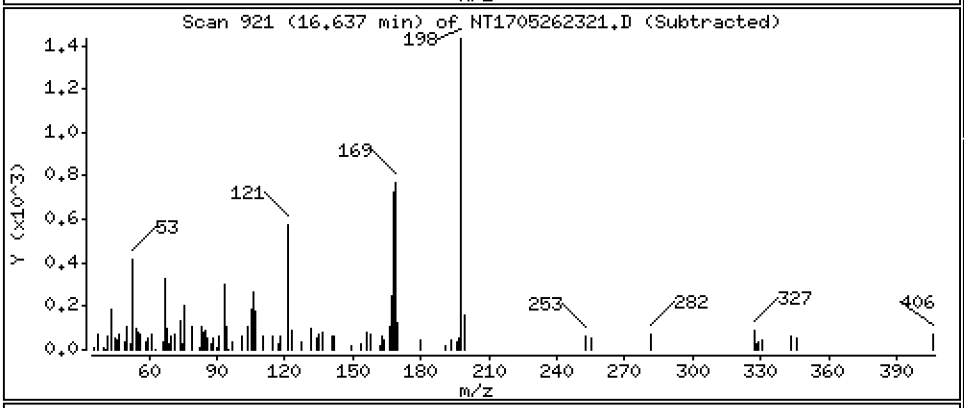
Column diameter: 0.25

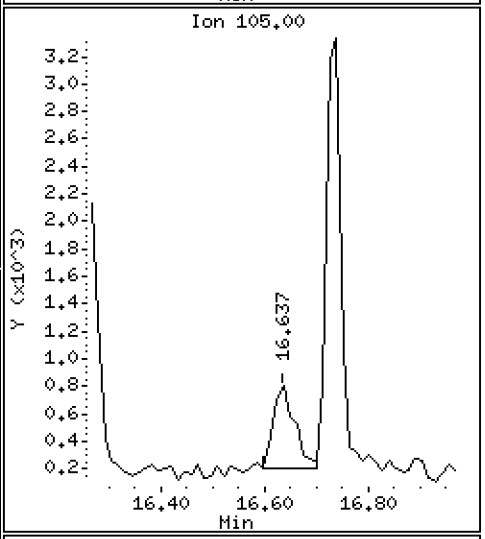
53 4,6-Dinitro-2-methylphenol

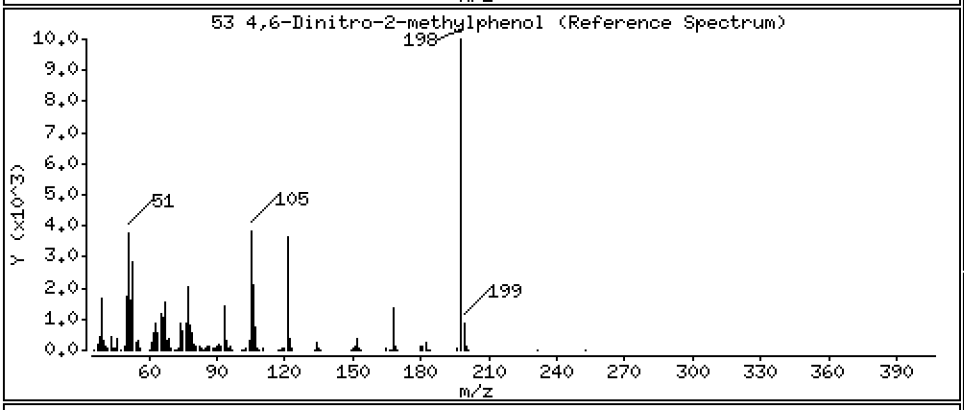
Concentration: 0.1349 ug/mL

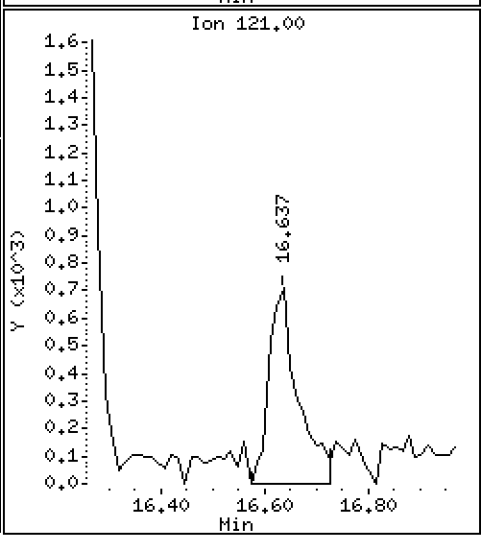


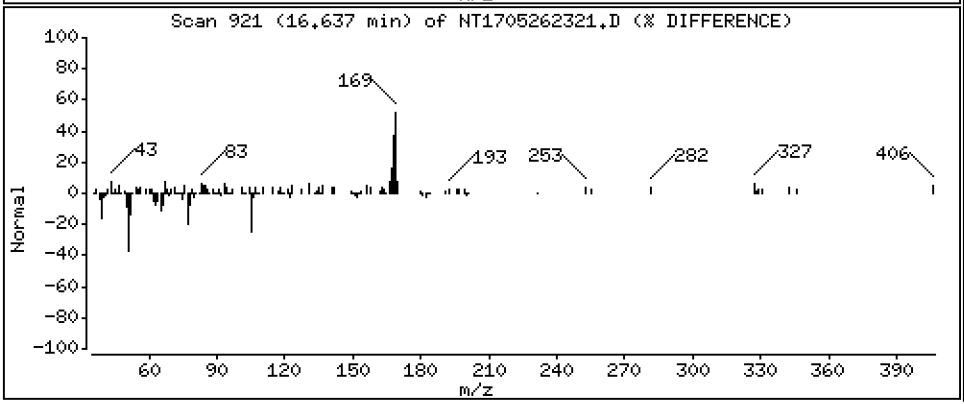












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

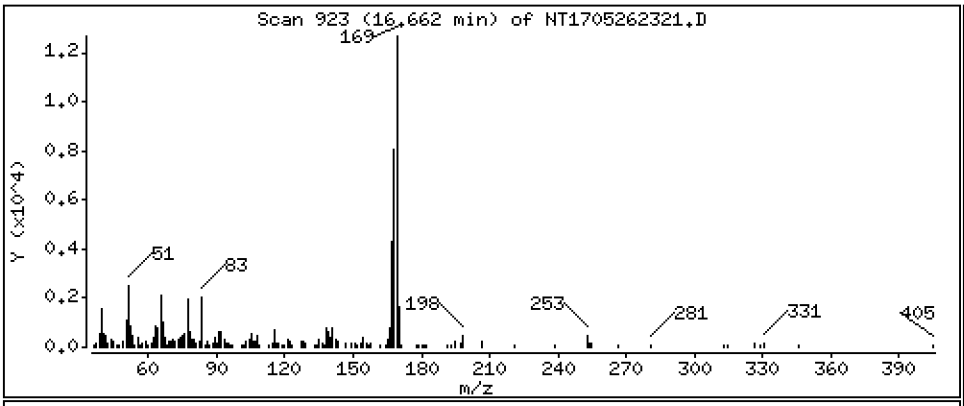
Operator: VTS

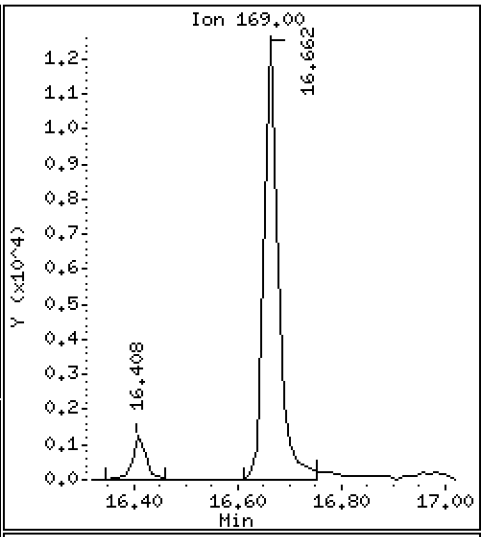
Column phase: ZB-5msi

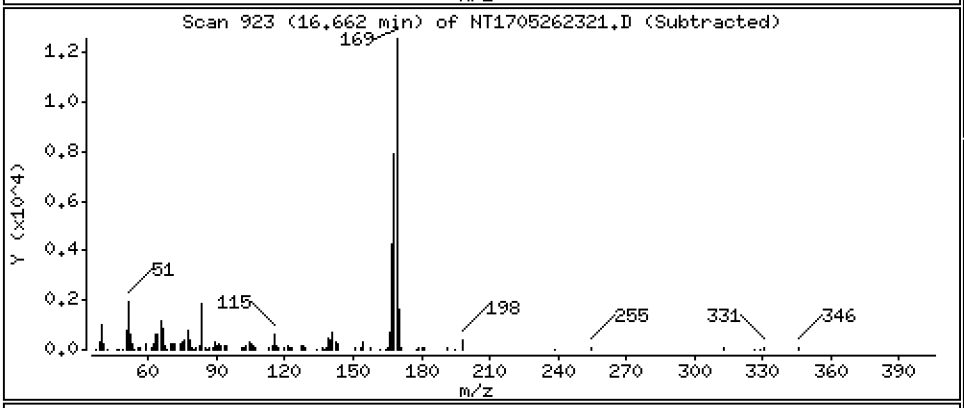
Column diameter: 0.25

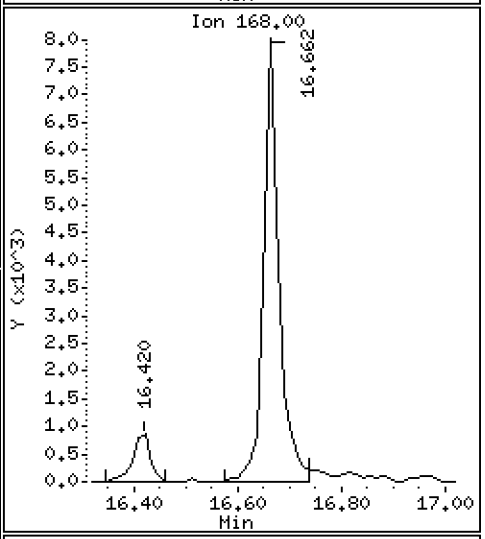
54 N-Nitrosodiphenylamine

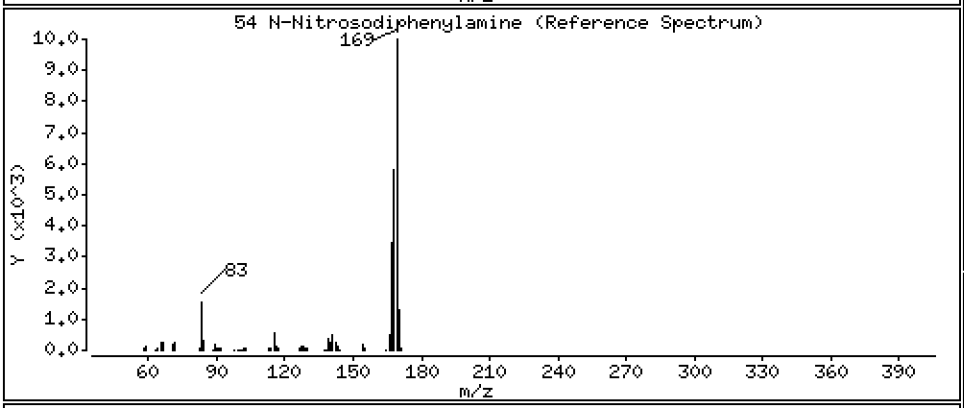
Concentration: 0.1967 ug/mL

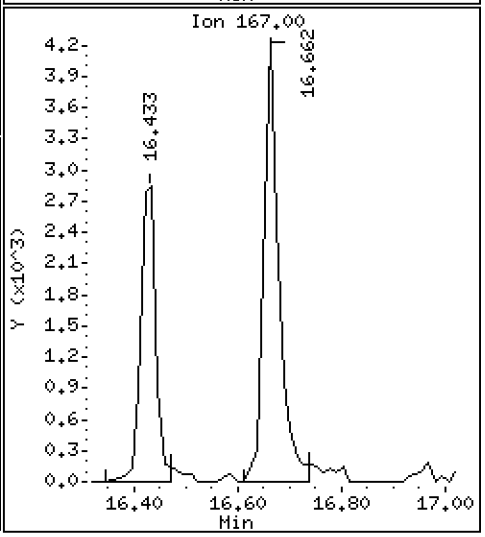


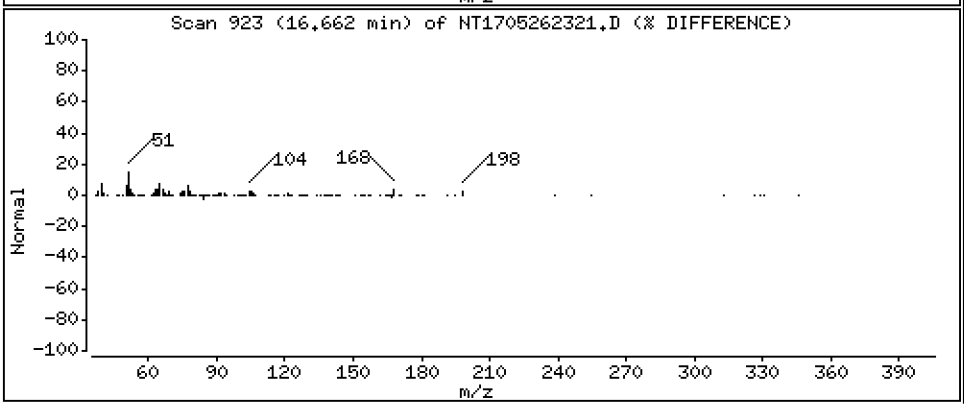












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

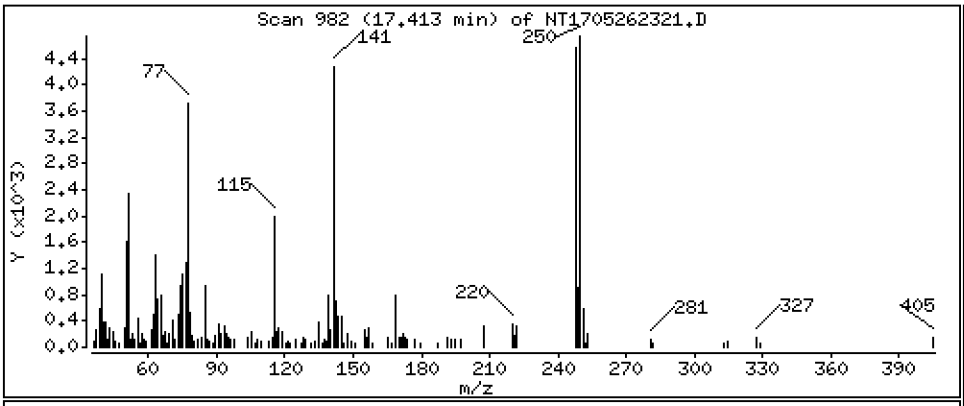
Operator: VTS

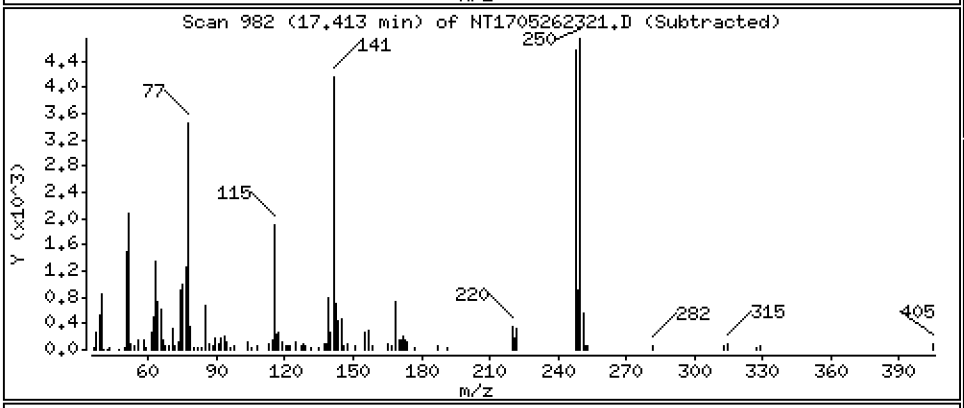
Column phase: ZB-5msi

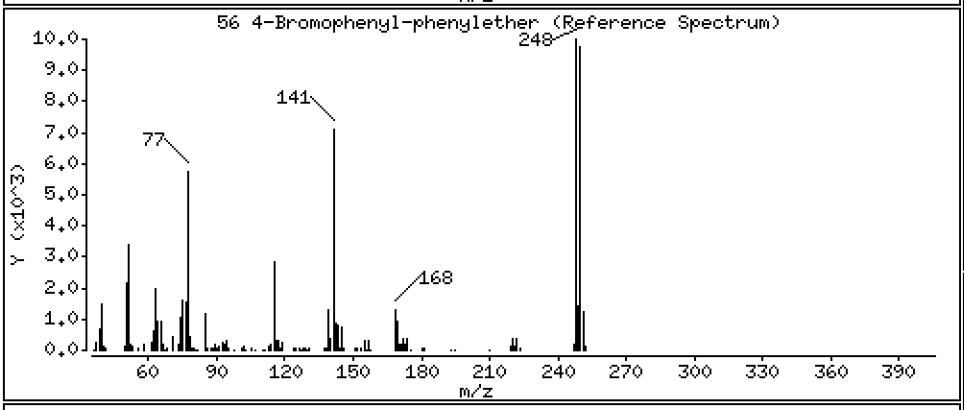
Column diameter: 0.25

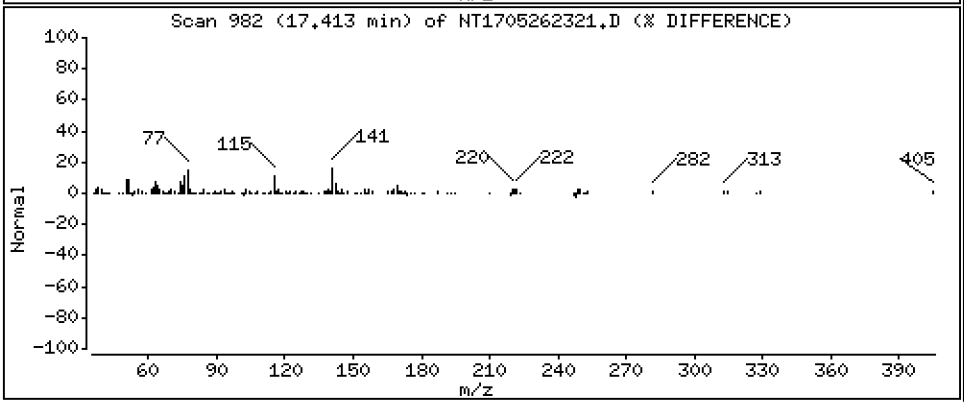
56 4-Bromophenyl-phenylether

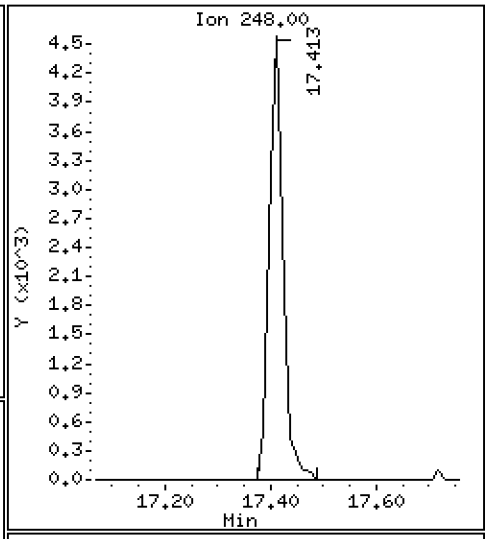
Concentration: 0.1950 ug/mL

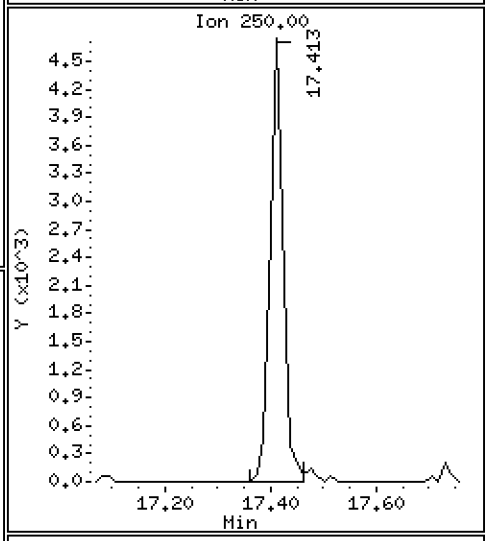


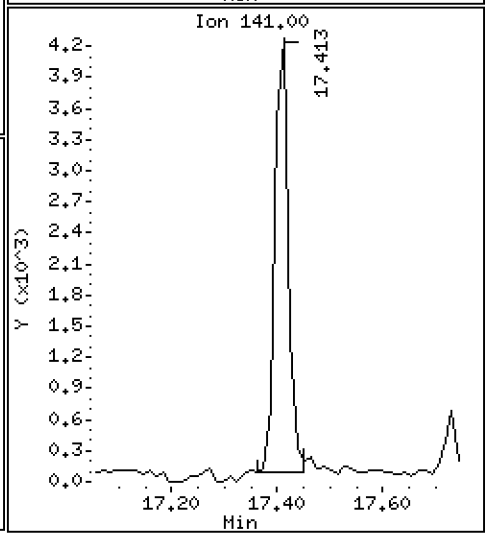












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

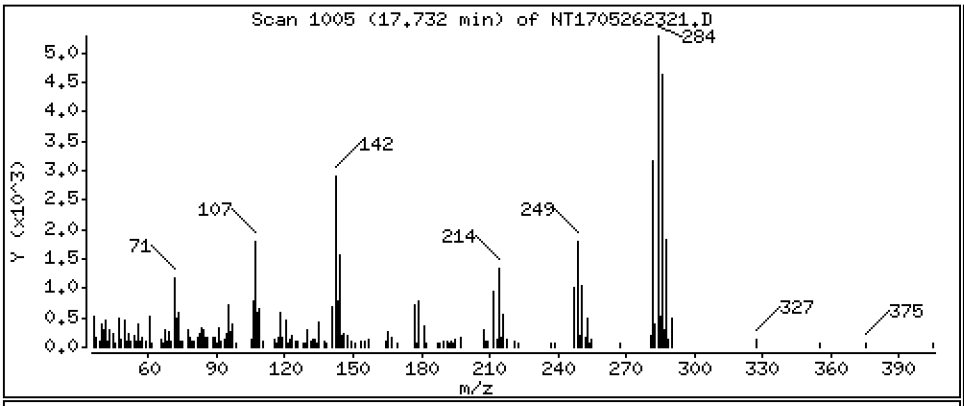
Operator: VTS

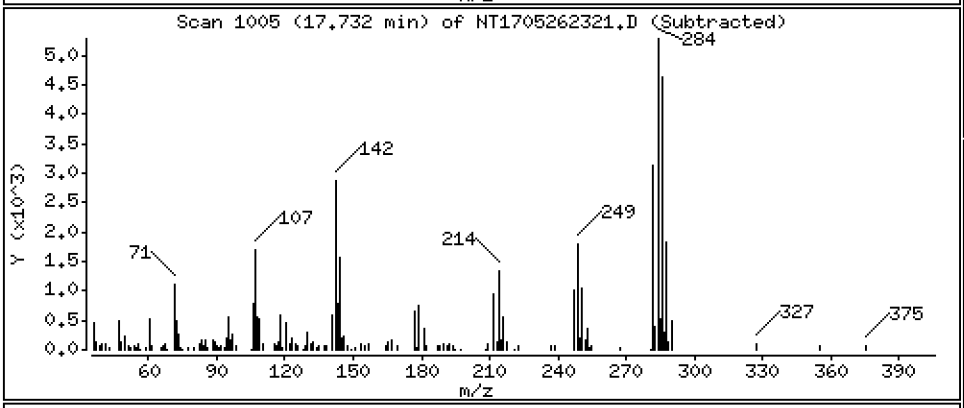
Column phase: ZB-5msi

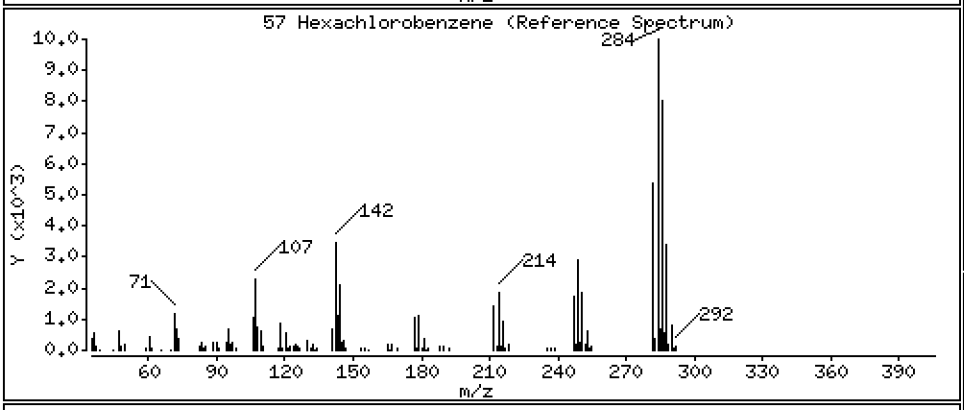
Column diameter: 0.25

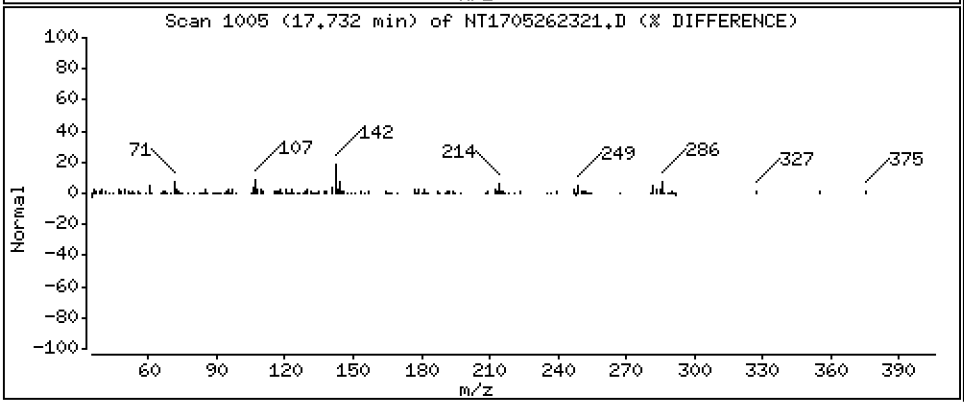
57 Hexachlorobenzene

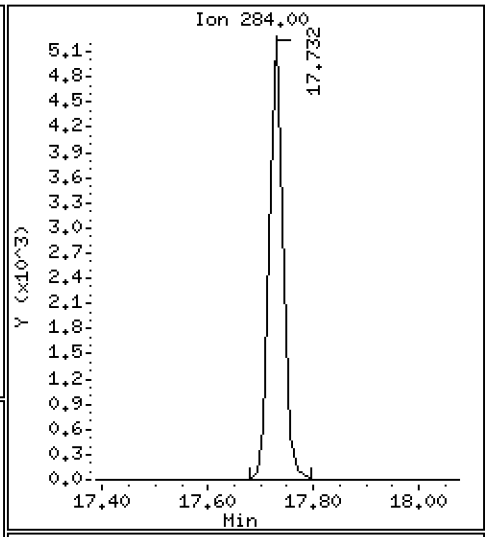
Concentration: 0.2192 ug/mL

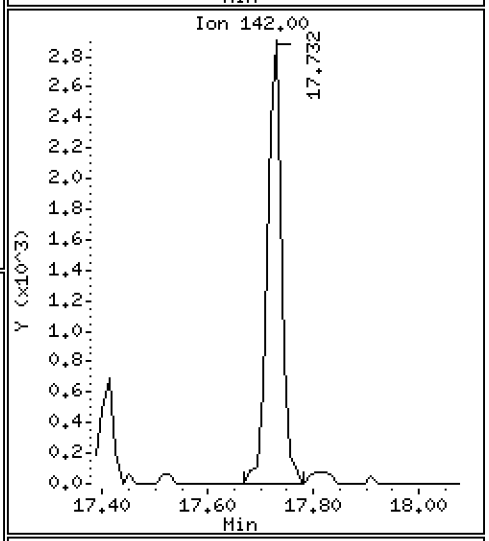


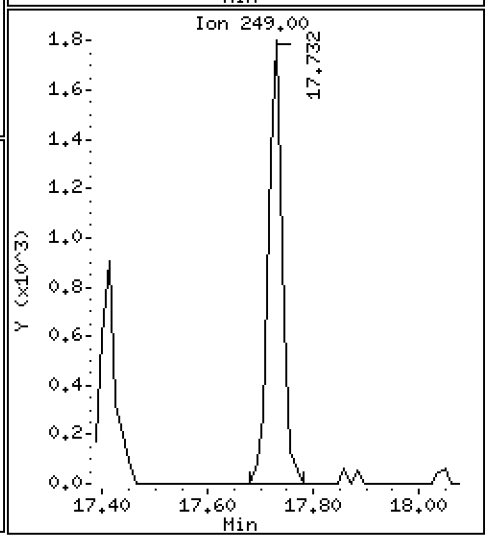












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

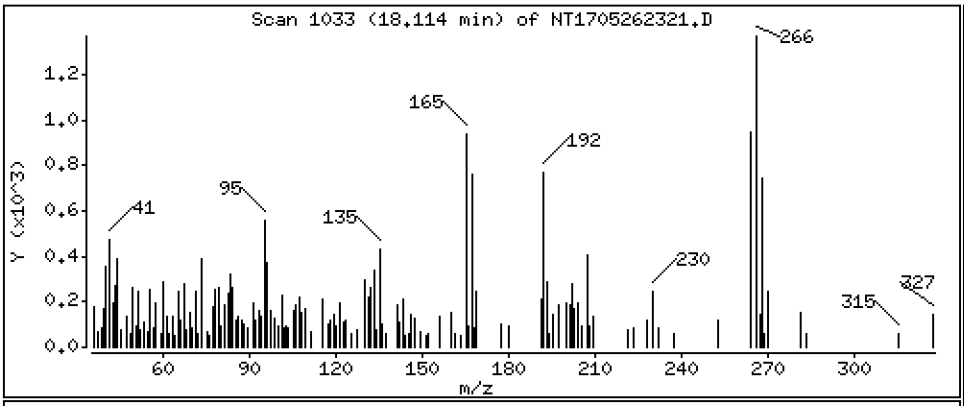
Operator: VTS

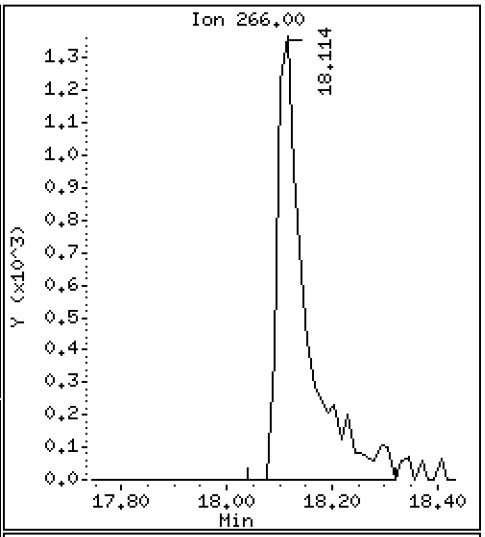
Column phase: ZB-5msi

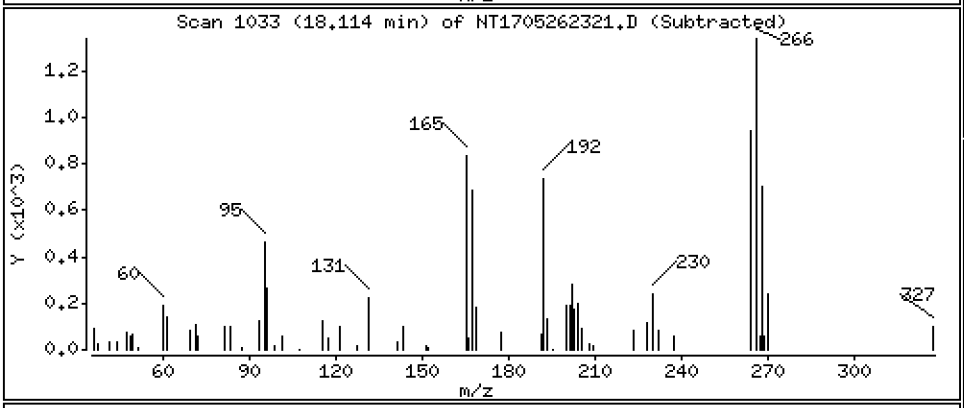
Column diameter: 0.25

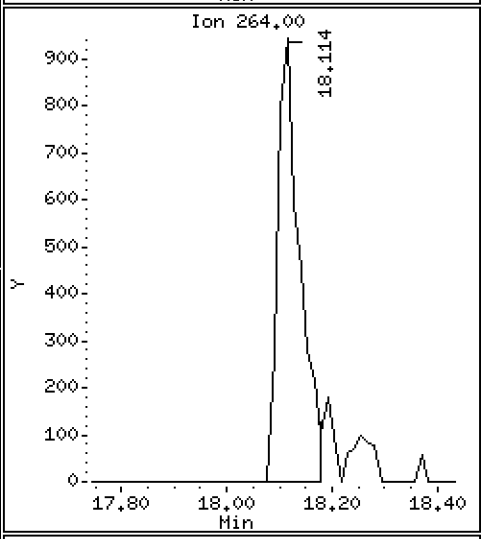
58 Pentachlorophenol

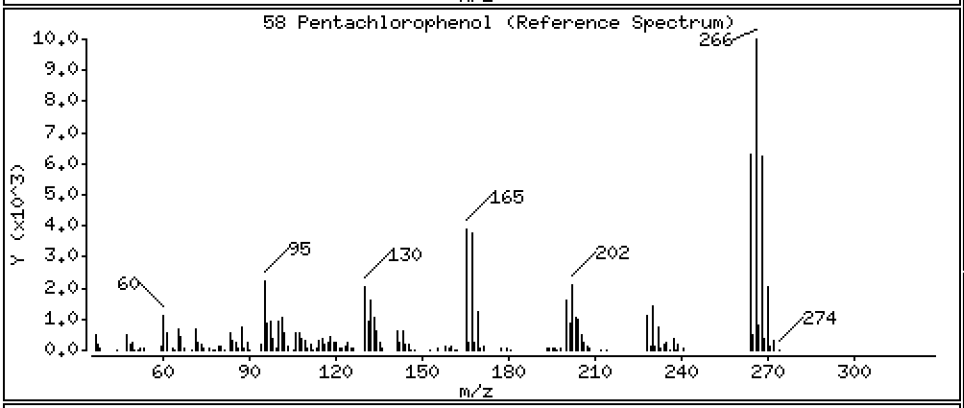
Concentration: 0.2038 ug/mL

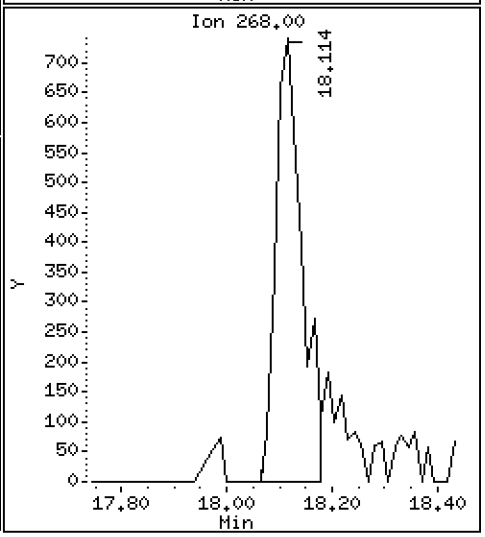


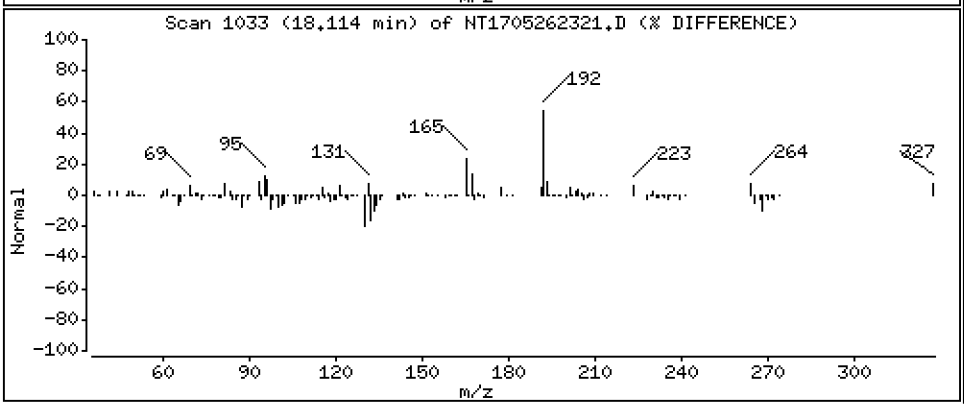












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

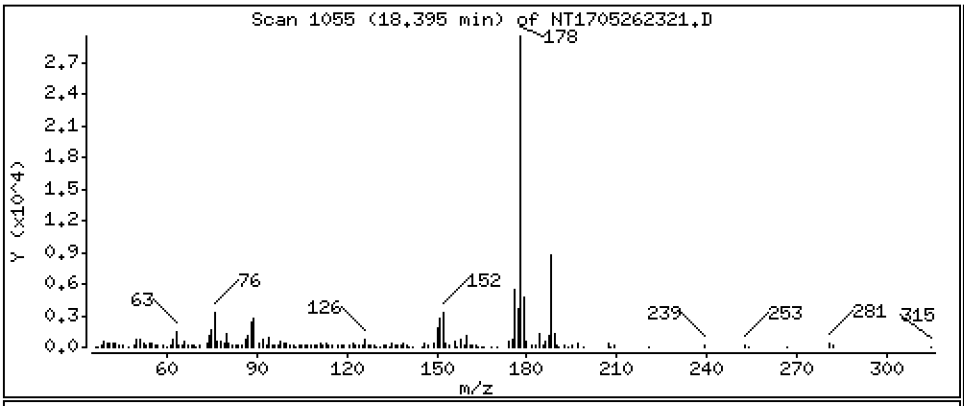
Operator: VTS

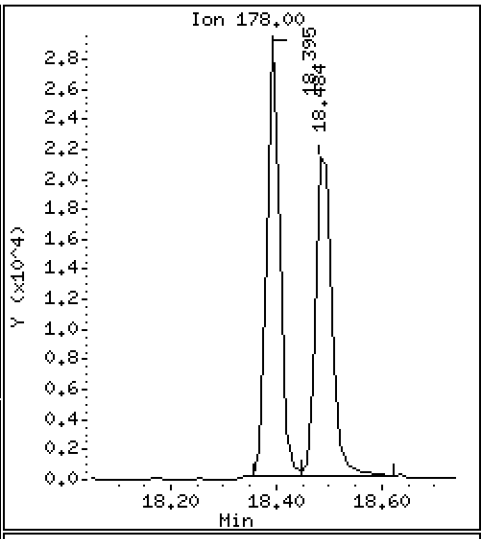
Column phase: ZB-5msi

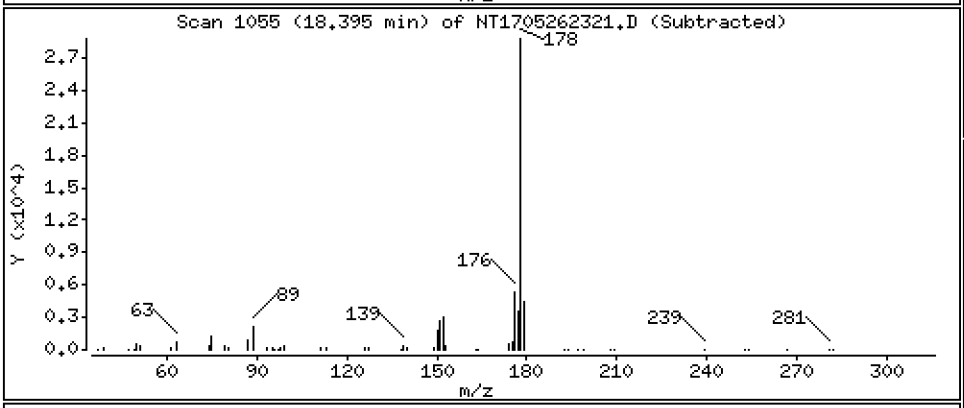
Column diameter: 0.25

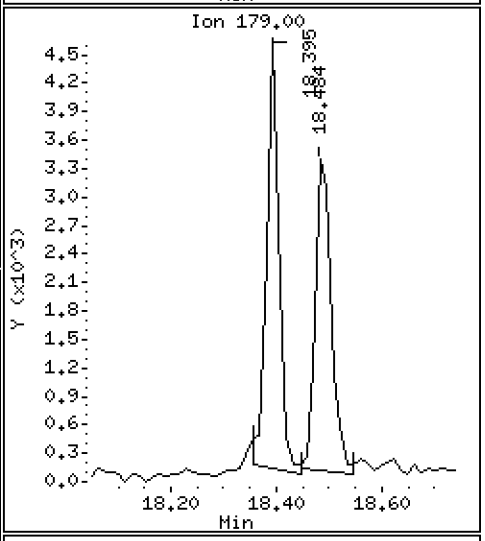
60 Phenanthrene

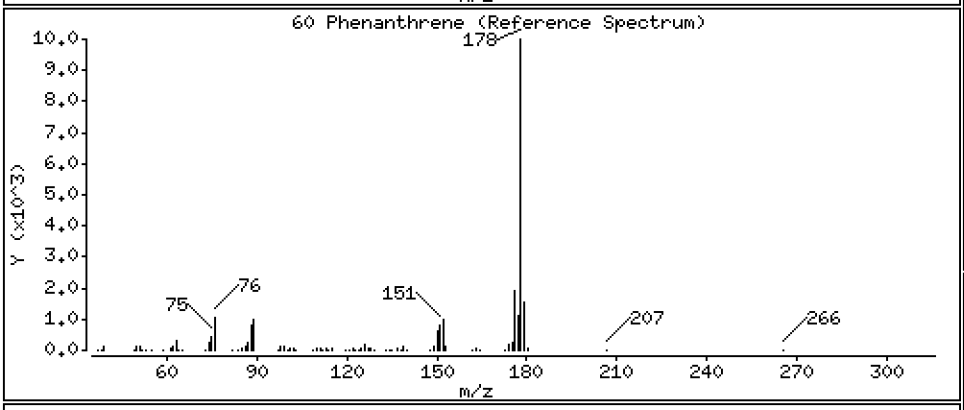
Concentration: 0.1948 ug/mL

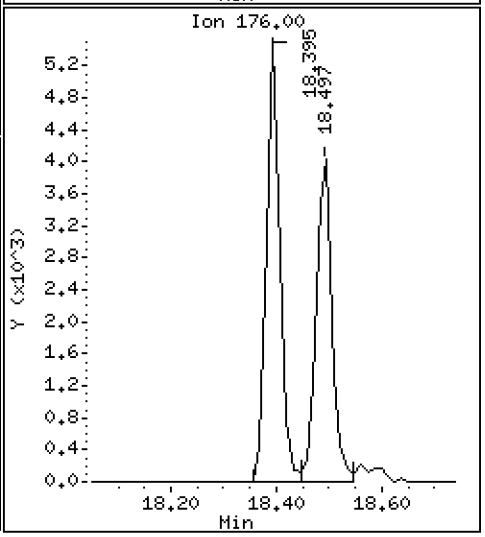


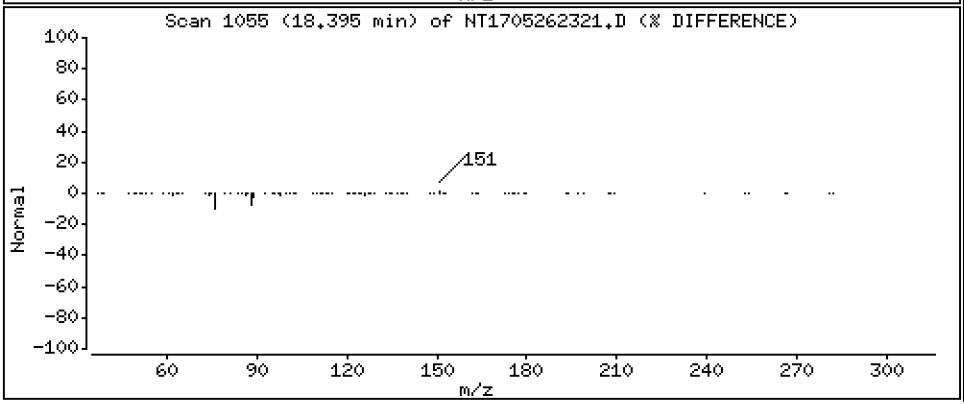












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

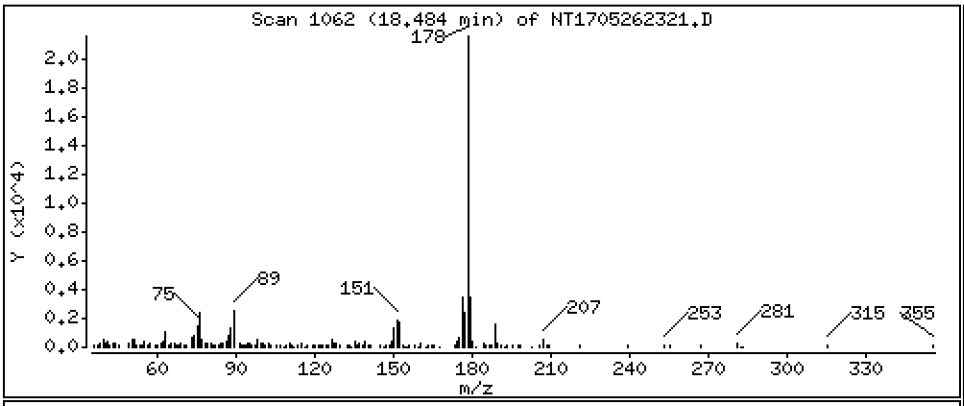
Operator: VTS

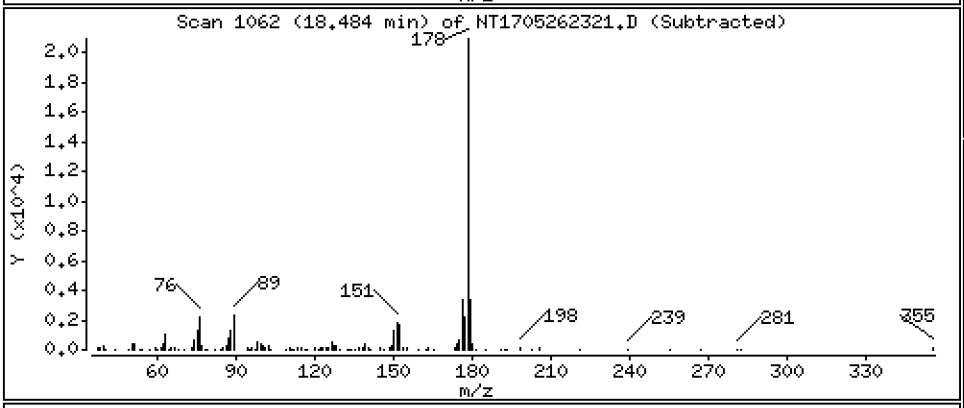
Column phase: ZB-5msi

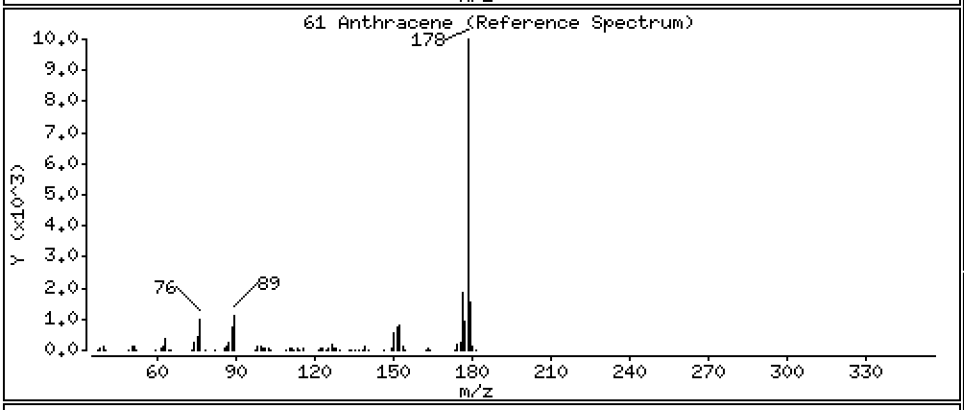
Column diameter: 0.25

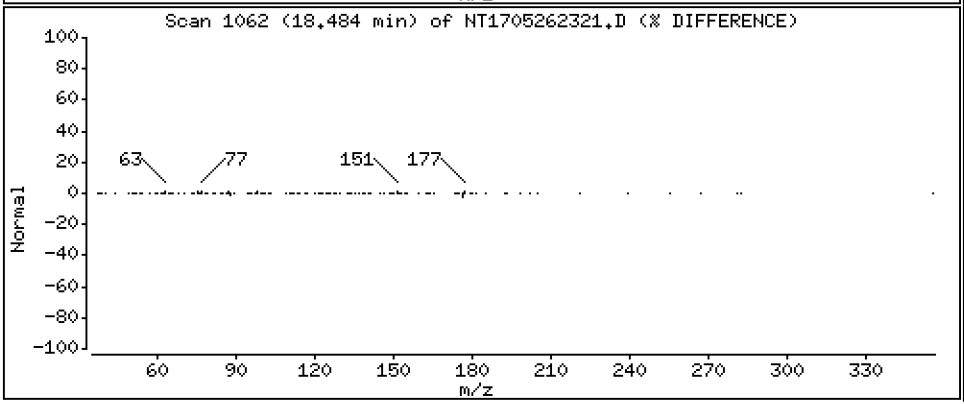
61 Anthracene

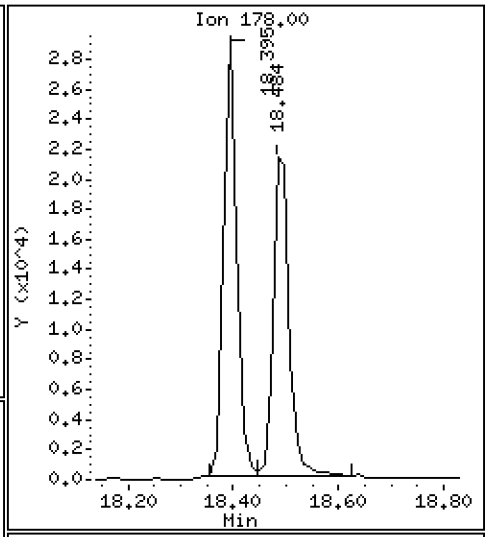
Concentration: 0.1950 ug/mL

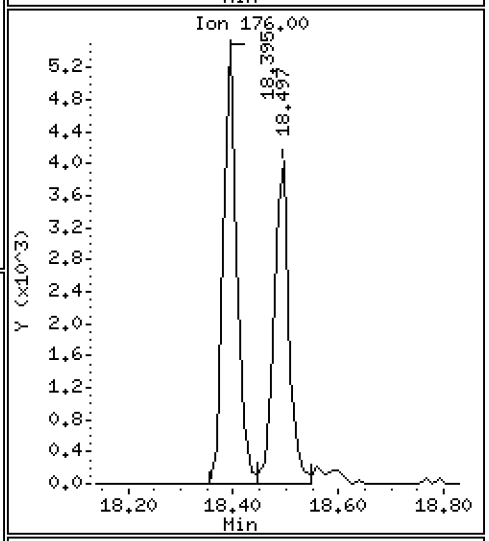


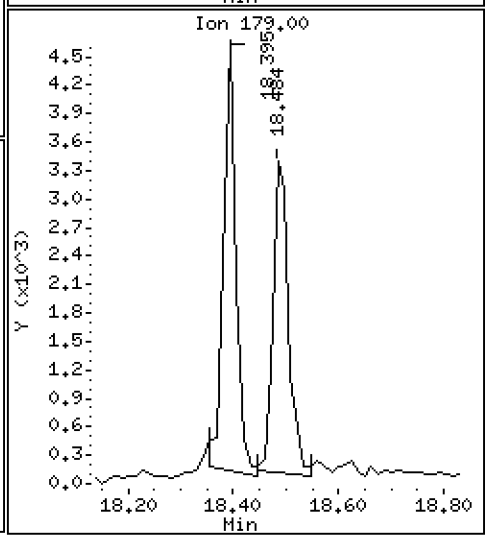












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

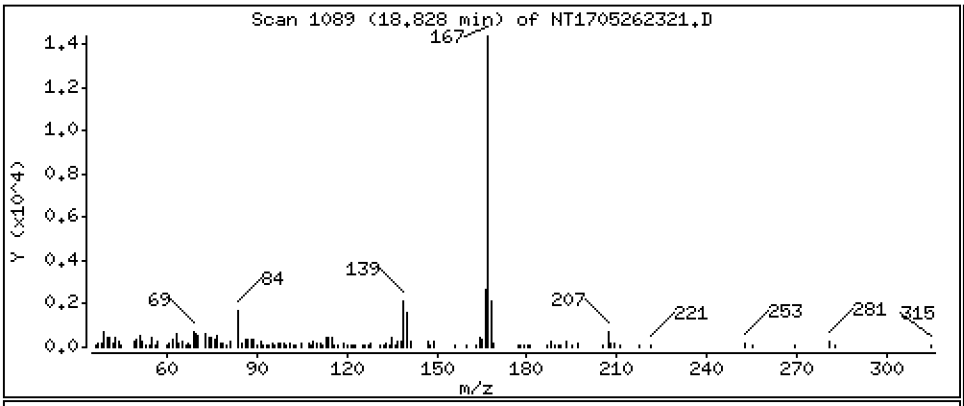
Operator: VTS

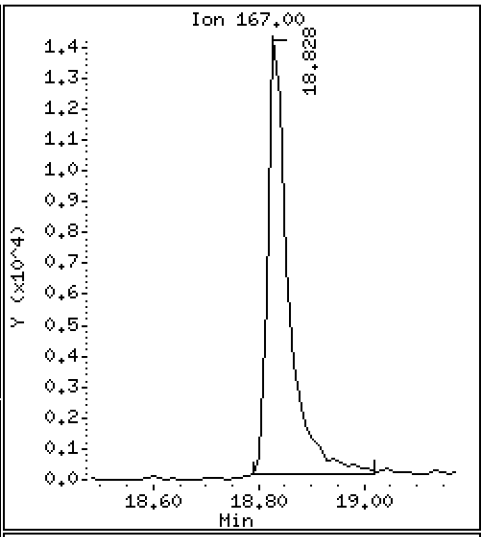
Column phase: ZB-5msi

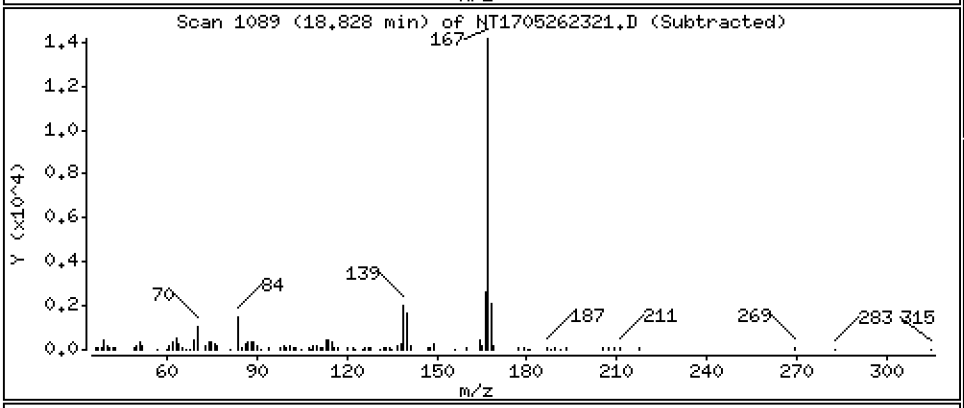
Column diameter: 0.25

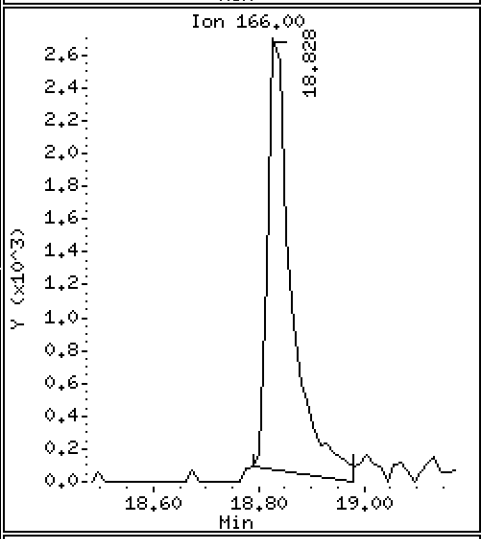
62 Carbazole

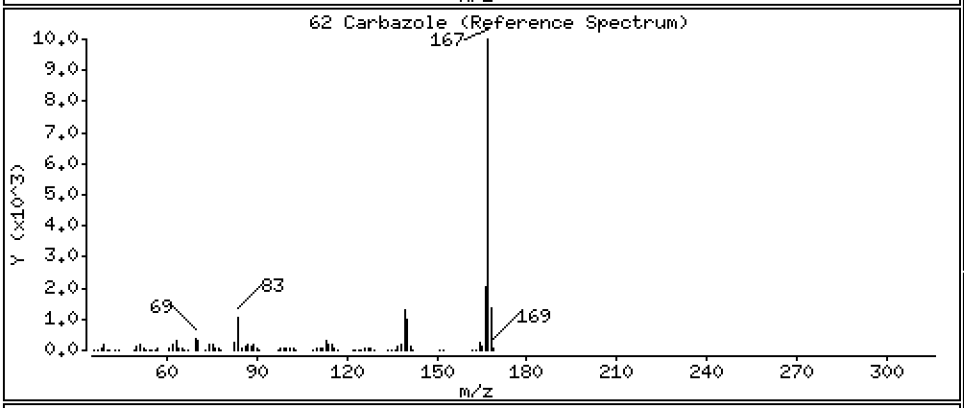
Concentration: 0.2639 ug/mL

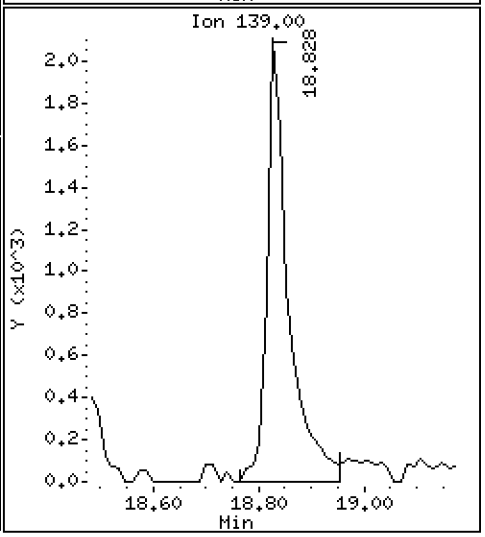


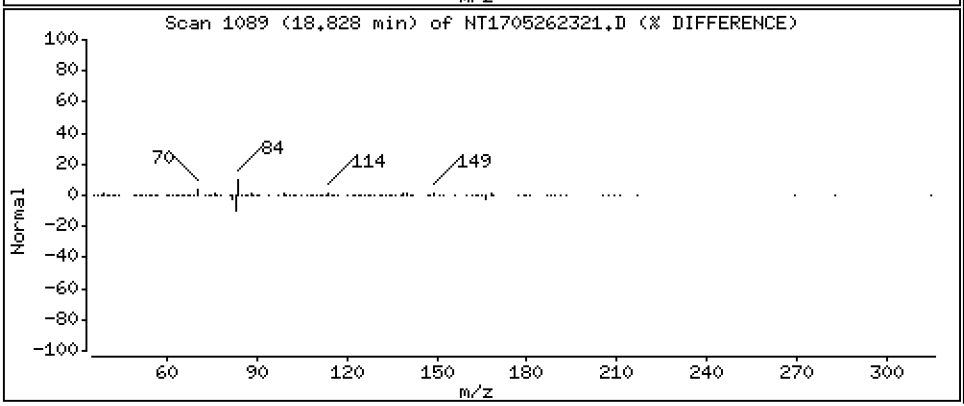












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

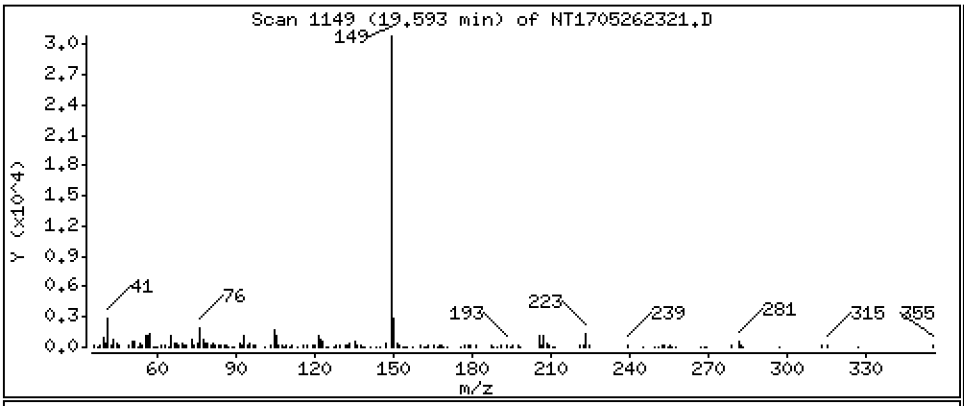
Operator: VTS

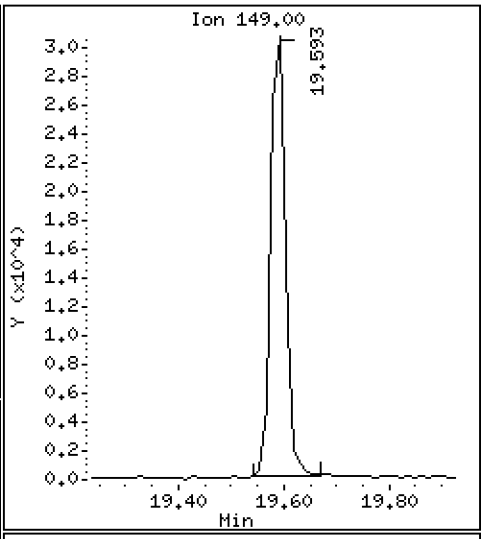
Column phase: ZB-5msi

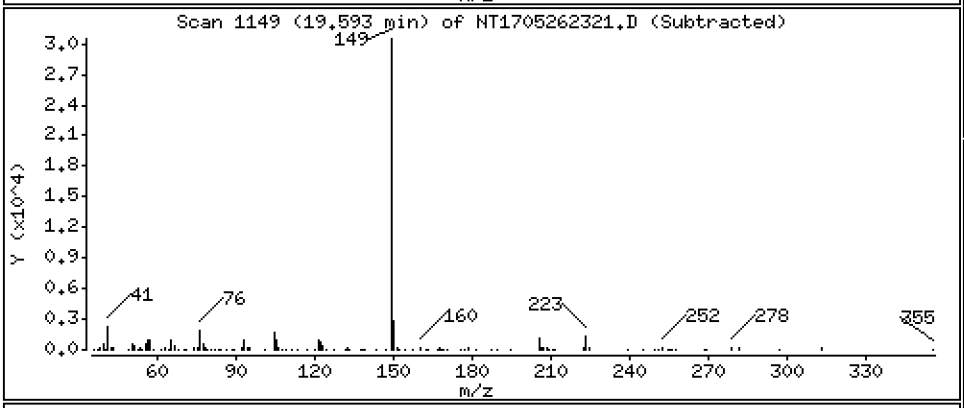
Column diameter: 0.25

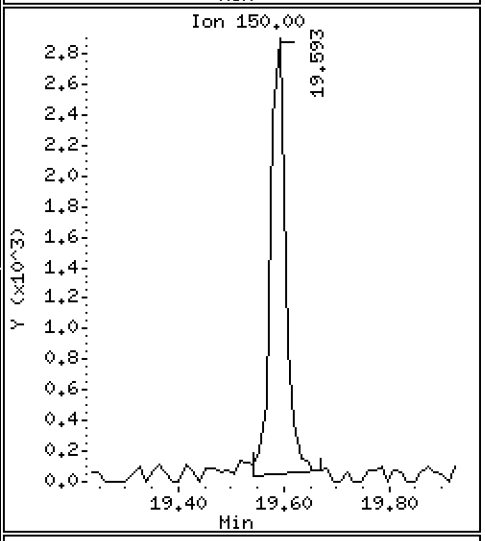
63 Di-n-butylphthalate

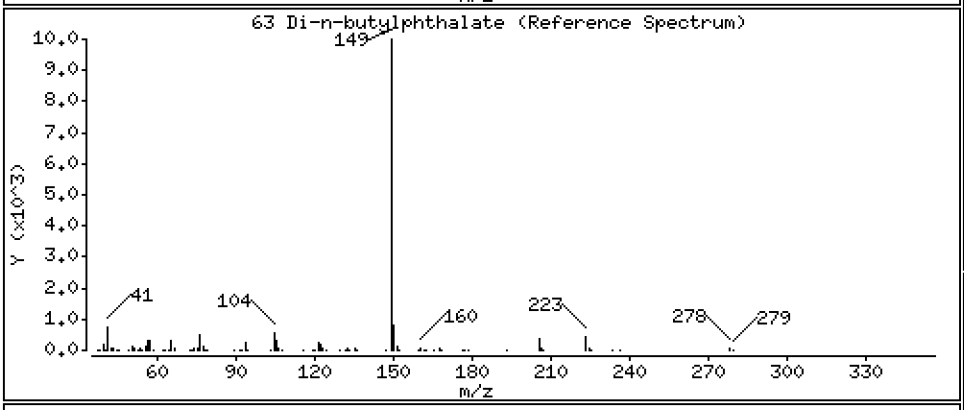
Concentration: 0.1972 ug/mL

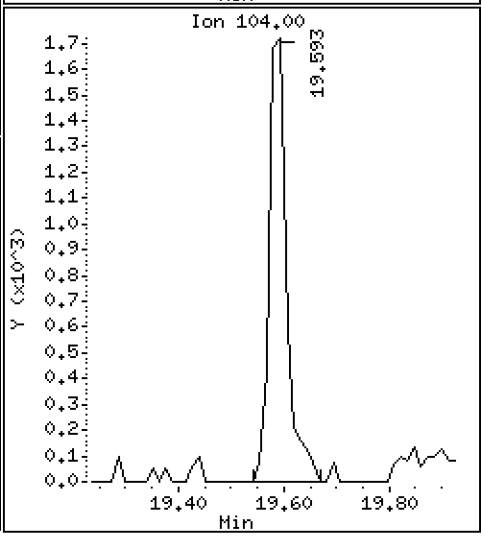


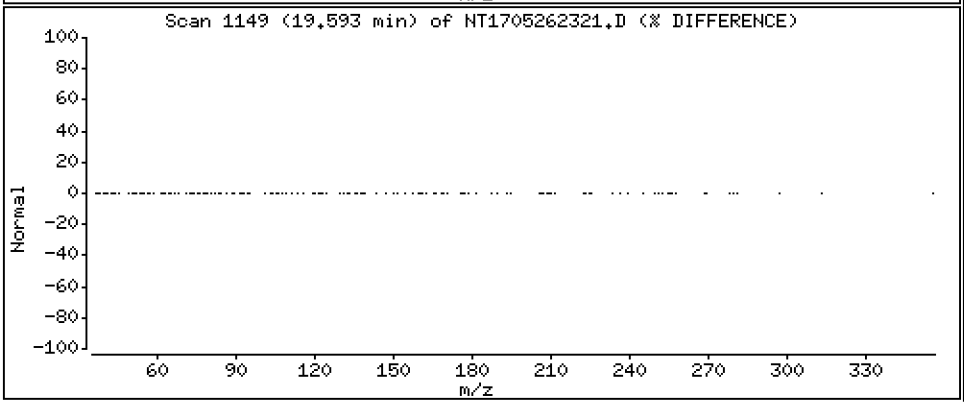












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

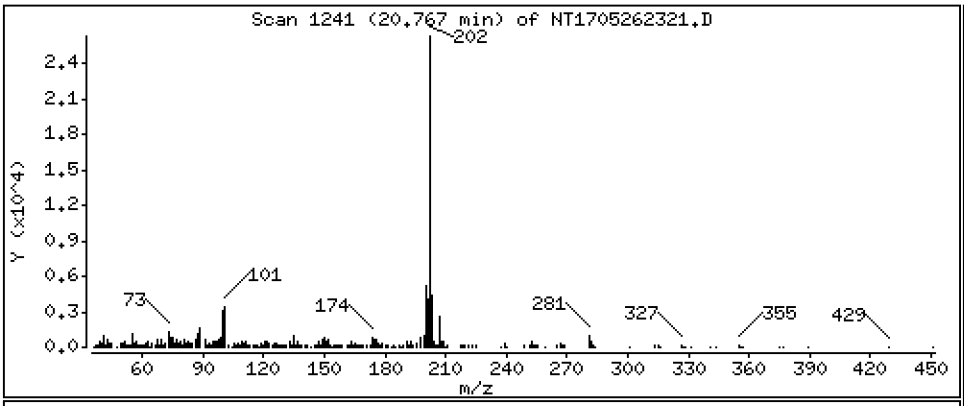
Operator: VTS

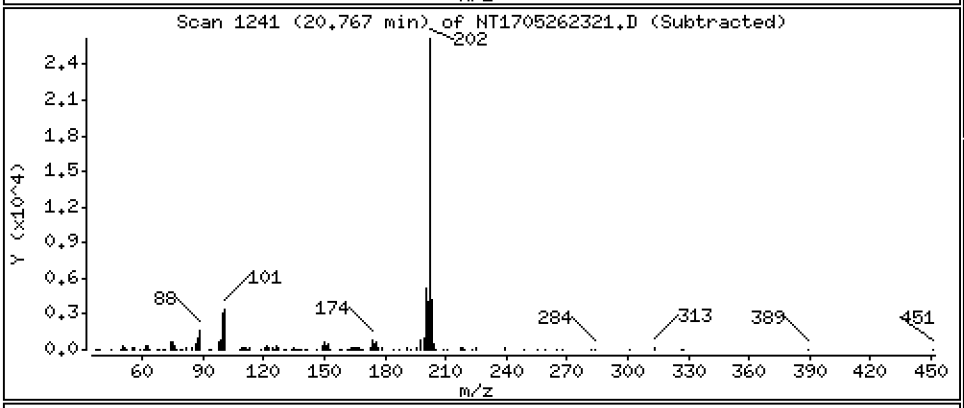
Column phase: ZB-5msi

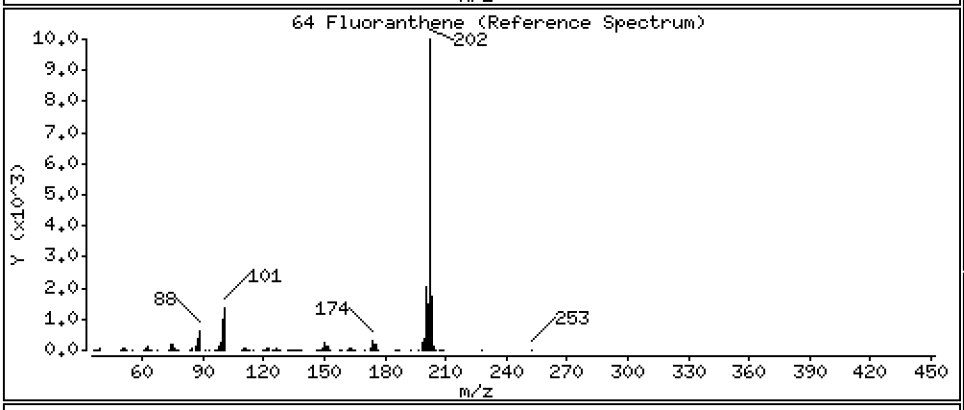
Column diameter: 0.25

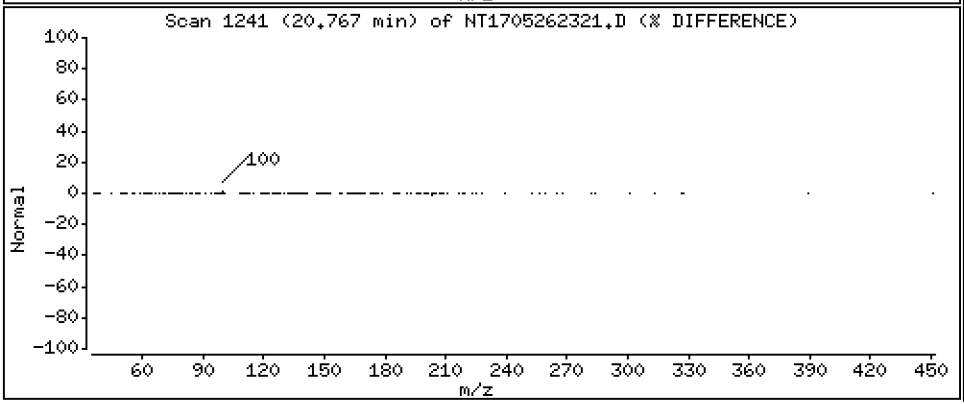
64 Fluoranthene

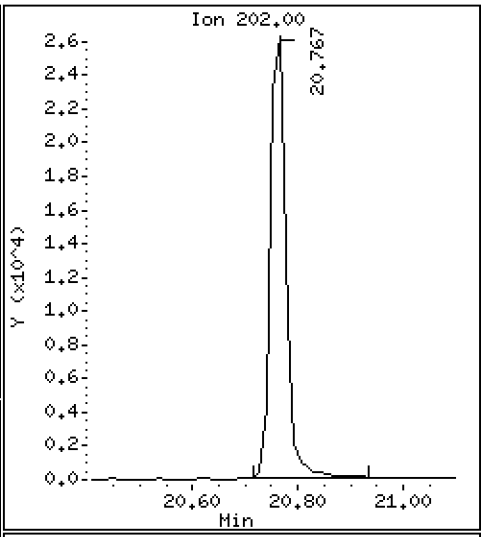
Concentration: 0.1745 ug/mL

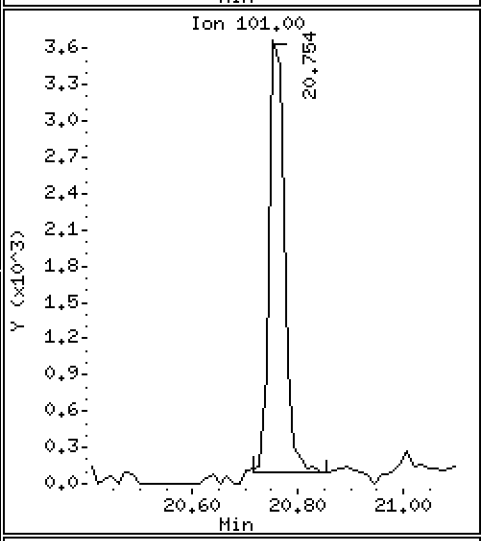


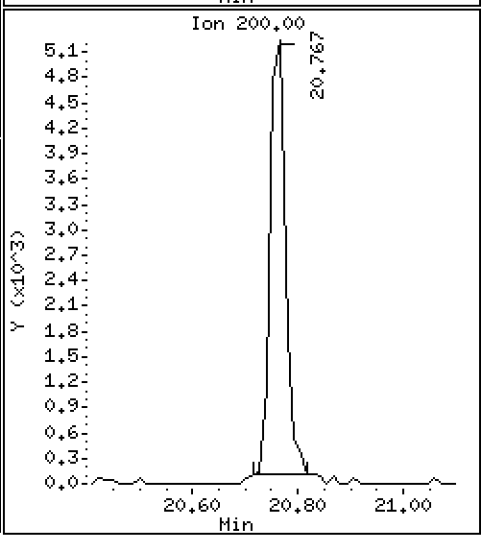












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

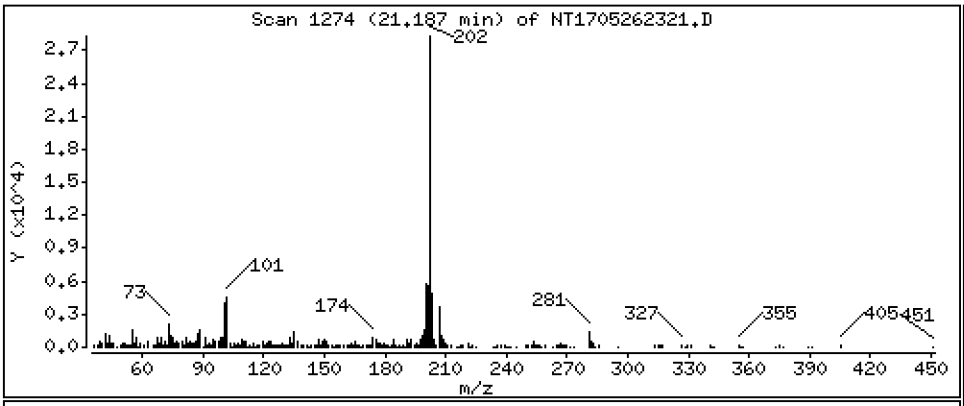
Operator: VTS

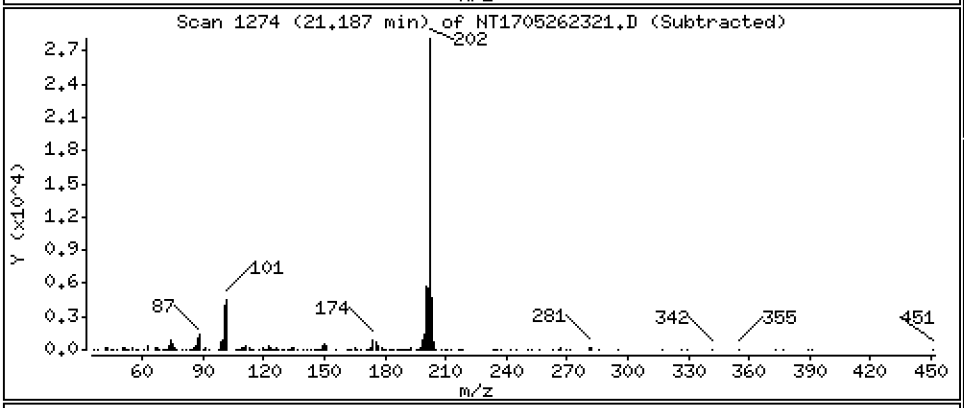
Column phase: ZB-5msi

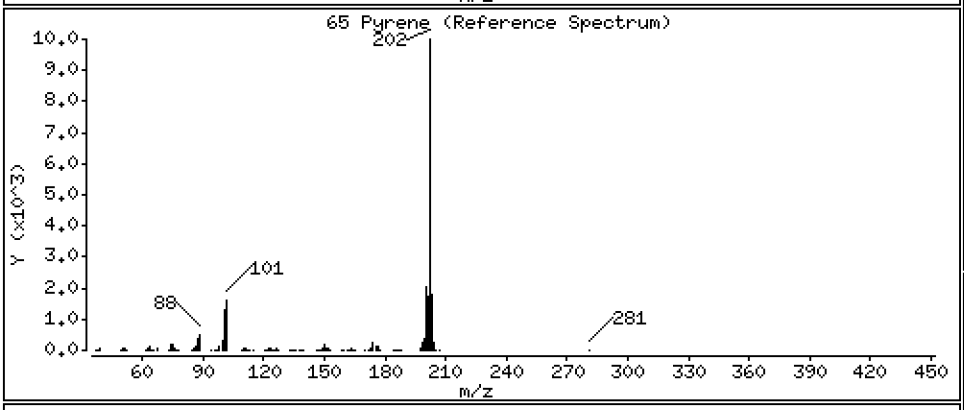
Column diameter: 0.25

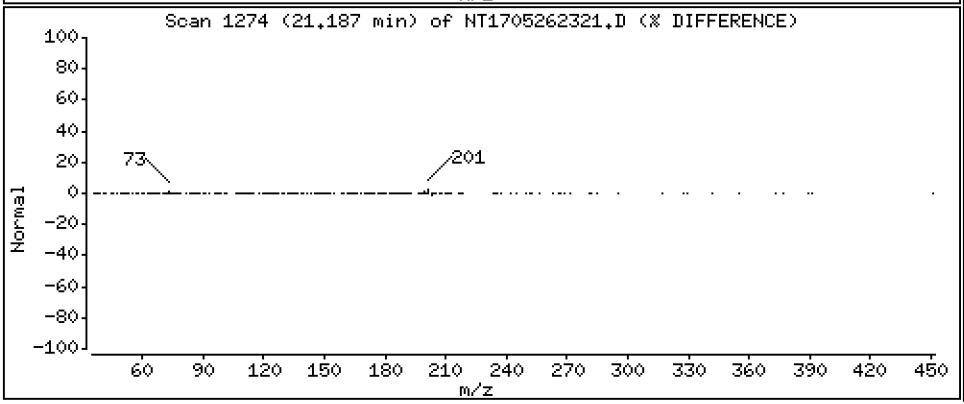
65 Pyrene

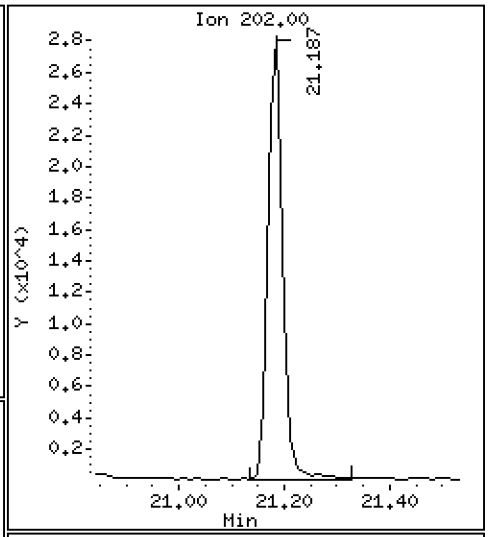
Concentration: 0.1827 ug/mL

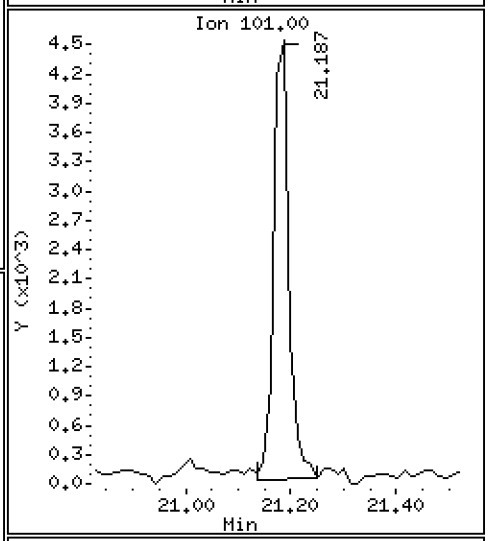


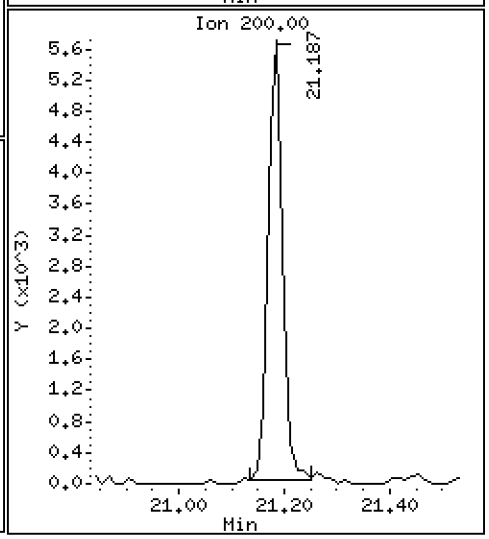












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

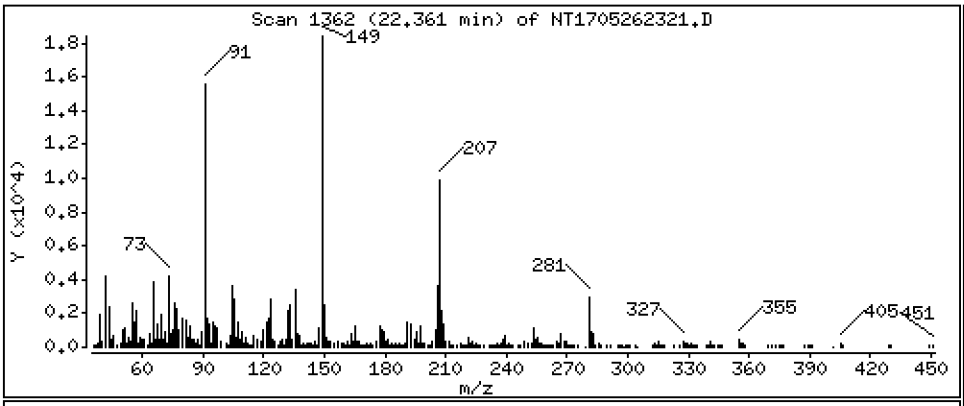
Operator: VTS

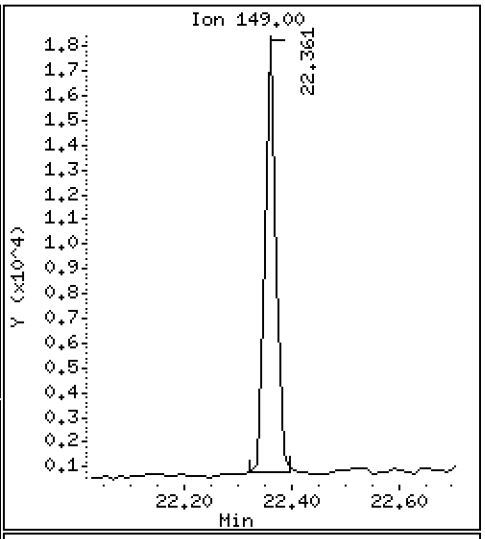
Column phase: ZB-5msi

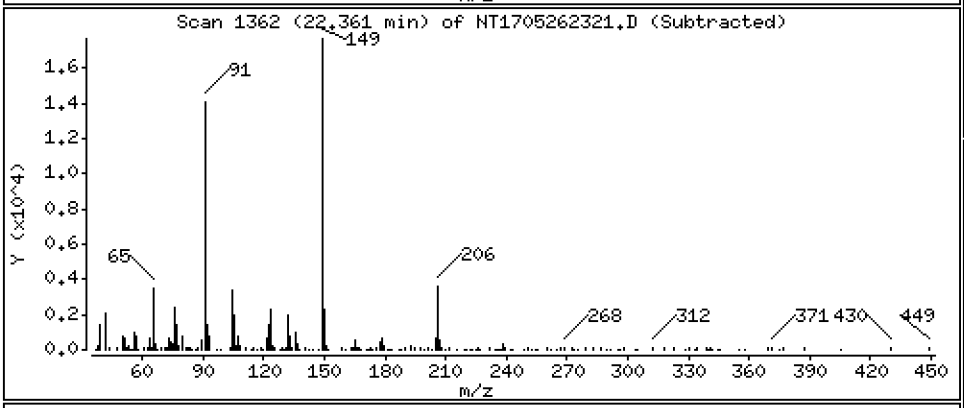
Column diameter: 0.25

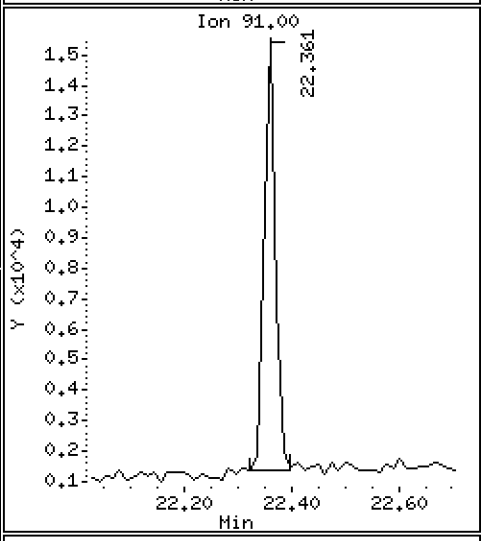
67 Butylbenzylphthalate

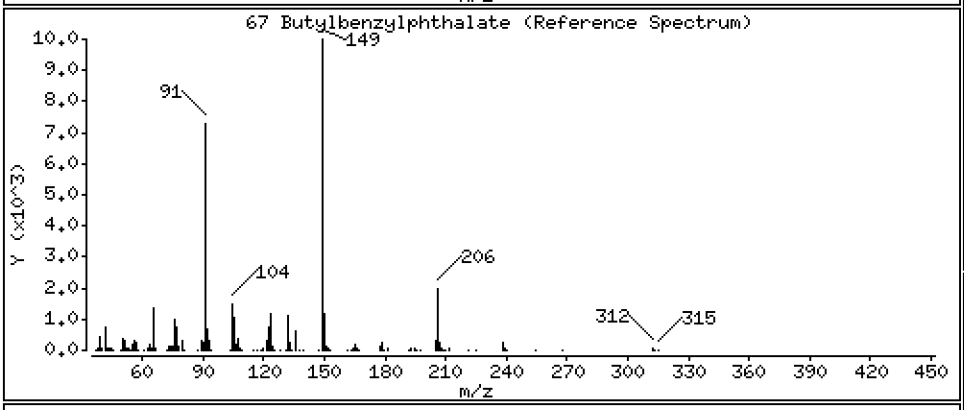
Concentration: 0.1899 ug/mL

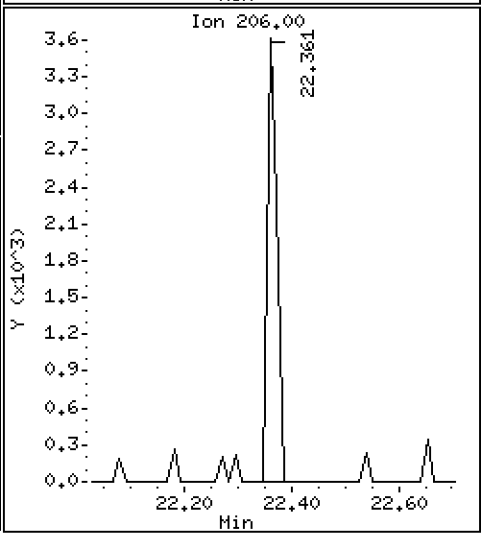


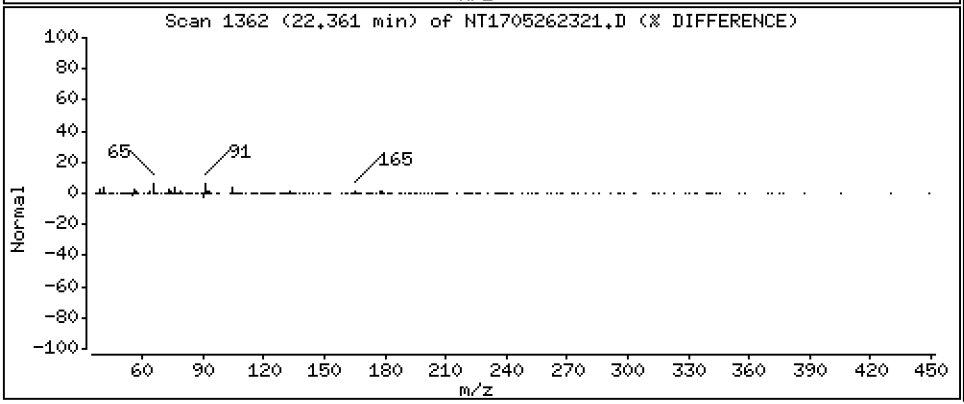












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

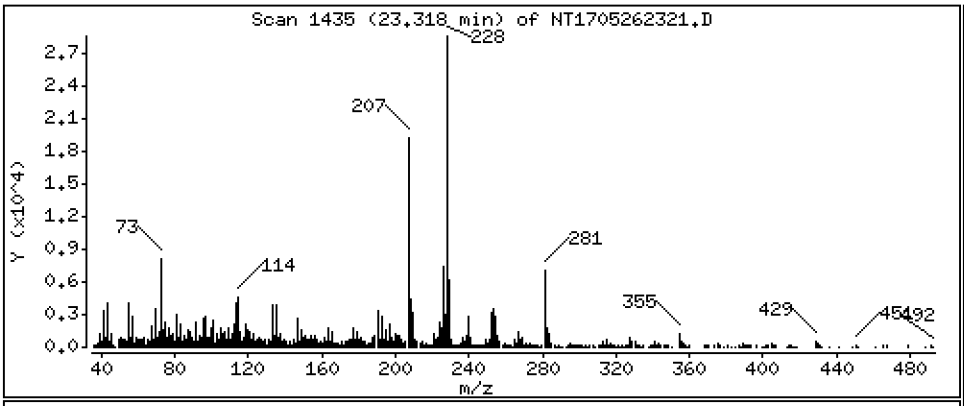
Operator: VTS

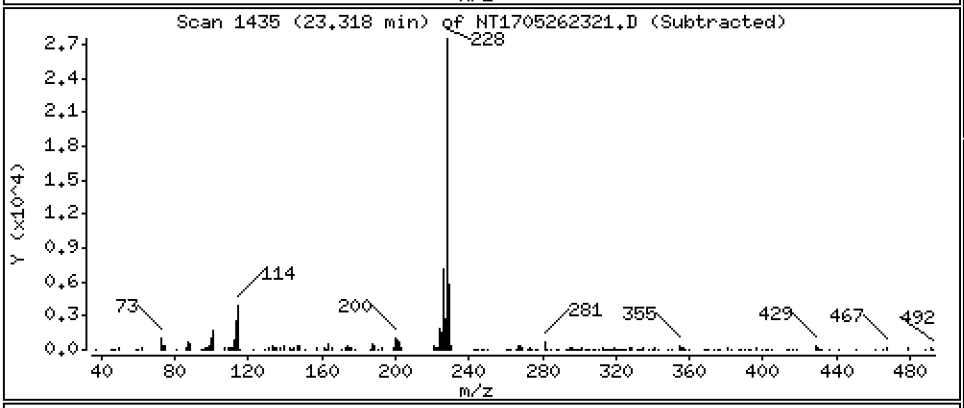
Column phase: ZB-5msi

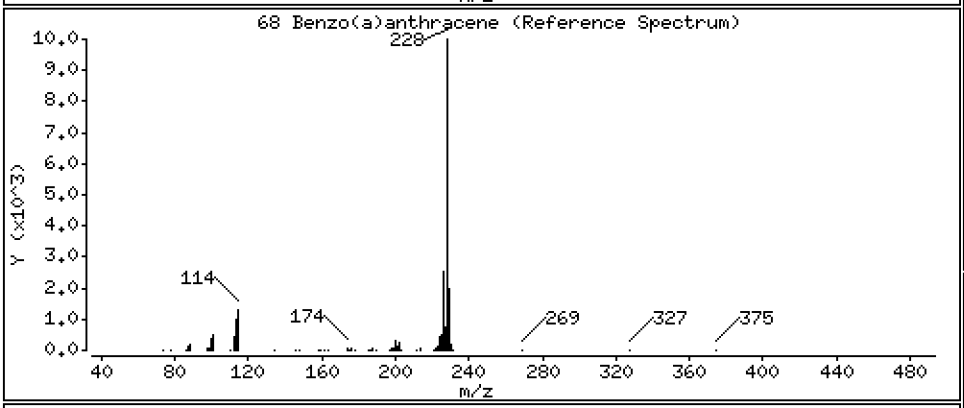
Column diameter: 0.25

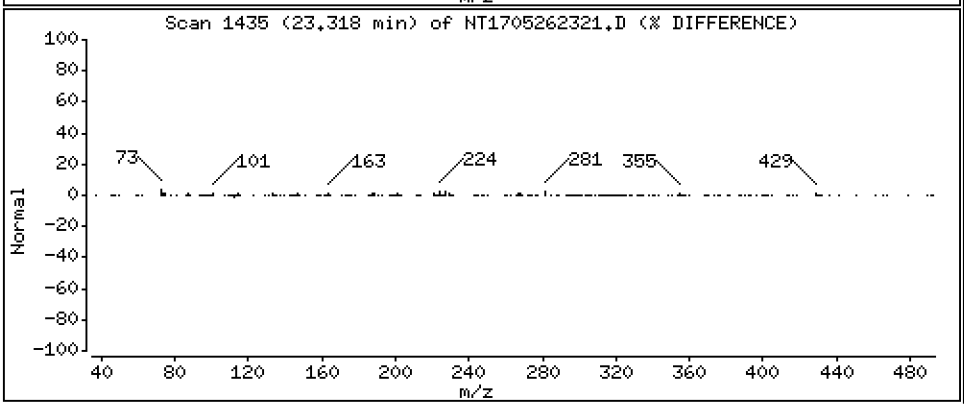
68 Benzo(a)anthracene

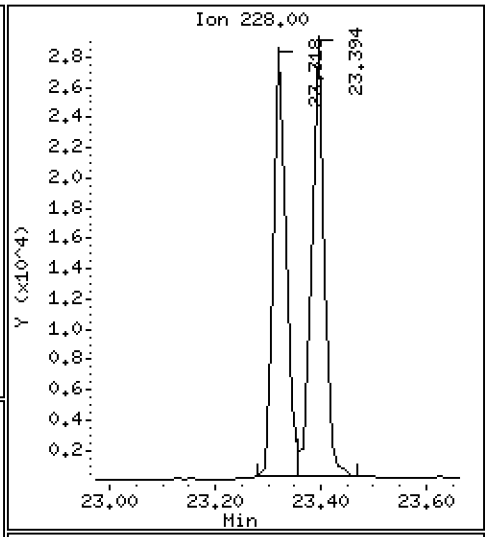
Concentration: 0.2084 ug/mL

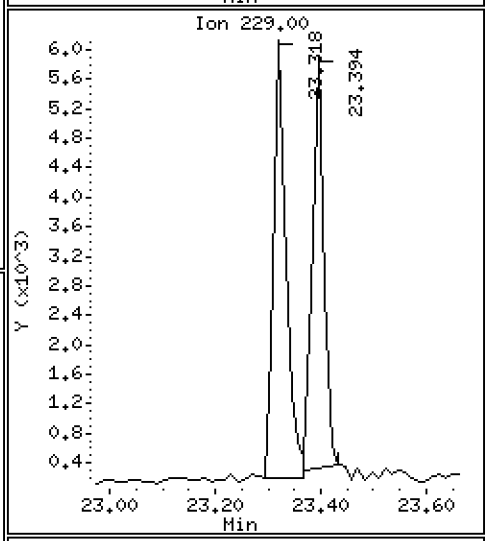


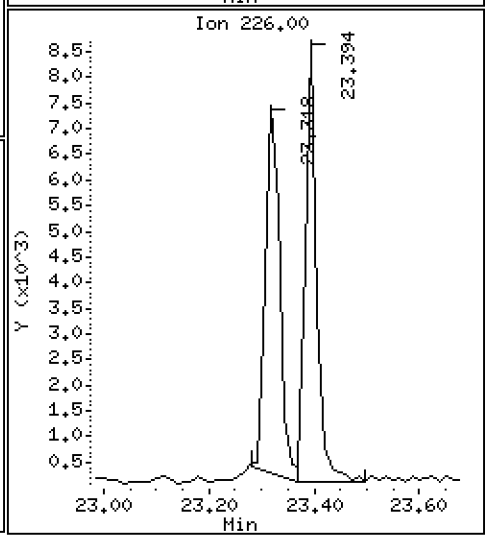












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

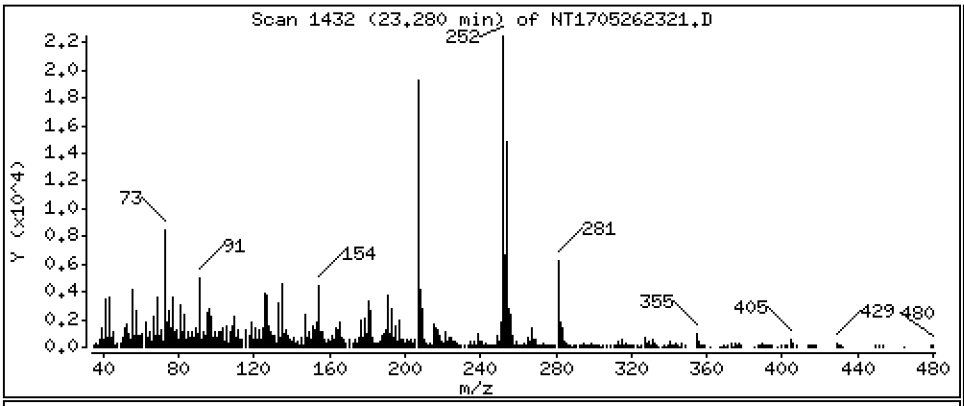
Operator: VTS

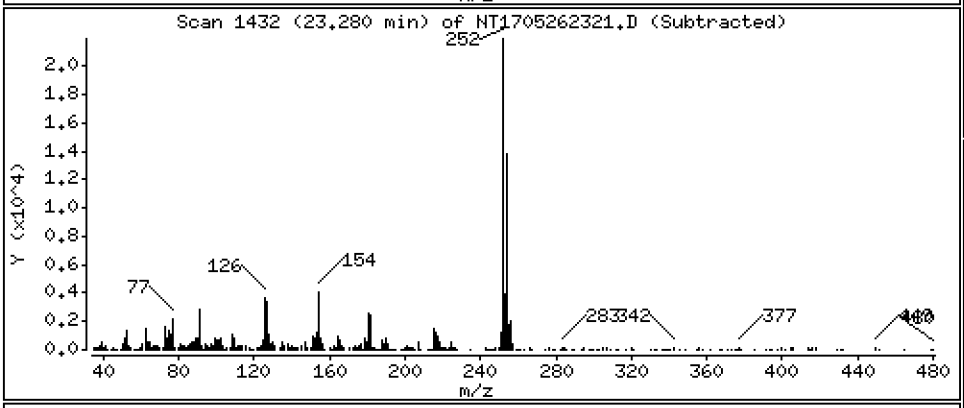
Column phase: ZB-5msi

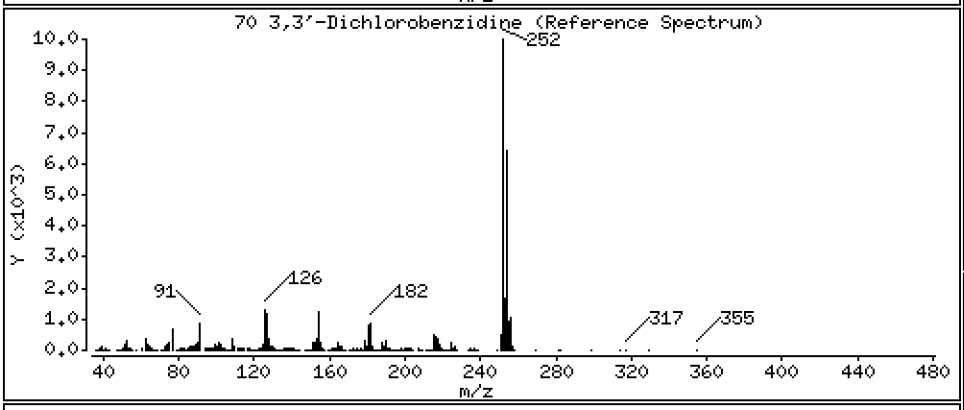
Column diameter: 0.25

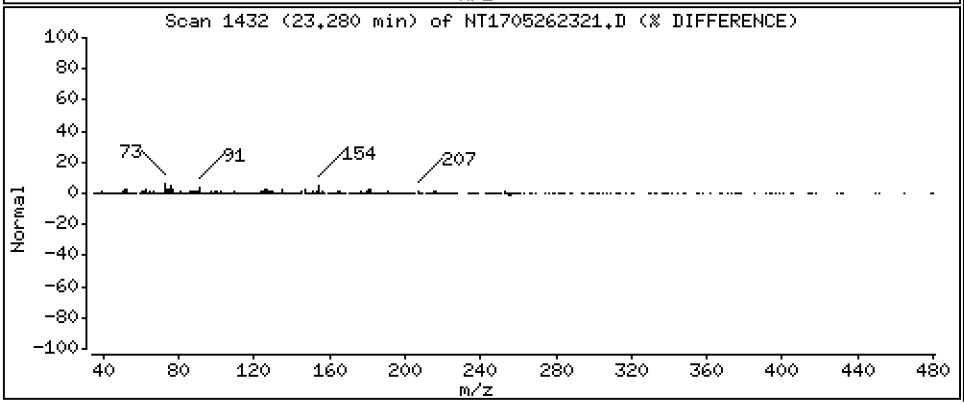
70 3,3'-Dichlorobenzidine

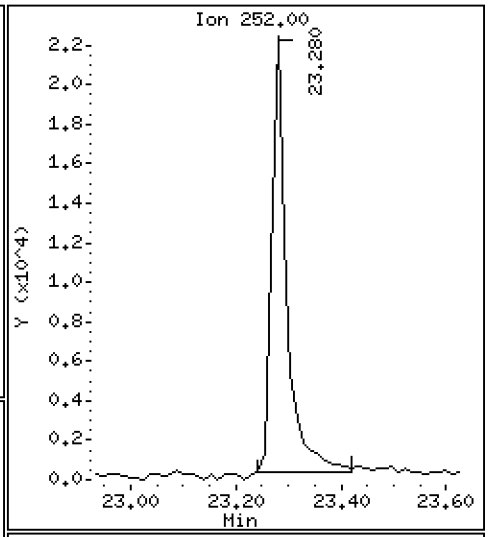
Concentration: 0.9960 ug/mL

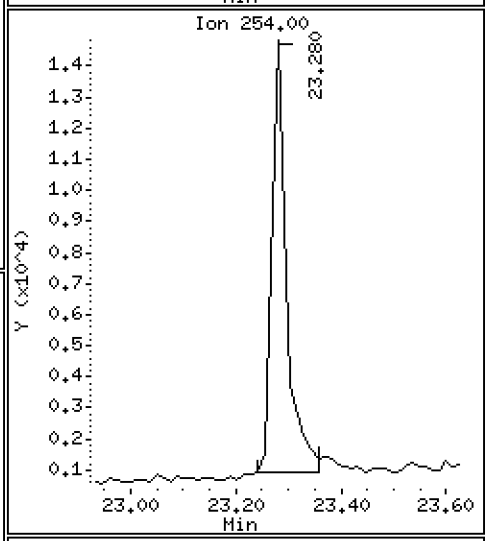


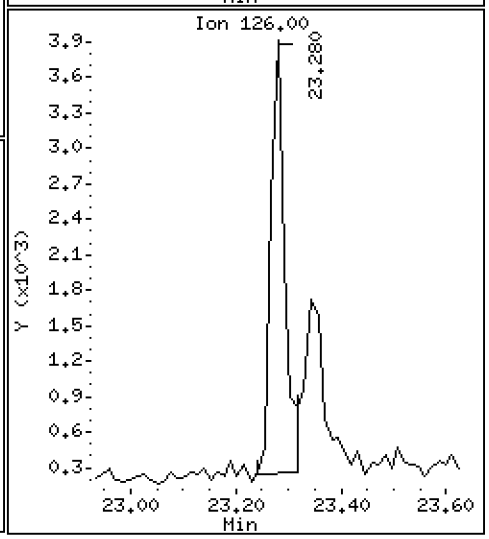












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

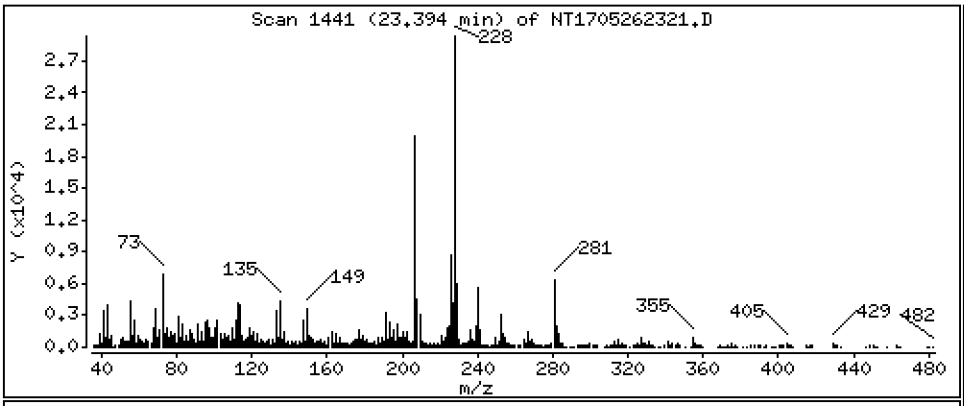
Operator: VTS

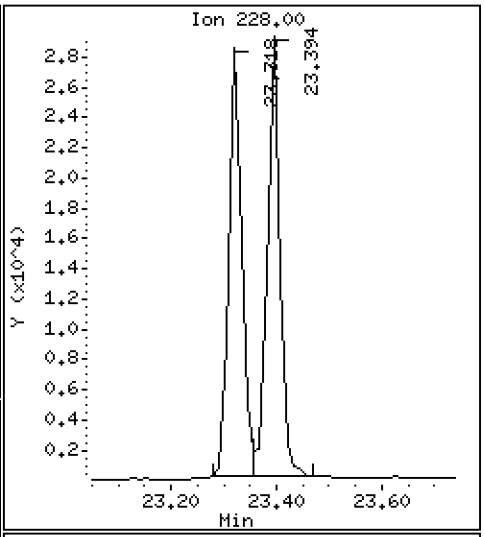
Column phase: ZB-5msi

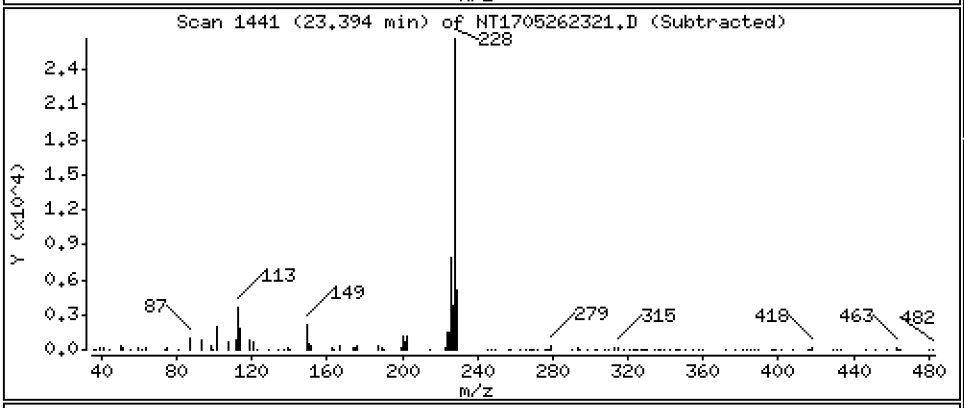
Column diameter: 0.25

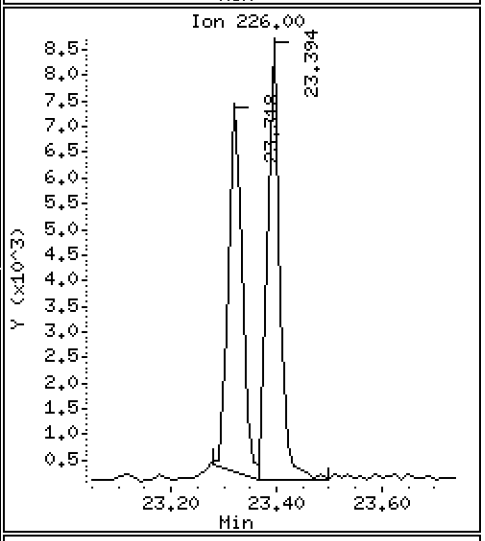
71 Chrysene

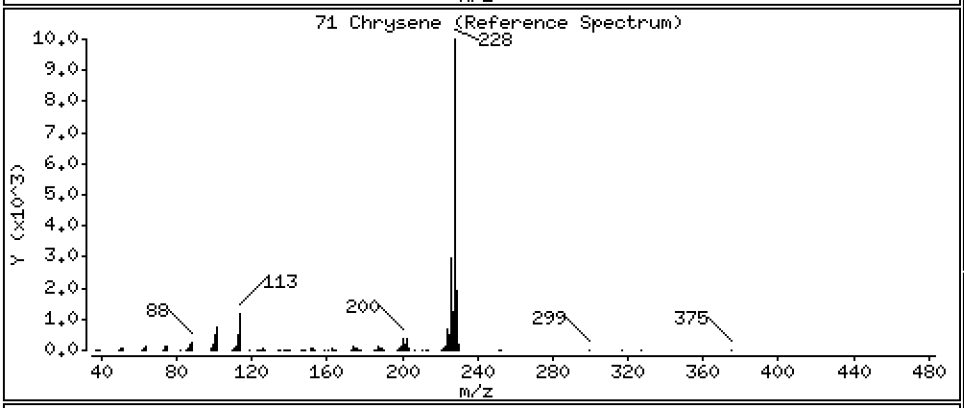
Concentration: 0.2172 ug/mL

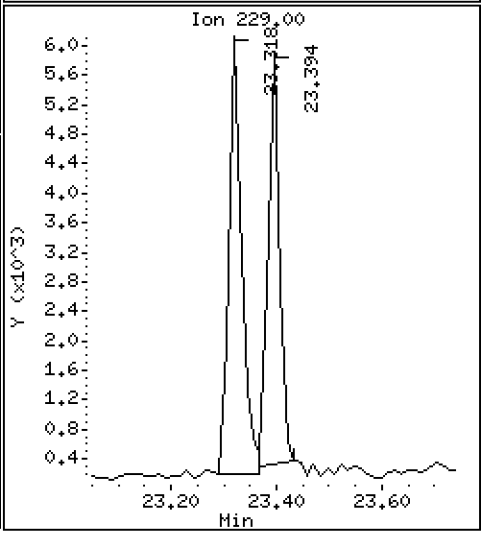


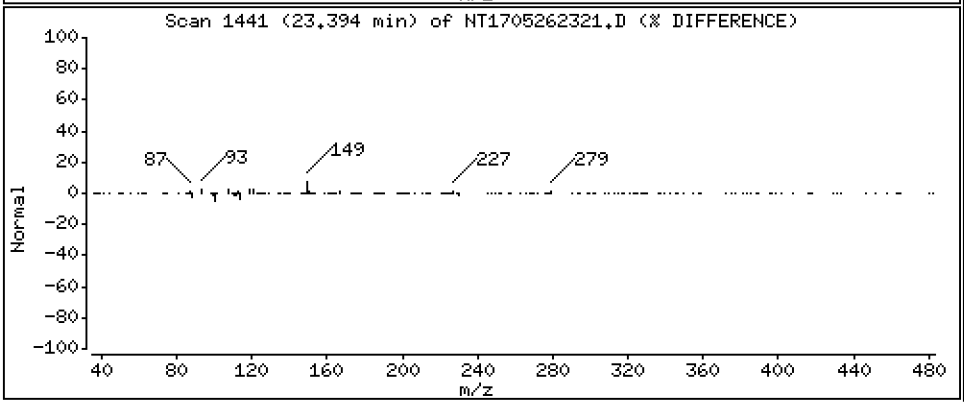












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

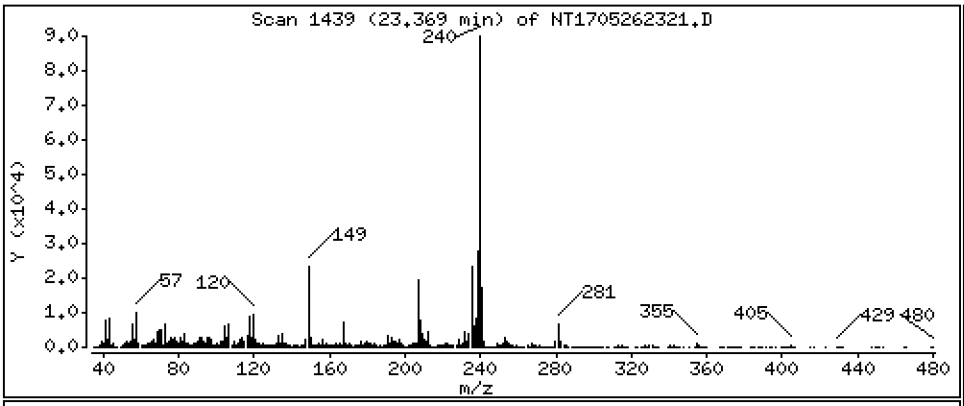
Operator: VTS

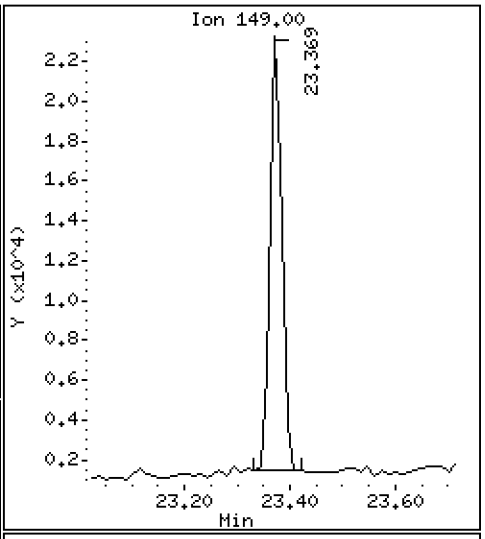
Column phase: ZB-5msi

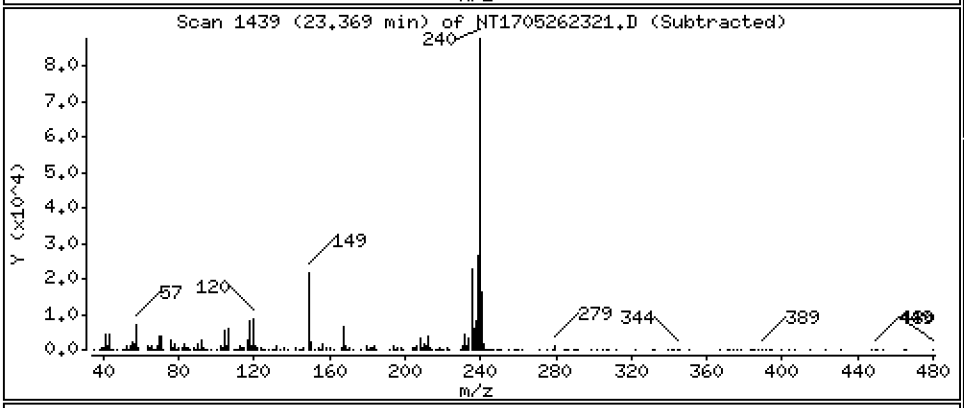
Column diameter: 0.25

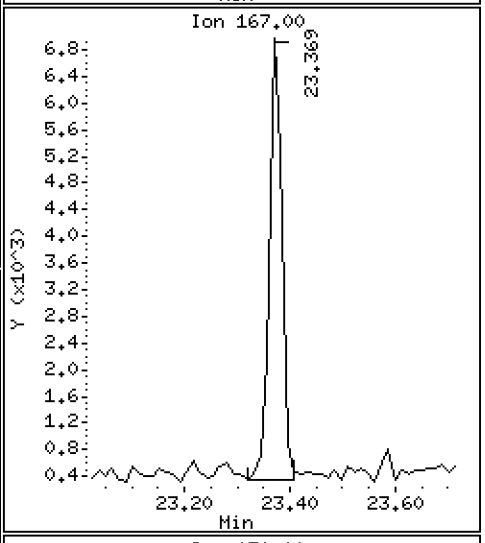
72 bis(2-Ethylhexyl)phthalate

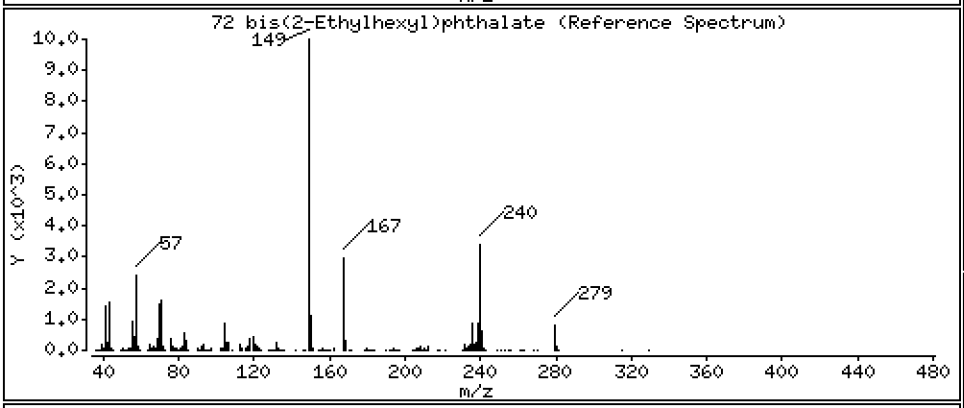
Concentration: 0.1810 ug/mL

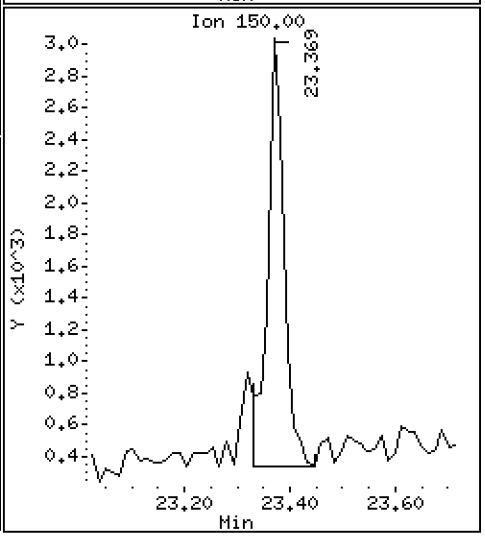


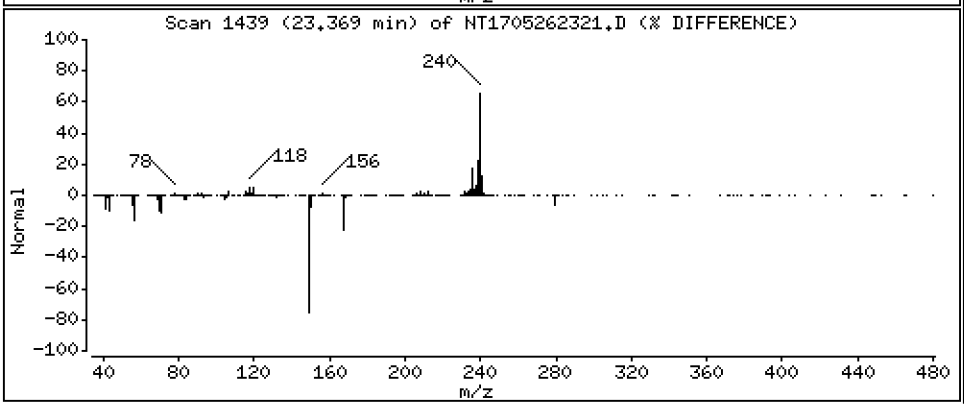












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

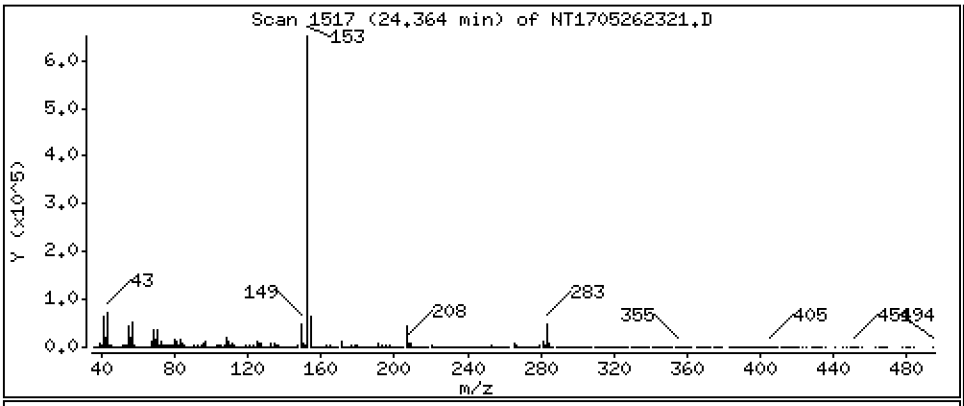
Operator: VTS

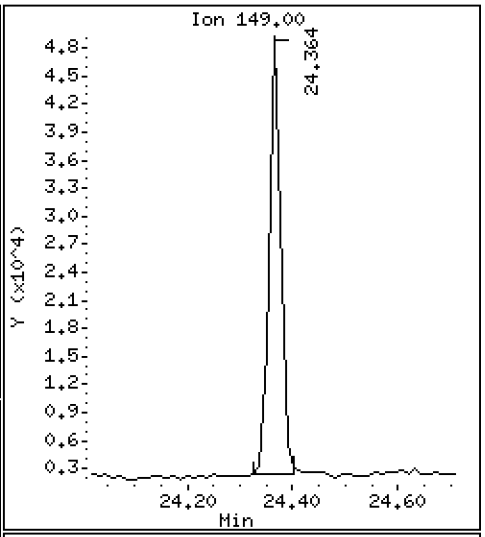
Column phase: ZB-5msi

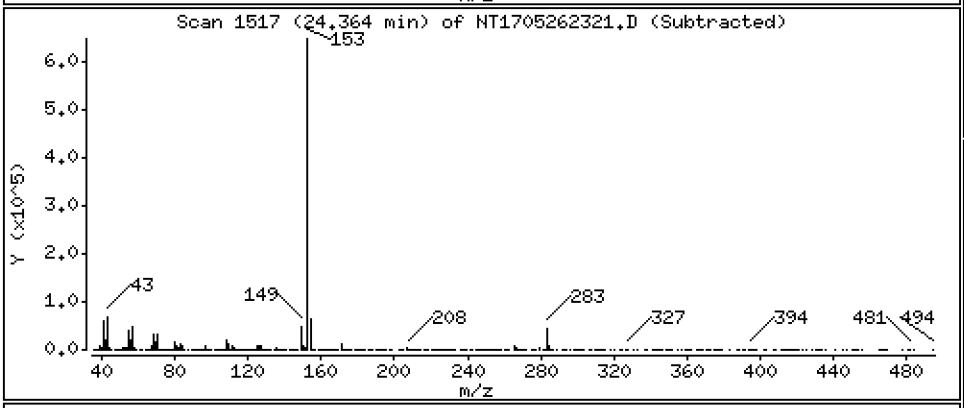
Column diameter: 0.25

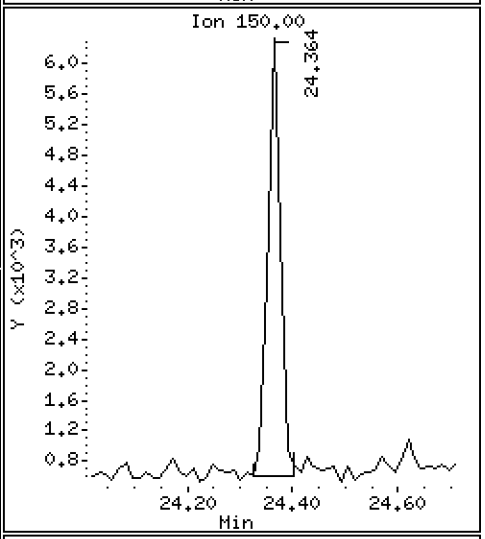
73 Di-n-octylphthalate

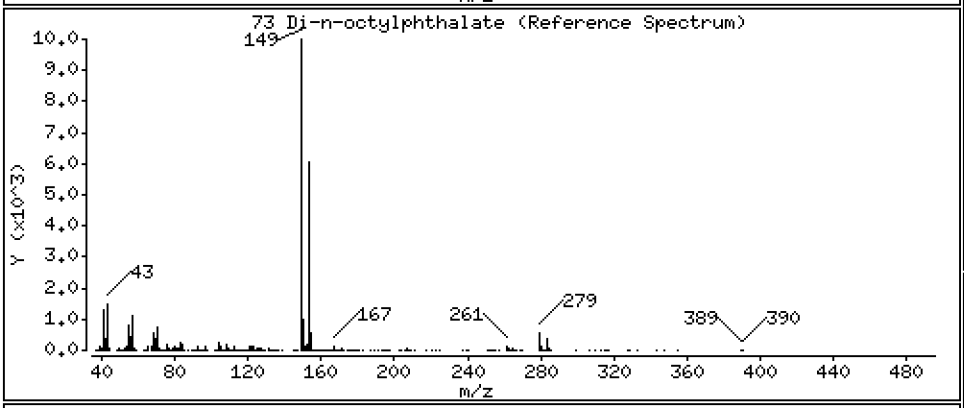
Concentration: 0.2125 ug/mL

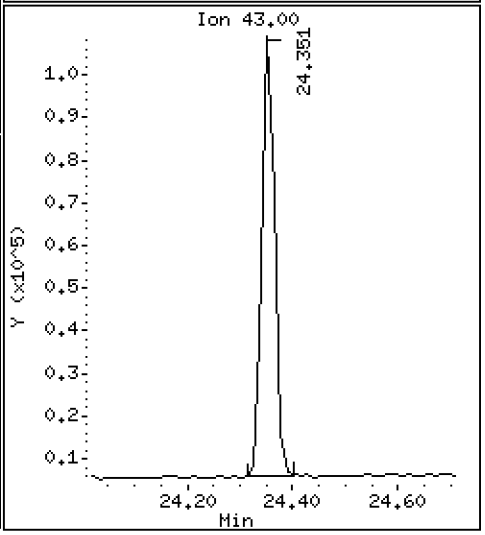


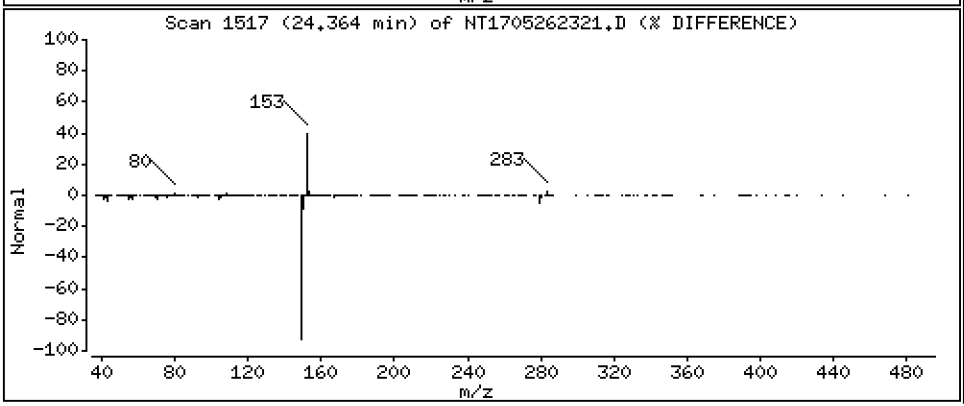












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

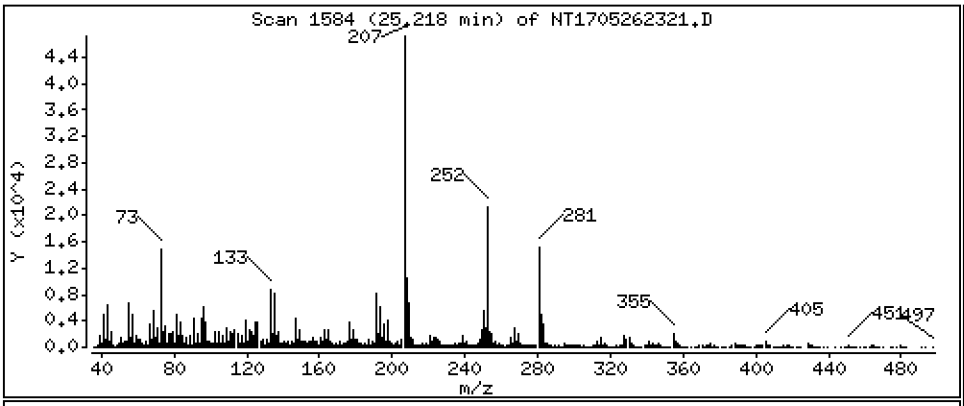
Operator: VTS

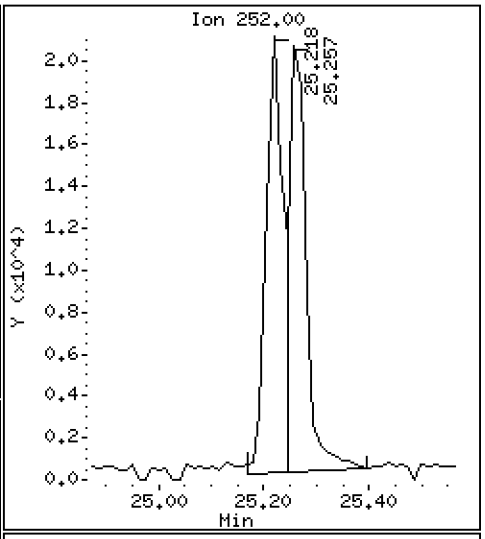
Column phase: ZB-5msi

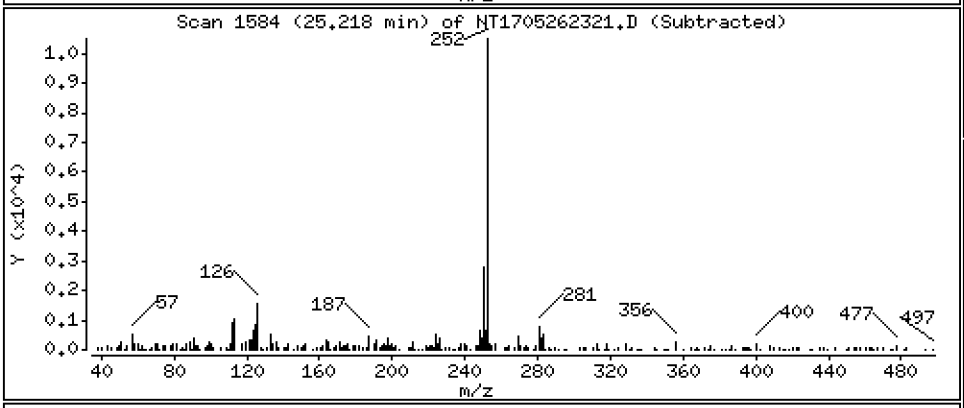
Column diameter: 0.25

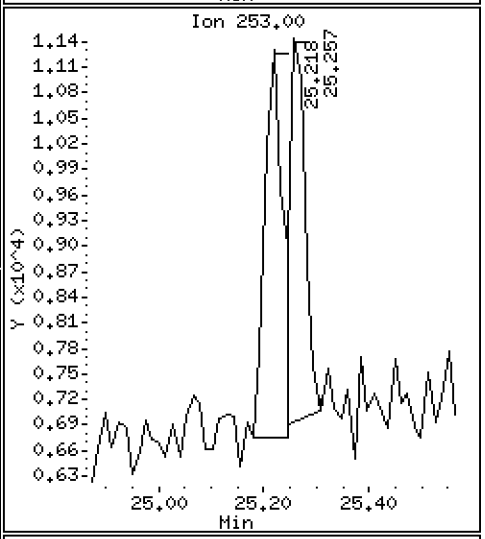
74 Benzo(b)fluoranthene

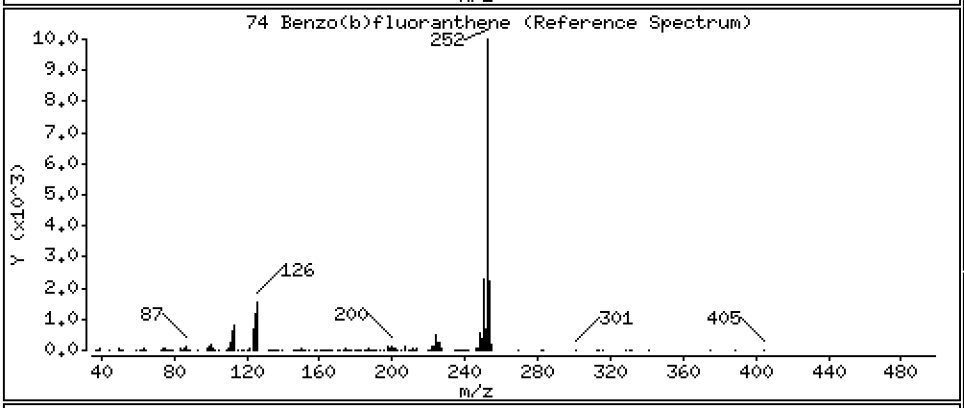
Concentration: 0.2243 ug/mL

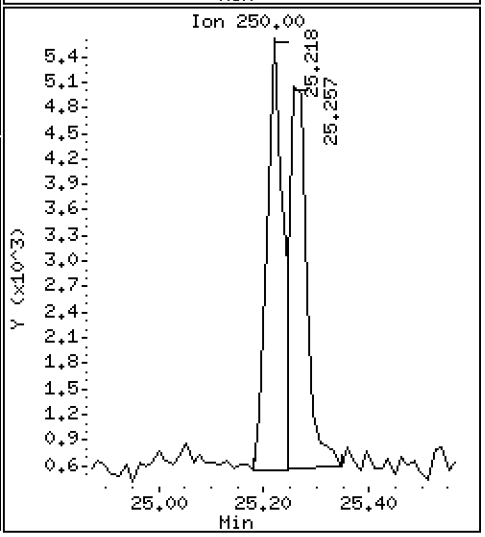


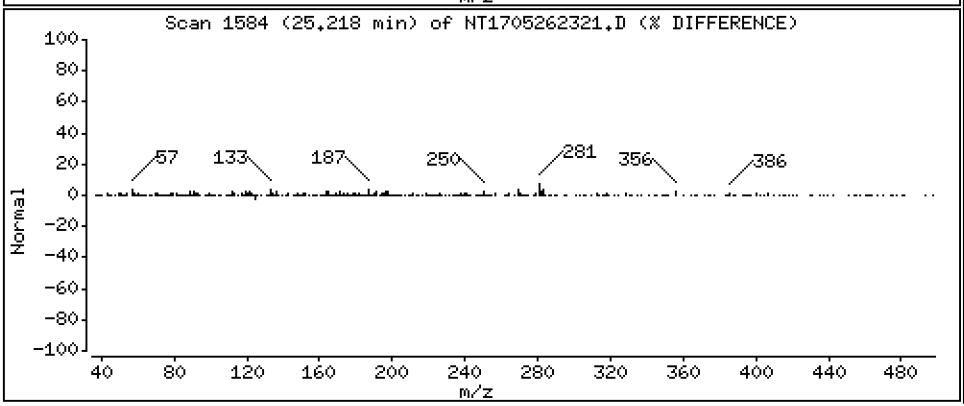












Date : 27-MAY-2023 01:10

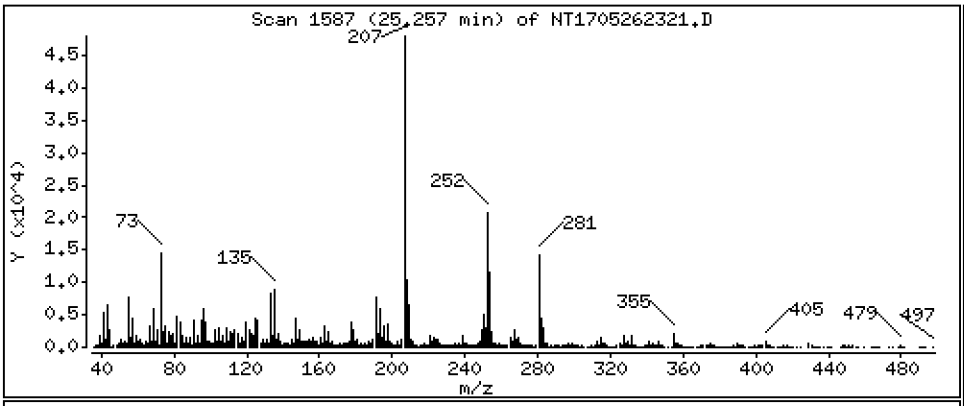
Client ID: Instrument: nt17.i

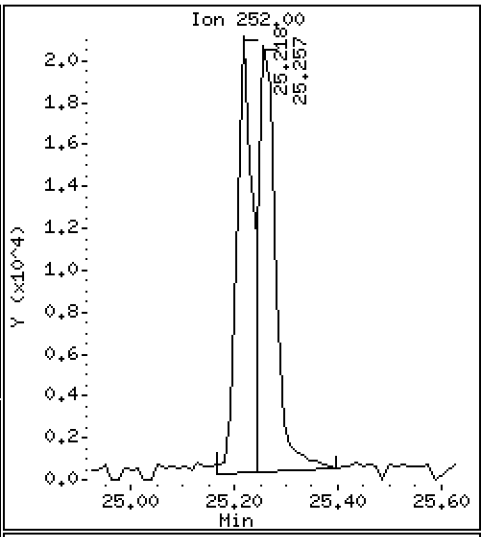
Sample Info: SLE0434-LCV2

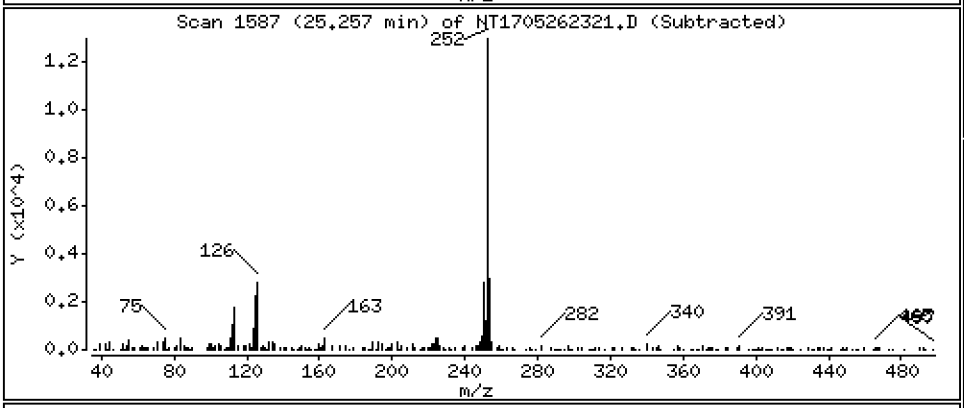
Operator: VTS

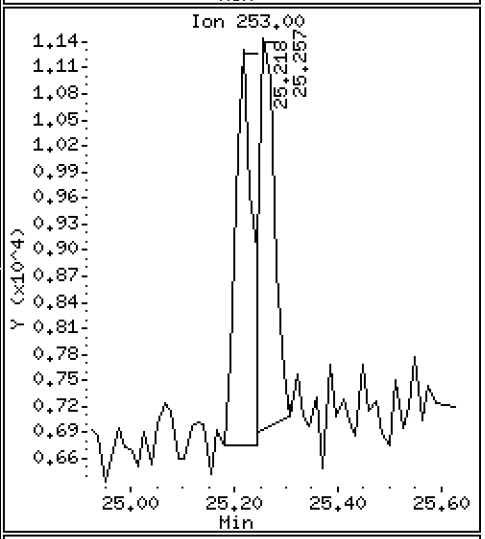
Column phase: ZB-5msi Column diameter: 0.25

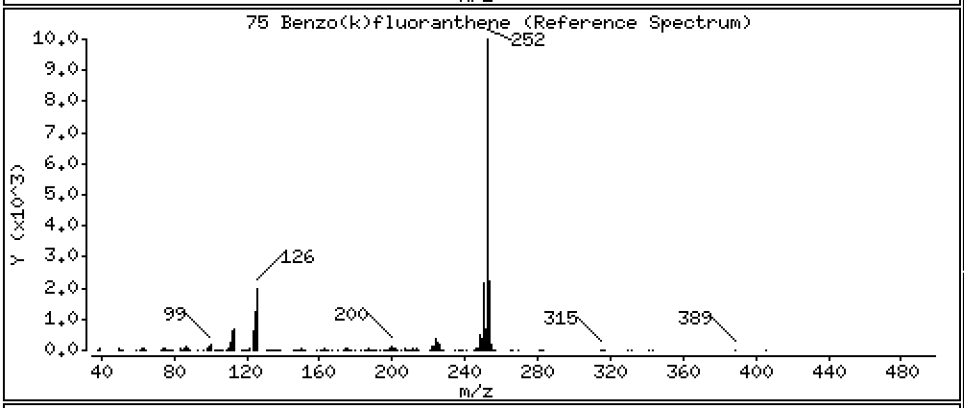
75 Benzo(k)fluoranthene Concentration: 0.2410 ug/mL

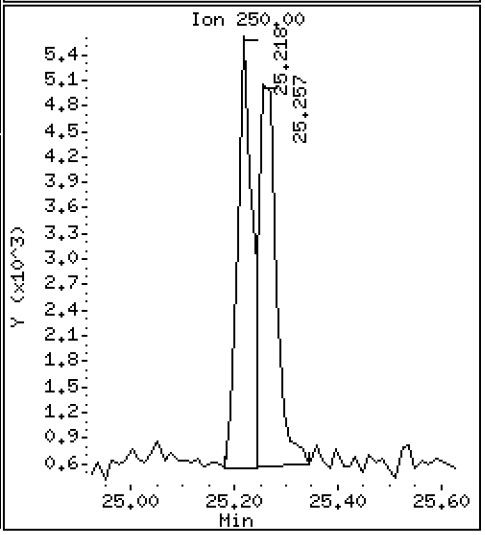


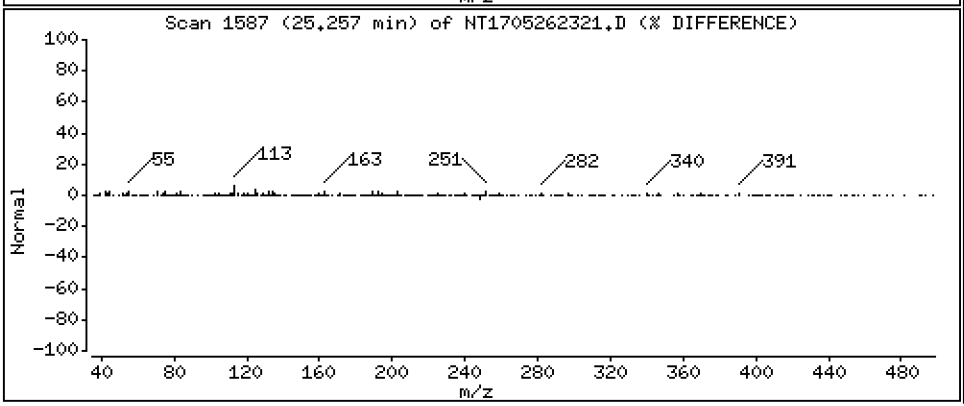












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

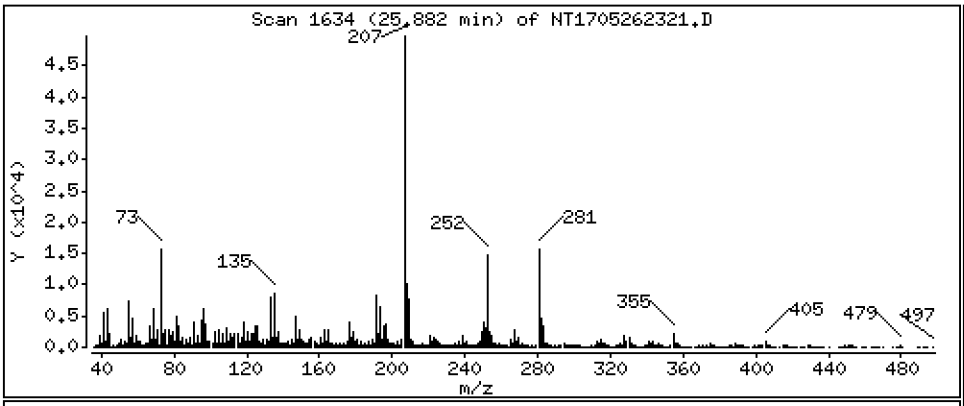
Operator: VTS

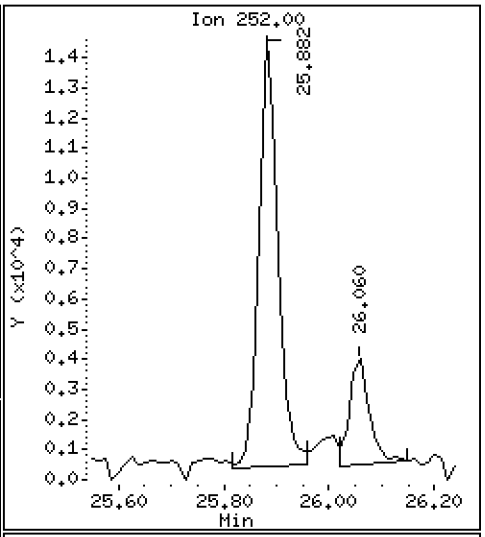
Column phase: ZB-5msi

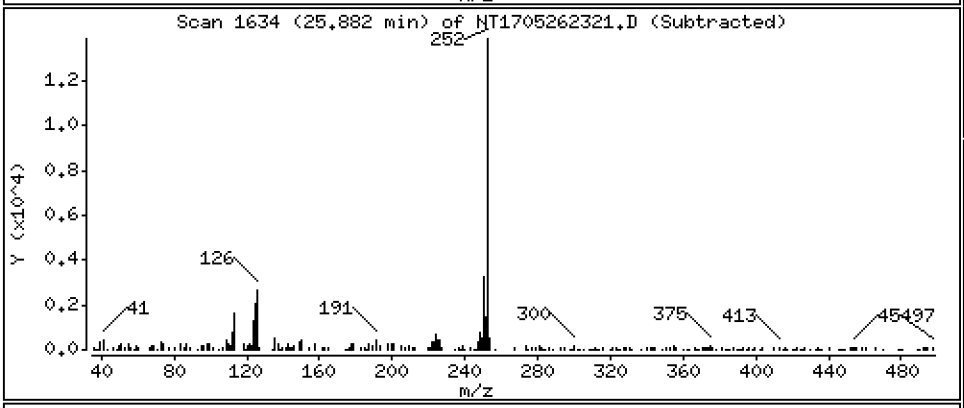
Column diameter: 0.25

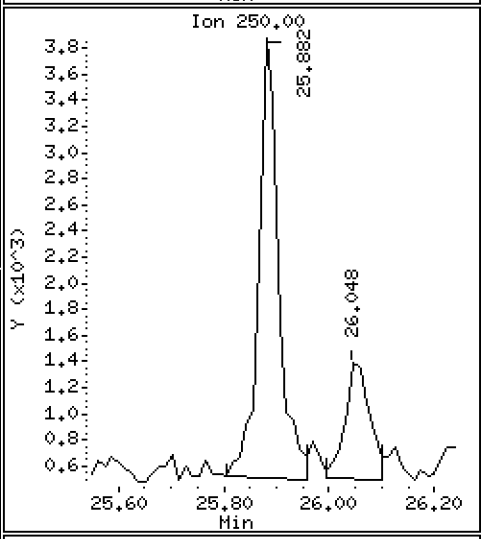
76 Benzo(a)pyrene

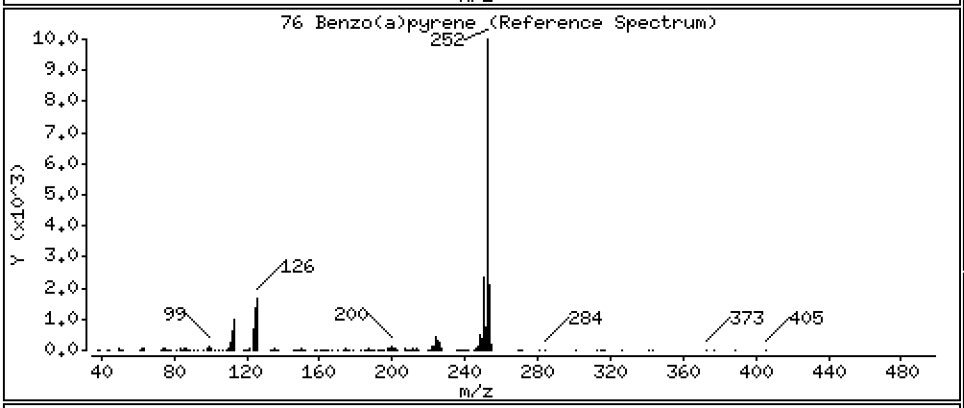
Concentration: 0.2121 ug/mL

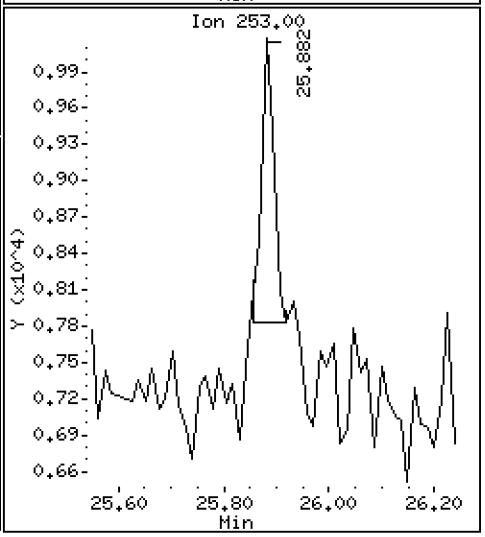


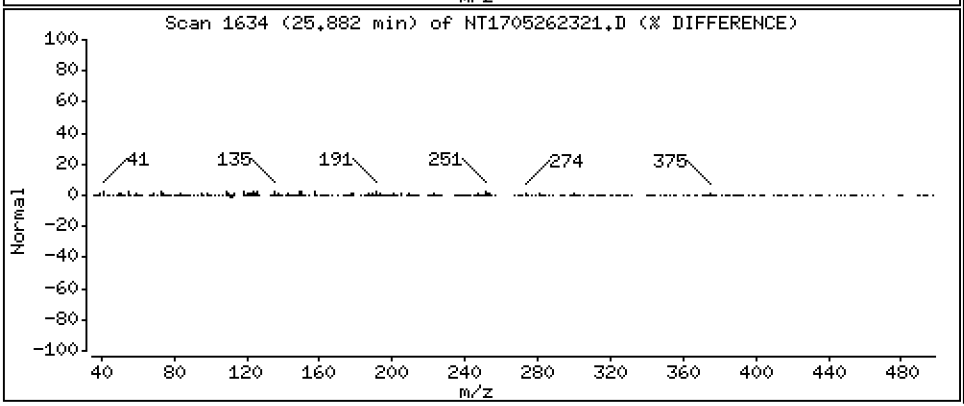












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

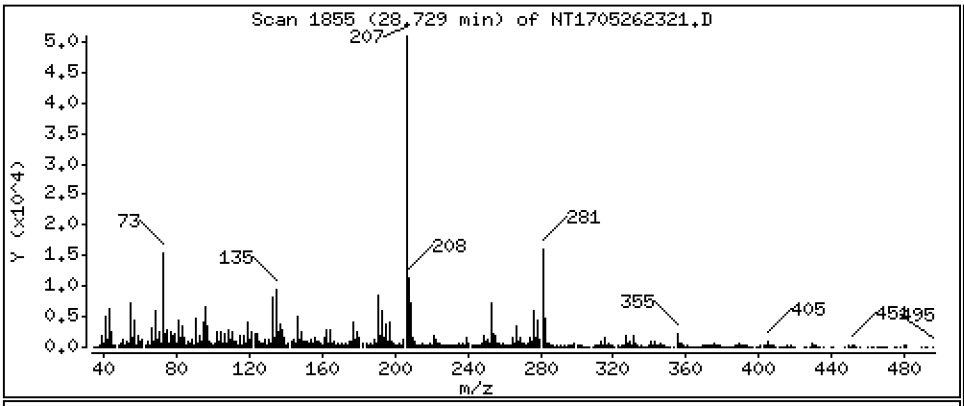
Operator: VTS

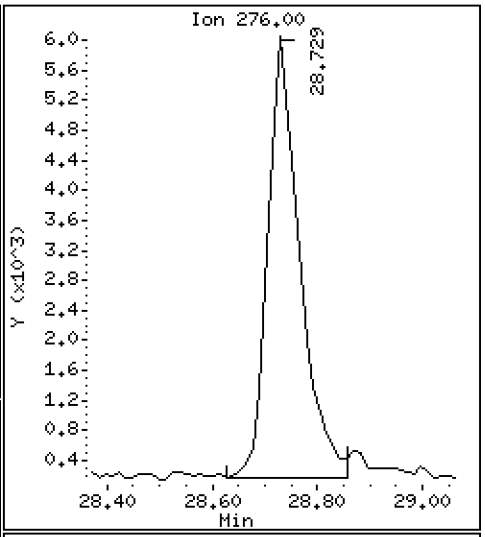
Column phase: ZB-5msi

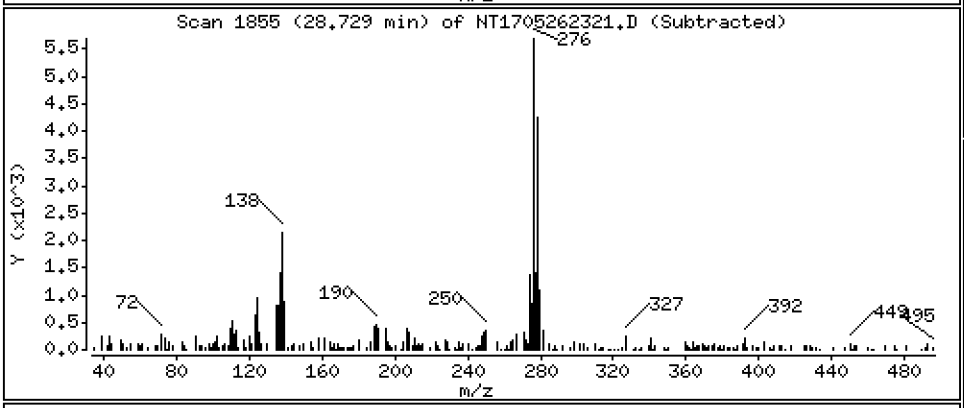
Column diameter: 0.25

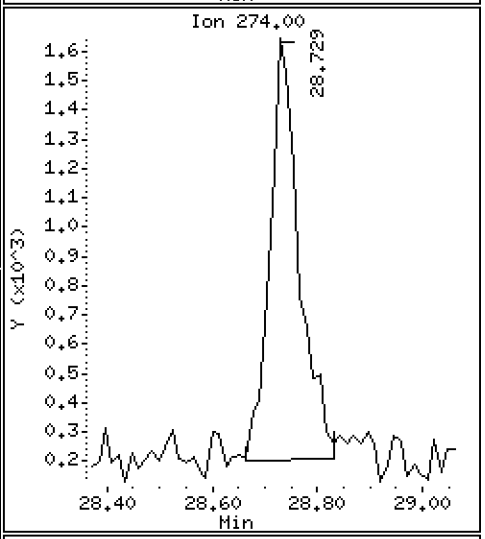
78 Indeno(1,2,3-cd)pyrene

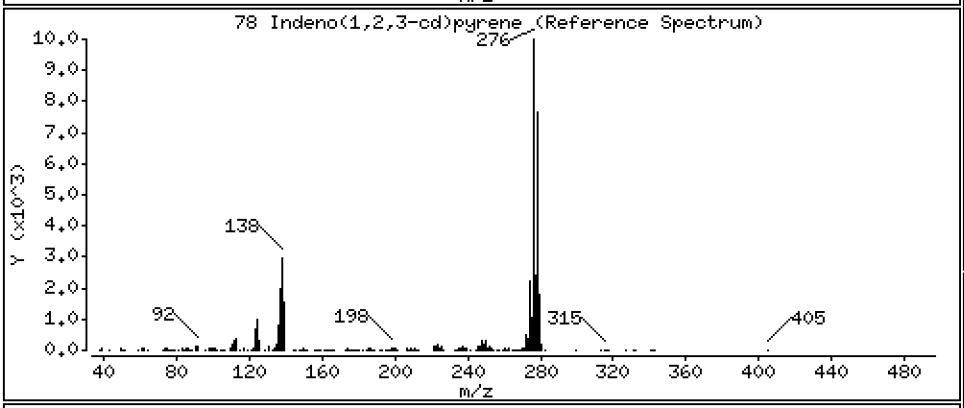
Concentration: 0.1276 ug/mL

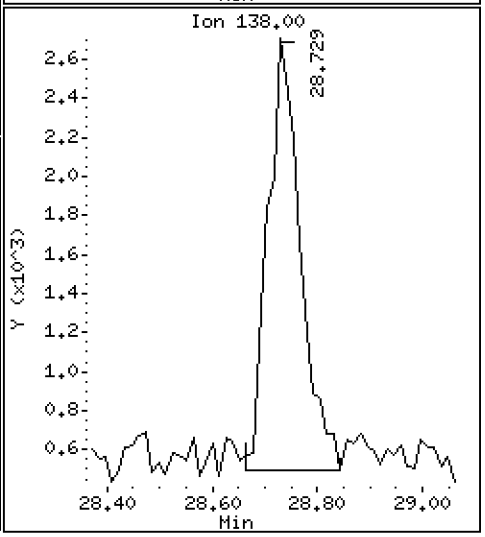


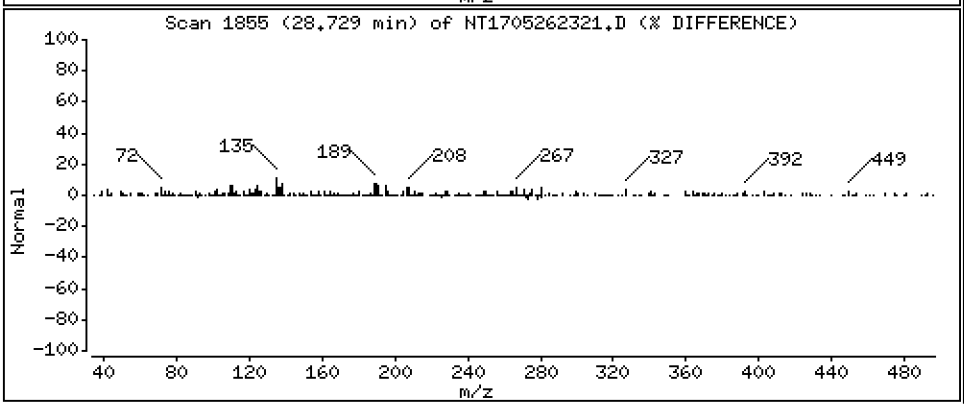












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

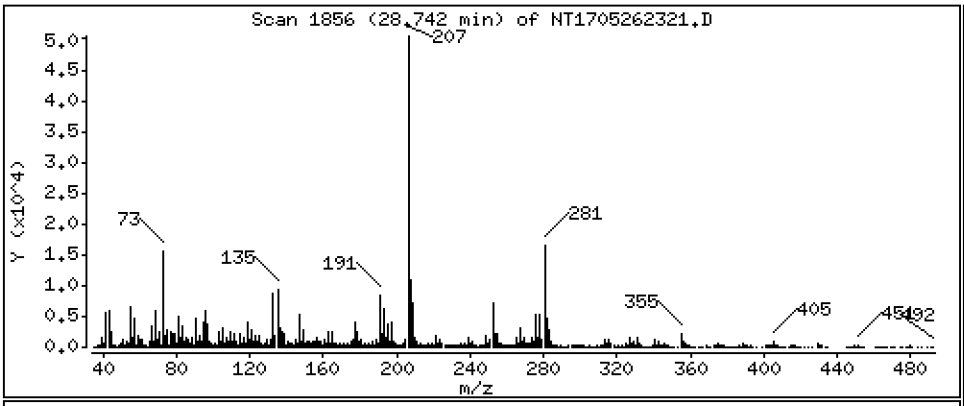
Operator: VTS

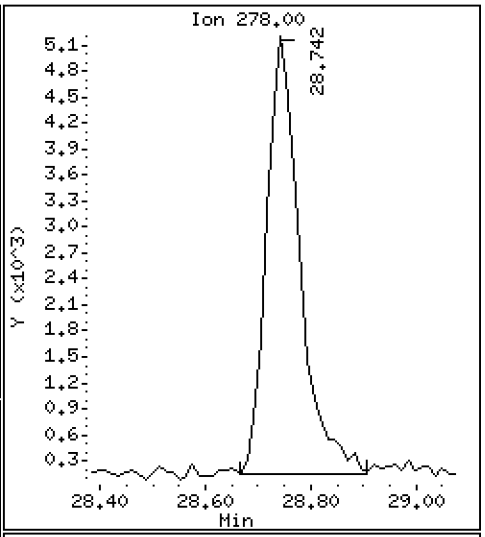
Column phase: ZB-5msi

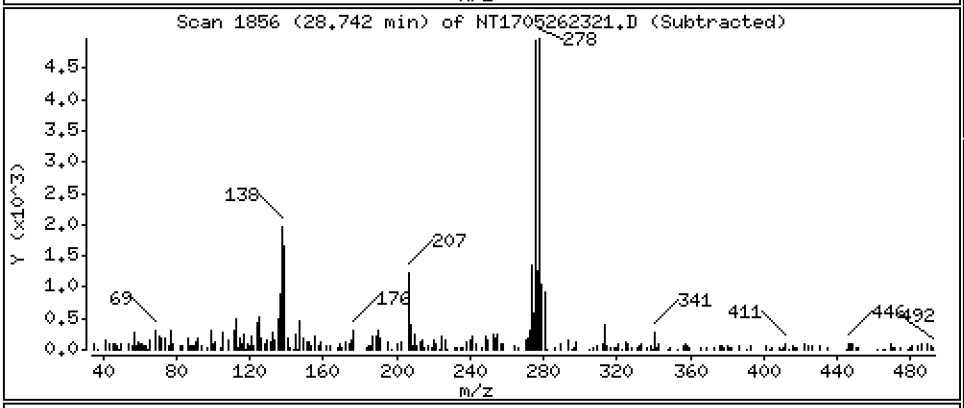
Column diameter: 0.25

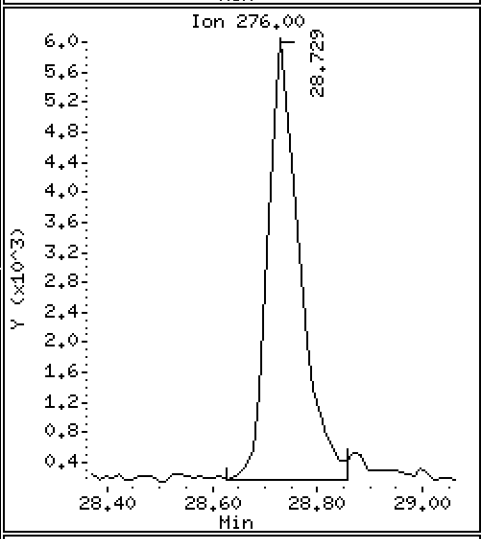
79 Dibenzo(a,h)anthracene

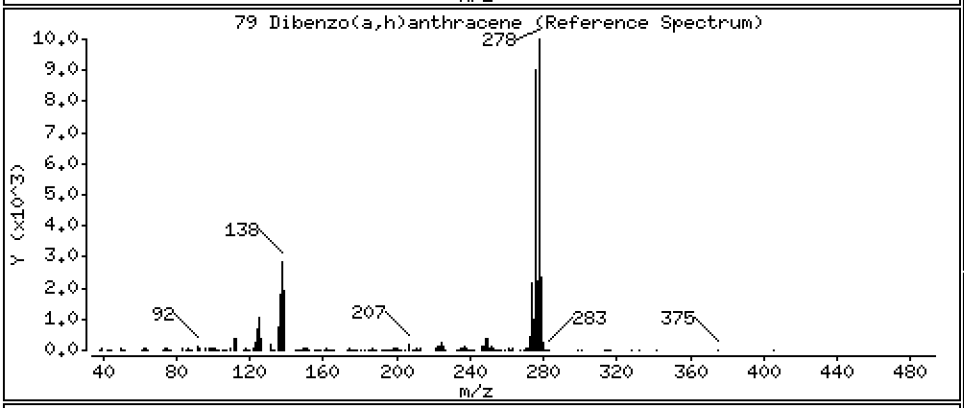
Concentration: 0.1378 ug/mL

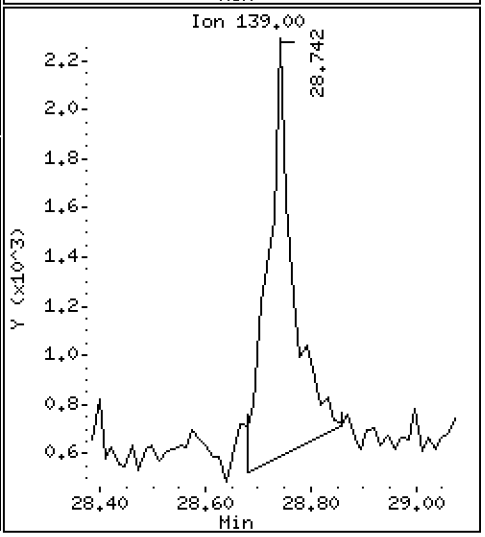


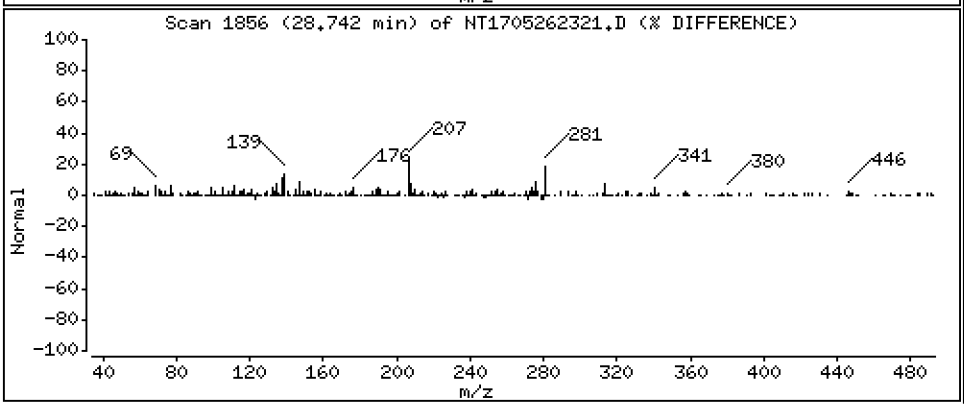












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

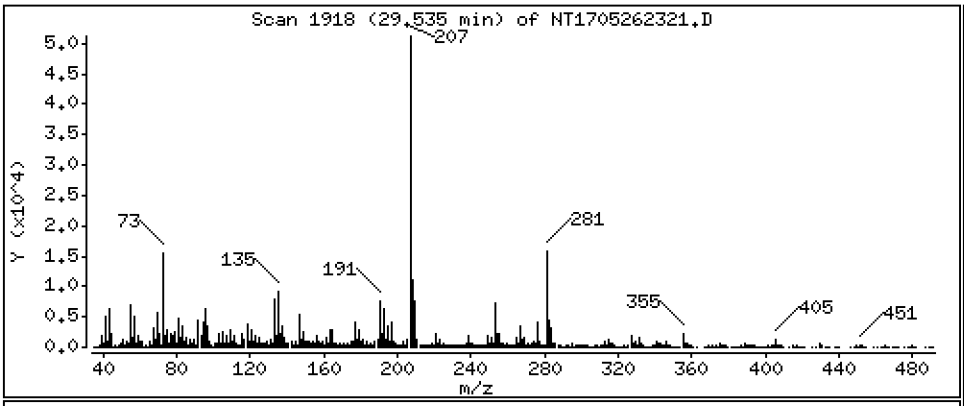
Operator: VTS

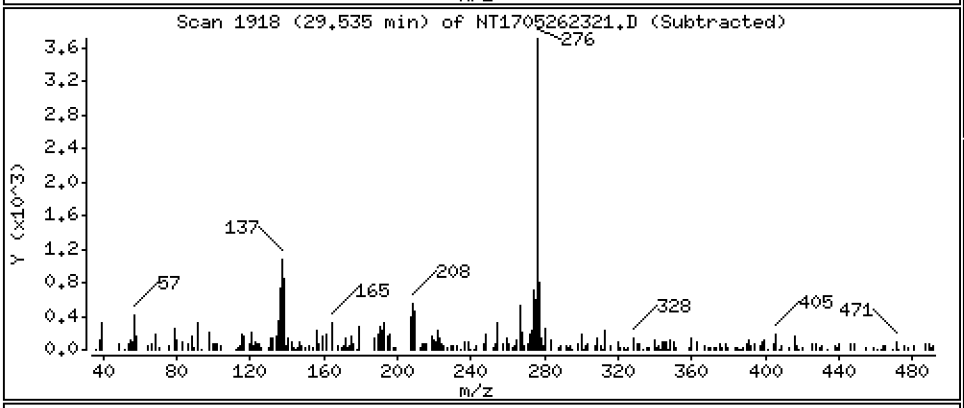
Column phase: ZB-5msi

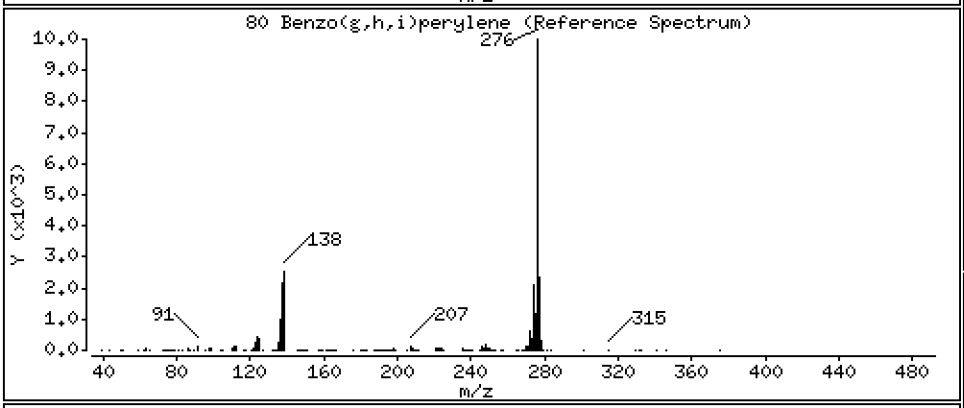
Column diameter: 0.25

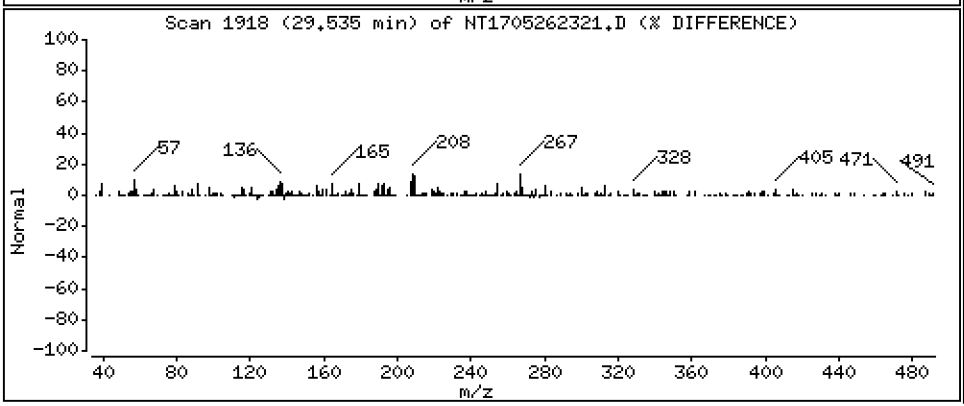
80 Benzo(g,h,i)perylene

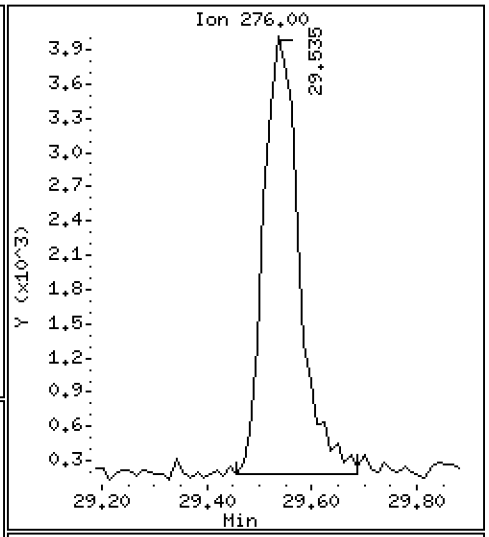
Concentration: 0.1105 ug/mL

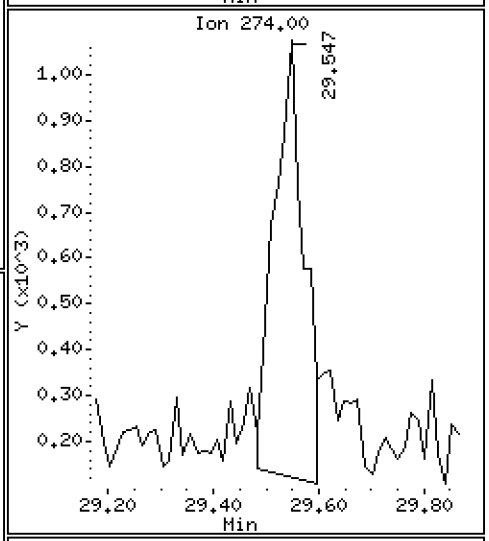


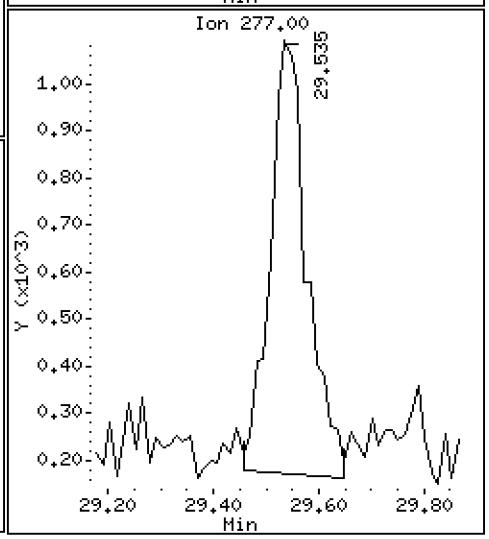












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

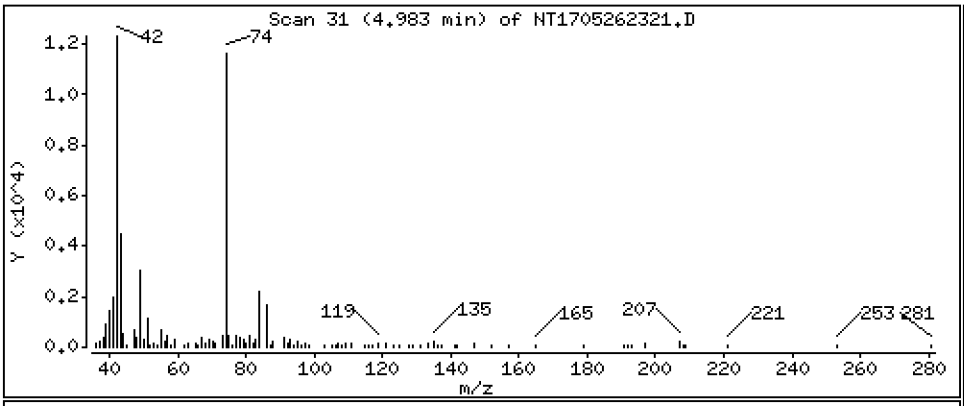
Operator: VTS

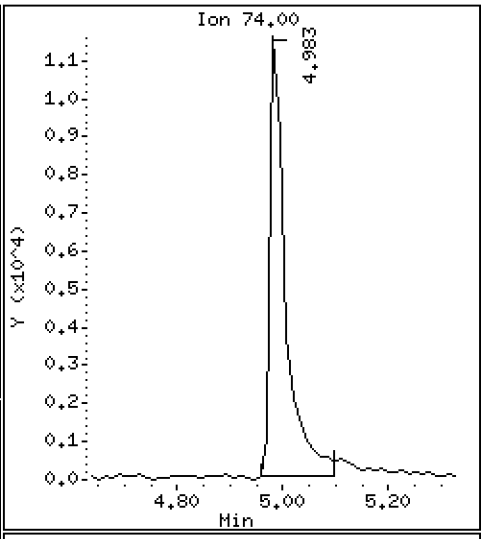
Column phase: ZB-5msi

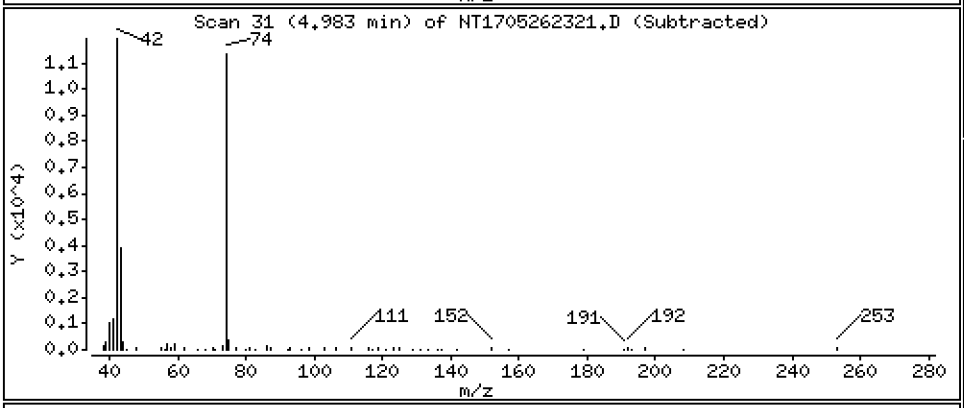
Column diameter: 0.25

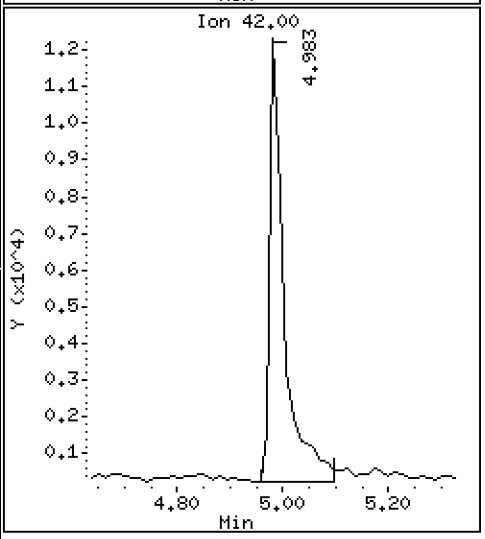
90 N-Nitrosodimethylamine

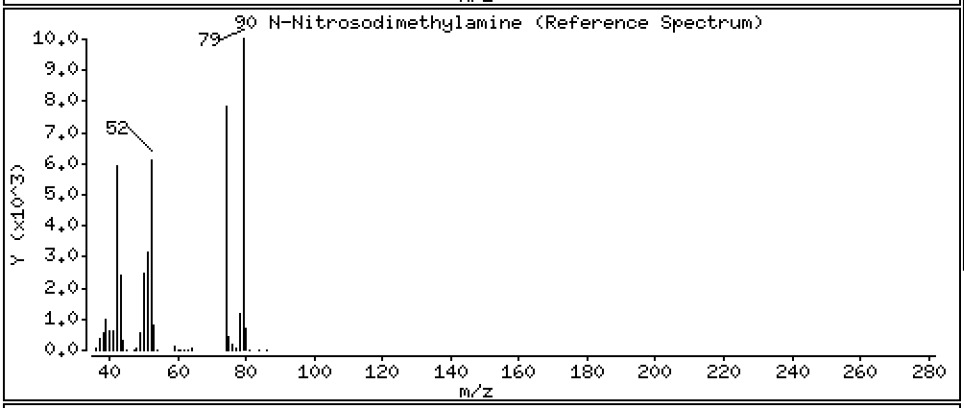
Concentration: 0.3074 ug/mL

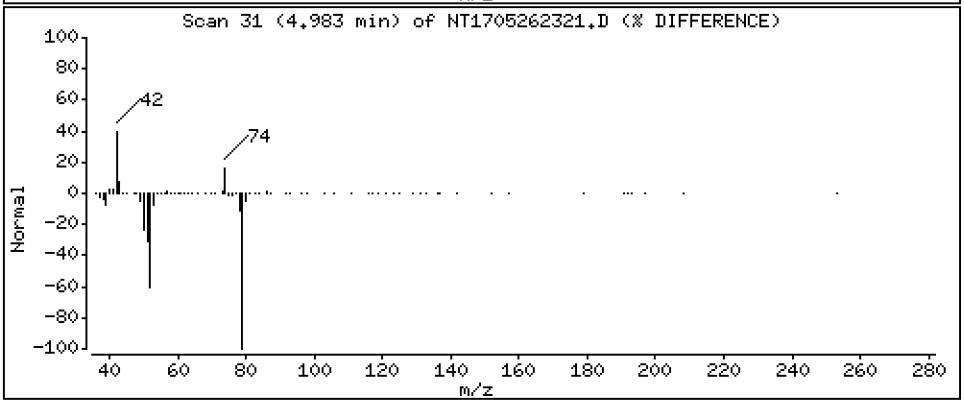












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

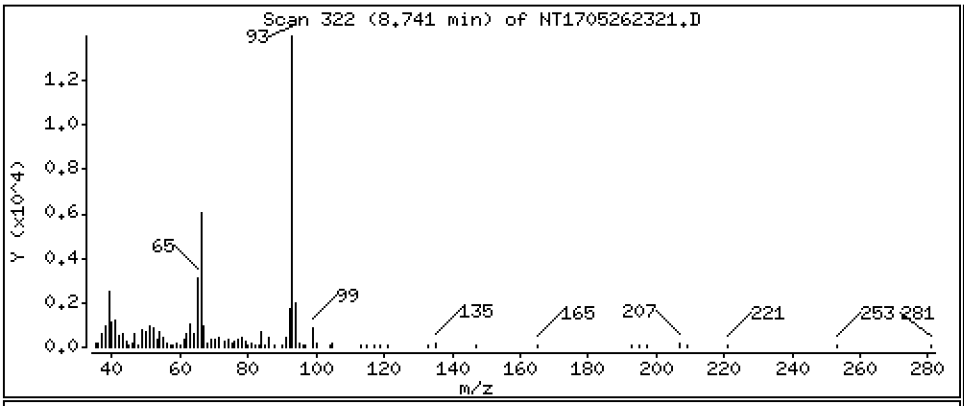
Operator: VTS

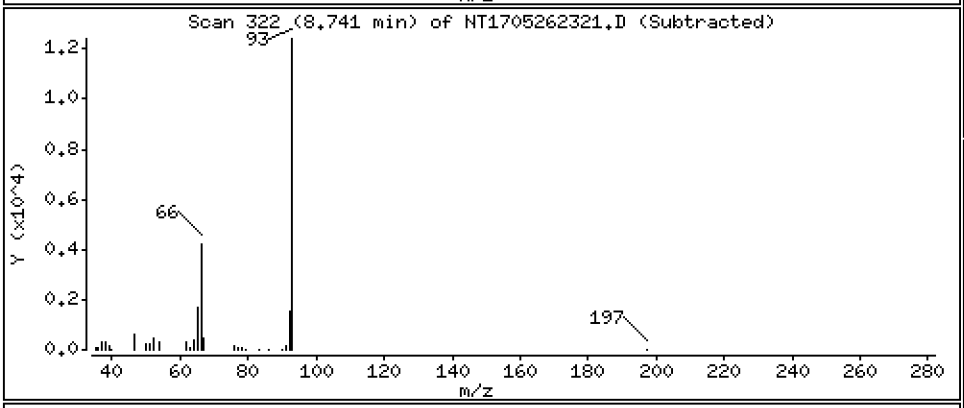
Column phase: ZB-5msi

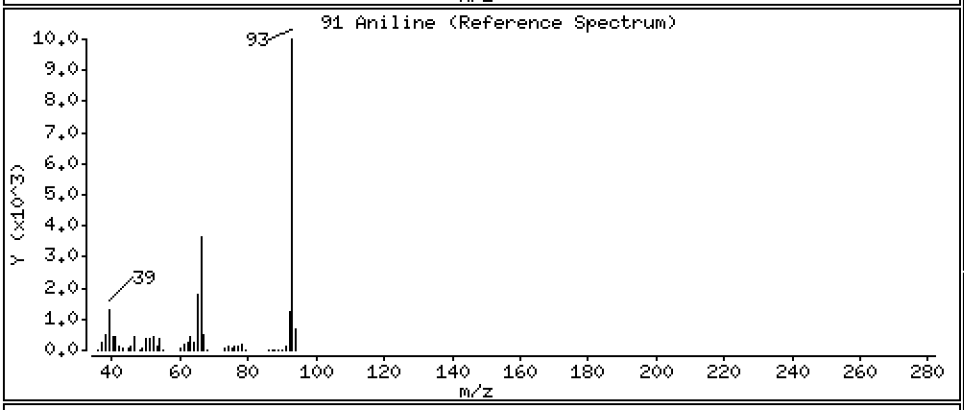
Column diameter: 0.25

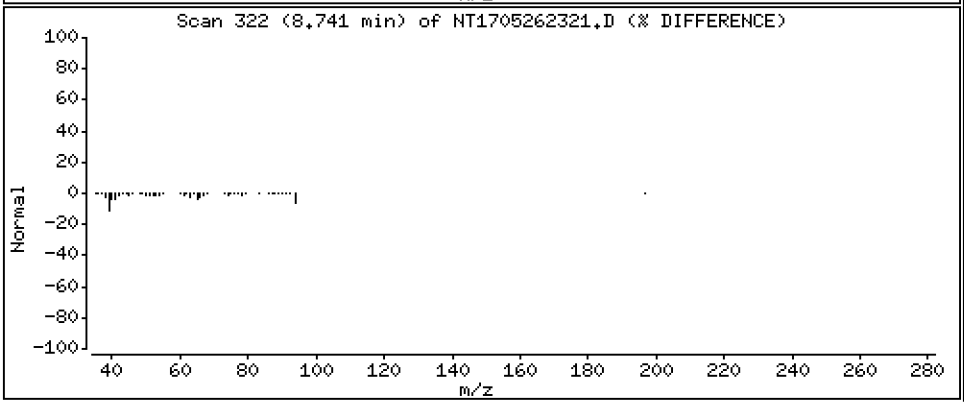
91 Aniline

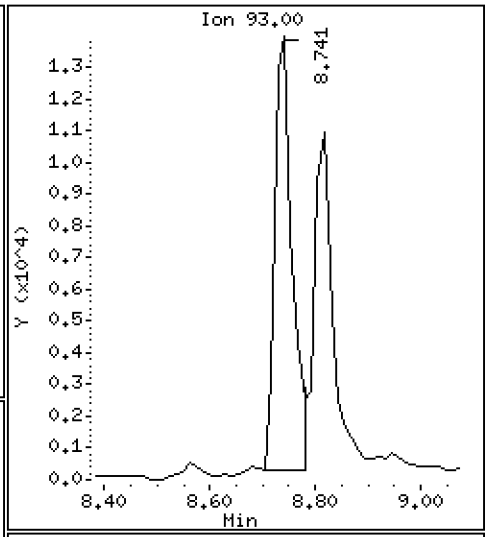
Concentration: 0.2362 ug/mL

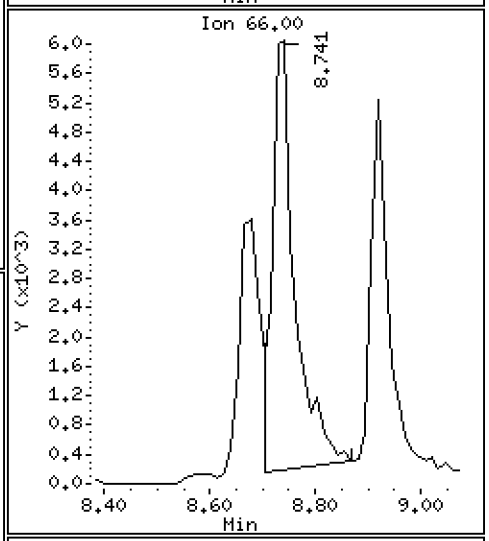


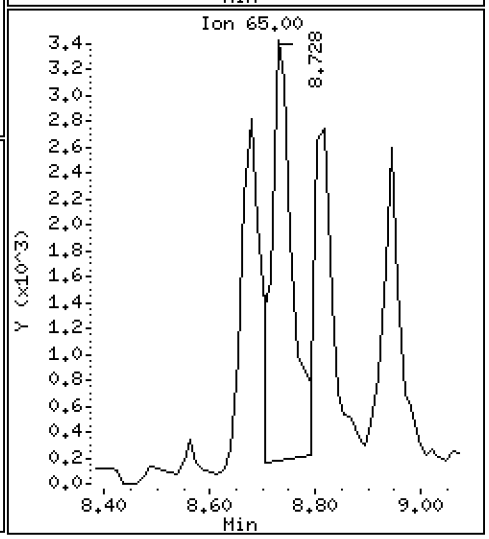












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

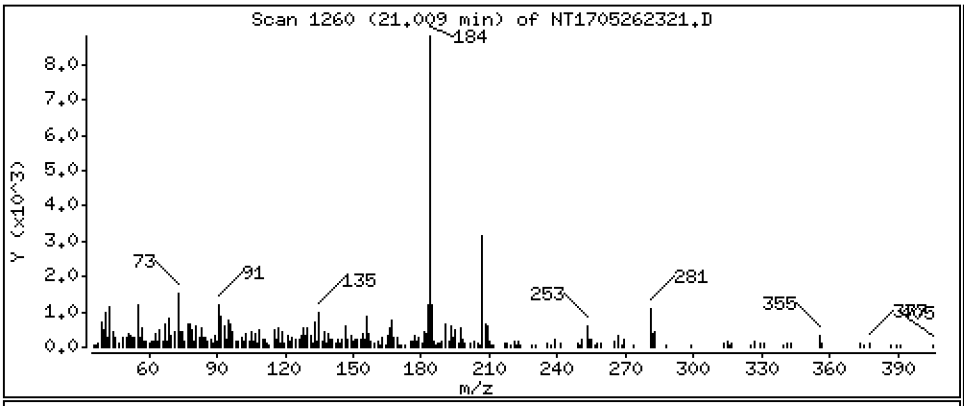
Operator: VTS

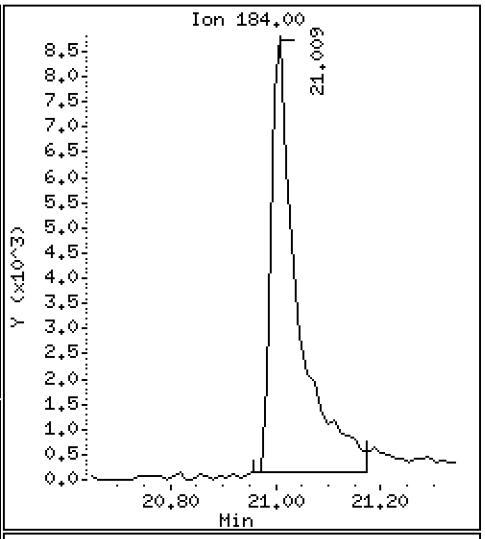
Column phase: ZB-5msi

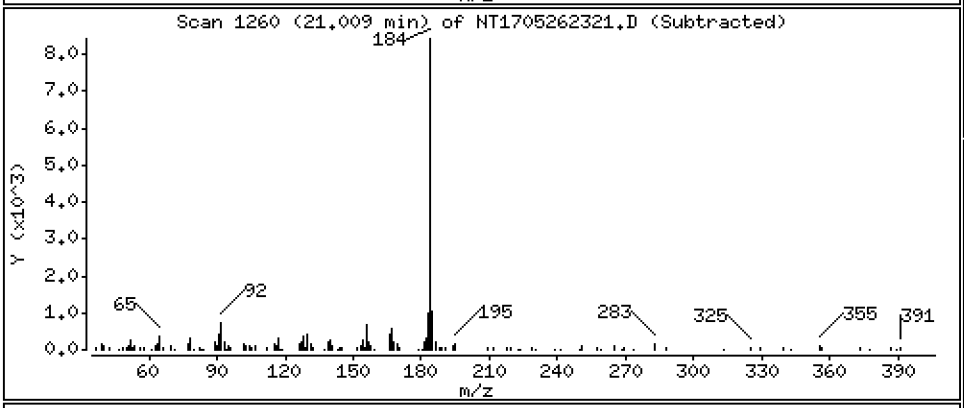
Column diameter: 0.25

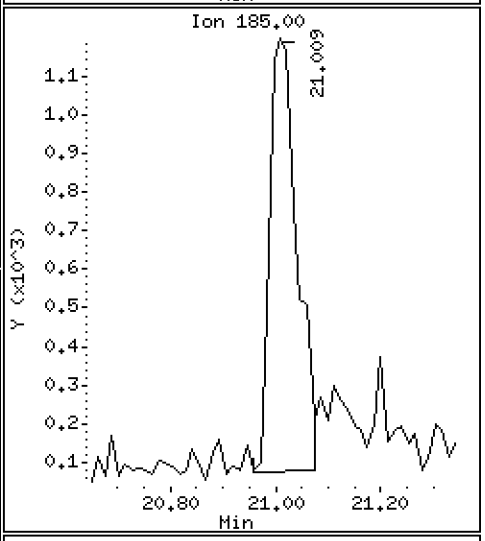
93 Benzidine

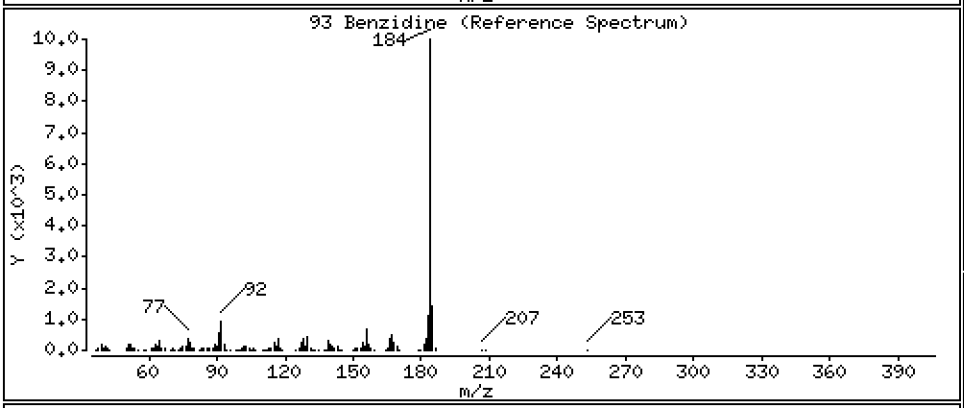
Concentration: 0.4249 ug/mL

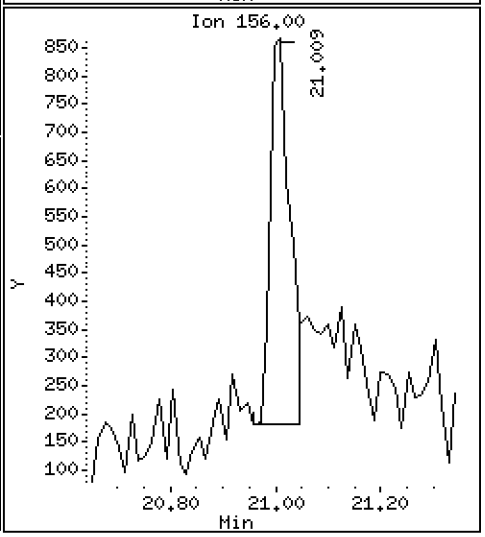


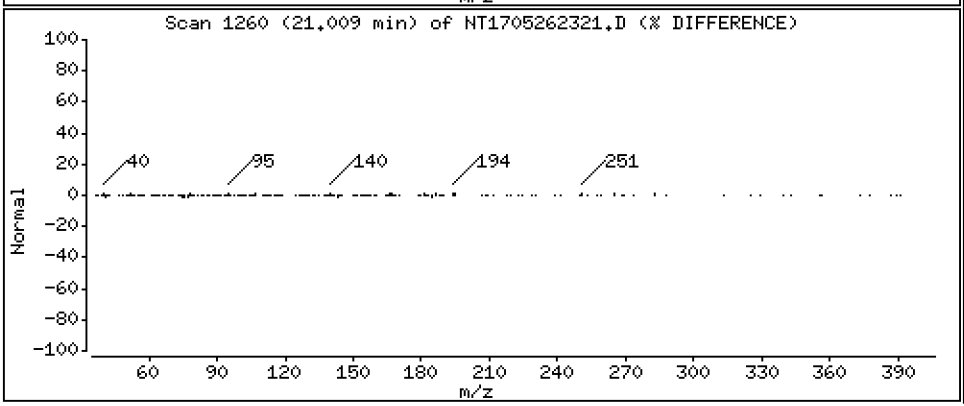












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

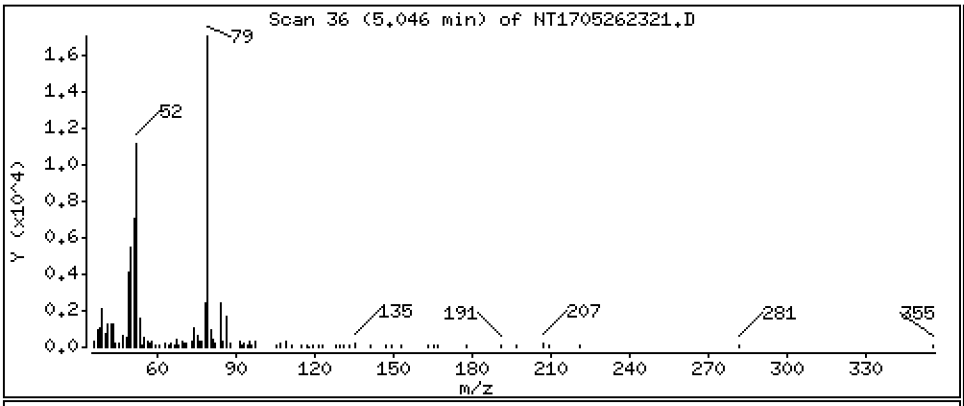
Operator: VTS

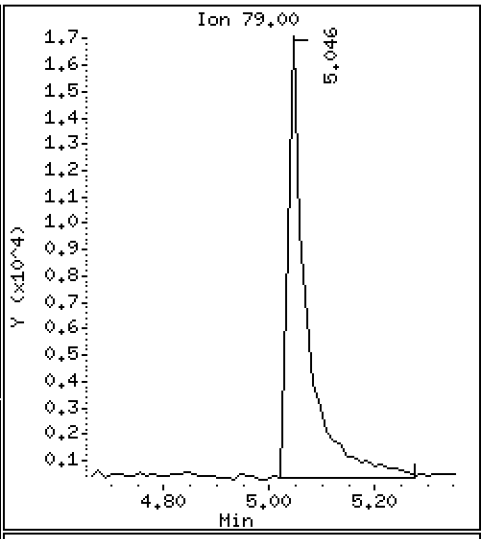
Column phase: ZB-5msi

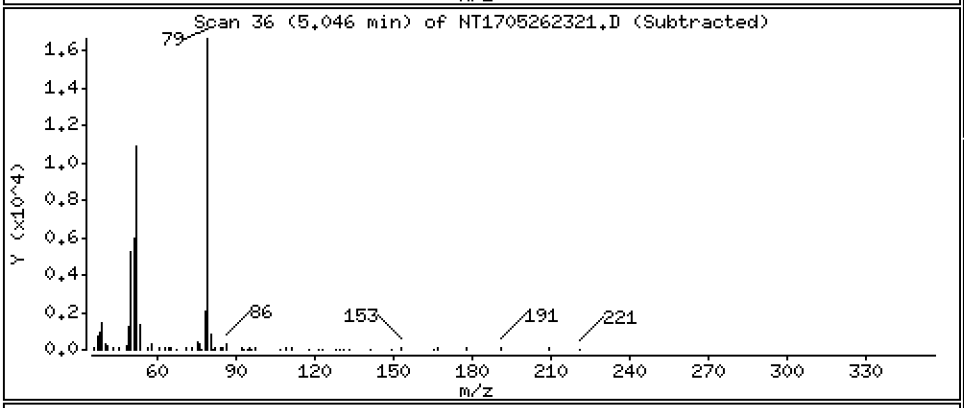
Column diameter: 0.25

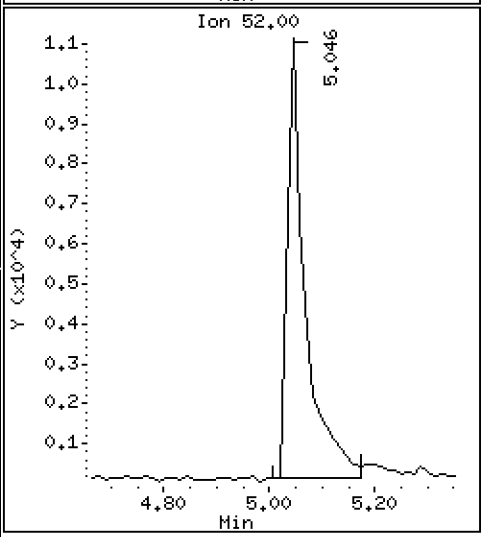
103 Pyridine

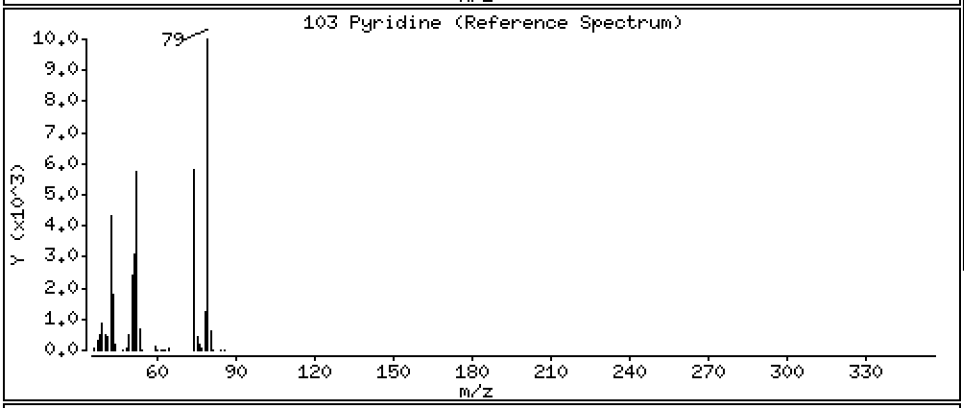
Concentration: 0.3488 ug/mL

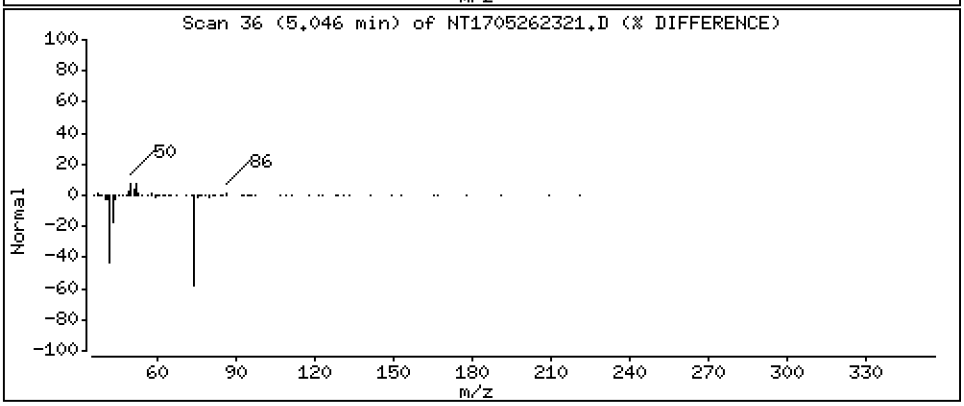












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

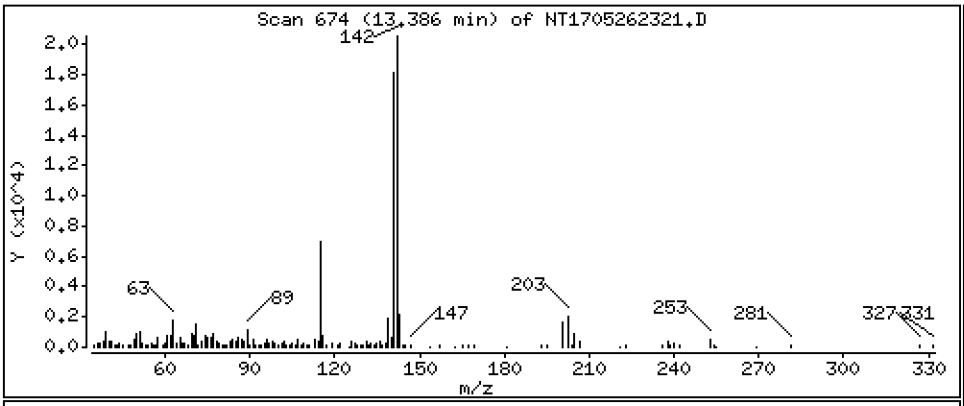
Operator: VTS

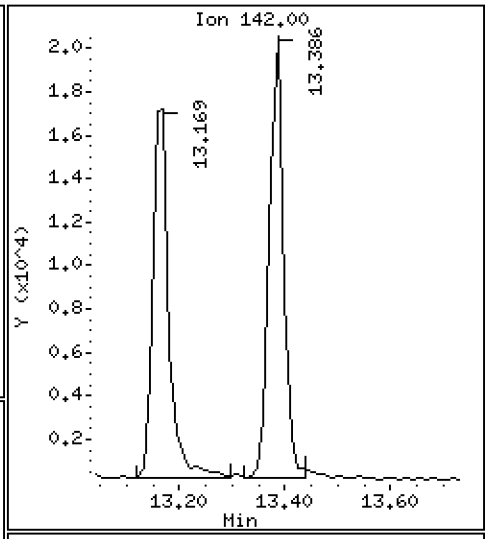
Column phase: ZB-5msi

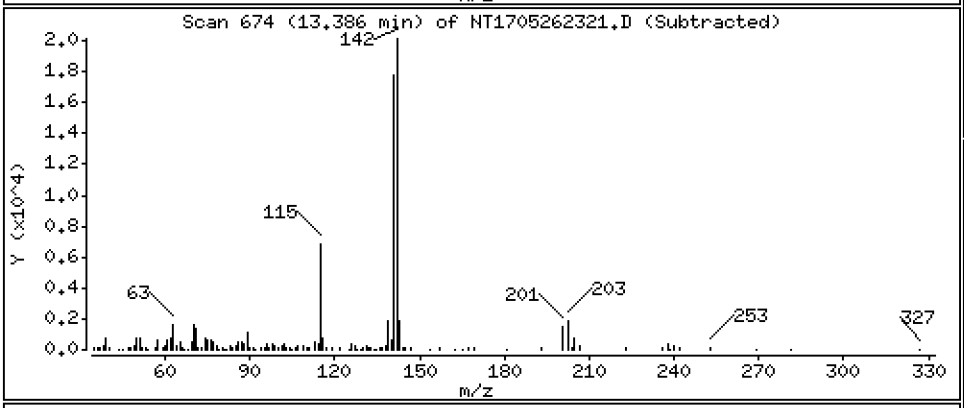
Column diameter: 0.25

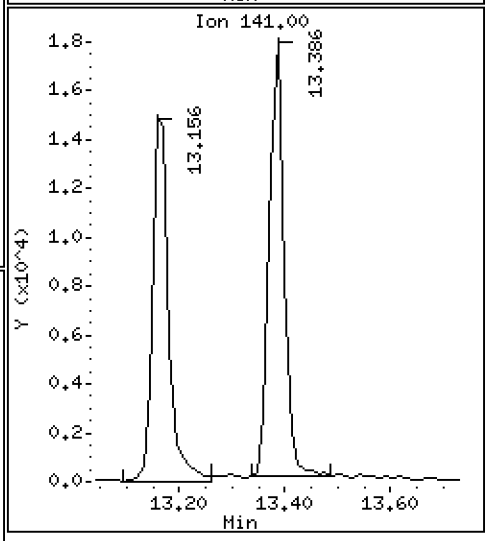
105 1-methylnaphthalene

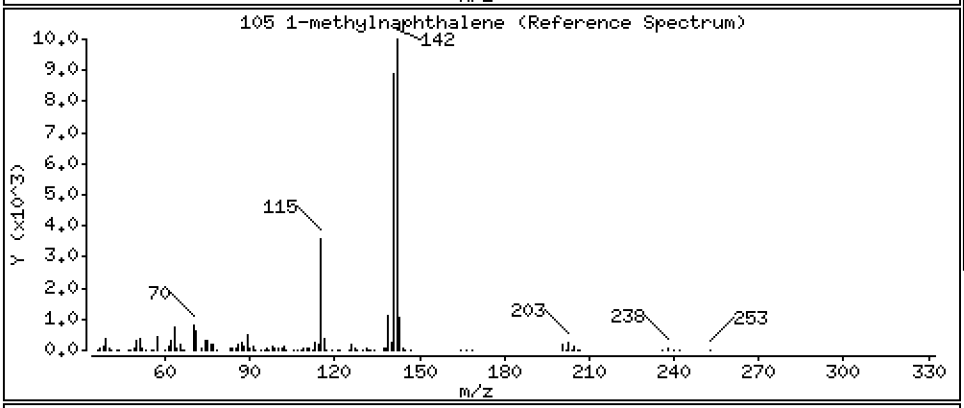
Concentration: 0.1960 ug/mL

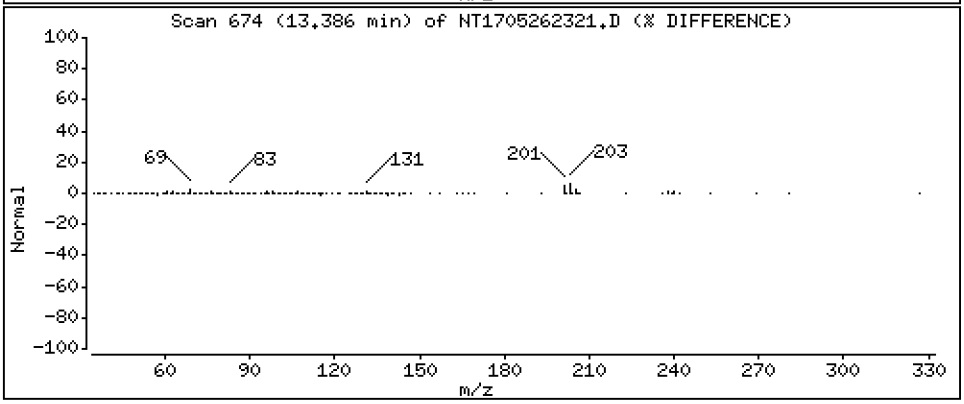












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

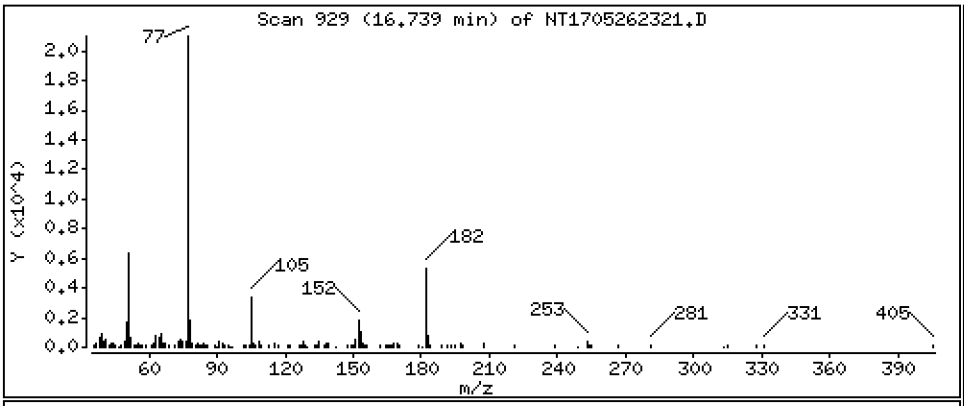
Operator: VTS

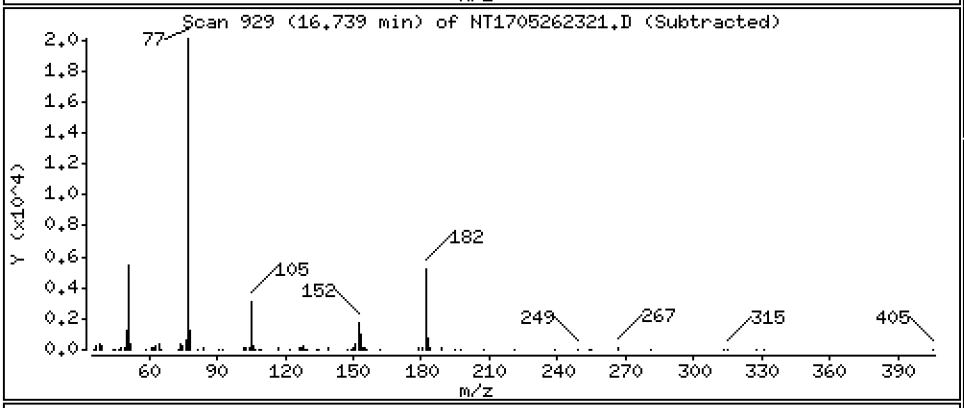
Column phase: ZB-5msi

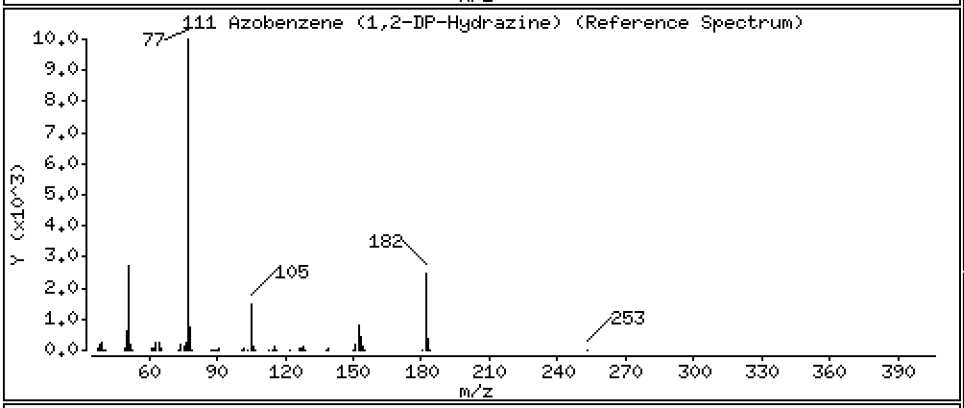
Column diameter: 0.25

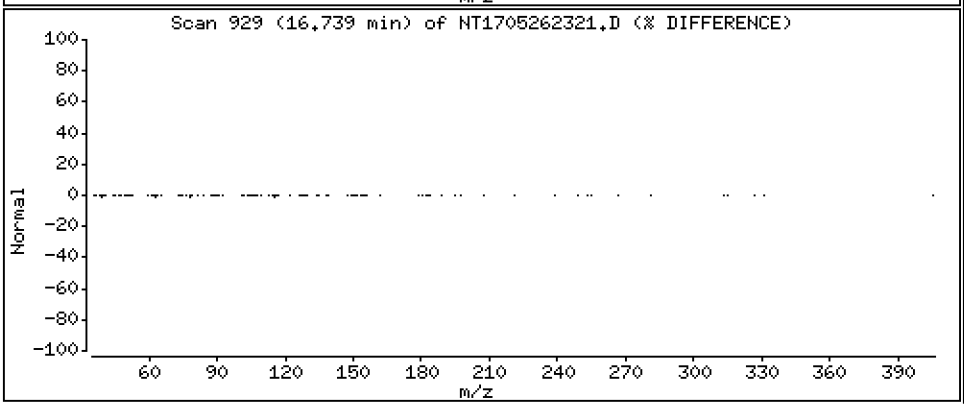
111 Azobenzene (1,2-DP-Hydrazine)

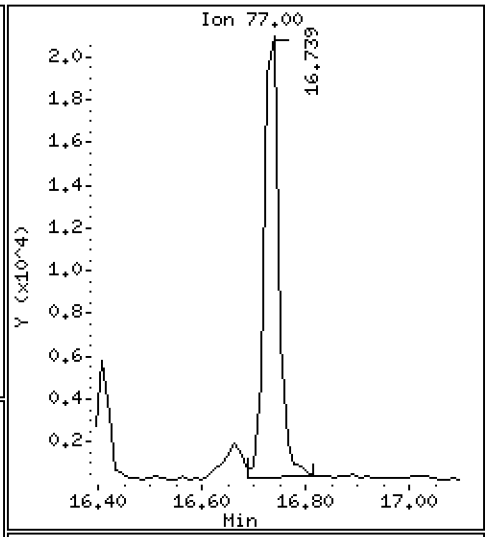
Concentration: 0.1930 ug/mL

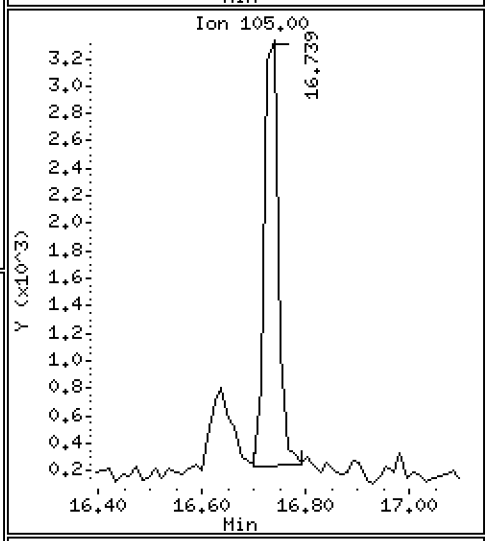


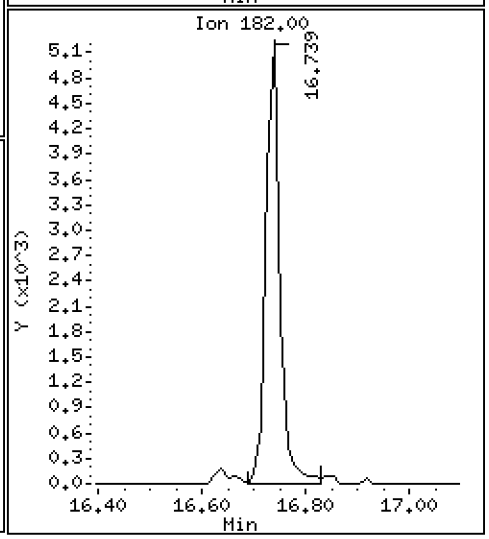












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

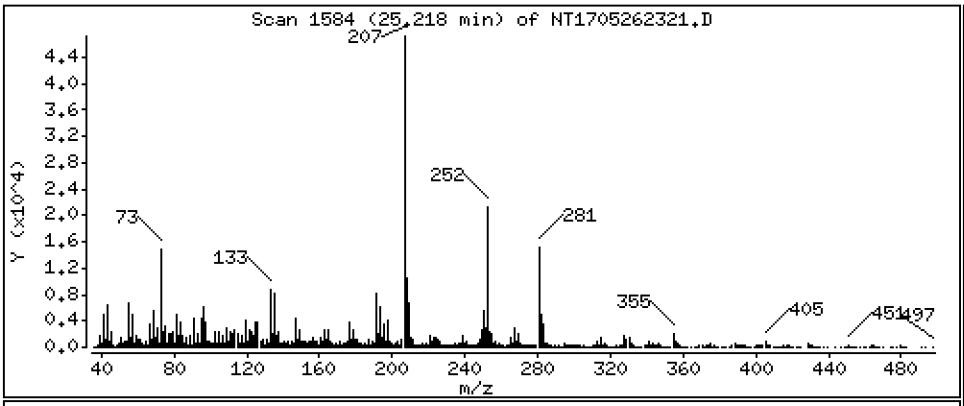
Operator: VTS

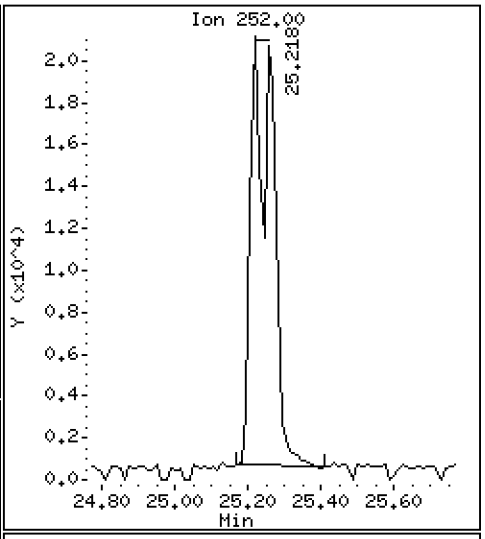
Column phase: ZB-5msi

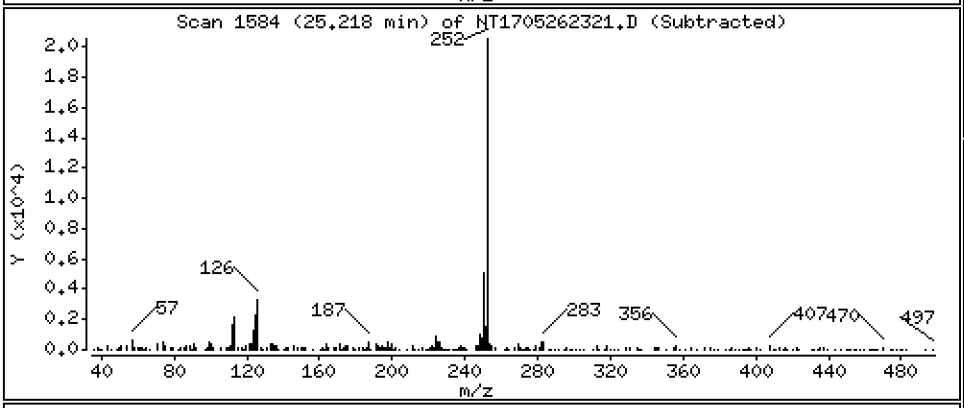
Column diameter: 0.25

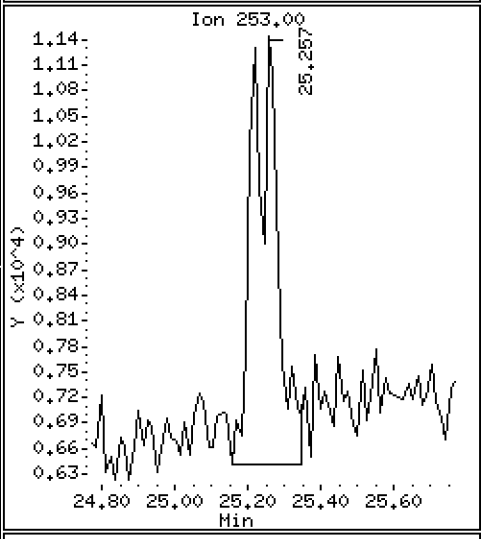
187 Total Benzofluoranthenes

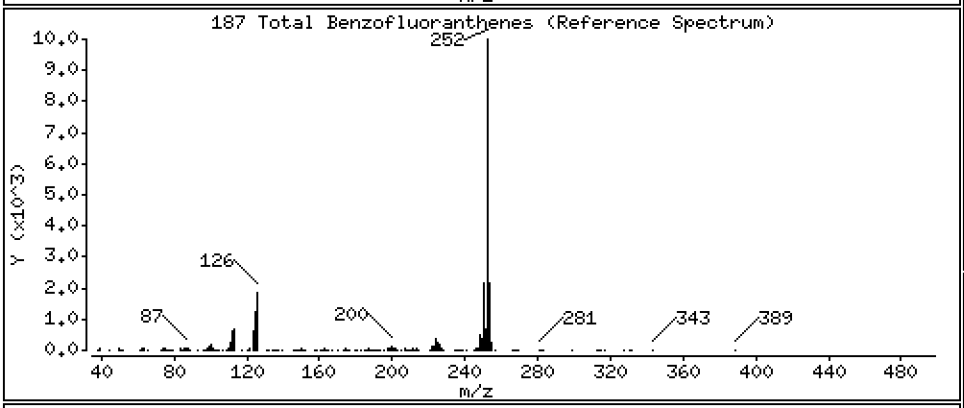
Concentration: 0.4404 ug/mL

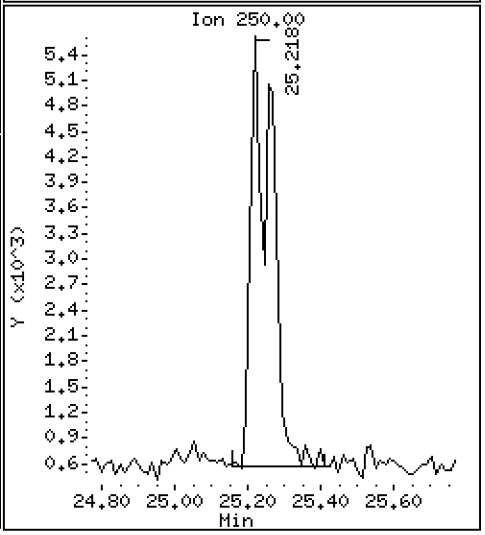


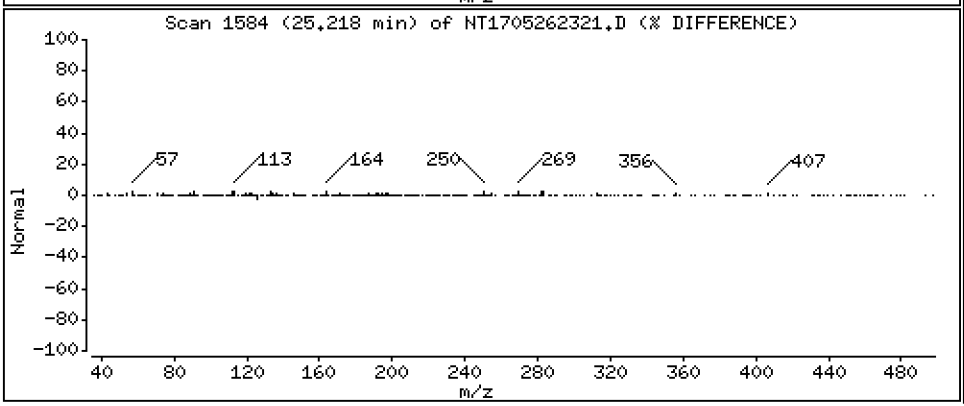












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

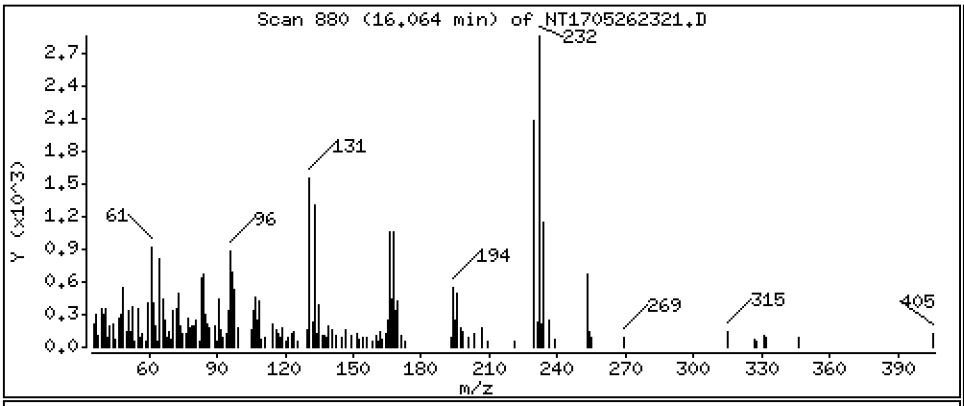
Operator: VTS

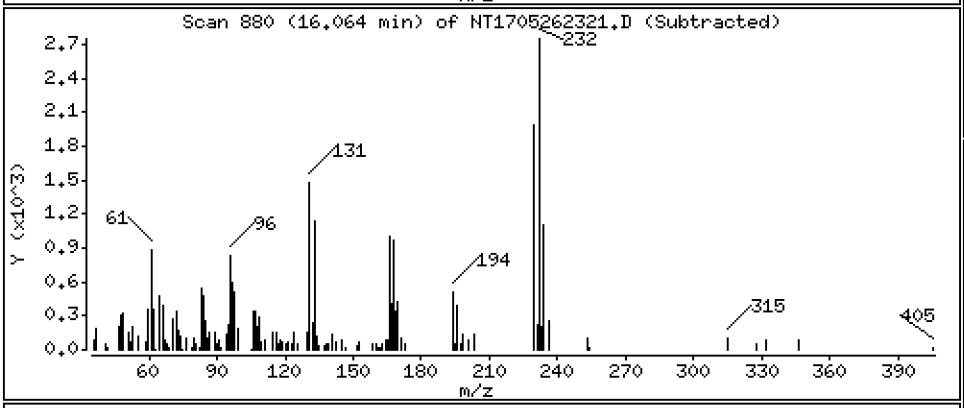
Column phase: ZB-5msi

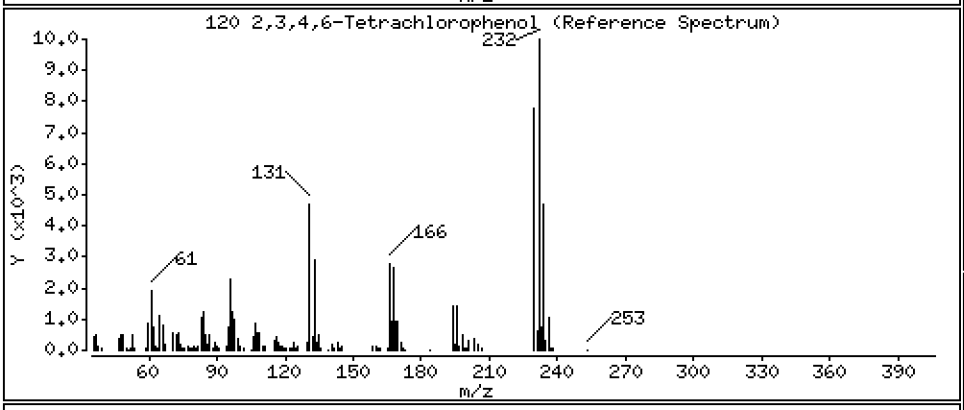
Column diameter: 0.25

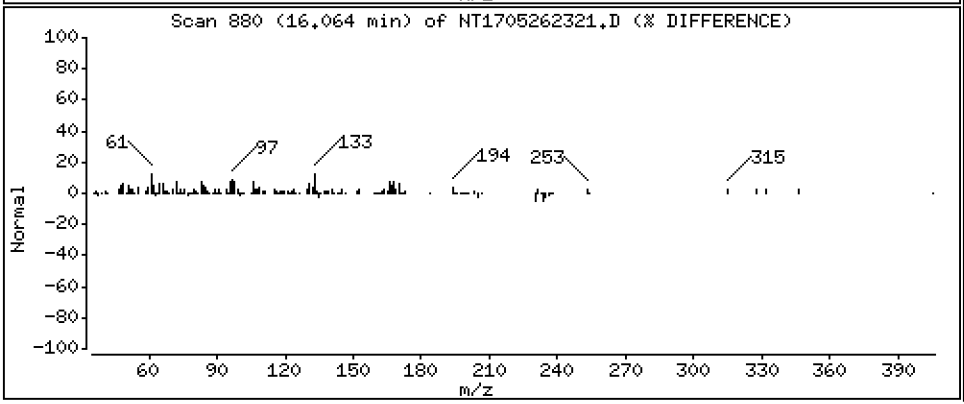
120 2,3,4,6-Tetrachlorophenol

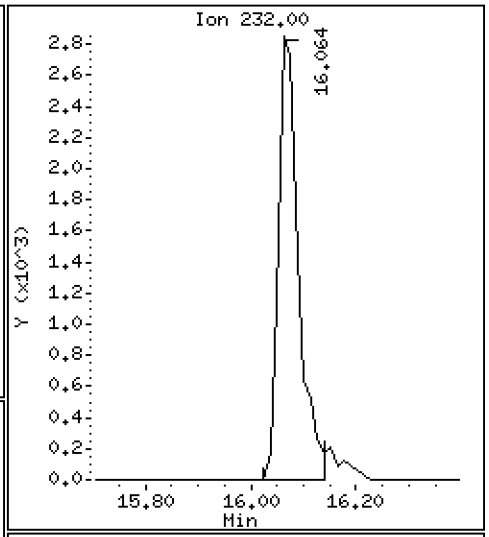
Concentration: 0.1117 ug/mL

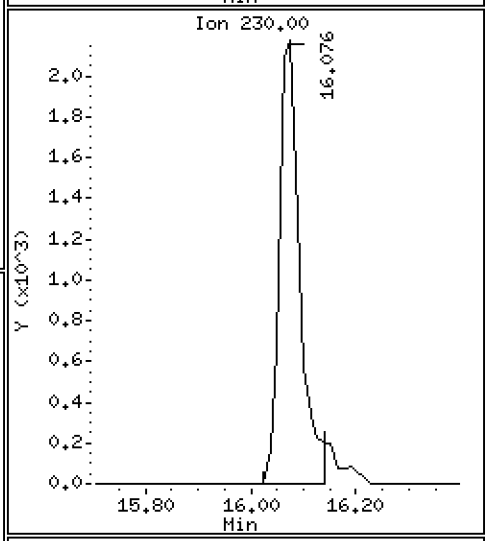


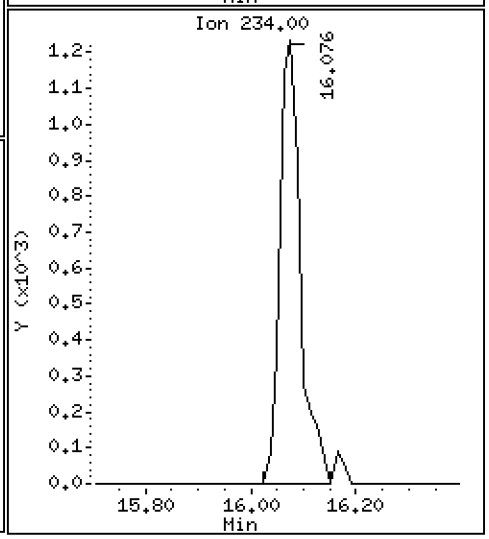












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D
Lab Smp Id: SLE0434-LCV2
Inj Date : 27-MAY-2023 01:10
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0434-LCV2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 13:34 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.071	7.071	(0.763)	29103	0.24695	0.2470
$	2 Phenol-d5	99	8.651	8.639	(0.934)	33652	0.21578	0.2158
	3 Phenol	94	8.677	8.664	(0.937)	28758	0.17409	0.1741
$	5 2-Chlorophenol-d4	132	8.919	8.919	(0.963)	31099	0.24895	0.2489
	4 Bis(2-Chloroethyl)ether	93	8.817	8.817	(0.952)	26653	0.22133	0.2213
	6 2-Chlorophenol	128	8.944	8.944	(0.966)	21183	0.15356	0.1536
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	26075	0.18677	0.1868
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	360010	4.00000	
	9 1,4-Dichlorobenzene	146	9.301	9.301	(1.004)	25958	0.18643	0.1864
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	15787	0.17980	0.1798
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	25680	0.19619	0.1962
	11 Benzyl alcohol	108	9.570	9.544	(1.033)	11128	0.14469	0.1447
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	6910	0.18729	0.1873
	13 2-Methylphenol	108	9.774	9.761	(1.055)	17719	0.14595	0.1460
	17 Hexachloroethane	117	10.234	10.234	(1.105)	8765	0.15736	0.1574
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	13862	0.14924	0.1492
	15 4-Methylphenol	108	10.055	10.030	(1.086)	13315	0.10772	0.1077
$	18 Nitrobenzene-d5	82	10.362	10.349	(0.884)	22372	0.18874	0.1887
	19 Nitrobenzene	77	10.387	10.387	(0.886)	22066	0.19512	0.1951
	20 Isophorone	82	10.834	10.835	(0.924)	30354	0.19608	0.1961
	21 2-Nitrophenol	139	11.026	11.013	(0.940)	12543	0.23017	0.2302
	22 2,4-Dimethylphenol	107	11.077	11.064	(0.945)	35391	0.33449	0.3345
	23 Bis(2-Chloroethoxy)methane	93	11.256	11.243	(0.960)	17192	0.18120	0.1812
	24 Benzoic acid	105	11.256	11.320	(0.960)	19189	0.26961	0.2696(M)
	25 2,4-Dichlorophenol	162	11.498	11.473	(0.980)	25801	0.30347	0.3035
	26 1,2,4-Trichlorobenzene	180	11.652	11.652	(0.993)	24101	0.26100	0.2610
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1041490	4.00000	
	28 Naphthalene	128	11.779	11.779	(1.004)	57833	0.20193	0.2019
	29 4-Chloroaniline	127	11.919	11.906	(1.016)	27891	0.24705	0.2470
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	9971	0.21799	0.2180
	31 4-Chloro-3-methylphenol	107	12.888	12.863	(1.099)	26265	0.28690	0.2869
	32 2-Methylnaphthalene	142	13.169	13.156	(1.123)	38173	0.18615	0.1861
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	999	0.01976	0.01976

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.793	13.781	(0.900)	17995	0.31639	0.3164
	35	2,4,5-Trichlorophenol	196	13.896	13.857	(0.907)	19980	0.33184	0.3318
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	43233	0.20187	0.2019
	37	2-Chloronaphthalene	162	14.151	14.151	(0.923)	33979	0.19558	0.1956
	38	2-Nitroaniline	65	14.418	14.406	(0.941)	17844	0.30326	0.3033
	39	Dimethylphthalate	163	14.827	14.827	(0.968)	38730	0.20706	0.2071
	40	Acenaphthylene	152	15.018	15.018	(0.980)	56506	0.20481	0.2048
	41	2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	15133	0.34557	0.3456
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	543612	4.00000	
	43	3-Nitroaniline	138	15.286	15.260	(0.998)	10790	0.26603	0.2660(M)
	44	Acenaphthene	153	15.388	15.388	(1.004)	34386	0.19938	0.1994
	45	2,4-Dinitrophenol	184	15.566	15.477	(1.016)	1607	0.06089	0.06089(M)
	46	Dibenzofuran	168	15.719	15.719	(1.026)	46893	0.19481	0.1948
	47	4-Nitrophenol	109	15.706	15.604	(1.025)	3983	0.14785	0.1478(M)
	48	2,4-Dinitrotoluene	165	15.783	15.783	(1.030)	15766	0.27503	0.2750
	50	Diethylphthalate	149	16.267	16.267	(1.062)	42997	0.23572	0.2357
	49	Fluorene	166	16.420	16.420	(1.072)	40023	0.17489	0.1749
	51	4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	19636	0.18663	0.1866
	52	4-Nitroaniline	138	16.560	16.535	(1.081)	9075	0.23639	0.2364
	53	4,6-Dinitro-2-methylphenol	198	16.636	16.611	(0.907)	4749	0.13493	0.1349
	54	N-Nitrosodiphenylamine	169	16.662	16.662	(0.908)	24301	0.19671	0.1967
$	55	2,4,6-Tribromophenol	330	16.967	16.967	(1.107)	5608	0.23650	0.2365
	56	4-Bromophenyl-phenylether	248	17.413	17.413	(0.949)	8440	0.19499	0.1950
	57	Hexachlorobenzene	284	17.731	17.731	(0.967)	9669	0.21922	0.2192
	58	Pentachlorophenol	266	18.114	18.088	(0.987)	5211	0.20380	0.2038(M)
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	881915	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	50134	0.19482	0.1948
	61	Anthracene	178	18.484	18.484	(1.008)	47119	0.19504	0.1950
	62	Carbazole	167	18.828	18.828	(1.026)	38631	0.26387	0.2639
	63	Di-n-butylphthalate	149	19.593	19.580	(1.068)	57536	0.19723	0.1972
	64	Fluoranthene	202	20.766	20.753	(0.889)	51598	0.17450	0.1745
	65	Pyrene	202	21.187	21.187	(0.907)	54771	0.18272	0.1827
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	37299	0.17504	0.1750
	67	Butylbenzylphthalate	149	22.360	22.361	(0.957)	25475	0.18989	0.1899
	68	Benzo(a)anthracene	228	23.317	23.317	(0.998)	48510	0.20840	0.2084
*	69	Chrysene-d12	240	23.356	23.356	(1.000)	632133	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.279	23.279	(0.997)	44912	0.99601	0.9960
	71	Chrysene	228	23.394	23.394	(1.002)	47579	0.21722	0.2172
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	34281	0.18099	0.1810
*	134	Di-n-octylphthalate-d4	153	24.351	24.363	(1.000)	1309126	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.363	(1.001)	70500	0.21246	0.2125
	74	Benzo(b)fluoranthene	252	25.218	25.218	(0.970)	48446	0.22428	0.2243
	75	Benzo(k)fluoranthene	252	25.256	25.269	(0.971)	49174	0.24095	0.2410
	76	Benzo(a)pyrene	252	25.881	25.894	(0.995)	36092	0.21211	0.2121
*	77	Perylene-d12	264	26.009	26.009	(1.000)	544824	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.729	28.716	(1.105)	25177	0.12756	0.1276
	79	Dibenzo(a,h)anthracene	278	28.742	28.729	(1.105)	22820	0.13776	0.1378
	80	Benzo(g,h,i)perylene	276	29.534	29.534	(1.136)	17997	0.11047	0.1105
	90	N-Nitrosodimethylamine	74	4.982	4.982	(0.538)	24167	0.30743	0.3074
	91	Aniline	93	8.740	8.728	(0.944)	32699	0.23622	0.2362
	93	Benzidine	184	21.008	20.996	(0.900)	31189	0.42486	0.4249
	103	Pyridine	79	5.046	5.008	(0.545)	43486	0.34876	0.3488
	105	1-methylnaphthalene	142	13.385	13.385	(1.141)	37286	0.19599	0.1960
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.738	16.738	(1.092)	41103	0.19304	0.1930

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.218	25.269	(0.970)	85388	0.44036	0.4404(M)
120 2,3,4,6-Tetrachlorophenol	232	16.063	16.050	(1.048)	7602	0.11171	0.1117

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262321.D
Lab Smp Id: SLE0434-LCV2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 23:55
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	327251	163626	654502	360010	10.01
27 Naphthalene-d8	1151610	575805	2303220	1041490	-9.56
42 Acenaphthene-d10	581592	290796	1163184	543612	-6.53
59 Phenanthrene-d10	918371	459186	1836742	881915	-3.97
69 Chrysene-d12	690072	345036	1380144	632133	-8.40
134 Di-n-octylphthala	1461689	730845	2923378	1309126	-10.44
77 Perylene-d12	568726	284363	1137452	544824	-4.20

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	-0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	-0.00
69 Chrysene-d12	23.36	22.86	23.86	23.36	-0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.05
77 Perylene-d12	26.01	25.51	26.51	26.01	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262321.D

Lab ID: SLE0434-LCV2
nt17.i, ABN.m, 27-MAY-2023 01:10

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.960	0.965	-0.0054	Benzoic acid
1.016	1.010	0.0058	2,4-Dinitrophenol
1.025	1.018	0.0066	4-Nitrophenol

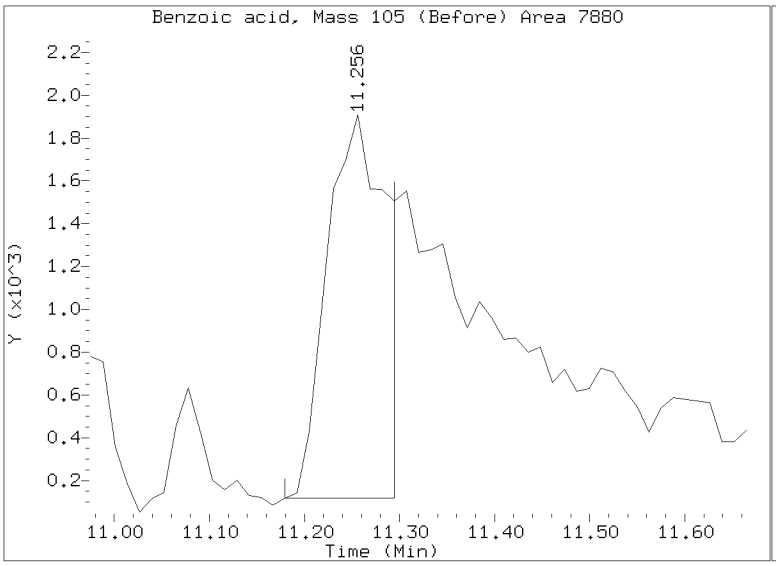
RRT check based on Ccal File: NT1705262319.D

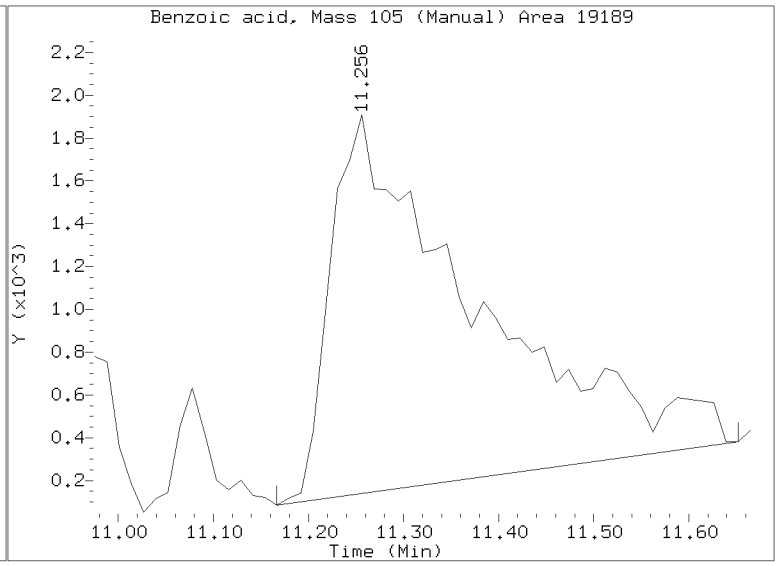
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

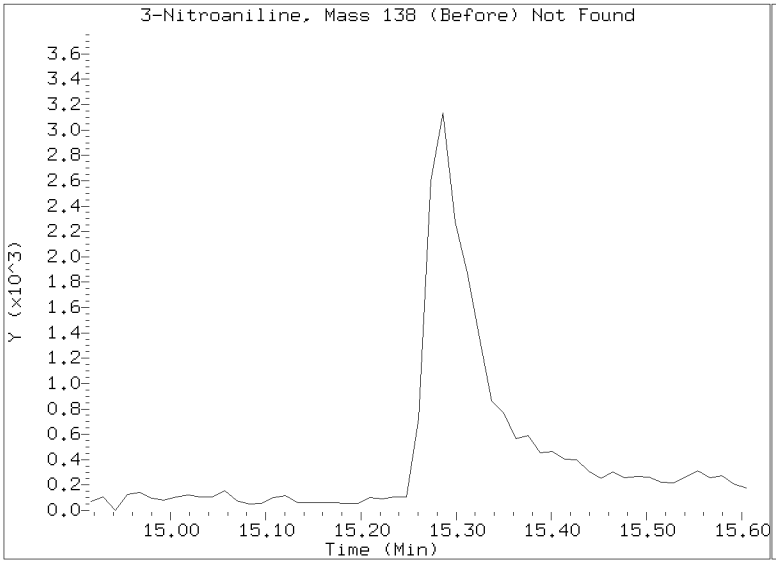
* Only compounds listed in the work order have been verified by the analyst *

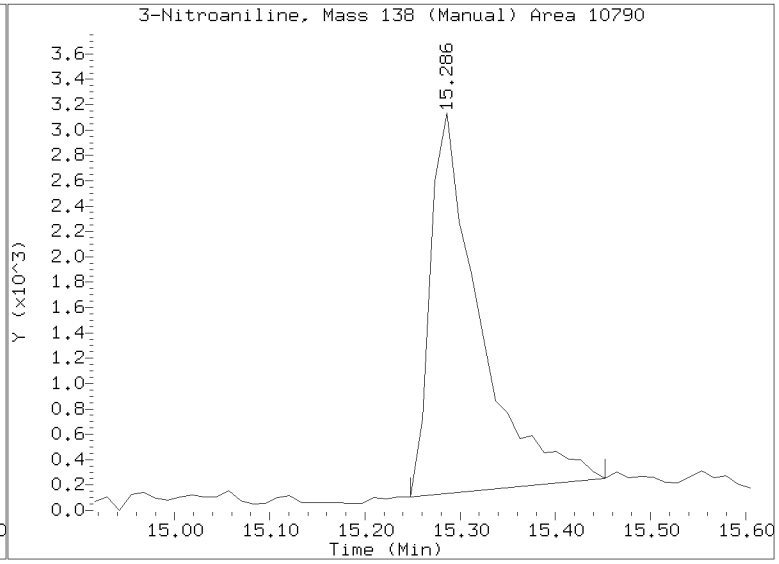
Quant Ion Manual Peak Adjustment Report

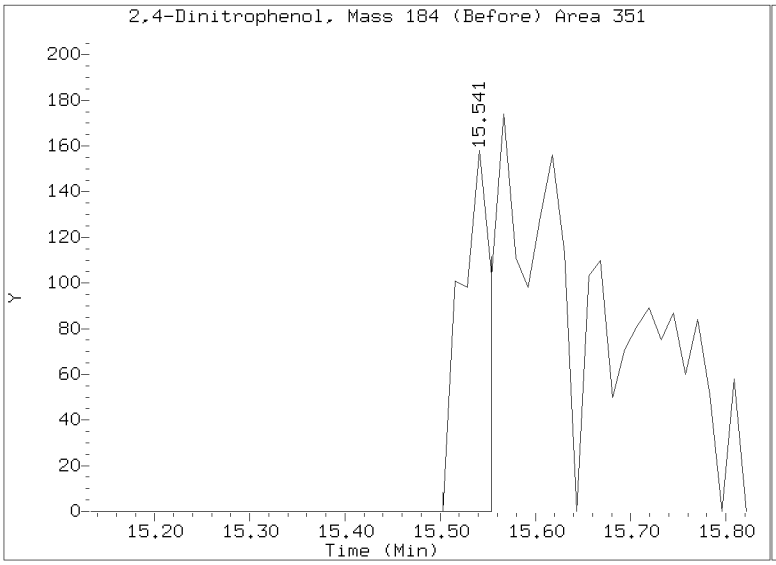
Datafile: //target/share/chem3/nt17.i/20230526.b/NT1705262321.D
Injection Date: 27-MAY-2023 01:10
Lab ID:SLE0434-LCV2 Client ID:
Report Date: 05/27/2023 13:34

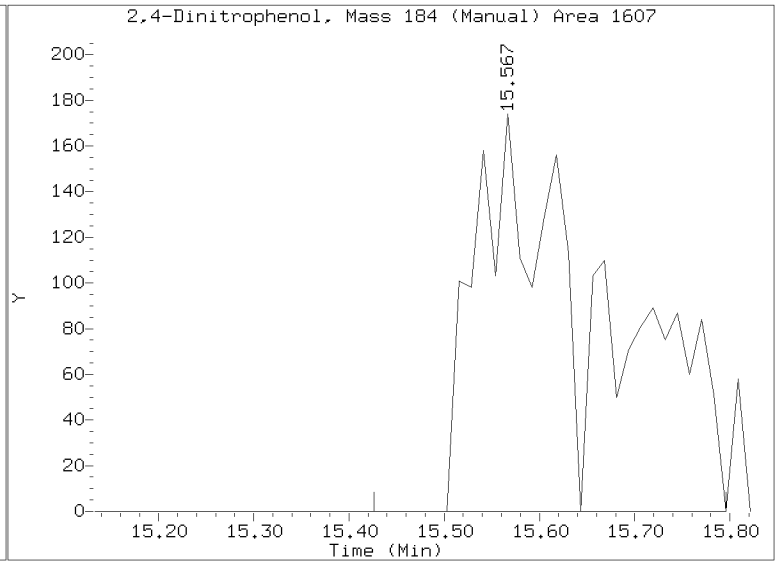












Quant Ion Manual Peak Adjustment Report

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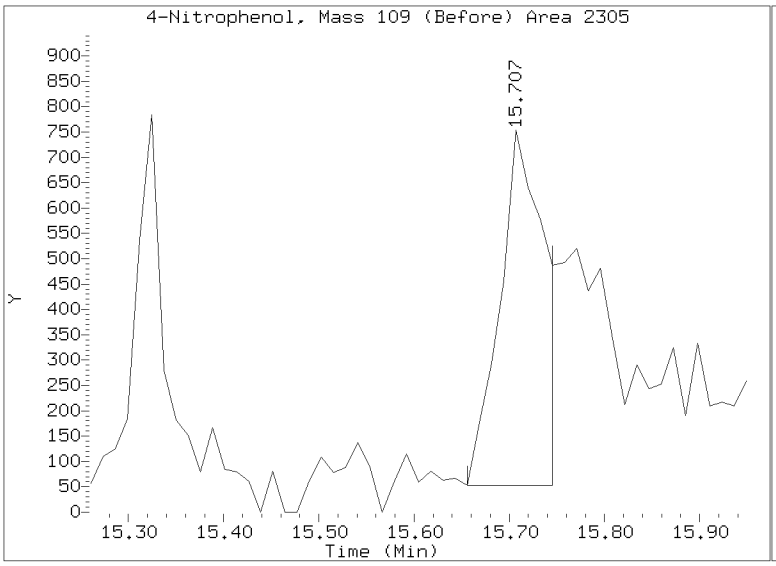
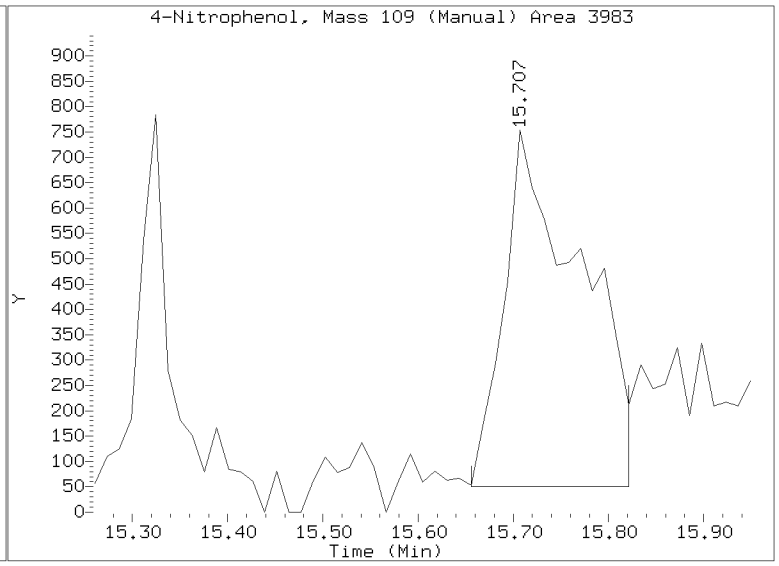
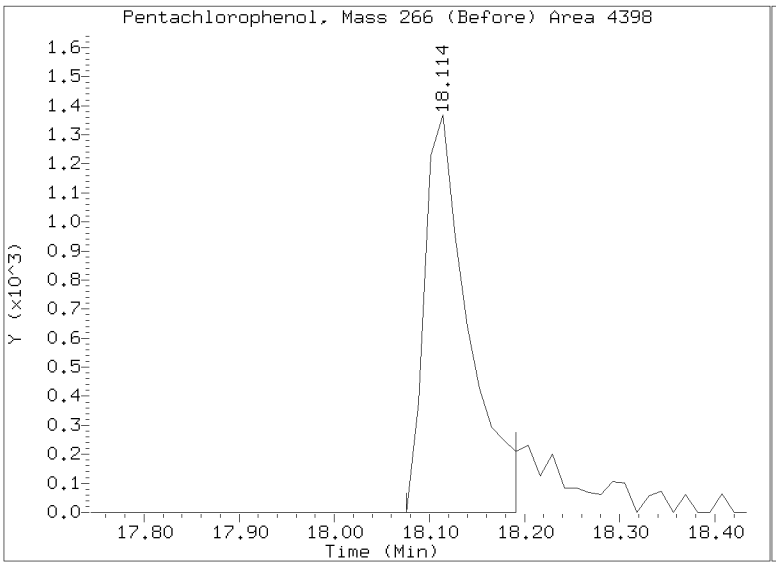
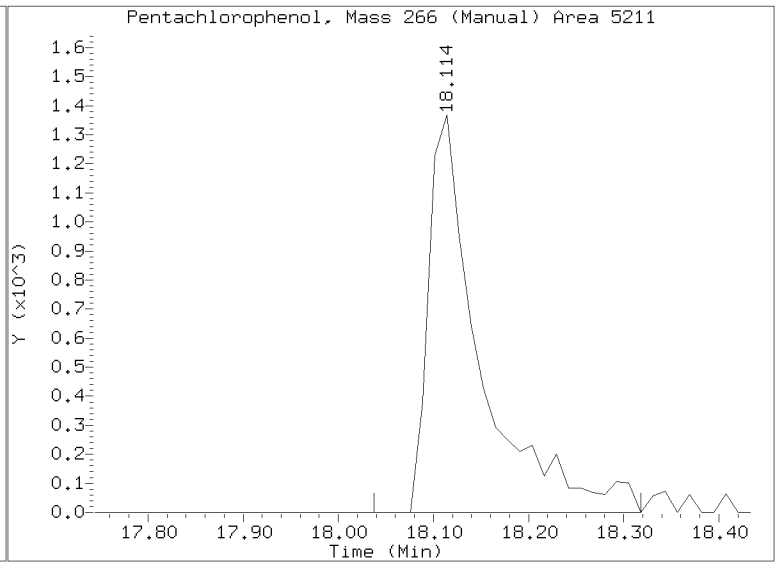
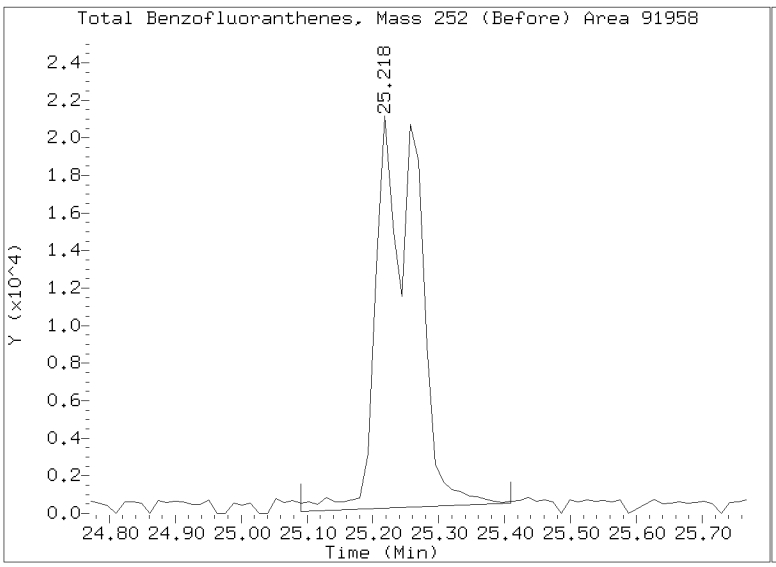
Injection Date: 27-MAY-2023 01:10
Lab ID:SLE0434-LCV2 Client ID:
Report Date: 05/27/2023 13:34

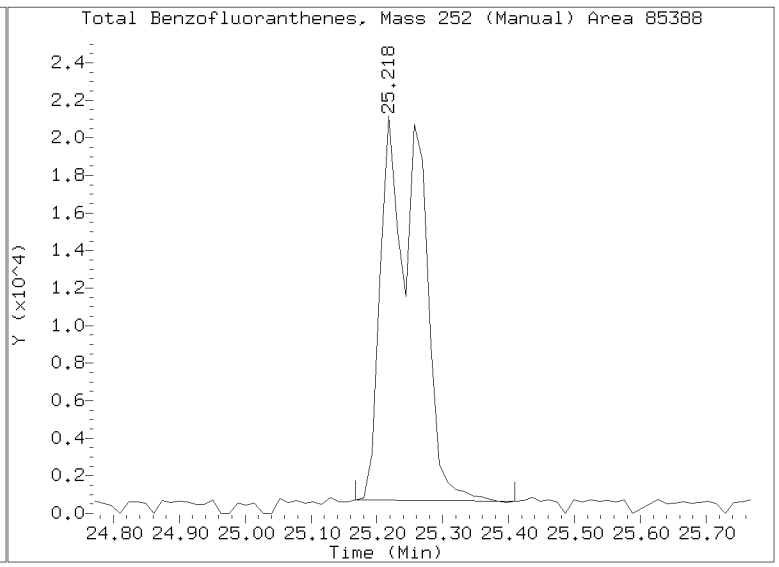












Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705262302.D	Calibration Date:	05/20/2023
Sequence:	SLE0434	Injection Date:	05/26/23
Lab Sample ID:	SLE0434-ICV1	Injection Time:	13:16
Sequence Name:	ABN 5		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	5.0000	5.5	1.8353850	2.0074660		9.4	+/-20
Benzyl Alcohol	A	5.0000	5.4	0.8545202	0.9145873		7.0	+/-20
4-Methylphenol	A	5.0000	5.4	1.3734410	1.4752330		7.4	+/-20
Naphthalene	A	5.0000	4.9	1.0999940	1.0881620		-1.1	+/-20
2-Methylnaphthalene	A	5.0000	5.1	0.7875944	0.8076824		2.6	+/-20
Acenaphthylene	A	5.0000	4.9	2.0301060	1.9814100		-2.4	+/-20
Dibenzofuran	A	5.0000	5.0	1.7711910	1.7739380		0.2	+/-20
Fluorene	A	5.0000	5.5	1.6839010	1.8551110		10.2	+/-20
Phenanthrene	A	5.0000	4.9	1.1671410	1.1527130		-1.2	+/-20
Anthracene	A	5.0000	5.0	1.0957620	1.1019570		0.6	+/-20
Fluoranthene	A	5.0000	4.9	1.8710850	1.8300410		-2.2	+/-20
Pyrene	A	5.0000	4.9	1.8967730	1.8623980		-1.8	+/-20
Butylbenzylphthalate	A	5.0000	5.0	0.8489339	0.8486947		-0.02	+/-20
Benzo(a)anthracene	A	5.0000	5.0	1.4729210	1.4803420		0.5	+/-20
Chrysene	A	5.0000	5.2	1.3859970	1.4369470		3.7	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	4.8	0.5787277	213216.6000		-3.3	+/-20
Benzofluoranthenes, Total	A	10.000	10.2	1.4236150	1.4476020		1.7	+/-20
Benzo(a)pyrene	A	5.0000	5.1	1.2492830	1.2674080		1.5	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	4.9	1.4490690	1.4257670		-1.6	+/-20
Dibenzo(a,h)anthracene	A	5.0000	4.9	1.2161710	1.2016910		-1.2	+/-20
Benzo(g,h,i)perylene	A	5.0000	4.8	1.1960510	1.1424220		-4.5	+/-20
2-Fluorophenol	A	7.5000	8.14	1.3093930	1.4214600		8.6	+/-20
Phenol-d5	A	7.5000	8.11	1.7328160	1.8735960		8.1	+/-20
2-Chlorophenol-d4	A	7.5000	7.89	1.3879870	1.4601370		5.2	+/-20
1,2-Dichlorobenzene-d4	A	5.0000	5.12	0.9755818	0.9998596		2.5	+/-20
Nitrobenzene-d5	A	5.0000	5.26	0.4552457	0.4789958		5.2	+/-20
2-Fluorobiphenyl	A	5.0000	4.92	1.5758130	1.5489160		-1.7	+/-20
2,4,6-Tribromophenol	A	7.5000	7.02	0.1414414	0.1633807		-6.4	+/-20
p-Terphenyl-d14	A	5.0000	5.87	1.3483810	1.5833960		17.4	+/-20
1,4-Dichlorobenzene-d4	A	4.0000	4.0	74521.0400	1.0000		0.0	

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705262302.D	Calibration Date:	05/20/2023
Sequence:	SLE0434	Injection Date:	05/26/23
Lab Sample ID:	SLE0434-ICV1	Injection Time:	13:16
Sequence Name:	ABN 5		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Naphthalene-d8	A	4.0000	4.0	263513.0000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	142608.8000	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	231763.7000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	143610.7000	1.0000		0.0	
Di-n-Octylphthalate-d4	A		4000	285983.8000				
Perylene-d12	A	4.0000	4.0	123763.9000	1.0000		0.0	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262302.D

Date : 26-MAY-2023 13:16

Client ID:

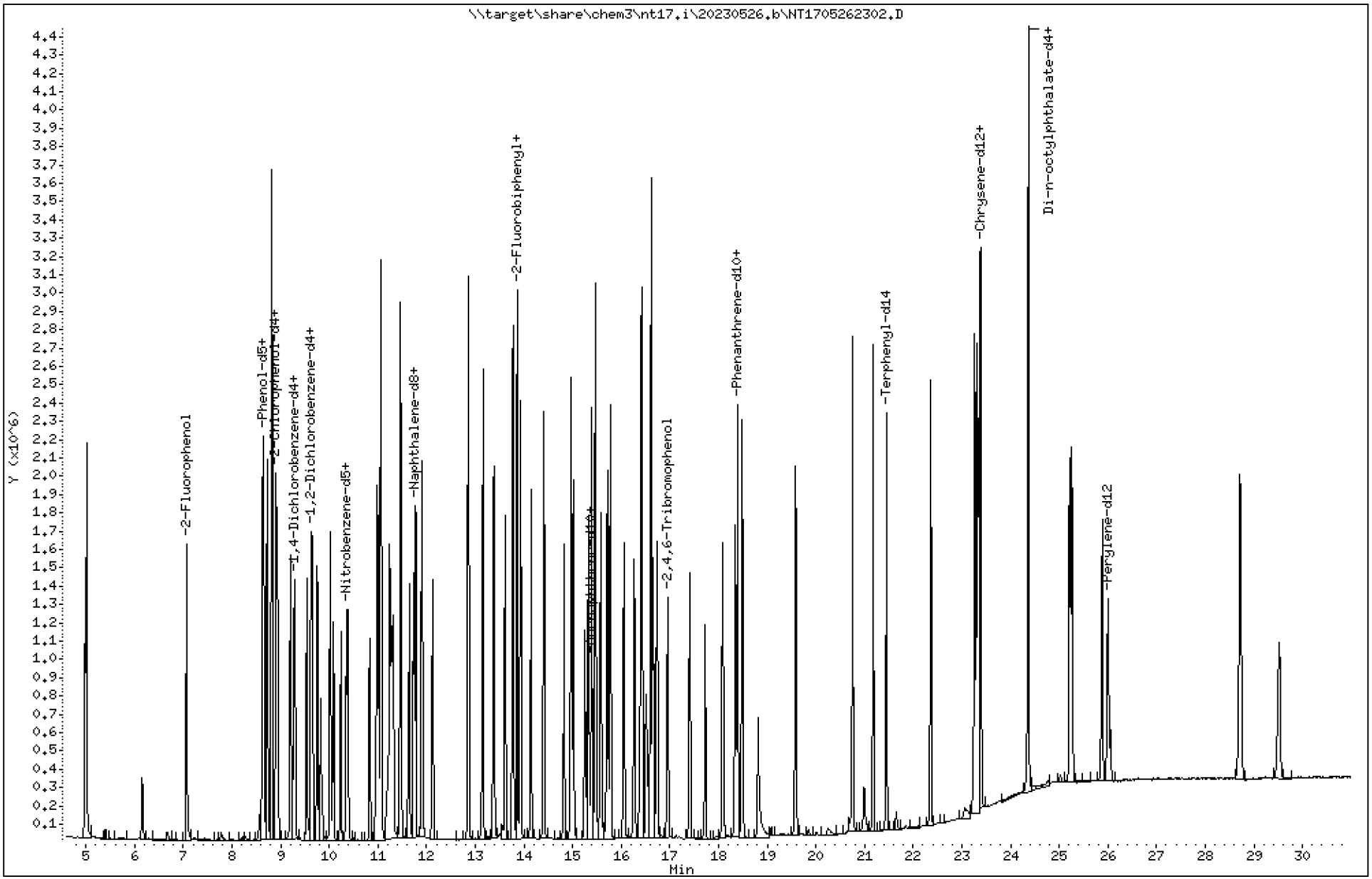
Sample Info: SLE0434-ICV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: VTS

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262302.D
Lab Smp Id: SLE0434-ICV1
Inj Date : 26-MAY-2023 13:16
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0434-ICV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 12:20 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.071	7.071	(0.763)	808945	7.50000	8.142
$	2 Phenol-d5	99	8.638	8.638	(0.933)	1066253	7.50000	8.109
	3 Phenol	94	8.651	8.651	(0.934)	761625	5.00000	5.469
$	5 2-Chlorophenol-d4	132	8.906	8.906	(0.961)	830956	7.50000	7.890
	4 Bis(2-Chloroethyl)ether	93	8.804	8.804	(0.950)	558404	5.00000	5.500
	6 2-Chlorophenol	128	8.931	8.931	(0.964)	574158	5.00000	4.937
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	588069	5.00000	4.996
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	303517	4.00000	
	9 1,4-Dichlorobenzene	146	9.289	9.289	(1.003)	562715	5.00000	4.794
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	379343	5.00000	5.124
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	561228	5.00000	5.086
	11 Benzyl alcohol	108	9.531	9.531	(1.029)	346991	5.00000	5.351
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	156770	5.00000	5.040
	13 2-Methylphenol	108	9.748	9.748	(1.052)	526354	5.00000	5.143
	17 Hexachloroethane	117	10.234	10.234	(1.105)	242608	5.00000	5.166
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	429961	5.00000	5.491
	15 4-Methylphenol	108	10.017	10.017	(1.081)	559698	5.00000	5.371
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	682854	5.00000	5.261
	19 Nitrobenzene	77	10.387	10.387	(0.886)	637565	5.00000	5.148
	20 Isophorone	82	10.834	10.834	(0.924)	819414	5.00000	4.834
	21 2-Nitrophenol	139	11.013	11.013	(0.939)	311906	5.00000	5.227
	22 2,4-Dimethylphenol	107	11.051	11.051	(0.942)	1126787	10.0000	9.725
	23 Bis(2-Chloroethoxy)methane	93	11.243	11.243	(0.959)	505586	5.00000	4.866
	24 Benzoic acid	105	11.307	11.307	(0.964)	1606578	20.0000	20.61
	25 2,4-Dichlorophenol	162	11.460	11.460	(0.977)	887234	10.0000	9.530
	26 1,2,4-Trichlorobenzene	180	11.651	11.651	(0.993)	586102	5.00000	5.796
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1140476	4.00000	
	28 Naphthalene	128	11.779	11.779	(1.004)	1551279	5.00000	4.946
	29 4-Chloroaniline	127	11.893	11.893	(1.014)	1231187	10.0000	9.959
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	303323	5.00000	6.056
	31 4-Chloro-3-methylphenol	107	12.850	12.850	(1.096)	1075212	10.0000	10.73
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	1151428	5.00000	5.128
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	421932	10.0000	7.290

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.781	13.781	(0.899)	660224	10.0000	10.14
	35	2,4,5-Trichlorophenol	196	13.857	13.857	(0.904)	688452	10.0000	9.986
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	1205175	5.00000	4.915
	37	2-Chloronaphthalene	162	14.151	14.151	(0.923)	984848	5.00000	4.951
	38	2-Nitroaniline	65	14.406	14.406	(0.940)	735202	10.0000	10.91
	39	Dimethylphthalate	163	14.826	14.826	(0.968)	1072793	5.00000	5.009
	40	Acenaphthylene	152	15.018	15.018	(0.980)	1541688	5.00000	4.880
	41	2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	522279	10.0000	10.42
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	622461	4.00000	
	43	3-Nitroaniline	138	15.247	15.247	(0.995)	469854	10.0000	10.12
	44	Acenaphthene	153	15.388	15.388	(1.004)	998310	5.00000	5.055
	45	2,4-Dinitrophenol	184	15.464	15.464	(1.009)	672635	20.0000	21.36
	46	Dibenzofuran	168	15.719	15.719	(1.026)	1380259	5.00000	5.008
	47	4-Nitrophenol	109	15.579	15.579	(1.017)	344604	10.0000	11.17
	48	2,4-Dinitrotoluene	165	15.770	15.770	(1.029)	709857	10.0000	10.81
	50	Diethylphthalate	149	16.267	16.267	(1.062)	1287303	5.00000	6.163
	49	Fluorene	166	16.420	16.420	(1.072)	1443418	5.00000	5.508
	51	4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	624805	5.00000	5.186
	52	4-Nitroaniline	138	16.509	16.509	(1.077)	448206	10.0000	10.20
	53	4,6-Dinitro-2-methylphenol	198	16.611	16.611	(0.906)	803404	20.0000	18.74
	54	N-Nitrosodiphenylamine	169	16.662	16.662	(0.908)	676212	5.00000	4.494
$	55	2,4,6-Tribromophenol	330	16.954	16.954	(1.106)	190684	7.50000	7.023
	56	4-Bromophenyl-phenylether	248	17.400	17.400	(0.949)	261878	5.00000	4.968
	57	Hexachlorobenzene	284	17.731	17.731	(0.967)	264981	5.00000	4.933
	58	Pentachlorophenol	266	18.088	18.088	(0.986)	304824	10.0000	9.366
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	1074054	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	1547595	5.00000	4.938
	61	Anthracene	178	18.483	18.483	(1.008)	1479451	5.00000	5.028
	62	Carbazole	167	18.815	18.815	(1.026)	947904	5.00000	5.028
	63	Di-n-butylphthalate	149	19.580	19.580	(1.067)	1838090	5.00000	5.174
	64	Fluoranthene	202	20.753	20.753	(0.889)	1655746	5.00000	4.890
	65	Pyrene	202	21.174	21.174	(0.907)	1685021	5.00000	4.909
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	1432591	5.00000	5.871
	67	Butylbenzylphthalate	149	22.360	22.360	(0.957)	767864	5.00000	4.999
	68	Benzo(a)anthracene	228	23.317	23.317	(0.998)	1339352	5.00000	5.025
*	69	Chrysene-d12	240	23.355	23.355	(1.000)	723807	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.266	23.266	(0.996)	861474	15.0000	15.63
	71	Chrysene	228	23.394	23.394	(1.002)	1300090	5.00000	5.184
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.959)	1066083	5.00000	4.835
*	134	Di-n-octylphthalate-d4	153	24.363	24.363	(1.000)	1524055	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.363	(1.000)	1884751	5.00000	4.879
	74	Benzo(b)fluoranthene	252	25.218	25.218	(0.970)	1417405	5.00000	5.360
	75	Benzo(k)fluoranthene	252	25.256	25.256	(0.972)	1210406	5.00000	4.845
	76	Benzo(a)pyrene	252	25.881	25.881	(0.996)	1056689	5.00000	5.073
*	77	Perylene-d12	264	25.996	25.996	(1.000)	666992	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.716	28.716	(1.105)	1188719	5.00000	4.920
	79	Dibenzo(a,h)anthracene	278	28.729	28.729	(1.105)	1001898	5.00000	4.940
	80	Benzo(g,h,i)perylene	276	29.521	29.521	(1.136)	952483	5.00000	4.776
	90	N-Nitrosodimethylamine	74	4.982	4.982	(0.538)	690217	10.0000	10.41
	91	Aniline	93	8.728	8.728	(0.942)	1220475	10.0000	10.46
	93	Benzidine	184	20.996	20.996	(0.899)	245965	10.0000	2.886
	103	Pyridine	79	5.007	5.007	(0.541)	1055671	10.0000	10.04
	105	1-methylnaphthalene	142	13.385	13.385	(1.141)	1047138	5.00000	5.026
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.725	16.725	(1.091)	1283397	5.00000	5.264

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.256	25.256	(0.972)	2413848	10.0000	10.17
120 2,3,4,6-Tetrachlorophenol	232	16.050	16.050	(1.047)	289217	5.00000	3.712

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262302.D
Lab Smp Id: SLE0434-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 27-MAY-2023
Calibration Time: 05:31
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	303517	151759	607034	303517	0.00
27 Naphthalene-d8	1140476	570238	2280952	1140476	0.00
42 Acenaphthene-d10	622461	311231	1244922	622461	0.00
59 Phenanthrene-d10	1074054	537027	2148108	1074054	0.00
69 Chrysene-d12	723807	361904	1447614	723807	0.00
134 Di-n-octylphthala	1524055	762028	3048110	1524055	0.00
77 Perylene-d12	666992	333496	1333984	666992	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	0.00
69 Chrysene-d12	23.36	22.86	23.86	23.36	0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	0.00
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262302.D

Lab ID: SLE0434-ICV1
nt17.i, ABN.m, 26-MAY-2023 13:16

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b

Instrument: nt17.i Date: 26-MAY-2023 Method: ABN.m

INITIAL CAL: 09-MAY-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1705262302.D 26-MAY-2023 13:16

Compound	%D
Hexachlorobutadiene	21.12
Hexachlorocyclopentadiene	-27.1
Diethylphthalate	23.26
Benzidine	-71.1
2,3,4,6-Tetrachlorophenol	-25.8

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705262319.D	Calibration Date:	05/20/2023
Sequence:	SLE0434	Injection Date:	05/26/23
Lab Sample ID:	SLE0434-ICV2	Injection Time:	23:55
Sequence Name:	ABN 5		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Phenol	A	5.0000	5.3	1.8353850	1.9334130		5.3	+/-20	
Benzyl Alcohol	A	5.0000	5.3	0.8545202	0.8989821		5.2	+/-20	
4-Methylphenol	A	5.0000	5.1	1.3734410	1.3979040		1.8	+/-20	
Naphthalene	A	5.0000	5.0	1.0999940	1.1109670		1.0	+/-20	
2-Methylnaphthalene	A	5.0000	5.0	0.7875944	0.7923669		0.6	+/-20	
Acenaphthylene	A	5.0000	5.1	2.0301060	2.0643150		1.7	+/-20	
Dibenzofuran	A	5.0000	5.1	1.7711910	1.7927840		1.2	+/-20	
Fluorene	A	5.0000	5.5	1.6839010	1.8652970		10.8	+/-20	
Phenanthrene	A	5.0000	4.9	1.1671410	1.1473350		-1.7	+/-20	
Anthracene	A	5.0000	5.0	1.0957620	1.1031820		0.7	+/-20	
Fluoranthene	A	5.0000	4.2	1.8710850	1.5734230		-15.9	+/-20	
Pyrene	A	5.0000	4.3	1.8967730	1.6150520		-14.9	+/-20	
Butylbenzylphthalate	A	5.0000	4.6	0.8489339	0.7806223		-8.0	+/-20	
Benzo(a)anthracene	A	5.0000	5.1	1.4729210	1.5084410		2.4	+/-20	
Chrysene	A	5.0000	5.1	1.3859970	1.4232090		2.7	+/-20	
bis(2-Ethylhexyl)phthalate	A	5.0000	4.4	0.5787277	187054.8000		-11.5	+/-20	
Benzofluoranthenes, Total	A	10.000	11.3	1.4236150	1.6132720		13.3	+/-20	
Benzo(a)pyrene	A	5.0000	5.0	1.2492830	1.2468320		-0.2	+/-20	
Indeno(1,2,3-cd)pyrene	A	5.0000	2.8	1.4490690	0.8174650		-43.6	+/-20	*
Dibenzo(a,h)anthracene	A	5.0000	3.1	1.2161710	0.7467905		-38.6	+/-20	*
Benzo(g,h,i)perylene	A	5.0000	2.2	1.1960510	0.5291392		-55.8	+/-20	*
2-Fluorophenol	A	7.5000	8.16	1.3093930	1.4240990		8.8	+/-20	
Phenol-d5	A	7.5000	8.05	1.7328160	1.8592440		7.3	+/-20	
2-Chlorophenol-d4	A	7.5000	7.81	1.3879870	1.4444720		4.1	+/-20	
1,2-Dichlorobenzene-d4	A	5.0000	5.13	0.9755818	1.0002570		2.5	+/-20	
Nitrobenzene-d5	A	5.0000	5.19	0.4552457	0.4728531		3.9	+/-20	
2-Fluorobiphenyl	A	5.0000	5.29	1.5758130	1.6659530		5.7	+/-20	
2,4,6-Tribromophenol	A	7.5000	6.86	0.1414414	0.1595584		-8.6	+/-20	
p-Terphenyl-d14	A	5.0000	4.21	1.3483810	1.1343560		-15.9	+/-20	
1,4-Dichlorobenzene-d4	A	4.0000	4.0	74521.0400	1.0000		0.0		

* Values outside of QC limits

INITIAL CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705262319.D	Calibration Date:	05/20/2023
Sequence:	SLE0434	Injection Date:	05/26/23
Lab Sample ID:	SLE0434-ICV2	Injection Time:	23:55
Sequence Name:	ABN 5		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Naphthalene-d8	A	4.0000	4.0	263513.0000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.0	142608.8000	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.0	231763.7000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.0	143610.7000	1.0000		0.0	
Di-n-Octylphthalate-d4	A		4000	285983.8000				
Perylene-d12	A	4.0000	4.0	123763.9000	1.0000		0.0	

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262319.D

Page 1

Date : 26-MAY-2023 23:55

Client ID:

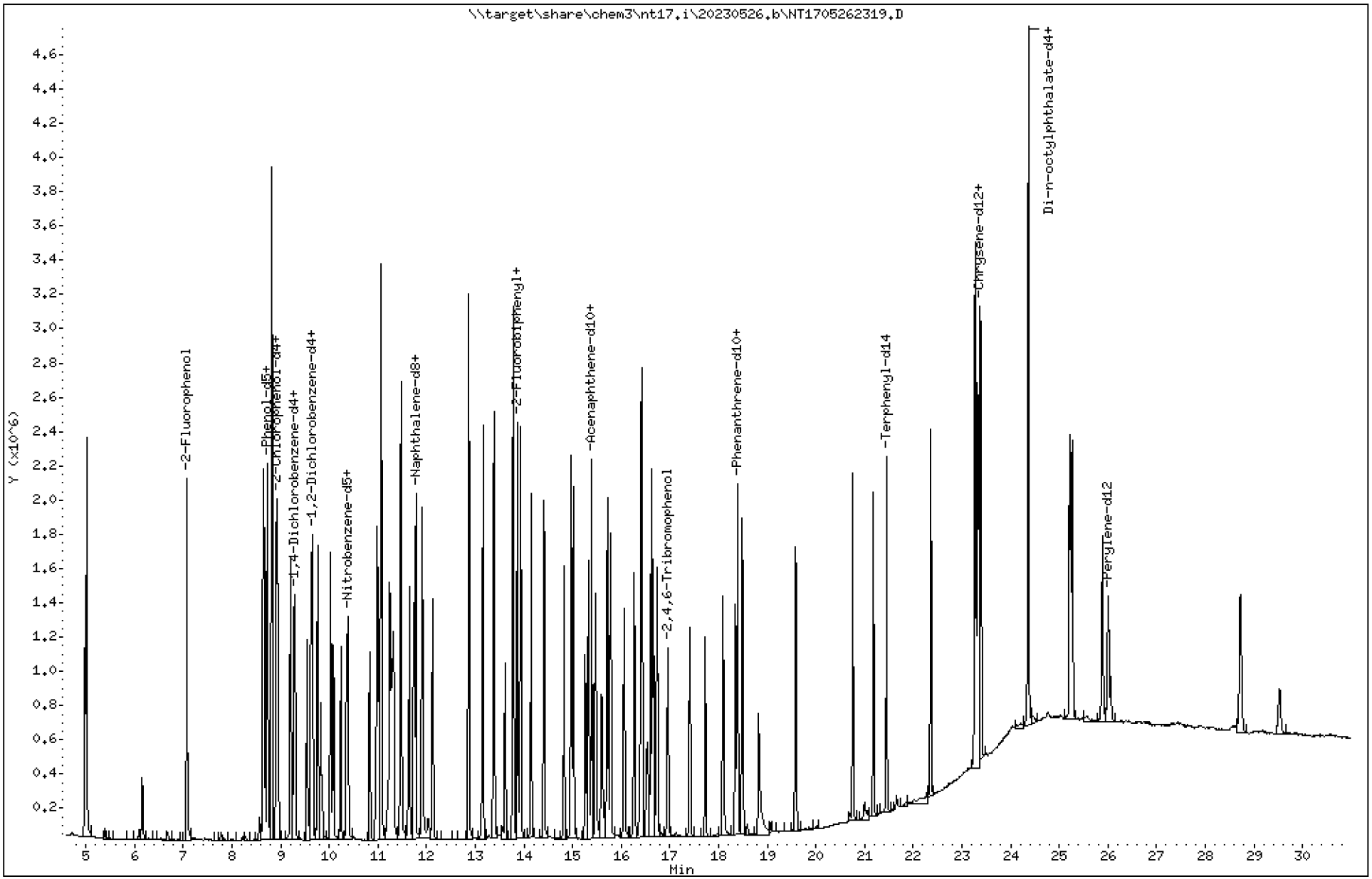
Instrument: nt17.i

Sample Info: SLE0434-ICV2

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262319.D
Lab Smp Id: SLE0434-ICV2
Inj Date : 26-MAY-2023 23:55
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0434-ICV2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 13:34 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							AMOUNTS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.071	7.071	(0.763)	873821	7.50000	8.157
$	2 Phenol-d5	99	8.639	8.639	(0.933)	1140824	7.50000	8.047
	3 Phenol	94	8.664	8.664	(0.935)	790889	5.00000	5.267
$	5 2-Chlorophenol-d4	132	8.919	8.919	(0.963)	886322	7.50000	7.805
	4 Bis(2-Chloroethyl)ether	93	8.817	8.817	(0.952)	594057	5.00000	5.427
	6 2-Chlorophenol	128	8.944	8.944	(0.966)	608198	5.00000	4.850
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	643194	5.00000	5.068
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	327251	4.00000	
	9 1,4-Dichlorobenzene	146	9.301	9.301	(1.004)	612672	5.00000	4.841
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	409169	5.00000	5.126
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	601683	5.00000	5.057
	11 Benzyl alcohol	108	9.544	9.544	(1.030)	367741	5.00000	5.260
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	163819	5.00000	4.885
	13 2-Methylphenol	108	9.761	9.761	(1.054)	541838	5.00000	4.910
	17 Hexachloroethane	117	10.234	10.234	(1.105)	230037	5.00000	4.543
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	420410	5.00000	4.979
	15 4-Methylphenol	108	10.030	10.030	(1.083)	571832	5.00000	5.089
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	680678	5.00000	5.193
	19 Nitrobenzene	77	10.387	10.387	(0.886)	635328	5.00000	5.081
	20 Isophorone	82	10.835	10.835	(0.924)	938145	5.00000	5.481
	21 2-Nitrophenol	139	11.013	11.013	(0.939)	324590	5.00000	5.387
	22 2,4-Dimethylphenol	107	11.064	11.064	(0.943)	1117577	10.0000	9.553
	23 Bis(2-Chloroethoxy)methane	93	11.243	11.243	(0.959)	533332	5.00000	5.084
	24 Benzoic acid	105	11.320	11.320	(0.965)	1555636	20.0000	19.77
	25 2,4-Dichlorophenol	162	11.473	11.473	(0.978)	1023814	10.0000	10.89
	26 1,2,4-Trichlorobenzene	180	11.652	11.652	(0.993)	620493	5.00000	6.077
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1151610	4.00000	
	28 Naphthalene	128	11.779	11.779	(1.004)	1599251	5.00000	5.050
	29 4-Chloroaniline	127	11.906	11.906	(1.015)	1229663	10.0000	9.850
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	251568	5.00000	4.974
	31 4-Chloro-3-methylphenol	107	12.863	12.863	(1.097)	1035778	10.0000	10.23
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	1140622	5.00000	5.030
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	247471	10.0000	4.576

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.781	13.781	(0.899)	646150	10.0000	10.62
	35	2,4,5-Trichlorophenol	196	13.857	13.857	(0.904)	689868	10.0000	10.71
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	1211131	5.00000	5.286
	37	2-Chloronaphthalene	162	14.151	14.151	(0.923)	975094	5.00000	5.246
	38	2-Nitroaniline	65	14.406	14.406	(0.940)	693386	10.0000	11.01
	39	Dimethylphthalate	163	14.827	14.827	(0.968)	1031519	5.00000	5.155
	40	Acenaphthylene	152	15.018	15.018	(0.980)	1500736	5.00000	5.084
	41	2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	479140	10.0000	10.23
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	581592	4.00000	
	43	3-Nitroaniline	138	15.260	15.260	(0.996)	360394	10.0000	8.305
	44	Acenaphthene	153	15.388	15.388	(1.004)	941900	5.00000	5.105
	45	2,4-Dinitrophenol	184	15.477	15.477	(1.010)	390468	20.0000	13.48
	46	Dibenzofuran	168	15.719	15.719	(1.026)	1303336	5.00000	5.061
	47	4-Nitrophenol	109	15.604	15.604	(1.018)	237522	10.0000	8.241
	48	2,4-Dinitrotoluene	165	15.783	15.783	(1.030)	619303	10.0000	10.10
	50	Diethylphthalate	149	16.267	16.267	(1.062)	1219284	5.00000	6.248
	49	Fluorene	166	16.420	16.420	(1.072)	1356052	5.00000	5.539
	51	4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	618641	5.00000	5.496
	52	4-Nitroaniline	138	16.535	16.535	(1.079)	356691	10.0000	8.684
	53	4,6-Dinitro-2-methylphenol	198	16.611	16.611	(0.906)	502724	20.0000	13.72
	54	N-Nitrosodiphenylamine	169	16.662	16.662	(0.908)	656391	5.00000	5.102
$	55	2,4,6-Tribromophenol	330	16.967	16.967	(1.107)	173996	7.50000	6.859
	56	4-Bromophenyl-phenylether	248	17.413	17.413	(0.949)	239821	5.00000	5.321
	57	Hexachlorobenzene	284	17.731	17.731	(0.967)	242792	5.00000	5.286
	58	Pentachlorophenol	266	18.088	18.088	(0.986)	252920	10.0000	9.101
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	918371	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	1317099	5.00000	4.915
	61	Anthracene	178	18.484	18.484	(1.008)	1266413	5.00000	5.034
	62	Carbazole	167	18.828	18.828	(1.026)	1045036	5.00000	6.370
	63	Di-n-butylphthalate	149	19.580	19.580	(1.067)	1535932	5.00000	5.056
	64	Fluoranthene	202	20.753	20.753	(0.889)	1357219	5.00000	4.205
	65	Pyrene	202	21.187	21.187	(0.907)	1393128	5.00000	4.257
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	978484	5.00000	4.206
	67	Butylbenzylphthalate	149	22.361	22.361	(0.957)	673357	5.00000	4.598
	68	Benzo(a)anthracene	228	23.317	23.317	(0.998)	1301166	5.00000	5.121
*	69	Chrysene-d12	240	23.356	23.356	(1.000)	690072	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.279	23.279	(0.997)	1107168	15.0000	20.55
	71	Chrysene	228	23.394	23.394	(1.002)	1227646	5.00000	5.134
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.959)	935274	5.00000	4.423
*	134	Di-n-octylphthalate-d4	153	24.363	24.363	(1.000)	1461689	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.363	(1.000)	1826613	5.00000	4.930
	74	Benzo(b)fluoranthene	252	25.218	25.218	(0.970)	1229217	5.00000	5.451
	75	Benzo(k)fluoranthene	252	25.269	25.269	(0.972)	1224209	5.00000	5.747
	76	Benzo(a)pyrene	252	25.894	25.894	(0.996)	886382	5.00000	4.990
*	77	Perylene-d12	264	26.009	26.009	(1.000)	568726	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.716	28.716	(1.104)	581142	5.00000	2.821
	79	Dibenzo(a,h)anthracene	278	28.729	28.729	(1.105)	530899	5.00000	3.070
	80	Benzo(g,h,i)perylene	276	29.534	29.534	(1.136)	376169	5.00000	2.212
	90	N-Nitrosodimethylamine	74	4.982	4.982	(0.538)	737459	10.0000	10.32
	91	Aniline	93	8.728	8.728	(0.942)	1315075	10.0000	10.45
	93	Benzidine	184	20.996	20.996	(0.899)	100495	10.0000	1.248
	103	Pyridine	79	5.008	5.008	(0.541)	1134830	10.0000	10.01
	105	1-methylnaphthalene	142	13.385	13.385	(1.141)	1044448	5.00000	4.965
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.738	16.738	(1.092)	1155003	5.00000	5.070

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.269	25.269	(0.972)	2293774	10.0000	11.33
120 2,3,4,6-Tetrachlorophenol	232	16.050	16.050	(1.047)	266022	5.00000	3.654

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262319.D
Lab Smp Id: SLE0434-ICV2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:16
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	303517	151759	607034	327251	7.82
27 Naphthalene-d8	1140476	570238	2280952	1151610	0.98
42 Acenaphthene-d10	622461	311231	1244922	581592	-6.57
59 Phenanthrene-d10	1074054	537027	2148108	918371	-14.49
69 Chrysene-d12	723807	361904	1447614	690072	-4.66
134 Di-n-octylphthala	1524055	762028	3048110	1461689	-4.09
77 Perylene-d12	666992	333496	1333984	568726	-14.73

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	0.00
69 Chrysene-d12	23.36	22.86	23.86	23.36	0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.36	0.00
77 Perylene-d12	26.00	25.50	26.50	26.01	0.05

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

REVIEW SUMMARY FOR FILE - NT1705262319.D

Lab ID: SLE0434-ICV2
nt17.i, ABN.m, 26-MAY-2023 23:55

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b

Instrument: nt17.i Date: 26-MAY-2023 Method: ABN.m

INITIAL CAL: 09-MAY-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1705262319.D 26-MAY-2023 23:55

Compound	%D
1,2,4-Trichlorobenzene	21.54
Hexachlorocyclopentadiene	-54.2
2,4-Dinitrophenol	-32.6
Diethylphthalate	24.96
4,6-Dinitro-2-methylphenol	-31.4
Carbazole	27.4
3,3'-Dichlorobenzidine	37.0
Indeno(1,2,3-cd)pyrene	-43.59
Dibenzo(a,h)anthracene	-38.59
Benzo(g,h,i)perylene	-55.76
Benzidine	-87.5
2,3,4,6-Tetrachlorophenol	-26.9

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705162311.D	Calibration Date:	05/20/2023
Sequence:	SLE0338	Injection Date:	05/17/23
Lab Sample ID:	SLE0338-SCV1	Injection Time:	00:29
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	5.0000	4.8	1.8353850	1.7703870		-3.5	+/-20
bis(2-chloroethyl) ether	A	5.0000	5.6	1.3379870	1.4893240		11.3	+/-20
2-Chlorophenol	A	5.0000	5.3	1.5326990	1.6228700		5.9	+/-20
1,3-Dichlorobenzene	A	5.0000	5.3	1.5511950	1.6501940		6.4	+/-20
1,4-Dichlorobenzene	A	5.0000	5.1	1.5470660	1.5691780		1.4	+/-20
1,2-Dichlorobenzene	A	5.0000	5.3	1.4543210	1.5292780		5.2	+/-20
Benzyl Alcohol	A	5.0000	5.3	0.8545202	0.9013726		5.5	+/-20
2,2'-Oxybis(1-chloropropane)	A	5.0000	6.2	0.4099195	0.5065919		23.6	+/-20
2-Methylphenol	A	5.0000	4.2	1.3488930	1.1408950		-15.4	+/-20
Hexachloroethane	A	5.0000	5.4	0.6188571	0.6706626		8.4	+/-20
N-Nitroso-di-n-Propylamine	A	5.0000	5.5	1.0320180	1.1388000		10.3	+/-20
4-Methylphenol	A	5.0000	4.7	1.3734410	1.2803100		-6.8	+/-20
Nitrobenzene	A	5.0000	5.3	0.4343371	0.4629085		6.6	+/-20
Isophorone	A	5.0000	6.9	0.5945569	0.8255466		38.9	+/-20
2-Nitrophenol	A	5.0000	4.9	0.2092939	0.2050518		-2.0	+/-20
2,4-Dimethylphenol	A	5.0000	3.8	0.4063609	0.3078683		-24.2	+/-20
Bis(2-Chloroethoxy)methane	A	5.0000	6.2	0.3643905	0.4541653		24.6	+/-20
2,4-Dichlorophenol	A	5.0000	4.7	0.3265369	0.3074331		-5.9	+/-20
1,2,4-Trichlorobenzene	A	5.0000	5.9	0.3546444	0.4170169		17.6	+/-20
Naphthalene	A	5.0000	5.1	1.0999940	1.1283830		2.6	+/-20
Benzoic acid	A	10.000	6.8	0.2083430	0.1848088		-32.4	+/-20
4-Chloroaniline	A	5.0000	4.5	0.4335951	0.3891520		-10.2	+/-20
Hexachlorobutadiene	A	5.0000	5.2	0.1756752	0.1841292		4.8	+/-20
4-Chloro-3-Methylphenol	A	5.0000	4.9	0.3515982	0.3430524		-2.4	+/-20
2-Methylnaphthalene	A	5.0000	5.0	0.7875944	0.7919961		0.6	+/-20
Hexachlorocyclopentadiene	A	5.0000	4.2	0.2851479	0.3138457		-15.6	+/-20
2,4,6-Trichlorophenol	A	5.0000	4.8	0.4185098	0.4012473		-4.1	+/-20
2,4,5-Trichlorophenol	A	5.0000	4.8	0.4430396	0.4286209		-3.3	+/-20
2-Chloronaphthalene	A	5.0000	5.4	1.2783860	1.3808230		8.0	+/-20
2-Nitroaniline	A	5.0000	5.4	0.4329542	0.4637668		7.1	+/-20
Acenaphthylene	A	5.0000	5.3	2.0301060	2.1446180		5.6	+/-20
Dimethylphthalate	A	5.0000	5.4	1.3763000	1.4914260		8.4	+/-20
2,6-Dinitrotoluene	A	5.0000	5.4	0.3222248	0.3482538		8.1	+/-20

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E

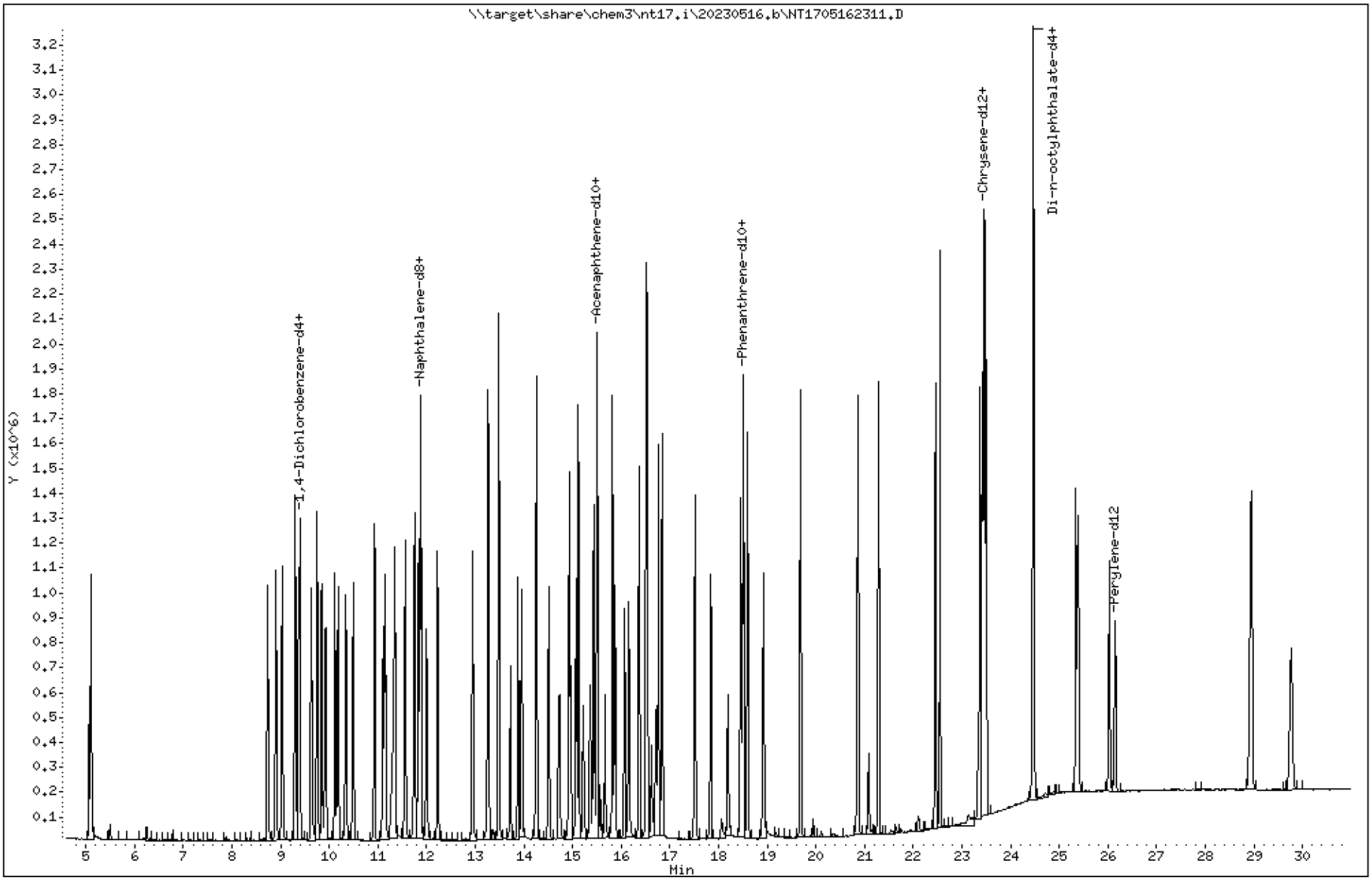
Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705162311.D	Calibration Date:	05/20/2023
Sequence:	SLE0338	Injection Date:	05/17/23
Lab Sample ID:	SLE0338-SCV1	Injection Time:	00:29
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Acenaphthene	A	5.0000	5.3	1.2690180	1.3408840		5.7	+/-20
3-Nitroaniline	A	5.0000	5.2	0.2984432	0.3085226		3.4	+/-20
2,4-Dinitrophenol	A	5.0000	2.1	0.1541125	0.0825980		-57.6	+/-20
Dibenzofuran	A	5.0000	5.2	1.7711910	1.8289500		3.3	+/-20
4-Nitrophenol	A	5.0000	4.5	0.1664767	0.1785537		-9.9	+/-20
2,4-Dinitrotoluene	A	5.0000	5.3	0.4218034	0.4445276		5.4	+/-20
Fluorene	A	5.0000	5.4	1.6839010	1.8177980		8.0	+/-20
4-Chlorophenylphenyl ether	A	5.0000	5.5	0.7741612	0.8457125		9.2	+/-20
Diethyl phthalate	A	5.0000	5.5	1.3422100	1.4747500		9.9	+/-20
4-Nitroaniline	A	5.0000	5.1	0.2824863	0.2885721		2.2	+/-20
4,6-Dinitro-2-methylphenol	A	5.0000	3.4	0.1119544	0.1071081		-32.9	+/-20
N-Nitrosodiphenylamine	A	5.0000	5.5	0.5603251	0.6129688		9.4	+/-20
4-Bromophenyl phenyl ether	A	5.0000	5.4	0.1963243	0.2128234		8.4	+/-20
Hexachlorobenzene	A	5.0000	4.9	0.2000477	0.1965571		-1.7	+/-20
Pentachlorophenol	A	5.0000	3.9	0.0936571	0.0930616		-21.1	+/-20
Phenanthrene	A	5.0000	5.0	1.1671410	1.1763460		0.8	+/-20
Anthracene	A	5.0000	4.5	1.0957620	0.9926848		-9.4	+/-20
Carbazole	A	5.0000	5.9	0.8459395	0.8437186		18.8	+/-20
Di-n-Butylphthalate	A	5.0000	5.6	1.3231390	1.4929340		12.8	+/-20
Fluoranthene	A	5.0000	5.5	1.8710850	2.0458810		9.3	+/-20
Pyrene	A	5.0000	5.3	1.8967730	1.9974090		5.3	+/-20
Butylbenzylphthalate	A	5.0000	5.8	0.8489339	0.9889680		16.5	+/-20
Benzo(a)anthracene	A	5.0000	5.1	1.4729210	1.4918120		1.3	+/-20
3,3'-Dichlorobenzidine	A	10.000	12.0	0.3736402	0.3589686		19.9	+/-20
Chrysene	A	5.0000	5.0	1.3859970	1.3909860		0.4	+/-20
bis(2-Ethylhexyl)phthalate	A	5.0000	5.8	0.5787277	0.6704186		15.8	+/-20
Di-n-Octylphthalate	A	5.0000	5.5	1.0139120	1.1117310		9.6	+/-20
Benzofluoranthenes, Total	A	10.000	10.0	1.4236150	1.4262140		0.2	+/-20
Benzo(a)pyrene	A	5.0000	5.2	1.2492830	1.2922210		3.4	+/-20
Indeno(1,2,3-cd)pyrene	A	5.0000	5.0	1.4490690	1.4575380		0.6	+/-20
Dibenzo(a,h)anthracene	A	5.0000	5.0	1.2161710	1.2087610		-0.6	+/-20
Benzo(g,h,i)perylene	A	5.0000	5.1	1.1960510	1.2090820		1.1	+/-20
1-Methylnaphthalene	A	5.0000	5.3	0.7306547	0.7671913		5.0	+/-20

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D
Date : 17-MAY-2023 00:29
Client ID:
Sample Info: SLE0338-SCV1

Instrument: nt17.i
Operator: JGR
Column phase: ZB-5msi
Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

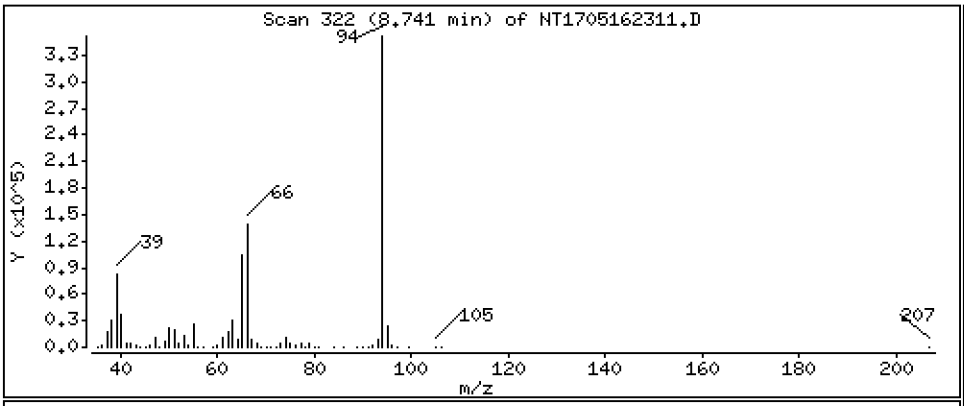
Operator: JGR

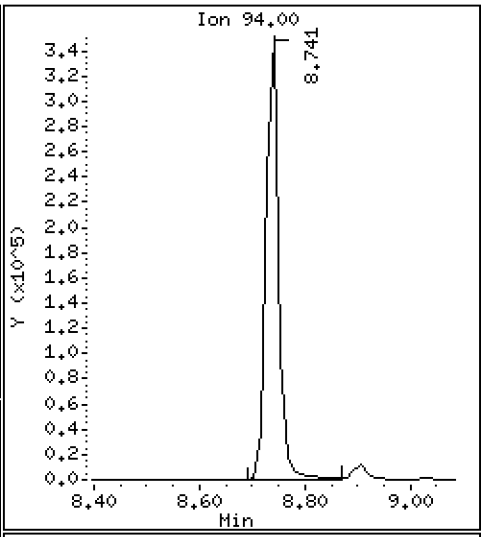
Column phase: ZB-5msi

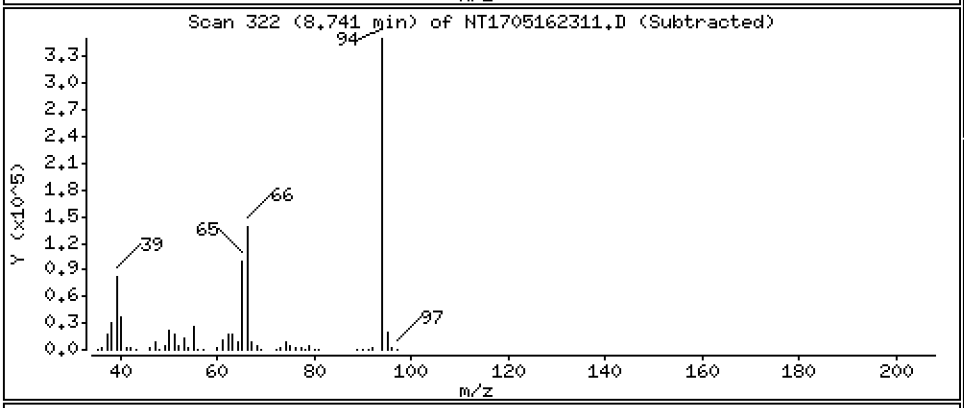
Column diameter: 0.25

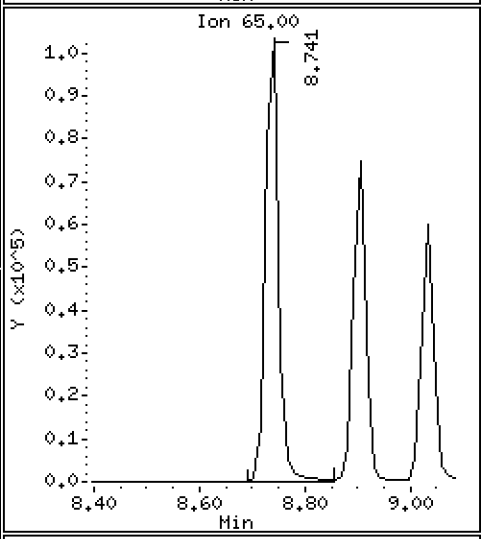
3 Phenol

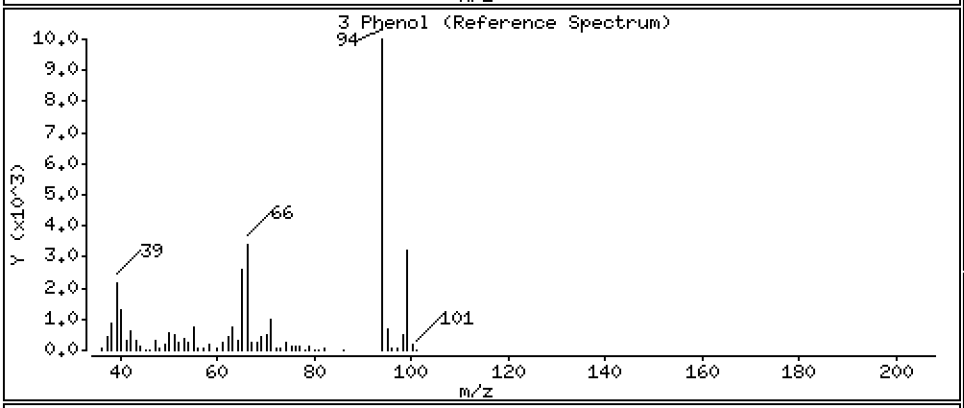
Concentration: 4.823 ug/mL

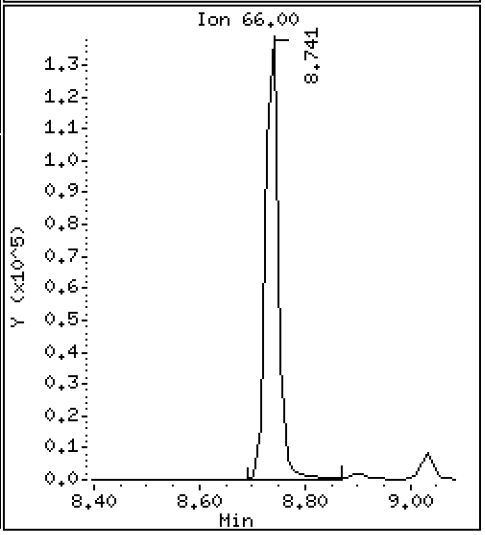


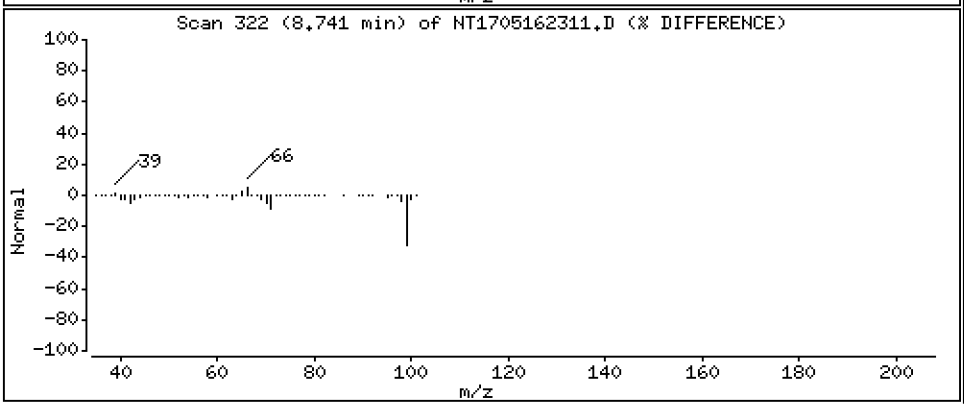












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

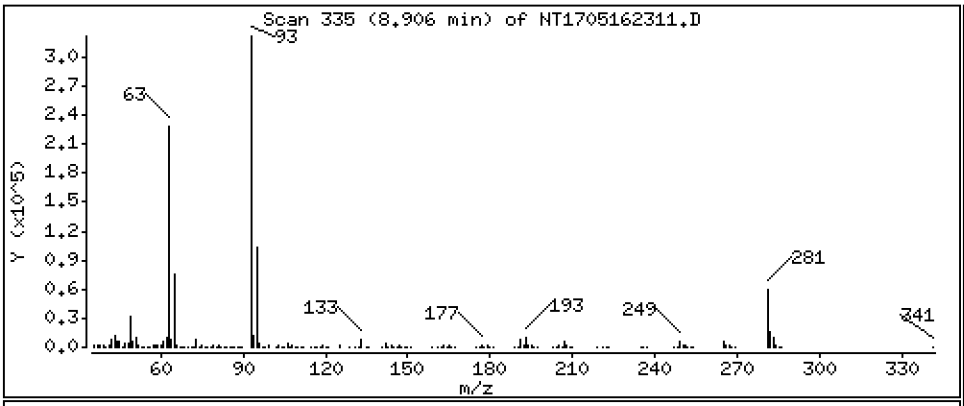
Operator: JGR

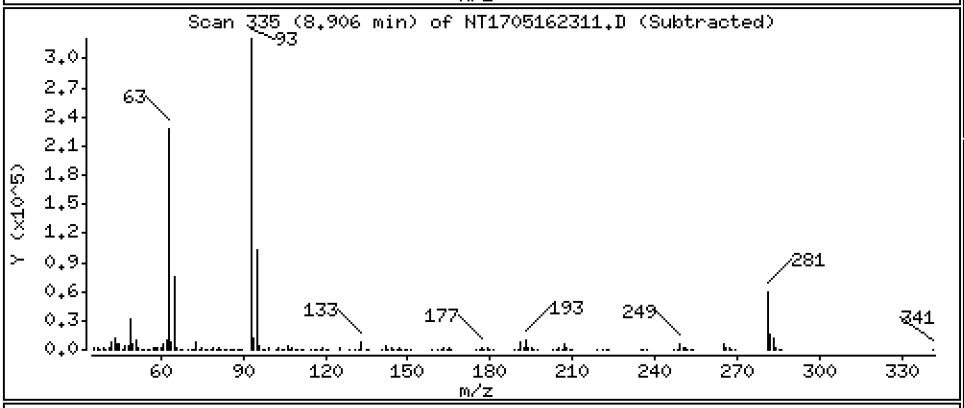
Column phase: ZB-5msi

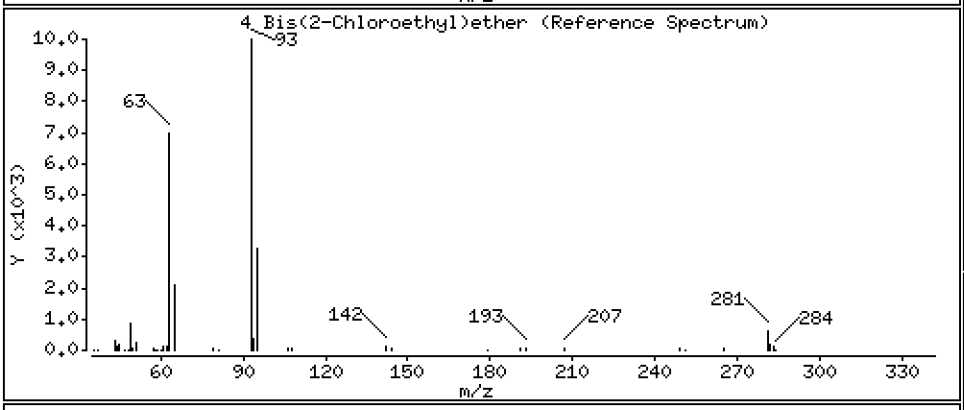
Column diameter: 0.25

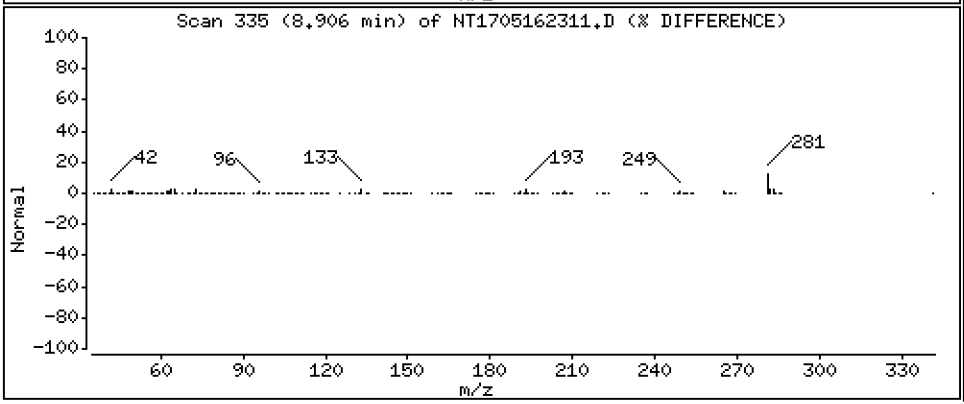
4 Bis(2-Chloroethyl)ether

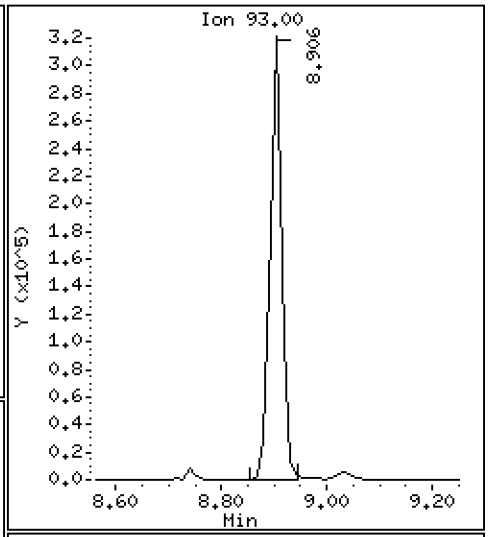
Concentration: 5.566 ug/mL

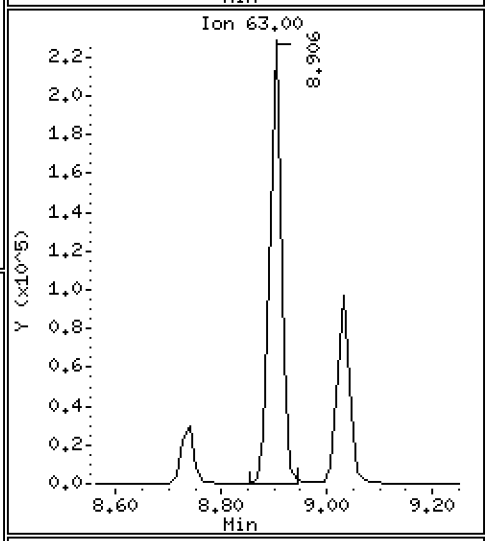


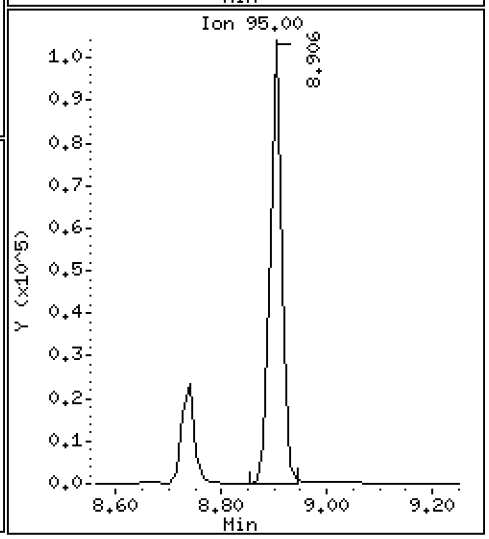












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

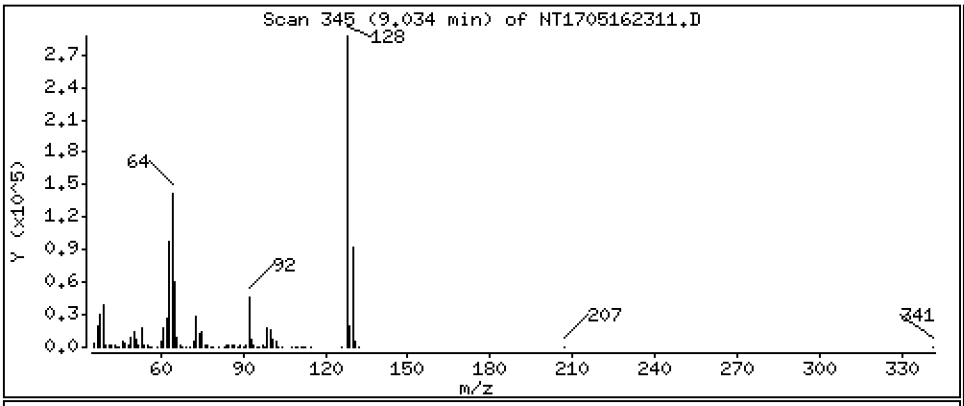
Operator: JGR

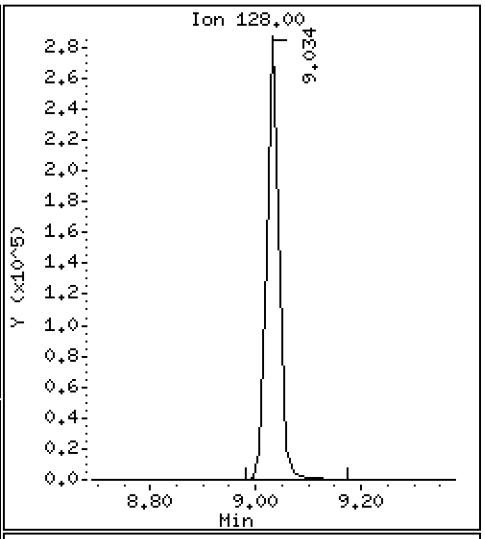
Column phase: ZB-5msi

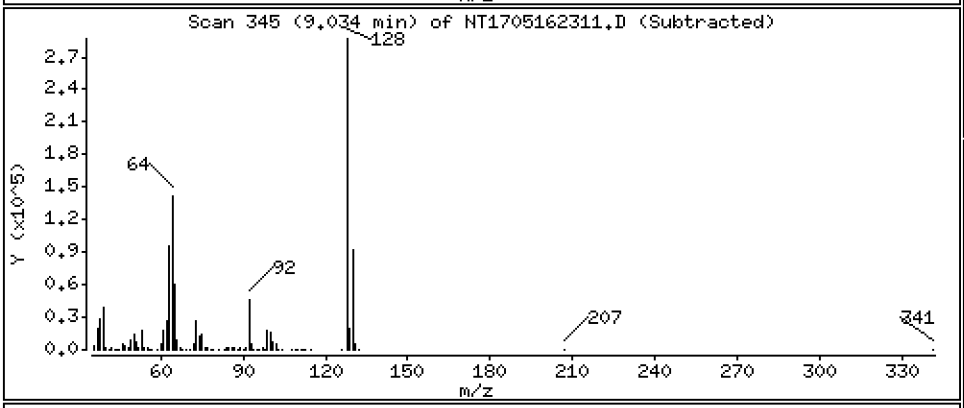
Column diameter: 0.25

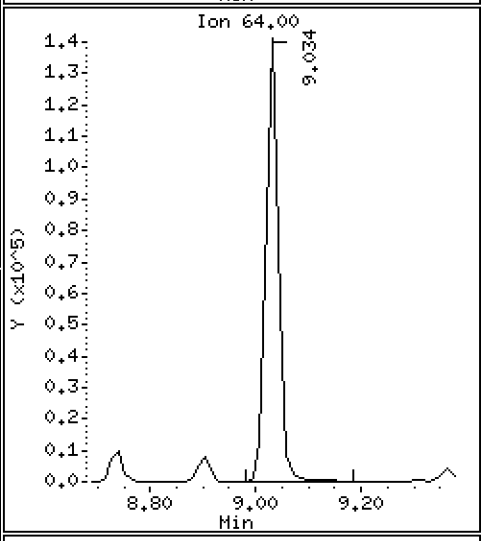
6 2-Chlorophenol

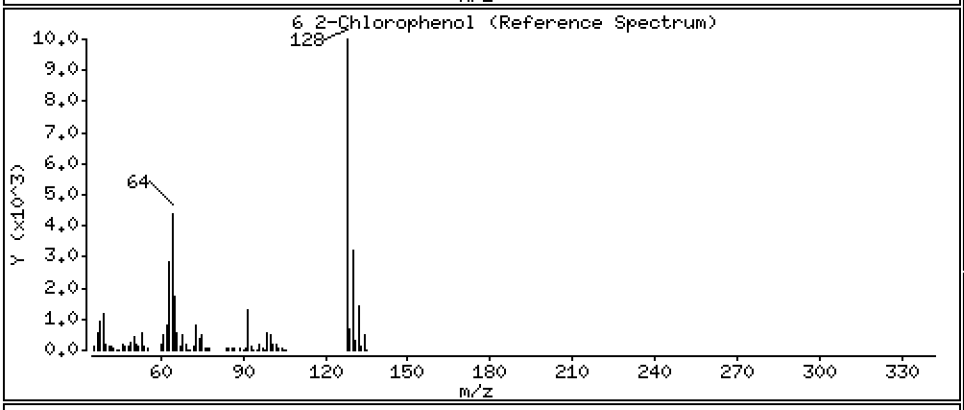
Concentration: 5.294 ug/mL

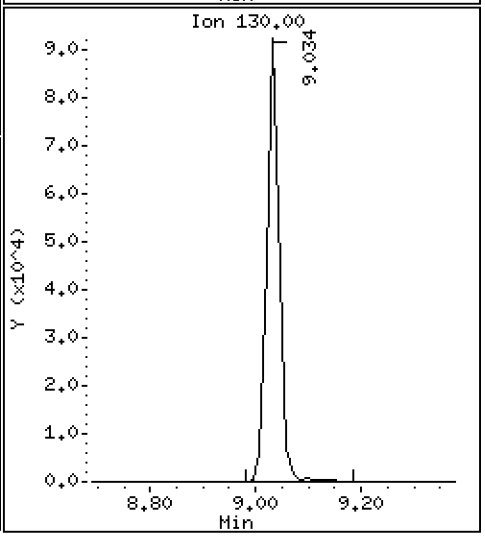


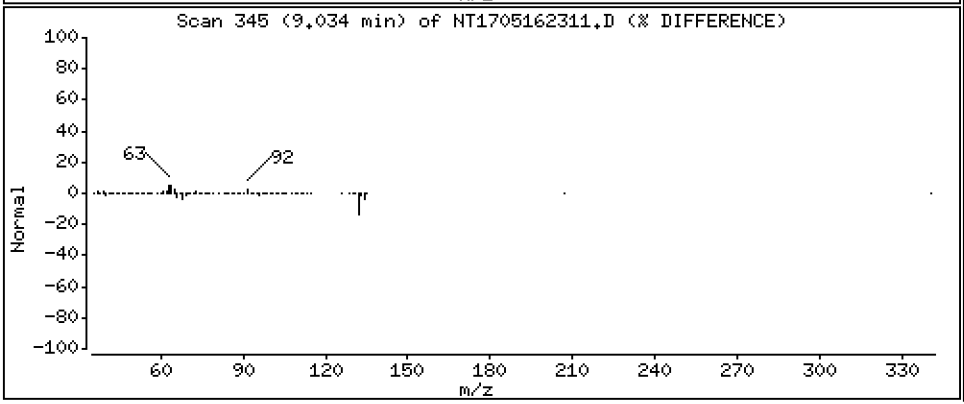












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

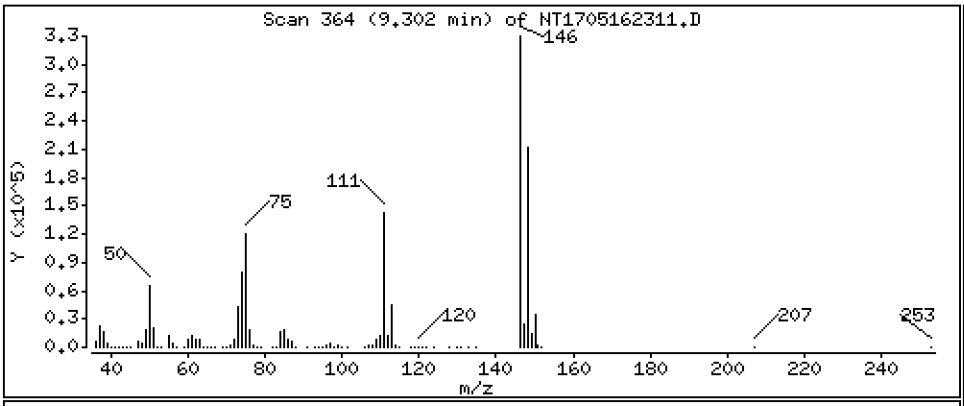
Operator: JGR

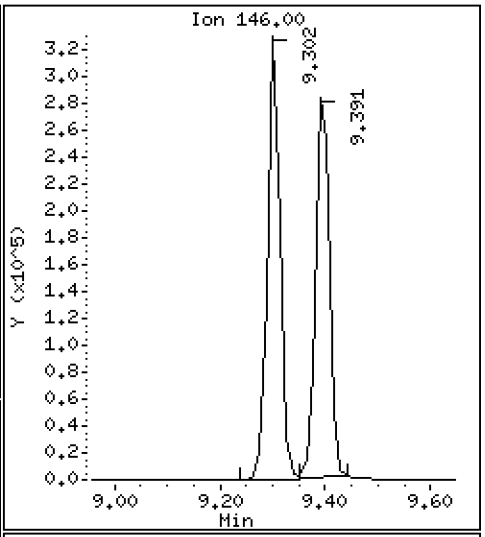
Column phase: ZB-5msi

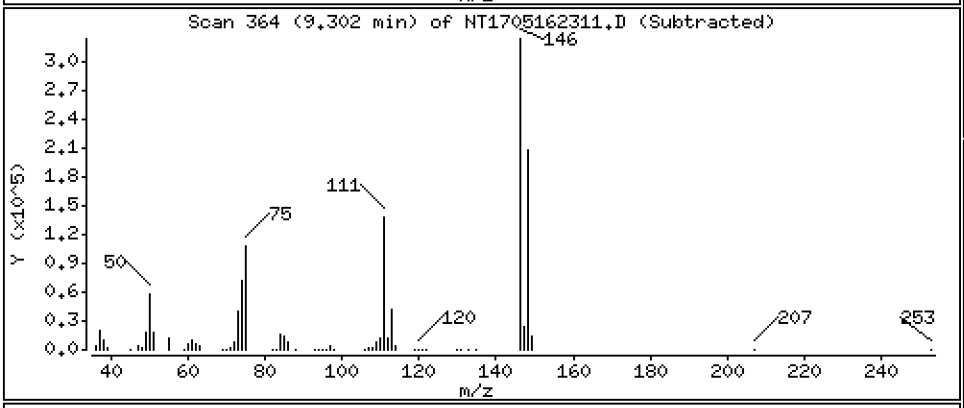
Column diameter: 0.25

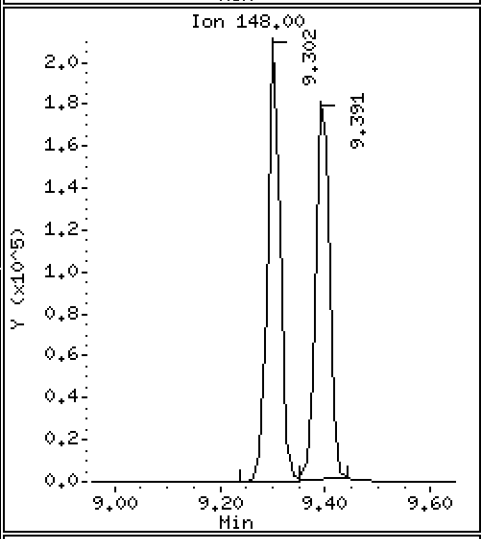
7 1,3-Dichlorobenzene

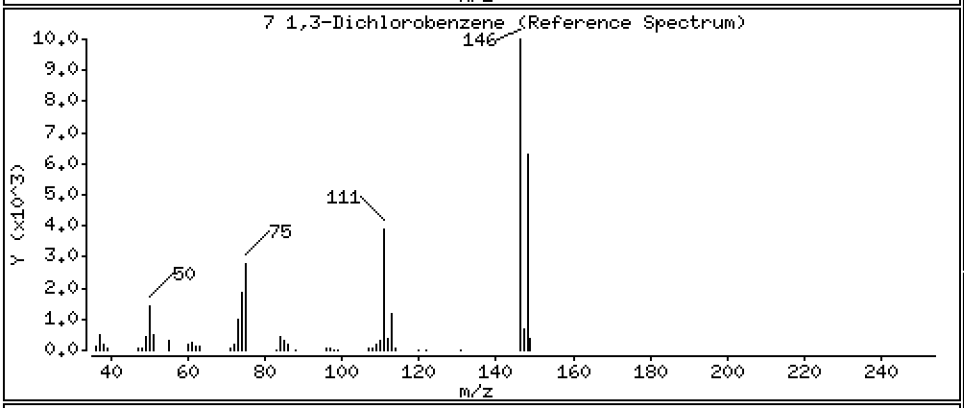
Concentration: 5.319 ug/mL

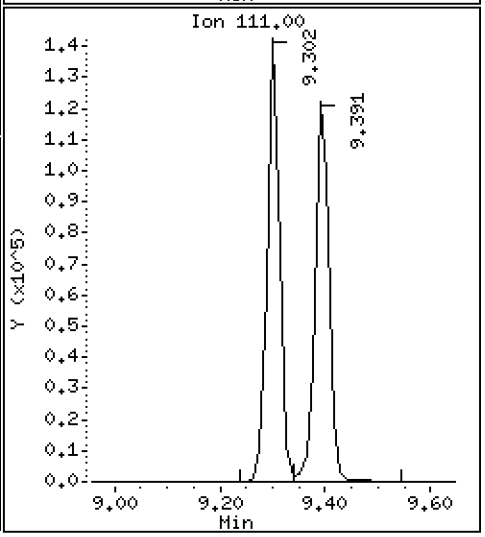


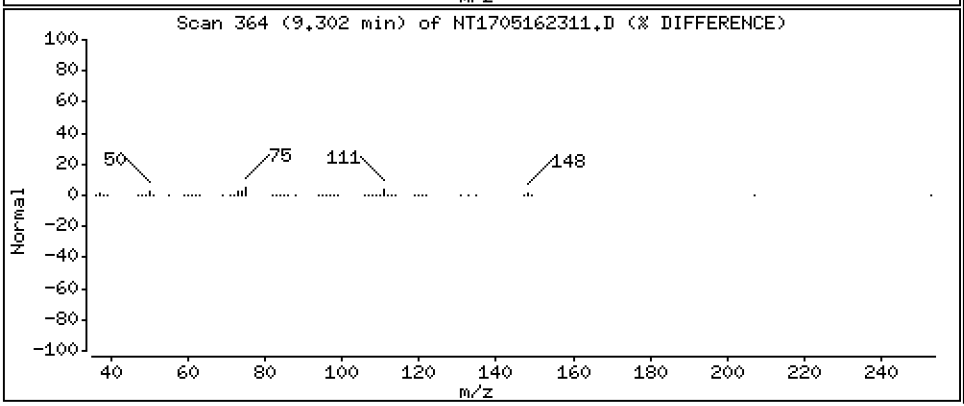












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

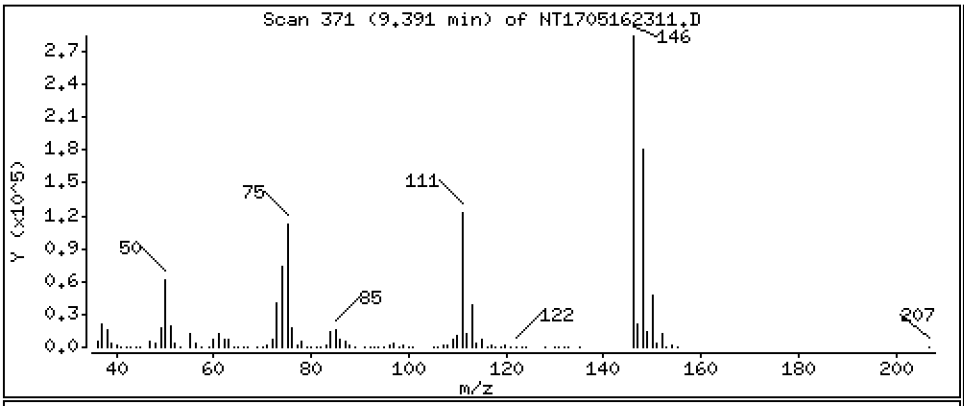
Operator: JGR

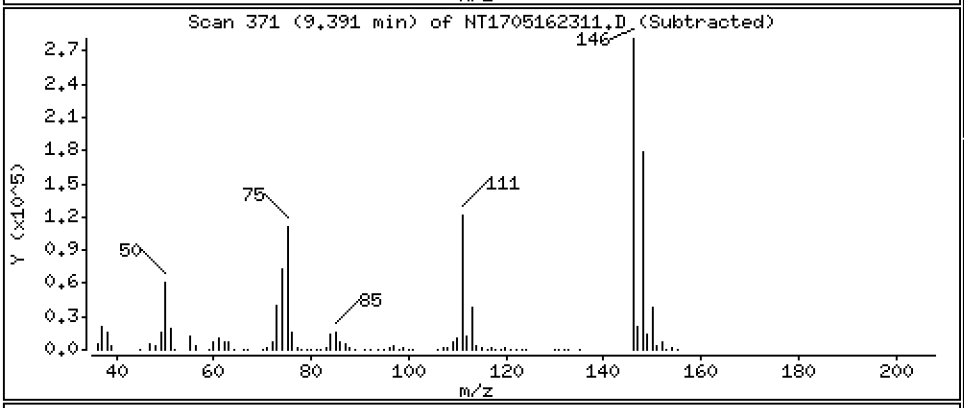
Column phase: ZB-5msi

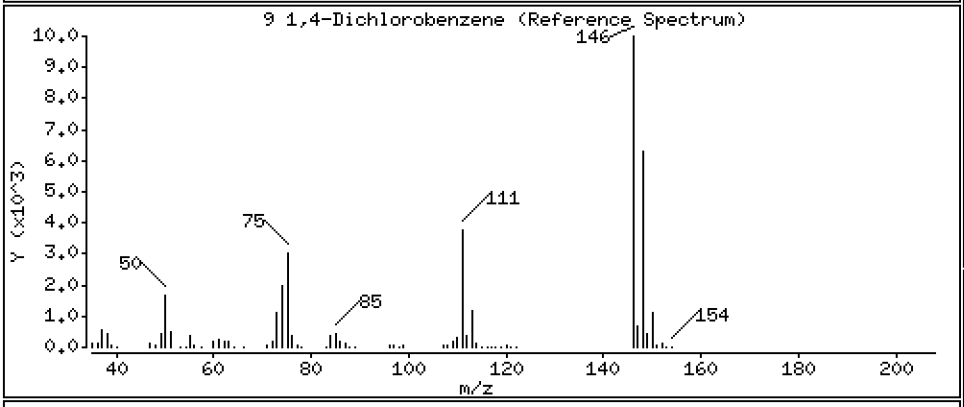
Column diameter: 0.25

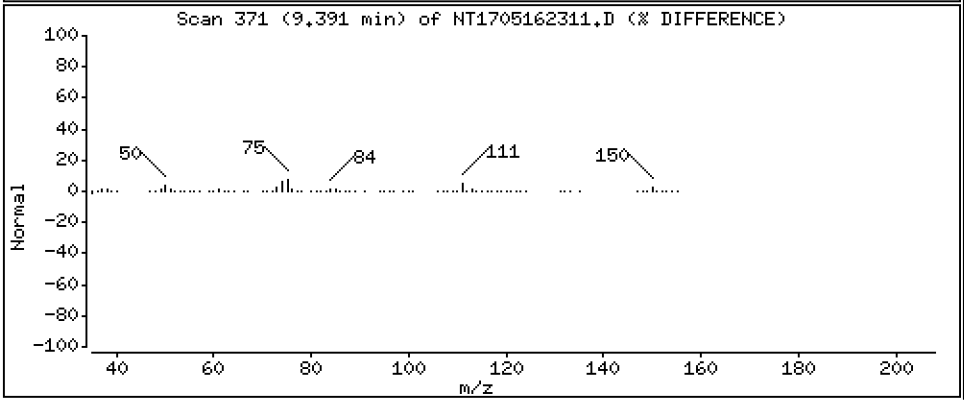
9 1,4-Dichlorobenzene

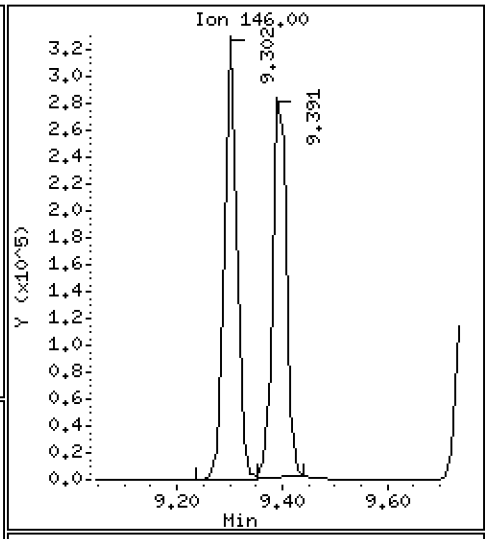
Concentration: 5.071 ug/mL

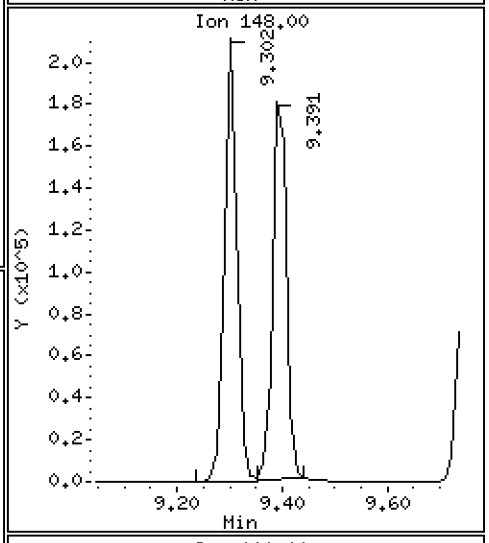


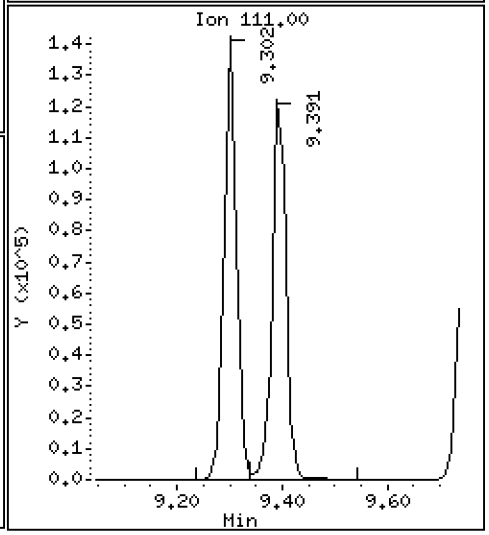












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

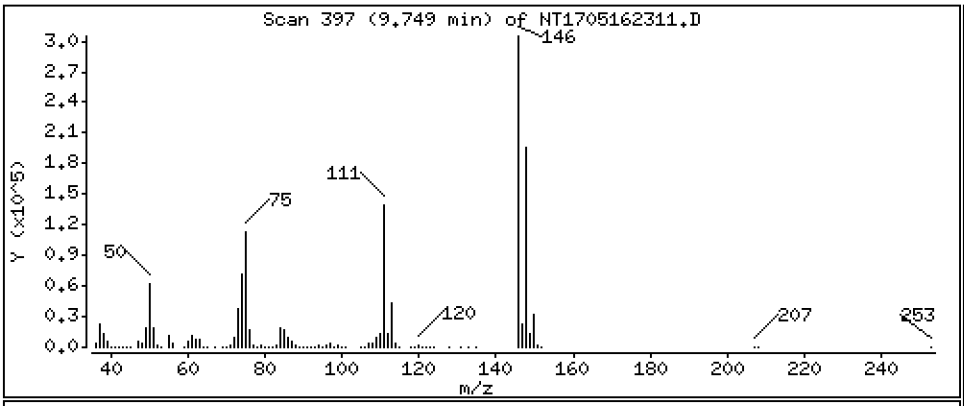
Operator: JGR

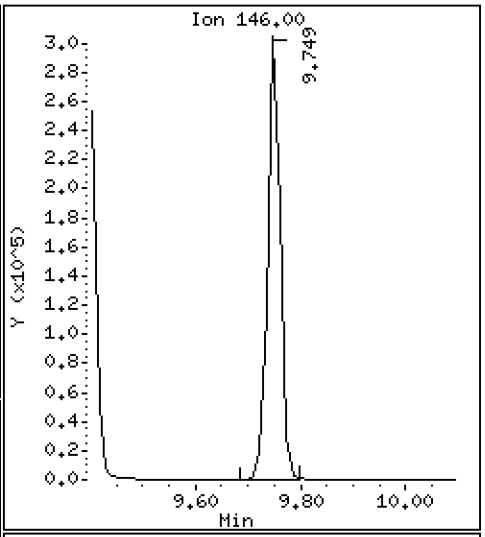
Column phase: ZB-5msi

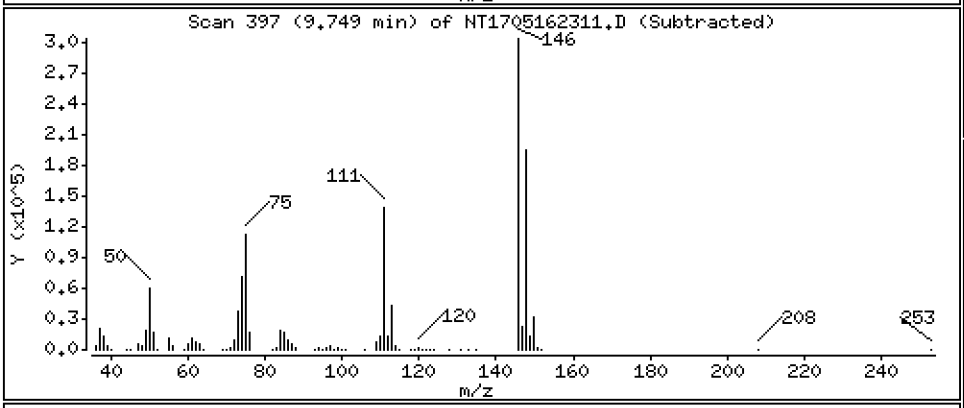
Column diameter: 0.25

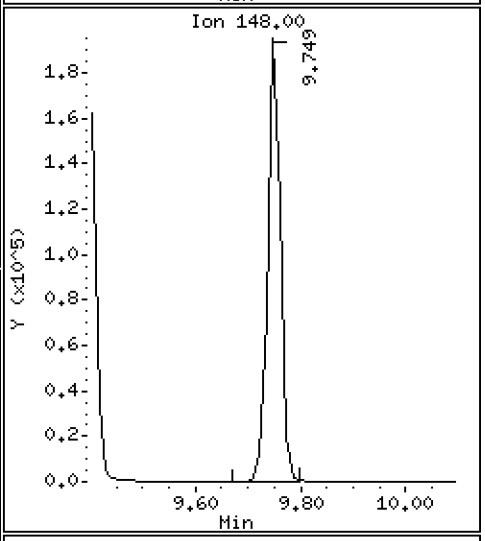
12 1,2-Dichlorobenzene

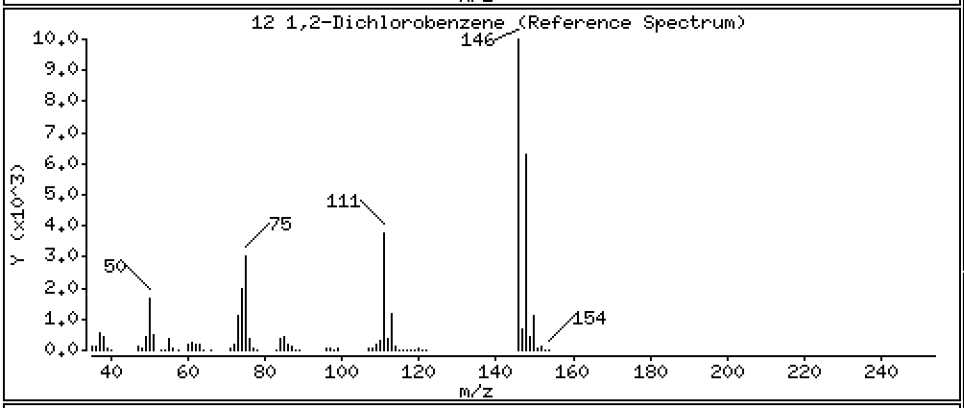
Concentration: 5.258 ug/mL

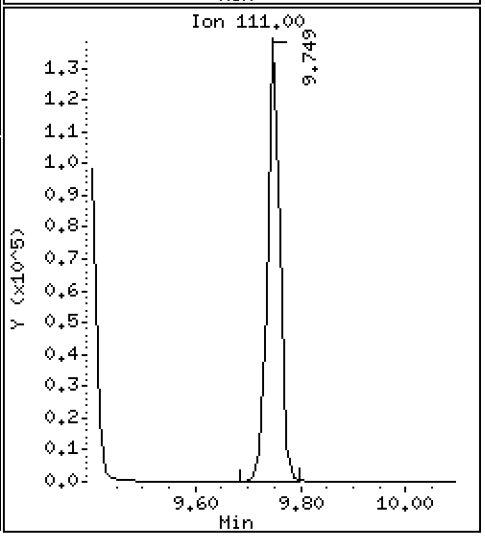


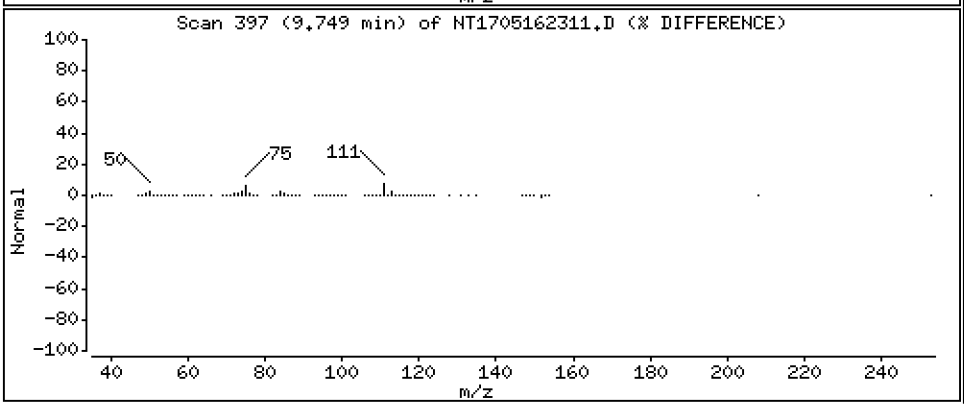












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

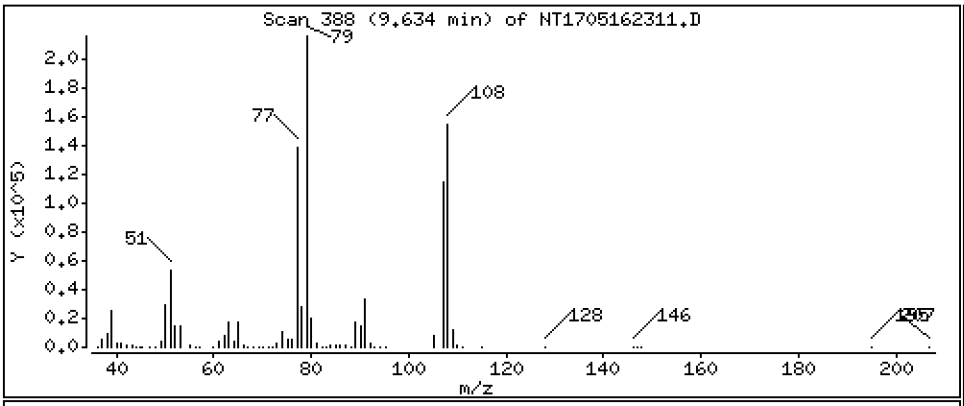
Operator: JGR

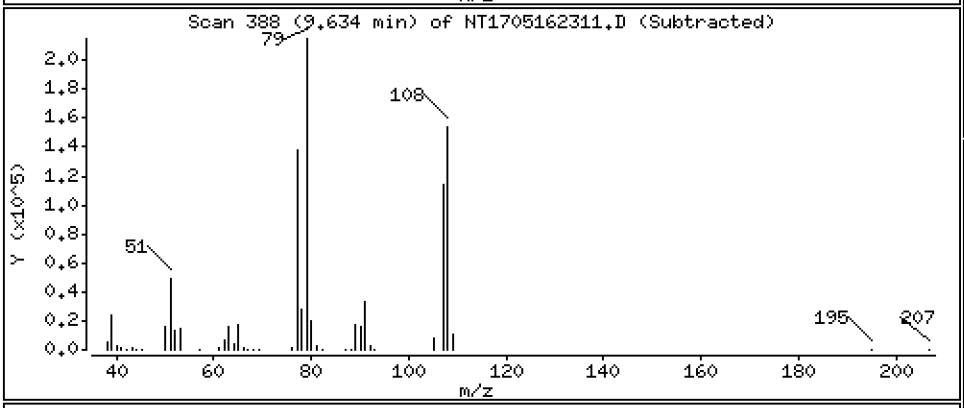
Column phase: ZB-5msi

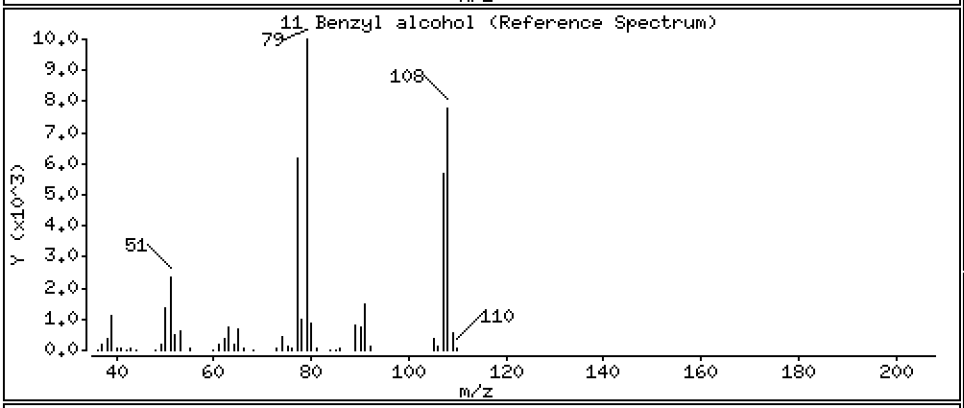
Column diameter: 0.25

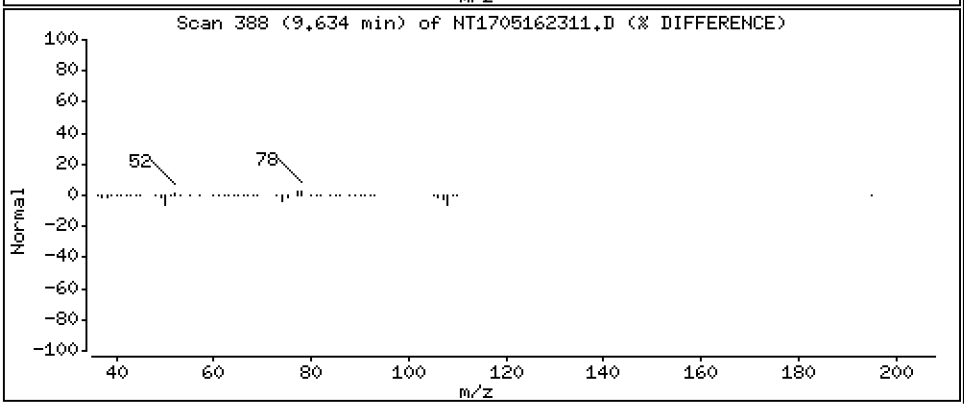
11 Benzyl alcohol

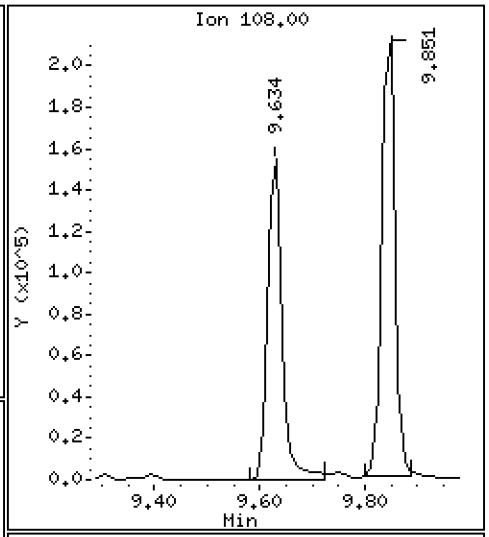
Concentration: 5.274 ug/mL

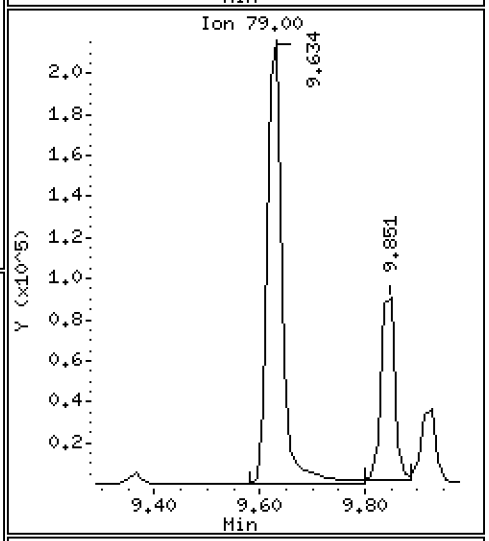


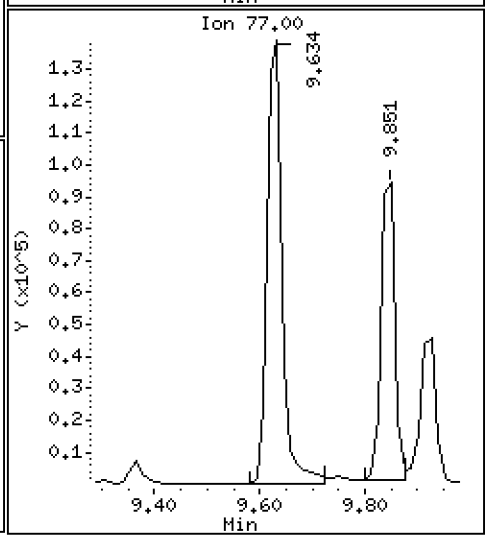












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

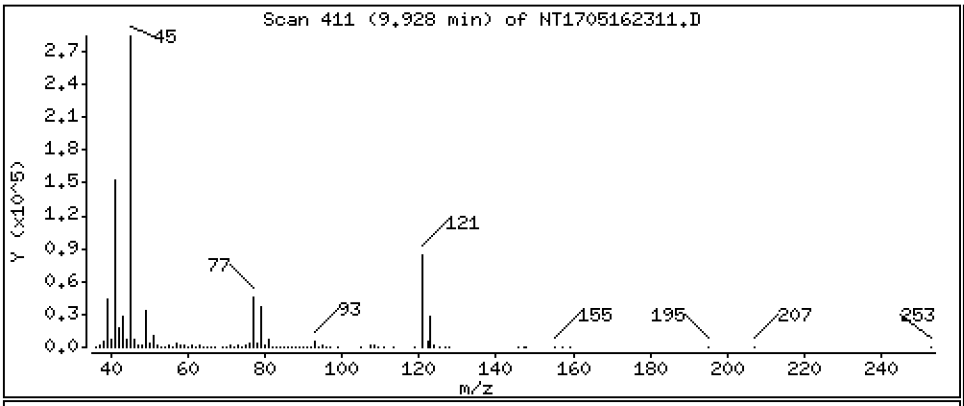
Operator: JGR

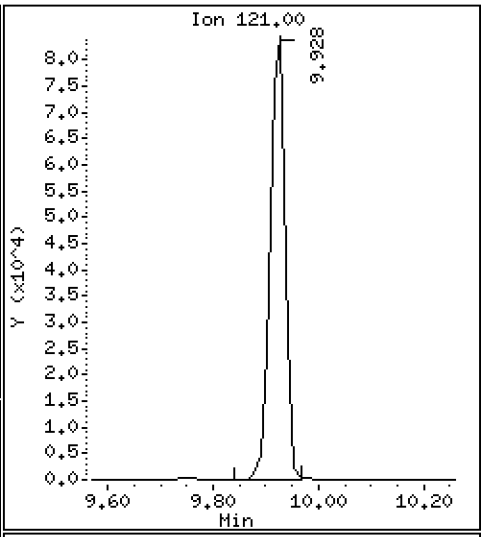
Column phase: ZB-5msi

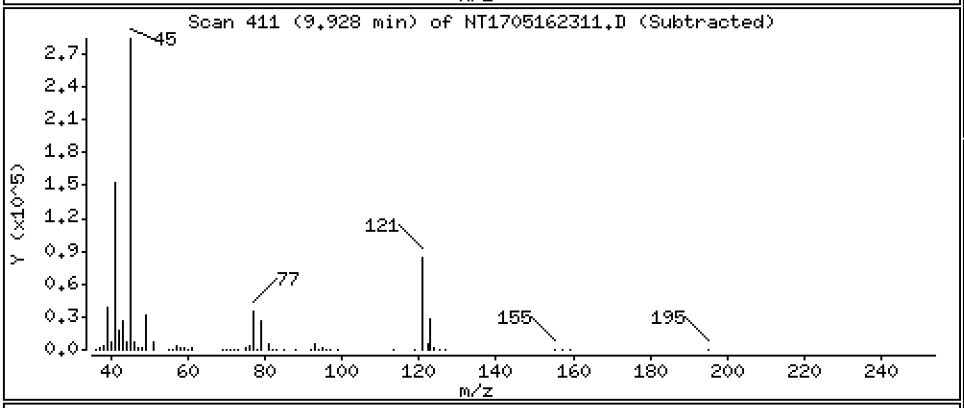
Column diameter: 0.25

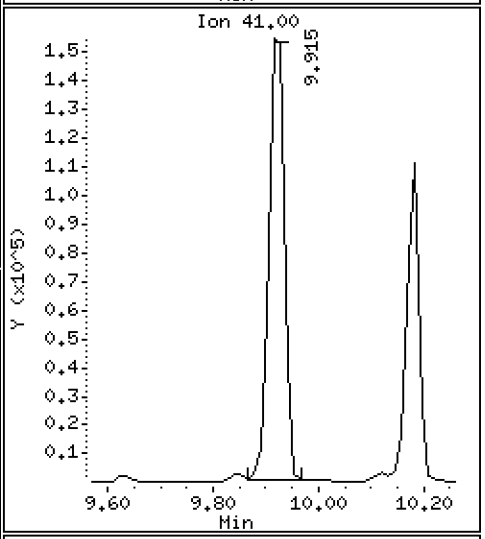
14 2,2'-oxybis(1-Chloropropane)

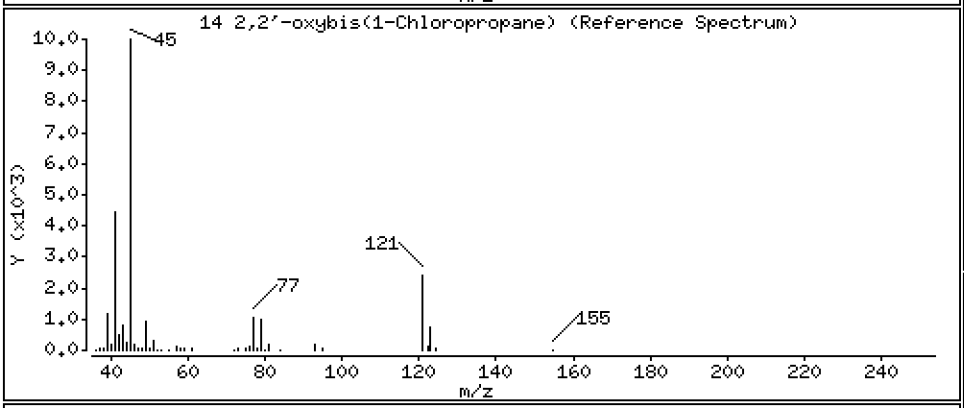
Concentration: 6.179 ug/mL

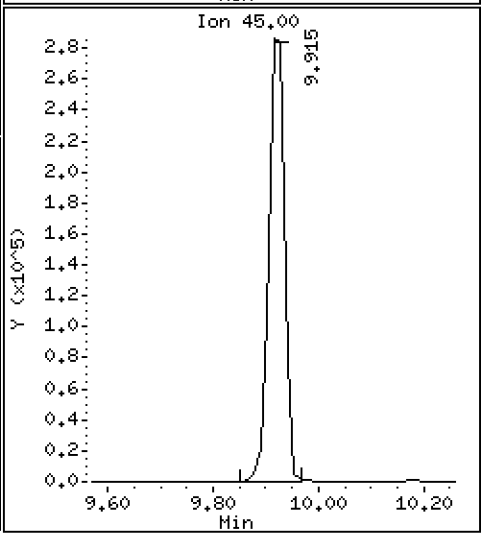


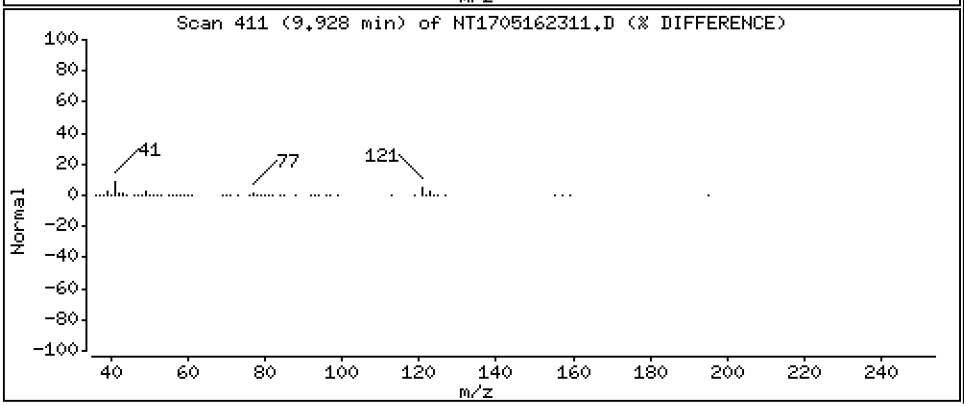












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

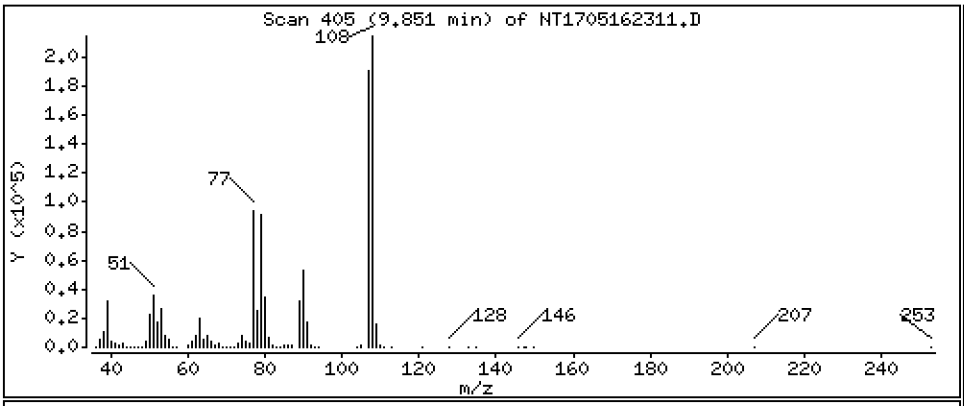
Operator: JGR

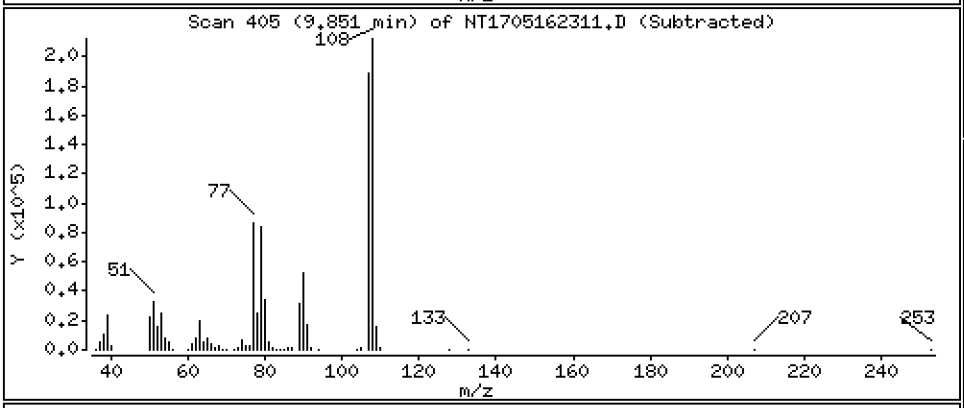
Column phase: ZB-5msi

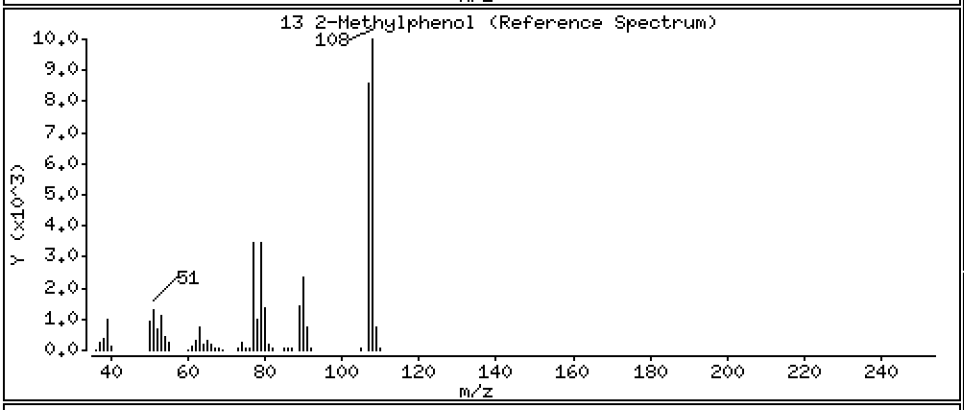
Column diameter: 0.25

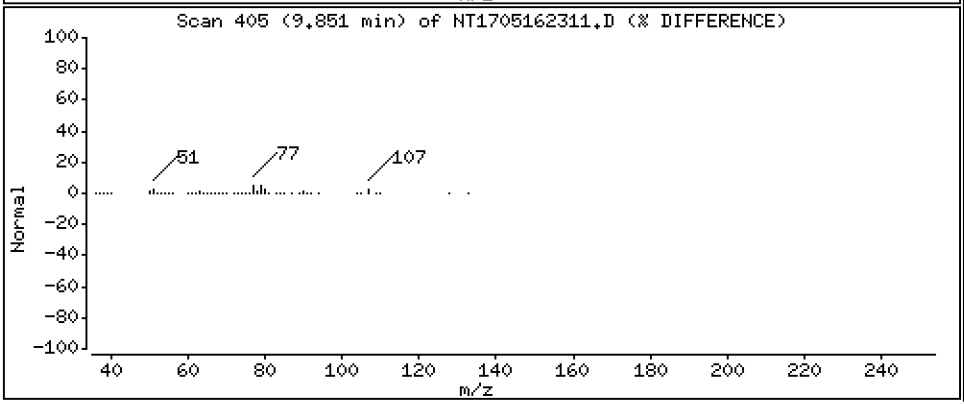
13 2-Methylphenol

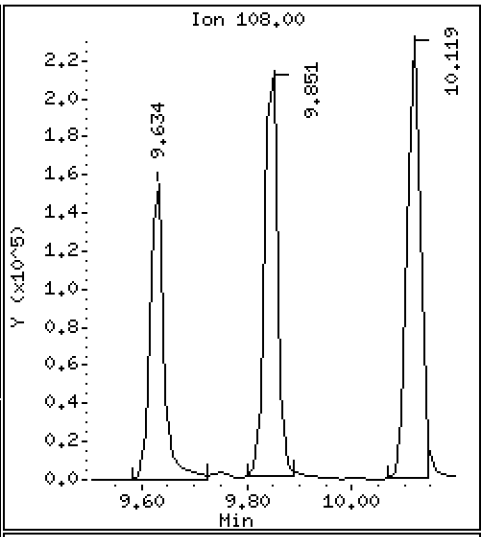
Concentration: 4.229 ug/mL

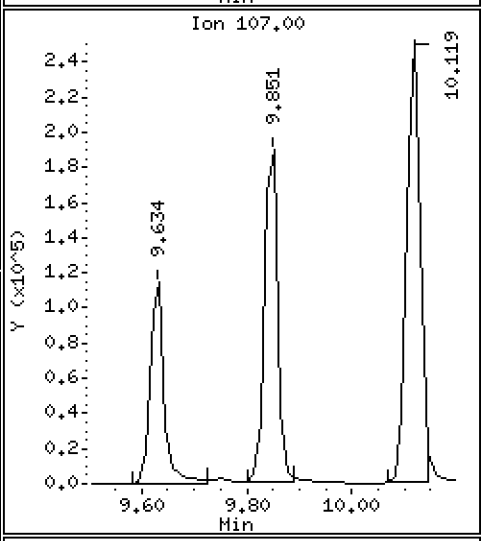


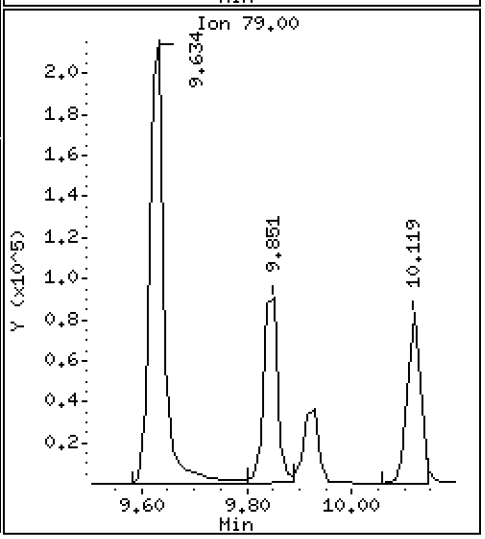












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

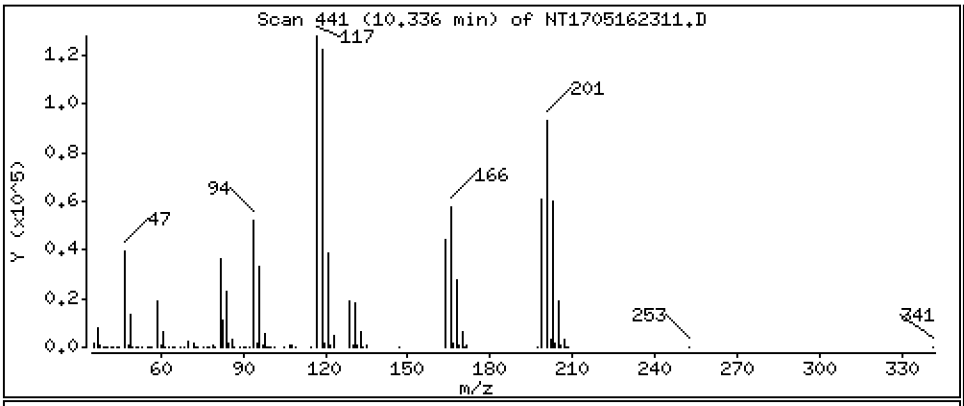
Operator: JGR

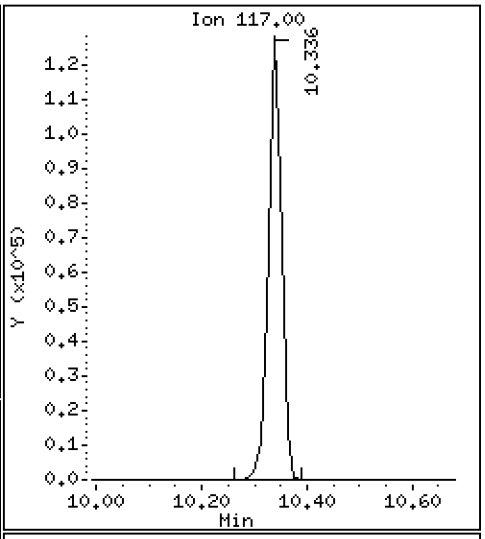
Column phase: ZB-5msi

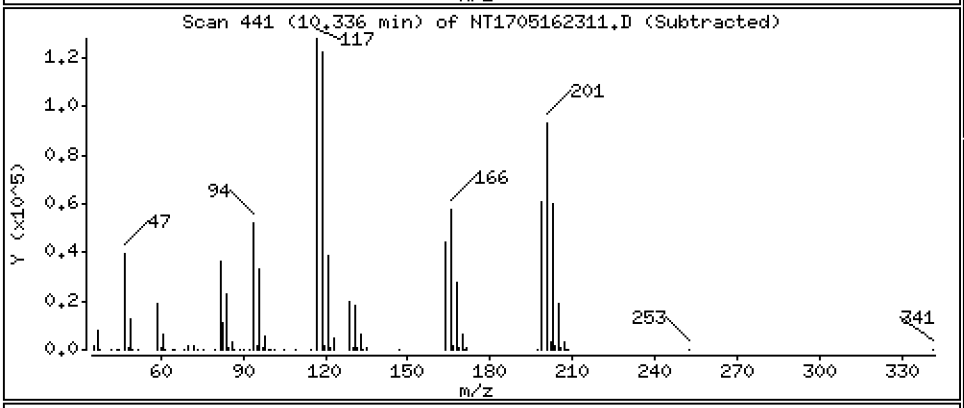
Column diameter: 0.25

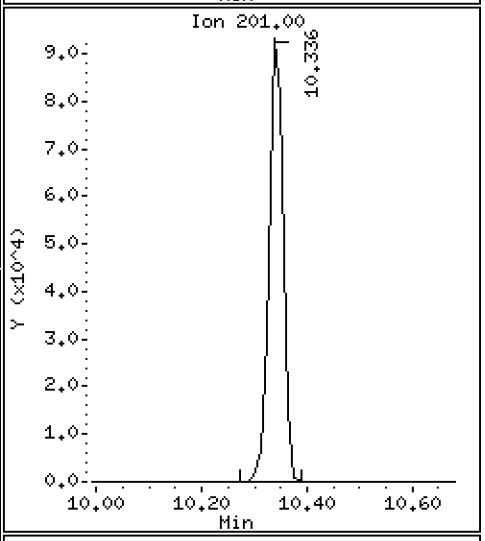
17 Hexachloroethane

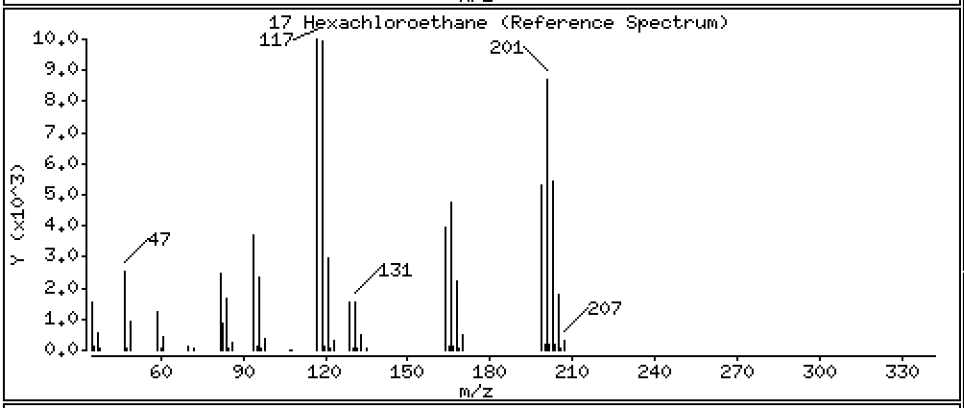
Concentration: 5.419 ug/mL

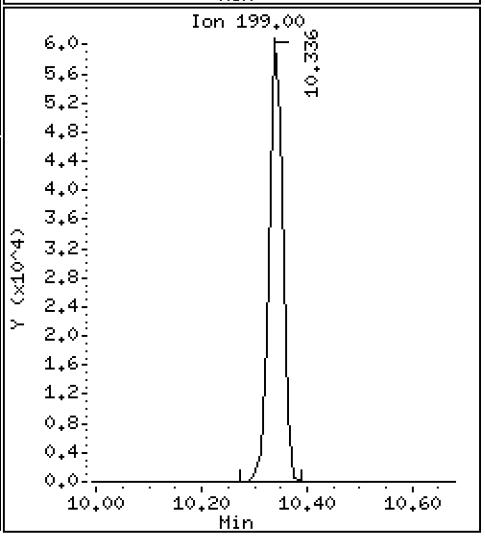


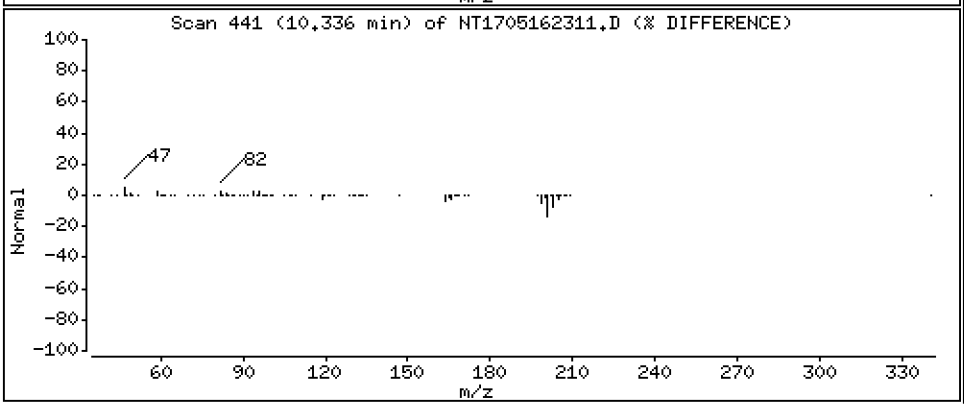












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

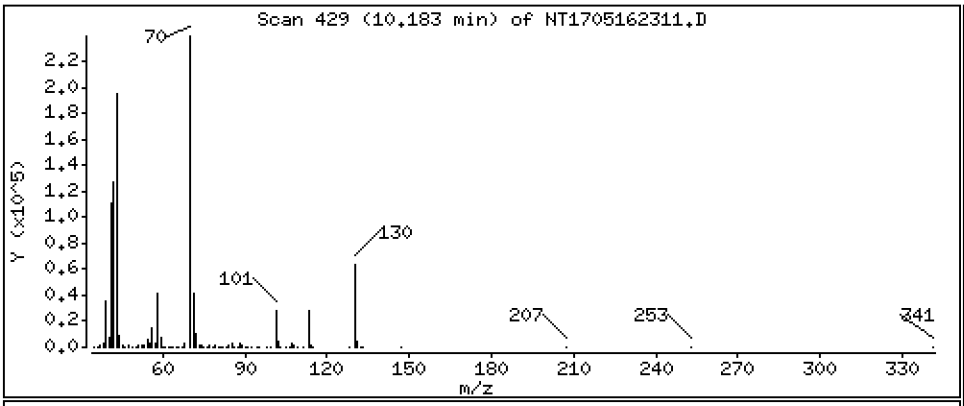
Operator: JGR

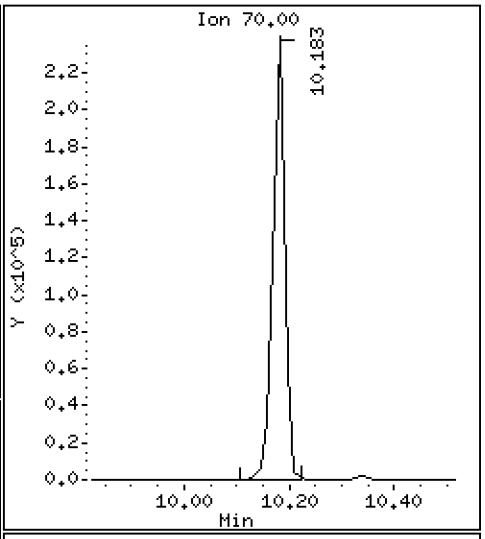
Column phase: ZB-5msi

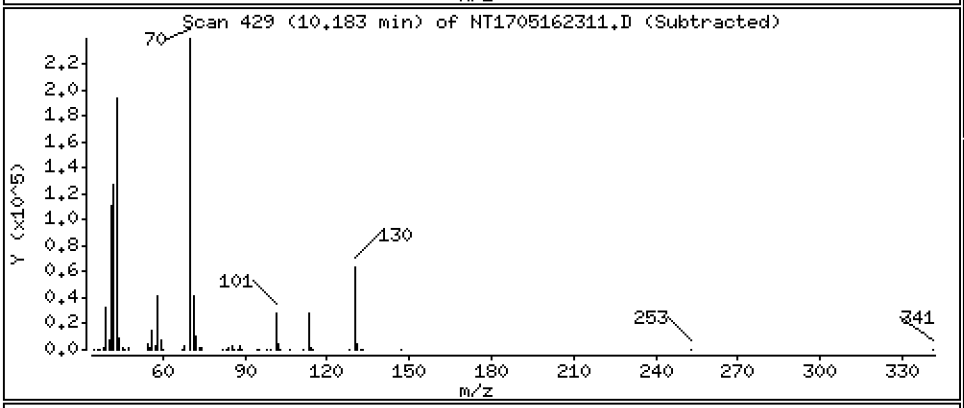
Column diameter: 0.25

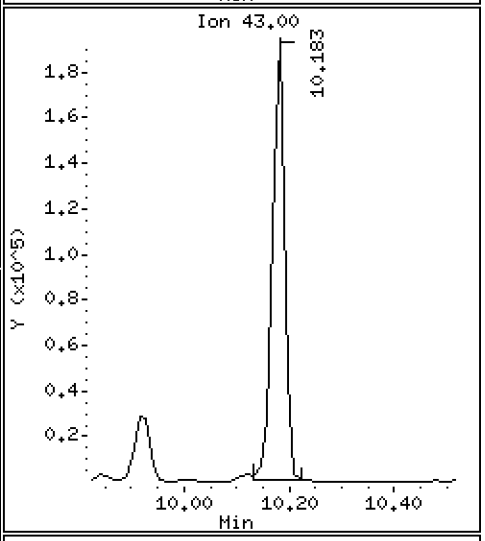
16 N-Nitroso-di-n-propylamine

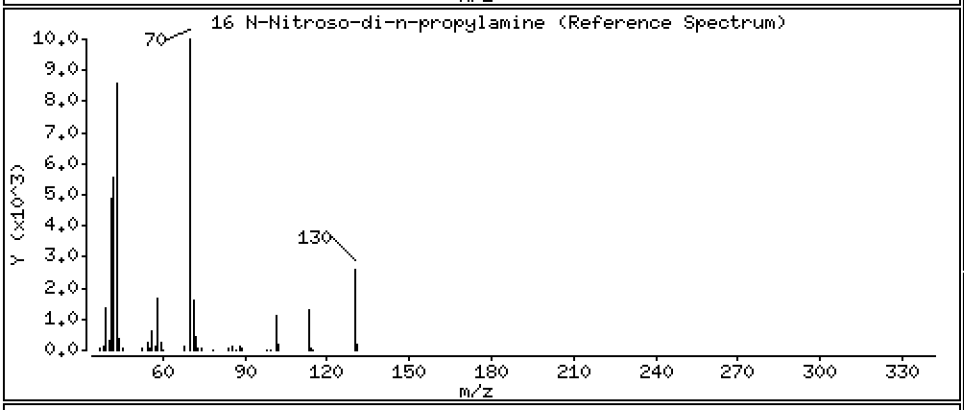
Concentration: 5.517 ug/mL

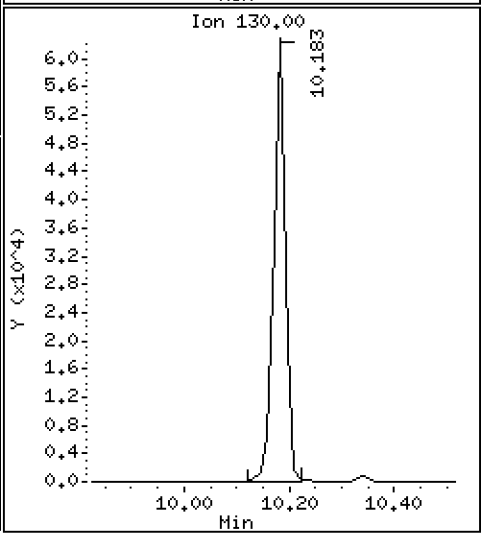


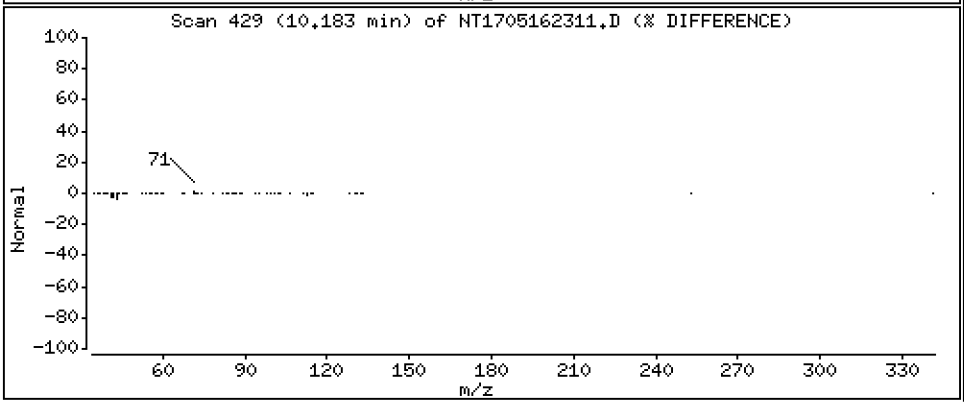












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

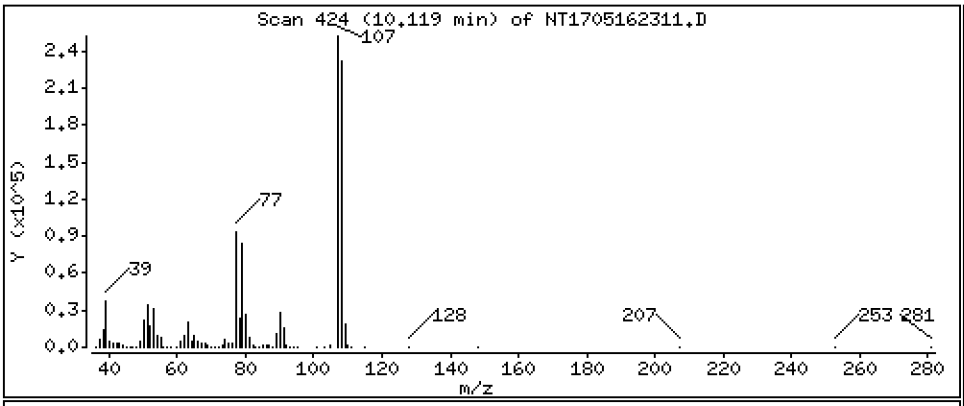
Operator: JGR

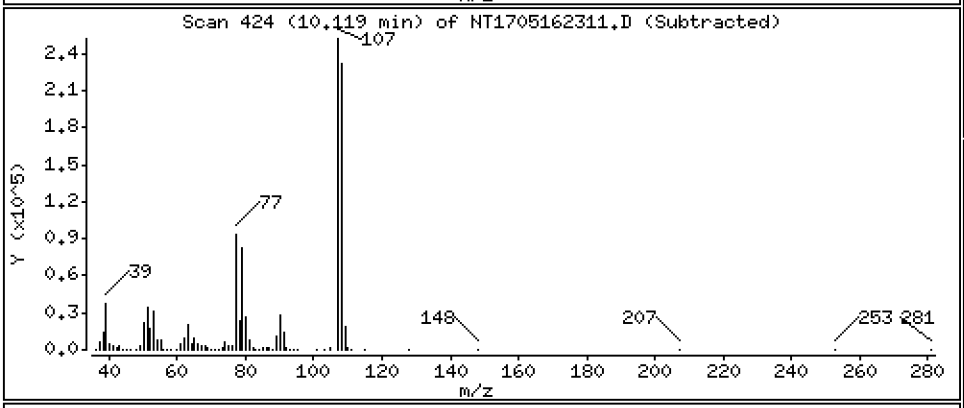
Column phase: ZB-5msi

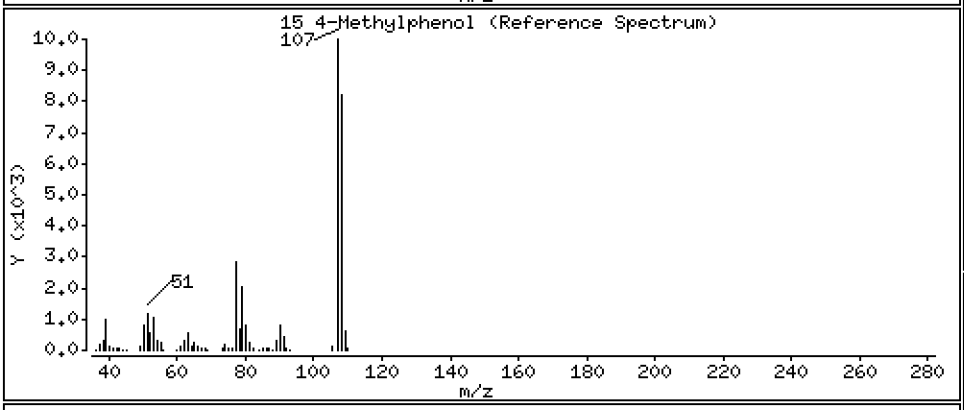
Column diameter: 0.25

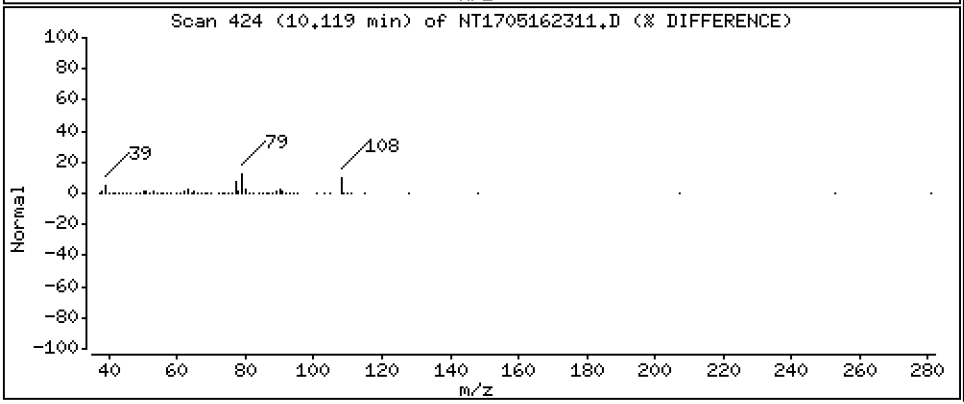
15 4-Methylphenol

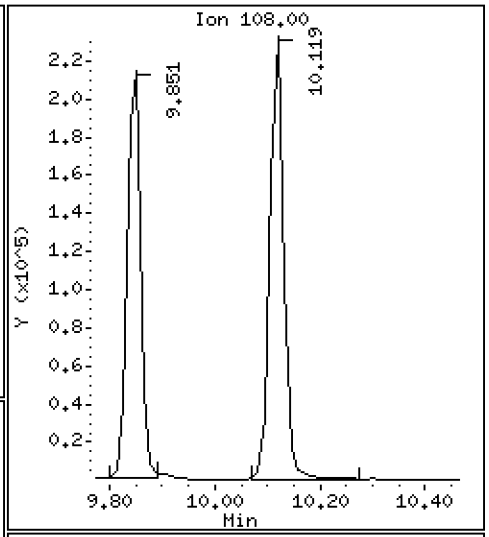
Concentration: 4.661 ug/mL

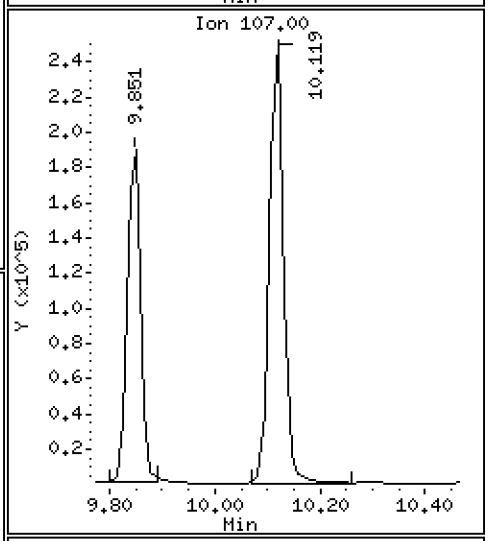


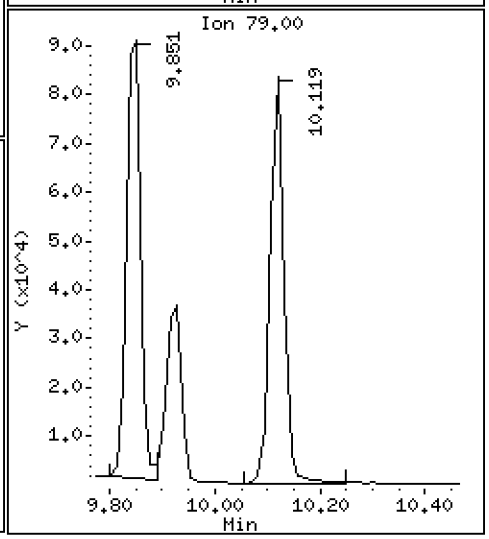












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

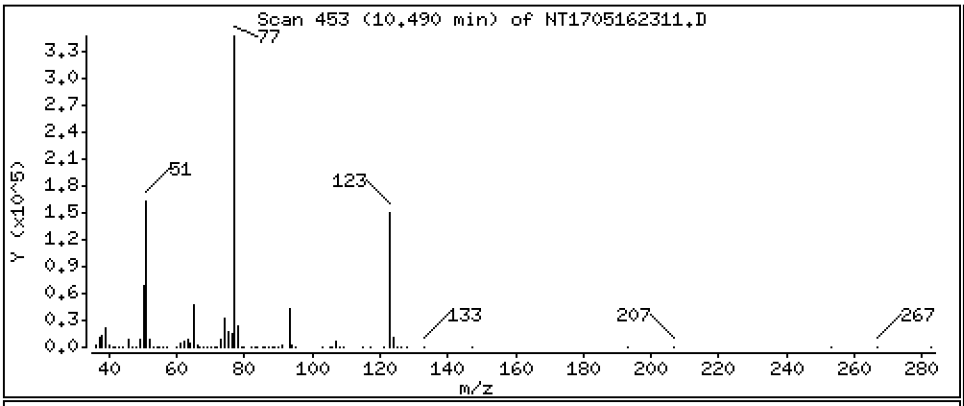
Operator: JGR

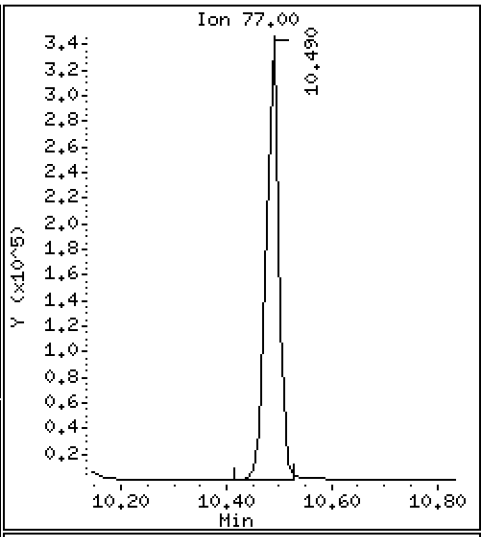
Column phase: ZB-5msi

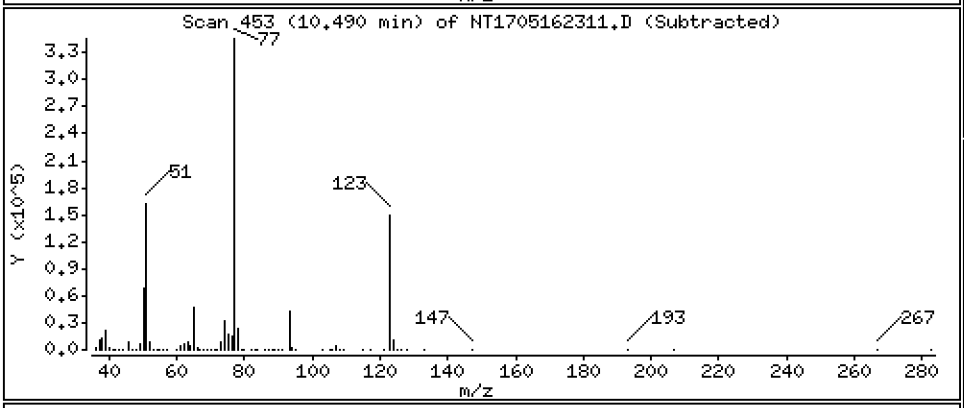
Column diameter: 0.25

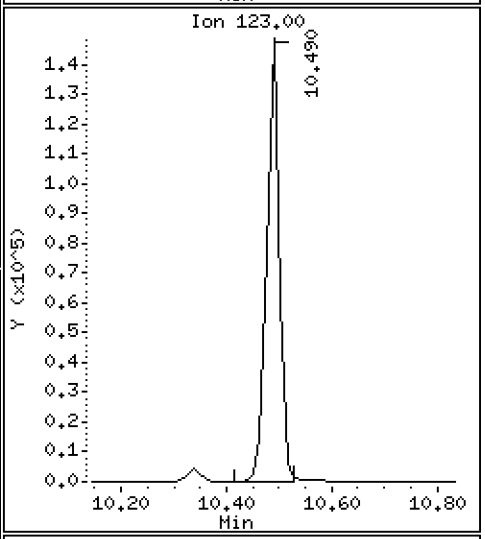
19 Nitrobenzene

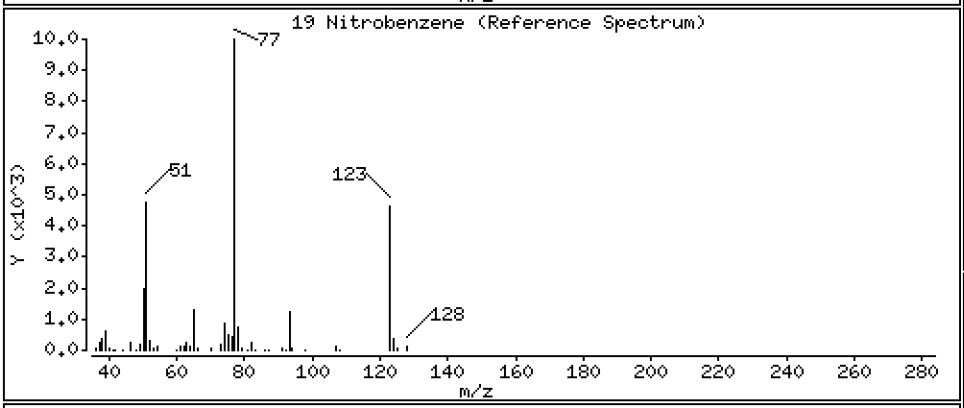
Concentration: 5.329 ug/mL

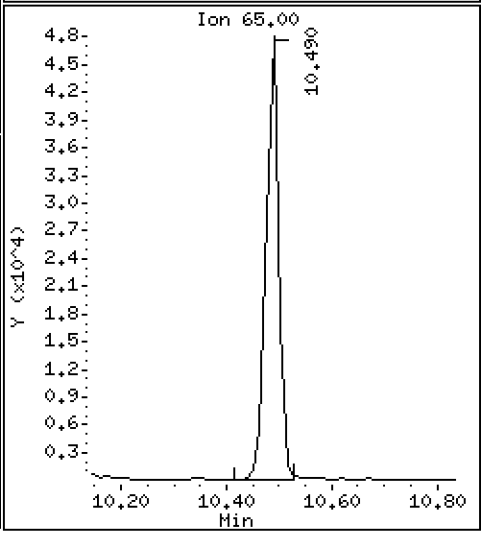


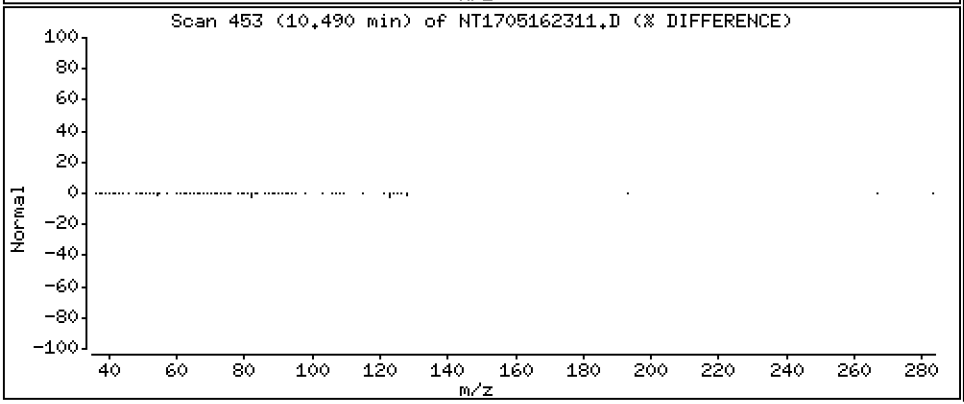












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

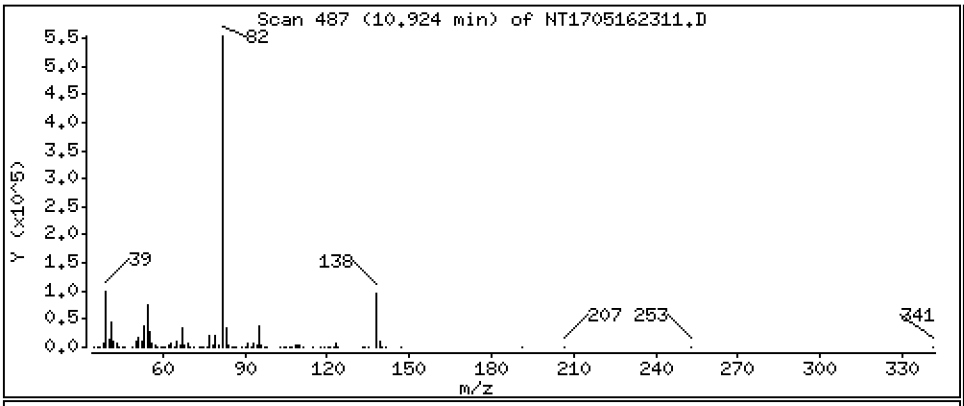
Operator: JGR

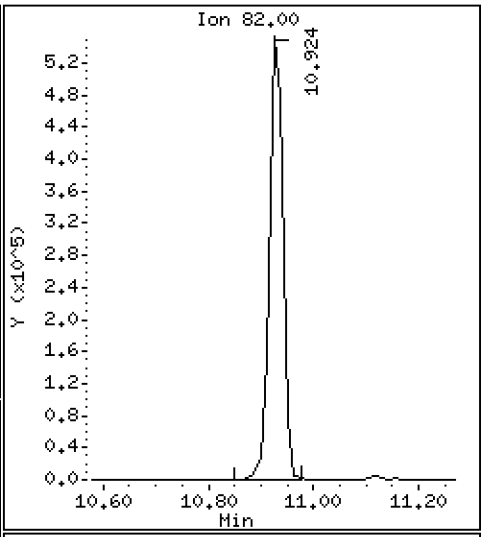
Column phase: ZB-5msi

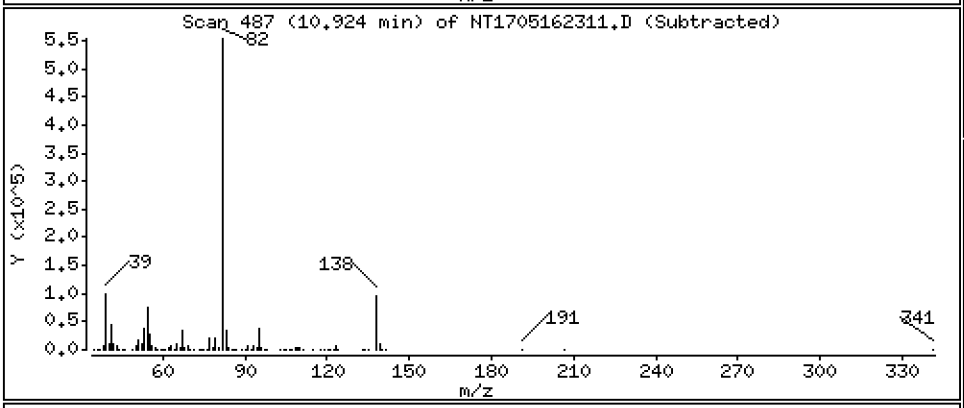
Column diameter: 0.25

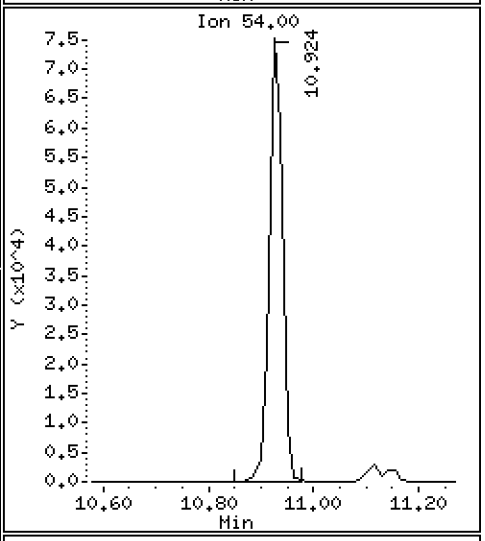
20 Isophorone

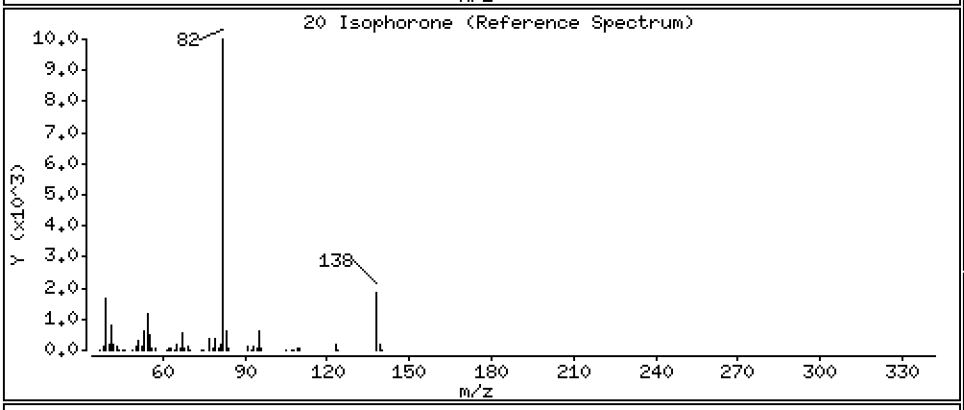
Concentration: 6.943 ug/mL

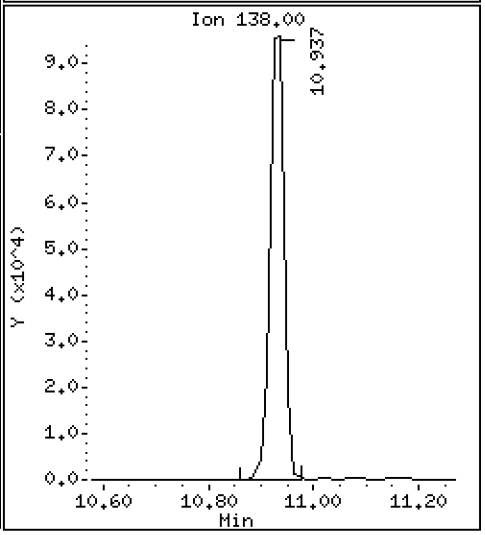


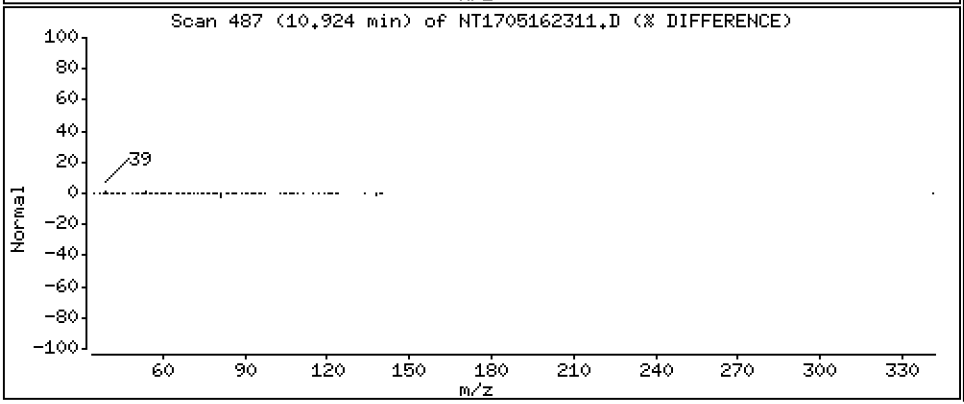












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

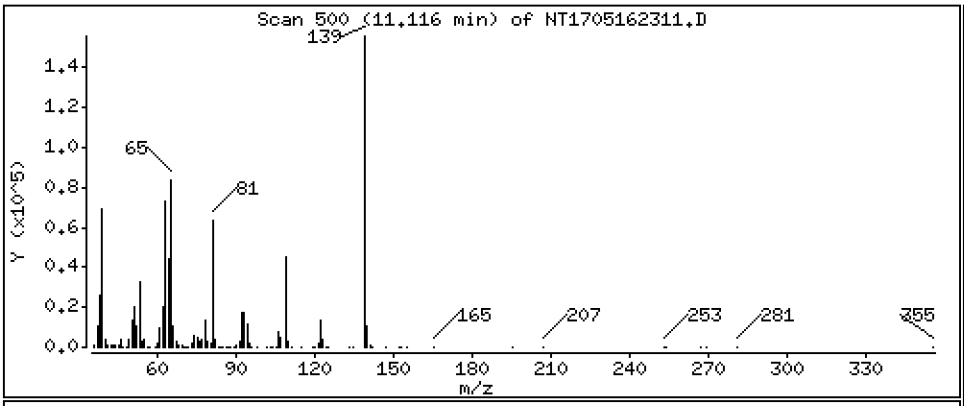
Operator: JGR

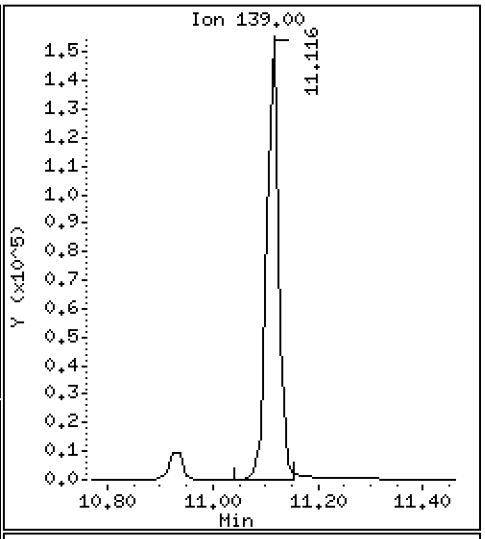
Column phase: ZB-5msi

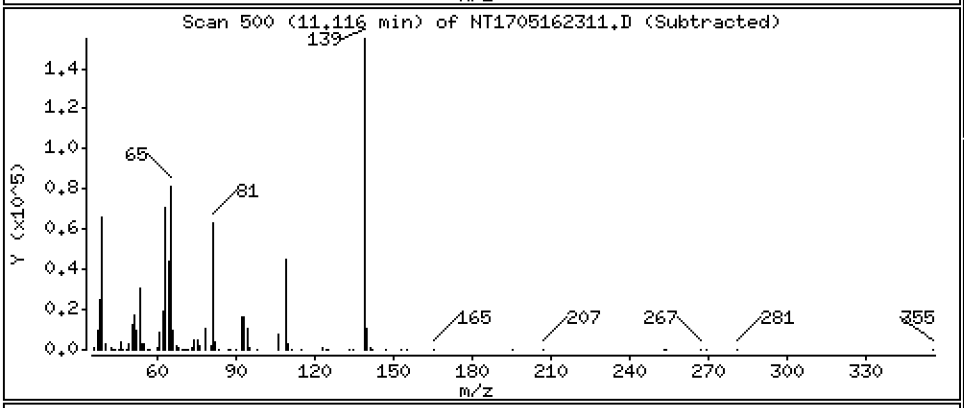
Column diameter: 0.25

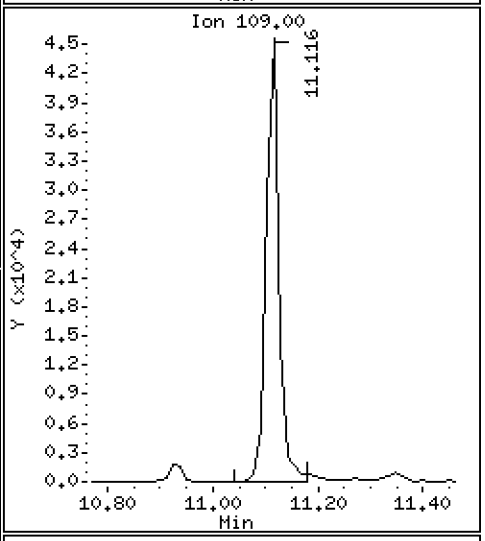
21 2-Nitrophenol

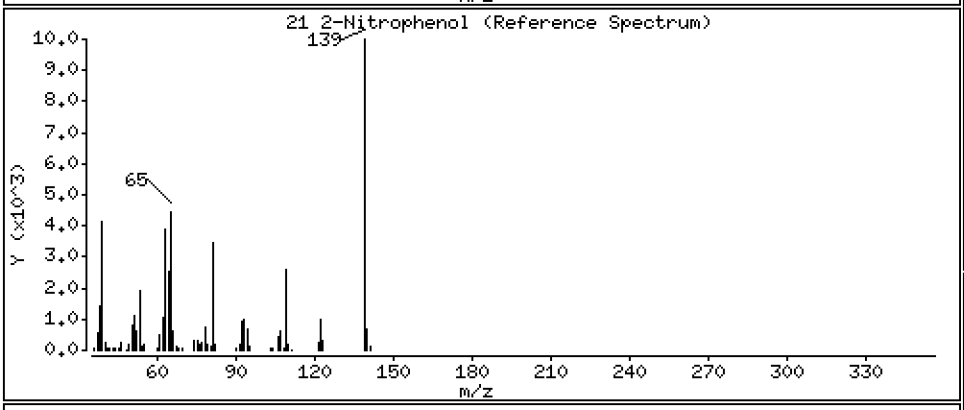
Concentration: 4.899 ug/mL

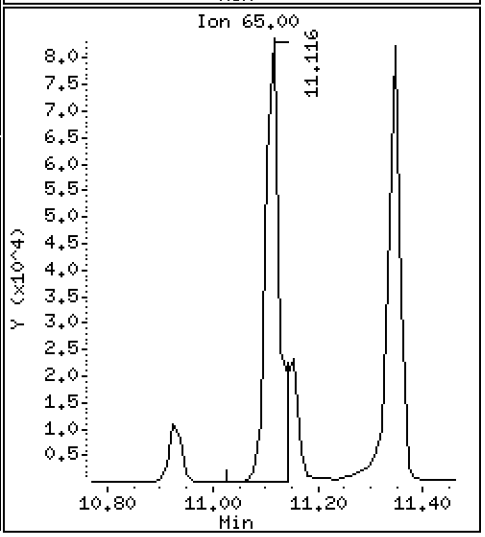


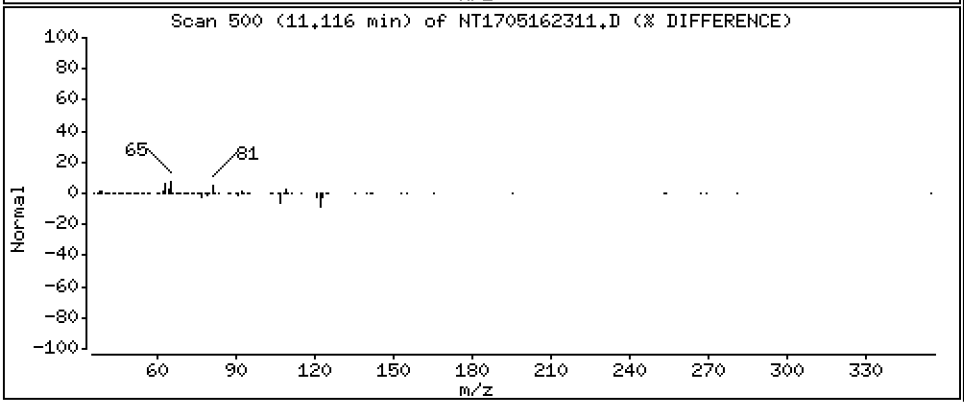












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

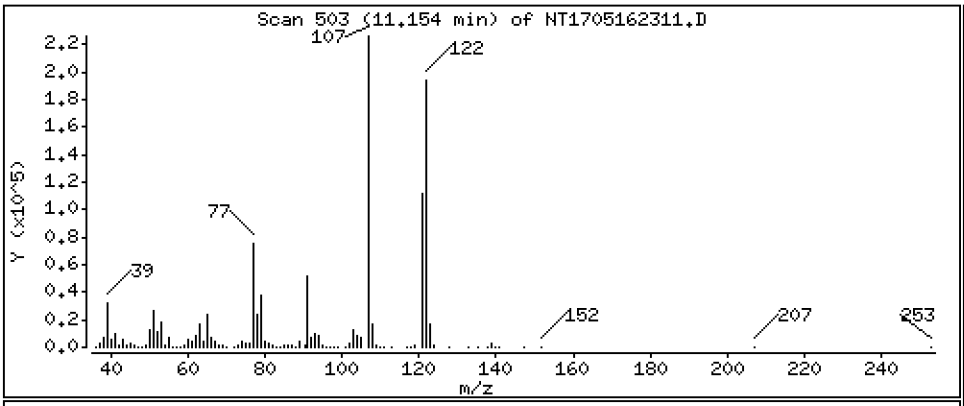
Operator: JGR

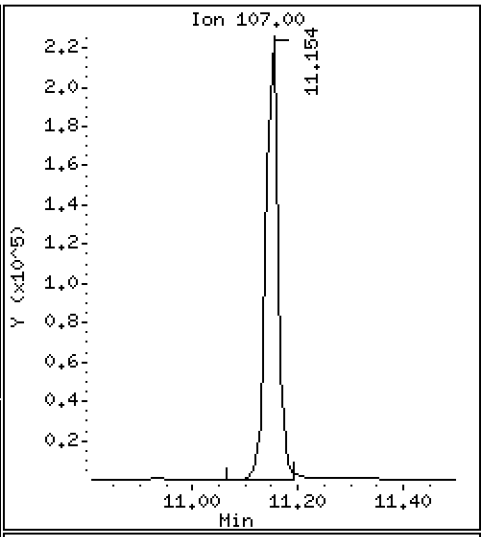
Column phase: ZB-5msi

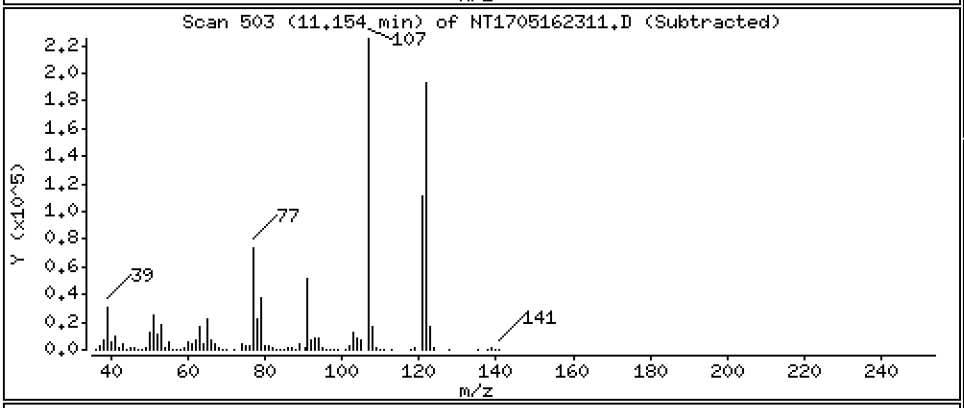
Column diameter: 0.25

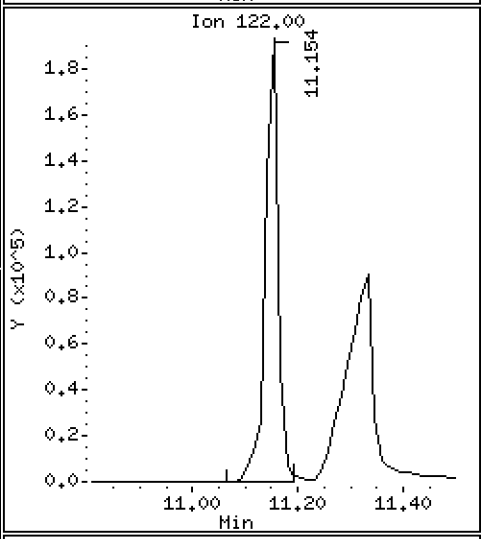
22 2,4-Dimethylphenol

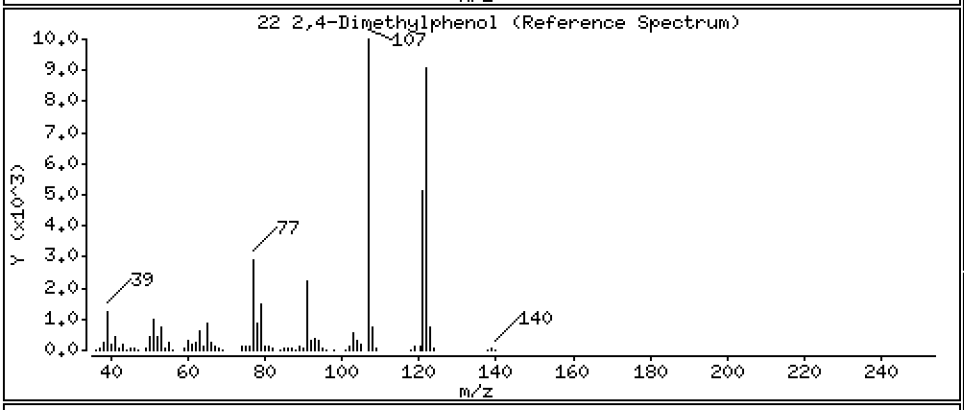
Concentration: 3.788 ug/mL

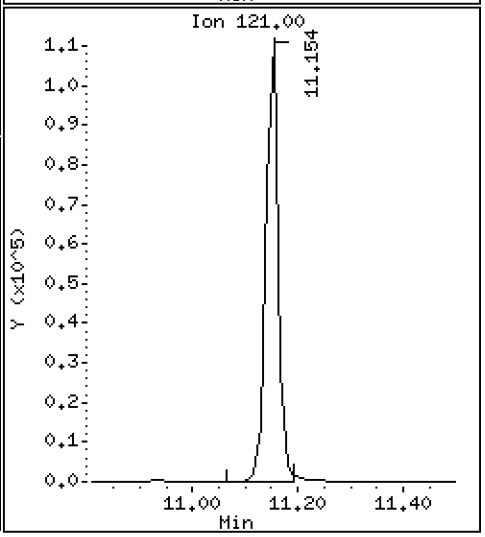


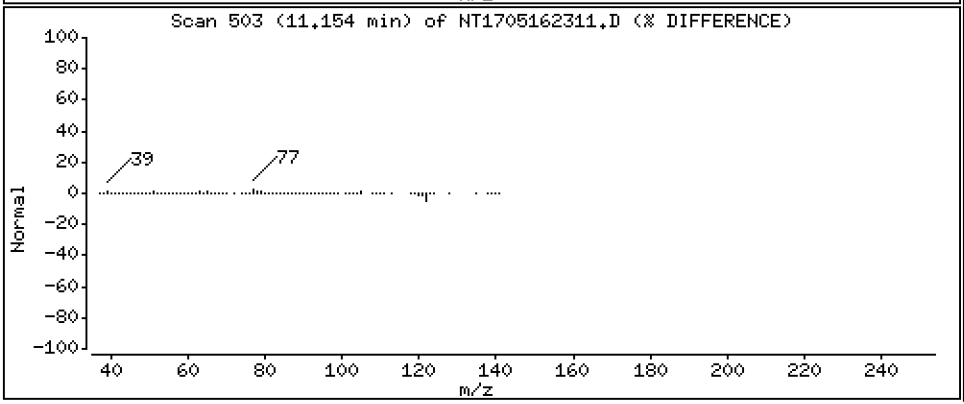












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

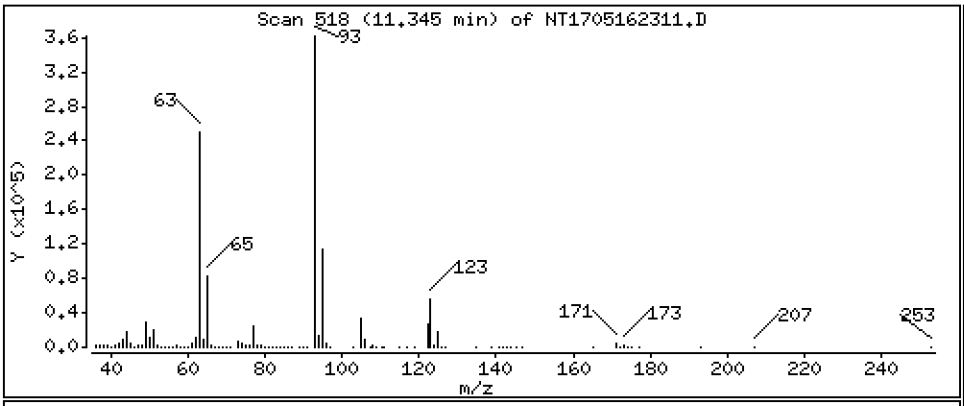
Operator: JGR

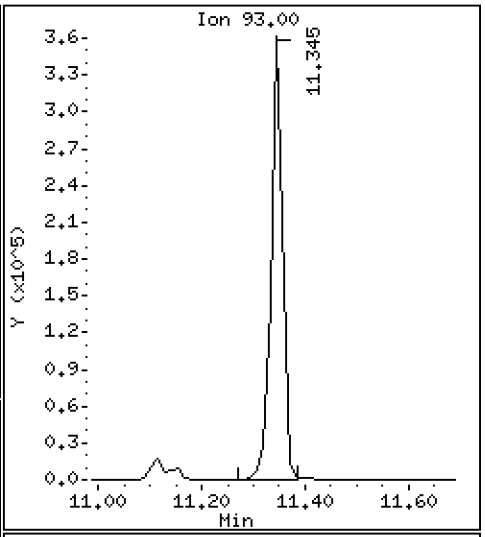
Column phase: ZB-5msi

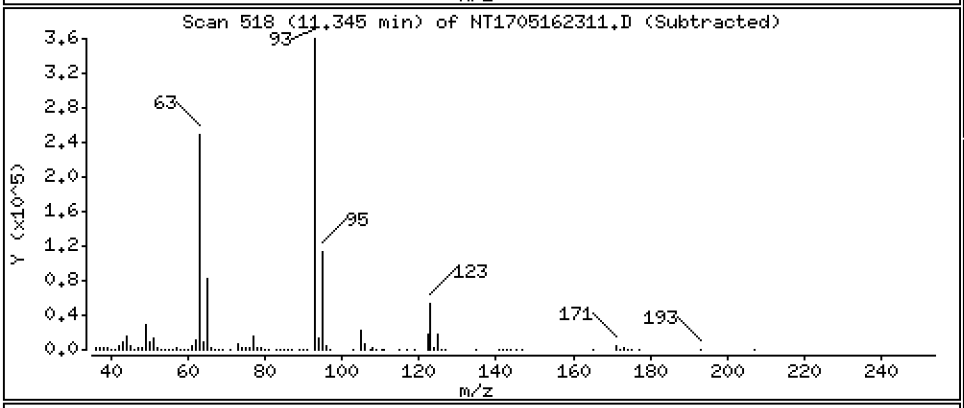
Column diameter: 0.25

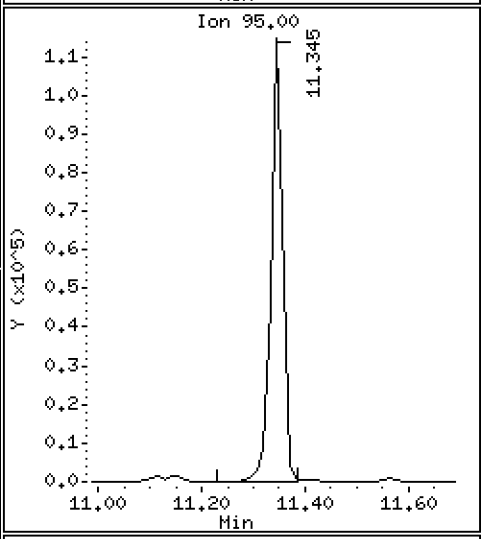
23 Bis(2-Chloroethoxy)methane

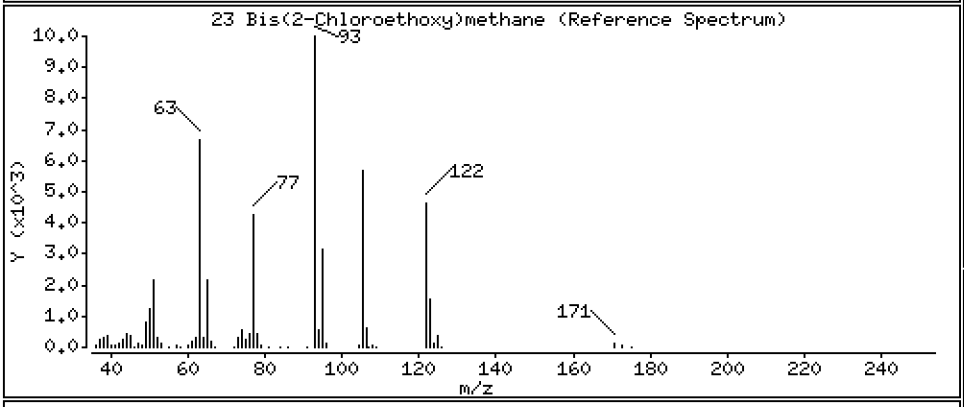
Concentration: 6.232 ug/mL

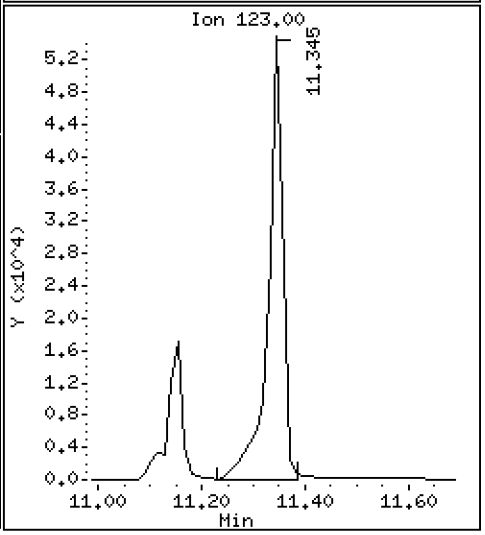


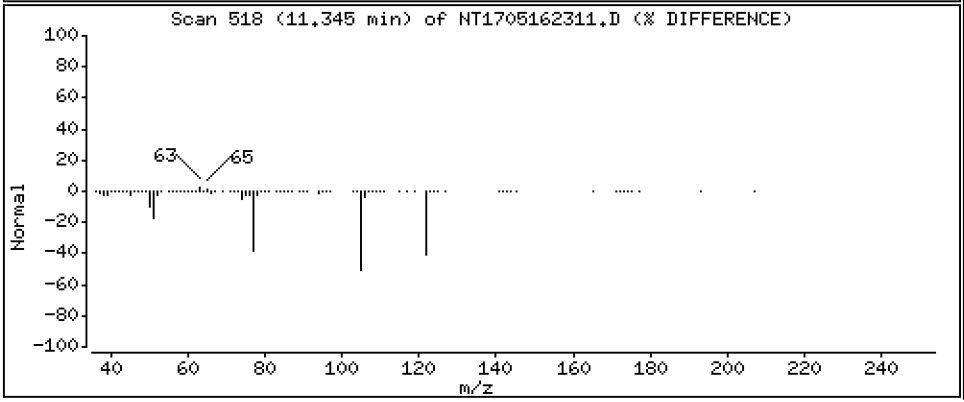












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

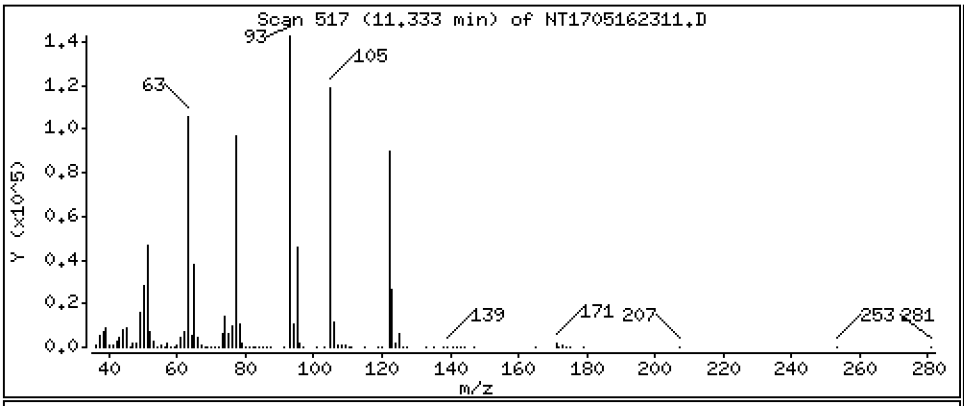
Operator: JGR

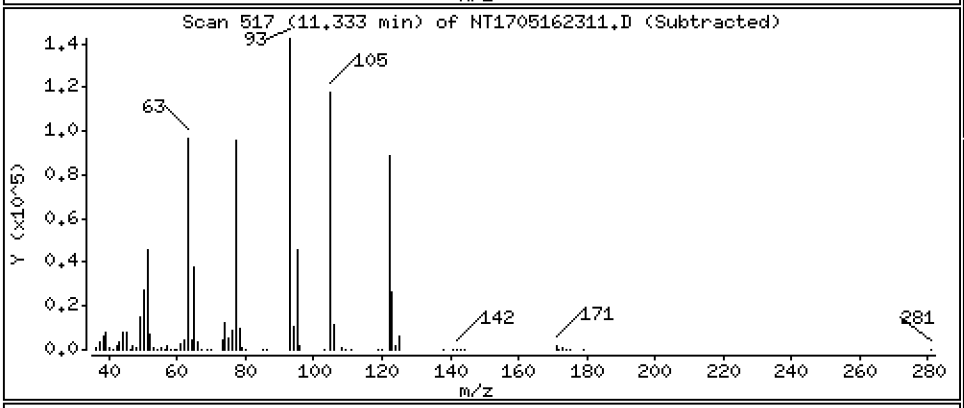
Column phase: ZB-5msi

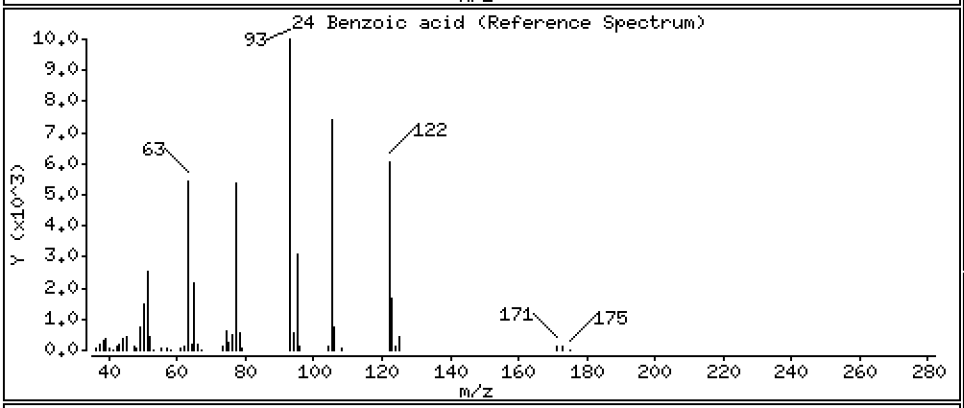
Column diameter: 0.25

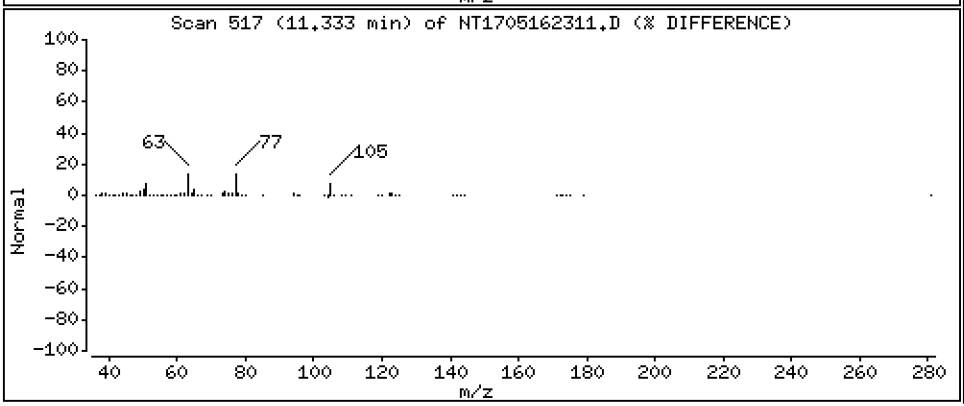
24 Benzoic acid

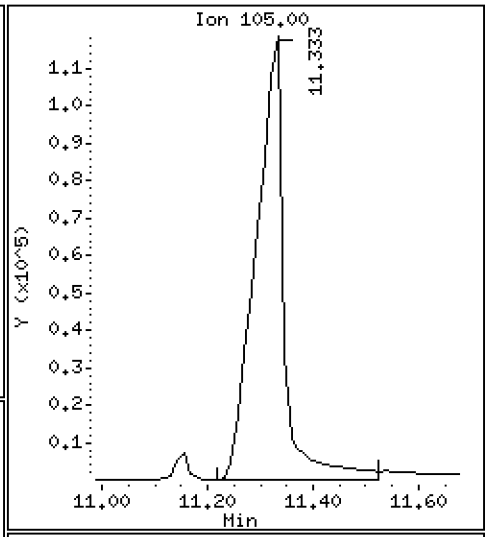
Concentration: 6.761 ug/mL

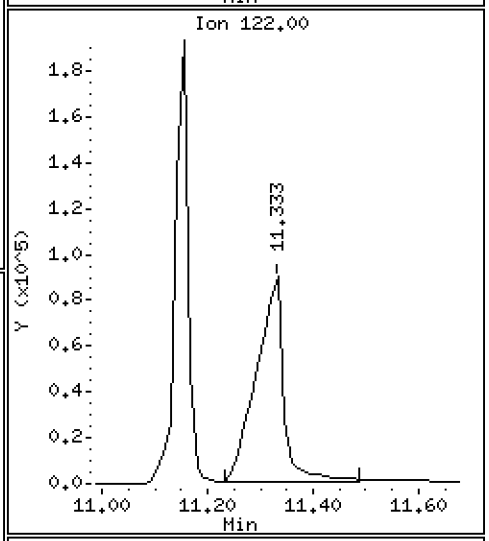


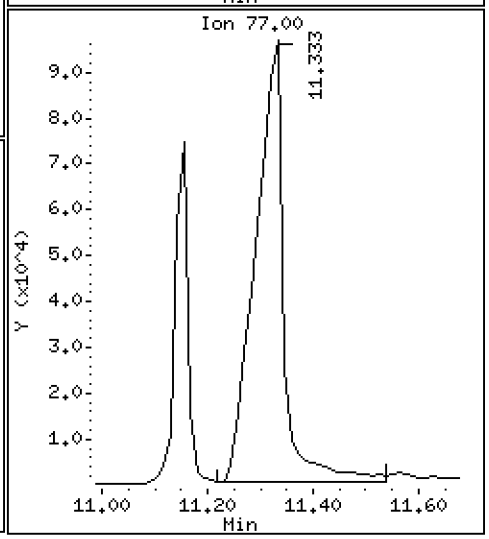












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

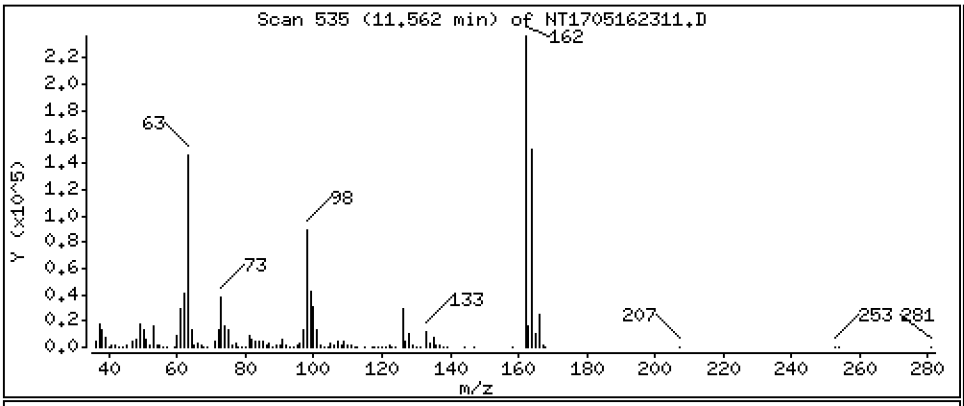
Operator: JGR

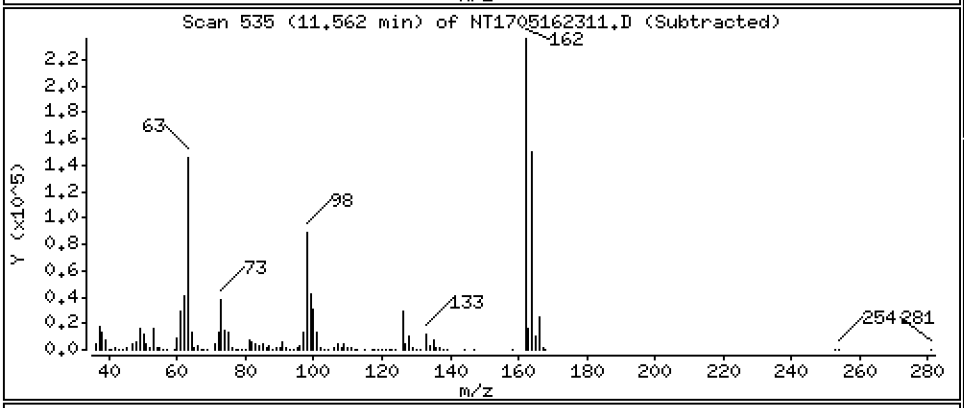
Column phase: ZB-5msi

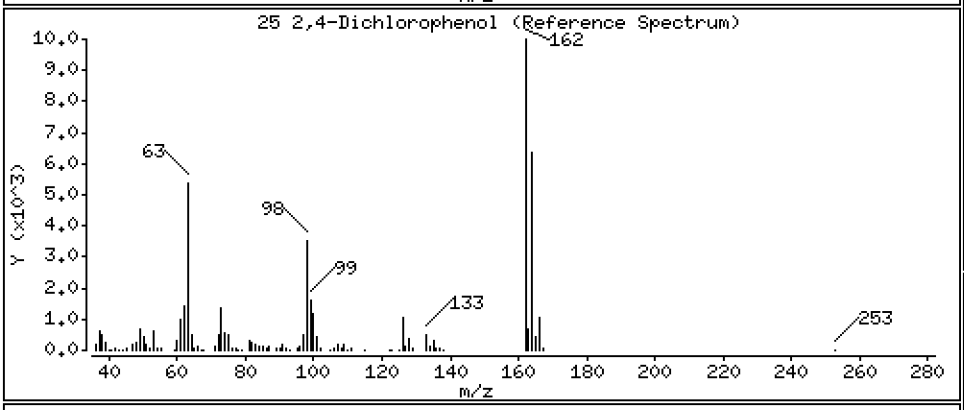
Column diameter: 0.25

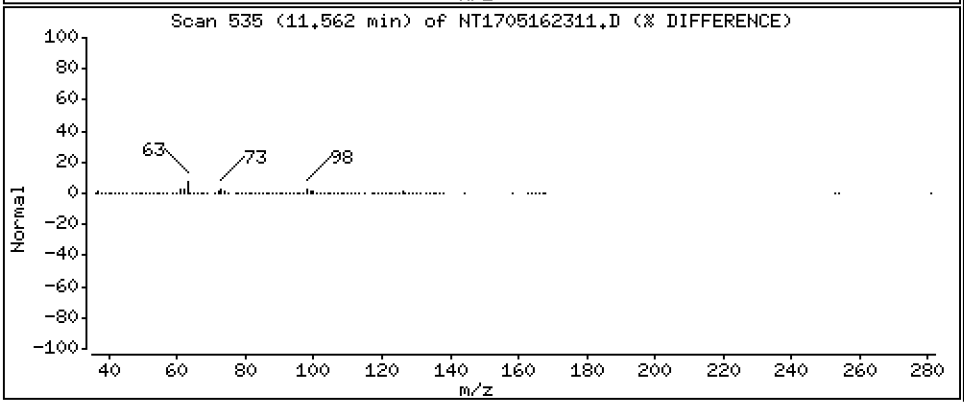
25 2,4-Dichlorophenol

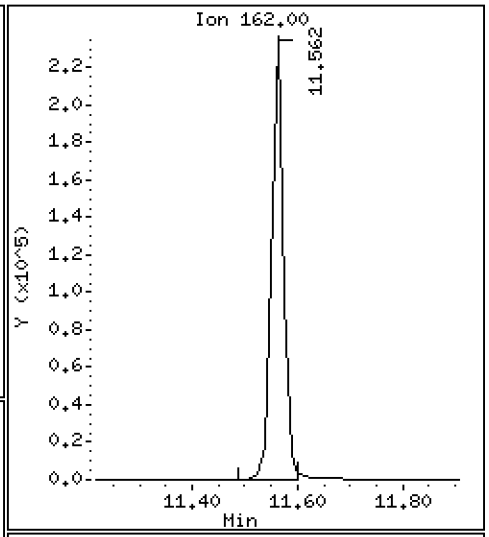
Concentration: 4.707 ug/mL

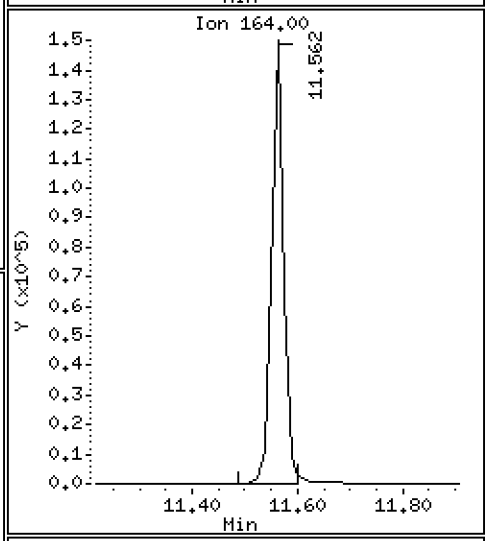


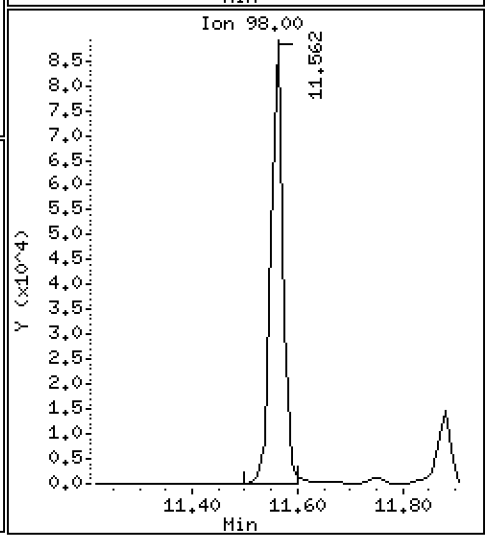












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

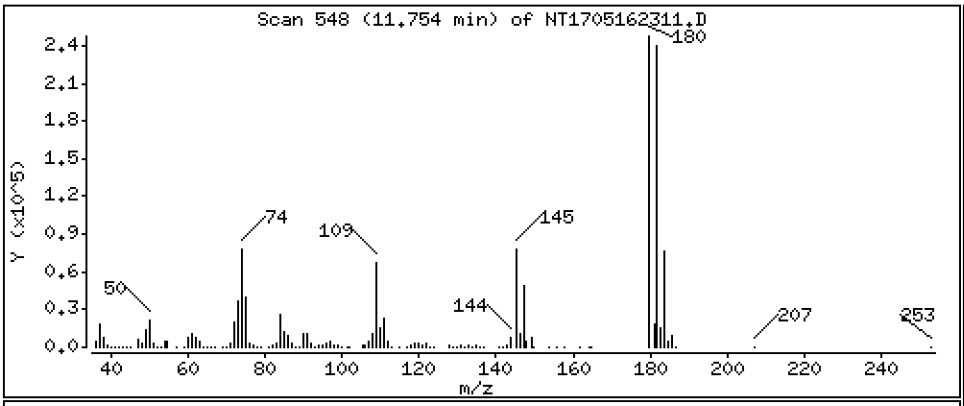
Operator: JGR

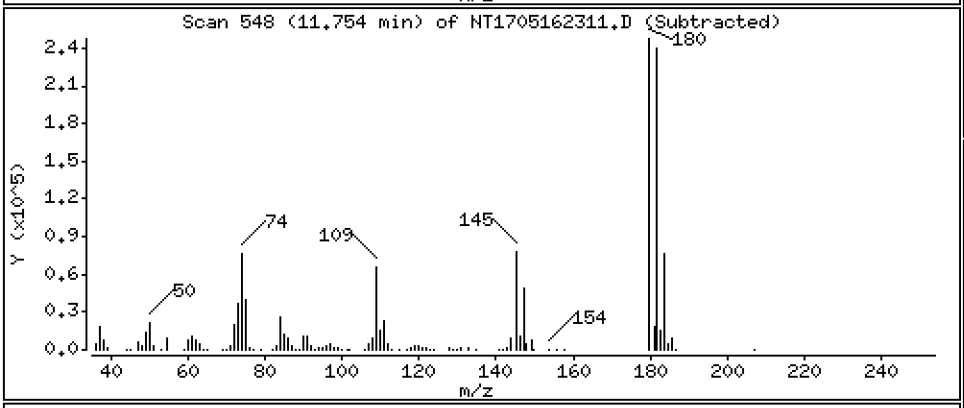
Column phase: ZB-5msi

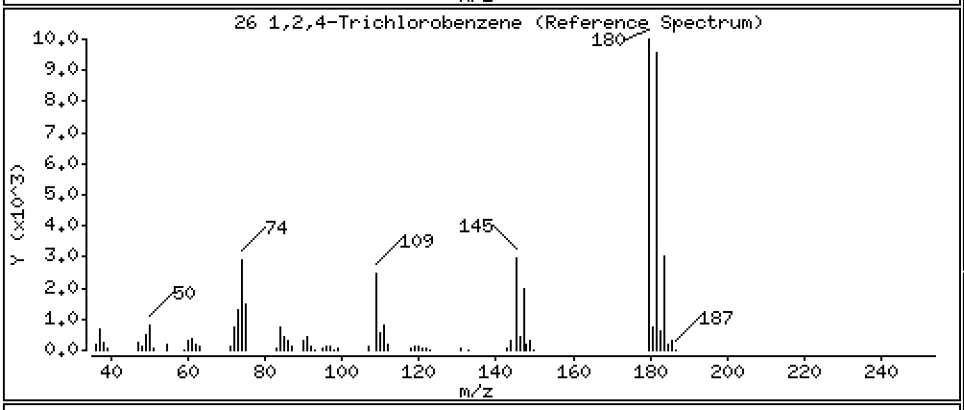
Column diameter: 0.25

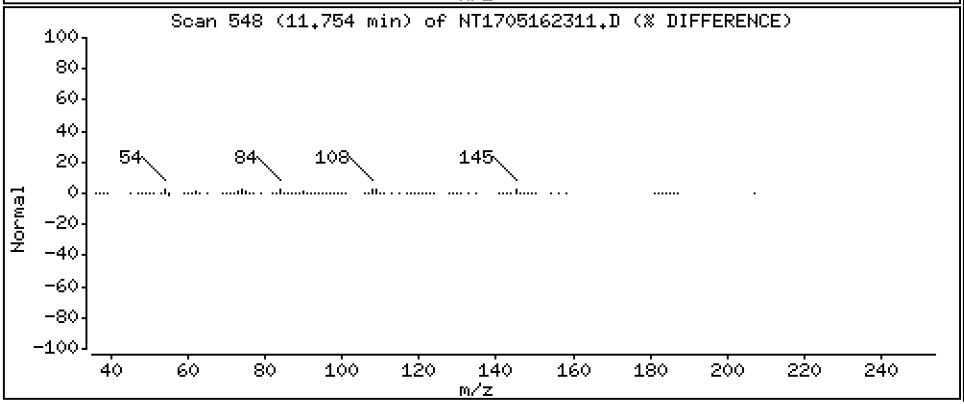
26 1,2,4-Trichlorobenzene

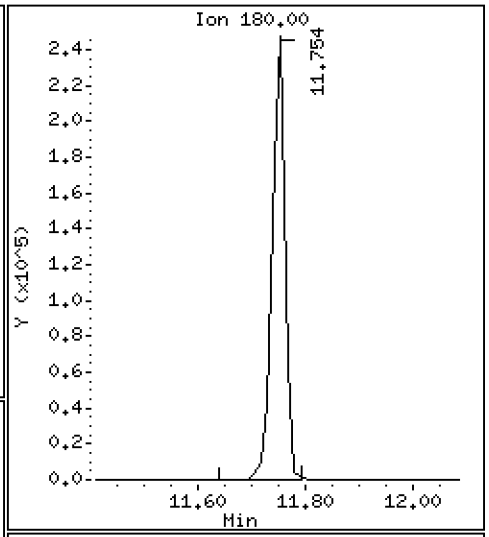
Concentration: 5.879 ug/mL

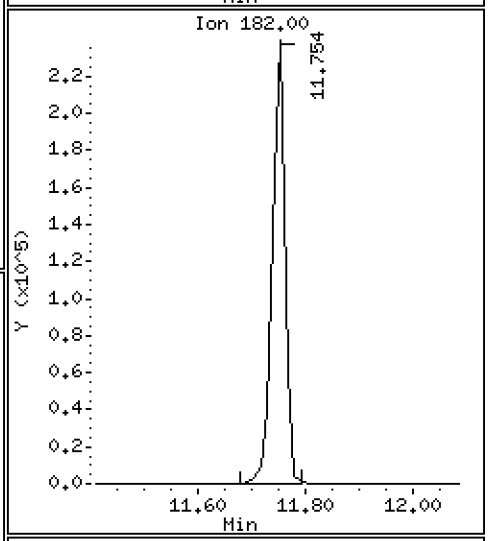


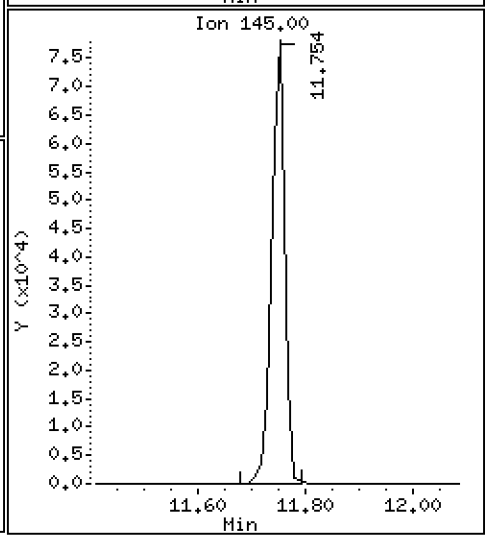












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

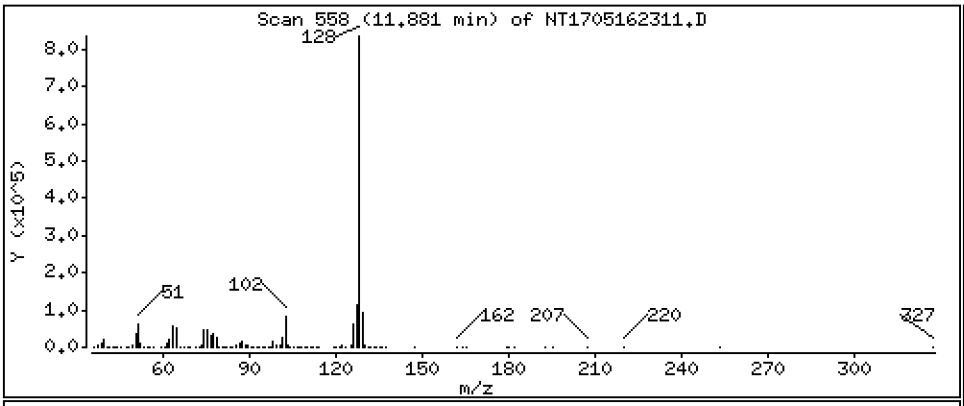
Operator: JGR

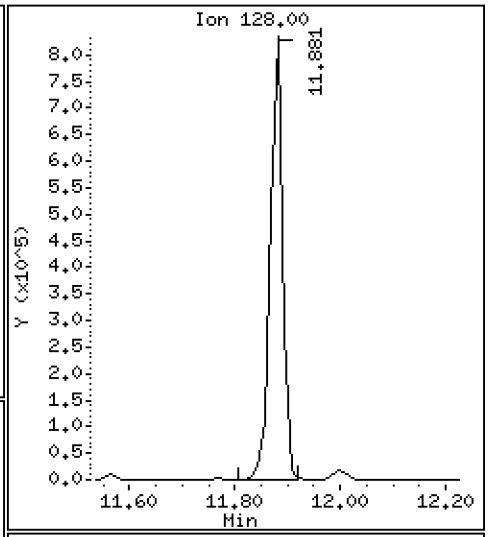
Column phase: ZB-5msi

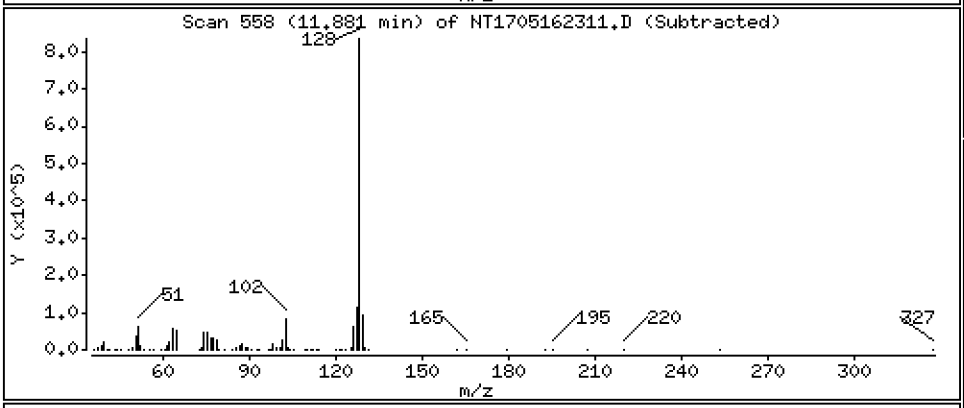
Column diameter: 0.25

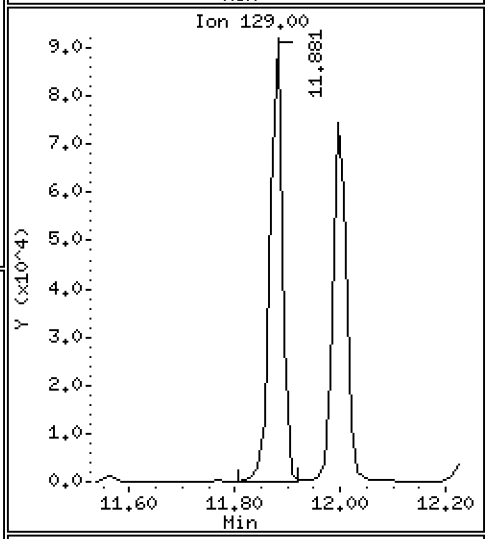
28 Naphthalene

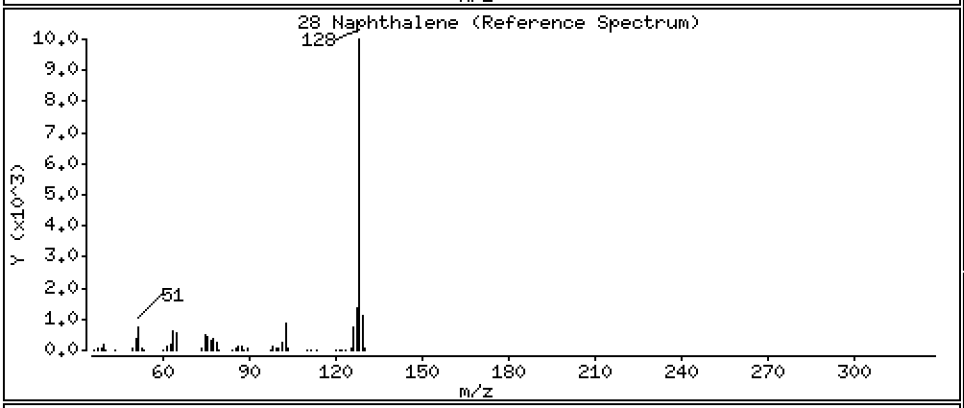
Concentration: 5.129 ug/mL

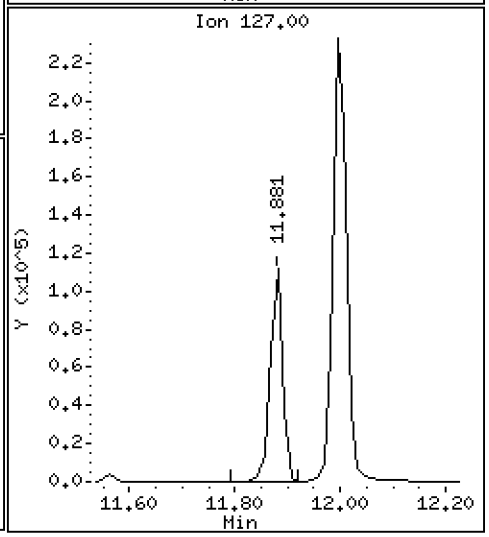


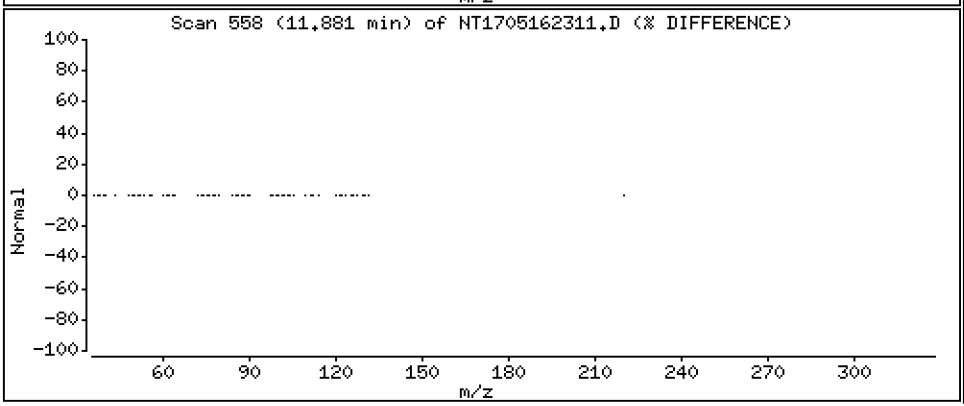












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

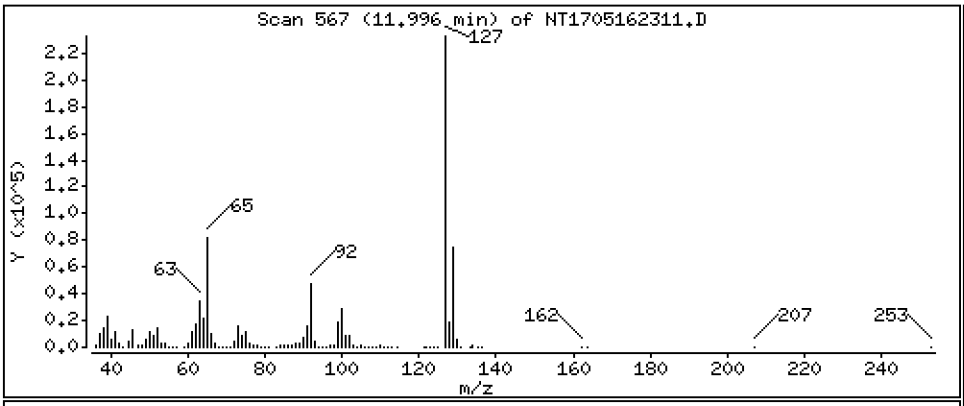
Operator: JGR

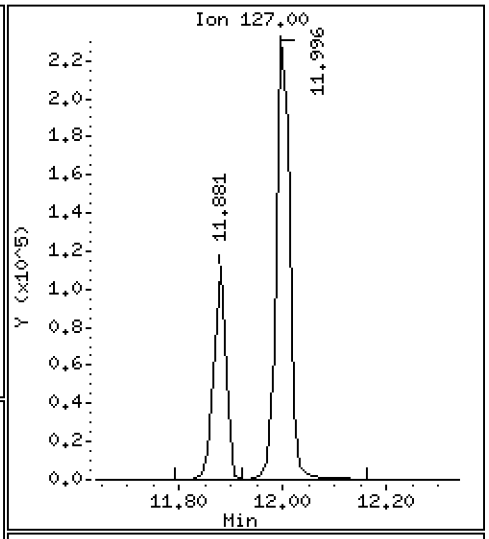
Column phase: ZB-5msi

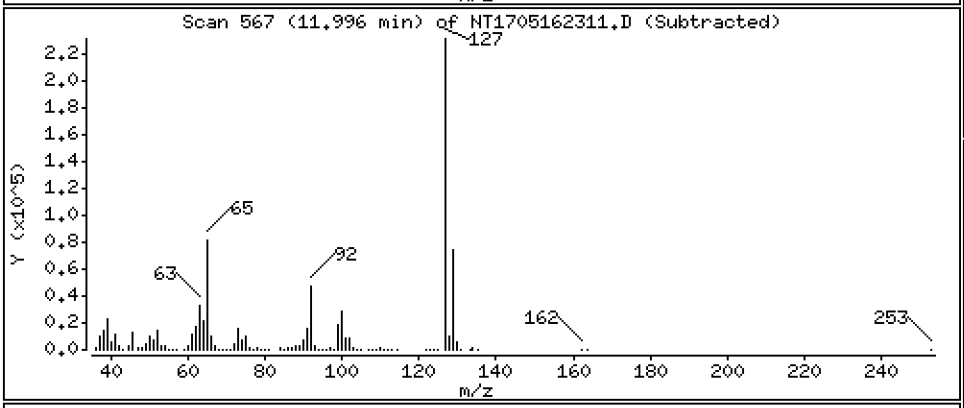
Column diameter: 0.25

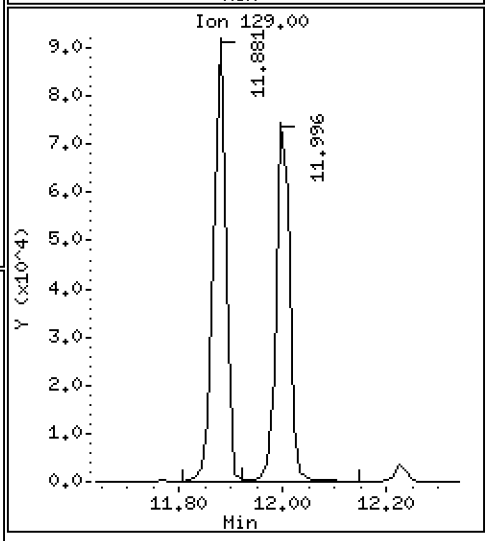
29 4-Chloroaniline

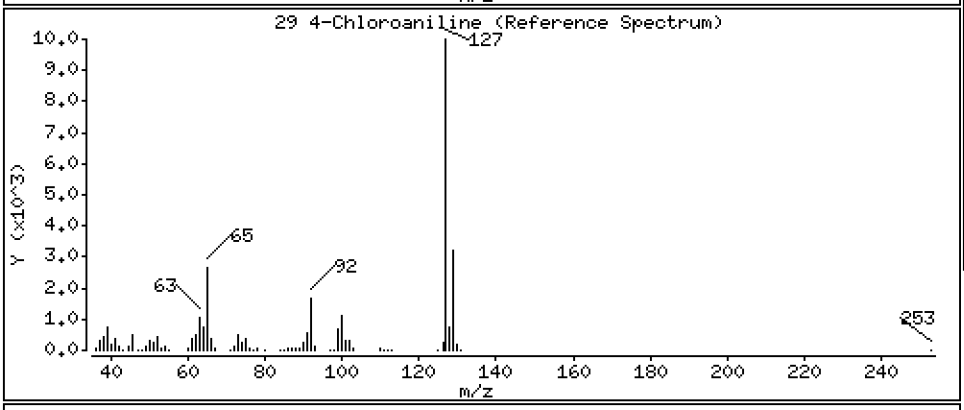
Concentration: 4.488 ug/mL

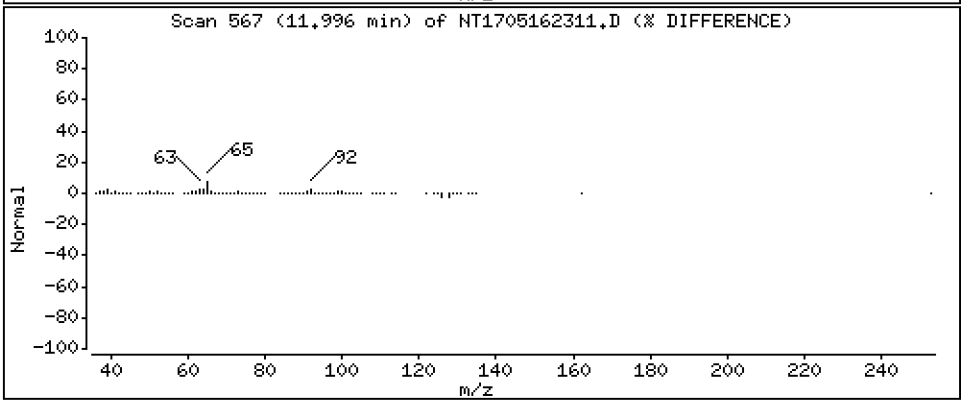












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

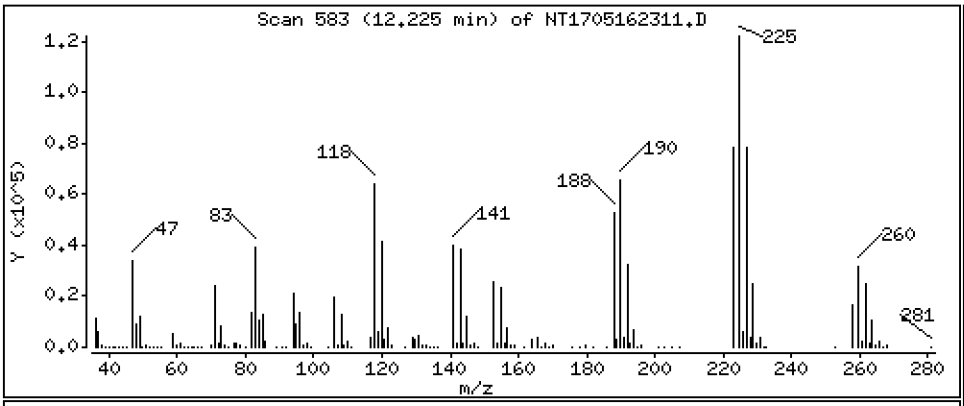
Operator: JGR

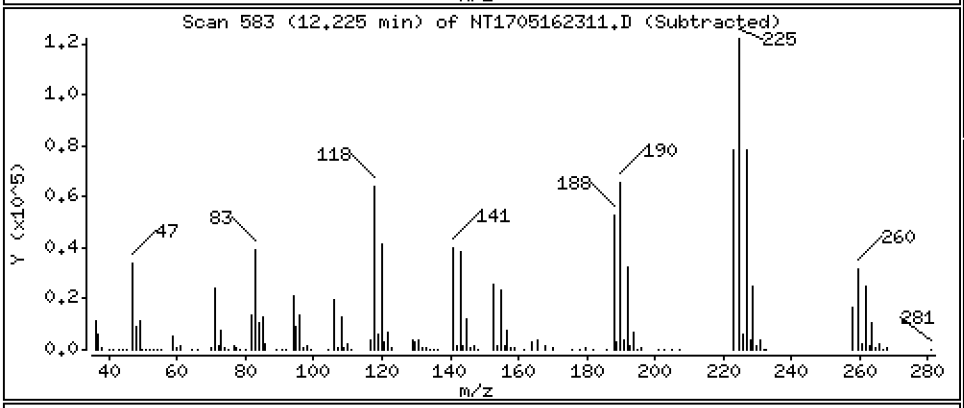
Column phase: ZB-5msi

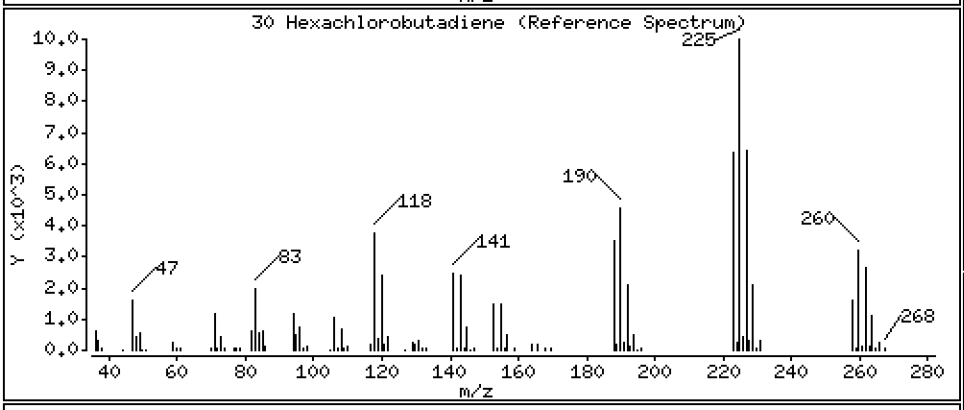
Column diameter: 0.25

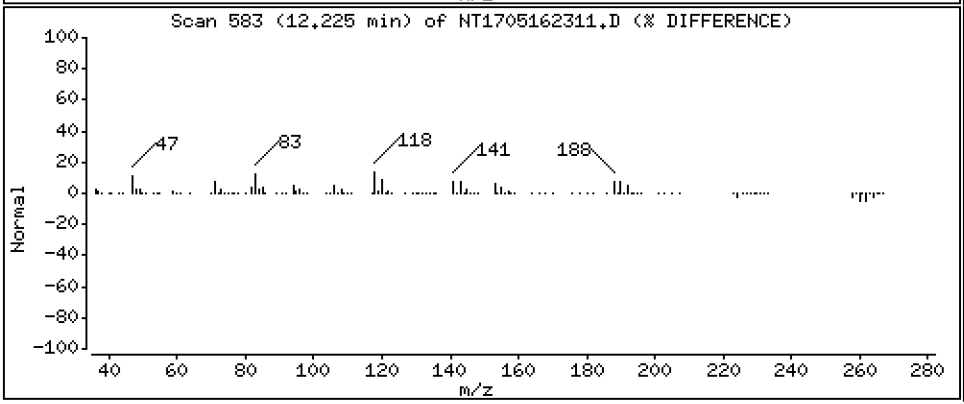
30 Hexachlorobutadiene

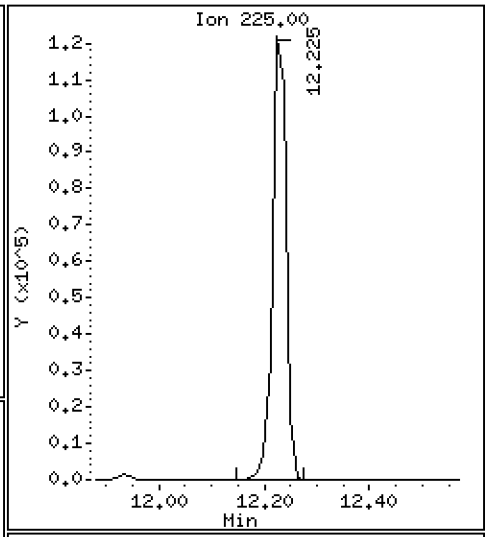
Concentration: 5.241 ug/mL

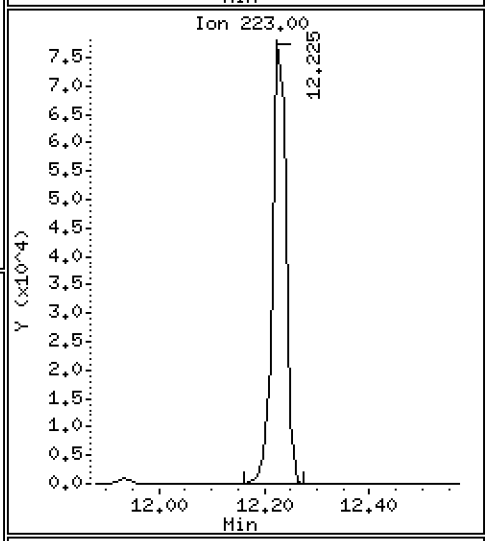


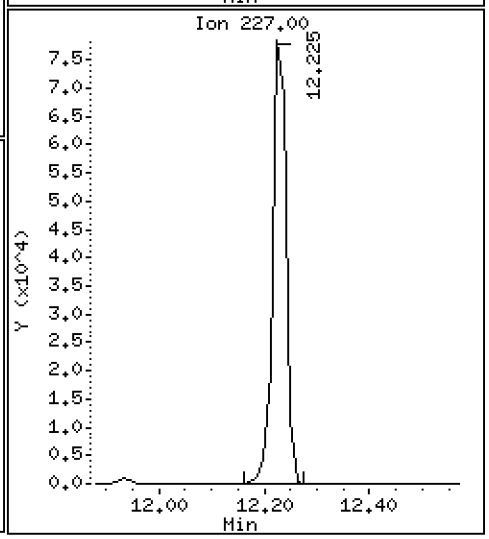












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

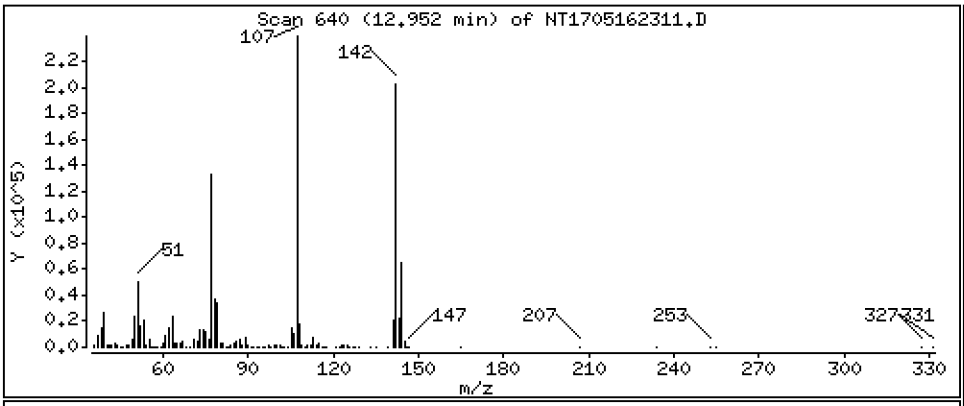
Operator: JGR

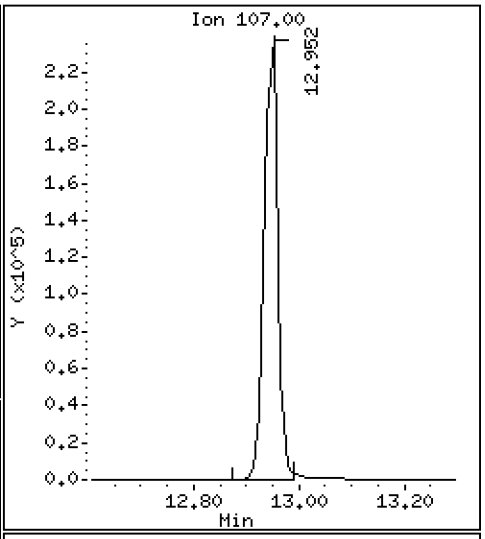
Column phase: ZB-5msi

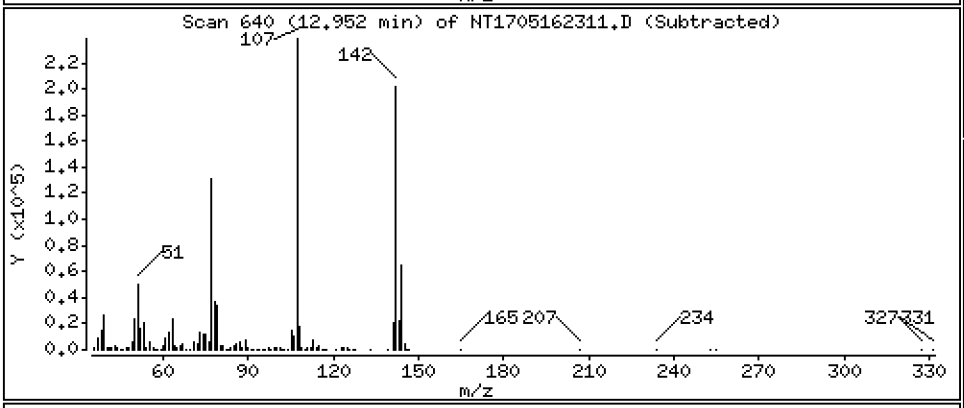
Column diameter: 0.25

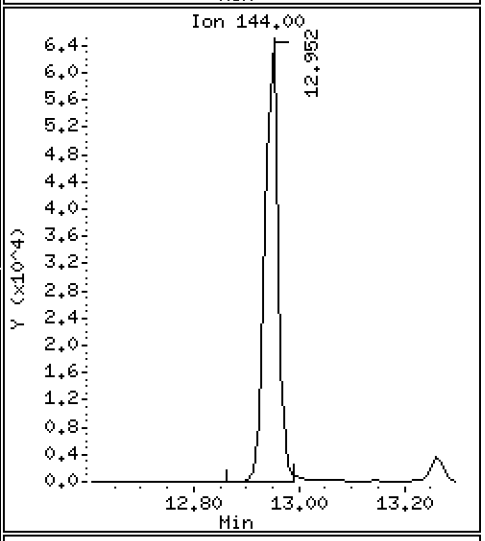
31 4-Chloro-3-methylphenol

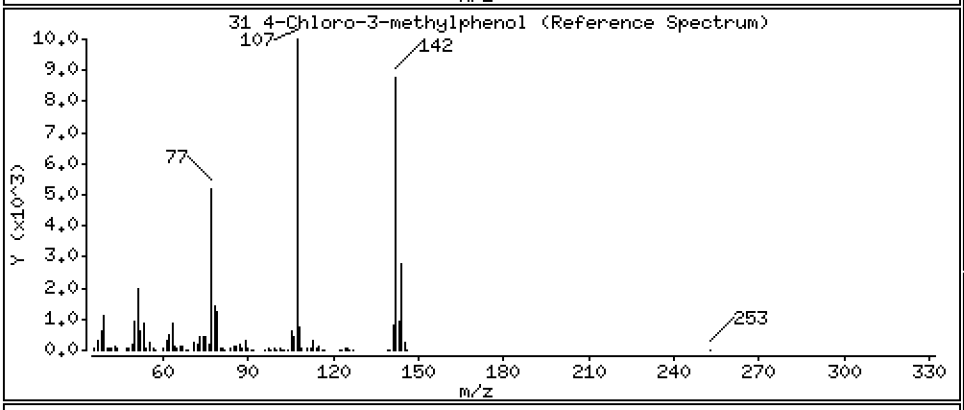
Concentration: 4.878 ug/mL

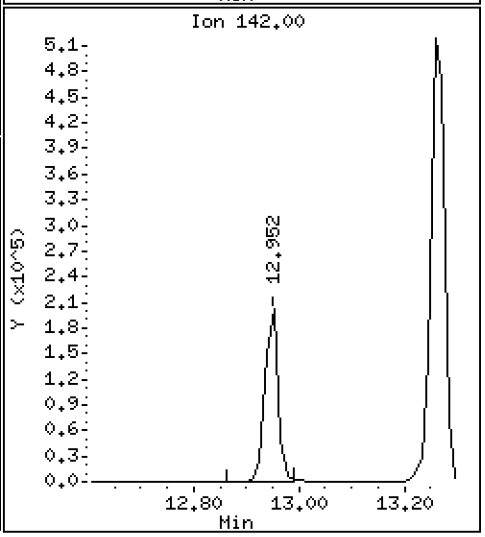


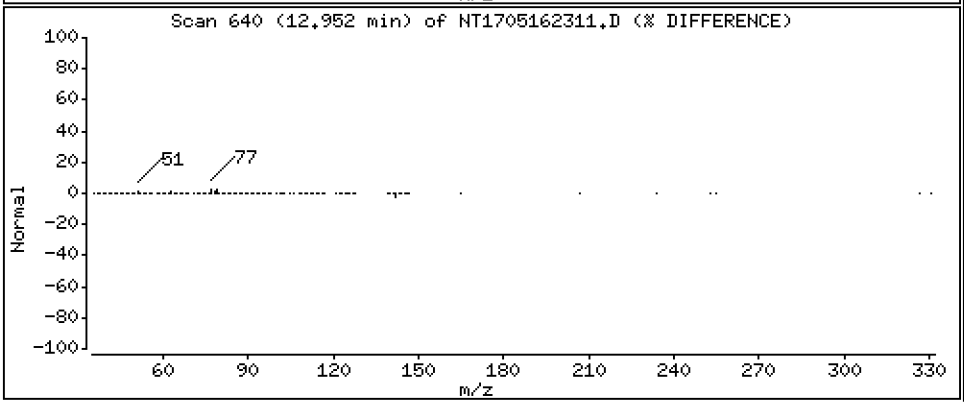












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

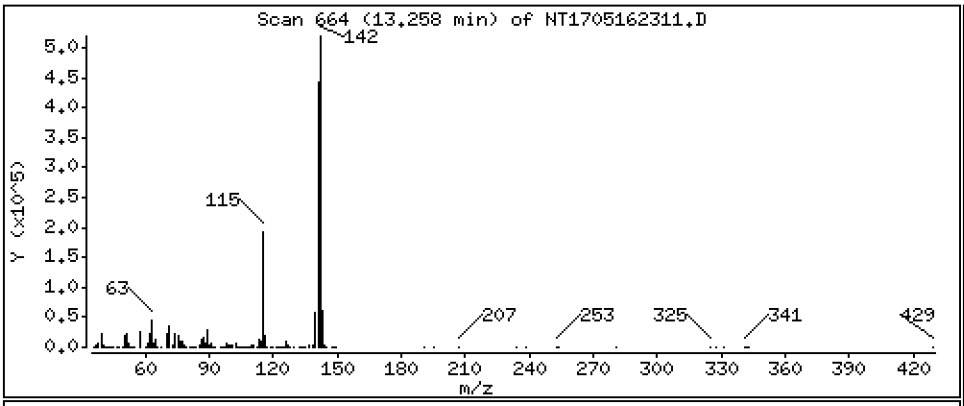
Operator: JGR

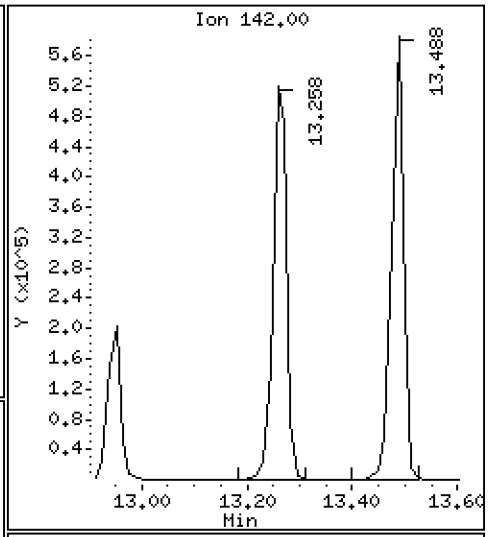
Column phase: ZB-5msi

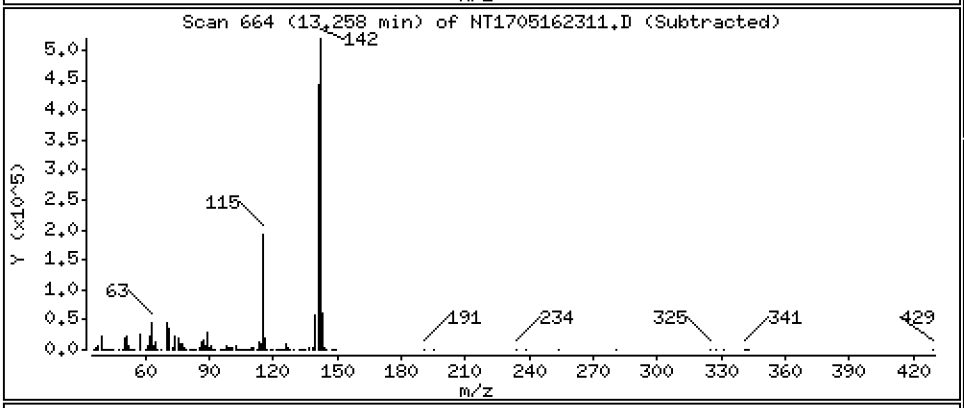
Column diameter: 0.25

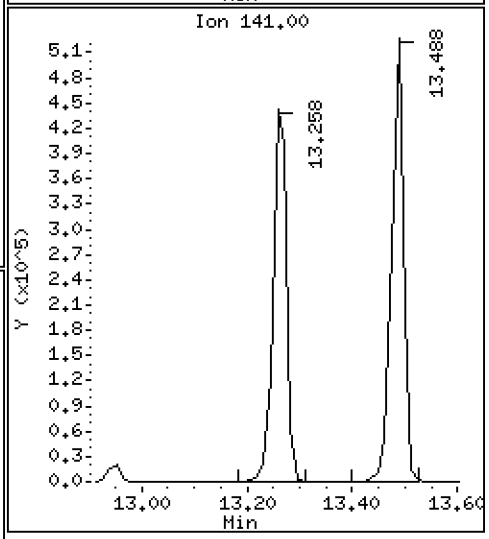
32 2-Methylnaphthalene

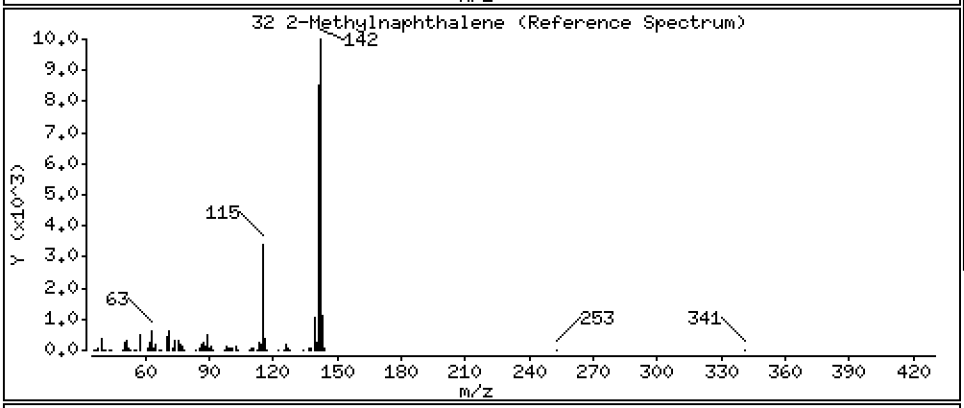
Concentration: 5.028 ug/mL

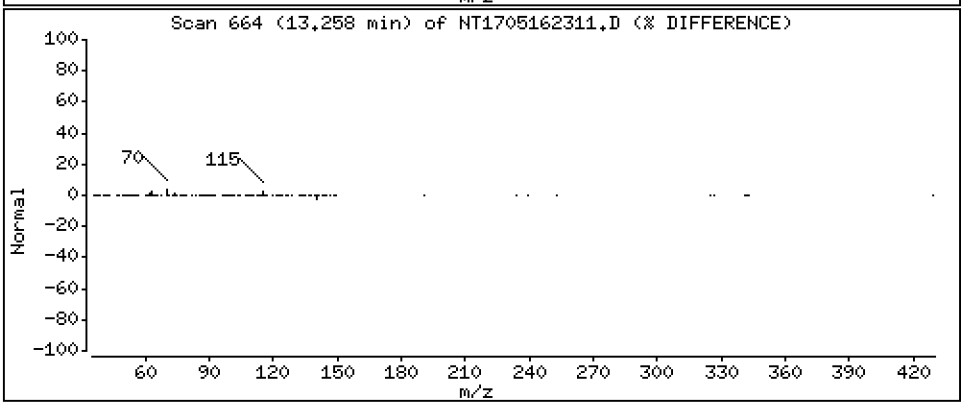












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

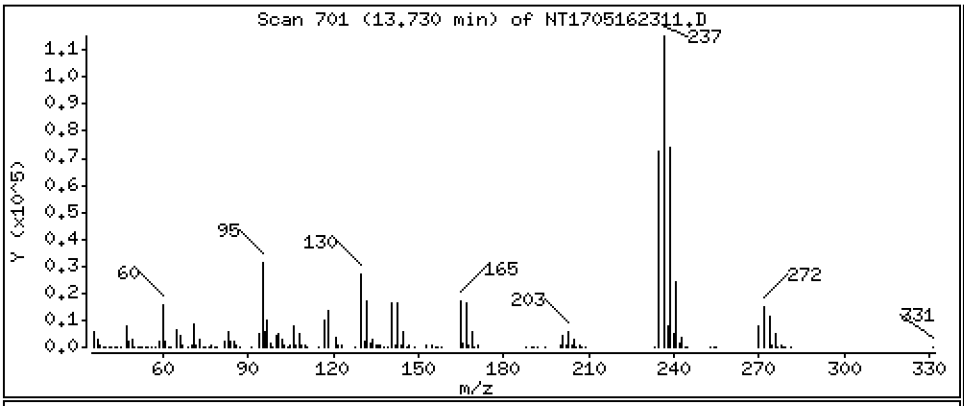
Operator: JGR

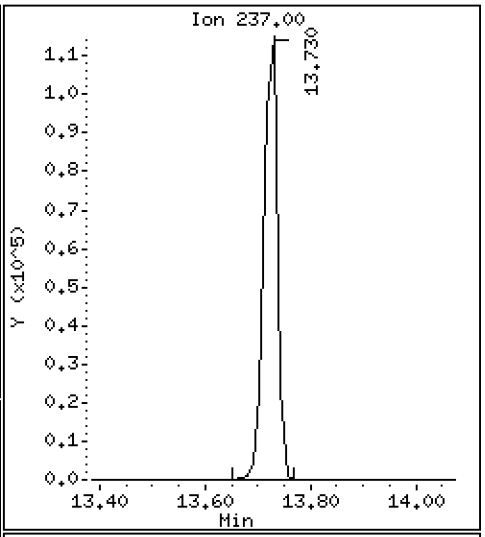
Column phase: ZB-5msi

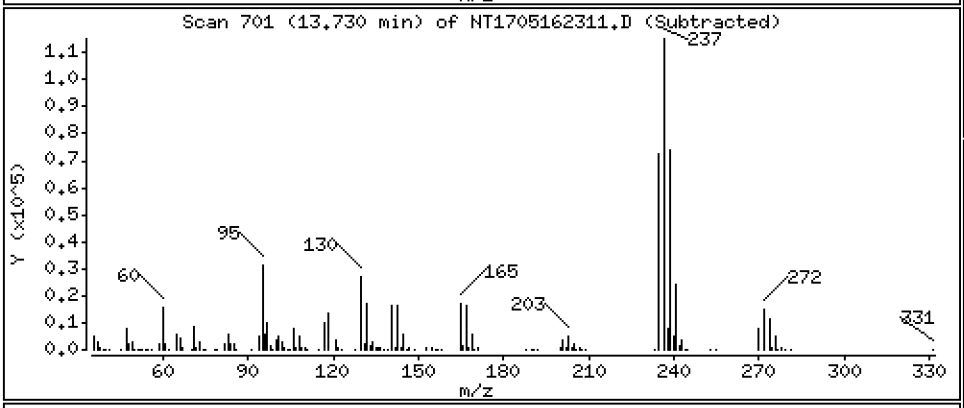
Column diameter: 0.25

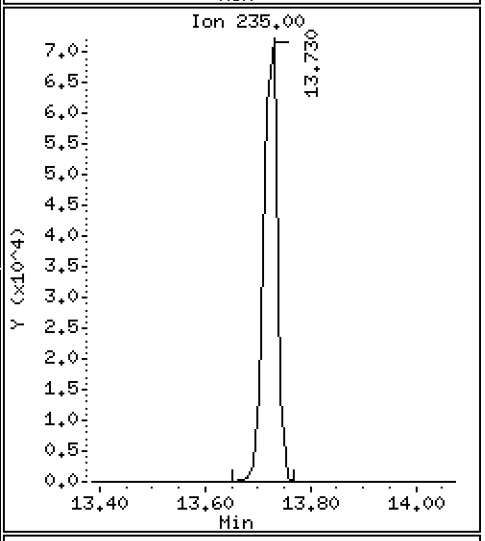
33 Hexachlorocyclopentadiene

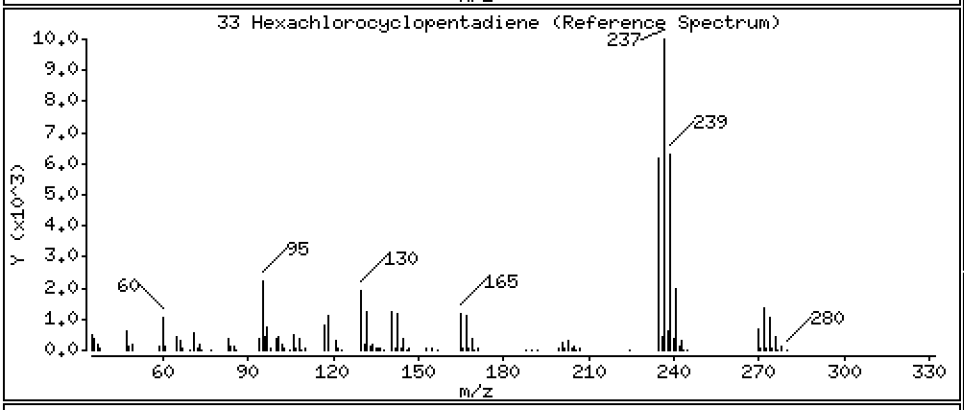
Concentration: 4.219 ug/mL

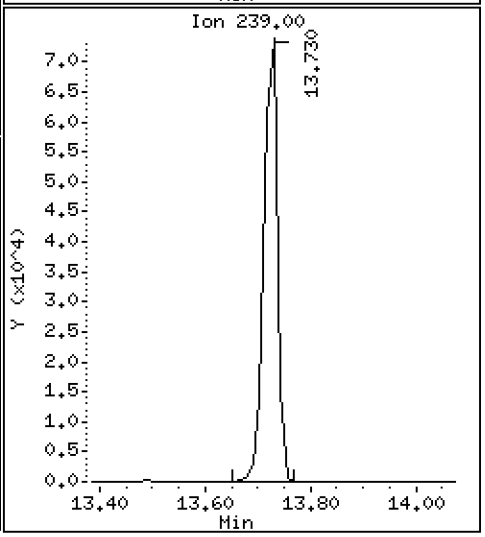


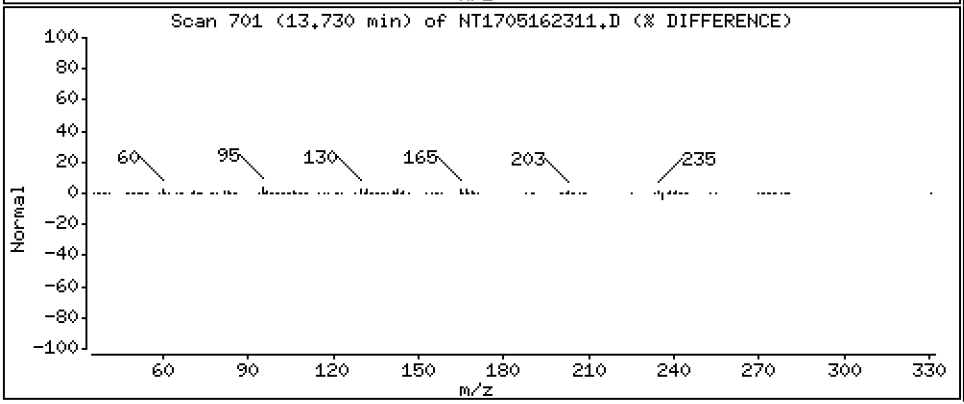












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

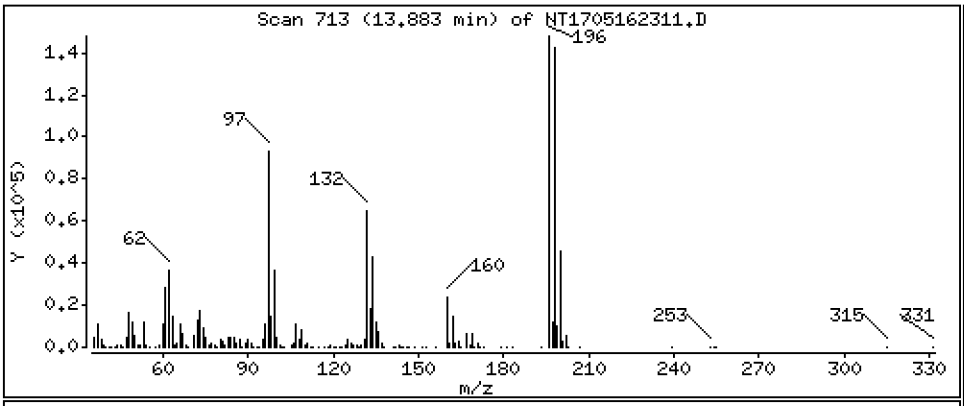
Operator: JGR

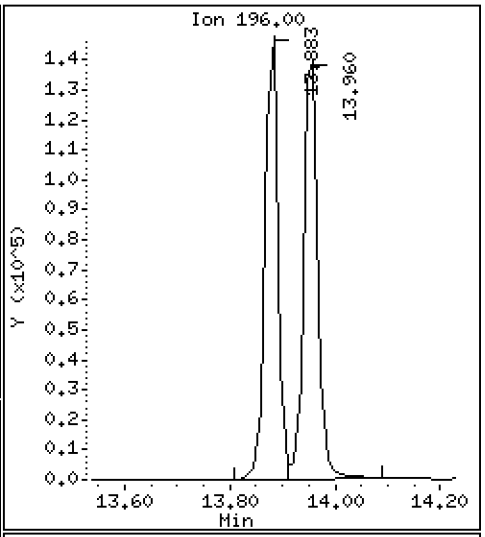
Column phase: ZB-5msi

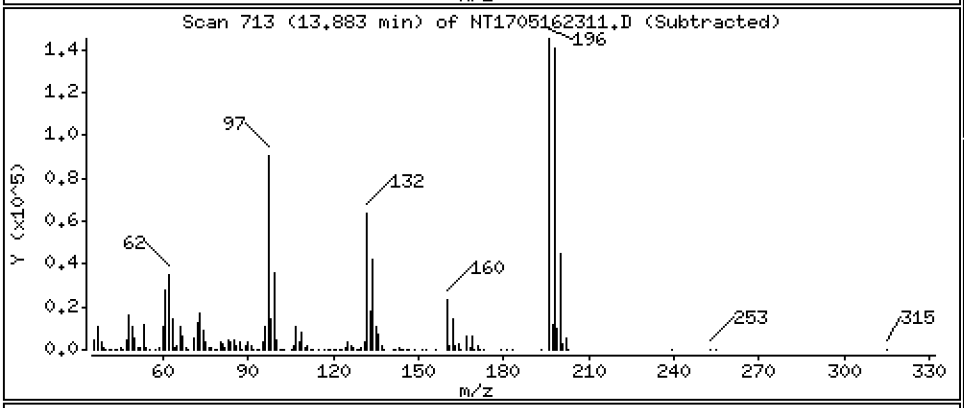
Column diameter: 0.25

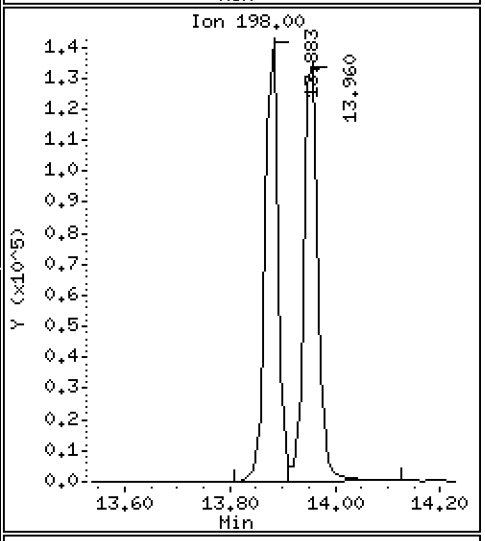
34 2,4,6-Trichlorophenol

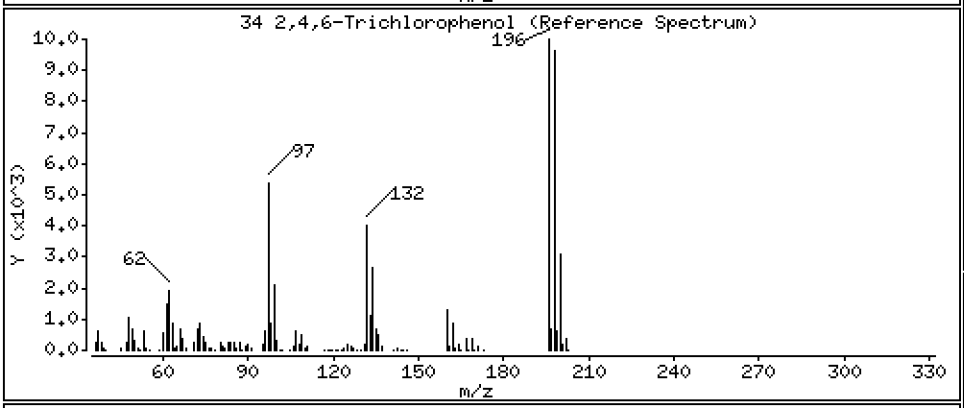
Concentration: 4.794 ug/mL

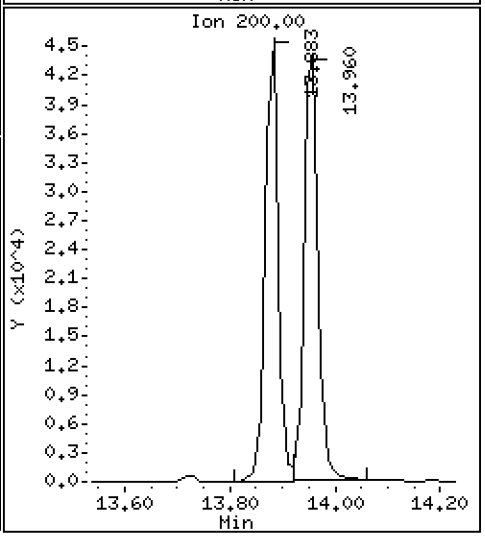


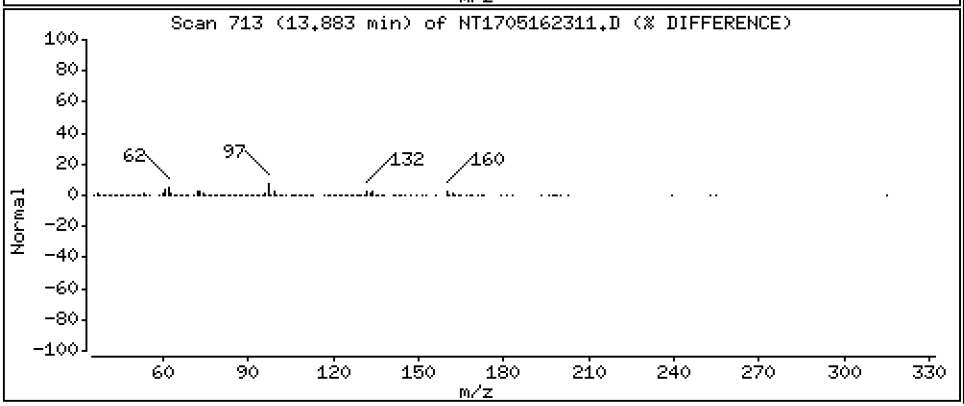












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

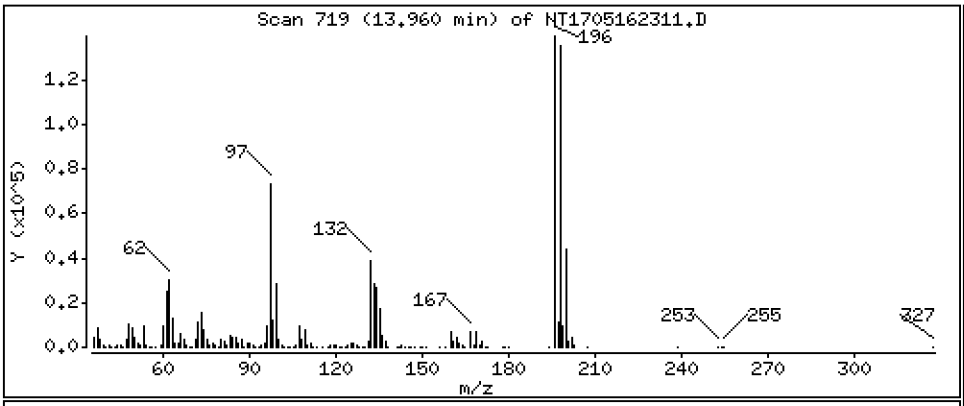
Operator: JGR

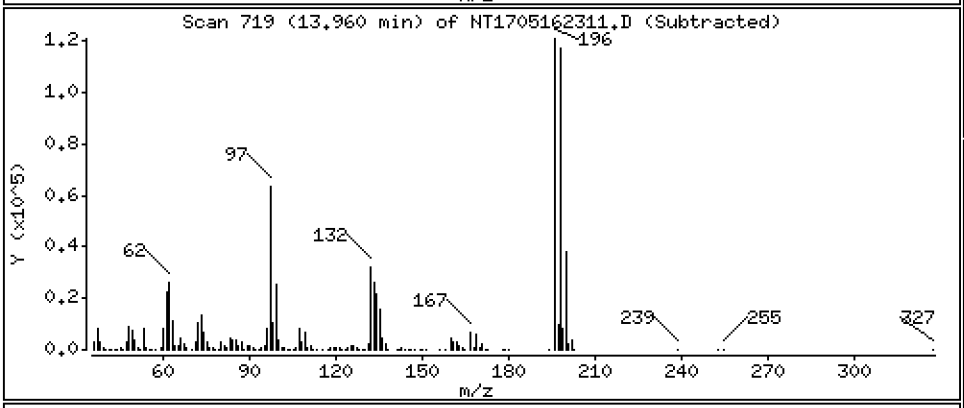
Column phase: ZB-5msi

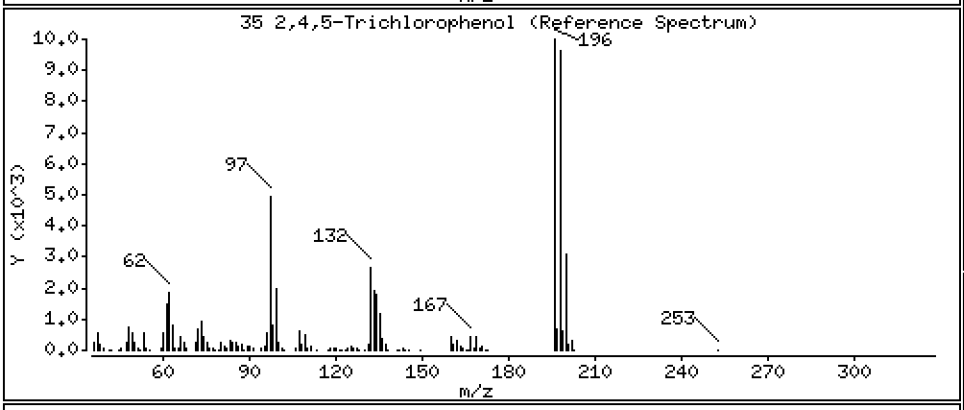
Column diameter: 0.25

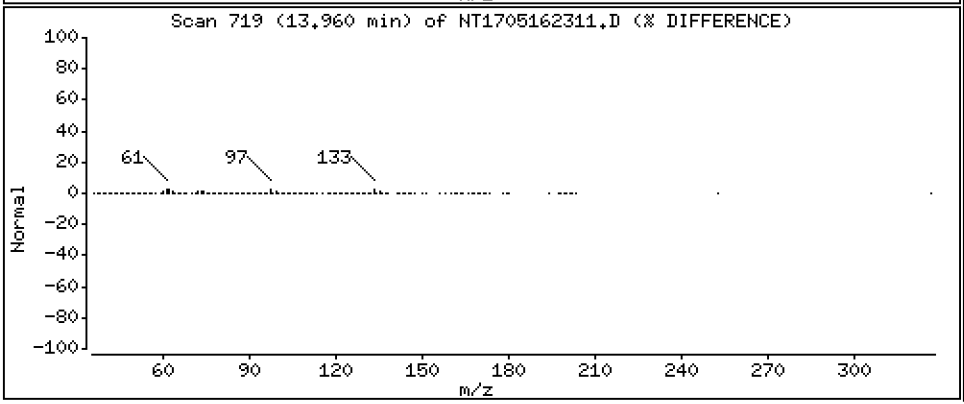
35 2,4,5-Trichlorophenol

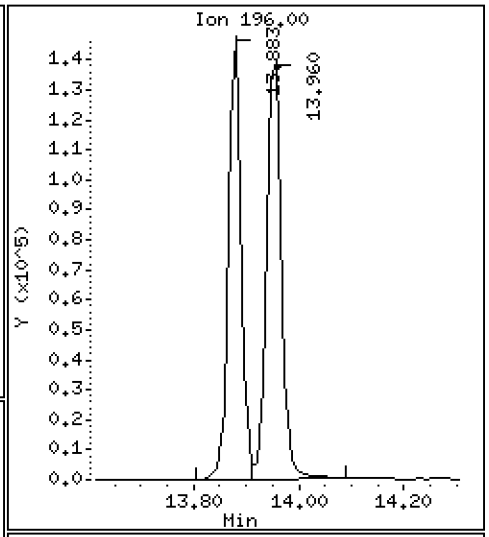
Concentration: 4.837 ug/mL

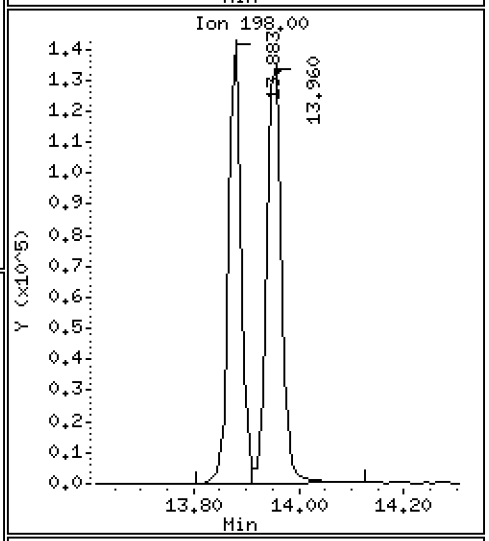


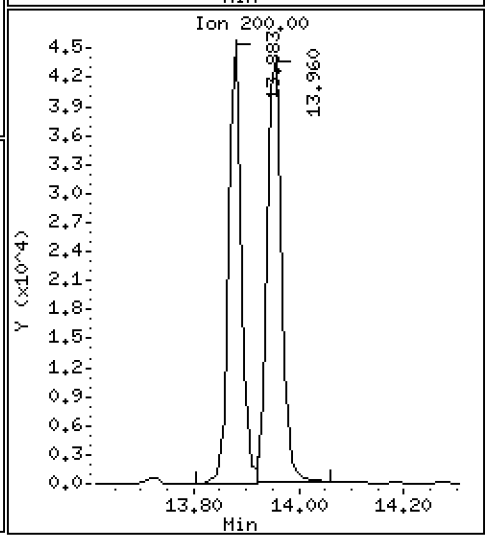












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

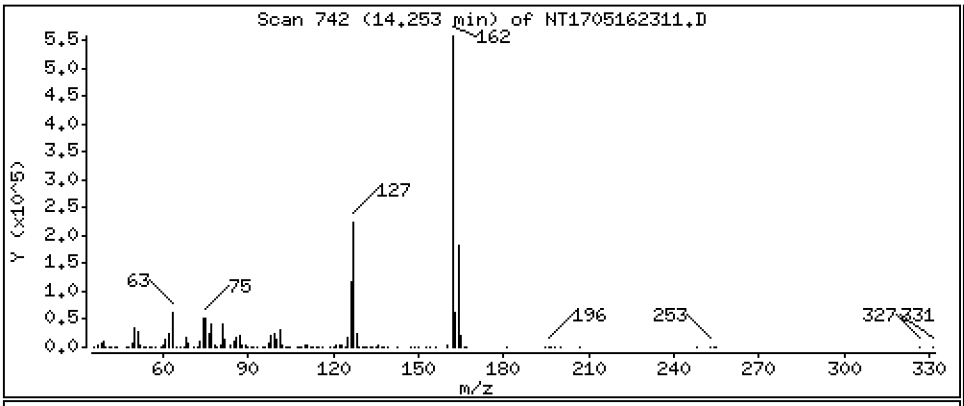
Operator: JGR

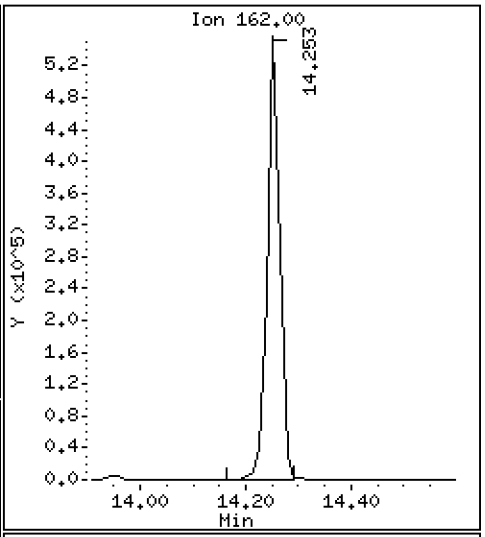
Column phase: ZB-5msi

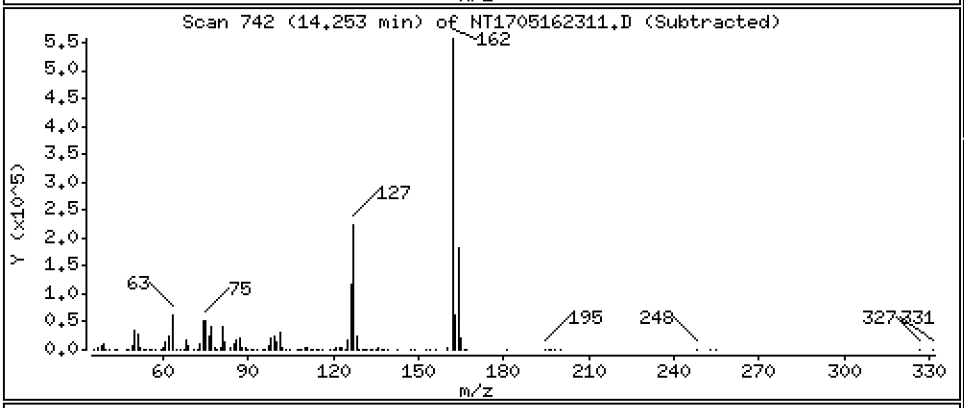
Column diameter: 0.25

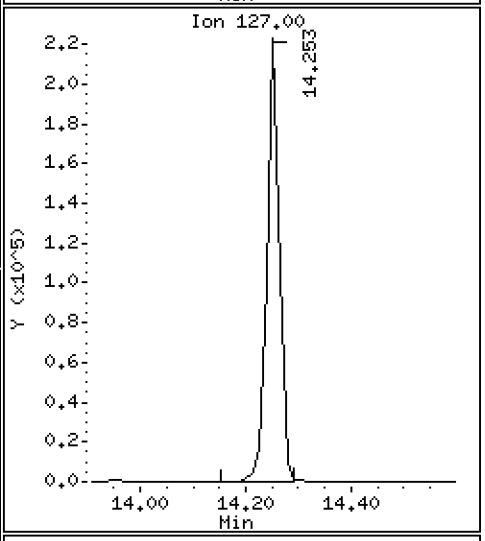
37 2-Chloronaphthalene

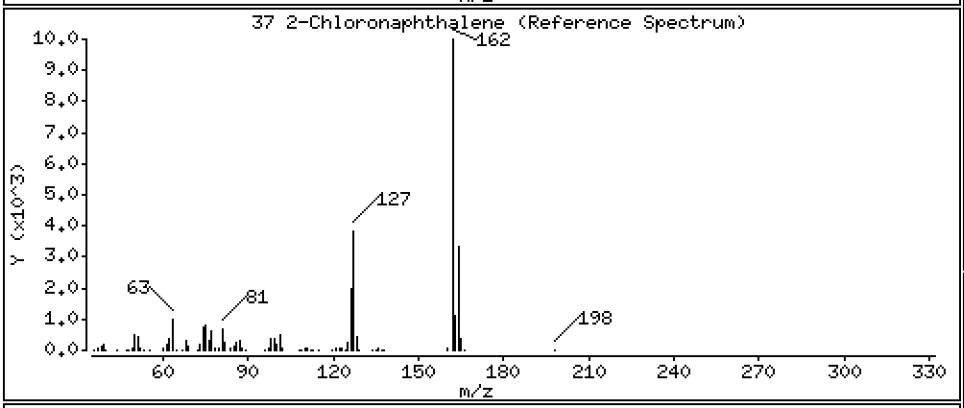
Concentration: 5.401 ug/mL

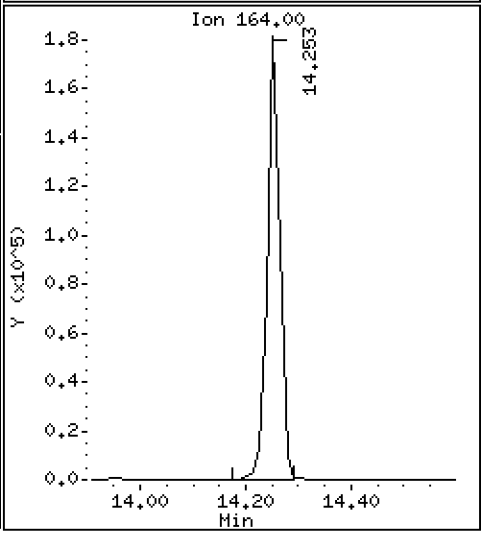


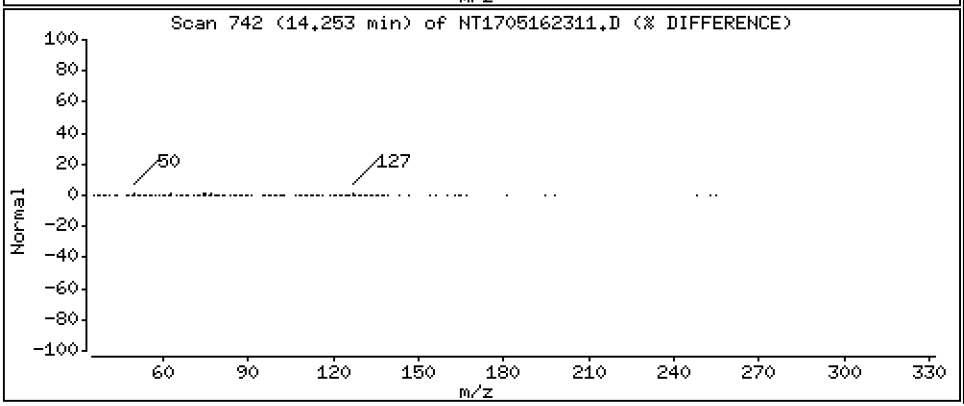












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

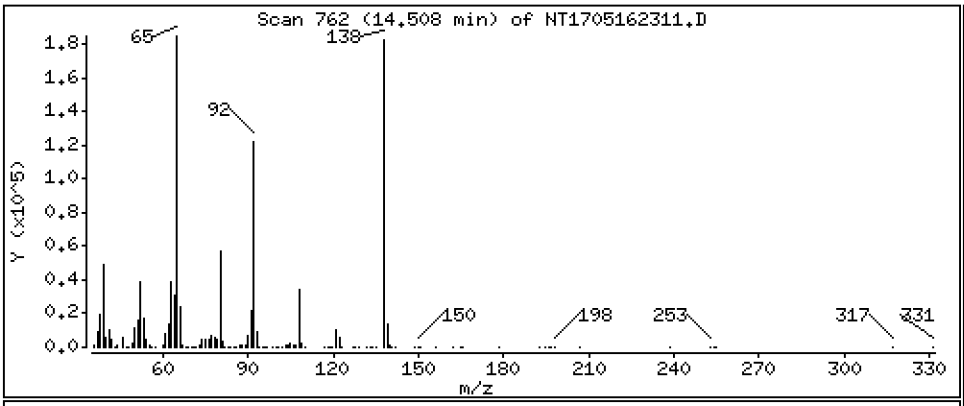
Operator: JGR

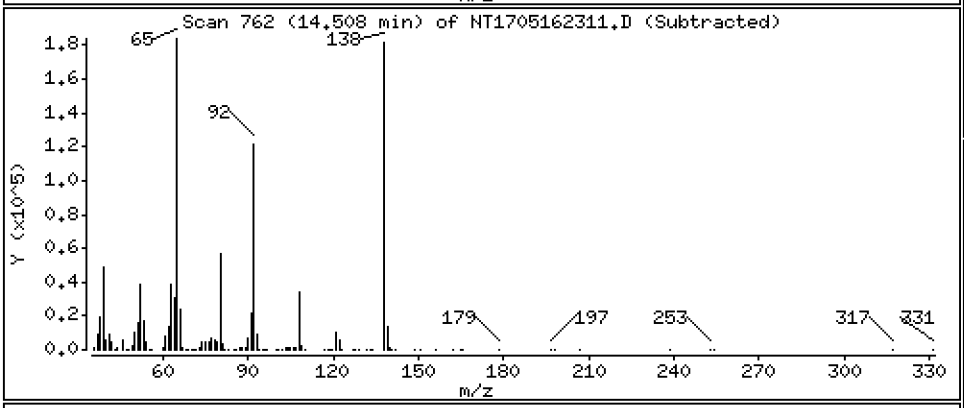
Column phase: ZB-5msi

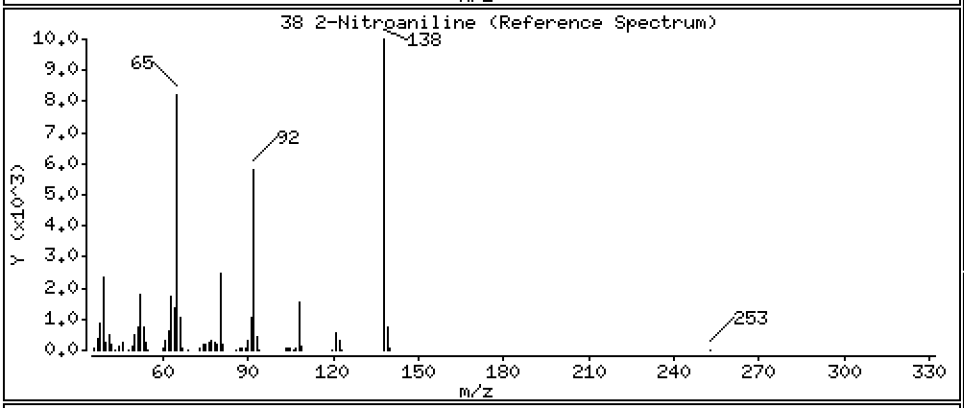
Column diameter: 0.25

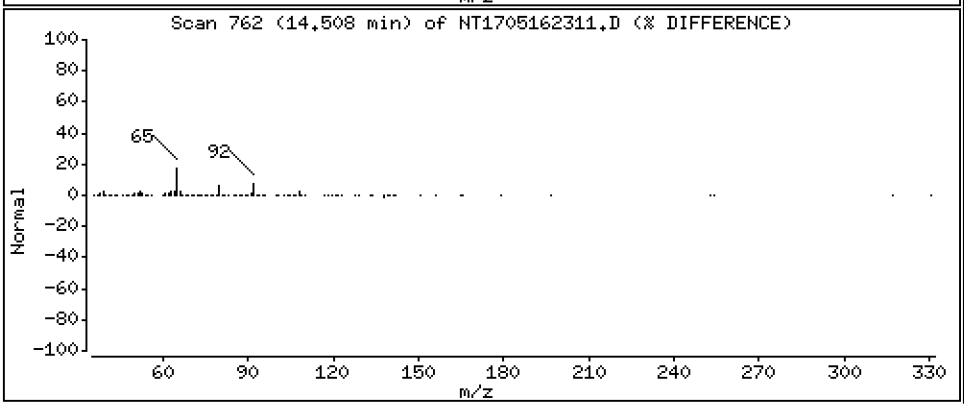
38 2-Nitroaniline

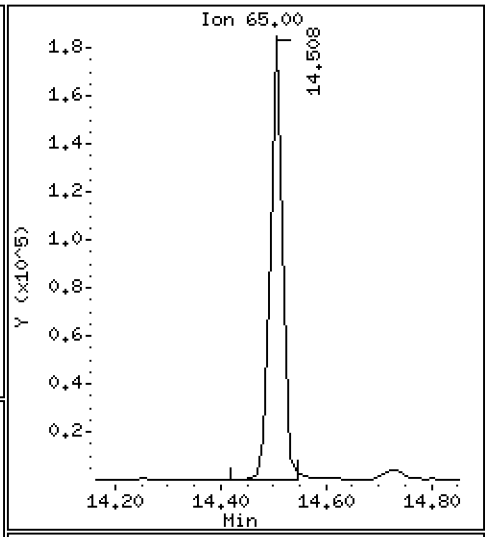
Concentration: 5.356 ug/mL

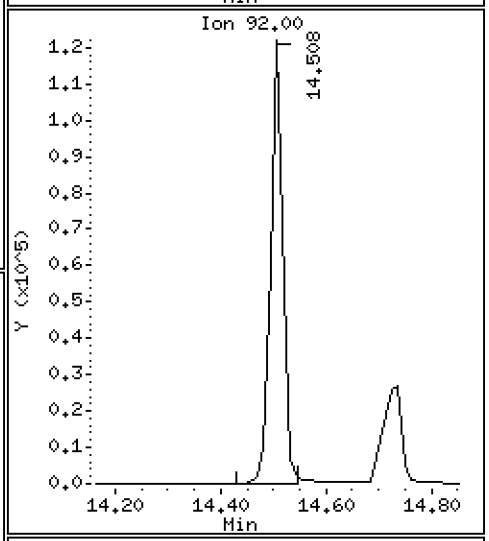


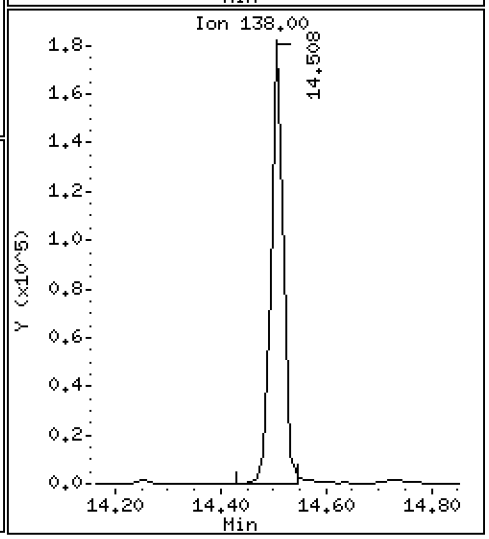












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

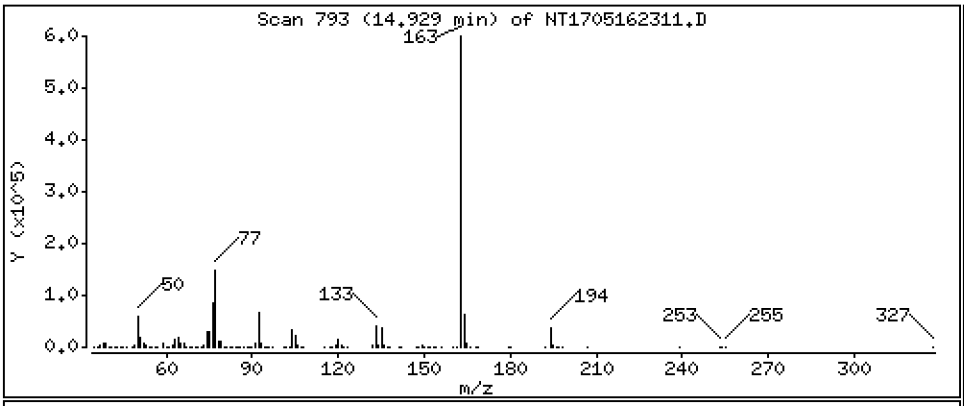
Operator: JGR

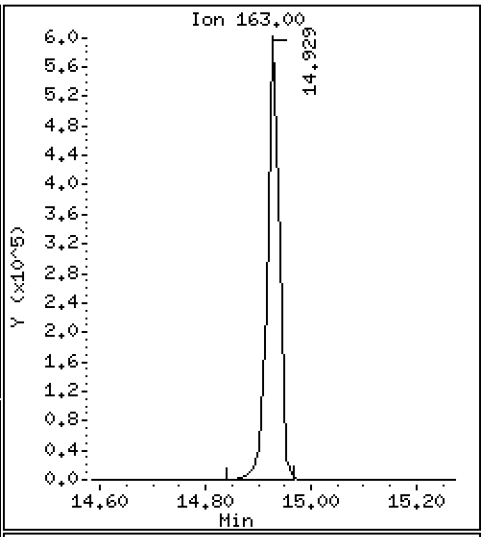
Column phase: ZB-5msi

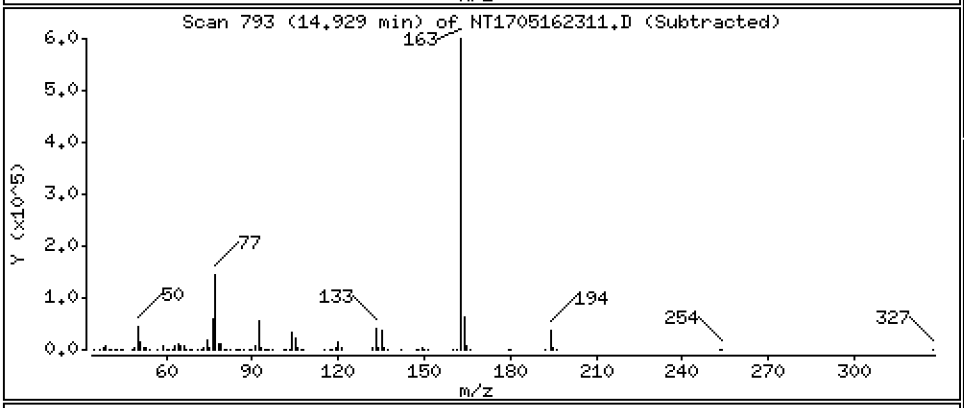
Column diameter: 0.25

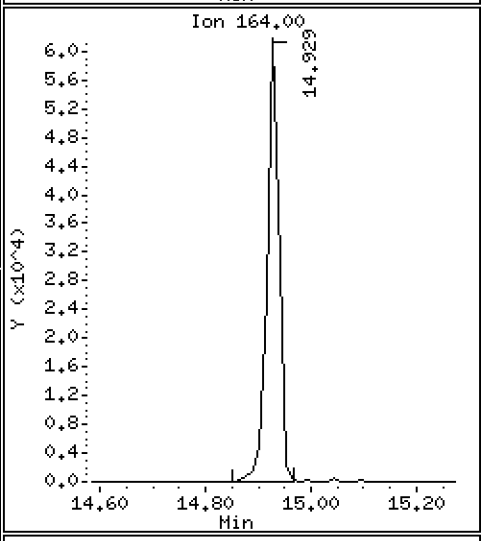
39 Dimethylphthalate

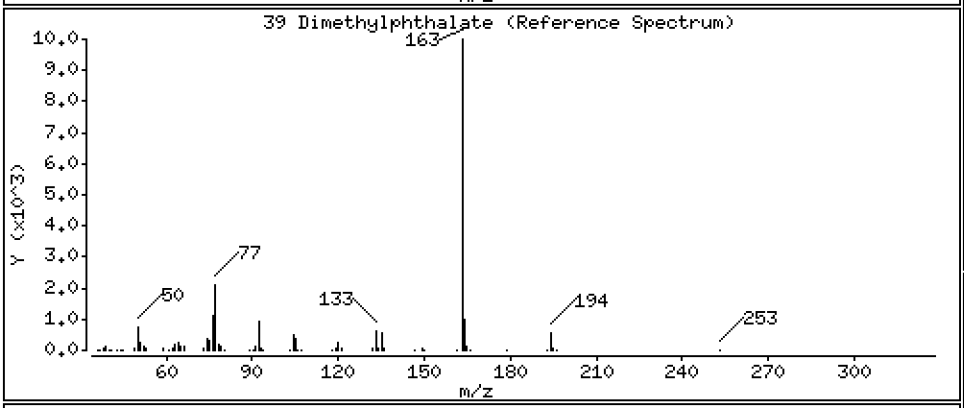
Concentration: 5.418 ug/mL

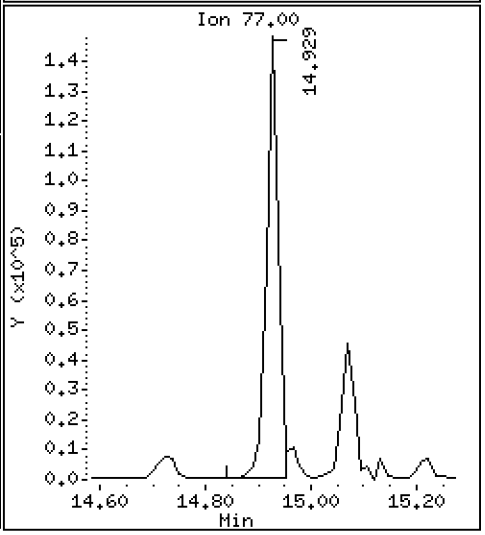


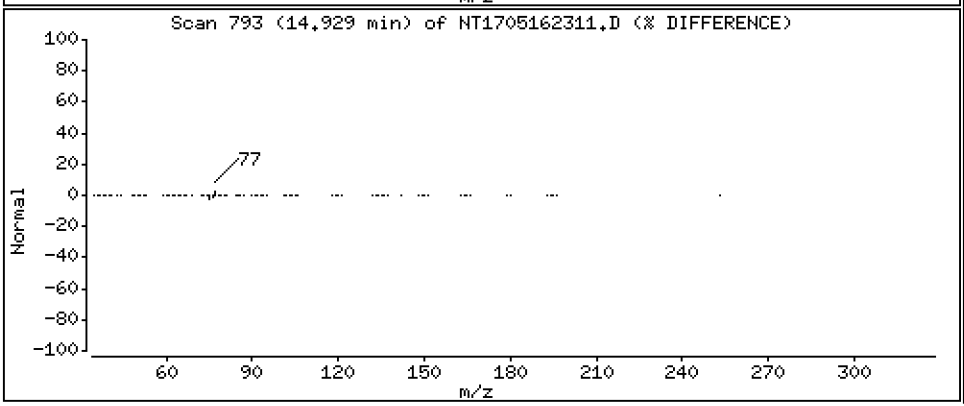












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

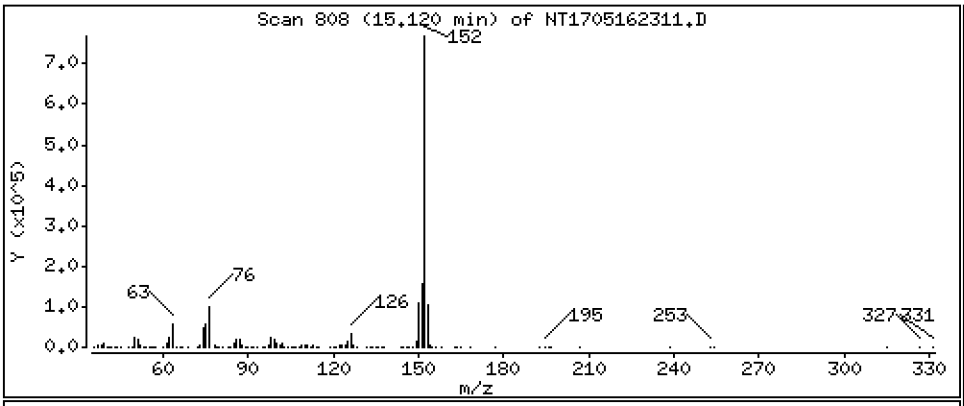
Operator: JGR

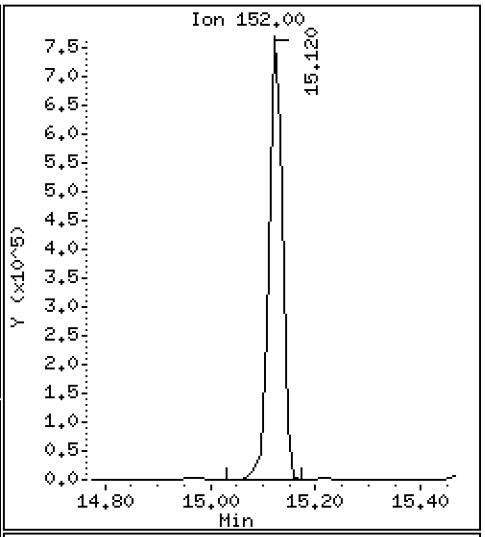
Column phase: ZB-5msi

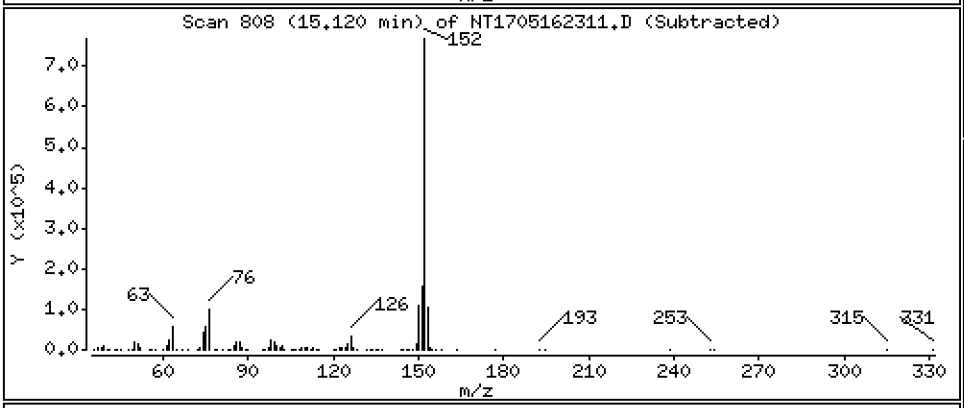
Column diameter: 0.25

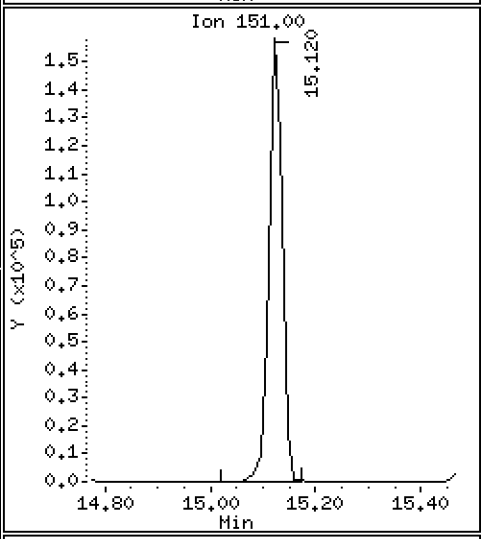
40 Acenaphthylene

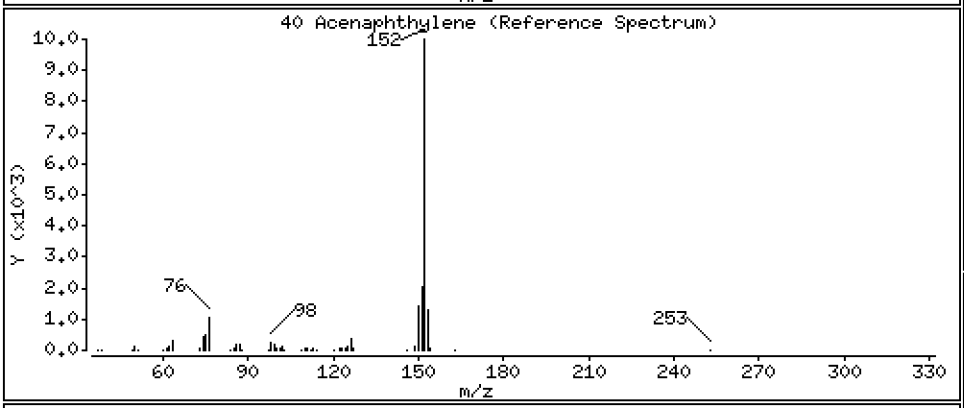
Concentration: 5.282 ug/mL

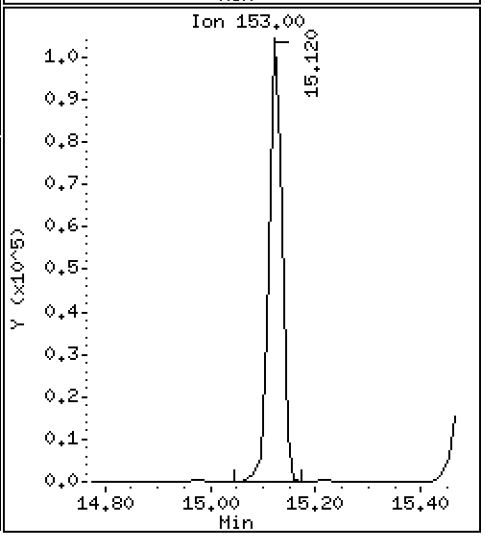


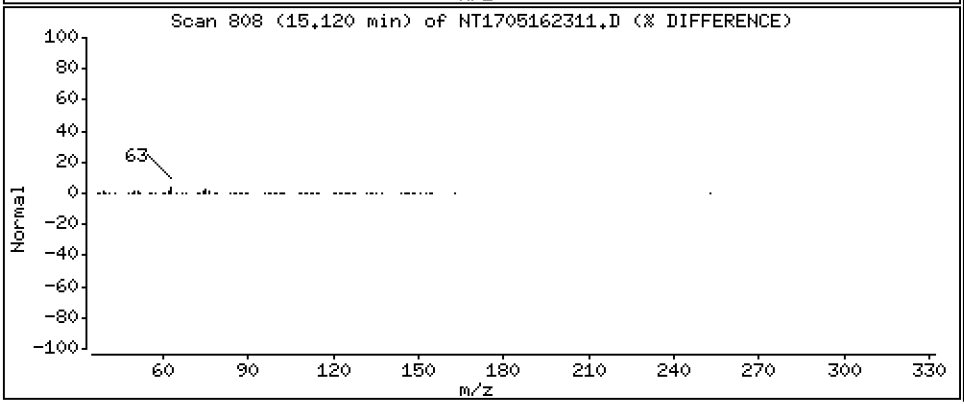












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

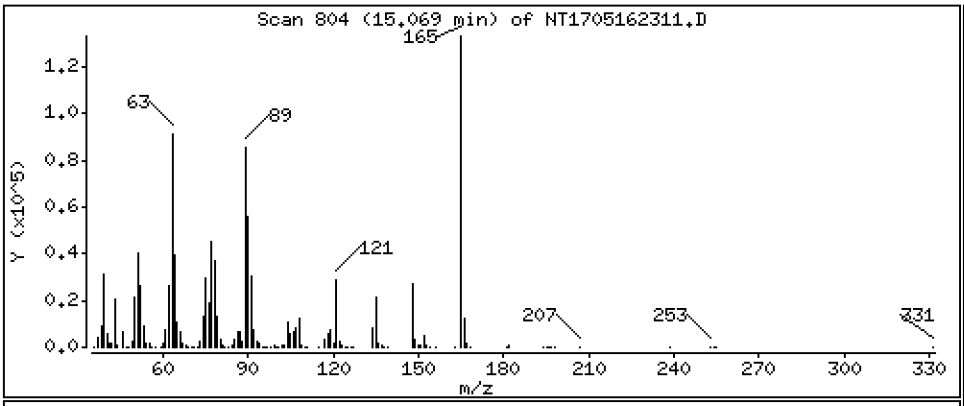
Operator: JGR

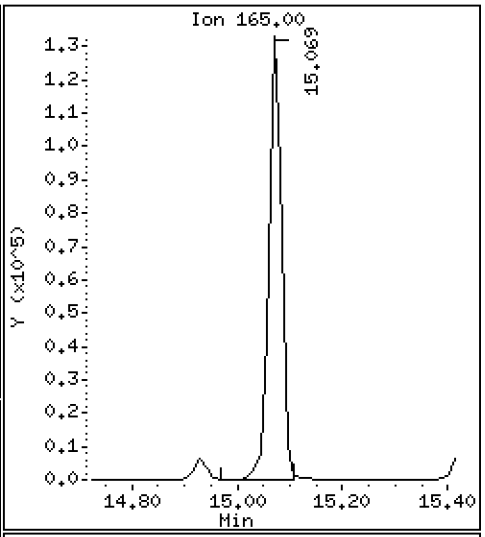
Column phase: ZB-5msi

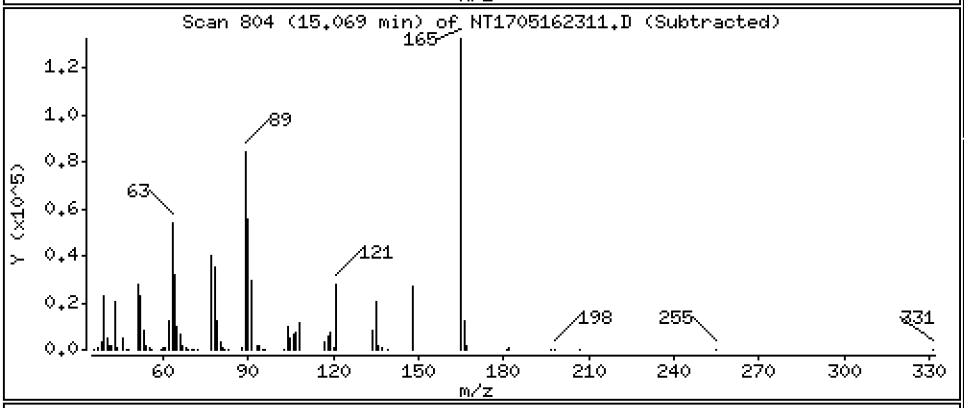
Column diameter: 0.25

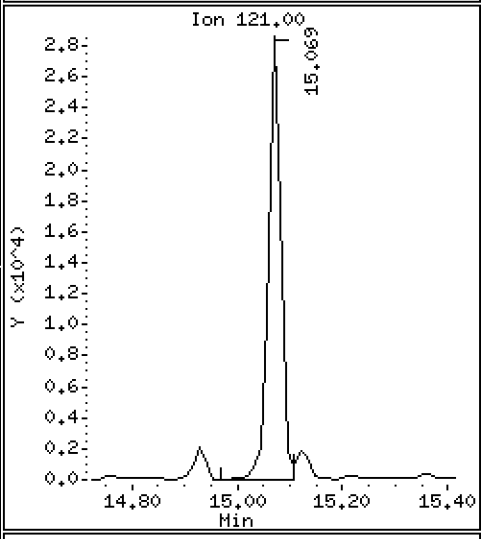
41 2,6-Dinitrotoluene

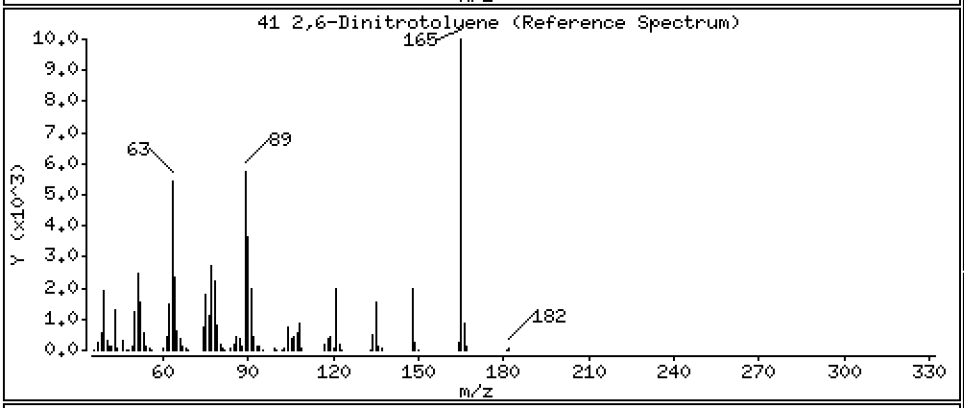
Concentration: 5.404 ug/mL

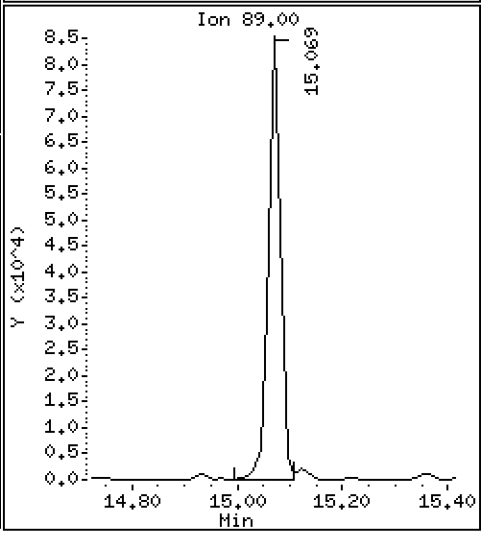


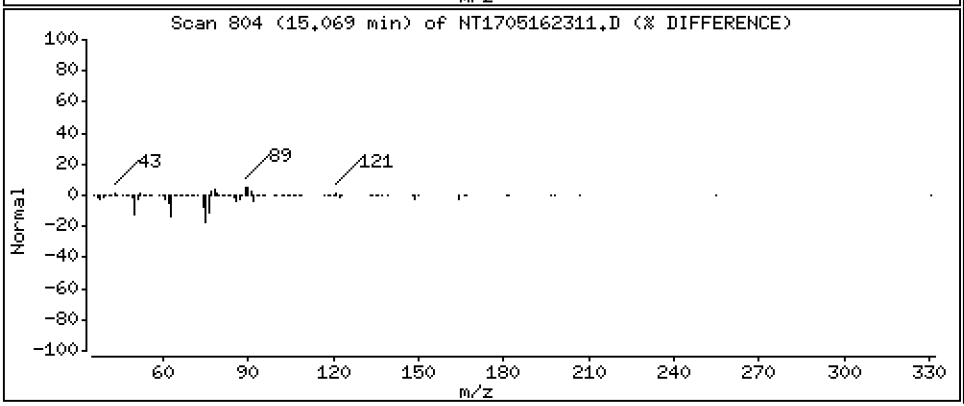












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

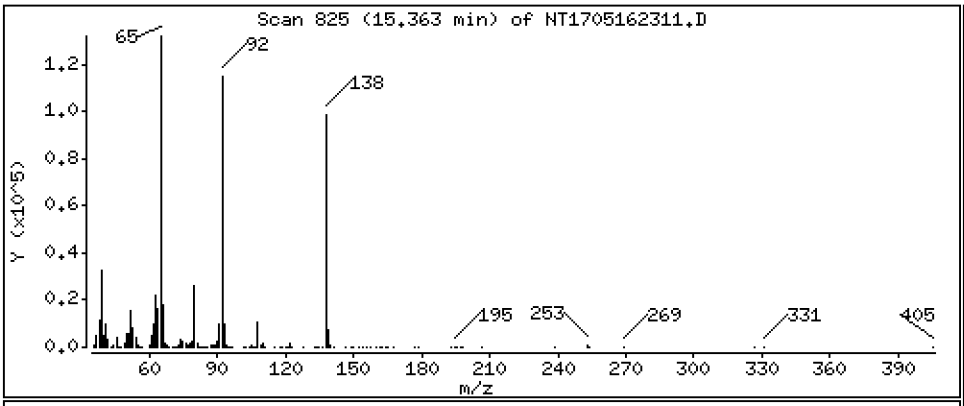
Operator: JGR

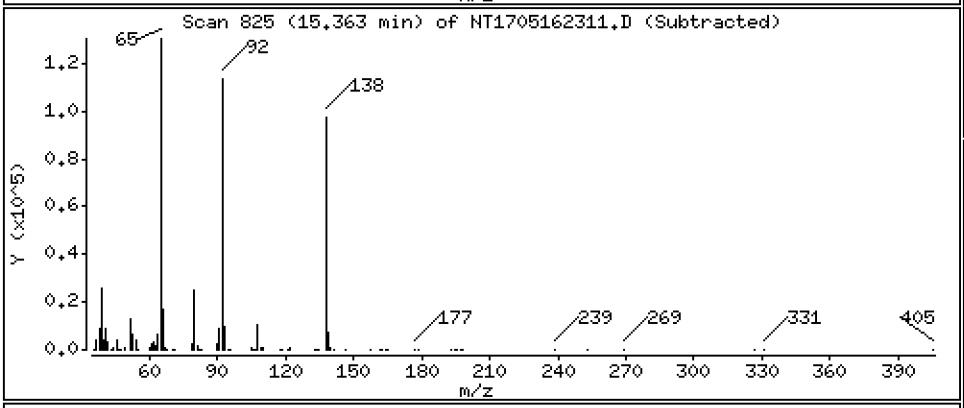
Column phase: ZB-5msi

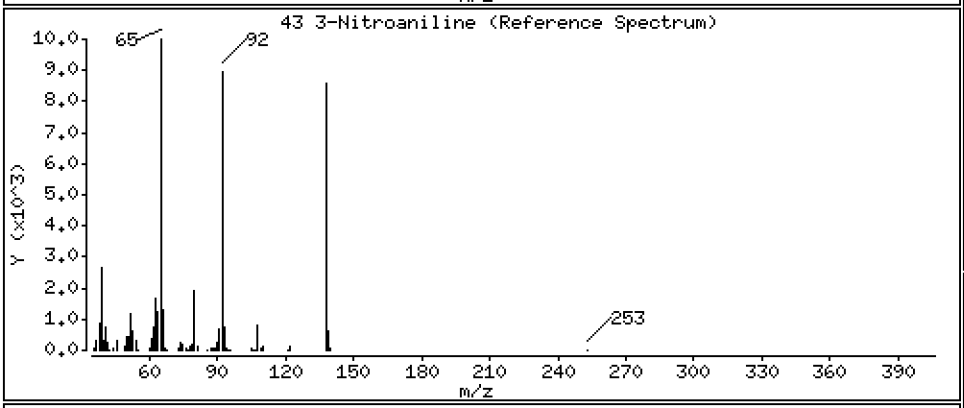
Column diameter: 0.25

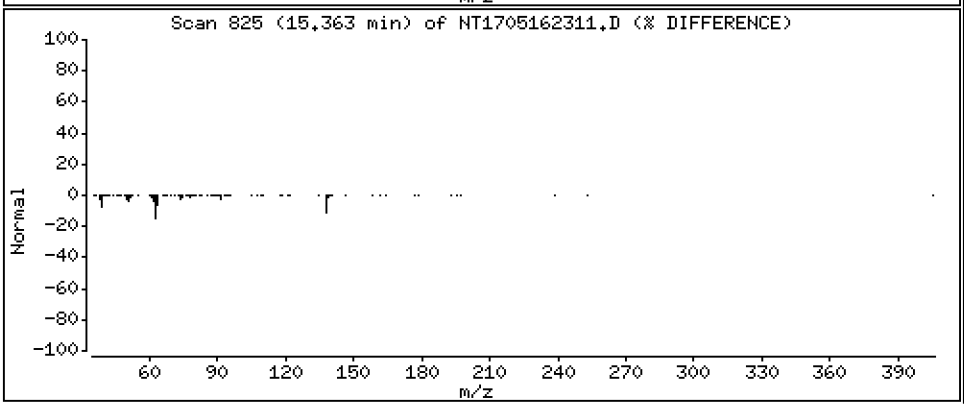
43 3-Nitroaniline

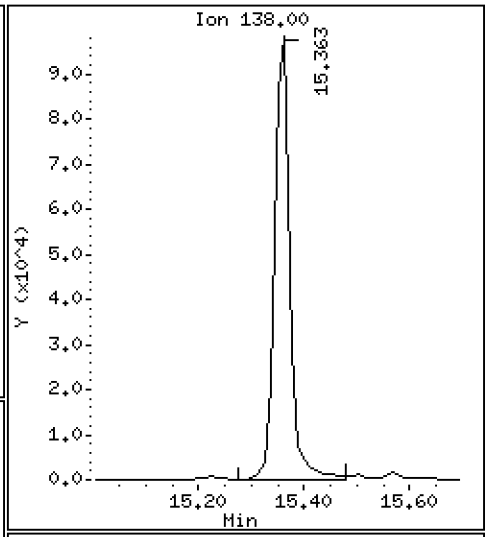
Concentration: 5.169 ug/mL

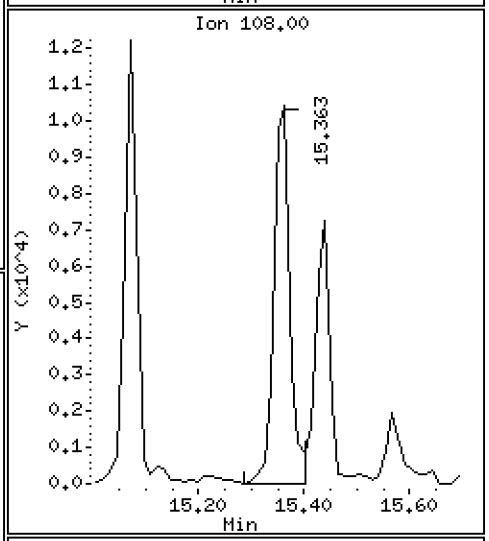


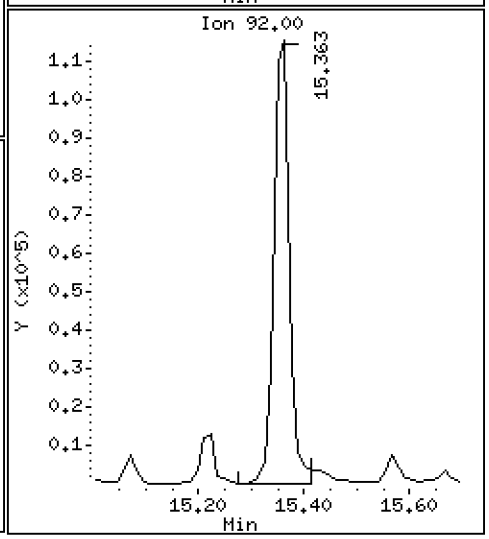












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

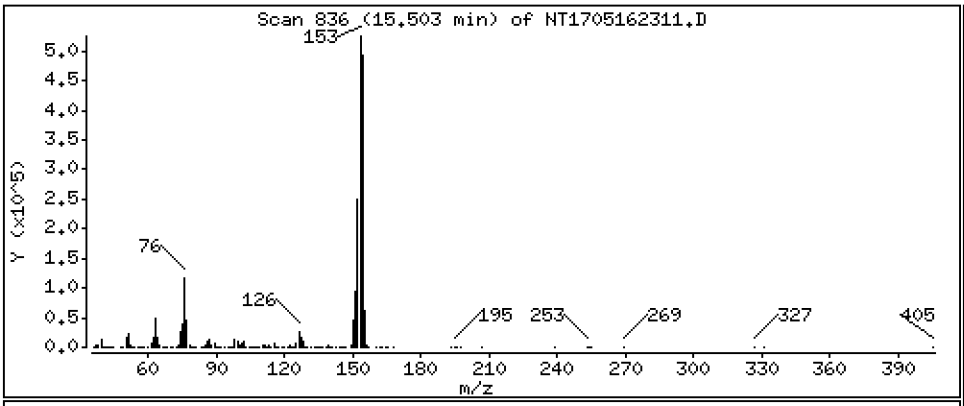
Operator: JGR

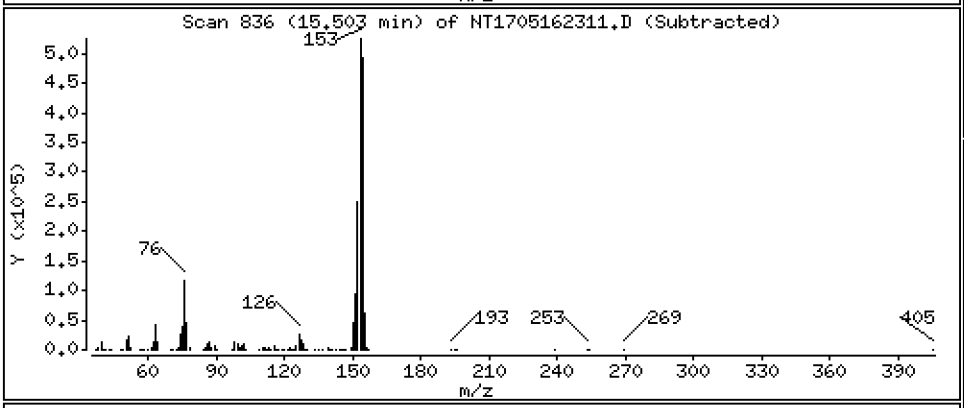
Column phase: ZB-5msi

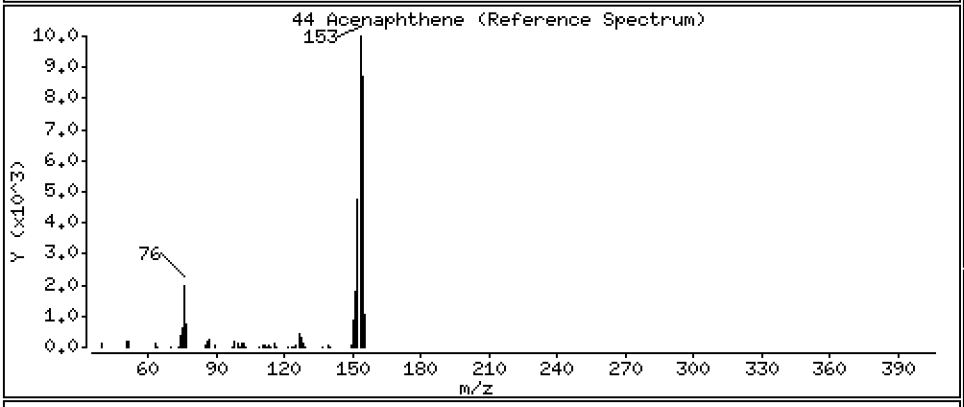
Column diameter: 0.25

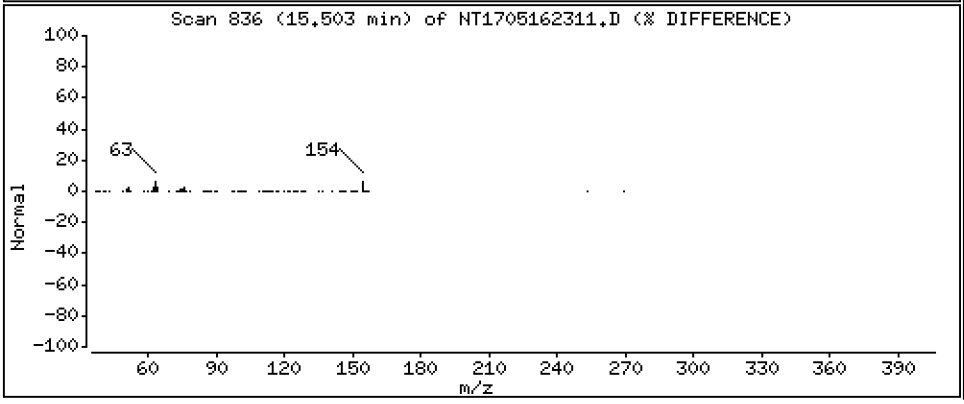
44 Acenaphthene

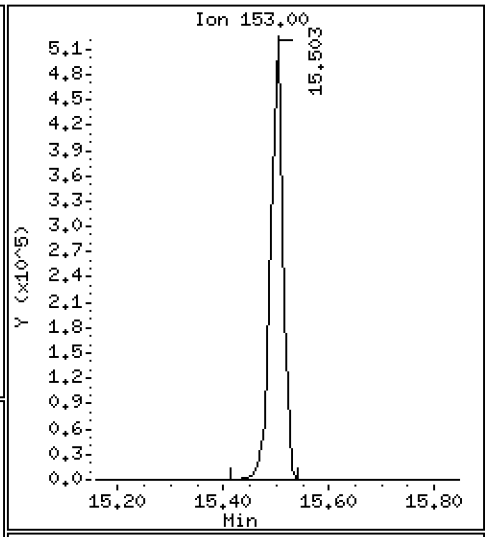
Concentration: 5.283 ug/mL

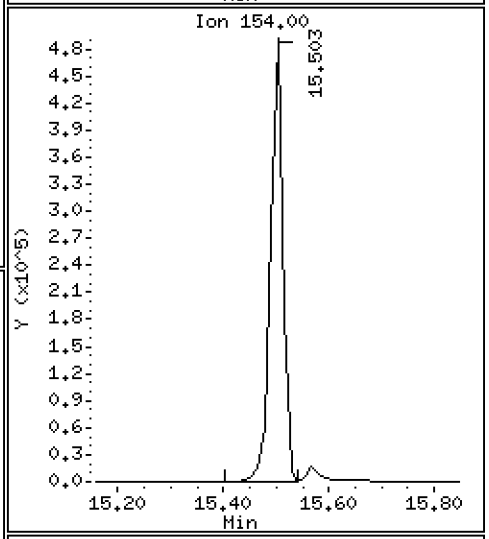


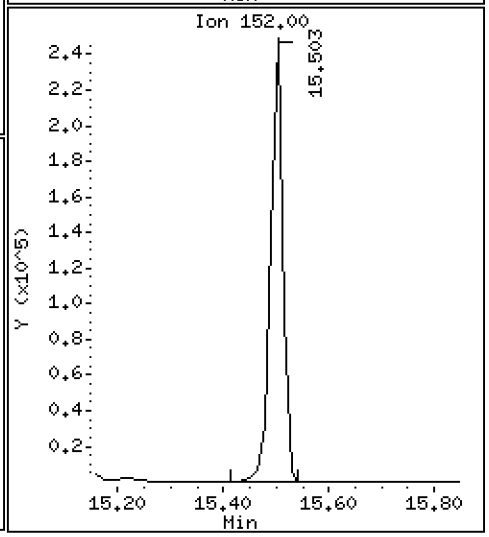












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

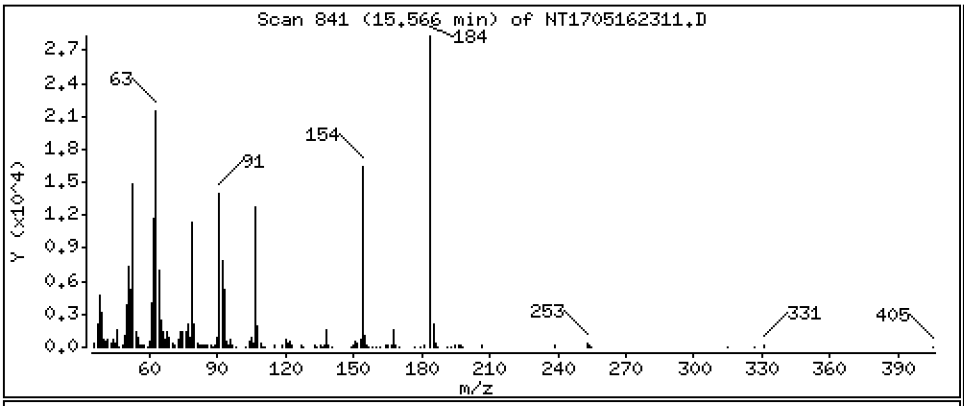
Operator: JGR

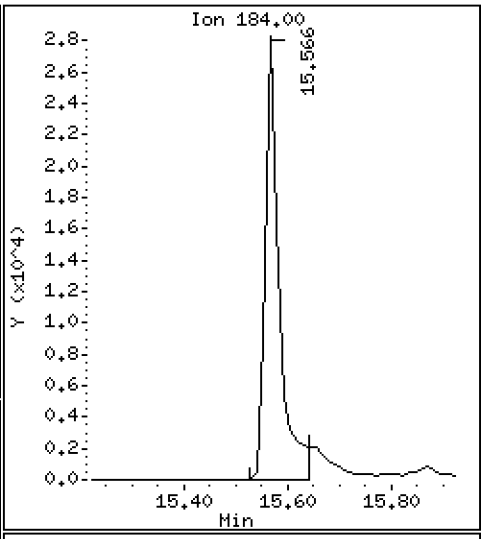
Column phase: ZB-5msi

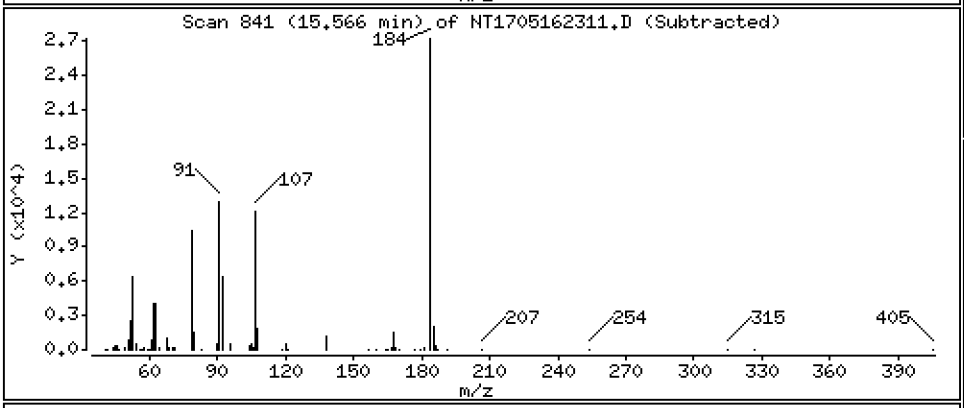
Column diameter: 0.25

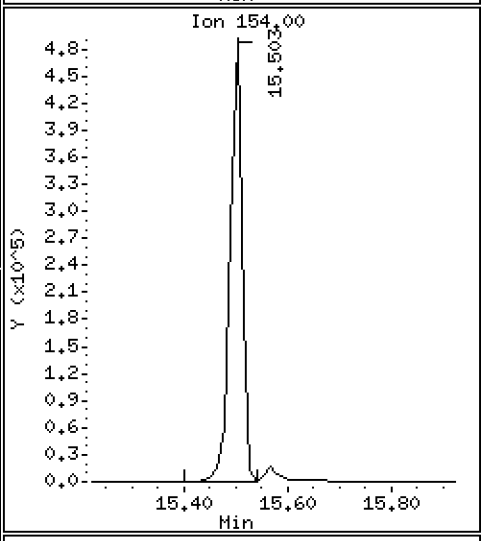
45 2,4-Dinitrophenol

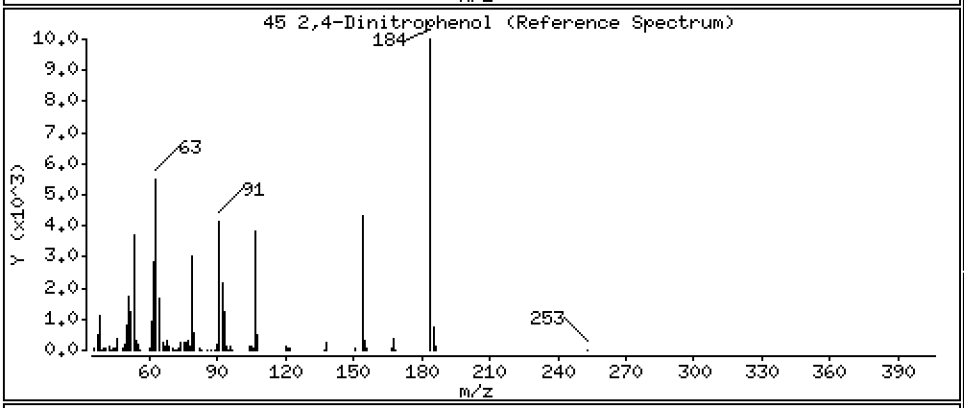
Concentration: 2.119 ug/mL

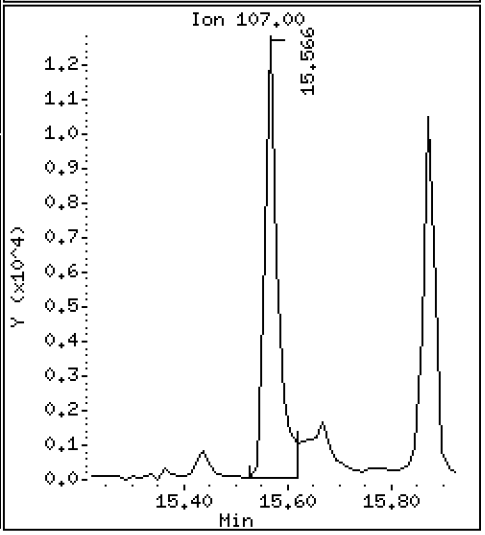


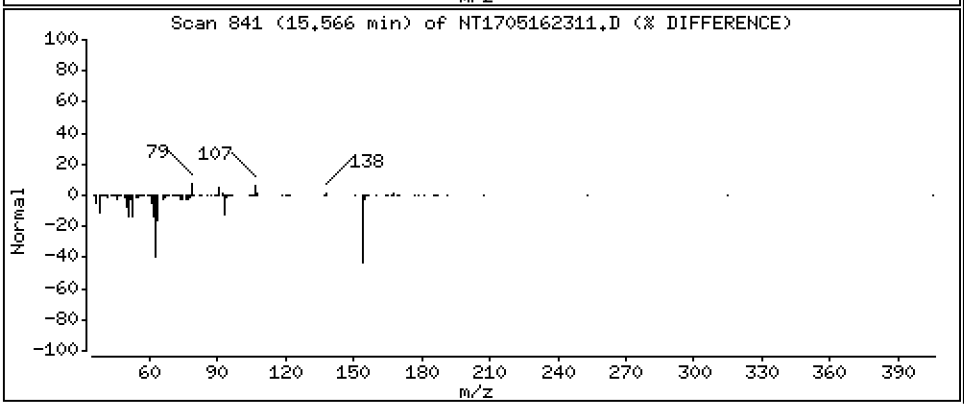












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

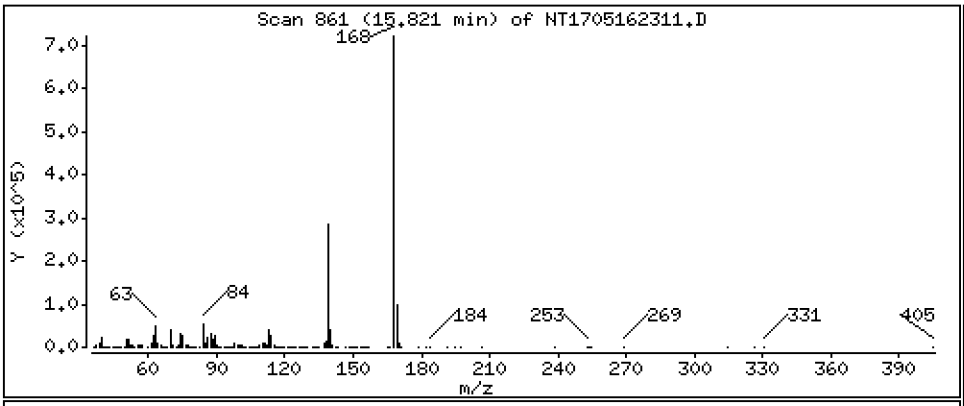
Operator: JGR

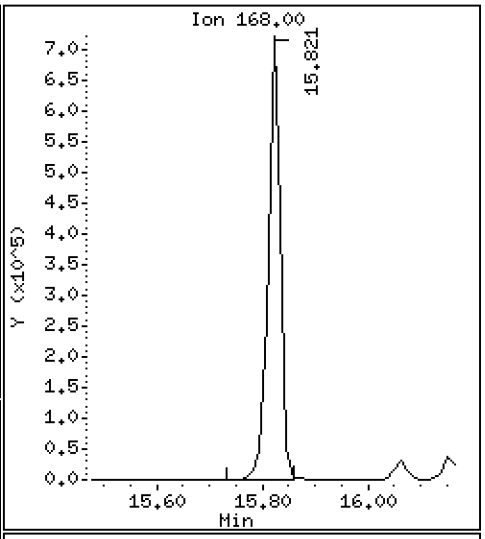
Column phase: ZB-5msi

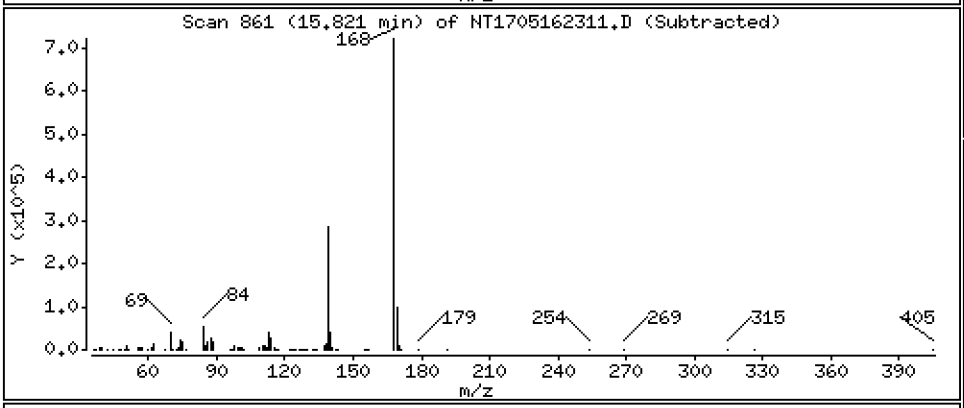
Column diameter: 0.25

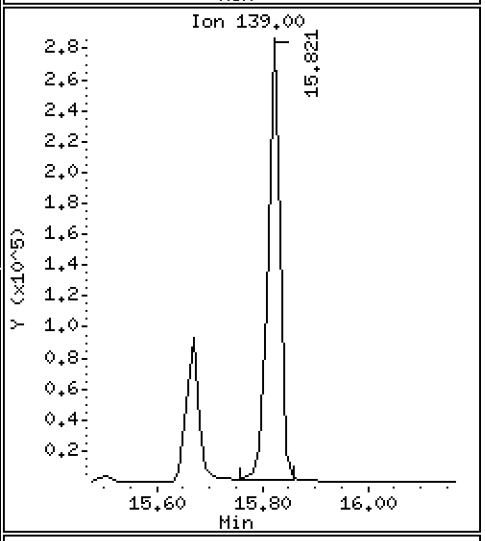
46 Dibenzofuran

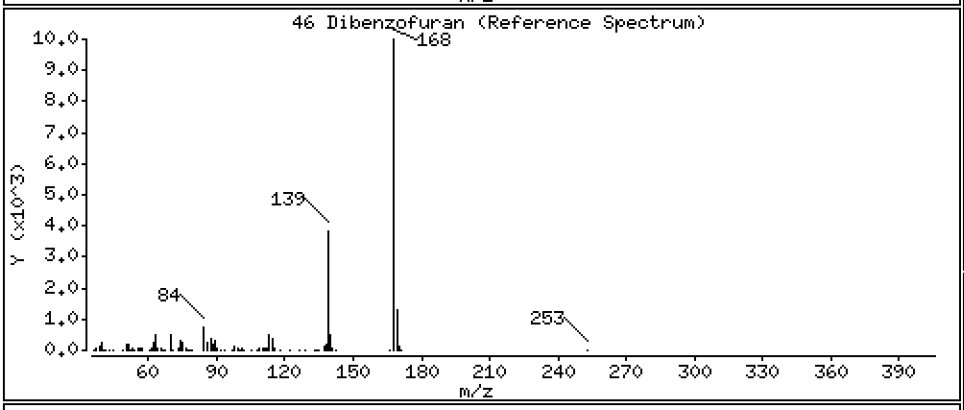
Concentration: 5.163 ug/mL

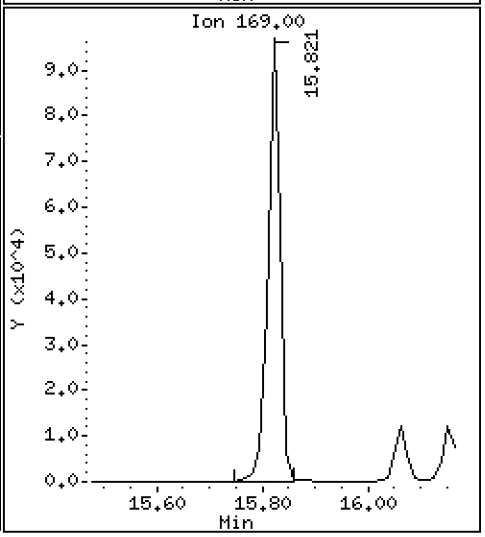


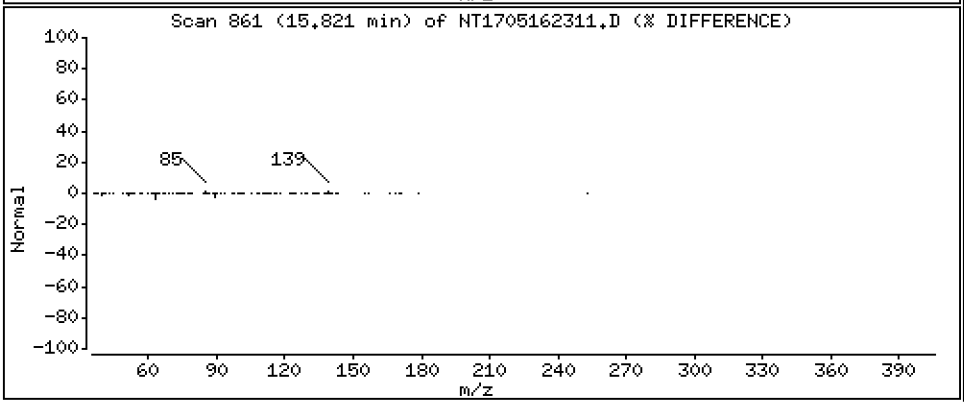












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

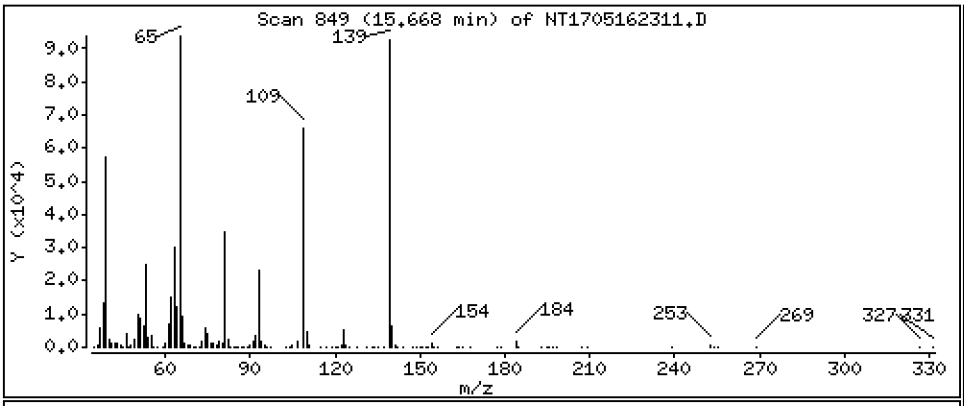
Operator: JGR

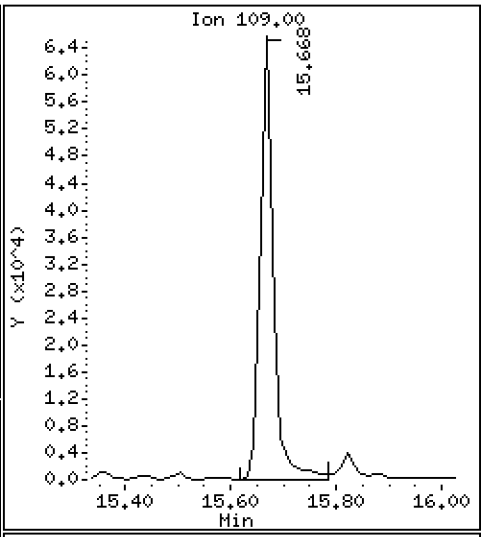
Column phase: ZB-5msi

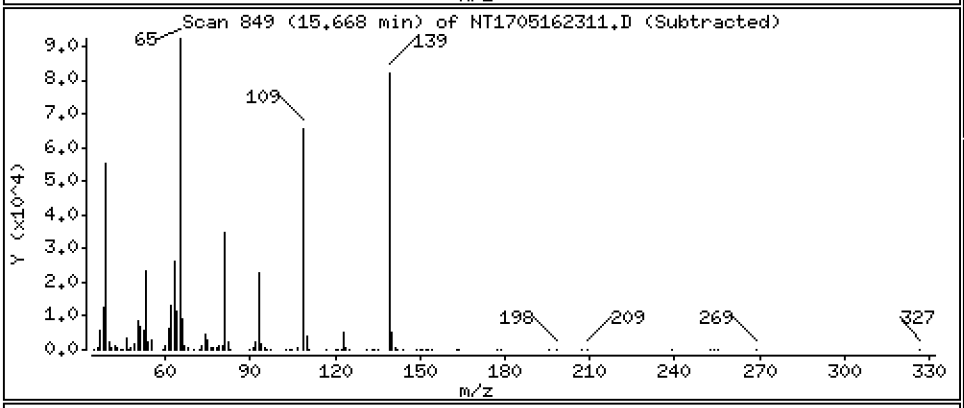
Column diameter: 0.25

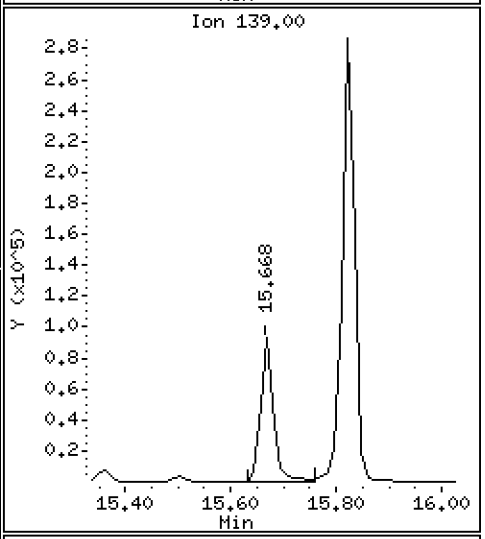
47 4-Nitrophenol

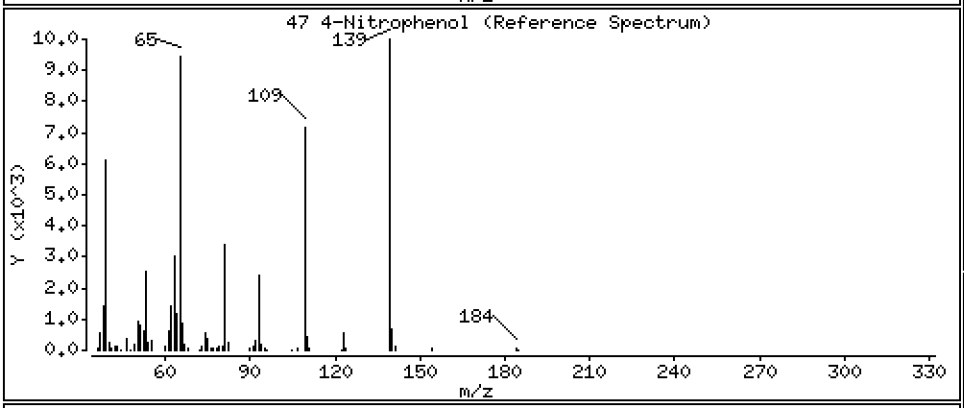
Concentration: 4.504 ug/mL

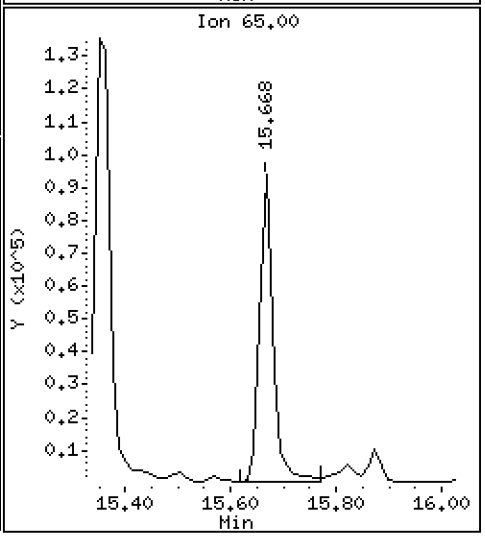


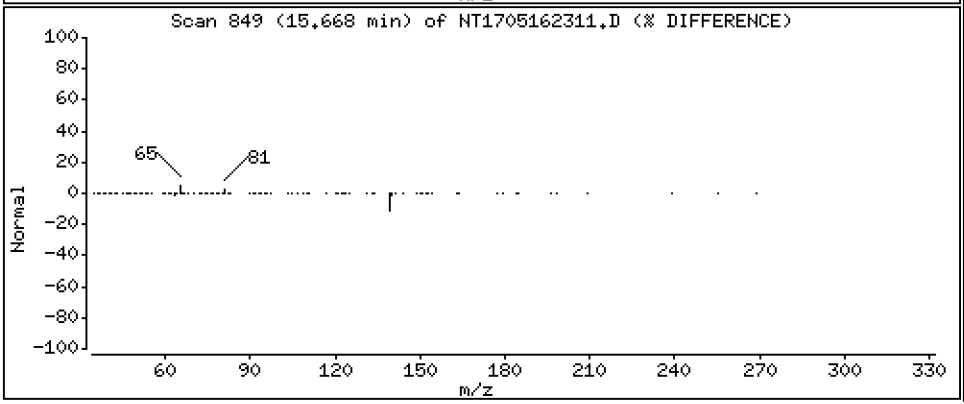












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

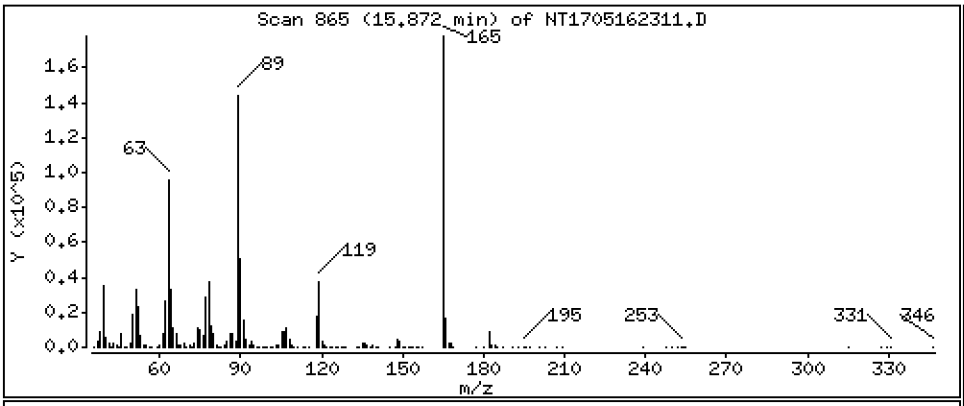
Operator: JGR

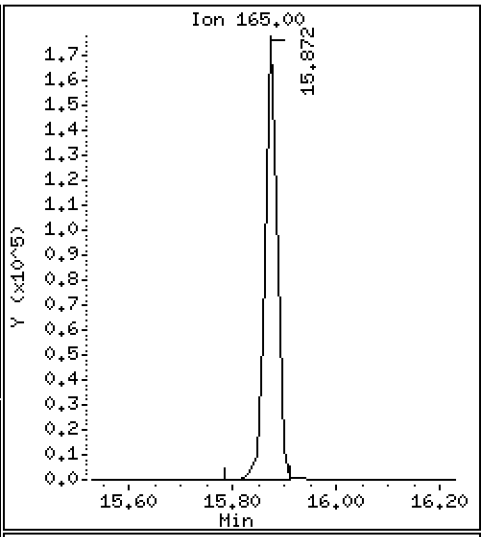
Column phase: ZB-5msi

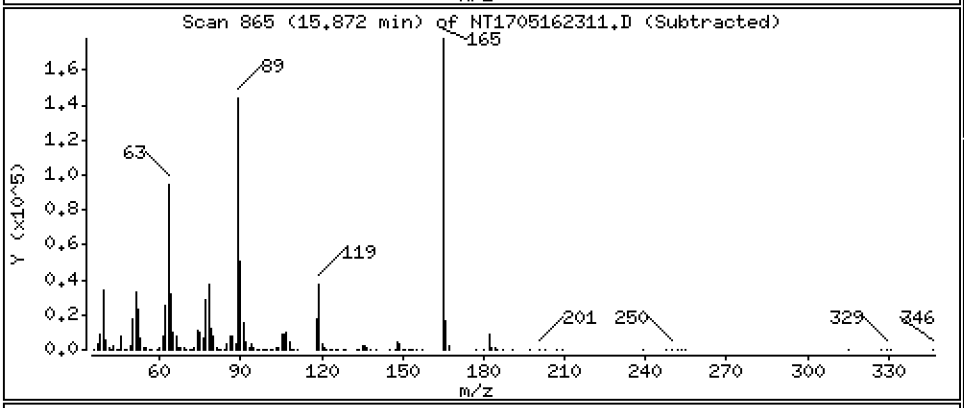
Column diameter: 0.25

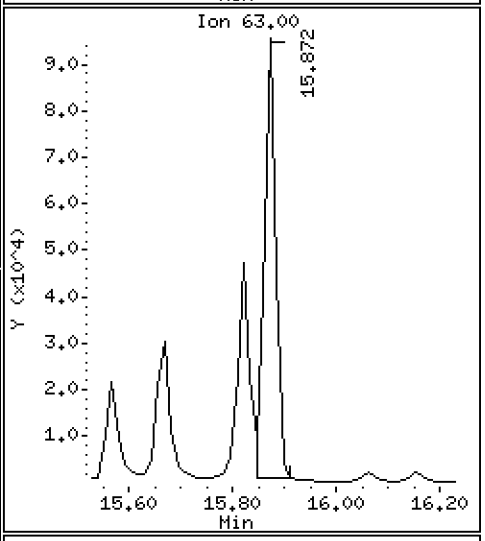
48 2,4-Dinitrotoluene

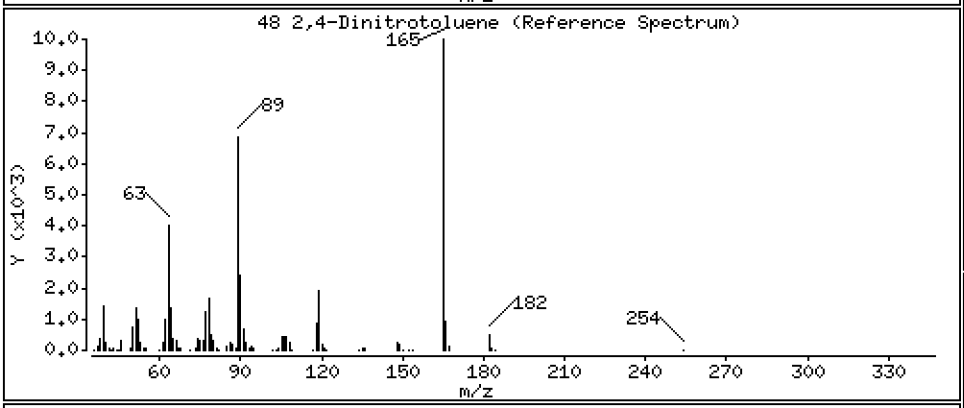
Concentration: 5.269 ug/mL

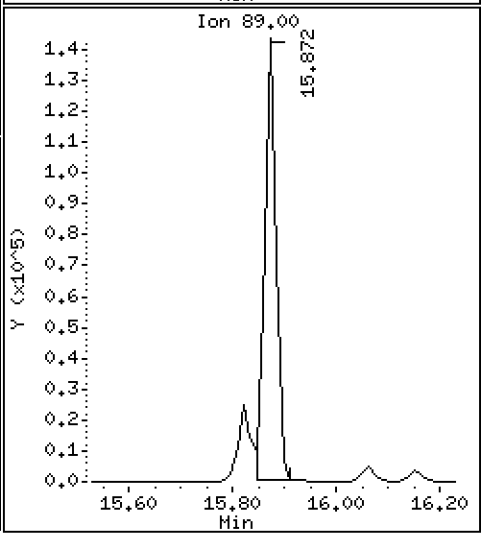


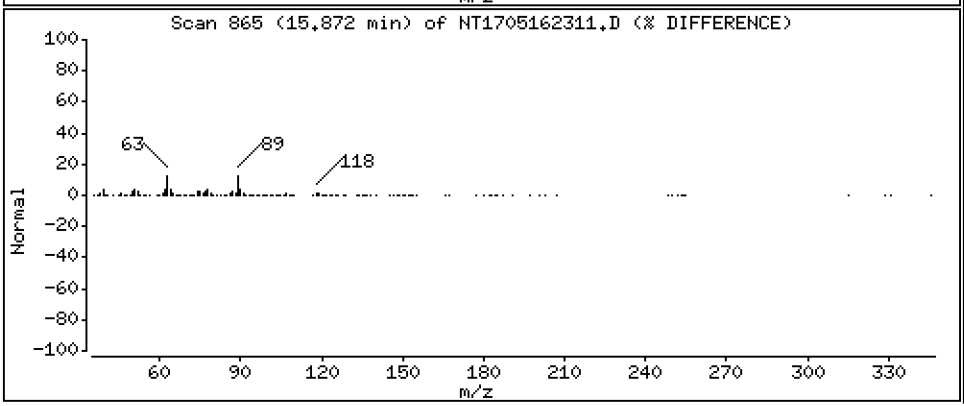












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

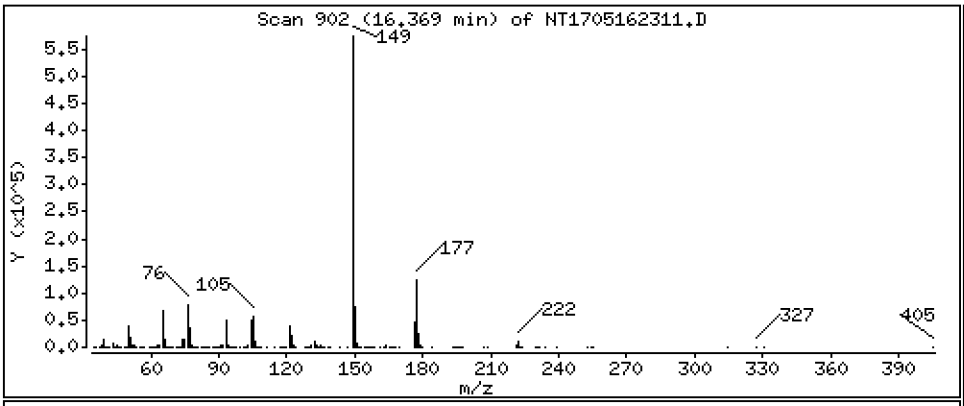
Operator: JGR

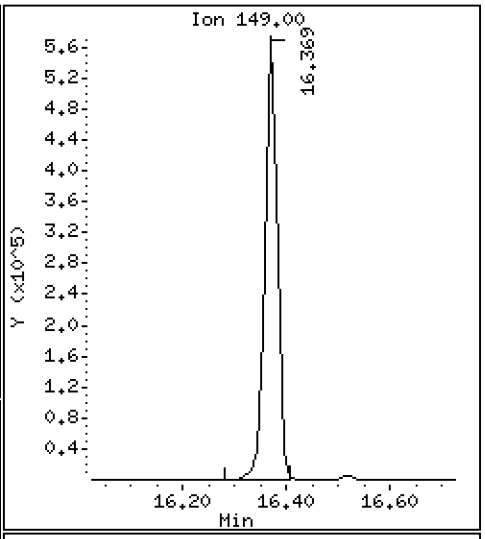
Column phase: ZB-5msi

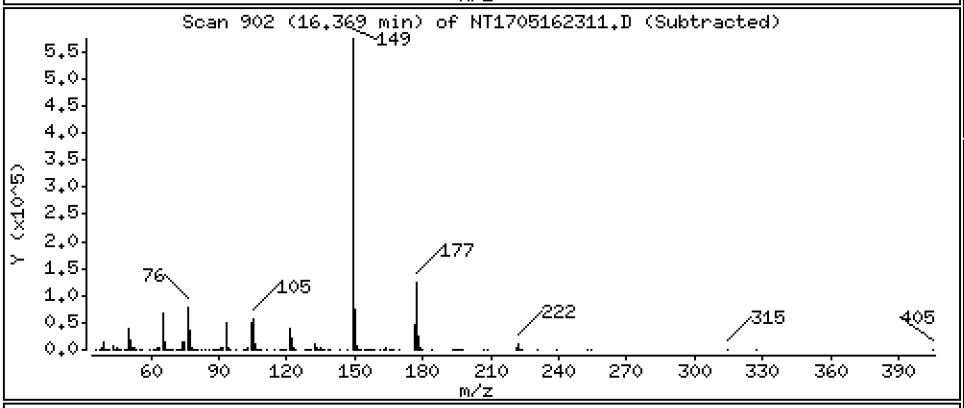
Column diameter: 0.25

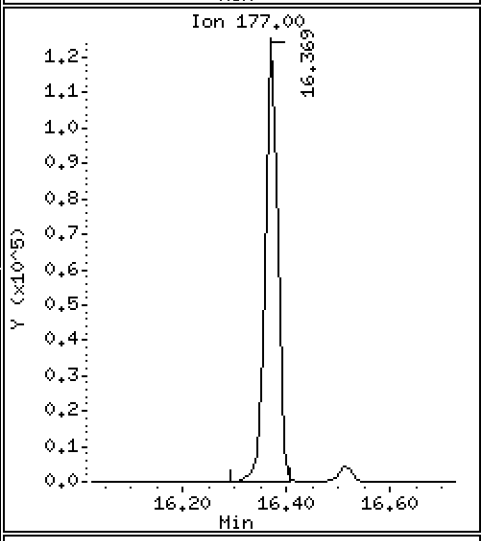
50 Diethylphthalate

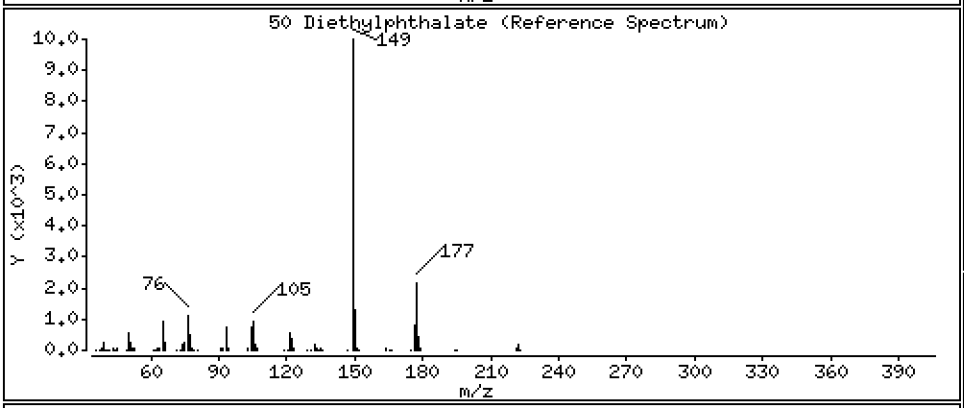
Concentration: 5.494 ug/mL

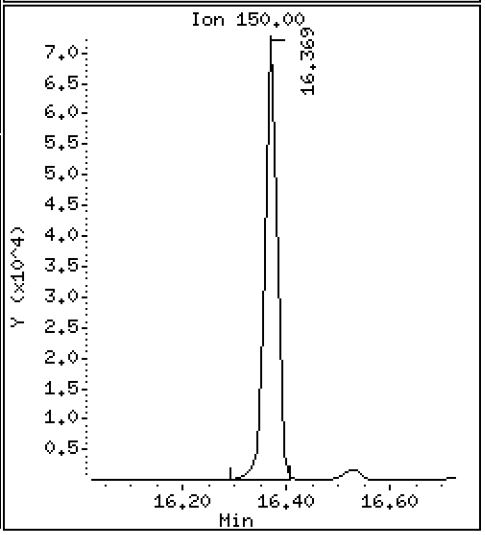


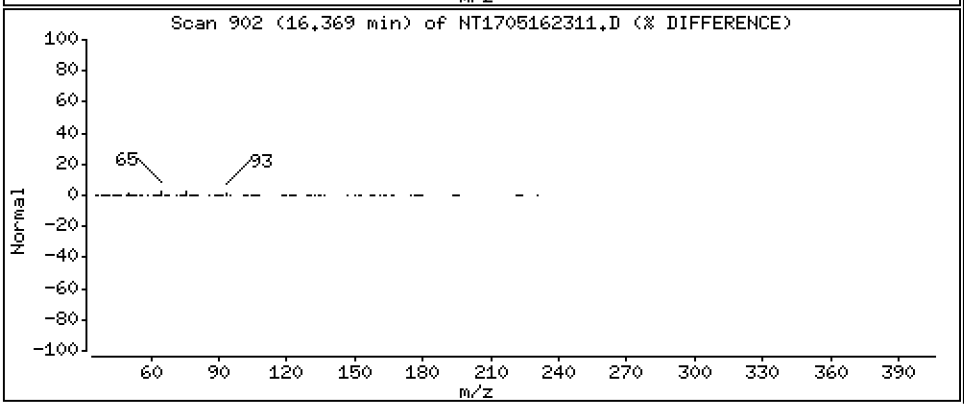












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

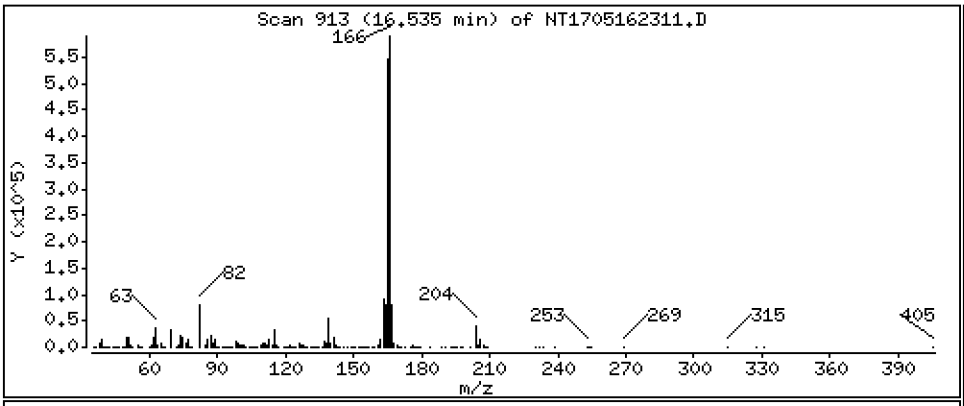
Operator: JGR

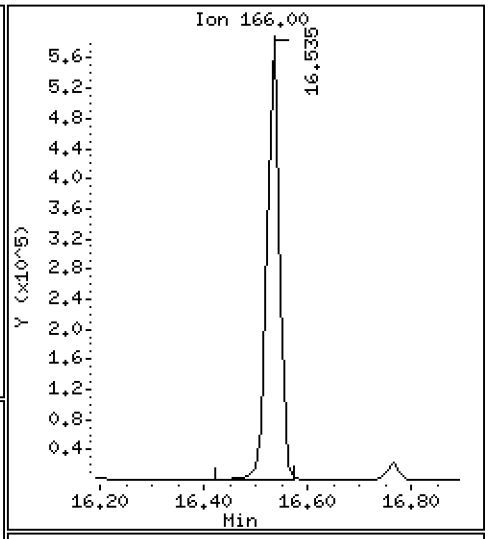
Column phase: ZB-5msi

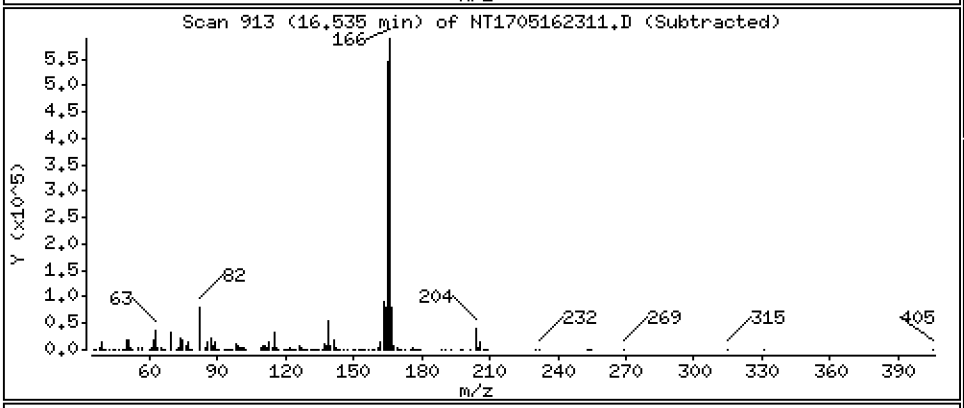
Column diameter: 0.25

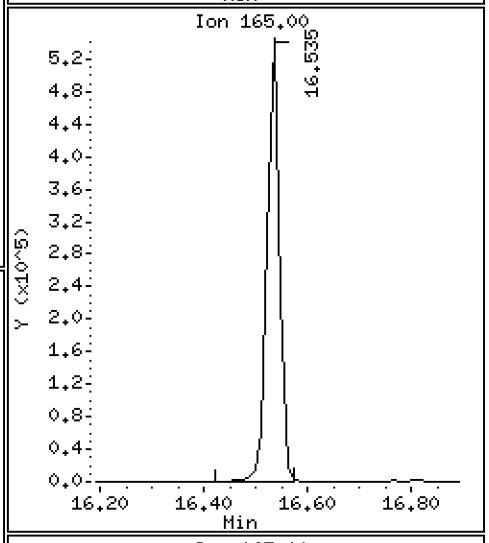
49 Fluorene

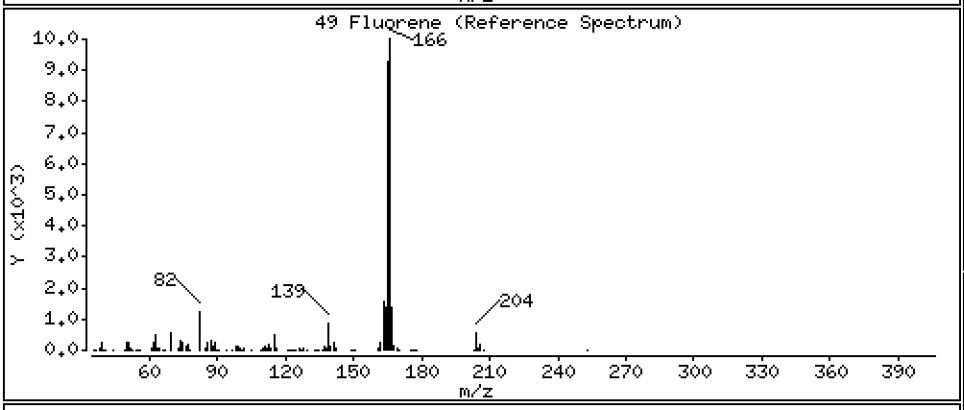
Concentration: 5.398 ug/mL

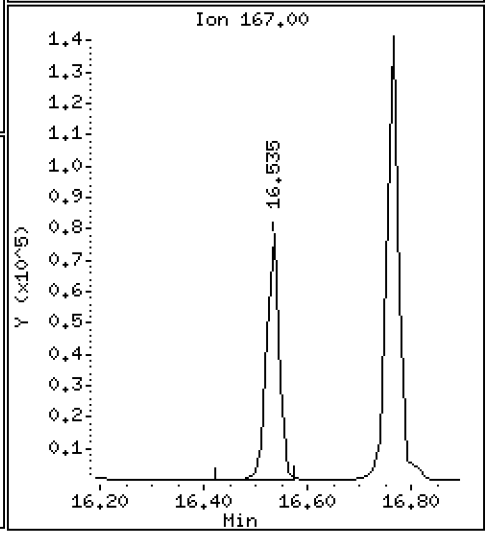


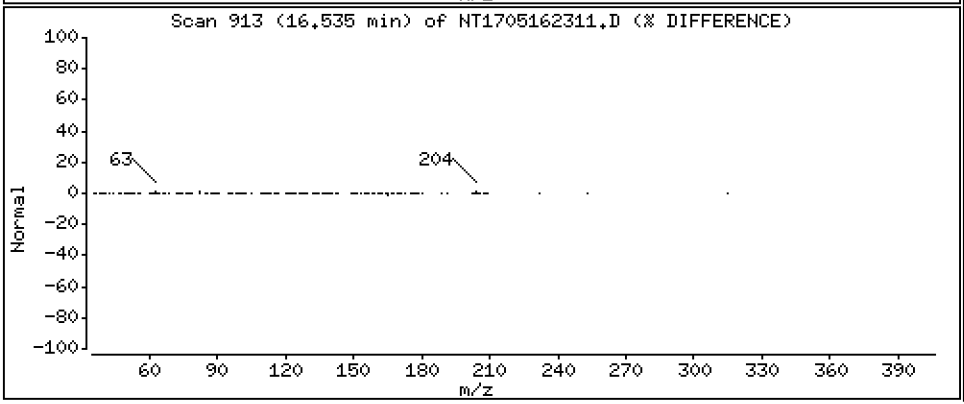












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

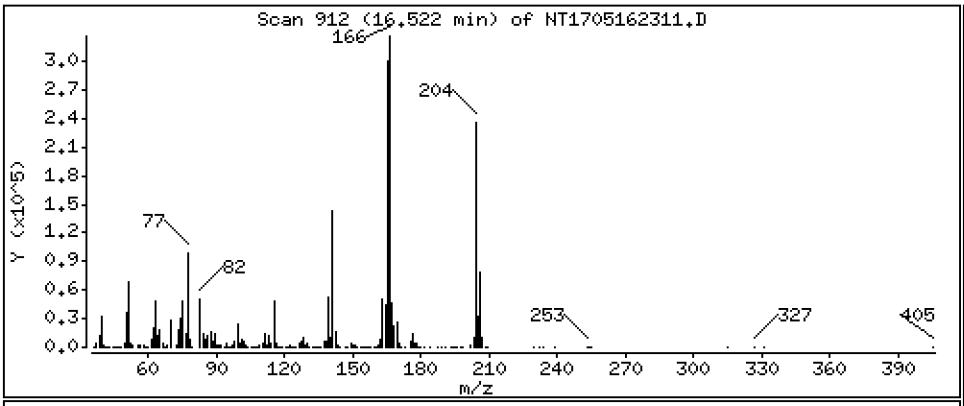
Operator: JGR

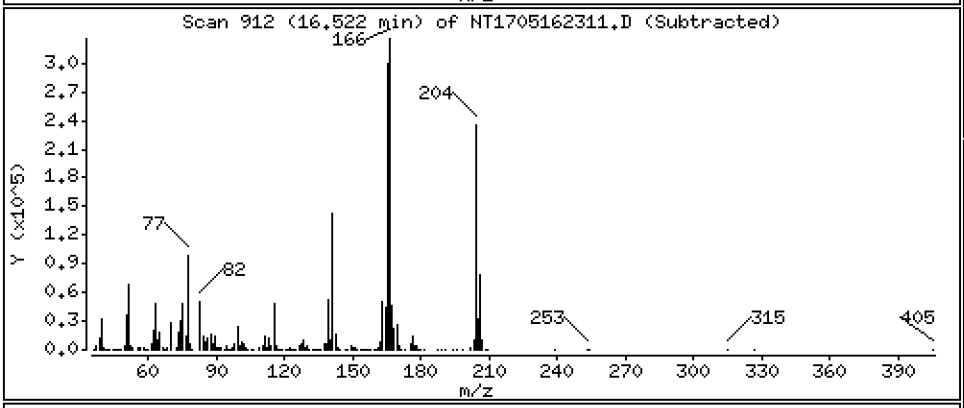
Column phase: ZB-5msi

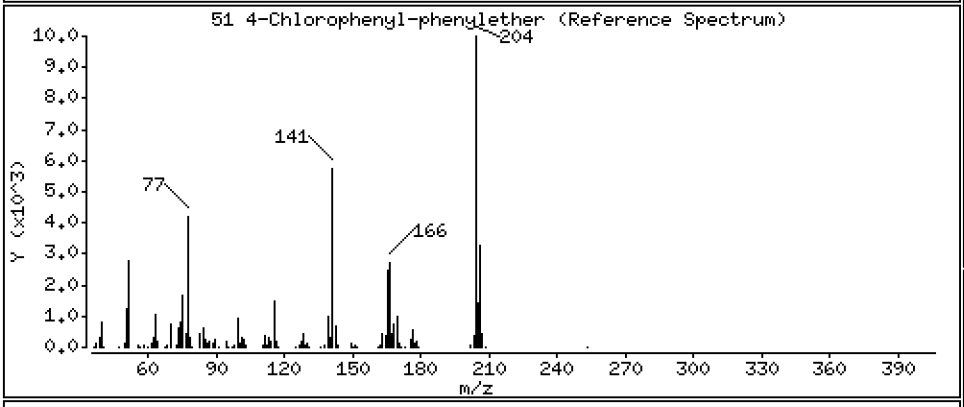
Column diameter: 0.25

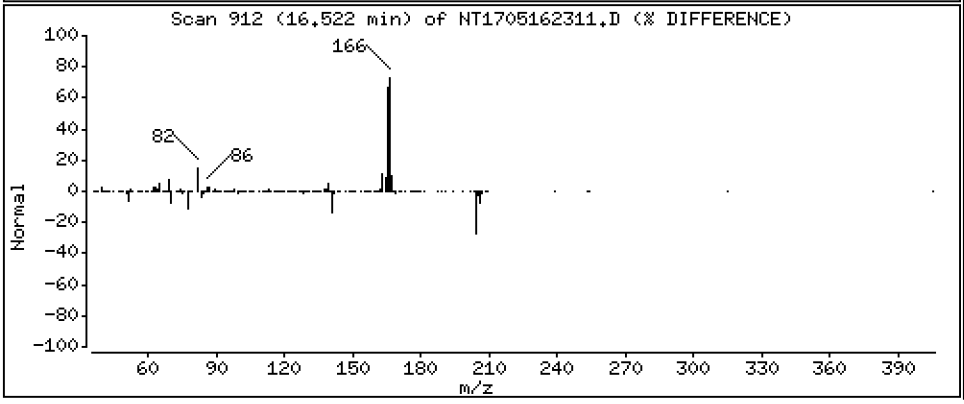
51 4-Chlorophenyl-phenylether

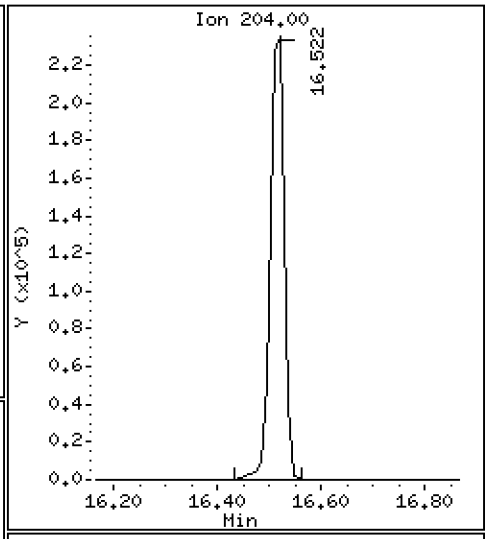
Concentration: 5.462 ug/mL

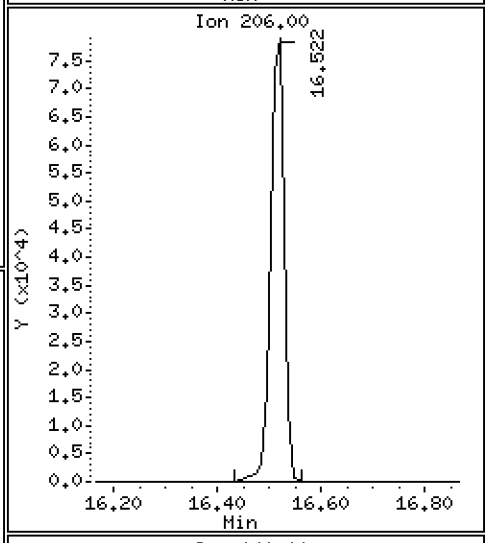


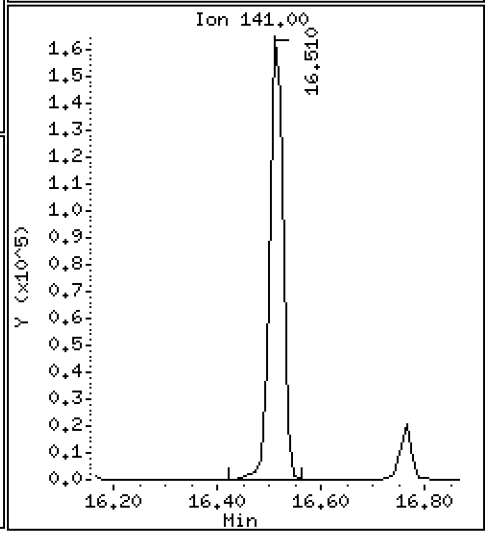












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

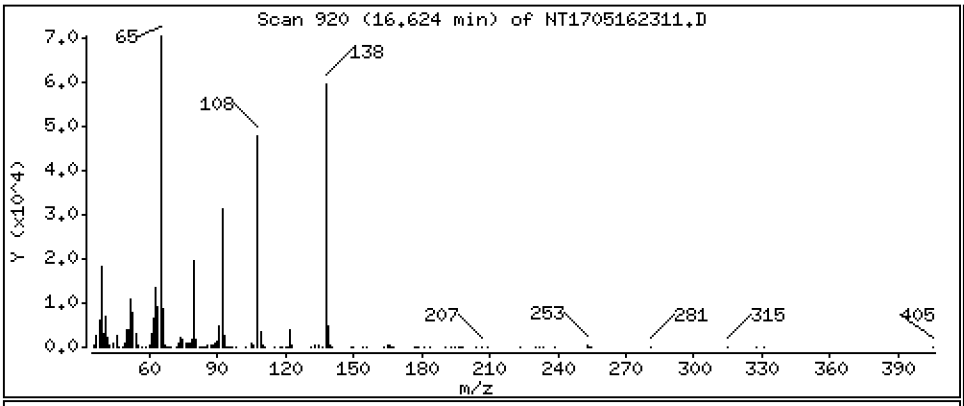
Operator: JGR

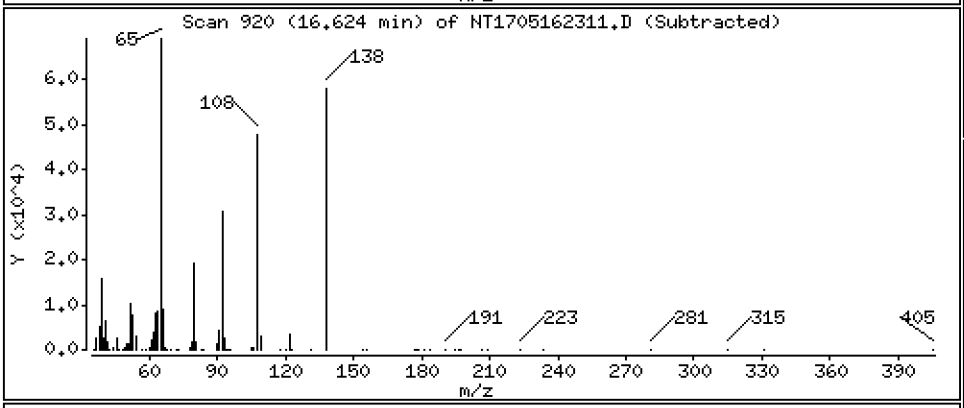
Column phase: ZB-5msi

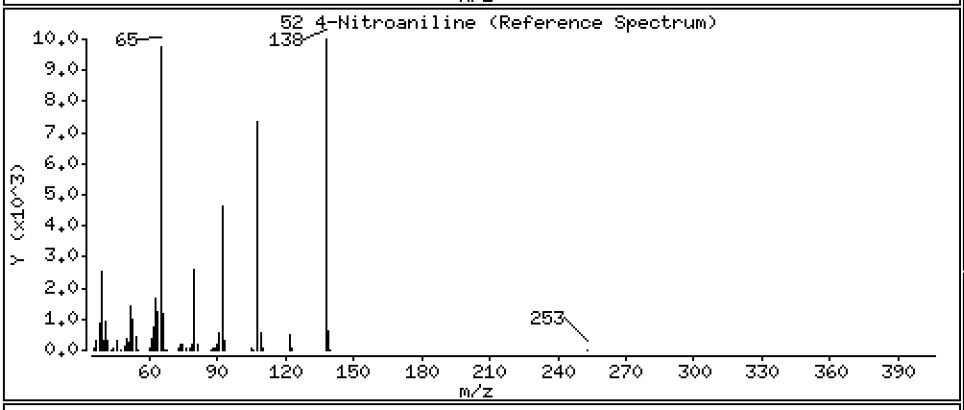
Column diameter: 0.25

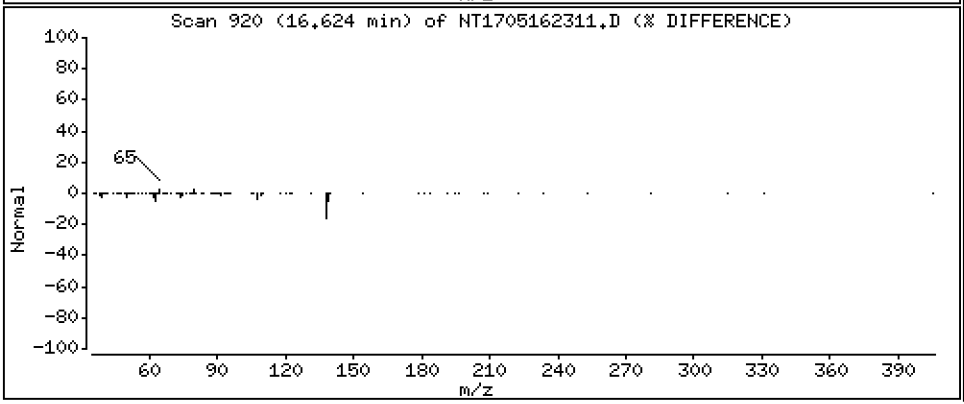
52 4-Nitroaniline

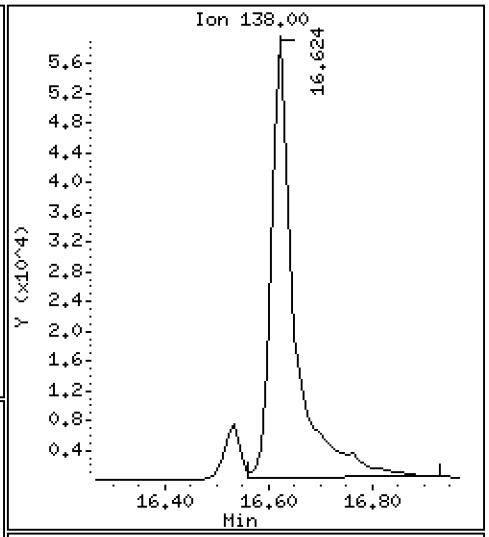
Concentration: 5.108 ug/mL

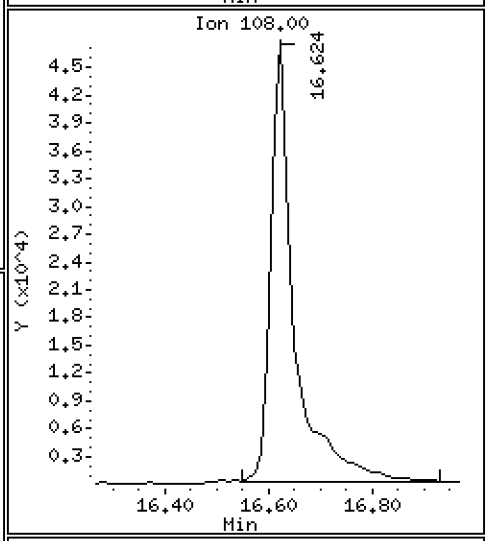


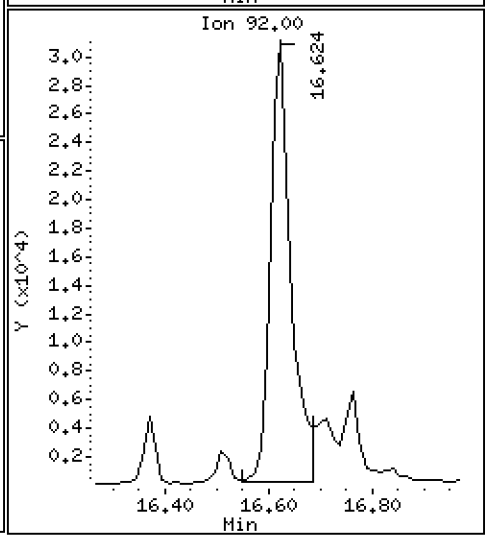












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

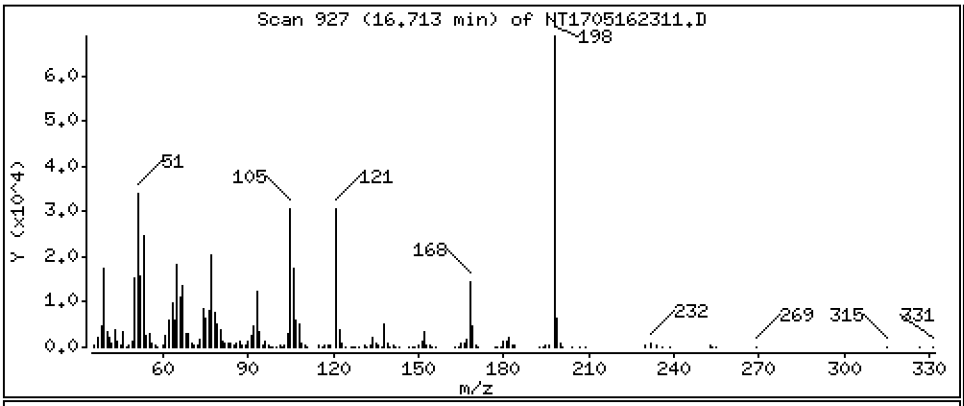
Operator: JGR

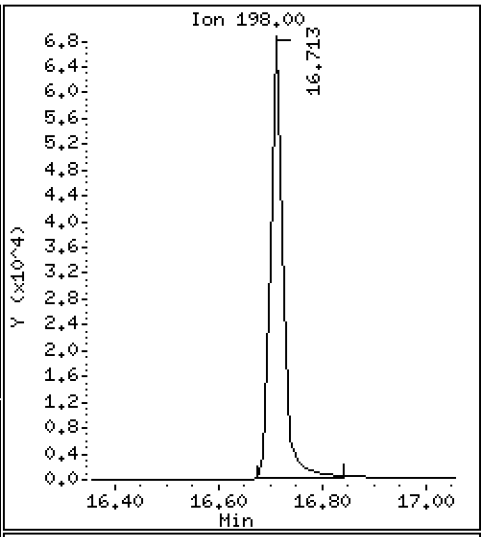
Column phase: ZB-5msi

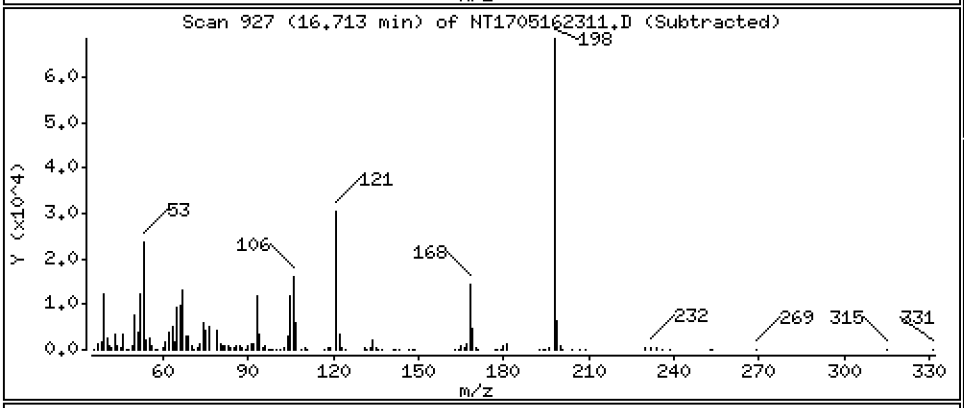
Column diameter: 0.25

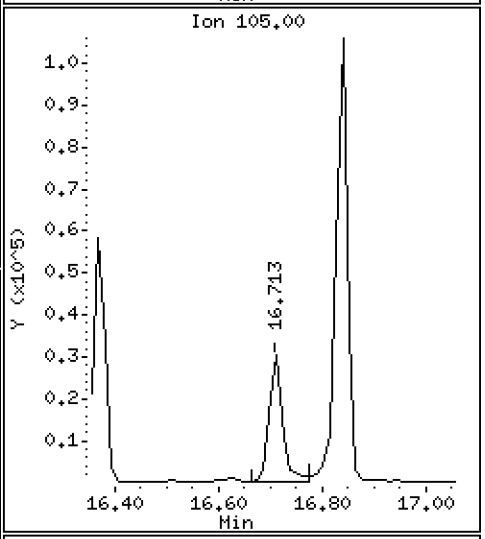
53 4,6-Dinitro-2-methylphenol

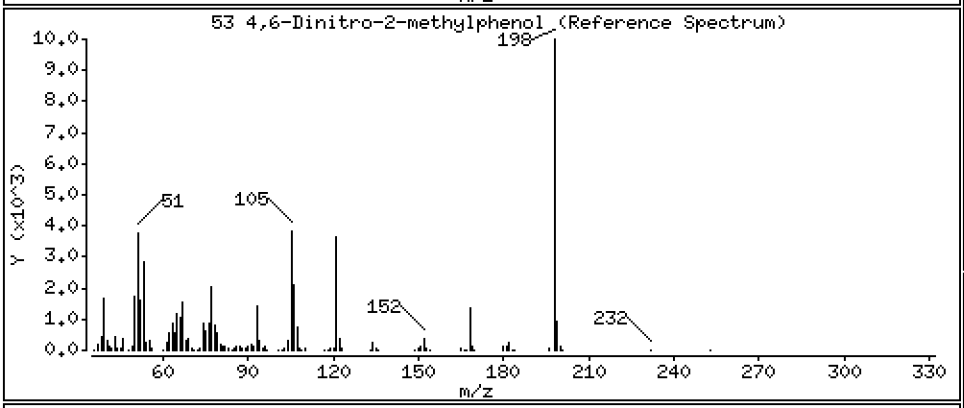
Concentration: 3.355 ug/mL

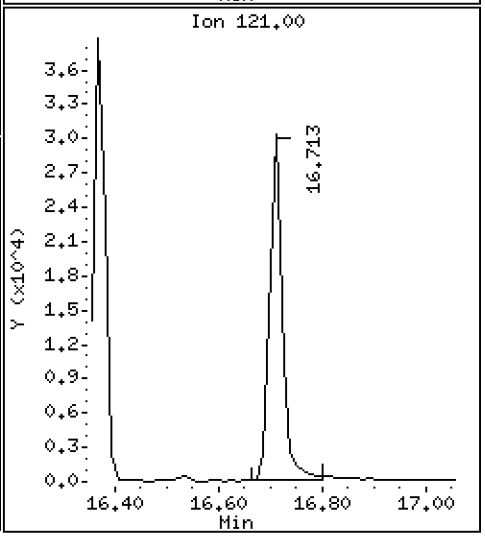


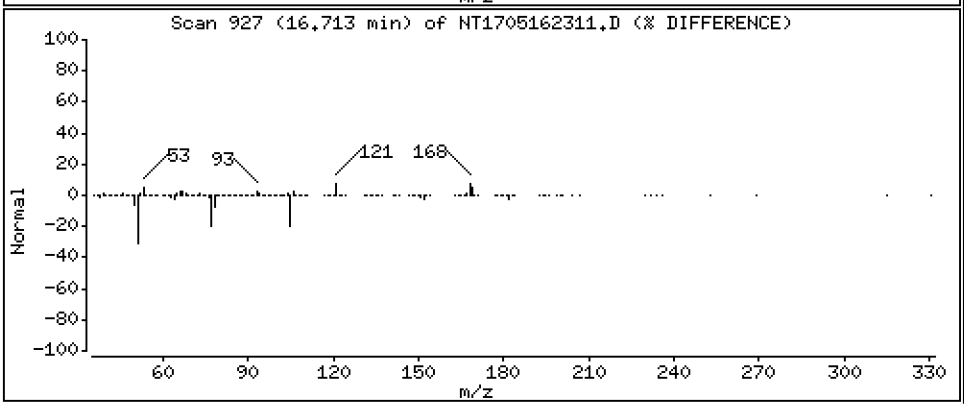












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

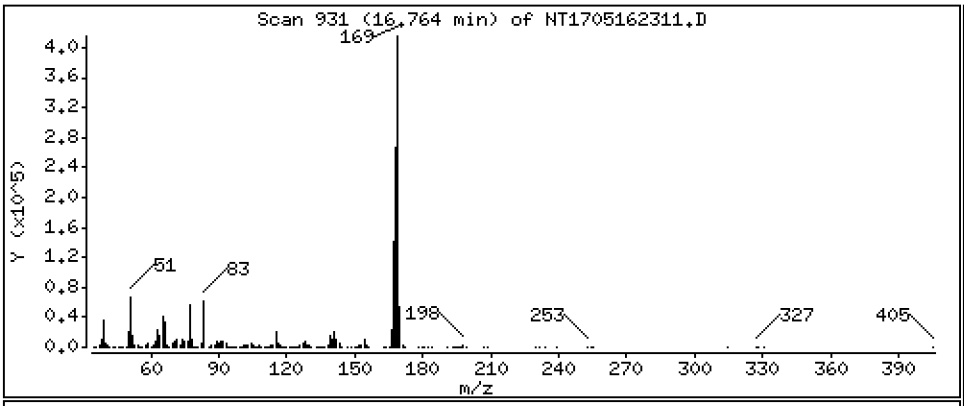
Operator: JGR

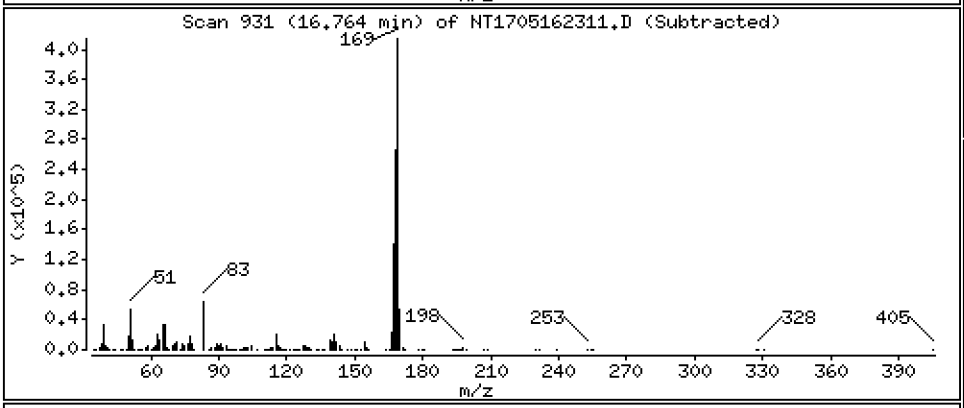
Column phase: ZB-5msi

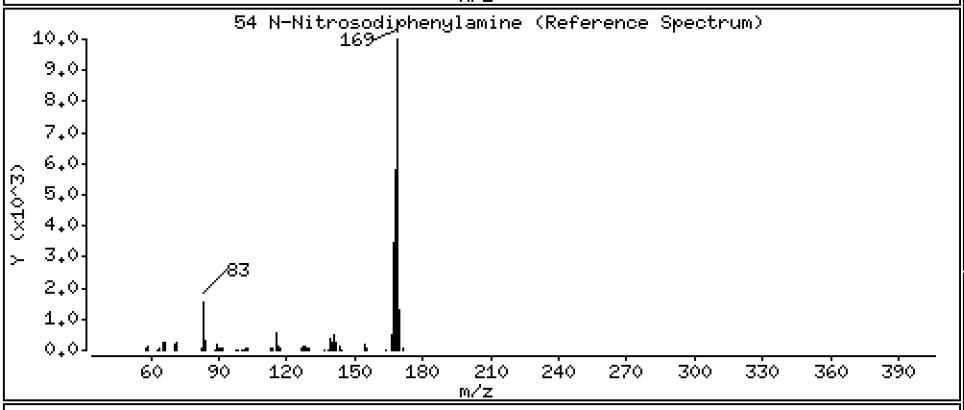
Column diameter: 0.25

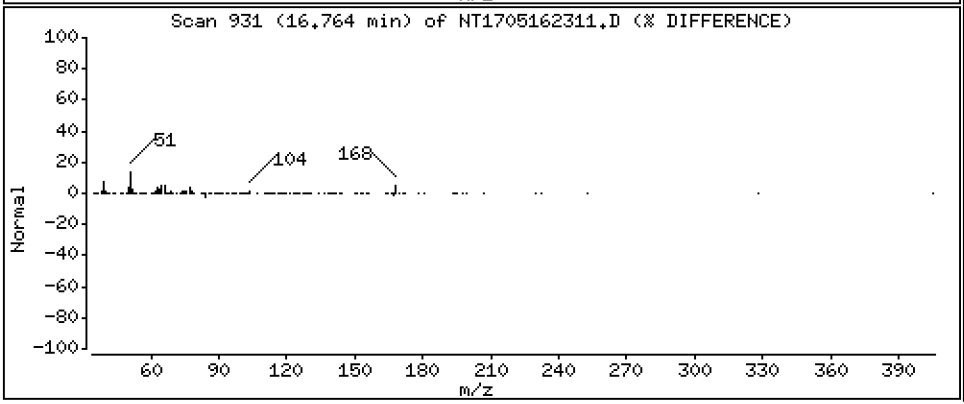
54 N-Nitrosodiphenylamine

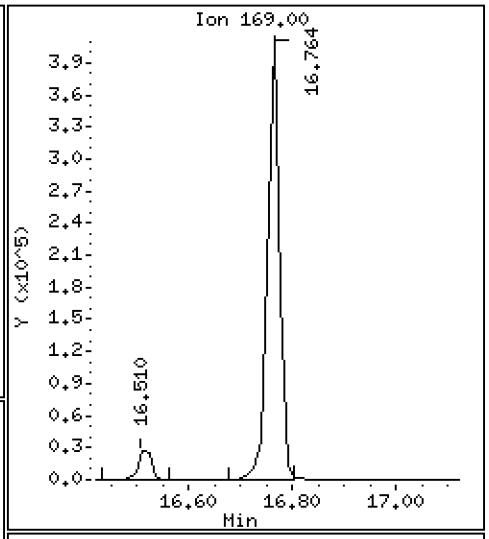
Concentration: 5.470 ug/mL

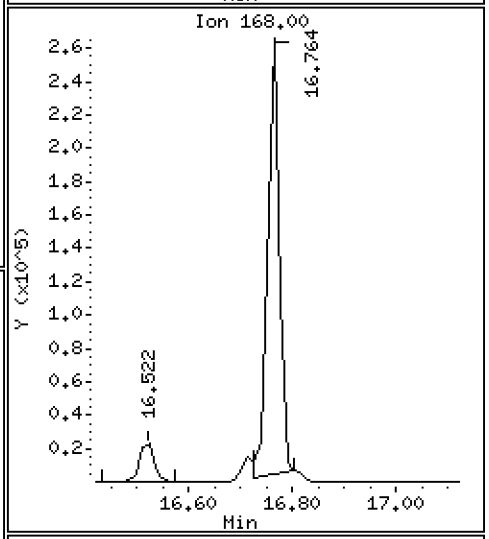


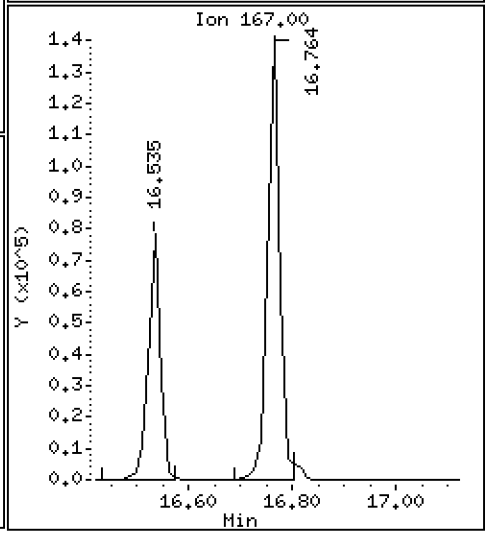












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

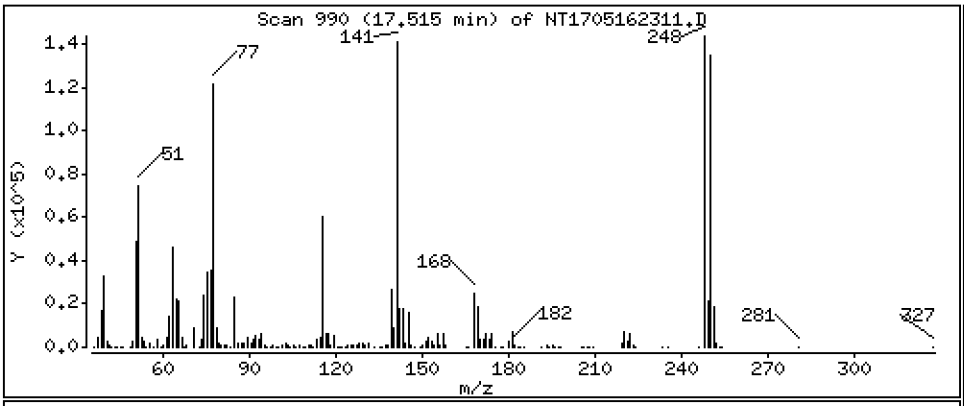
Operator: JGR

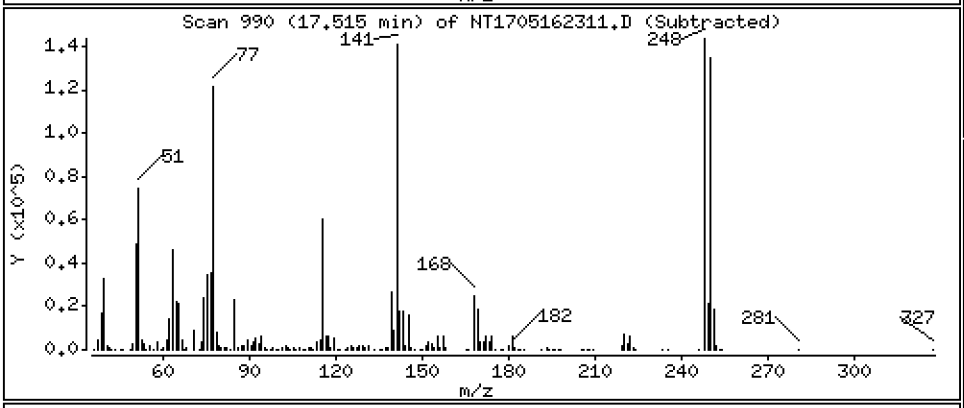
Column phase: ZB-5msi

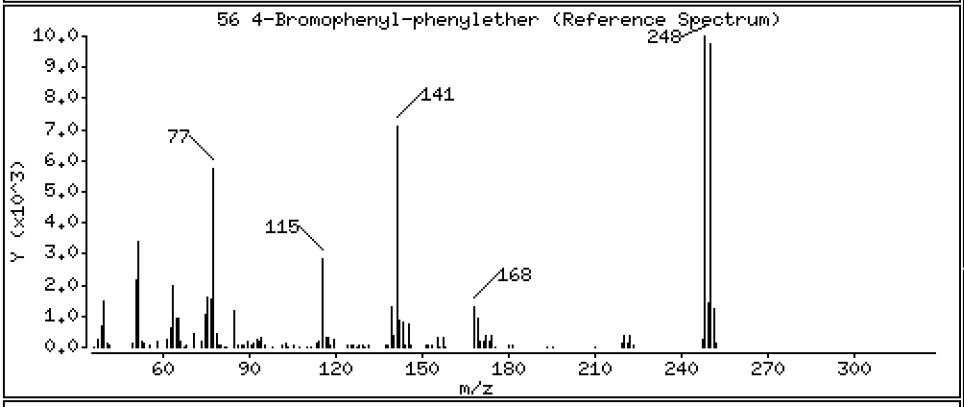
Column diameter: 0.25

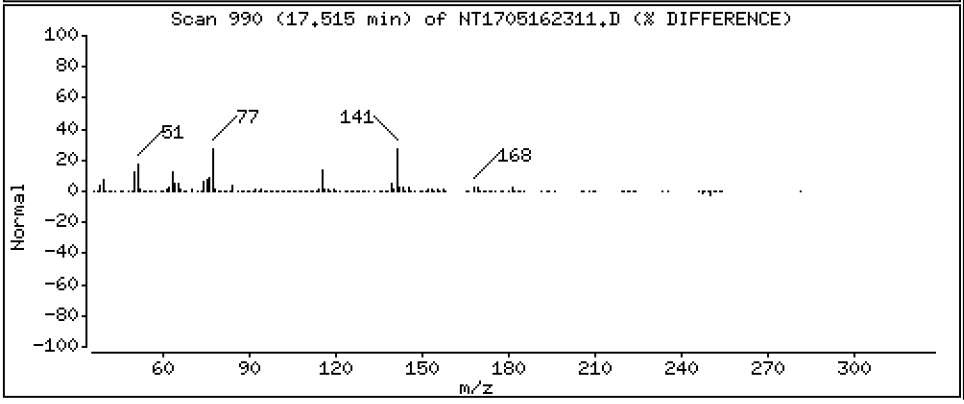
56 4-Bromophenyl-phenylether

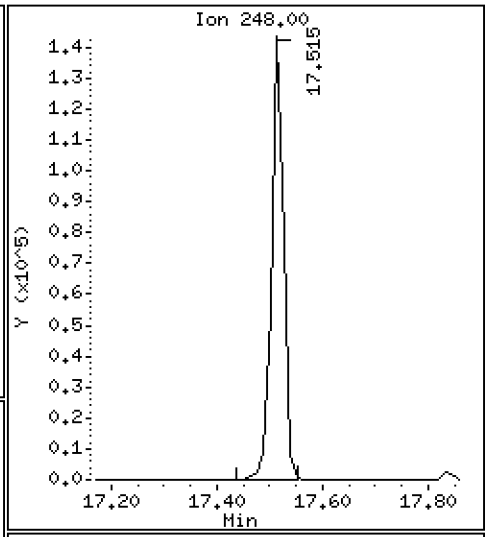
Concentration: 5.420 ug/mL

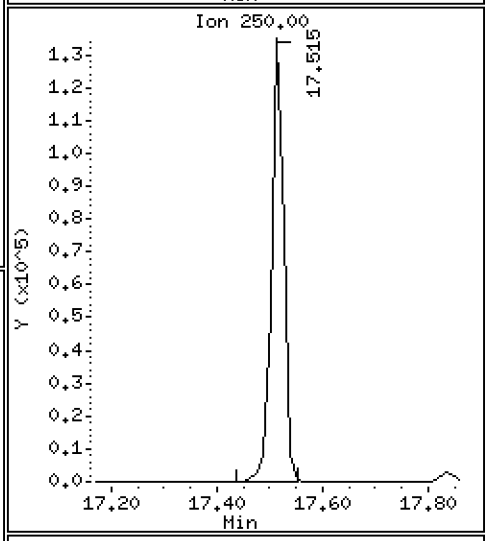


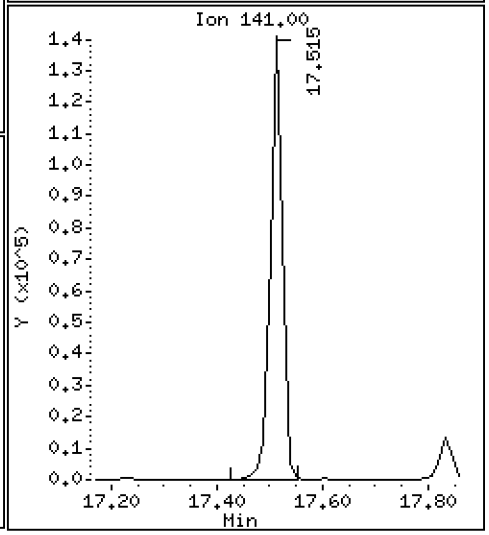












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

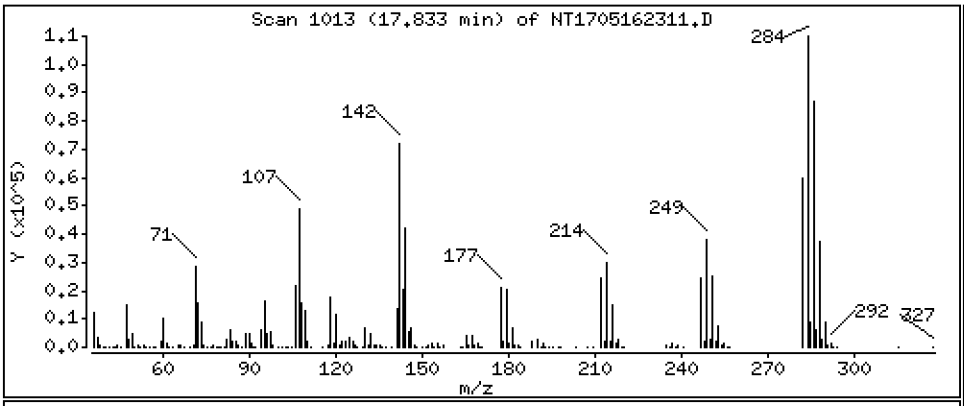
Operator: JGR

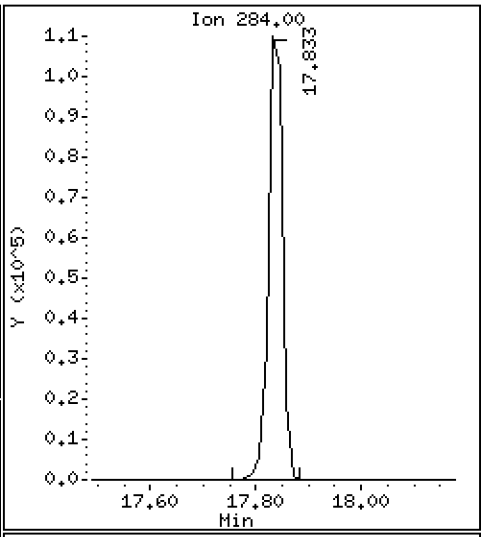
Column phase: ZB-5msi

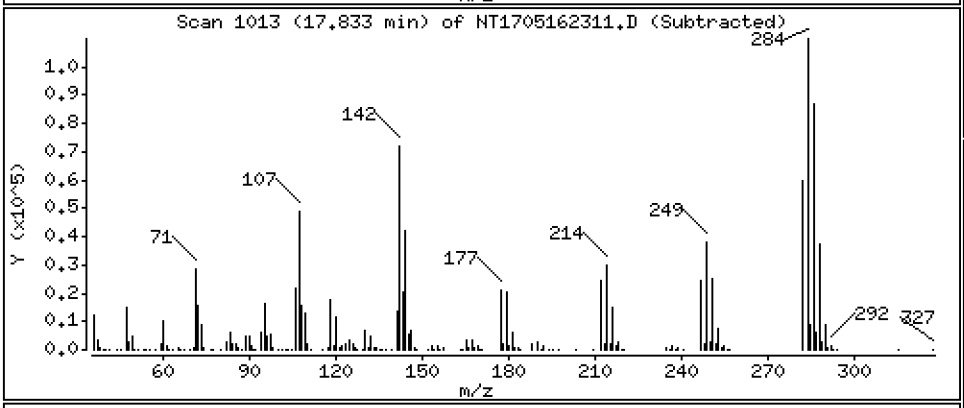
Column diameter: 0.25

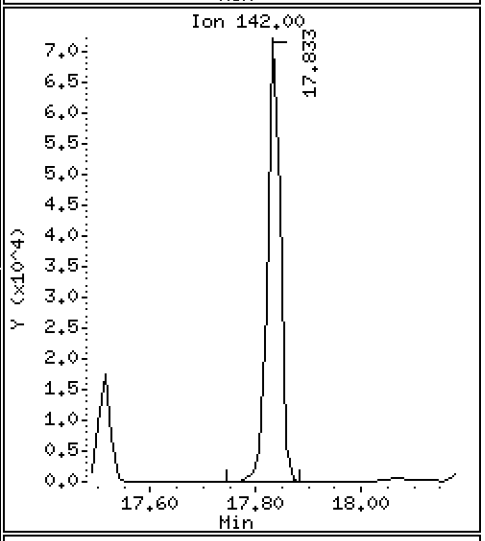
57 Hexachlorobenzene

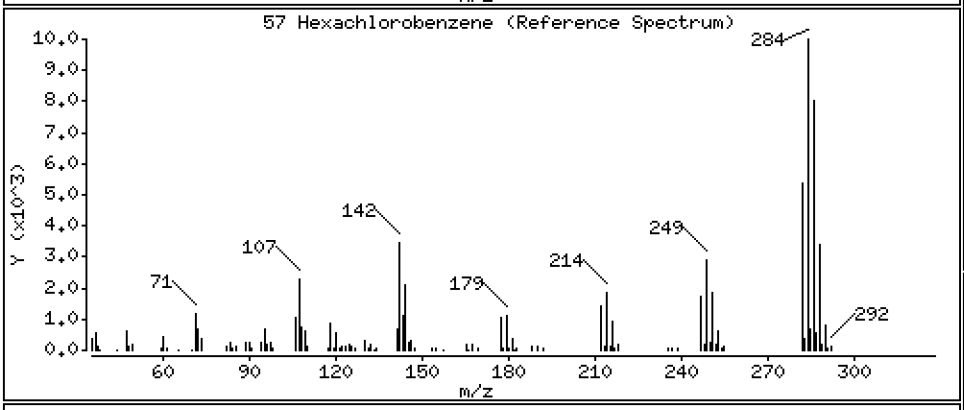
Concentration: 4.913 ug/mL

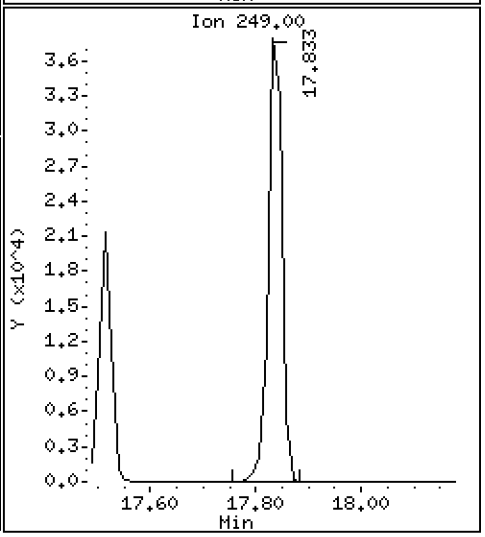


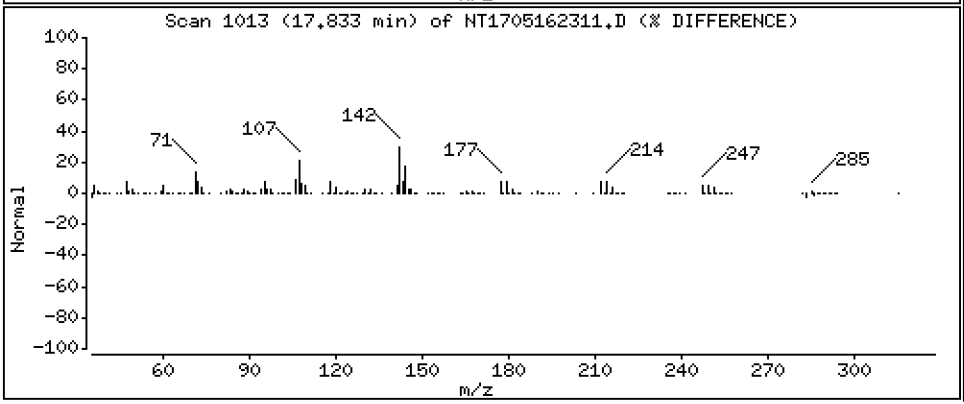












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

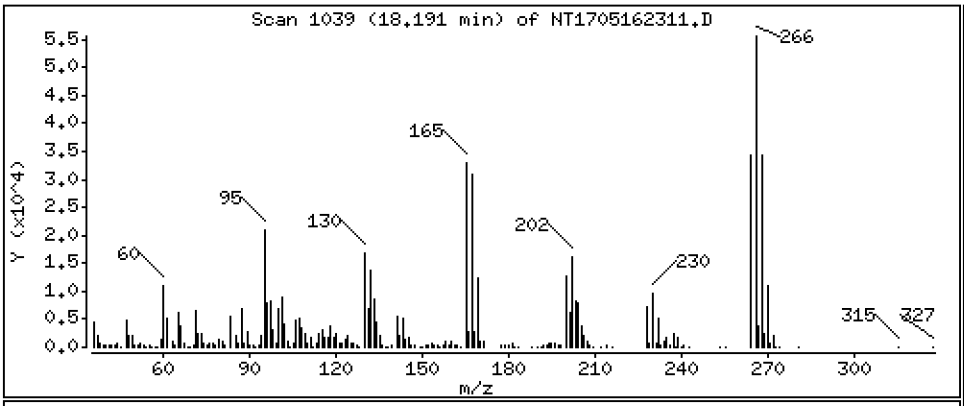
Operator: JGR

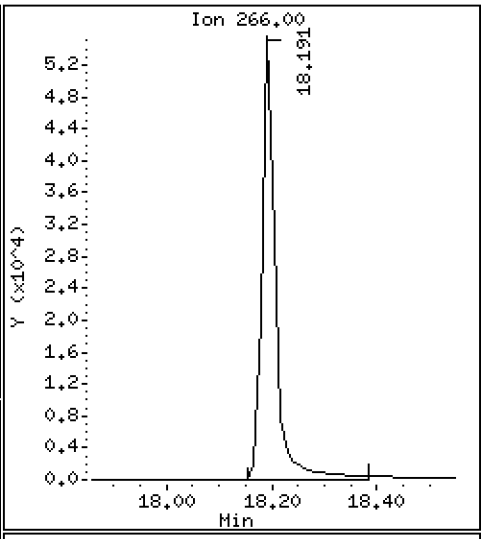
Column phase: ZB-5msi

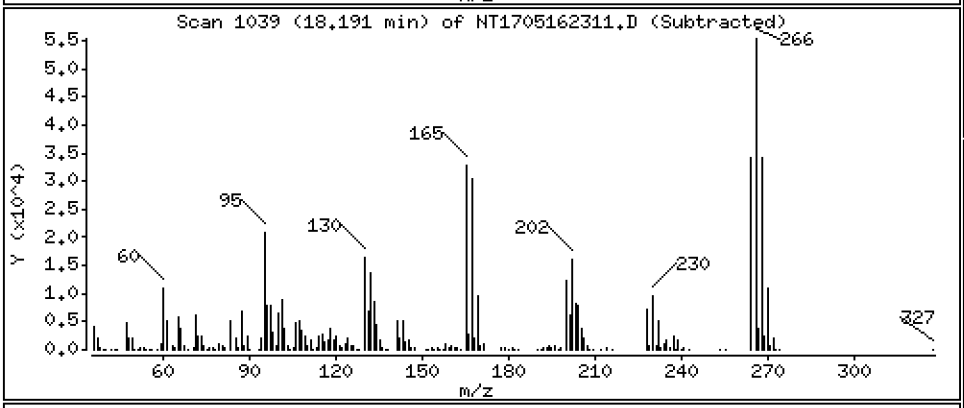
Column diameter: 0.25

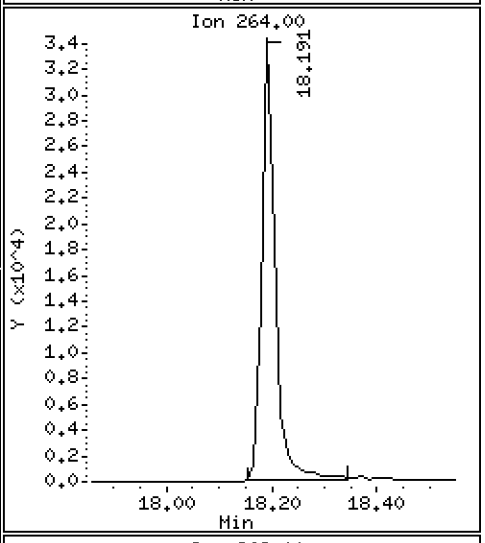
58 Pentachlorophenol

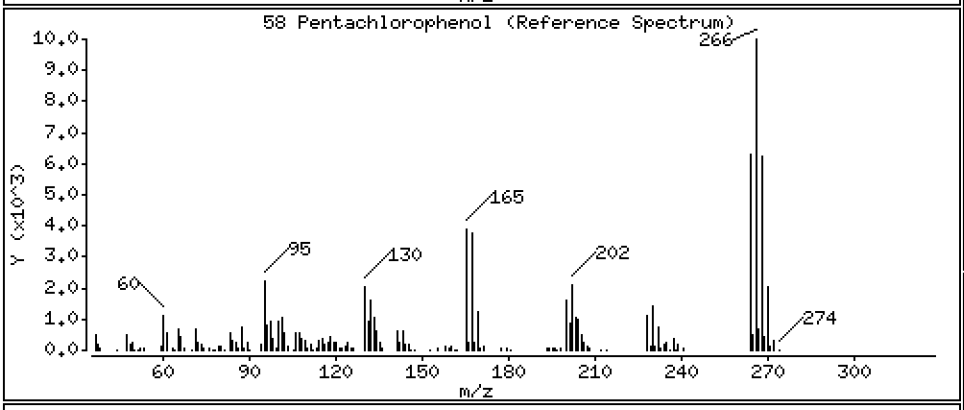
Concentration: 3.943 ug/mL

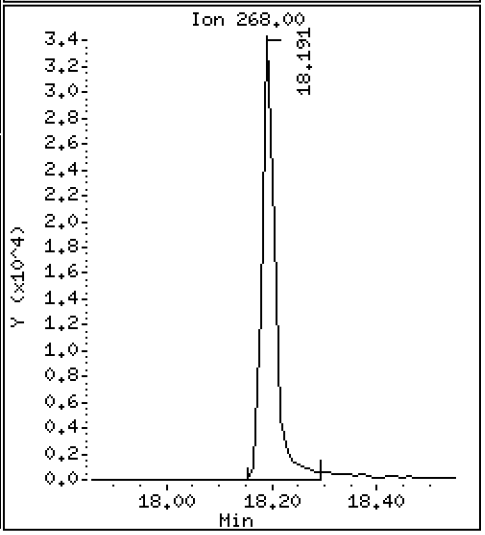


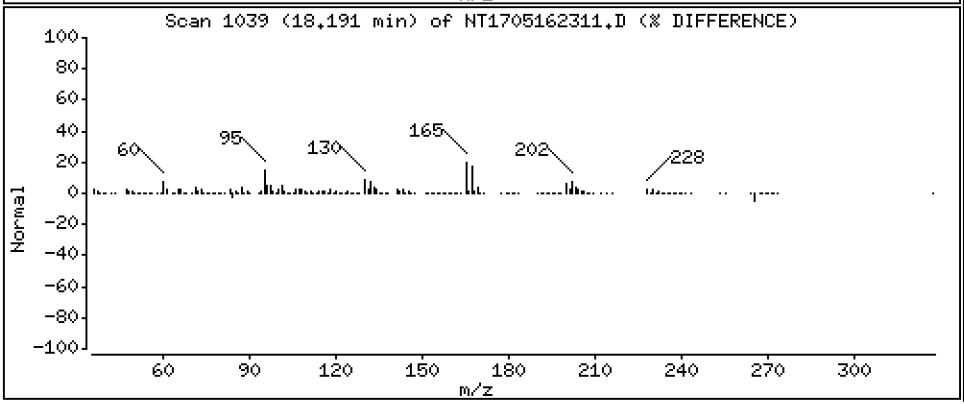












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

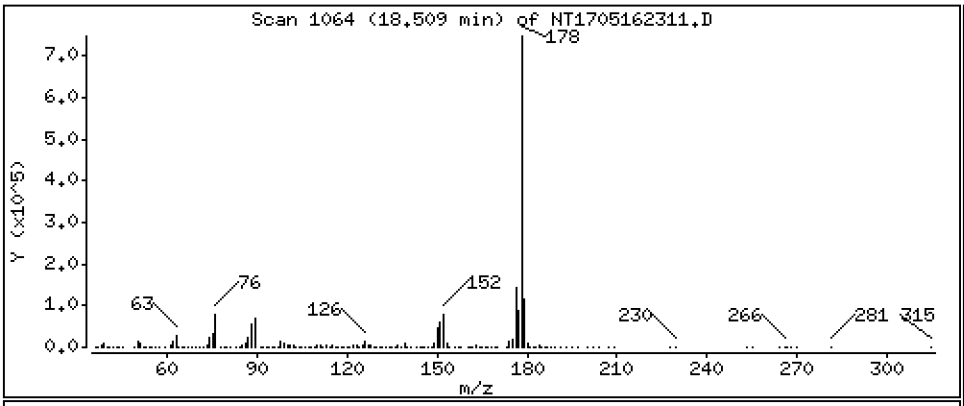
Operator: JGR

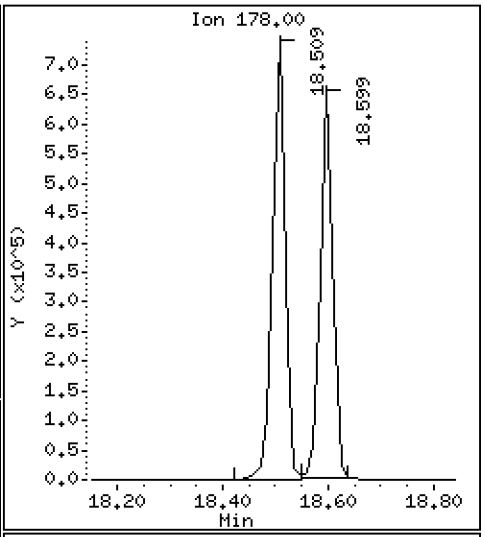
Column phase: ZB-5msi

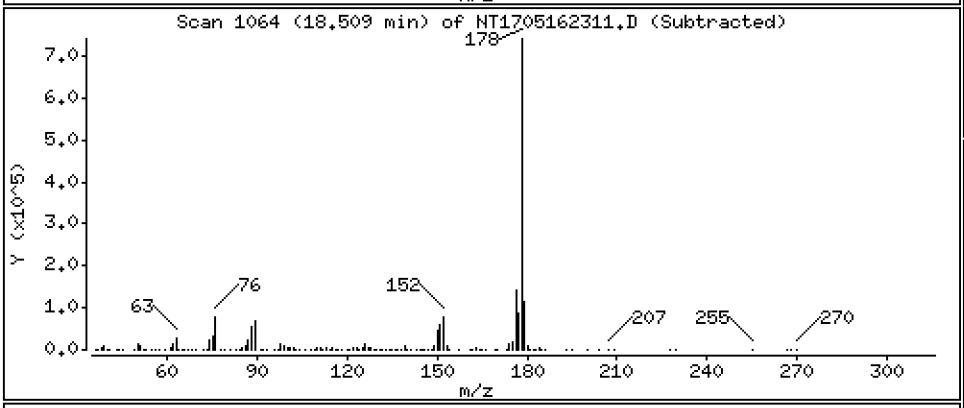
Column diameter: 0.25

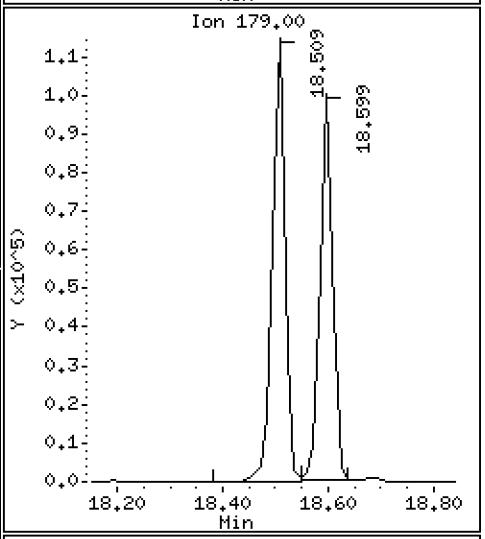
60 Phenanthrene

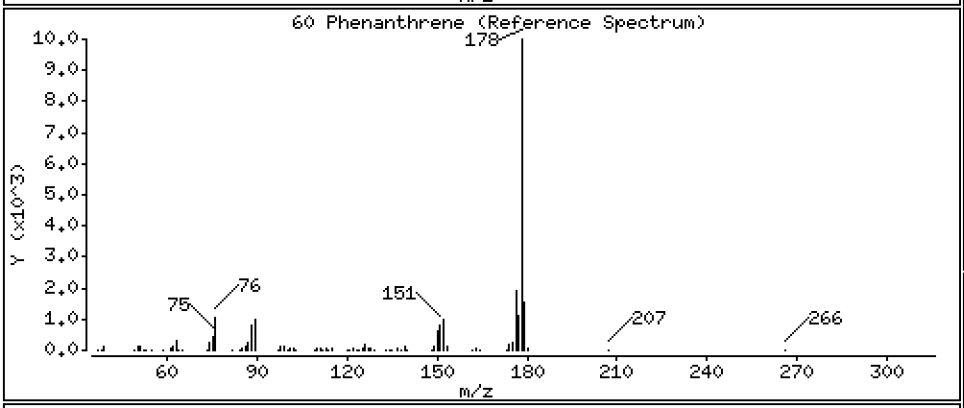
Concentration: 5.039 ug/mL

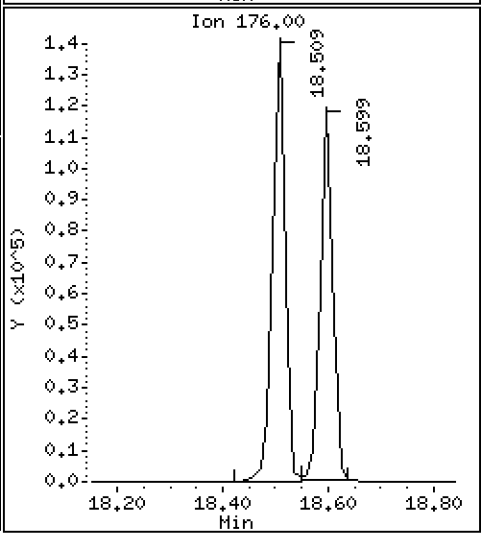


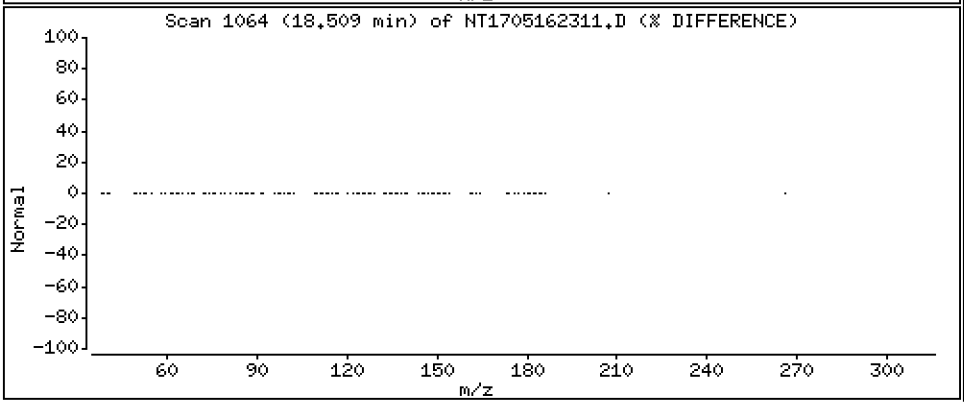












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

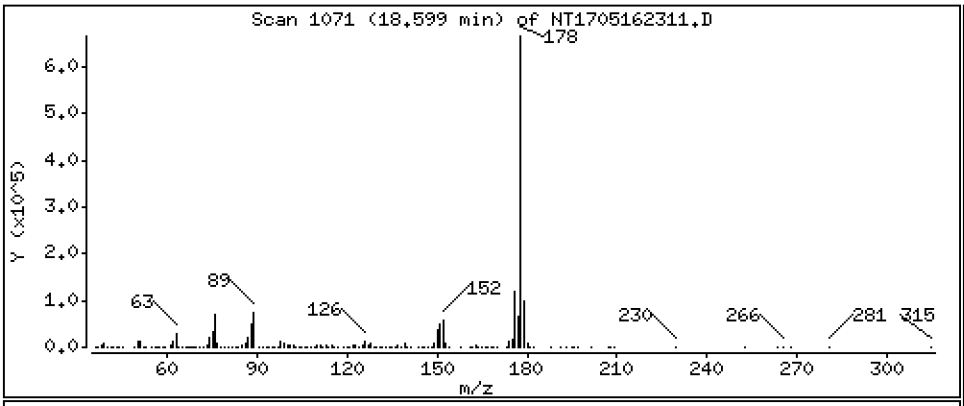
Operator: JGR

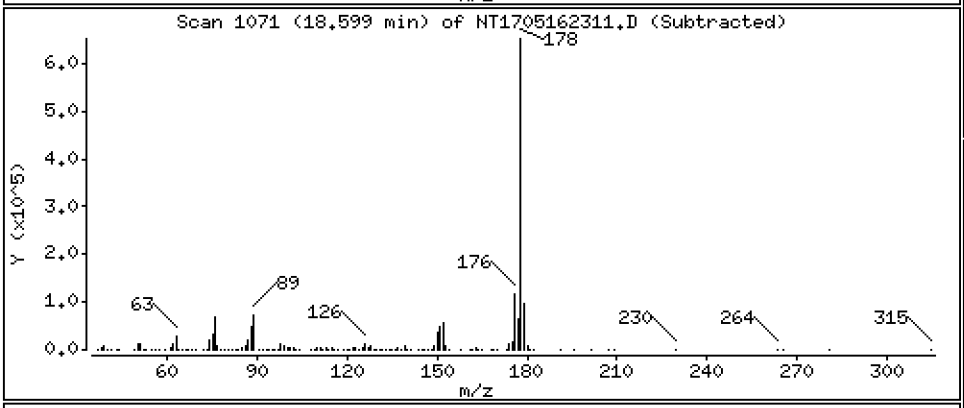
Column phase: ZB-5msi

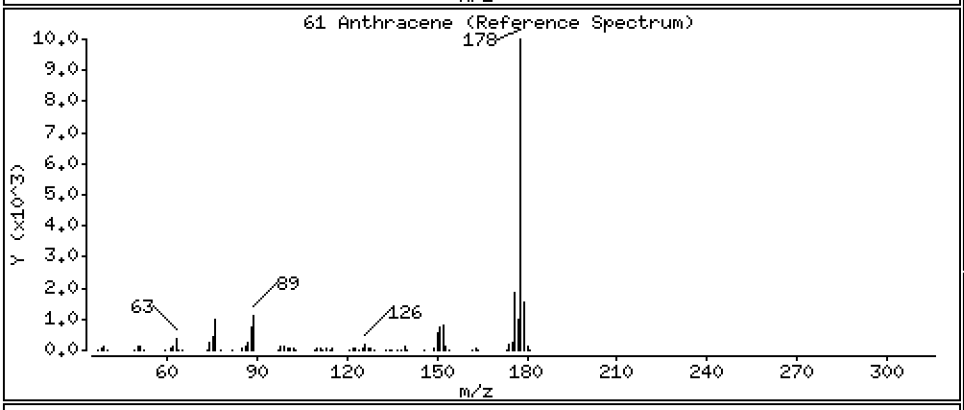
Column diameter: 0.25

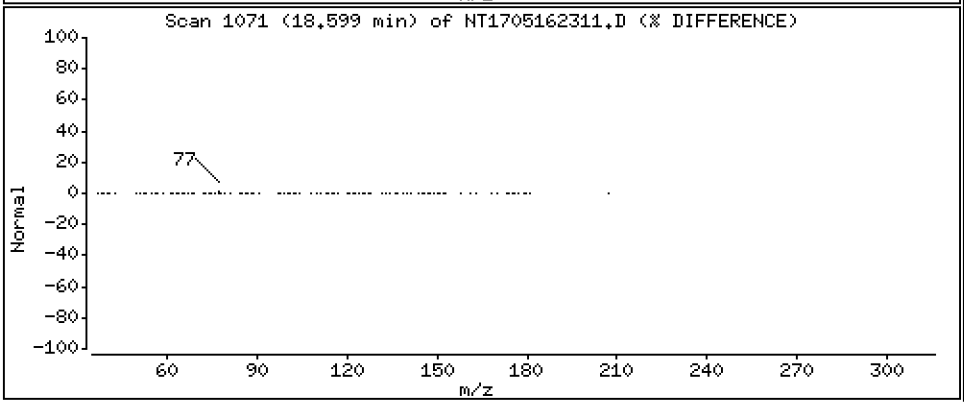
61 Anthracene

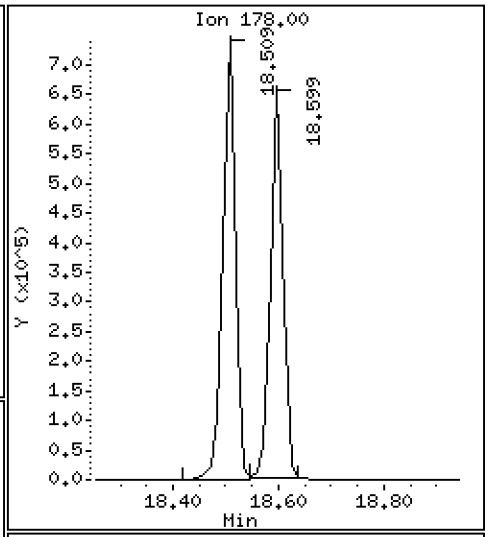
Concentration: 4.530 ug/mL

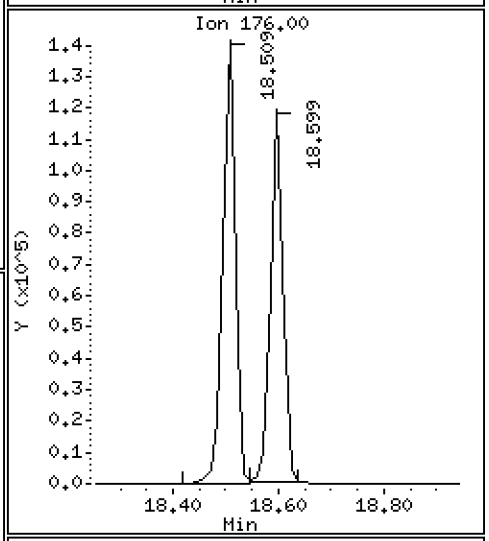


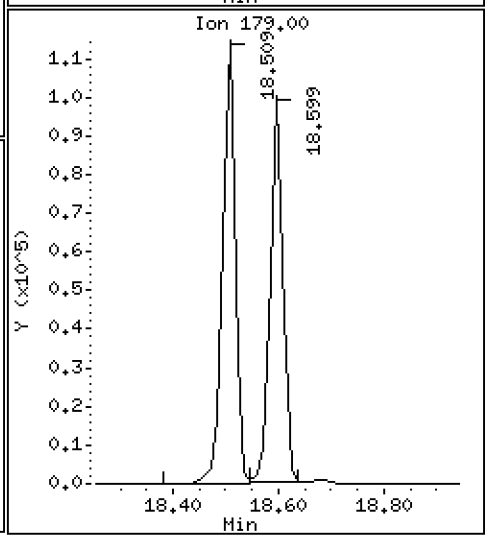












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

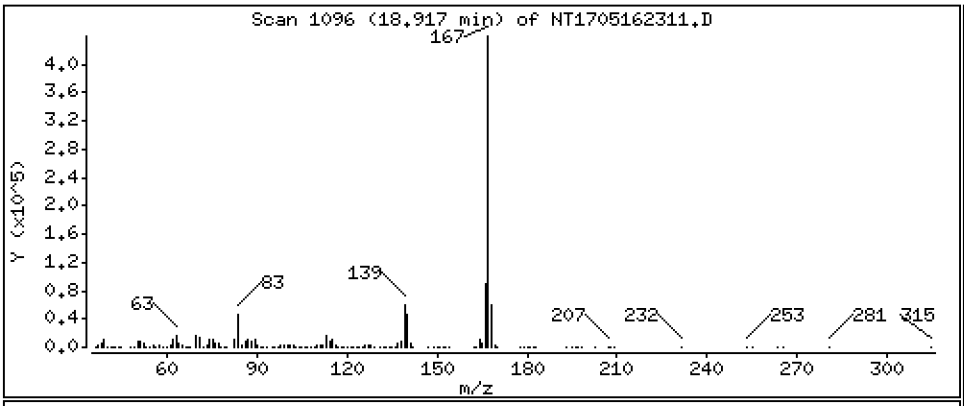
Operator: JGR

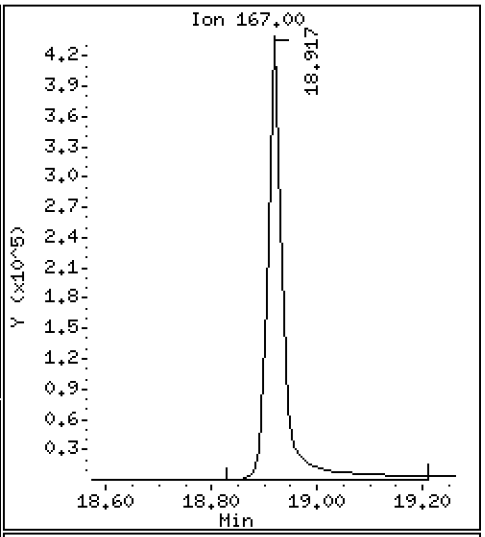
Column phase: ZB-5msi

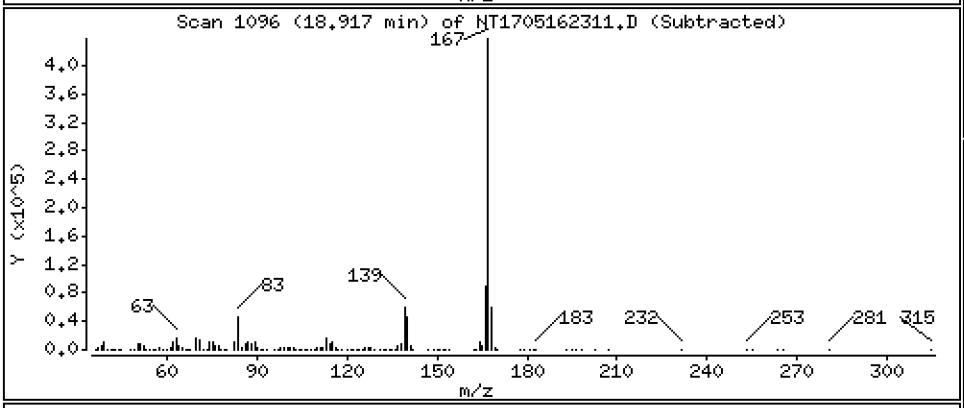
Column diameter: 0.25

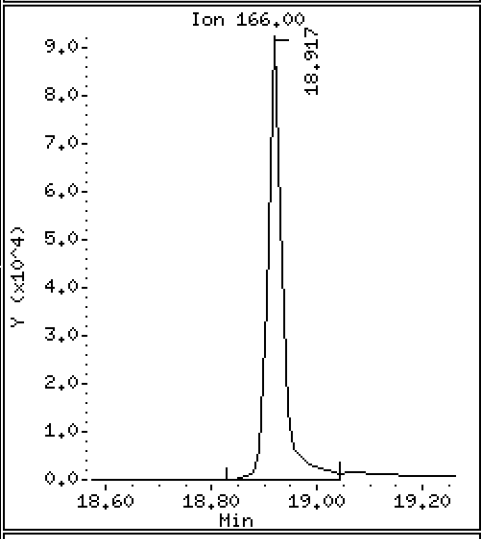
62 Carbazole

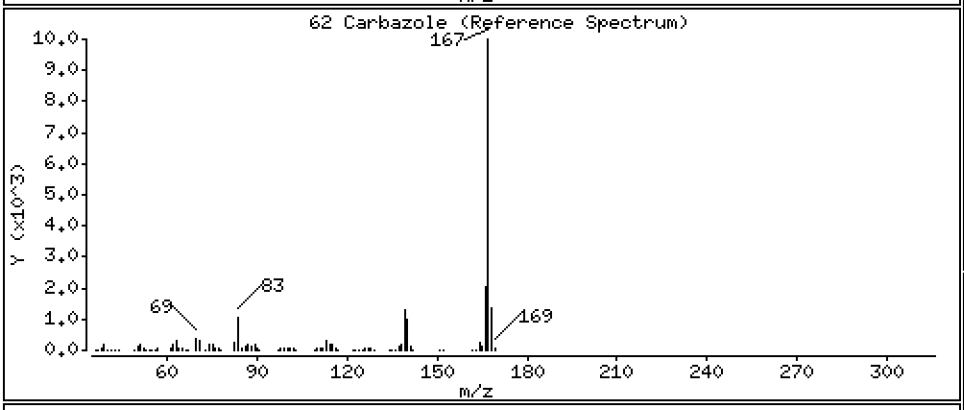
Concentration: 5.938 ug/mL

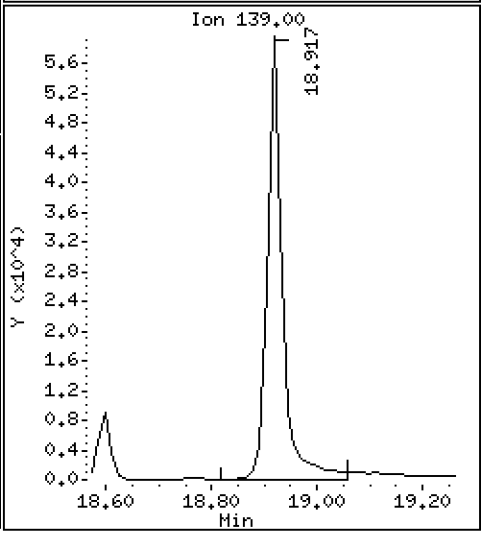


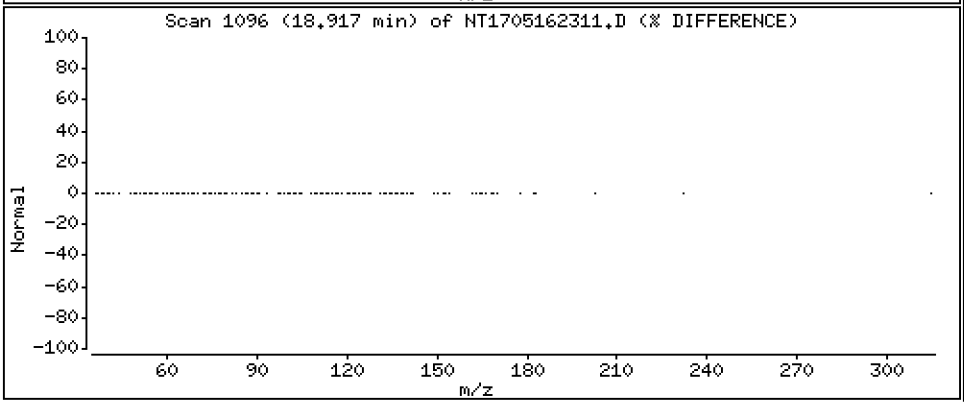












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

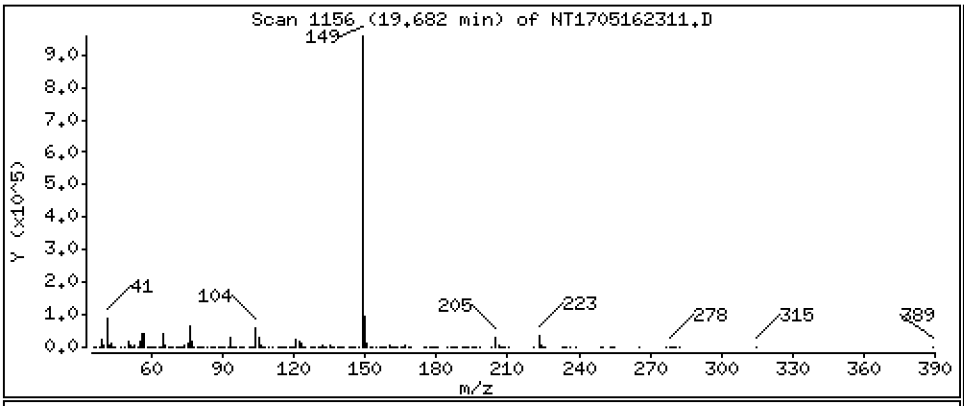
Operator: JGR

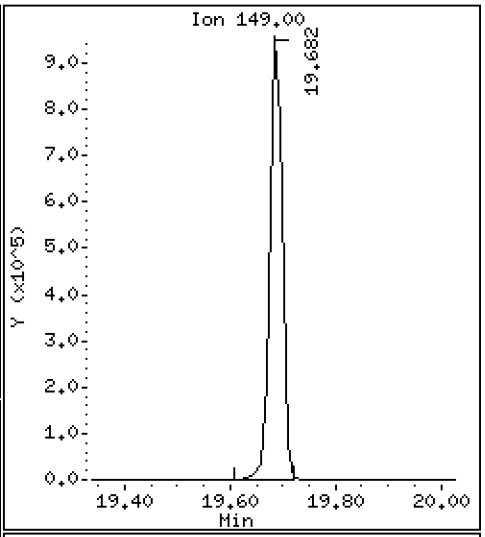
Column phase: ZB-5msi

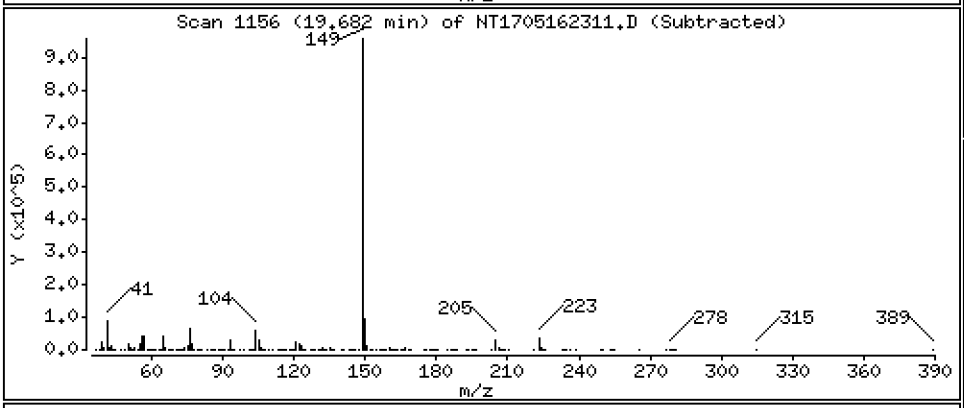
Column diameter: 0.25

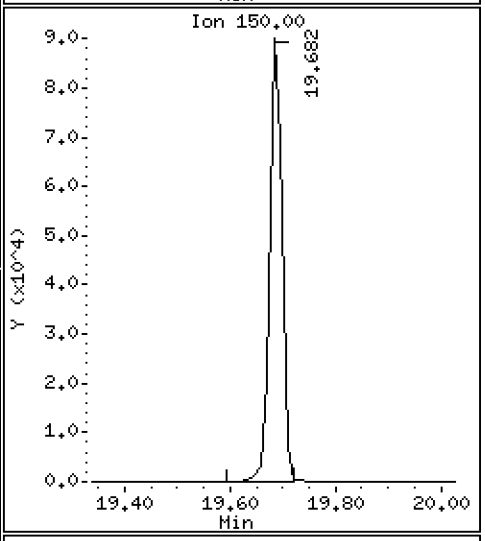
63 Di-n-butylphthalate

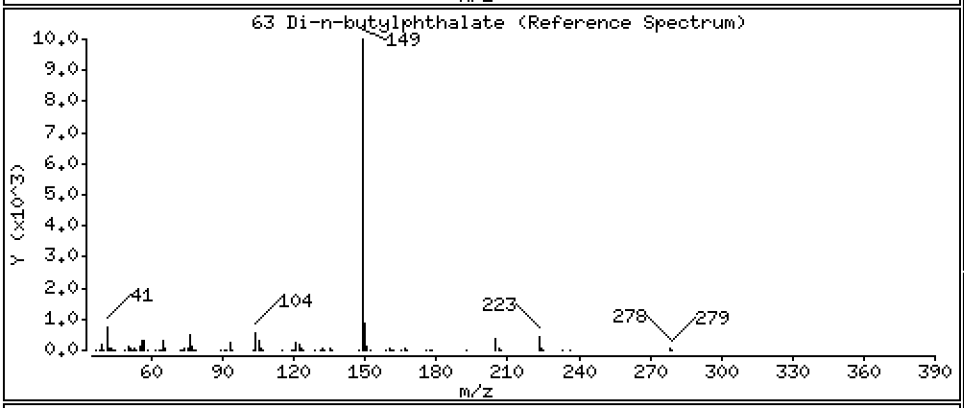
Concentration: 5.642 ug/mL

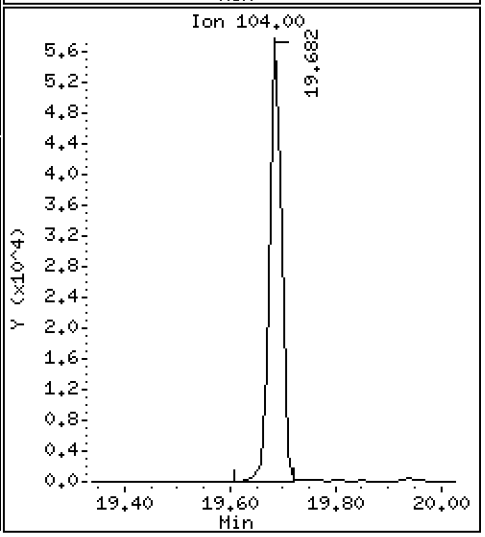


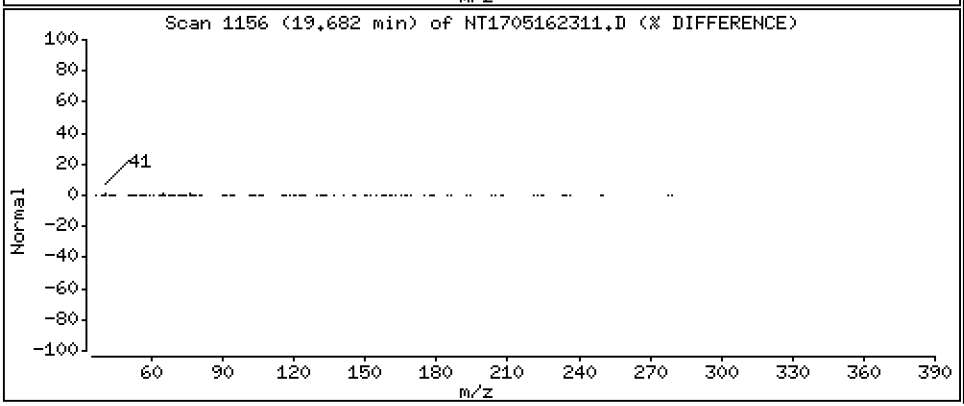












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

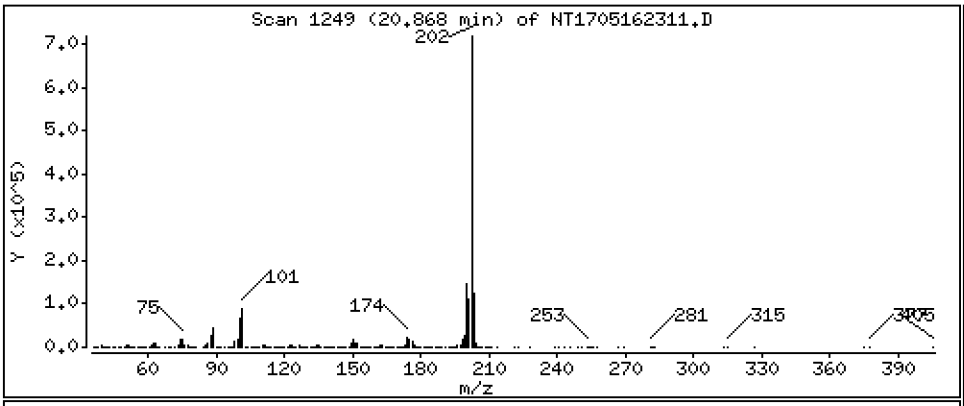
Operator: JGR

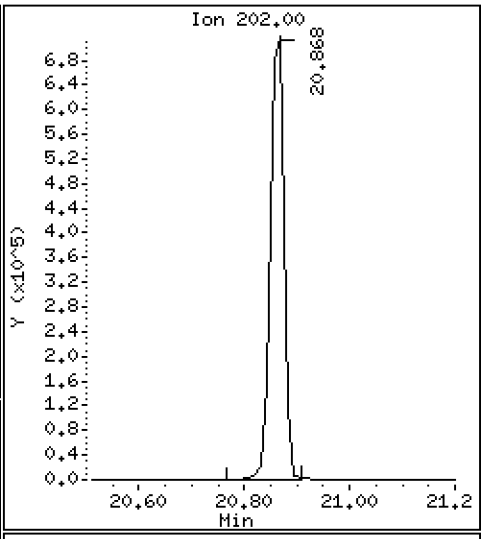
Column phase: ZB-5msi

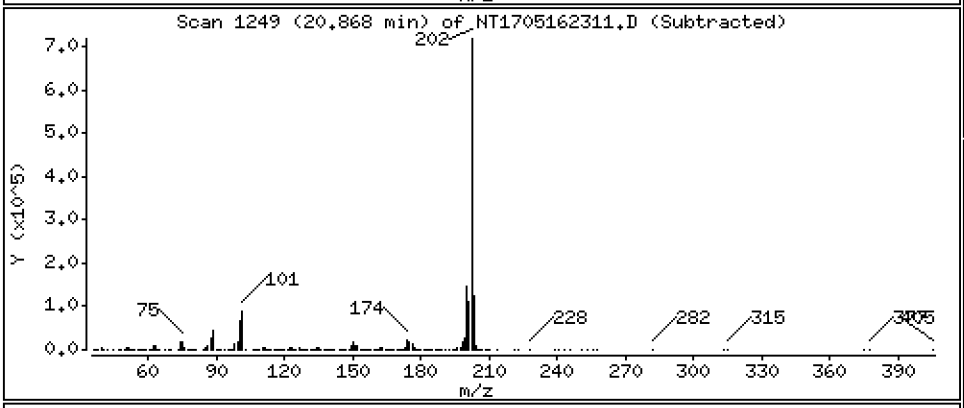
Column diameter: 0.25

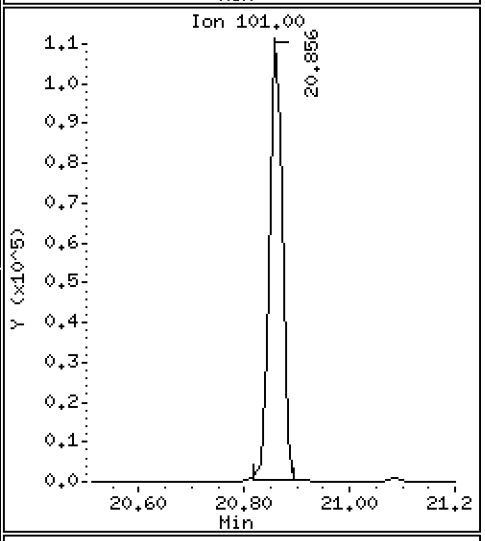
64 Fluoranthene

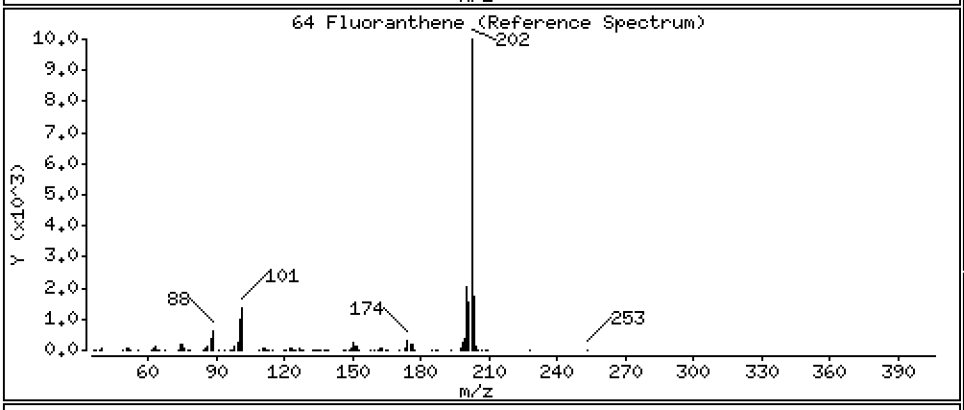
Concentration: 5.467 ug/mL

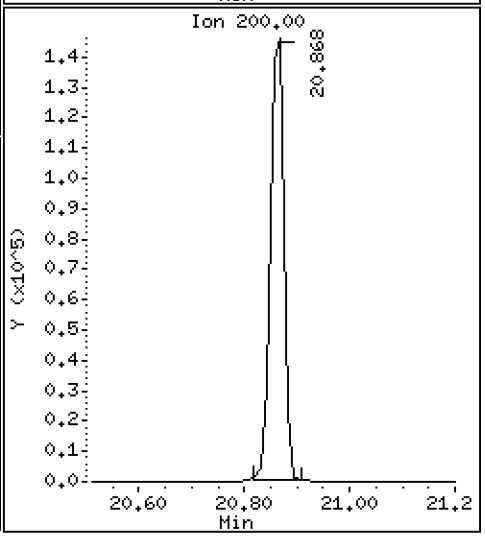


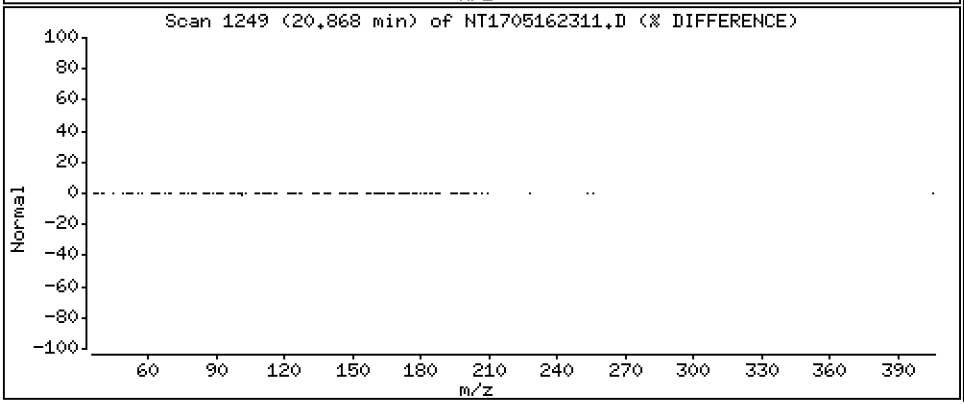












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

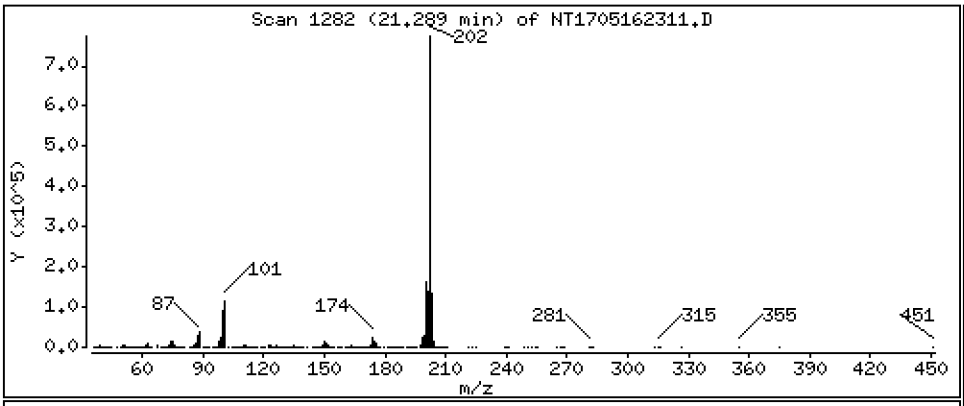
Operator: JGR

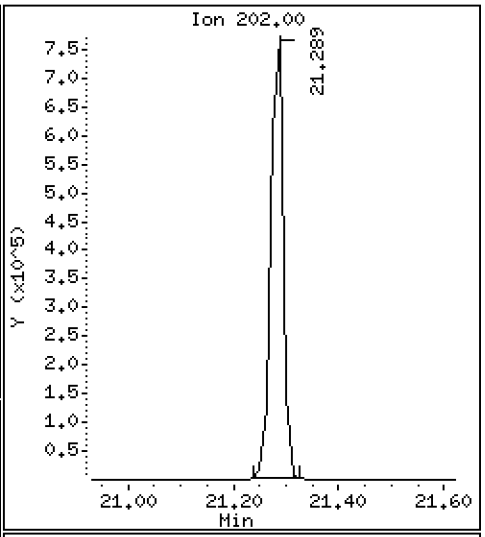
Column phase: ZB-5msi

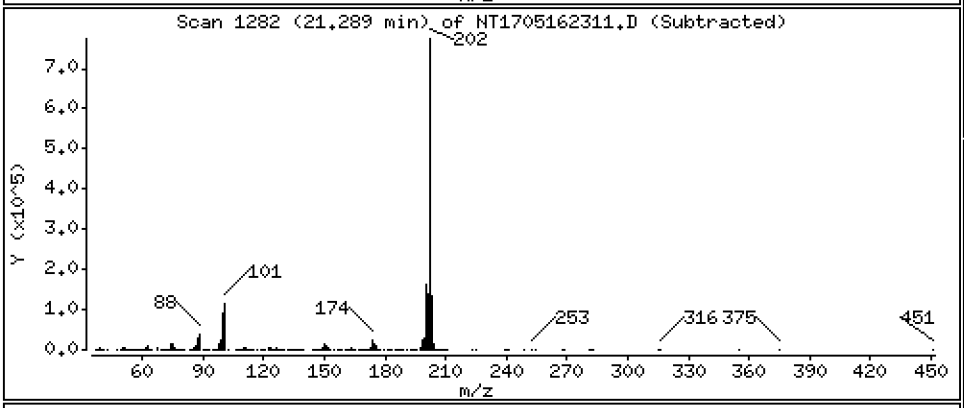
Column diameter: 0.25

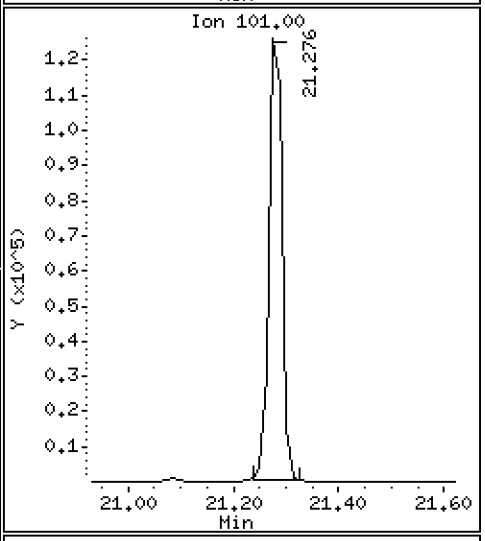
65 Pyrene

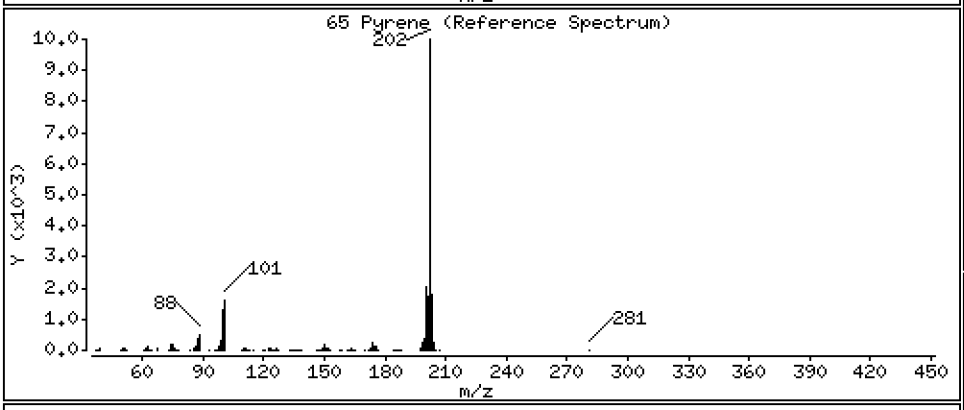
Concentration: 5.265 ug/mL

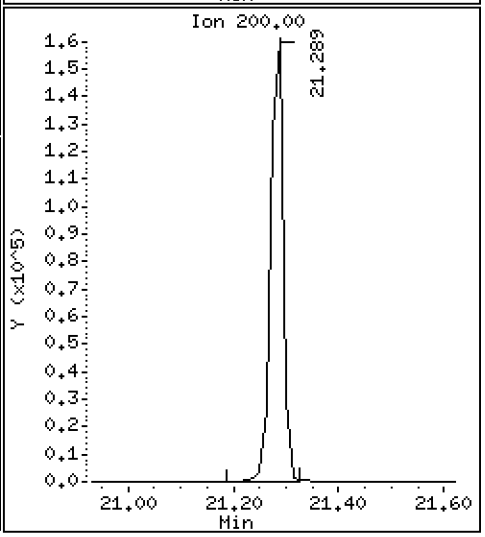


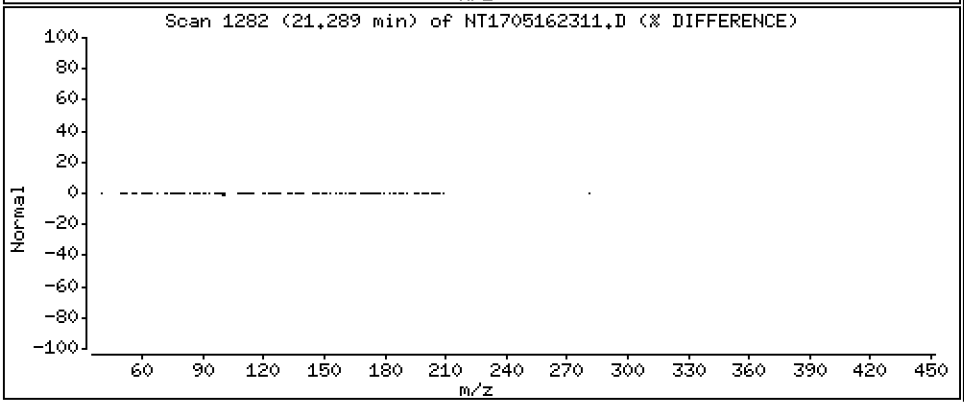












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

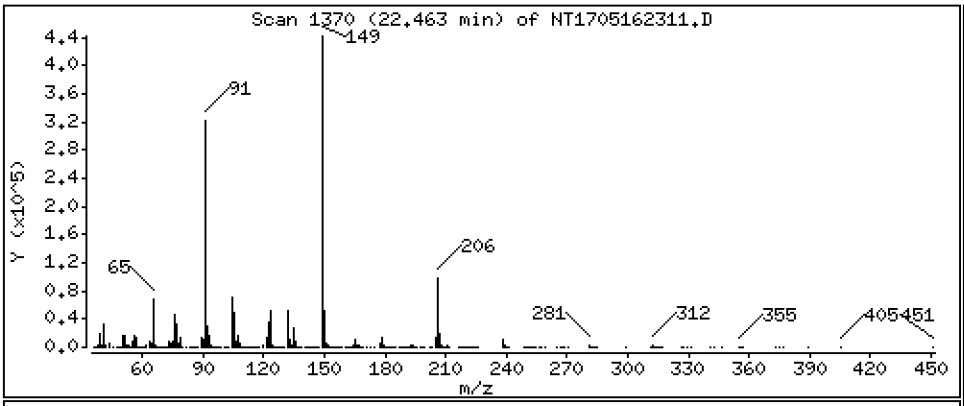
Operator: JGR

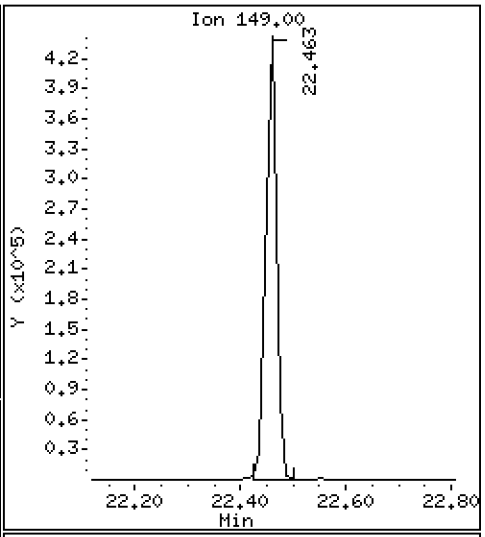
Column phase: ZB-5msi

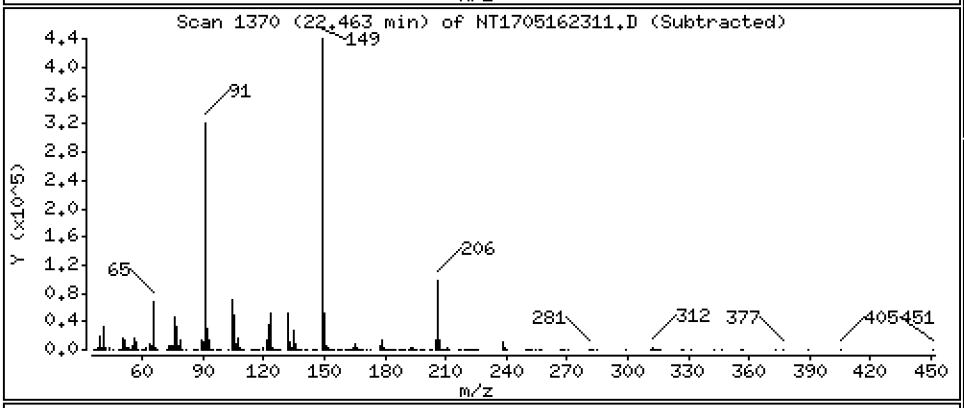
Column diameter: 0.25

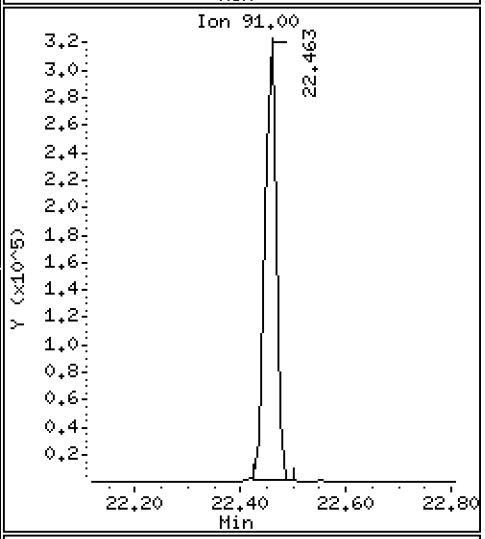
67 Butylbenzylphthalate

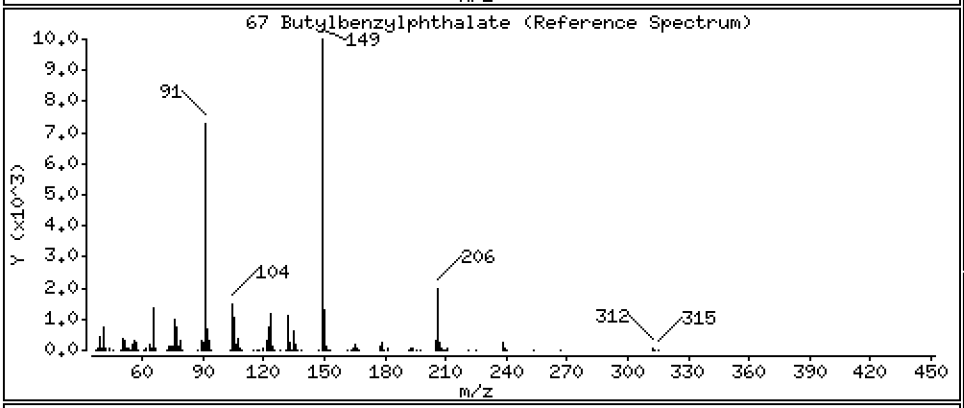
Concentration: 5.825 ug/mL

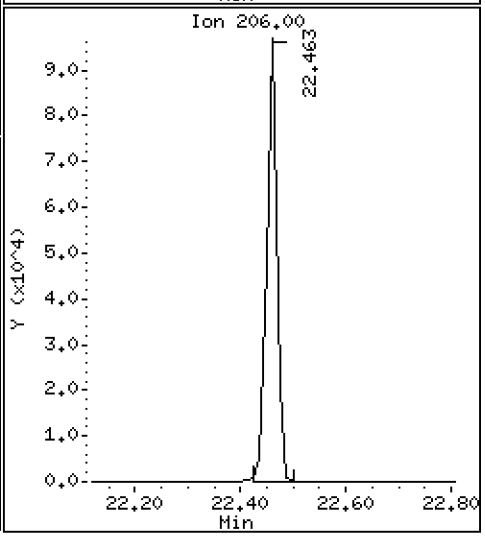


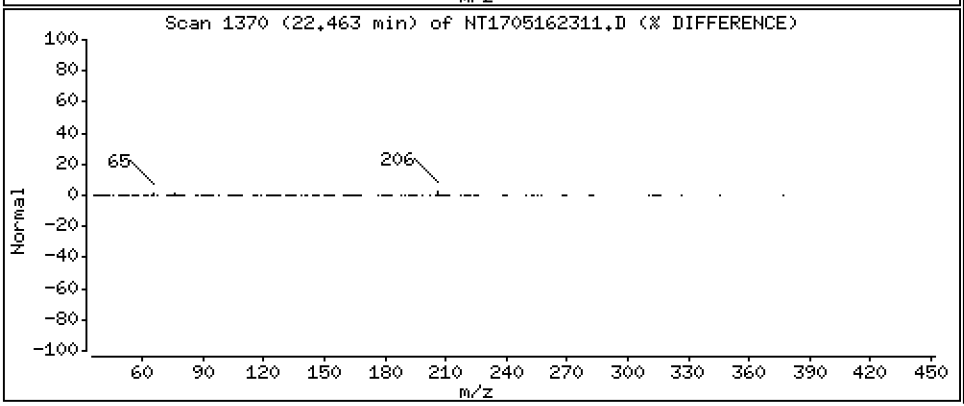












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

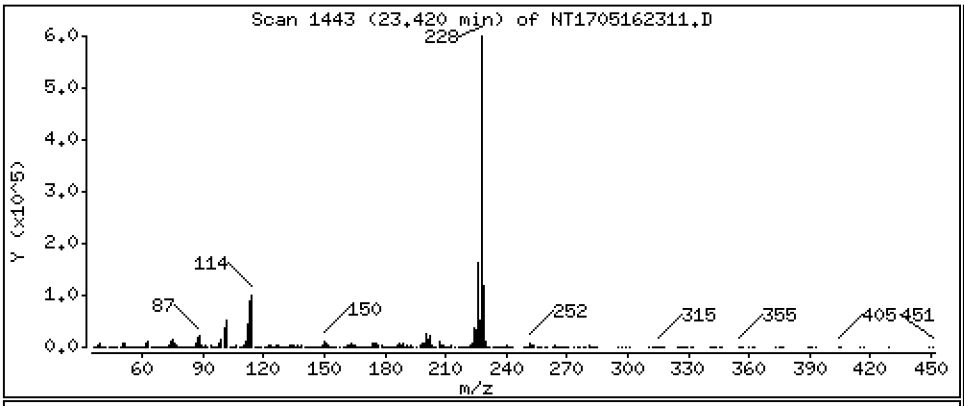
Operator: JGR

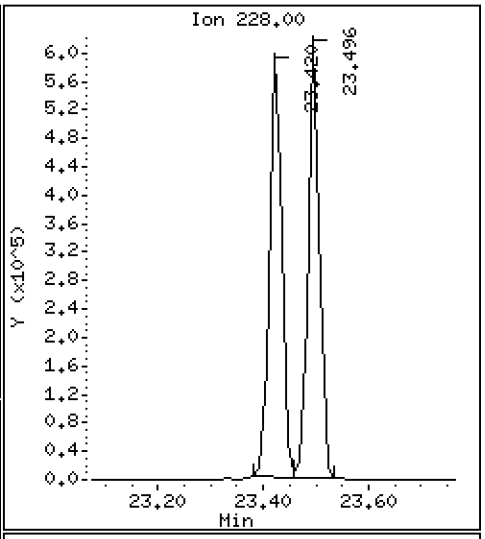
Column phase: ZB-5msi

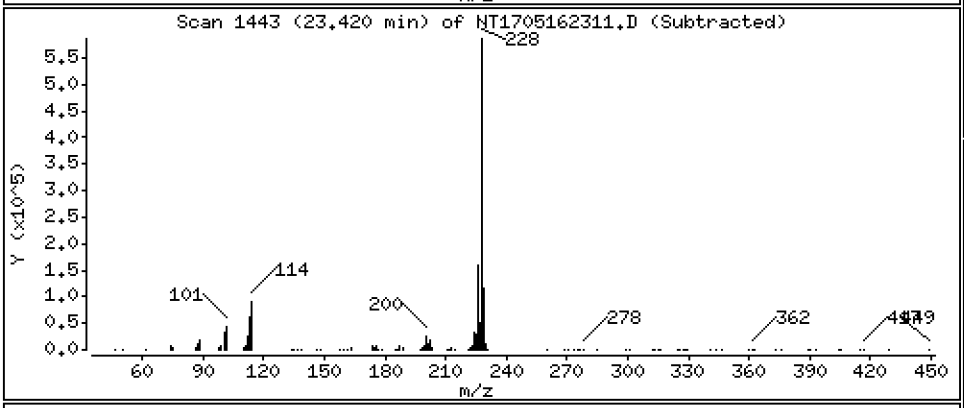
Column diameter: 0.25

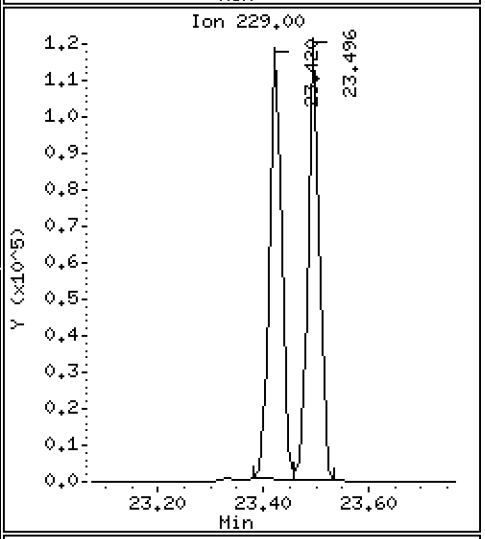
68 Benzo(a)anthracene

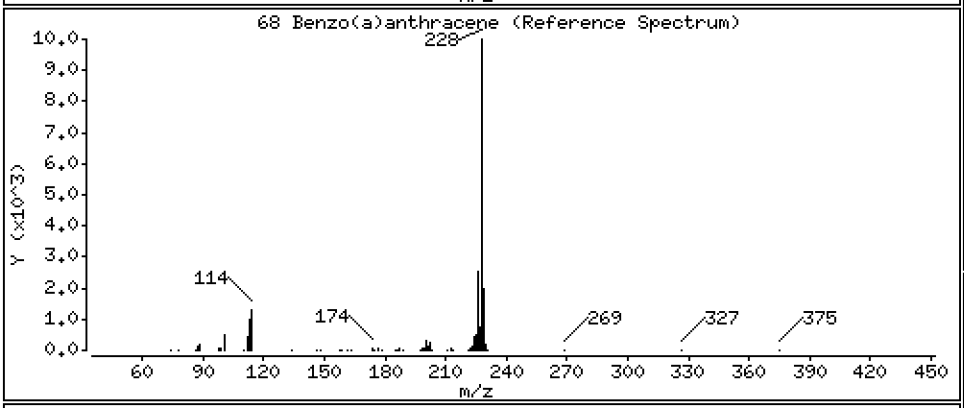
Concentration: 5.064 ug/mL

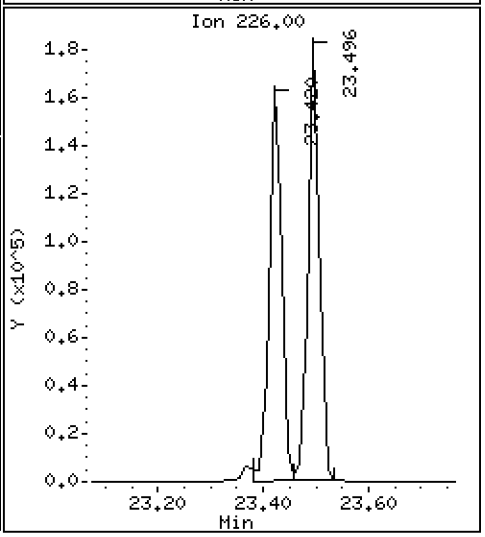


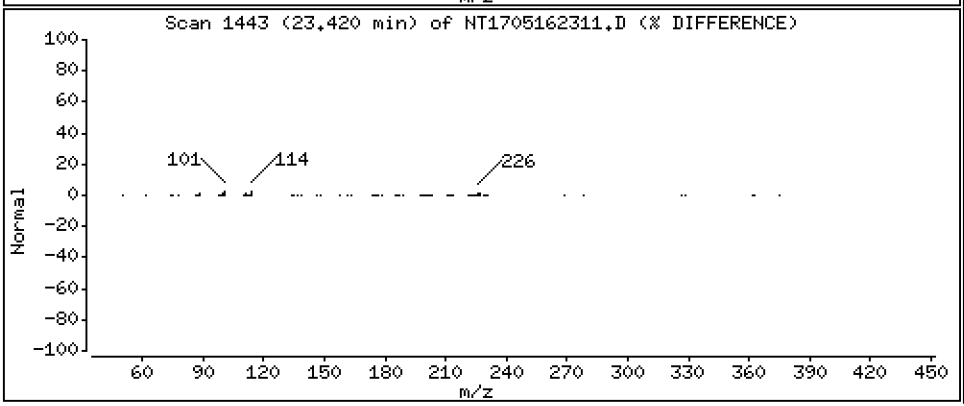












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

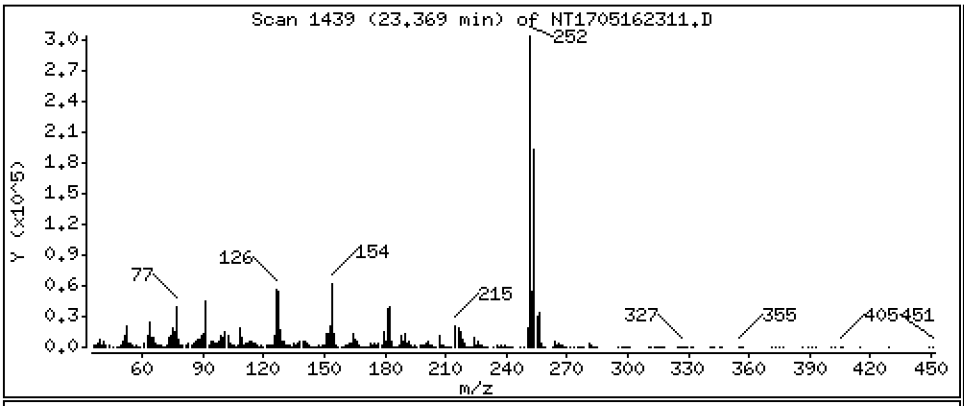
Operator: JGR

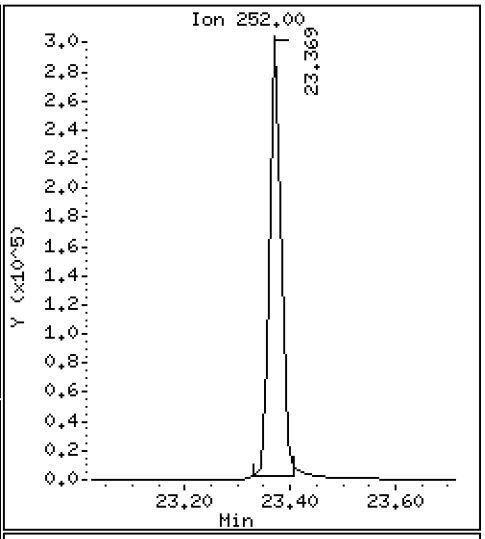
Column phase: ZB-5msi

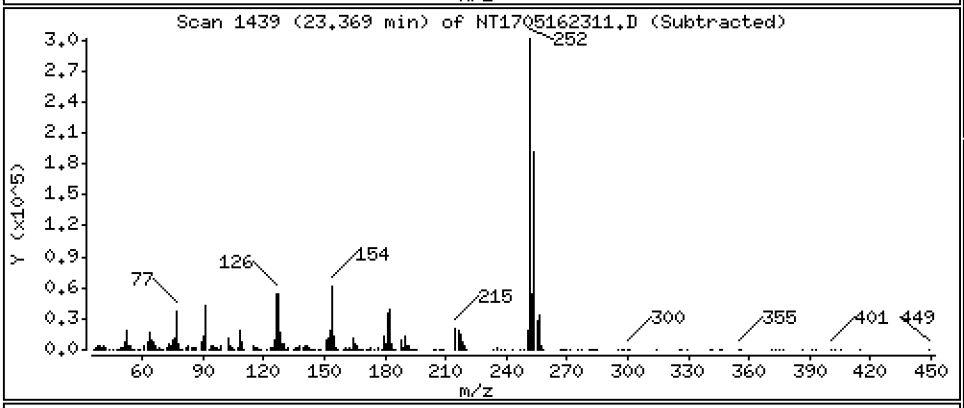
Column diameter: 0.25

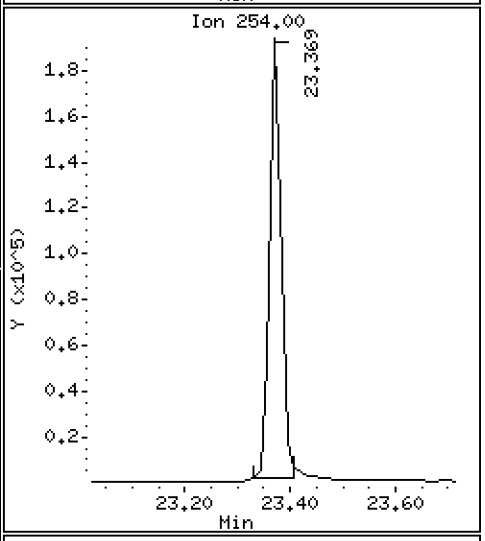
70 3,3'-Dichlorobenzidine

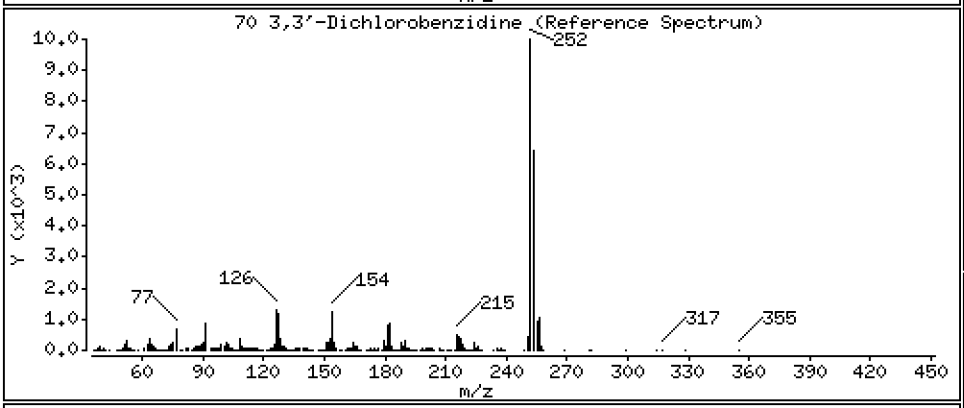
Concentration: 11.99 ug/mL

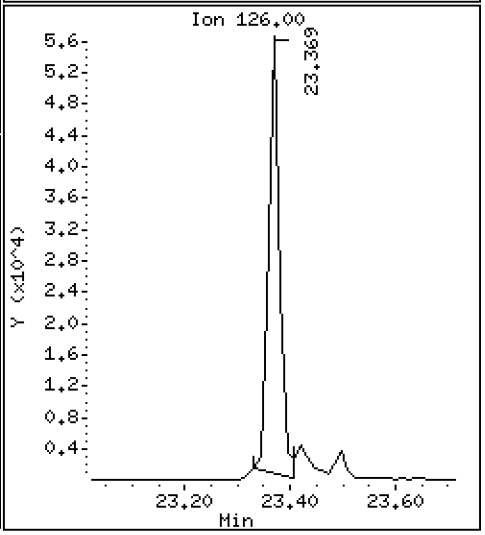


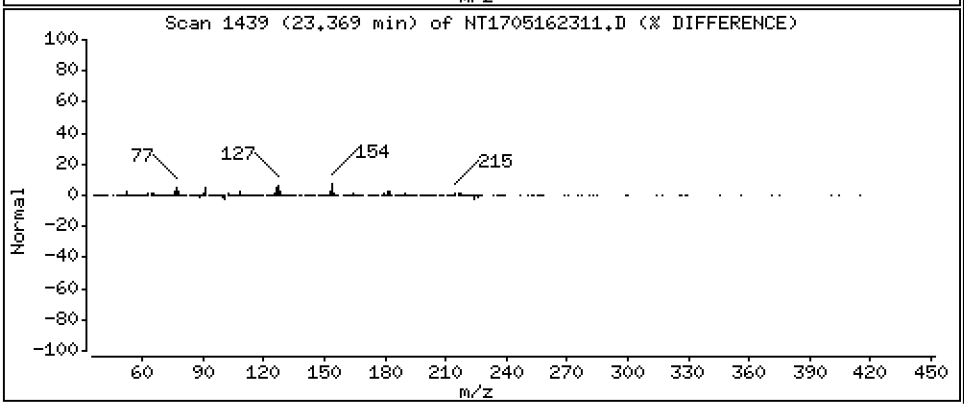












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

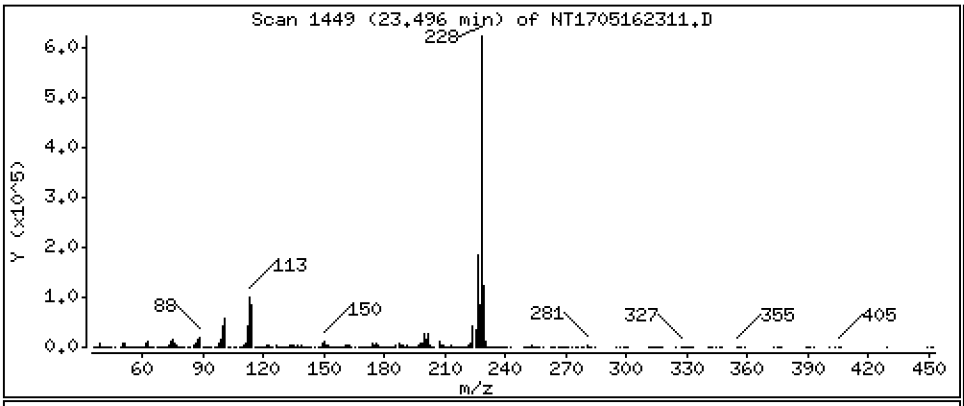
Operator: JGR

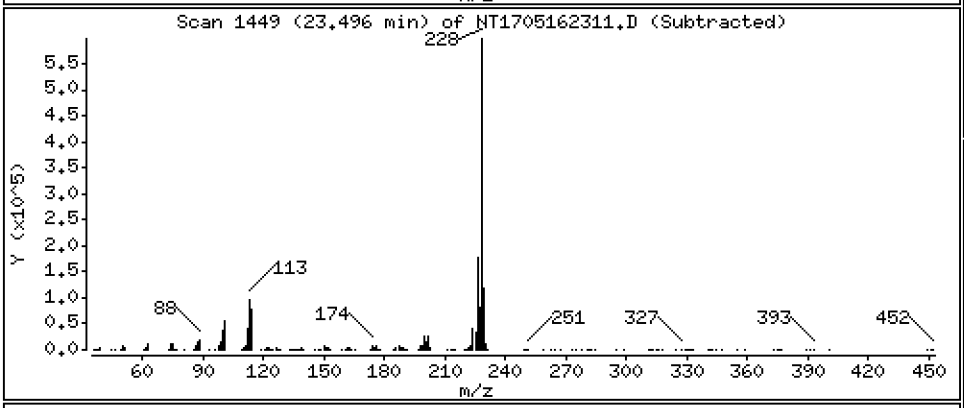
Column phase: ZB-5msi

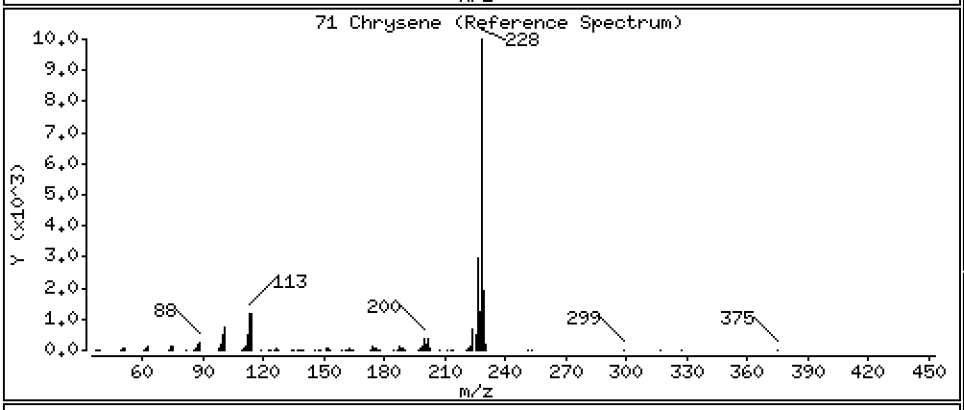
Column diameter: 0.25

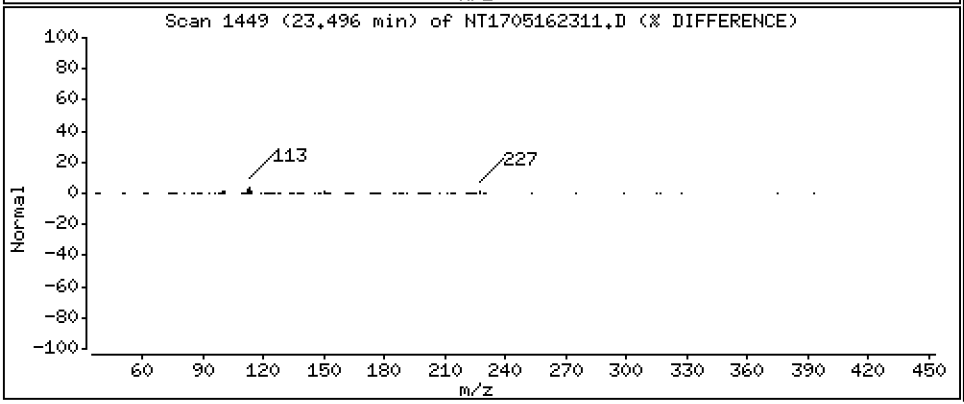
71 Chrysene

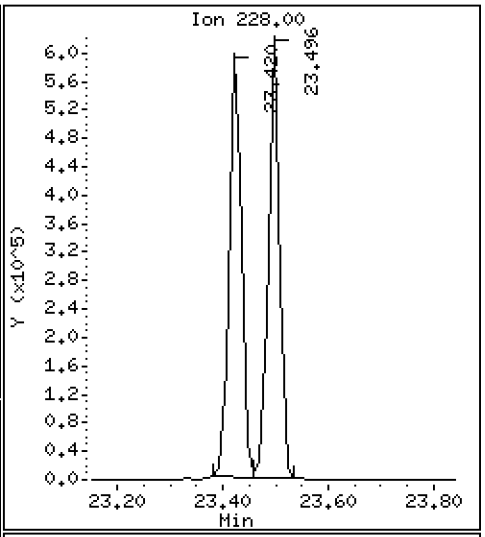
Concentration: 5.018 ug/mL

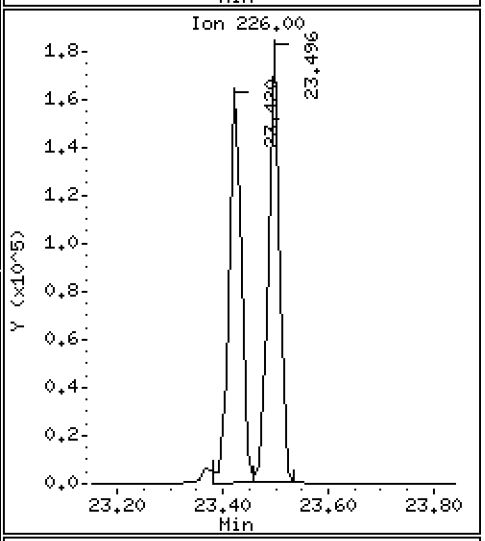


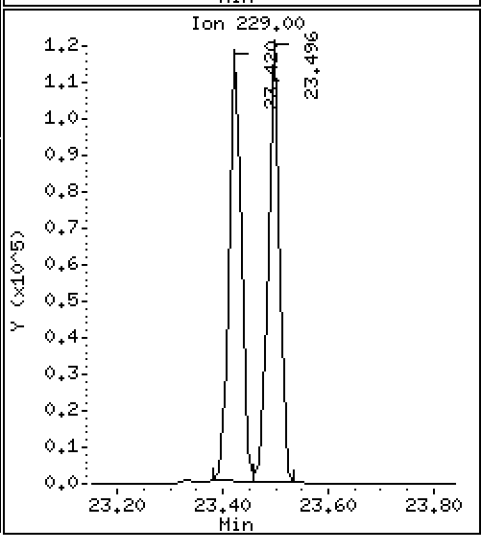












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

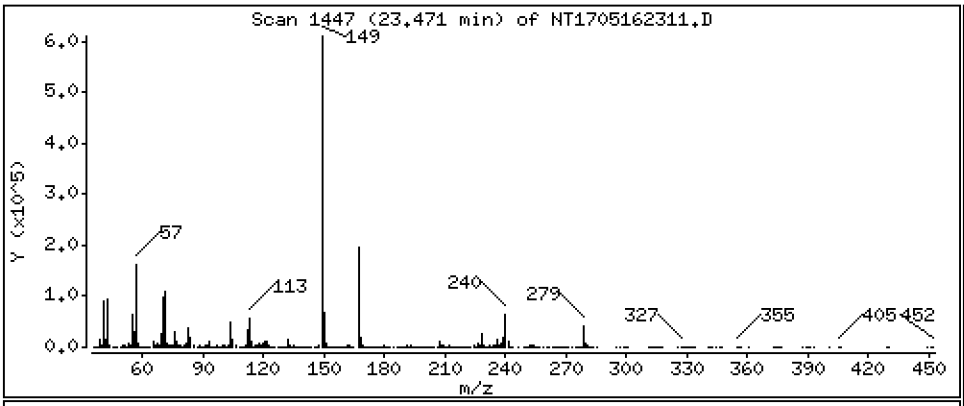
Operator: JGR

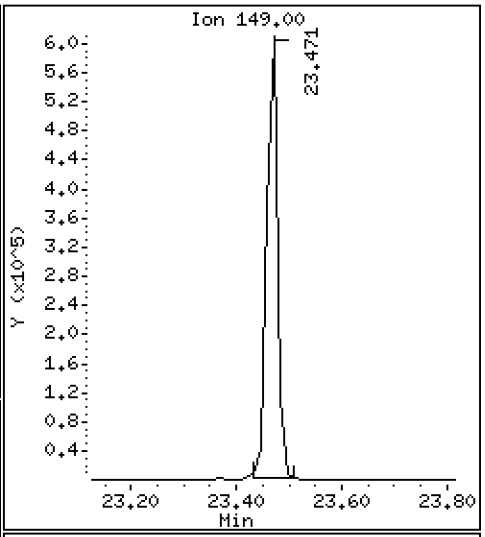
Column phase: ZB-5msi

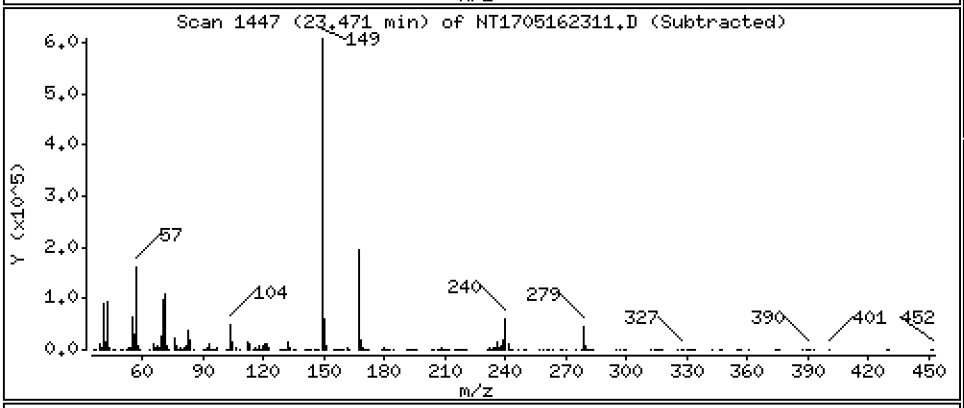
Column diameter: 0.25

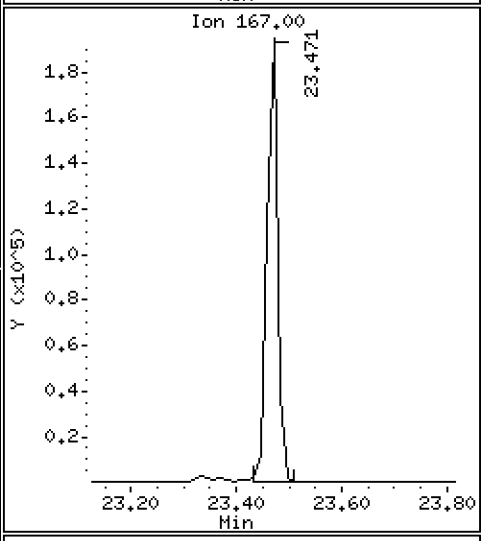
72 bis(2-Ethylhexyl)phthalate

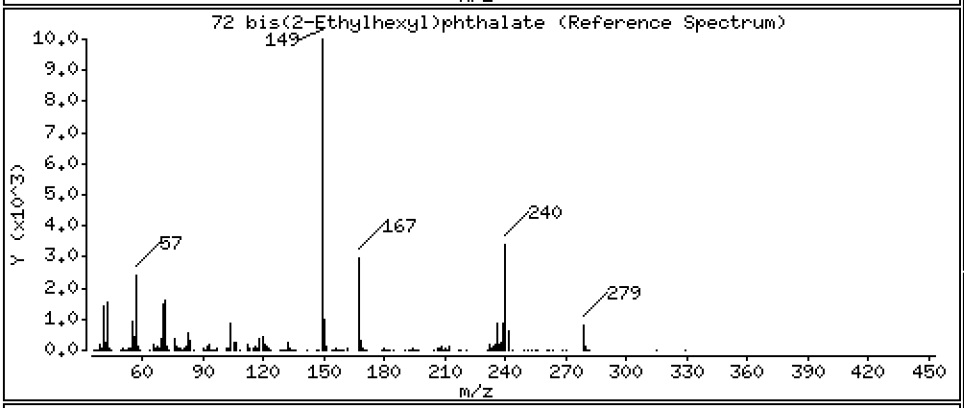
Concentration: 5.792 ug/mL

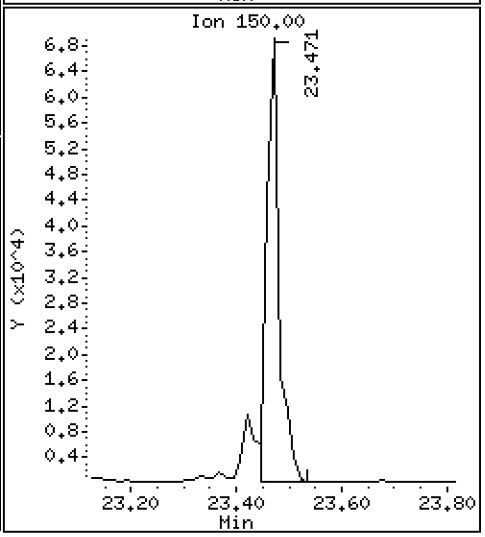


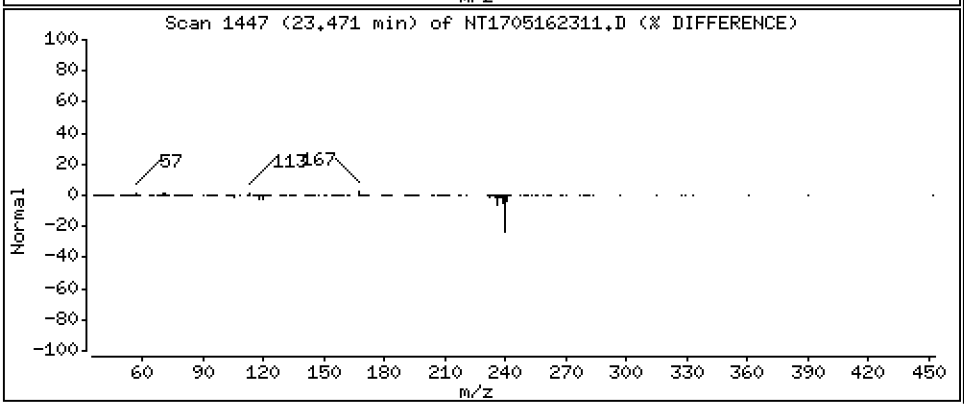












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

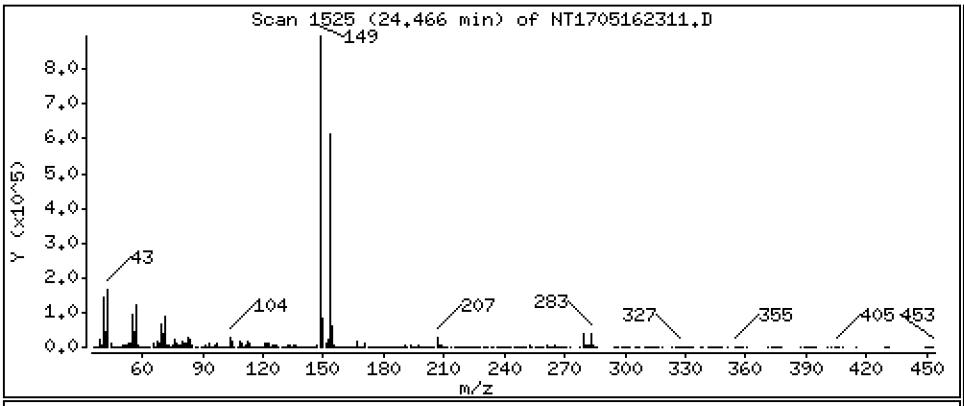
Operator: JGR

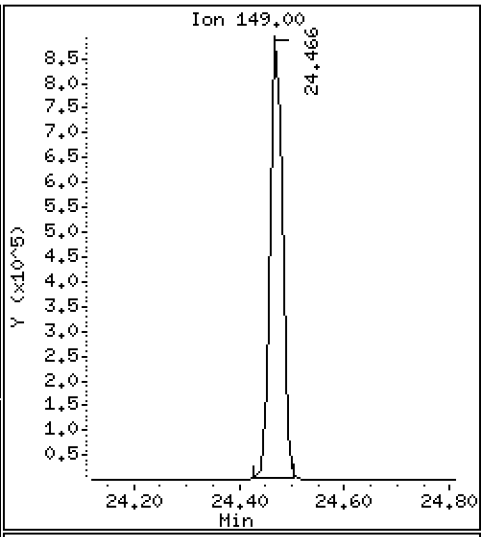
Column phase: ZB-5msi

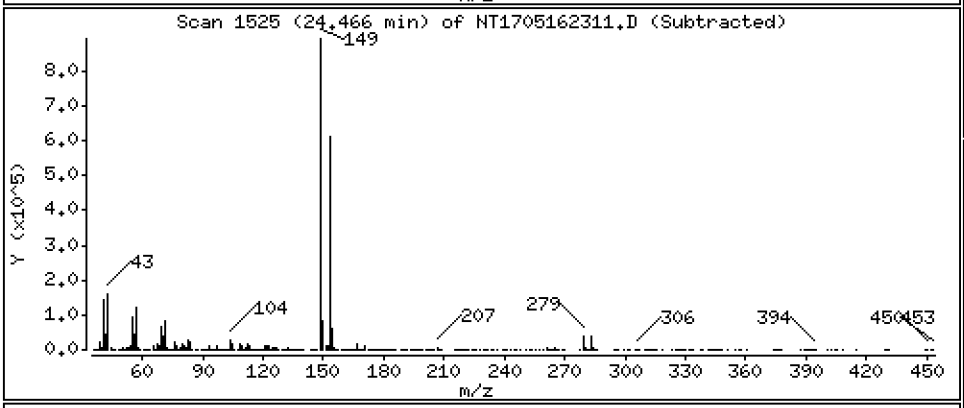
Column diameter: 0.25

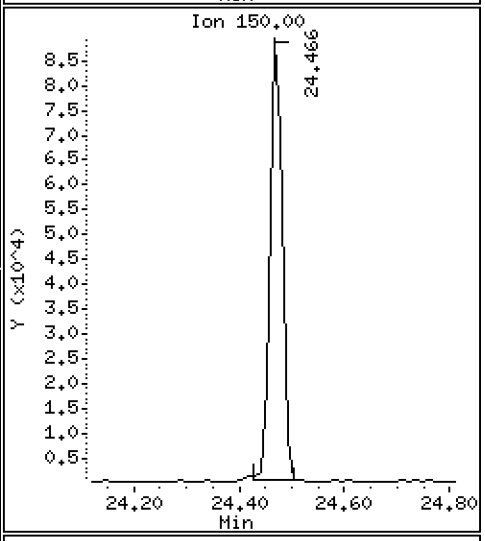
73 Di-n-octylphthalate

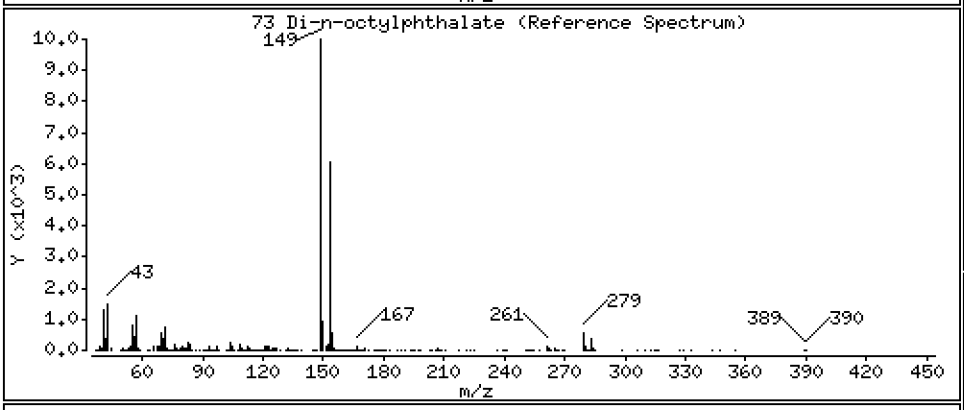
Concentration: 5.482 ug/mL

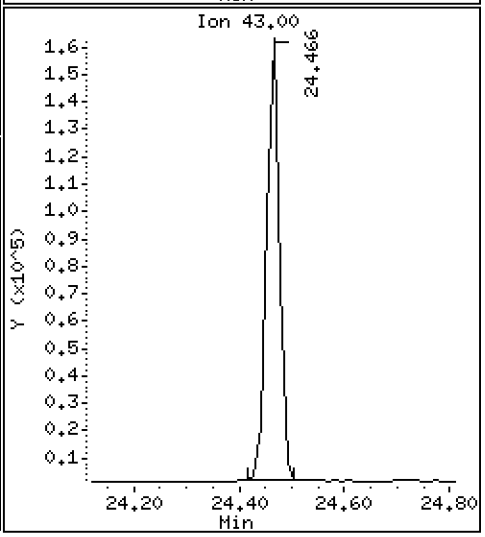


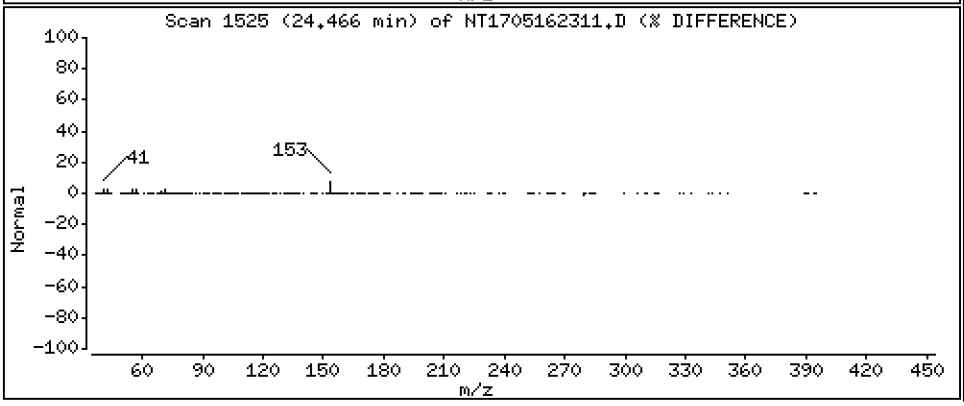












Date : 17-MAY-2023 00:29

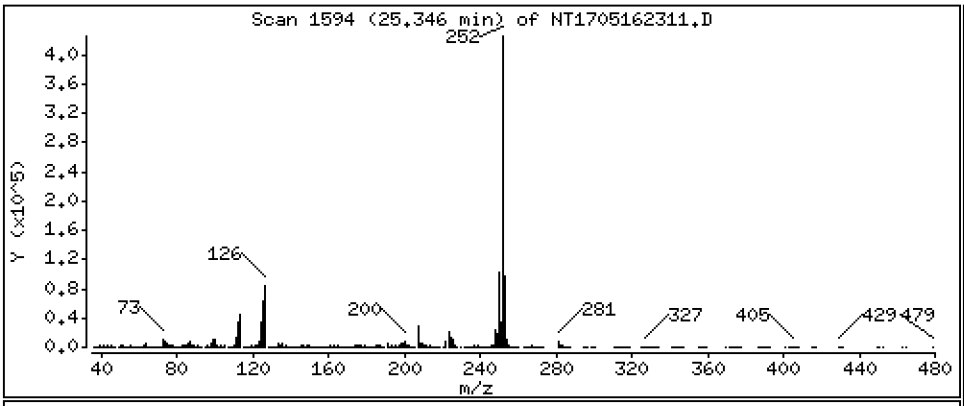
Client ID: Instrument: nt17.i

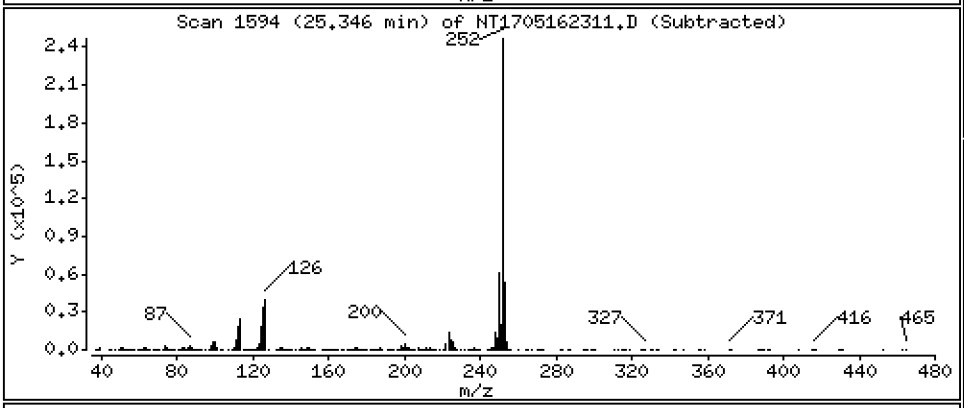
Sample Info: SLE0338-SCV1

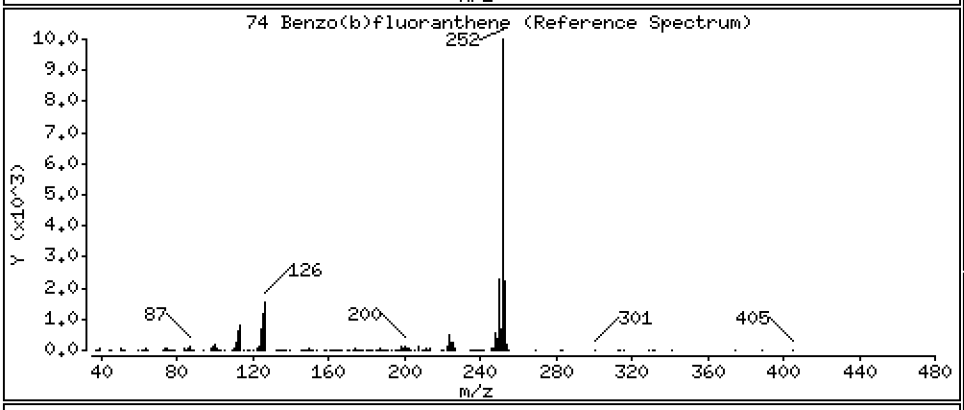
Operator: JGR

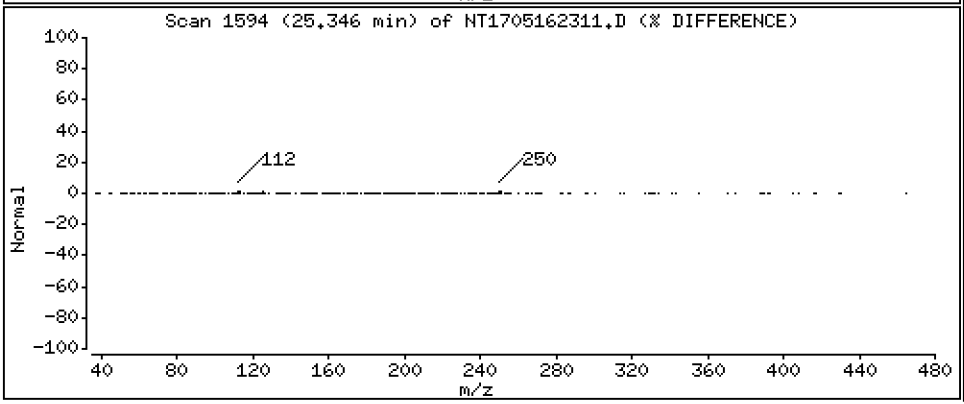
Column phase: ZB-5msi Column diameter: 0.25

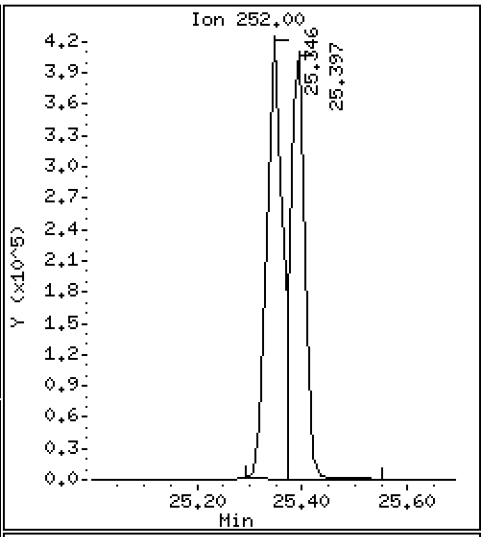
74 Benzo(b)fluoranthene Concentration: 4.912 ug/mL

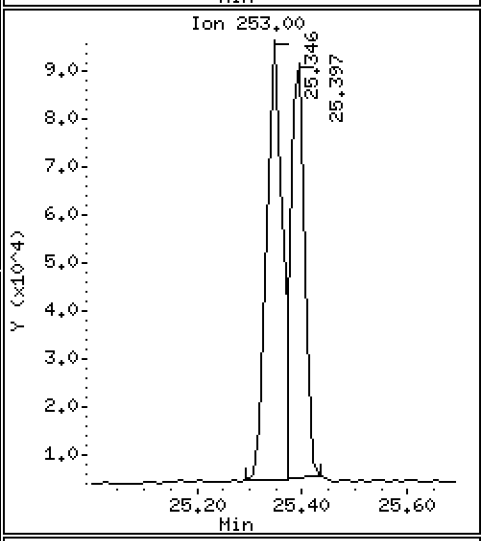


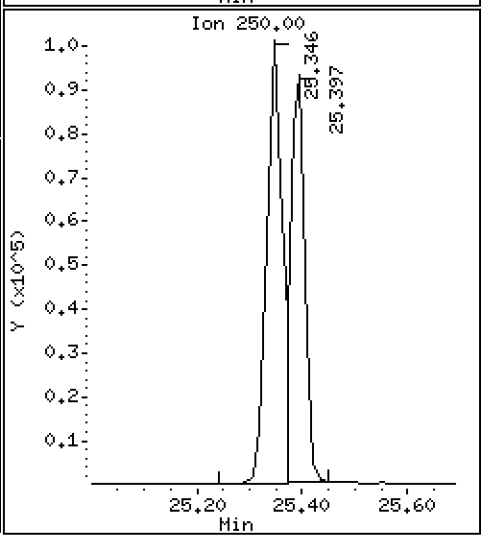












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

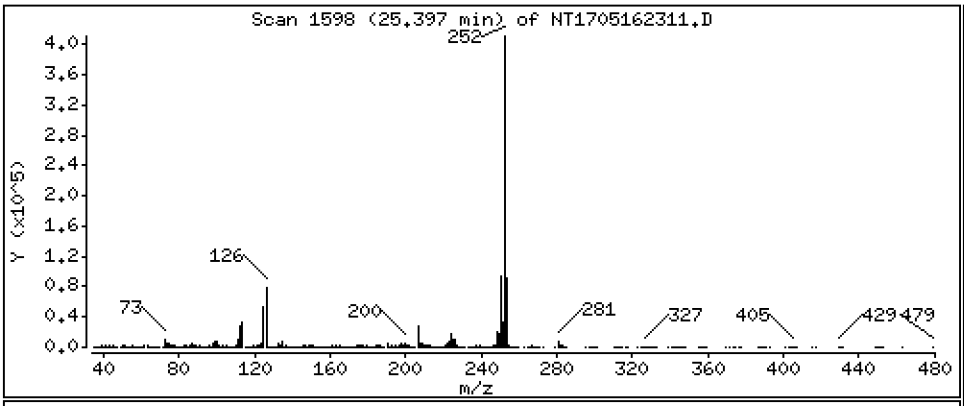
Operator: JGR

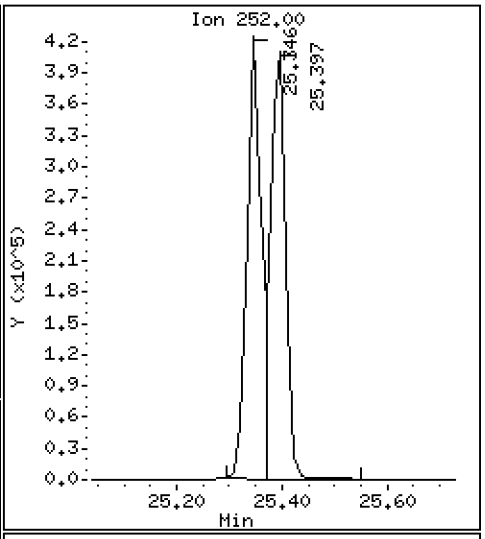
Column phase: ZB-5msi

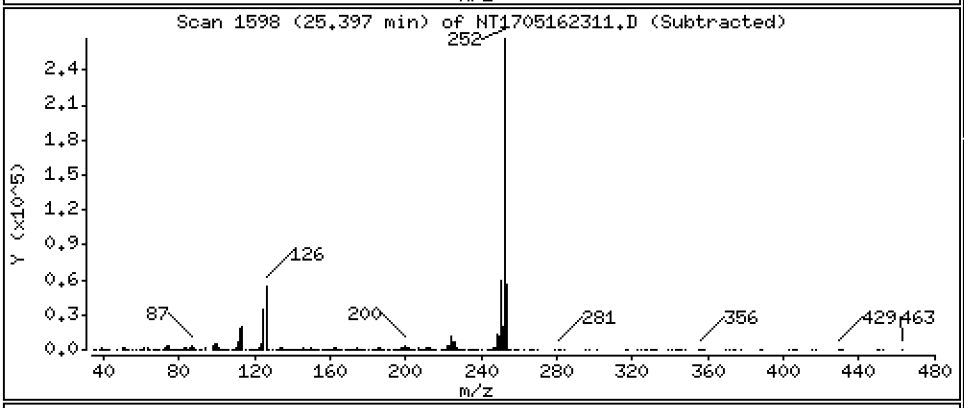
Column diameter: 0.25

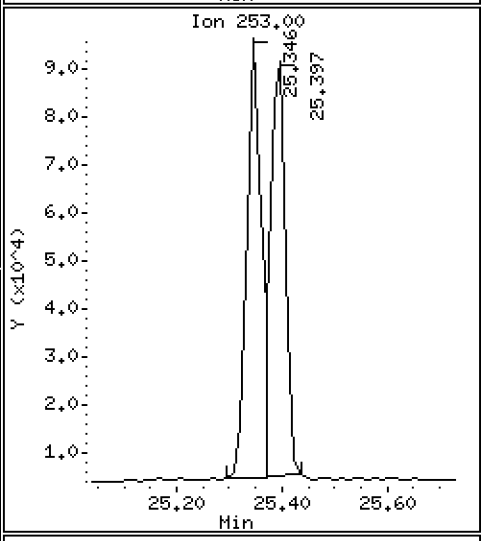
75 Benzo(k)fluoranthene

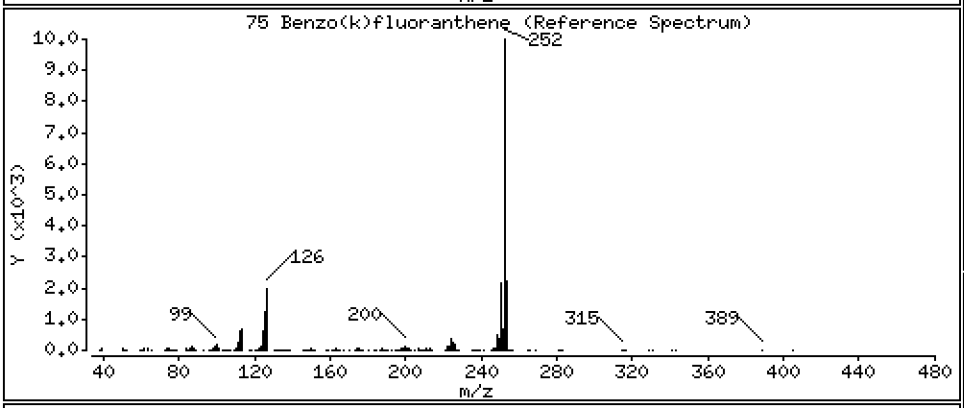
Concentration: 4.965 ug/mL

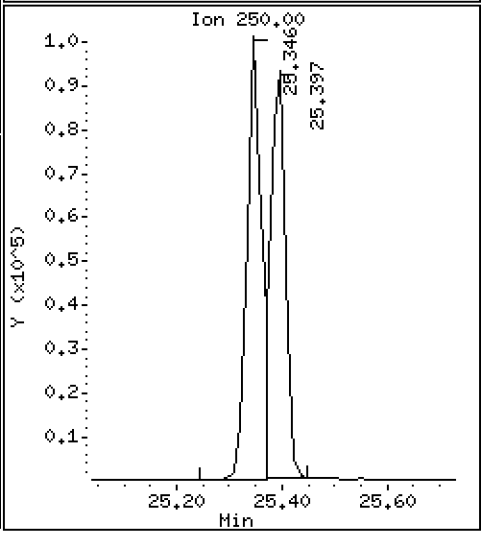


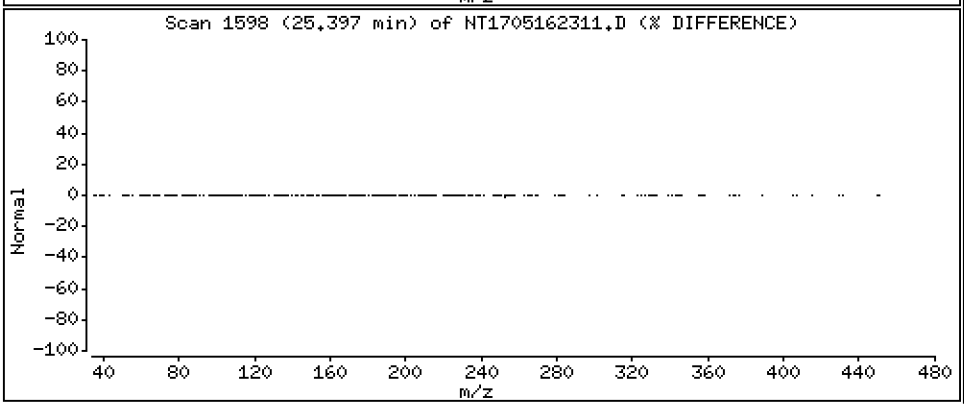












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

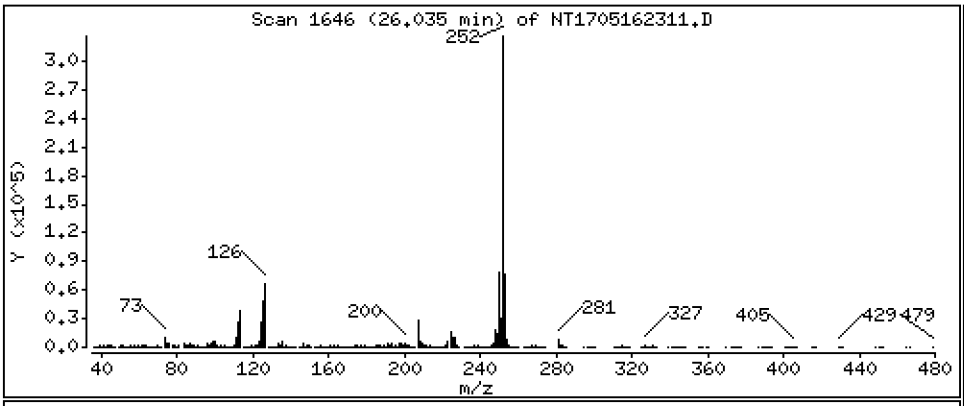
Operator: JGR

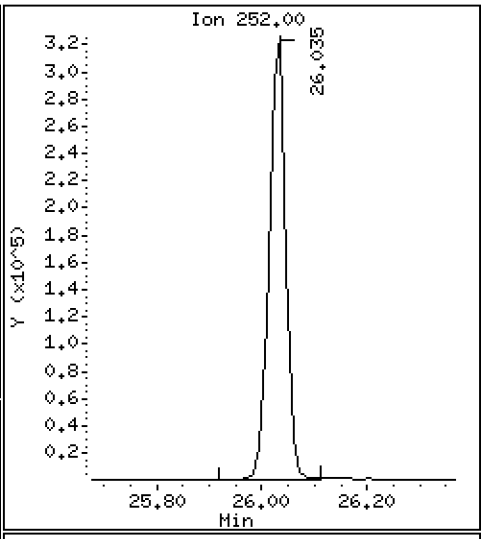
Column phase: ZB-5msi

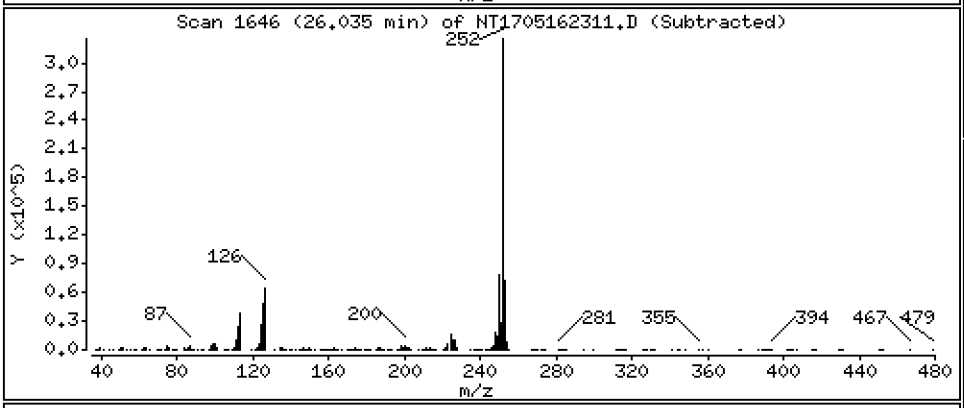
Column diameter: 0.25

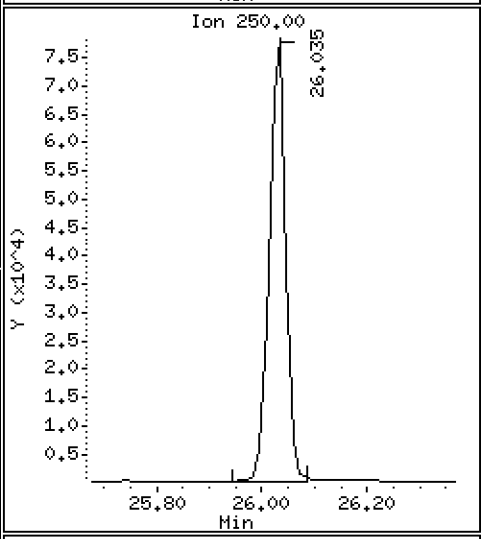
76 Benzo(a)pyrene

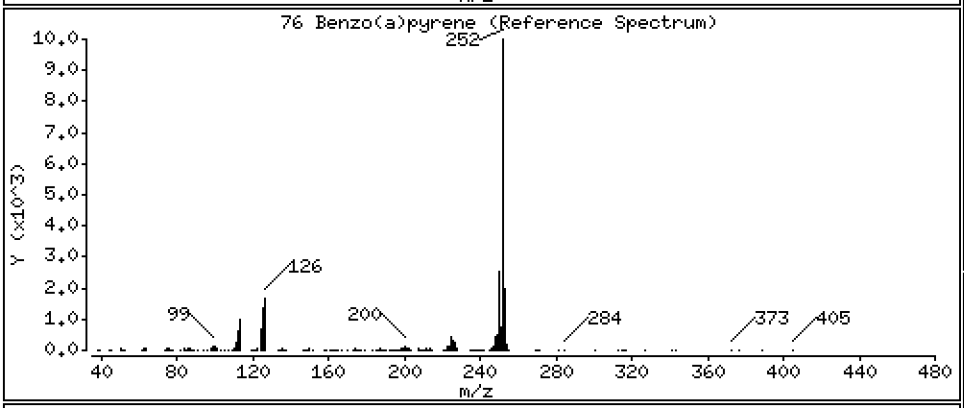
Concentration: 5.172 ug/mL

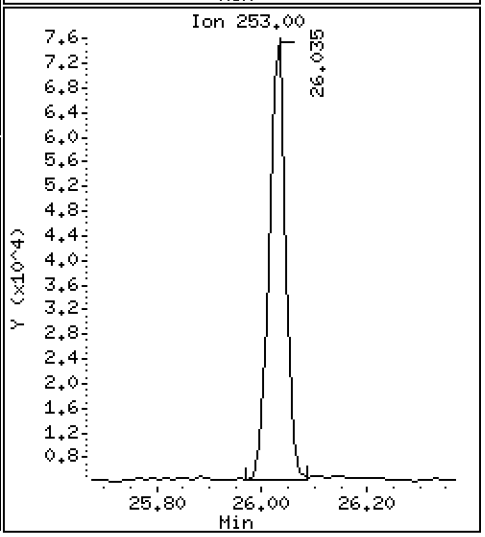


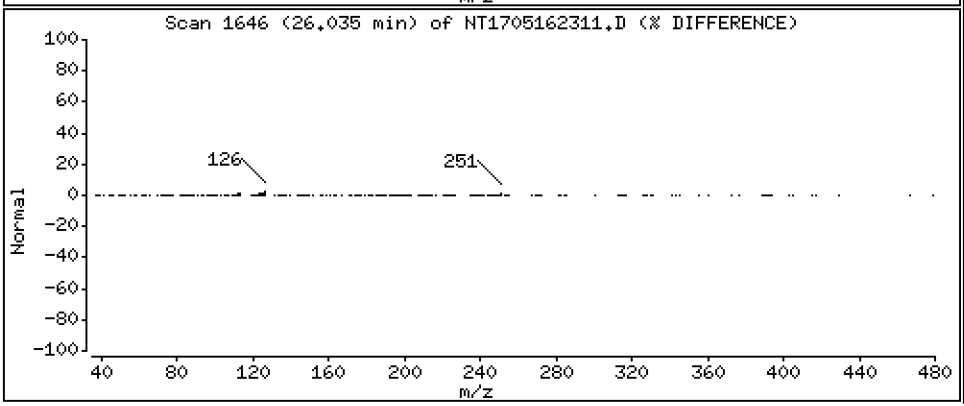












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

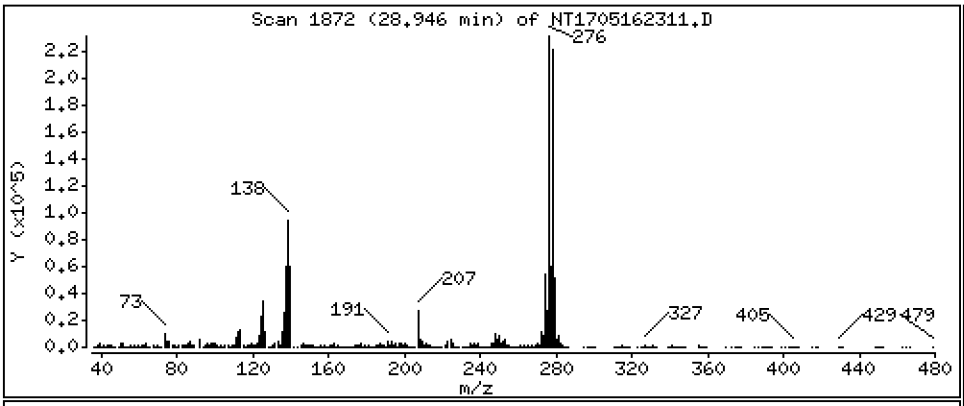
Operator: JGR

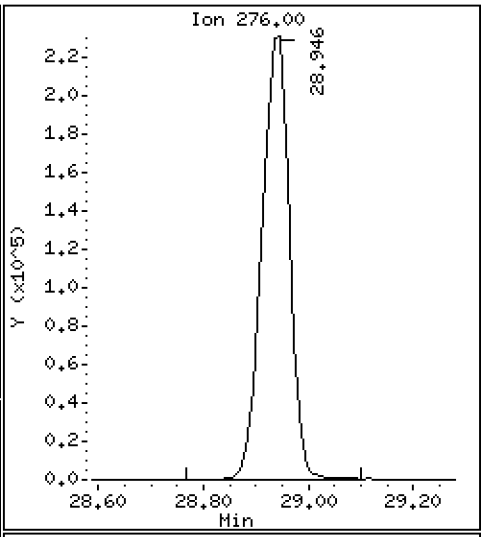
Column phase: ZB-5msi

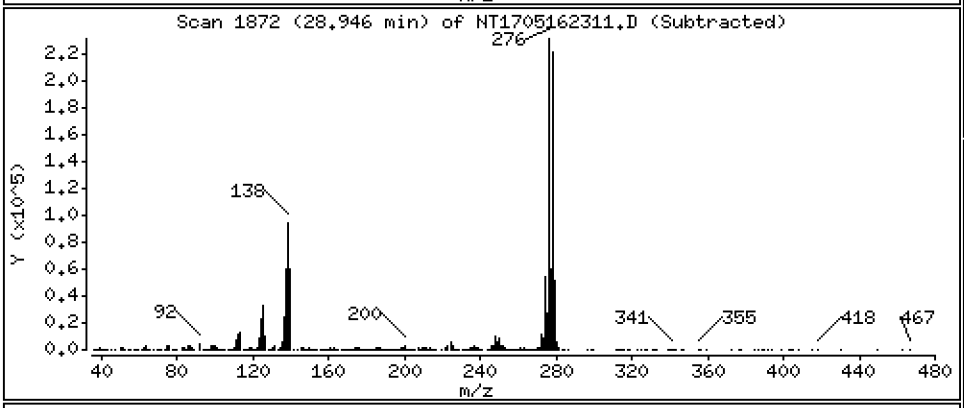
Column diameter: 0.25

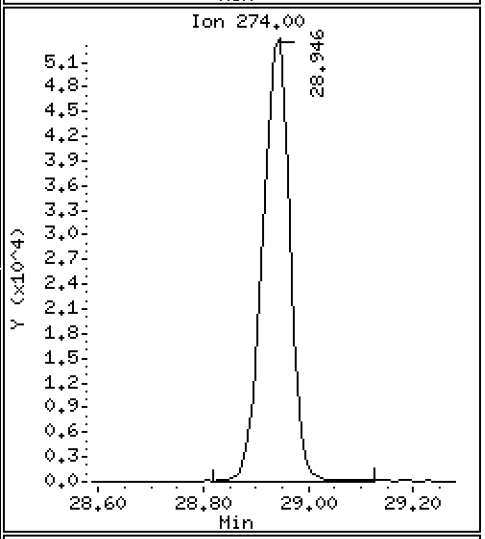
78 Indeno(1,2,3-cd)pyrene

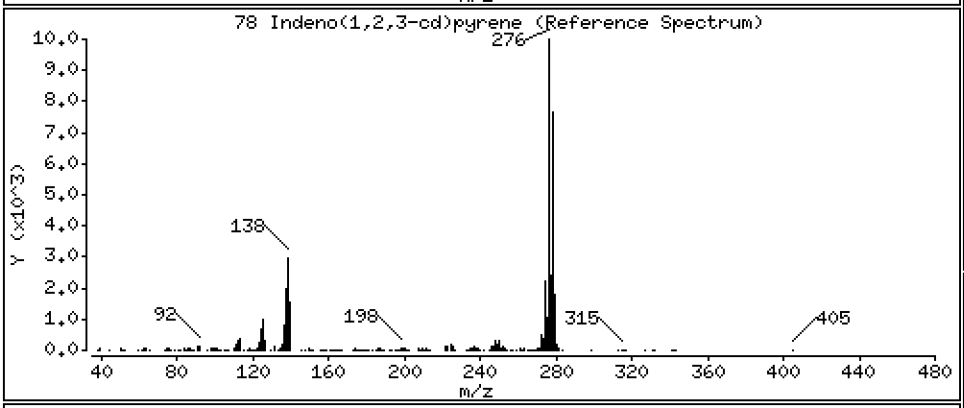
Concentration: 5.029 ug/mL

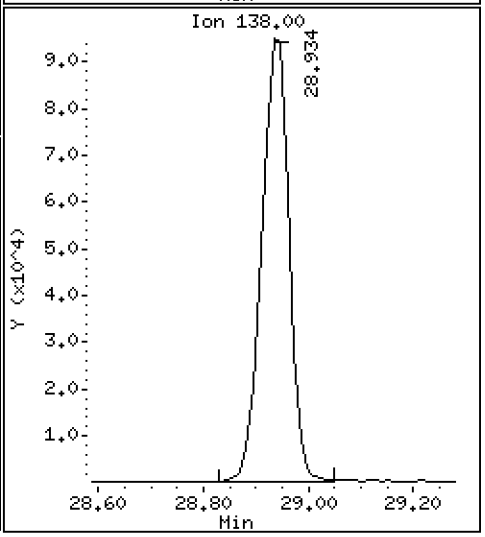


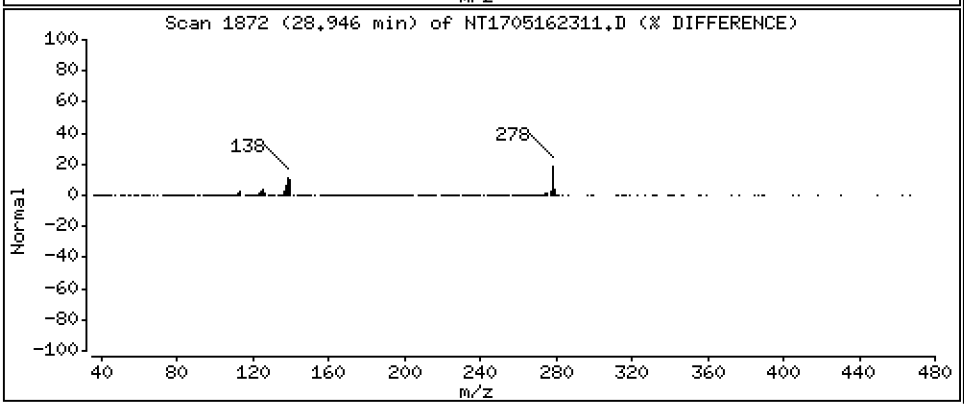












Date : 17-MAY-2023 00:29

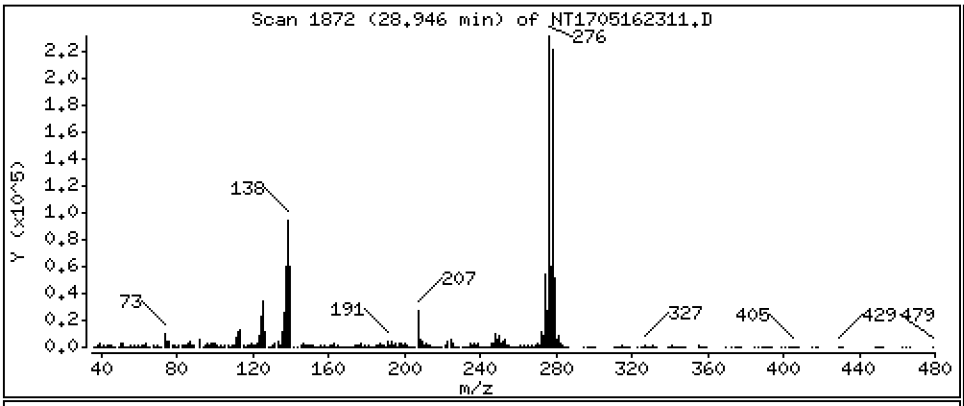
Client ID: Instrument: nt17.i

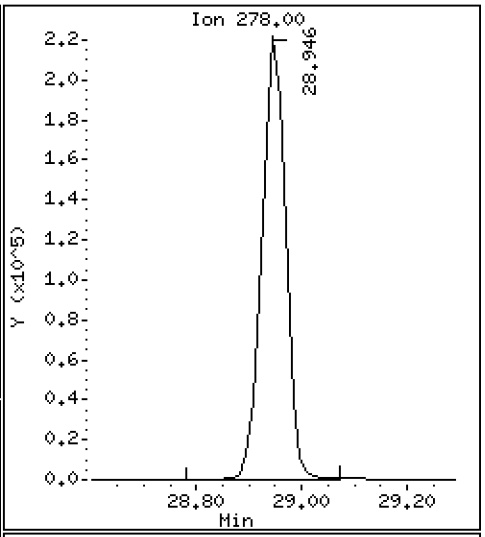
Sample Info: SLE0338-SCV1

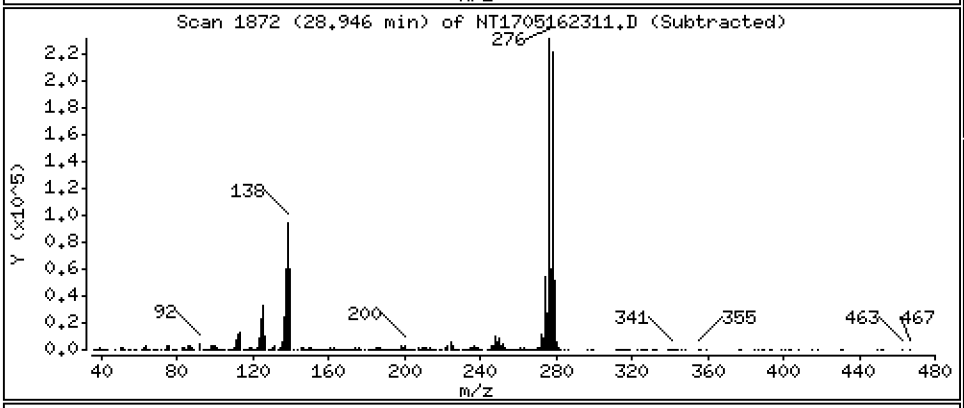
Operator: JGR

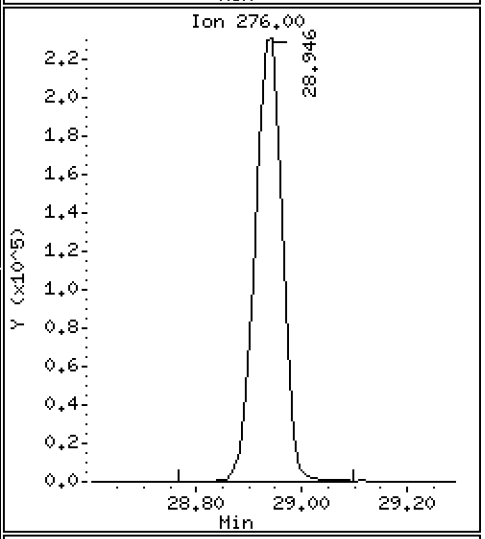
Column phase: ZB-5msi Column diameter: 0.25

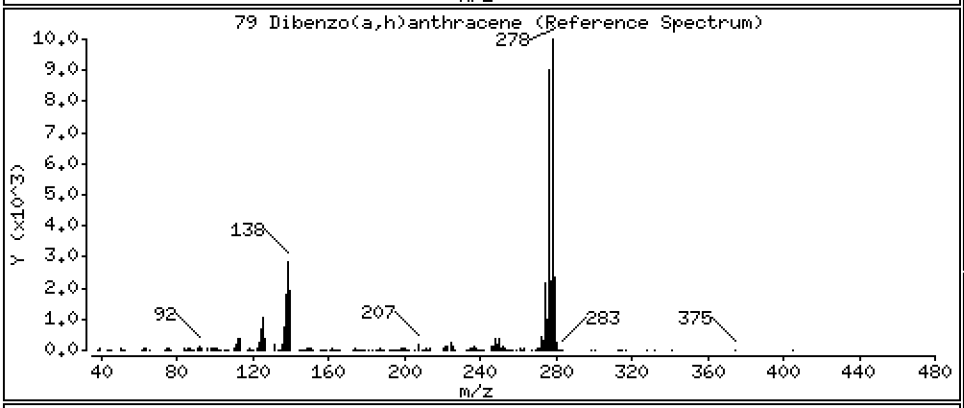
79 Dibenzo(a,h)anthracene Concentration: 4.970 ug/mL

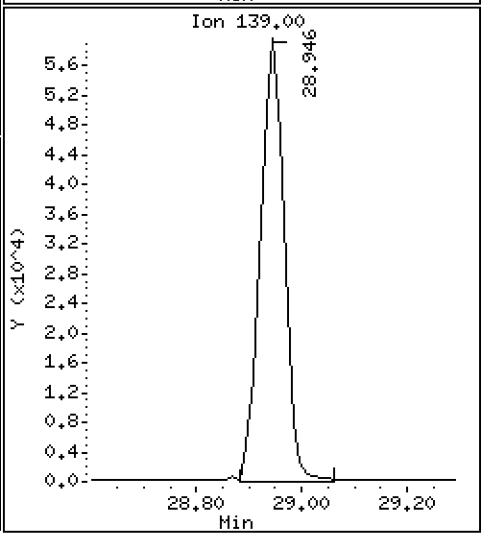


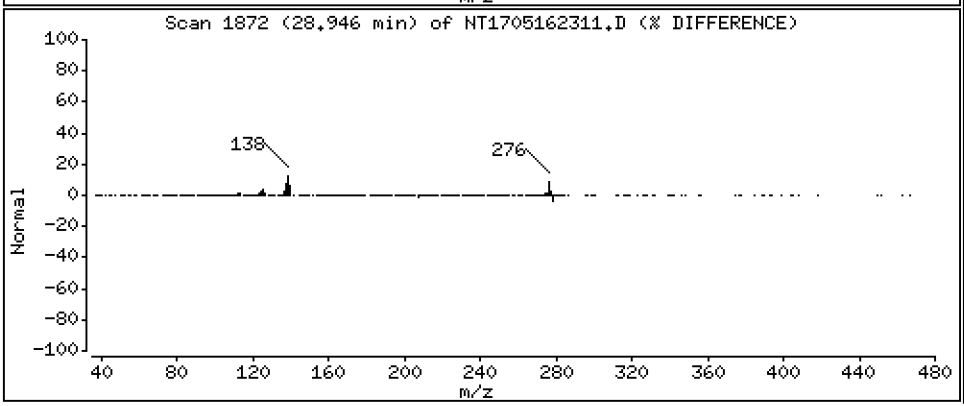












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

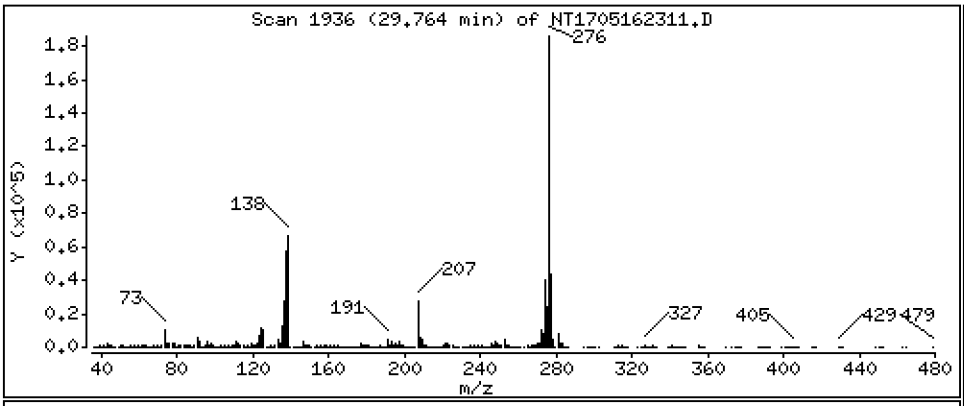
Operator: JGR

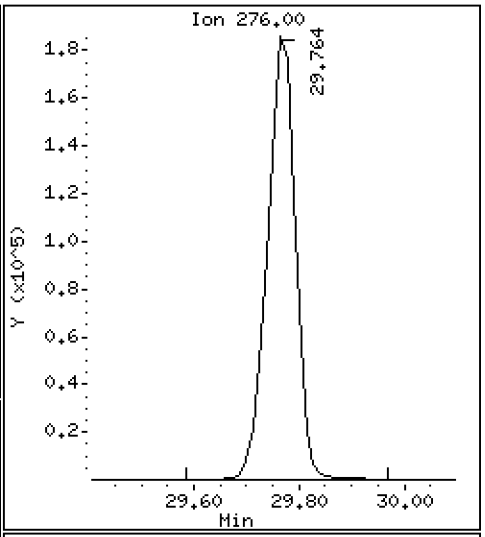
Column phase: ZB-5msi

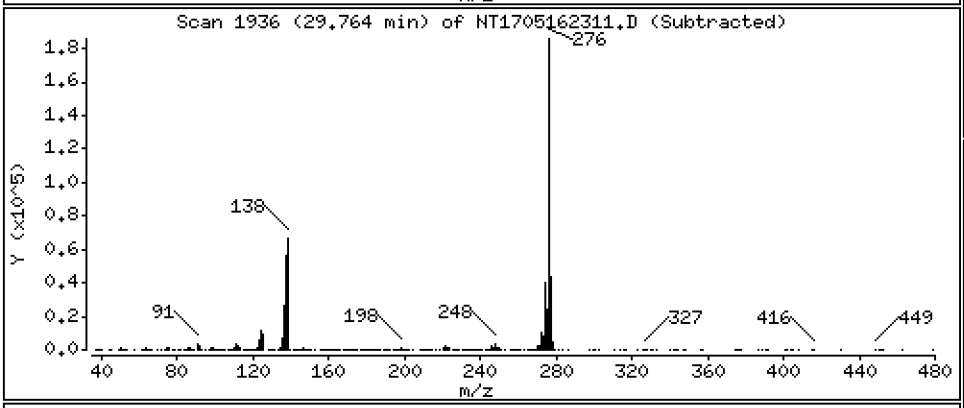
Column diameter: 0.25

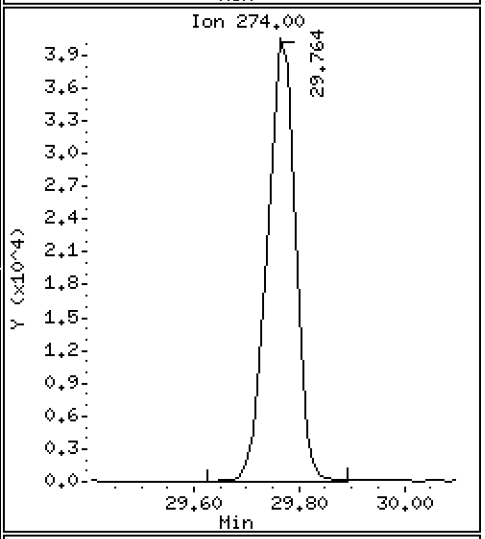
80 Benzo(g,h,i)perylene

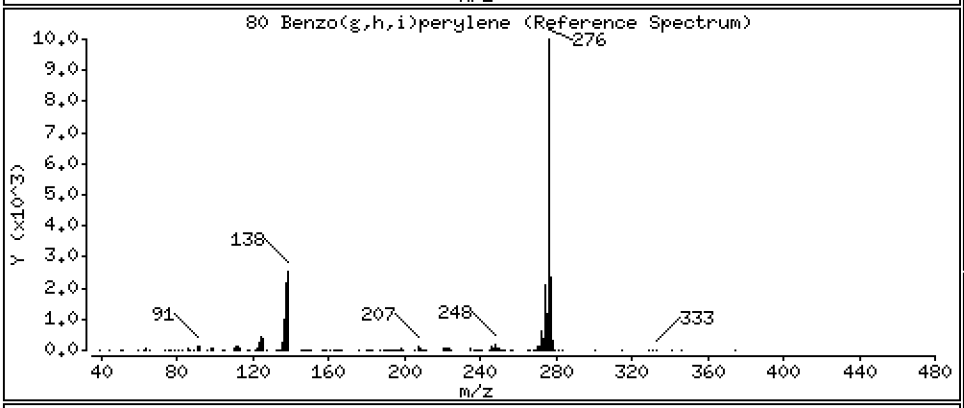
Concentration: 5.054 ug/mL

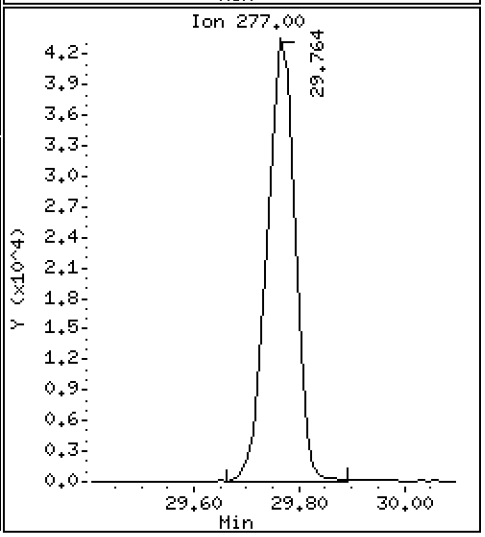


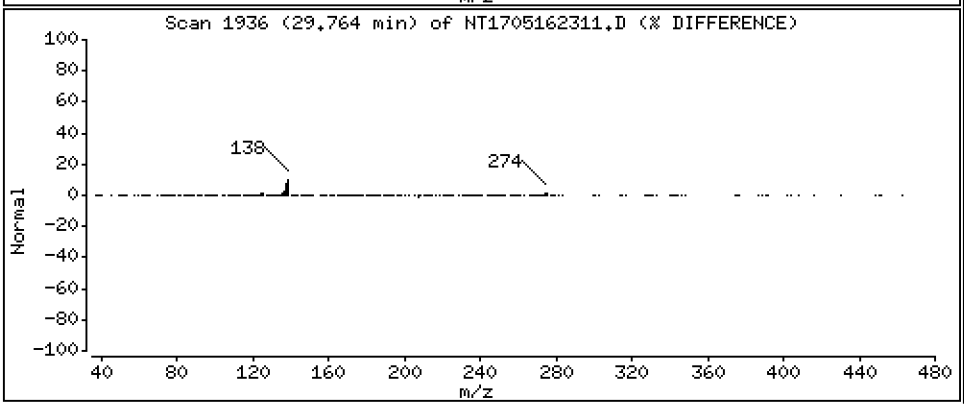












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

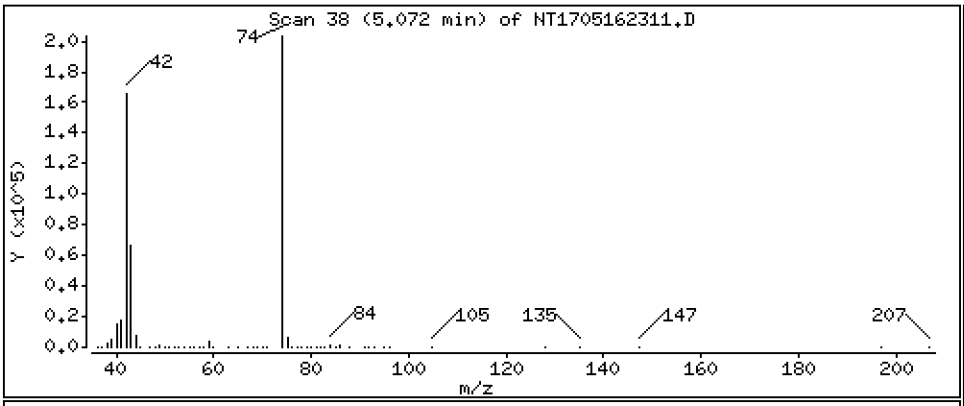
Operator: JGR

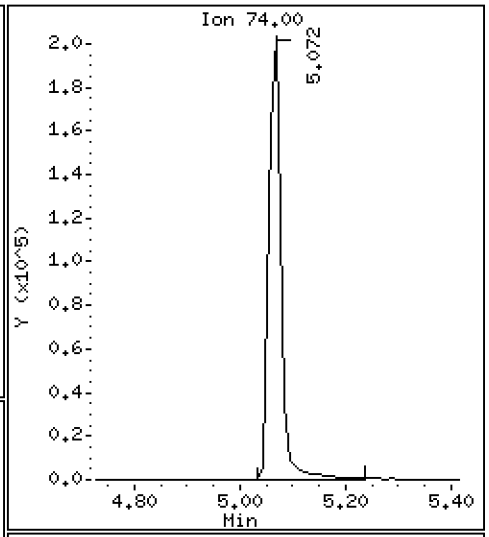
Column phase: ZB-5msi

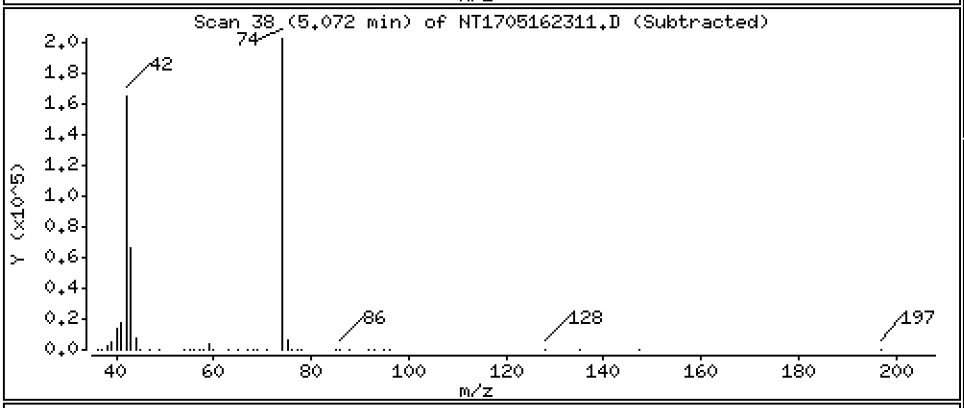
Column diameter: 0.25

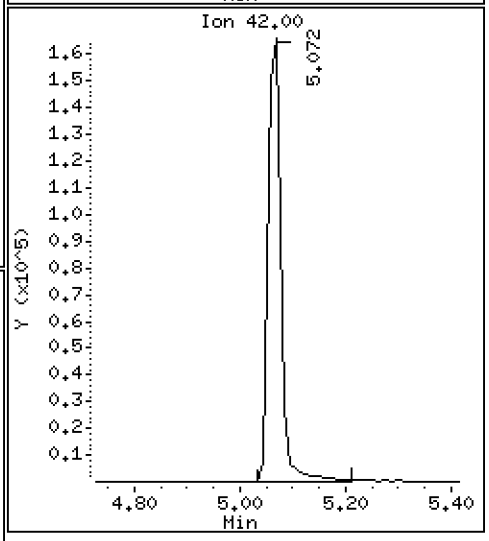
90 N-Nitrosodimethylamine

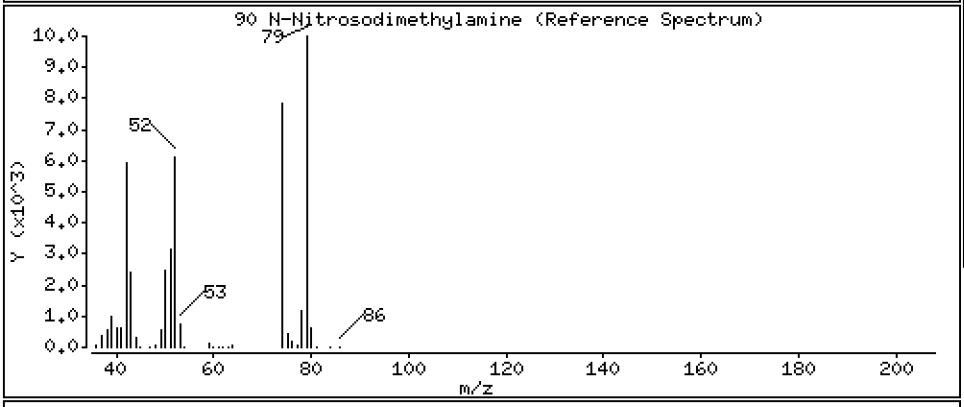
Concentration: 5.767 ug/mL

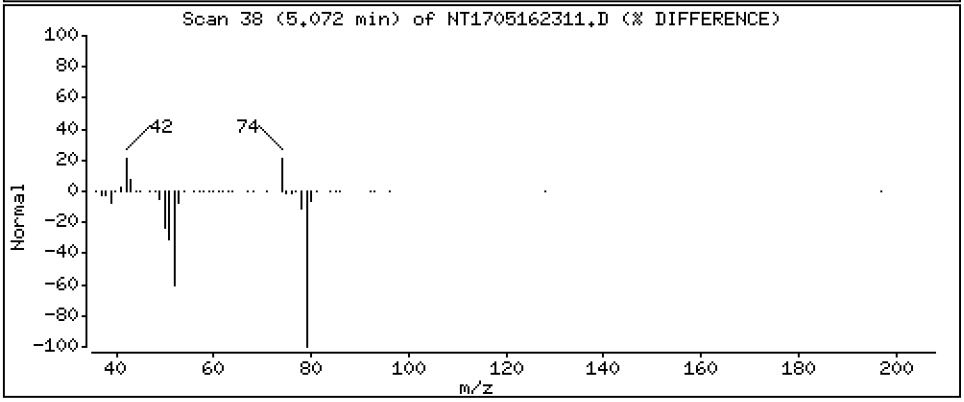












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

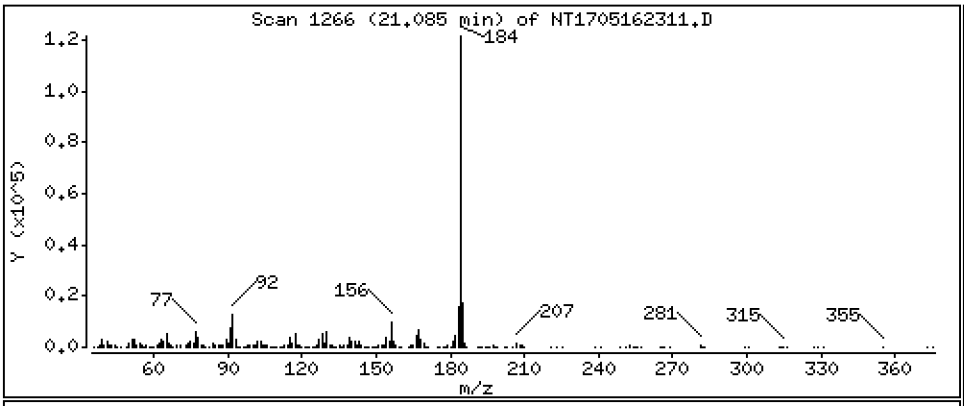
Operator: JGR

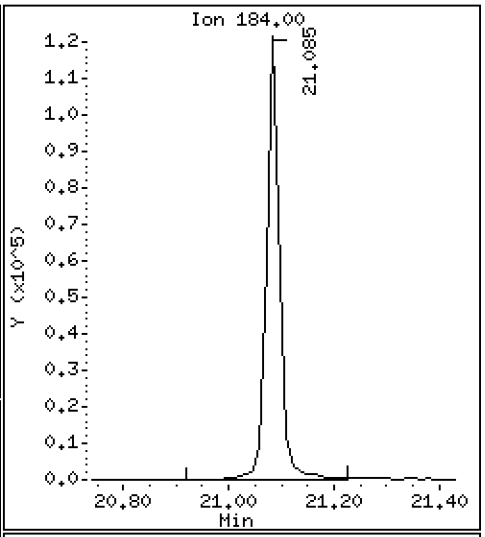
Column phase: ZB-5msi

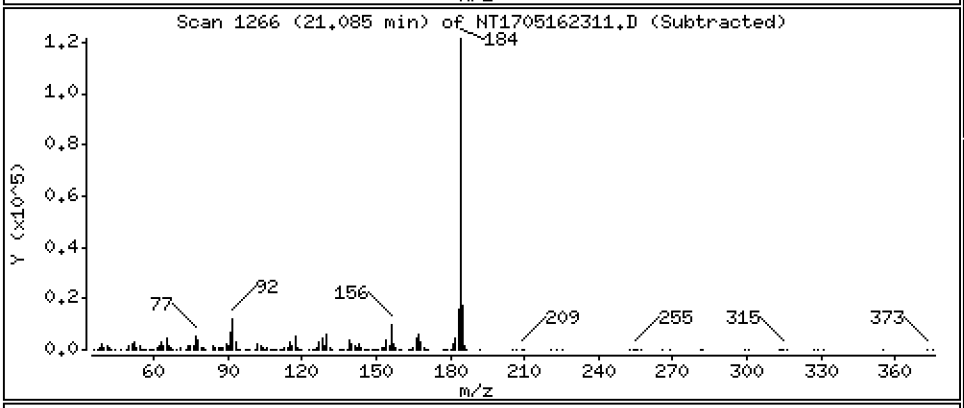
Column diameter: 0.25

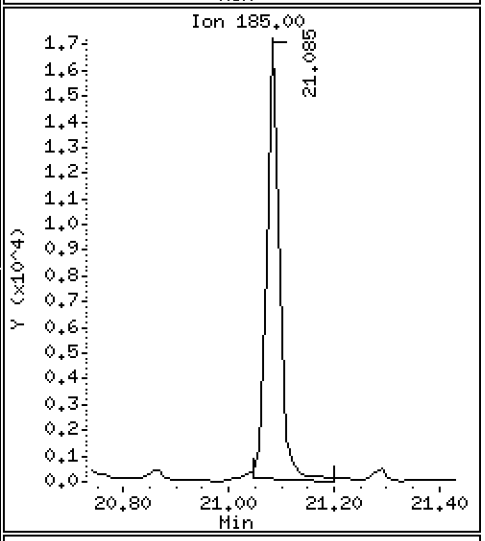
93 Benzidine

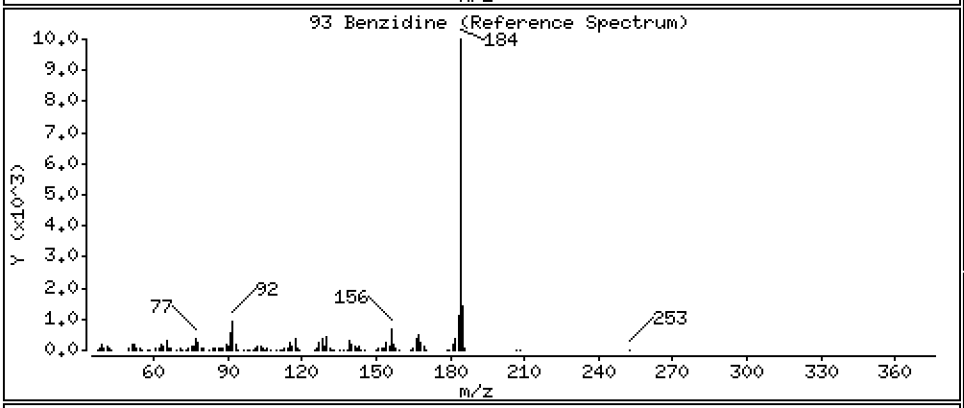
Concentration: 3.457 ug/mL

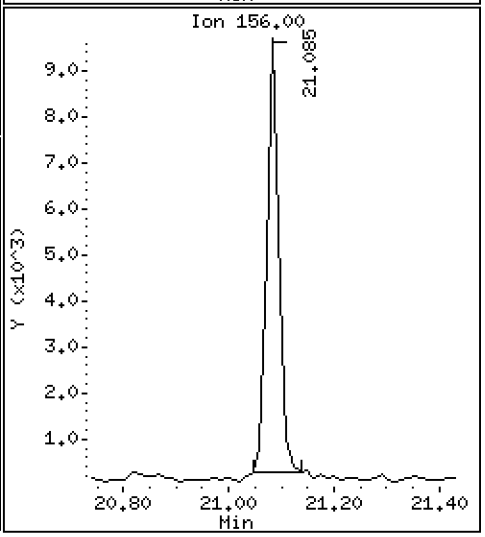


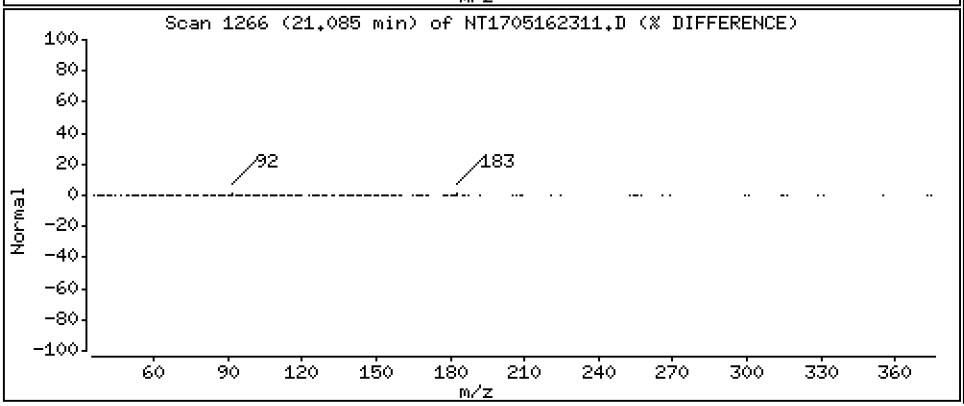












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

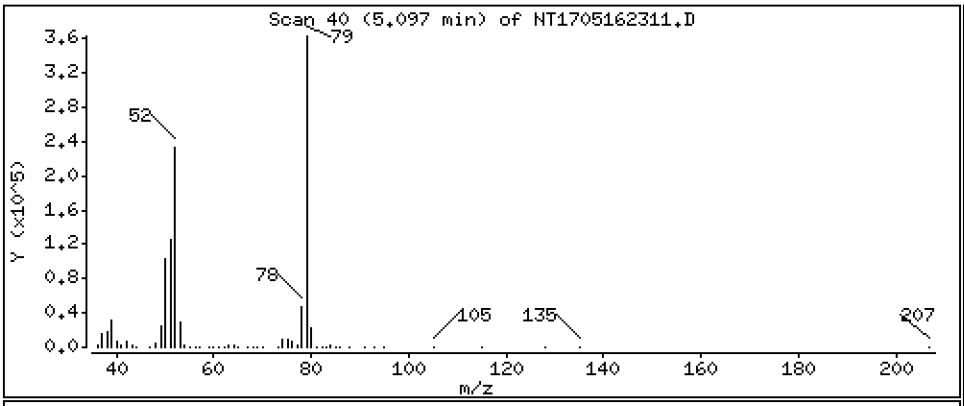
Operator: JGR

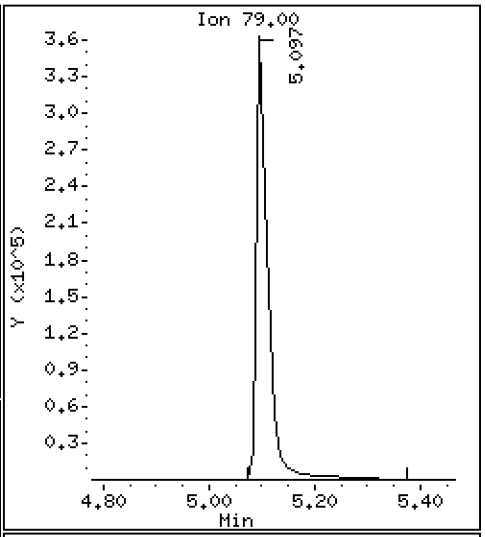
Column phase: ZB-5msi

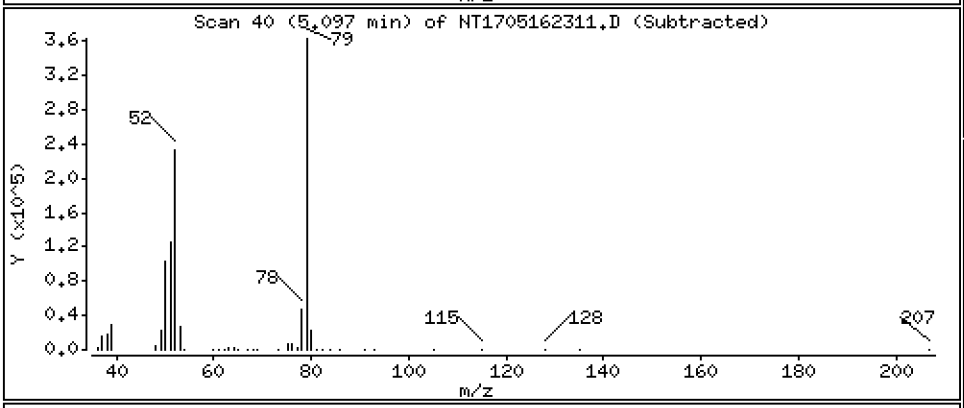
Column diameter: 0.25

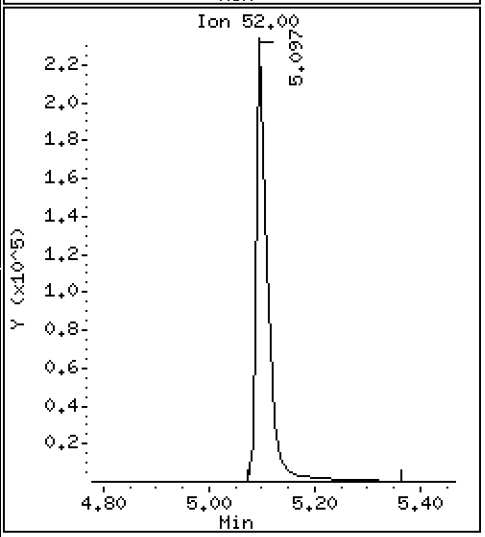
103 Pyridine

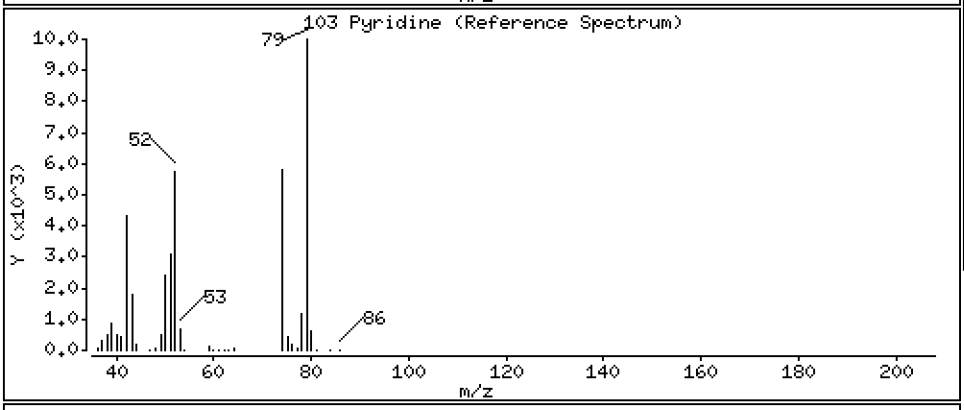
Concentration: 5.811 ug/mL

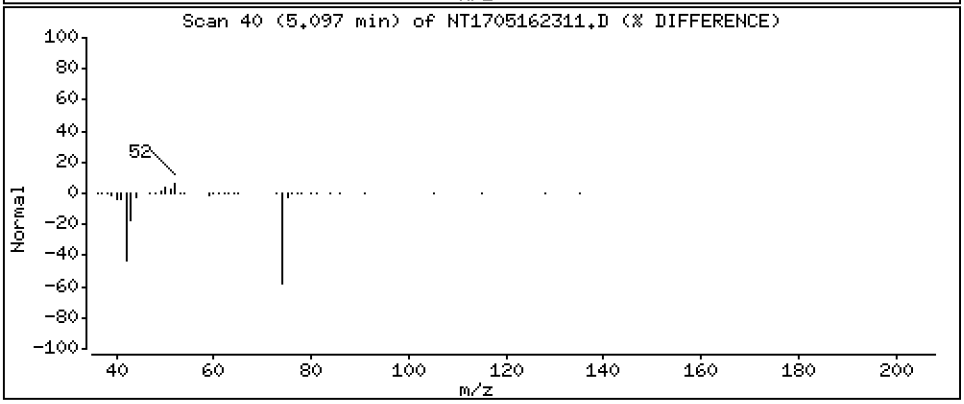












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

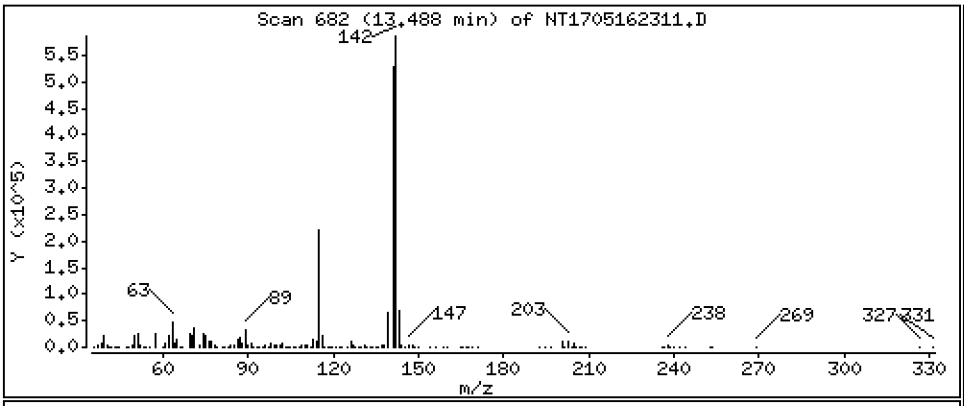
Operator: JGR

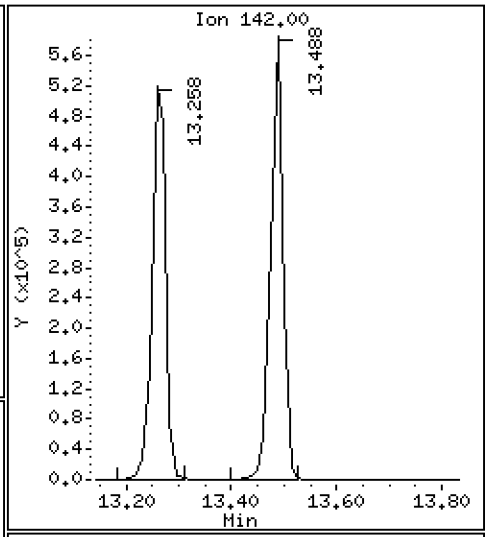
Column phase: ZB-5msi

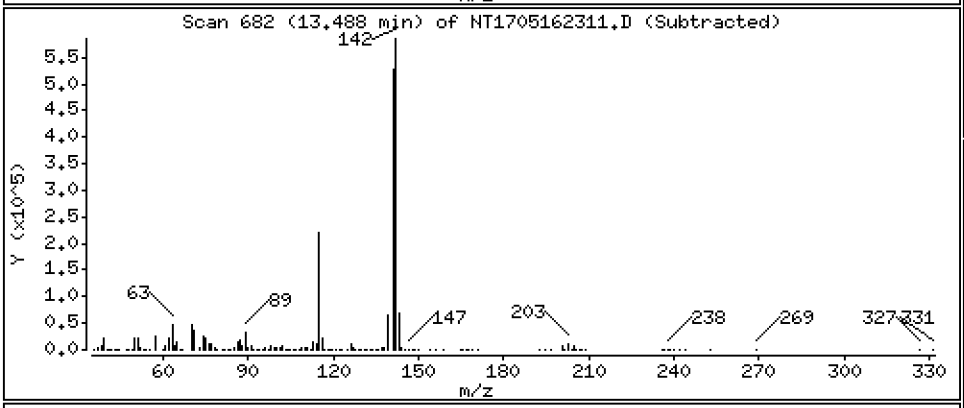
Column diameter: 0.25

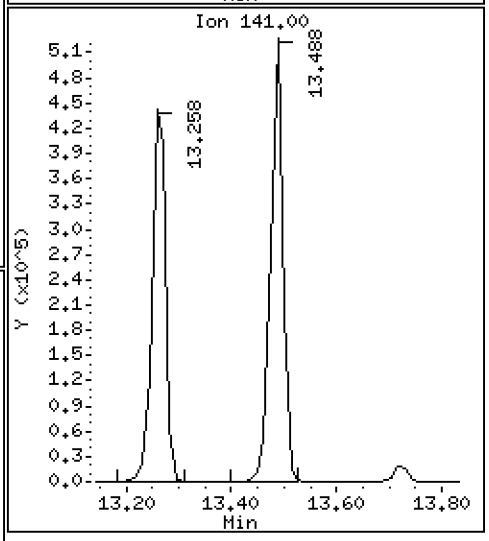
105 1-methylnaphthalene

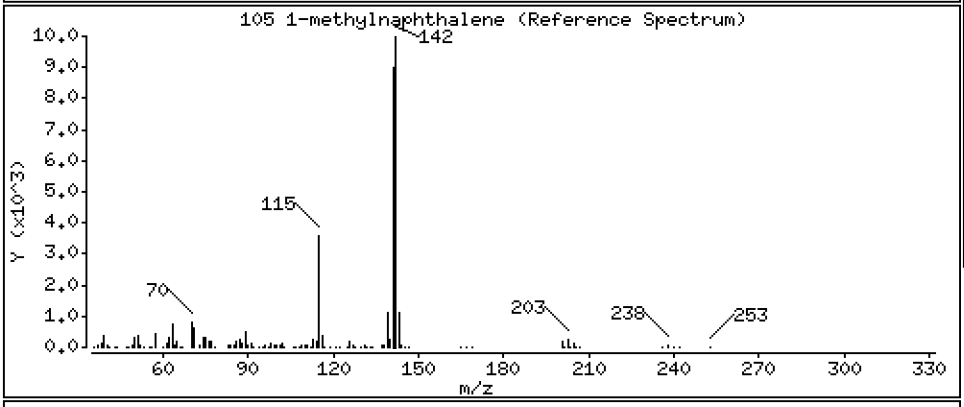
Concentration: 5.250 ug/mL

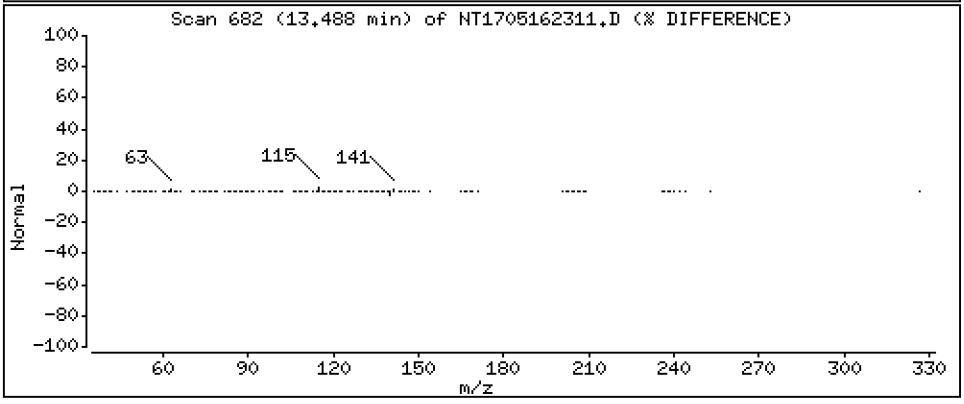












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

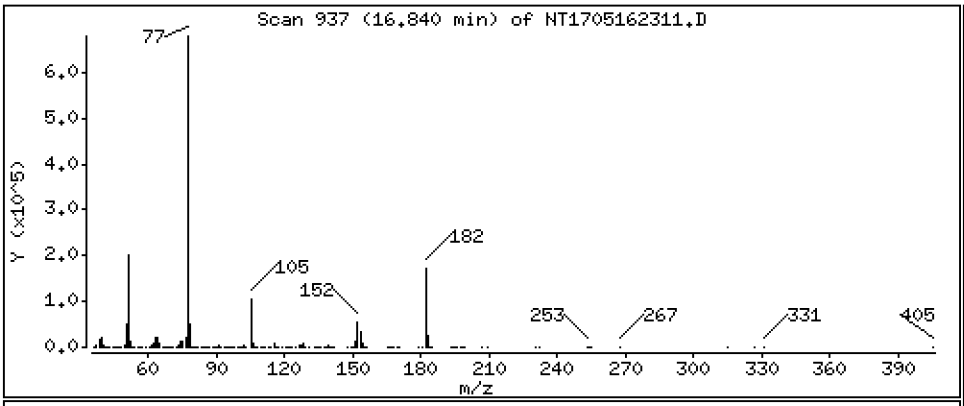
Operator: JGR

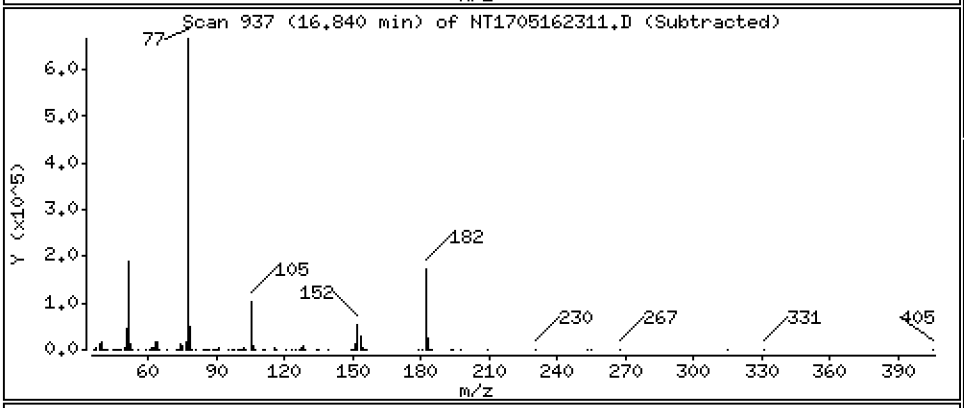
Column phase: ZB-5msi

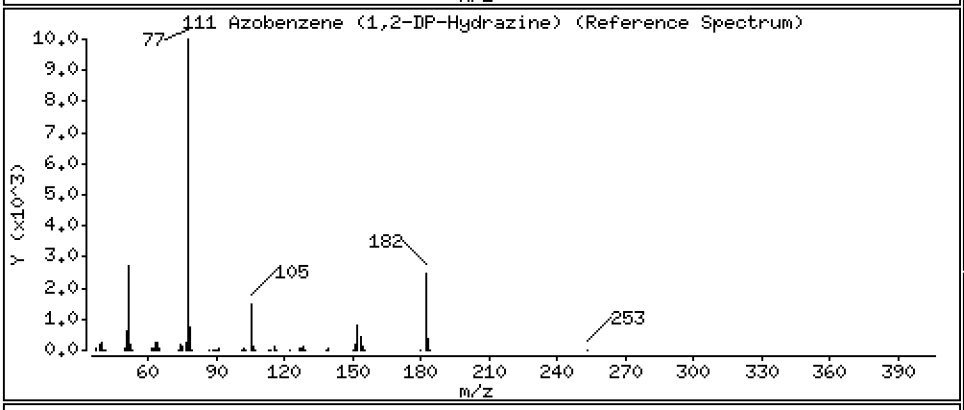
Column diameter: 0.25

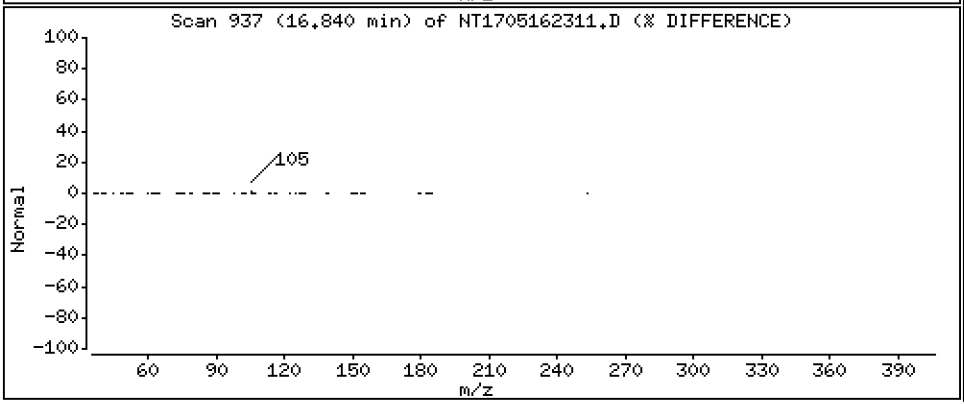
111 Azobenzene (1,2-DP-Hydrazine)

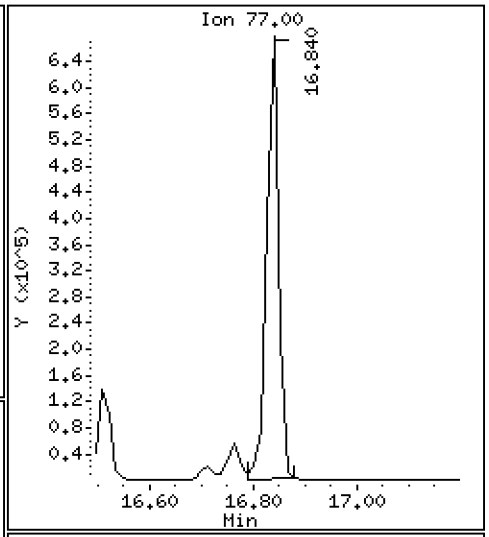
Concentration: 5.338 ug/mL

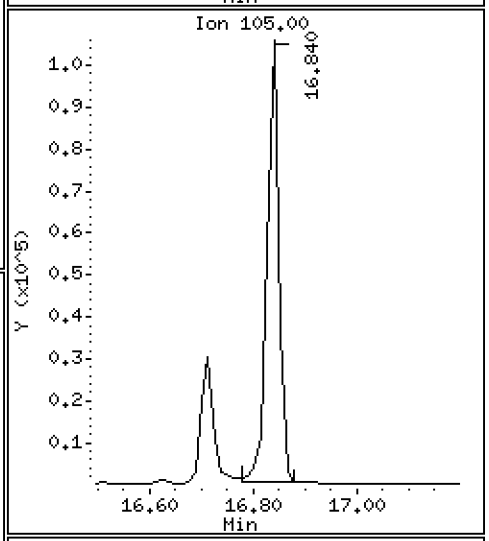


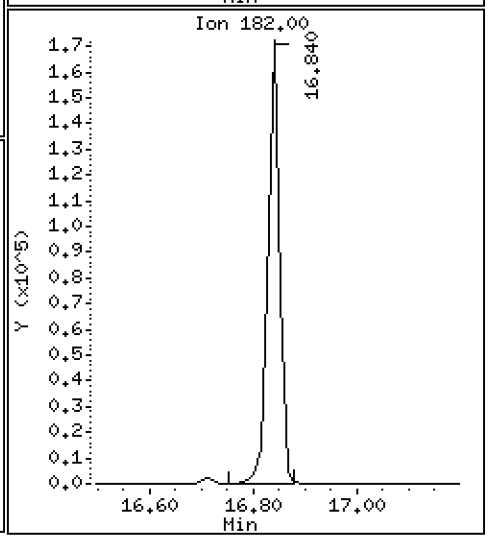












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

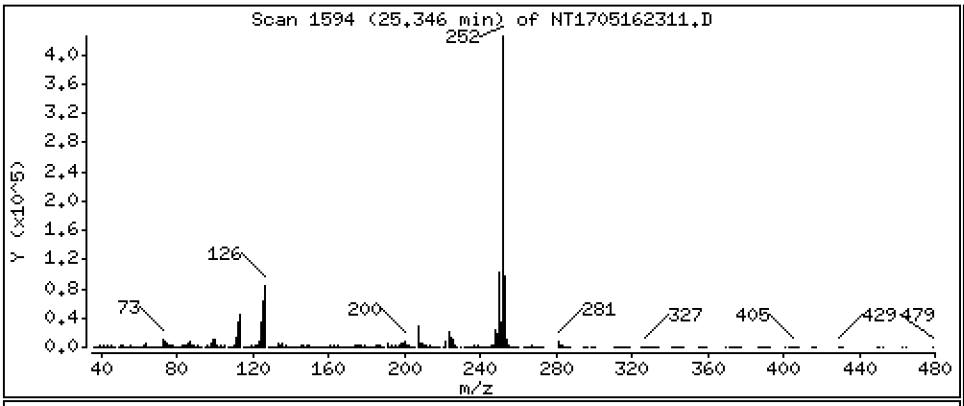
Operator: JGR

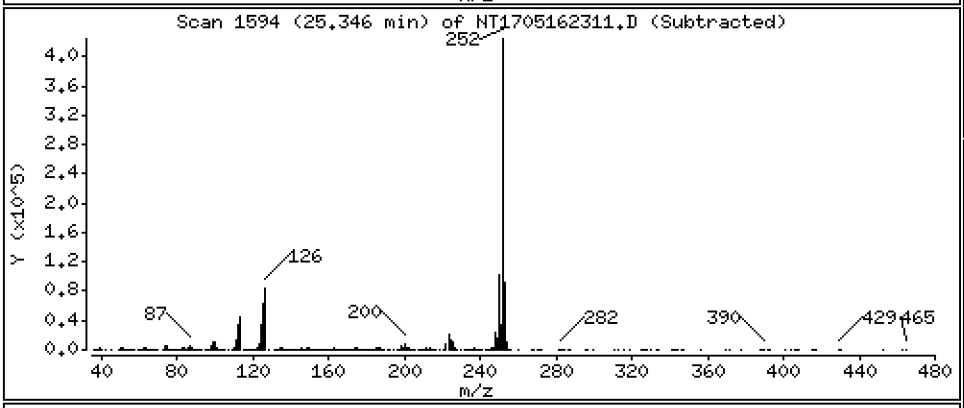
Column phase: ZB-5msi

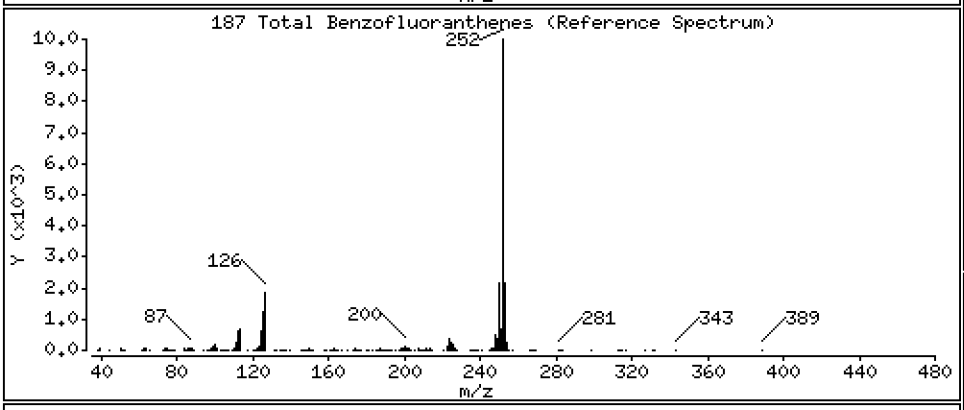
Column diameter: 0.25

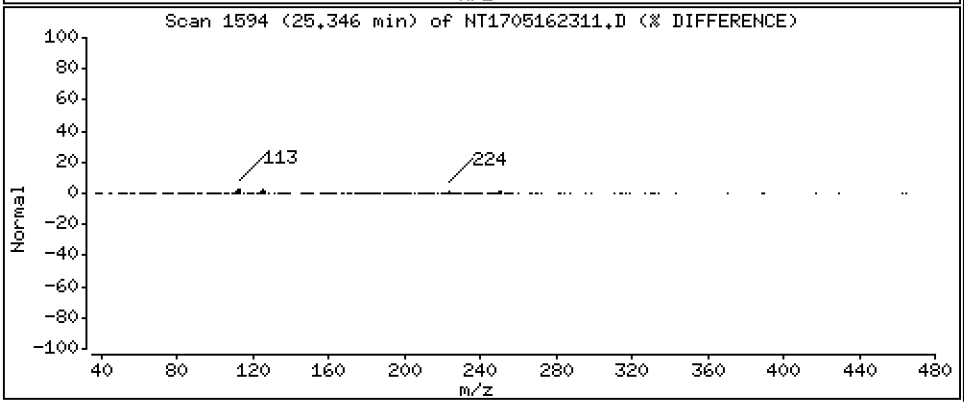
187 Total Benzofluoranthenes

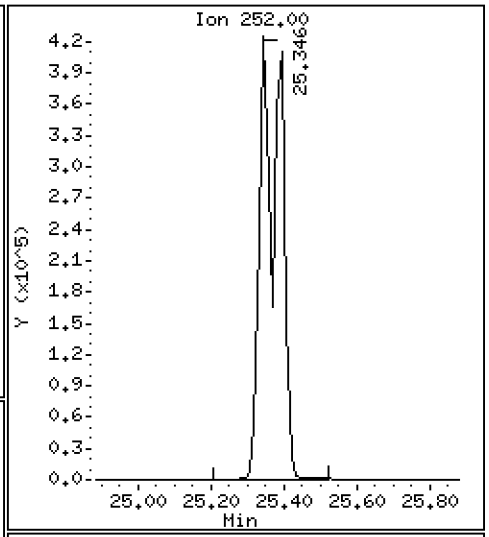
Concentration: 10.02 ug/mL

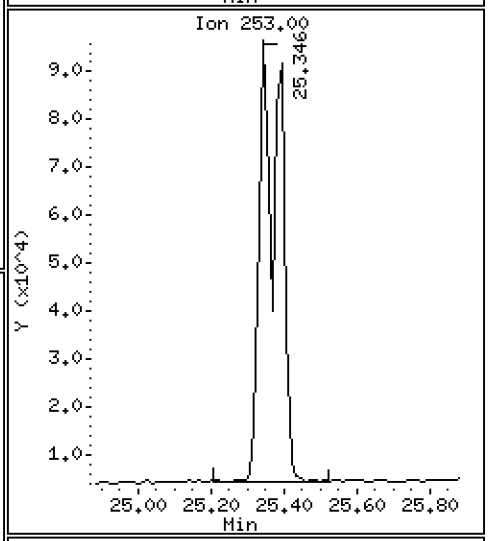


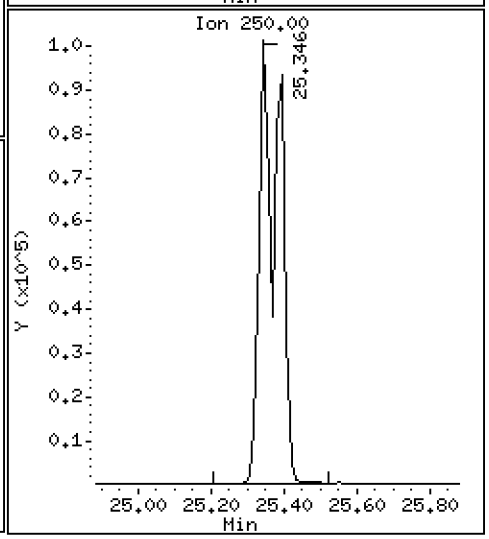












Data File: \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0338-SCV1

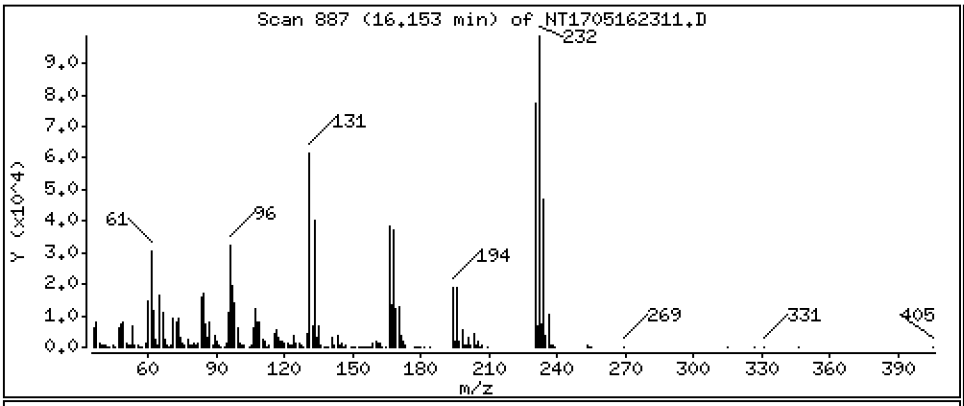
Operator: JGR

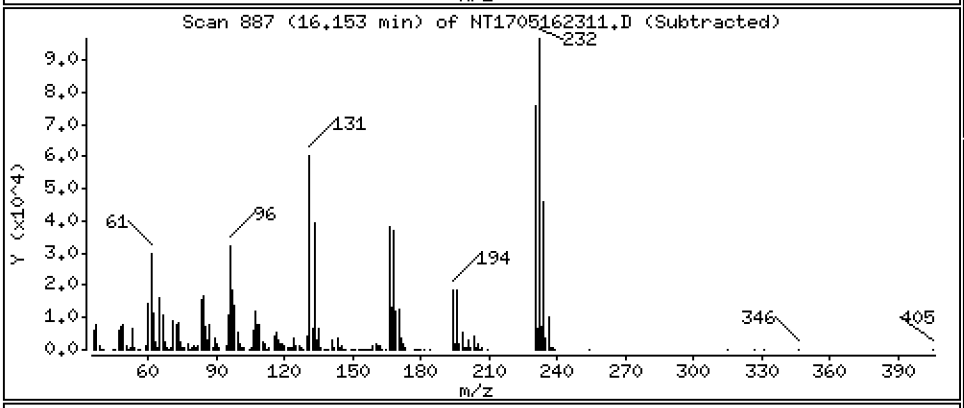
Column phase: ZB-5msi

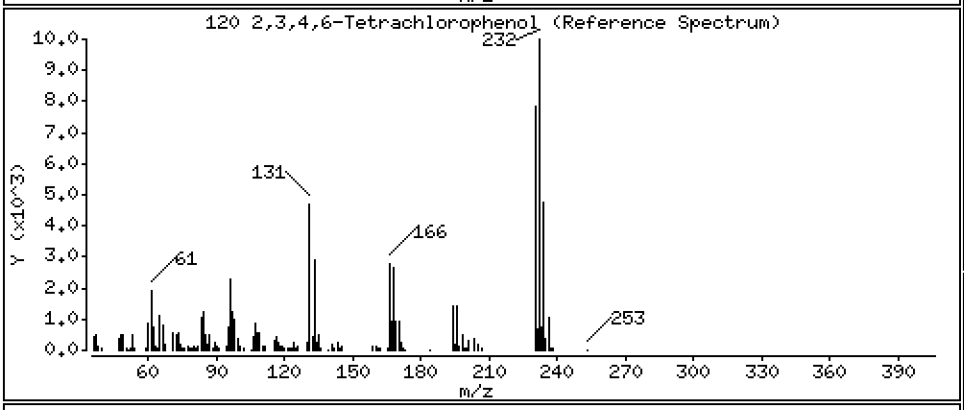
Column diameter: 0.25

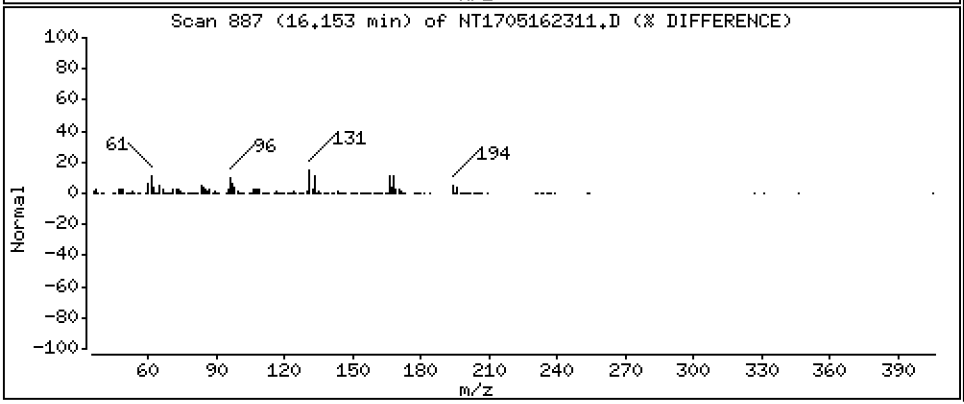
120 2,3,4,6-Tetrachlorophenol

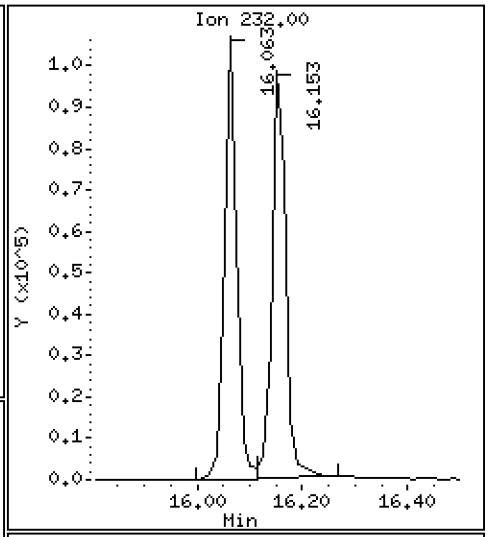
Concentration: 3.283 ug/mL

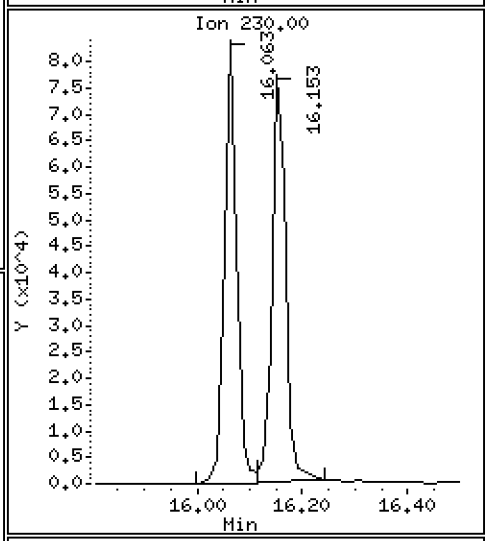


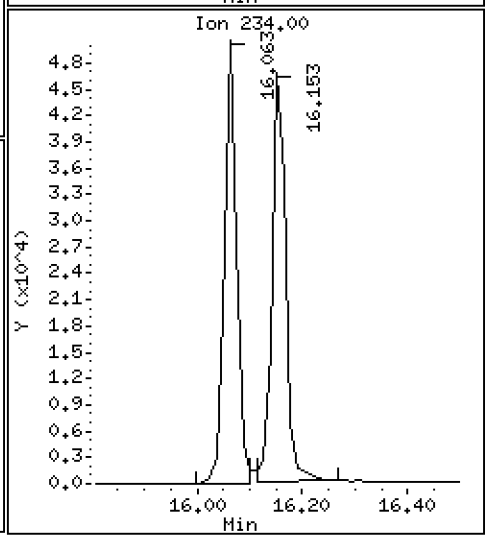












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230516.b\NT1705162311.D
Lab Smp Id: SLE0338-SCV1
Inj Date : 17-MAY-2023 00:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0338-SCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230516.b\ABN.m
Meth Date : 20-May-2023 12:06 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	Compound Not Detected.					
$	2 Phenol-d5	99	Compound Not Detected.					
	3 Phenol	94	8.740	8.740	(0.933)	588001	4.82293	4.823
$	5 2-Chlorophenol-d4	132	Compound Not Detected.					
	4 Bis(2-Chloroethyl)ether	93	8.906	8.906	(0.951)	494651	5.56554	5.566
	6 2-Chlorophenol	128	9.033	9.033	(0.965)	539006	5.29416	5.294
	7 1,3-Dichlorobenzene	146	9.301	9.301	(0.993)	548081	5.31911	5.319
*	8 1,4-Dichlorobenzene-d4	152	9.365	9.365	(1.000)	265705	4.00000	
	9 1,4-Dichlorobenzene	146	9.390	9.391	(1.003)	521173	5.07146	5.071
$	10 1,2-Dichlorobenzene-d4	152	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	9.748	9.748	(1.041)	507921	5.25771	5.258
	11 Benzyl alcohol	108	9.633	9.633	(1.029)	299374	5.27414	5.274
	14 2,2'-oxybis(1-Chloropropane)	121	9.927	9.914	(1.060)	168255	6.17916	6.179
	13 2-Methylphenol	108	9.850	9.851	(1.052)	378927	4.22901	4.229
	17 Hexachloroethane	117	10.336	10.336	(1.104)	222748	5.41856	5.419
	16 N-Nitroso-di-n-propylamine	70	10.183	10.170	(1.087)	378231	5.51734	5.517
	15 4-Methylphenol	108	10.119	10.119	(1.080)	425231	4.66096	4.661
$	18 Nitrobenzene-d5	82	Compound Not Detected.					
	19 Nitrobenzene	77	10.489	10.489	(0.886)	558517	5.32891	5.329
	20 Isophorone	82	10.924	10.924	(0.922)	996054	6.94254	6.943
	21 2-Nitrophenol	139	11.115	11.115	(0.939)	247403	4.89866	4.899
	22 2,4-Dimethylphenol	107	11.153	11.154	(0.942)	371455	3.78811	3.788
	23 Bis(2-Chloroethoxy)methane	93	11.345	11.345	(0.958)	547968	6.23185	6.232
	24 Benzoic acid	105	11.332	11.333	(0.957)	445958	6.76086	6.761
	25 2,4-Dichlorophenol	162	11.562	11.562	(0.976)	370930	4.70748	4.707
	26 1,2,4-Trichlorobenzene	180	11.753	11.753	(0.992)	503147	5.87937	5.879
*	27 Naphthalene-d8	136	11.842	11.830	(1.000)	965231	4.00000	
	28 Naphthalene	128	11.881	11.881	(1.003)	1361438	5.12904	5.129
	29 4-Chloroaniline	127	11.995	11.995	(1.013)	469527	4.48751	4.488
	30 Hexachlorobutadiene	225	12.225	12.225	(1.032)	222159	5.24062	5.241
	31 4-Chloro-3-methylphenol	107	12.952	12.952	(1.094)	413906	4.87847	4.878
	32 2-Methylnaphthalene	142	13.258	13.258	(1.120)	955574	5.02794	5.028
	33 Hexachlorocyclopentadiene	237	13.730	13.730	(0.889)	201170	4.21896	4.219

			QUANT SIG					CONCENTRATIONS ON-COLUMN	CONCENTRATIONS FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
	34	2,4,6-Trichlorophenol	196	13.883	13.883	(0.899)	257193	4.79376	4.794
	35	2,4,5-Trichlorophenol	196	13.959	13.959	(0.904)	274739	4.83728	4.837
$	36	2-Fluorobiphenyl	172	Compound Not Detected.					
	37	2-Chloronaphthalene	162	14.252	14.253	(0.923)	885085	5.40065	5.401
	38	2-Nitroaniline	65	14.507	14.508	(0.940)	297267	5.35584	5.356
	39	Dimethylphthalate	163	14.928	14.929	(0.967)	955980	5.41824	5.418
	40	Acenaphthylene	152	15.120	15.120	(0.979)	1374665	5.28203	5.282
	41	2,6-Dinitrotoluene	165	15.069	15.069	(0.976)	223225	5.40390	5.404
*	42	Acenaphthene-d10	164	15.438	15.426	(1.000)	512787	4.00000	
	43	3-Nitroaniline	138	15.362	15.349	(0.995)	197758	5.16887	5.169
	44	Acenaphthene	153	15.502	15.502	(1.004)	859485	5.28316	5.283
	45	2,4-Dinitrophenol	184	15.566	15.567	(1.008)	52944	2.11874	2.119
	46	Dibenzofuran	168	15.821	15.821	(1.025)	1172327	5.16305	5.163
	47	4-Nitrophenol	109	15.668	15.681	(1.015)	114450	4.50365	4.504
	48	2,4-Dinitrotoluene	165	15.872	15.872	(1.028)	284935	5.26937	5.269
	50	Diethylphthalate	149	16.369	16.369	(1.060)	945291	5.49374	5.494
	49	Fluorene	166	16.535	16.535	(1.071)	1165179	5.39758	5.398
	51	4-Chlorophenyl-phenylether	204	16.522	16.509	(1.070)	542088	5.46212	5.462
	52	4-Nitroaniline	138	16.624	16.611	(1.077)	184970	5.10772	5.108
	53	4,6-Dinitro-2-methylphenol	198	16.713	16.713	(0.905)	113822	3.35487	3.355
	54	N-Nitrosodiphenylamine	169	16.764	16.764	(0.908)	651392	5.46976	5.470
$	55	2,4,6-Tribromophenol	330	Compound Not Detected.					
	56	4-Bromophenyl-phenylether	248	17.514	17.515	(0.949)	226164	5.42020	5.420
	57	Hexachlorobenzene	284	17.833	17.833	(0.966)	208878	4.91276	4.913
	58	Pentachlorophenol	266	18.190	18.203	(0.985)	98895	3.94337	3.943
*	59	Phenanthrene-d10	188	18.458	18.458	(1.000)	850147	4.00000	
	60	Phenanthrene	178	18.509	18.496	(1.003)	1250084	5.03943	5.039
	61	Anthracene	178	18.598	18.598	(1.008)	1054910	4.52965	4.530
	62	Carbazole	167	18.917	18.918	(1.025)	896606	5.93842	5.938
	63	Di-n-butylphthalate	149	19.682	19.682	(1.066)	1586517	5.64164	5.642
	64	Fluoranthene	202	20.868	20.855	(0.890)	1308113	5.46710	5.467
	65	Pyrene	202	21.289	21.276	(0.908)	1277121	5.26528	5.265
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.462	22.462	(0.958)	632335	5.82476	5.825
	68	Benzo(a)anthracene	228	23.419	23.419	(0.998)	953848	5.06413	5.064
*	69	Chrysene-d12	240	23.457	23.445	(1.000)	511511	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.368	23.369	(0.996)	459041	11.9948	11.99
	71	Chrysene	228	23.496	23.496	(1.002)	889381	5.01800	5.018
	72	bis(2-Ethylhexyl)phthalate	149	23.470	23.470	(0.959)	875291	5.79218	5.792
*	134	Di-n-octylphthalate-d4	153	24.465	24.465	(1.000)	1044471	4.00000	
	73	Di-n-octylphthalate	149	24.465	24.465	(1.000)	1451463	5.48238	5.482
	74	Benzo(b)fluoranthene	252	25.345	25.345	(0.969)	887996	4.91157	4.912
	75	Benzo(k)fluoranthene	252	25.396	25.384	(0.971)	848094	4.96504	4.965(H)
	76	Benzo(a)pyrene	252	26.034	26.022	(0.996)	736579	5.17185	5.172
*	77	Perylene-d12	264	26.149	26.149	(1.000)	456008	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.946	28.933	(1.107)	830811	5.02922	5.029
	79	Dibenzo(a,h)anthracene	278	28.946	28.946	(1.107)	689006	4.96953	4.970
	80	Benzo(g,h,i)perylene	276	29.764	29.751	(1.138)	689189	5.05448	5.054
	90	N-Nitrosodimethylamine	74	5.071	5.071	(0.542)	334608	5.76731	5.767
	91	Aniline	93	Compound Not Detected.					
	93	Benzidine	184	21.085	21.085	(0.899)	208933	3.45722	3.457
	103	Pyridine	79	5.097	5.122	(0.544)	534742	5.81084	5.811
	105	1-methylnaphthalene	142	13.487	13.487	(1.139)	925646	5.25003	5.250
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.840	16.840	(1.091)	1072104	5.33771	5.338

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.345	25.384	(0.969)	1625913	10.0183	10.02
120 2,3,4,6-Tetrachlorophenol	232	16.152	16.152	(1.046)	210743	3.28296	3.283

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162311.D
Lab Smp Id: SLE0338-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\ABN.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 20:07
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	287078	143539	574156	265705	-7.45
27 Naphthalene-d8	1056758	528379	2113516	965231	-8.66
42 Acenaphthene-d10	587510	293755	1175020	512787	-12.72
59 Phenanthrene-d10	933575	466788	1867150	850147	-8.94
69 Chrysene-d12	576570	288285	1153140	511511	-11.28
134 Di-n-octylphthala	1181651	590826	2363302	1044471	-11.61
77 Perylene-d12	491359	245680	982718	456008	-7.19

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.37	8.87	9.87	9.37	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.46	17.96	18.96	18.46	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
134 Di-n-octylphthala	24.47	23.97	24.97	24.47	-0.00
77 Perylene-d12	26.15	25.65	26.65	26.15	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162311.D

Lab ID: SLE0338-SCV1
nt17.i, ABN.m, 17-MAY-2023 00:29

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

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.008	0.000	1.0083	2,4-Dinitrophenol

RRT check based on Ccal File: NT1705162308.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705262328.D	Calibration Date:	05/20/2023
Sequence:	SLE0434	Injection Date:	05/27/23
Lab Sample ID:	SLE0434-CCV1	Injection Time:	05:31
Sequence Name:	ABN 5		

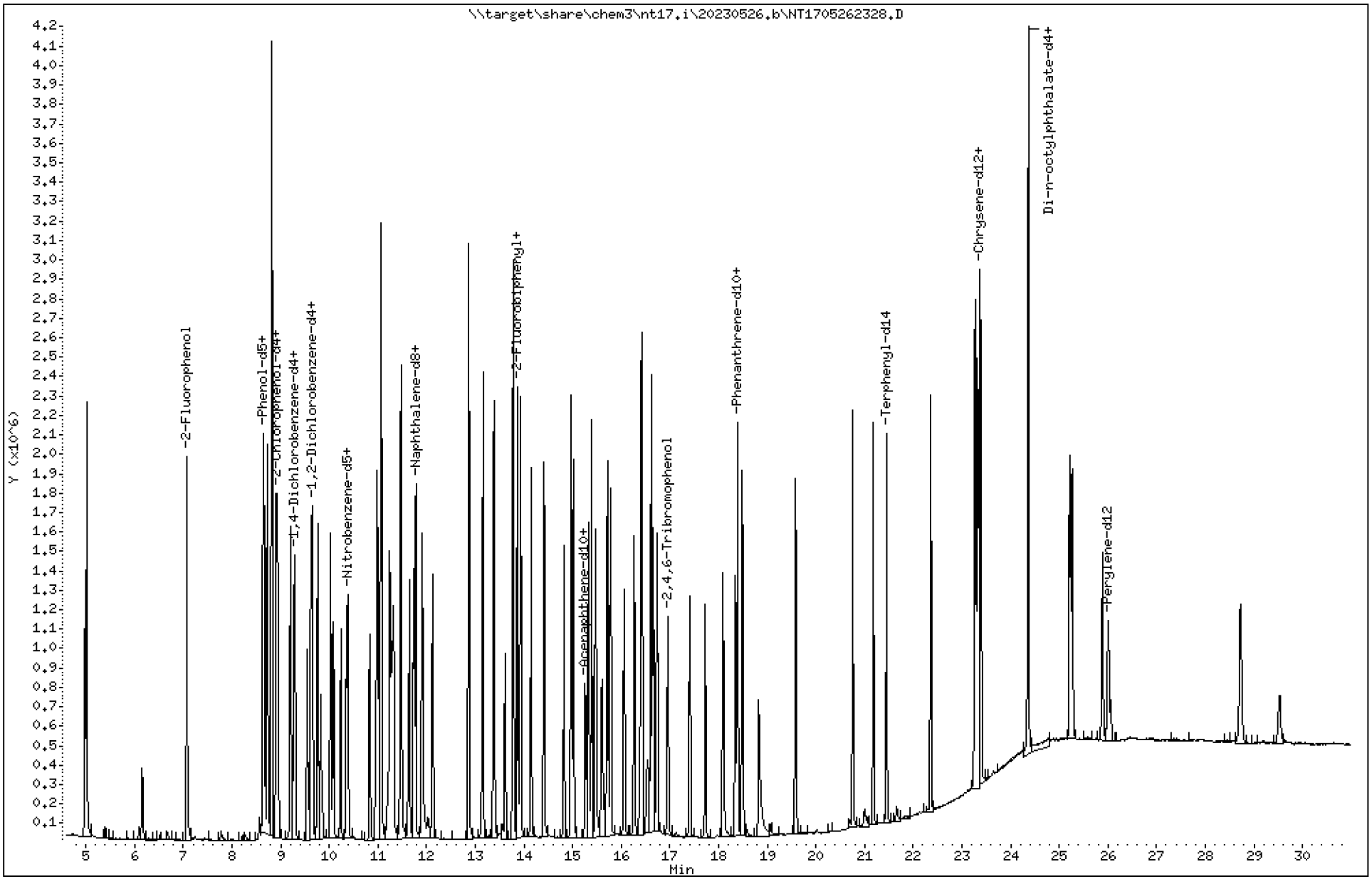
		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Phenol	A	5.0000	5.2	1.8353850	1.9058420		3.8	+/-50	
Benzyl Alcohol	A	5.0000	5.2	0.8545202	0.8836087		3.4	+/-50	
4-Methylphenol	A	5.0000	5.0	1.3734410	1.3739450		0.04	+/-50	
Naphthalene	A	5.0000	5.0	1.0999940	1.1034940		0.3	+/-50	
2-Methylnaphthalene	A	5.0000	5.0	0.7875944	0.7926639		0.6	+/-50	
Acenaphthylene	A	5.0000	5.1	2.0301060	2.0666220		1.8	+/-50	
Dibenzofuran	A	5.0000	5.1	1.7711910	1.8014260		1.7	+/-50	
Fluorene	A	5.0000	4.4	1.6839010	1.4734580		-12.5	+/-50	
Phenanthrene	A	5.0000	5.0	1.1671410	1.1683380		0.1	+/-50	
Anthracene	A	5.0000	5.1	1.0957620	1.1203480		2.2	+/-50	
Fluoranthene	A	5.0000	4.4	1.8710850	1.6364850		-12.5	+/-50	
Pyrene	A	5.0000	4.4	1.8967730	1.6863950		-11.1	+/-50	
Butylbenzylphthalate	A	5.0000	4.6	0.8489339	0.7760020		-8.6	+/-50	
Benzo(a)anthracene	A	5.0000	5.0	1.4729210	1.4733670		0.04	+/-50	
Chrysene	A	5.0000	5.0	1.3859970	1.3814360		-0.3	+/-50	
bis(2-Ethylhexyl)phthalate	A	5.0000	4.4	0.5787277	170504.8		-11.5	+/-50	
Benzofluoranthenes, Total	A	10.000	11.6	1.4236150	1.6487280		15.8	+/-50	
Benzo(a)pyrene	A	5.0000	5.0	1.2492830	1.2613410		1.0	+/-50	
Indeno(1,2,3-cd)pyrene	A	5.0000	3.0	1.4490690	0.8719830		-39.8	+/-50	
Dibenzo(a,h)anthracene	A	5.0000	3.2	1.2161710	0.7839475		-35.5	+/-50	
Benzo(g,h,i)perylene	A	5.0000	2.5	1.1960510	0.5910355		-50.6	+/-50	*
2-Fluorophenol	A	7.5000	8.13	1.3093930	1.4199840		8.4	+/-50	
Phenol-d5	A	7.5000	7.94	1.7328160	1.8353590		5.9	+/-50	
2-Chlorophenol-d4	A	7.5000	7.72	1.3879870	1.4286480		2.9	+/-50	
1,2-Dichlorobenzene-d4	A	5.0000	5.07	0.9755818	0.9886062		1.3	+/-50	
Nitrobenzene-d5	A	5.0000	5.23	0.4552457	0.4757264		4.5	+/-50	
2-Fluorobiphenyl	A	5.0000	5.23	1.5758130	1.6477170		4.6	+/-50	
2,4,6-Tribromophenol	A	7.5000	7.13	0.1414414	0.1659621		-4.9	+/-50	
p-Terphenyl-d14	A	5.0000	4.36	1.3483810	1.1755420		-12.8	+/-50	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262328.D
Date : 27-MAY-2023 05:31
Client ID:
Sample Info: SLE0434-CCV1

Instrument: nt17.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262328.D
Lab Smp Id: SLE0434-CCV1
Inj Date : 27-MAY-2023 05:31
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0434-CCV1
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 13:35 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 2 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.071	7.071	(0.763)	845864	7.50000	8.133
$	2 Phenol-d5	99	8.639	8.639	(0.933)	1093297	7.50000	7.944
	3 Phenol	94	8.664	8.664	(0.935)	756855	5.00000	5.192
$	5 2-Chlorophenol-d4	132	8.906	8.906	(0.961)	851025	7.50000	7.720
	4 Bis(2-Chloroethyl)ether	93	8.804	8.804	(0.950)	574951	5.00000	5.410
	6 2-Chlorophenol	128	8.944	8.944	(0.966)	590310	5.00000	4.849
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	614969	5.00000	4.991
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	317699	4.00000	
	9 1,4-Dichlorobenzene	146	9.301	9.301	(1.004)	591194	5.00000	4.811
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	392599	5.00000	5.067
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	580244	5.00000	5.023
	11 Benzyl alcohol	108	9.544	9.544	(1.030)	350902	5.00000	5.170
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	158498	5.00000	4.868
	13 2-Methylphenol	108	9.761	9.761	(1.054)	520015	5.00000	4.854
	17 Hexachloroethane	117	10.234	10.234	(1.105)	221060	5.00000	4.497
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	399522	5.00000	4.874
	15 4-Methylphenol	108	10.030	10.030	(1.083)	545626	5.00000	5.002
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	659625	5.00000	5.225
	19 Nitrobenzene	77	10.387	10.387	(0.886)	622507	5.00000	5.168
	20 Isophorone	82	10.835	10.835	(0.924)	771925	5.00000	4.682
	21 2-Nitrophenol	139	11.013	11.013	(0.939)	311395	5.00000	5.365
	22 2,4-Dimethylphenol	107	11.064	11.064	(0.943)	1073353	10.0000	9.525
	23 Bis(2-Chloroethoxy)methane	93	11.243	11.243	(0.959)	504745	5.00000	4.995
	24 Benzoic acid	105	11.320	11.320	(0.965)	1508987	20.0000	19.91
	25 2,4-Dichlorophenol	162	11.473	11.473	(0.978)	986801	10.0000	10.90
	26 1,2,4-Trichlorobenzene	180	11.652	11.652	(0.993)	586462	5.00000	5.963
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1109251	4.00000	
	28 Naphthalene	128	11.779	11.779	(1.004)	1530065	5.00000	5.016
	29 4-Chloroaniline	127	11.906	11.906	(1.015)	1137731	10.0000	9.462
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	239215	5.00000	4.910
	31 4-Chloro-3-methylphenol	107	12.863	12.863	(1.097)	1000407	10.0000	10.26
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	1099079	5.00000	5.032
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	226843	10.0000	4.261

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.781	13.781	(0.899)	627108	10.0000	10.47
	35	2,4,5-Trichlorophenol	196	13.870	13.870	(0.905)	670999	10.0000	10.58
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	1179234	5.00000	5.228
	37	2-Chloronaphthalene	162	14.151	14.151	(0.923)	945278	5.00000	5.166
	38	2-Nitroaniline	65	14.406	14.406	(0.940)	673009	10.0000	10.86
	39	Dimethylphthalate	163	14.827	14.827	(0.968)	1002926	5.00000	5.091
	40	Acenaphthylene	152	15.018	15.018	(0.980)	1479035	5.00000	5.090
	41	2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	471078	10.0000	10.21
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	572542	4.00000	
	43	3-Nitroaniline	138	15.260	15.260	(0.996)	305067	10.0000	7.141
	44	Acenaphthene	153	15.388	15.388	(1.004)	920101	5.00000	5.065
	45	2,4-Dinitrophenol	184	15.477	15.477	(1.010)	462082	20.0000	16.12
	46	Dibenzofuran	168	15.719	15.719	(1.026)	1289240	5.00000	5.085
	47	4-Nitrophenol	109	15.604	15.604	(1.018)	233218	10.0000	8.219
	48	2,4-Dinitrotoluene	165	15.783	15.783	(1.030)	616509	10.0000	10.21
	50	Diethylphthalate	149	16.267	16.267	(1.062)	1235947	5.00000	6.433
	49	Fluorene	166	16.420	16.420	(1.072)	1054521	5.00000	4.375
	51	4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	610969	5.00000	5.514
	52	4-Nitroaniline	138	16.547	16.547	(1.080)	325510	10.0000	8.050
	53	4,6-Dinitro-2-methylphenol	198	16.611	16.611	(0.906)	562060	20.0000	15.46
	54	N-Nitrosodiphenylamine	169	16.662	16.662	(0.908)	648693	5.00000	5.083
$	55	2,4,6-Tribromophenol	330	16.967	16.967	(1.107)	178163	7.50000	7.134
	56	4-Bromophenyl-phenylether	248	17.413	17.413	(0.949)	238271	5.00000	5.329
	57	Hexachlorobenzene	284	17.731	17.731	(0.967)	243899	5.00000	5.353
	58	Pentachlorophenol	266	18.088	18.088	(0.986)	254862	10.0000	9.238
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	911027	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	1330484	5.00000	5.005
	61	Anthracene	178	18.484	18.484	(1.008)	1275834	5.00000	5.112
	62	Carbazole	167	18.828	18.828	(1.026)	1058378	5.00000	6.493
	63	Di-n-butylphthalate	149	19.580	19.580	(1.067)	1566193	5.00000	5.197
	64	Fluoranthene	202	20.753	20.753	(0.889)	1382607	5.00000	4.373
	65	Pyrene	202	21.174	21.174	(0.907)	1424774	5.00000	4.445
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	993173	5.00000	4.359
	67	Butylbenzylphthalate	149	22.361	22.361	(0.957)	655616	5.00000	4.570
	68	Benzo(a)anthracene	228	23.317	23.317	(0.998)	1244794	5.00000	5.002
*	69	Chrysene-d12	240	23.356	23.356	(1.000)	675891	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.279	23.279	(0.997)	981676	15.0000	18.78
	71	Chrysene	228	23.394	23.394	(1.002)	1167125	5.00000	4.984
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	852524	5.00000	4.425
*	134	Di-n-octylphthalate-d4	153	24.351	24.351	(1.000)	1331493	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.363	(1.001)	1661815	5.00000	4.924
	74	Benzo(b)fluoranthene	252	25.218	25.218	(0.970)	1108378	5.00000	5.658
	75	Benzo(k)fluoranthene	252	25.269	25.269	(0.972)	1087056	5.00000	5.873
	76	Benzo(a)pyrene	252	25.881	25.881	(0.995)	779080	5.00000	5.048
*	77	Perylene-d12	264	26.009	26.009	(1.000)	494128	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.729	28.729	(1.105)	538589	5.00000	3.009
	79	Dibenzo(a,h)anthracene	278	28.729	28.729	(1.105)	484213	5.00000	3.223
	80	Benzo(g,h,i)perylene	276	29.534	29.534	(1.136)	365059	5.00000	2.471
	90	N-Nitrosodimethylamine	74	4.982	4.982	(0.538)	727879	10.0000	10.49
	91	Aniline	93	8.728	8.728	(0.942)	1250758	10.0000	10.24
	93	Benzidine	184	20.996	20.996	(0.899)	99669	10.0000	1.264
	103	Pyridine	79	5.008	5.008	(0.541)	1087512	10.0000	9.884
	105	1-methylnaphthalene	142	13.385	13.385	(1.141)	999698	5.00000	4.934
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.738	16.738	(1.092)	1133300	5.00000	5.054

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	AMOUNTS ON-COL (ug/mL)
187 Total Benzofluoranthenes	252	25.269	25.269	(0.972)	2036707	10.0000	11.58
120 2,3,4,6-Tetrachlorophenol	232	16.050	16.050	(1.047)	295159	5.00000	4.118

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262328.D
Lab Smp Id: SLE0434-CCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 23:55
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	327251	163626	654502	317699	-2.92
27 Naphthalene-d8	1151610	575805	2303220	1109251	-3.68
42 Acenaphthene-d10	581592	290796	1163184	572542	-1.56
59 Phenanthrene-d10	918371	459186	1836742	911027	-0.80
69 Chrysene-d12	690072	345036	1380144	675891	-2.06
134 Di-n-octylphthala	1461689	730845	2923378	1331493	-8.91
77 Perylene-d12	568726	284363	1137452	494128	-13.12

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	0.00
69 Chrysene-d12	23.36	22.86	23.86	23.36	0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.05
77 Perylene-d12	26.01	25.51	26.51	26.01	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262328.D

Lab ID: SLE0434-CCV1
nt17.i, ABN.m, 27-MAY-2023 05:31

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

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b

Instrument: nt17.i Date: 27-MAY-2023 Method: ABN.m

INITIAL CAL: 09-MAY-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1705262328.D 27-MAY-2023 05:31

Compound	%D
Hexachlorocyclopentadiene	-57.4
3-Nitroaniline	-28.59
Diethylphthalate	28.67
4,6-Dinitro-2-methylphenol	-22.7
Carbazole	29.9
3,3'-Dichlorobenzidine	25.2
Indeno(1,2,3-cd)pyrene	-39.82
Dibenzo(a,h)anthracene	-35.54
Benzo(g,h,i)perylene	-50.58
Benzidine	-87.4

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705262304.D	Calibration Date:	05/20/2023
Sequence:	SLE0434	Injection Date:	05/26/23
Lab Sample ID:	SLE0434-LCV1	Injection Time:	14:31
Sequence Name:	ABN 0.2		

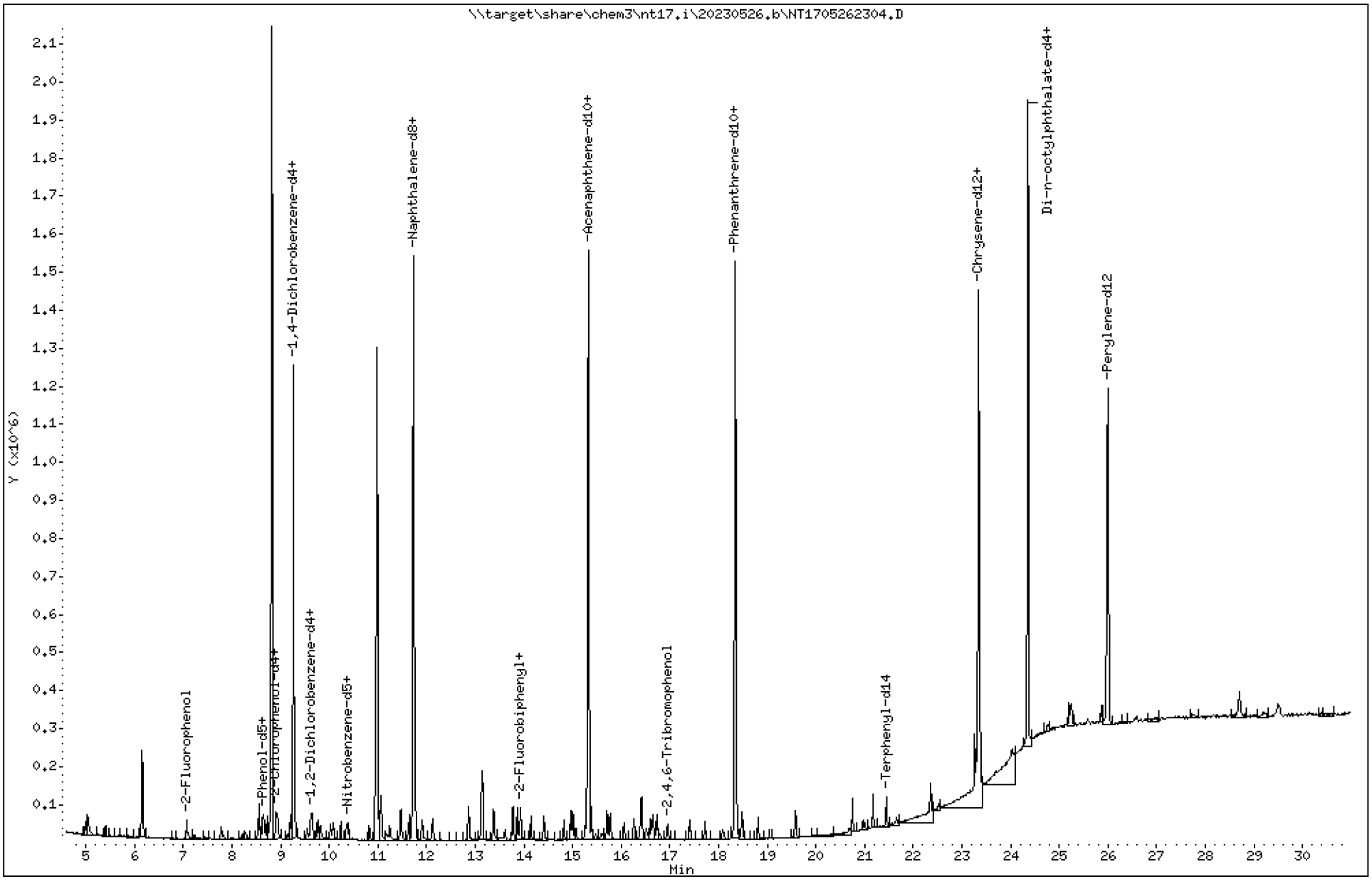
		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.8353850	1.8199460		-0.8	+/-50
Benzyl Alcohol	A	0.20000	0.2	0.8545202	0.6775815		-20.7	+/-50
4-Methylphenol	A	0.20000	0.2	1.3734410	1.2833660		-6.6	+/-50
Naphthalene	A	0.20000	0.2	1.0999940	1.0869750		-1.2	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7875944	0.7378506		-6.3	+/-50
Acenaphthylene	A	0.20000	0.2	2.0301060	2.1027840		3.6	+/-50
Dibenzofuran	A	0.20000	0.2	1.7711910	1.7529620		-1.0	+/-50
Fluorene	A	0.20000	0.2	1.6839010	1.8860460		12.0	+/-50
Phenanthrene	A	0.20000	0.2	1.1671410	1.1871160		1.7	+/-50
Anthracene	A	0.20000	0.2	1.0957620	1.0138480		-7.5	+/-50
Fluoranthene	A	0.20000	0.2	1.8710850	1.8222070		-2.6	+/-50
Pyrene	A	0.20000	0.2	1.8967730	1.9308580		1.8	+/-50
Butylbenzylphthalate	A	0.20000	0.2	0.8489339	0.8252708		-2.8	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4729210	1.5945180		8.3	+/-50
Chrysene	A	0.20000	0.2	1.3859970	1.4530120		4.8	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.2	0.5787277	168555		-6.1	+/-50
Benzofluoranthenes, Total	A	0.40000	0.4	1.4236150	1.4105620		-0.9	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2492830	1.2744000		2.0	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.2	1.4490690	1.4329270		-1.1	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.2	1.2161710	1.1890510		-2.2	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.2	1.1960510	1.1714120		-2.1	+/-50
2-Fluorophenol	A	0.30000	0.276	1.3093930	1.2028060		-8.1	+/-50
Phenol-d5	A	0.30000	0.282	1.7328160	1.6274340		-6.1	+/-50
2-Chlorophenol-d4	A	0.30000	0.296	1.3879870	1.3699520		-1.3	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.218	0.9755818	1.0610870		8.8	+/-50
Nitrobenzene-d5	A	0.20000	0.186	0.4552457	0.4230946		-7.1	+/-50
2-Fluorobiphenyl	A	0.20000	0.204	1.5758130	1.6096390		2.1	+/-50
2,4,6-Tribromophenol	A	0.30000	0.243	0.1414414	0.1410673		-19.2	+/-50
p-Terphenyl-d14	A	0.20000	0.208	1.3483810	1.3994850		3.8	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D
Date : 26-MAY-2023 14:31
Client ID:
Sample Info: SLE0434-LCV1

Instrument: nt17.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

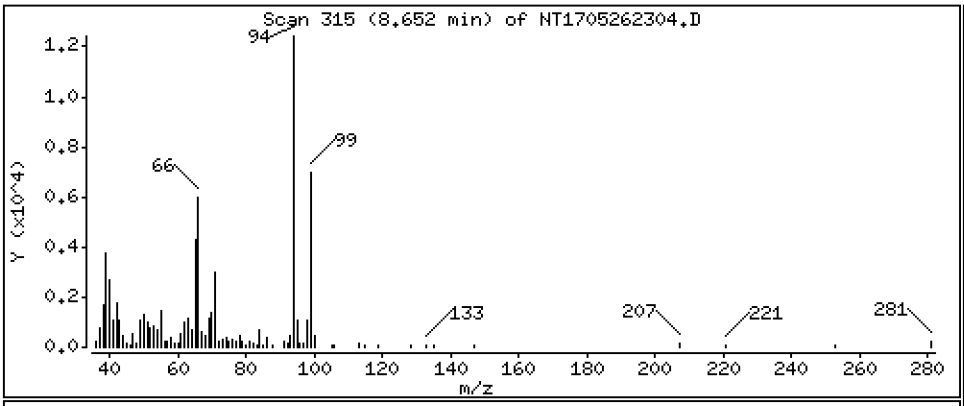
Operator: VTS

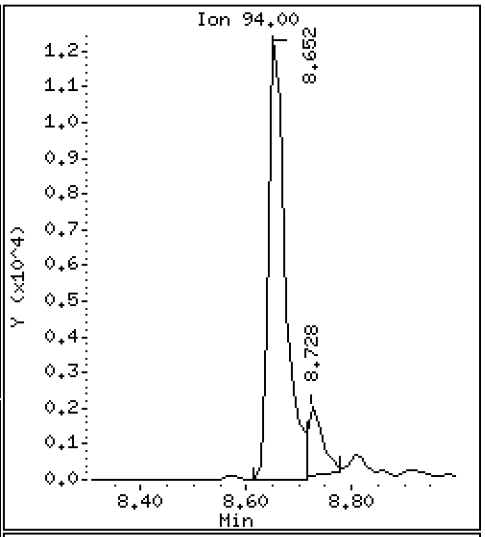
Column phase: ZB-5msi

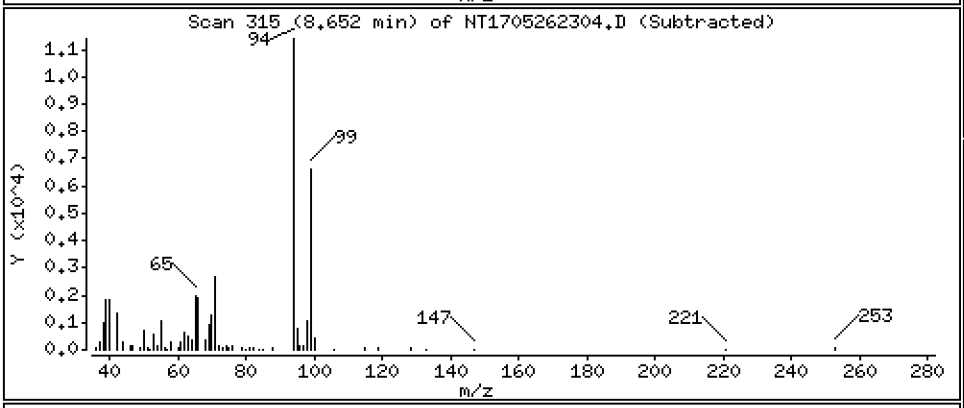
Column diameter: 0.25

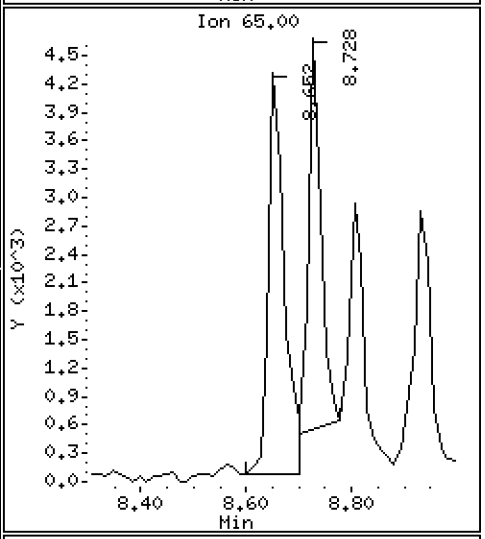
3 Phenol

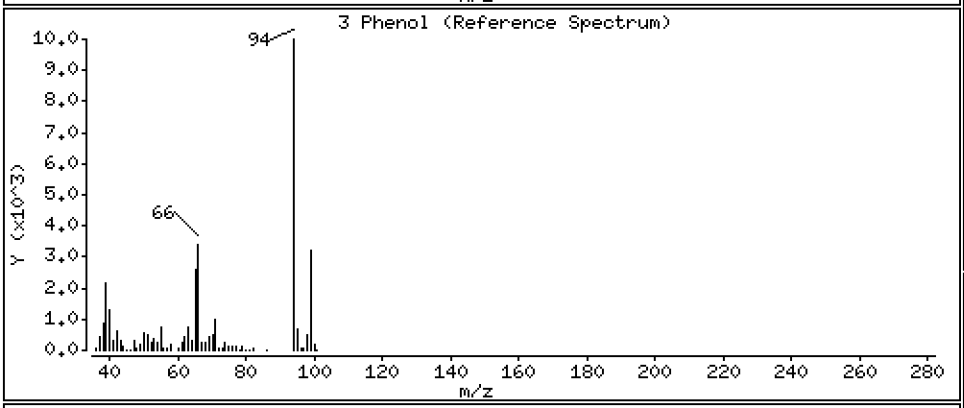
Concentration: 0.1983 ug/mL

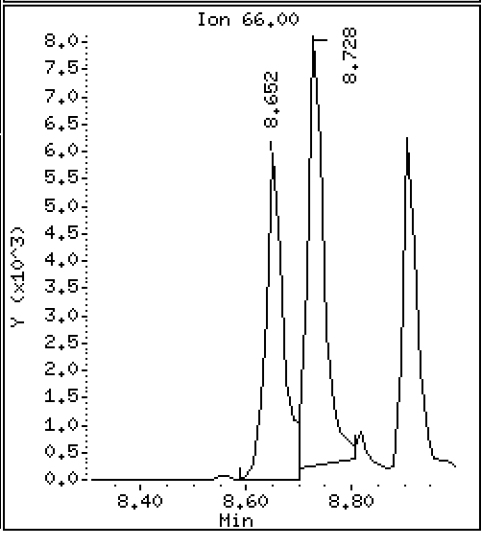


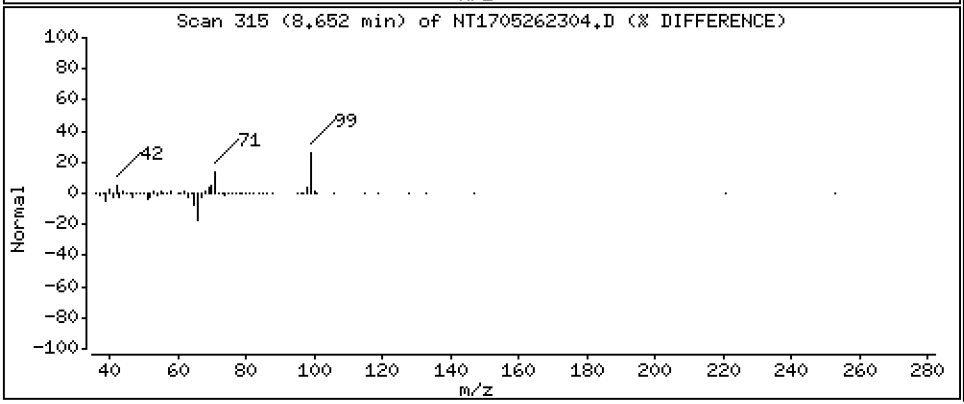












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

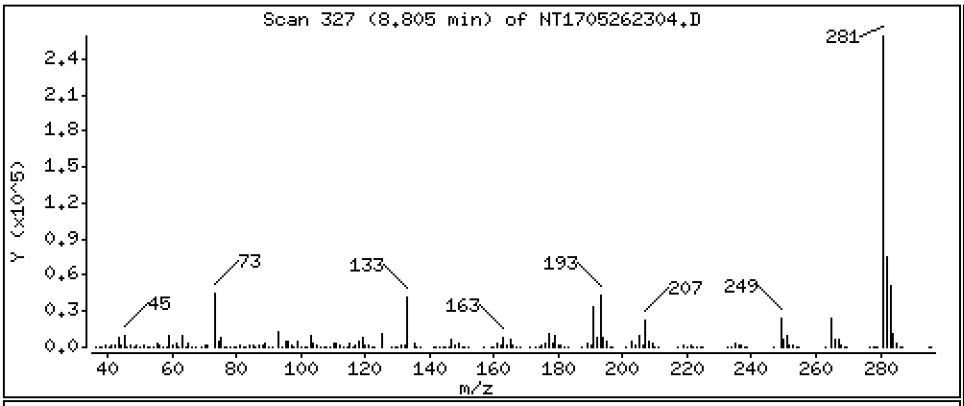
Operator: VTS

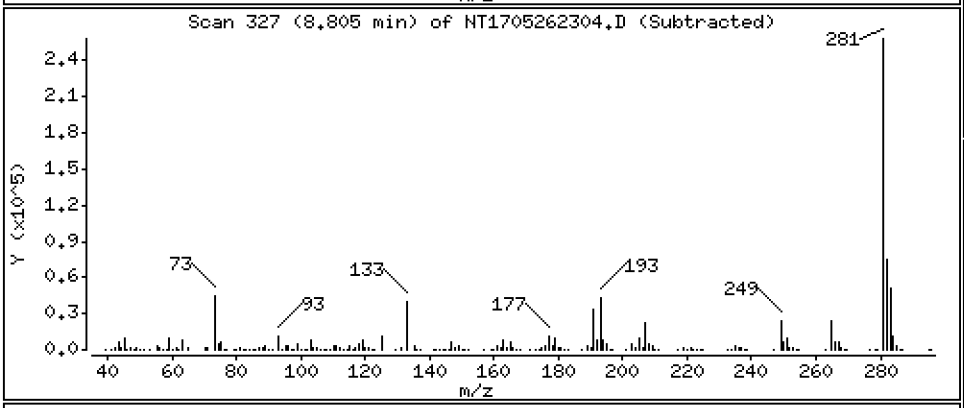
Column phase: ZB-5msi

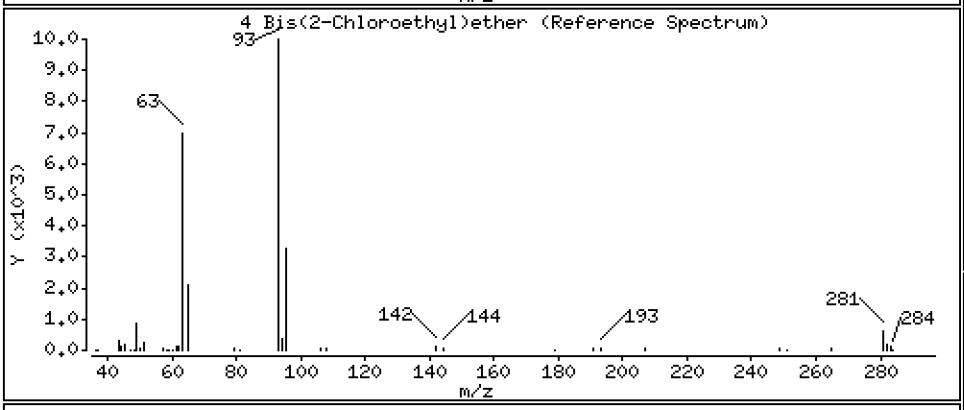
Column diameter: 0.25

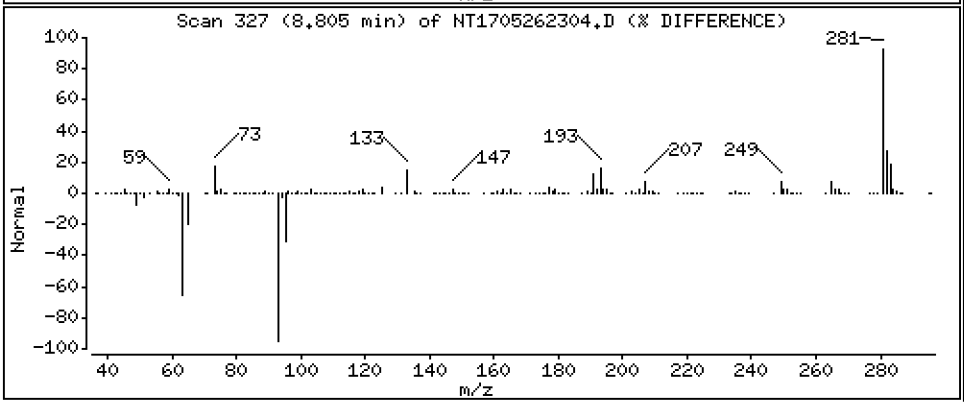
4 Bis(2-Chloroethyl)ether

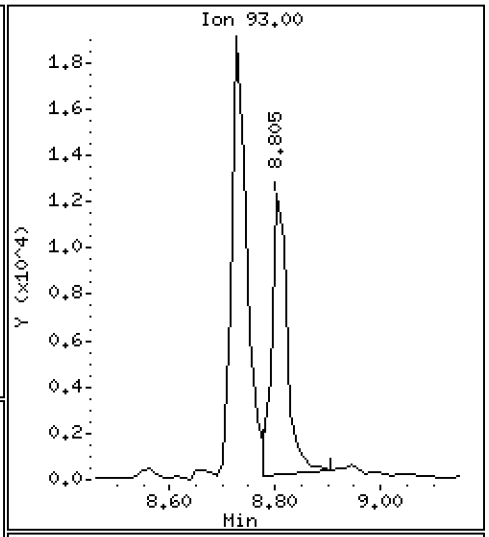
Concentration: 0.2369 ug/mL

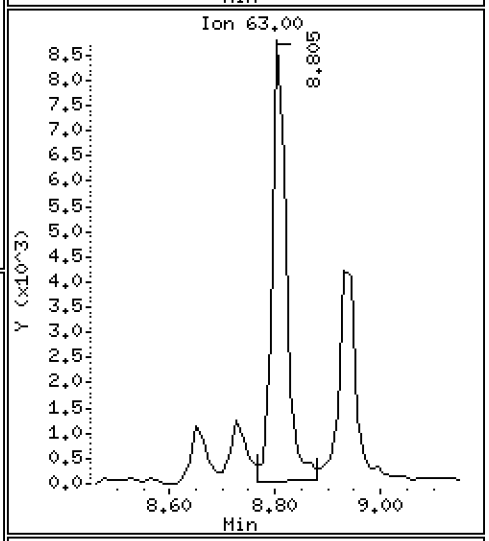


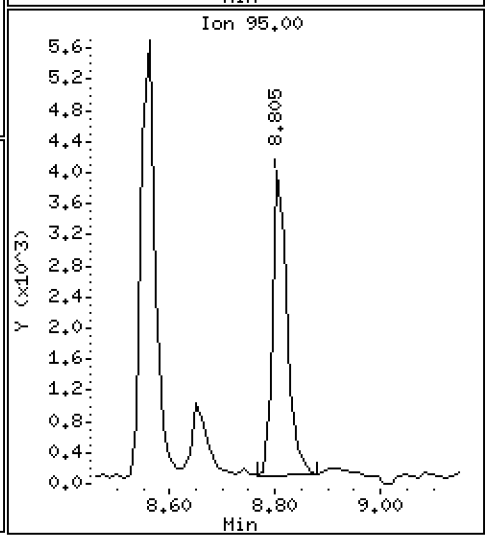












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

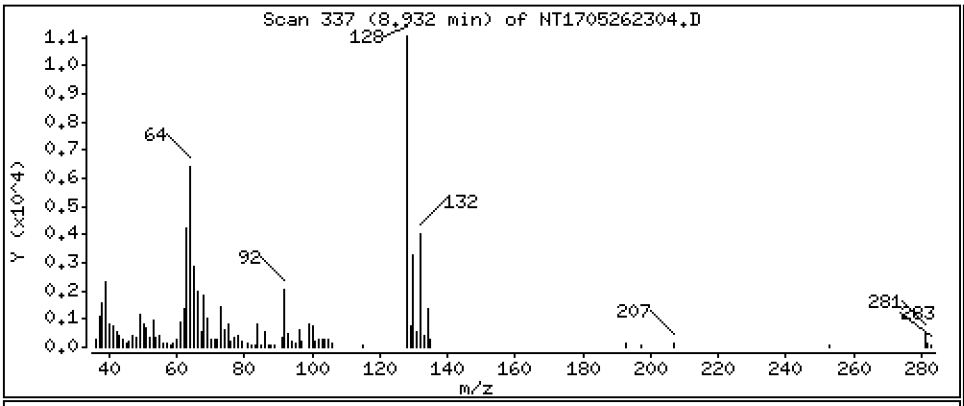
Operator: VTS

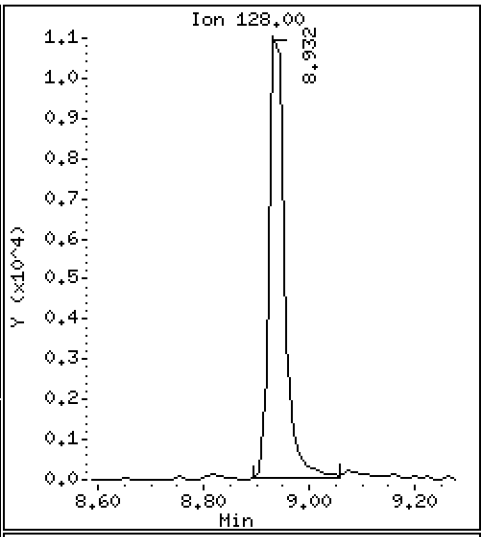
Column phase: ZB-5msi

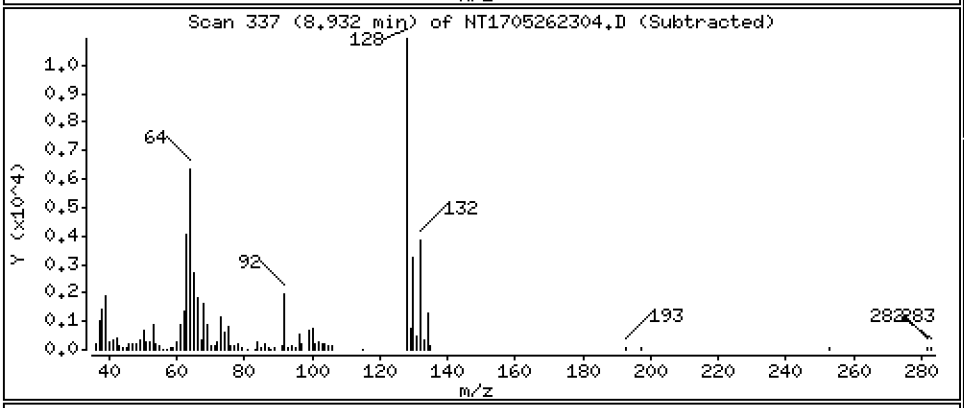
Column diameter: 0.25

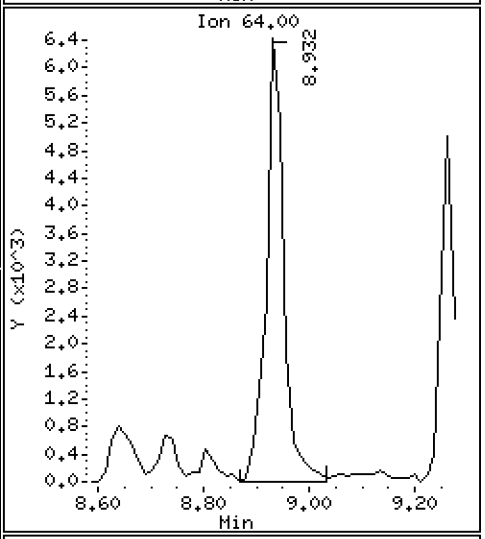
6 2-Chlorophenol

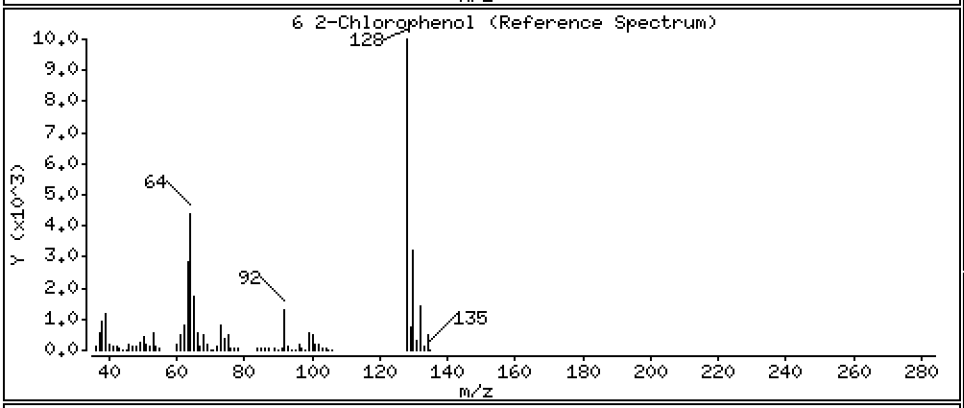
Concentration: 0.1888 ug/mL

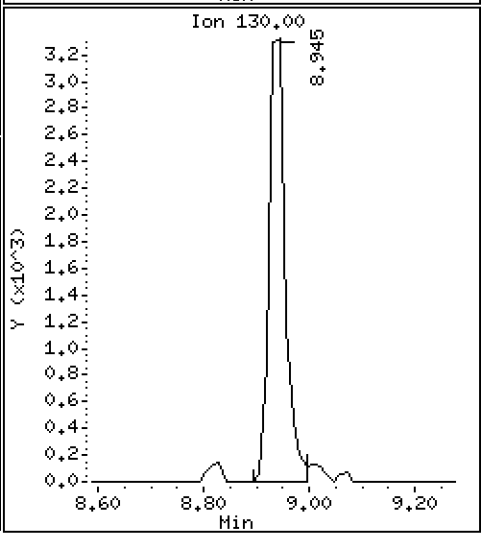


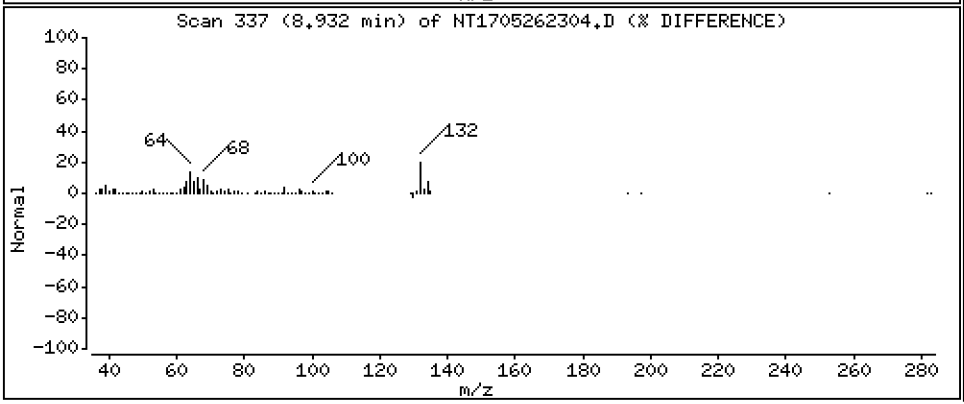












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

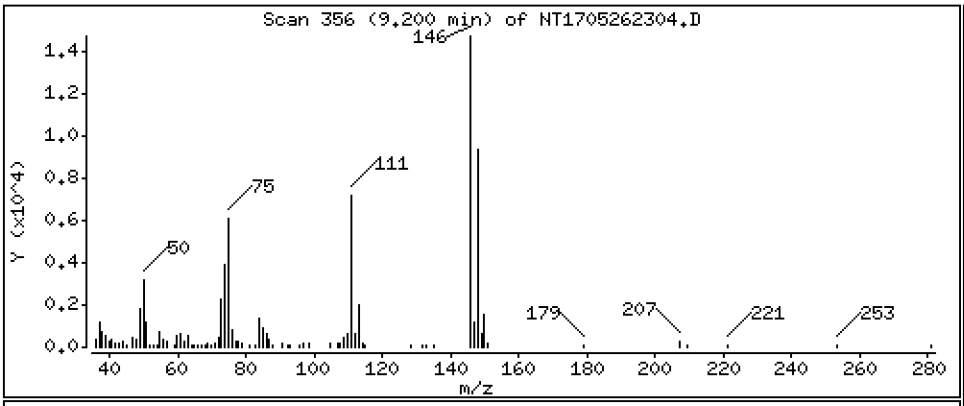
Operator: VTS

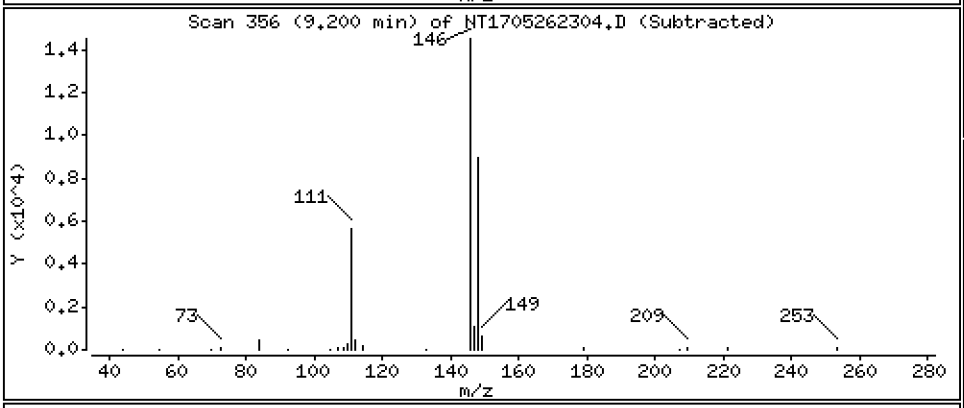
Column phase: ZB-5msi

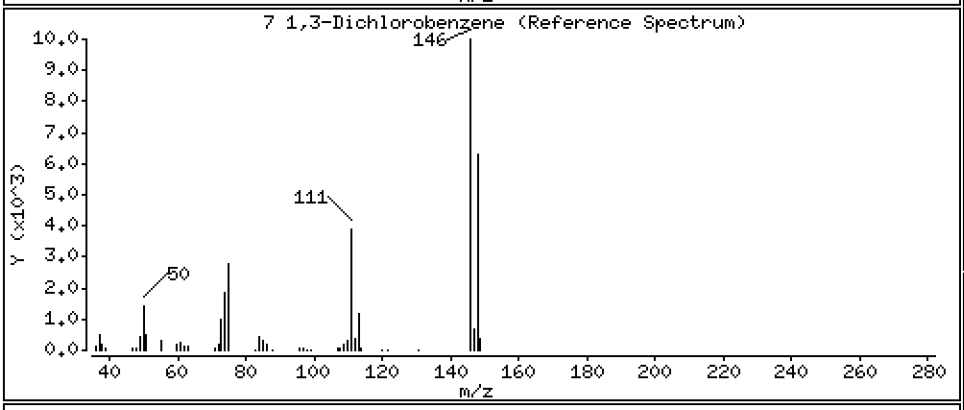
Column diameter: 0.25

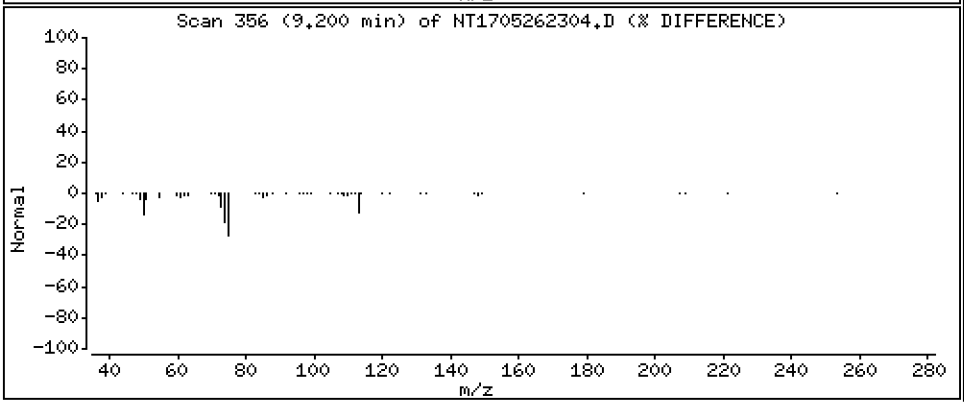
7 1,3-Dichlorobenzene

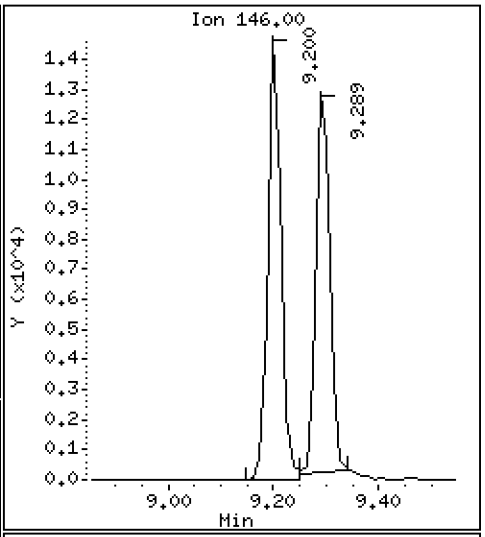
Concentration: 0.2088 ug/mL

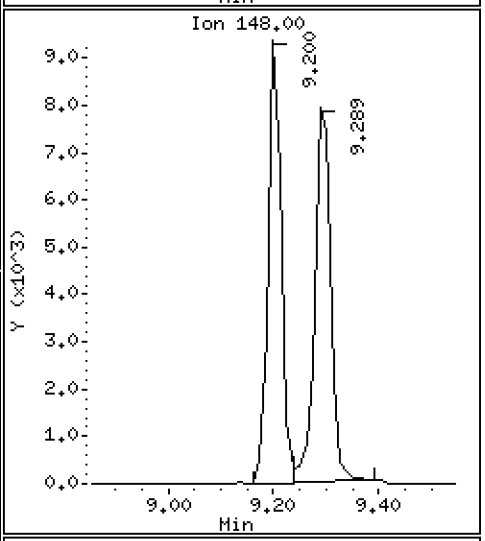


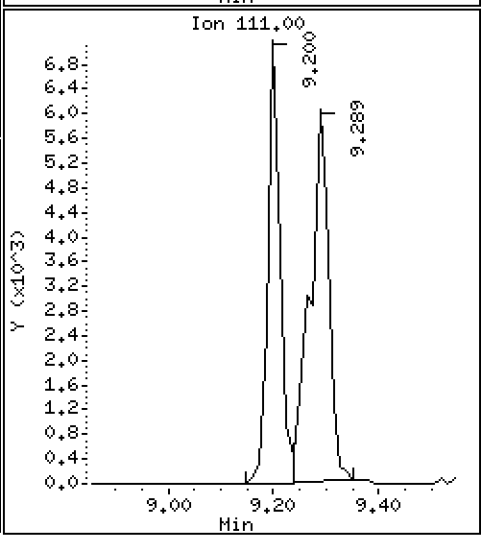












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

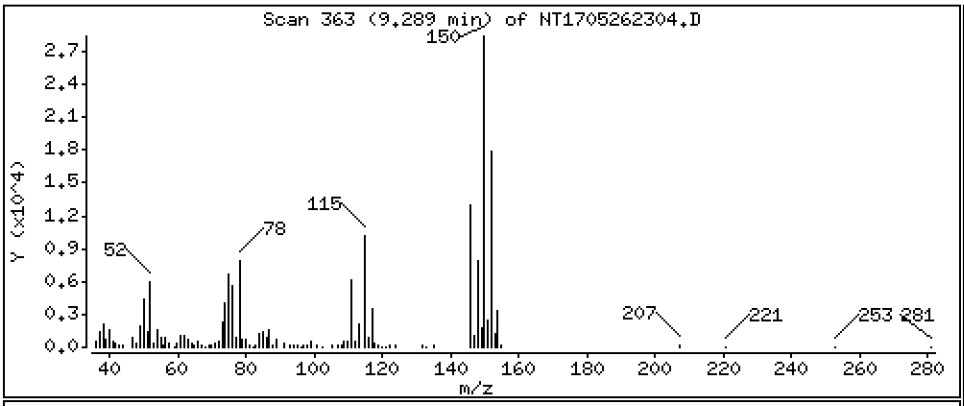
Operator: VTS

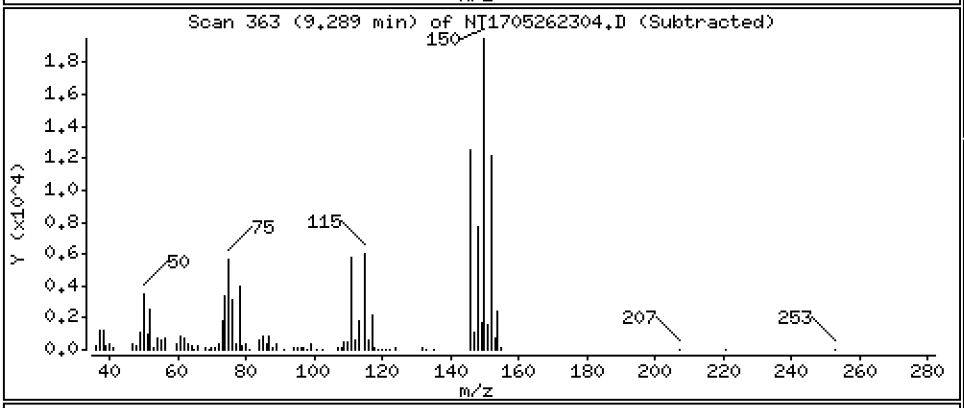
Column phase: ZB-5msi

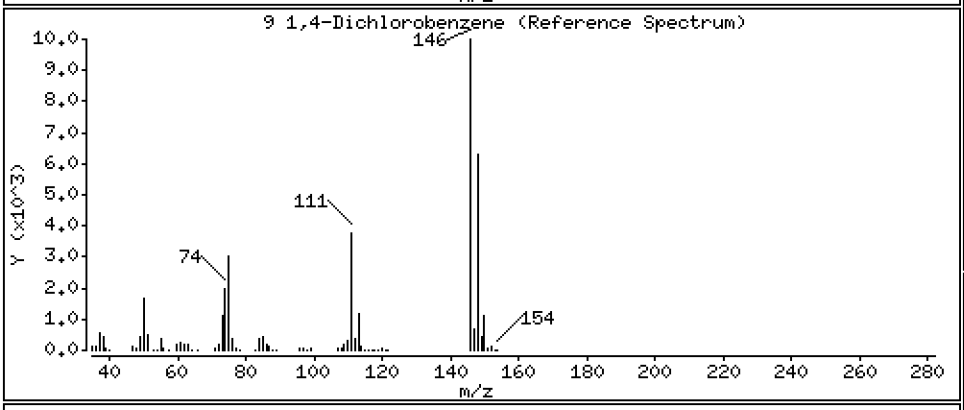
Column diameter: 0.25

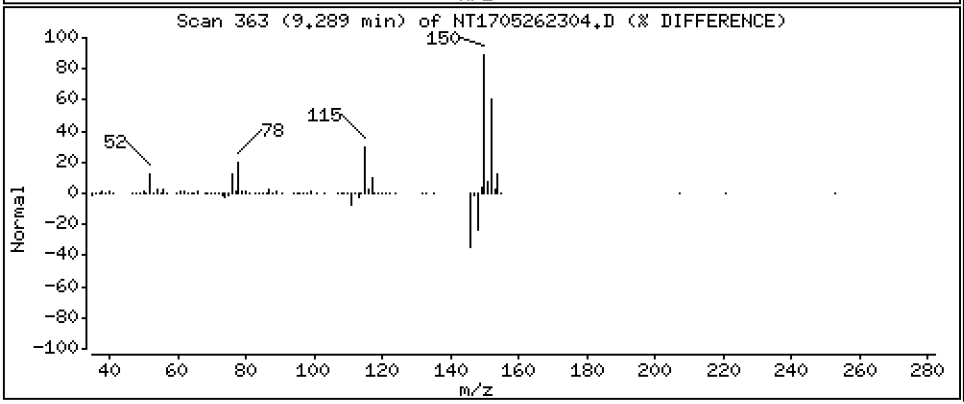
9 1,4-Dichlorobenzene

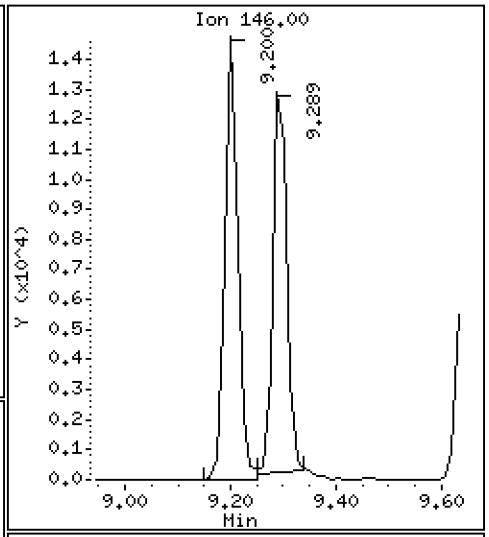
Concentration: 0.1906 ug/mL

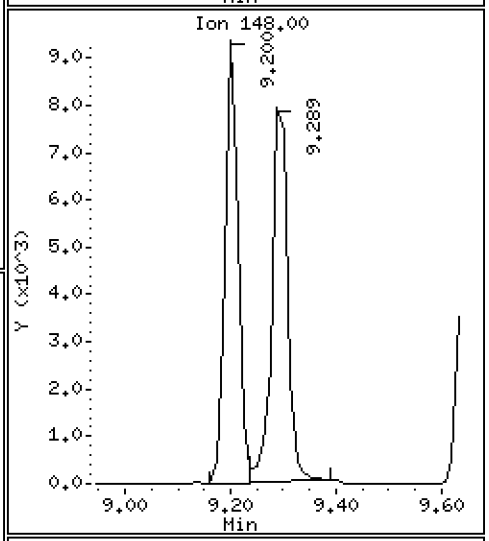


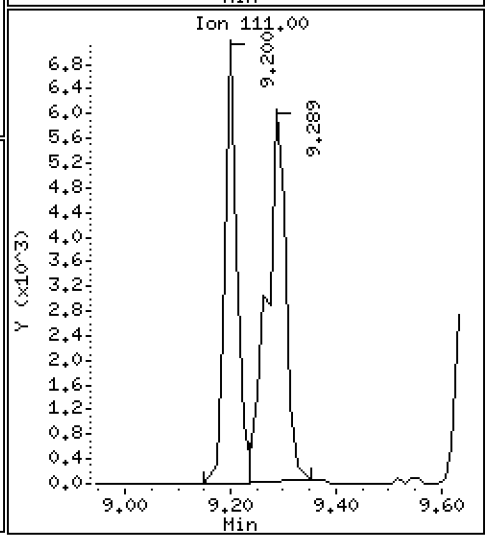












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

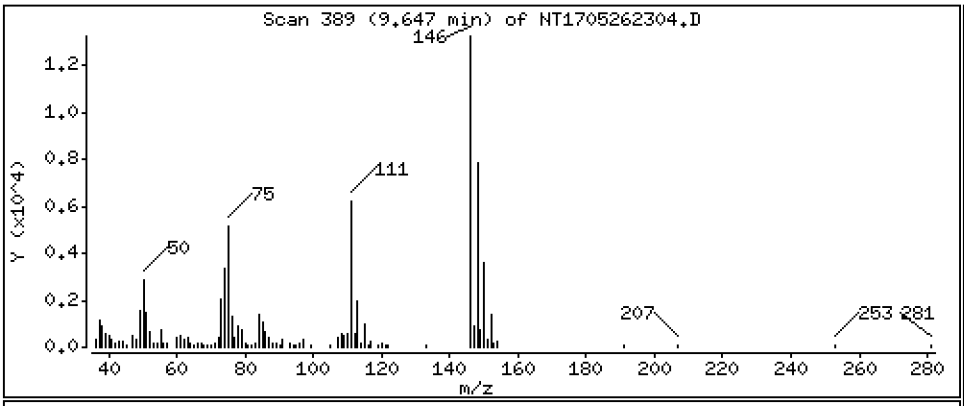
Operator: VTS

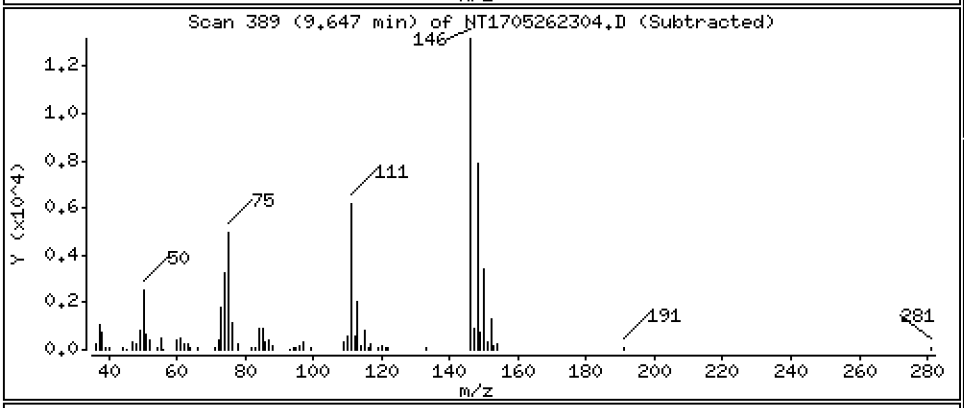
Column phase: ZB-5msi

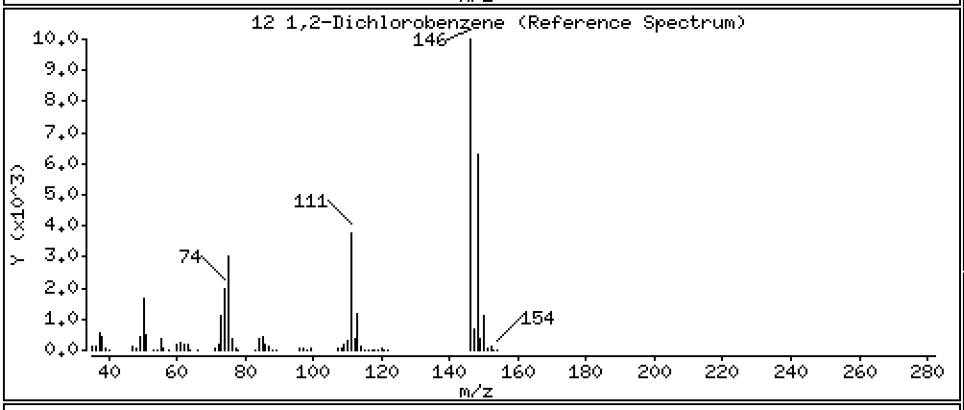
Column diameter: 0.25

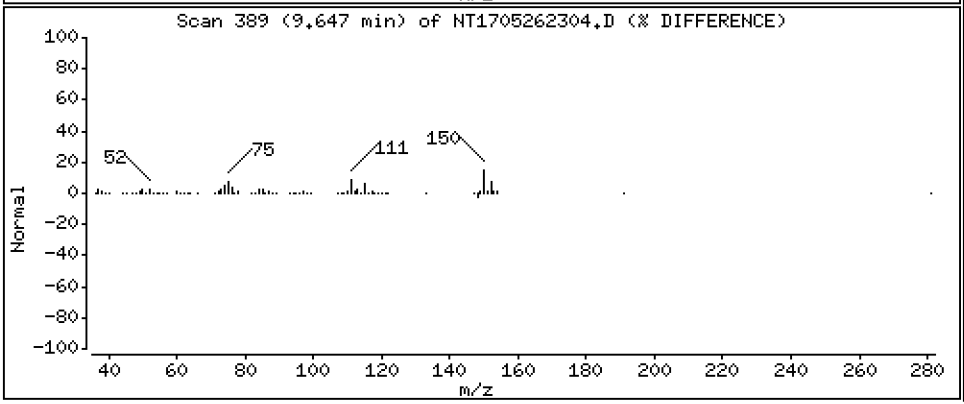
12 1,2-Dichlorobenzene

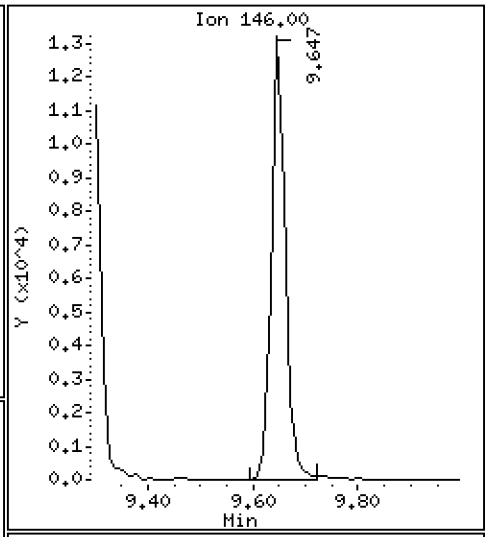
Concentration: 0.2120 ug/mL

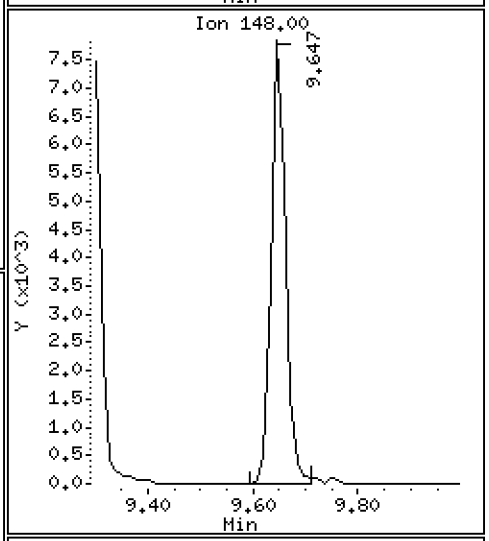


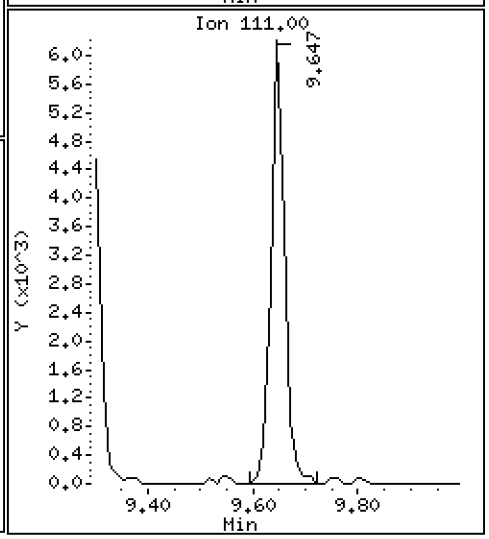












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

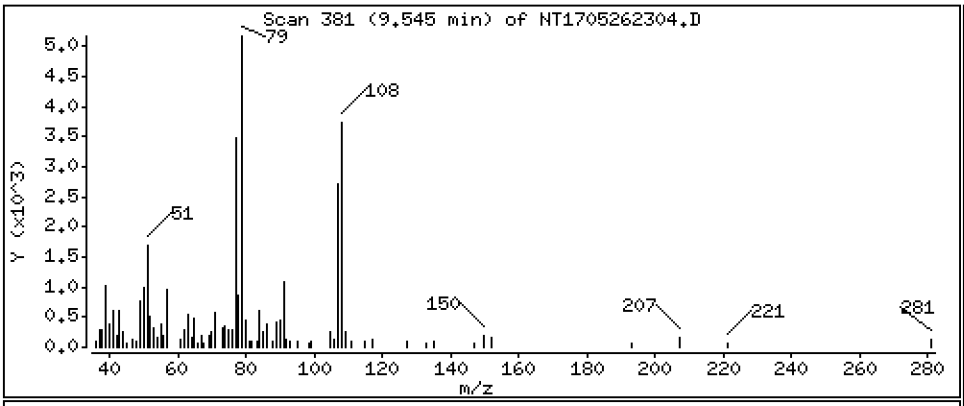
Operator: VTS

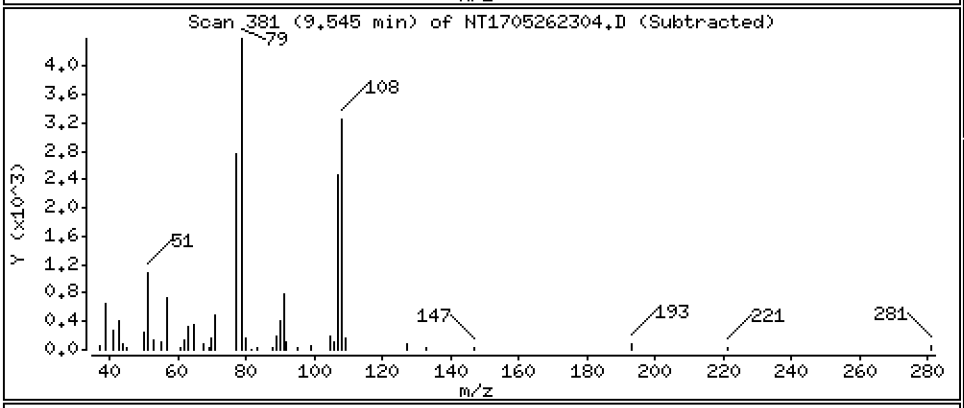
Column phase: ZB-5msi

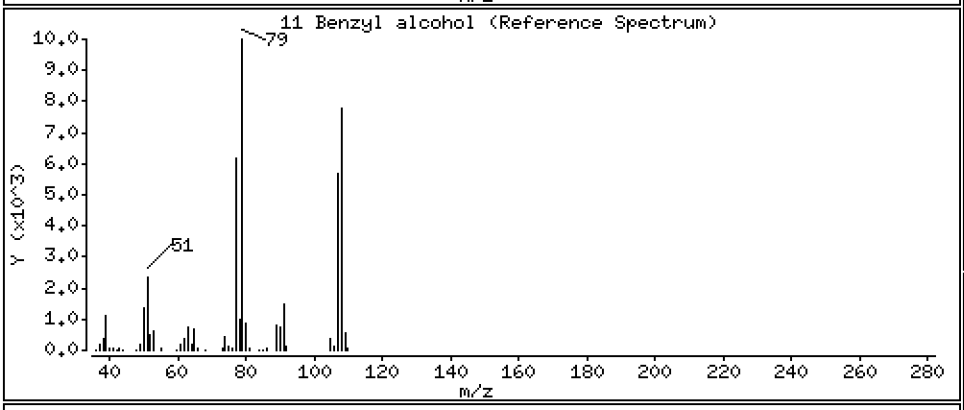
Column diameter: 0.25

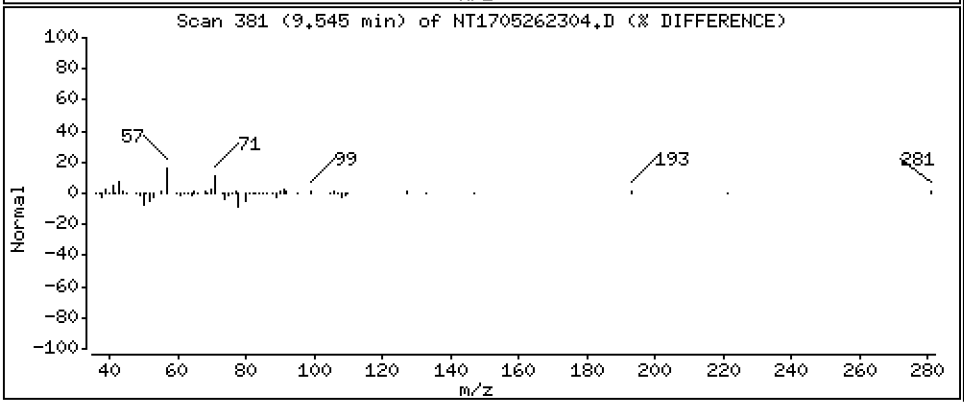
11 Benzyl alcohol

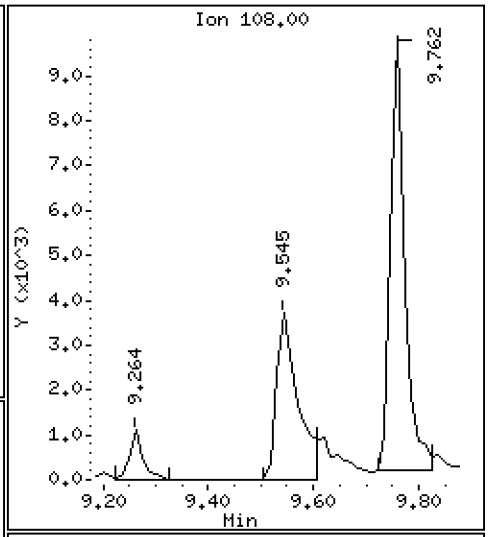
Concentration: 0.1586 ug/mL

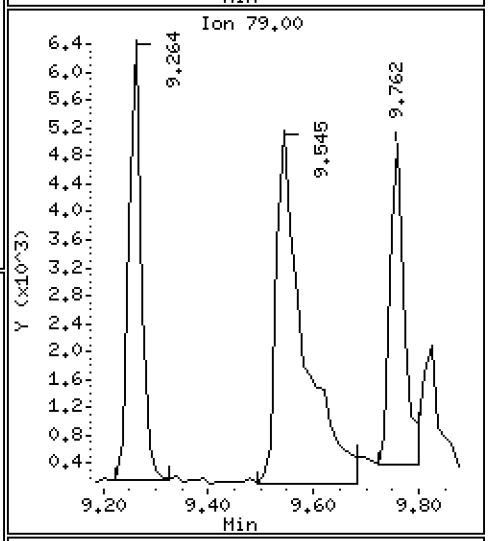


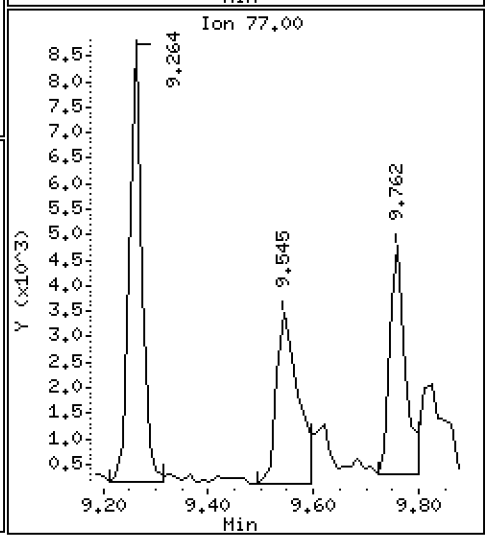












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

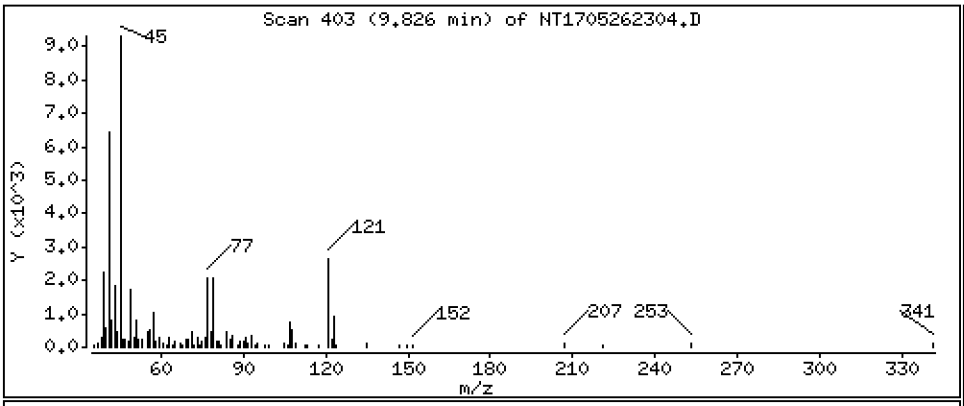
Operator: VTS

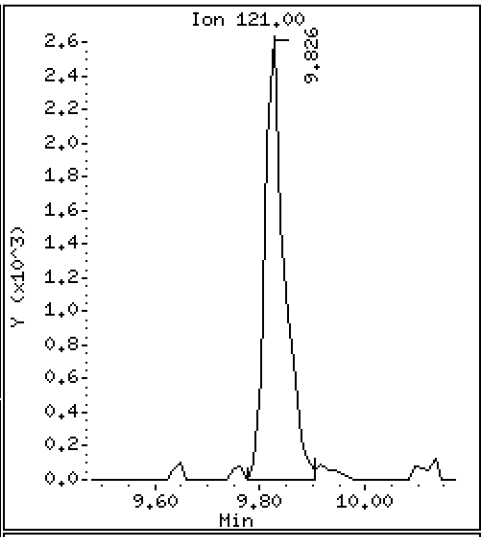
Column phase: ZB-5msi

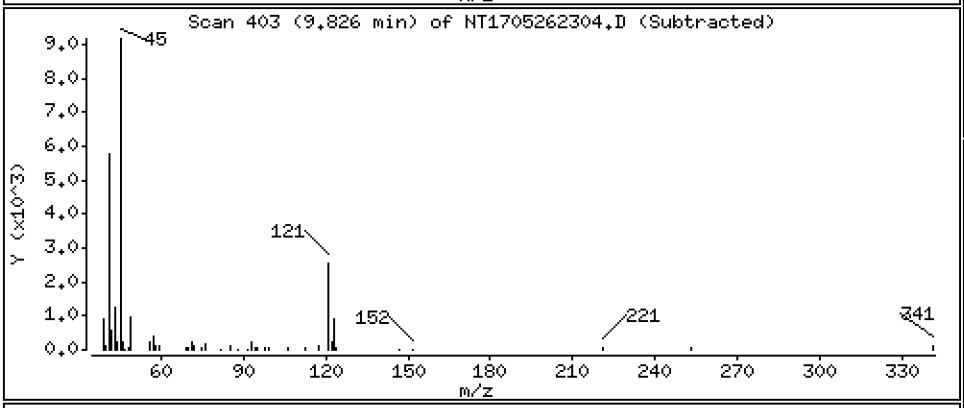
Column diameter: 0.25

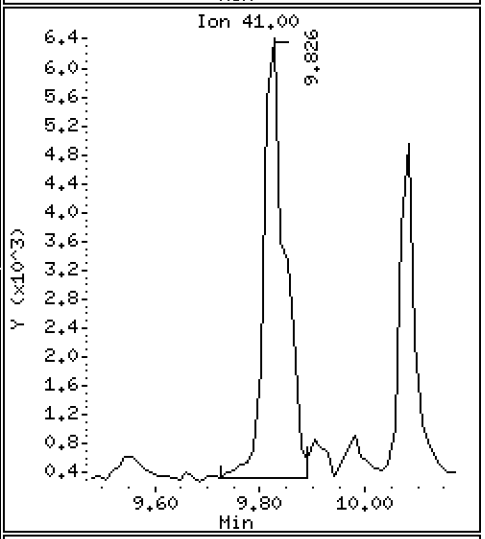
14 2,2'-oxybis(1-Chloropropane)

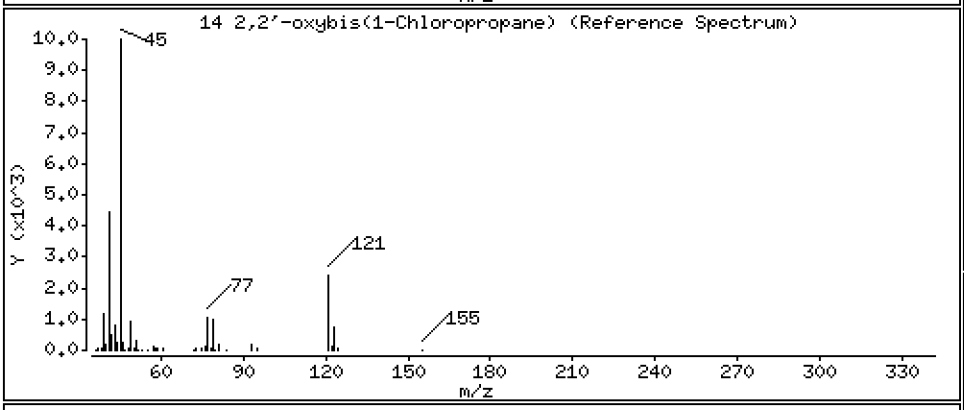
Concentration: 0.2123 ug/mL

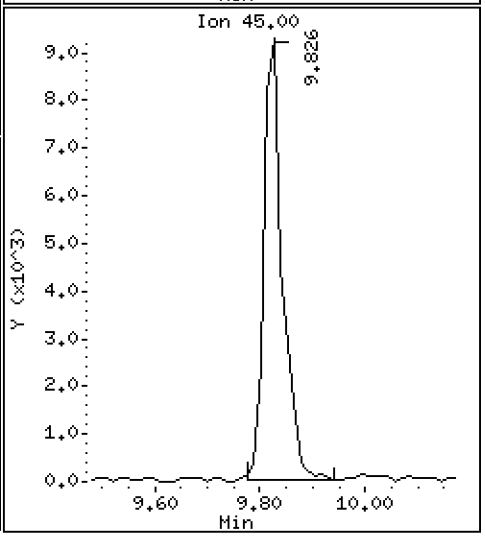


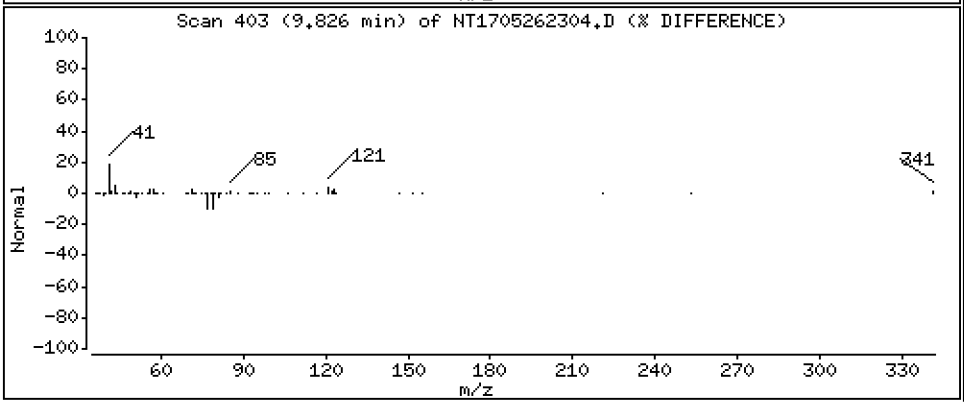












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

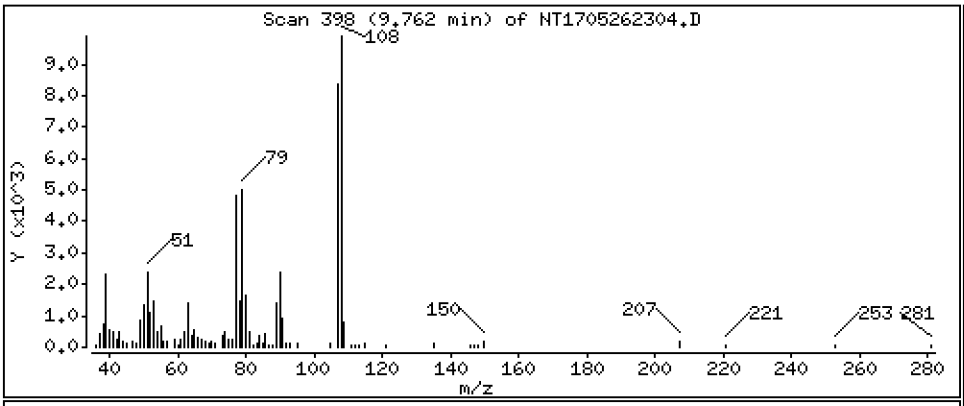
Operator: VTS

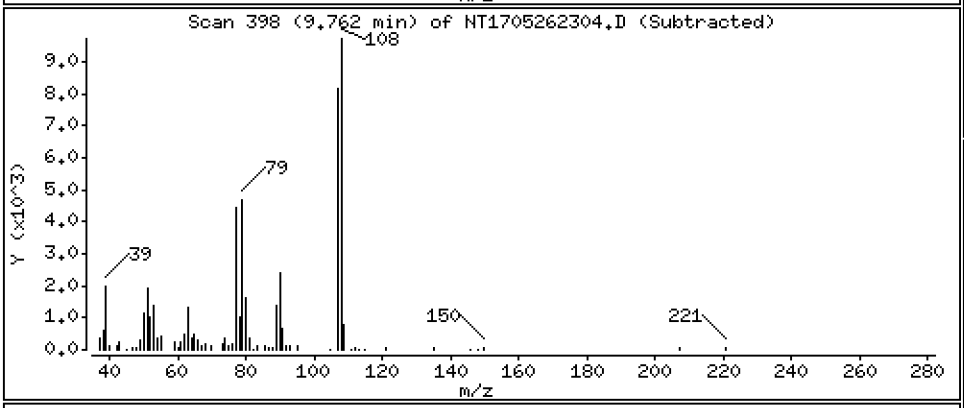
Column phase: ZB-5msi

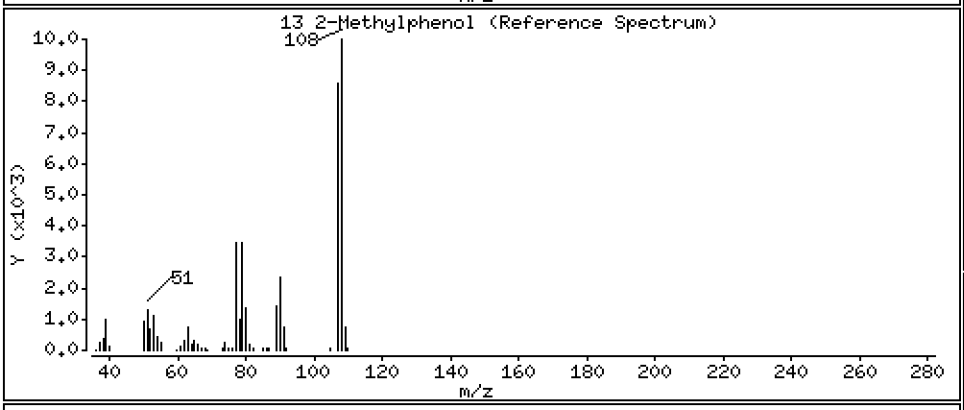
Column diameter: 0.25

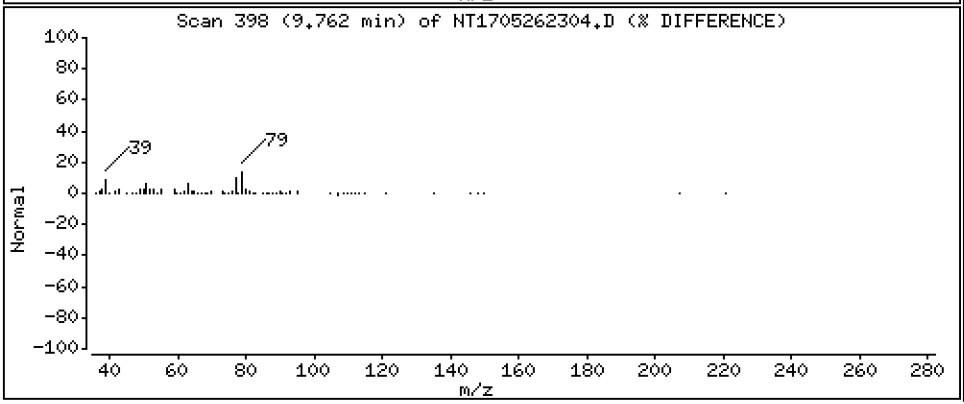
13 2-Methylphenol

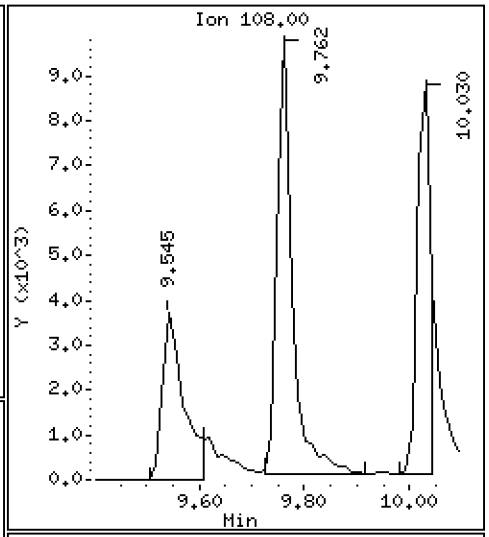
Concentration: 0.1868 ug/mL

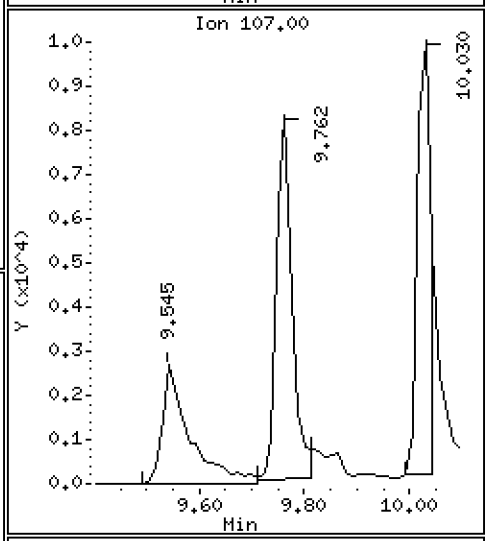


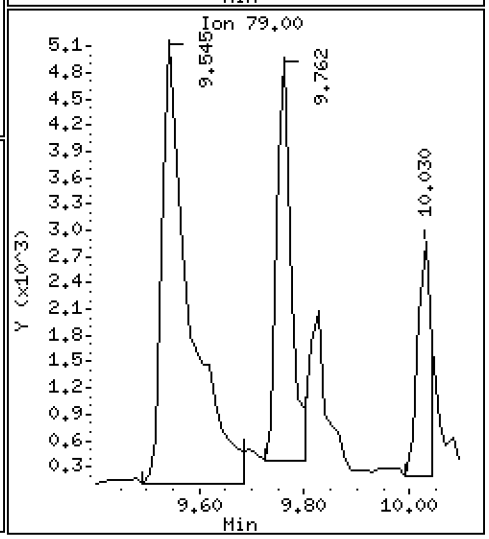












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

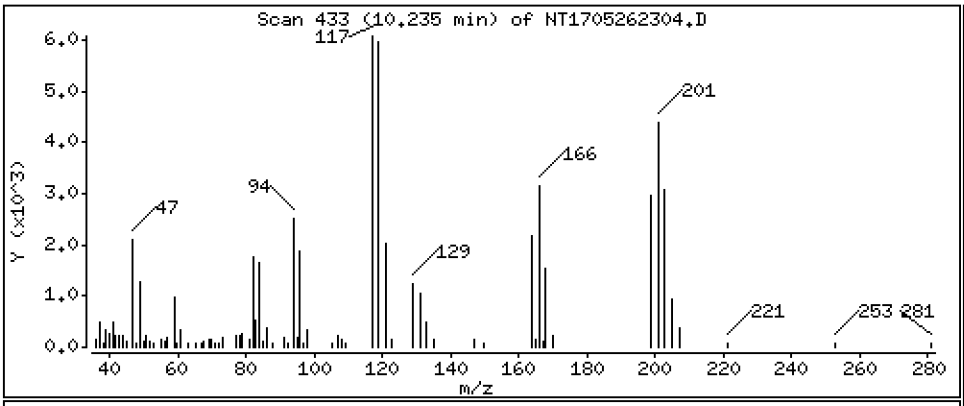
Operator: VTS

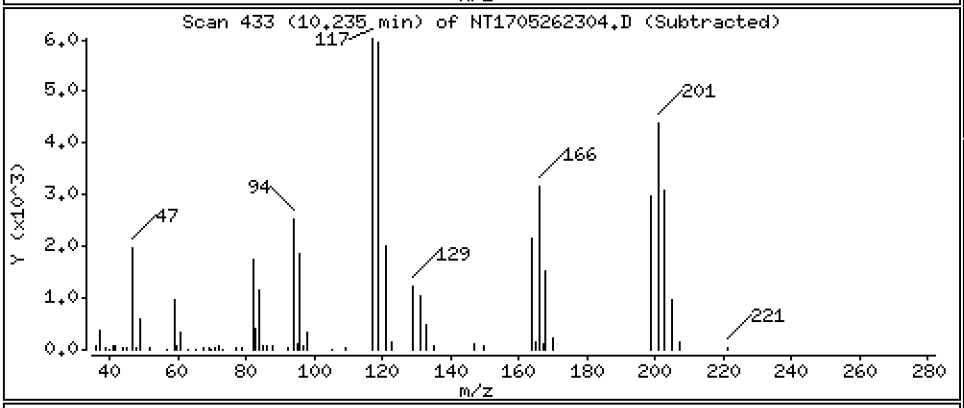
Column phase: ZB-5msi

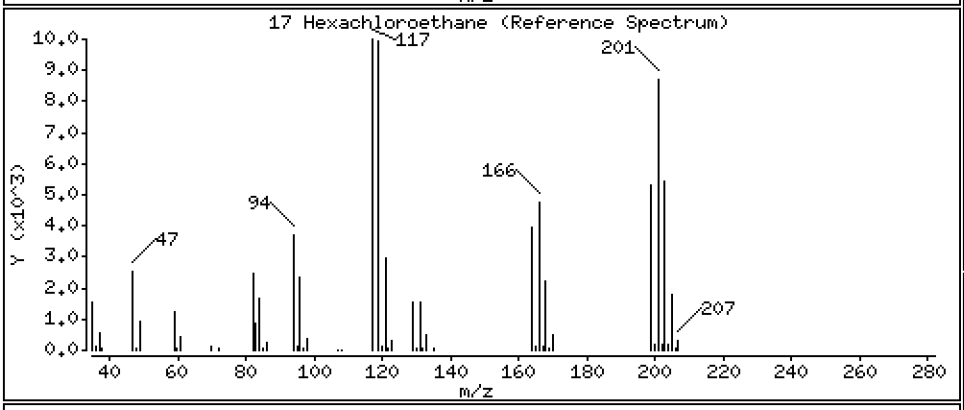
Column diameter: 0.25

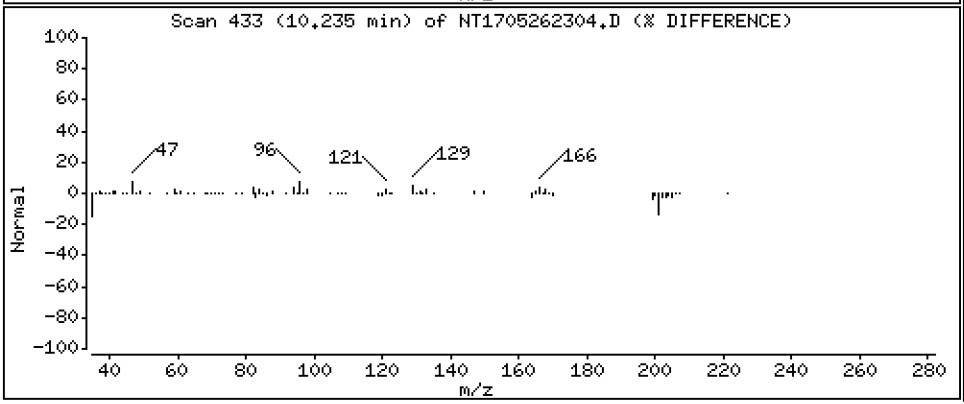
17 Hexachloroethane

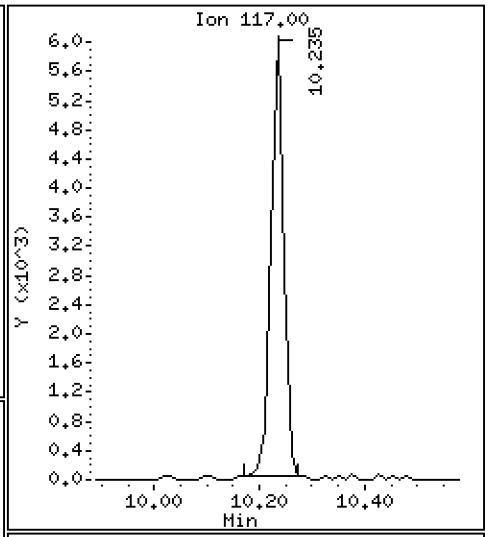
Concentration: 0.2061 ug/mL

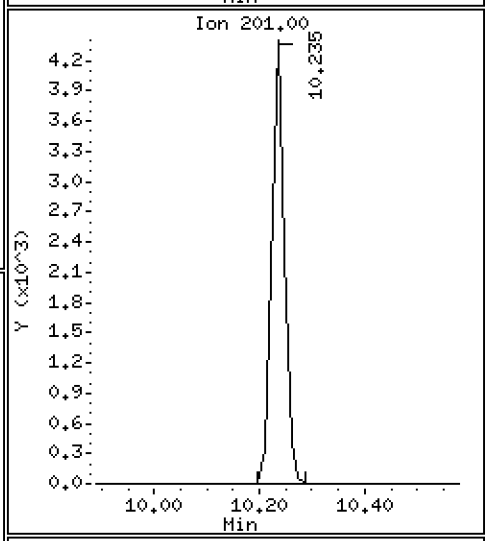


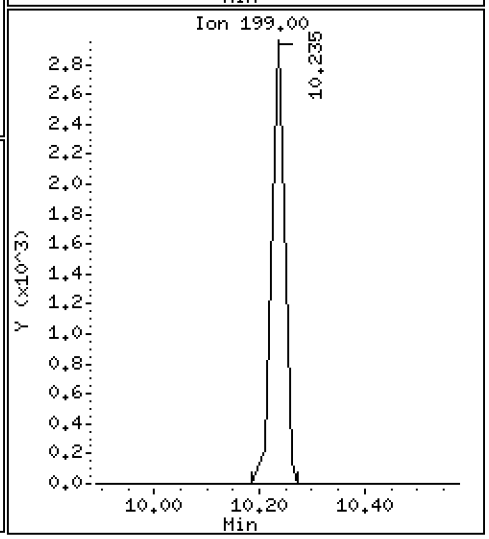












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

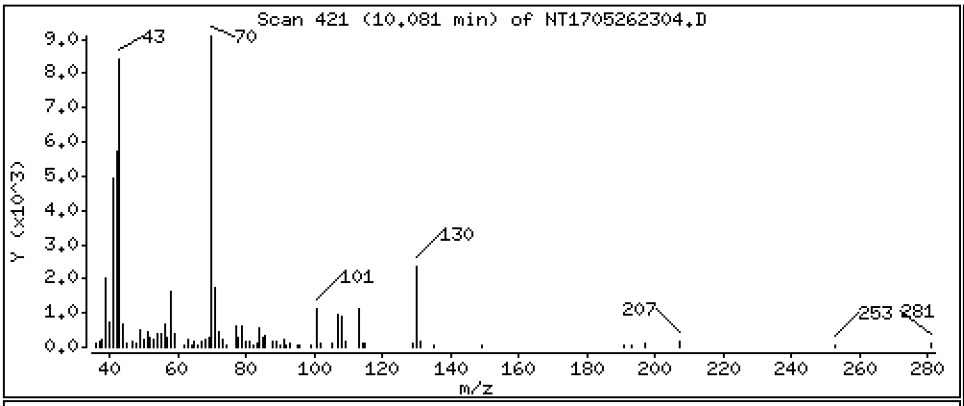
Operator: VTS

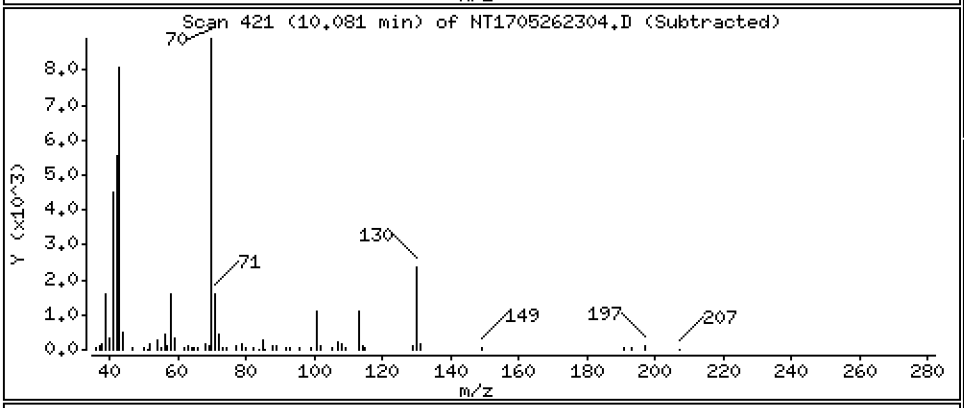
Column phase: ZB-5msi

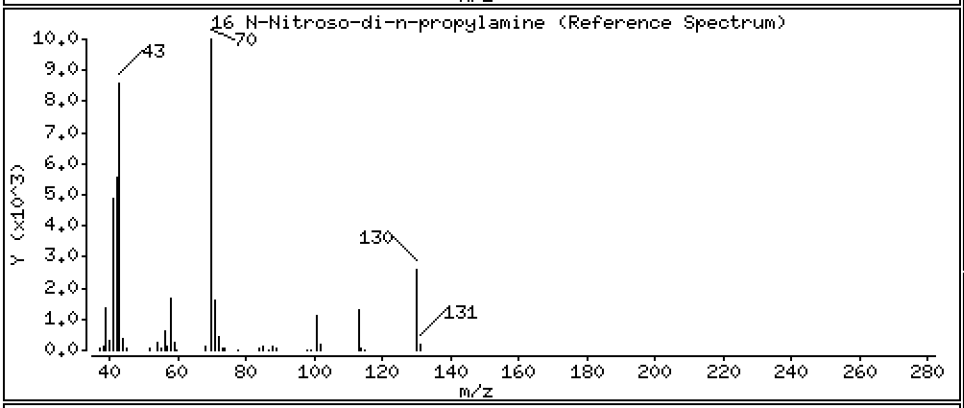
Column diameter: 0.25

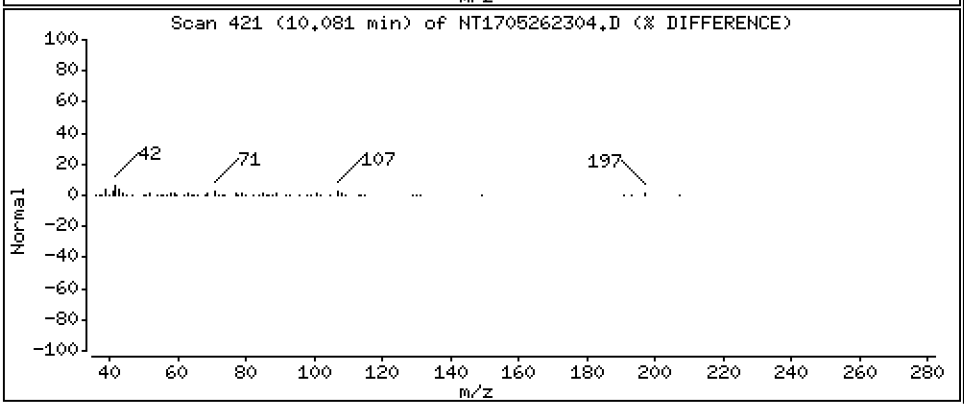
16 N-Nitroso-di-n-propylamine

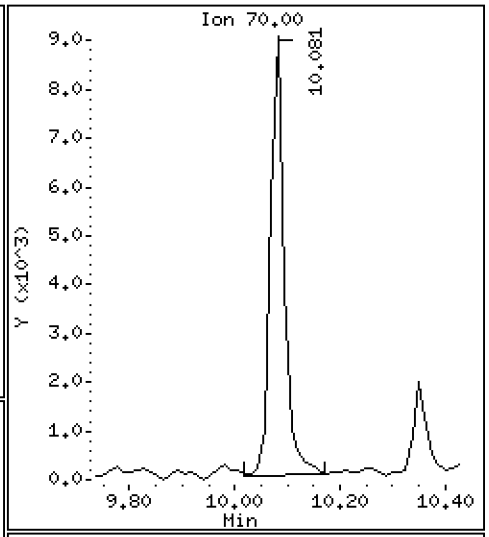
Concentration: 0.2032 ug/mL

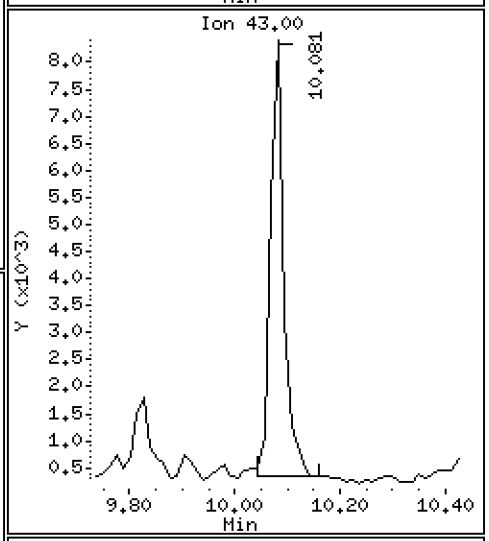


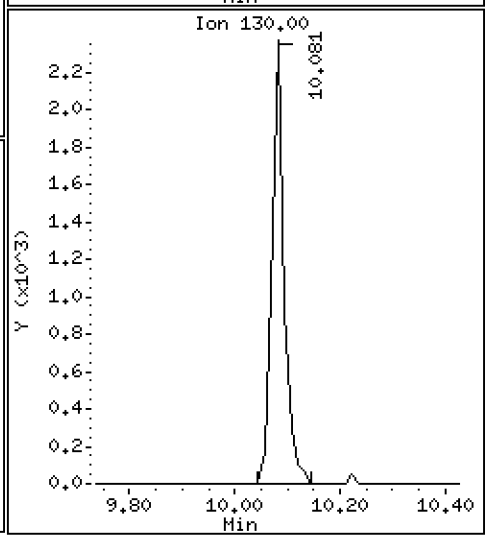












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

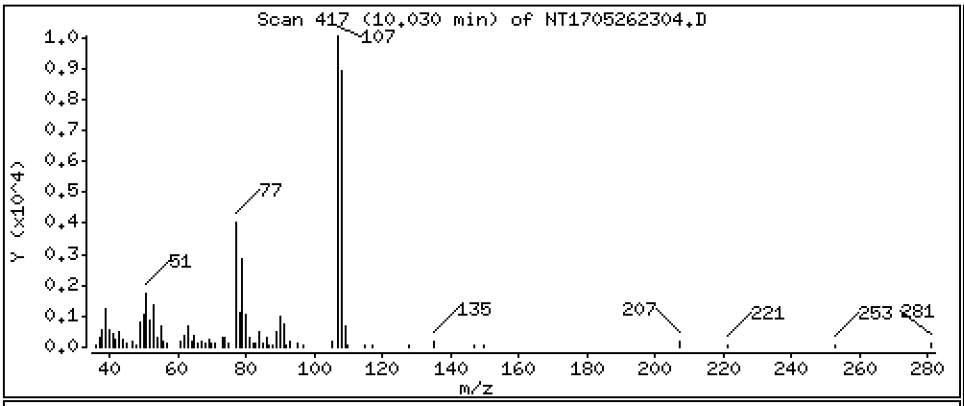
Operator: VTS

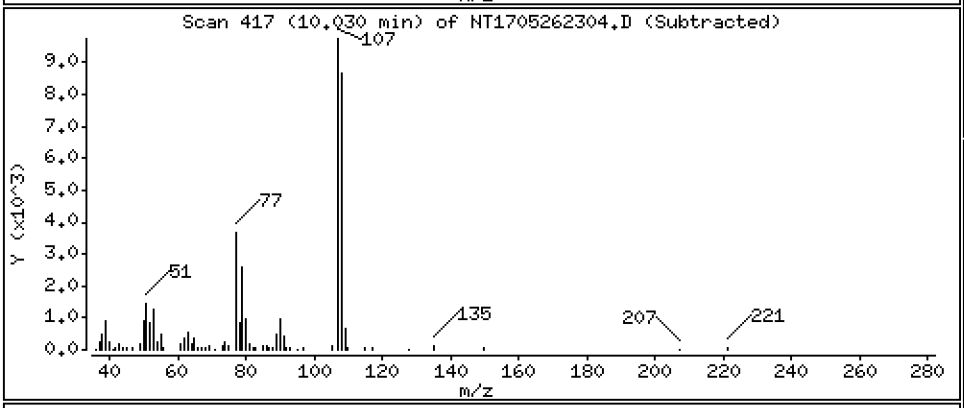
Column phase: ZB-5msi

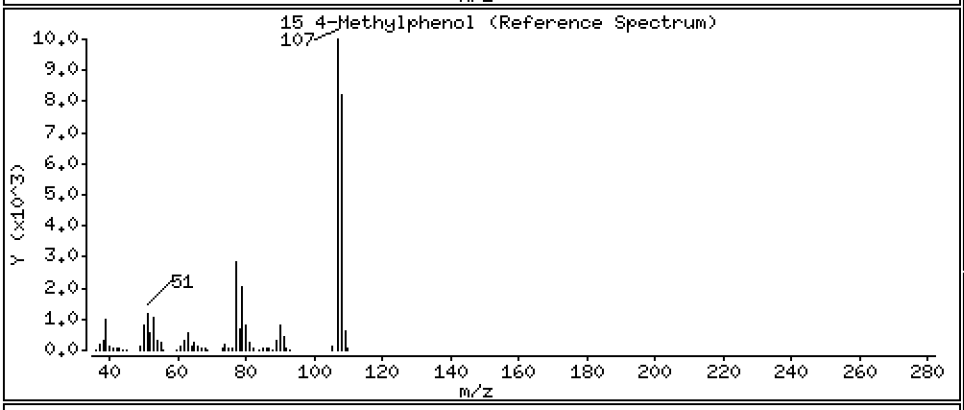
Column diameter: 0.25

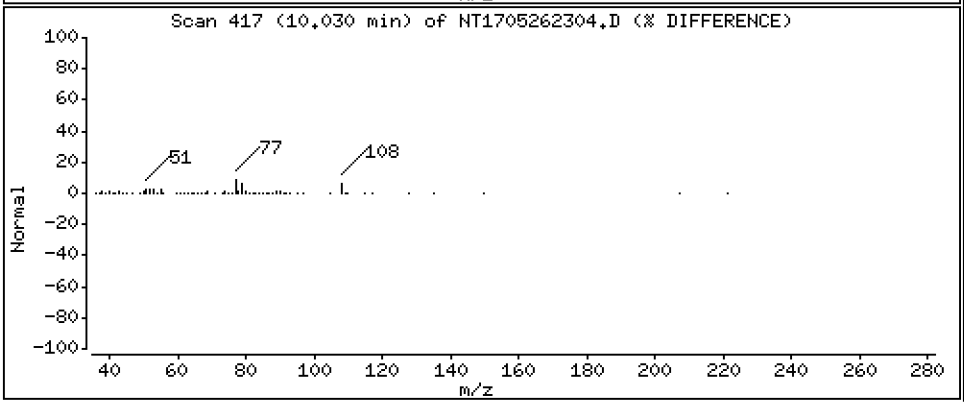
15 4-Methylphenol

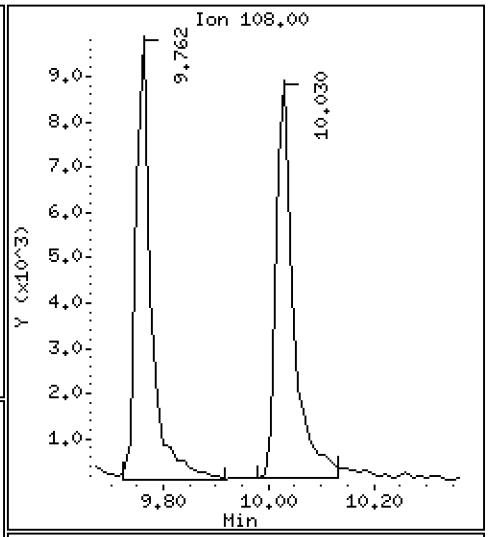
Concentration: 0.1869 ug/mL

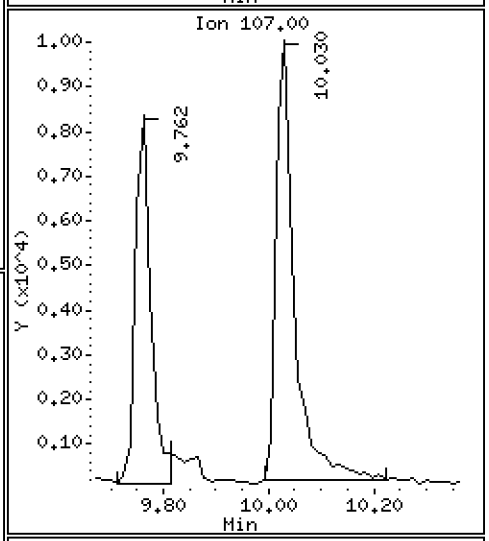


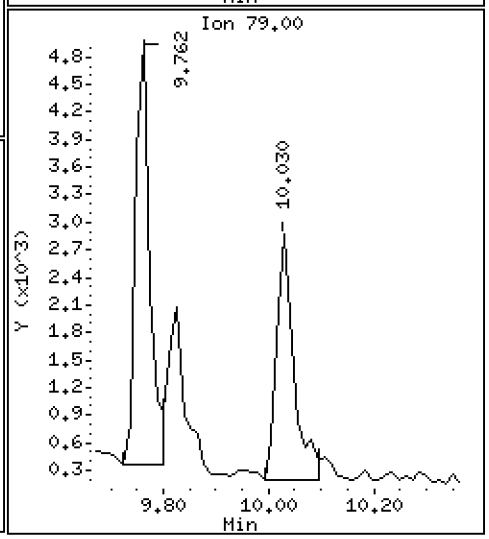












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

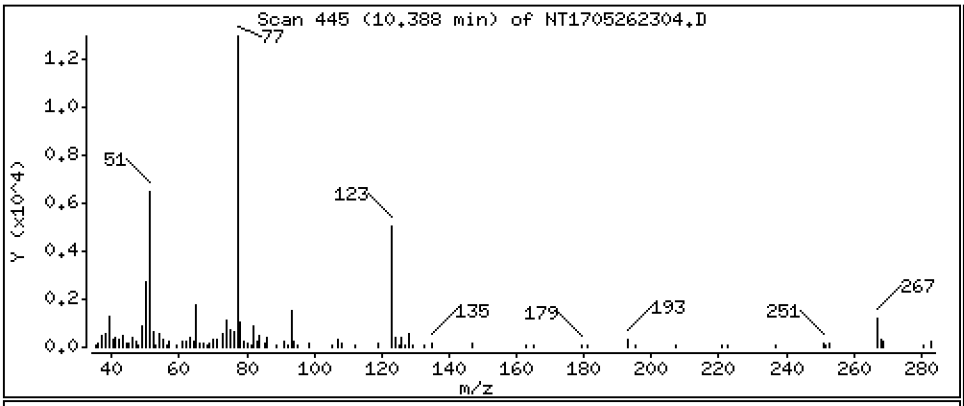
Operator: VTS

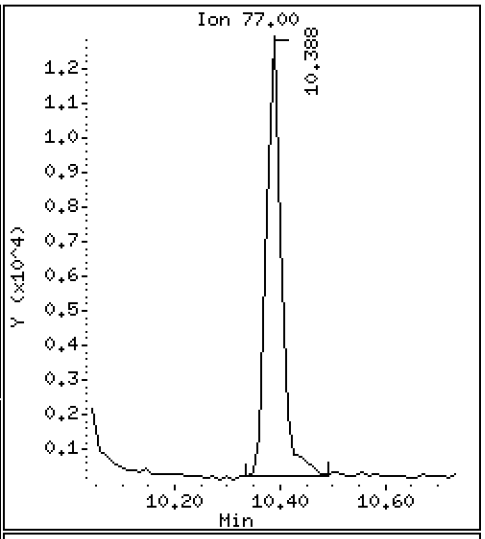
Column phase: ZB-5msi

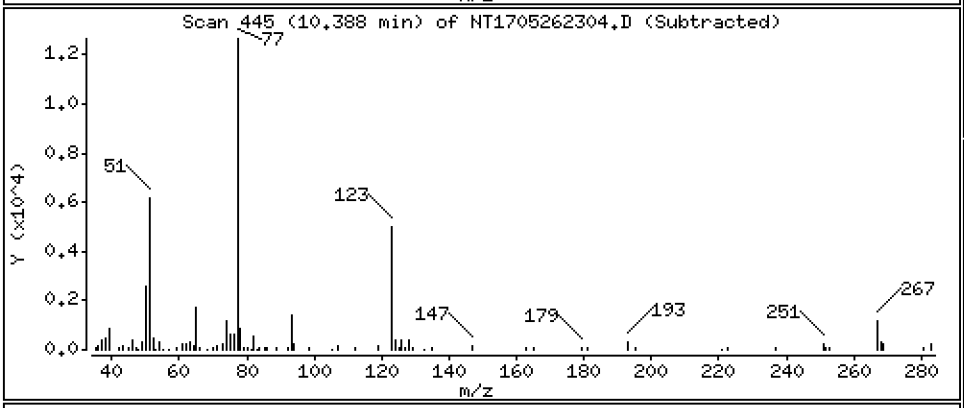
Column diameter: 0.25

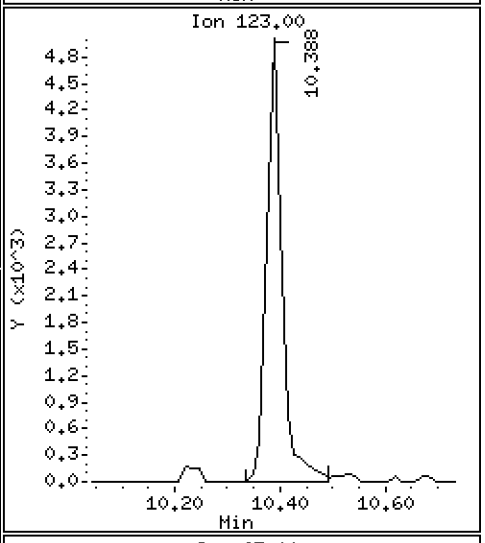
19 Nitrobenzene

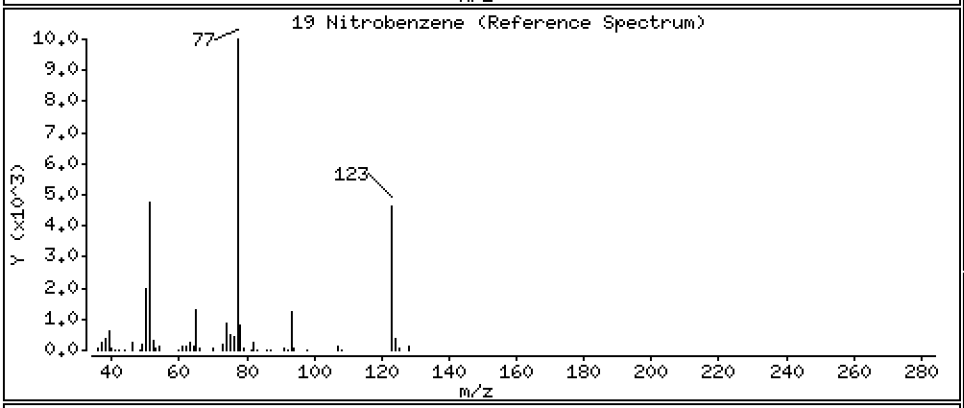
Concentration: 0.1974 ug/mL

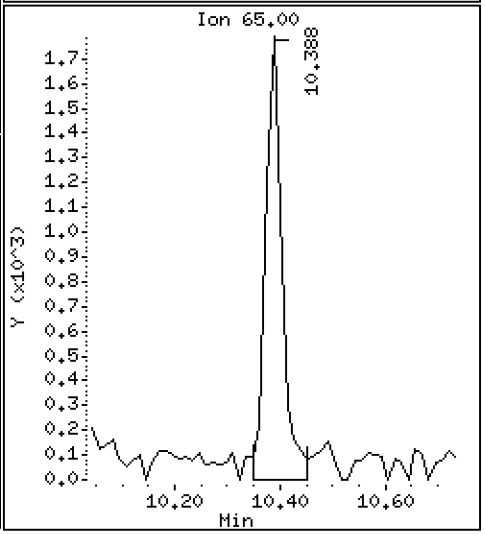


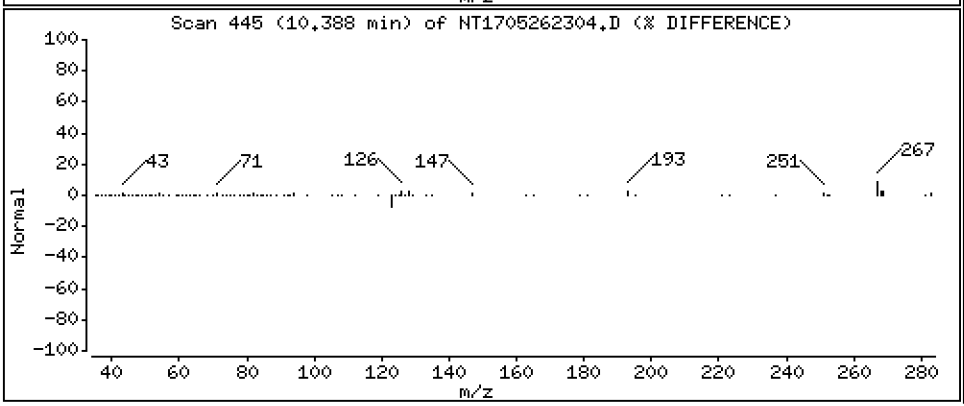












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

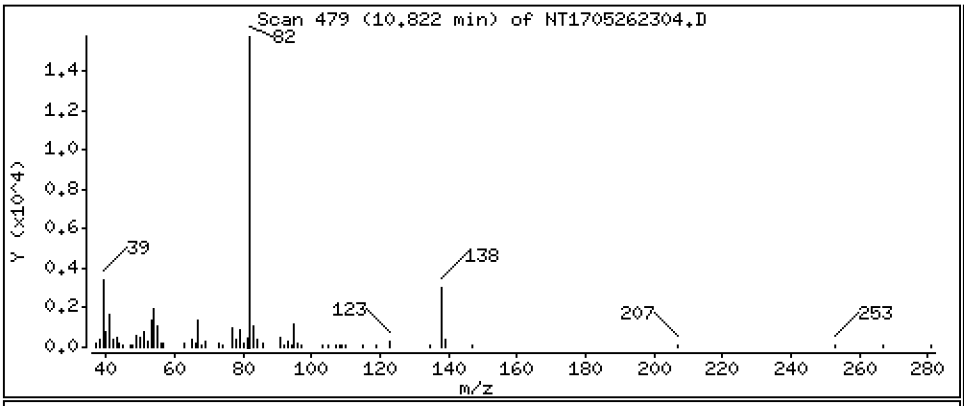
Operator: VTS

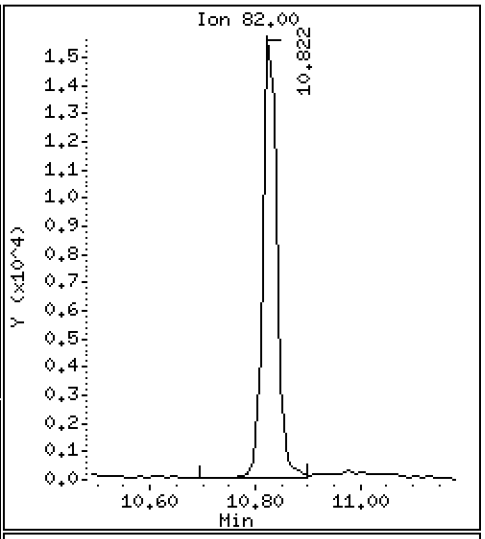
Column phase: ZB-5msi

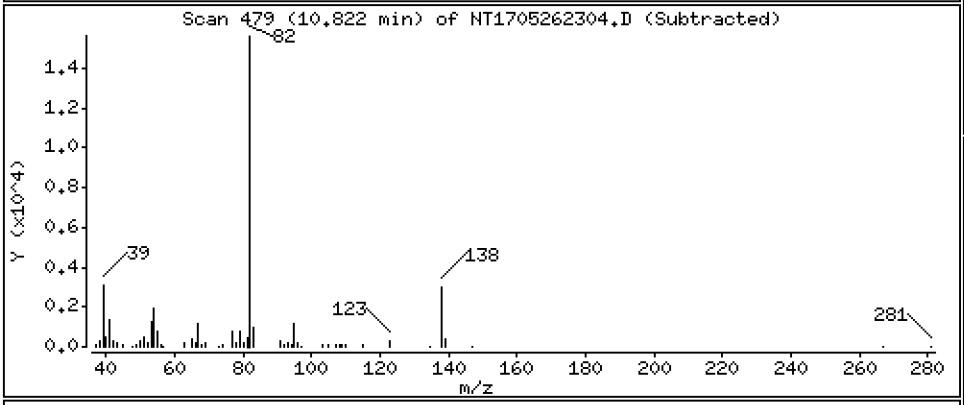
Column diameter: 0.25

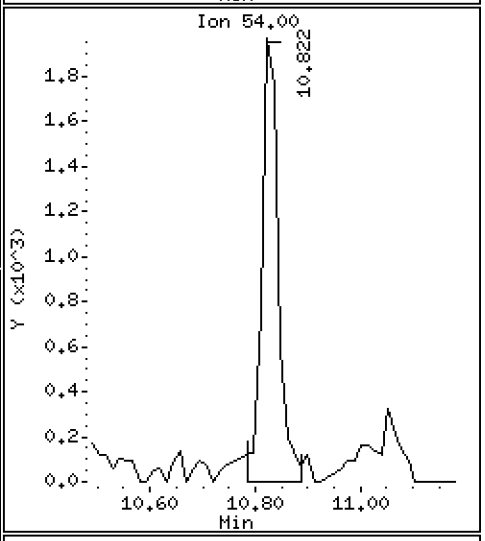
20 Isophorone

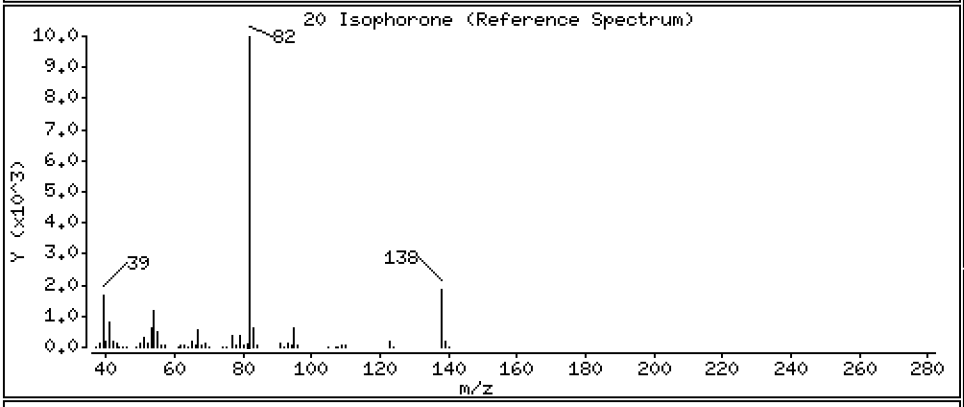
Concentration: 0.1762 ug/mL

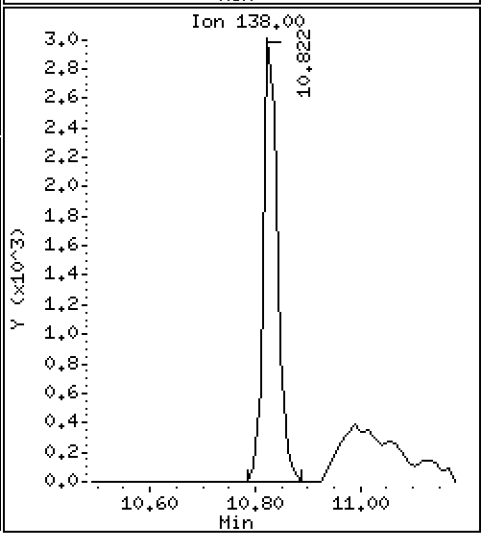


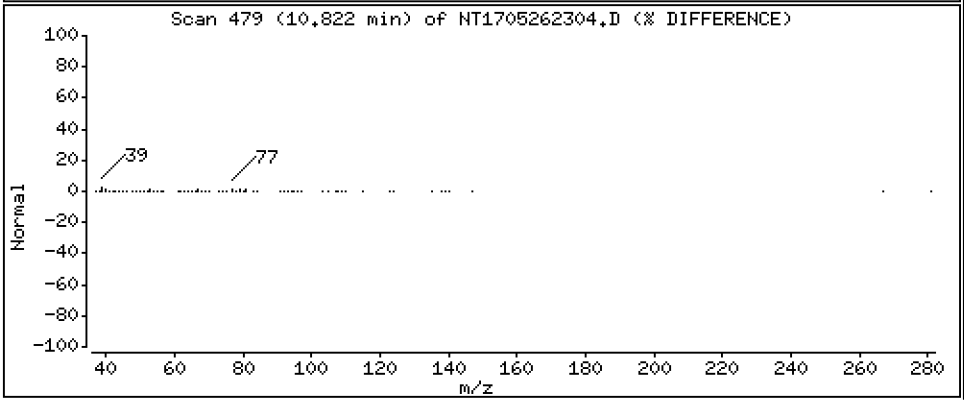












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

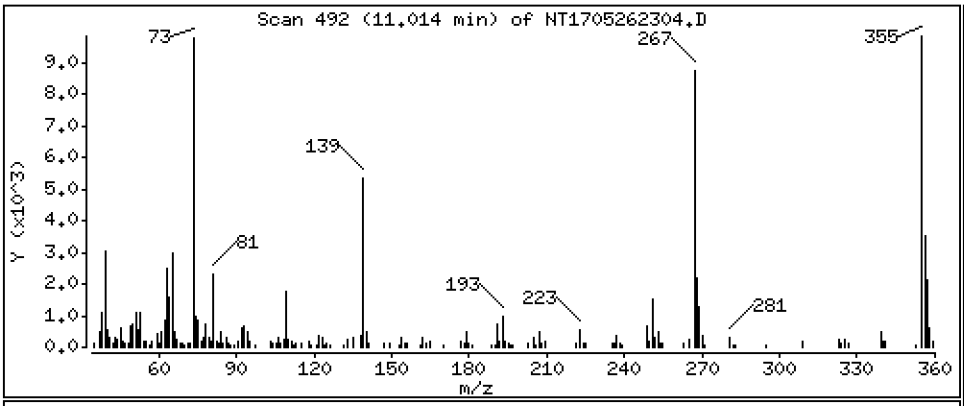
Operator: VTS

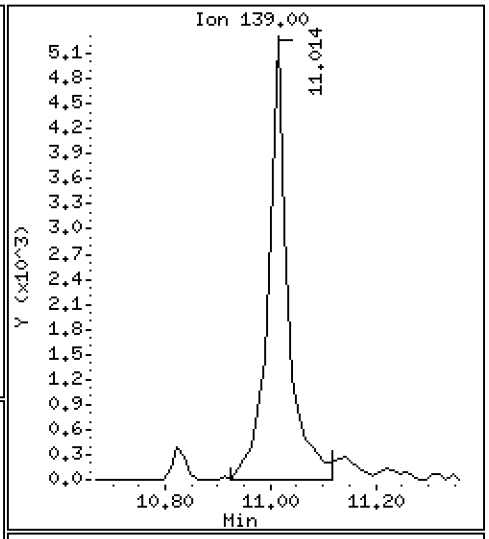
Column phase: ZB-5msi

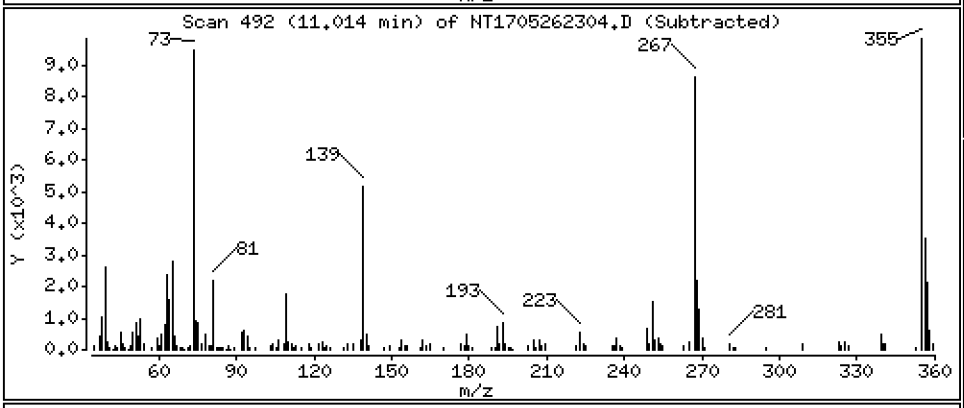
Column diameter: 0.25

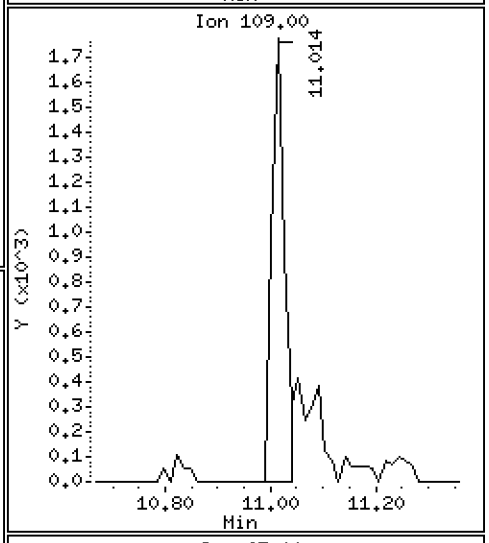
21 2-Nitrophenol

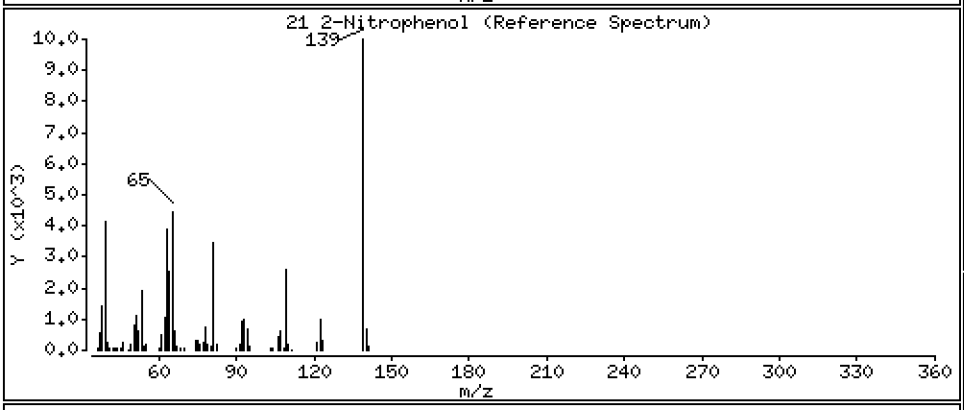
Concentration: 0.2610 ug/mL

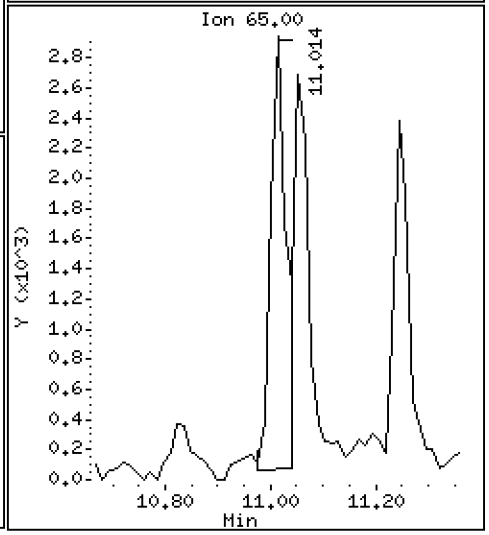


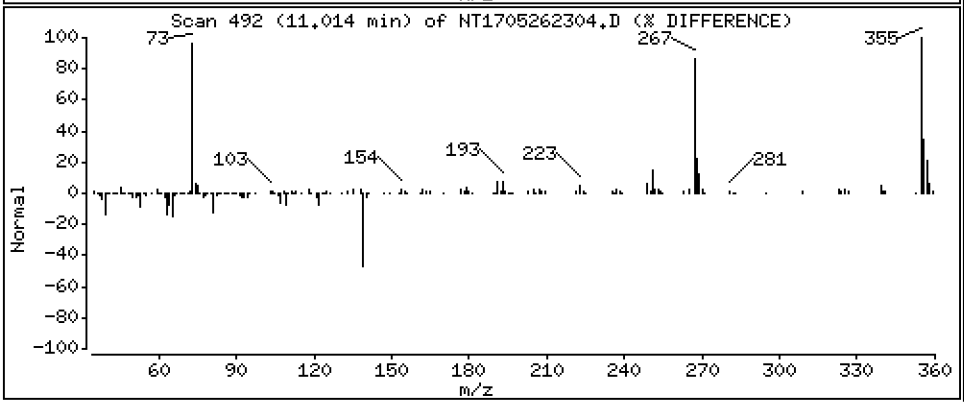












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

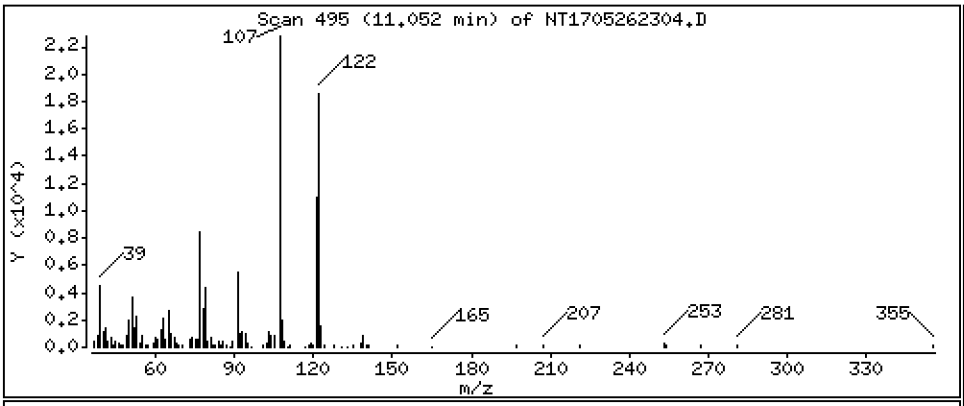
Operator: VTS

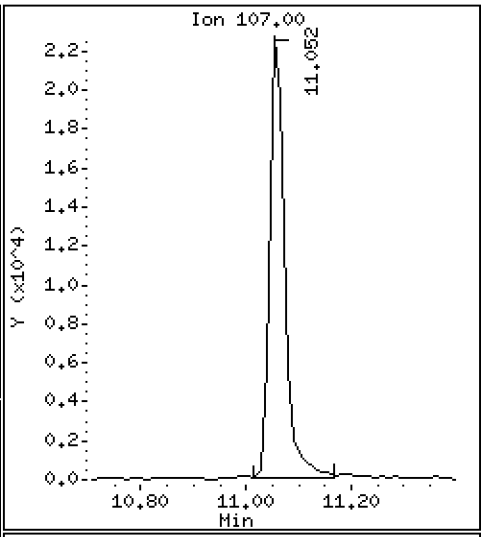
Column phase: ZB-5msi

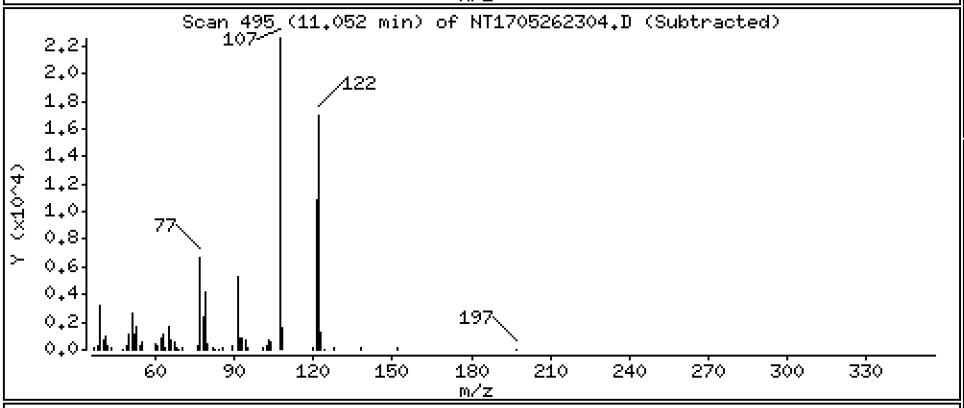
Column diameter: 0.25

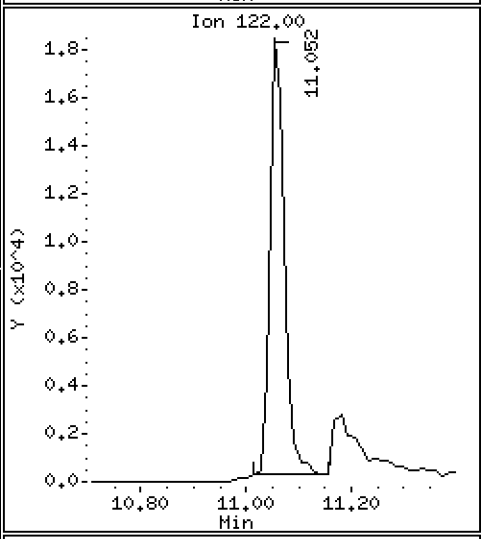
22 2,4-Dimethylphenol

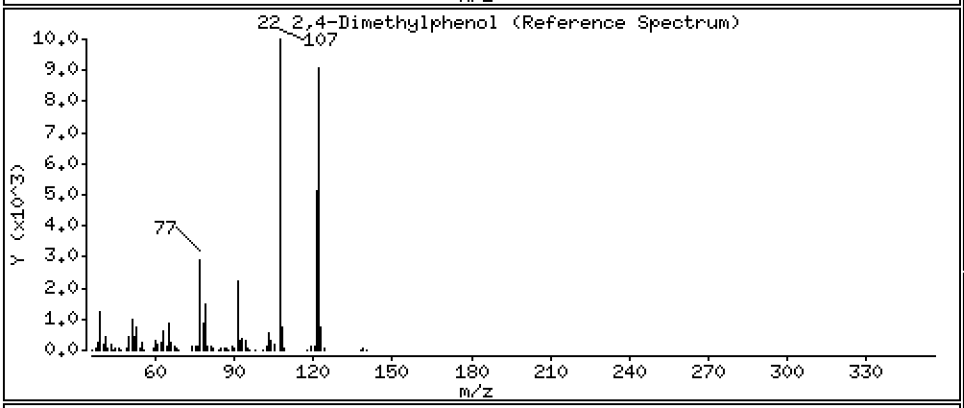
Concentration: 0.3870 ug/mL

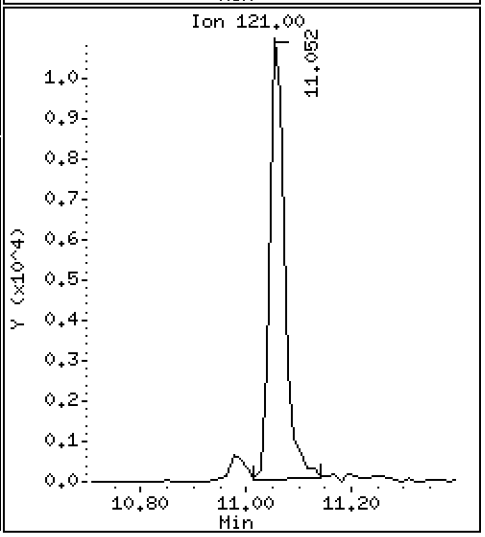


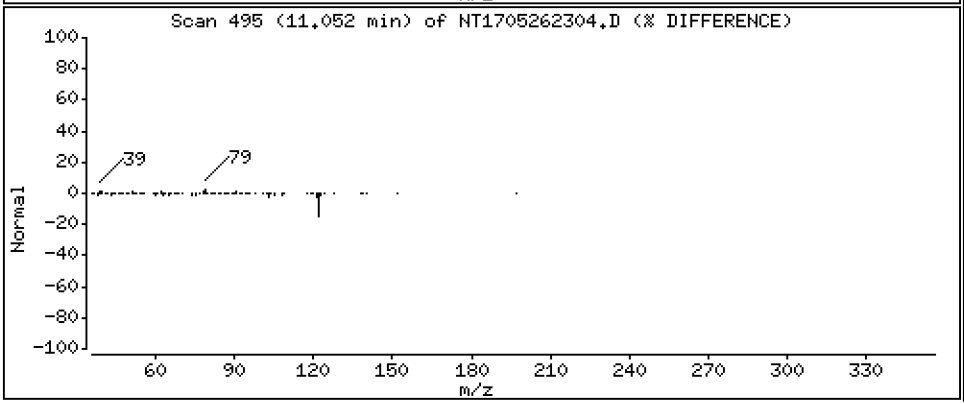












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

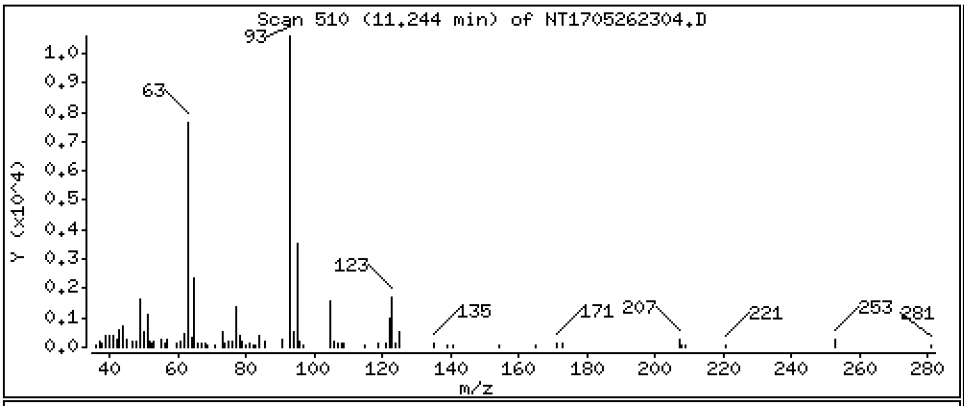
Operator: VTS

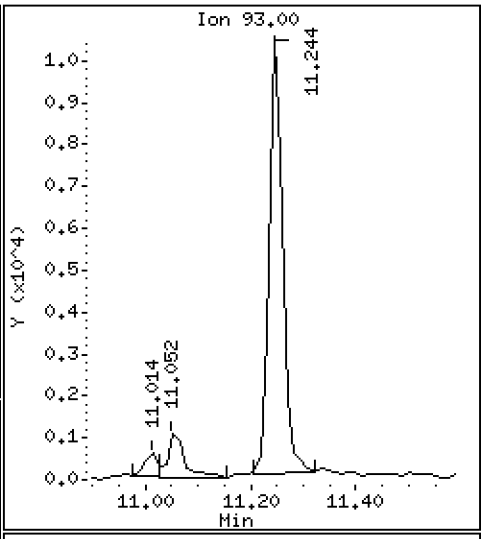
Column phase: ZB-5msi

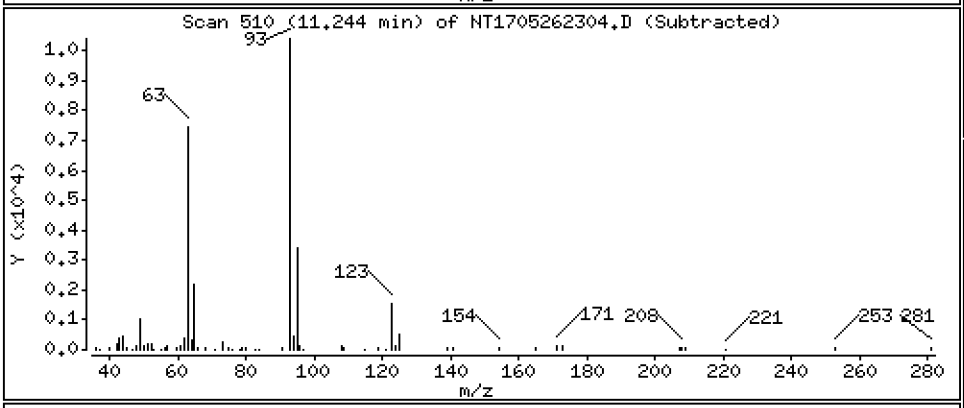
Column diameter: 0.25

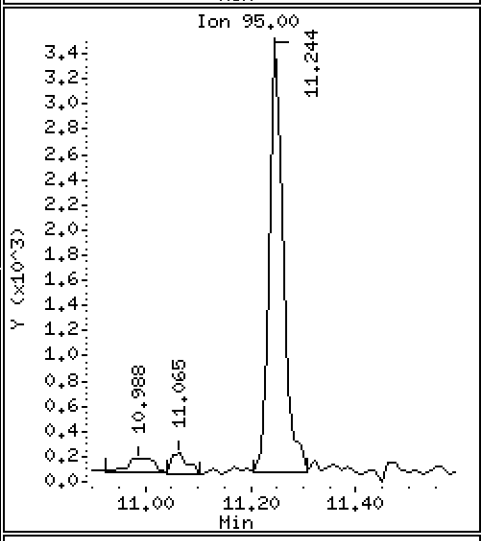
23 Bis(2-Chloroethoxy)methane

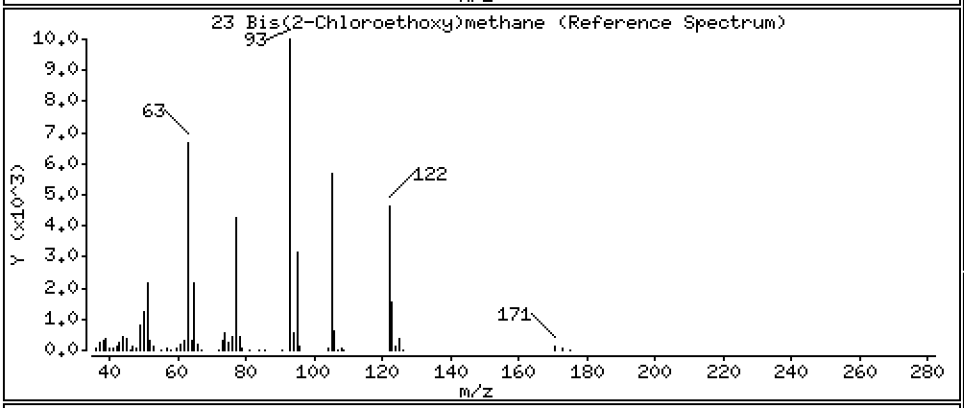
Concentration: 0.1790 ug/mL

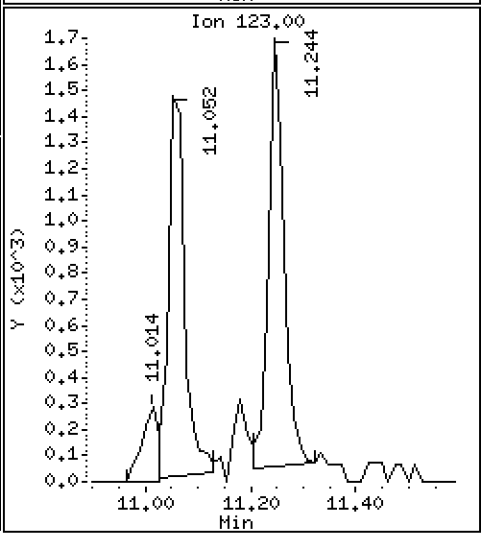


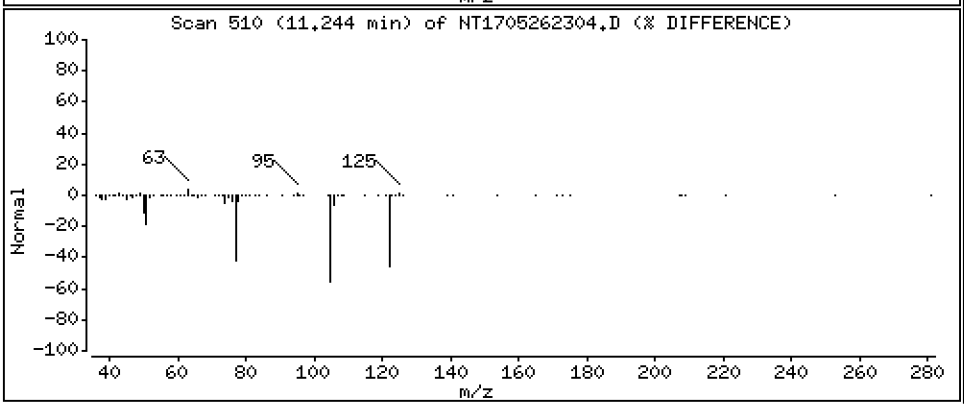












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

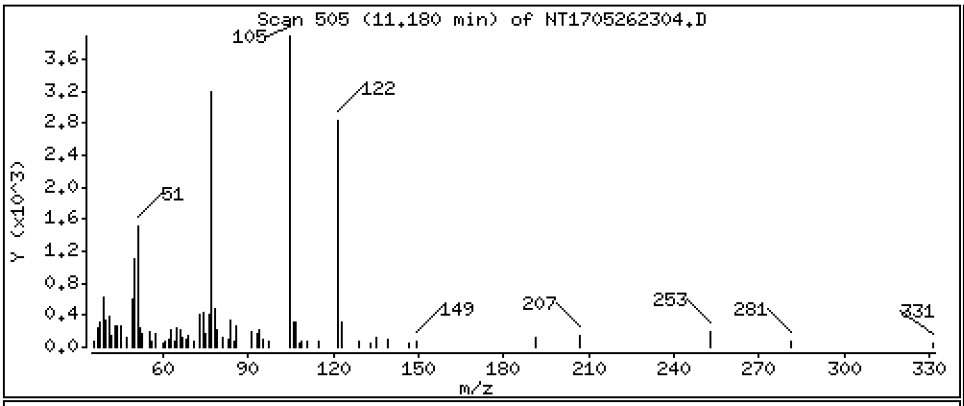
Operator: VTS

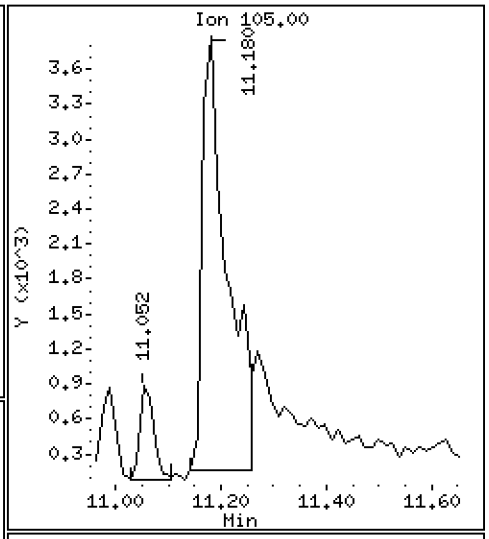
Column phase: ZB-5msi

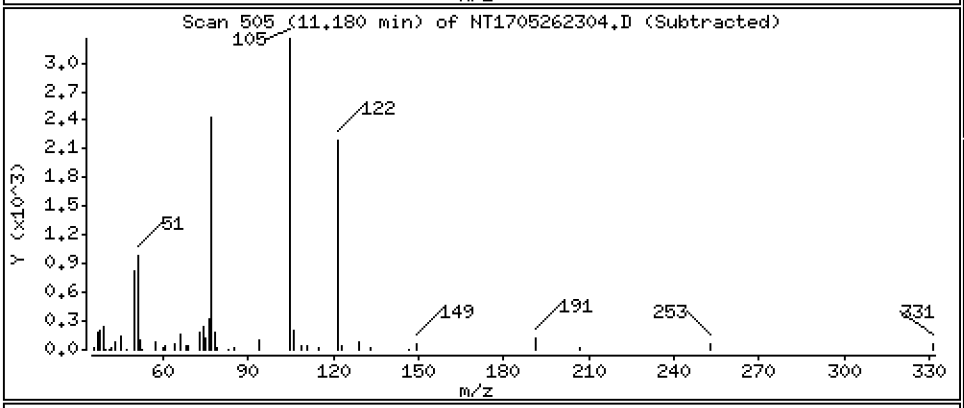
Column diameter: 0.25

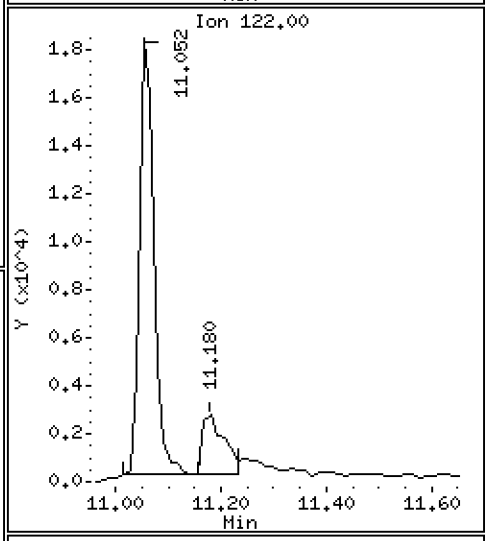
24 Benzoic acid

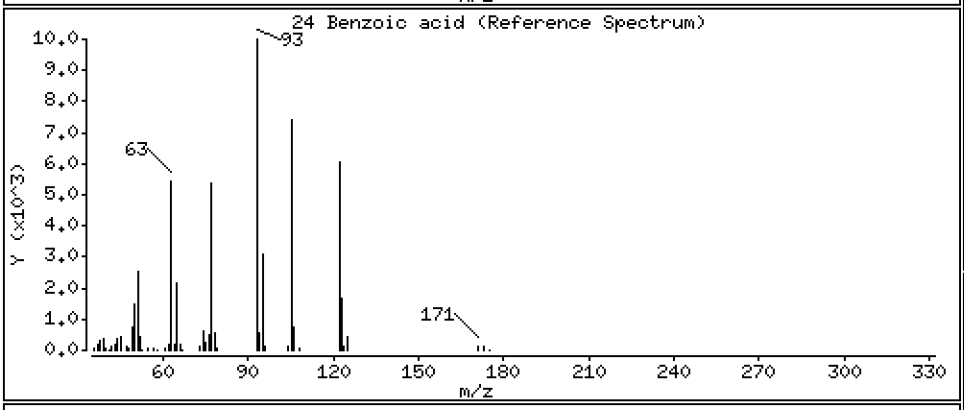
Concentration: 0.1600 ug/mL

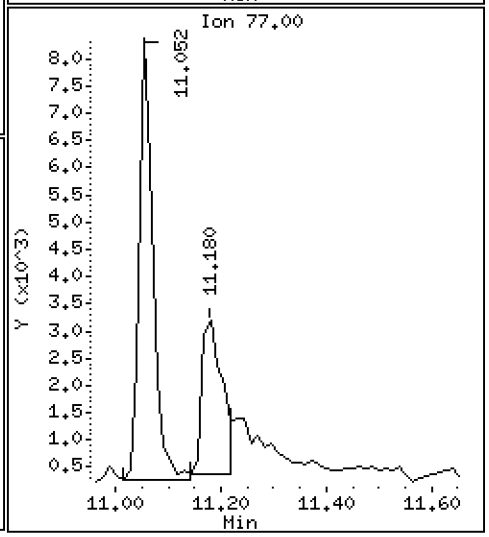


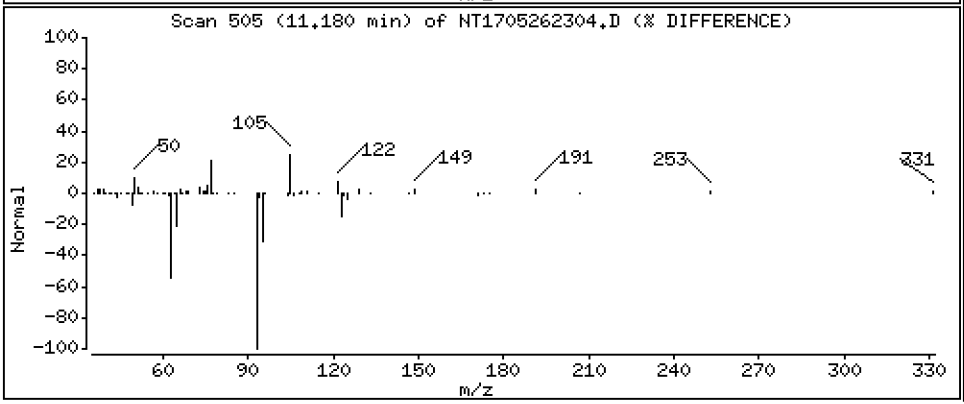












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

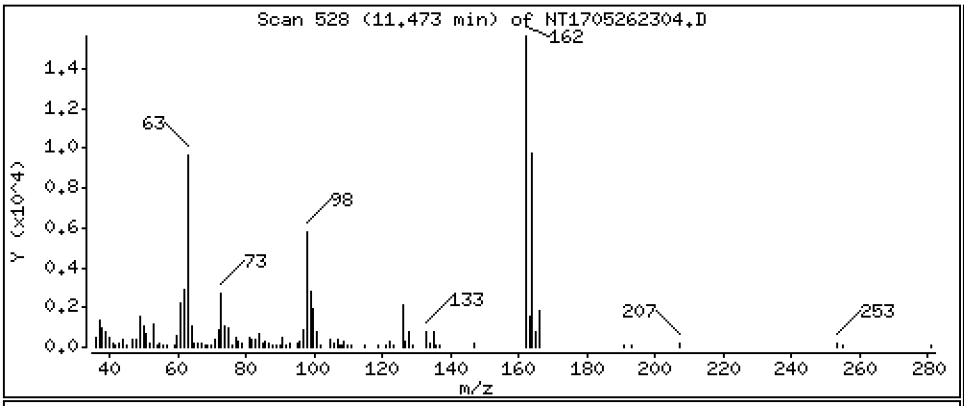
Operator: VTS

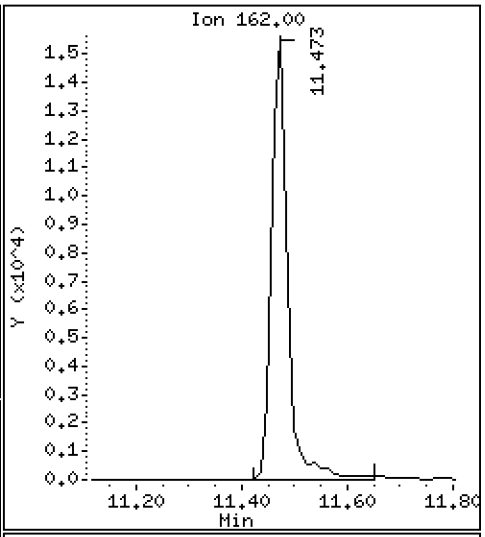
Column phase: ZB-5msi

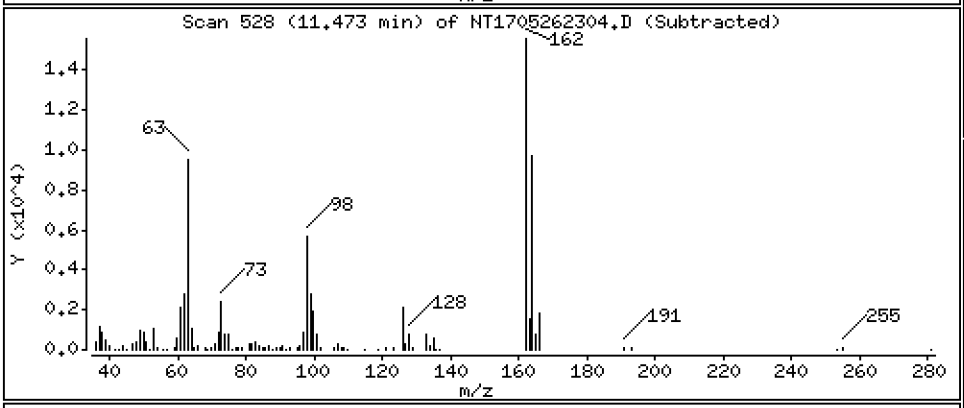
Column diameter: 0.25

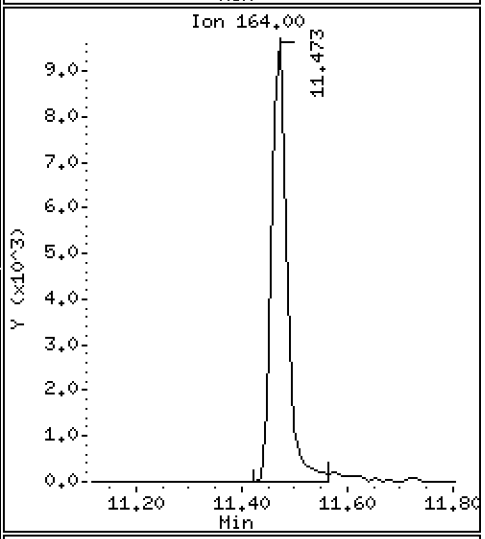
25 2,4-Dichlorophenol

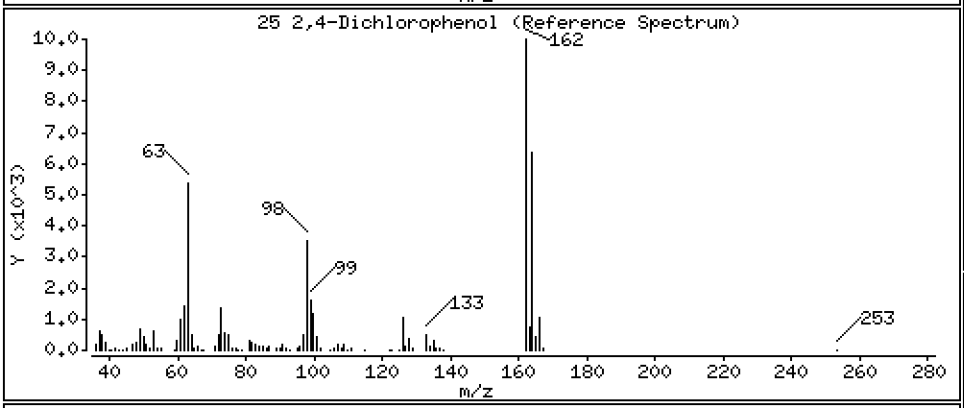
Concentration: 0.4023 ug/mL

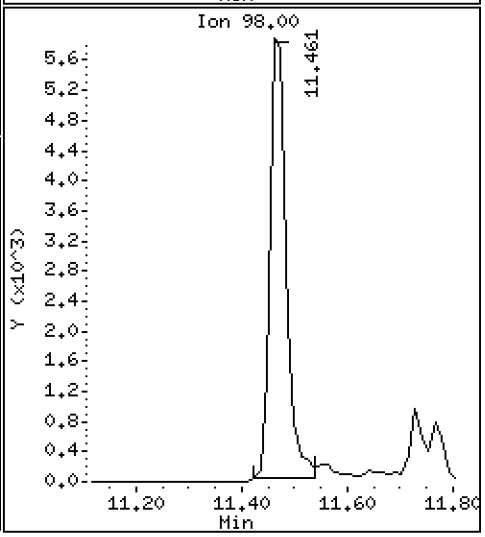


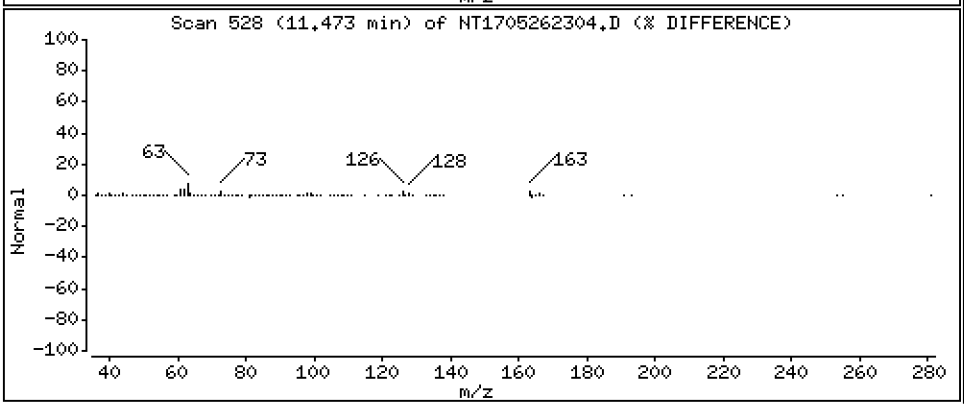












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

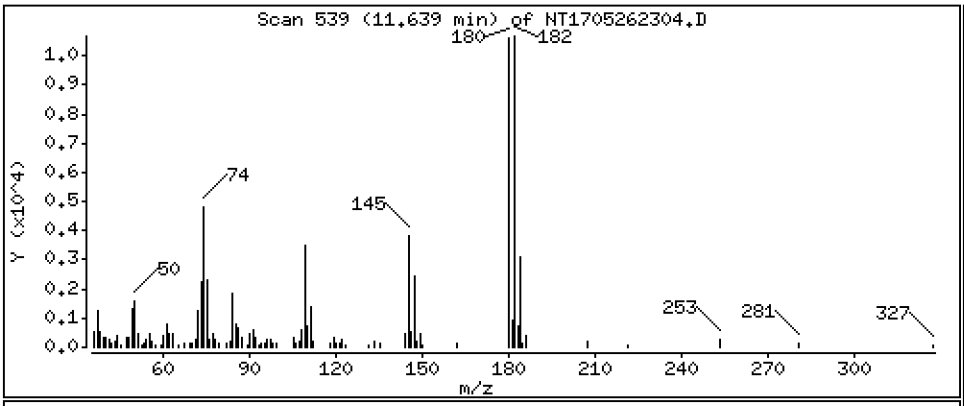
Operator: VTS

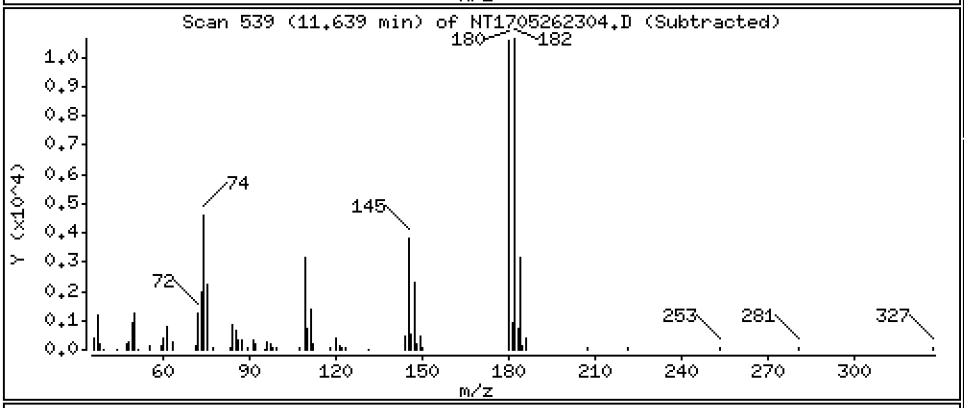
Column phase: ZB-5msi

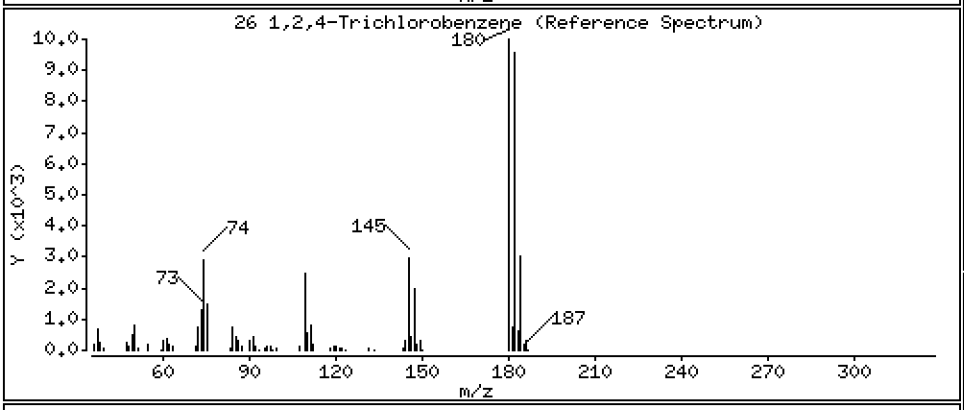
Column diameter: 0.25

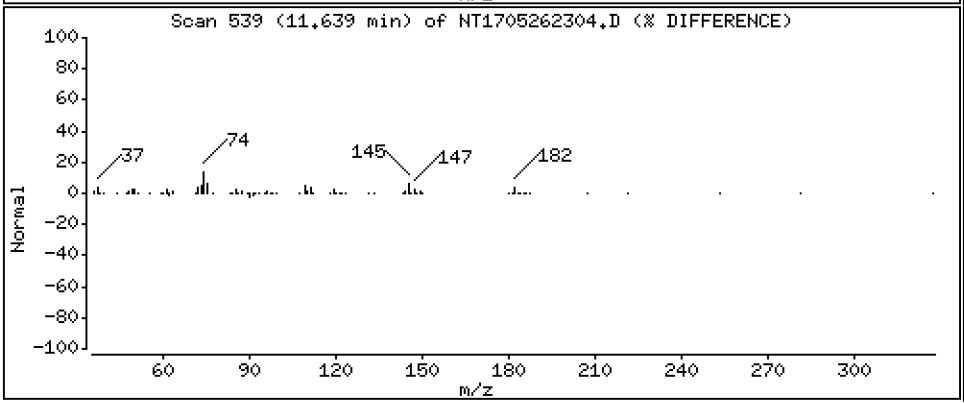
26 1,2,4-Trichlorobenzene

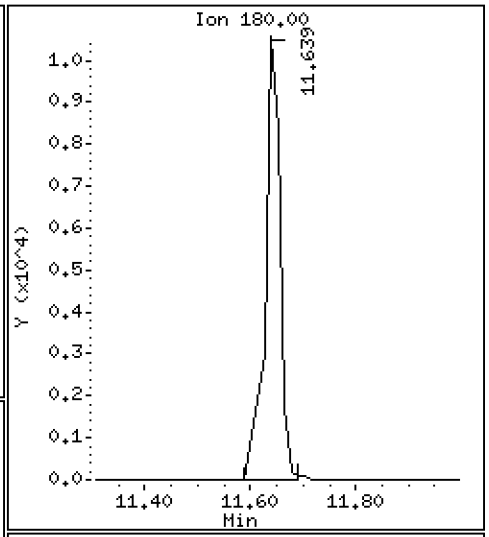
Concentration: 0.2404 ug/mL

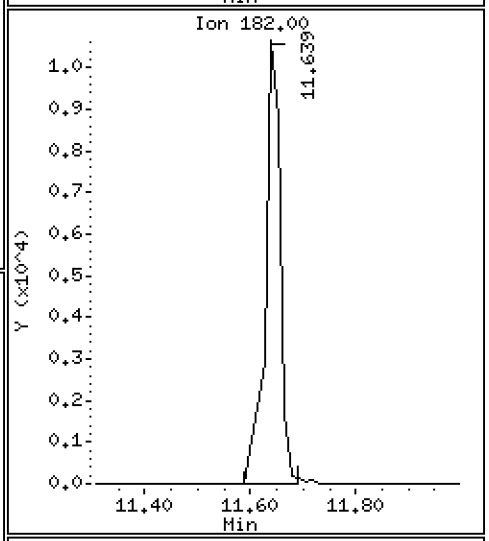


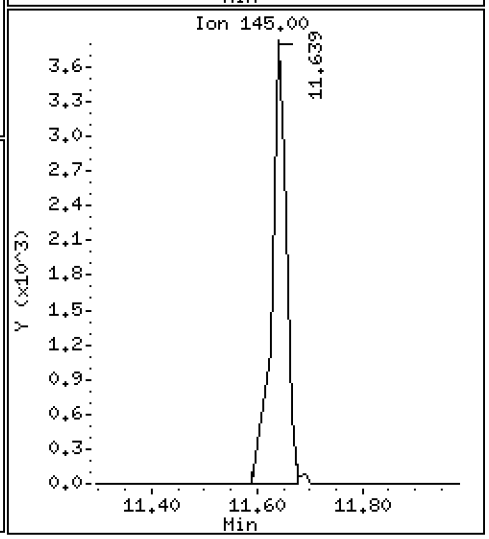












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

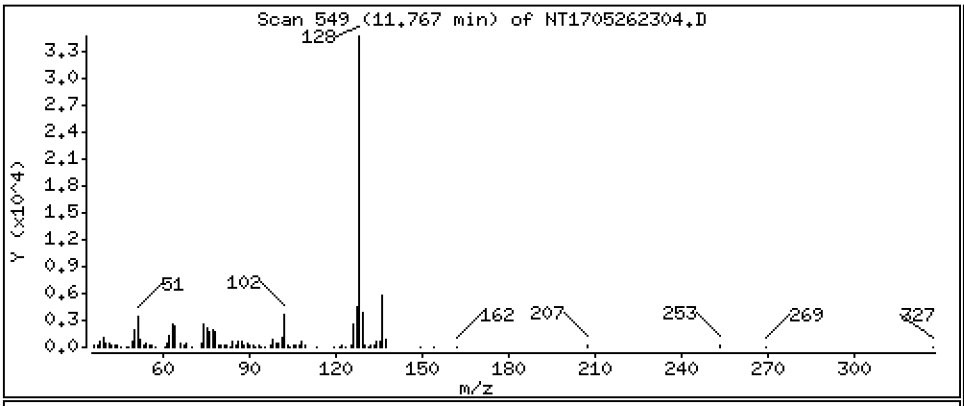
Operator: VTS

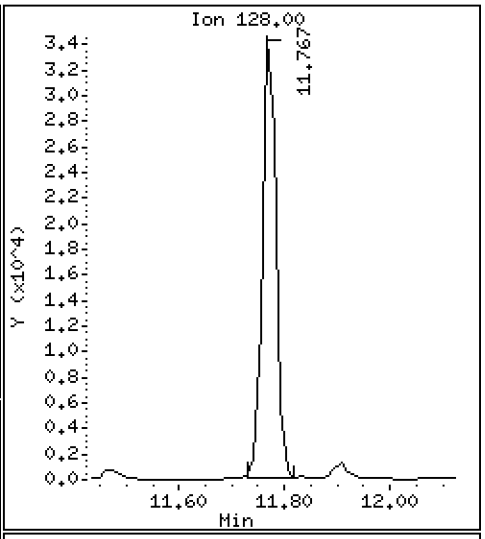
Column phase: ZB-5msi

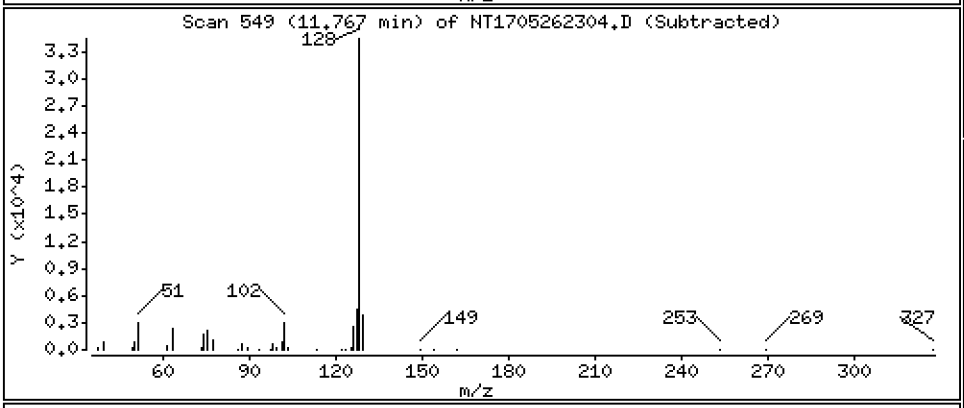
Column diameter: 0.25

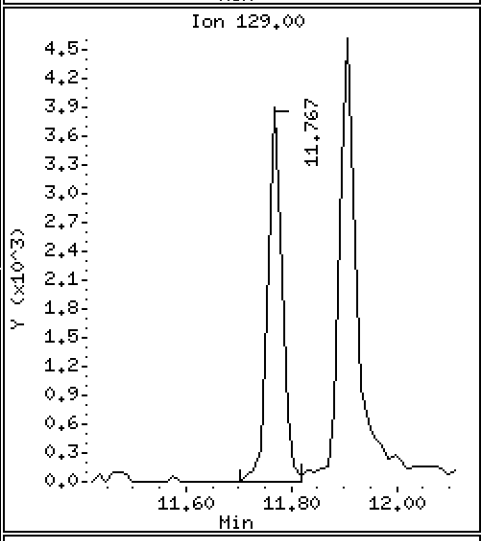
28 Naphthalene

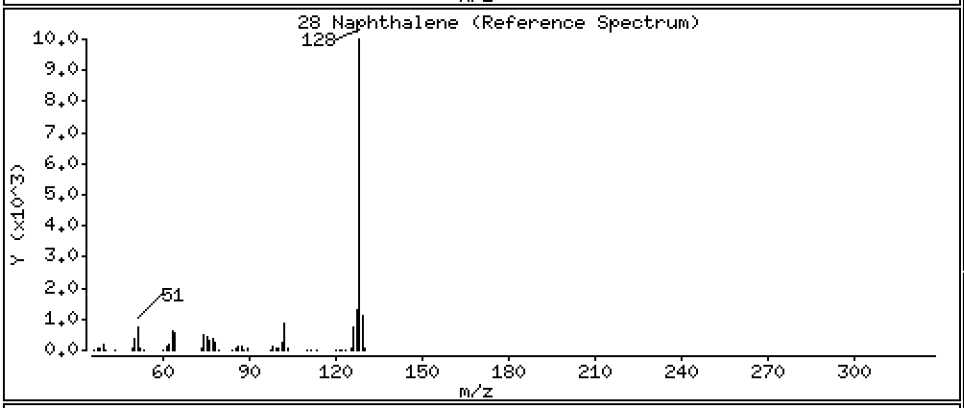
Concentration: 0.1976 ug/mL

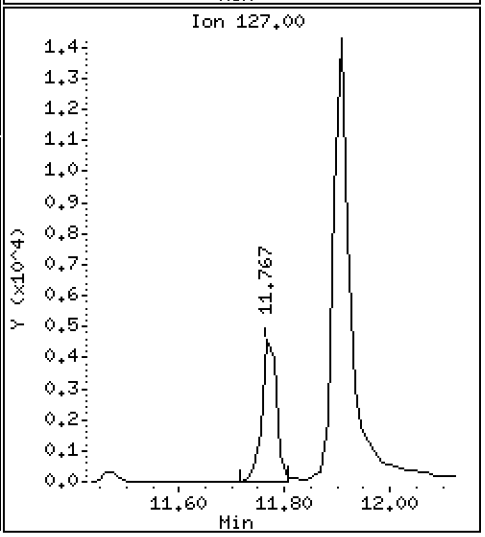


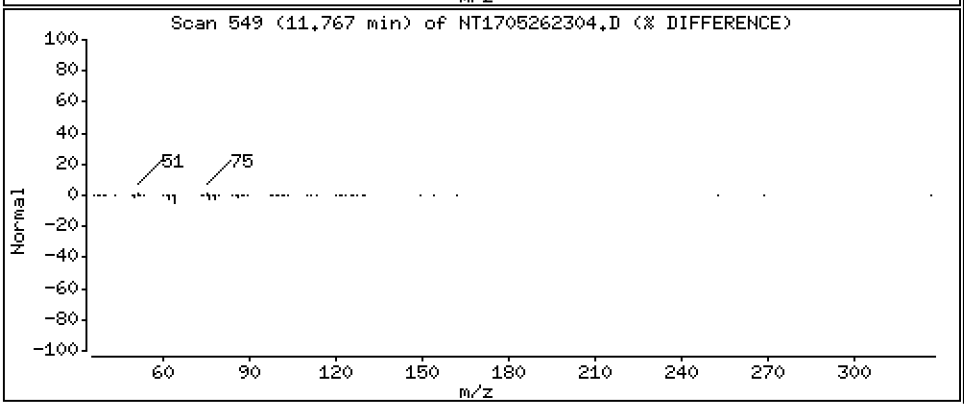












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

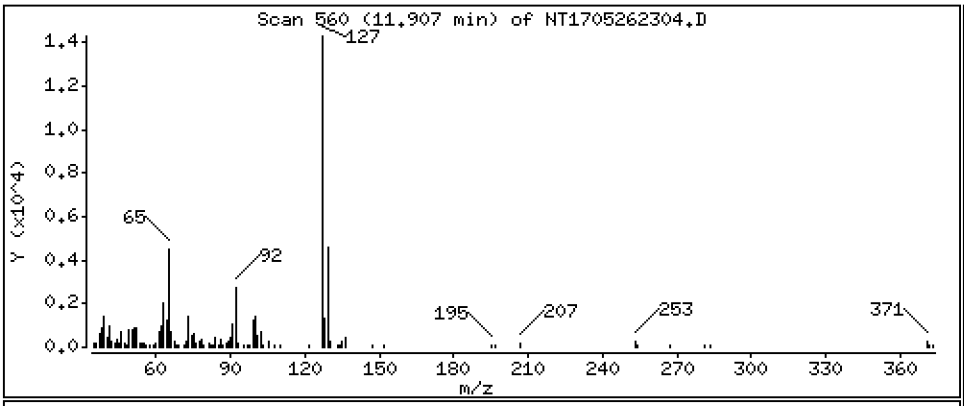
Operator: VTS

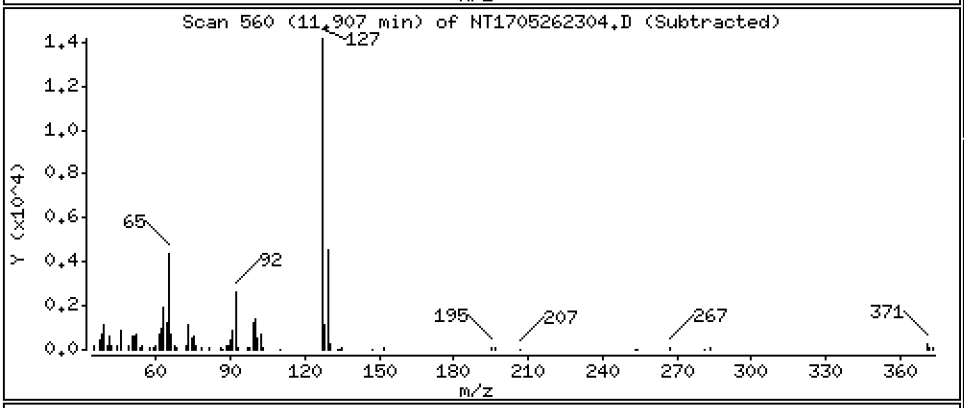
Column phase: ZB-5msi

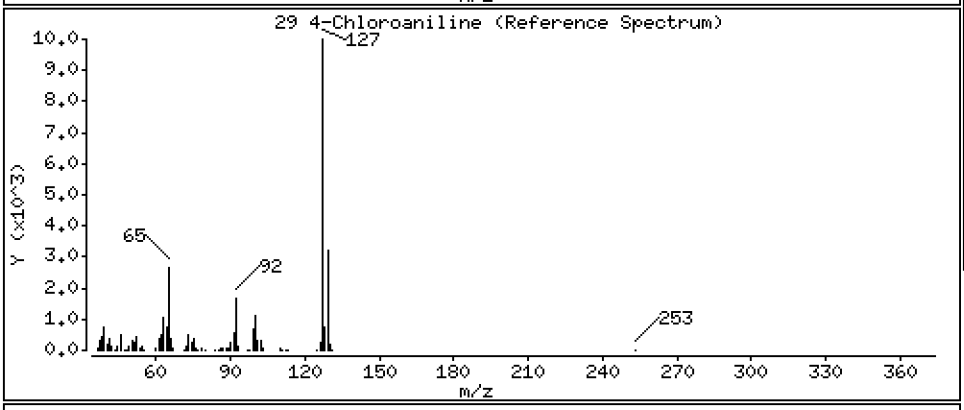
Column diameter: 0.25

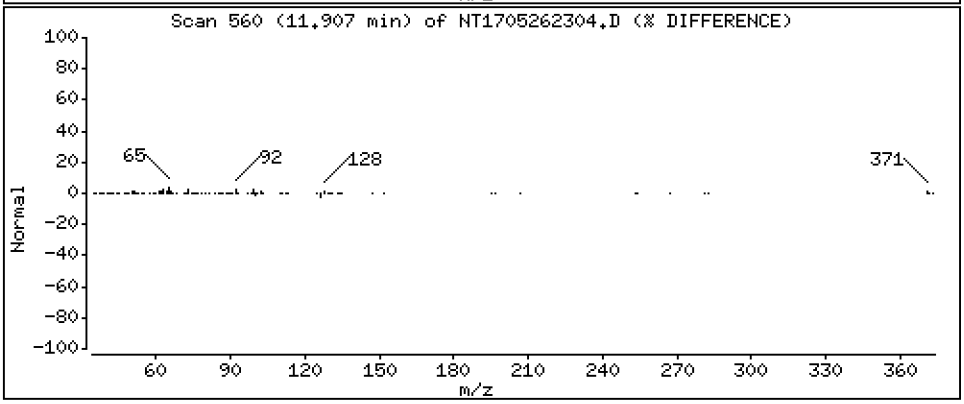
29 4-Chloroaniline

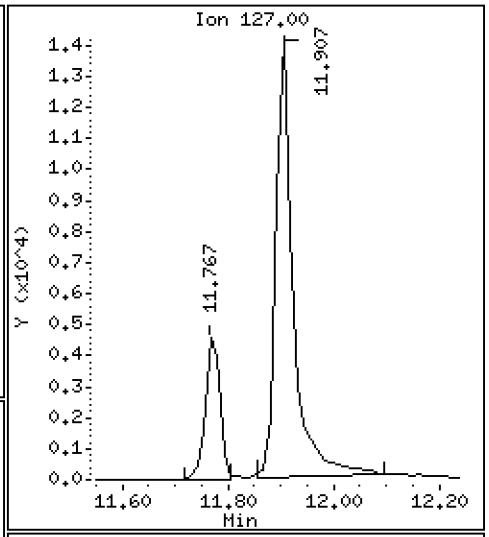
Concentration: 0.2918 ug/mL

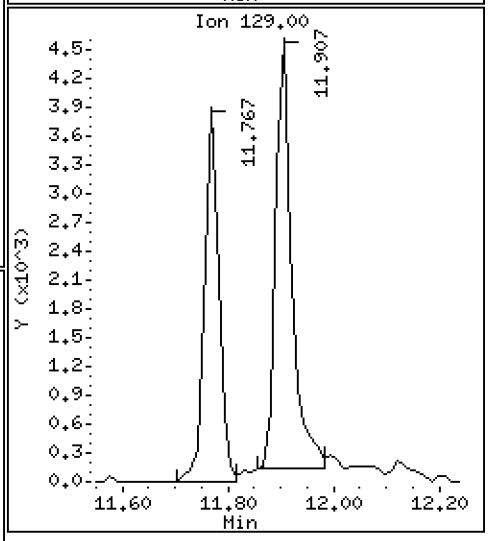












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

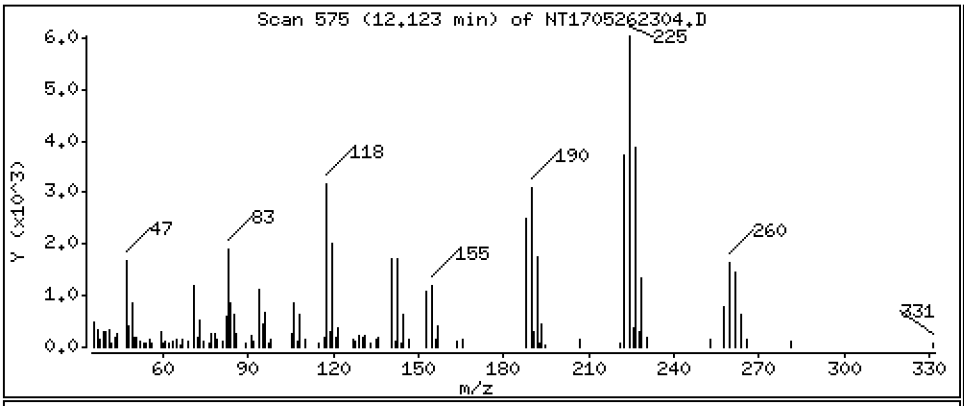
Operator: VTS

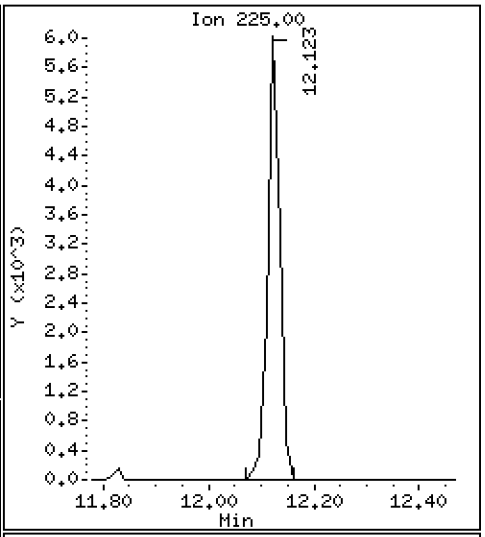
Column phase: ZB-5msi

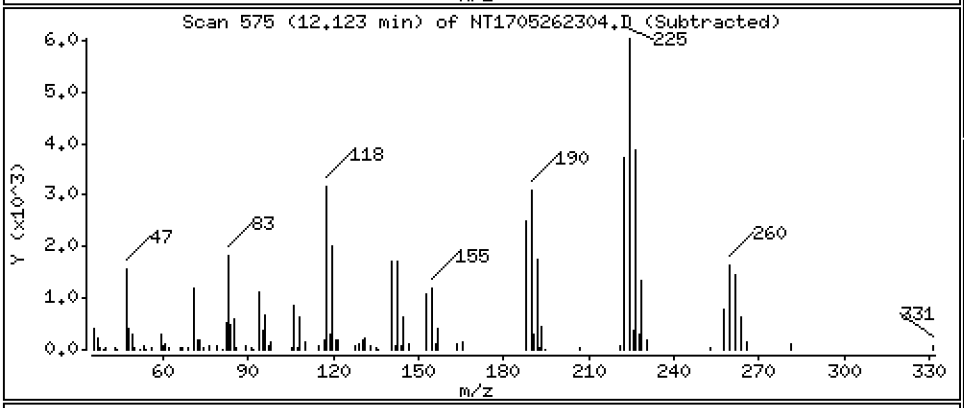
Column diameter: 0.25

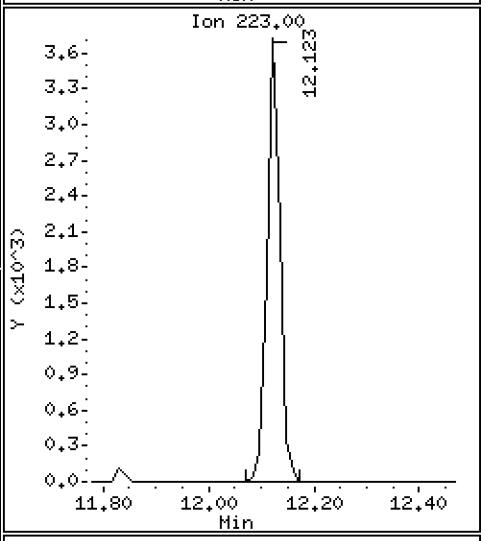
30 Hexachlorobutadiene

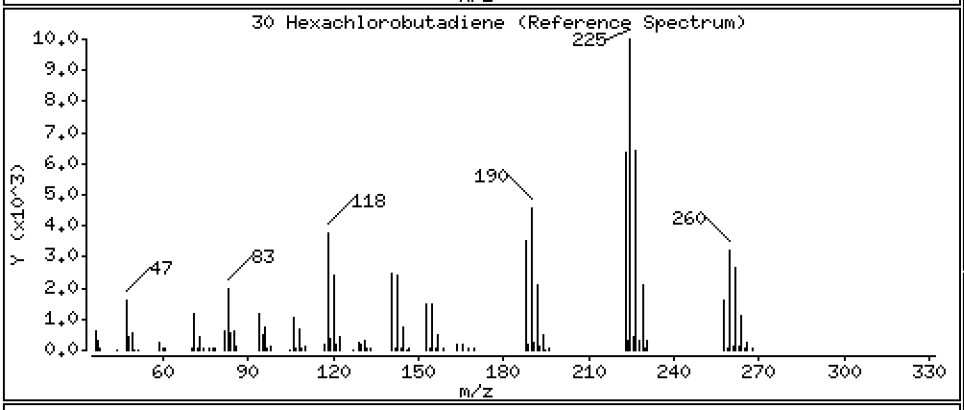
Concentration: 0.1913 ug/mL

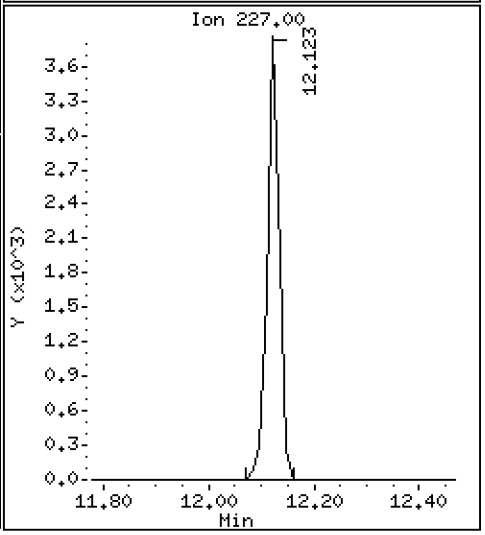


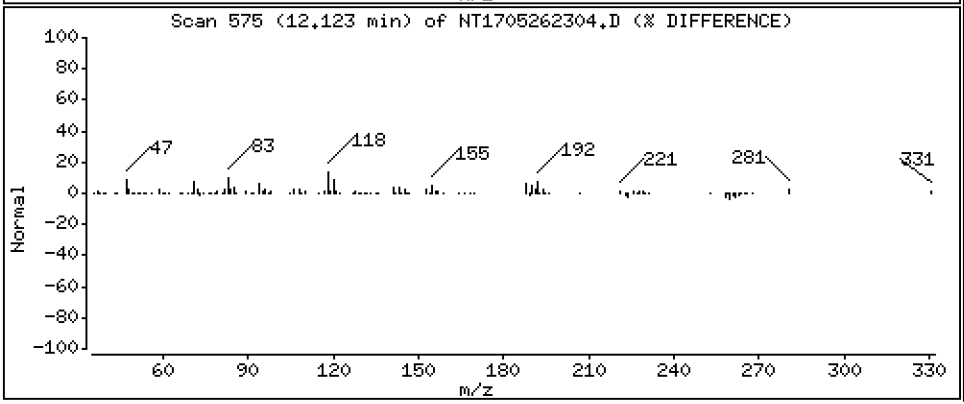












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

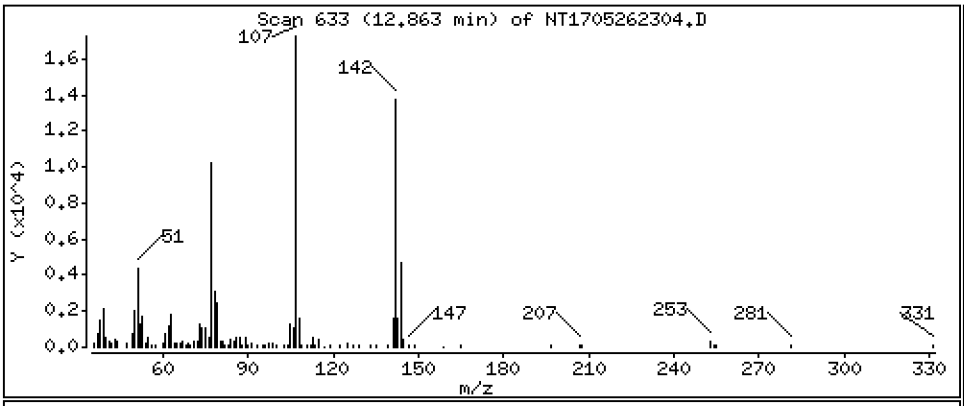
Operator: VTS

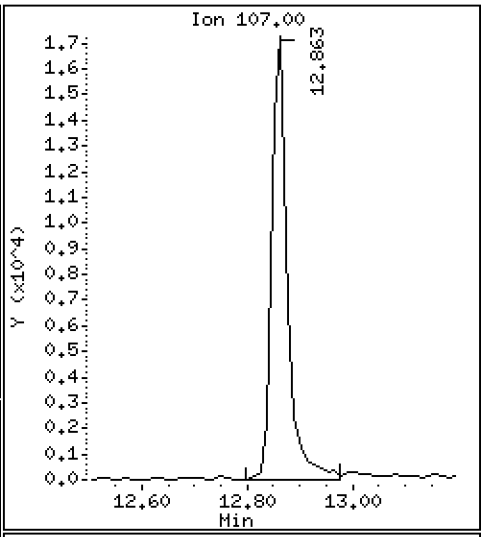
Column phase: ZB-5msi

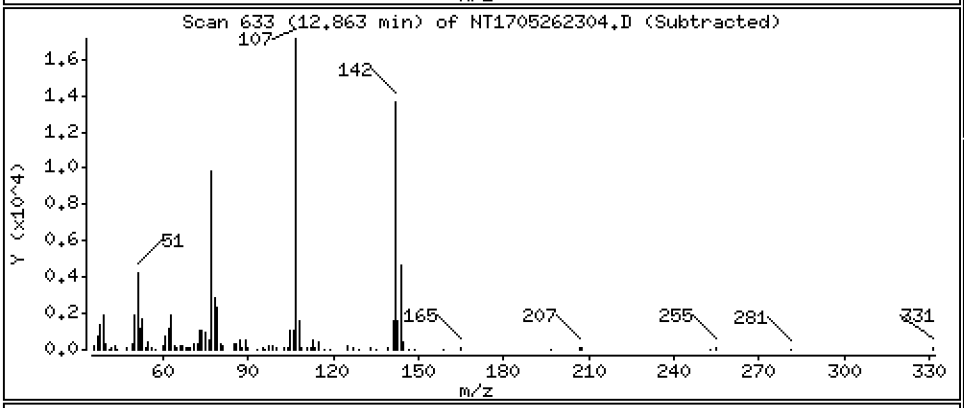
Column diameter: 0.25

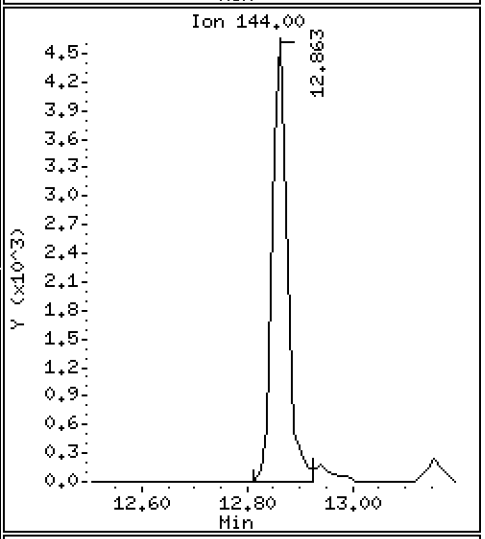
31 4-Chloro-3-methylphenol

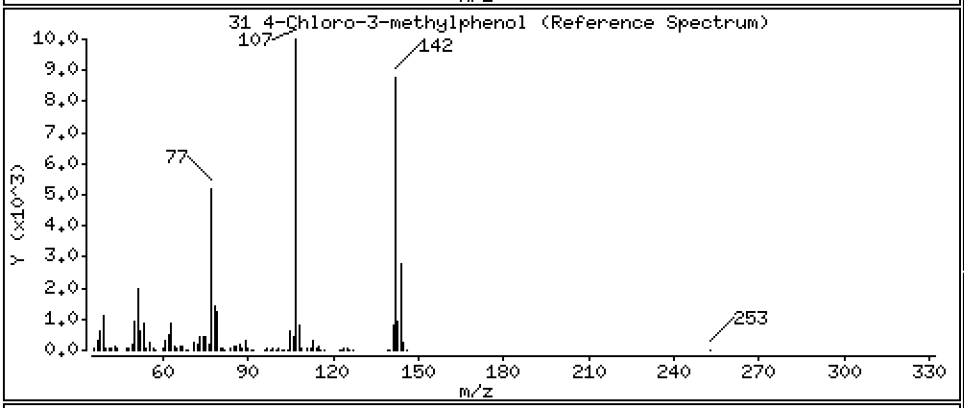
Concentration: 0.3609 ug/mL

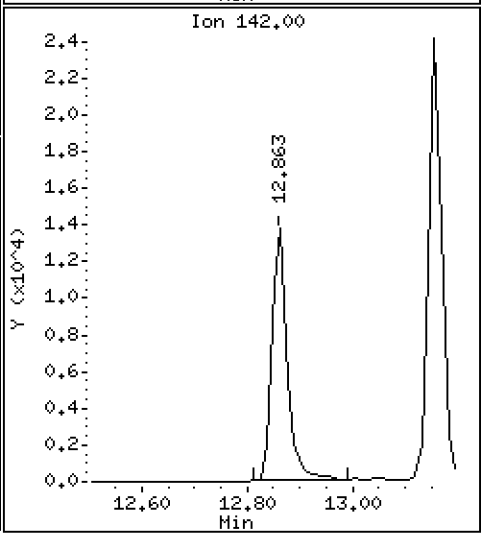


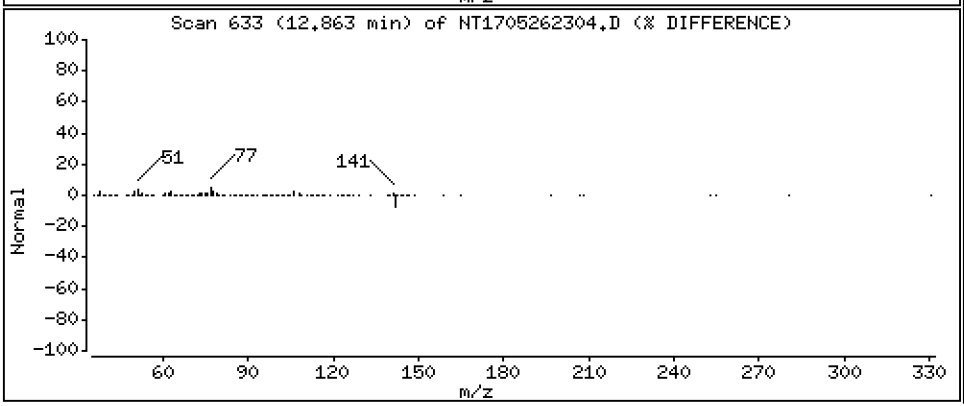












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

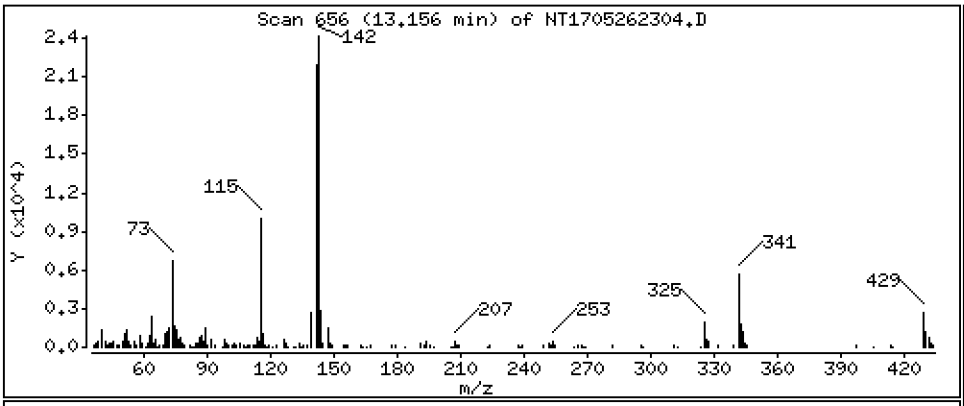
Operator: VTS

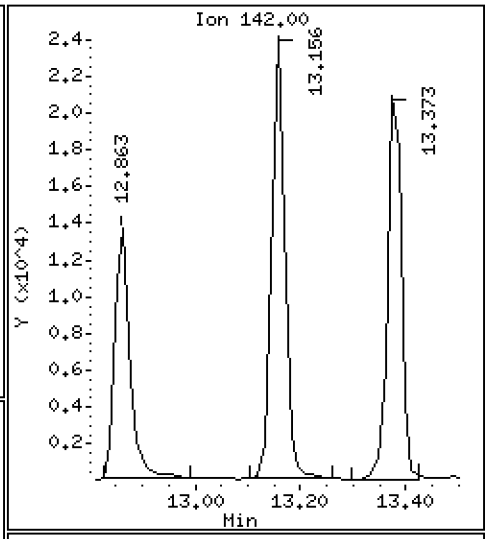
Column phase: ZB-5msi

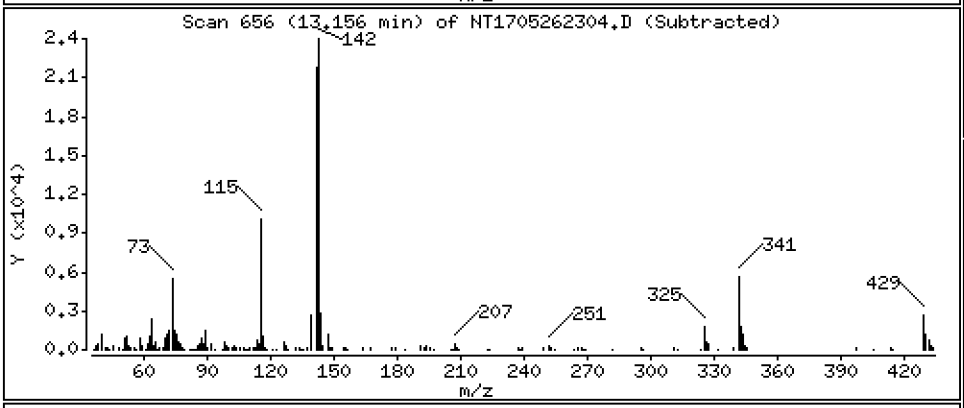
Column diameter: 0.25

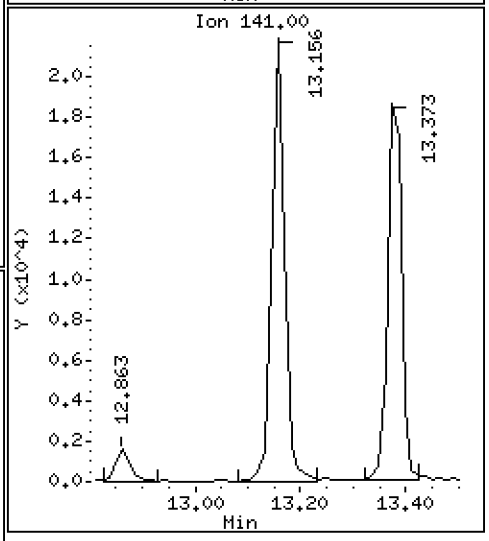
32 2-Methylnaphthalene

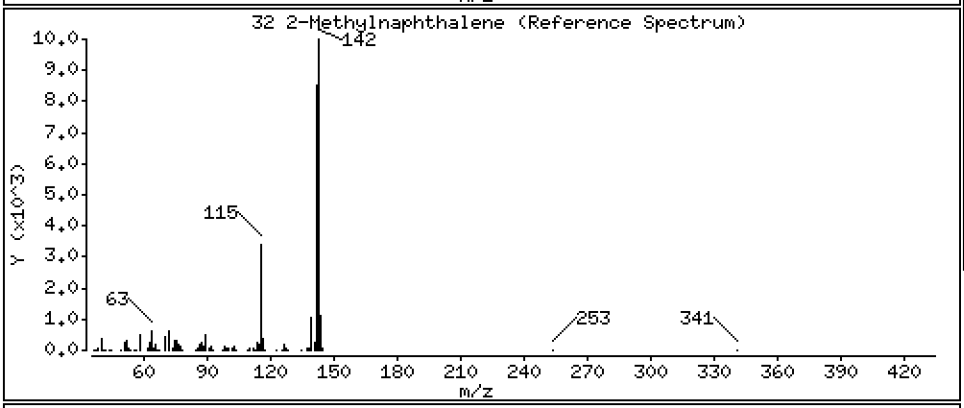
Concentration: 0.1874 ug/mL

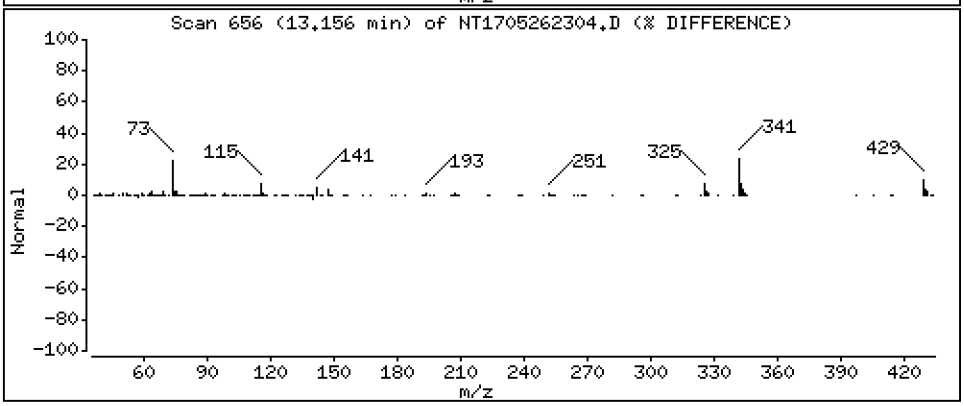












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

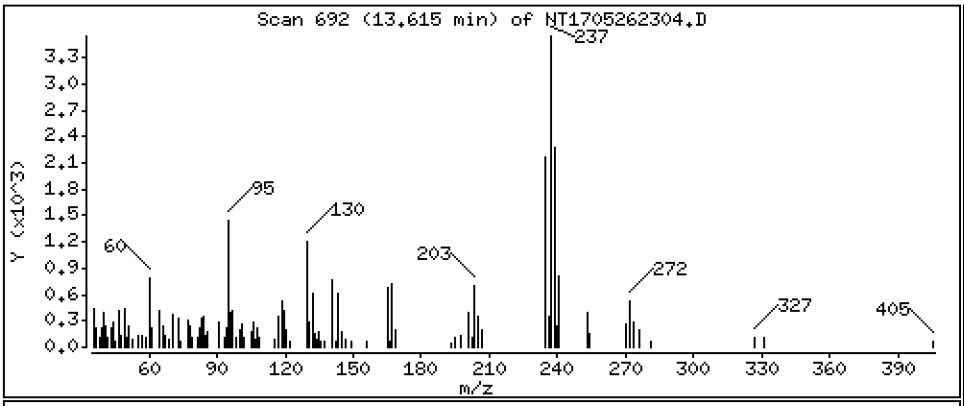
Operator: VTS

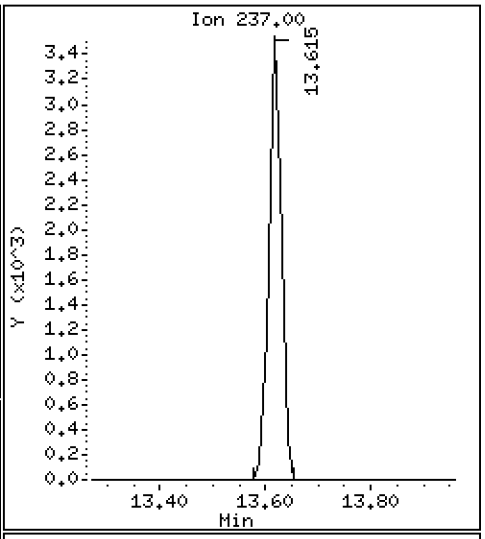
Column phase: ZB-5msi

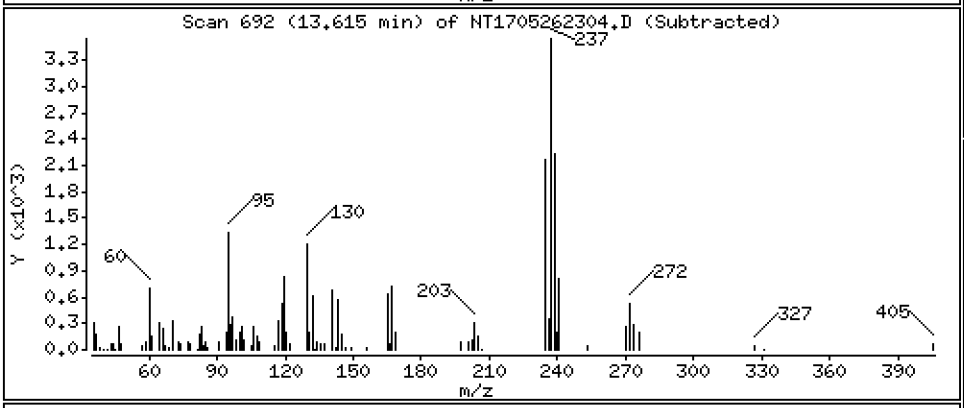
Column diameter: 0.25

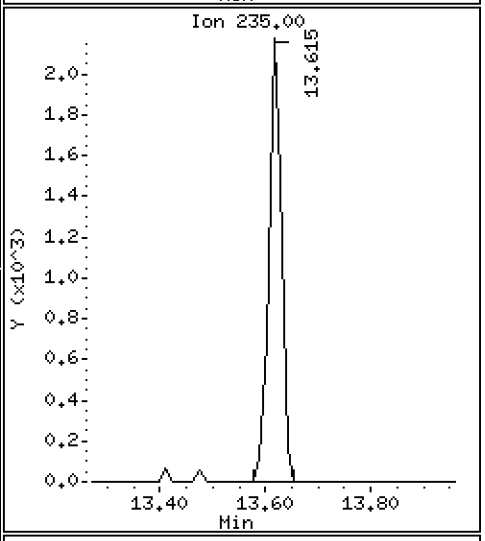
33 Hexachlorocyclopentadiene

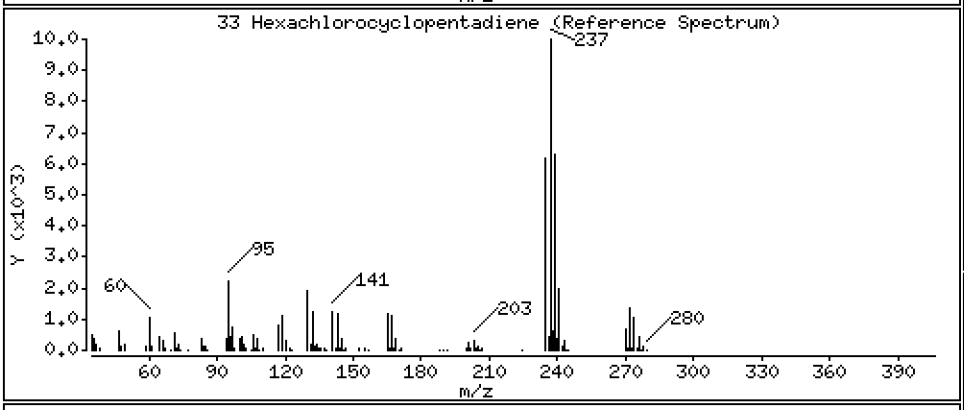
Concentration: 0.1077 ug/mL

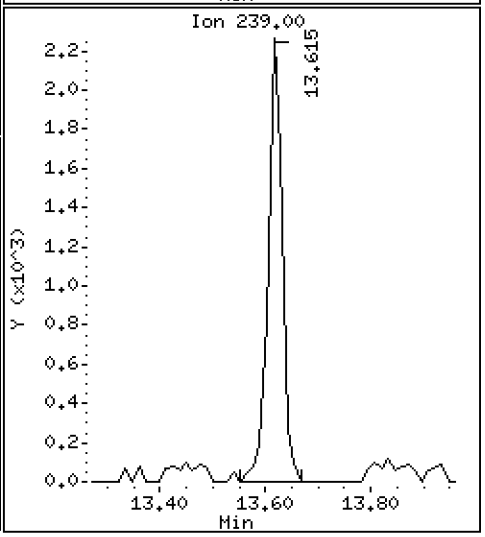


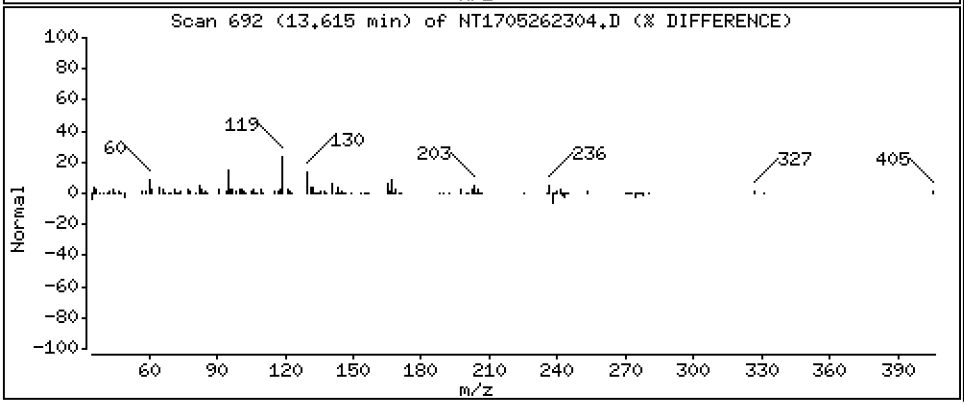












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

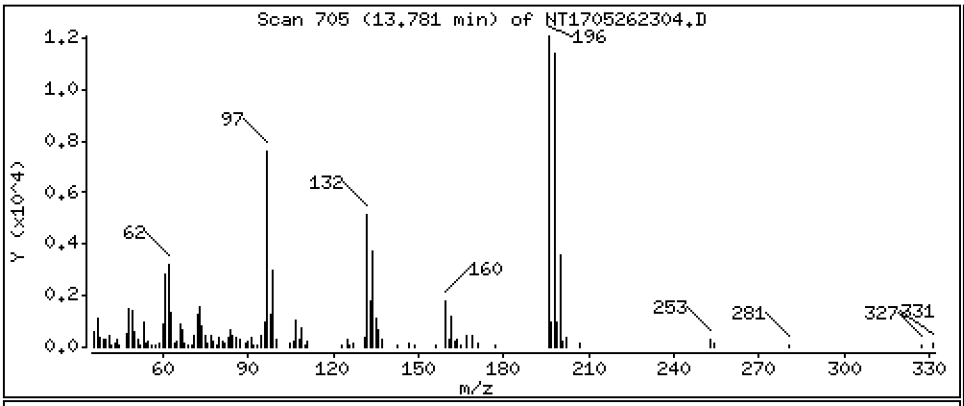
Operator: VTS

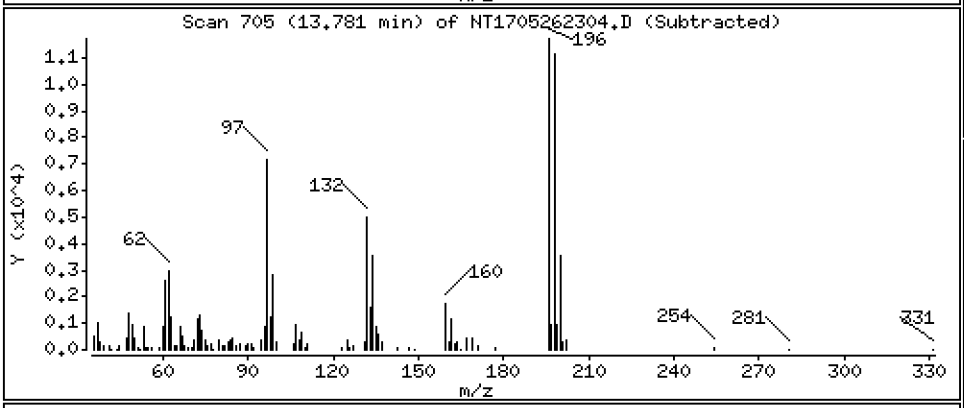
Column phase: ZB-5msi

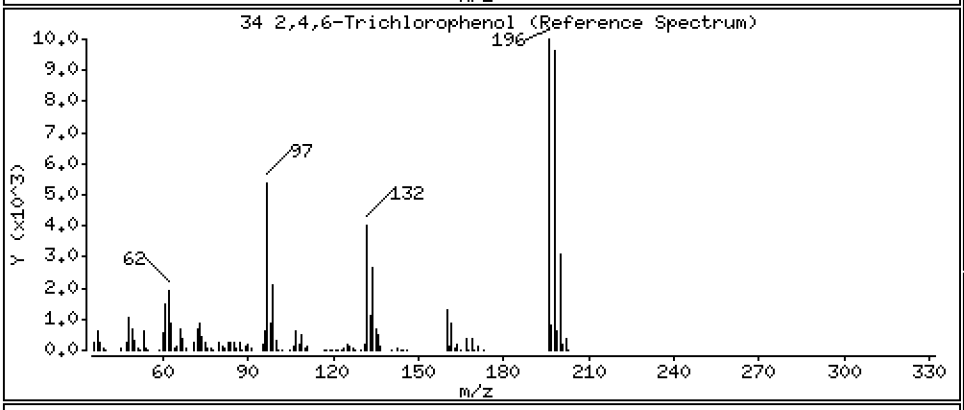
Column diameter: 0.25

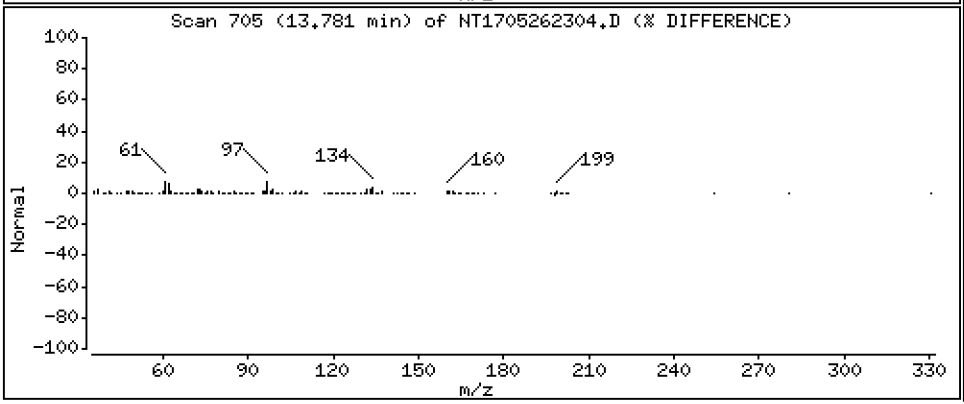
34 2,4,6-Trichlorophenol

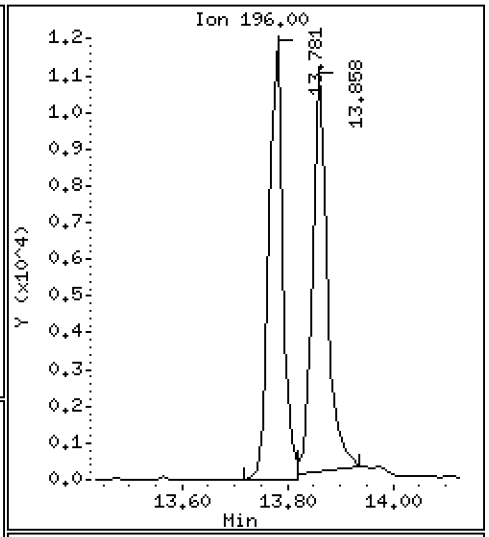
Concentration: 0.3562 ug/mL

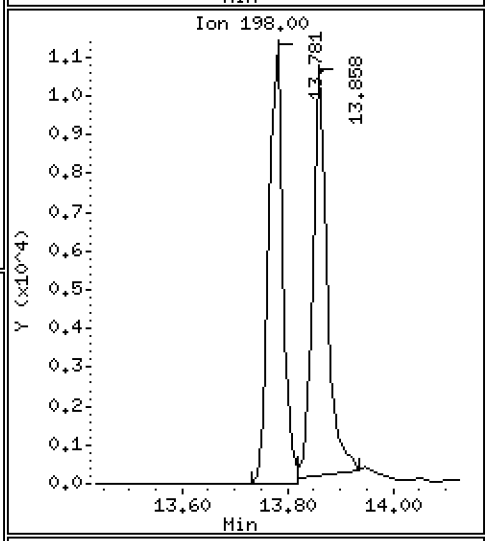


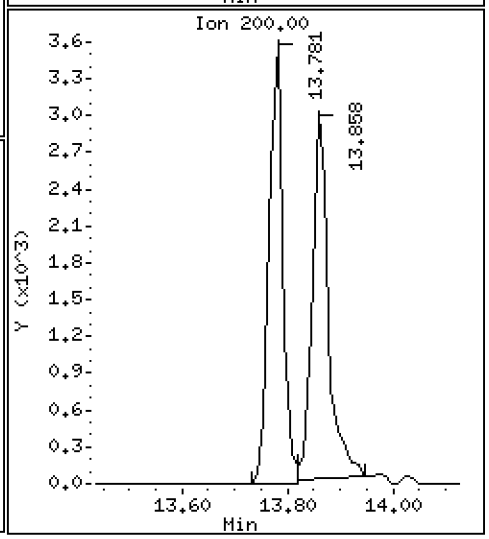












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

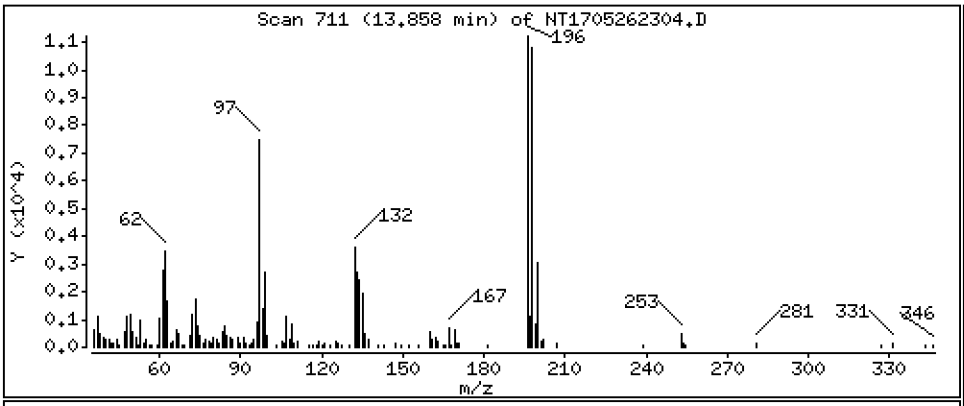
Operator: VTS

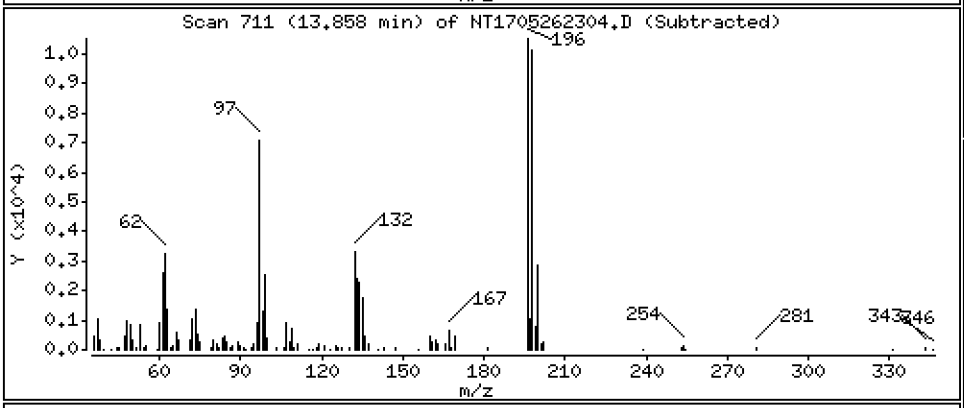
Column phase: ZB-5msi

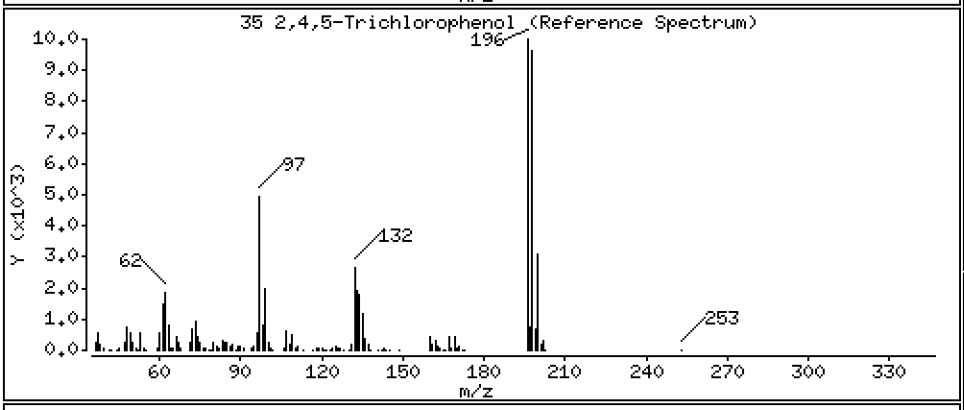
Column diameter: 0.25

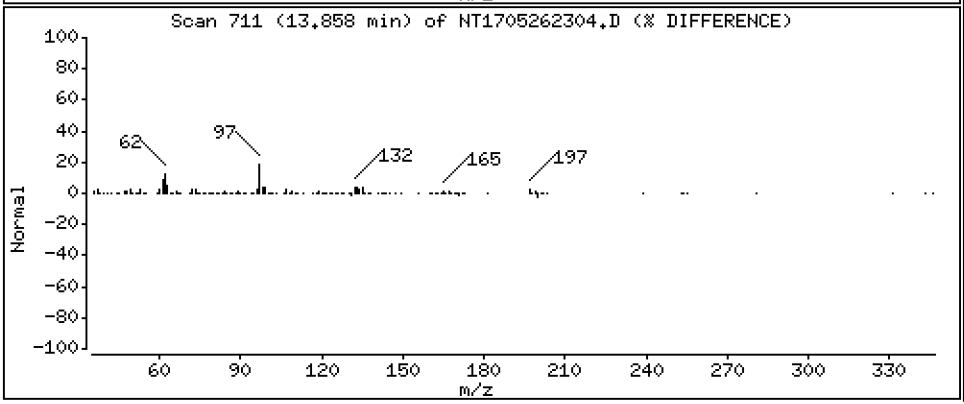
35 2,4,5-Trichlorophenol

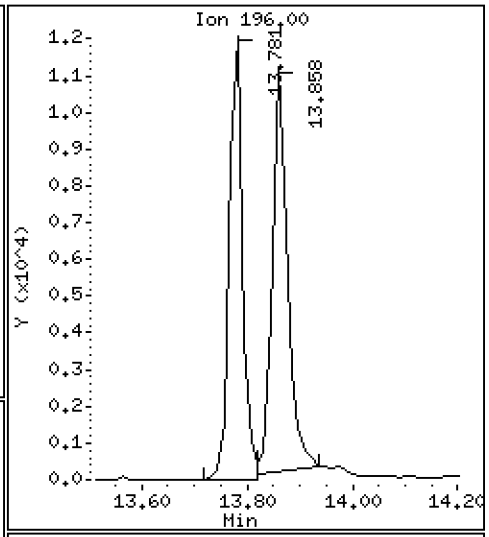
Concentration: 0.3389 ug/mL

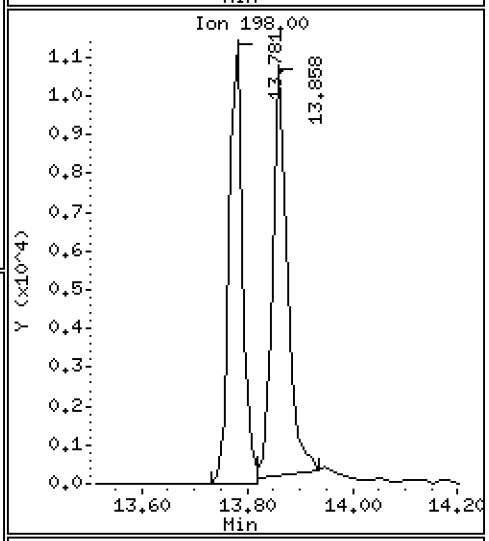


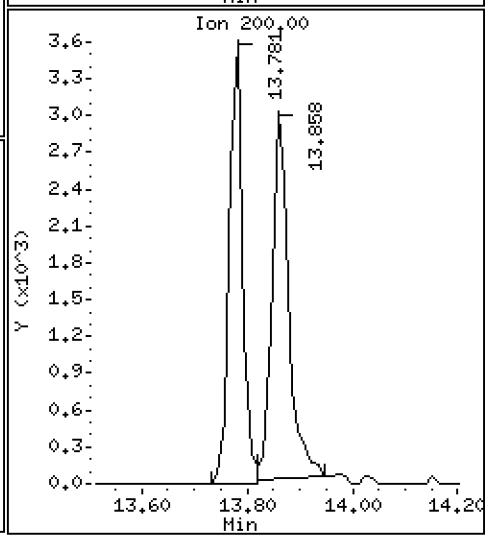












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

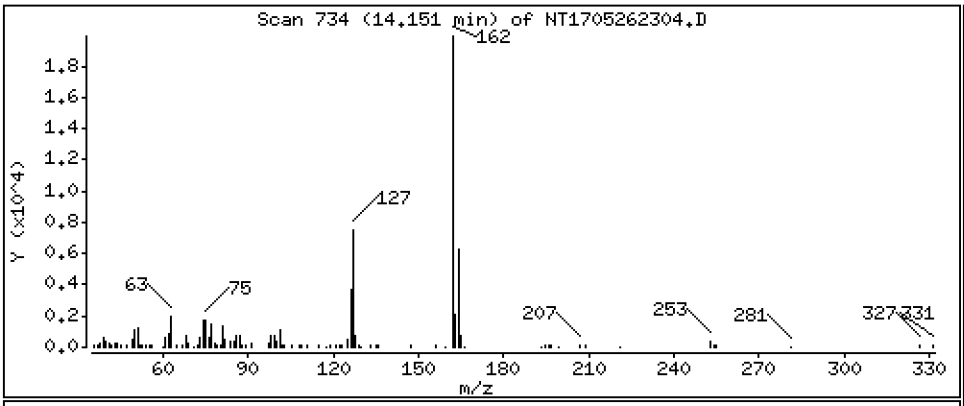
Operator: VTS

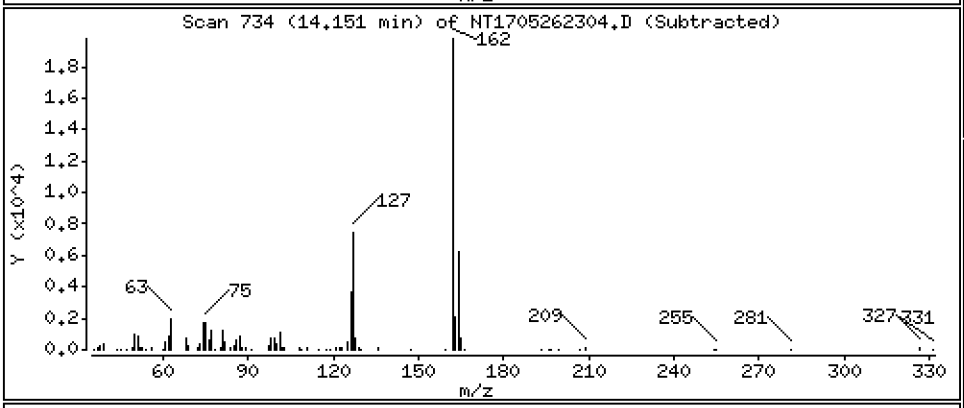
Column phase: ZB-5msi

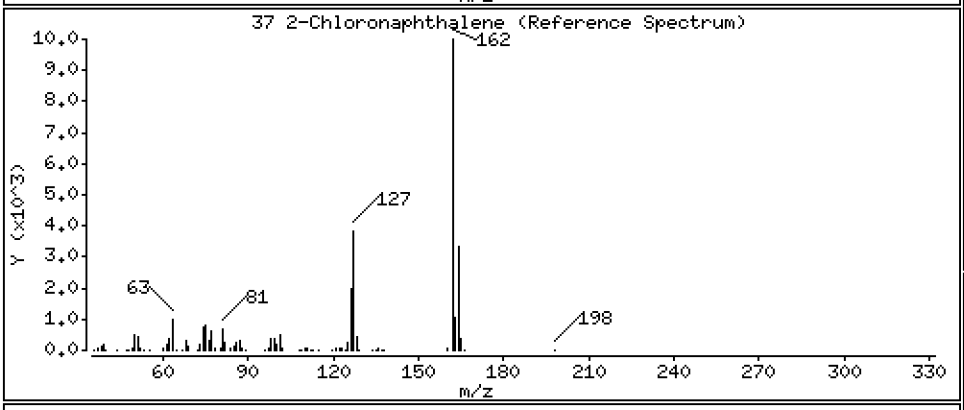
Column diameter: 0.25

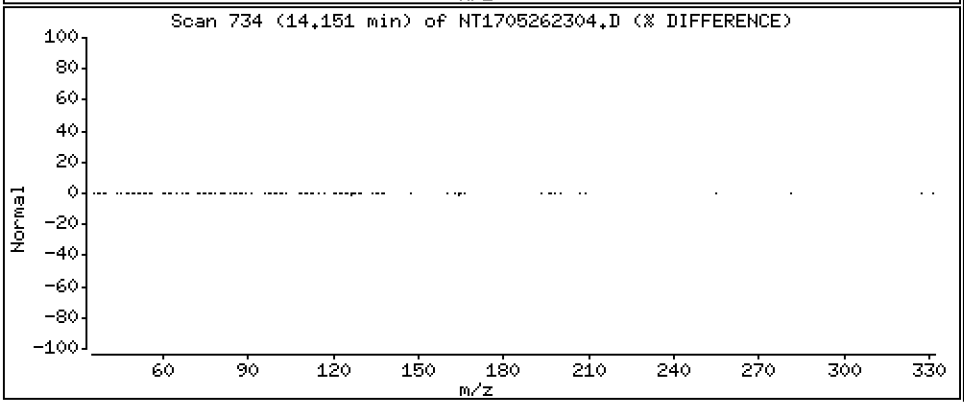
37 2-Chloronaphthalene

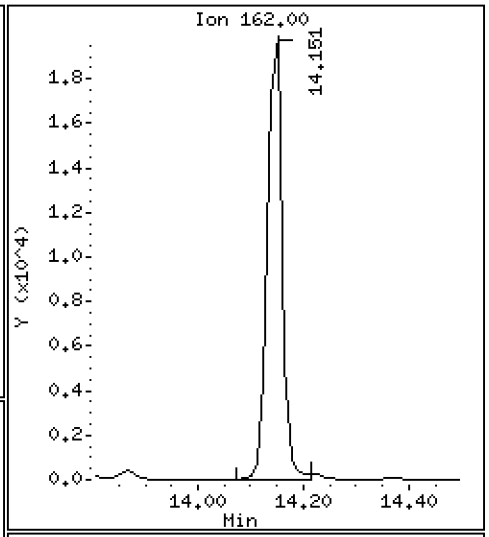
Concentration: 0.2059 ug/mL

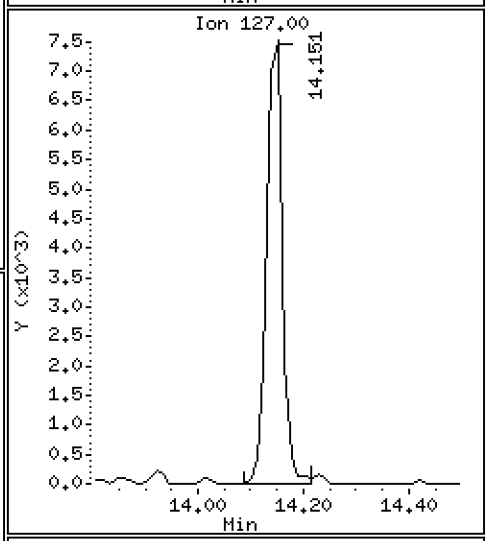


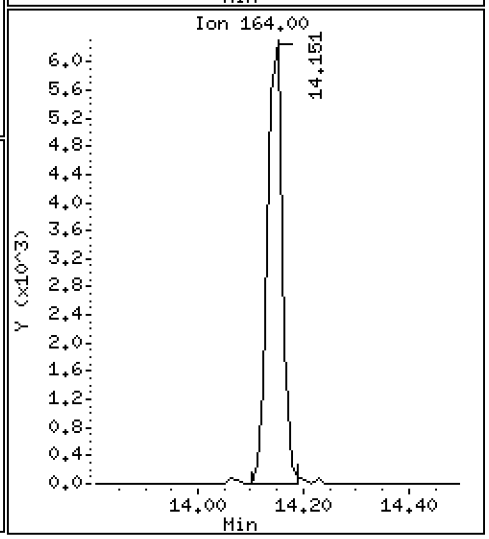












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

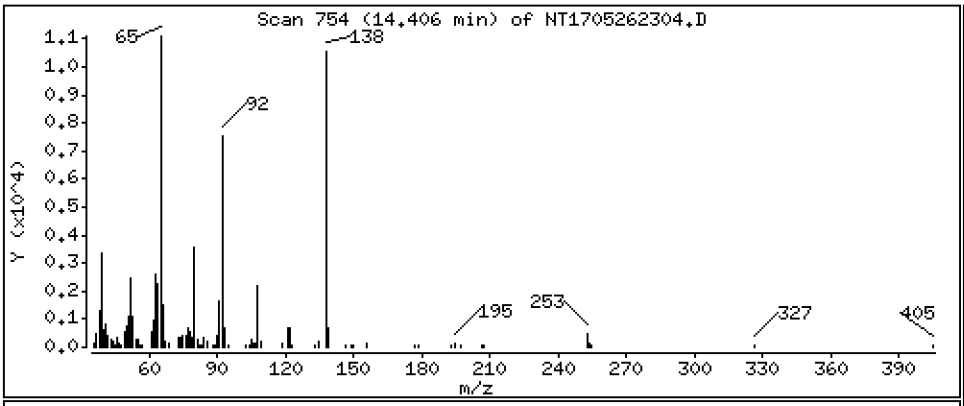
Operator: VTS

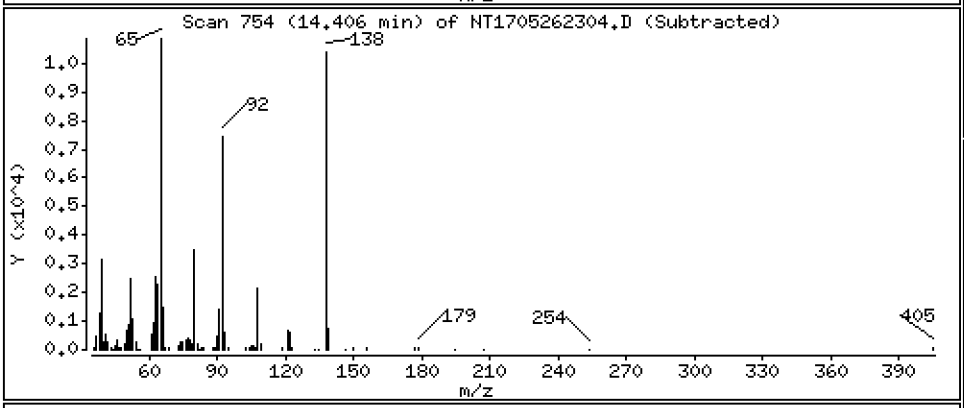
Column phase: ZB-5msi

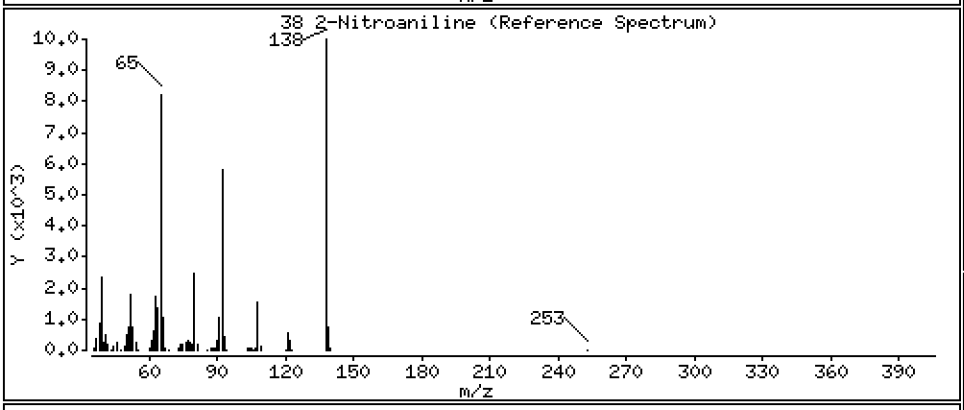
Column diameter: 0.25

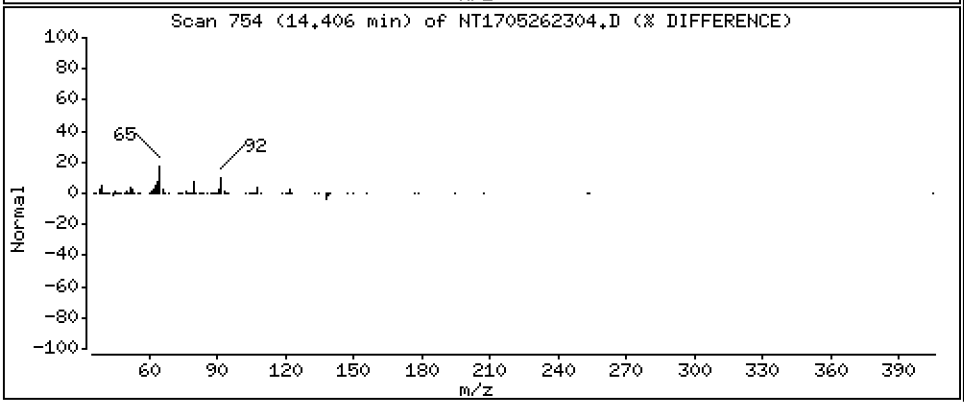
38 2-Nitroaniline

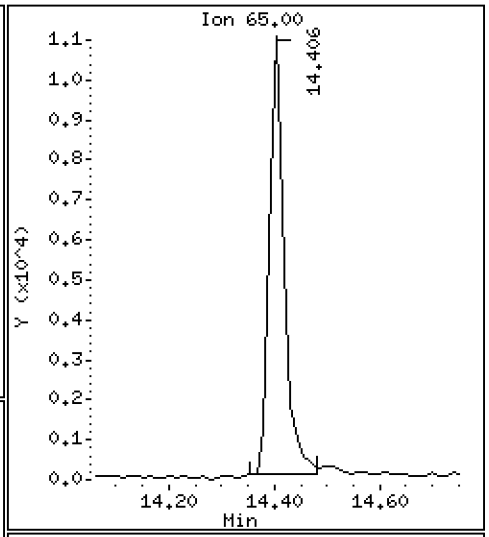
Concentration: 0.3449 ug/mL

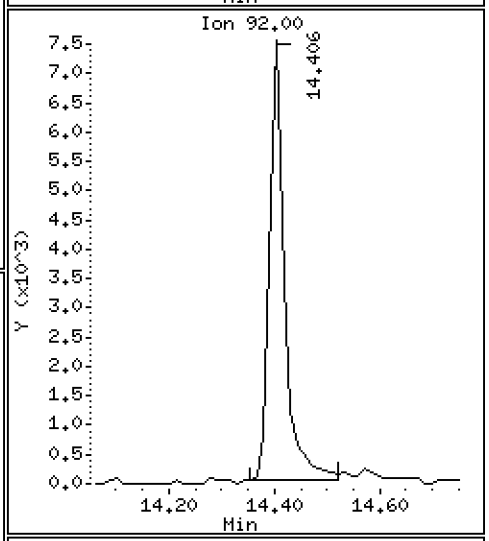


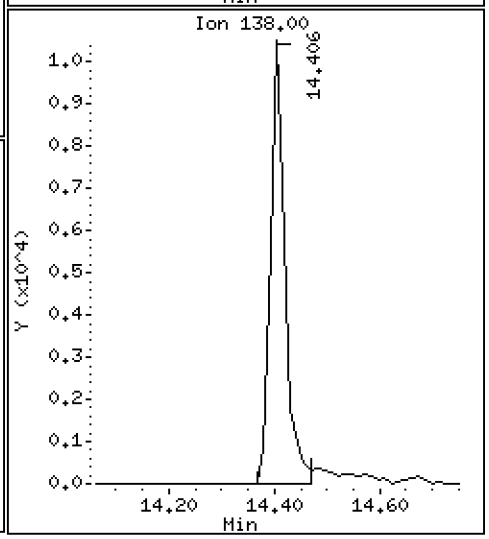












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

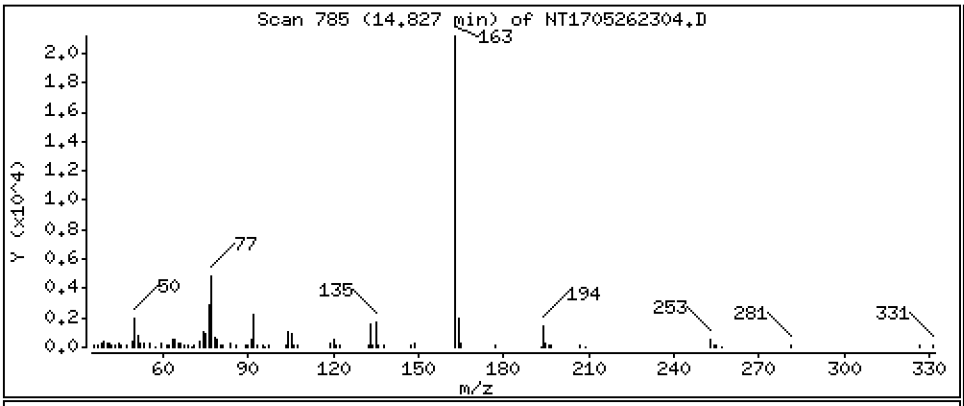
Operator: VTS

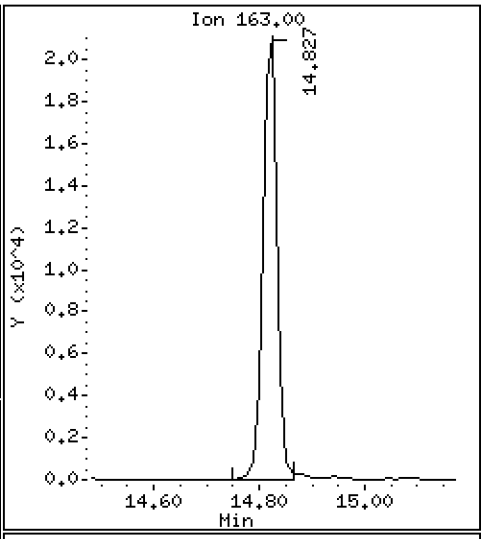
Column phase: ZB-5msi

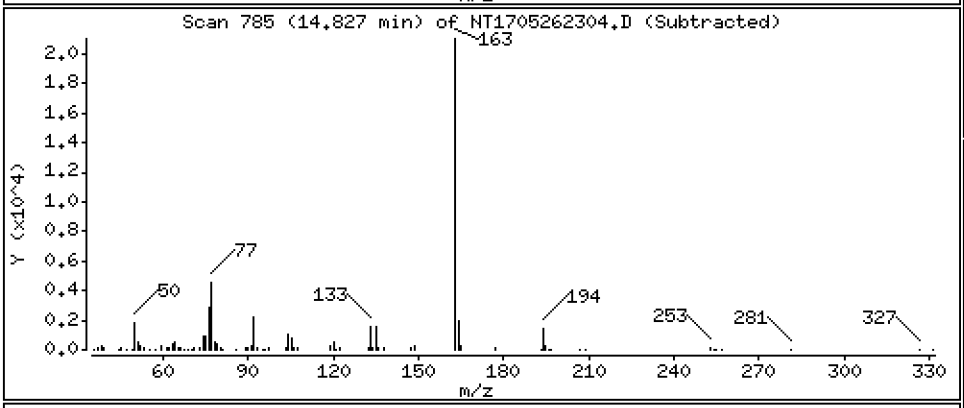
Column diameter: 0.25

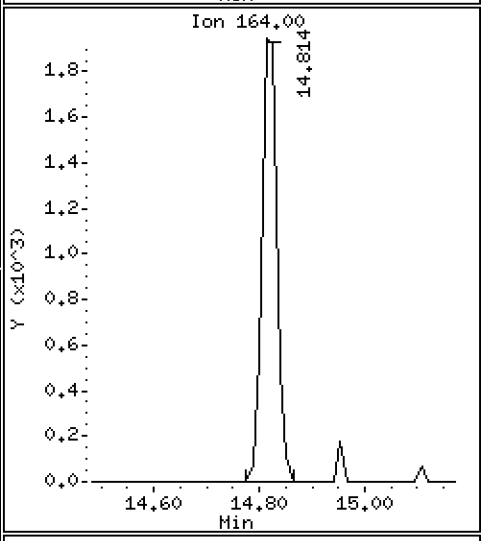
39 Dimethylphthalate

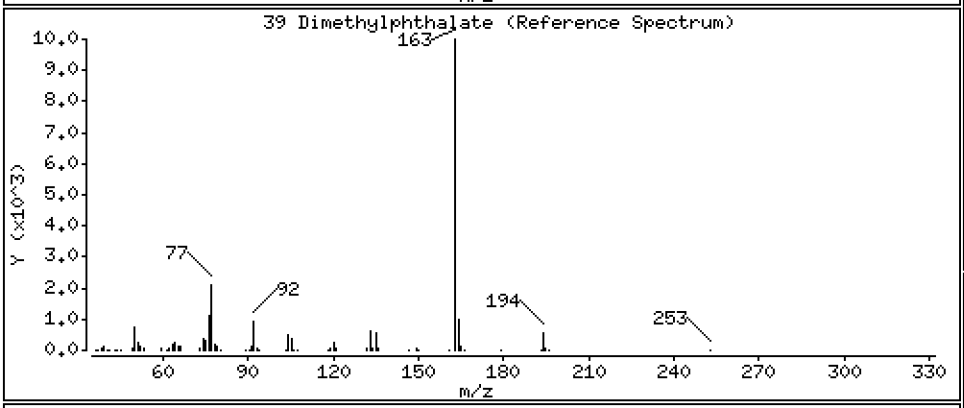
Concentration: 0.1997 ug/mL

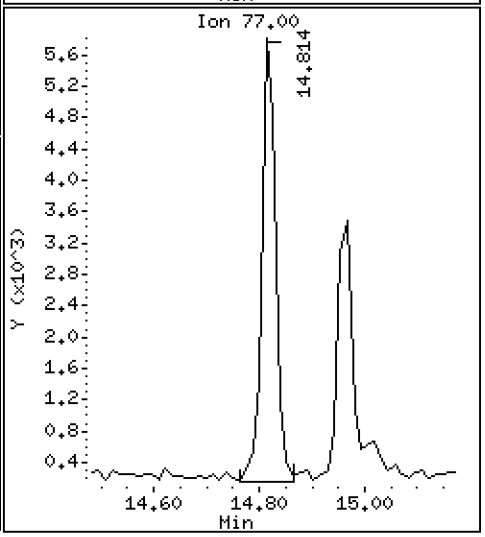


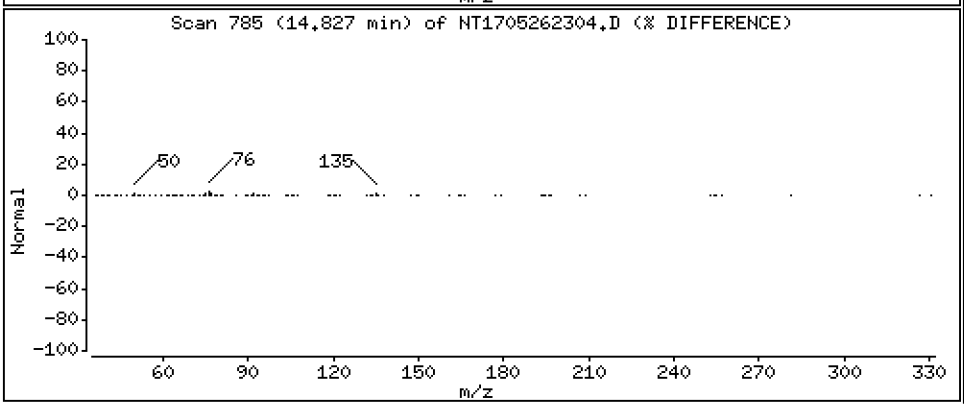












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

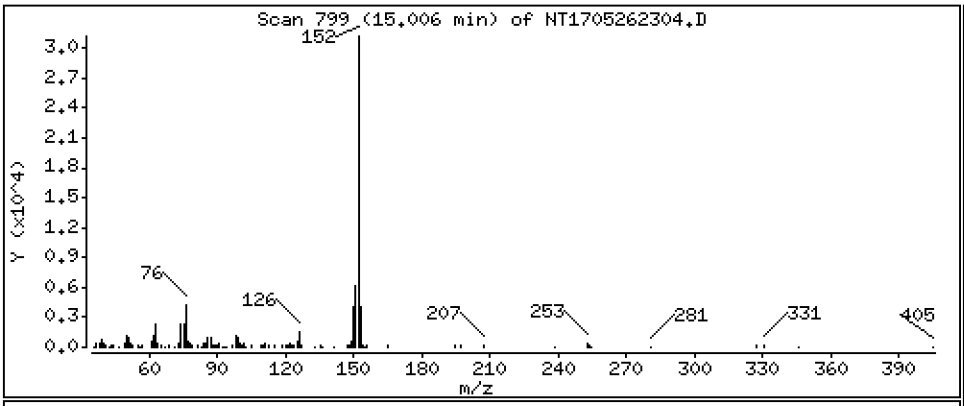
Operator: VTS

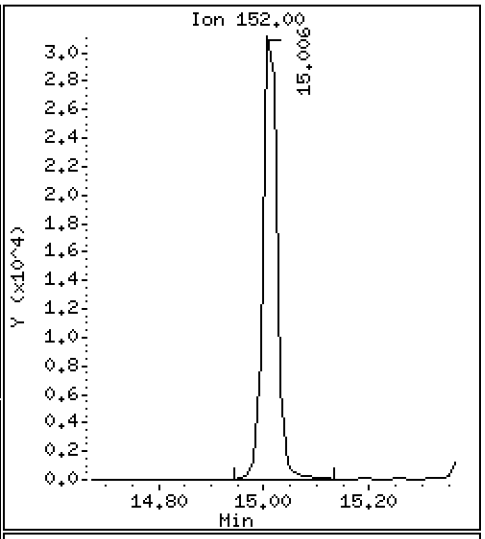
Column phase: ZB-5msi

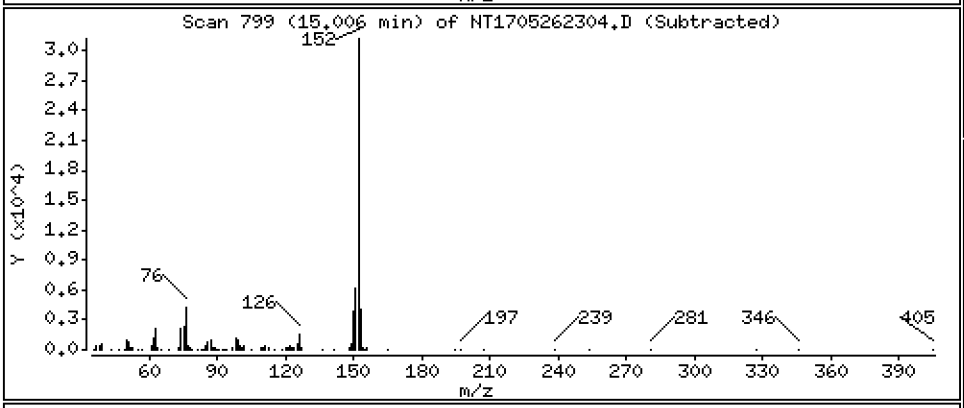
Column diameter: 0.25

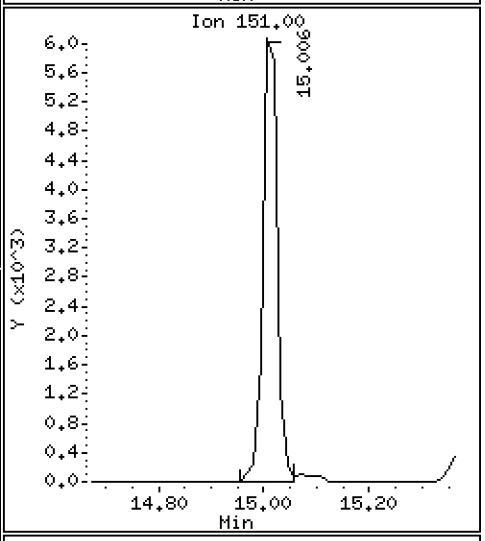
40 Acenaphthylene

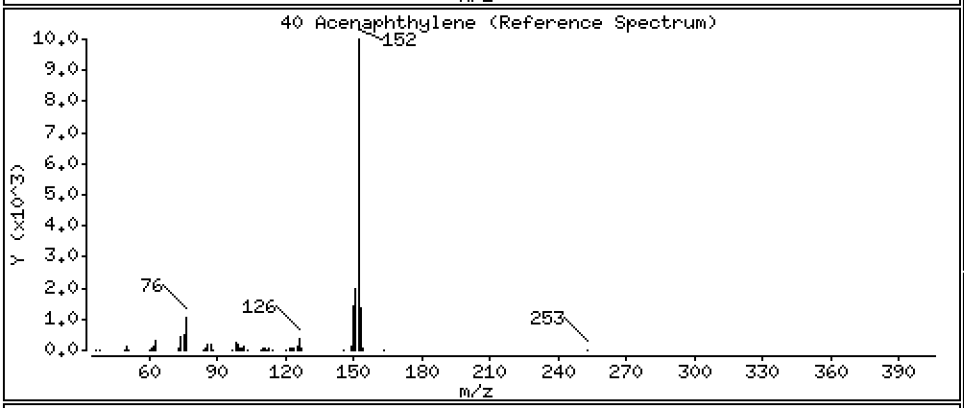
Concentration: 0.2072 ug/mL

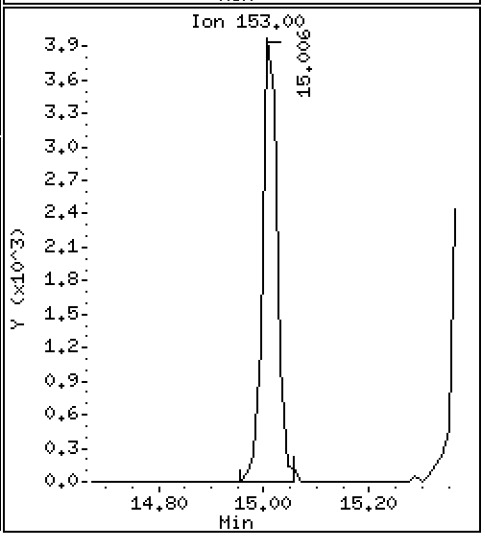


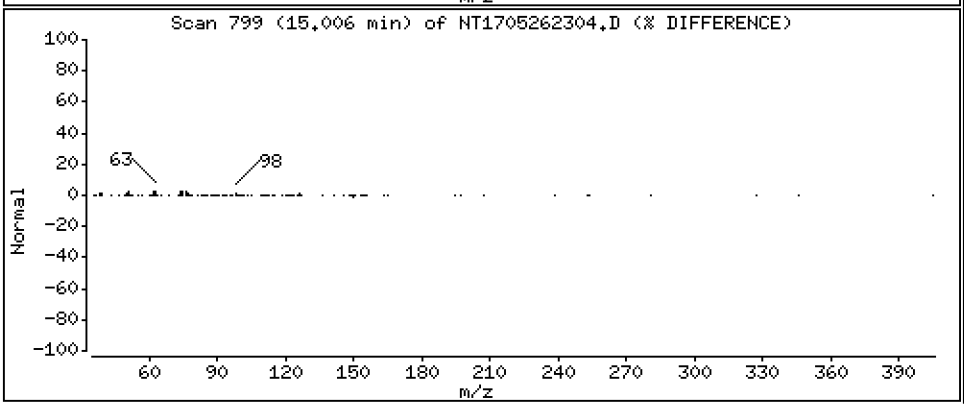












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

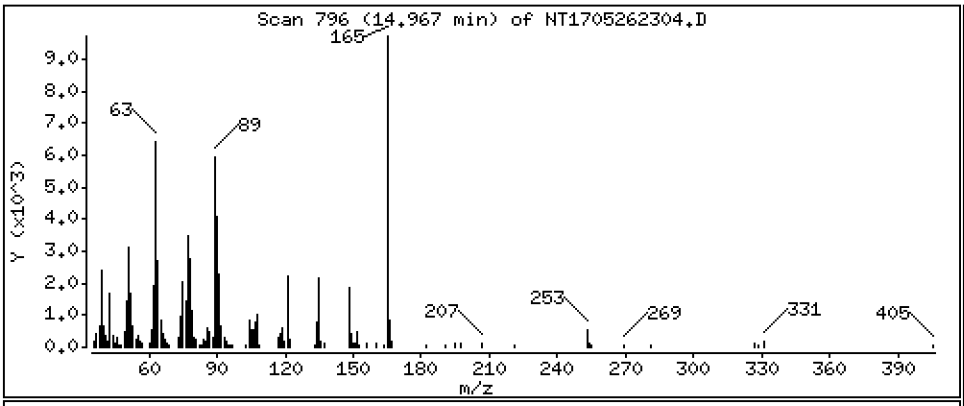
Operator: VTS

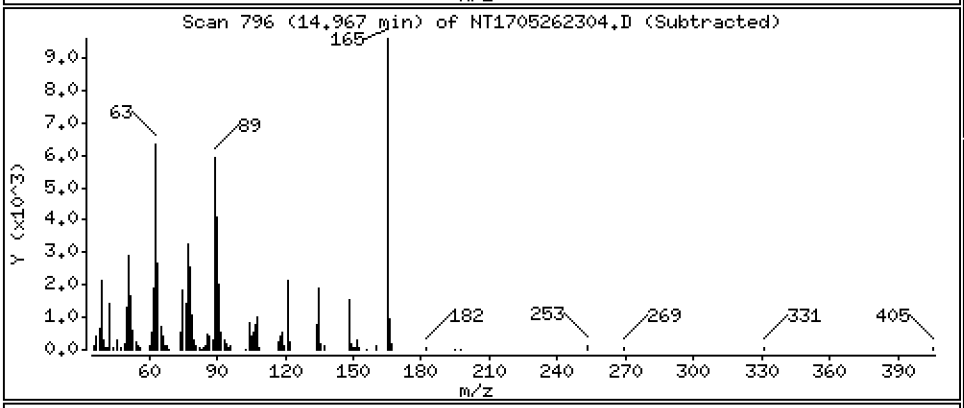
Column phase: ZB-5msi

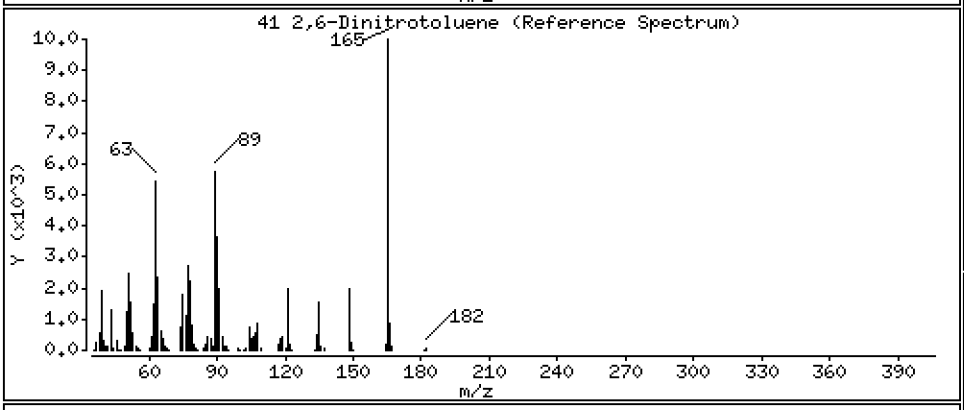
Column diameter: 0.25

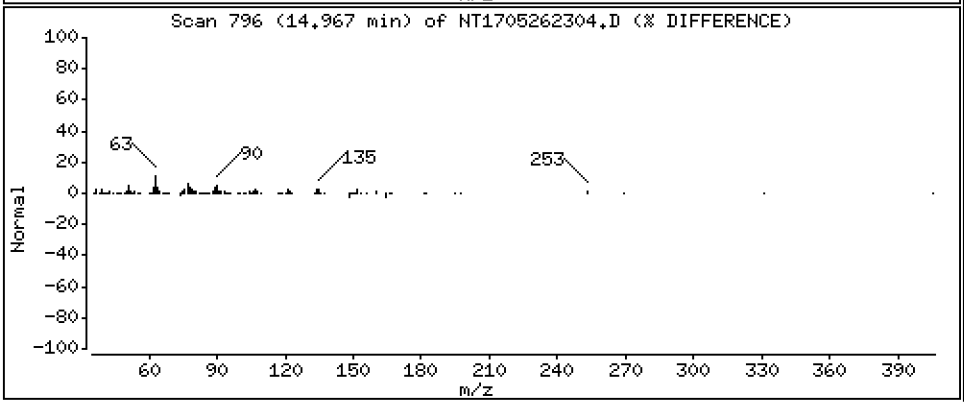
41 2,6-Dinitrotoluene

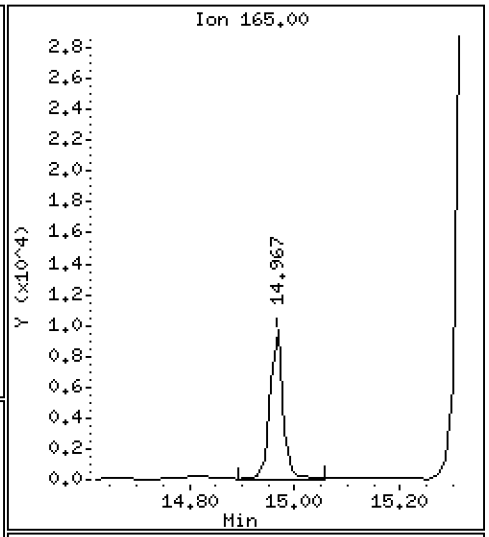
Concentration: 0.3679 ug/mL

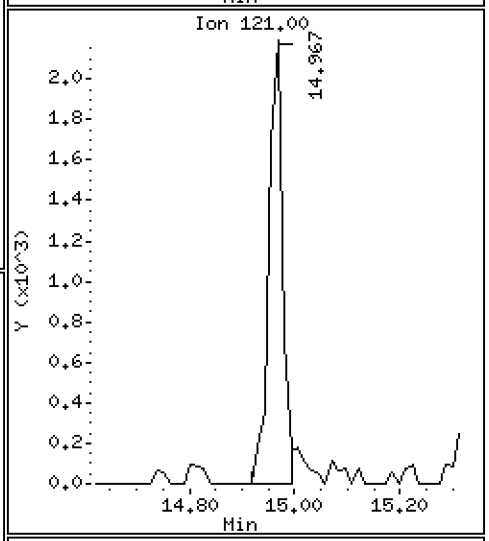


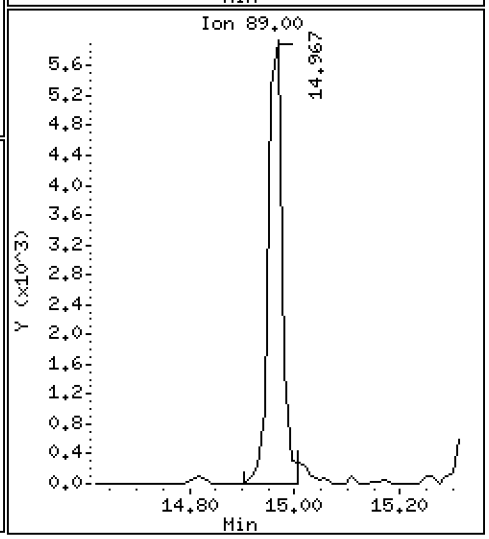












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

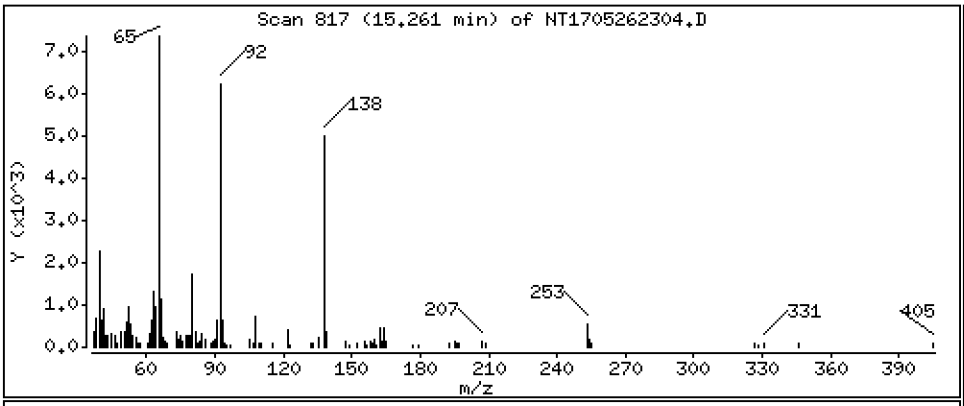
Operator: VTS

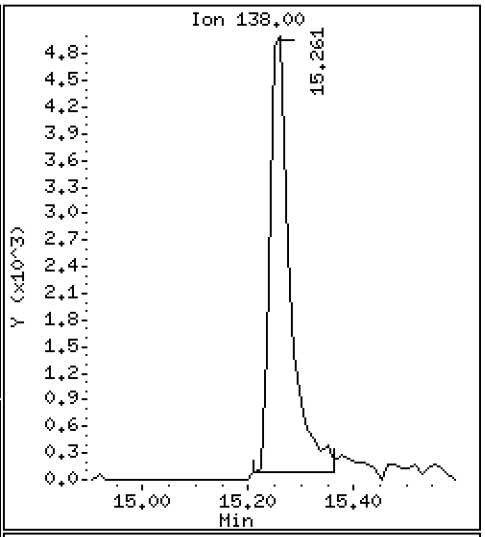
Column phase: ZB-5msi

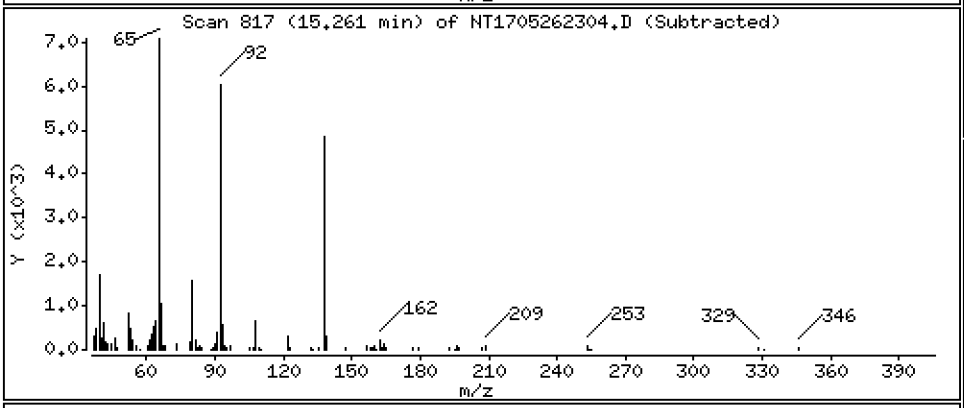
Column diameter: 0.25

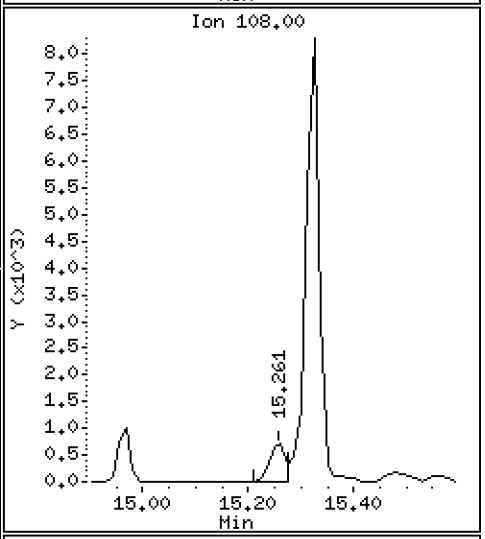
43 3-Nitroaniline

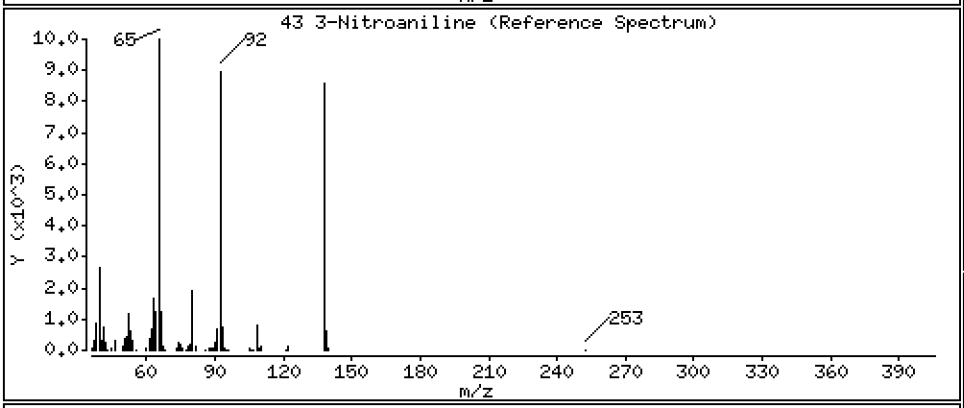
Concentration: 0.3056 ug/mL

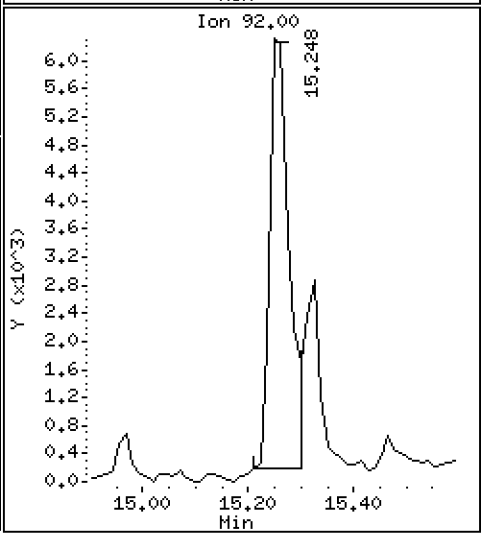


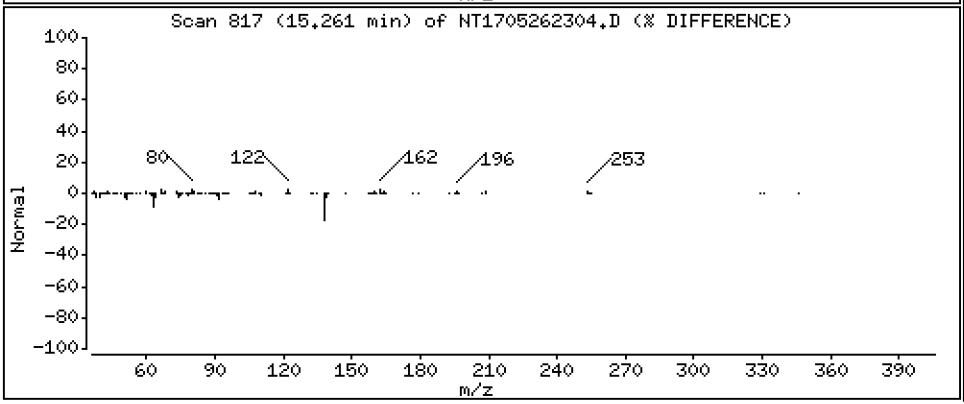












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

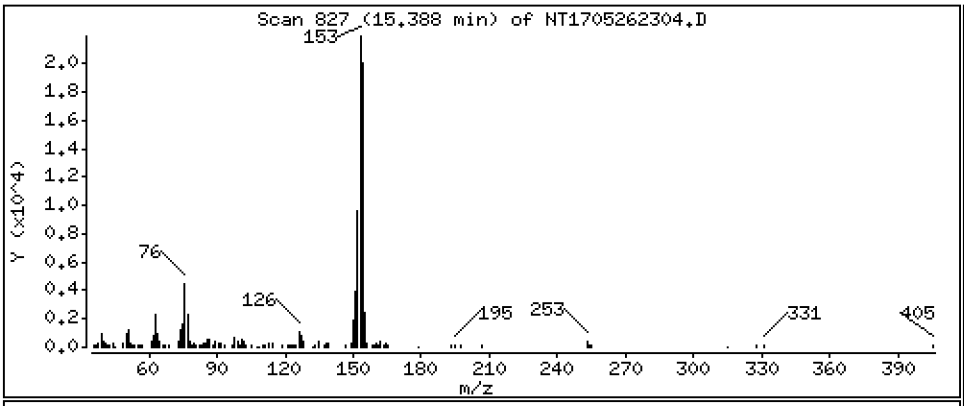
Operator: VTS

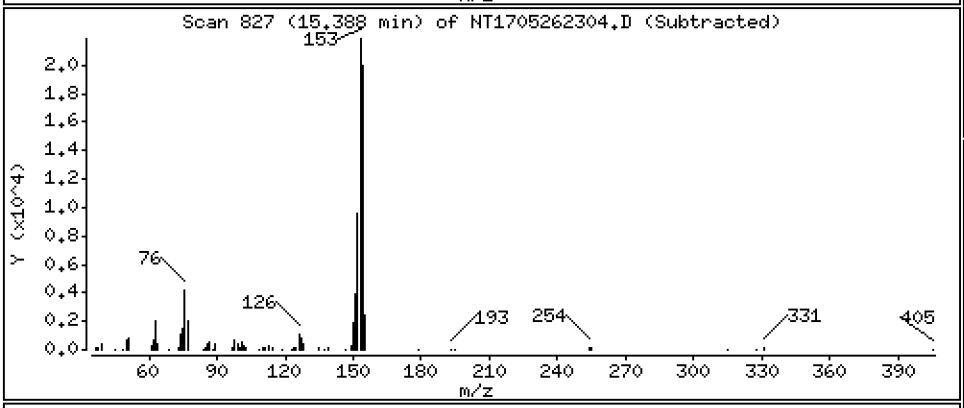
Column phase: ZB-5msi

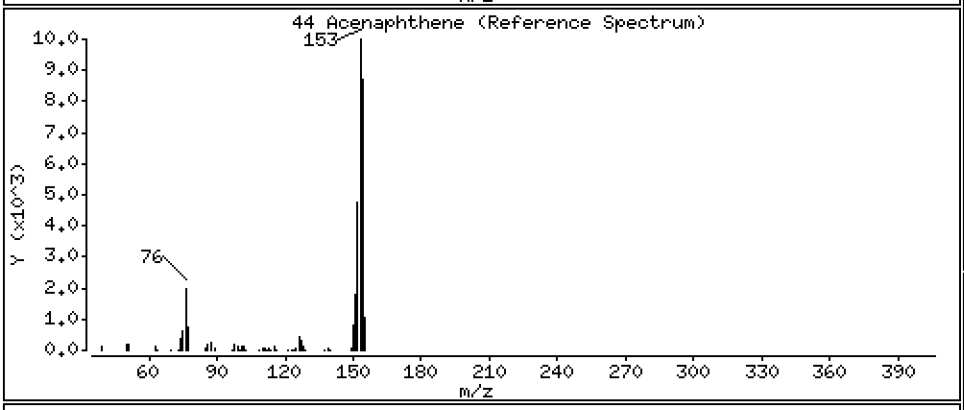
Column diameter: 0.25

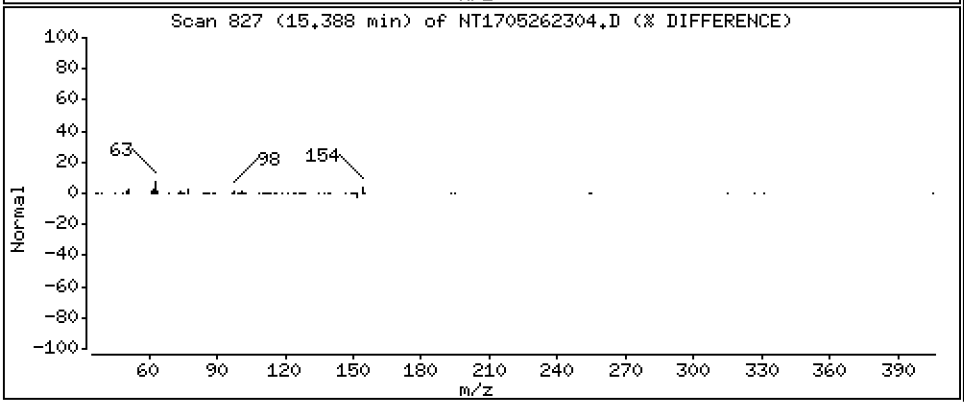
44 Acenaphthene

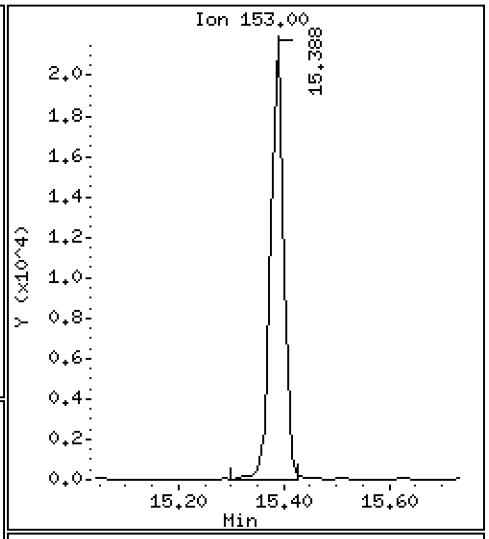
Concentration: 0.2060 ug/mL

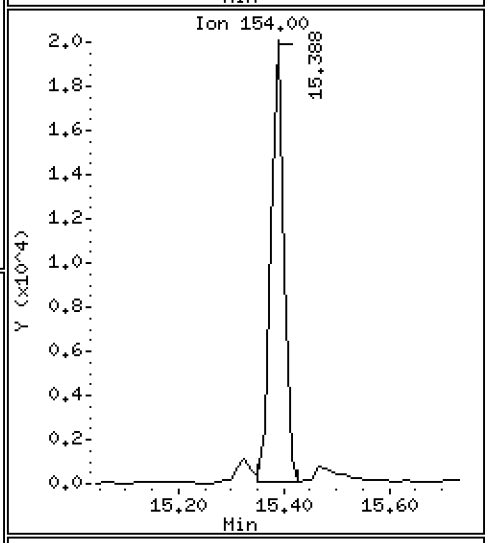


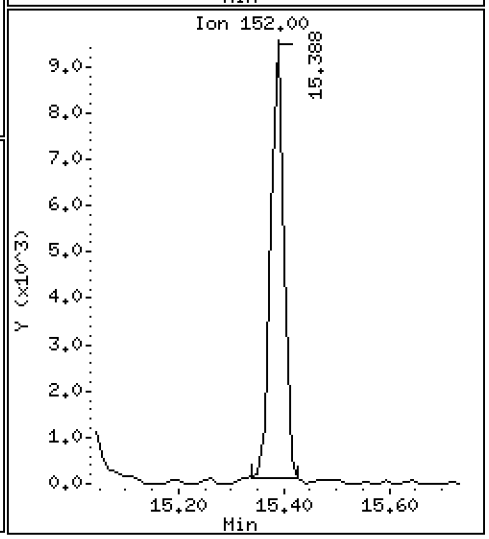












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

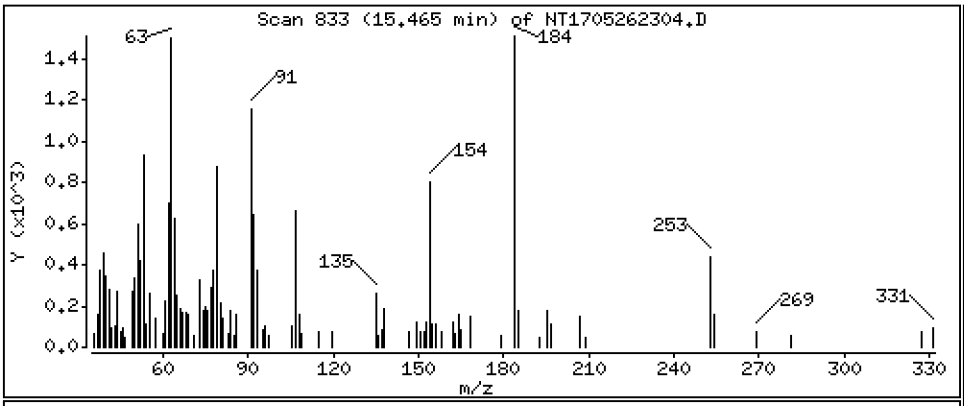
Operator: VTS

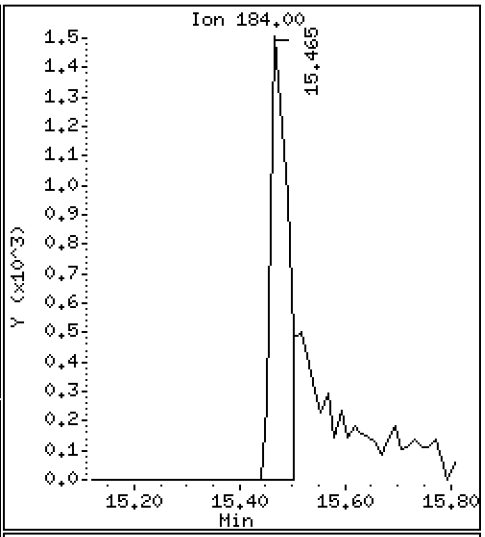
Column phase: ZB-5msi

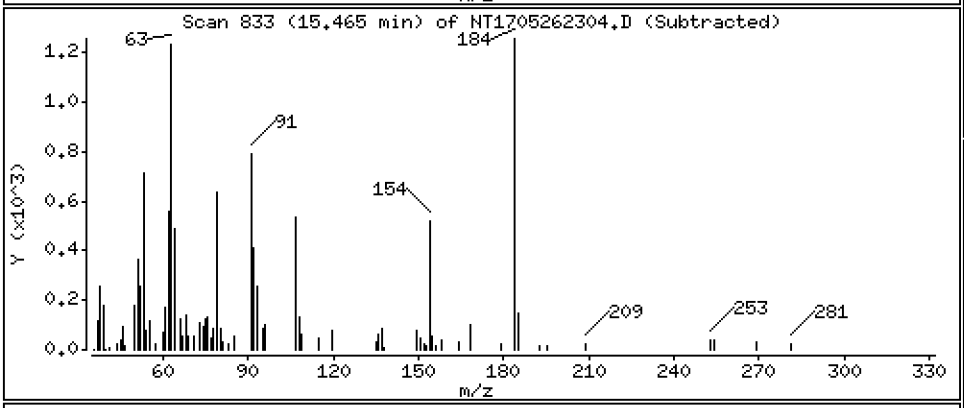
Column diameter: 0.25

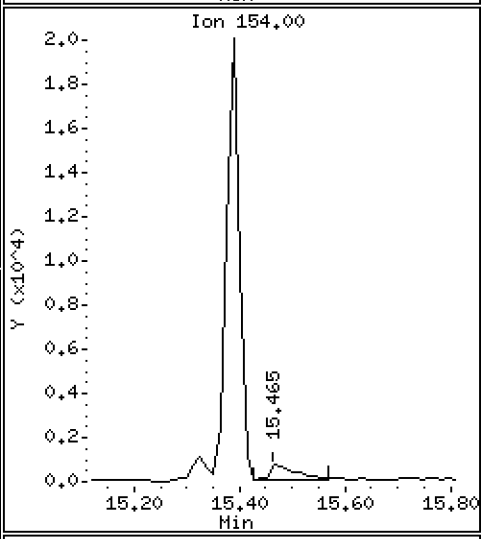
45 2,4-Dinitrophenol

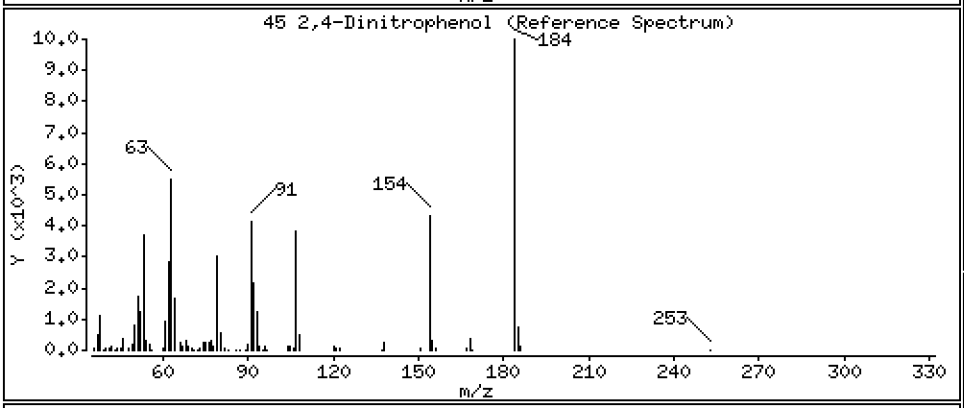
Concentration: 0.1227 ug/mL

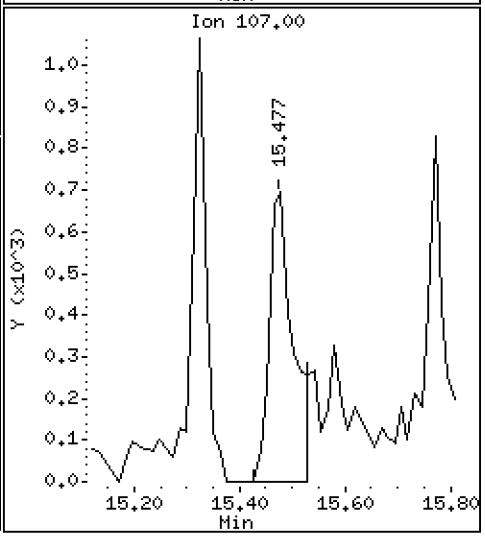


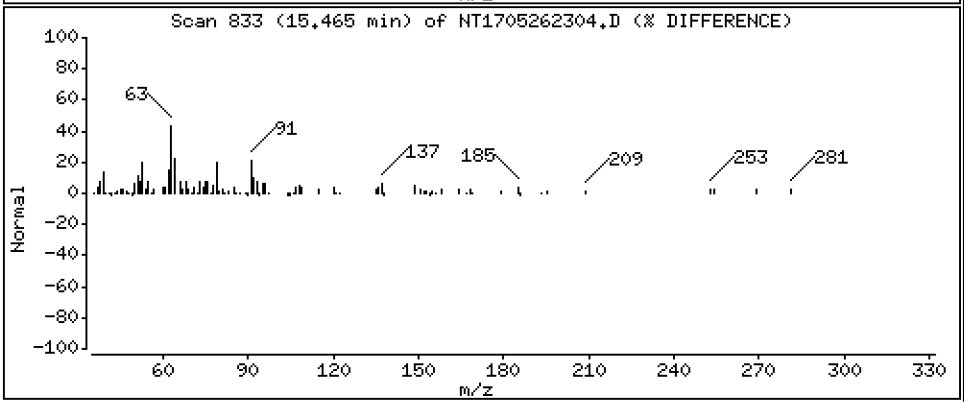












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

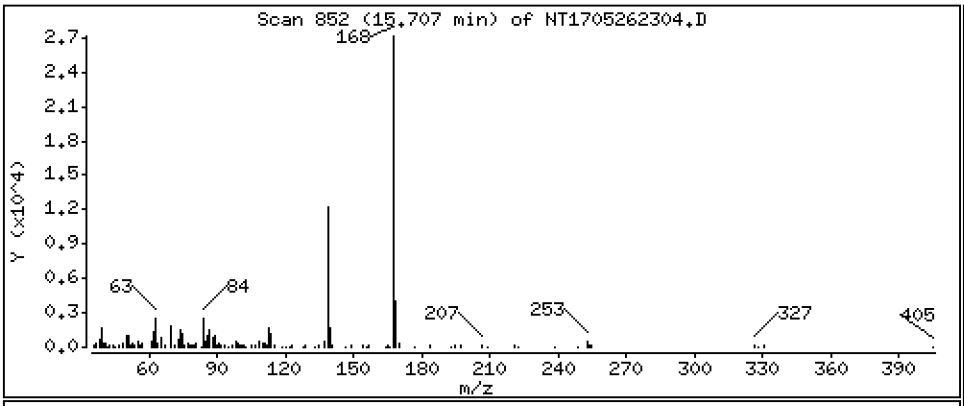
Operator: VTS

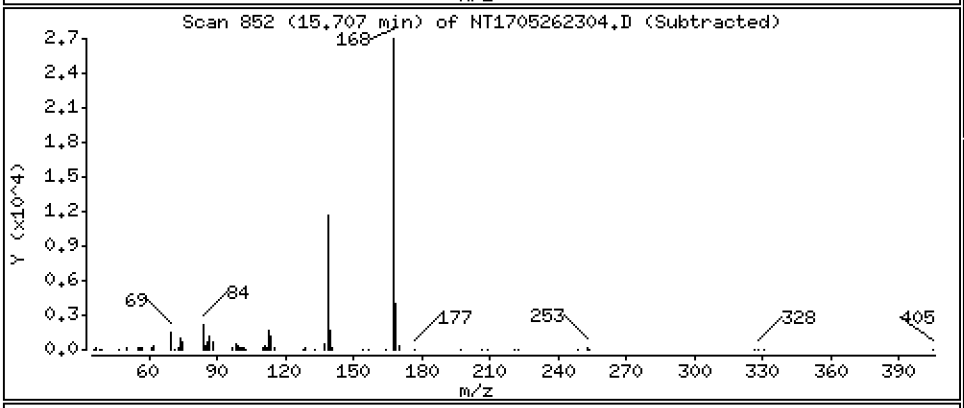
Column phase: ZB-5msi

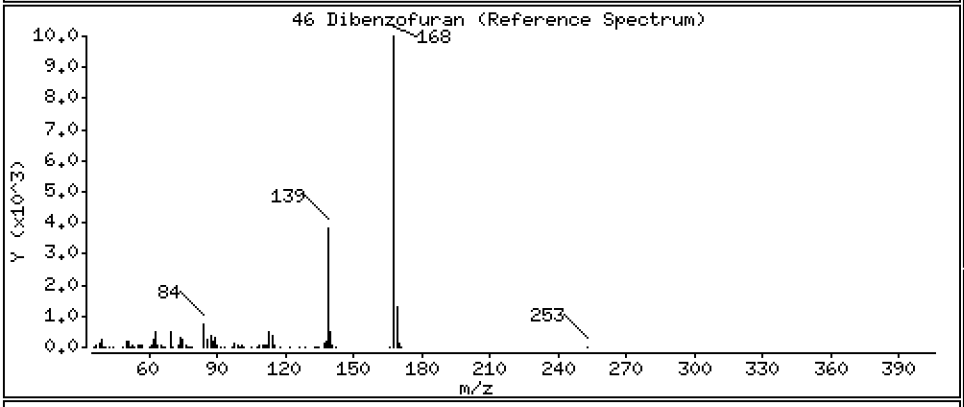
Column diameter: 0.25

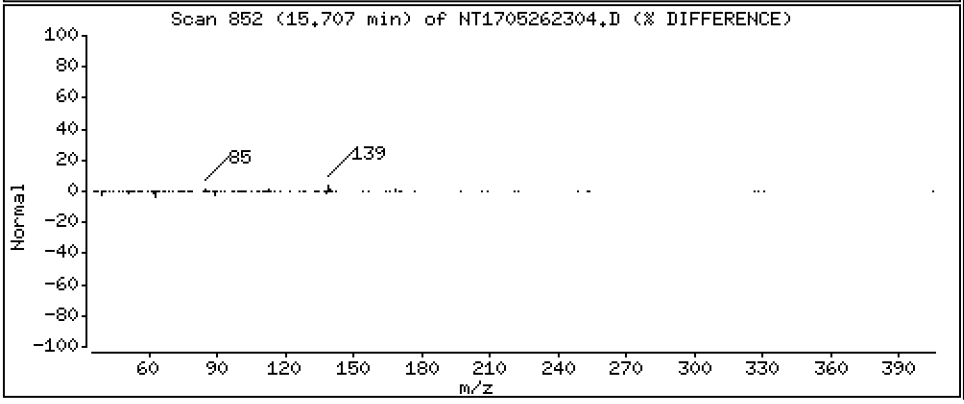
46 Dibenzofuran

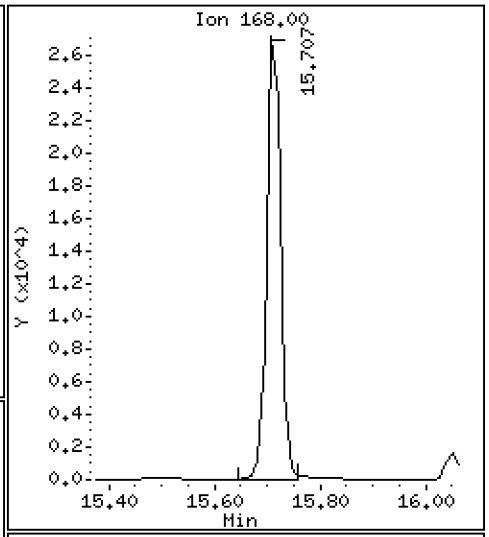
Concentration: 0.1979 ug/mL

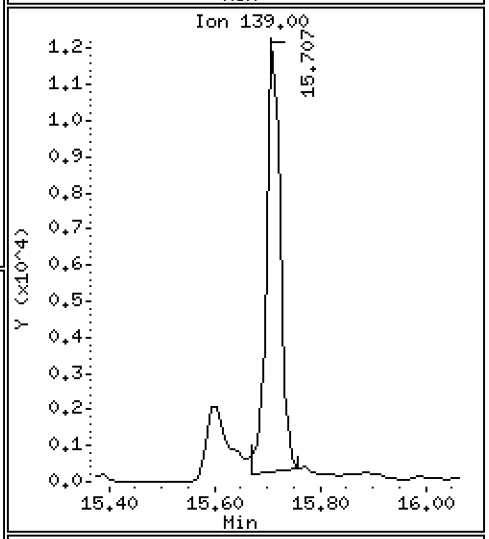


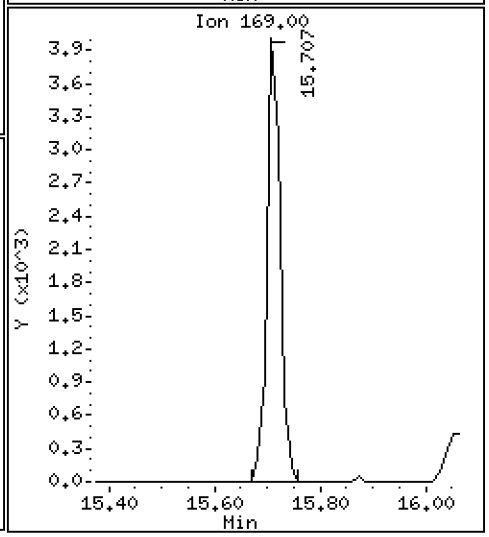












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

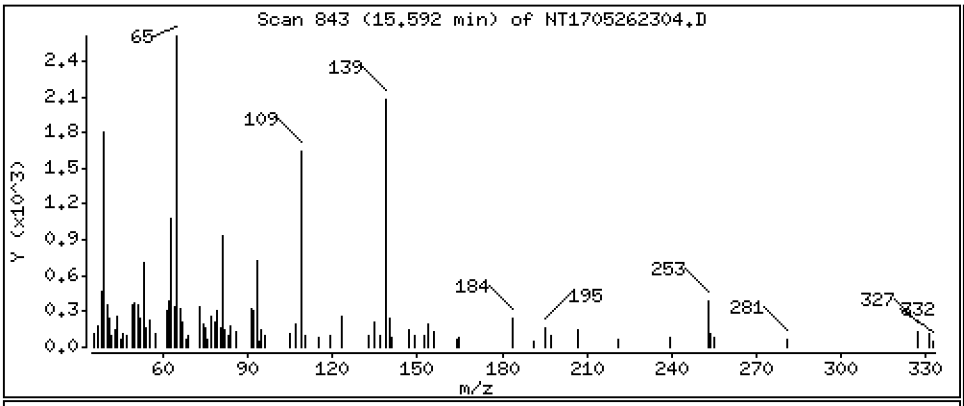
Operator: VTS

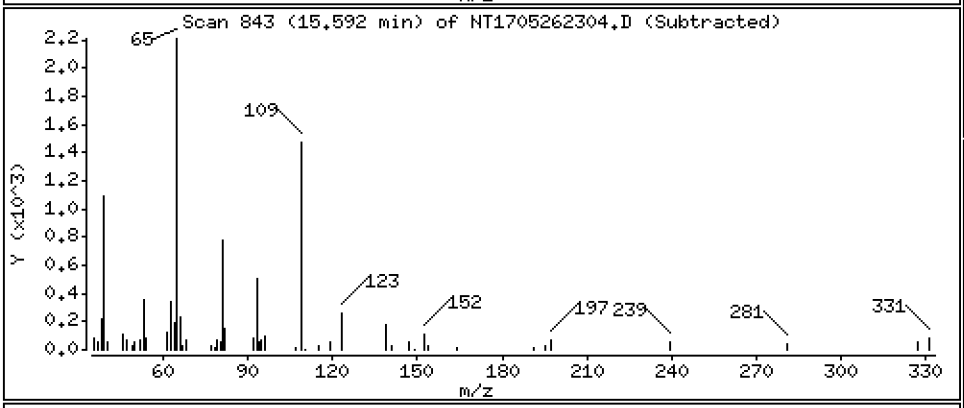
Column phase: ZB-5msi

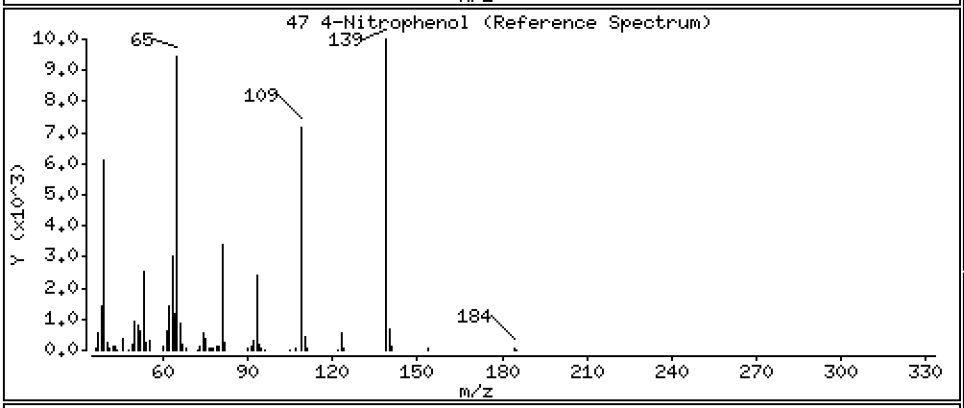
Column diameter: 0.25

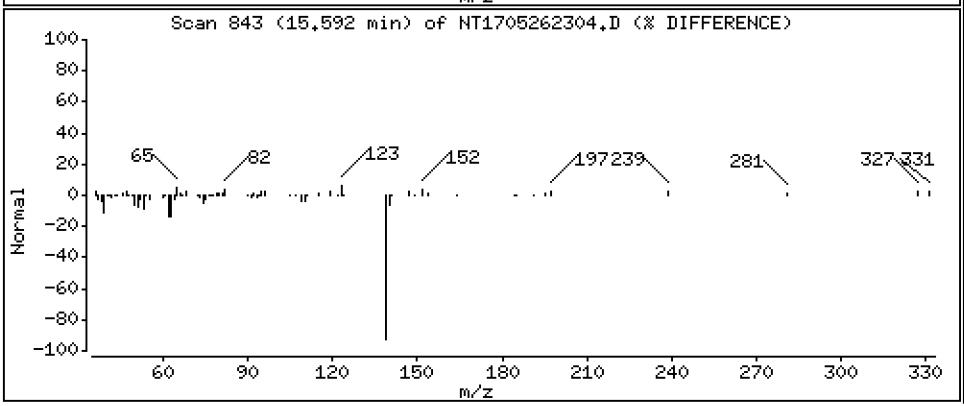
47 4-Nitrophenol

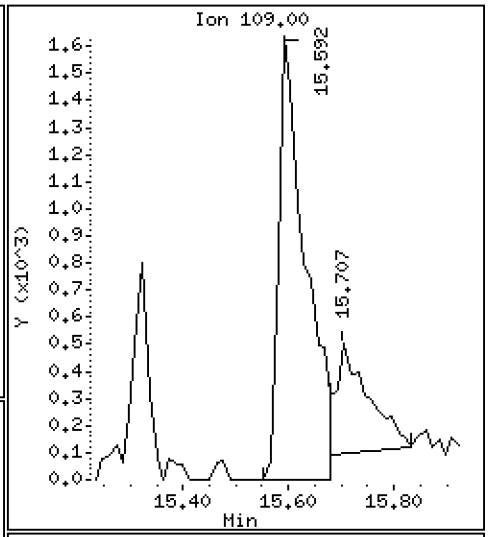
Concentration: 0.2097 ug/mL

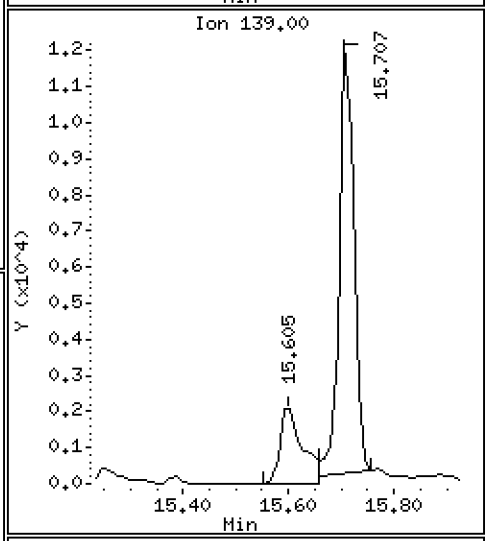


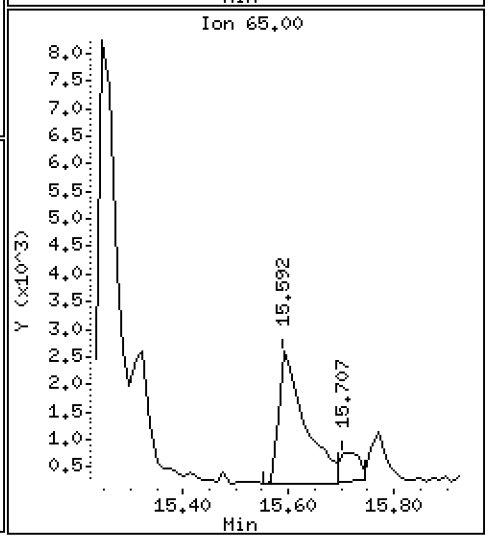












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

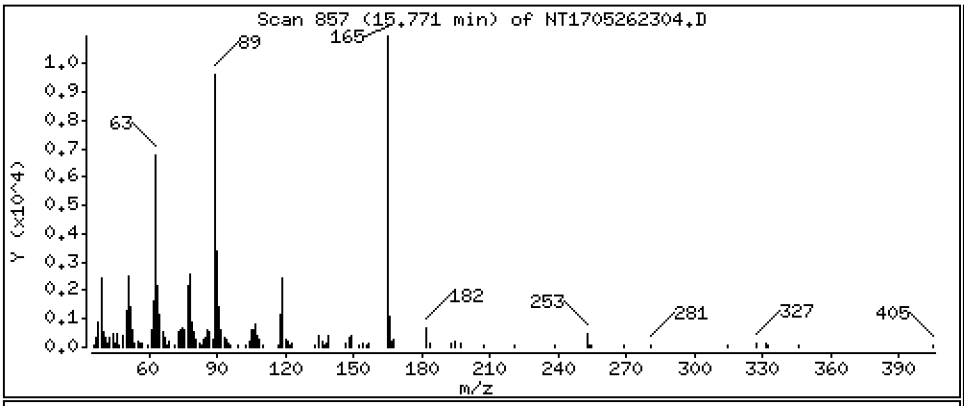
Operator: VTS

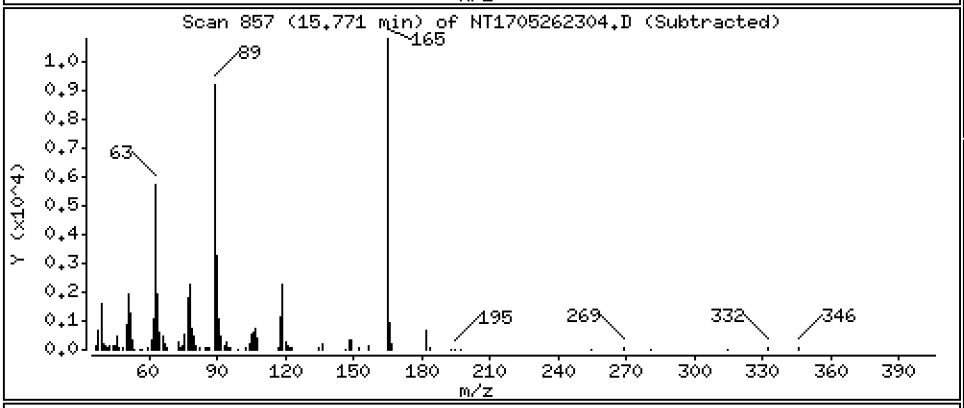
Column phase: ZB-5msi

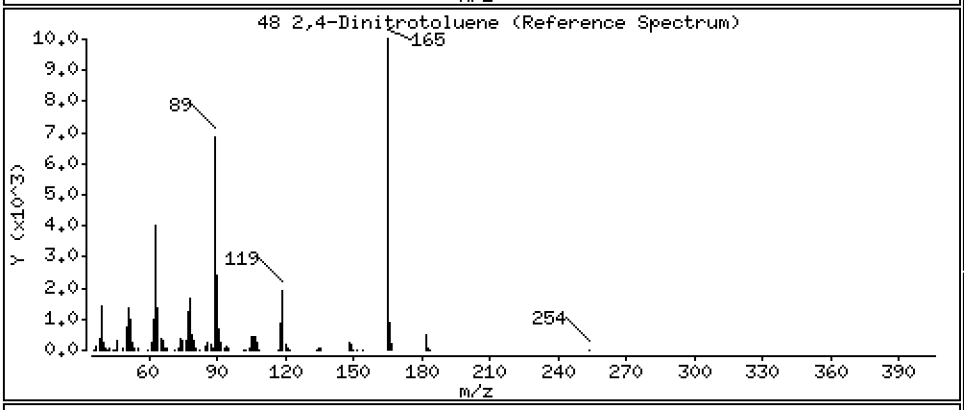
Column diameter: 0.25

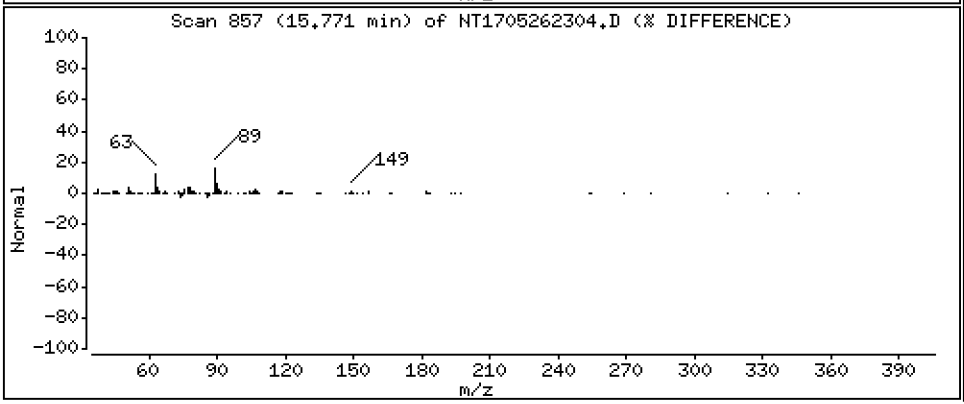
48 2,4-Dinitrotoluene

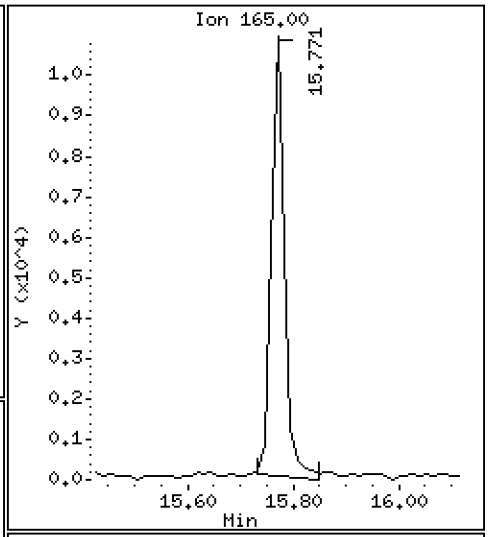
Concentration: 0.3191 ug/mL

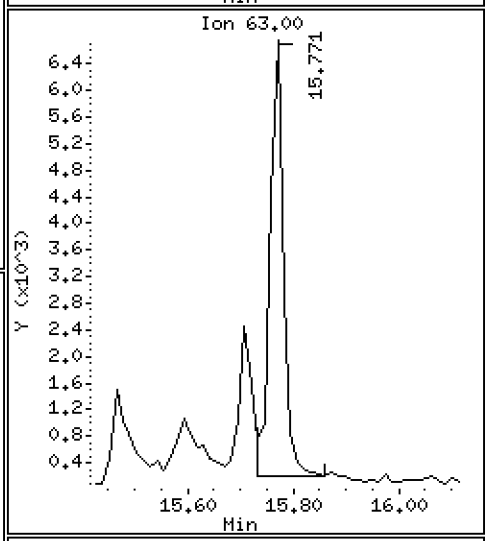


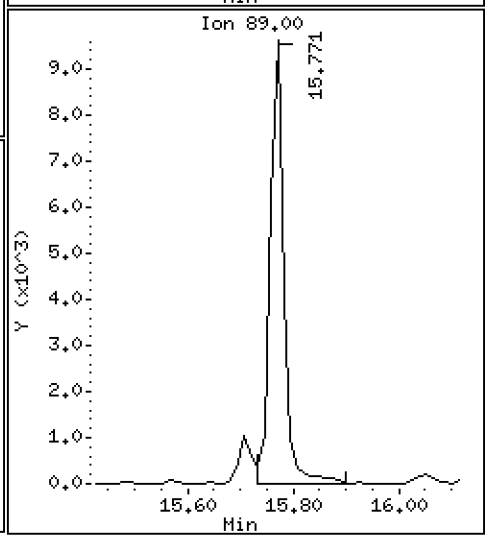












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

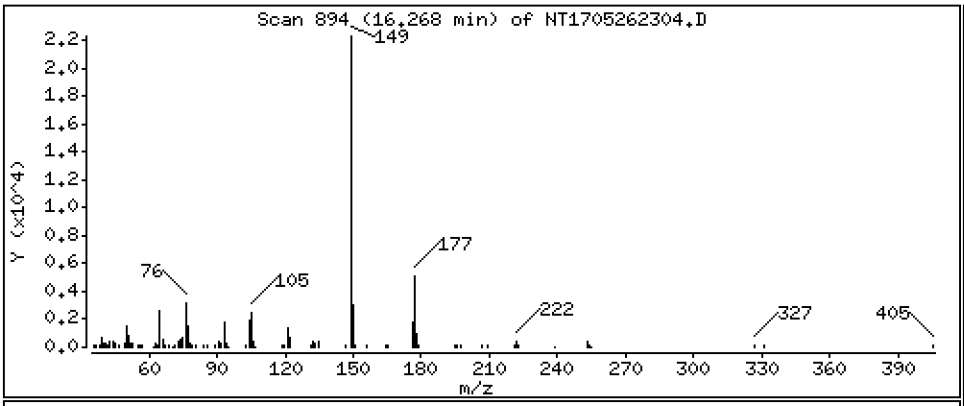
Operator: VTS

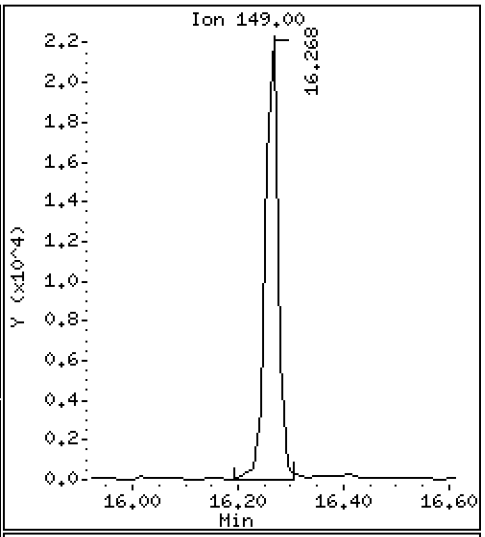
Column phase: ZB-5msi

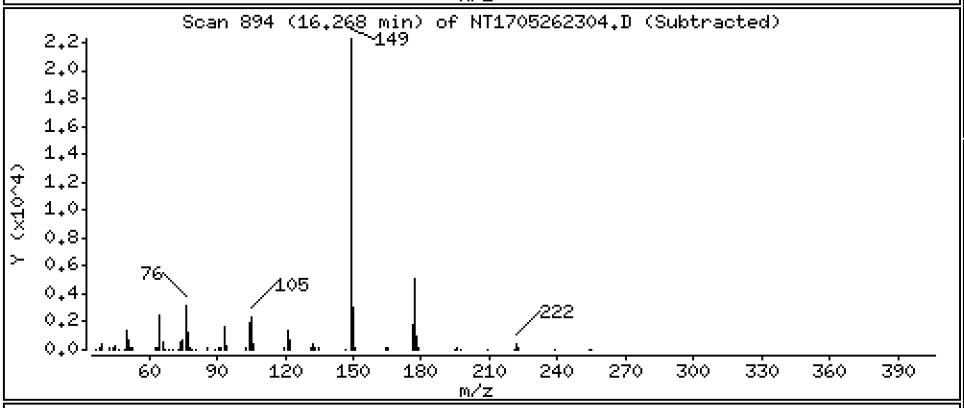
Column diameter: 0.25

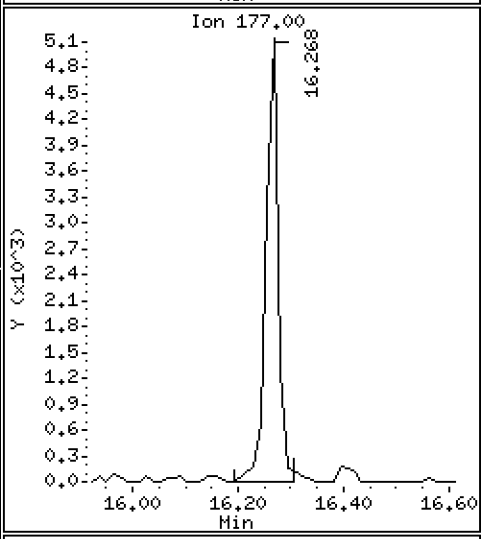
50 Diethylphthalate

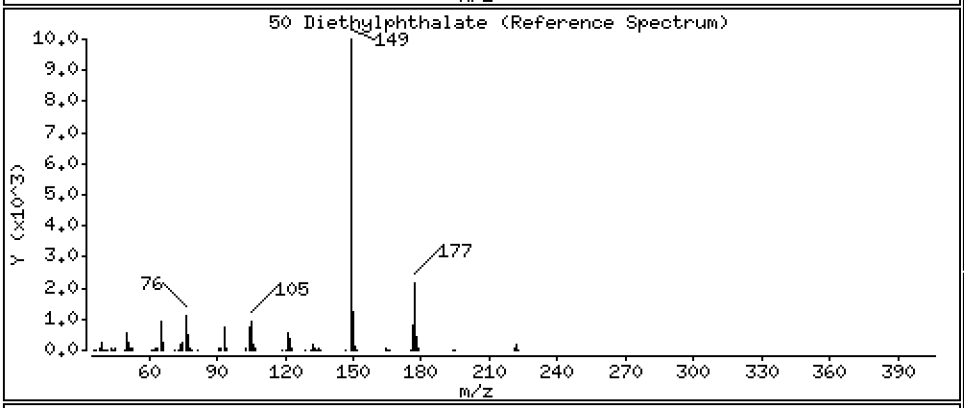
Concentration: 0.2517 ug/mL

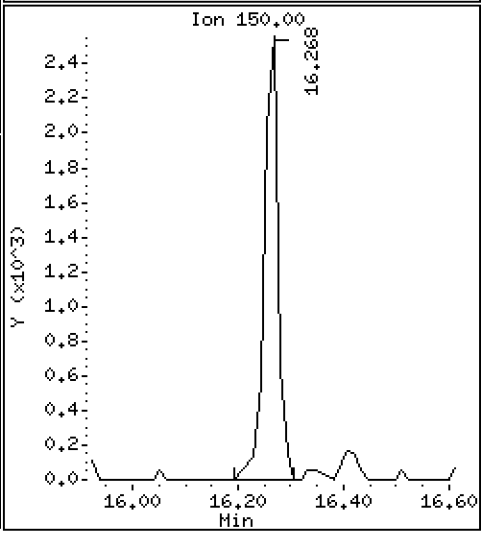


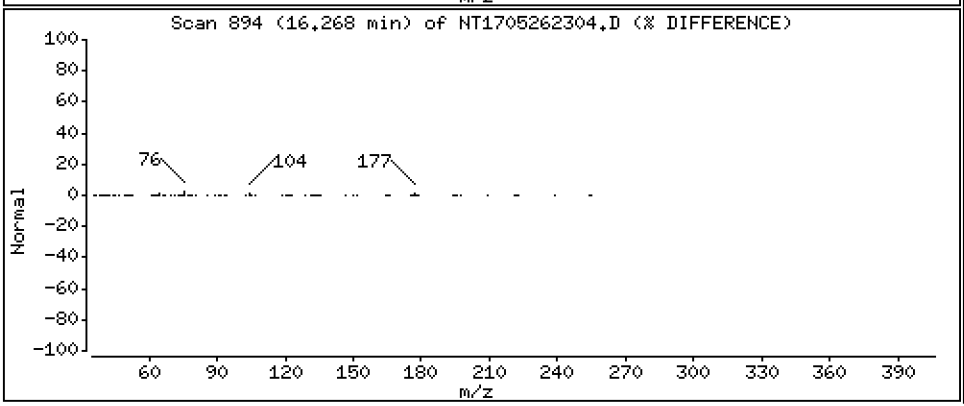












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

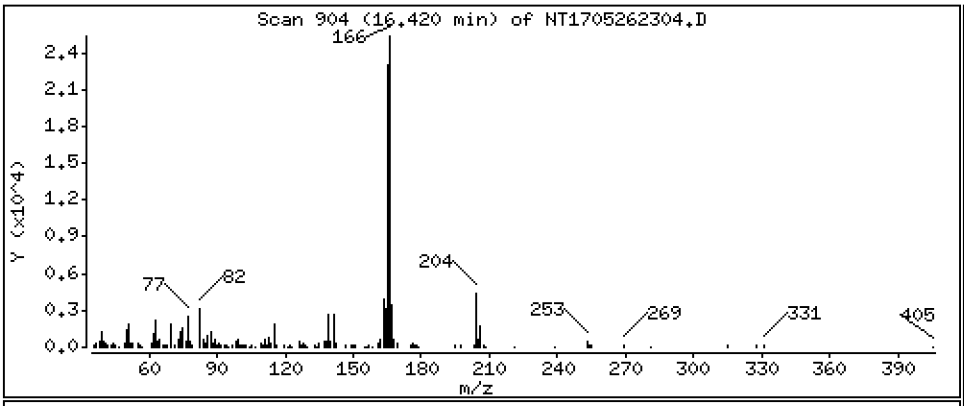
Operator: VTS

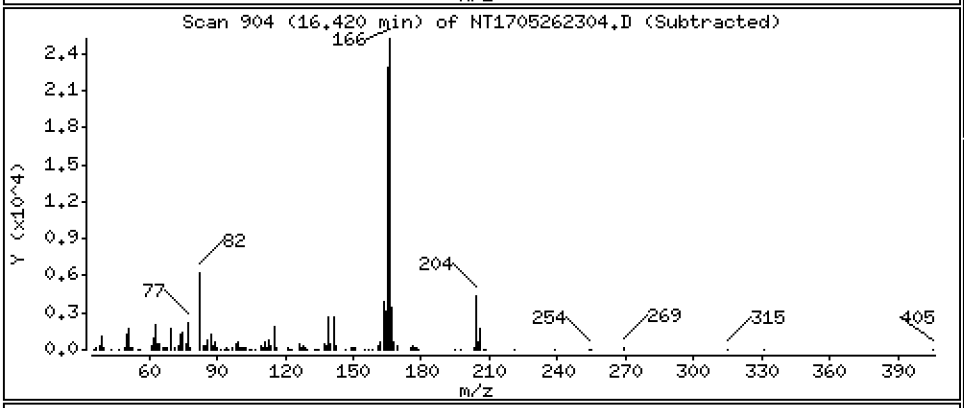
Column phase: ZB-5msi

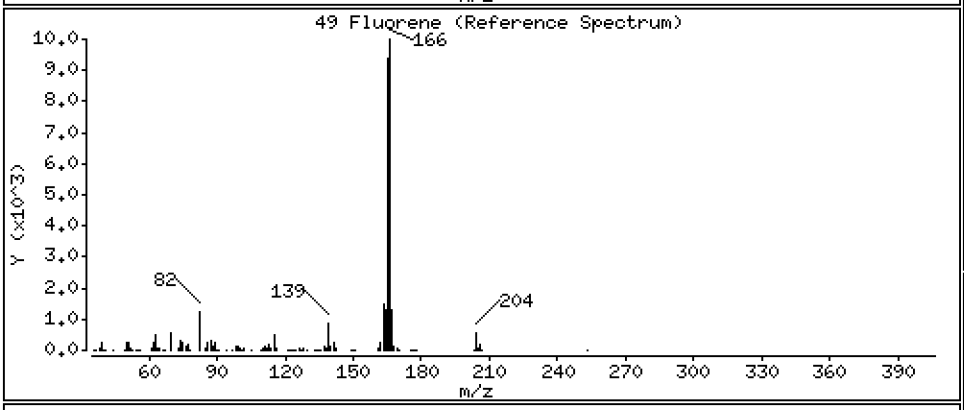
Column diameter: 0.25

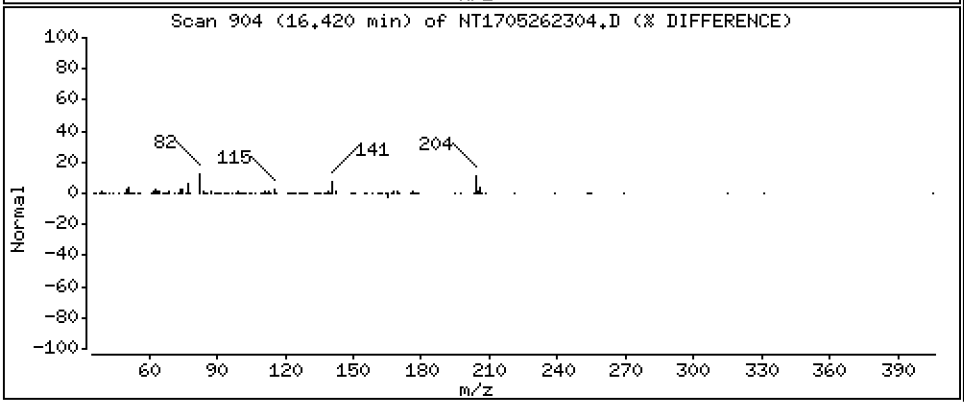
49 Fluorene

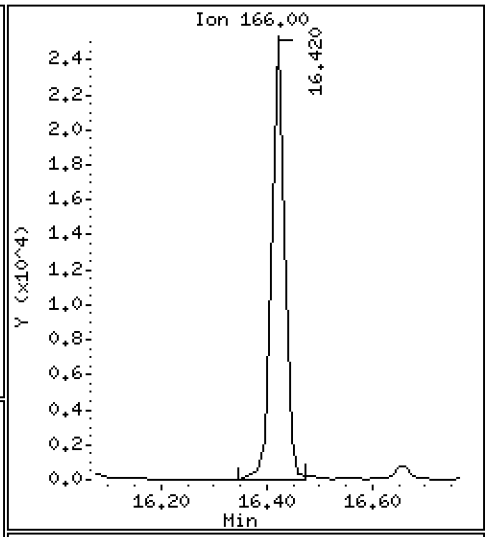
Concentration: 0.2240 ug/mL

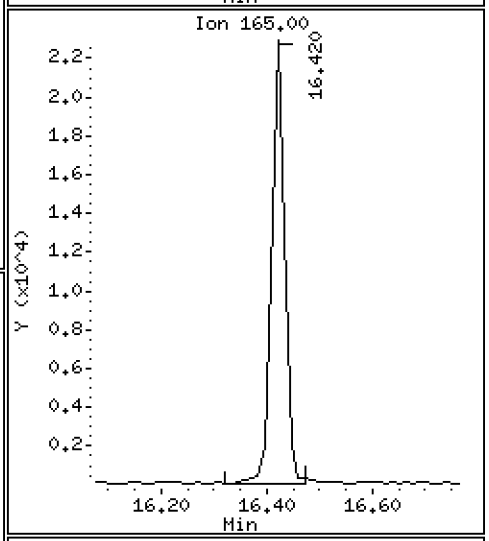


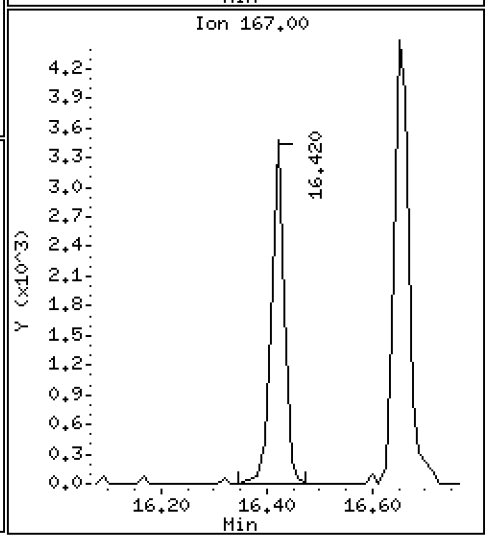












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

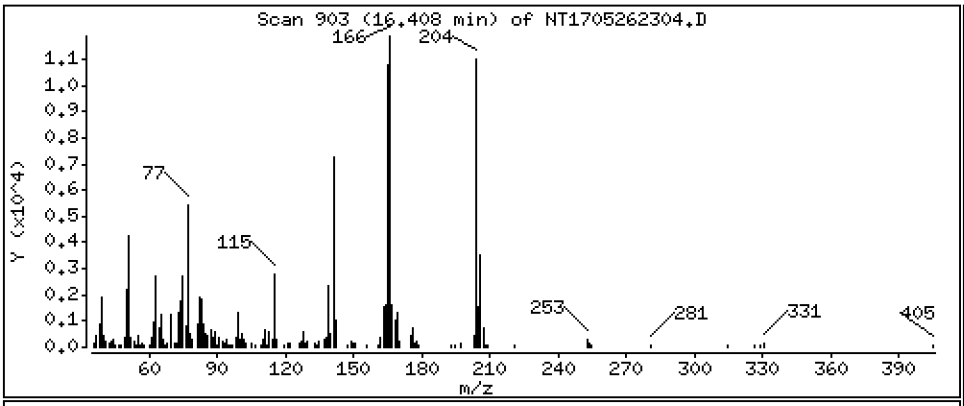
Operator: VTS

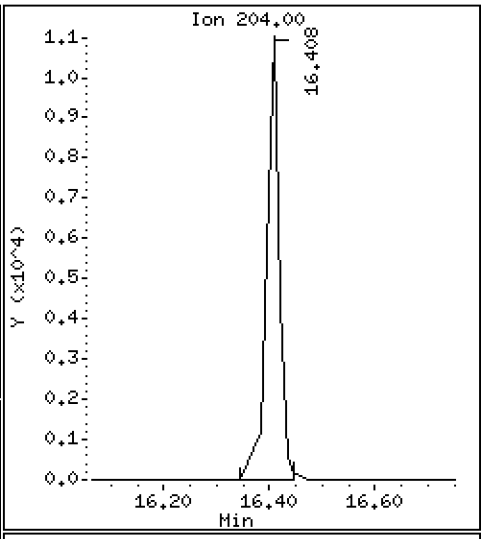
Column phase: ZB-5msi

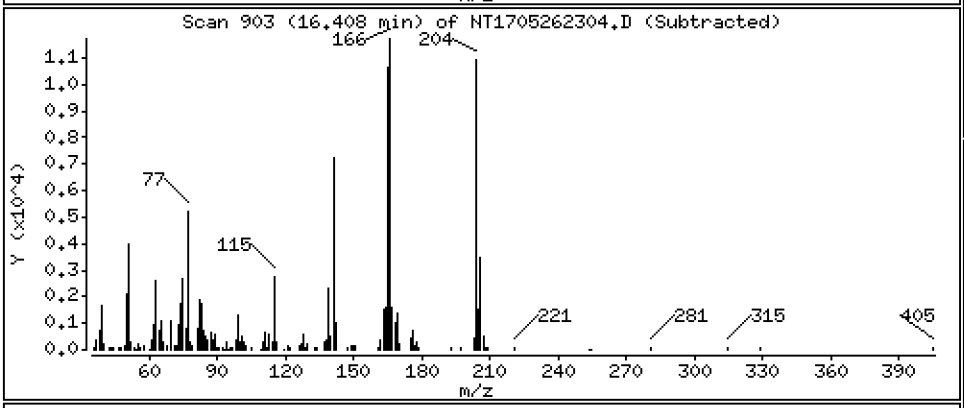
Column diameter: 0.25

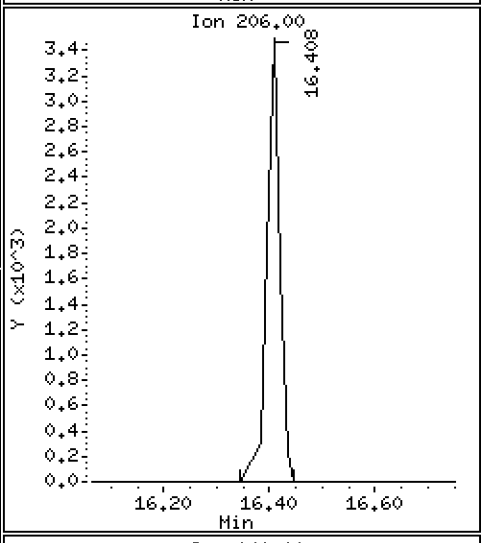
51 4-Chlorophenyl-phenylether

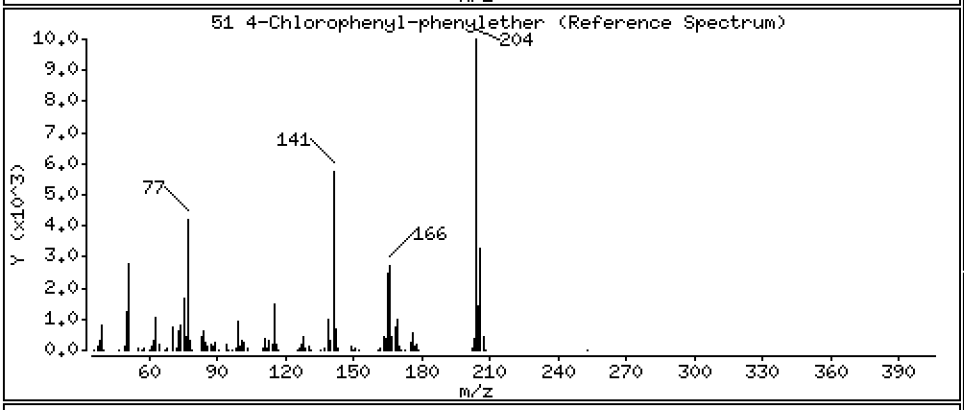
Concentration: 0.2107 ug/mL

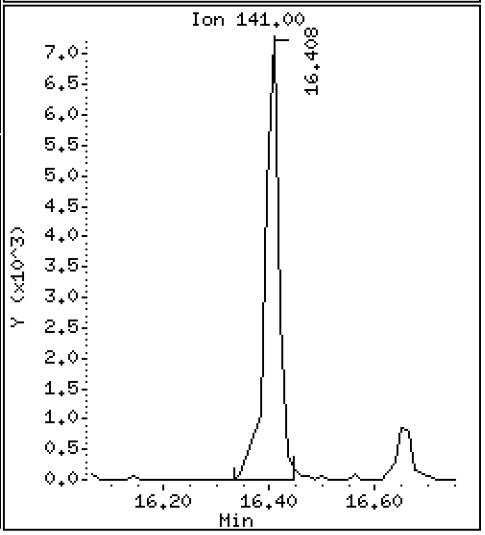


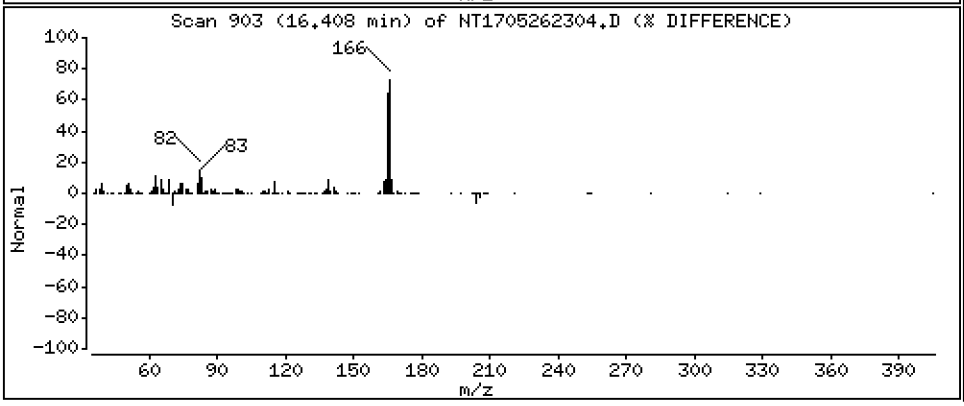












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

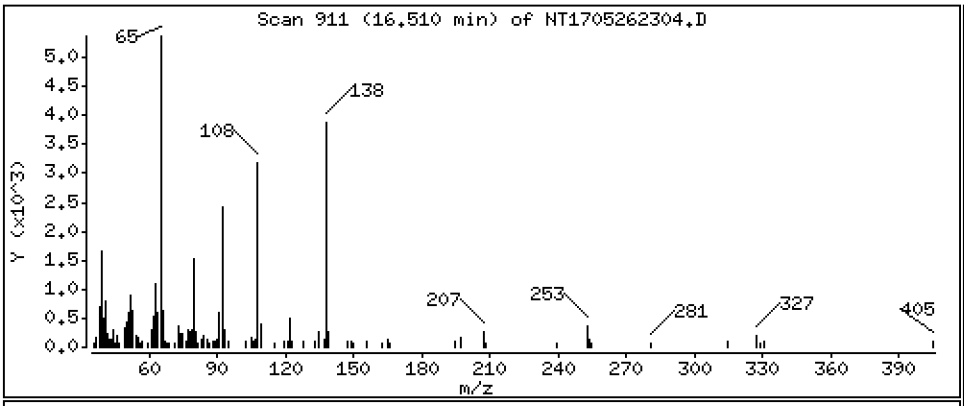
Operator: VTS

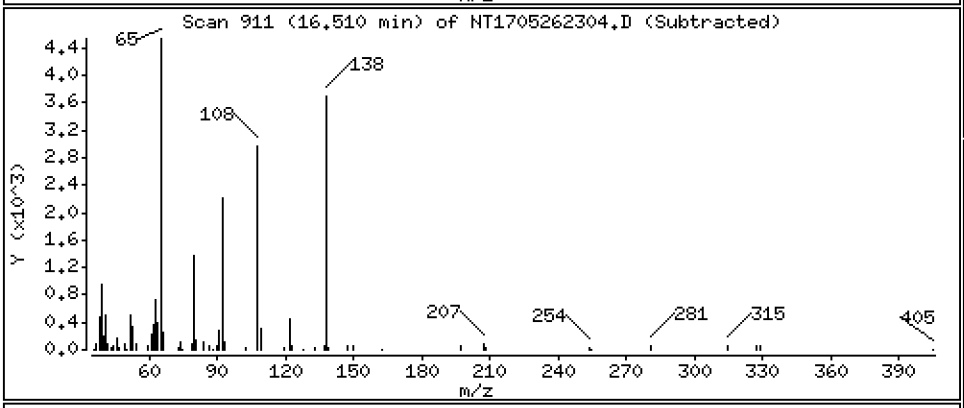
Column phase: ZB-5msi

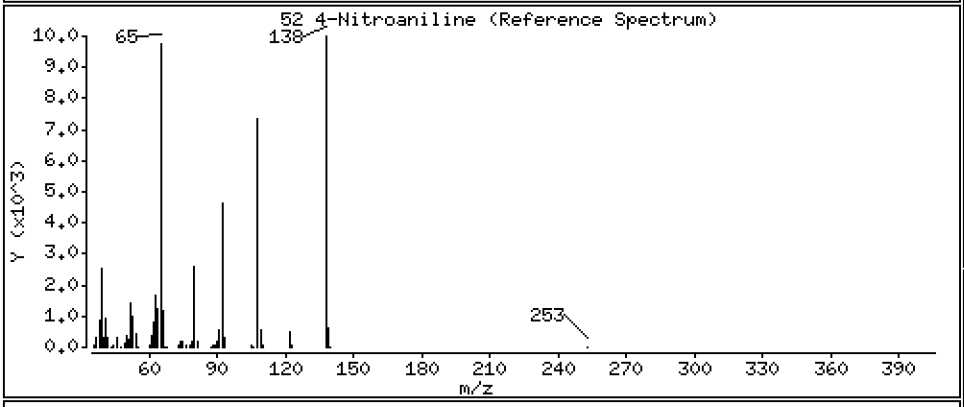
Column diameter: 0.25

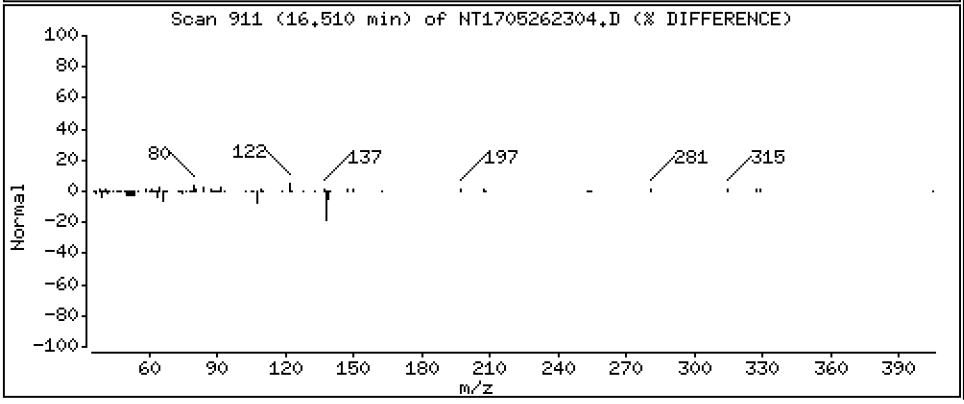
52 4-Nitroaniline

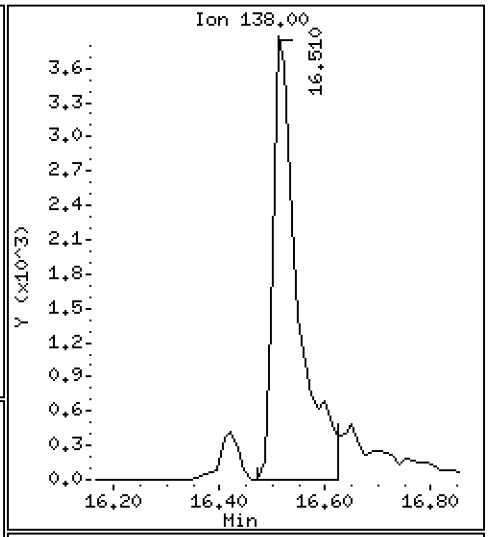
Concentration: 0.3136 ug/mL

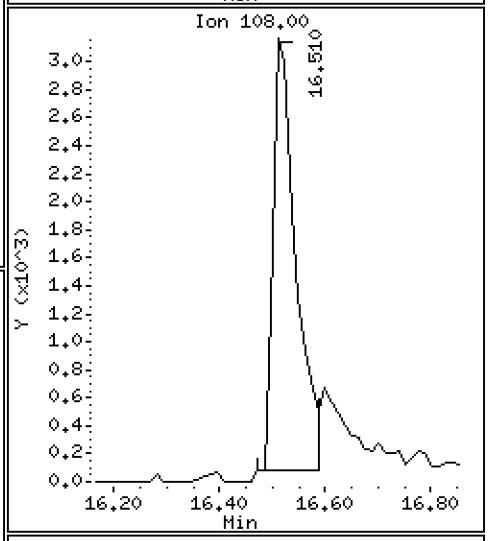


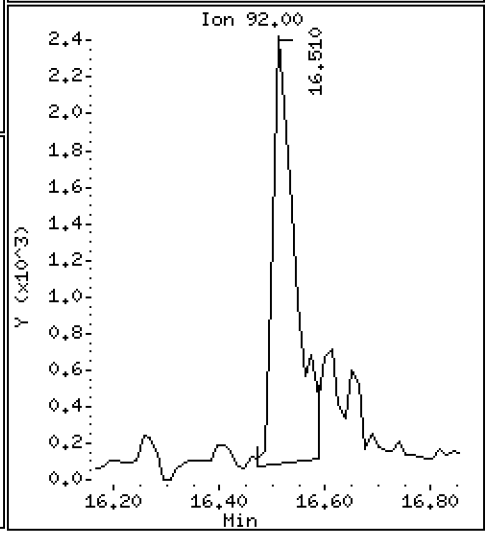












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

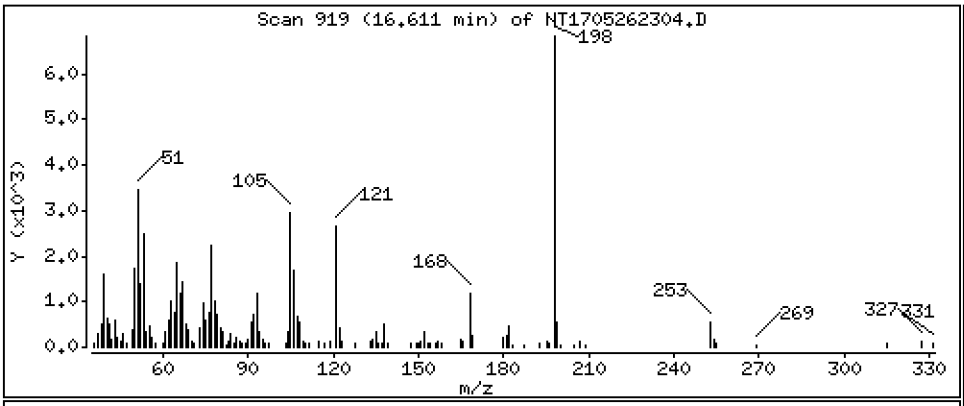
Operator: VTS

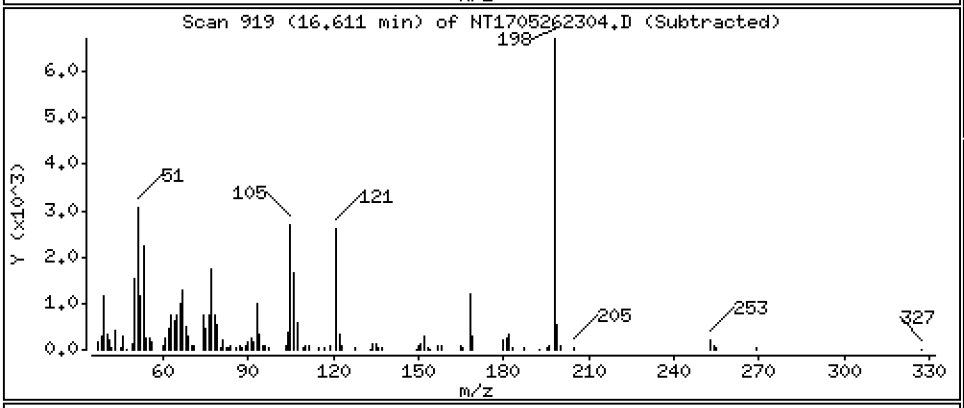
Column phase: ZB-5msi

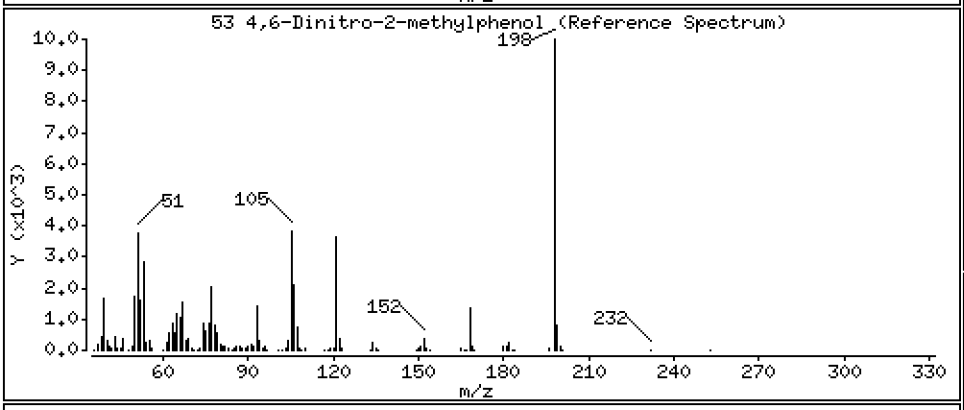
Column diameter: 0.25

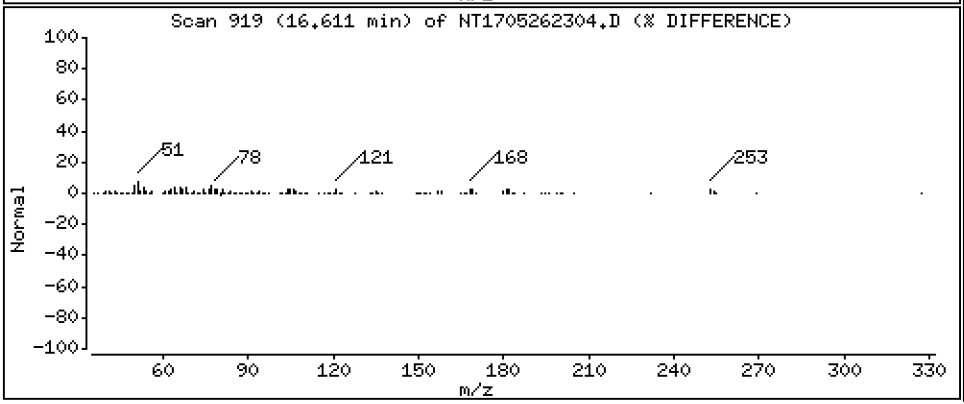
53 4,6-Dinitro-2-methylphenol

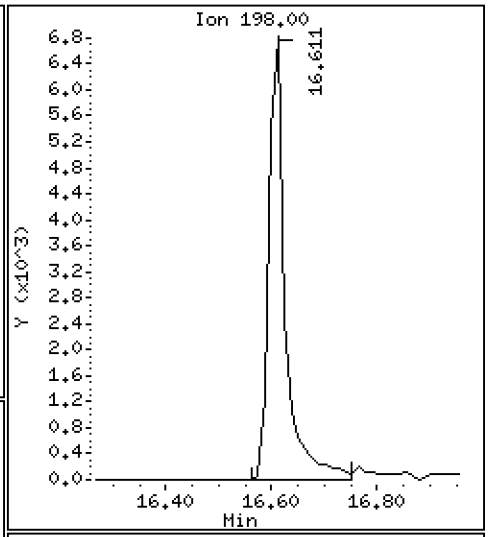
Concentration: 0.3902 ug/mL

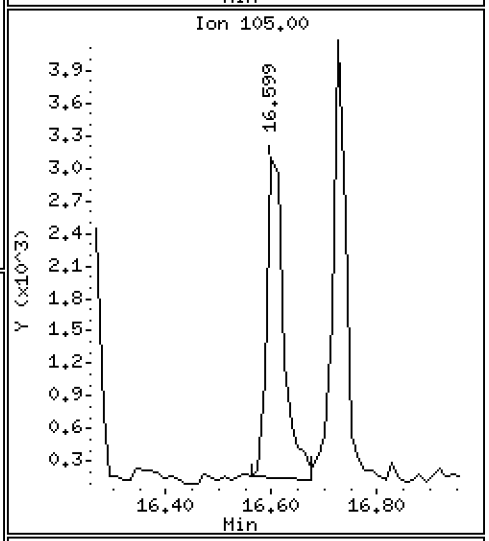


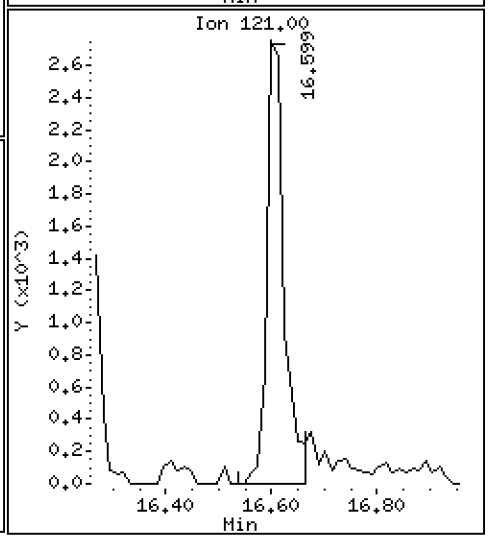












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

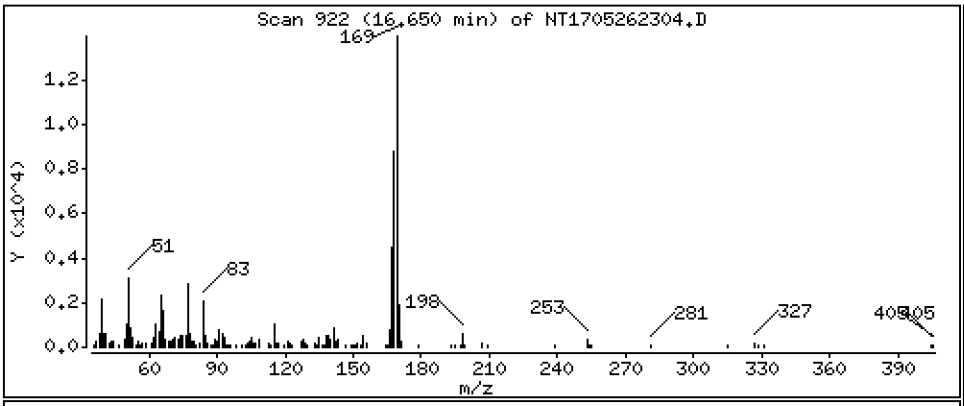
Operator: VTS

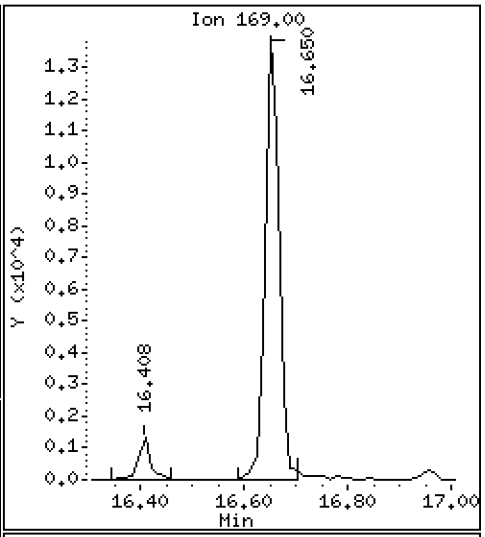
Column phase: ZB-5msi

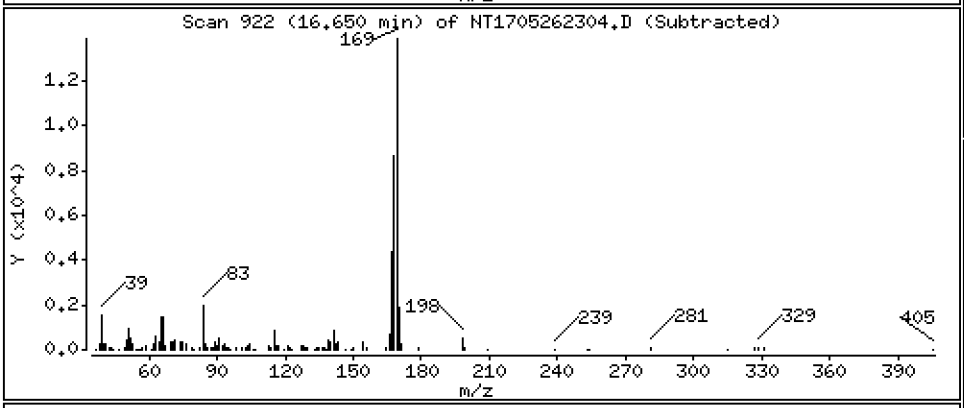
Column diameter: 0.25

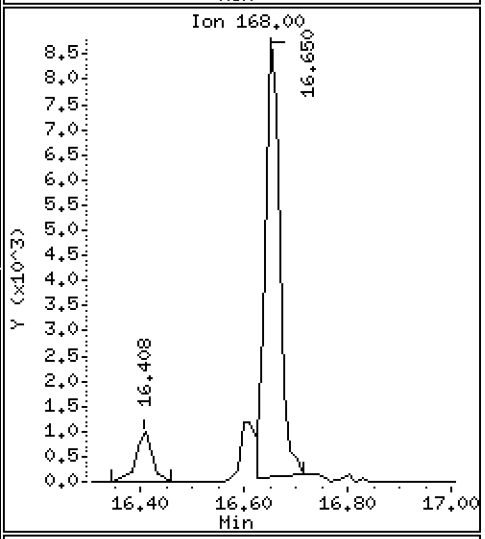
54 N-Nitrosodiphenylamine

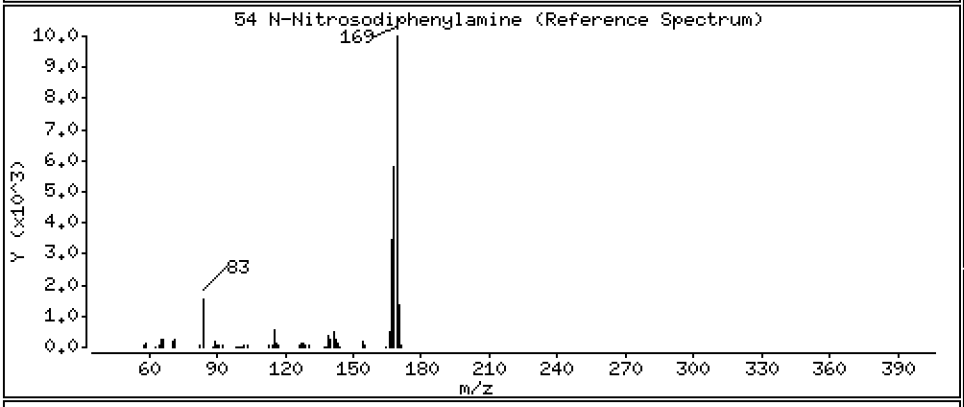
Concentration: 0.1929 ug/mL

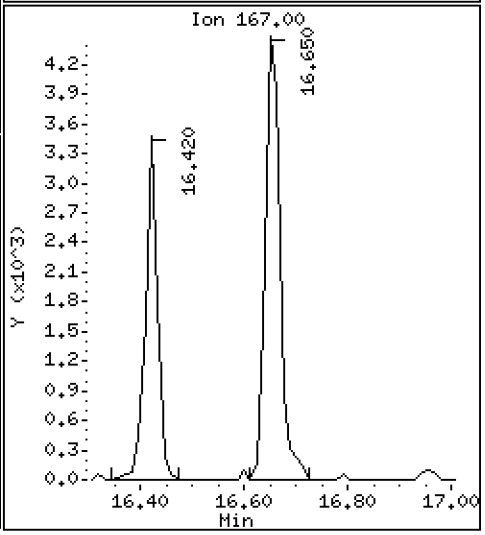


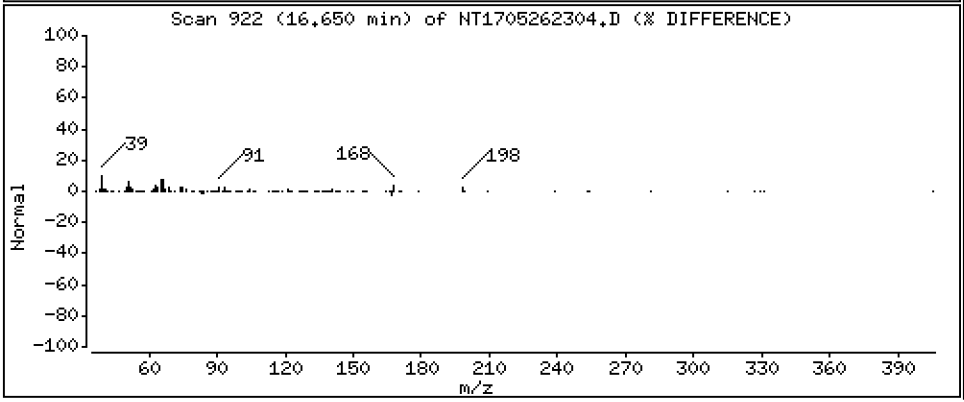












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

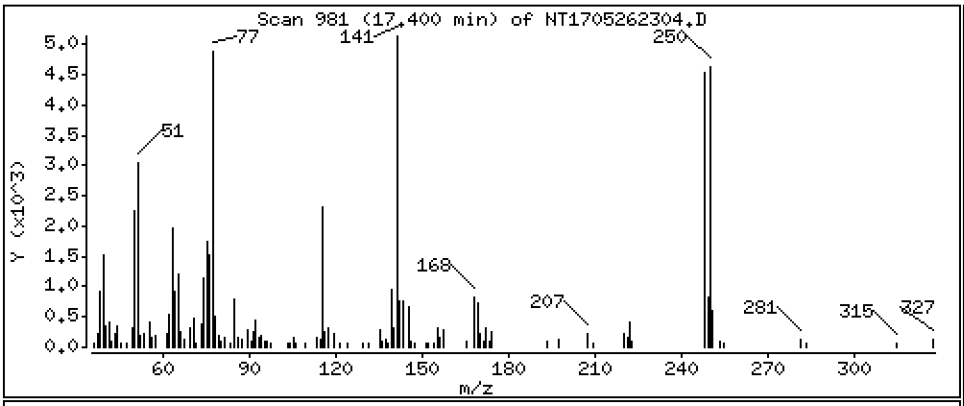
Operator: VTS

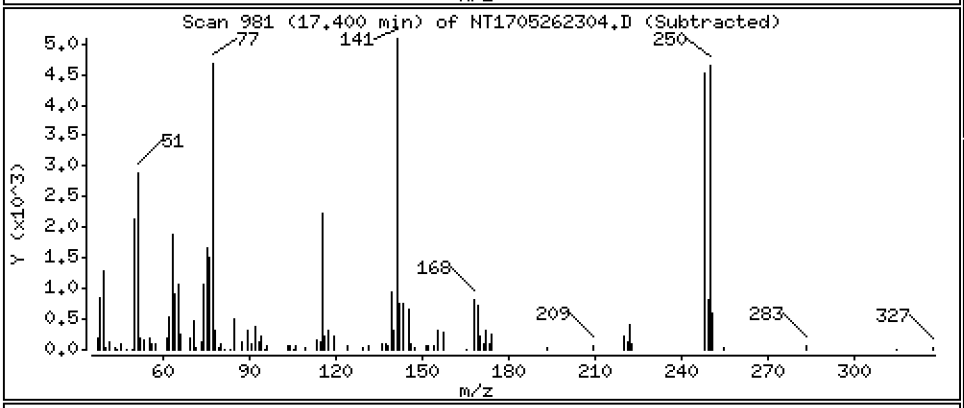
Column phase: ZB-5msi

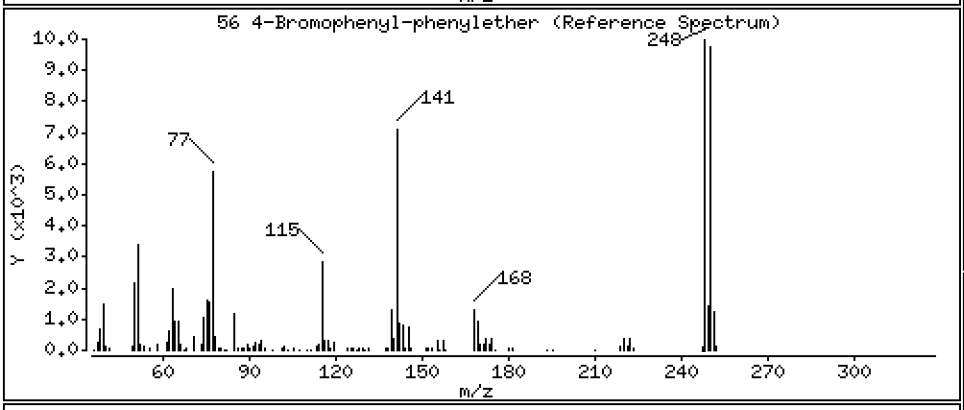
Column diameter: 0.25

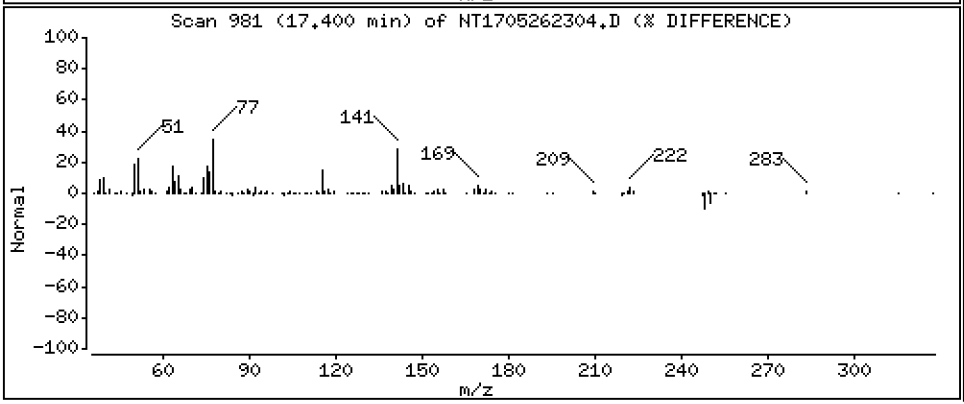
56 4-Bromophenyl-phenylether

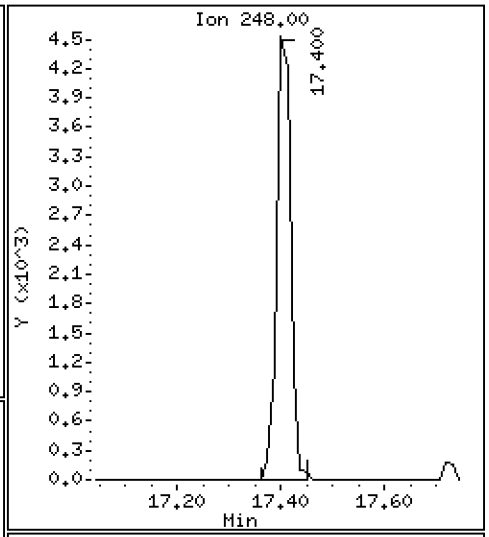
Concentration: 0.1845 ug/mL

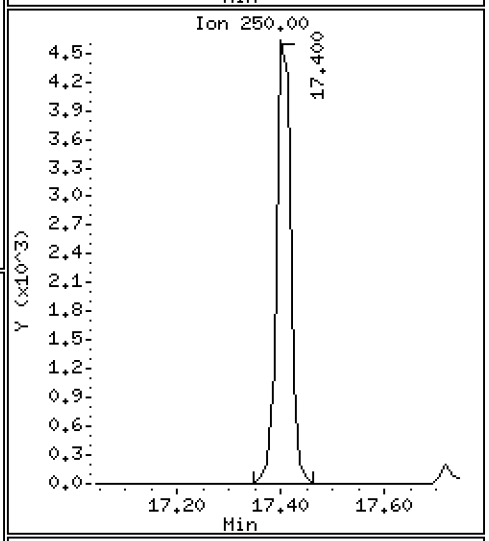


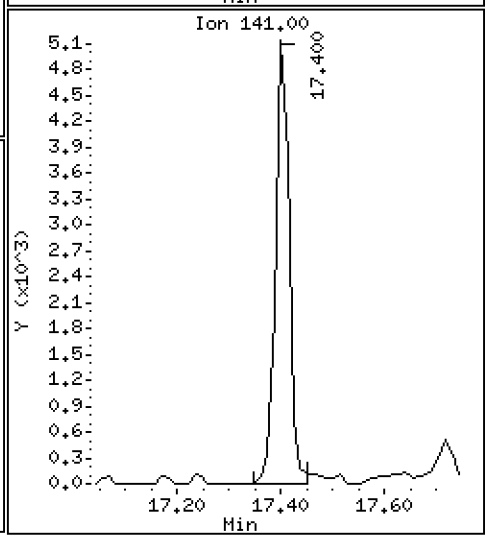












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

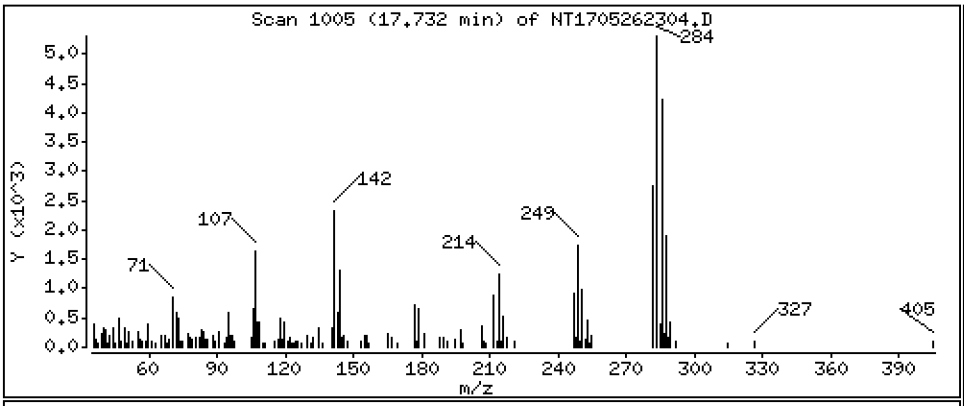
Operator: VTS

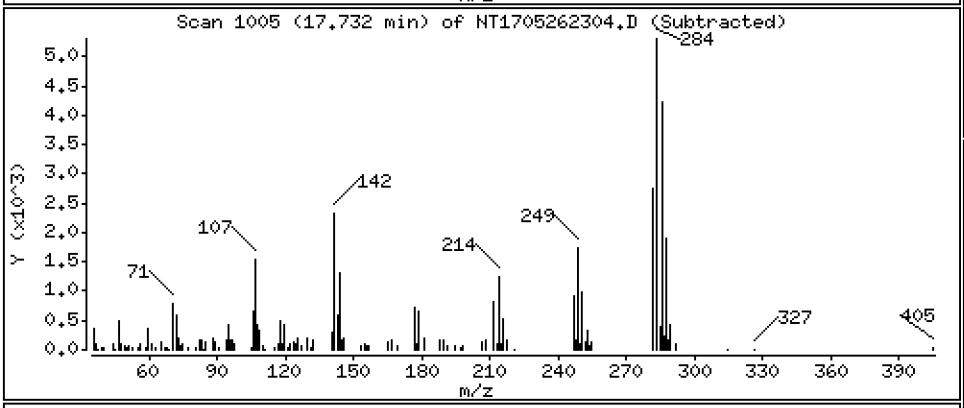
Column phase: ZB-5msi

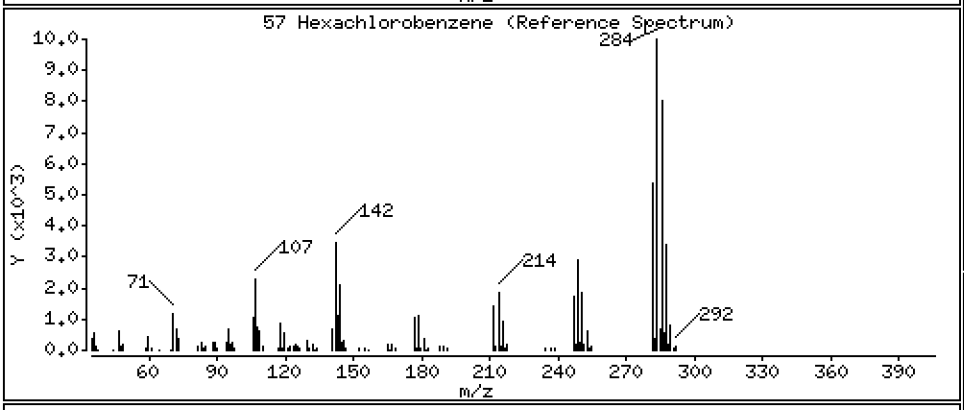
Column diameter: 0.25

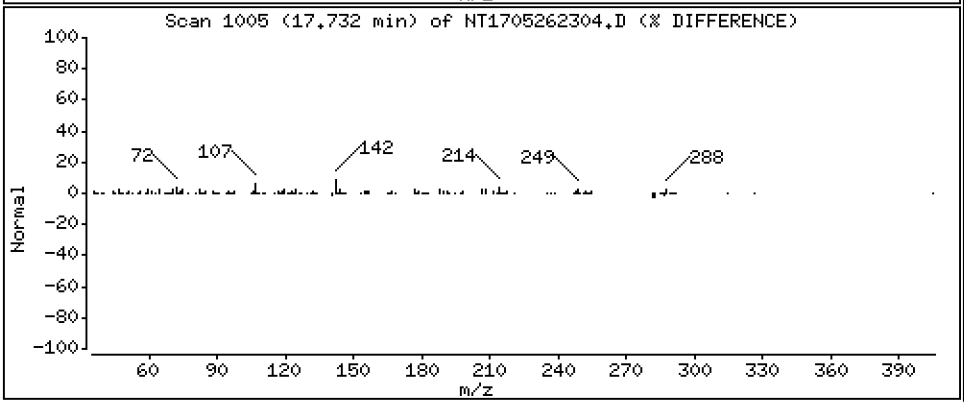
57 Hexachlorobenzene

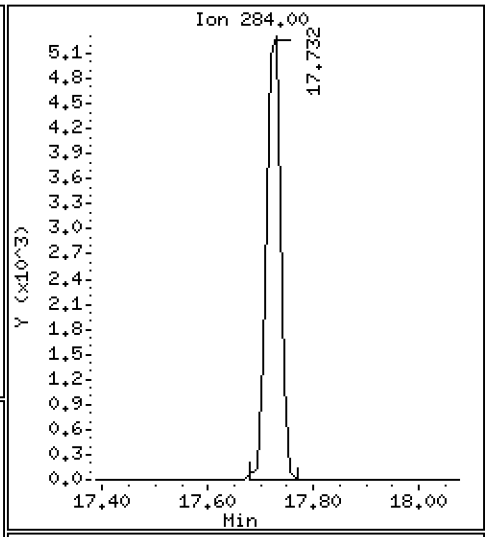
Concentration: 0.2131 ug/mL

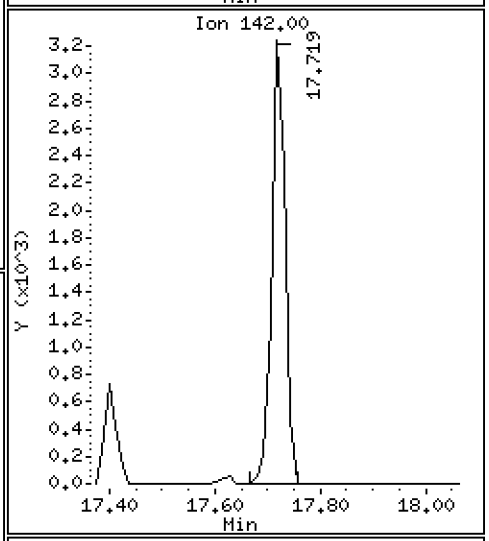


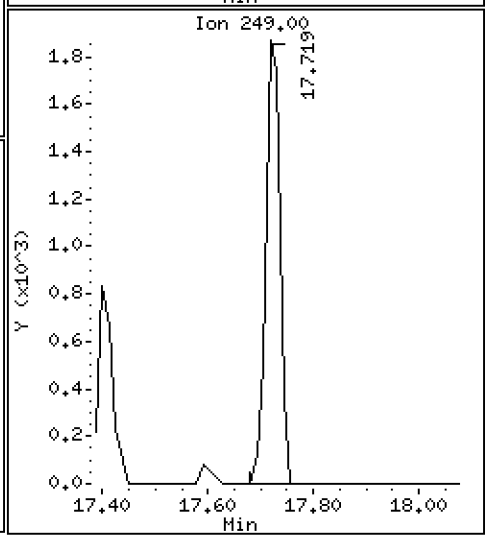












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

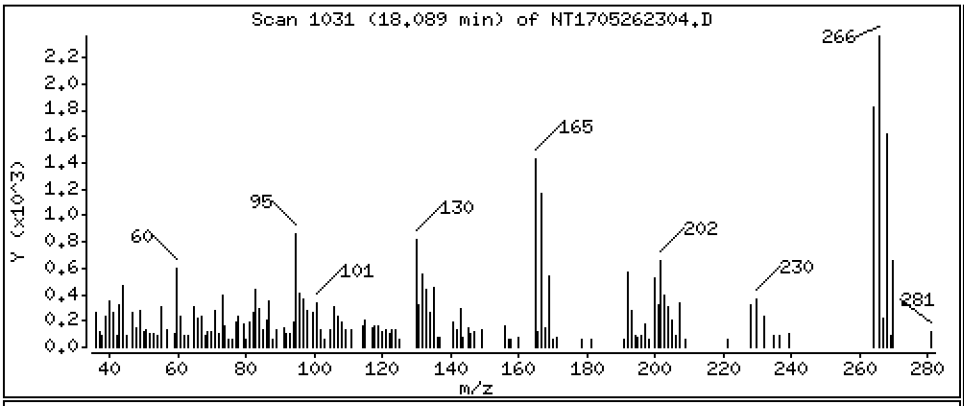
Operator: VTS

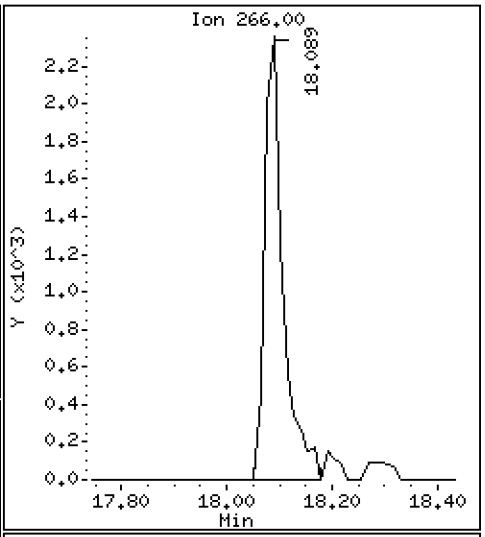
Column phase: ZB-5msi

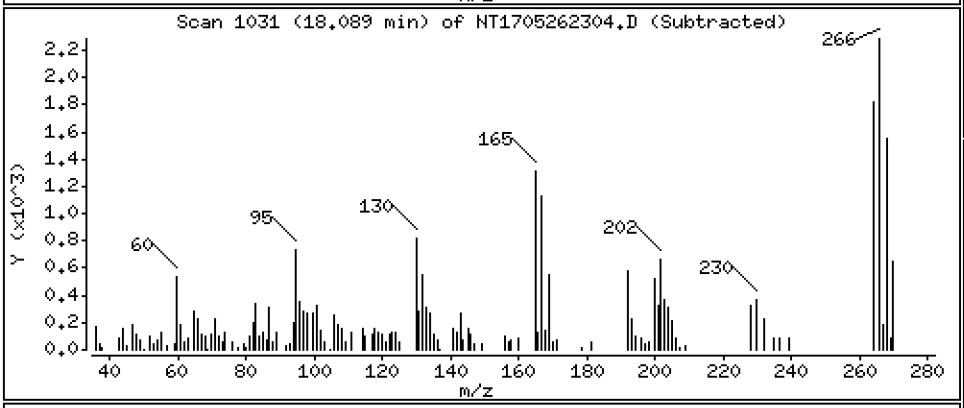
Column diameter: 0.25

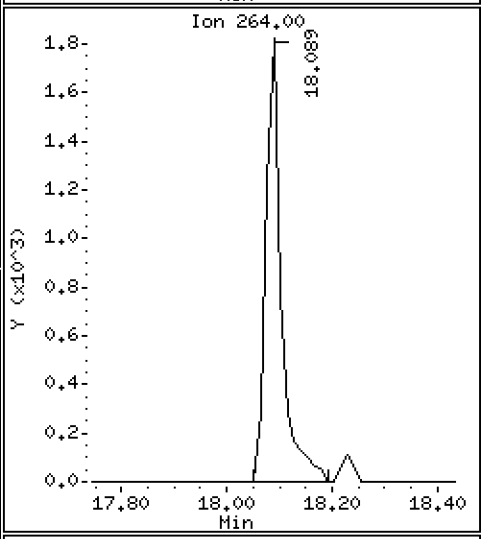
58 Pentachlorophenol

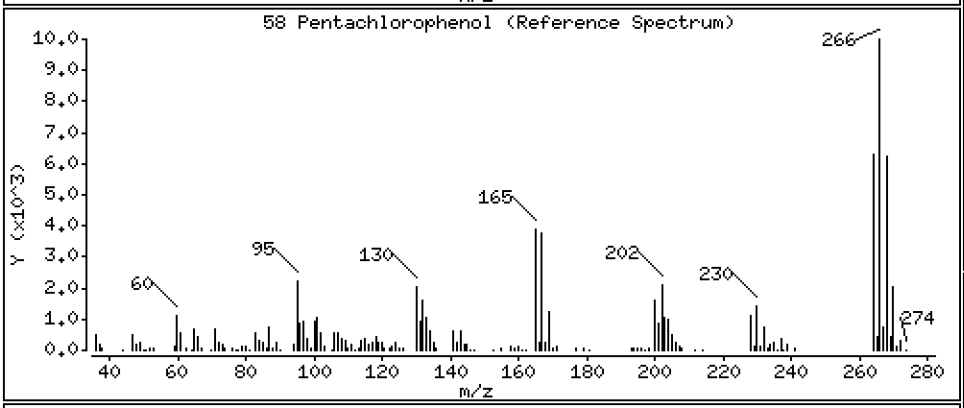
Concentration: 0.2079 ug/mL

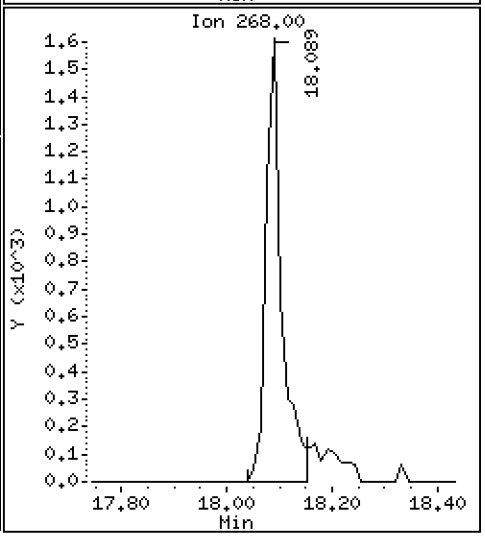


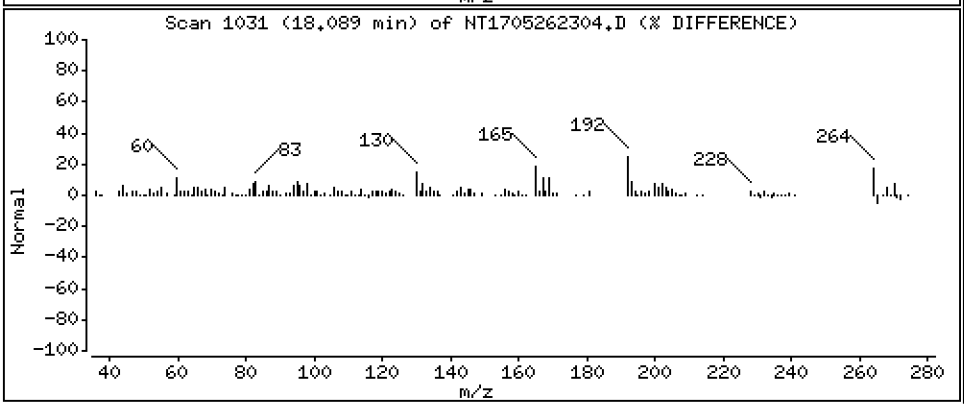












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

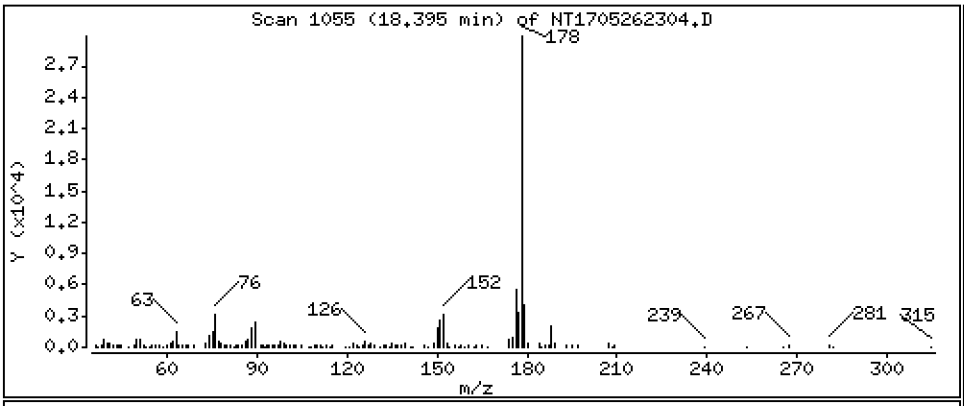
Operator: VTS

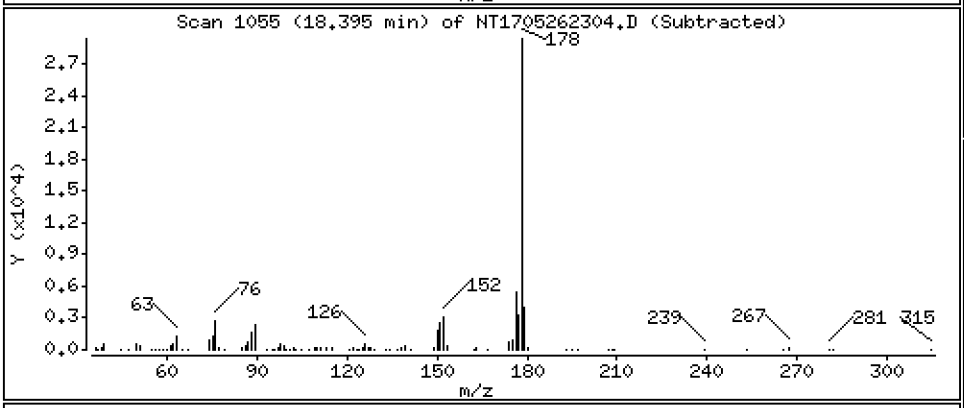
Column phase: ZB-5msi

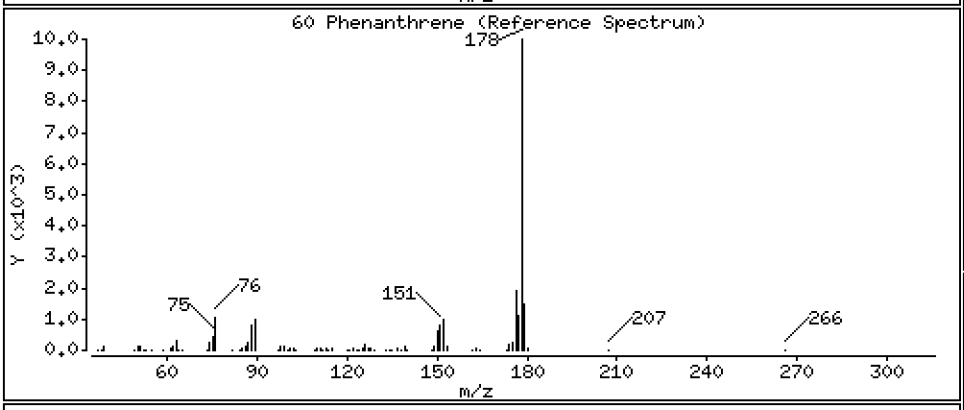
Column diameter: 0.25

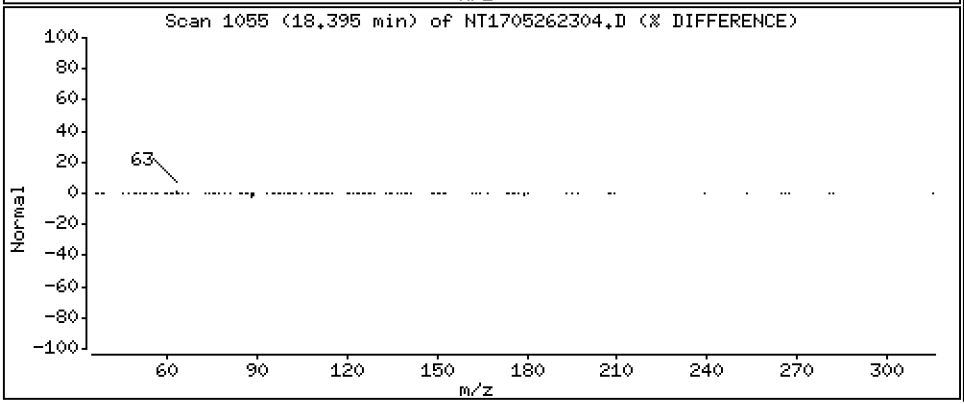
60 Phenanthrene

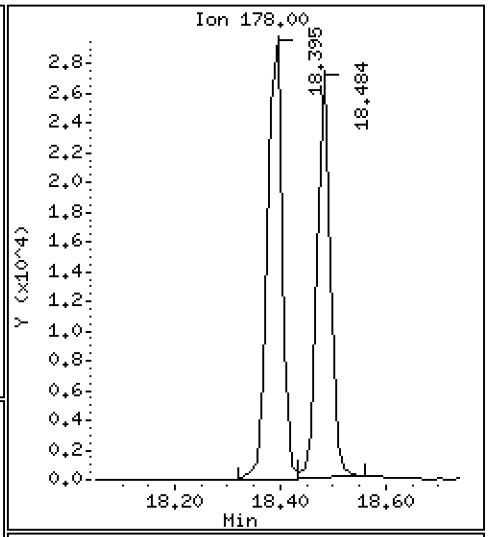
Concentration: 0.2034 ug/mL

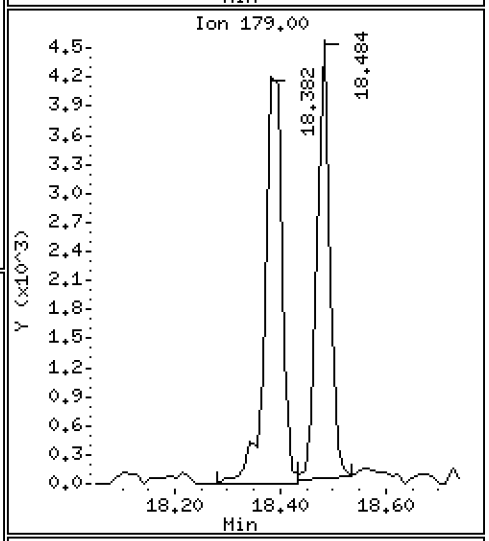


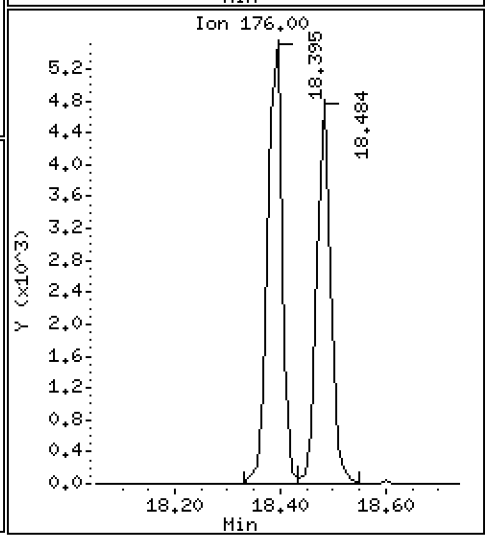












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

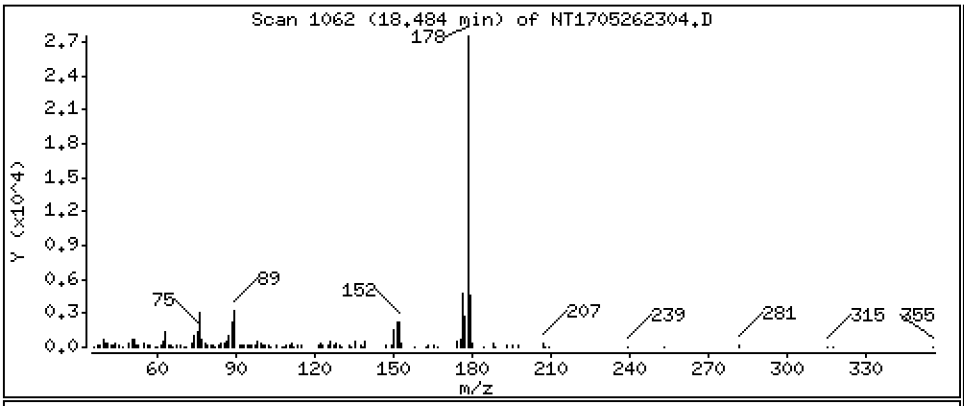
Operator: VTS

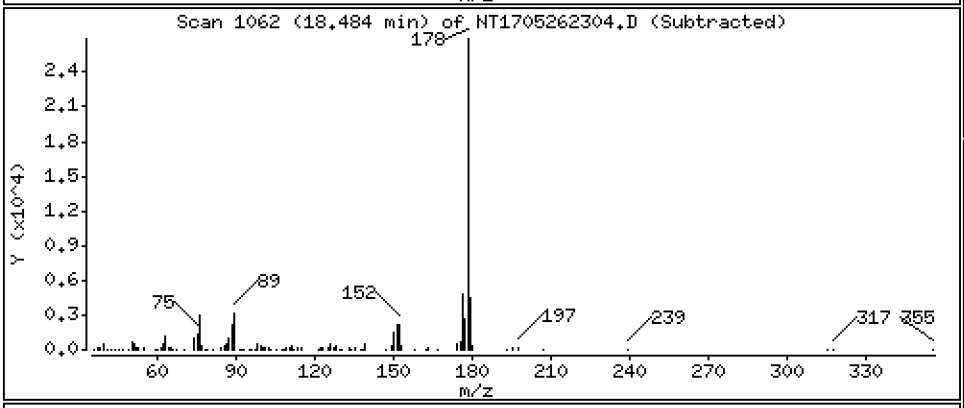
Column phase: ZB-5msi

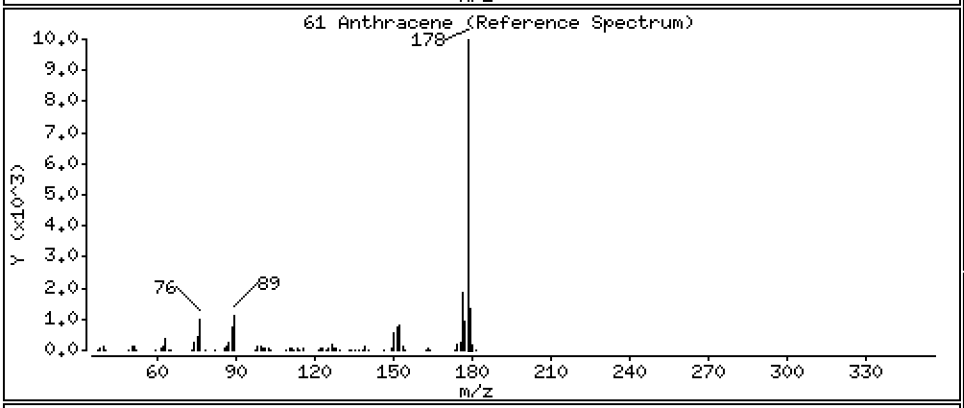
Column diameter: 0.25

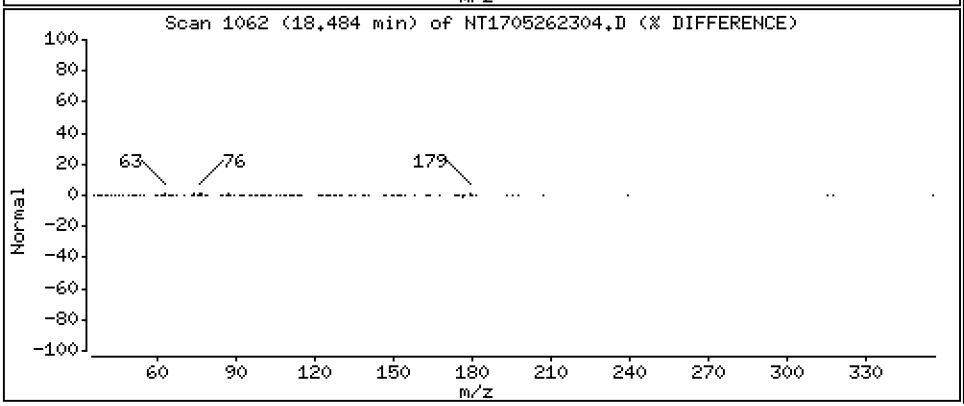
61 Anthracene

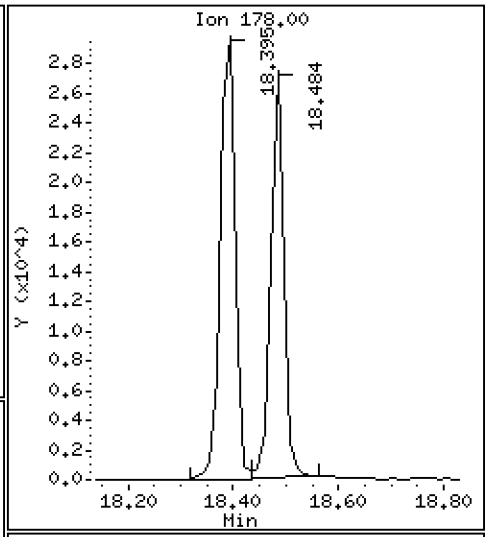
Concentration: 0.1850 ug/mL

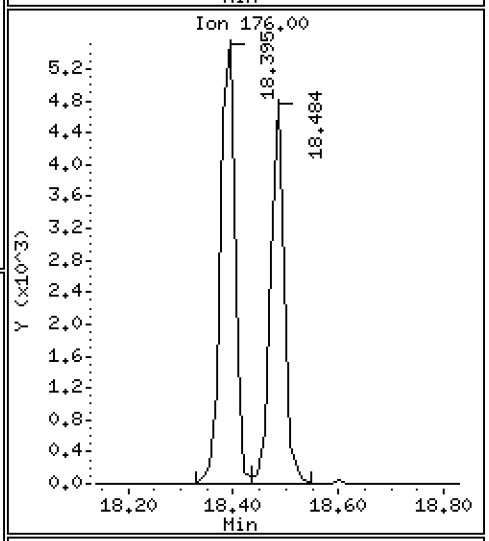


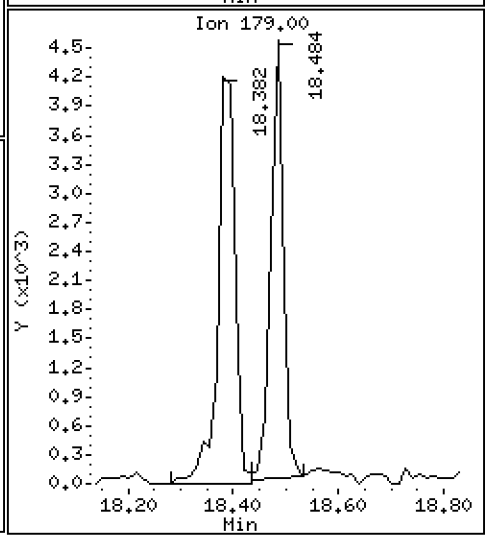












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

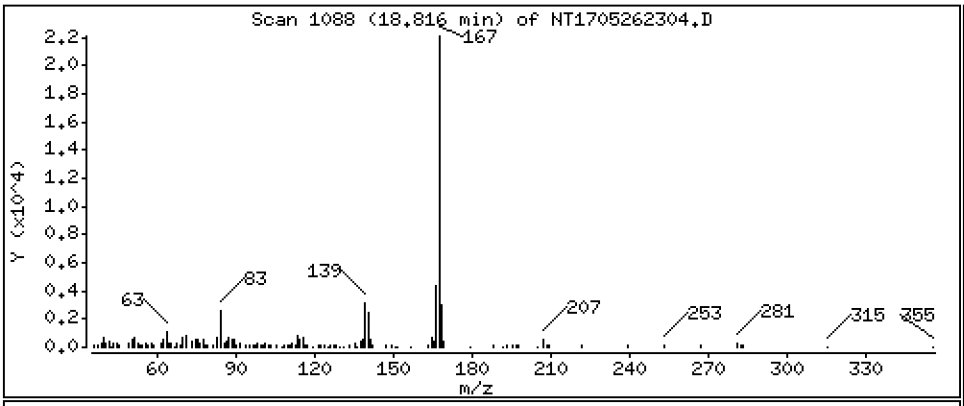
Operator: VTS

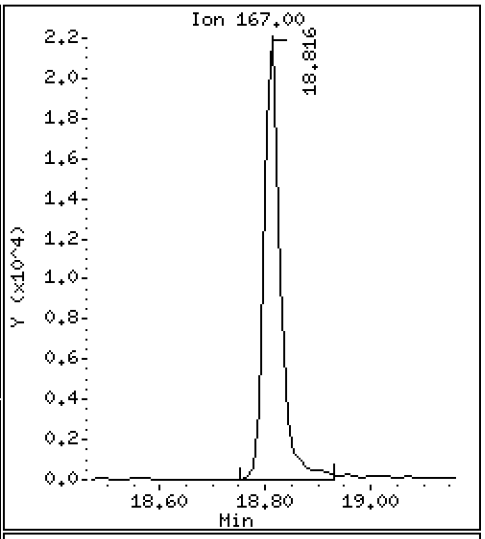
Column phase: ZB-5msi

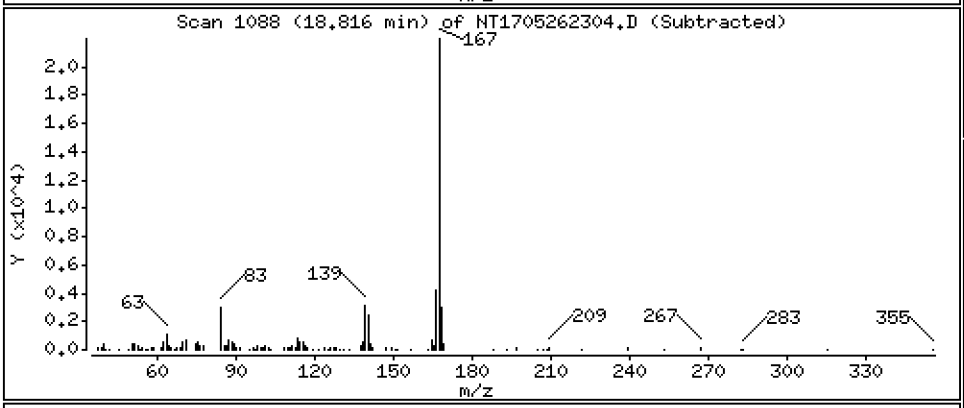
Column diameter: 0.25

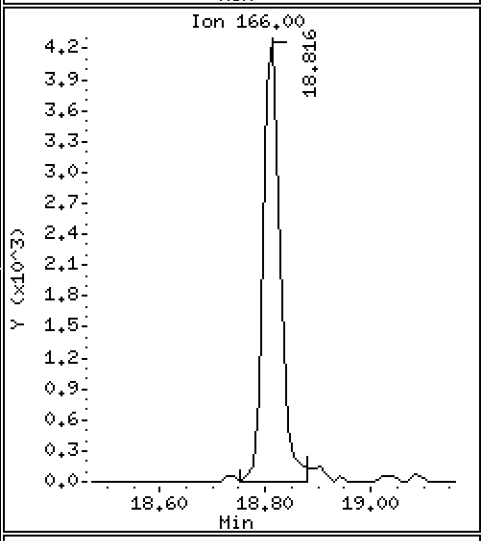
62 Carbazole

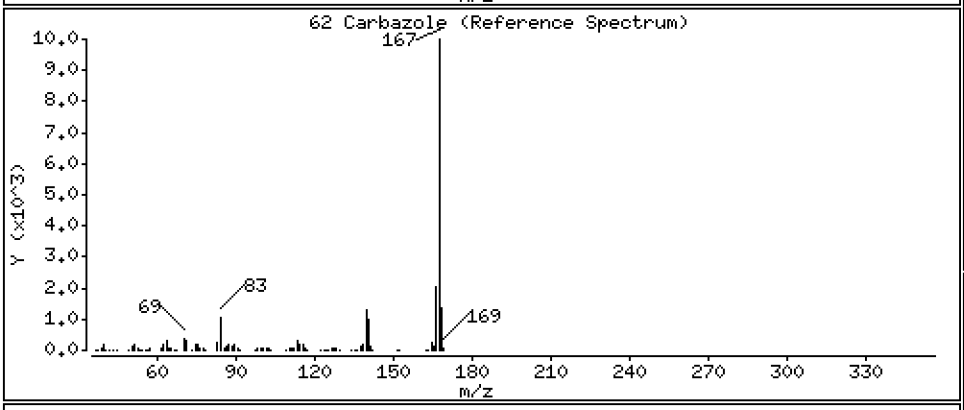
Concentration: 0.2944 ug/mL

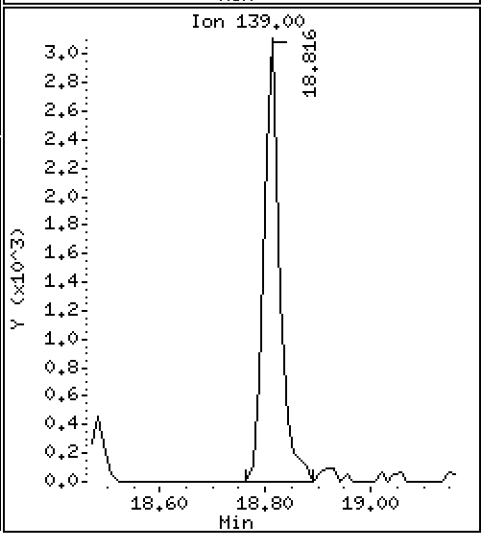


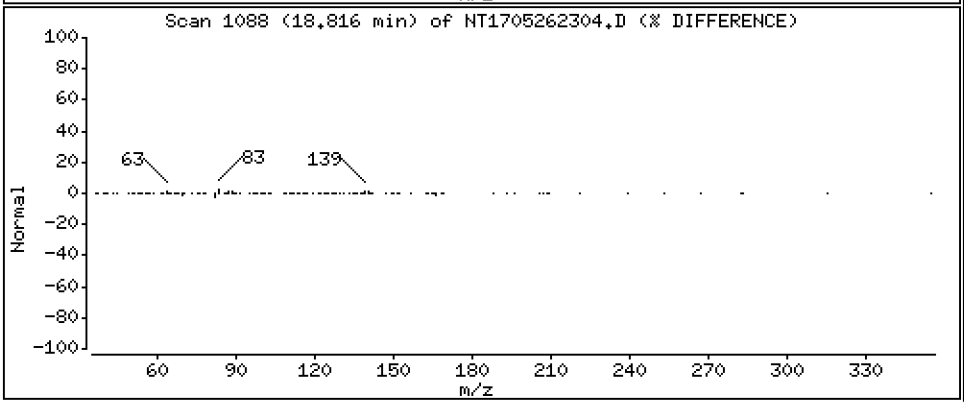












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

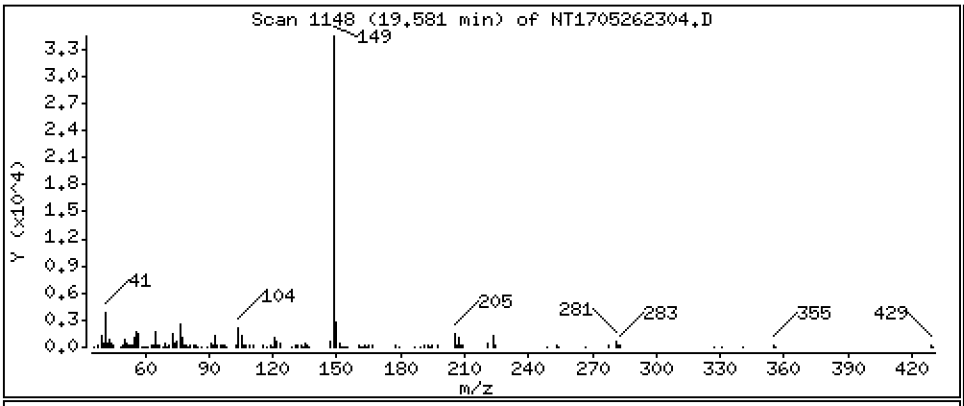
Operator: VTS

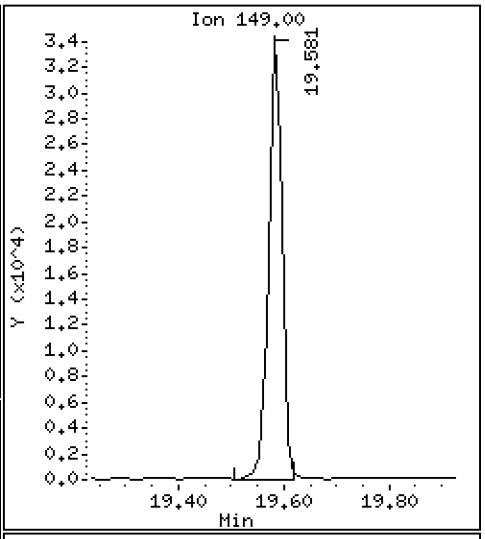
Column phase: ZB-5msi

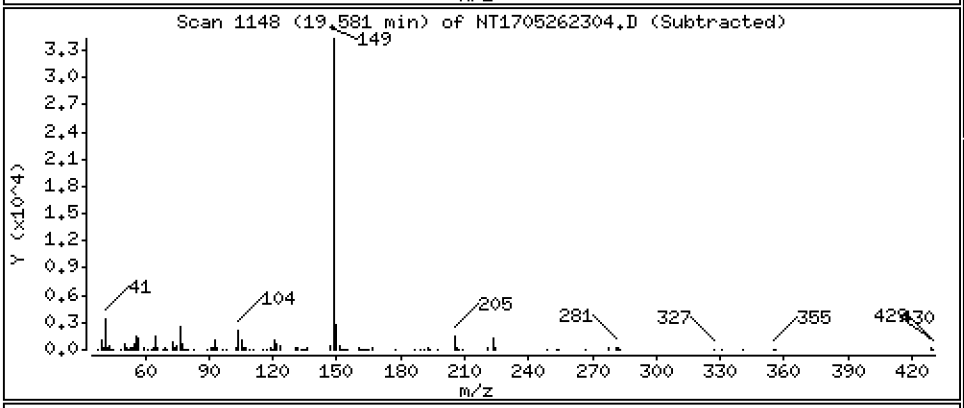
Column diameter: 0.25

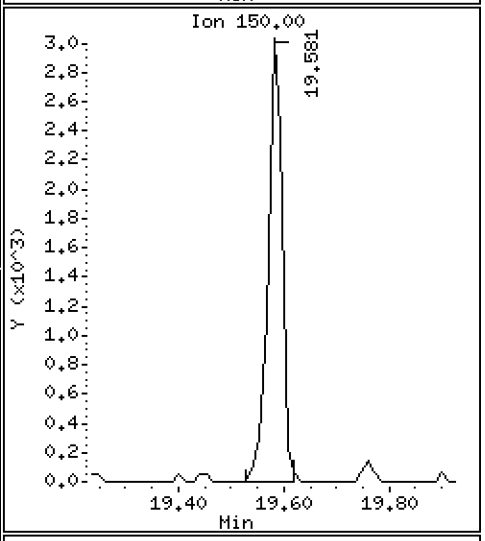
63 Di-n-butylphthalate

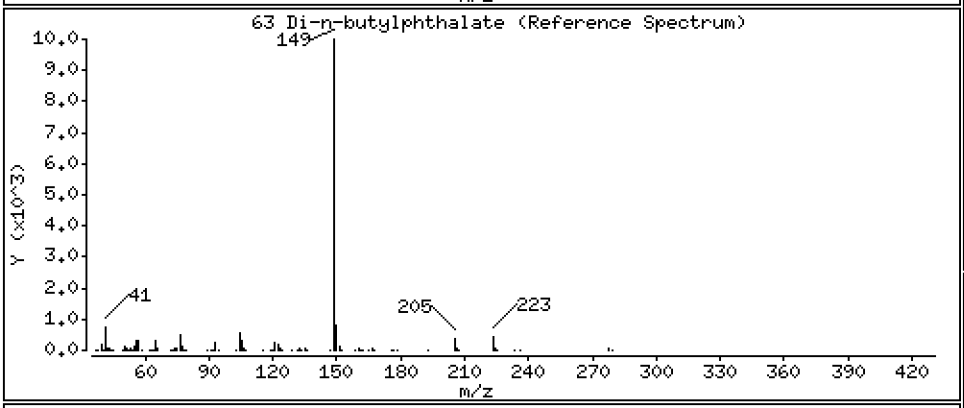
Concentration: 0.1889 ug/mL

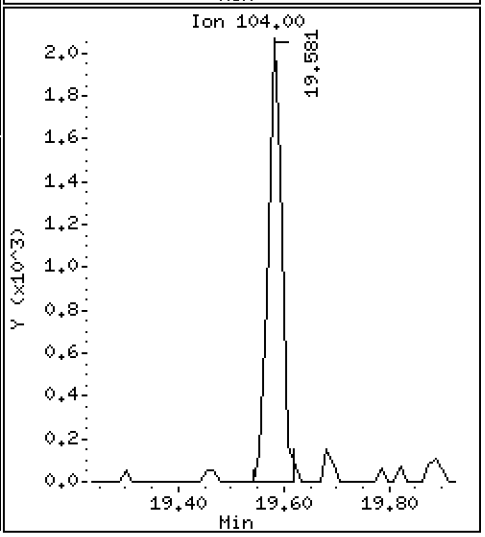


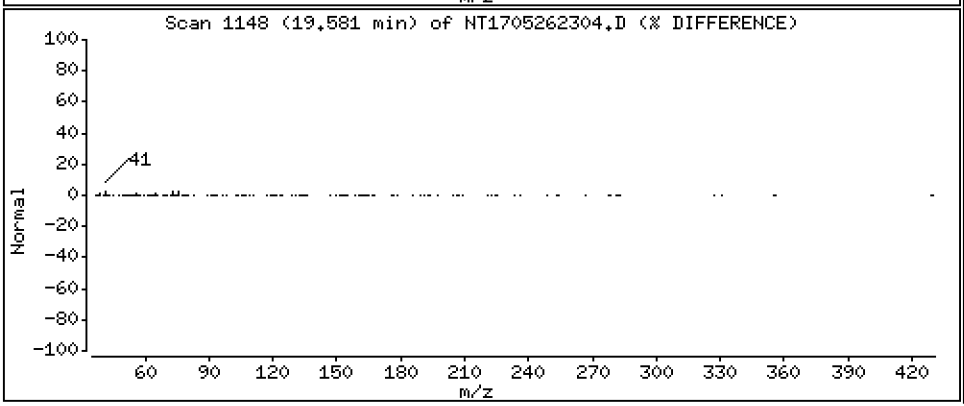












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

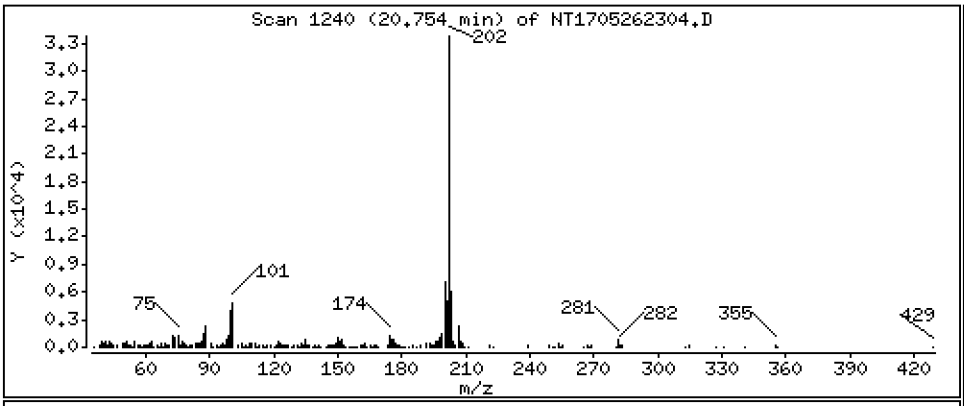
Operator: VTS

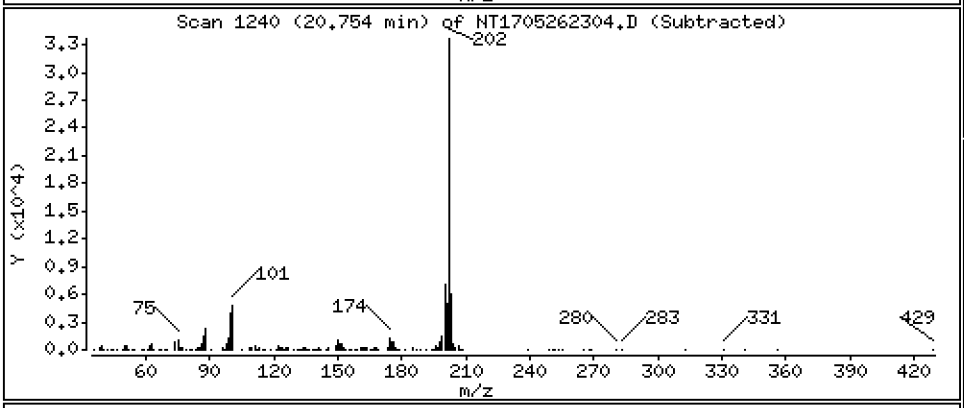
Column phase: ZB-5msi

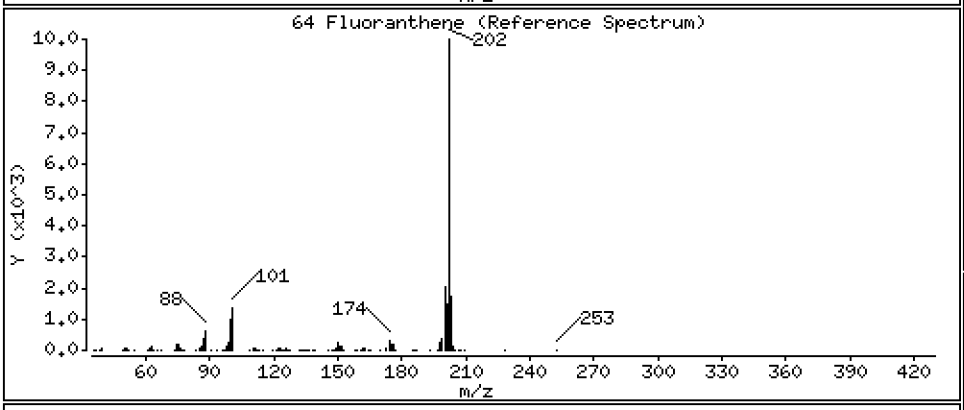
Column diameter: 0.25

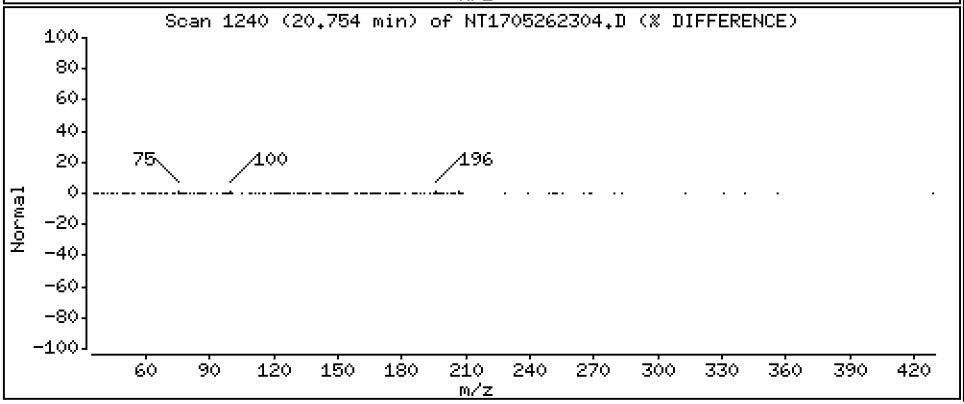
64 Fluoranthene

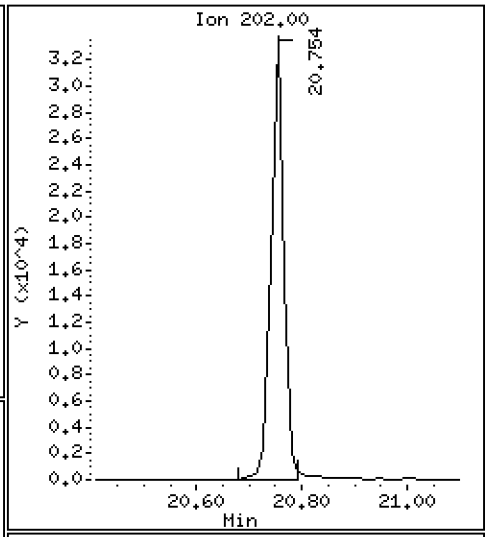
Concentration: 0.1948 ug/mL

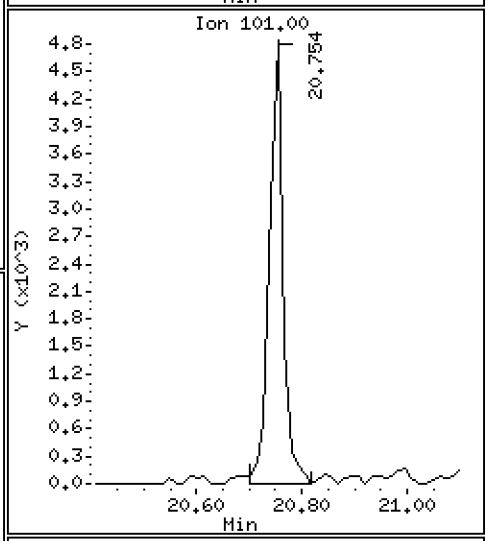


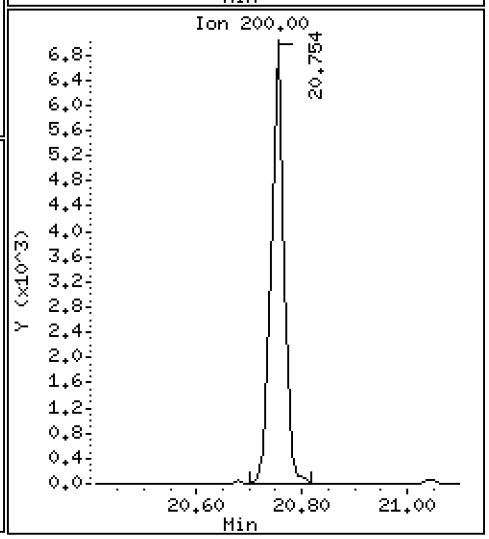












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

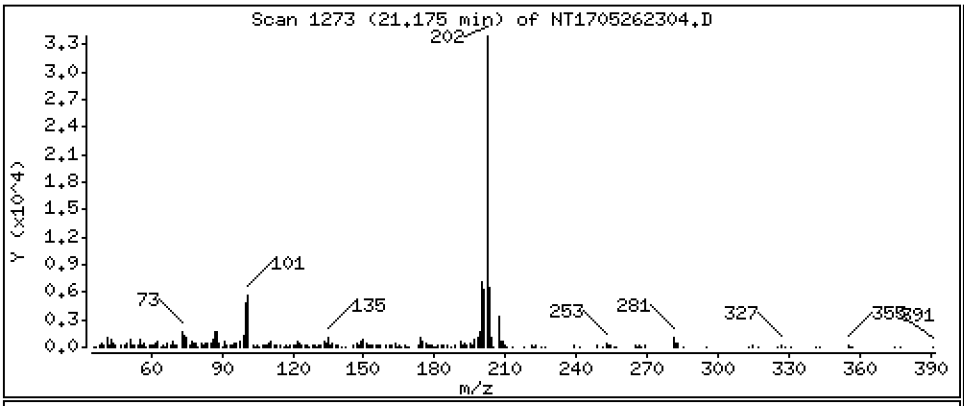
Operator: VTS

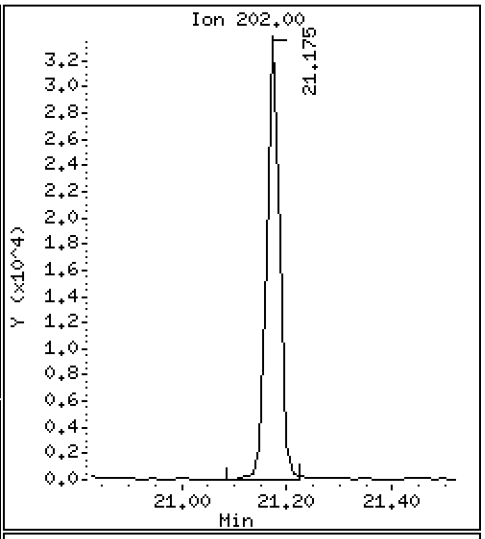
Column phase: ZB-5msi

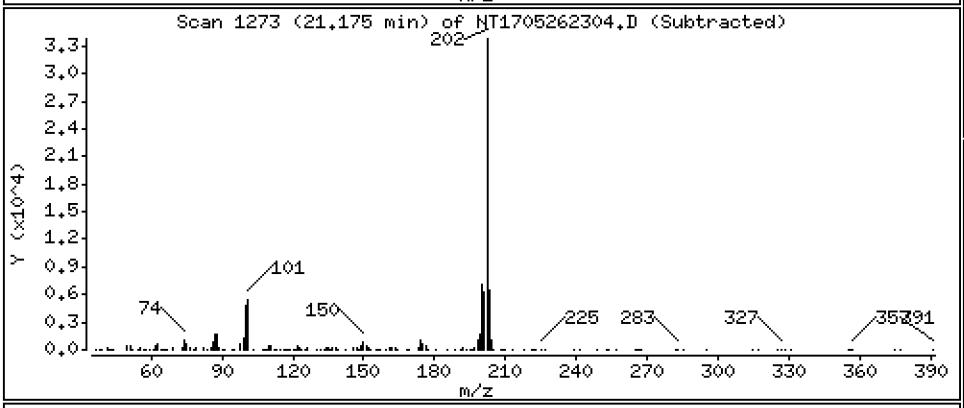
Column diameter: 0.25

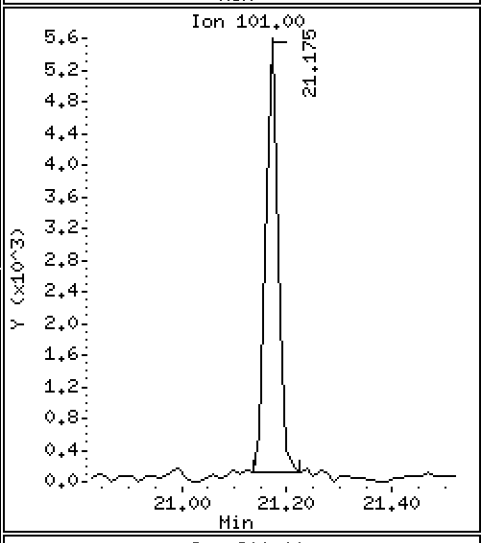
65 Pyrene

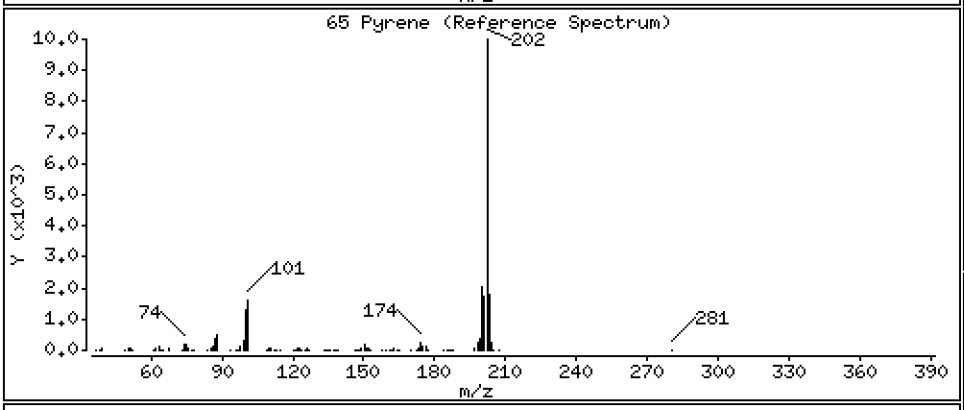
Concentration: 0.2036 ug/mL

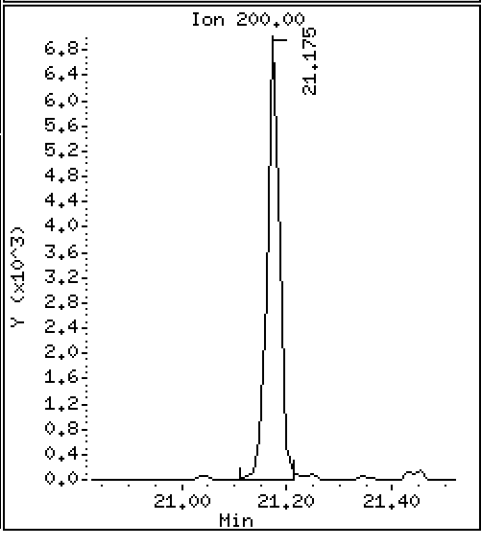


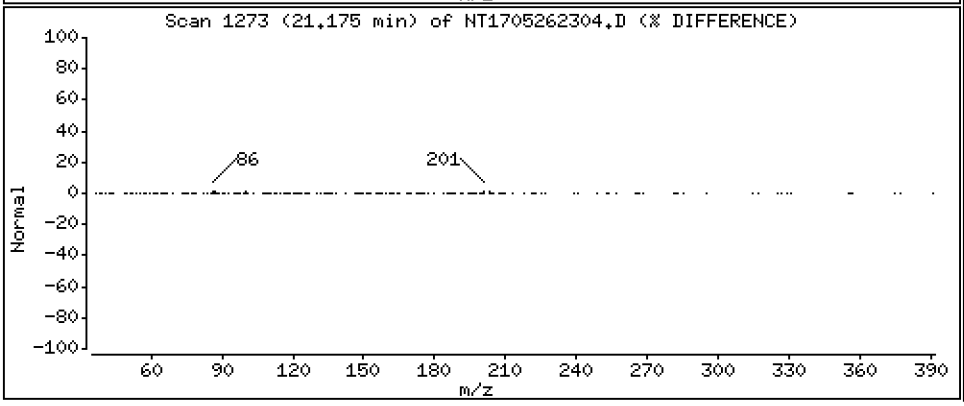












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

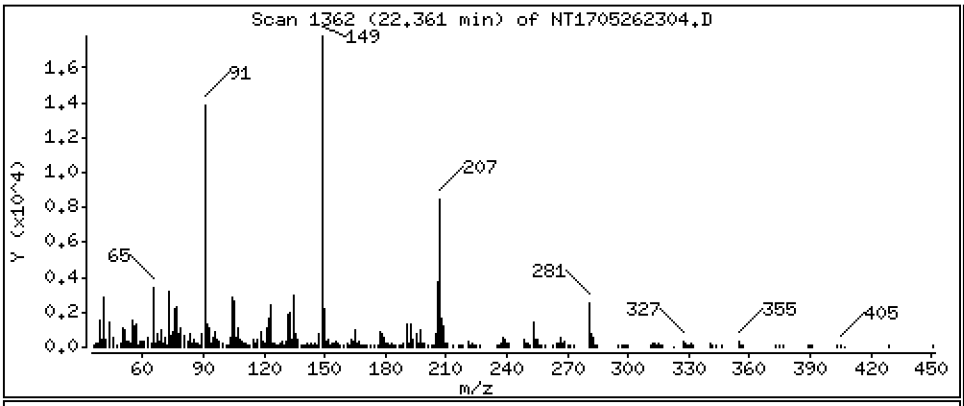
Operator: VTS

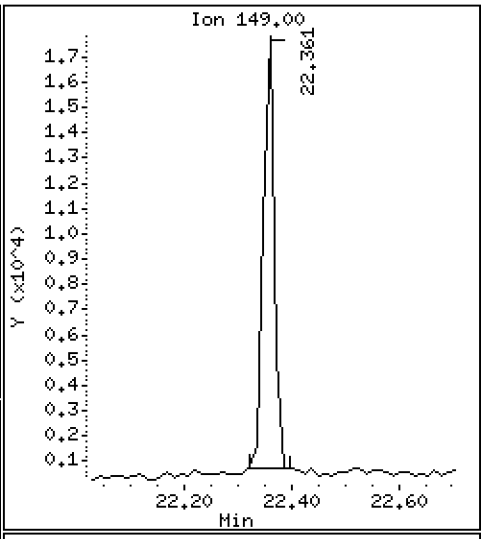
Column phase: ZB-5msi

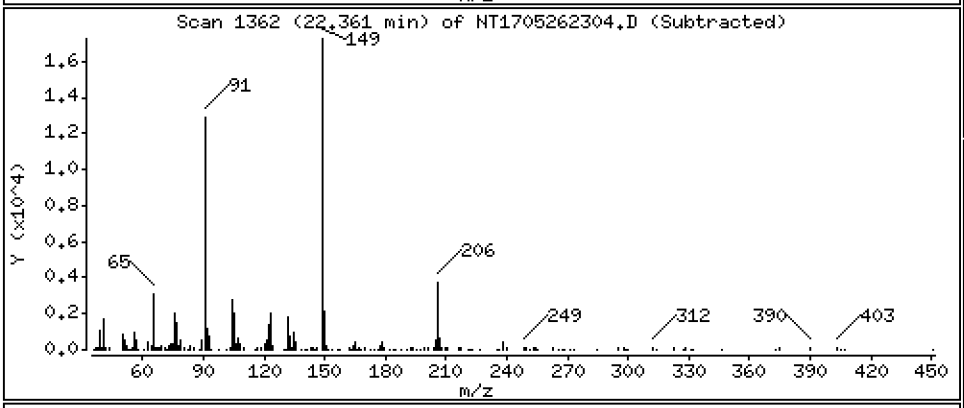
Column diameter: 0.25

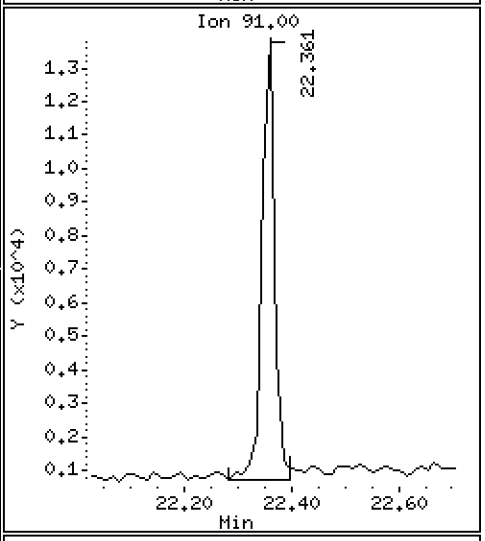
67 Butylbenzylphthalate

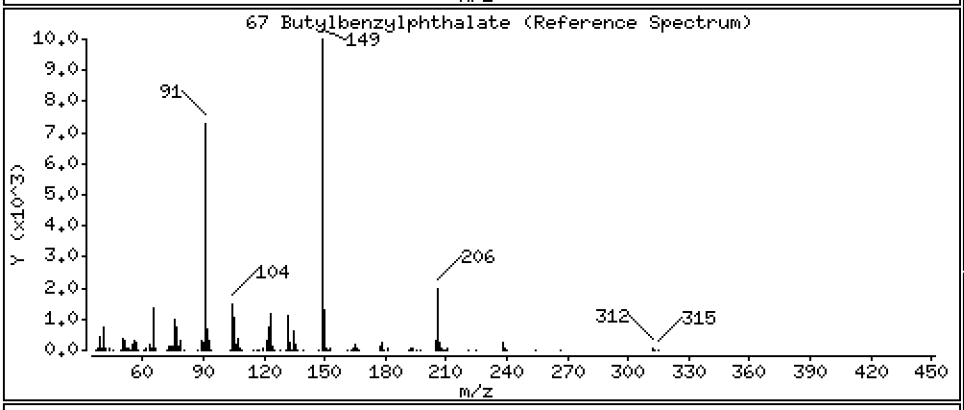
Concentration: 0.1944 ug/mL

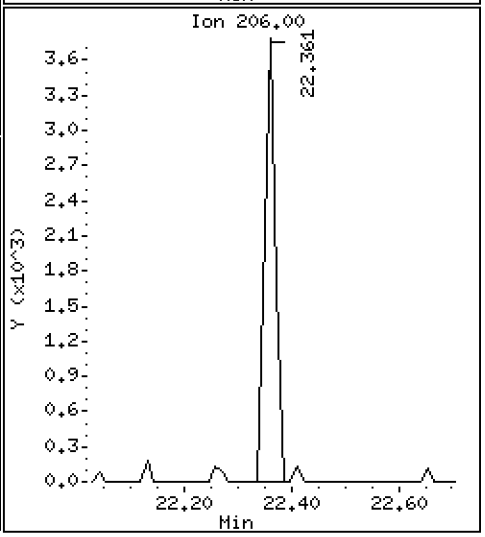


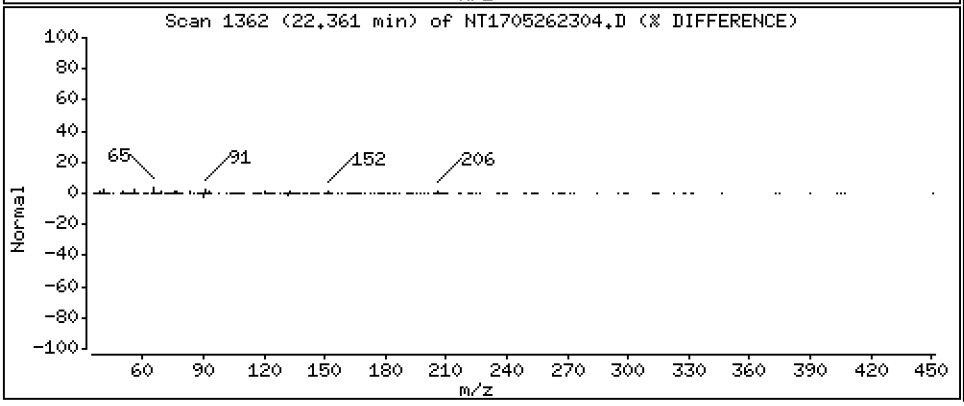












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

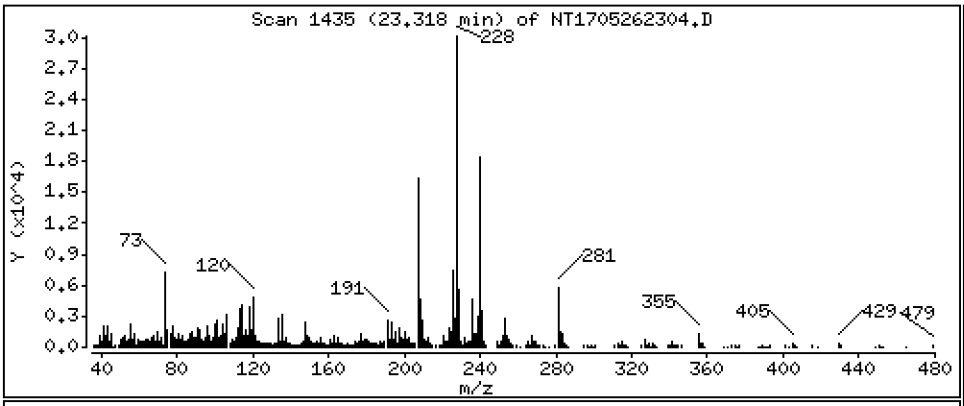
Operator: VTS

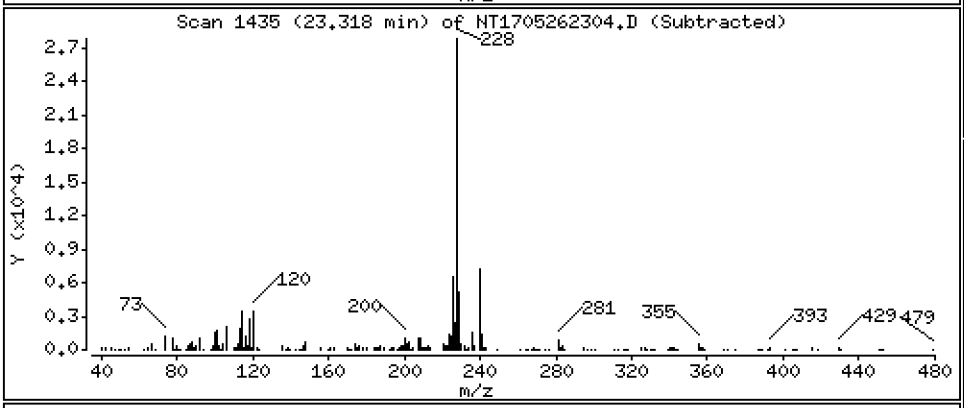
Column phase: ZB-5msi

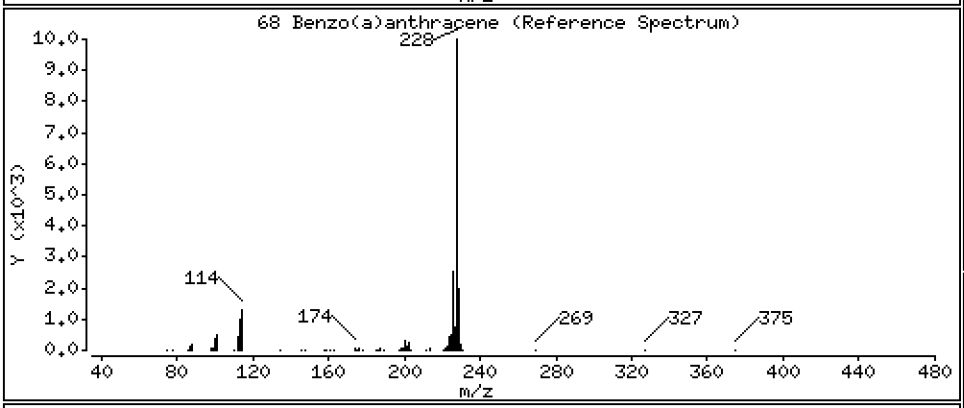
Column diameter: 0.25

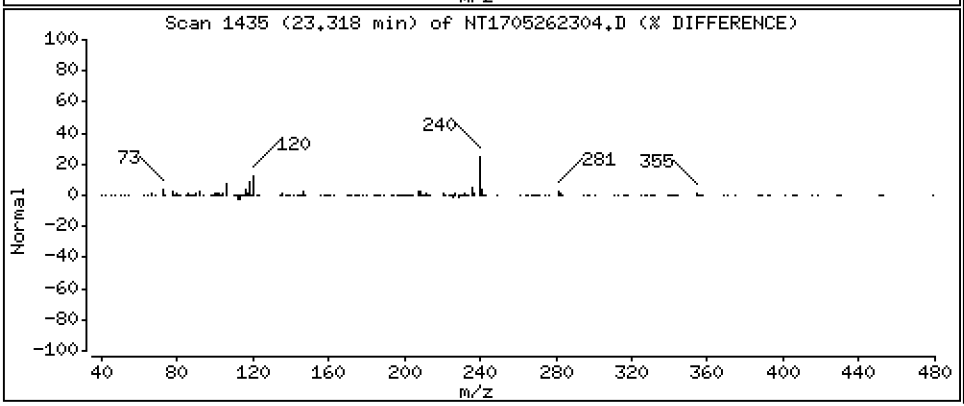
68 Benzo(a)anthracene

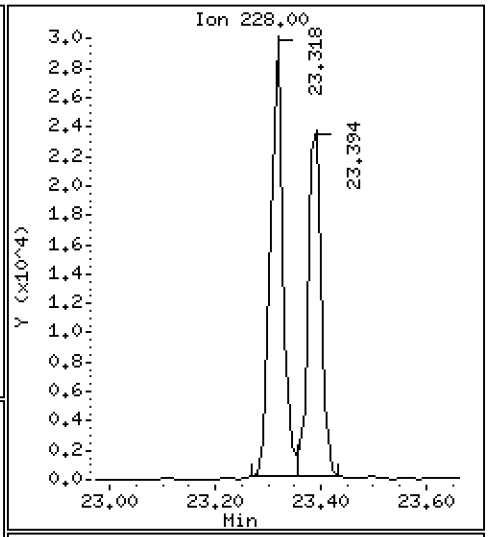
Concentration: 0.2165 ug/mL

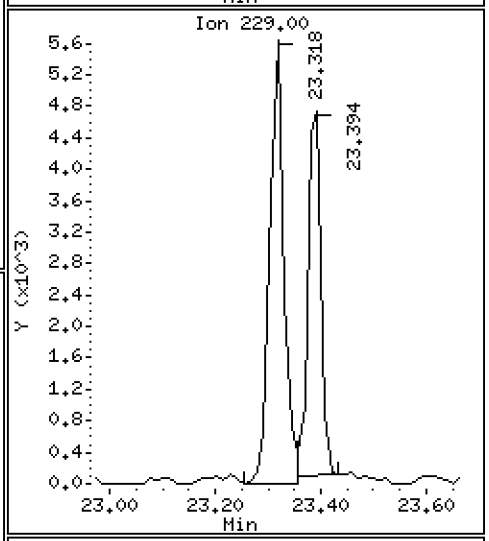


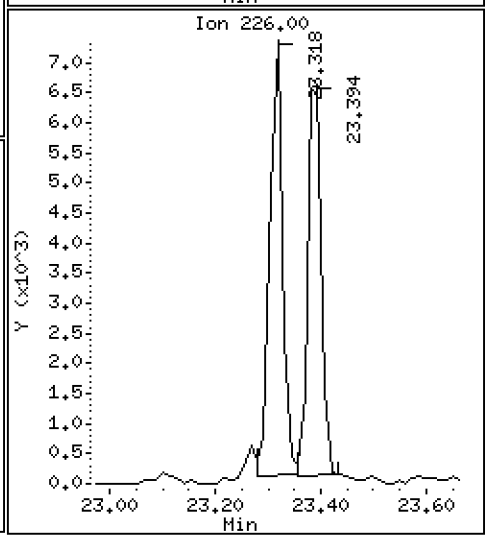












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

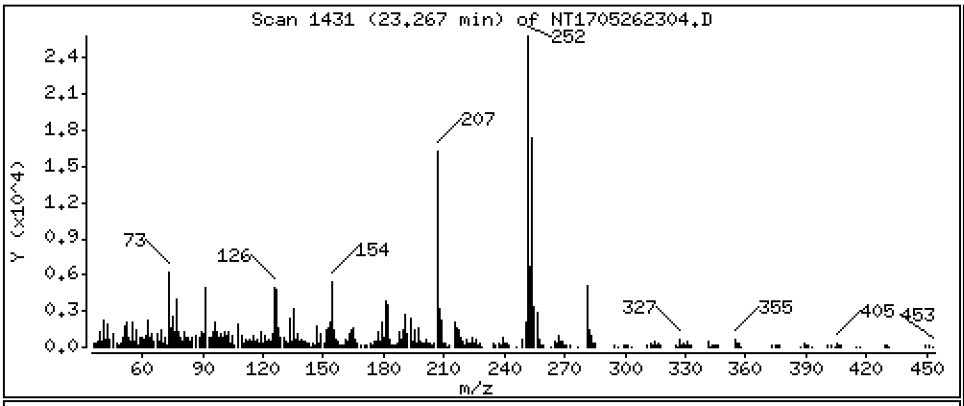
Operator: VTS

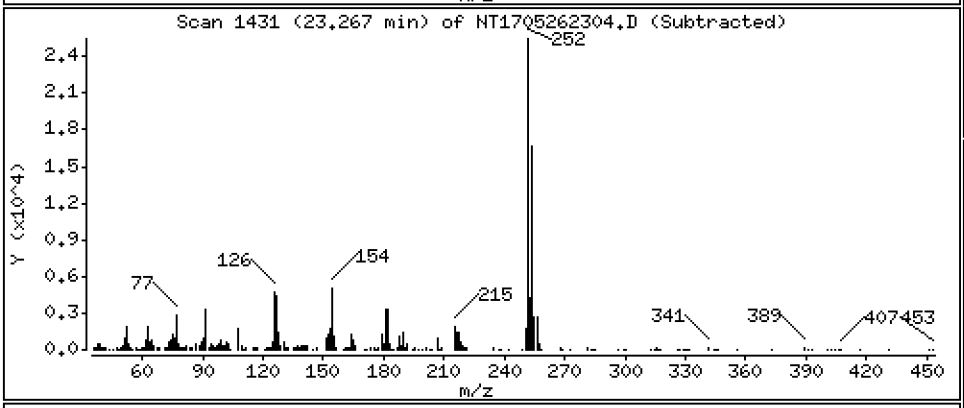
Column phase: ZB-5msi

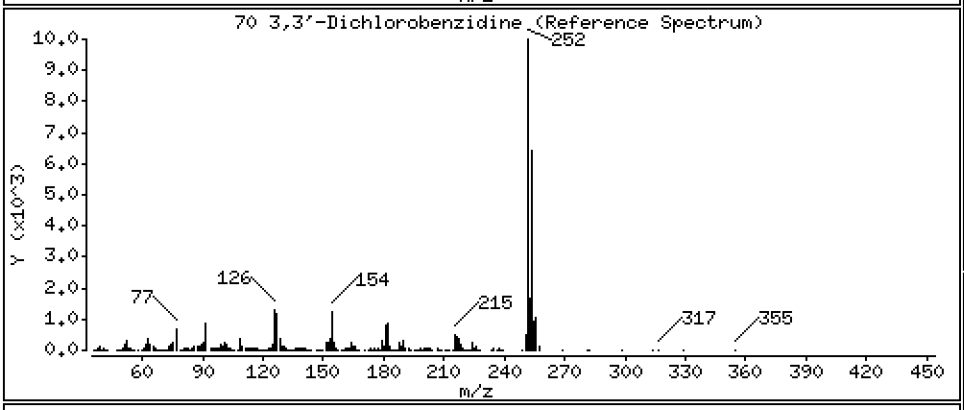
Column diameter: 0.25

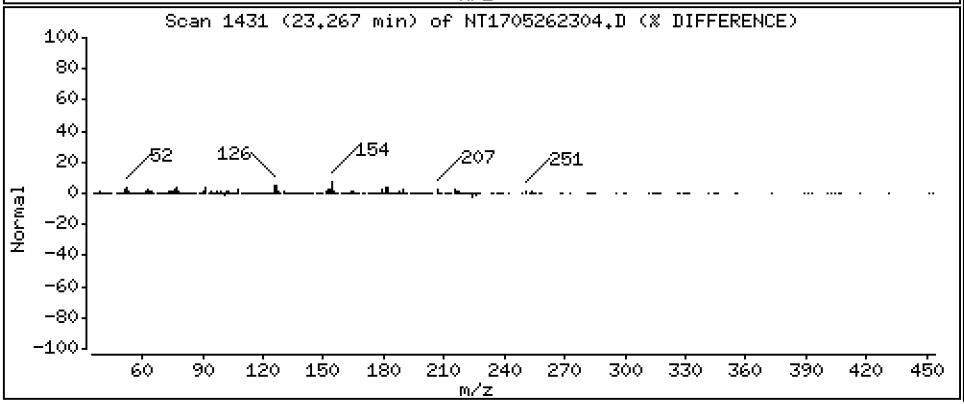
70 3,3'-Dichlorobenzidine

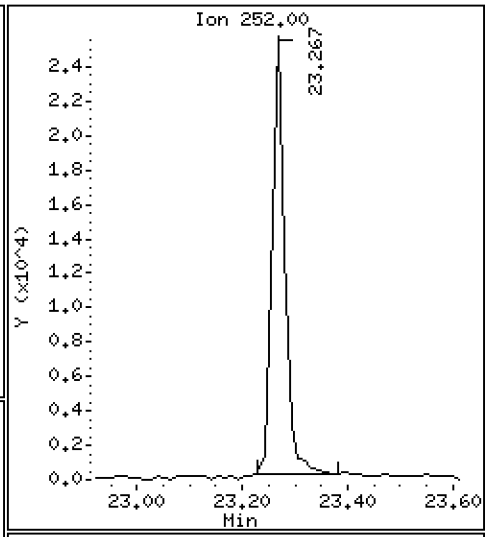
Concentration: 1.001 ug/mL

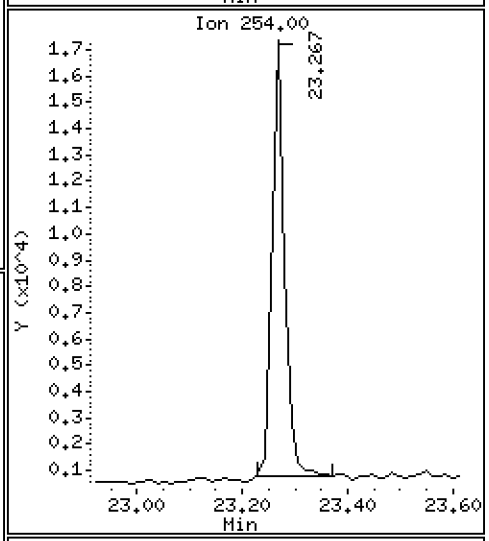


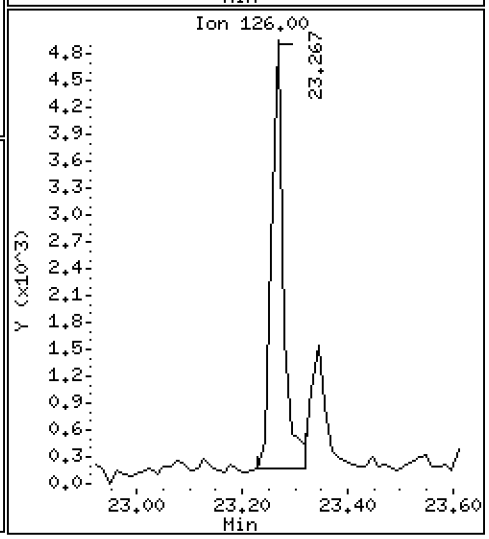












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

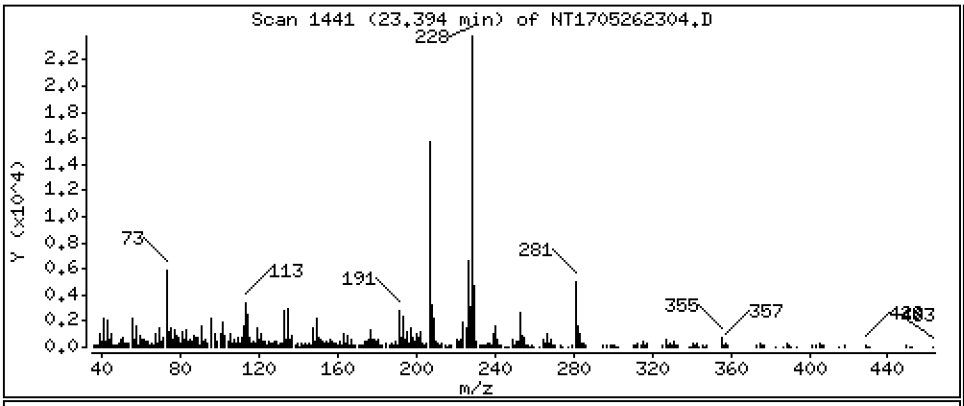
Operator: VTS

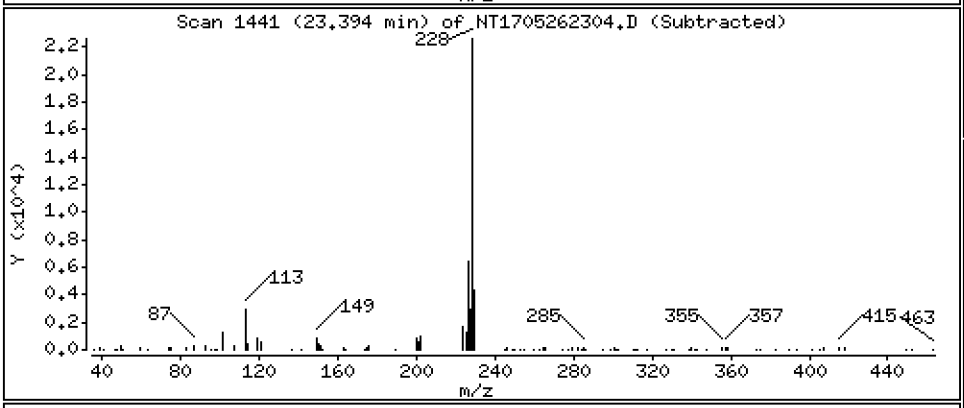
Column phase: ZB-5msi

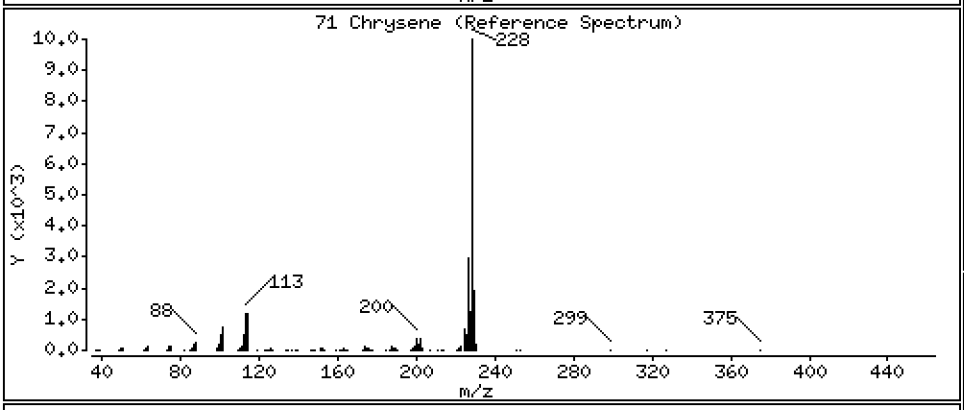
Column diameter: 0.25

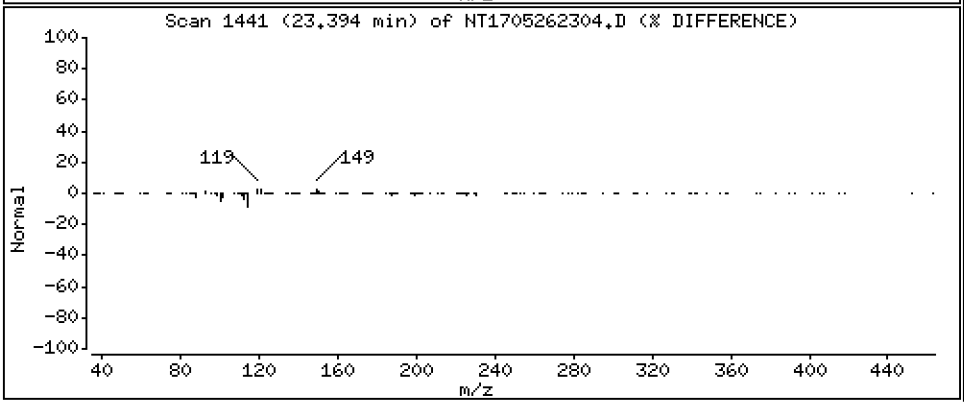
71 Chrysene

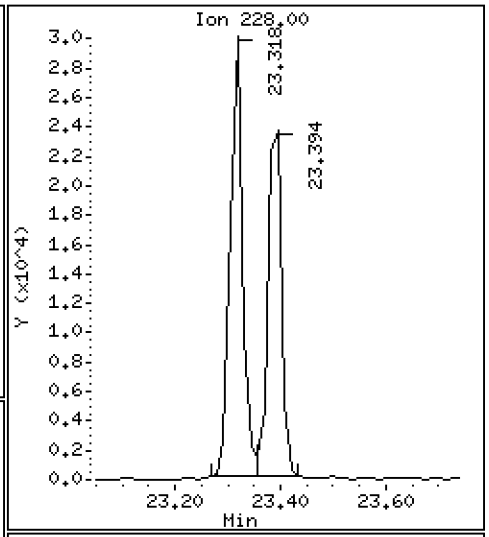
Concentration: 0.2097 ug/mL

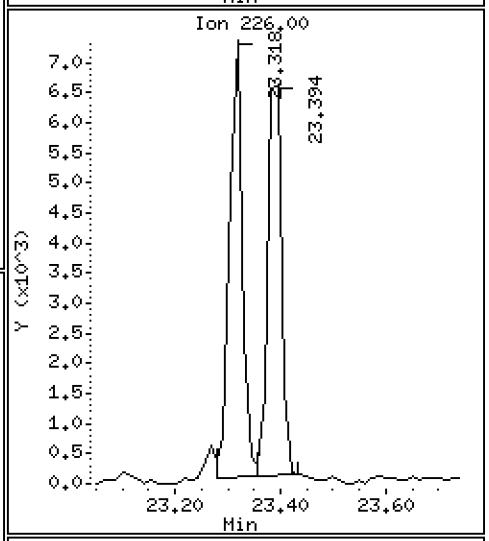


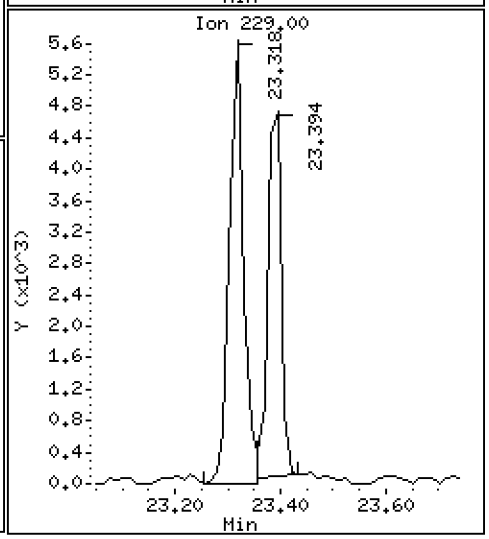












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

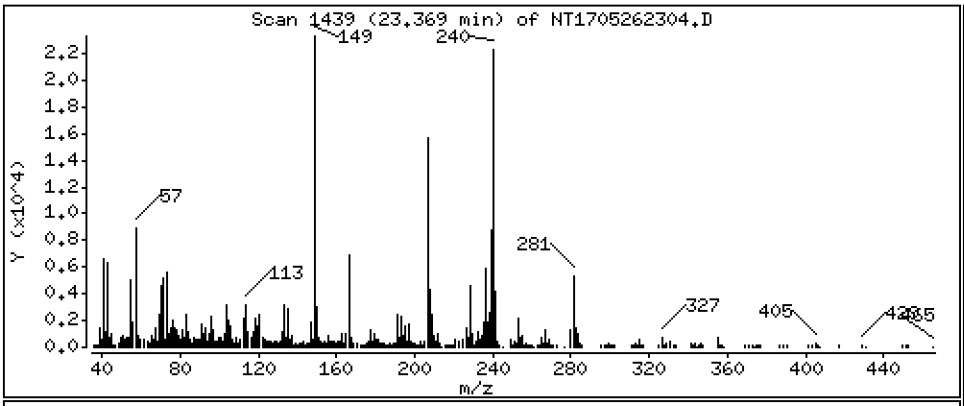
Operator: VTS

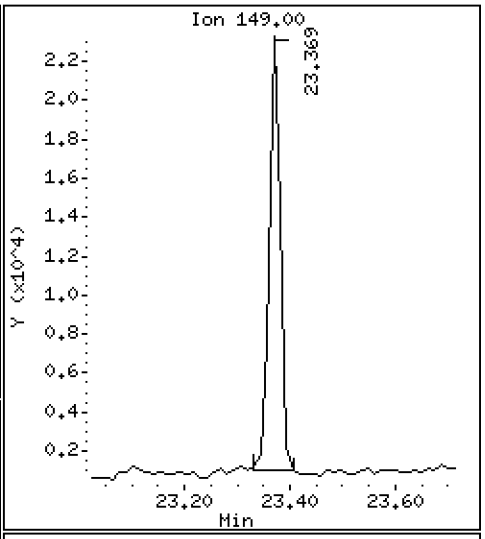
Column phase: ZB-5msi

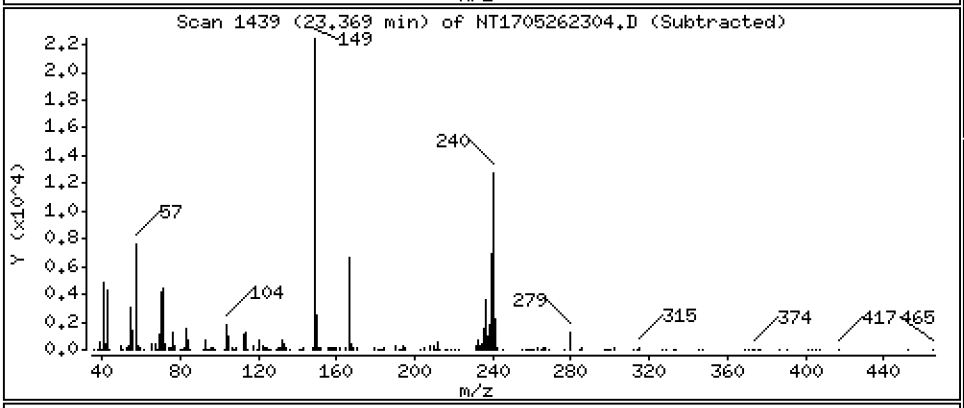
Column diameter: 0.25

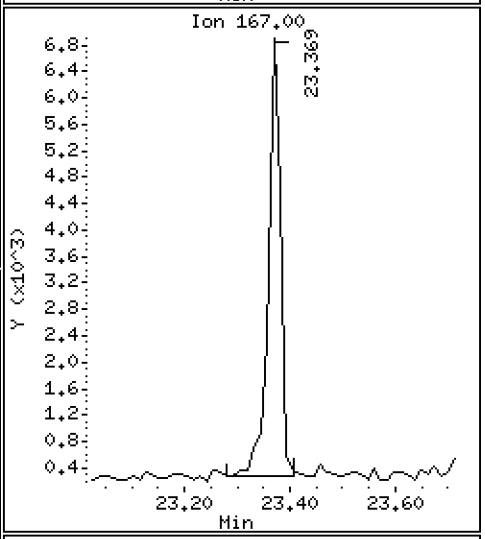
72 bis(2-Ethylhexyl)phthalate

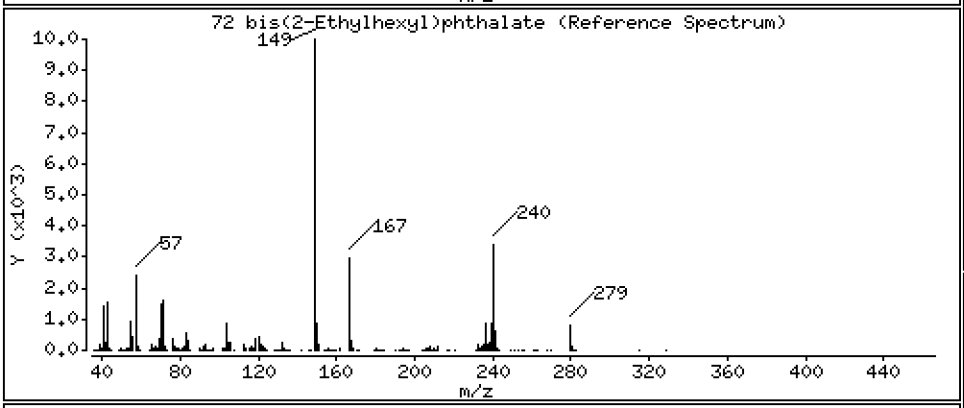
Concentration: 0.1878 ug/mL

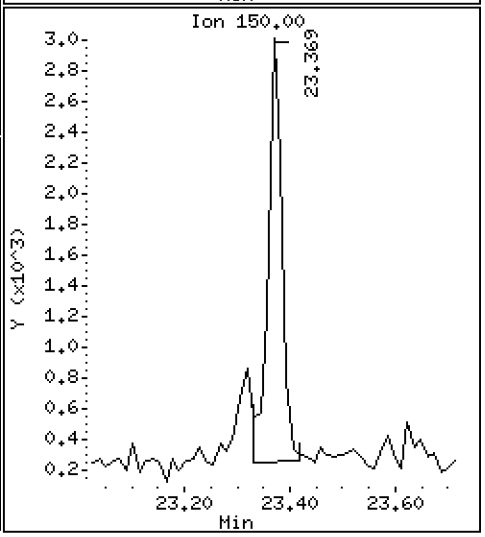


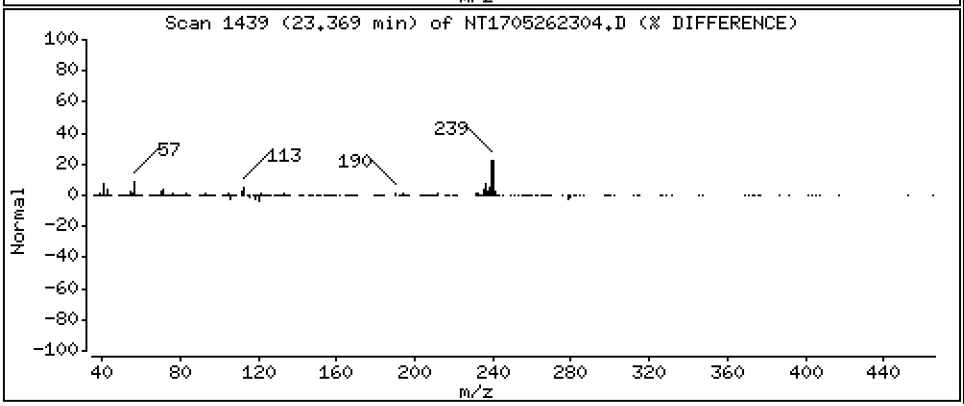












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

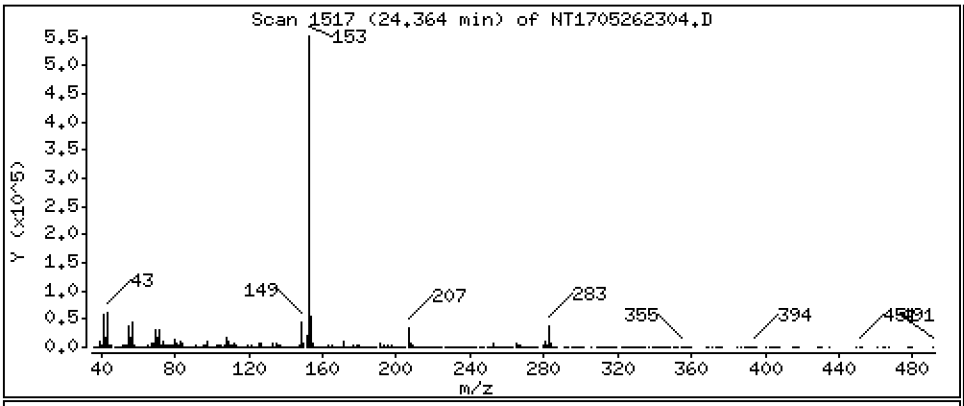
Operator: VTS

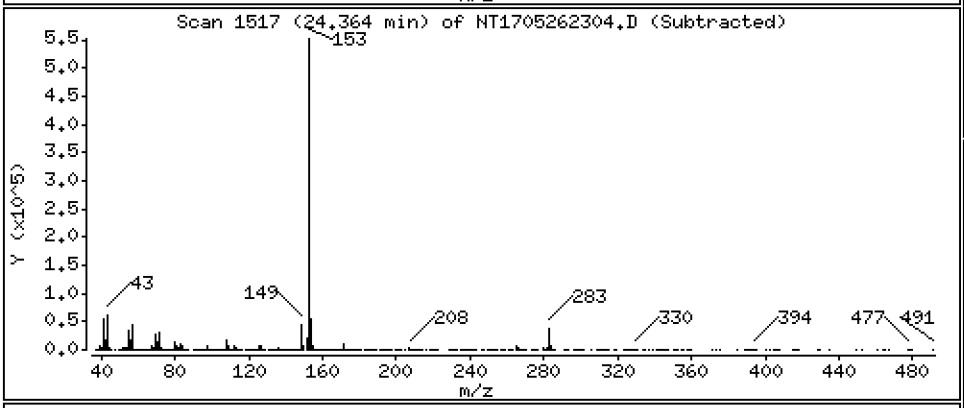
Column phase: ZB-5msi

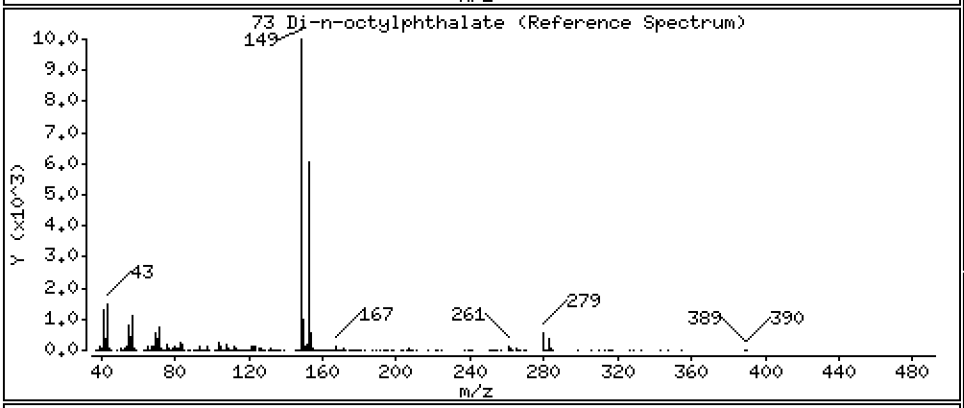
Column diameter: 0.25

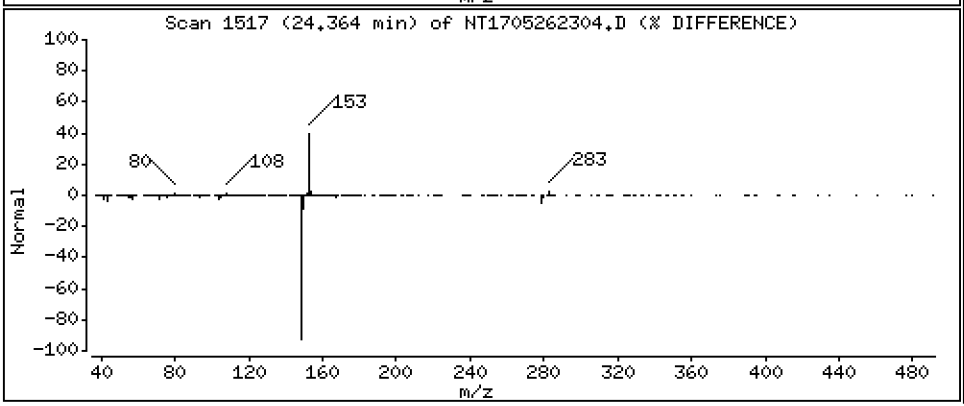
73 Di-n-octylphthalate

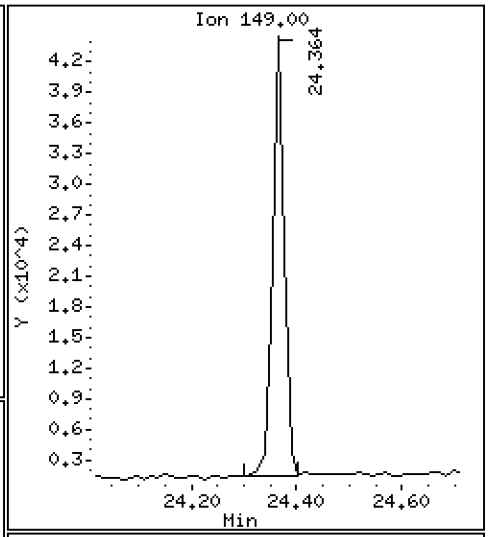
Concentration: 0.2110 ug/mL

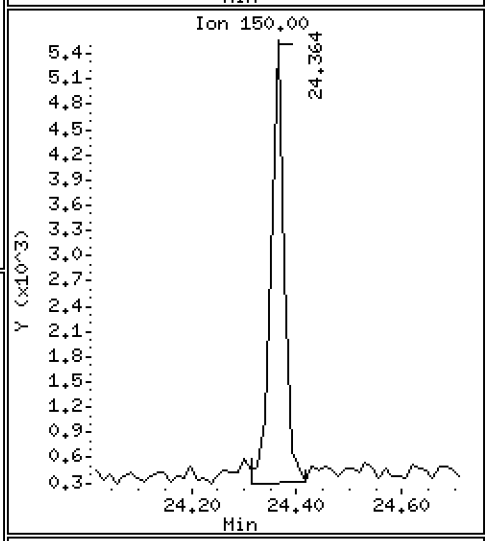


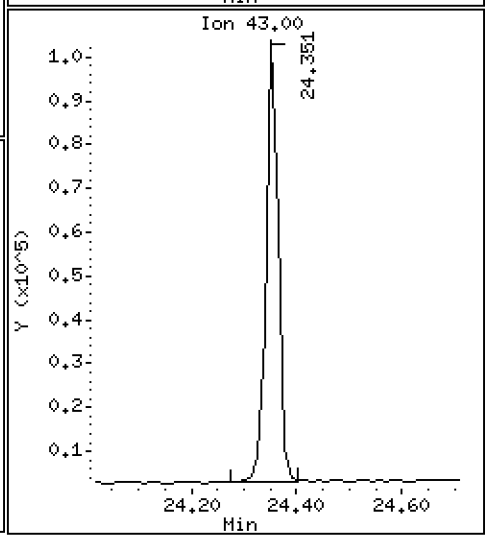












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

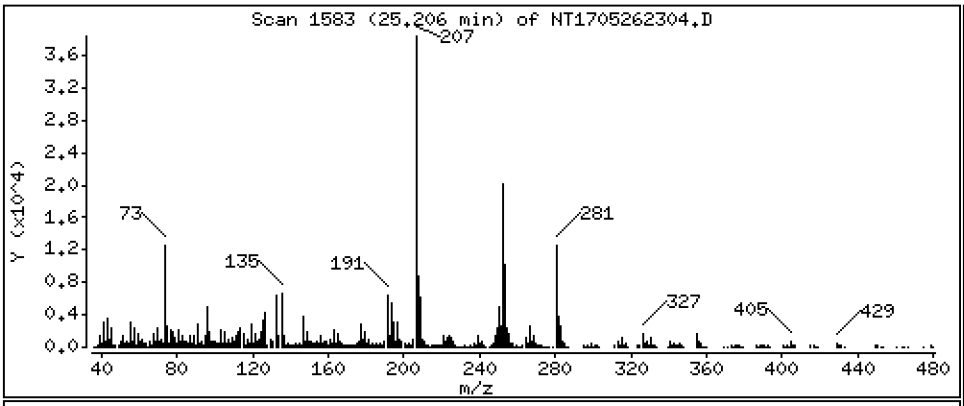
Operator: VTS

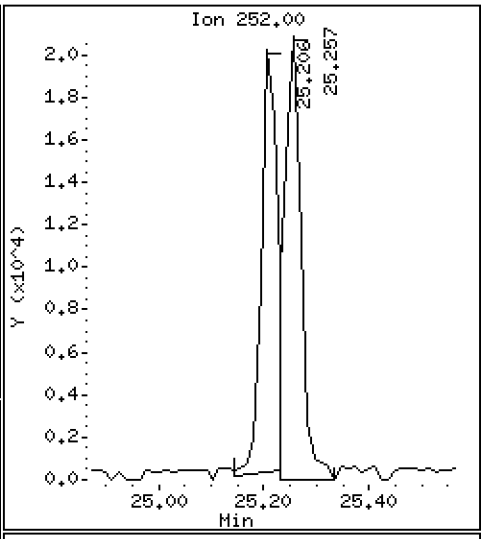
Column phase: ZB-5msi

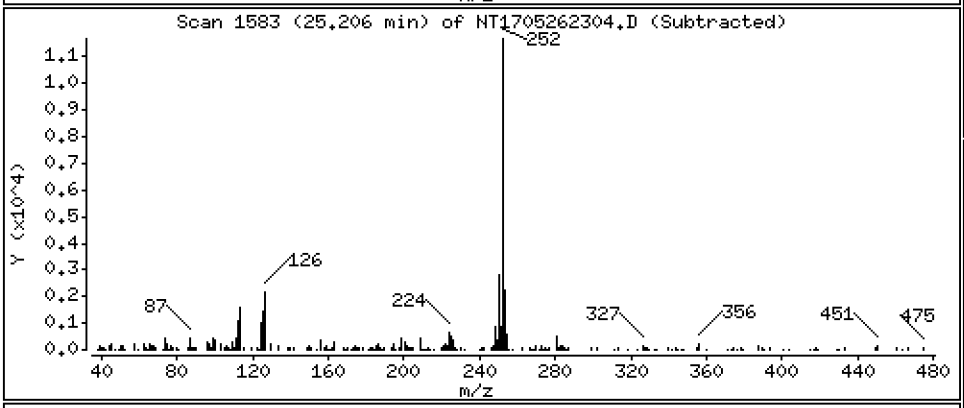
Column diameter: 0.25

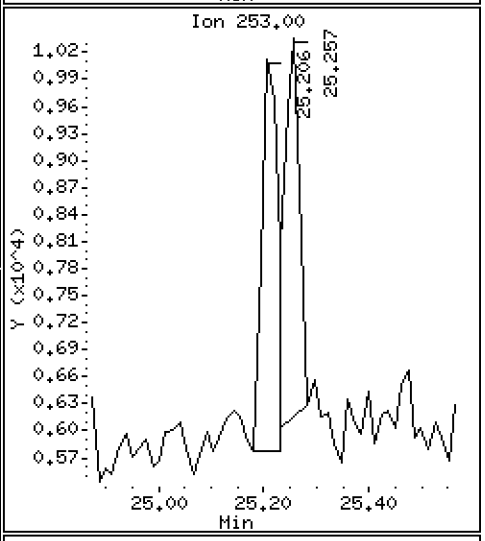
74 Benzo(b)fluoranthene

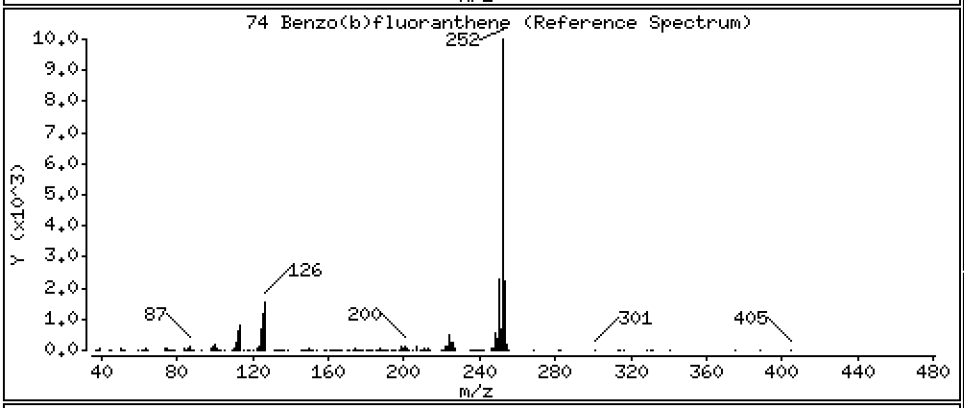
Concentration: 0.1795 ug/mL

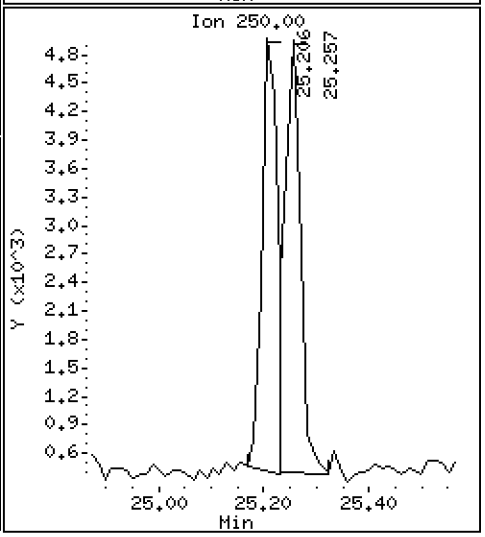


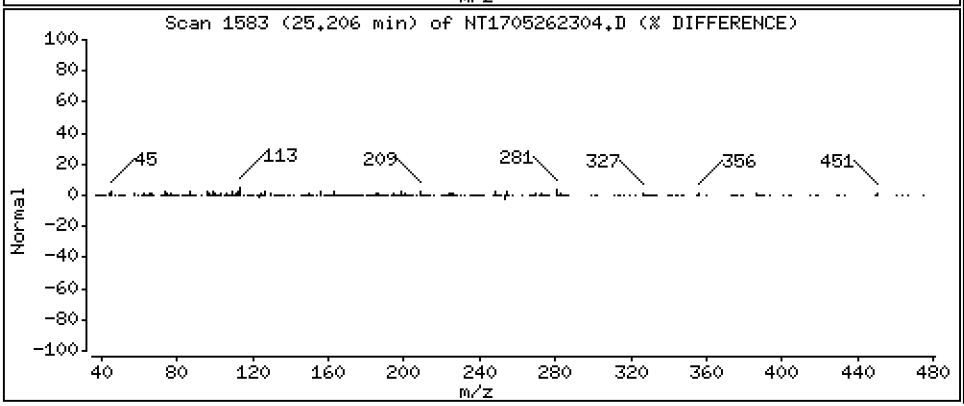












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

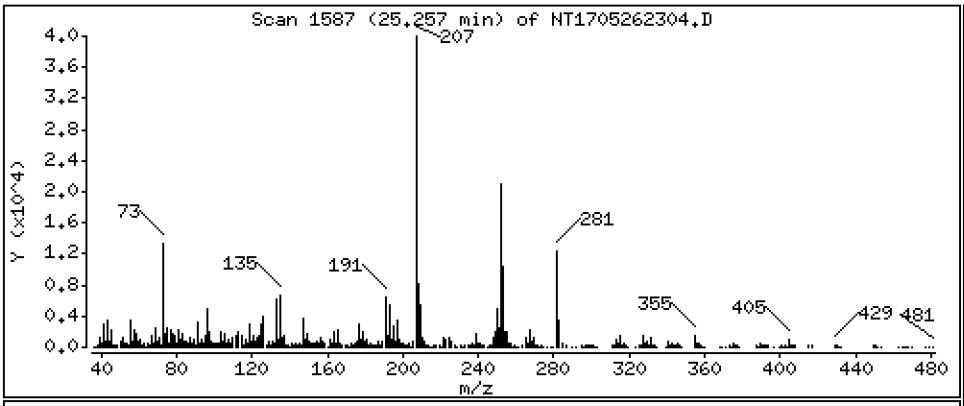
Operator: VTS

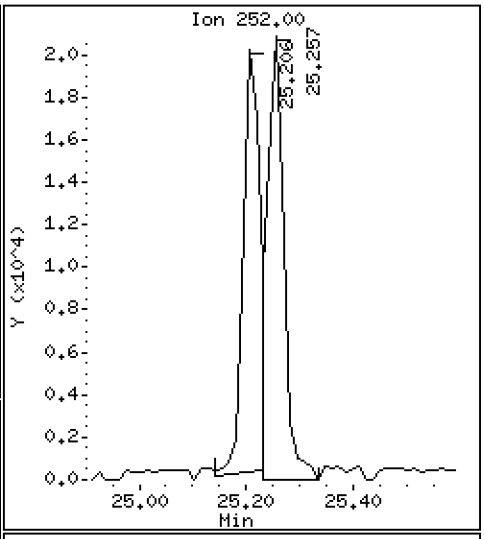
Column phase: ZB-5msi

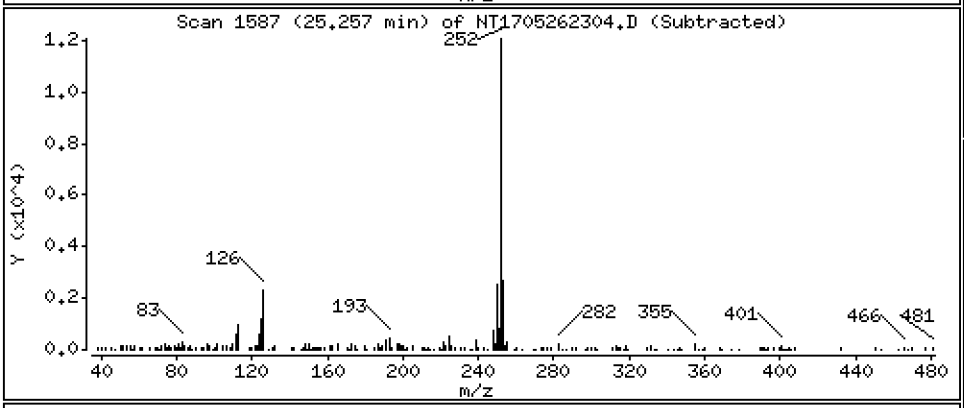
Column diameter: 0.25

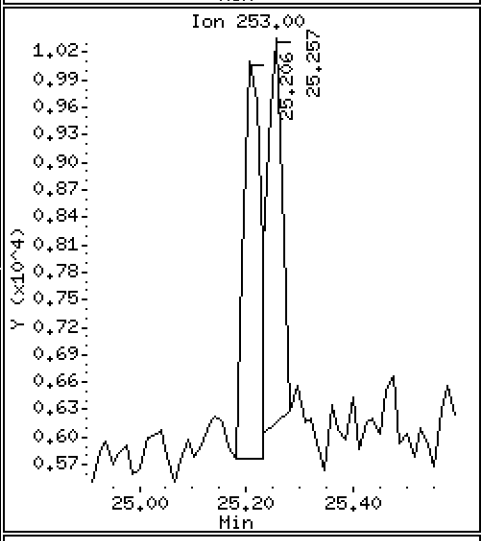
75 Benzo(k)fluoranthene

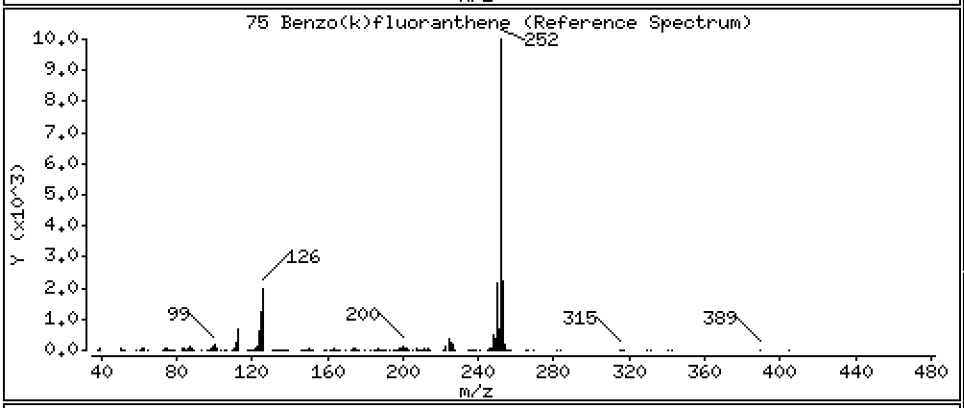
Concentration: 0.2115 ug/mL

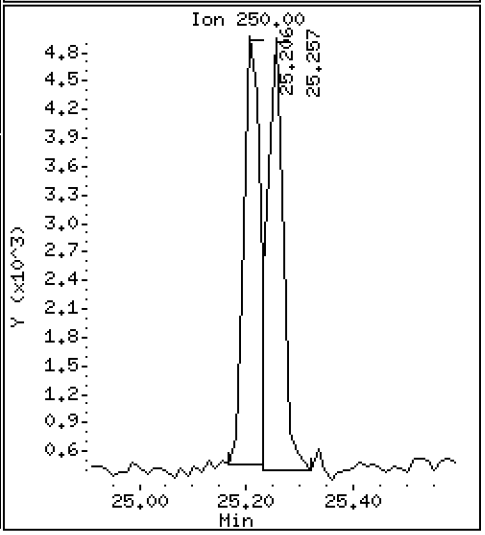


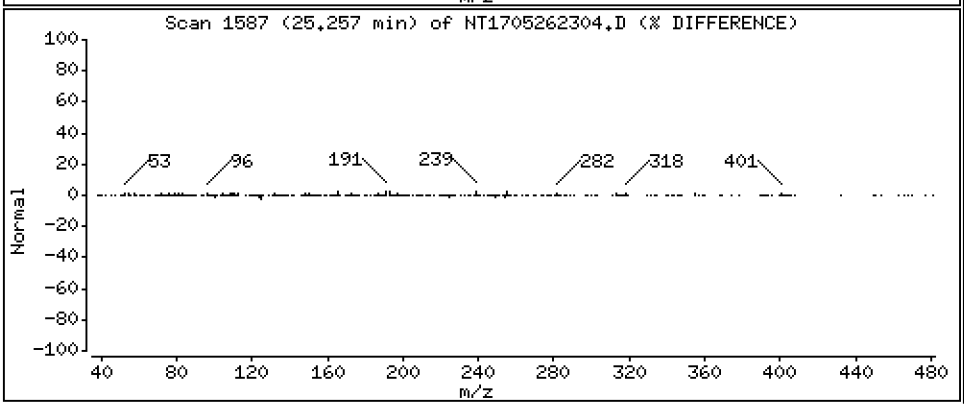












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

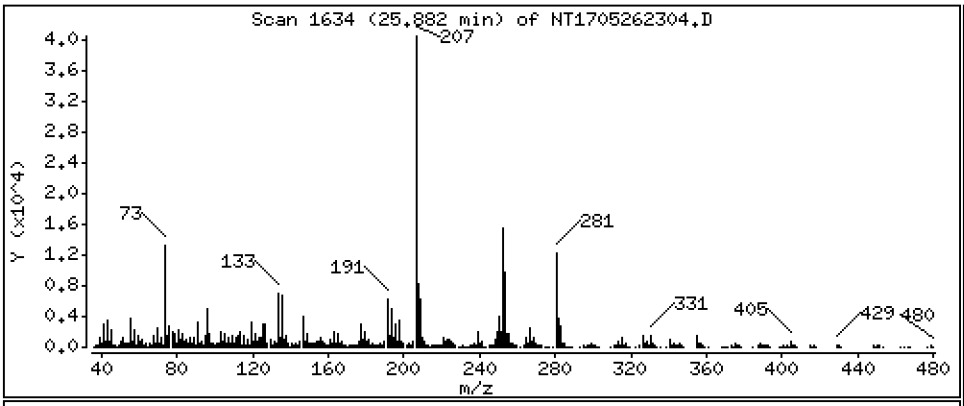
Operator: VTS

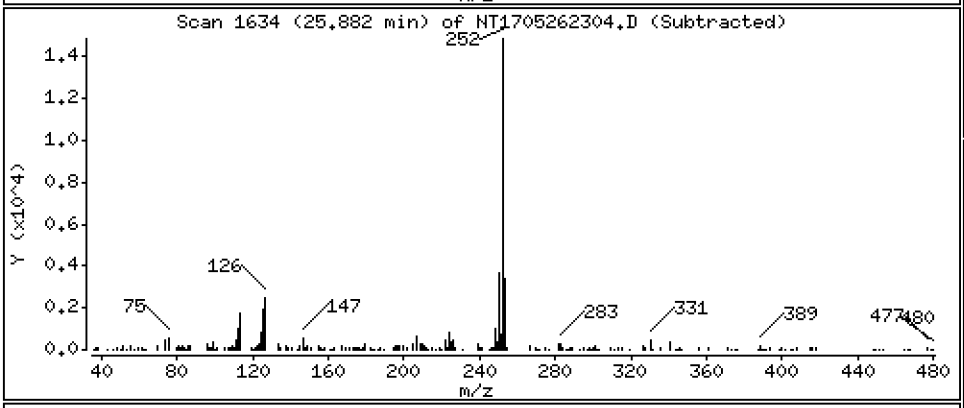
Column phase: ZB-5msi

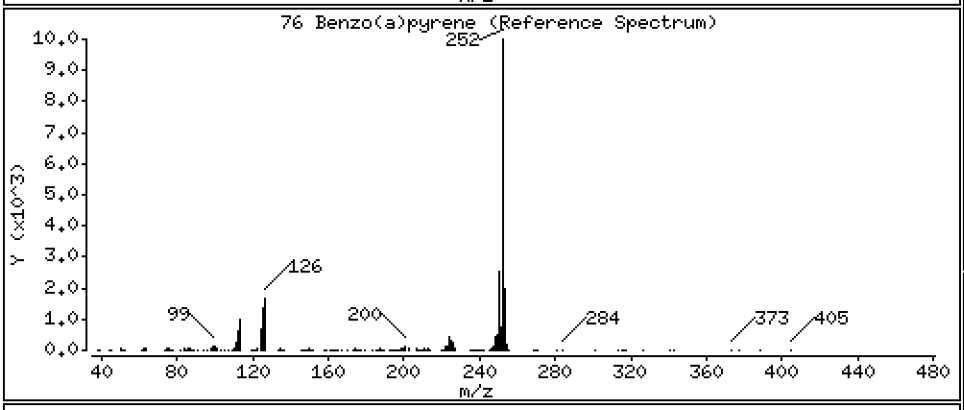
Column diameter: 0.25

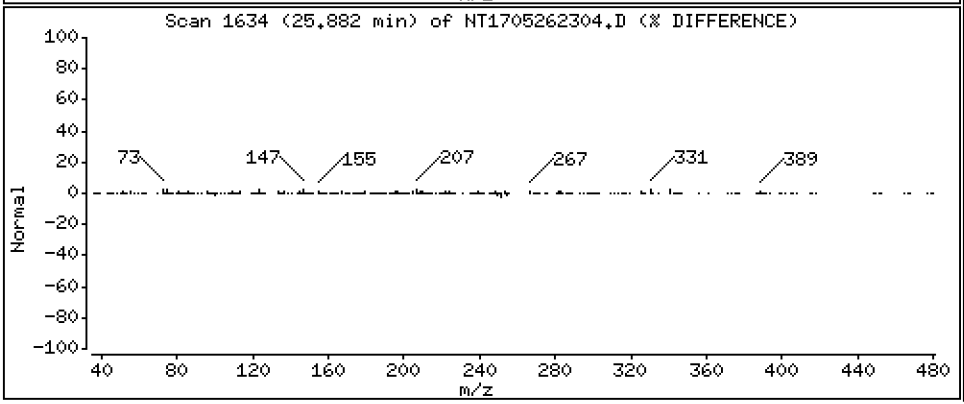
76 Benzo(a)pyrene

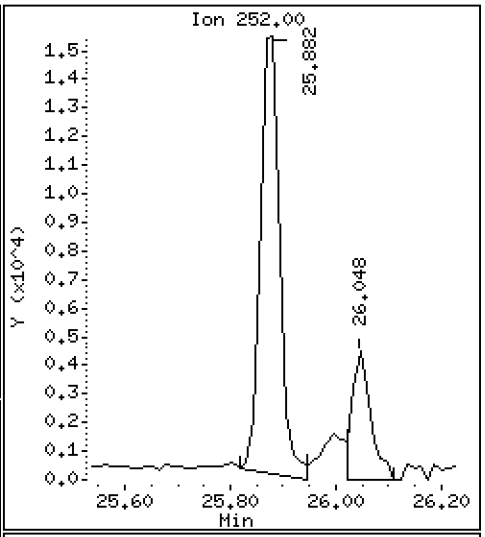
Concentration: 0.2040 ug/mL

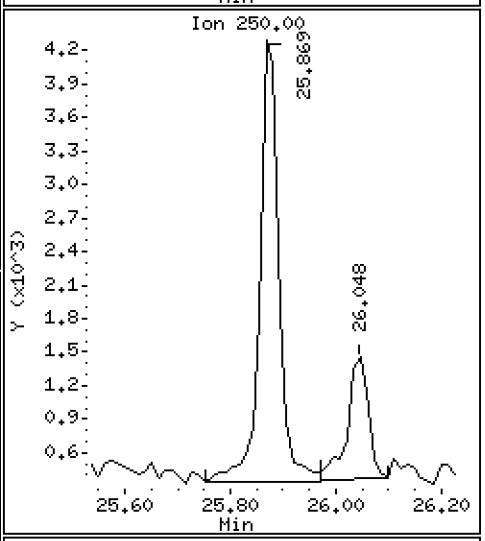


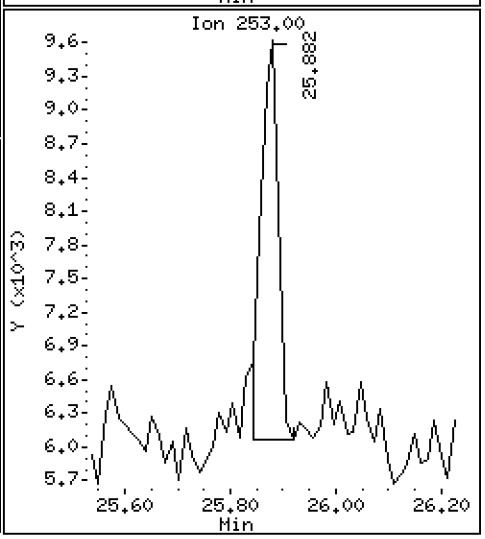












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

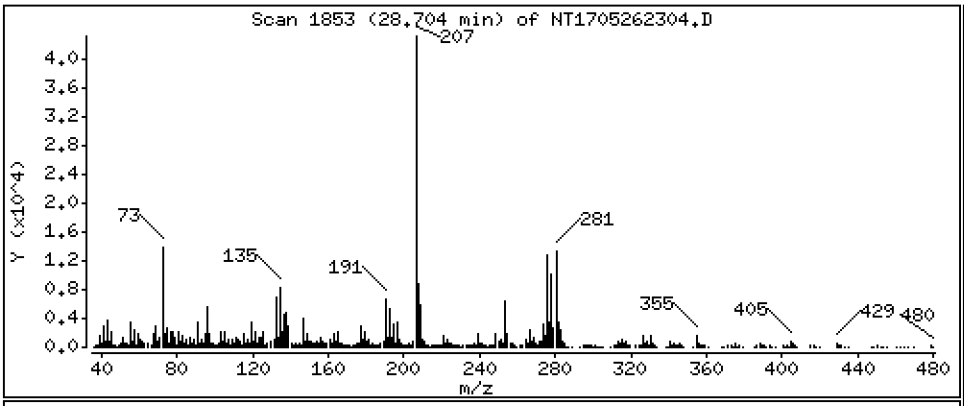
Operator: VTS

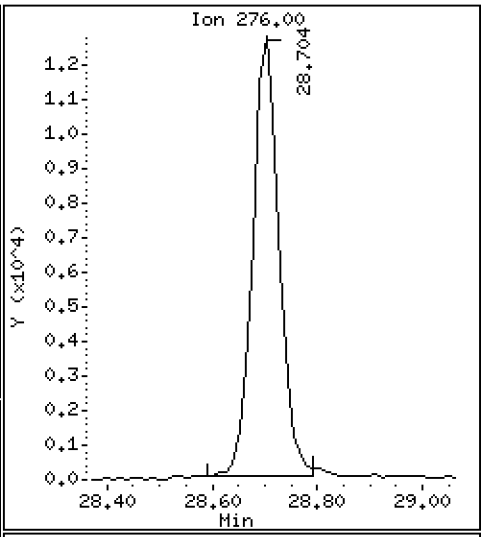
Column phase: ZB-5msi

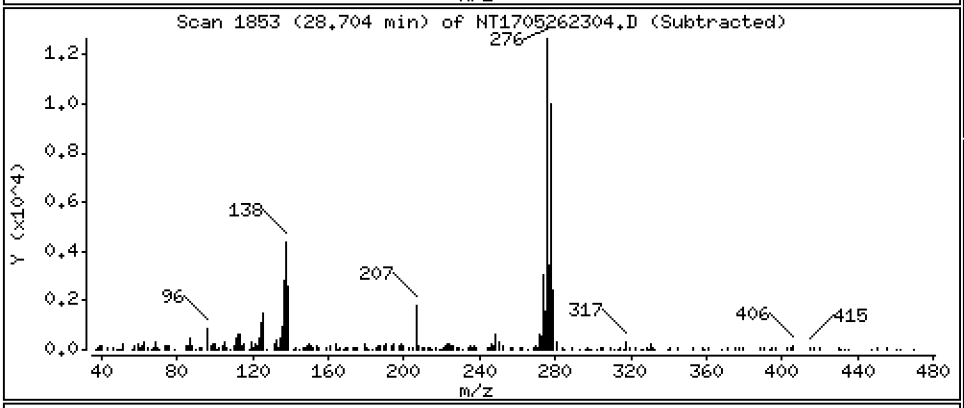
Column diameter: 0.25

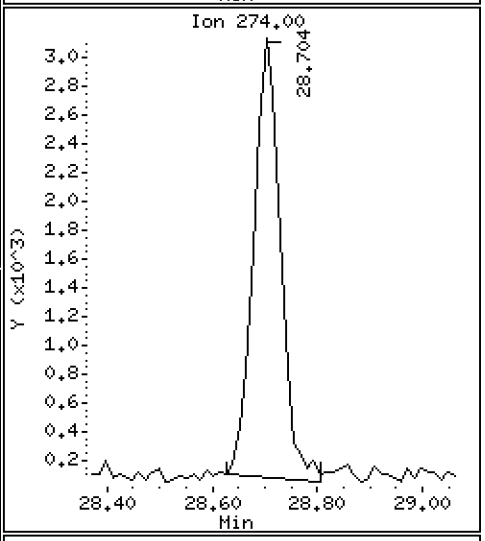
78 Indeno(1,2,3-cd)pyrene

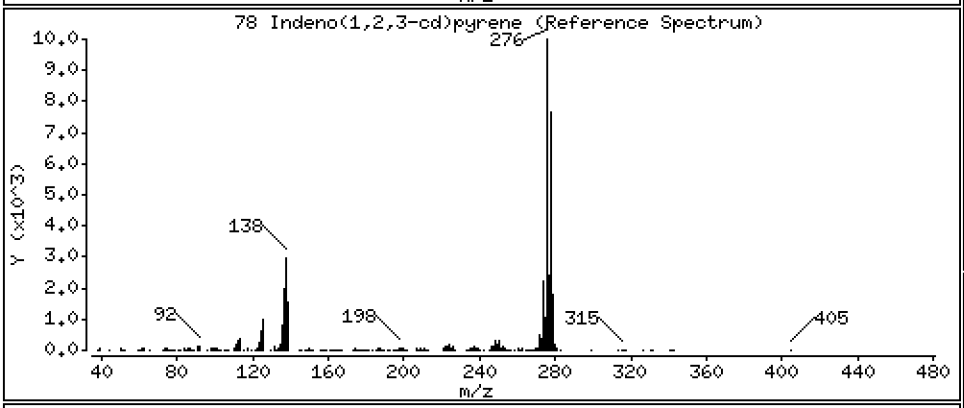
Concentration: 0.1978 ug/mL

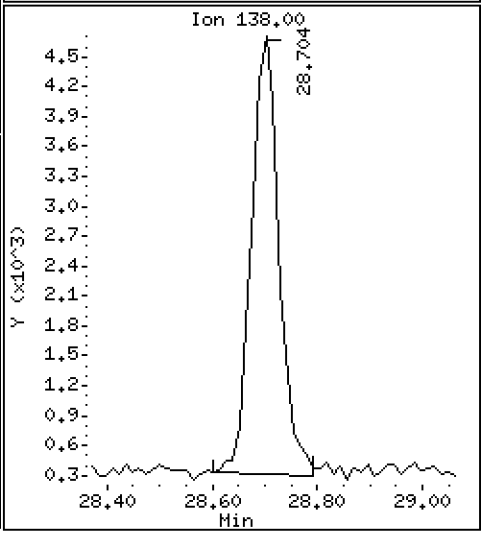


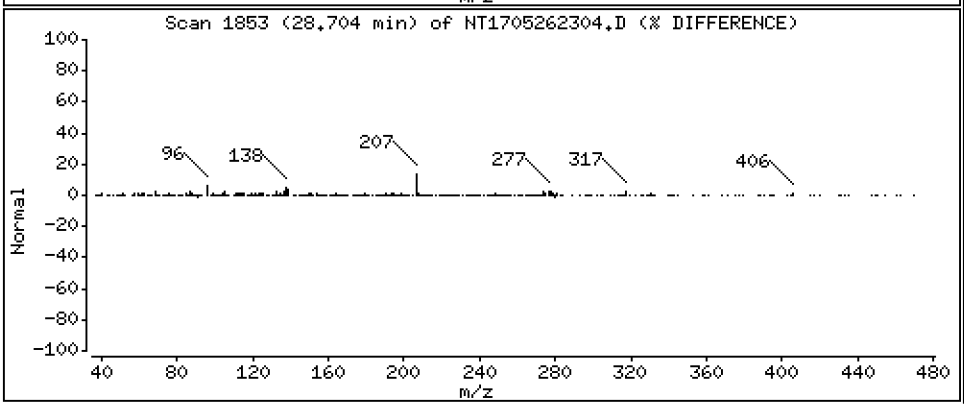












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

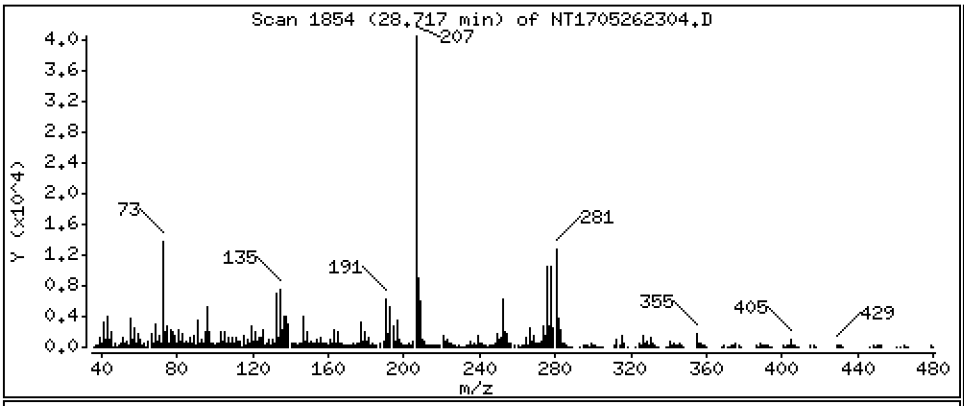
Operator: VTS

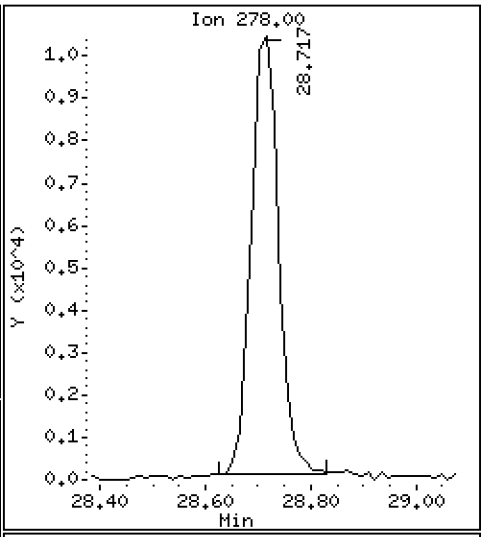
Column phase: ZB-5msi

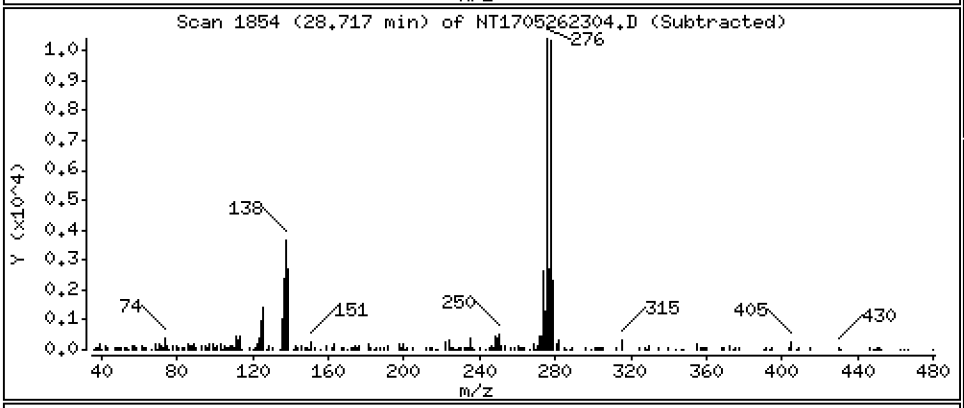
Column diameter: 0.25

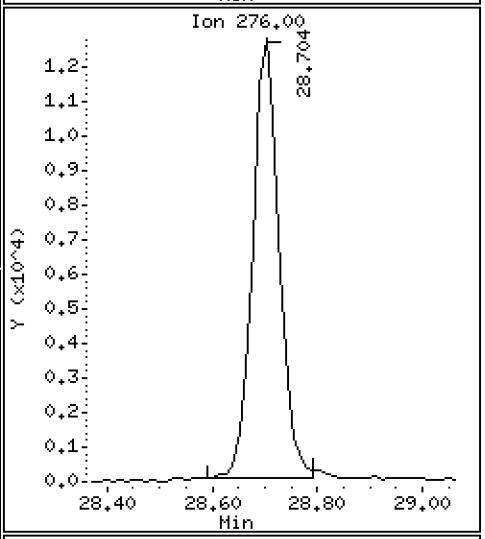
79 Dibenzo(a,h)anthracene

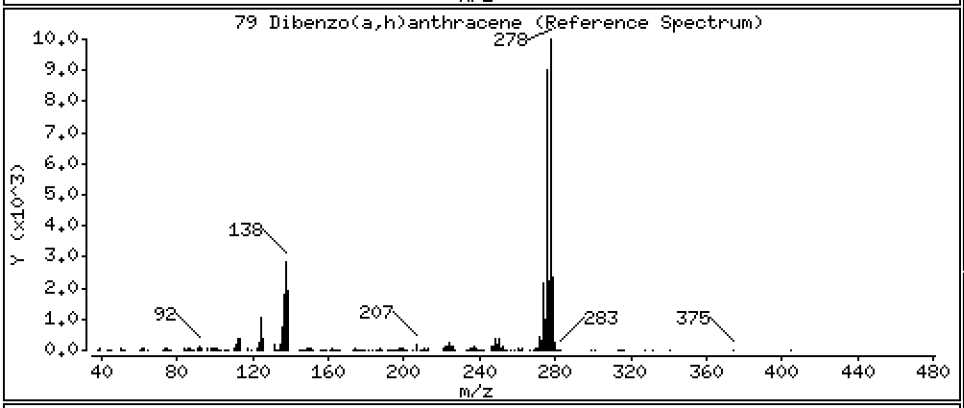
Concentration: 0.1955 ug/mL

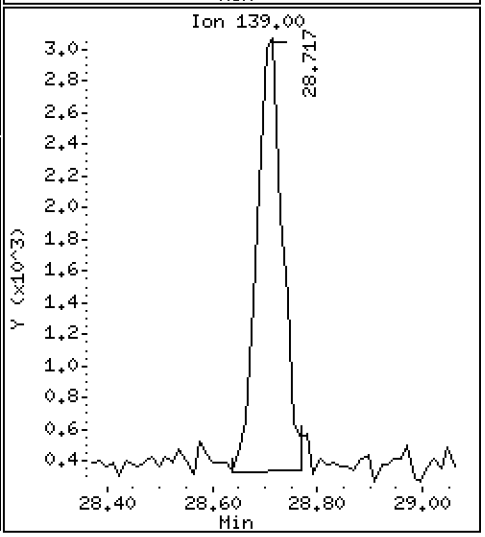


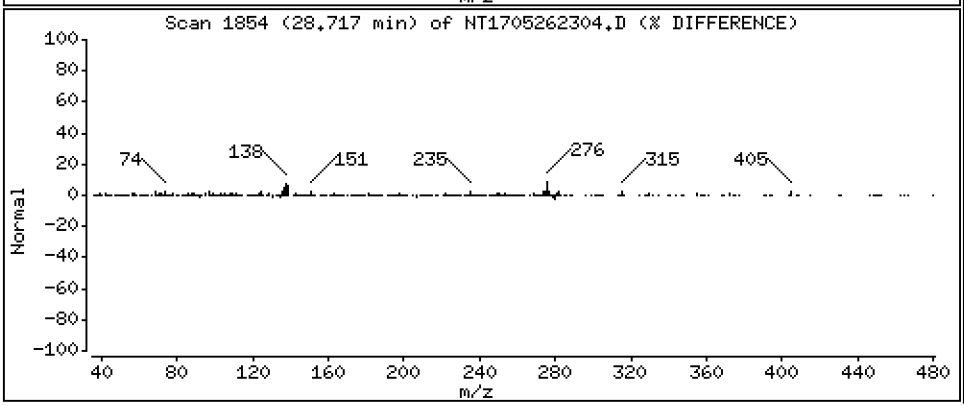












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

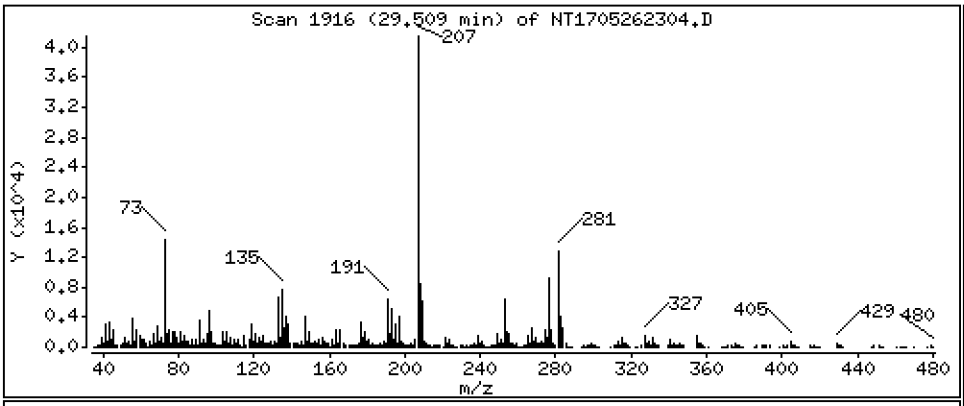
Operator: VTS

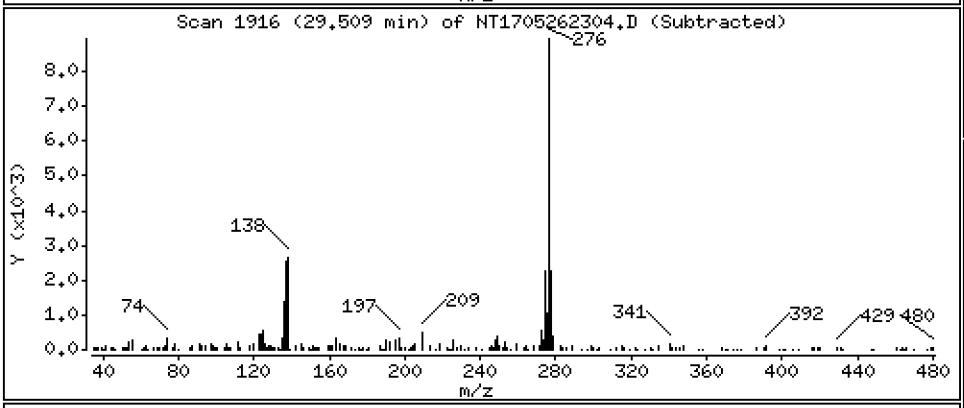
Column phase: ZB-5msi

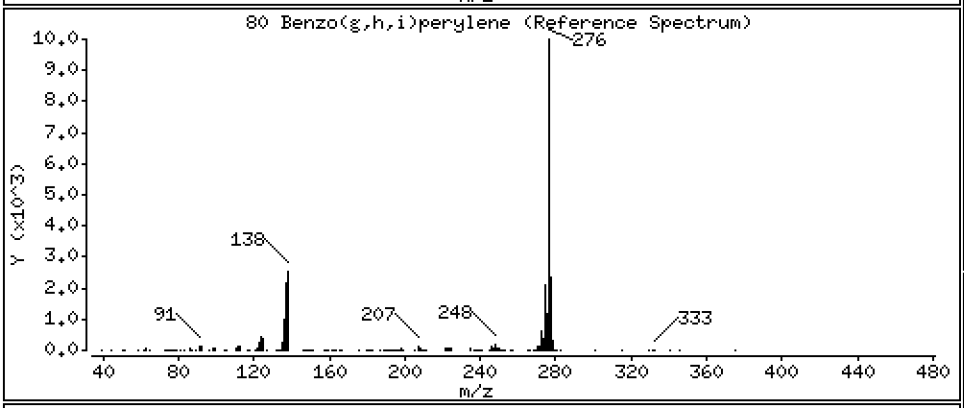
Column diameter: 0.25

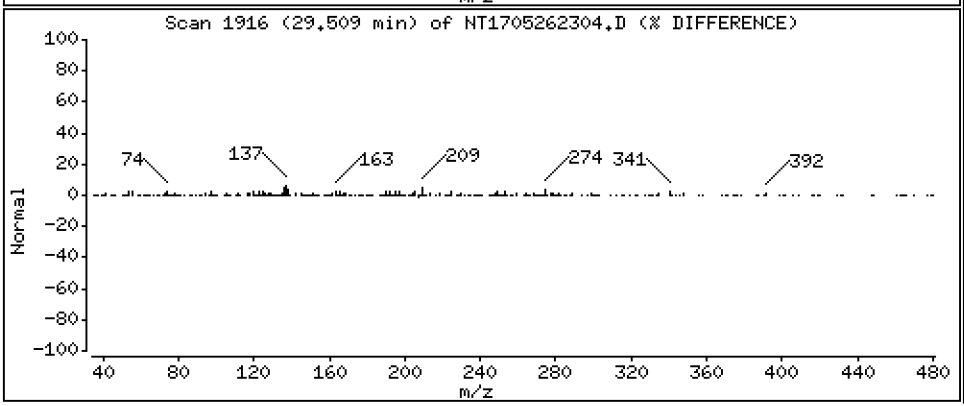
80 Benzo(g,h,i)perylene

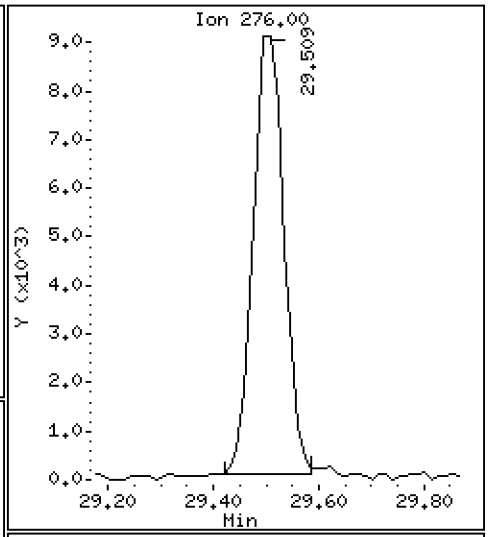
Concentration: 0.1959 ug/mL

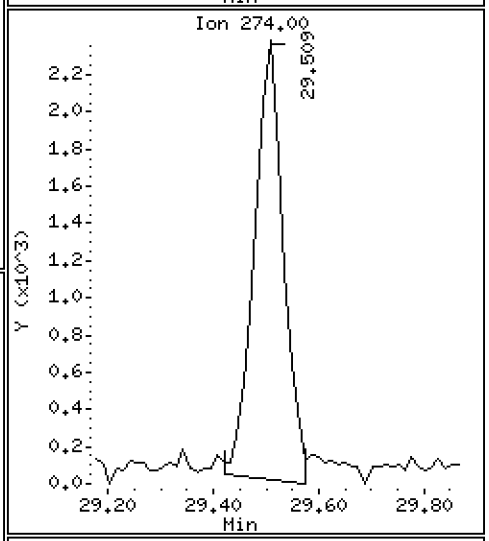


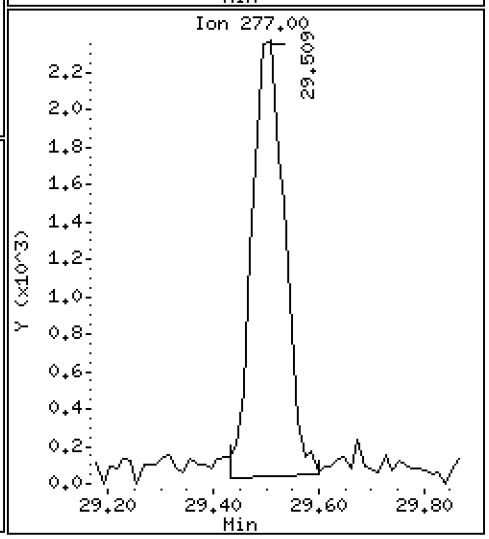












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

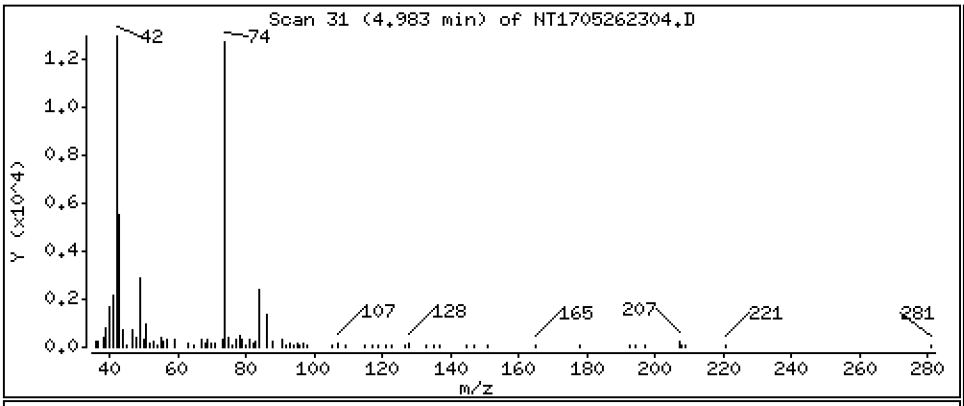
Operator: VTS

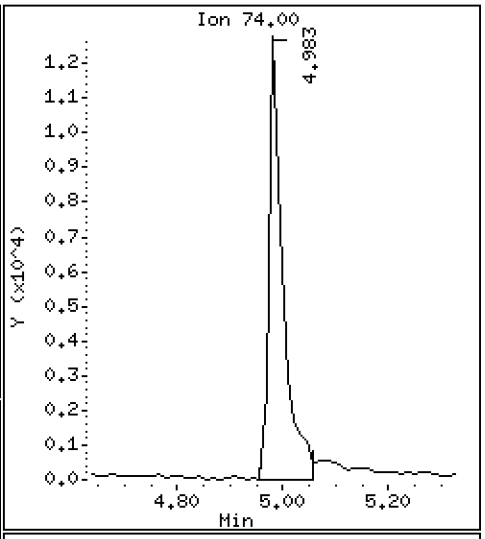
Column phase: ZB-5msi

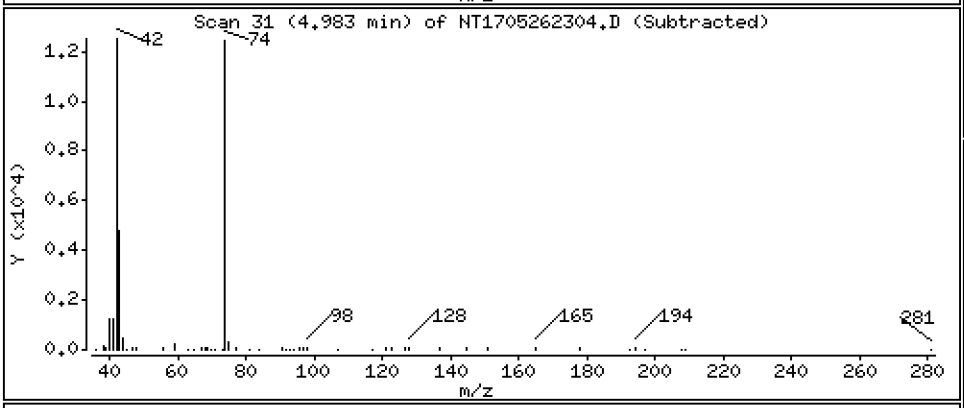
Column diameter: 0.25

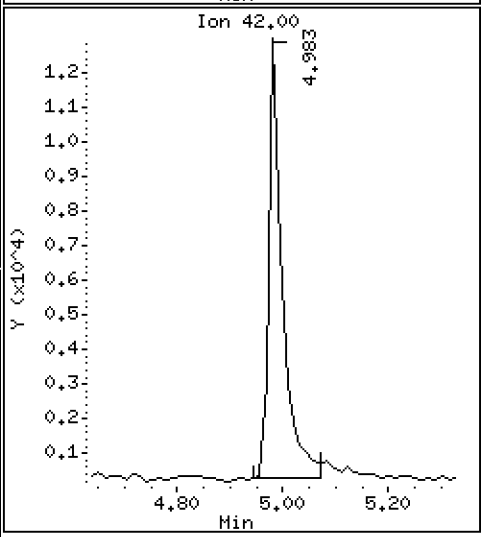
90 N-Nitrosodimethylamine

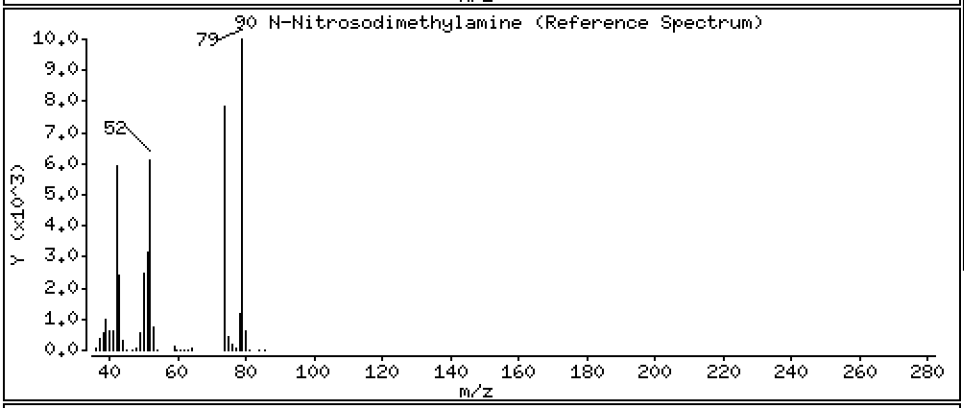
Concentration: 0.3325 ug/mL

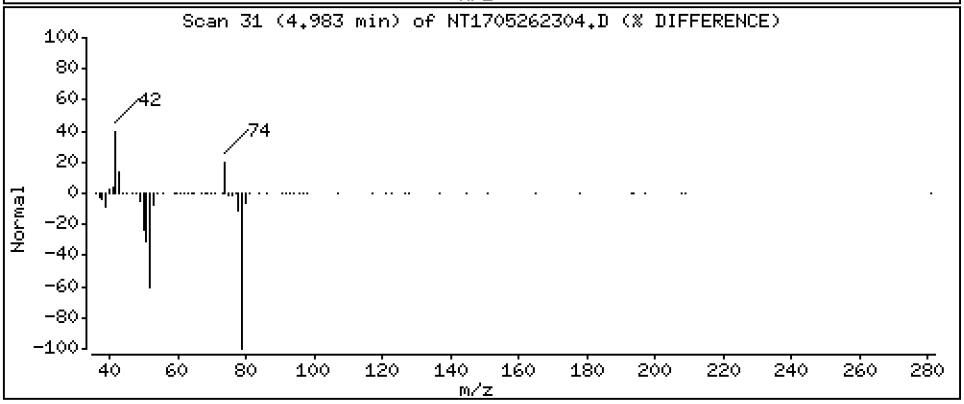












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

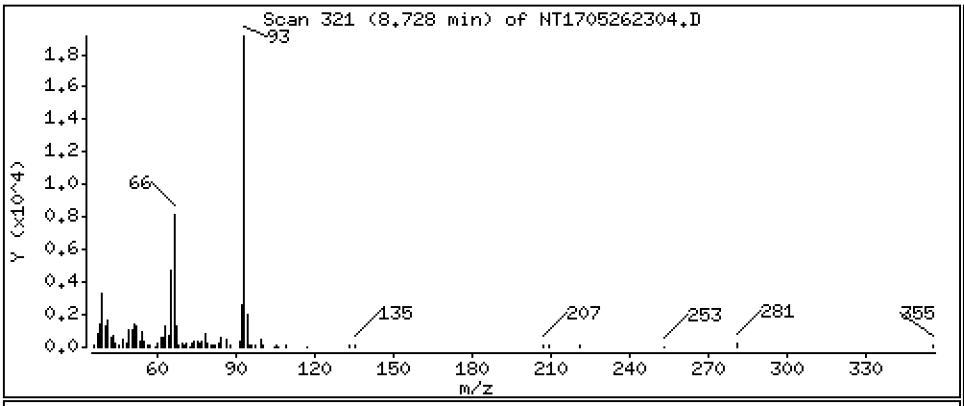
Operator: VTS

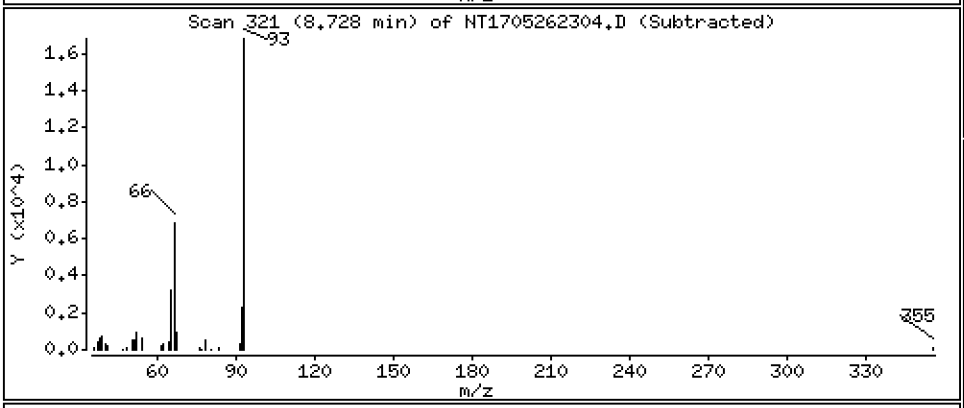
Column phase: ZB-5msi

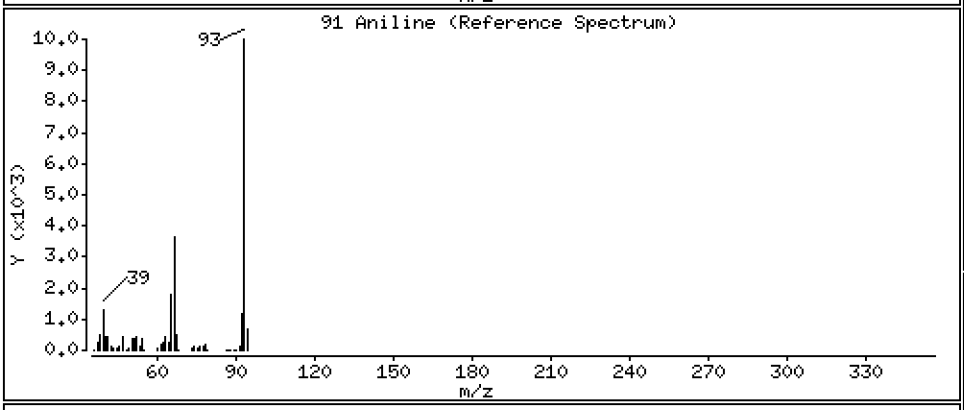
Column diameter: 0.25

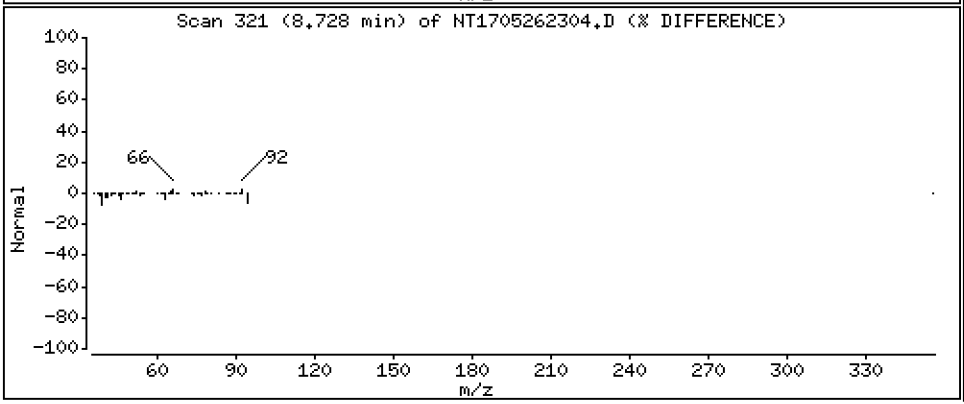
91 Aniline

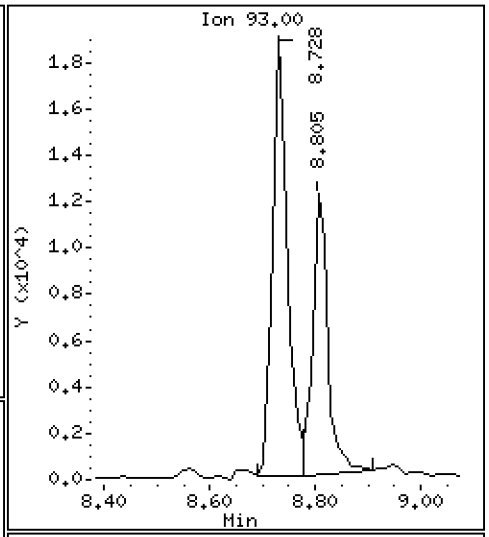
Concentration: 0.3170 ug/mL

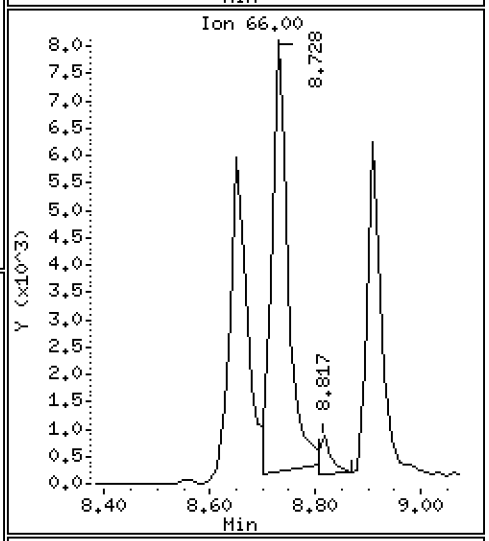


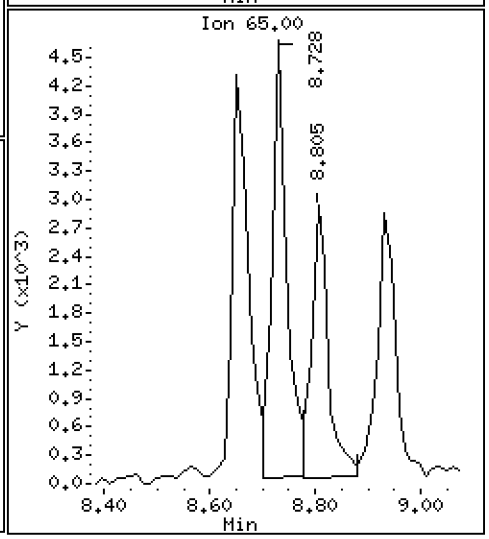












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

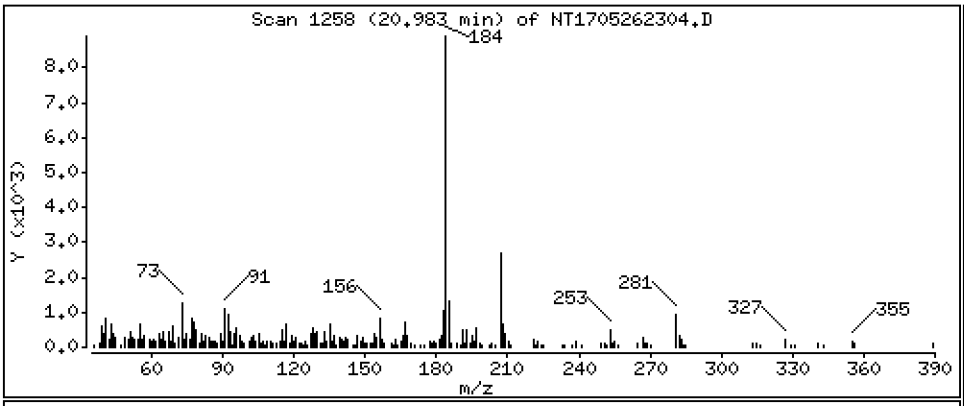
Operator: VTS

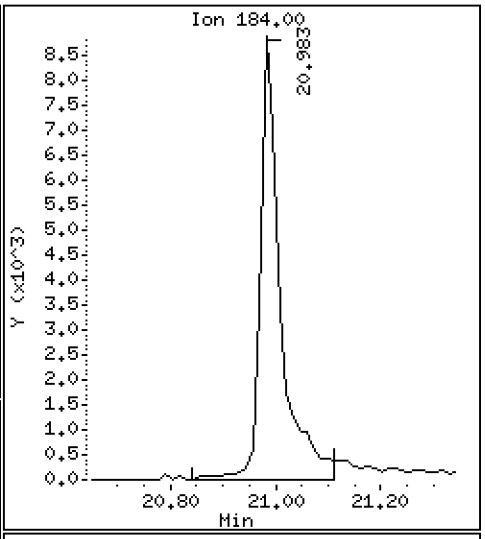
Column phase: ZB-5msi

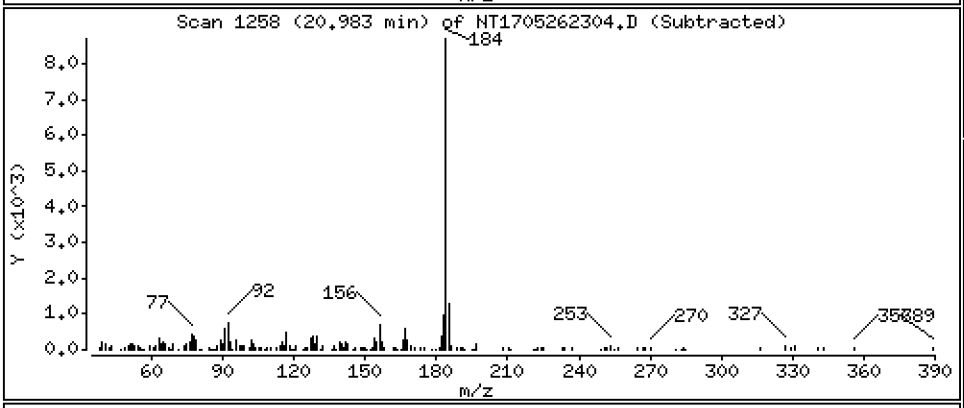
Column diameter: 0.25

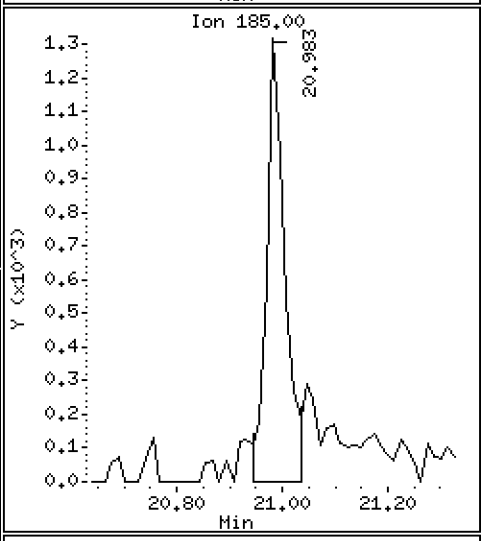
93 Benzidine

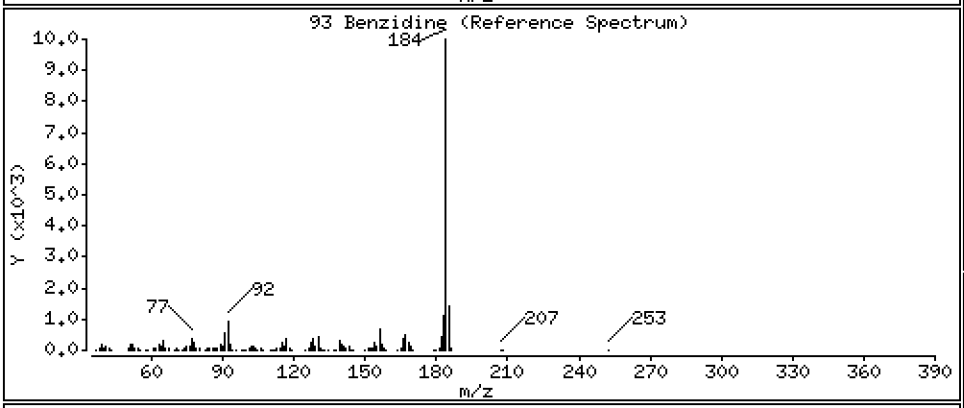
Concentration: 0.3413 ug/mL

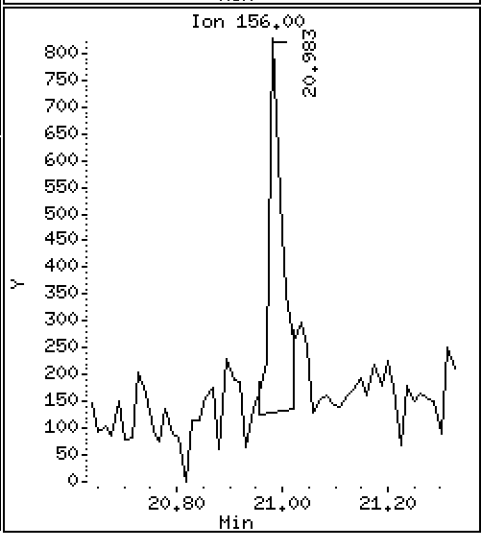


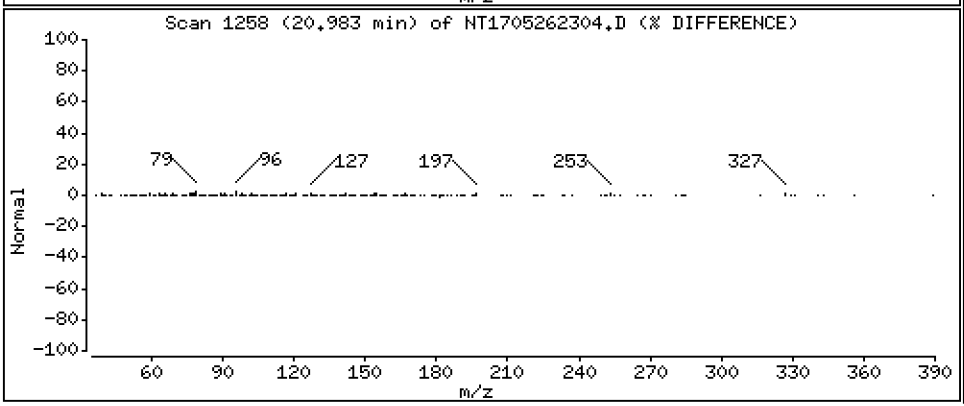












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

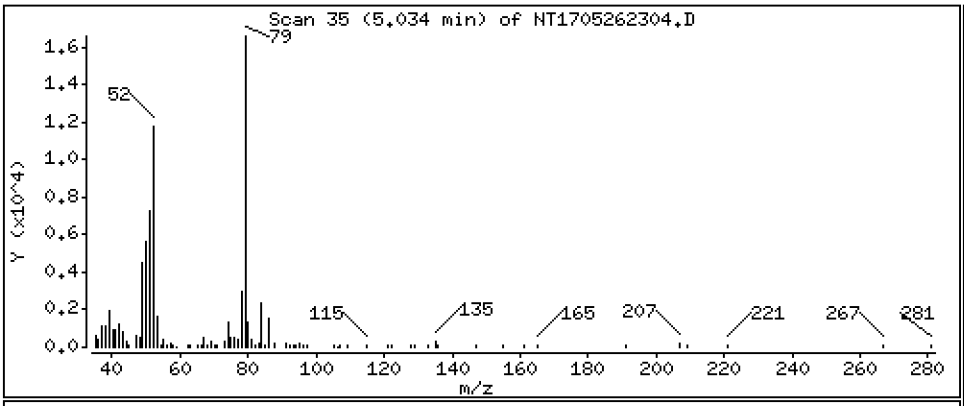
Operator: VTS

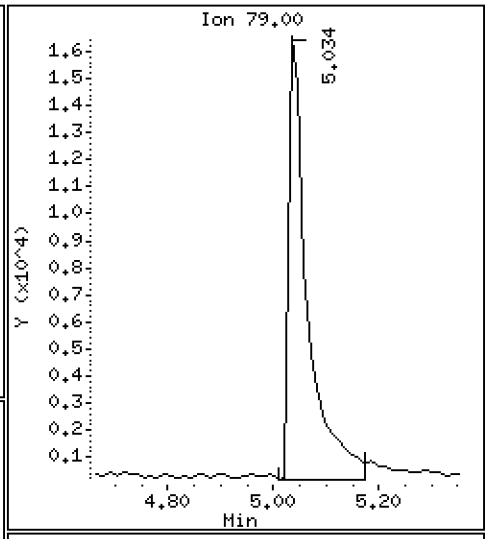
Column phase: ZB-5msi

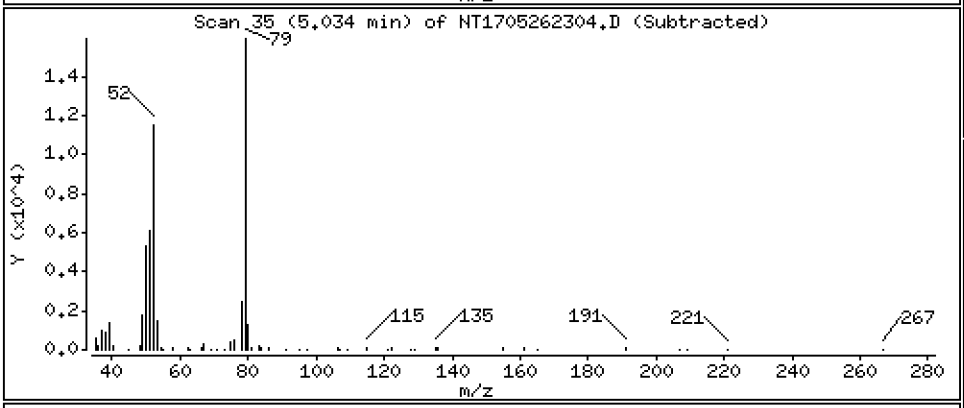
Column diameter: 0.25

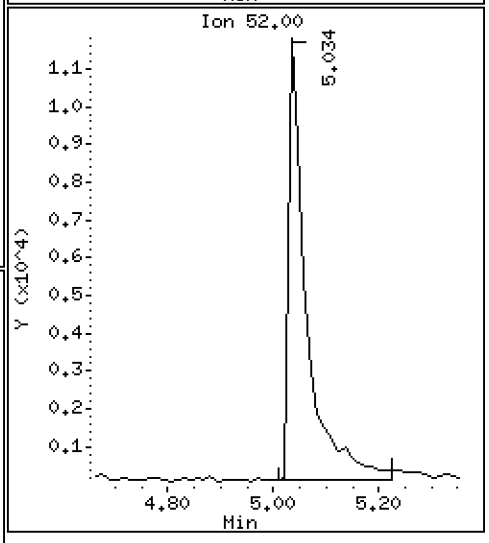
103 Pyridine

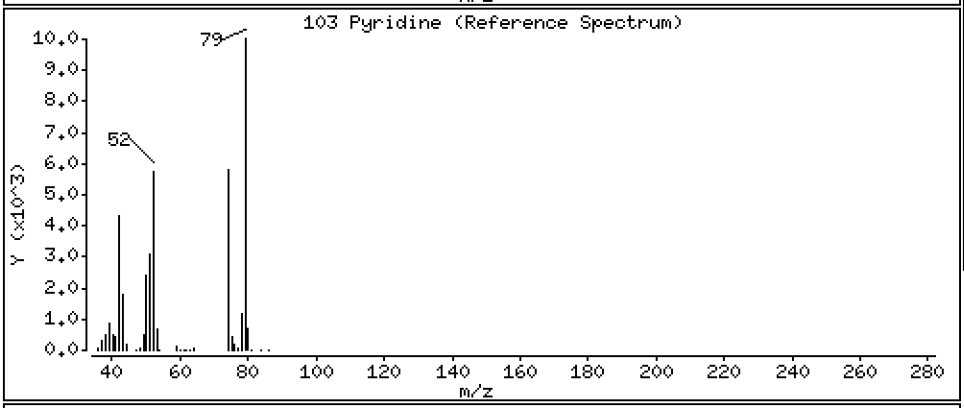
Concentration: 0.3879 ug/mL

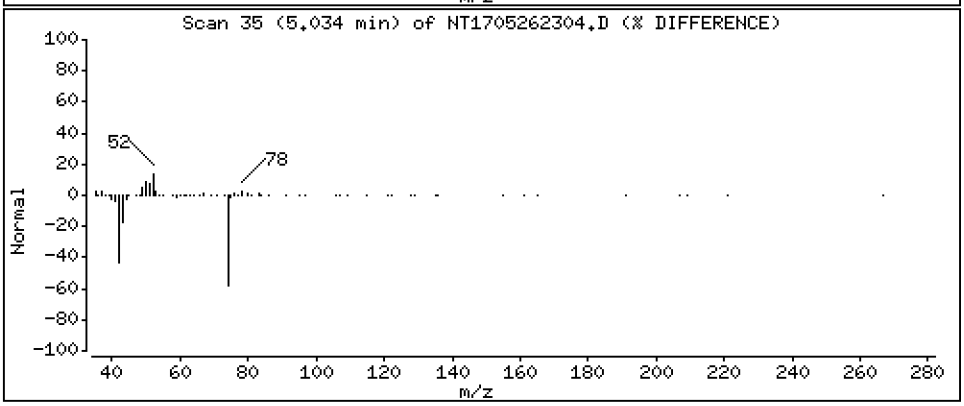












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262304.D

Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

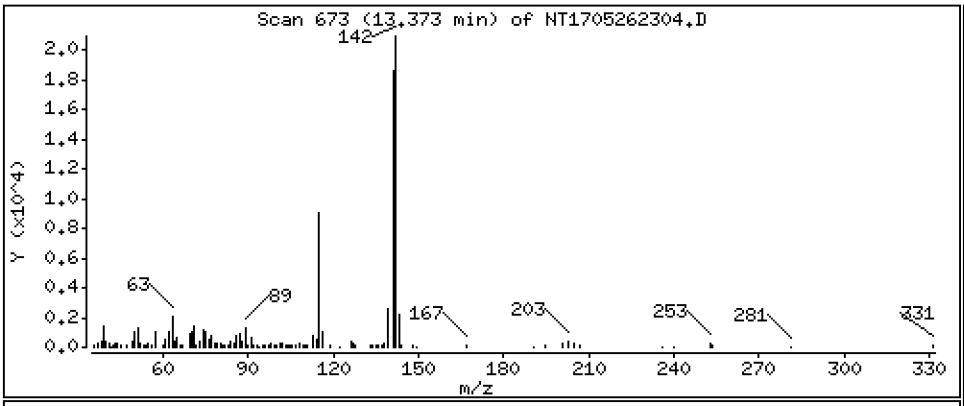
Operator: VTS

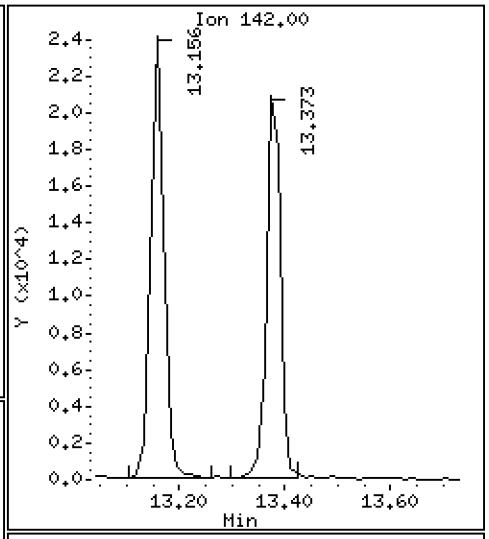
Column phase: ZB-5msi

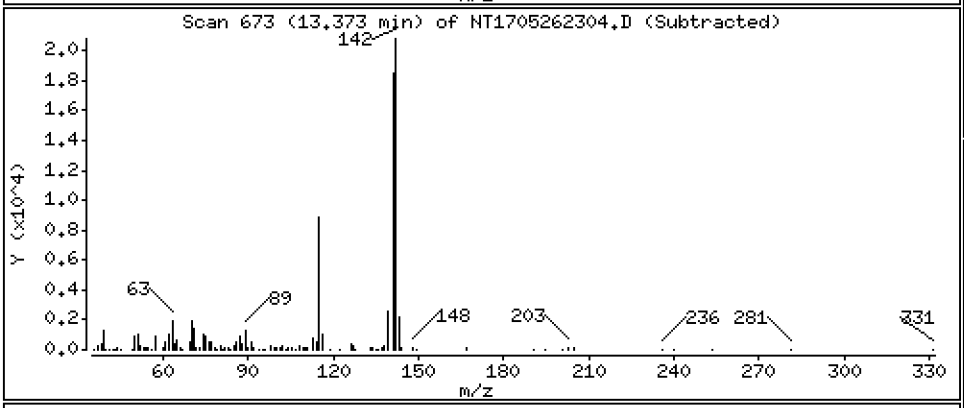
Column diameter: 0.25

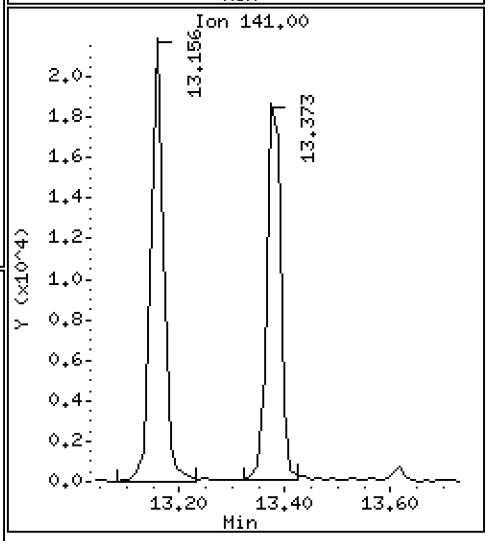
105 1-methylnaphthalene

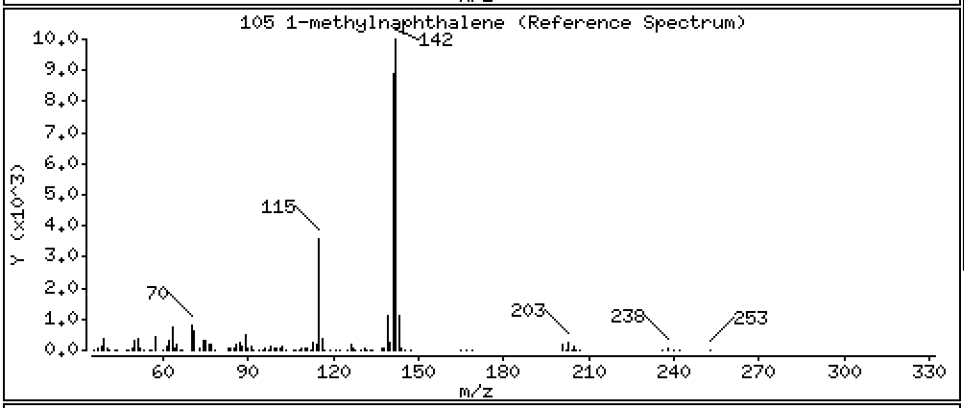
Concentration: 0.1882 ug/mL

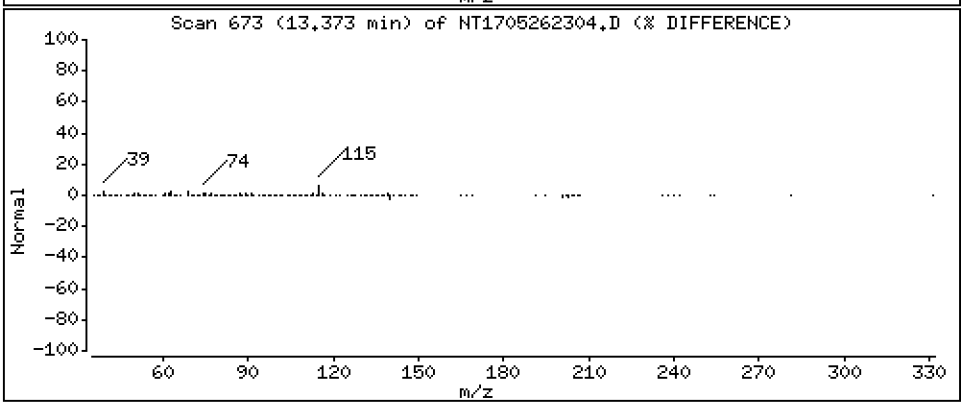












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

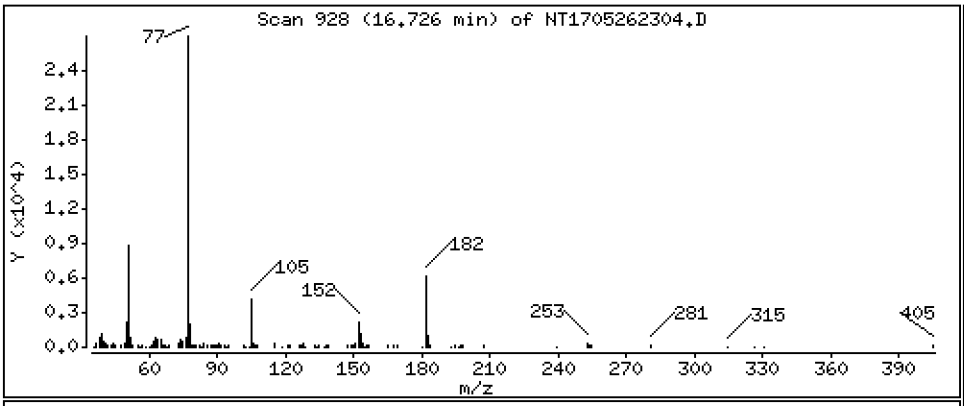
Operator: VTS

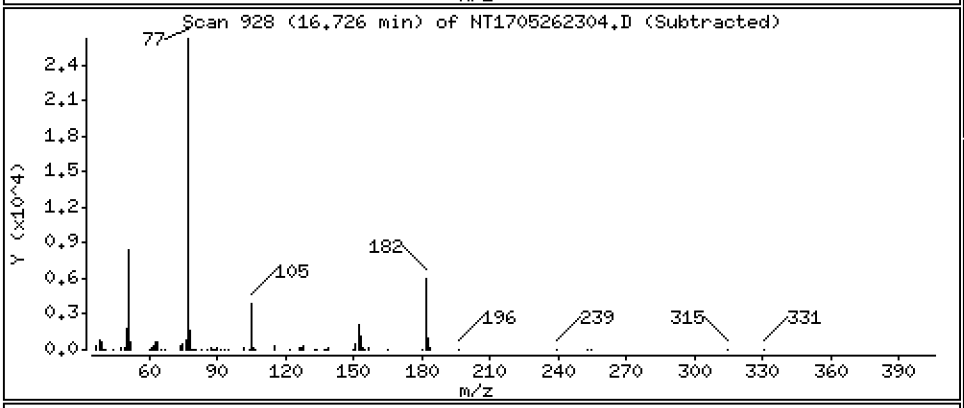
Column phase: ZB-5msi

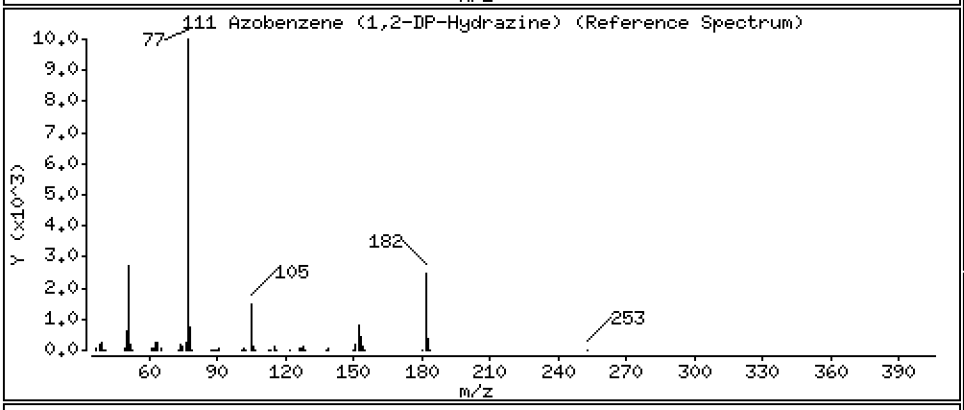
Column diameter: 0.25

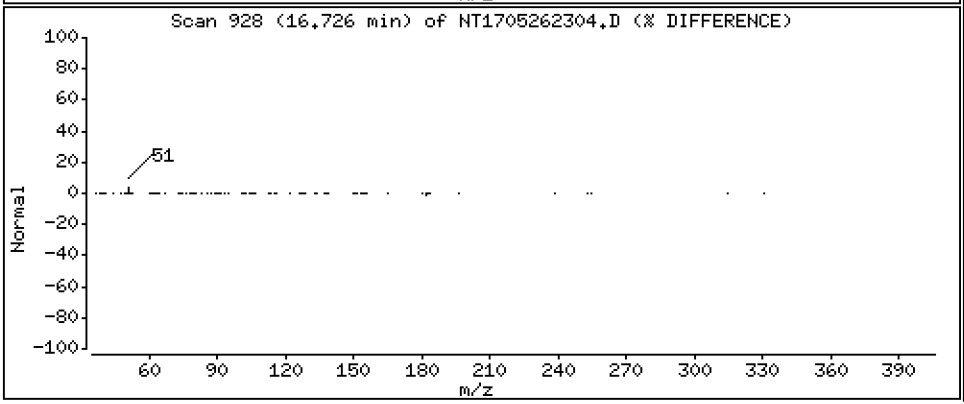
111 Azobenzene (1,2-DP-Hydrazine)

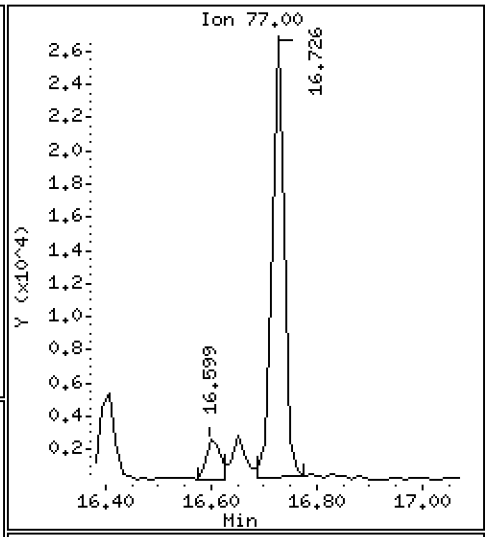
Concentration: 0.1949 ug/mL

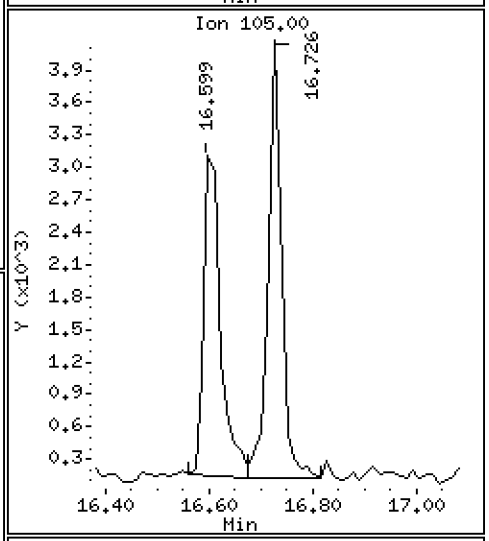


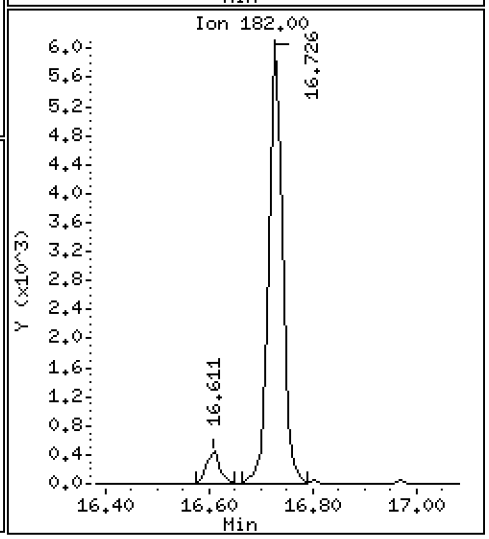












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

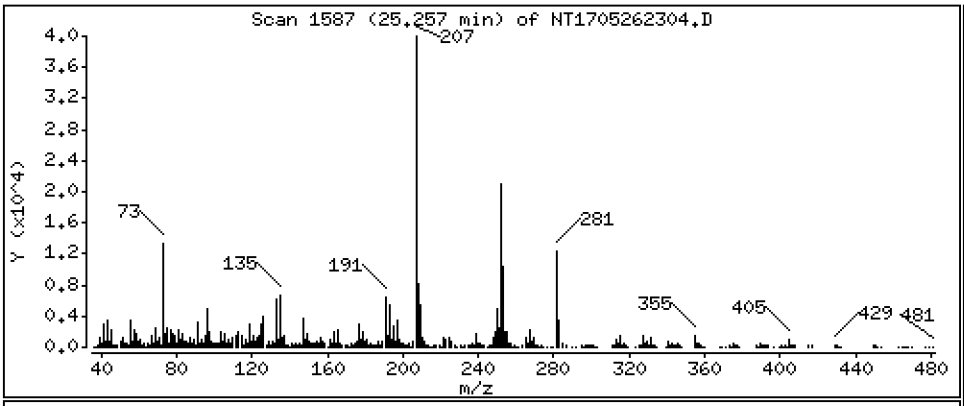
Operator: VTS

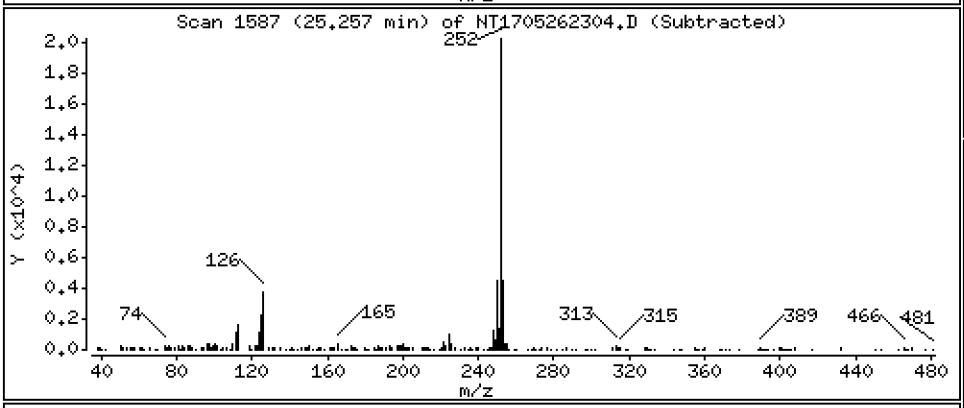
Column phase: ZB-5msi

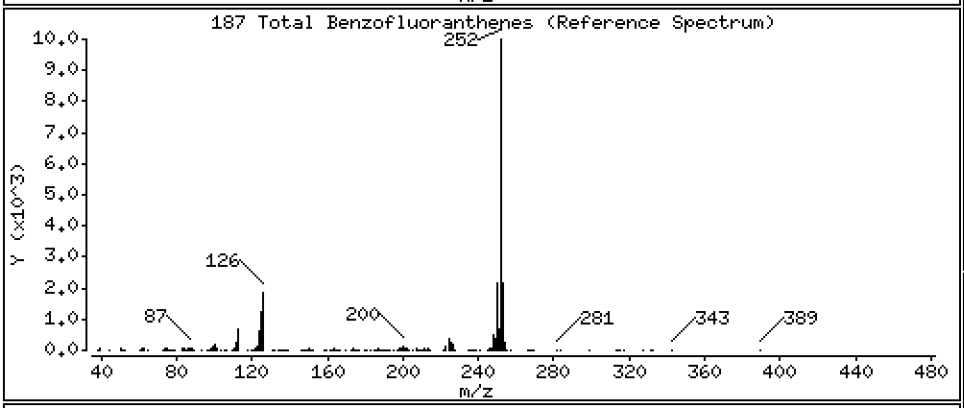
Column diameter: 0.25

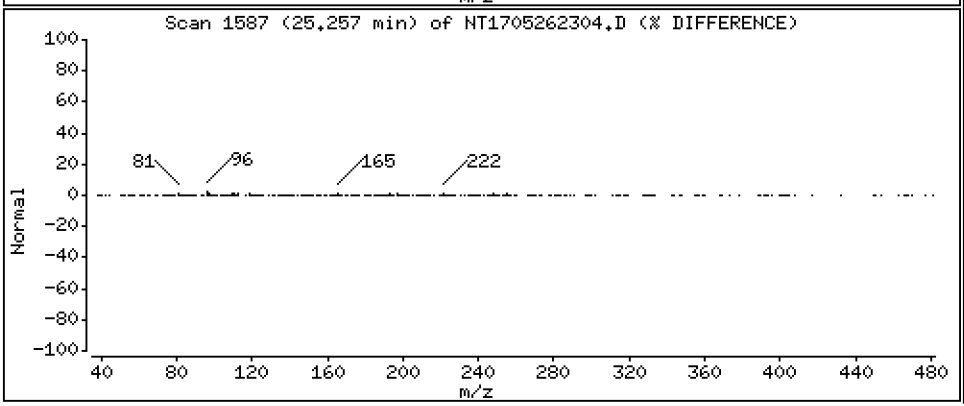
187 Total Benzofluoranthenes

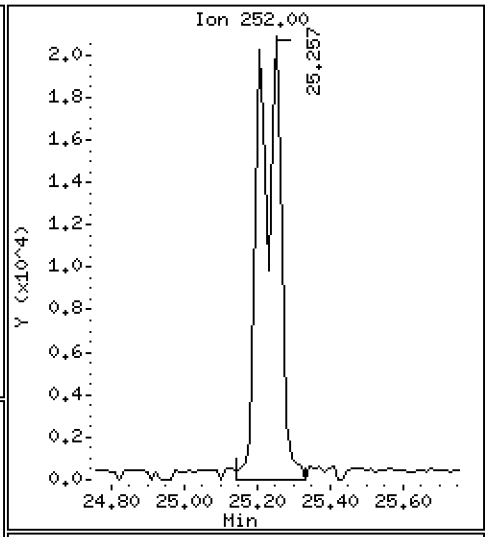
Concentration: 0.3963 ug/mL

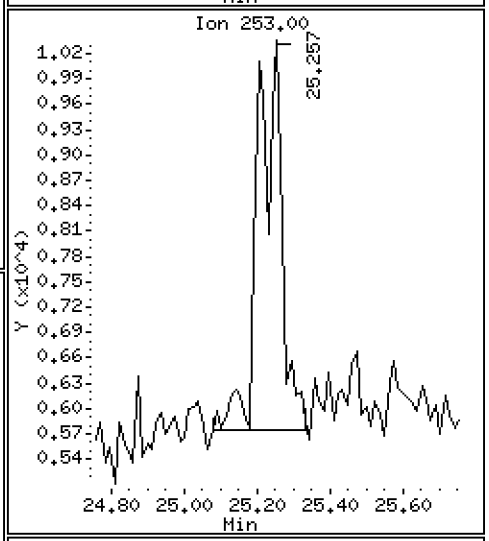


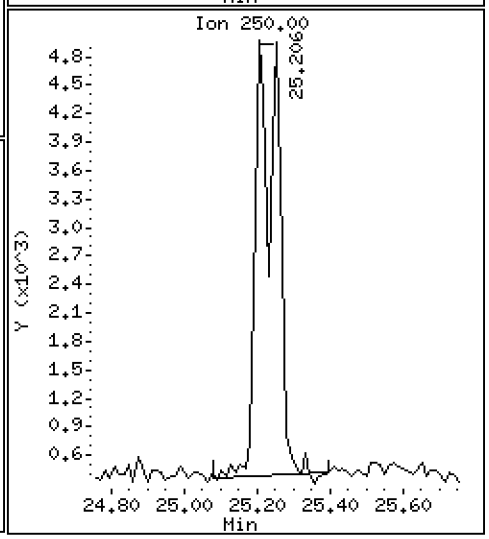












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Date : 26-MAY-2023 14:31

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV1

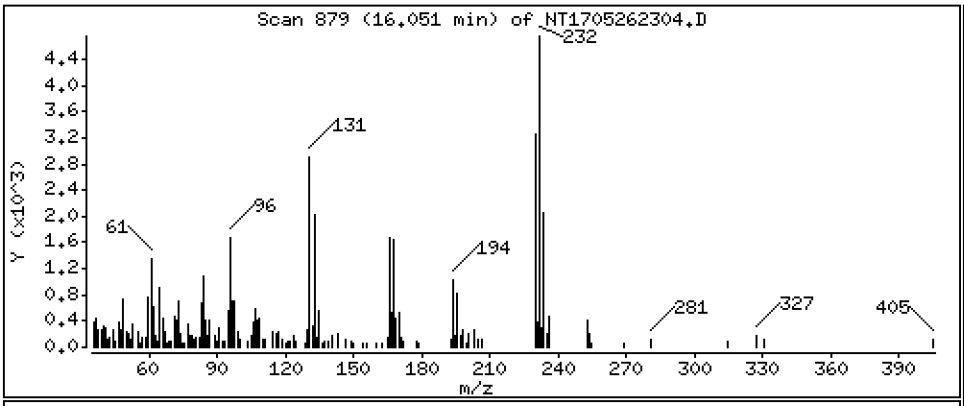
Operator: VTS

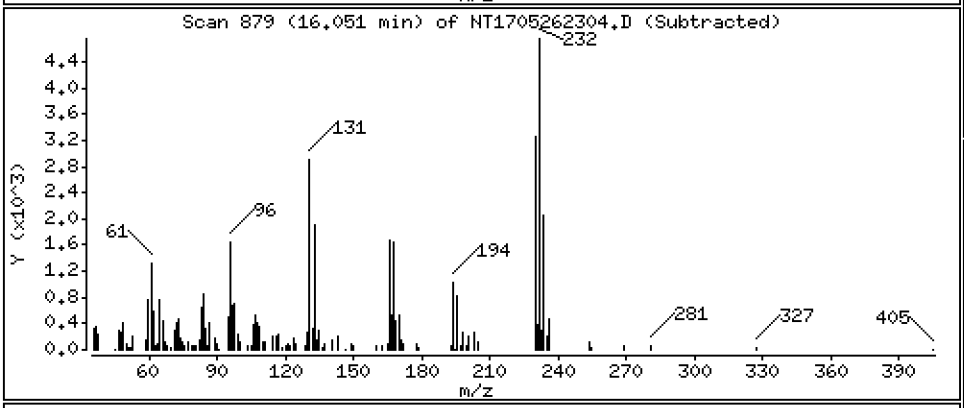
Column phase: ZB-5msi

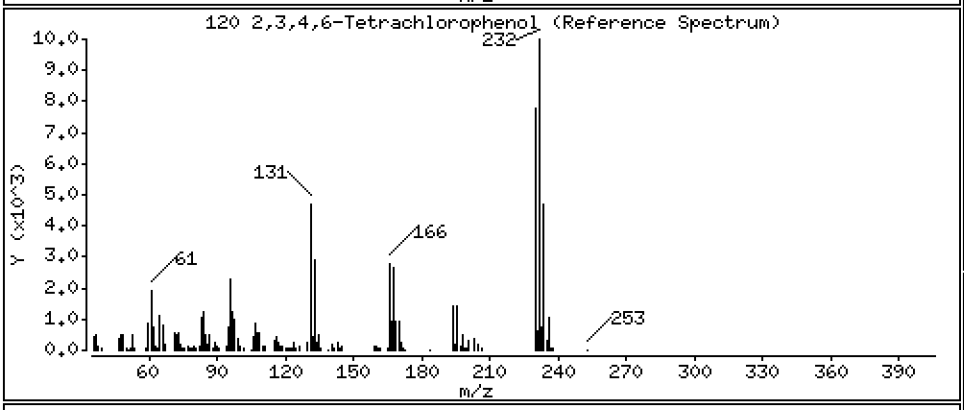
Column diameter: 0.25

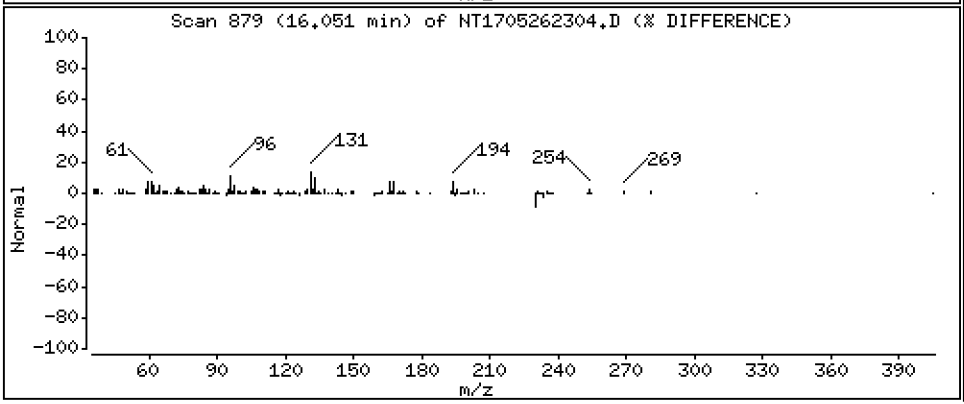
120 2,3,4,6-Tetrachlorophenol

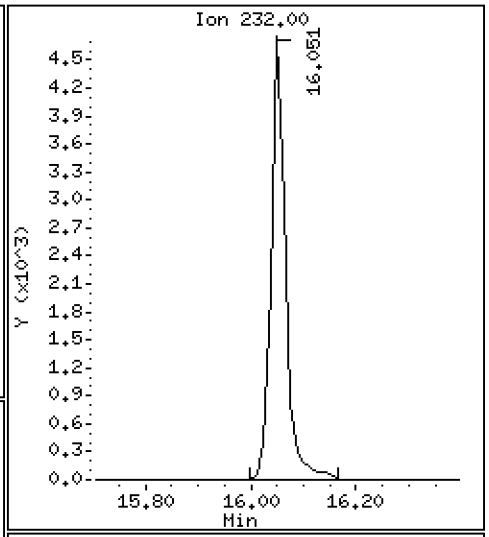
Concentration: 0.1256 ug/mL

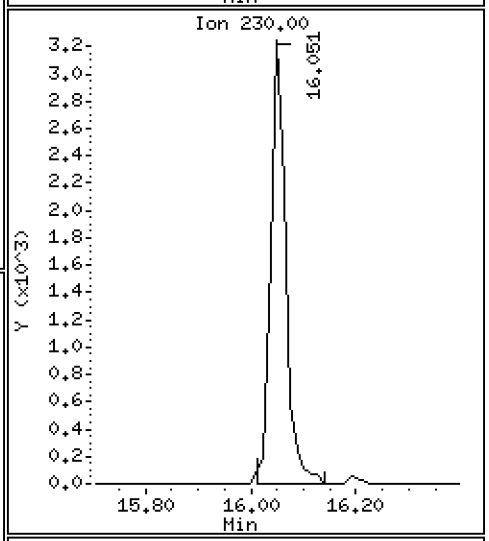


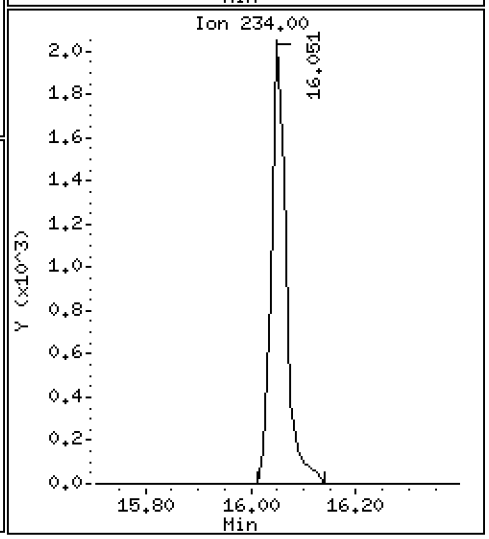












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

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Inj Date : 26-MAY-2023 14:31
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0434-LCV1
Misc Info :
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Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 12:20 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.071	7.071	(0.763)	28547	0.27558	0.2756
$	2 Phenol-d5	99	8.639	8.638	(0.933)	38625	0.28176	0.2818
	3 Phenol	94	8.651	8.651	(0.934)	28796	0.19832	0.1983
$	5 2-Chlorophenol-d4	132	8.906	8.906	(0.961)	32514	0.29610	0.2961
	4 Bis(2-Chloroethyl)ether	93	8.804	8.804	(0.950)	25073	0.23687	0.2369
	6 2-Chlorophenol	128	8.932	8.931	(0.964)	22895	0.18882	0.1888
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	25619	0.20876	0.2088
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	316449	4.00000	
	9 1,4-Dichlorobenzene	146	9.289	9.289	(1.003)	23333	0.19064	0.1906
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	16789	0.21753	0.2175
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	24388	0.21197	0.2120
	11 Benzyl alcohol	108	9.544	9.531	(1.030)	10721	0.15859	0.1586
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	6885	0.21231	0.2123
	13 2-Methylphenol	108	9.761	9.748	(1.054)	19936	0.18682	0.1868
	17 Hexachloroethane	117	10.234	10.234	(1.105)	10091	0.20611	0.2061
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	16587	0.20316	0.2032
	15 4-Methylphenol	108	10.030	10.017	(1.083)	20306	0.18688	0.1869
$	18 Nitrobenzene-d5	82	10.349	10.349	(0.882)	24166	0.18588	0.1859
	19 Nitrobenzene	77	10.387	10.387	(0.886)	24485	0.19739	0.1974
	20 Isophorone	82	10.822	10.834	(0.923)	29912	0.17616	0.1762
	21 2-Nitrophenol	139	11.013	11.013	(0.939)	15602	0.26103	0.2610
	22 2,4-Dimethylphenol	107	11.052	11.051	(0.942)	44914	0.38702	0.3870
	23 Bis(2-Chloroethoxy)methane	93	11.243	11.243	(0.959)	18629	0.17901	0.1790
	24 Benzoic acid	105	11.179	11.307	(0.953)	12488	0.15997	0.1600
	25 2,4-Dichlorophenol	162	11.473	11.460	(0.978)	37519	0.40233	0.4023
	26 1,2,4-Trichlorobenzene	180	11.639	11.651	(0.992)	24345	0.24037	0.2404
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1142345	4.00000	
	28 Naphthalene	128	11.766	11.779	(1.003)	62085	0.19763	0.1976
	29 4-Chloroaniline	127	11.906	11.893	(1.015)	36133	0.29180	0.2918
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	9598	0.19131	0.1913
	31 4-Chloro-3-methylphenol	107	12.863	12.850	(1.097)	36237	0.36088	0.3609
	32 2-Methylnaphthalene	142	13.156	13.156	(1.122)	42144	0.18737	0.1874
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	5772	0.10773	0.1077

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.781	13.781	(0.899)	21473	0.35620	0.3562
	35	2,4,5-Trichlorophenol	196	13.857	13.857	(0.904)	21626	0.33887	0.3389
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	46372	0.20429	0.2043
	37	2-Chloronaphthalene	162	14.151	14.151	(0.923)	37913	0.20589	0.2059
	38	2-Nitroaniline	65	14.406	14.406	(0.940)	21512	0.34494	0.3449
	39	Dimethylphthalate	163	14.827	14.826	(0.968)	39581	0.19965	0.1997
	40	Acenaphthylene	152	15.005	15.018	(0.979)	60579	0.20716	0.2072
	41	2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	17075	0.36788	0.3679
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	576179	4.00000	
	43	3-Nitroaniline	138	15.260	15.247	(0.996)	13138	0.30561	0.3056
	44	Acenaphthene	153	15.388	15.388	(1.004)	37656	0.20600	0.2060
	45	2,4-Dinitrophenol	184	15.464	15.464	(1.009)	3432	0.12268	0.1227
	46	Dibenzofuran	168	15.706	15.719	(1.025)	50501	0.19794	0.1979
	47	4-Nitrophenol	109	15.592	15.579	(1.017)	5988	0.20971	0.2097
	48	2,4-Dinitrotoluene	165	15.770	15.770	(1.029)	19390	0.31913	0.3191
	50	Diethylphthalate	149	16.267	16.267	(1.062)	48659	0.25168	0.2517
	49	Fluorene	166	16.420	16.420	(1.072)	54335	0.22401	0.2240
	51	4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	23499	0.21073	0.2107
	52	4-Nitroaniline	138	16.509	16.509	(1.077)	12759	0.31356	0.3136
	53	4,6-Dinitro-2-methylphenol	198	16.611	16.611	(0.906)	14918	0.39018	0.3902
	54	N-Nitrosodiphenylamine	169	16.649	16.662	(0.908)	25891	0.19292	0.1929
$	55	2,4,6-Tribromophenol	330	16.954	16.954	(1.106)	6096	0.24255	0.2426
	56	4-Bromophenyl-phenylether	248	17.400	17.400	(0.949)	8676	0.18451	0.1845
	57	Hexachlorobenzene	284	17.731	17.731	(0.967)	10211	0.21311	0.2131
	58	Pentachlorophenol	266	18.088	18.088	(0.986)	5774	0.20787	0.2079
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	958053	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	56866	0.20342	0.2034
	61	Anthracene	178	18.484	18.483	(1.008)	48566	0.18505	0.1850
	62	Carbazole	167	18.815	18.815	(1.026)	46837	0.29440	0.2944
	63	Di-n-butylphthalate	149	19.580	19.580	(1.067)	59856	0.18887	0.1889
	64	Fluoranthene	202	20.753	20.753	(0.889)	54741	0.19478	0.1948
	65	Pyrene	202	21.174	21.174	(0.907)	58005	0.20359	0.2036
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	42042	0.20758	0.2076
	67	Butylbenzylphthalate	149	22.360	22.360	(0.958)	24792	0.19443	0.1944
	68	Benzo(a)anthracene	228	23.317	23.317	(0.999)	47901	0.21651	0.2165
*	69	Chrysene-d12	240	23.343	23.355	(1.000)	600821	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.266	23.266	(0.997)	42918	1.00137	1.001
	71	Chrysene	228	23.394	23.394	(1.002)	43650	0.20967	0.2097
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	33711	0.18777	0.1878
*	134	Di-n-octylphthalate-d4	153	24.351	24.363	(1.000)	1240881	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.363	(1.001)	66355	0.21096	0.2110
	74	Benzo(b)fluoranthene	252	25.205	25.218	(0.970)	43971	0.17947	0.1795
	75	Benzo(k)fluoranthene	252	25.256	25.256	(0.972)	48945	0.21145	0.2115
	76	Benzo(a)pyrene	252	25.881	25.881	(0.996)	39375	0.20402	0.2040
*	77	Perylene-d12	264	25.996	25.996	(1.000)	617938	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.703	28.716	(1.104)	44273	0.19777	0.1978
	79	Dibenzo(a,h)anthracene	278	28.716	28.729	(1.105)	36738	0.19554	0.1955
	80	Benzo(g,h,i)perylene	276	29.509	29.521	(1.135)	36193	0.19588	0.1959
	90	N-Nitrosodimethylamine	74	4.982	4.982	(0.538)	22974	0.33248	0.3325
	91	Aniline	93	8.728	8.728	(0.942)	38575	0.31702	0.3170
	93	Benzidine	184	20.983	20.996	(0.899)	23802	0.34129	0.3413
	103	Pyridine	79	5.033	5.007	(0.543)	42515	0.38791	0.3879
	105	1-methylnaphthalene	142	13.373	13.385	(1.140)	39278	0.18823	0.1882
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.725	16.725	(1.091)	43994	0.19494	0.1949

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.256	25.256	(0.972)	87164	0.39633	0.3963
120 2,3,4,6-Tetrachlorophenol	232	16.050	16.050	(1.047)	9060	0.12561	0.1256

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262304.D
Lab Smp Id: SLE0434-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:16
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	303517	151759	607034	316449	4.26
27 Naphthalene-d8	1140476	570238	2280952	1142345	0.16
42 Acenaphthene-d10	622461	311231	1244922	576179	-7.44
59 Phenanthrene-d10	1074054	537027	2148108	958053	-10.80
69 Chrysene-d12	723807	361904	1447614	600821	-16.99
134 Di-n-octylphthala	1524055	762028	3048110	1240881	-18.58
77 Perylene-d12	666992	333496	1333984	617938	-7.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	0.00
69 Chrysene-d12	23.36	22.86	23.86	23.34	-0.05
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.05
77 Perylene-d12	26.00	25.50	26.50	26.00	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262304.D

Lab ID: SLE0434-LCV1
nt17.i, ABN.m, 26-MAY-2023 14:31

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.964	-0.0109	Benzoic acid

RRT check based on Ccal File: NT1705262302.D

On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

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

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION CONTINUING CALIBRATION CHECK

EPA 8270E

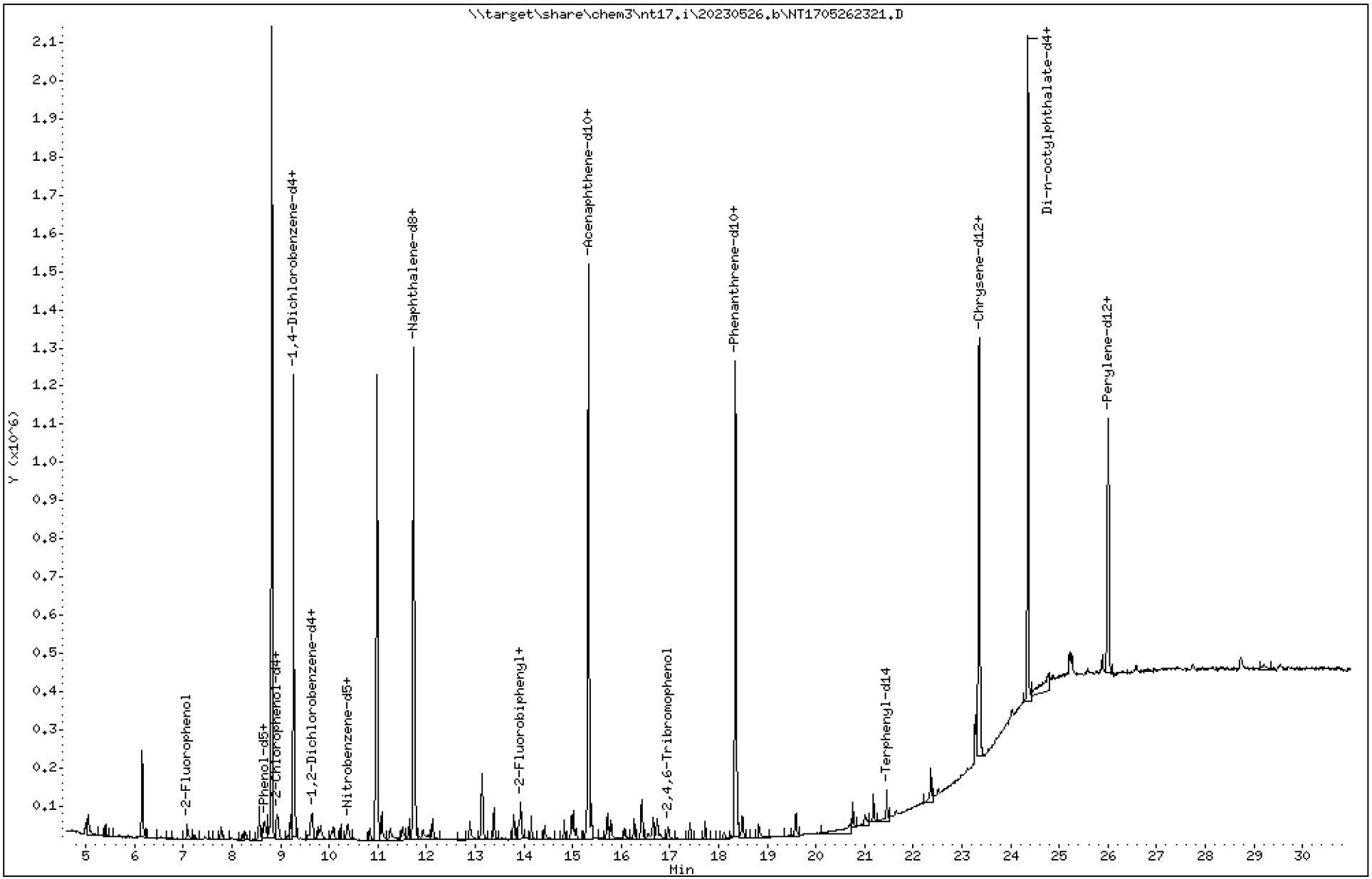
Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00065
Lab File ID:	NT1705262321.D	Calibration Date:	05/20/2023
Sequence:	SLE0434	Injection Date:	05/27/23
Lab Sample ID:	SLE0434-LCV2	Injection Time:	01:10
Sequence Name:	ABN 0.2		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.20000	0.2	1.8353850	1.5976220		-13.0	+/-50
Benzyl Alcohol	A	0.20000	0.1	0.8545202	0.6182050		-27.7	+/-50
4-Methylphenol	A	0.20000	0.1	1.3734410	0.7397017		-46.1	+/-50
Naphthalene	A	0.20000	0.2	1.0999940	1.1105820		1.0	+/-50
2-Methylnaphthalene	A	0.20000	0.2	0.7875944	0.7330459		-6.9	+/-50
Acenaphthylene	A	0.20000	0.2	2.0301060	2.0789090		2.4	+/-50
Dibenzofuran	A	0.20000	0.2	1.7711910	1.7252380		-2.6	+/-50
Fluorene	A	0.20000	0.2	1.6839010	1.4724840		-12.6	+/-50
Phenanthrene	A	0.20000	0.2	1.1671410	1.1369350		-2.6	+/-50
Anthracene	A	0.20000	0.2	1.0957620	1.0685610		-2.5	+/-50
Fluoranthene	A	0.20000	0.2	1.8710850	1.6325050		-12.8	+/-50
Pyrene	A	0.20000	0.2	1.8967730	1.7328950		-8.6	+/-50
Butylbenzylphthalate	A	0.20000	0.2	0.8489339	0.8060013		-5.1	+/-50
Benzo(a)anthracene	A	0.20000	0.2	1.4729210	1.5348040		4.2	+/-50
Chrysene	A	0.20000	0.2	1.3859970	1.5053480		8.6	+/-50
bis(2-Ethylhexyl)phthalate	A	0.20000	0.2	0.5787277	171405		-9.5	+/-50
Benzofluoranthenes, Total	A	0.40000	0.4	1.4236150	1.5672580		10.1	+/-50
Benzo(a)pyrene	A	0.20000	0.2	1.2492830	1.3249050		6.1	+/-50
Indeno(1,2,3-cd)pyrene	A	0.20000	0.1	1.4490690	0.9242251		-36.2	+/-50
Dibenzo(a,h)anthracene	A	0.20000	0.1	1.2161710	0.8377017		-31.1	+/-50
Benzo(g,h,i)perylene	A	0.20000	0.1	1.1960510	0.6606537		-44.8	+/-50
2-Fluorophenol	A	0.30000	0.247	1.3093930	1.0778590		-17.7	+/-50
Phenol-d5	A	0.30000	0.216	1.7328160	1.2463360		-28.1	+/-50
2-Chlorophenol-d4	A	0.30000	0.249	1.3879870	1.1517830		-17.0	+/-50
1,2-Dichlorobenzene-d4	A	0.20000	0.180	0.9755818	0.8770312		-10.1	+/-50
Nitrobenzene-d5	A	0.20000	0.189	0.4552457	0.4296153		-5.6	+/-50
2-Fluorobiphenyl	A	0.20000	0.202	1.5758130	1.5905830		0.9	+/-50
2,4,6-Tribromophenol	A	0.30000	0.237	0.1414414	0.1375491		-21.2	+/-50
p-Terphenyl-d14	A	0.20000	0.175	1.3483810	1.1801000		-12.5	+/-50

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D
Date : 27-MAY-2023 01:10
Client ID:
Sample Info: SLE0434-LCV2

Instrument: nt17.i
Operator: VTS
Column phase: ZB-5msi
Column diameter: 0.25



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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

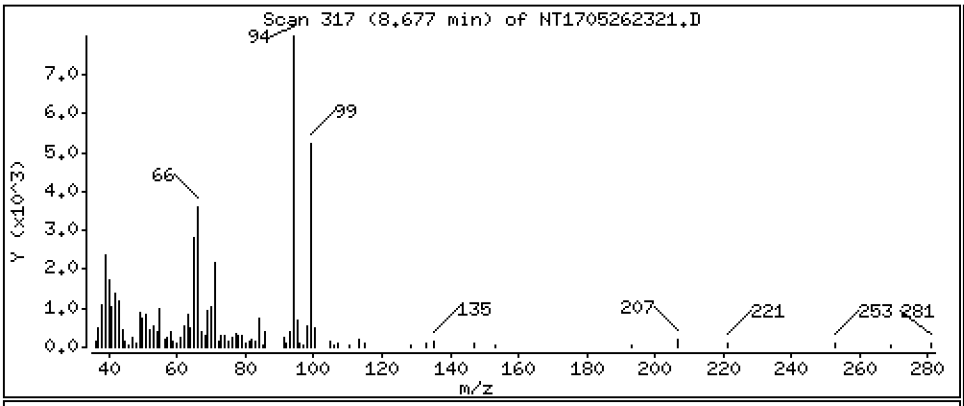
Operator: VTS

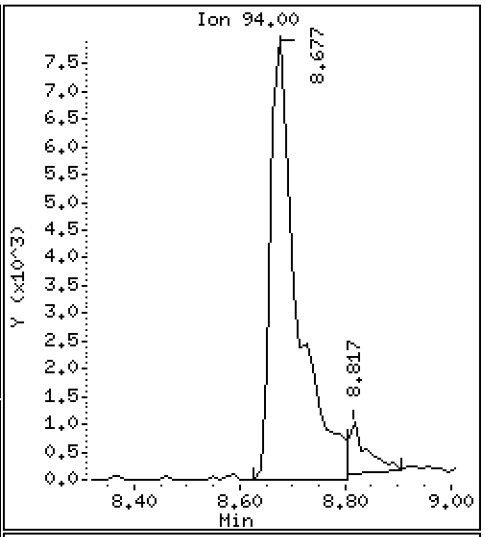
Column phase: ZB-5msi

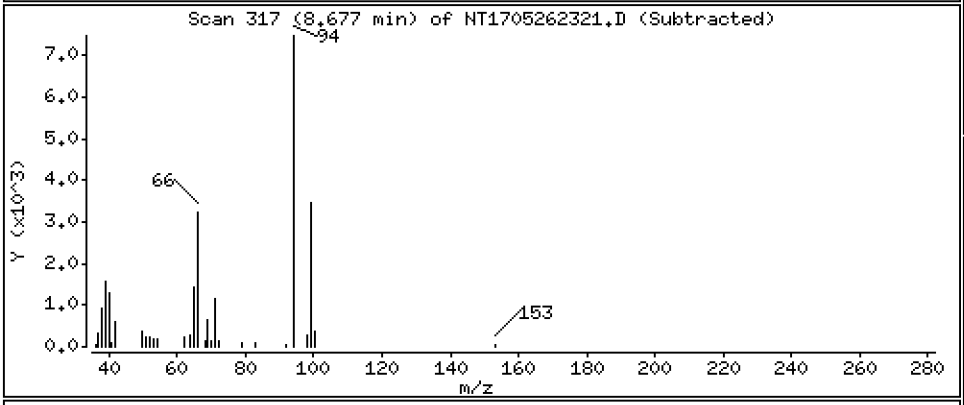
Column diameter: 0.25

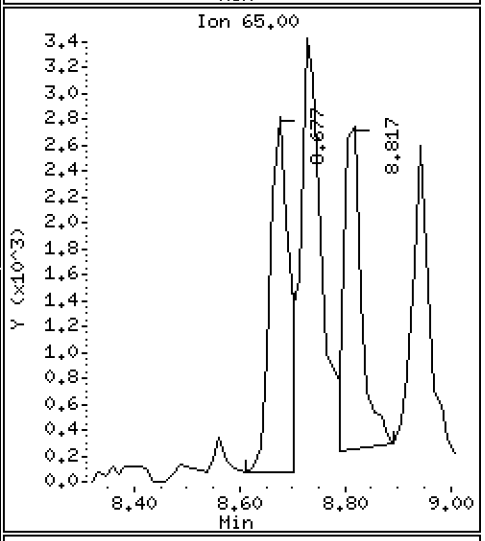
3 Phenol

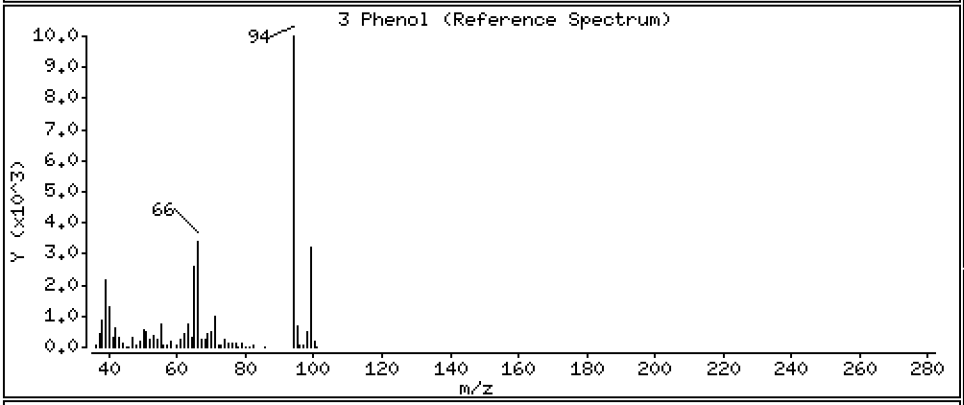
Concentration: 0.1741 ug/mL

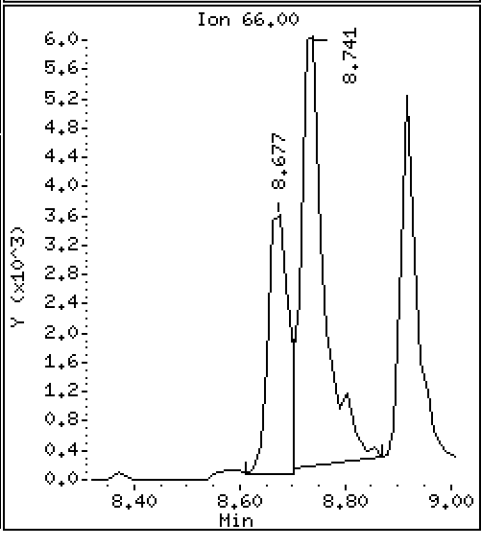


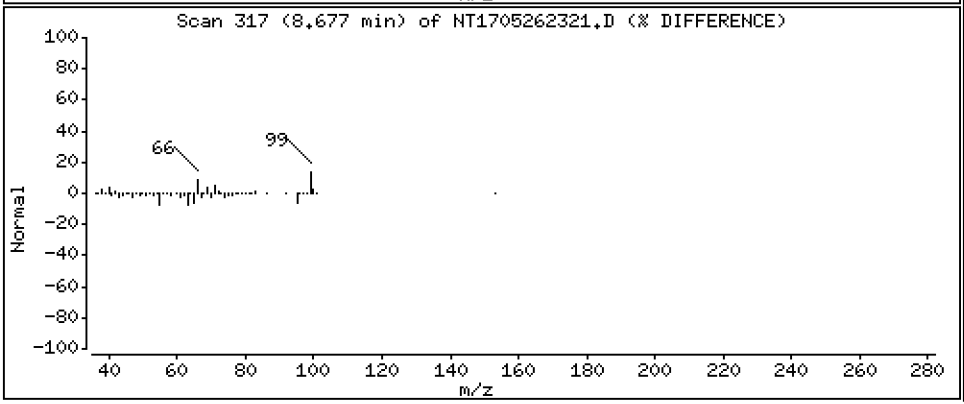












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

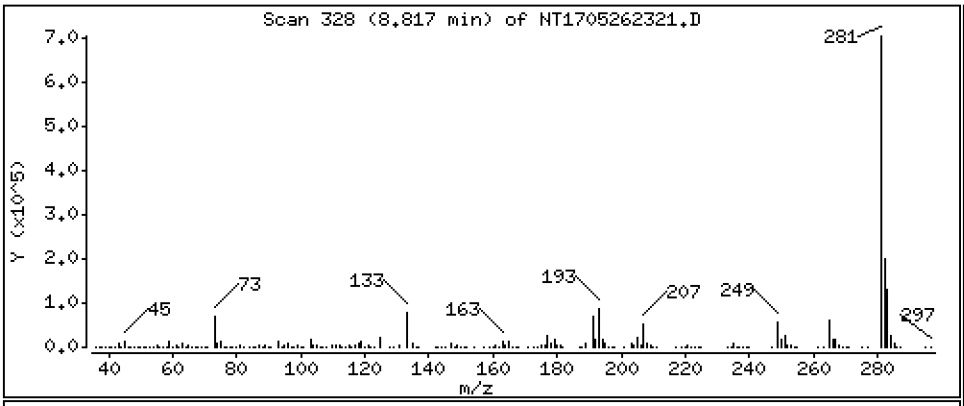
Operator: VTS

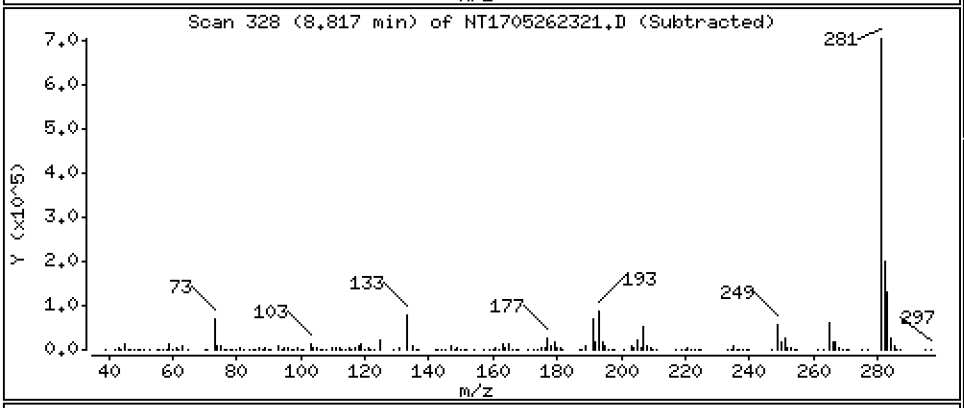
Column phase: ZB-5msi

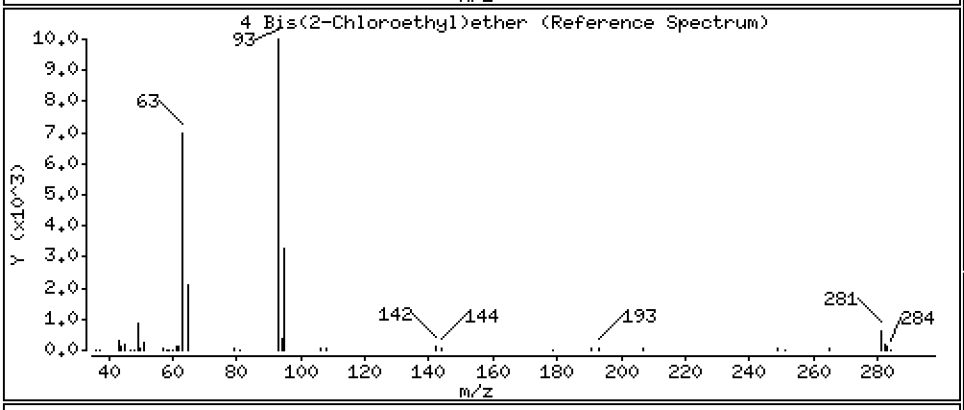
Column diameter: 0.25

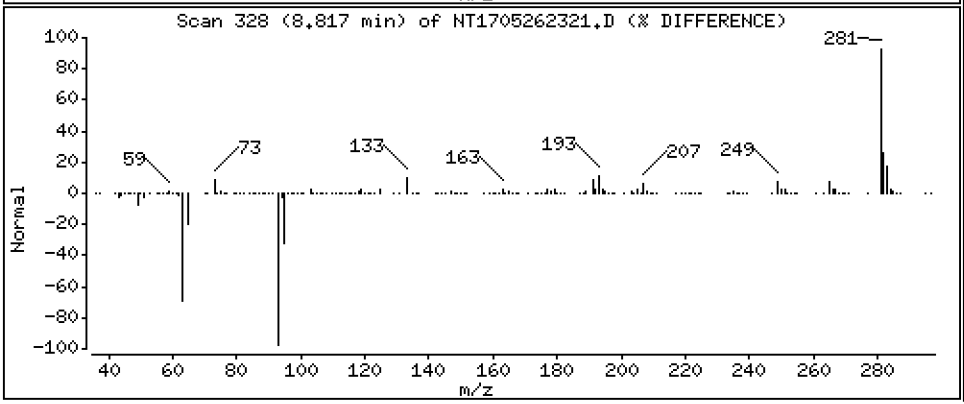
4 Bis(2-Chloroethyl)ether

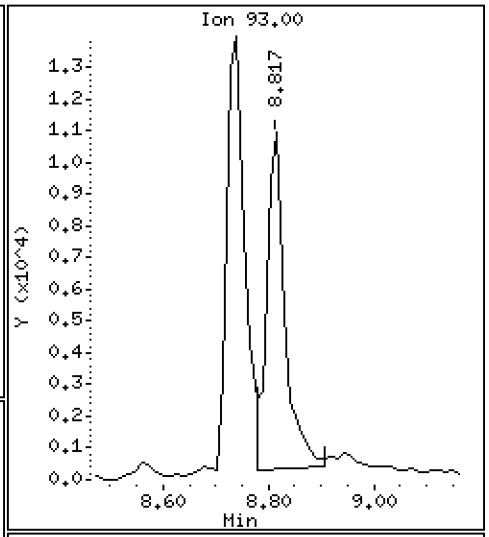
Concentration: 0.2213 ug/mL

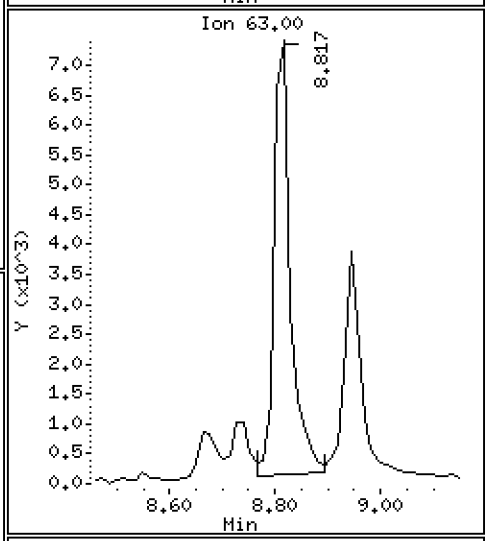


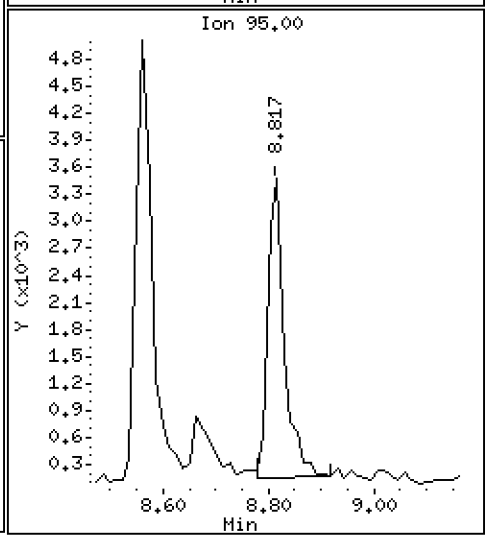












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

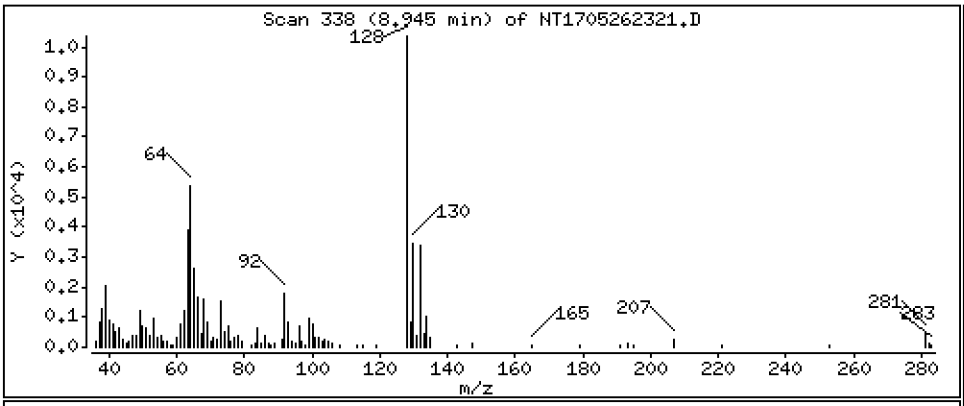
Operator: VTS

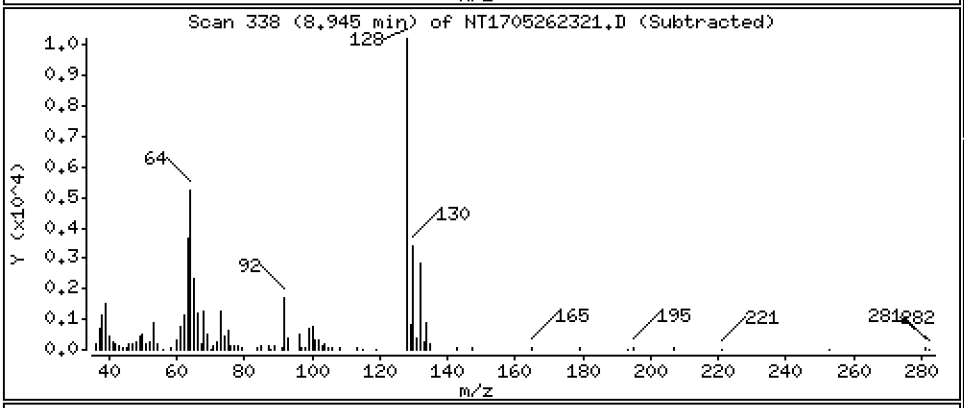
Column phase: ZB-5msi

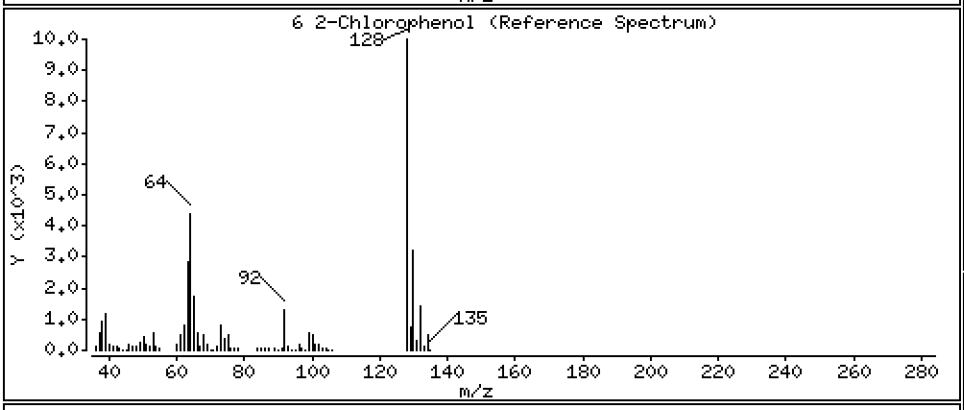
Column diameter: 0.25

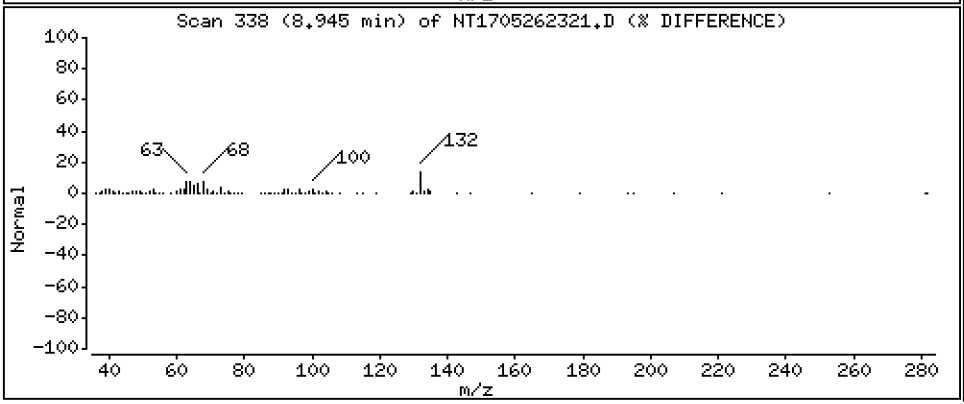
6 2-Chlorophenol

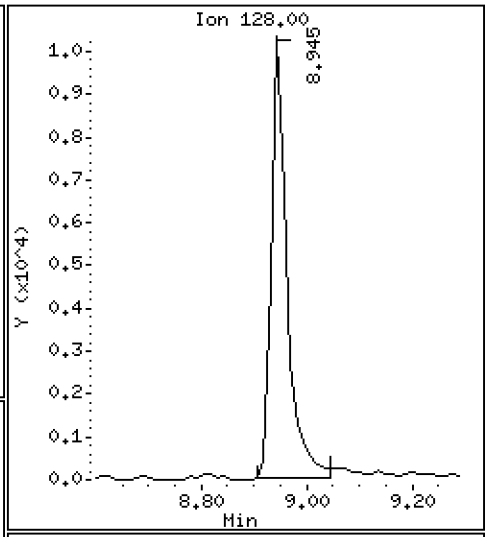
Concentration: 0.1536 ug/mL

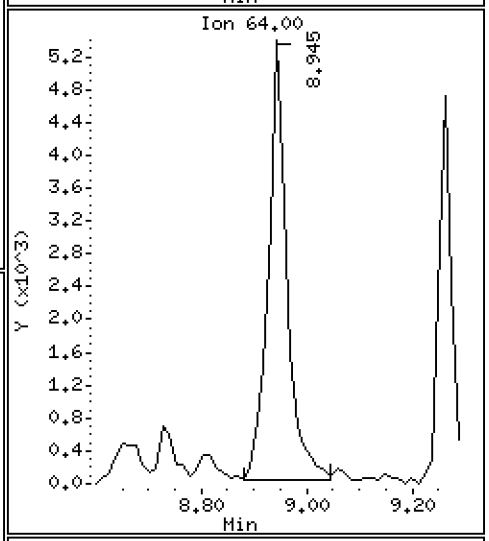


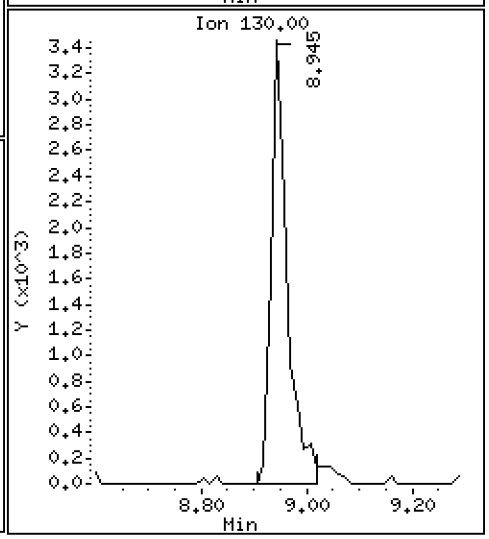












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

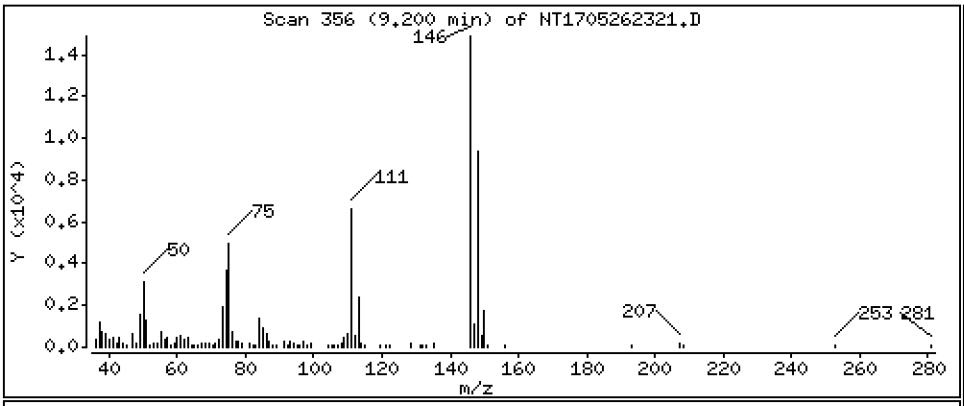
Operator: VTS

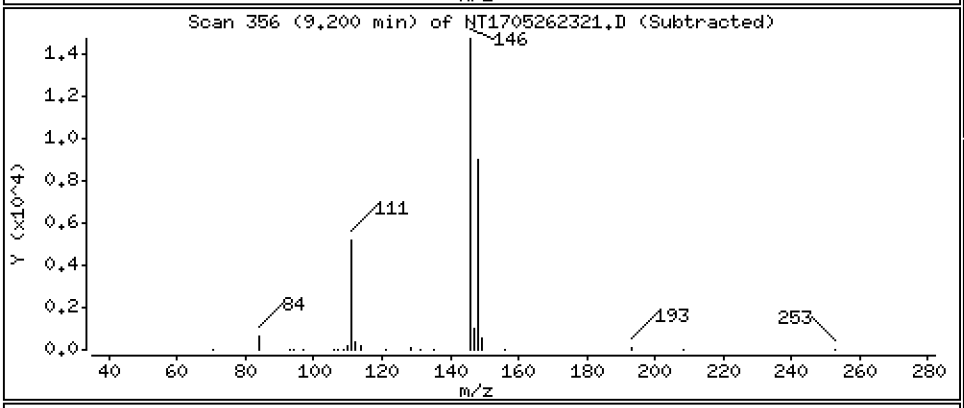
Column phase: ZB-5msi

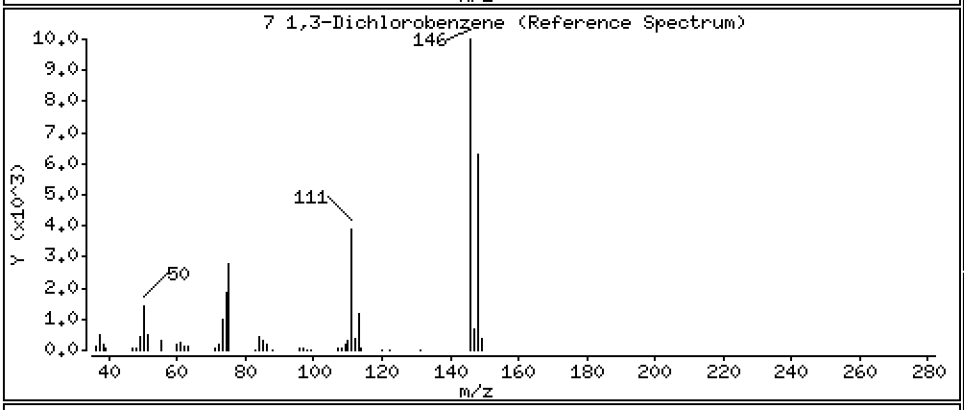
Column diameter: 0.25

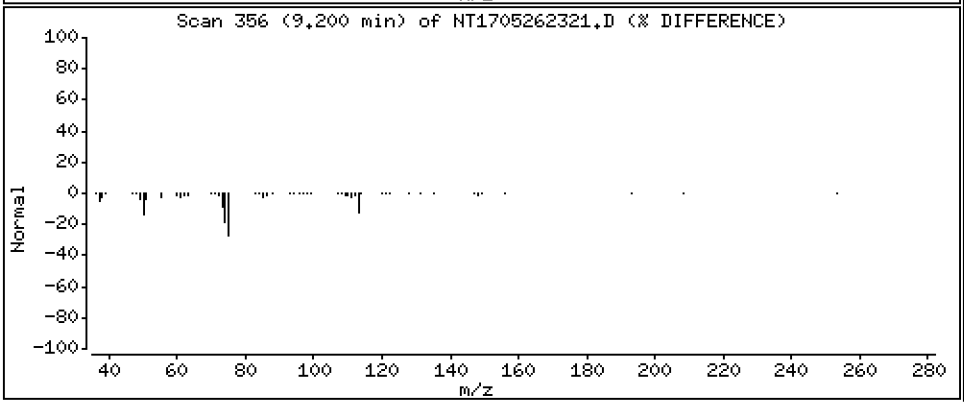
7 1,3-Dichlorobenzene

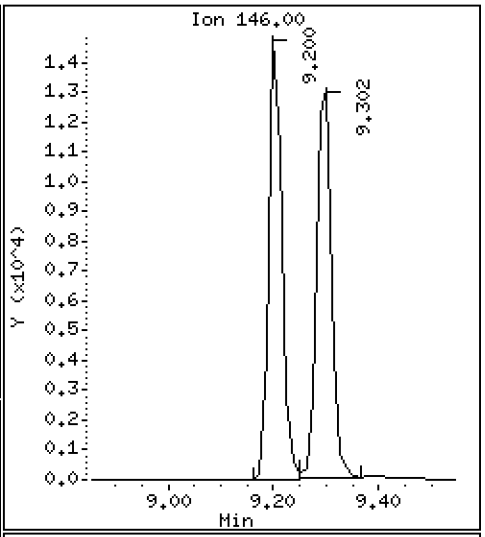
Concentration: 0.1868 ug/mL

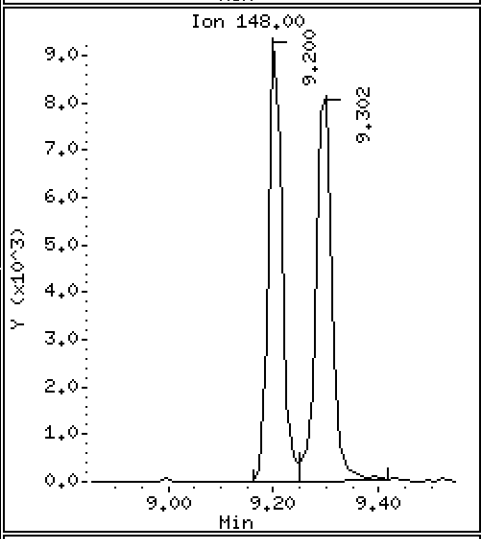


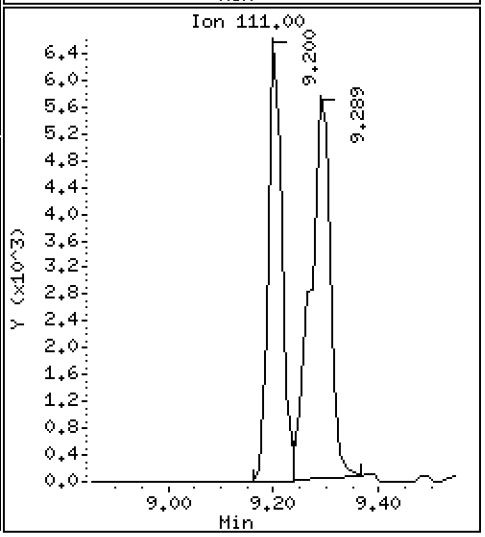












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

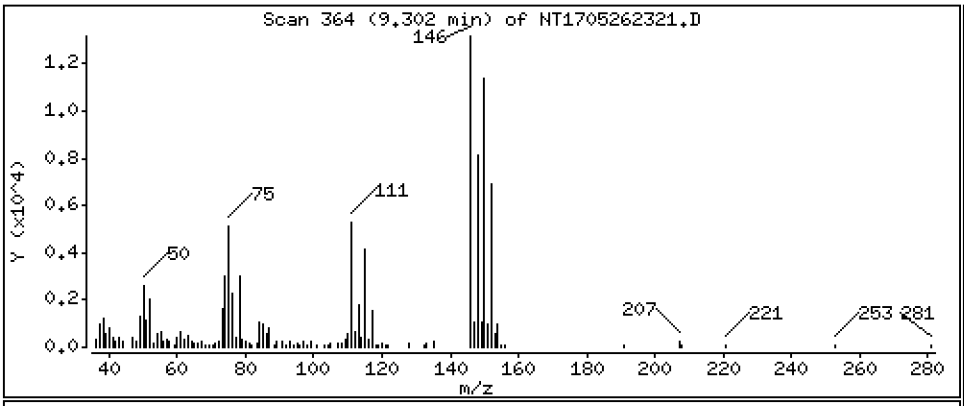
Operator: VTS

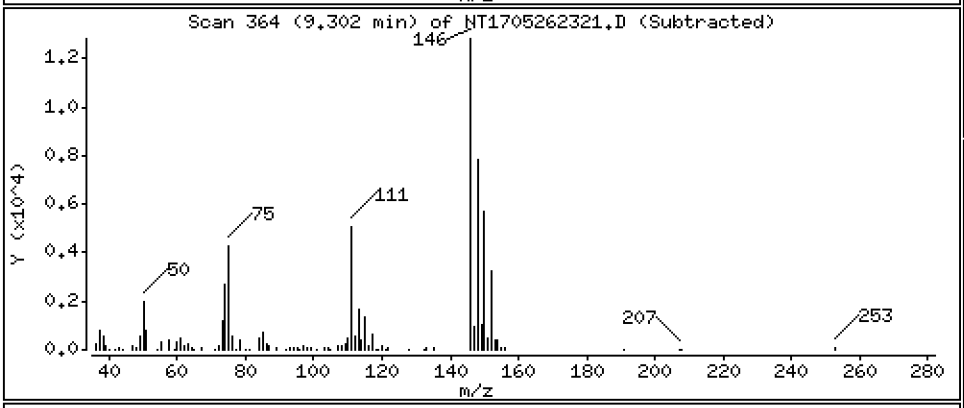
Column phase: ZB-5msi

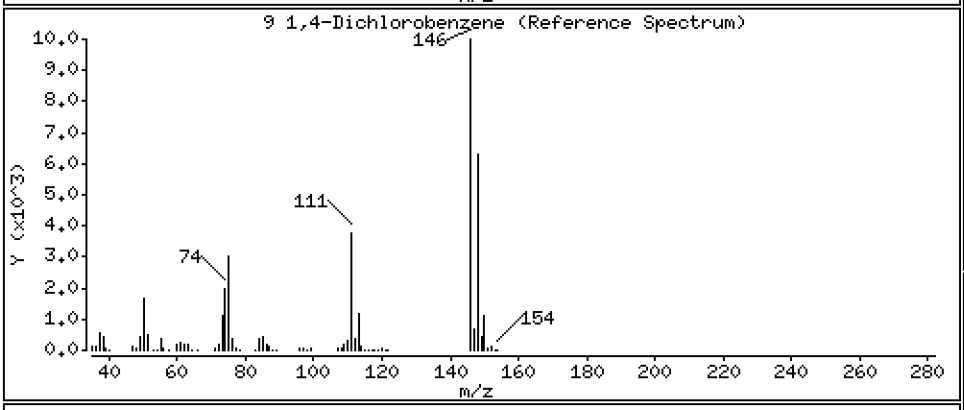
Column diameter: 0.25

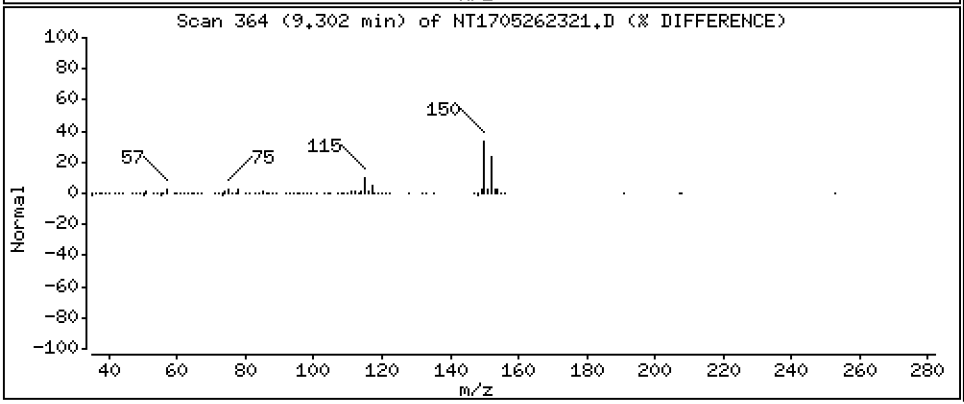
9 1,4-Dichlorobenzene

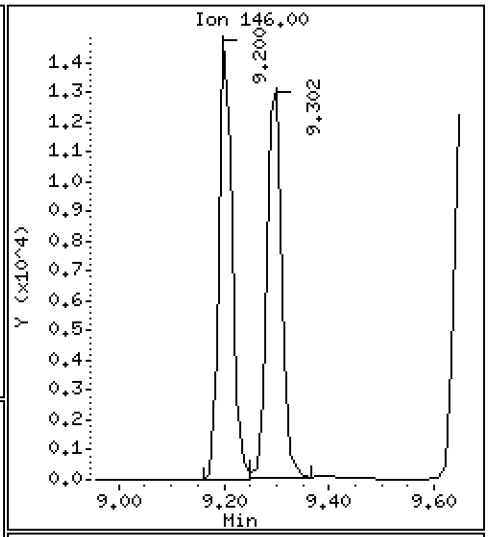
Concentration: 0.1864 ug/mL

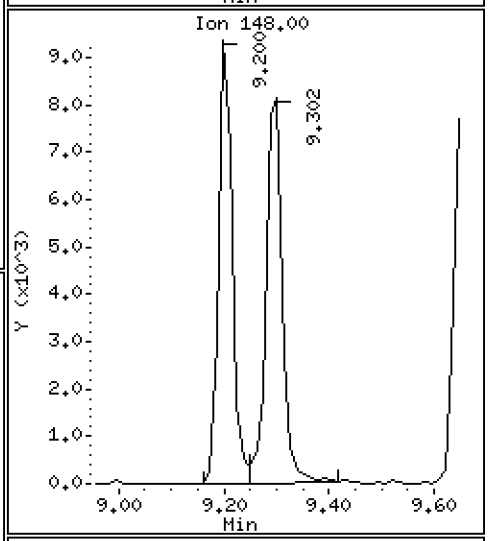


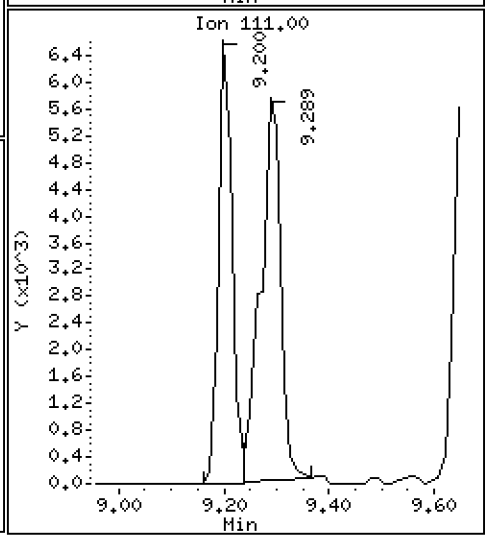












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

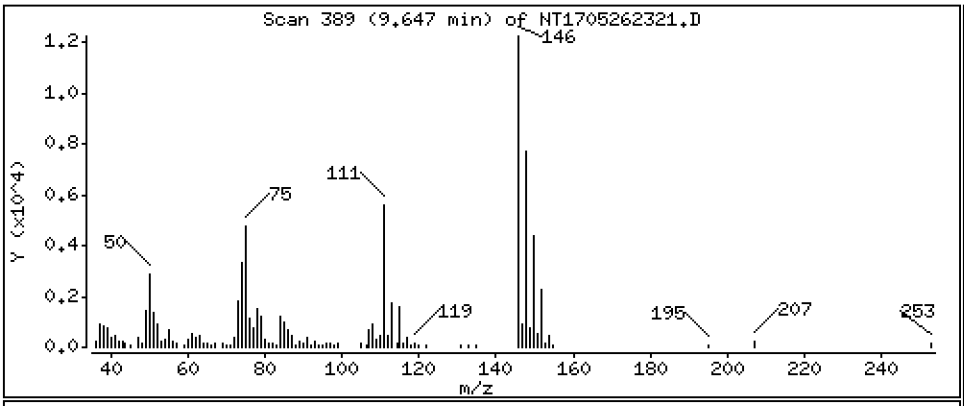
Operator: VTS

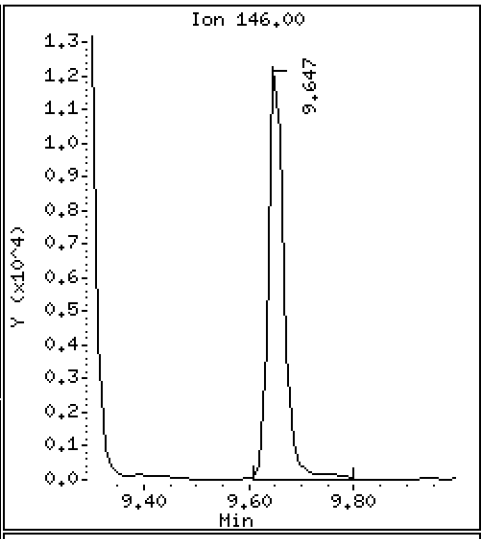
Column phase: ZB-5msi

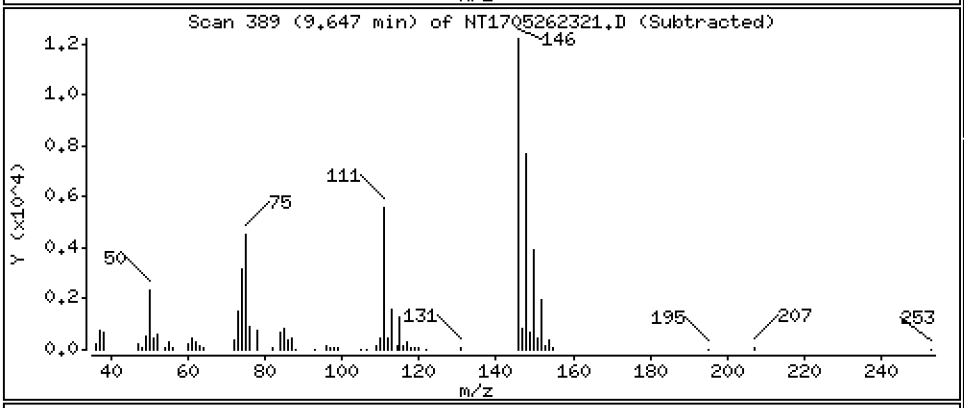
Column diameter: 0.25

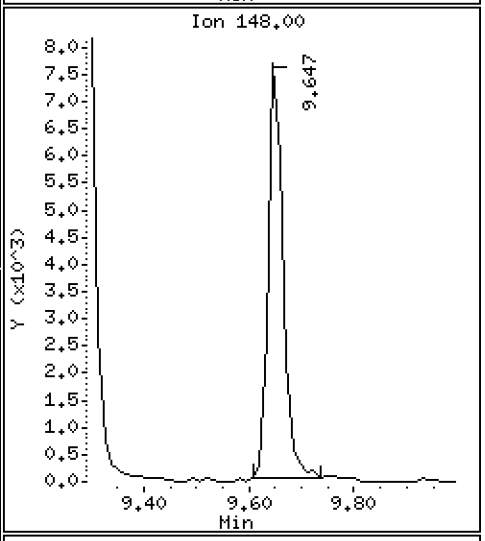
12 1,2-Dichlorobenzene

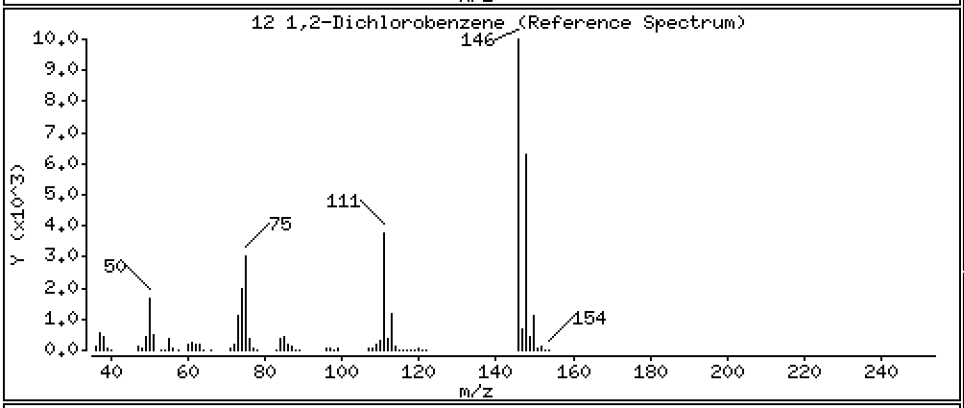
Concentration: 0.1962 ug/mL

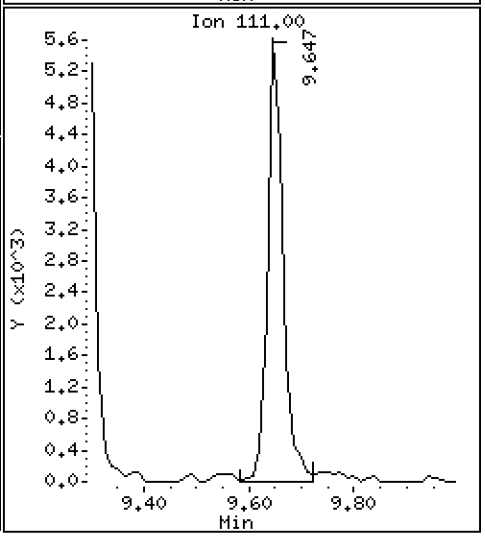


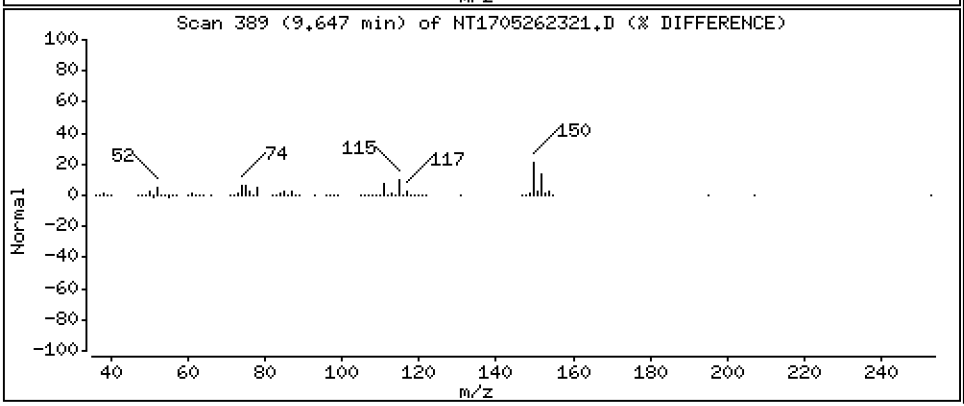












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

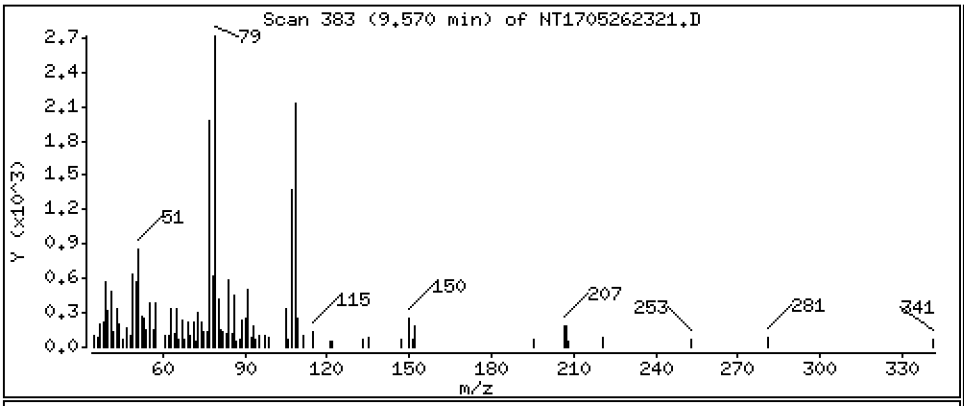
Operator: VTS

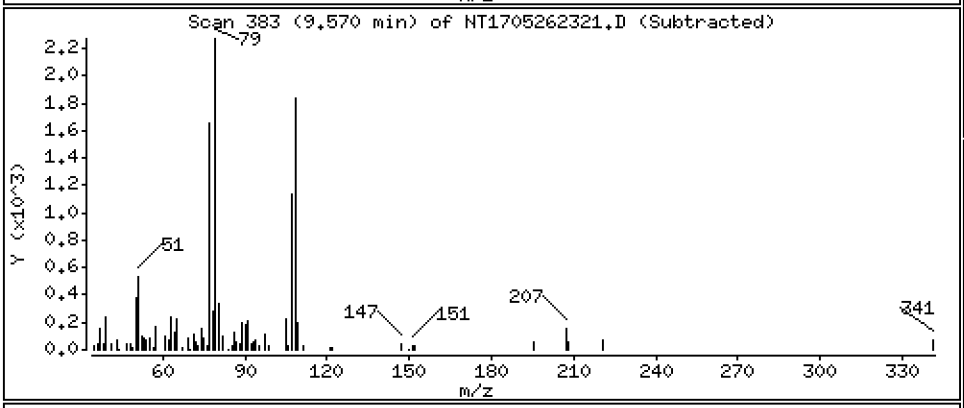
Column phase: ZB-5msi

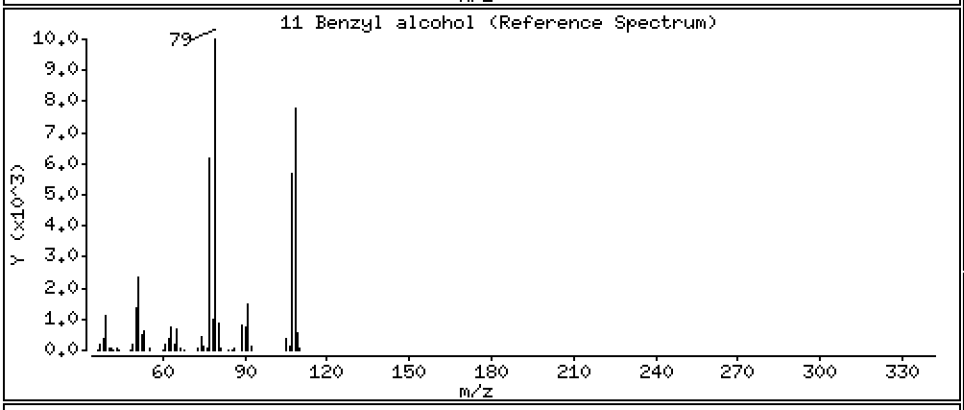
Column diameter: 0.25

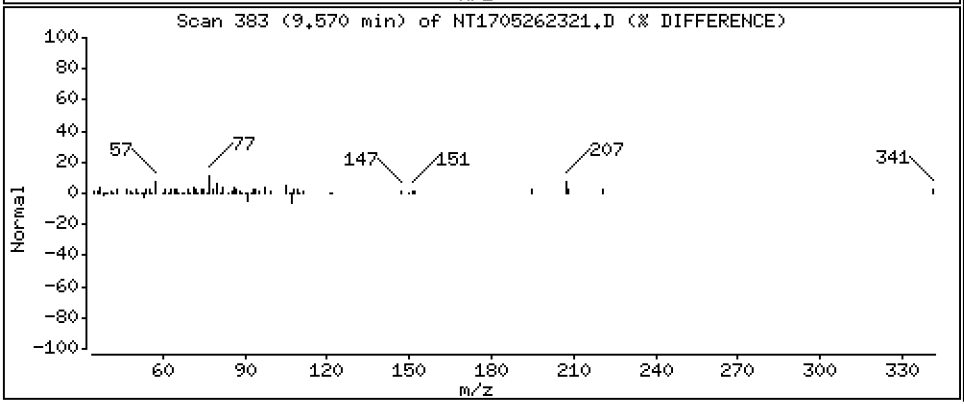
11 Benzyl alcohol

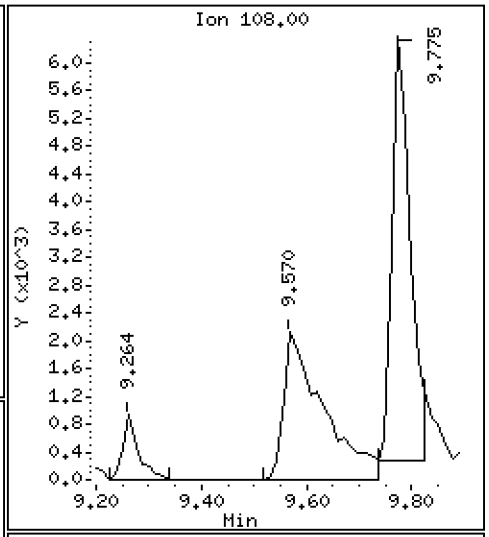
Concentration: 0.1447 ug/mL

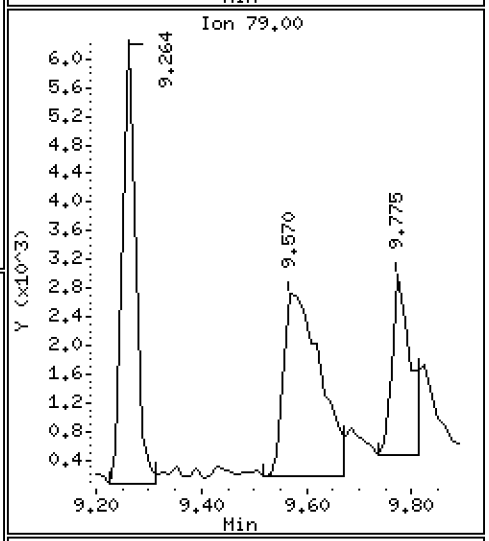


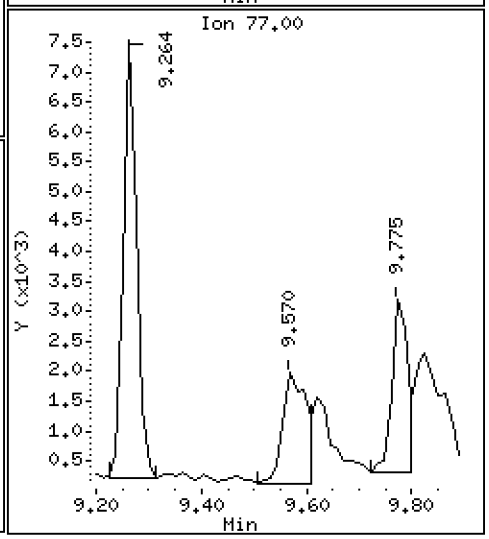












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

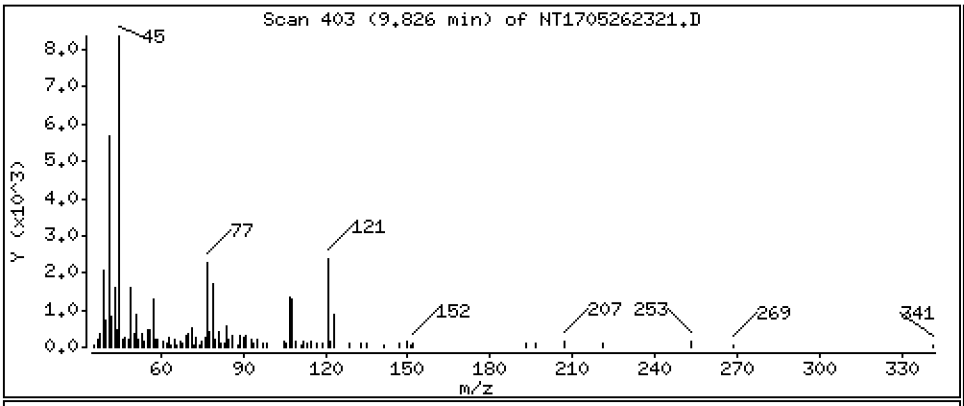
Operator: VTS

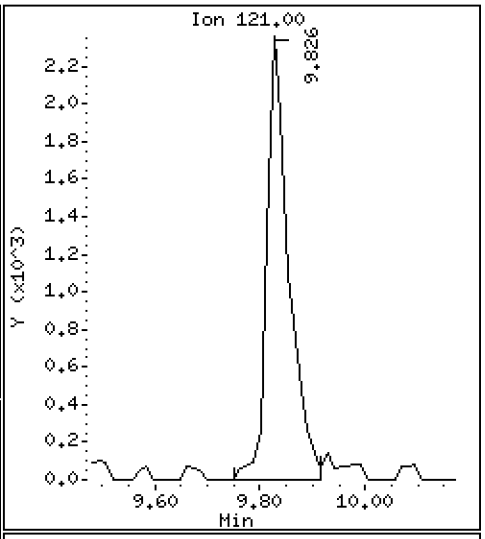
Column phase: ZB-5msi

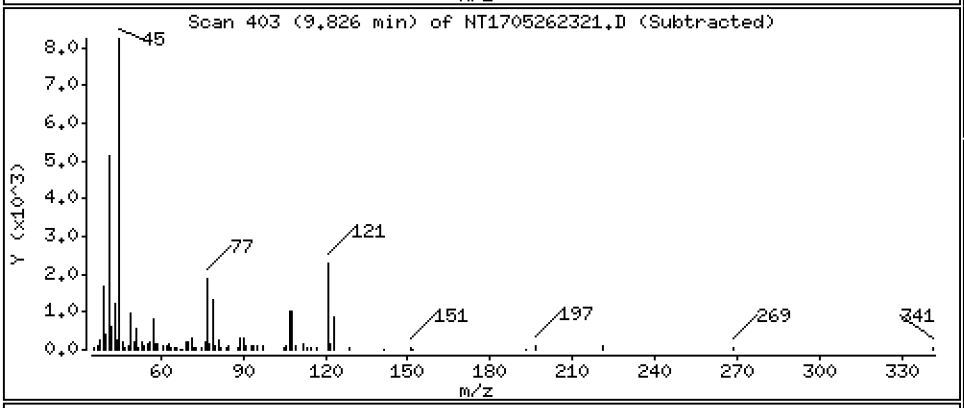
Column diameter: 0.25

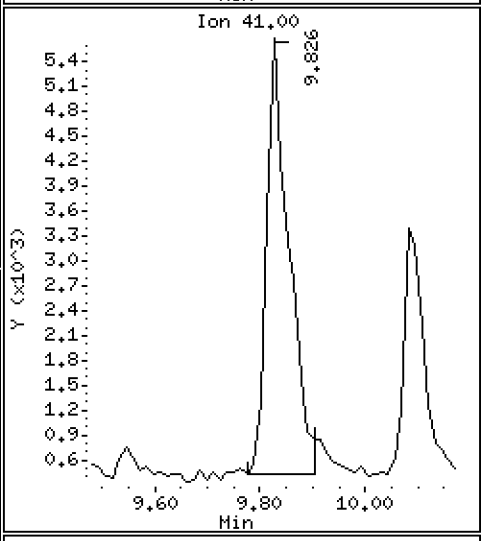
14 2,2'-oxybis(1-Chloropropane)

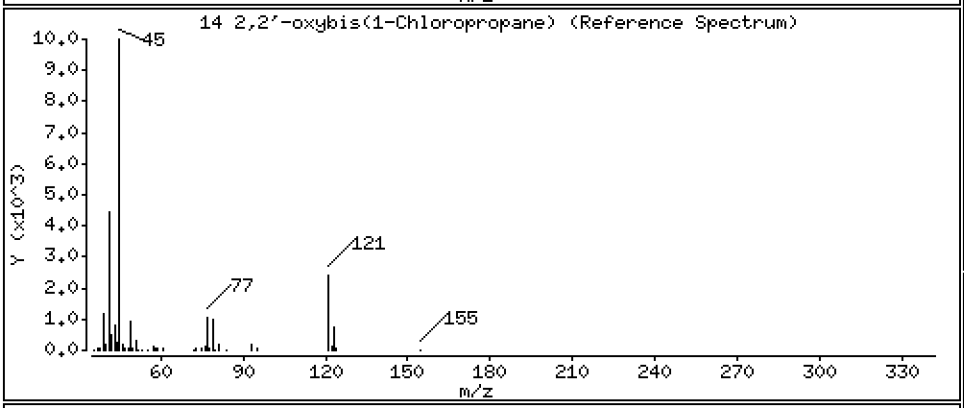
Concentration: 0.1873 ug/mL

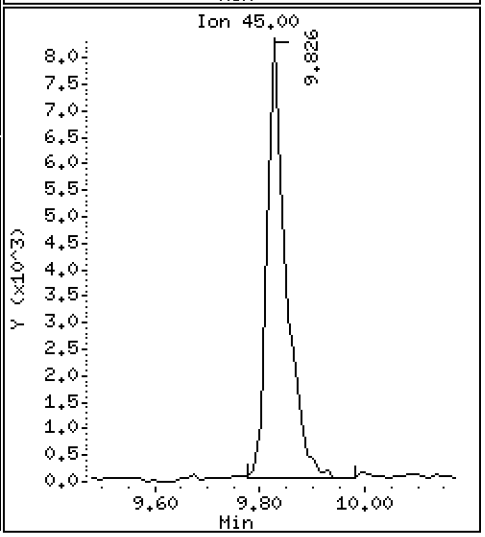


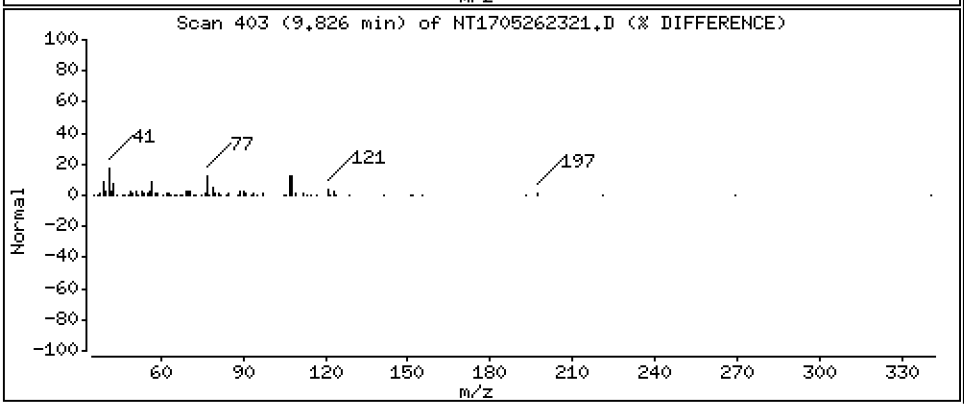












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

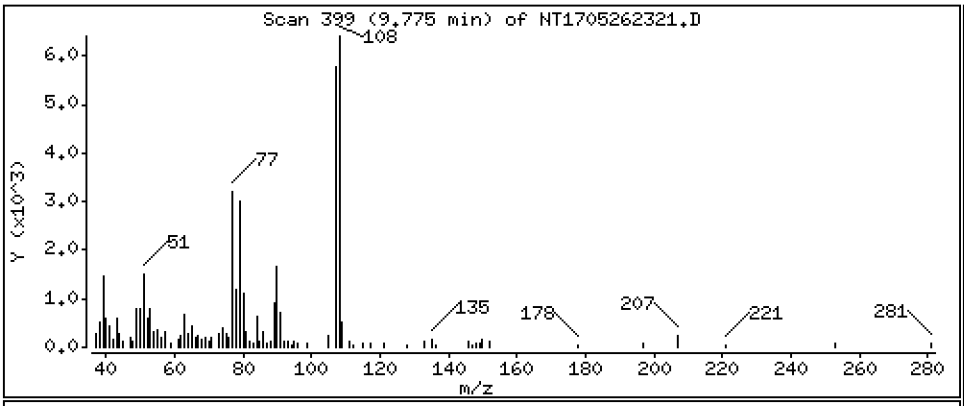
Operator: VTS

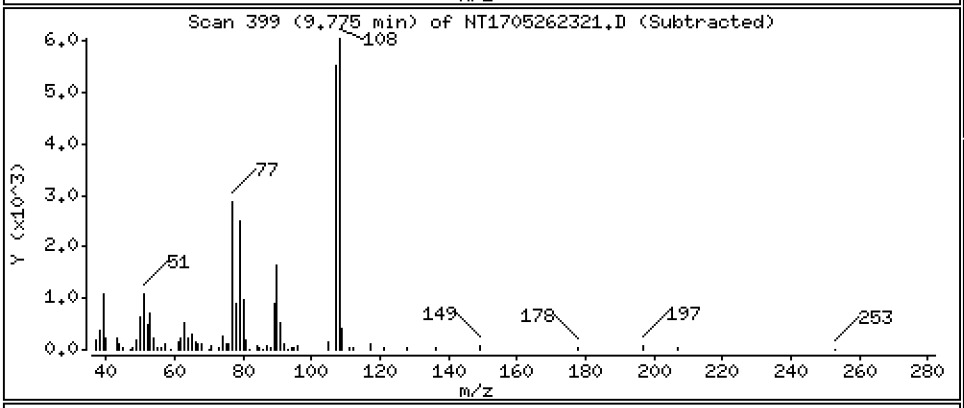
Column phase: ZB-5msi

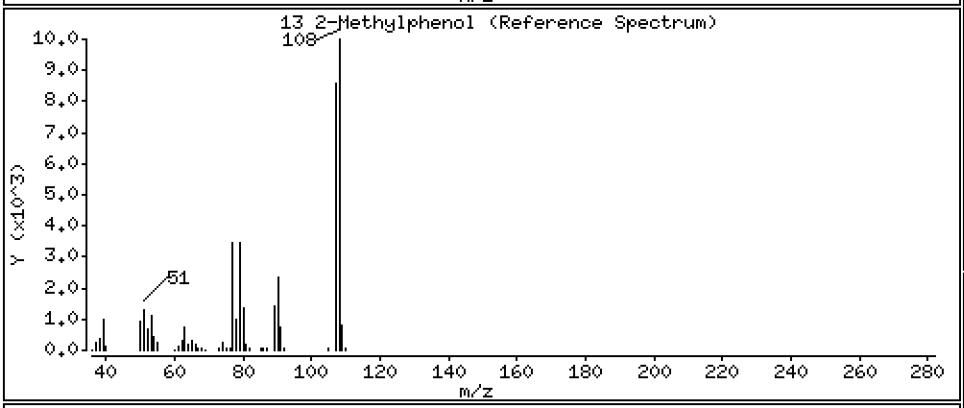
Column diameter: 0.25

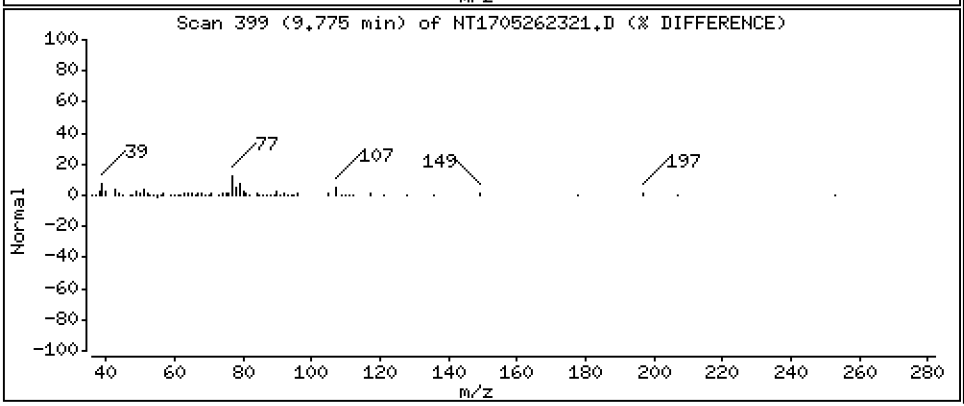
13 2-Methylphenol

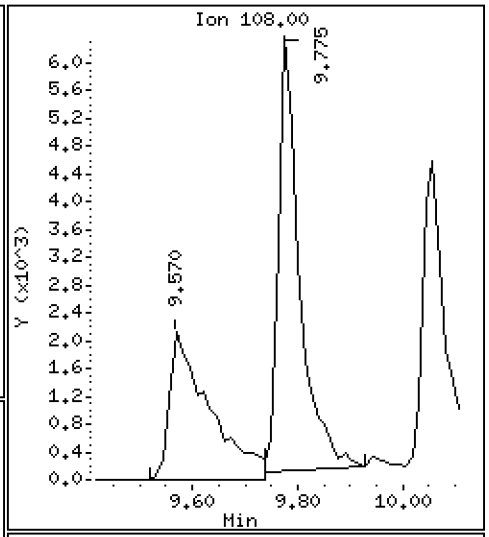
Concentration: 0.1460 ug/mL

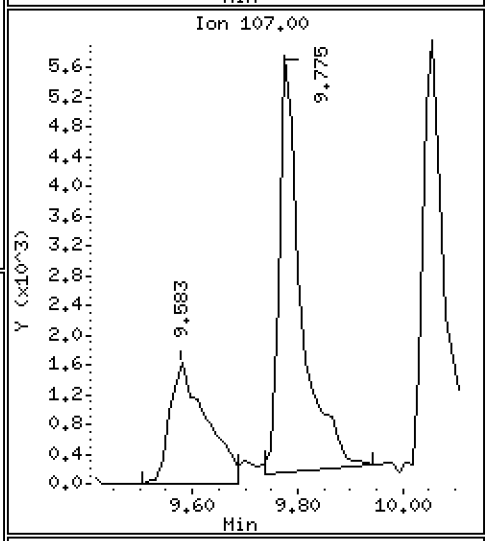


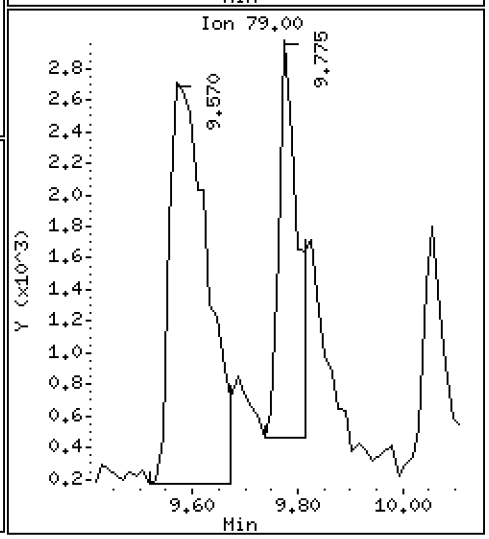












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

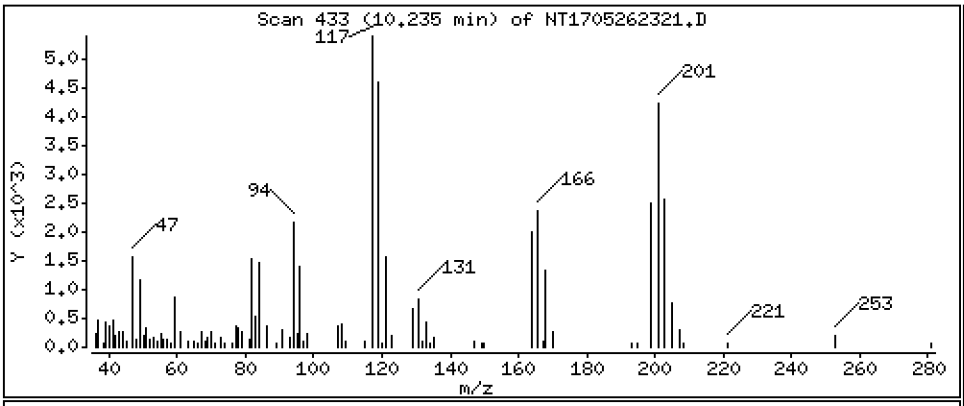
Operator: VTS

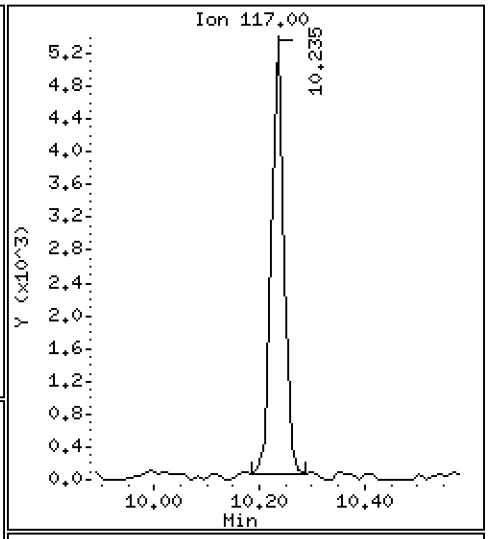
Column phase: ZB-5msi

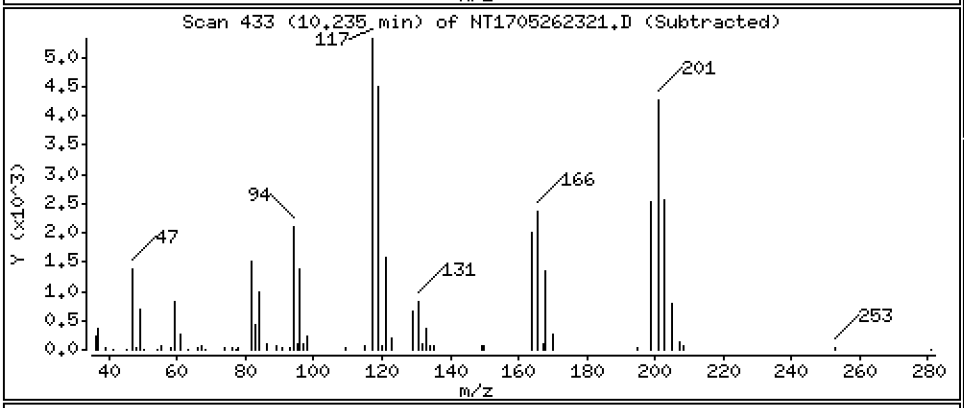
Column diameter: 0.25

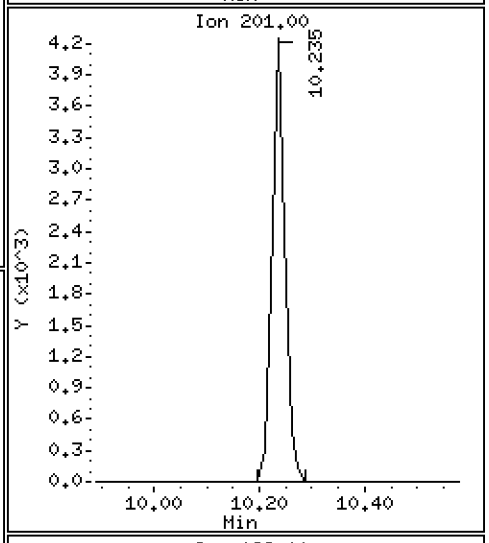
17 Hexachloroethane

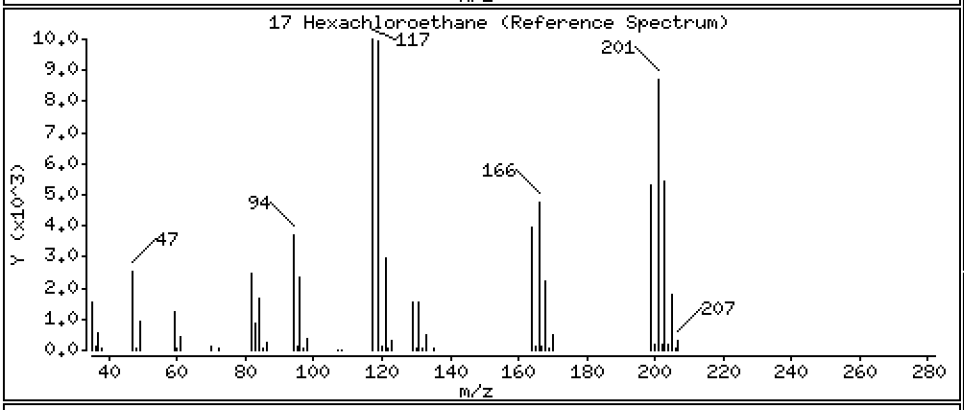
Concentration: 0.1574 ug/mL

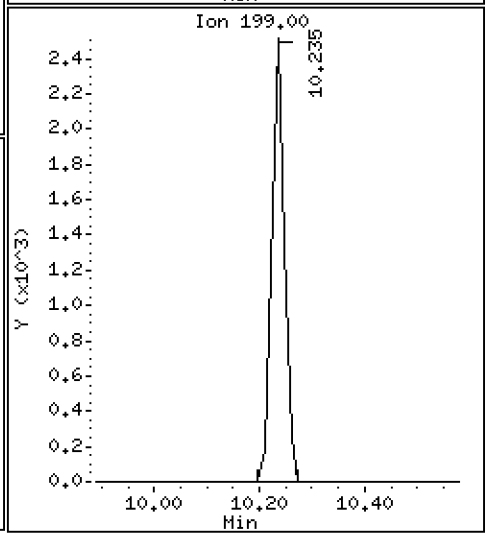


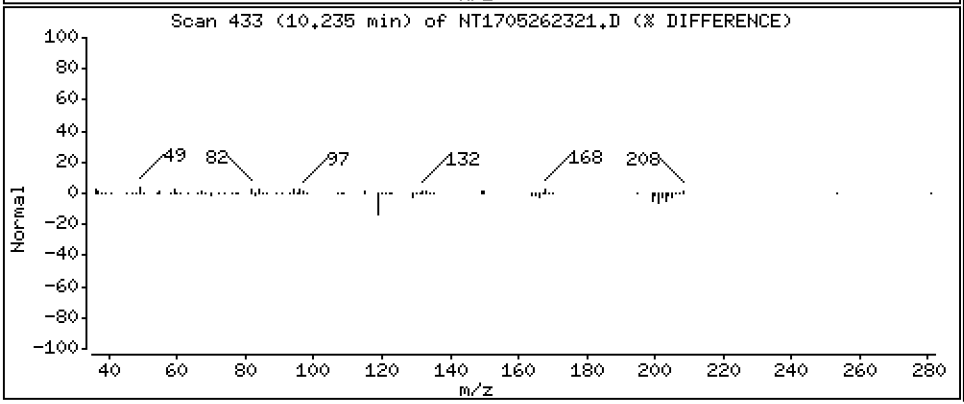












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

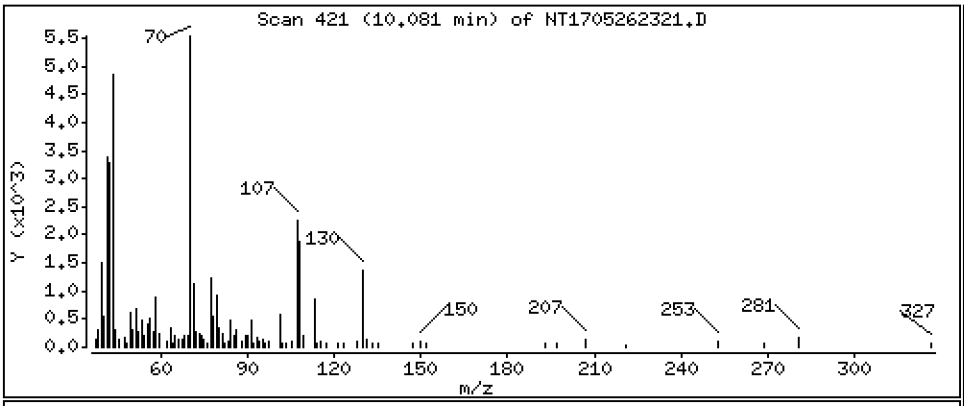
Operator: VTS

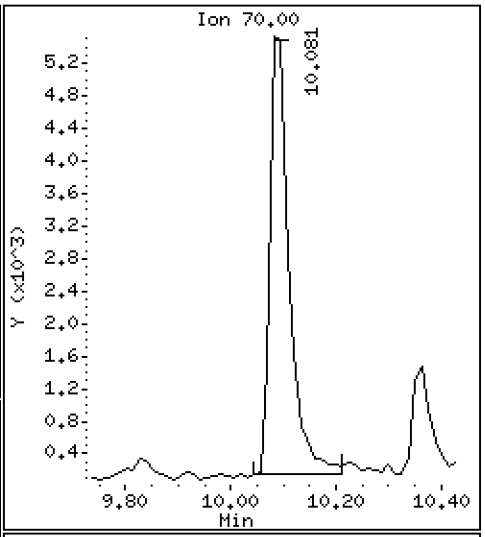
Column phase: ZB-5msi

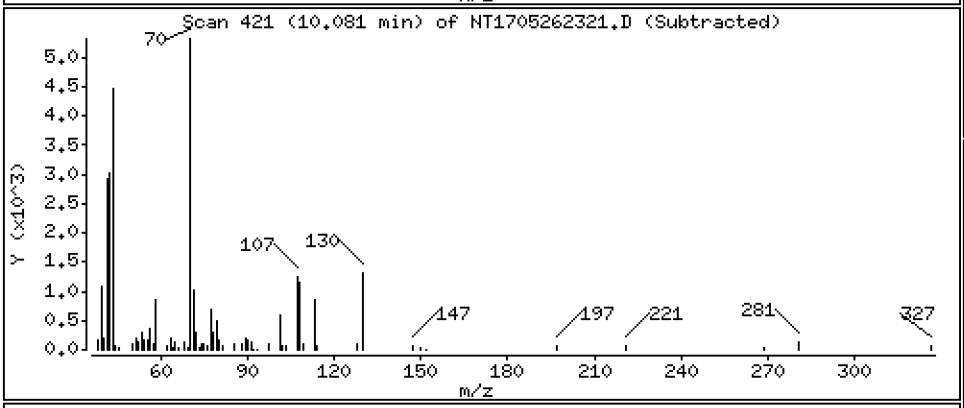
Column diameter: 0.25

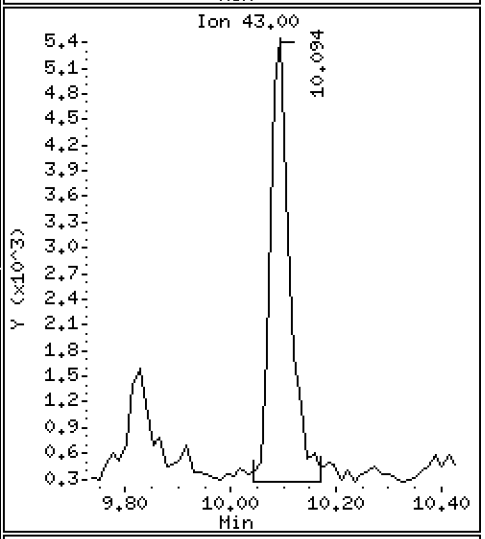
16 N-Nitroso-di-n-propylamine

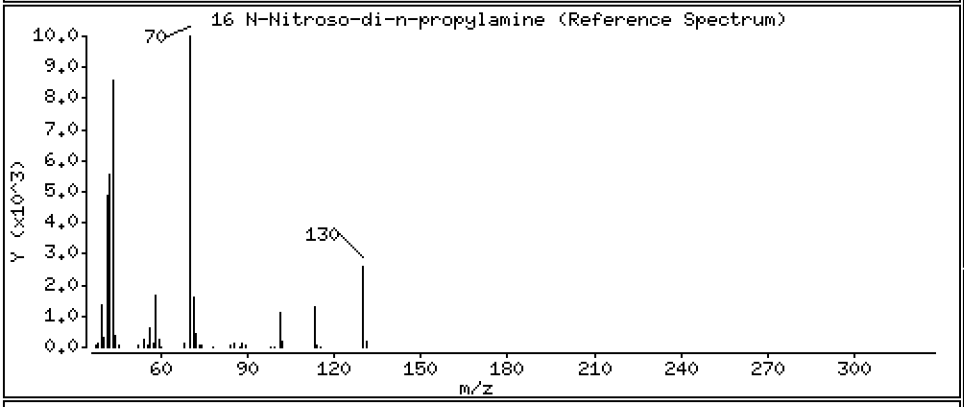
Concentration: 0.1492 ug/mL

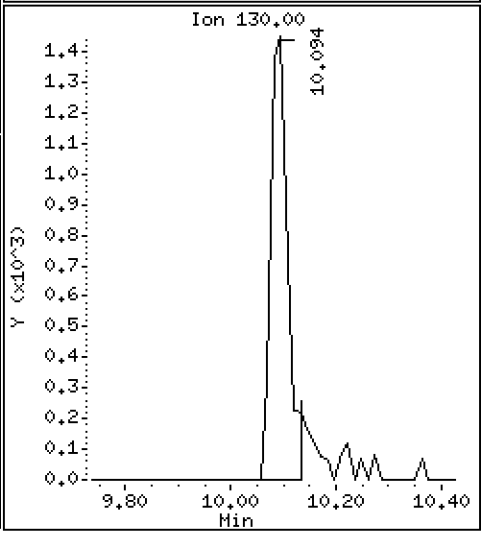


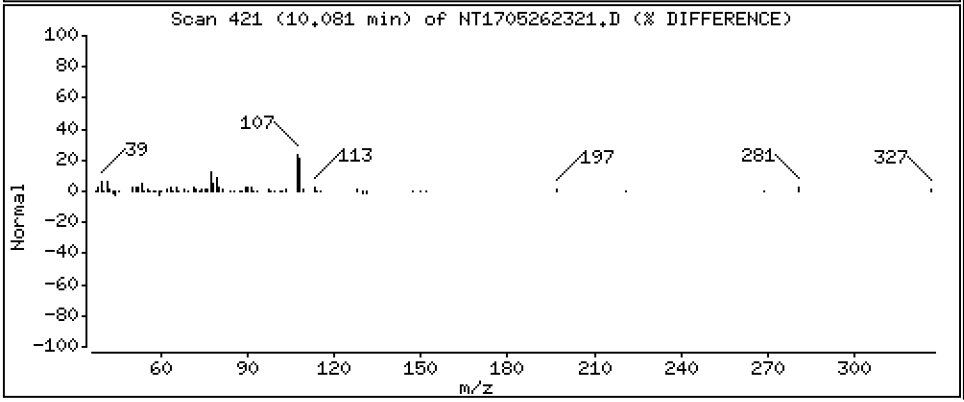












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

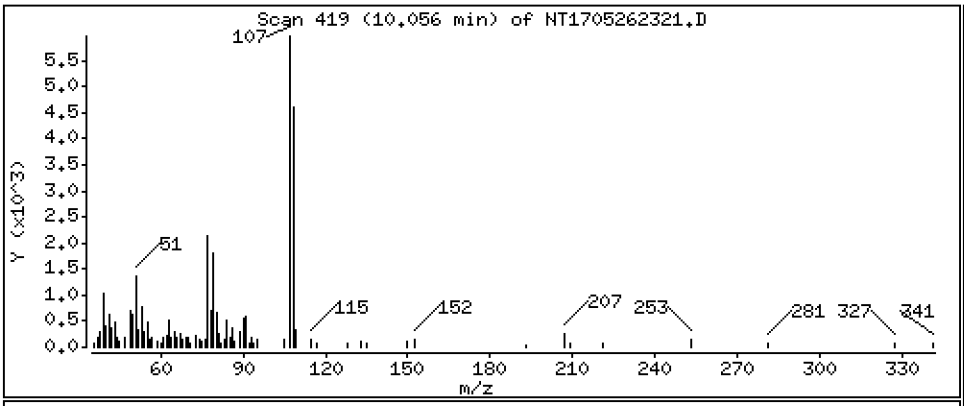
Operator: VTS

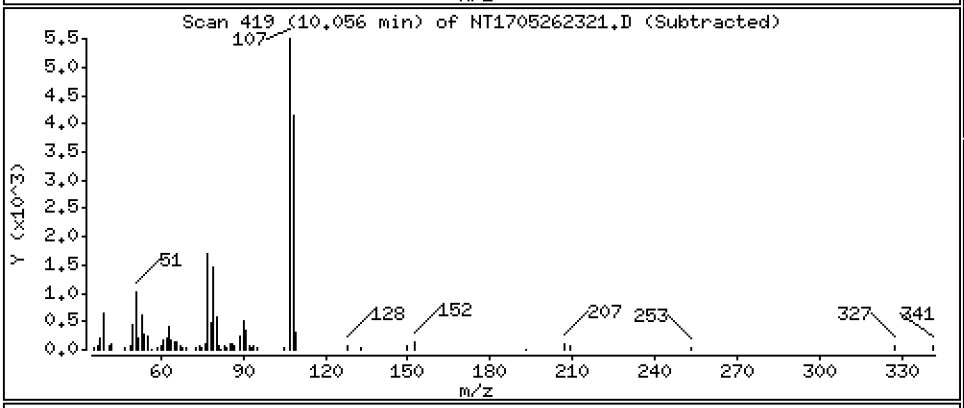
Column phase: ZB-5msi

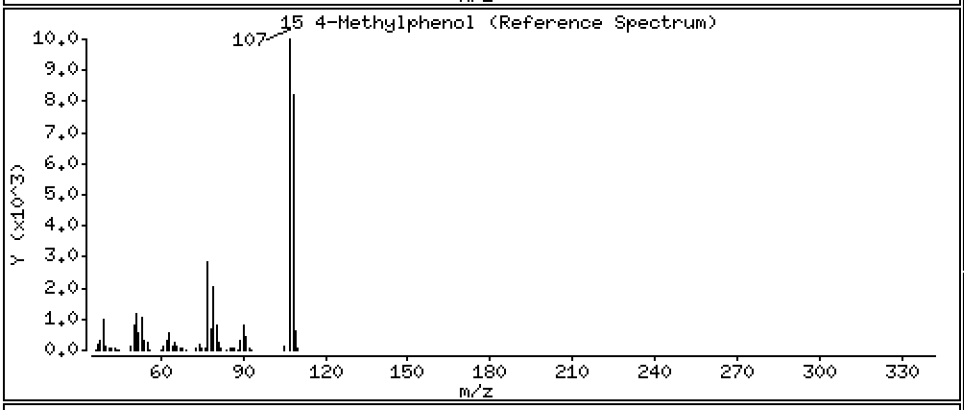
Column diameter: 0.25

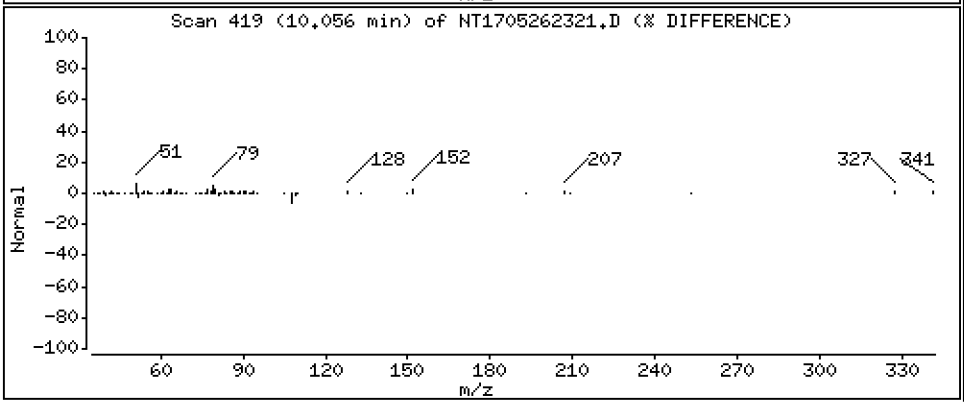
15 4-Methylphenol

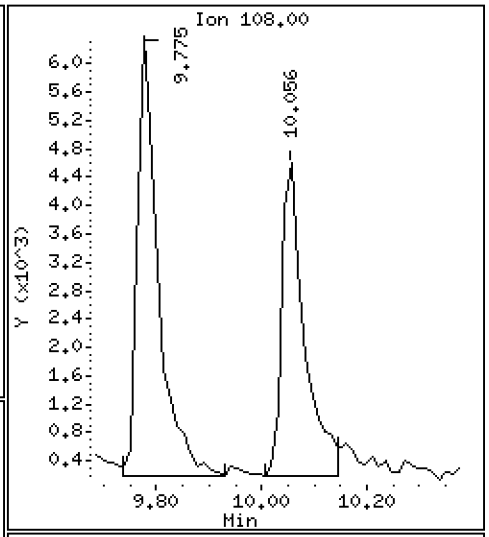
Concentration: 0.1077 ug/mL

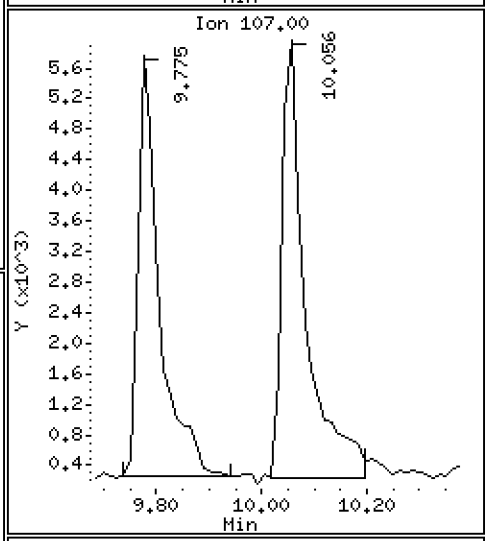


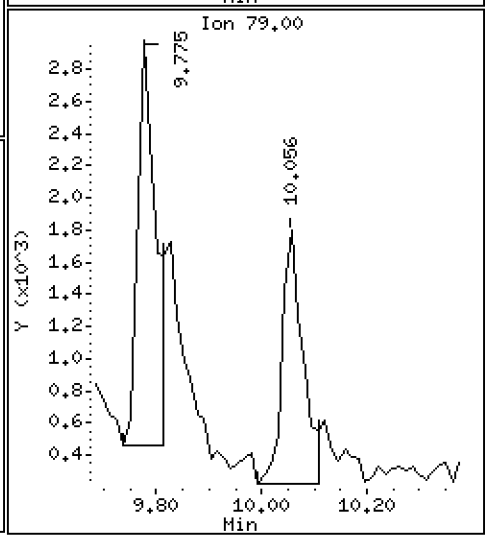












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

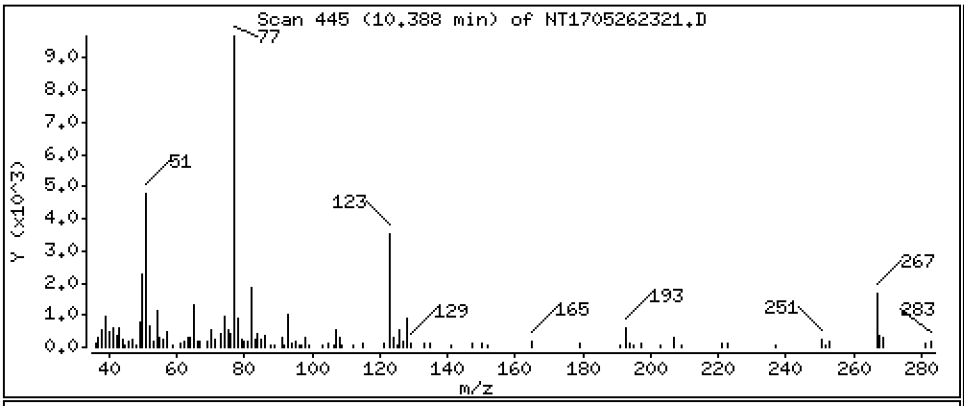
Operator: VTS

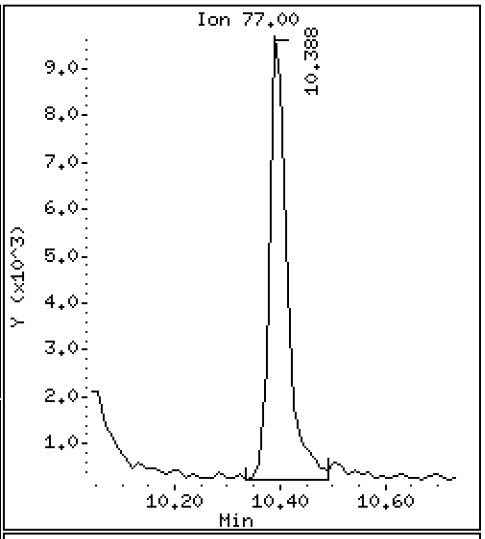
Column phase: ZB-5msi

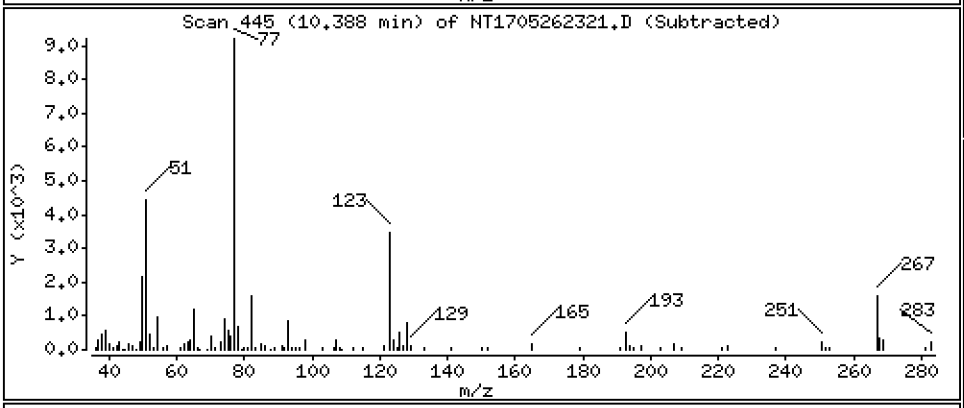
Column diameter: 0.25

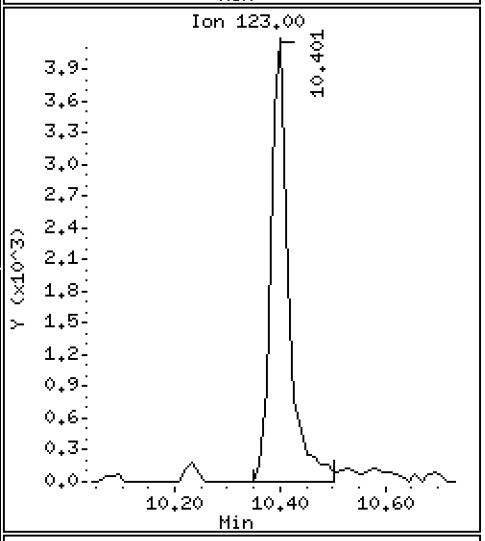
19 Nitrobenzene

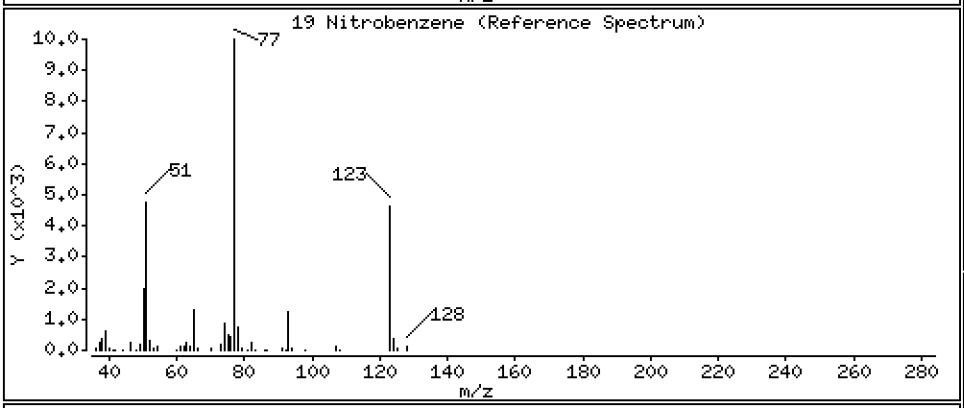
Concentration: 0.1951 ug/mL

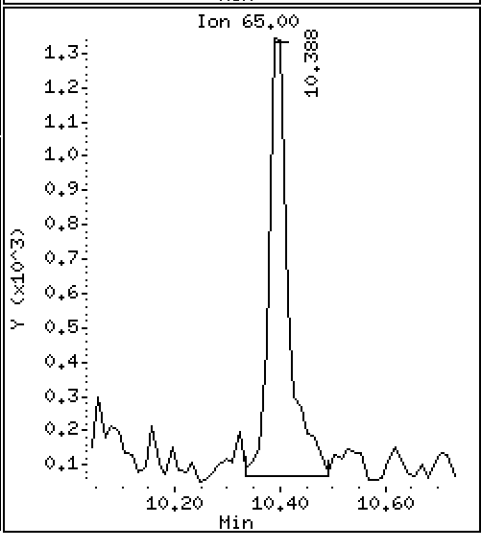


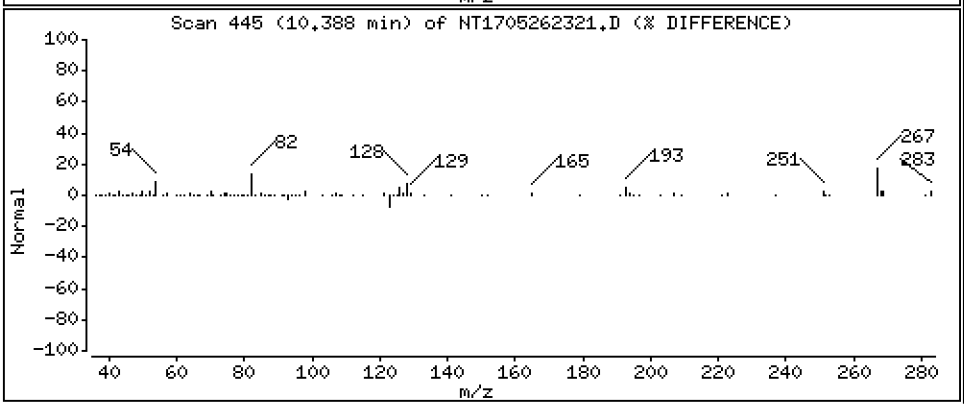












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

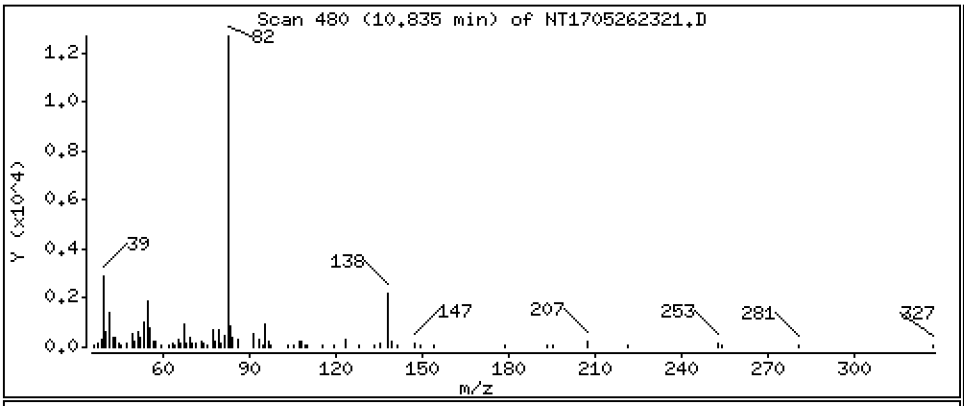
Operator: VTS

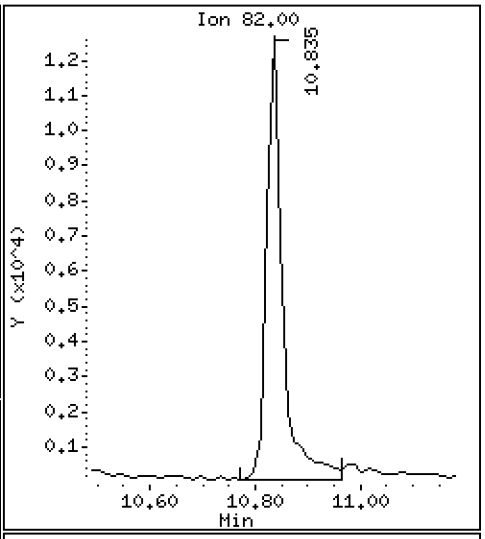
Column phase: ZB-5msi

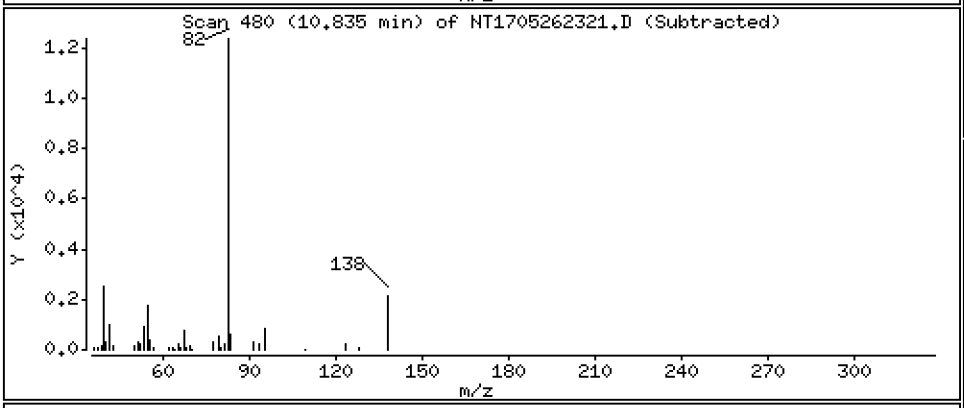
Column diameter: 0.25

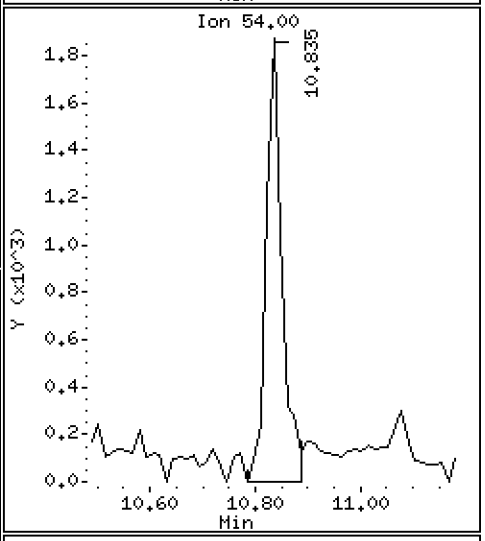
20 Isophorone

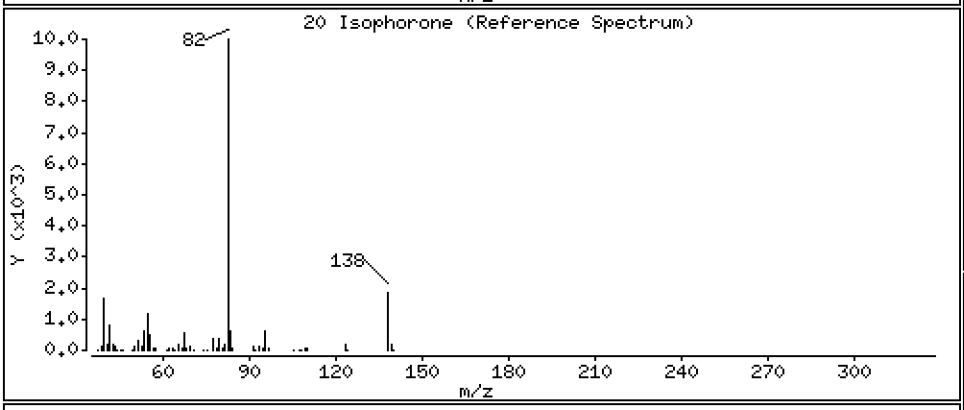
Concentration: 0.1961 ug/mL

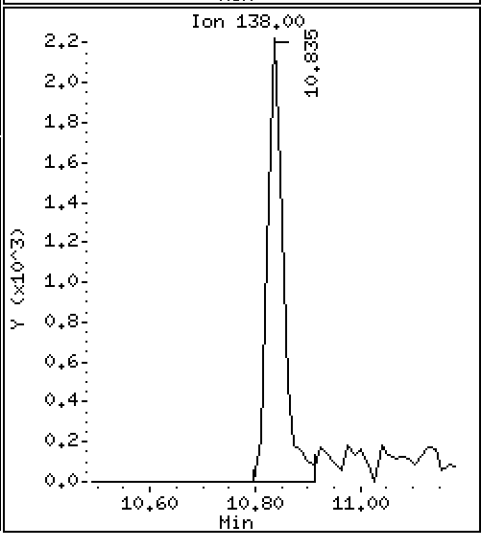


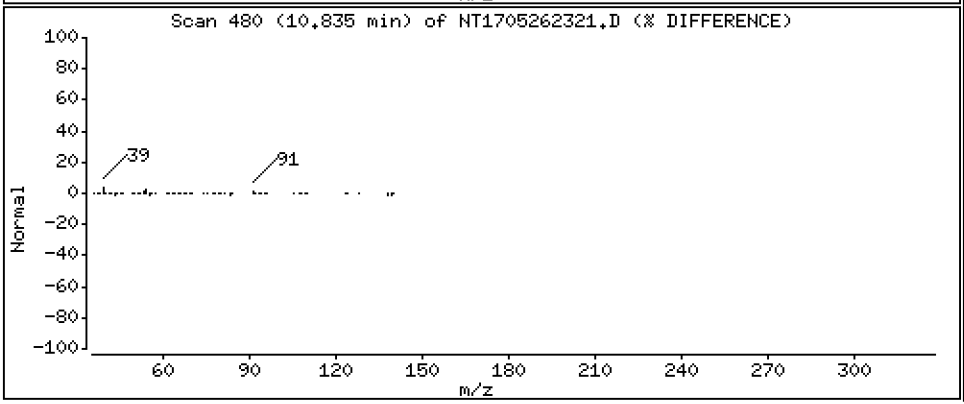












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

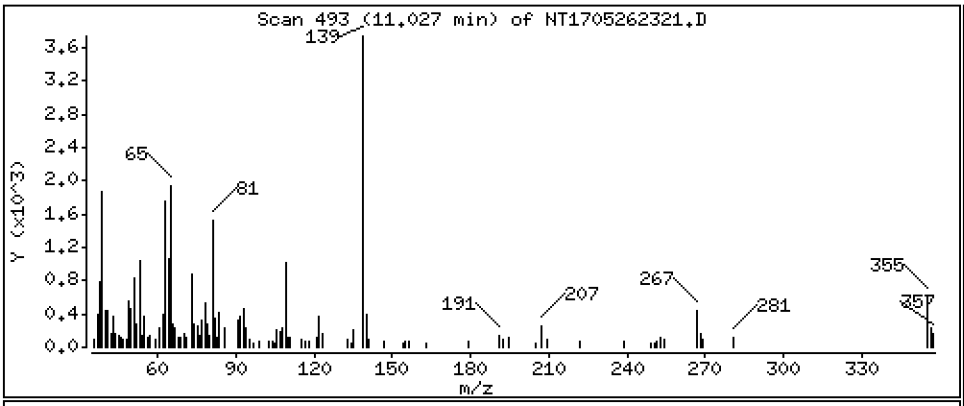
Operator: VTS

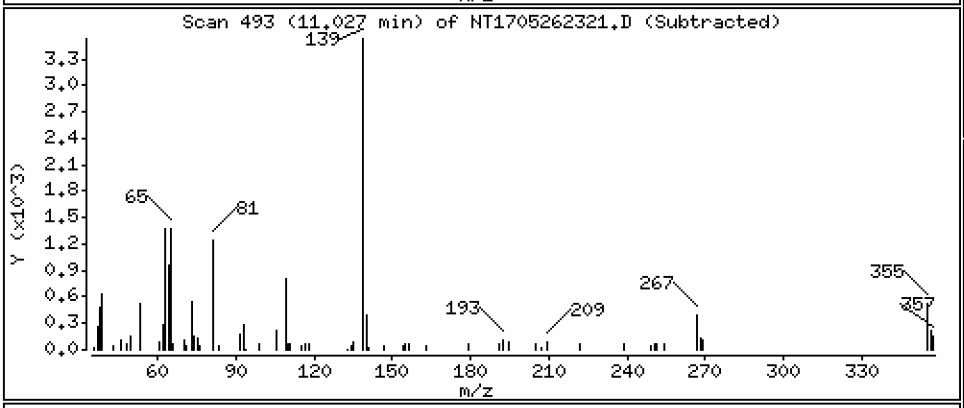
Column phase: ZB-5msi

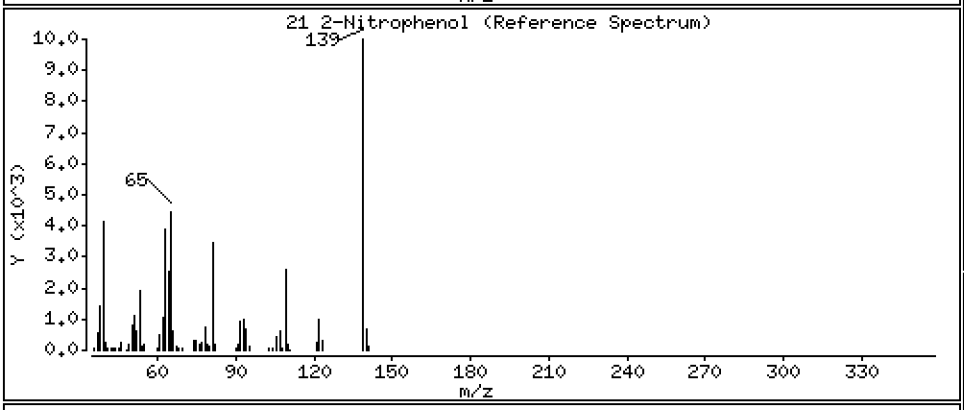
Column diameter: 0.25

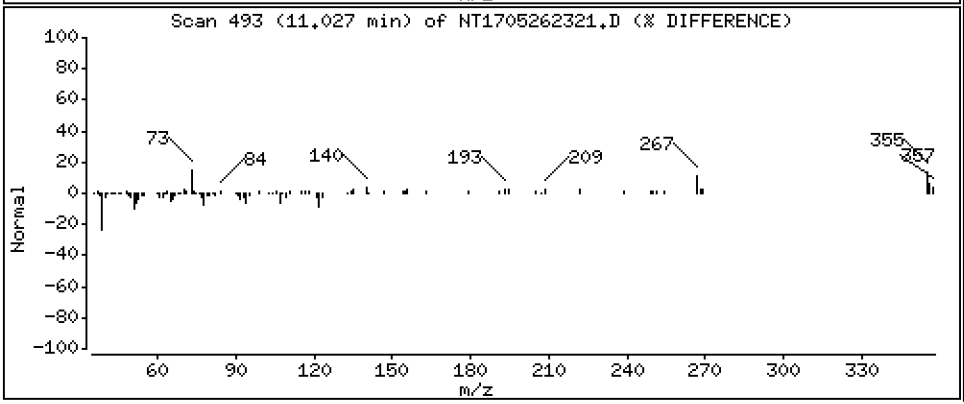
21 2-Nitrophenol

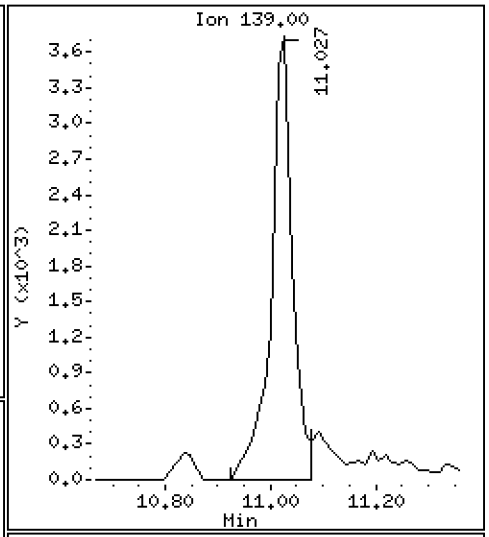
Concentration: 0.2302 ug/mL

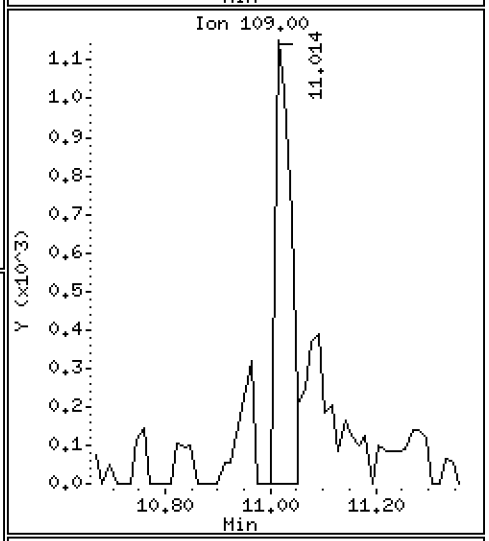


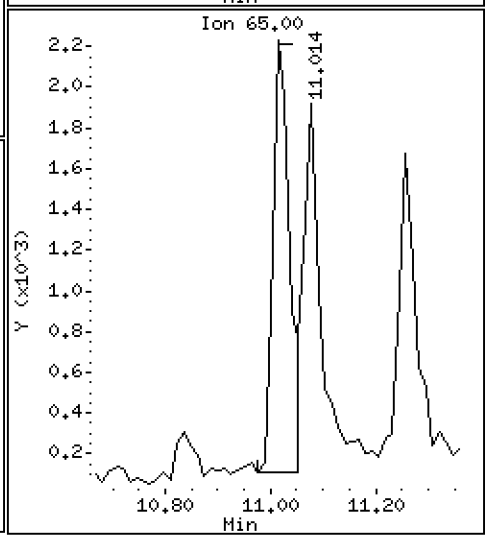












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

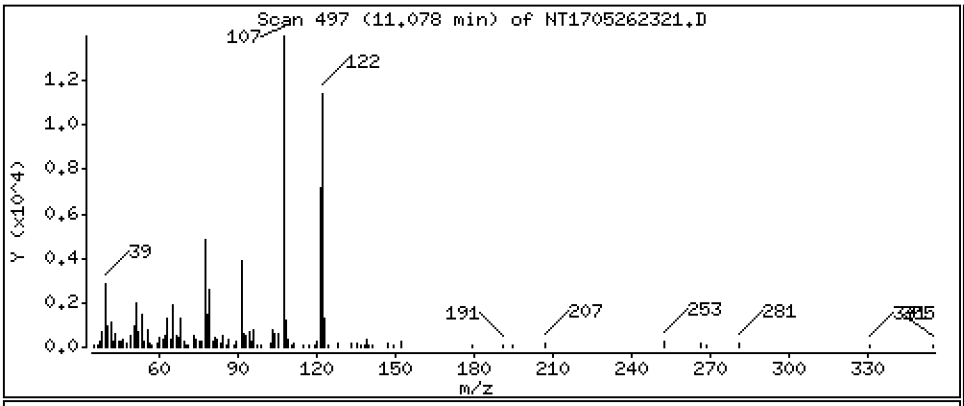
Operator: VTS

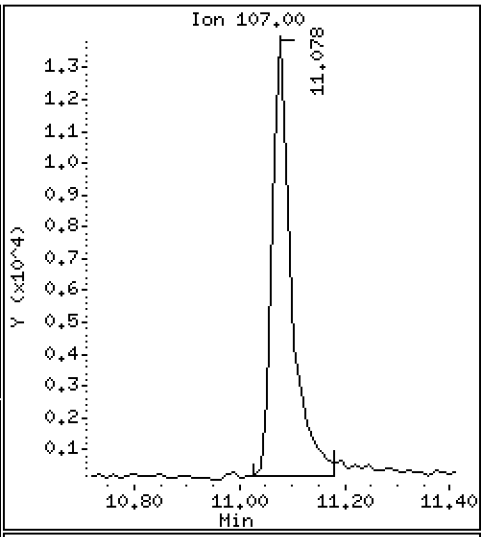
Column phase: ZB-5msi

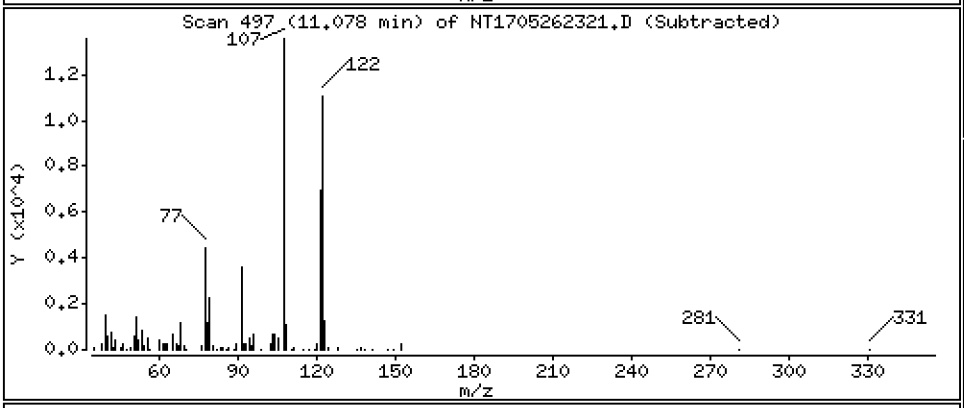
Column diameter: 0.25

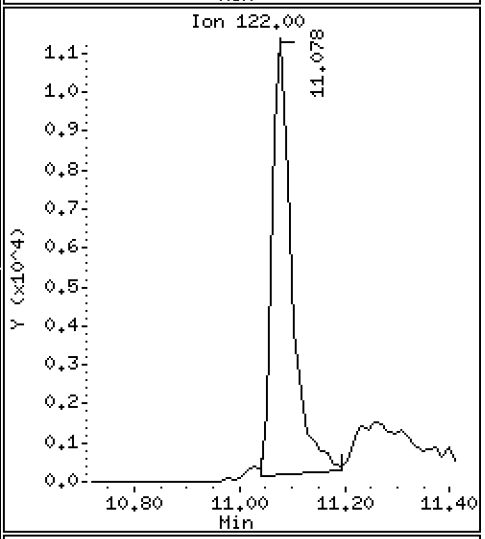
22 2,4-Dimethylphenol

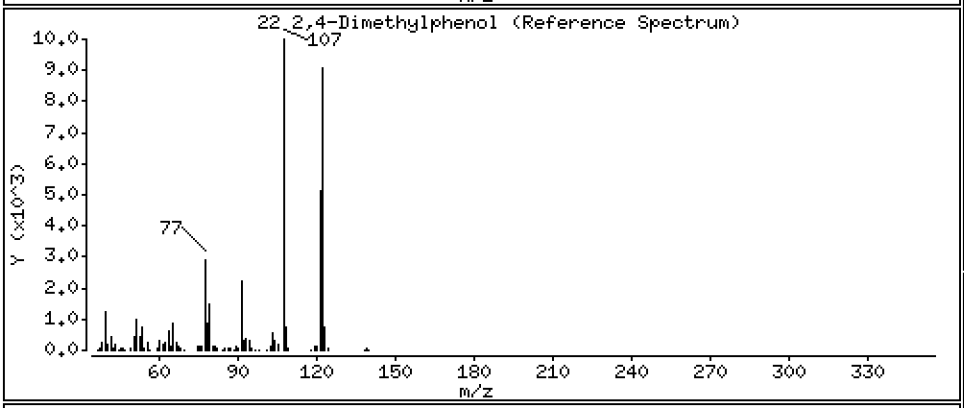
Concentration: 0.3345 ug/mL

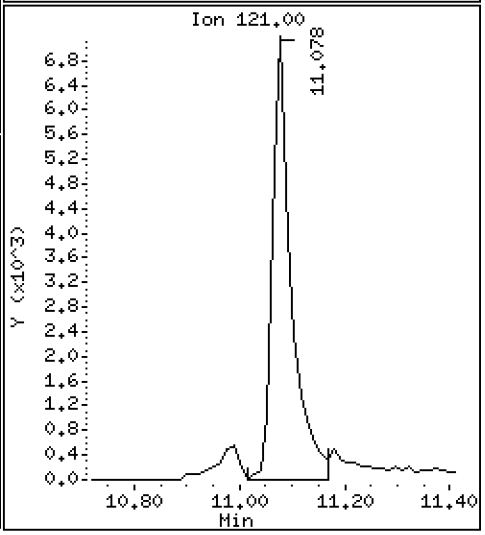


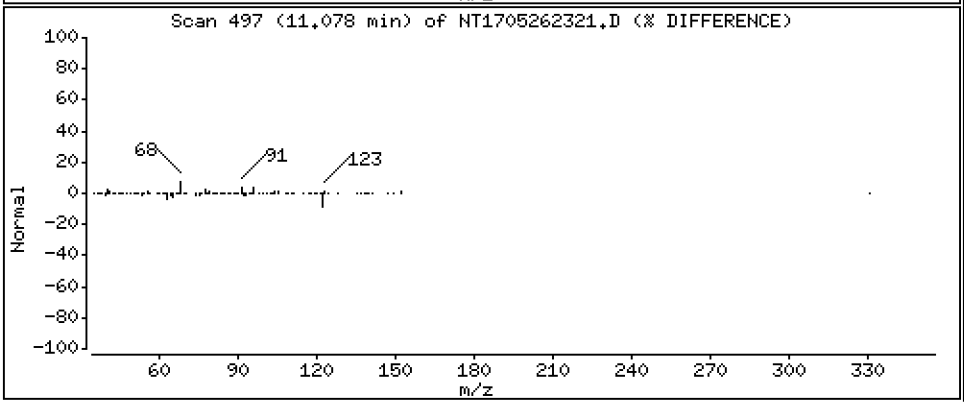












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

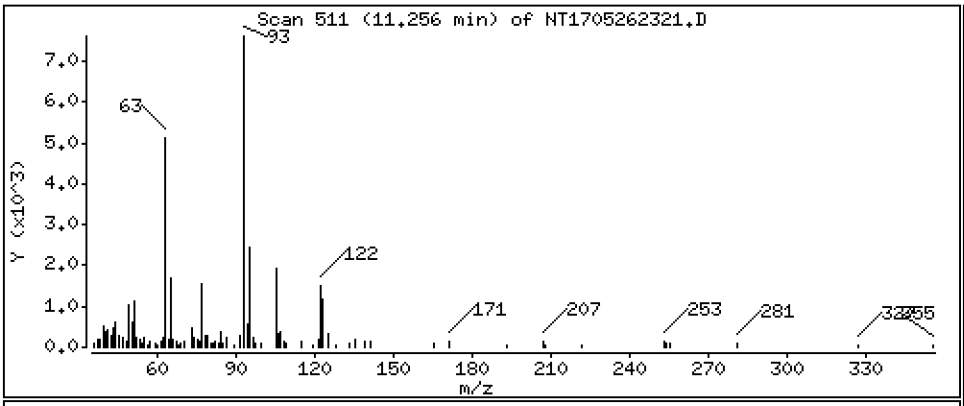
Operator: VTS

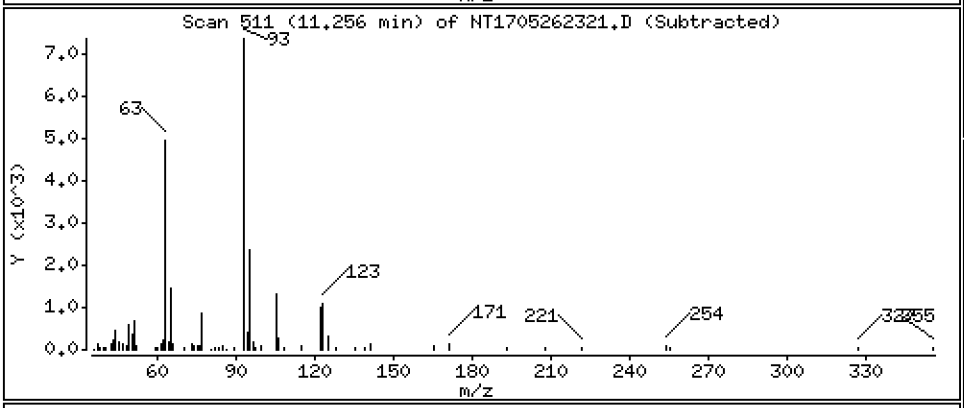
Column phase: ZB-5msi

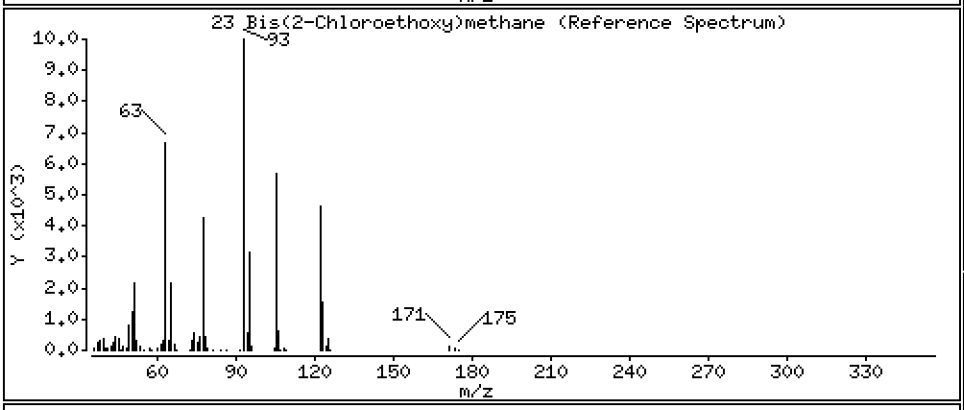
Column diameter: 0.25

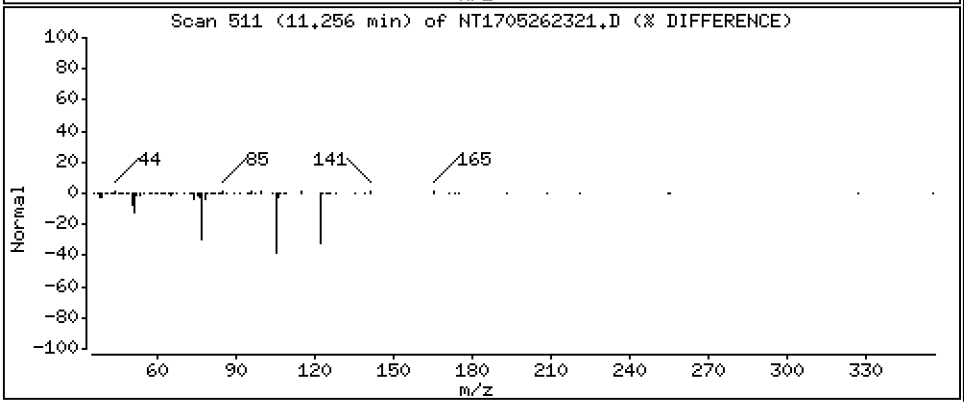
23 Bis(2-Chloroethoxy)methane

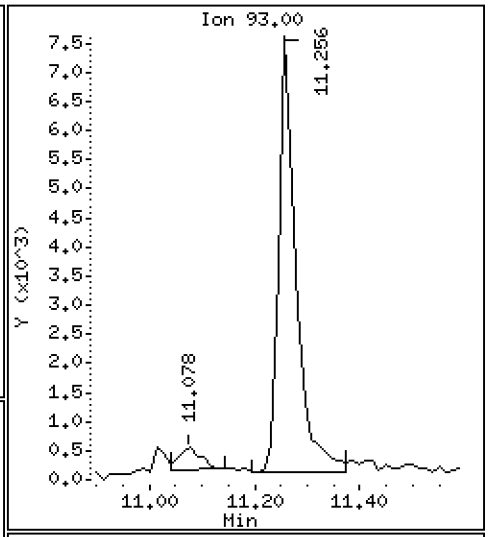
Concentration: 0.1812 ug/mL

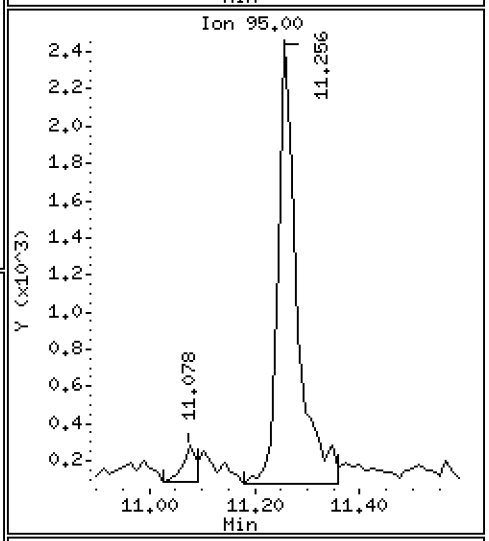


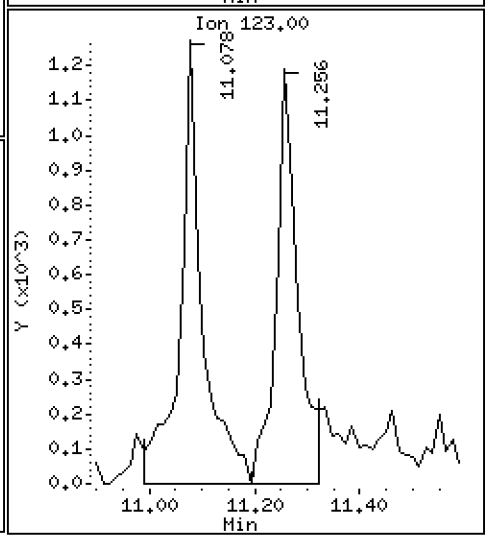












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

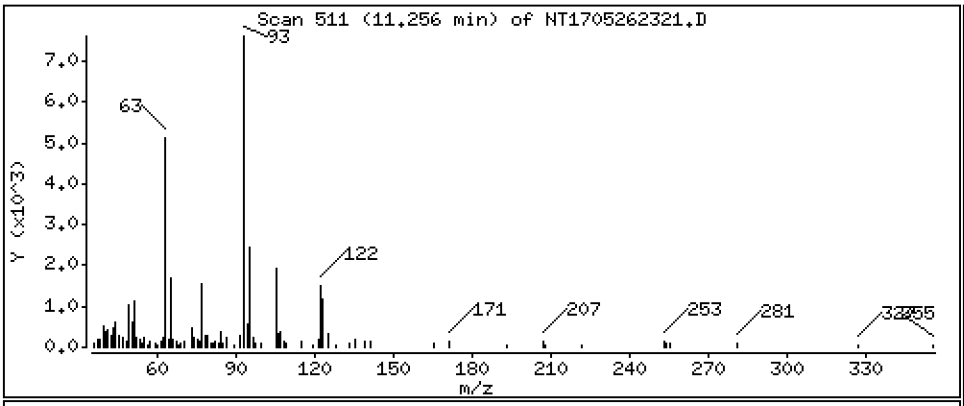
Operator: VTS

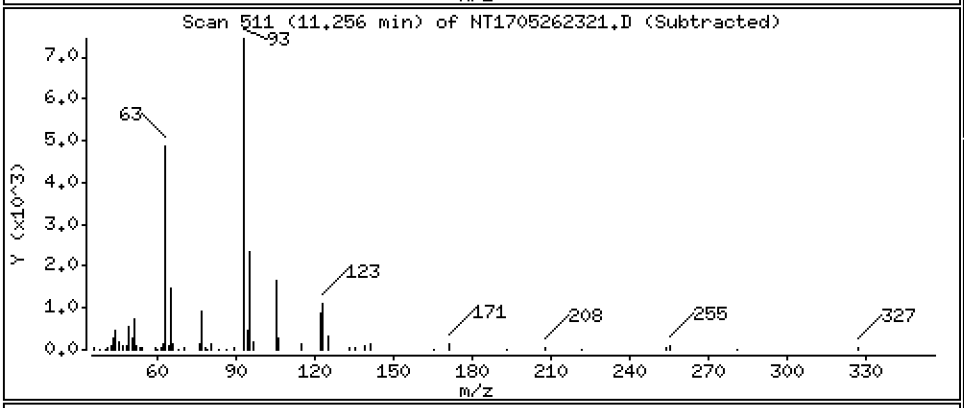
Column phase: ZB-5msi

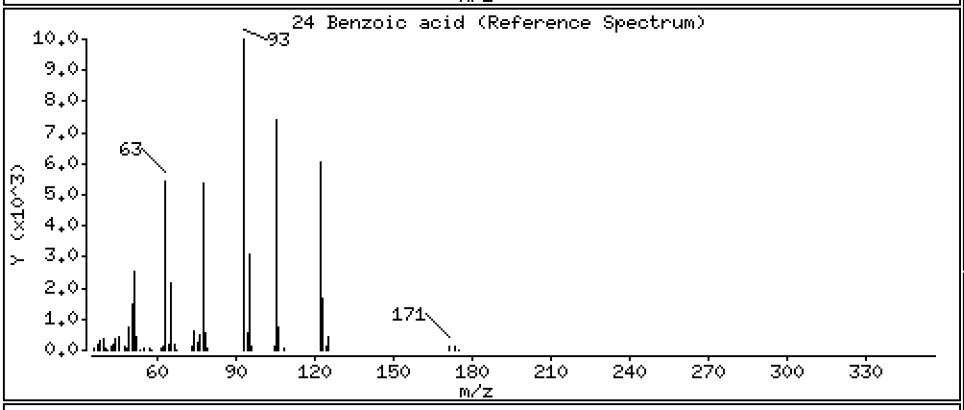
Column diameter: 0.25

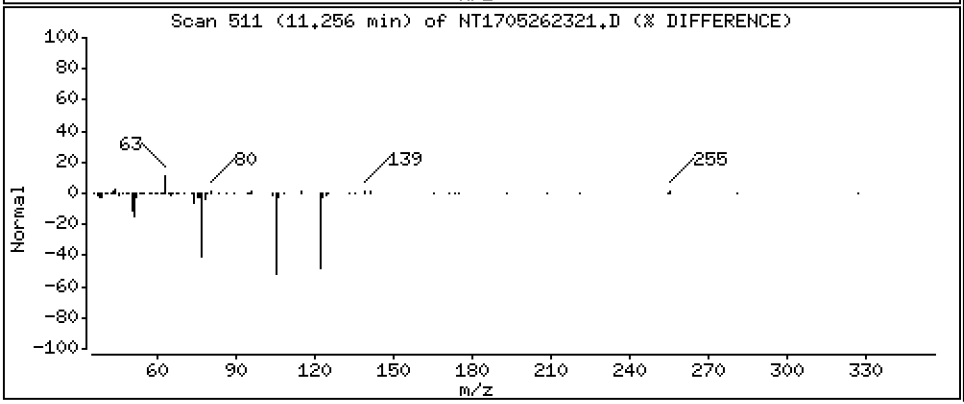
24 Benzoic acid

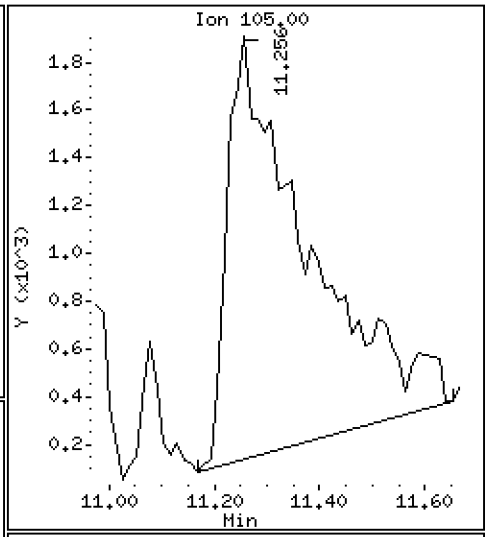
Concentration: 0.2696 ug/mL

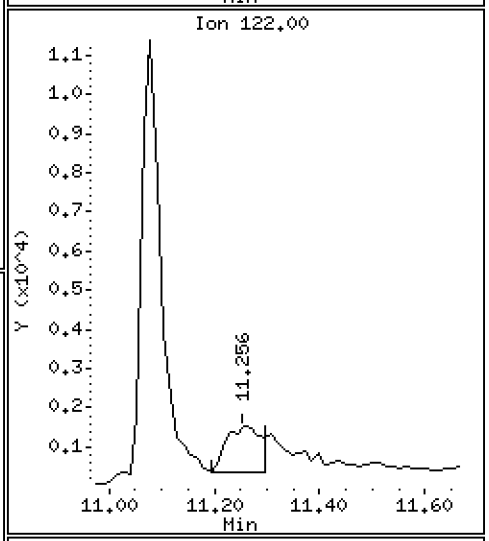


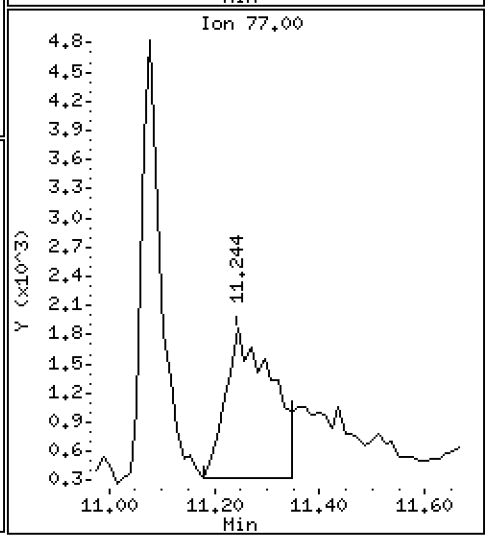












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

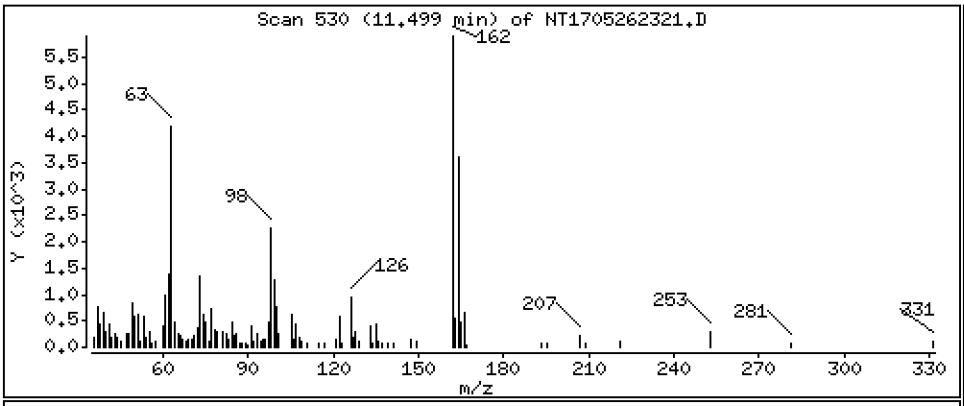
Operator: VTS

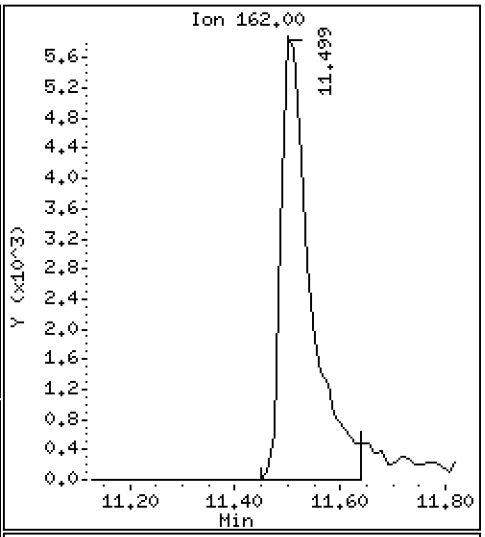
Column phase: ZB-5msi

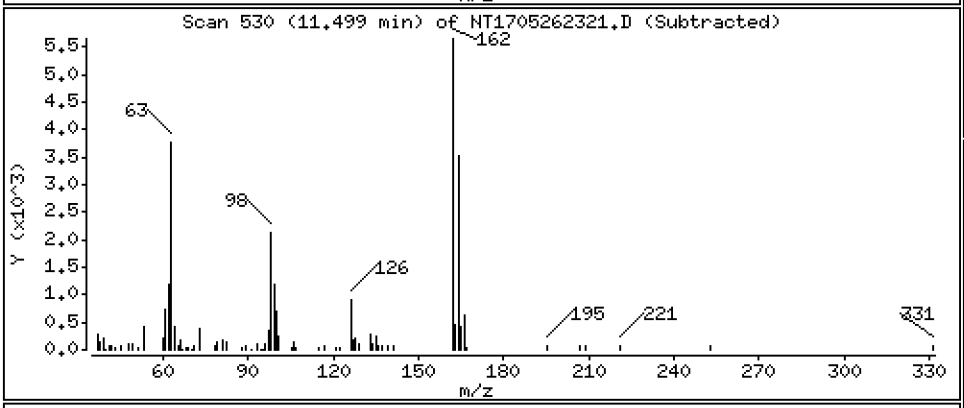
Column diameter: 0.25

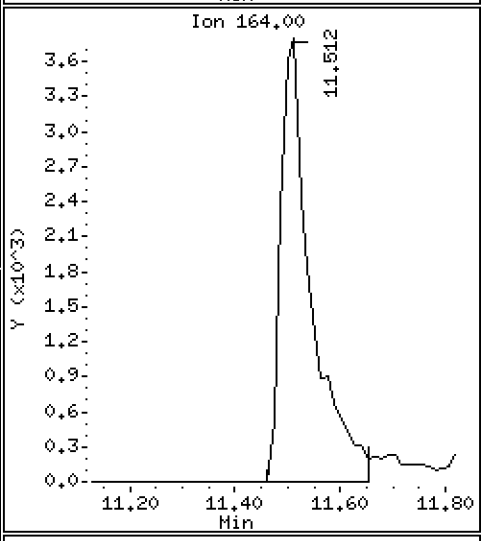
25 2,4-Dichlorophenol

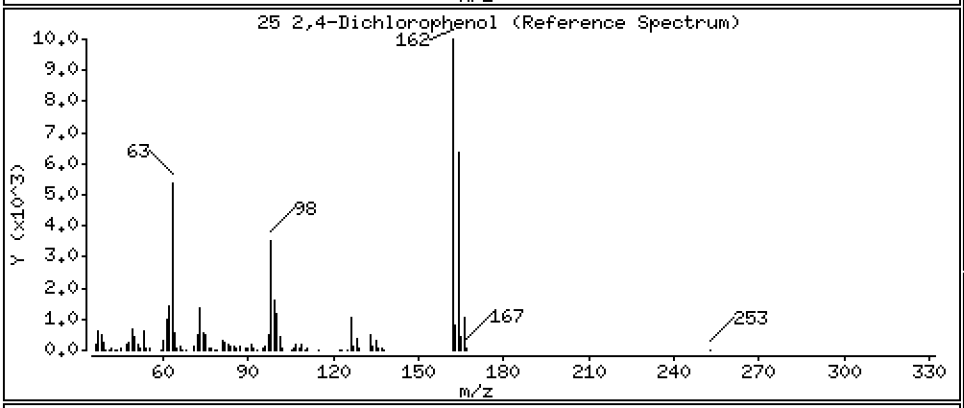
Concentration: 0.3035 ug/mL

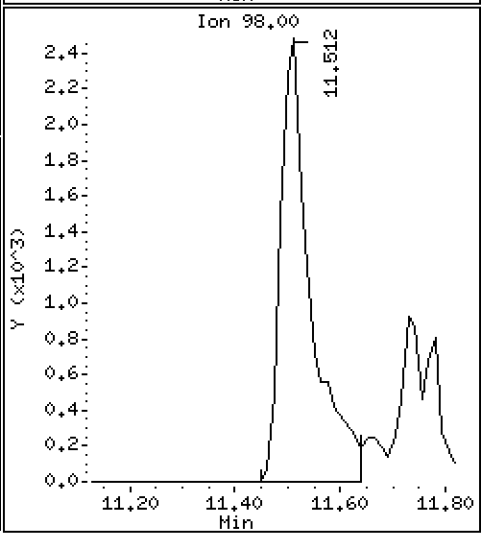


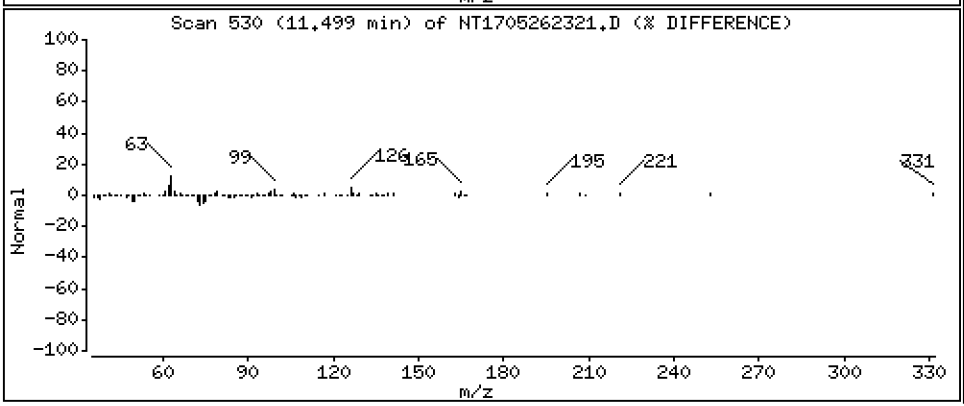












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

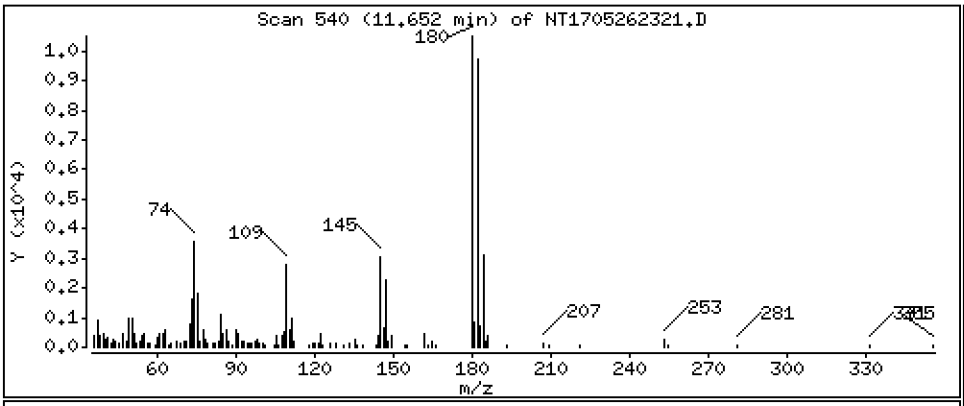
Operator: VTS

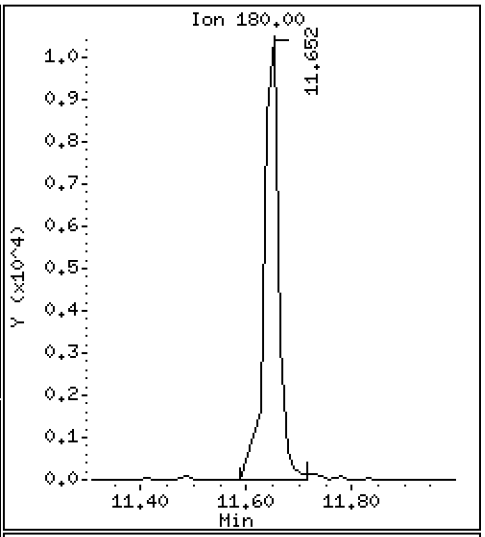
Column phase: ZB-5msi

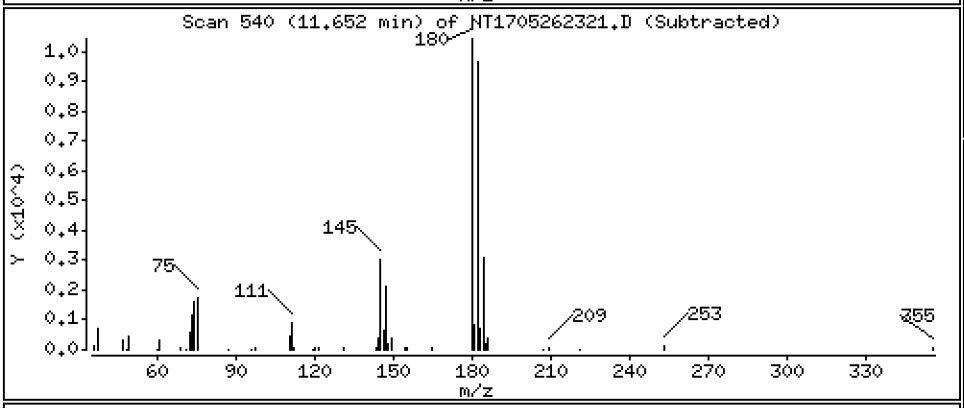
Column diameter: 0.25

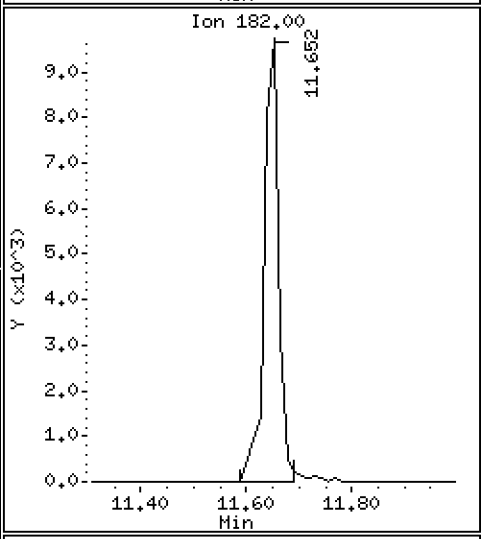
26 1,2,4-Trichlorobenzene

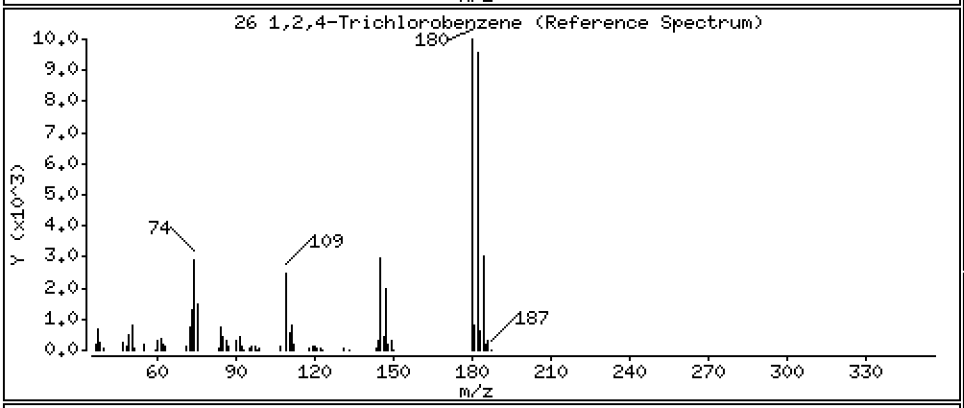
Concentration: 0.2610 ug/mL

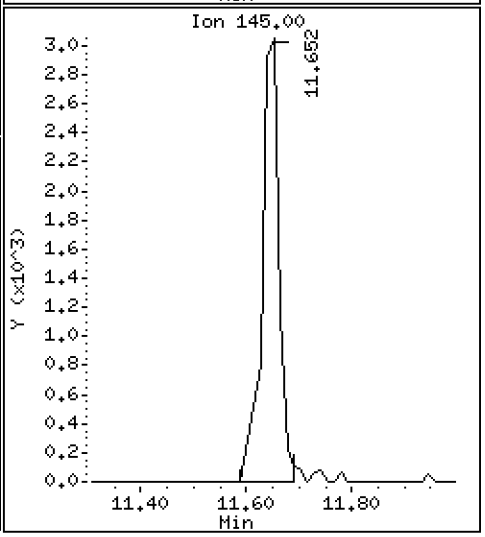


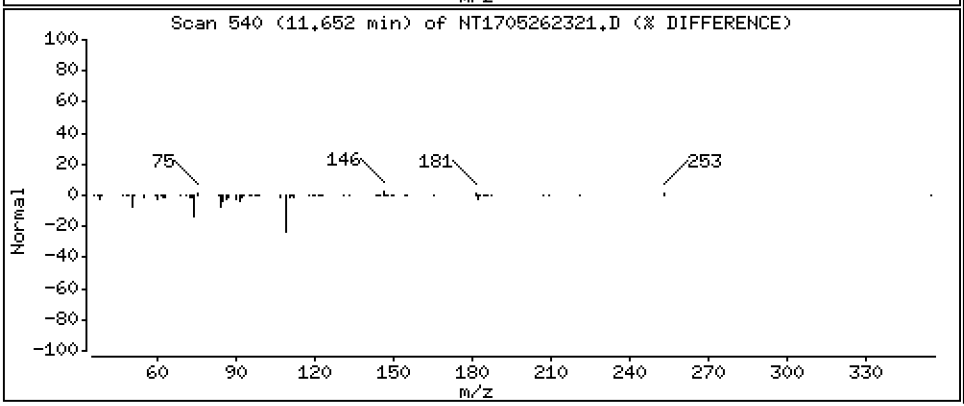












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

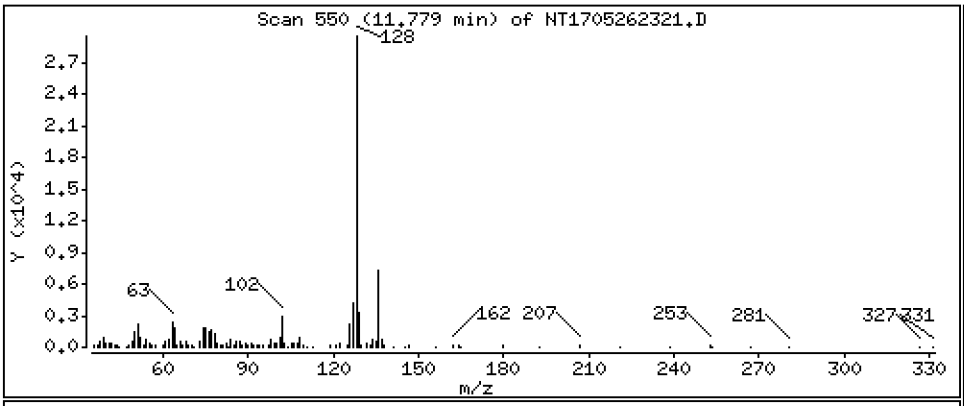
Operator: VTS

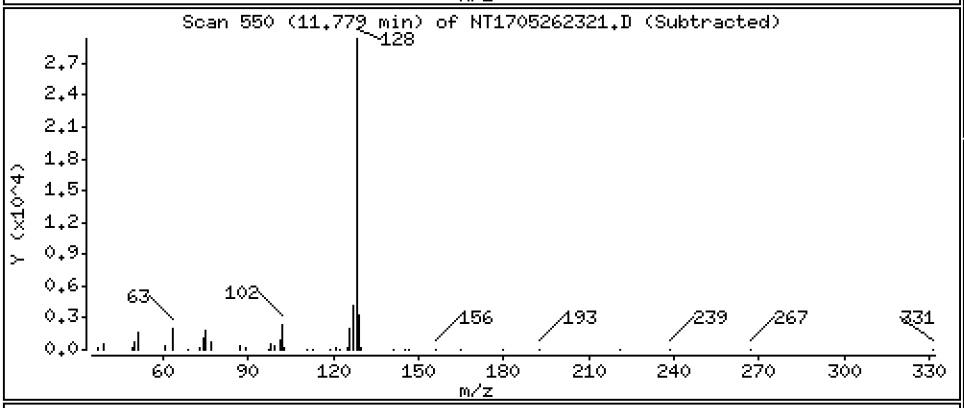
Column phase: ZB-5msi

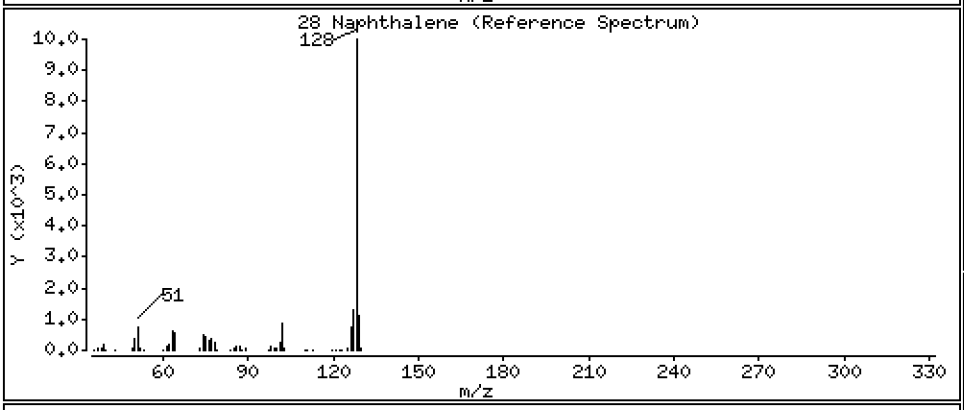
Column diameter: 0.25

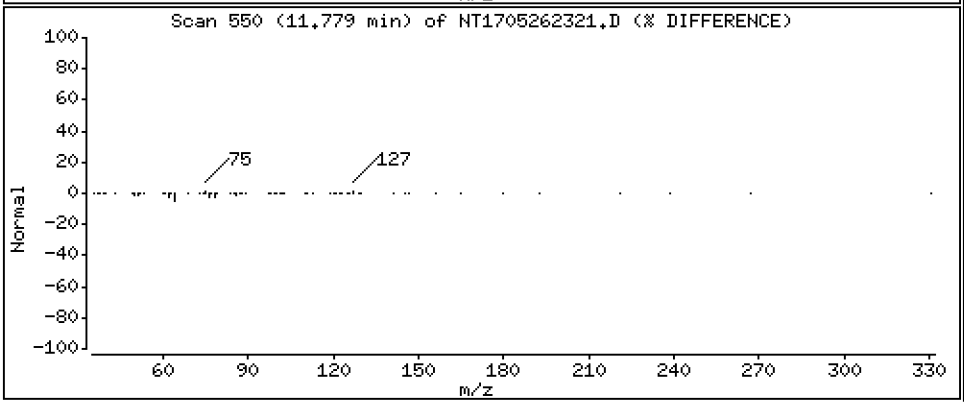
28 Naphthalene

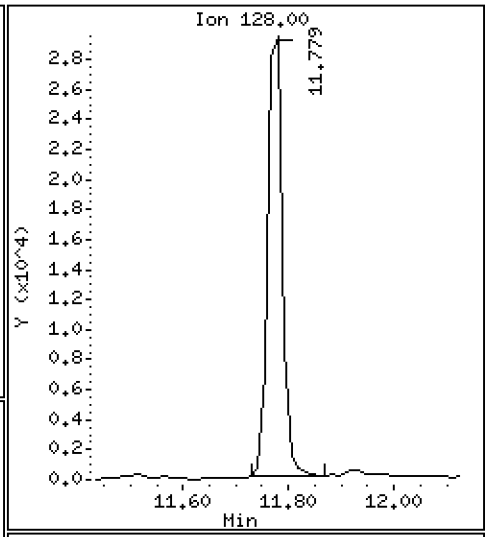
Concentration: 0.2019 ug/mL

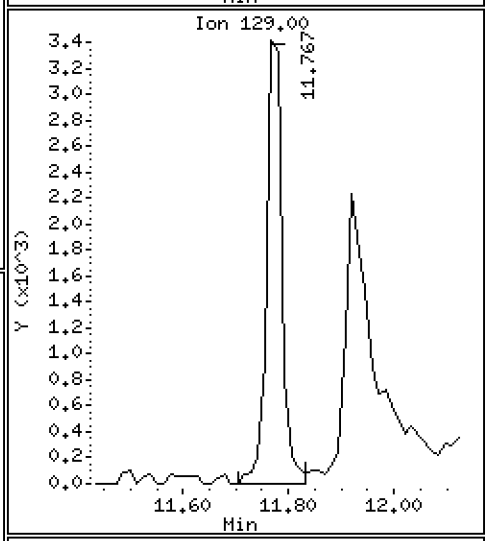


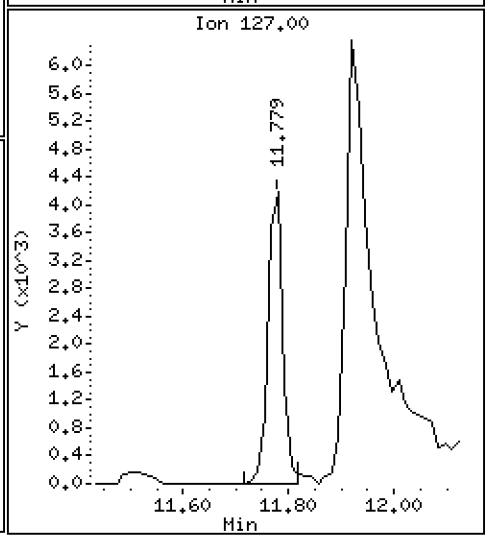












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

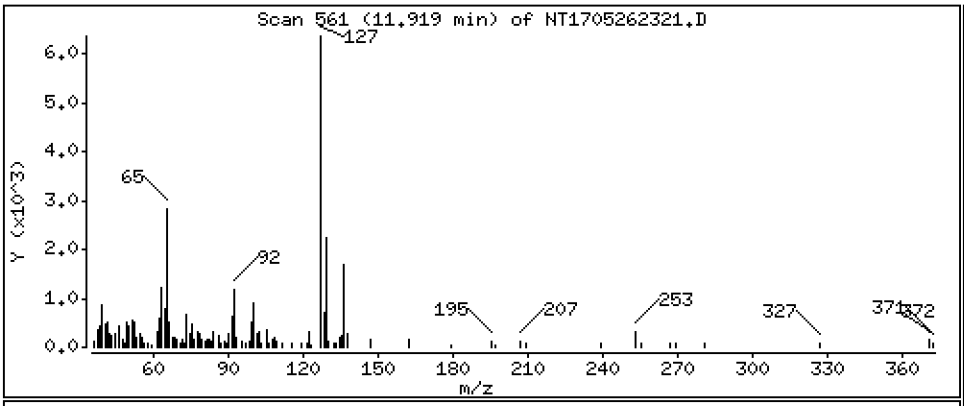
Operator: VTS

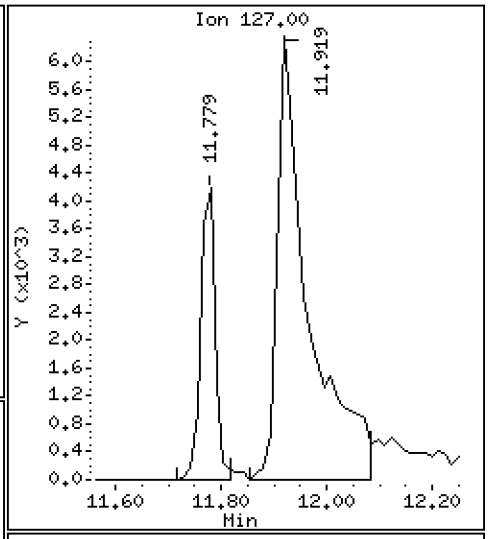
Column phase: ZB-5msi

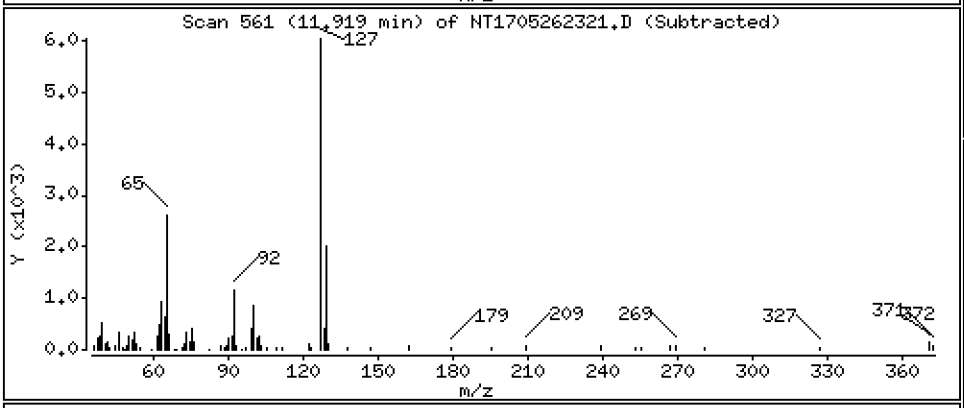
Column diameter: 0.25

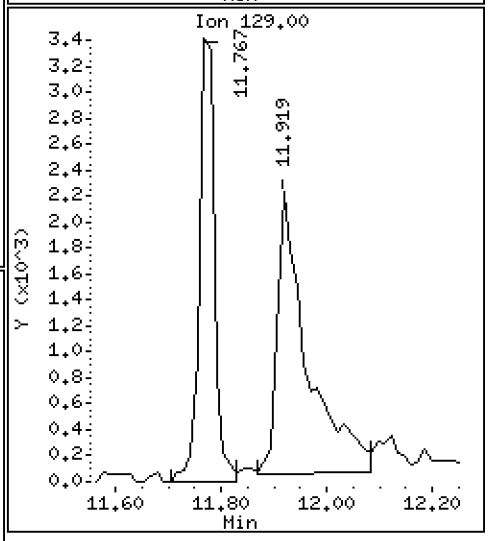
29 4-Chloroaniline

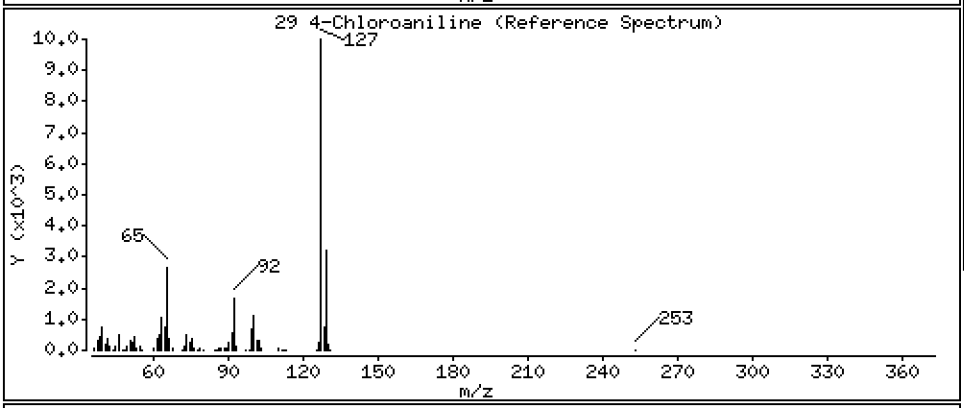
Concentration: 0.2470 ug/mL

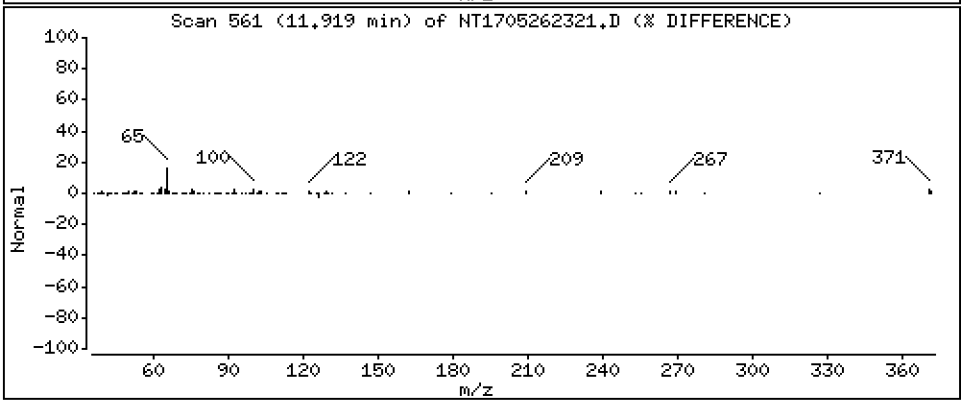












Date : 27-MAY-2023 01:10

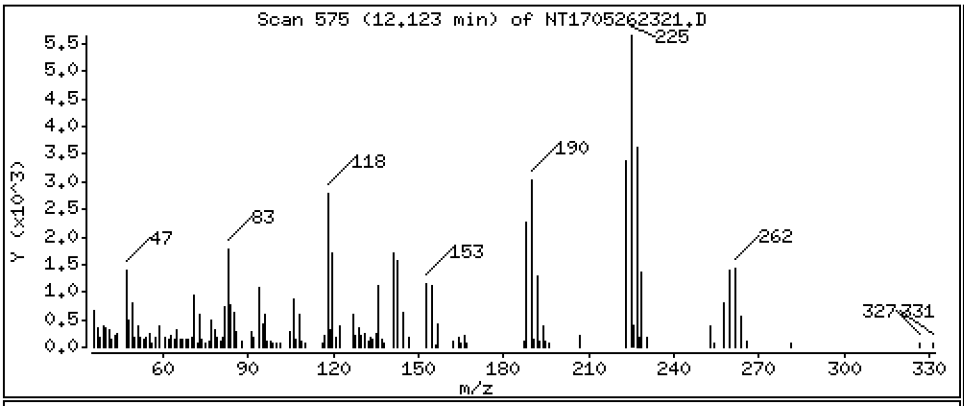
Client ID: Instrument: nt17.i

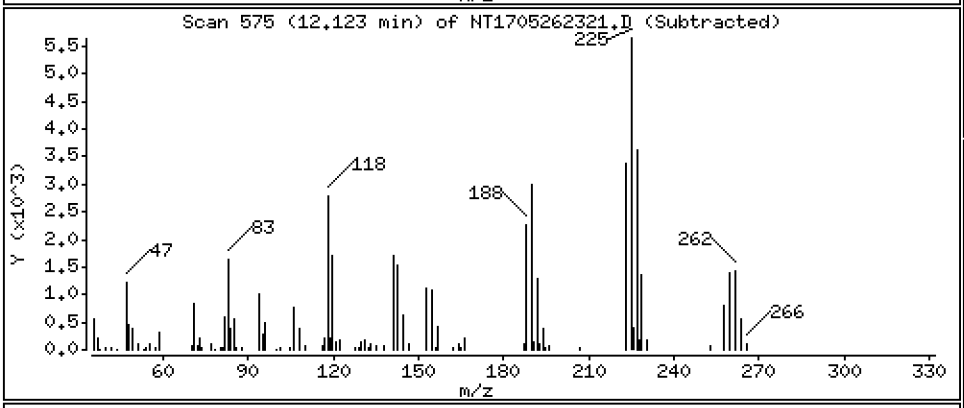
Sample Info: SLE0434-LCV2

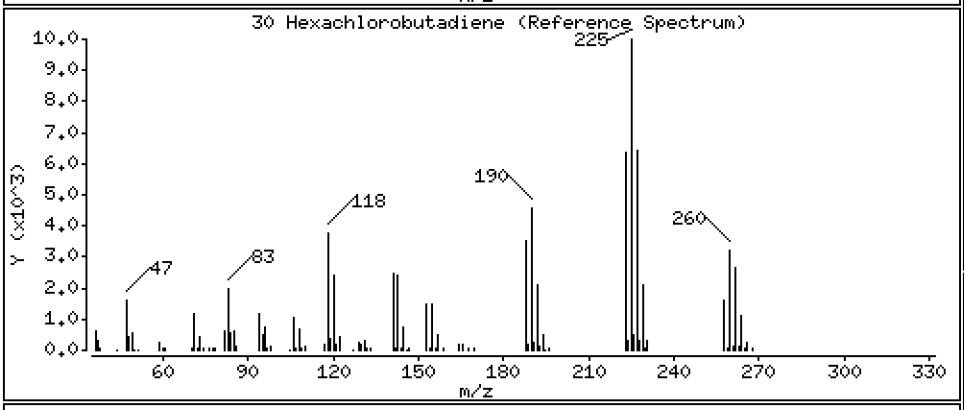
Operator: VTS

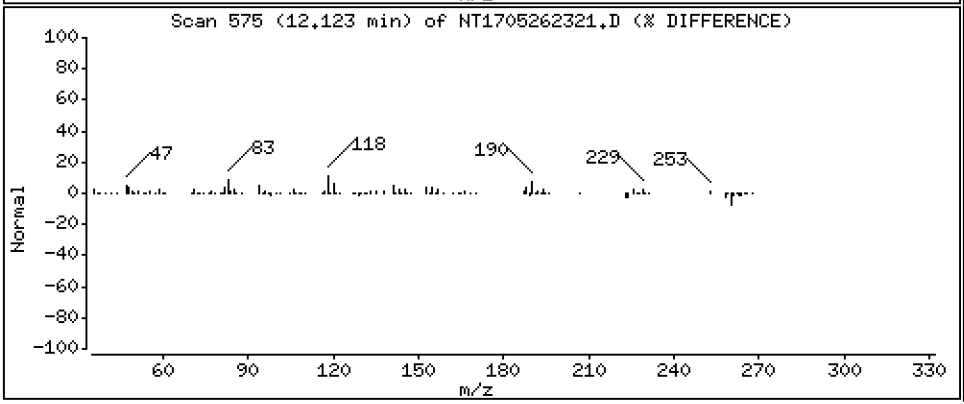
Column phase: ZB-5msi Column diameter: 0.25

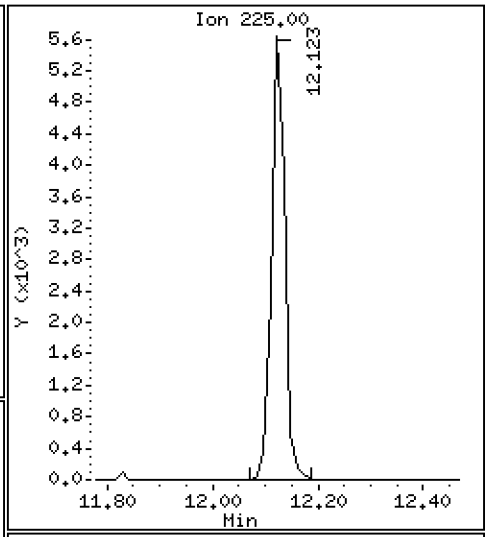
30 Hexachlorobutadiene Concentration: 0.2180 ug/mL

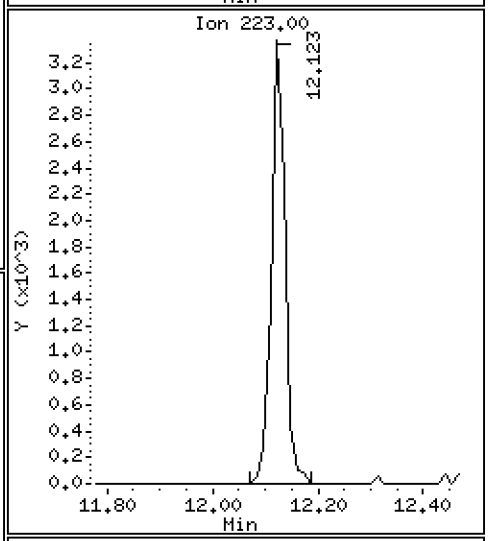


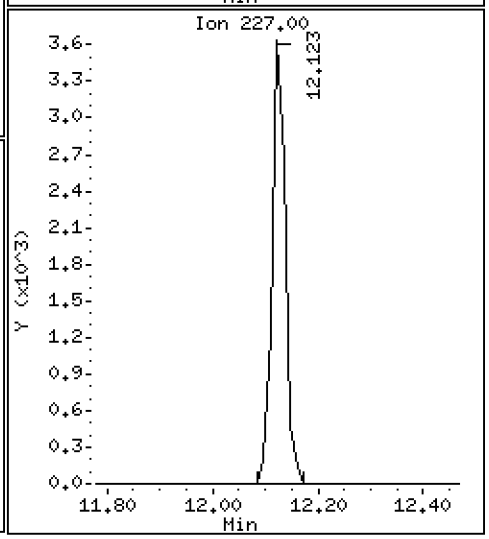












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

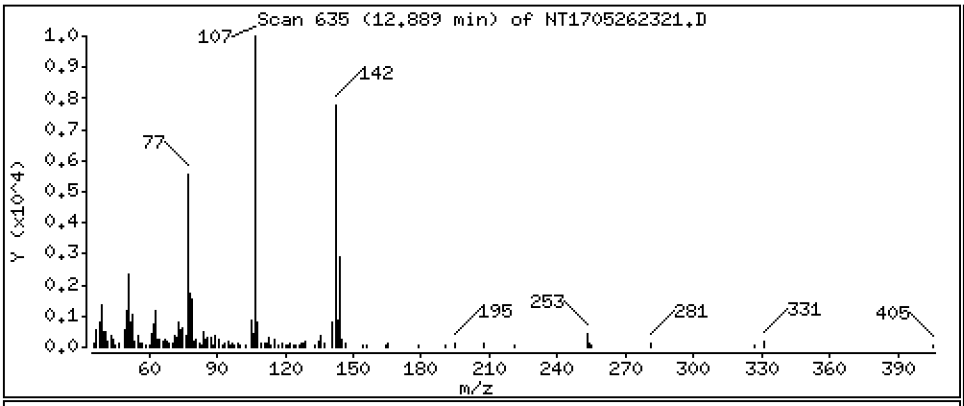
Operator: VTS

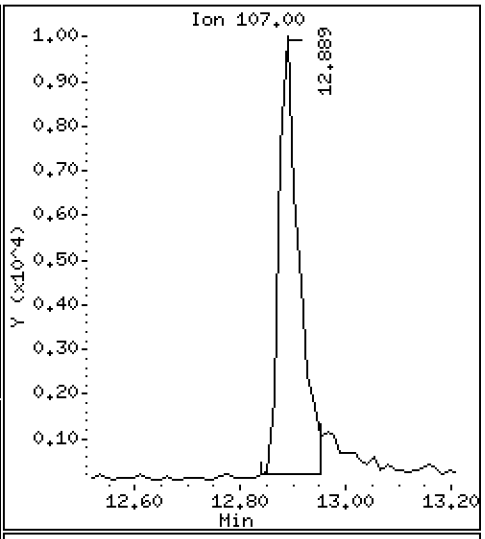
Column phase: ZB-5msi

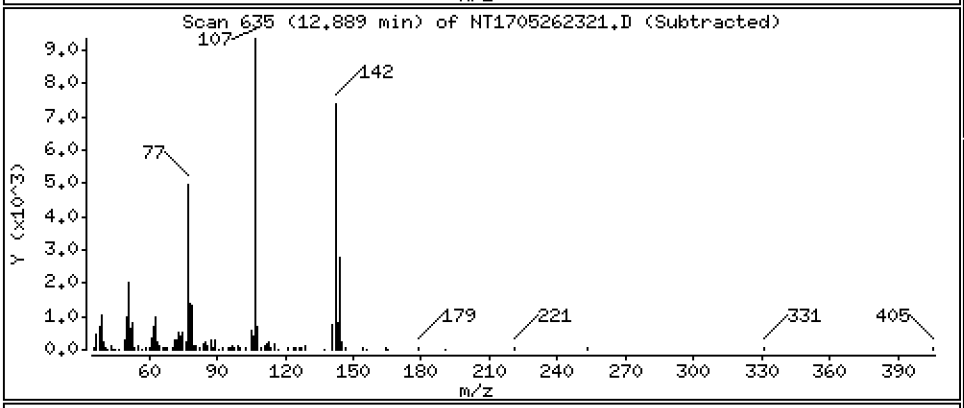
Column diameter: 0.25

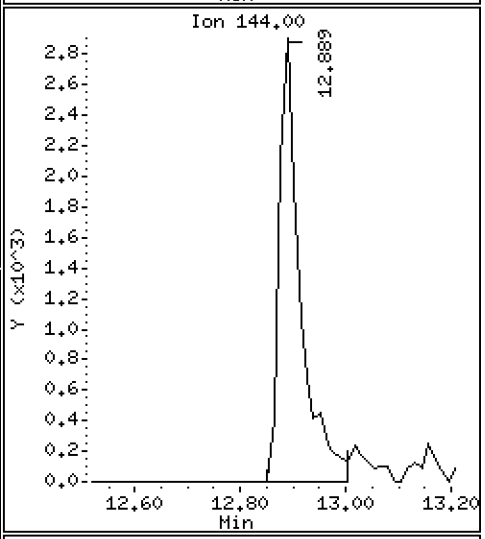
31 4-Chloro-3-methylphenol

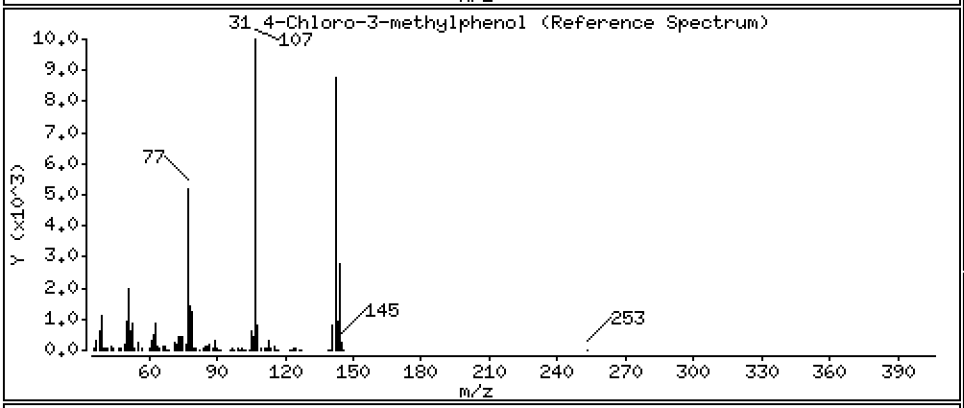
Concentration: 0.2869 ug/mL

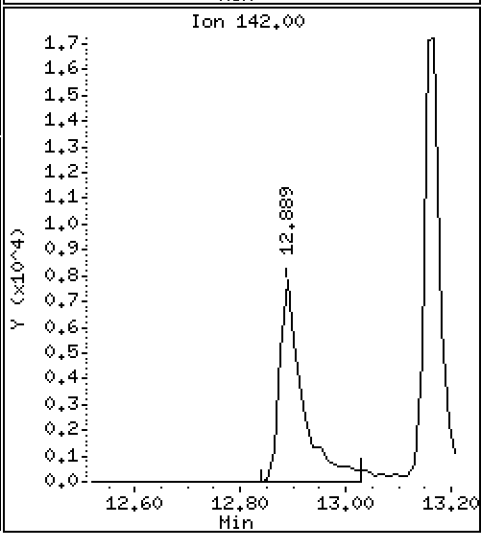


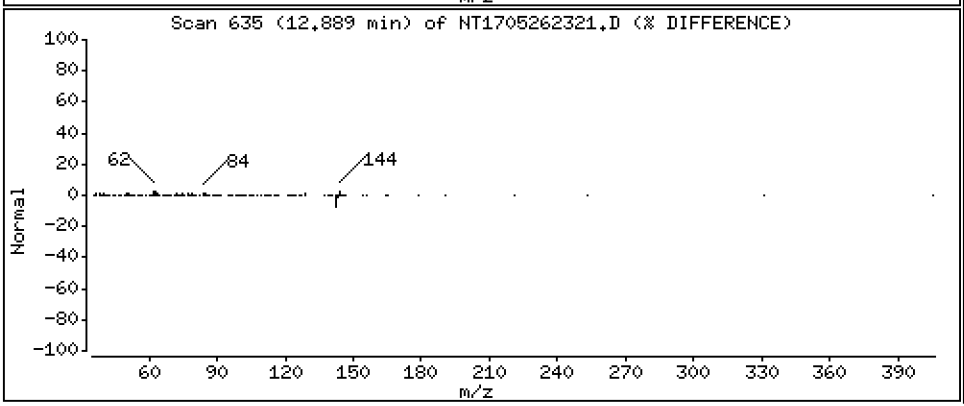












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

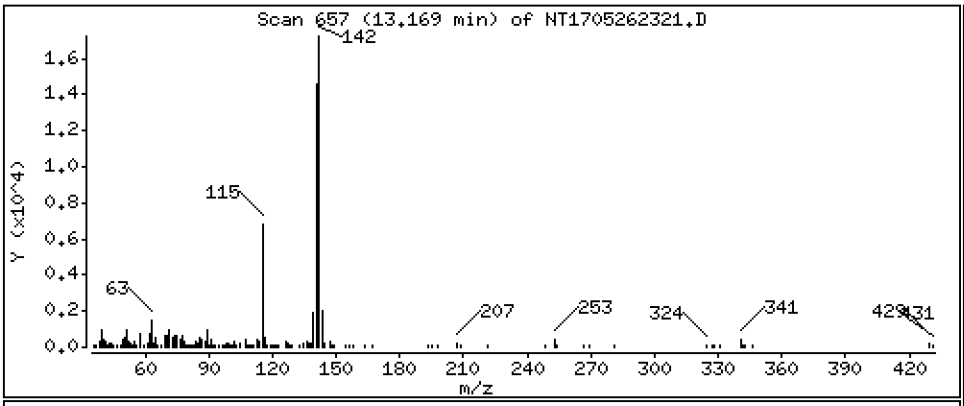
Operator: VTS

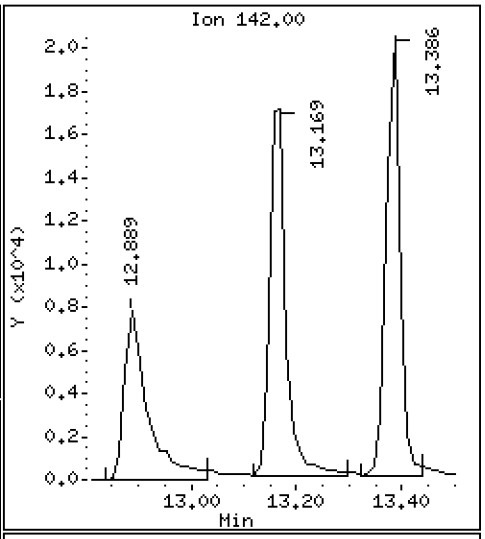
Column phase: ZB-5msi

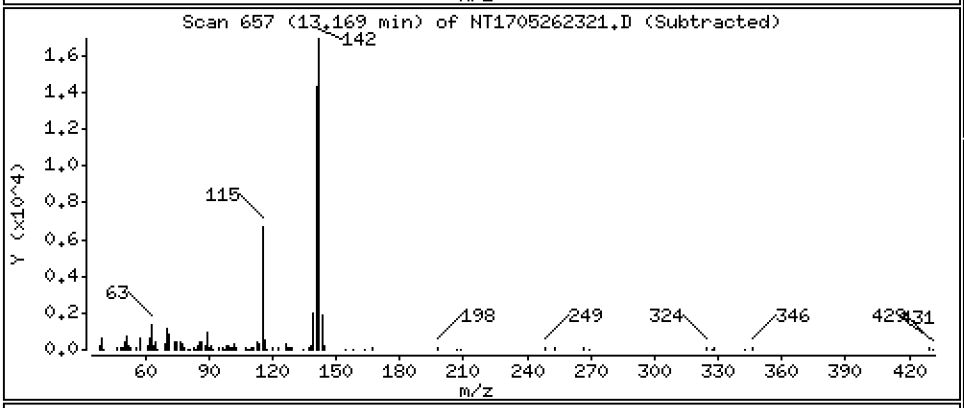
Column diameter: 0.25

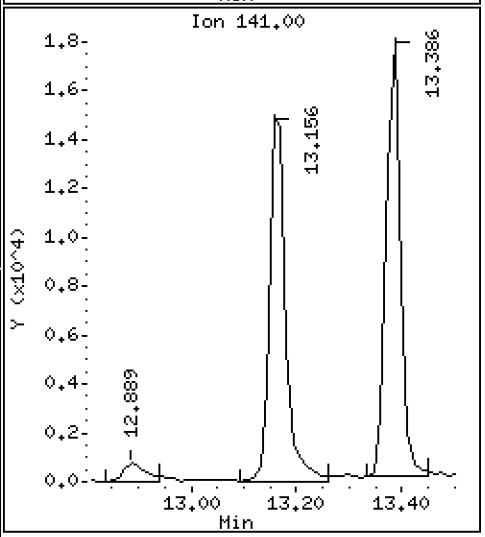
32 2-Methylnaphthalene

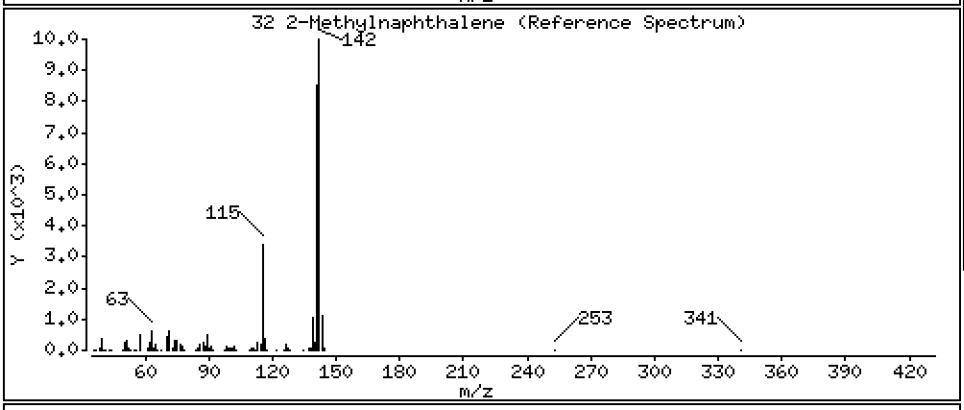
Concentration: 0.1861 ug/mL

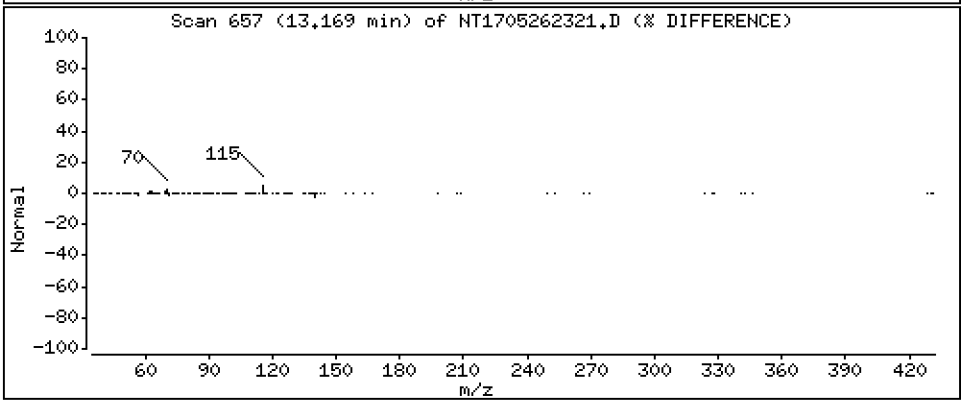












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

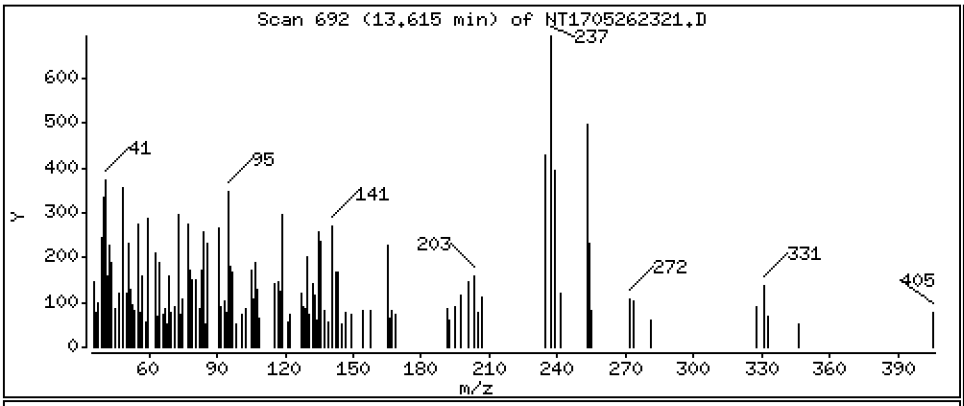
Operator: VTS

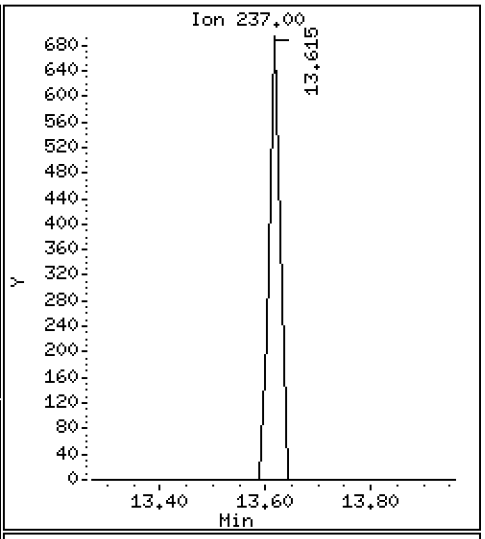
Column phase: ZB-5msi

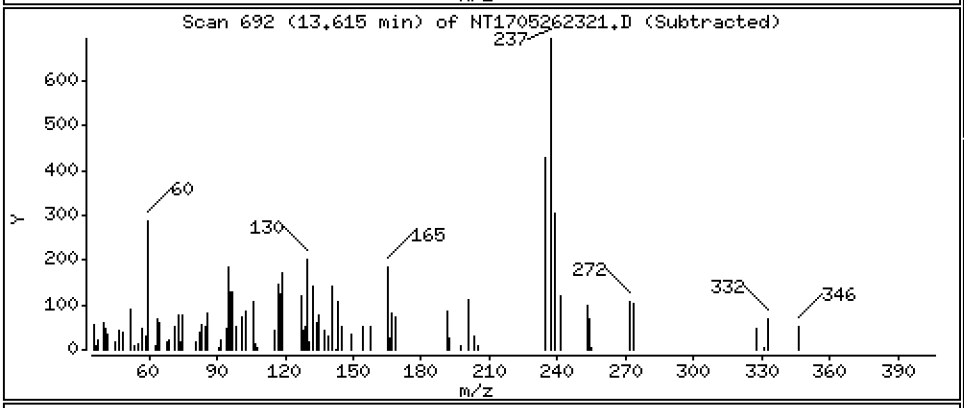
Column diameter: 0.25

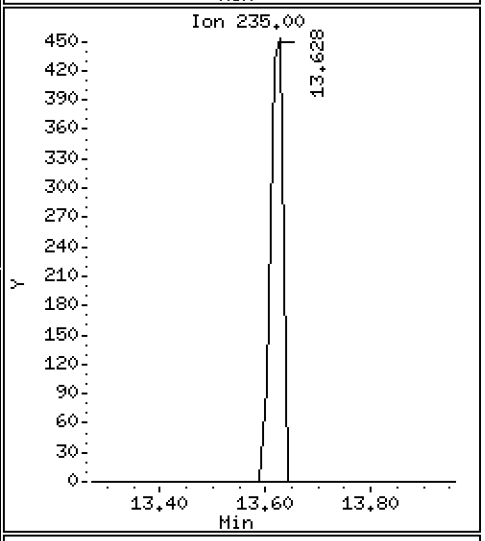
33 Hexachlorocyclopentadiene

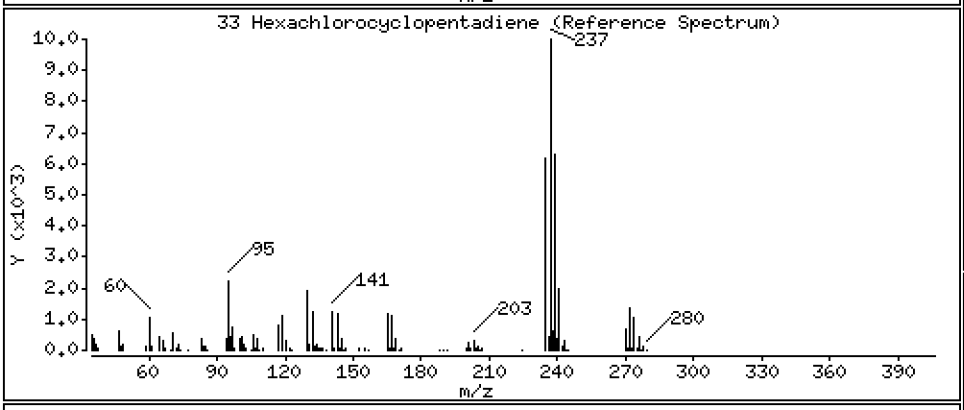
Concentration: 0.01976 ug/mL

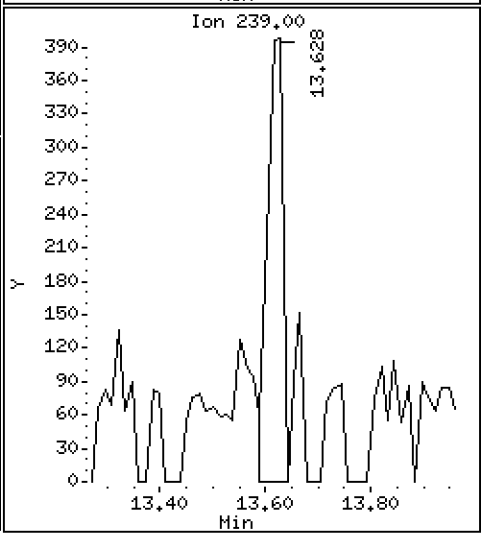


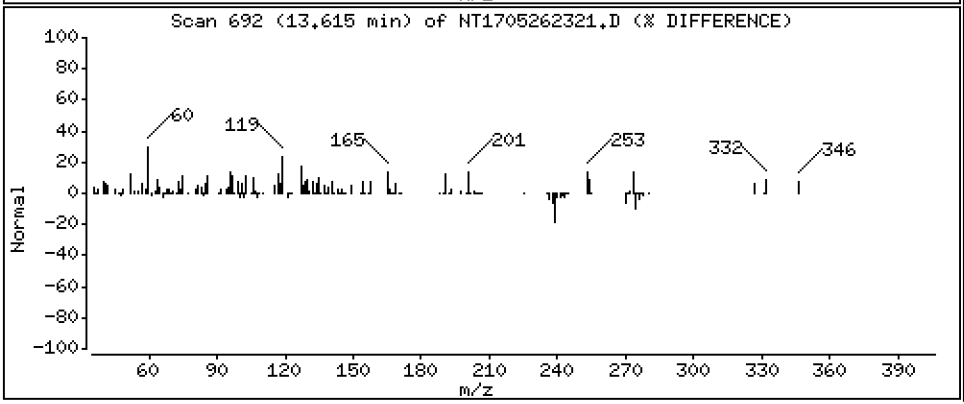












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

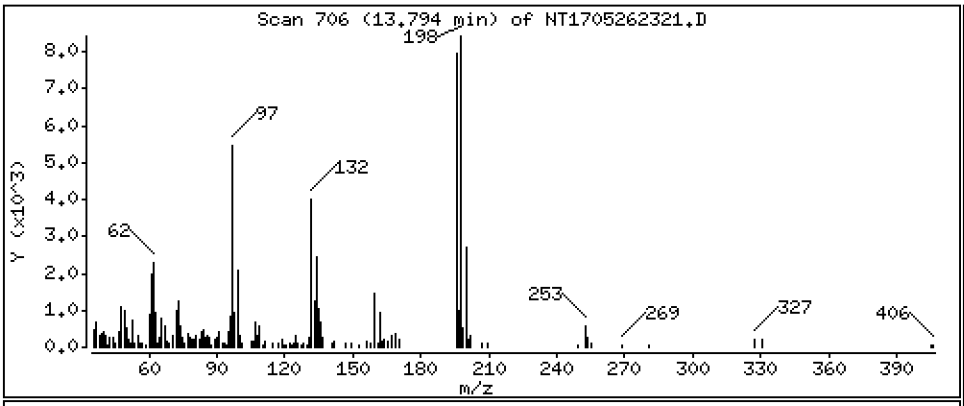
Operator: VTS

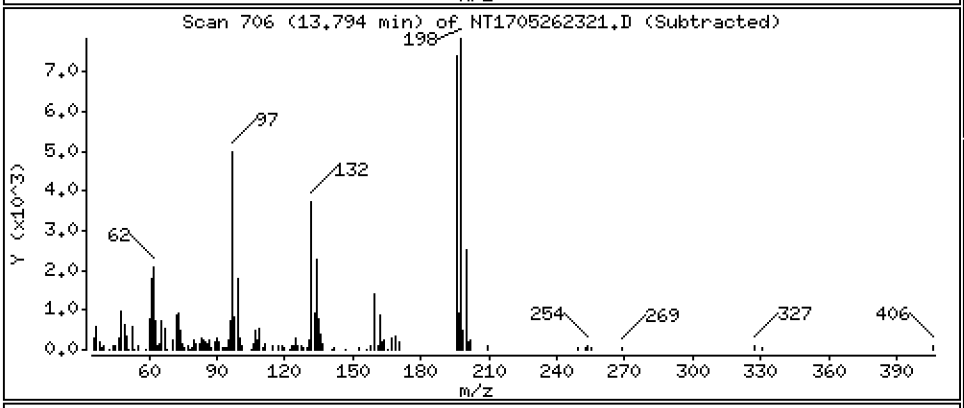
Column phase: ZB-5msi

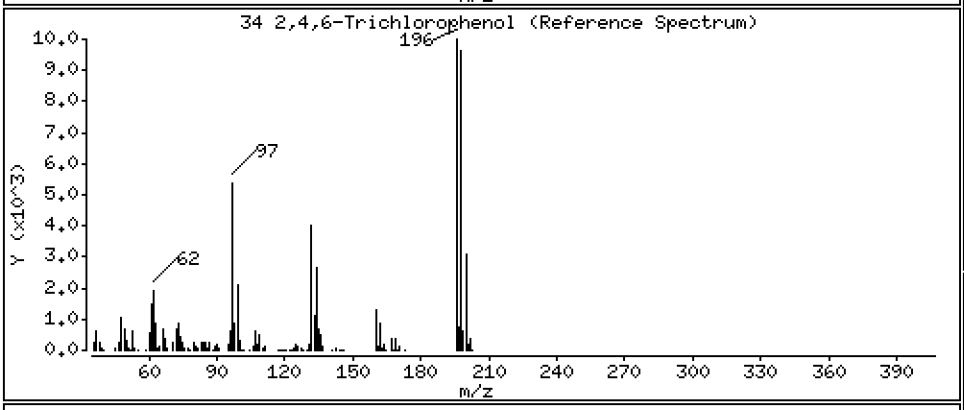
Column diameter: 0.25

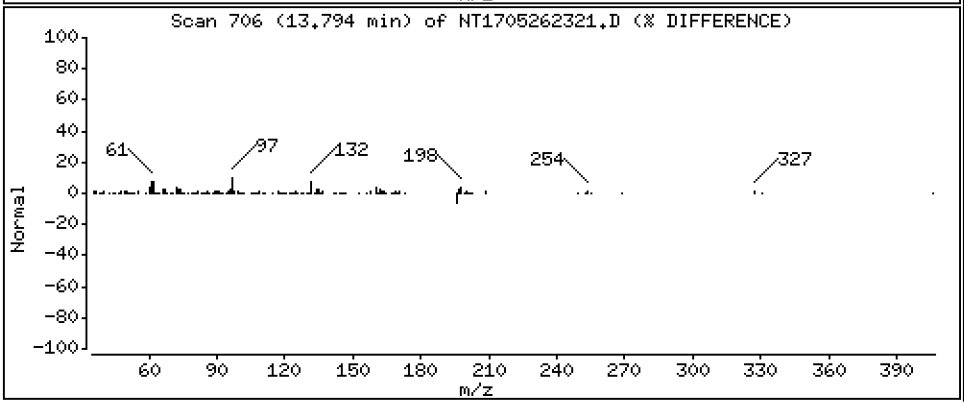
34 2,4,6-Trichlorophenol

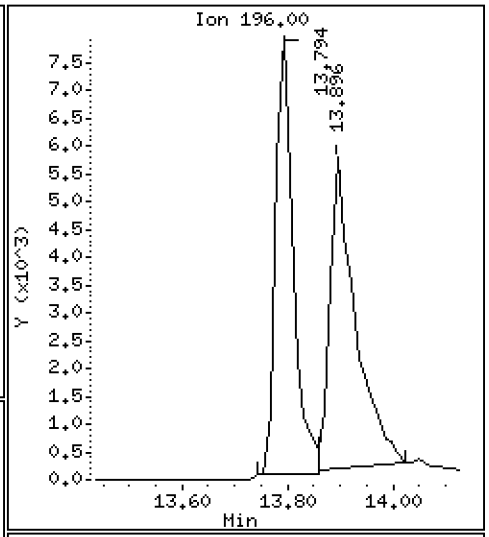
Concentration: 0.3164 ug/mL

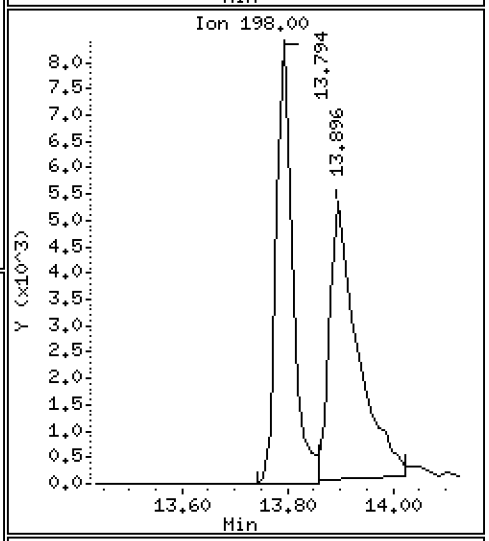


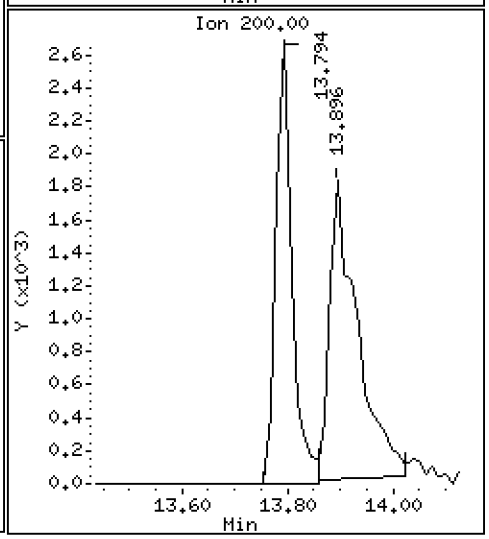












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

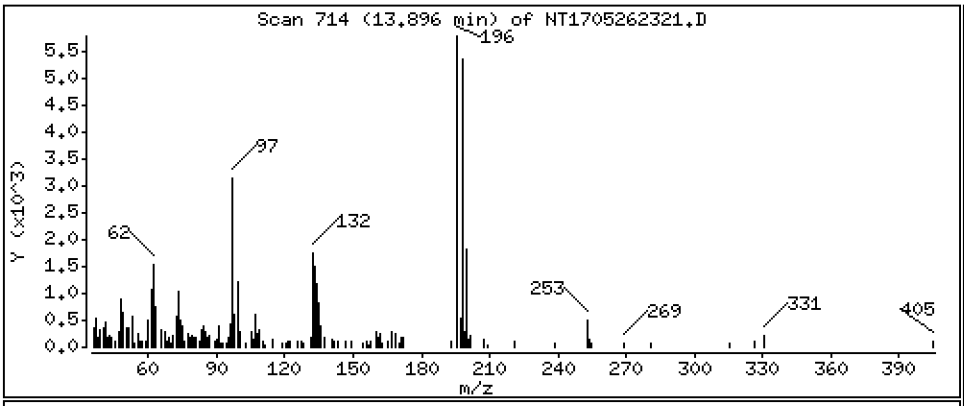
Operator: VTS

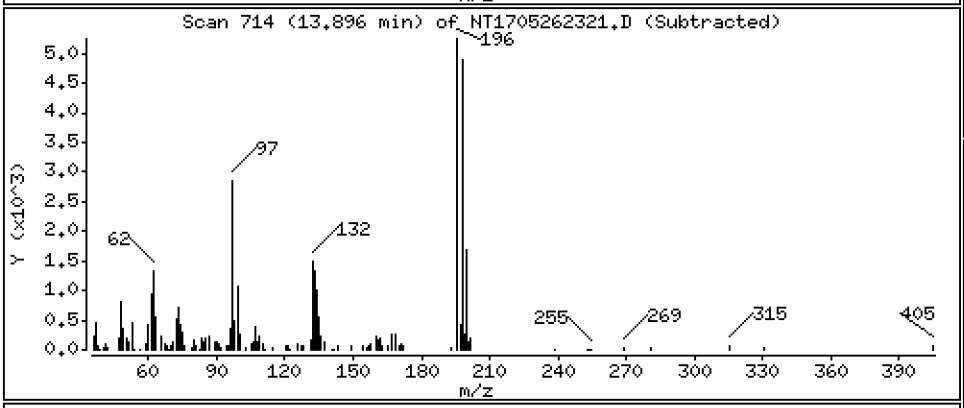
Column phase: ZB-5msi

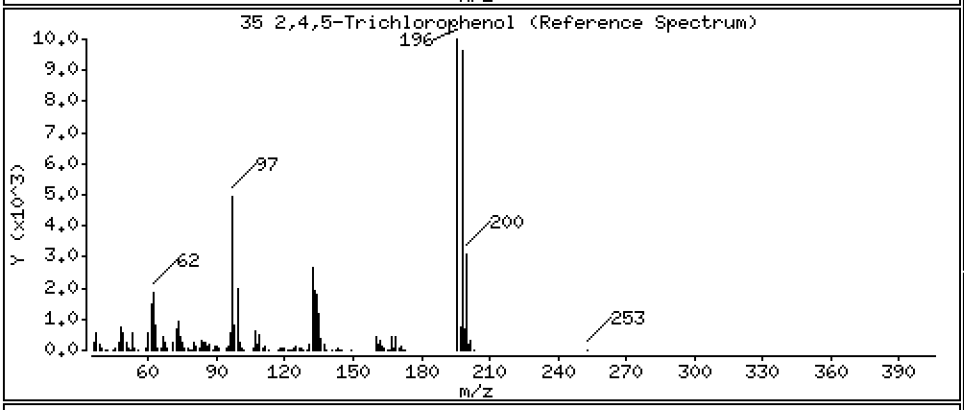
Column diameter: 0.25

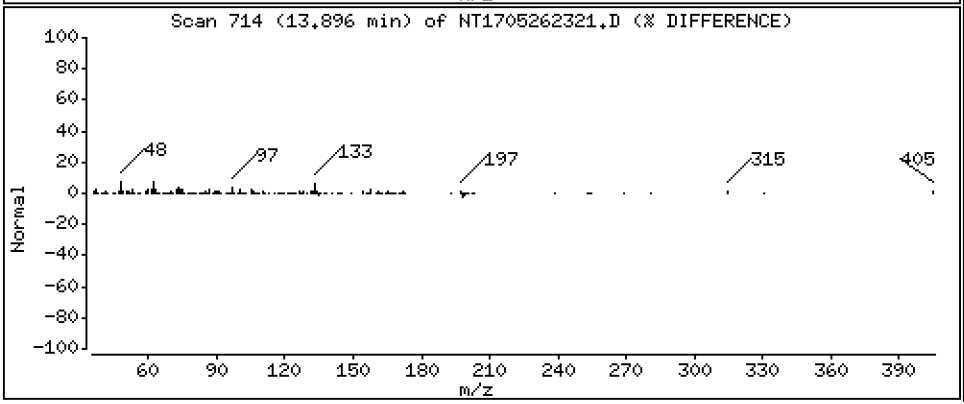
35 2,4,5-Trichlorophenol

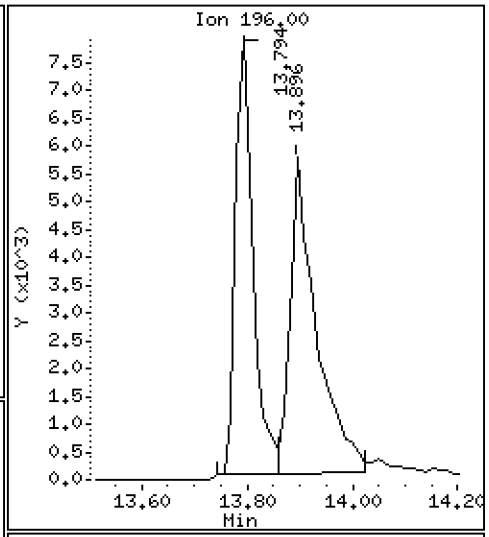
Concentration: 0.3318 ug/mL

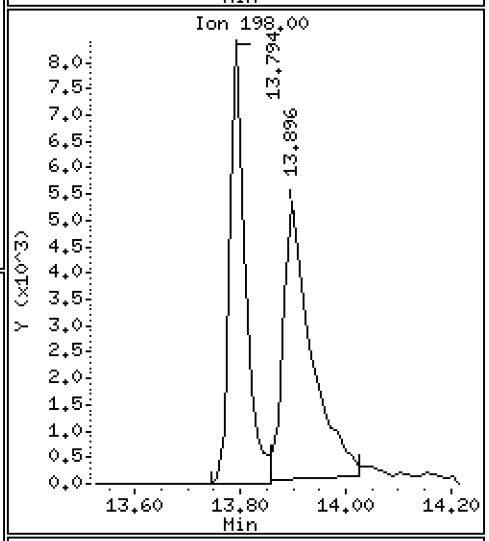


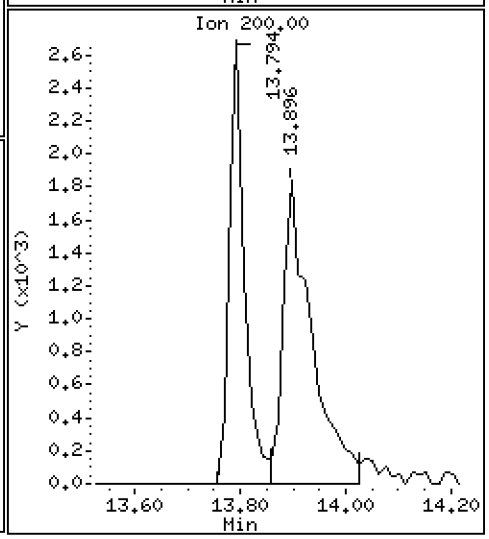












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

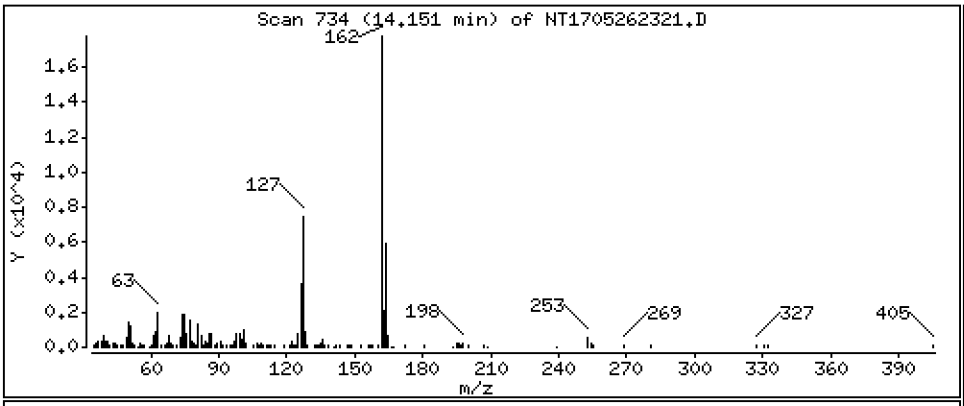
Operator: VTS

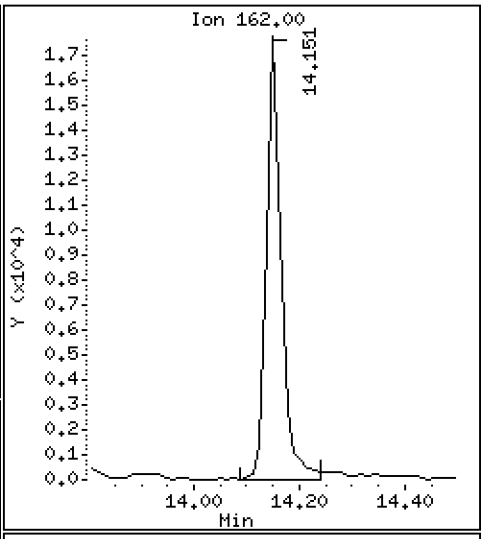
Column phase: ZB-5msi

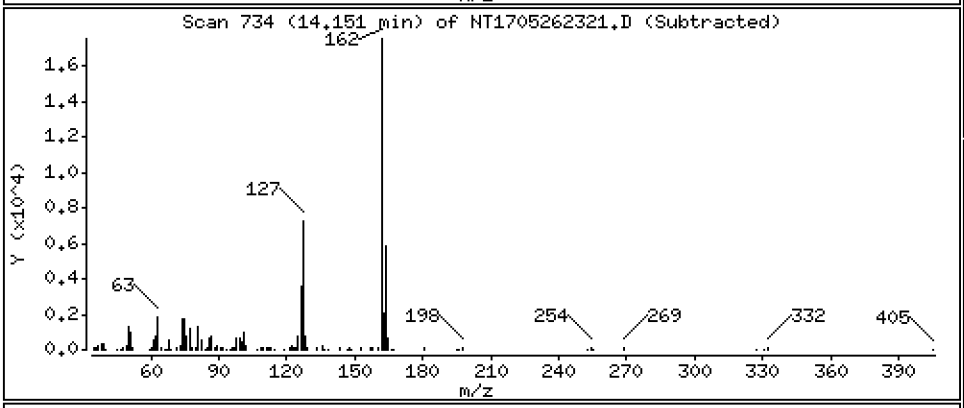
Column diameter: 0.25

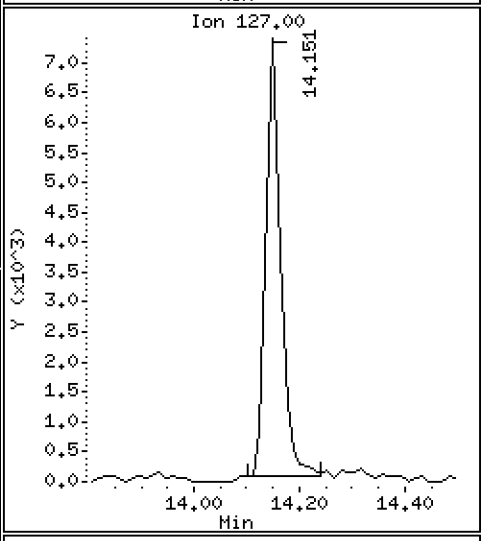
37 2-Chloronaphthalene

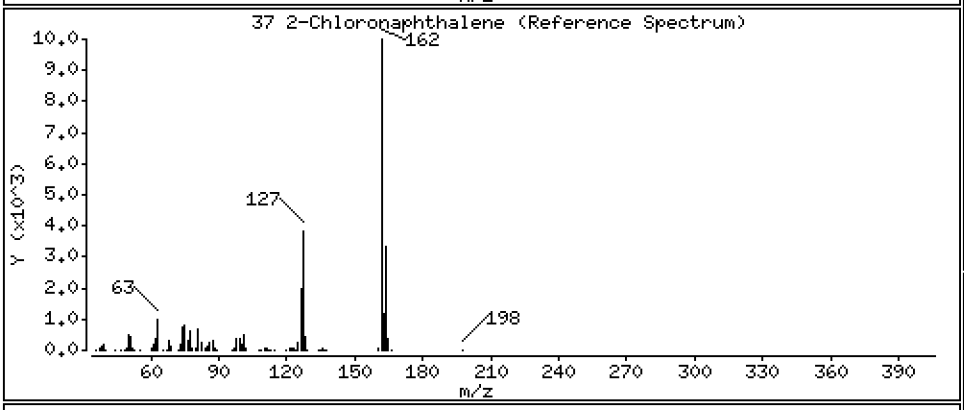
Concentration: 0.1956 ug/mL

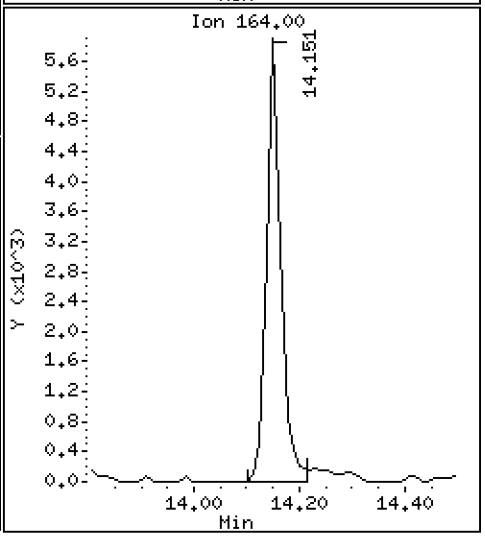


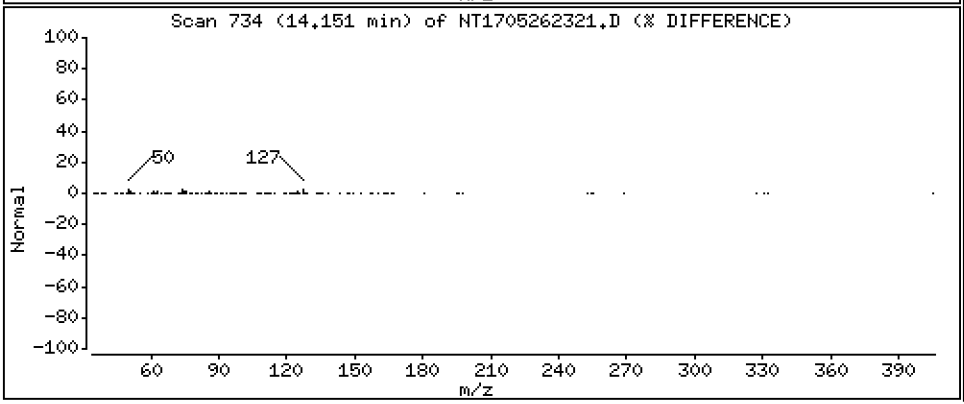












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

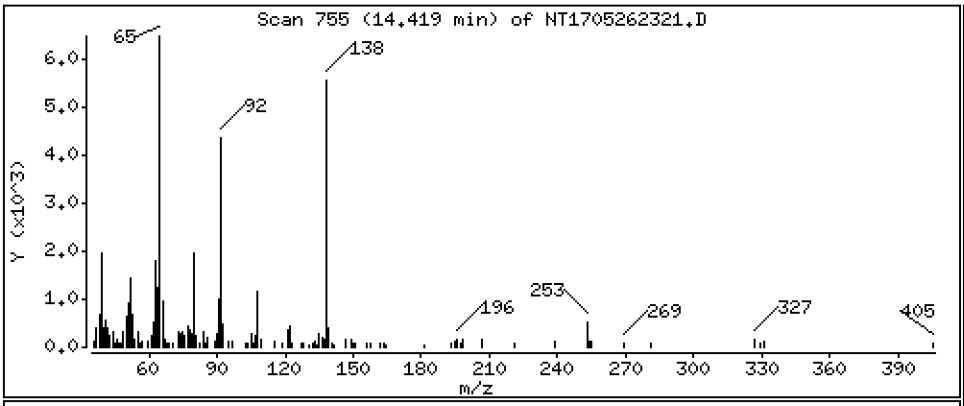
Operator: VTS

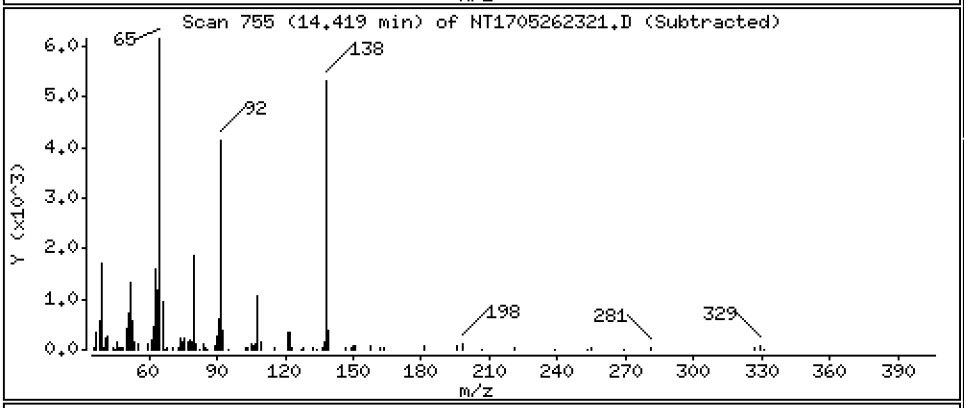
Column phase: ZB-5msi

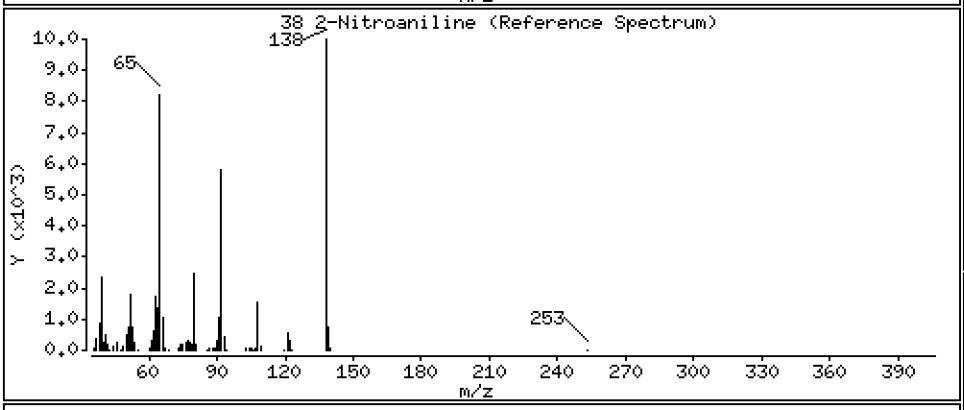
Column diameter: 0.25

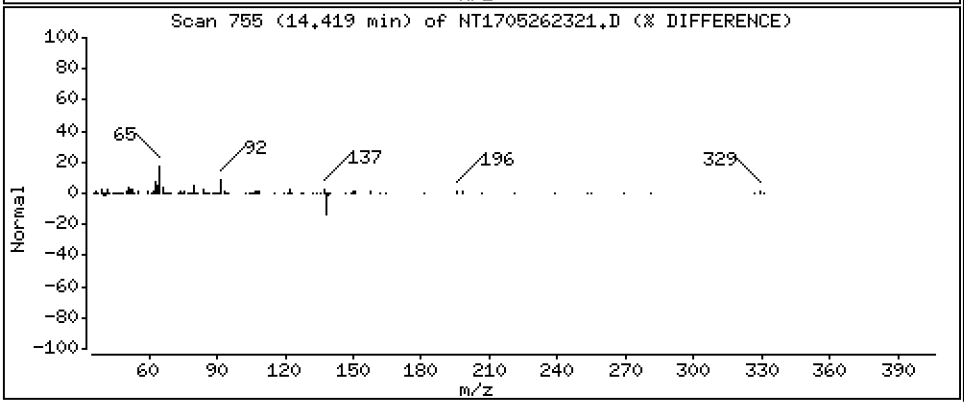
38 2-Nitroaniline

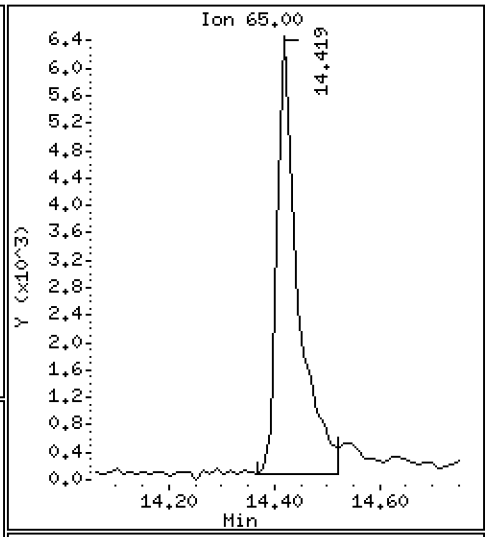
Concentration: 0.3033 ug/mL

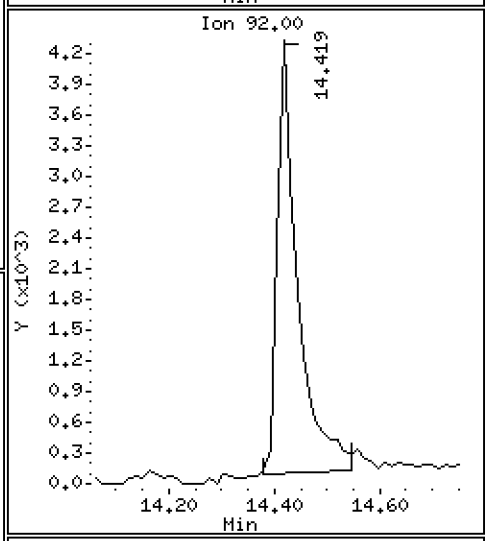


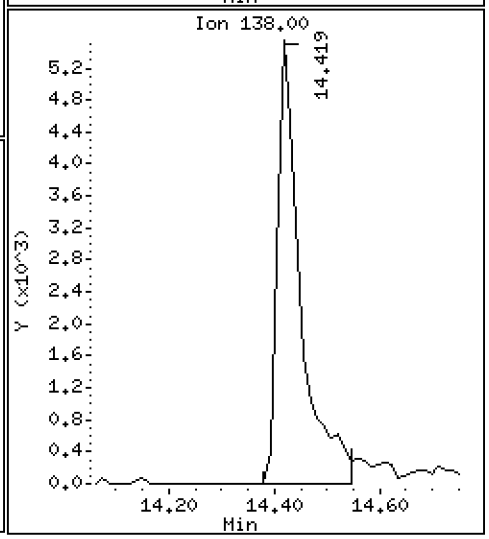












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

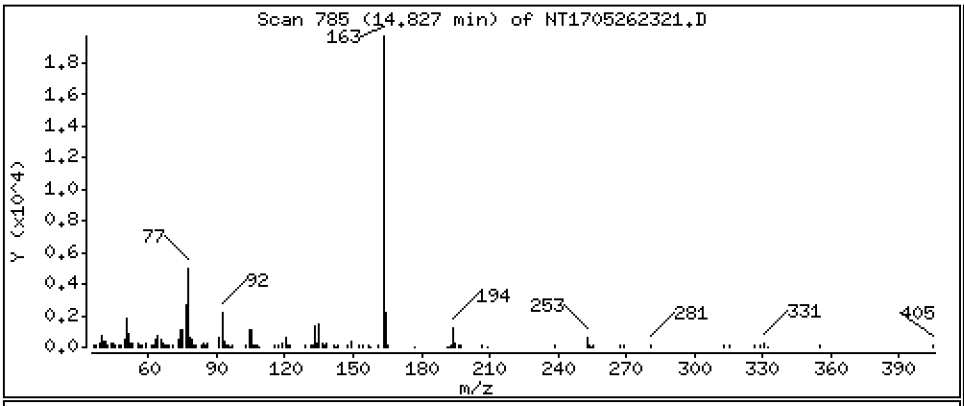
Operator: VTS

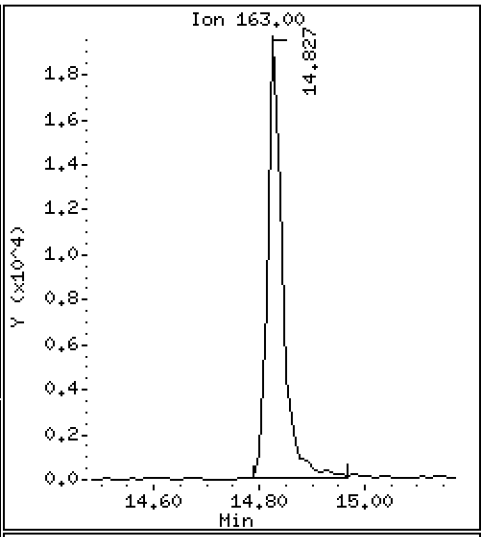
Column phase: ZB-5msi

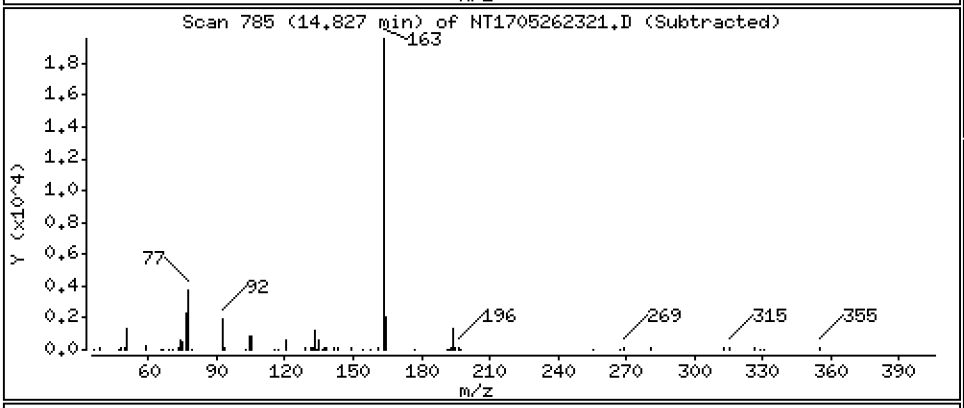
Column diameter: 0.25

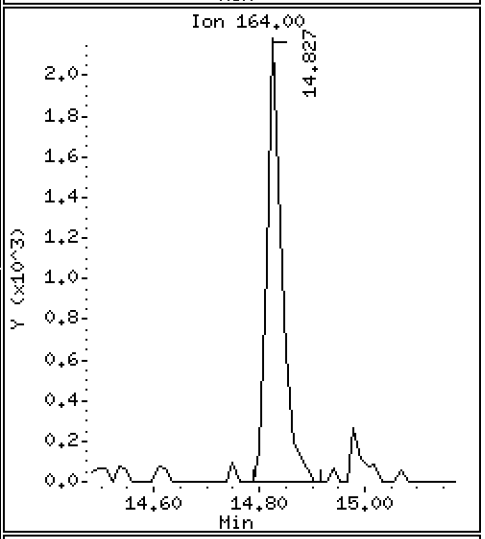
39 Dimethylphthalate

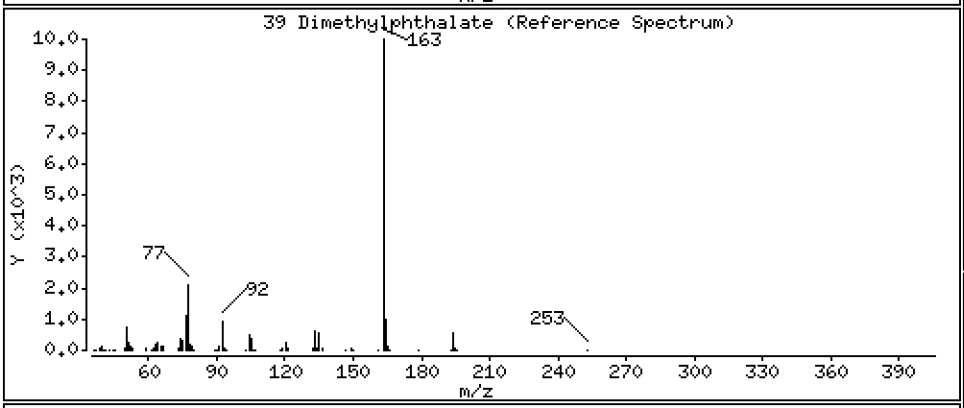
Concentration: 0.2071 ug/mL

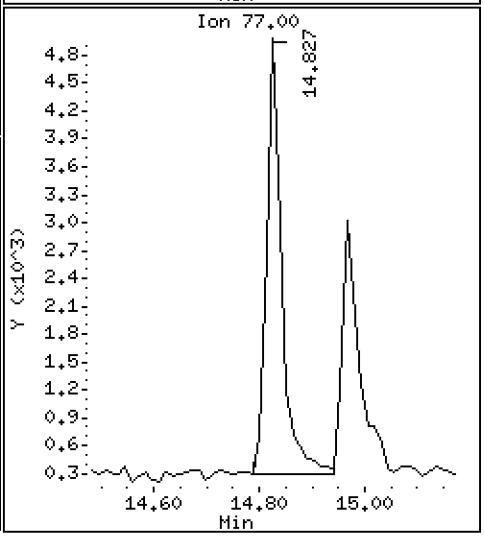


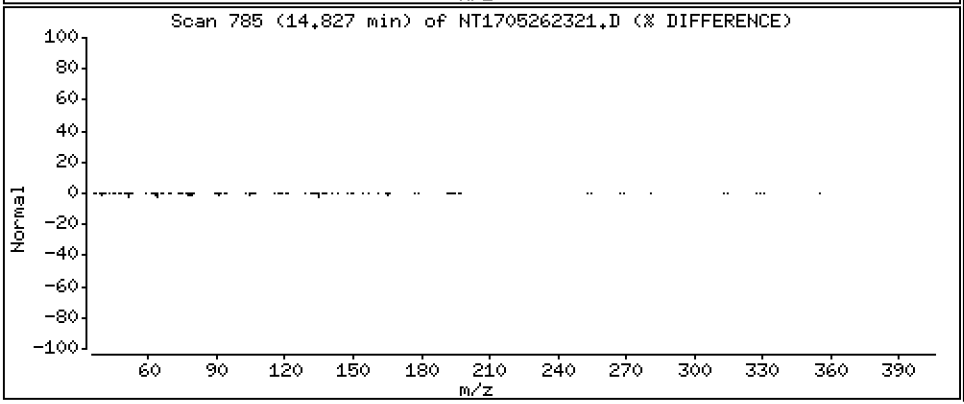












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

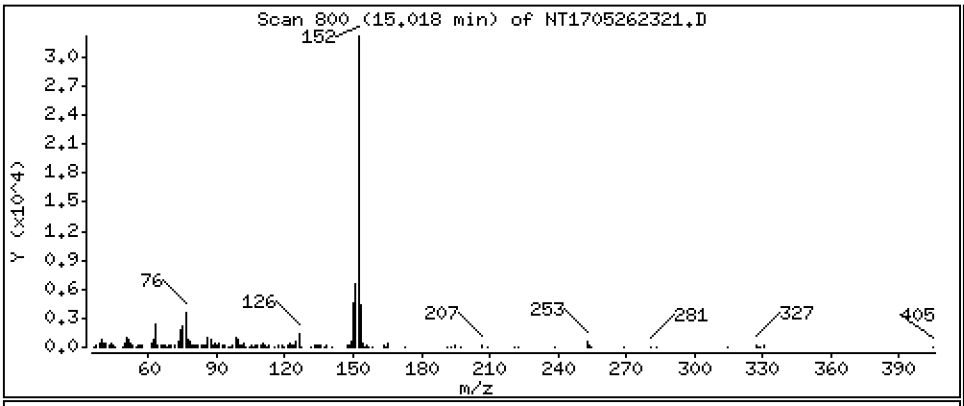
Operator: VTS

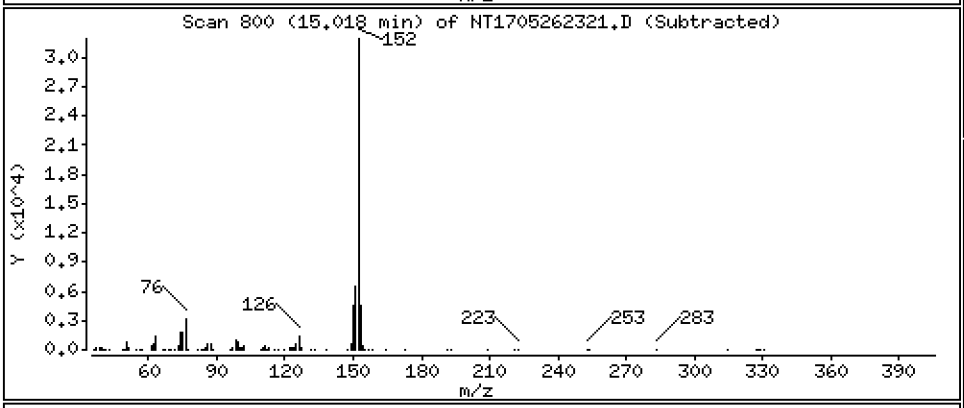
Column phase: ZB-5msi

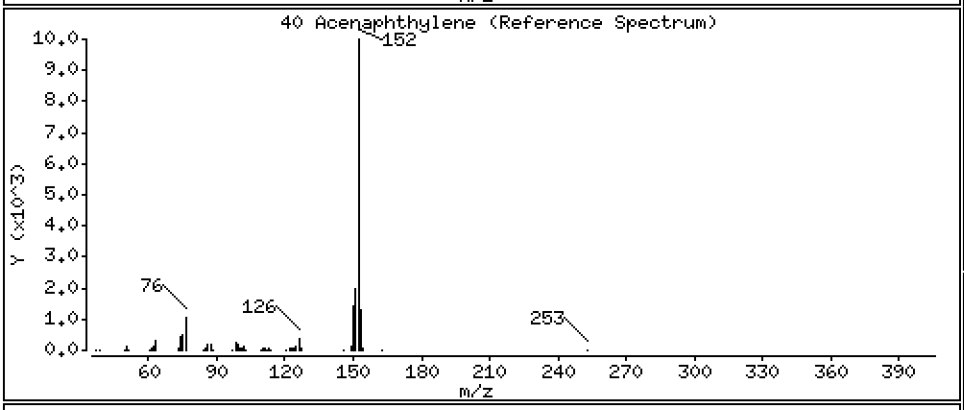
Column diameter: 0.25

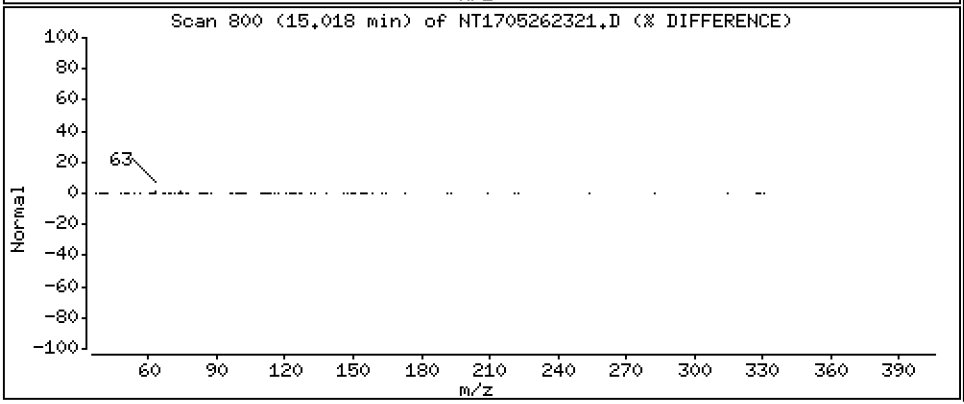
40 Acenaphthylene

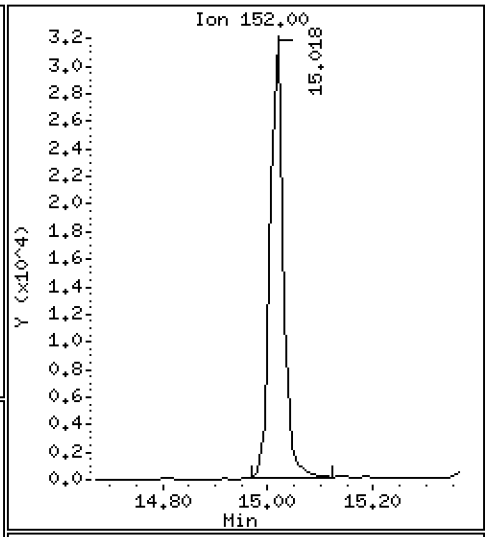
Concentration: 0.2048 ug/mL

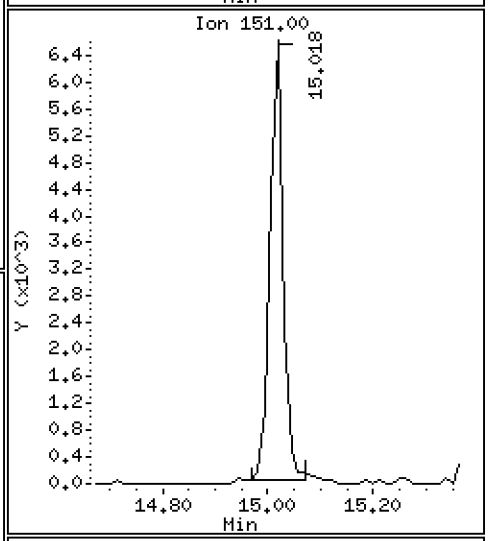


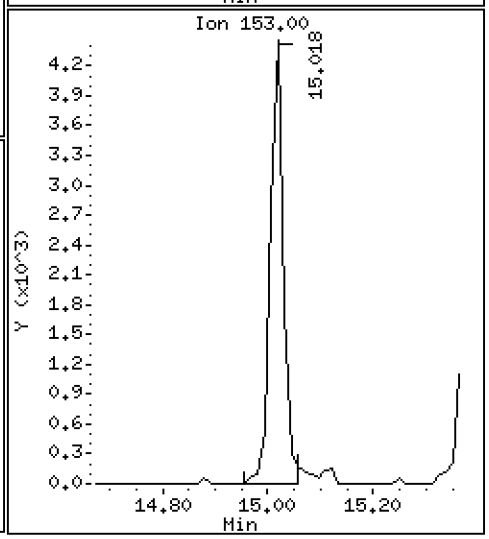












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

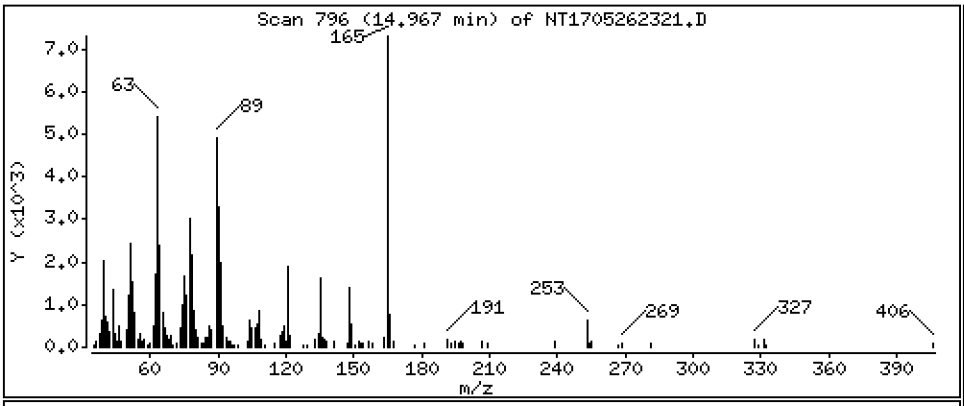
Operator: VTS

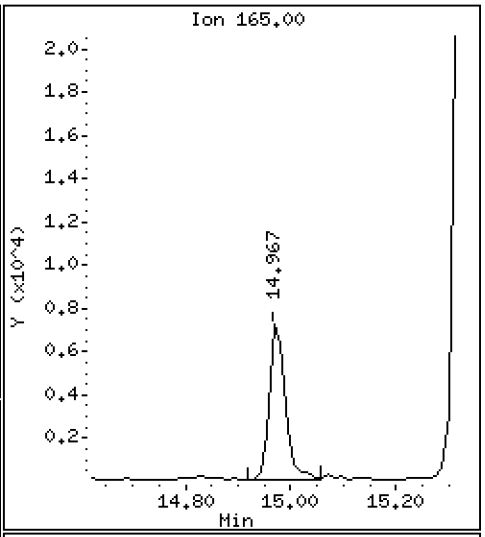
Column phase: ZB-5msi

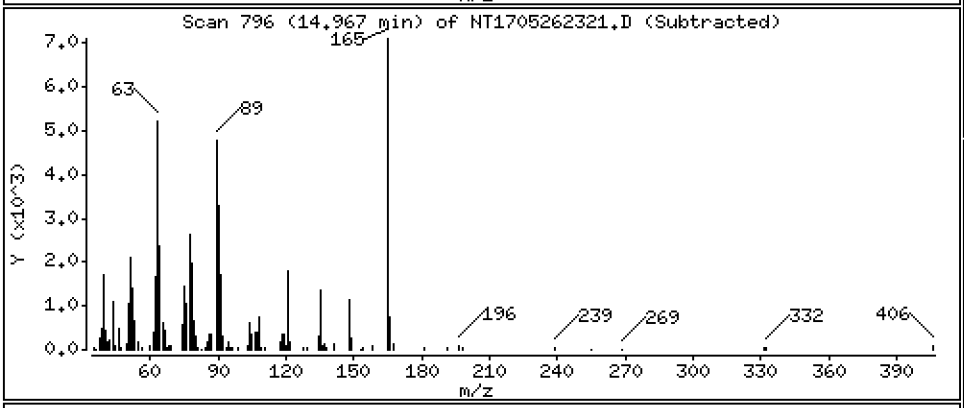
Column diameter: 0.25

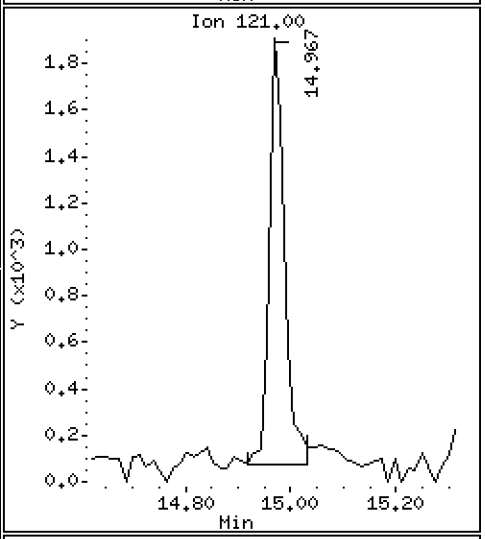
41 2,6-Dinitrotoluene

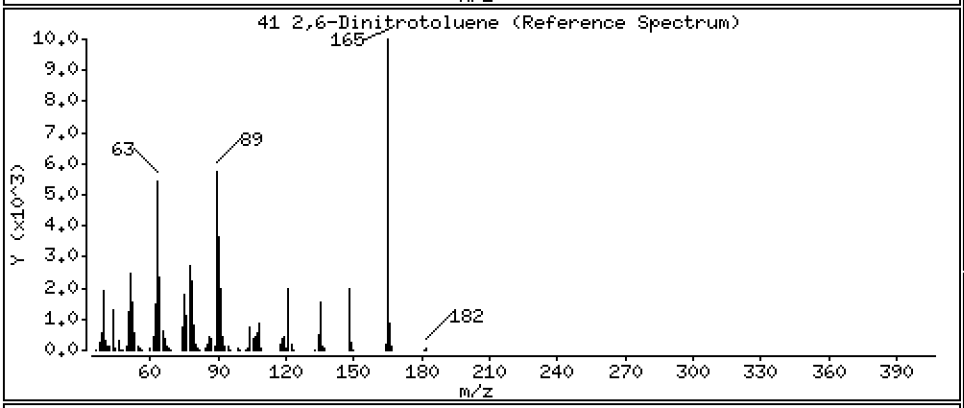
Concentration: 0.3456 ug/mL

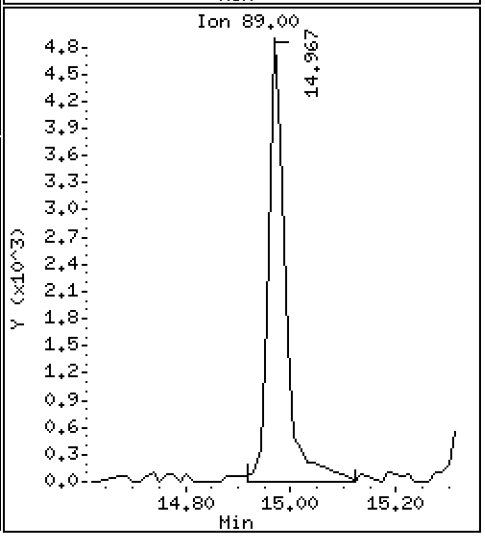


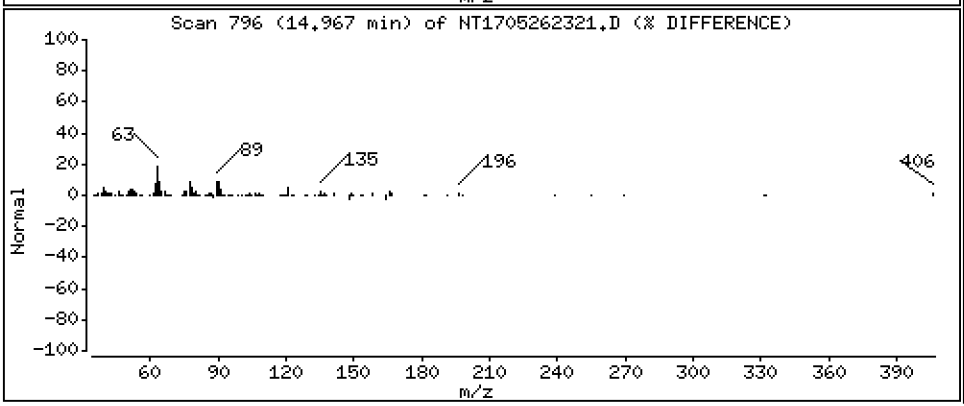












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

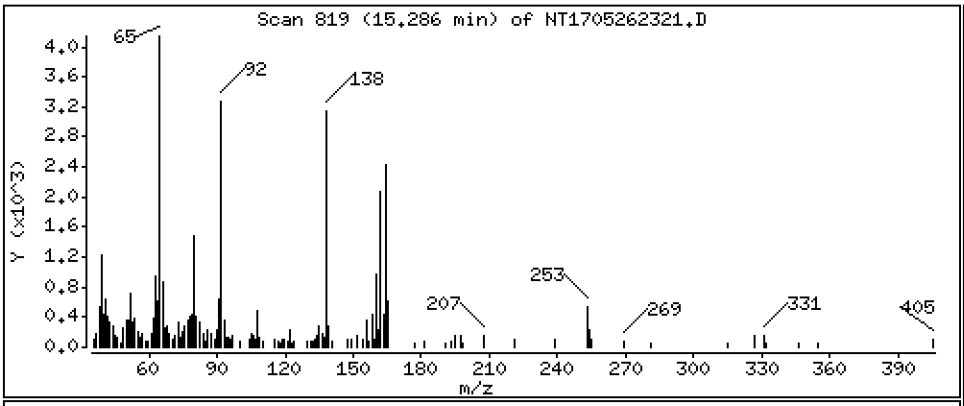
Operator: VTS

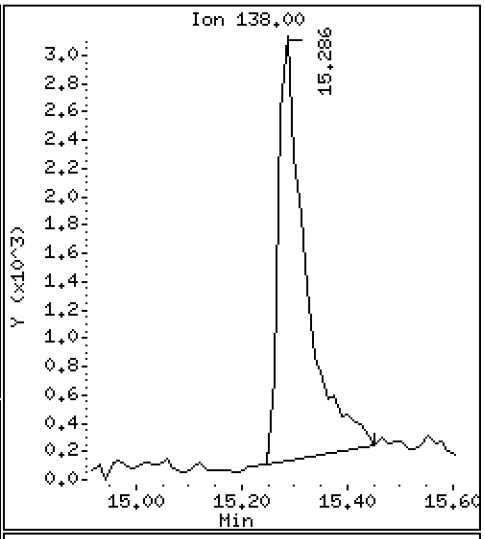
Column phase: ZB-5msi

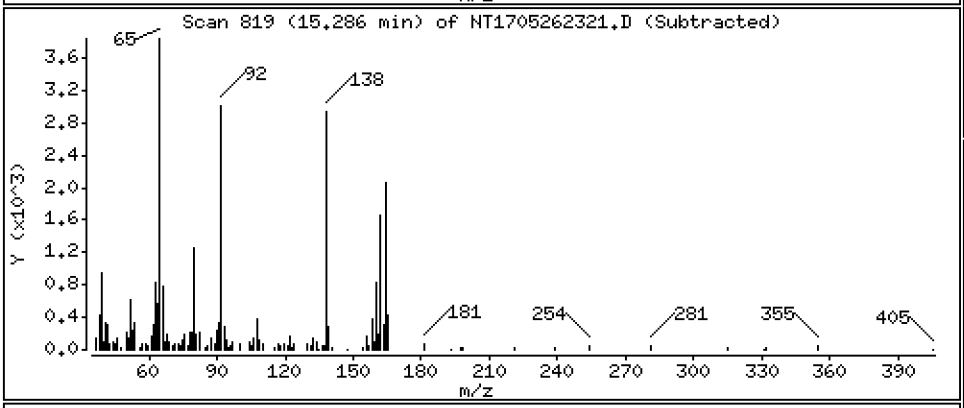
Column diameter: 0.25

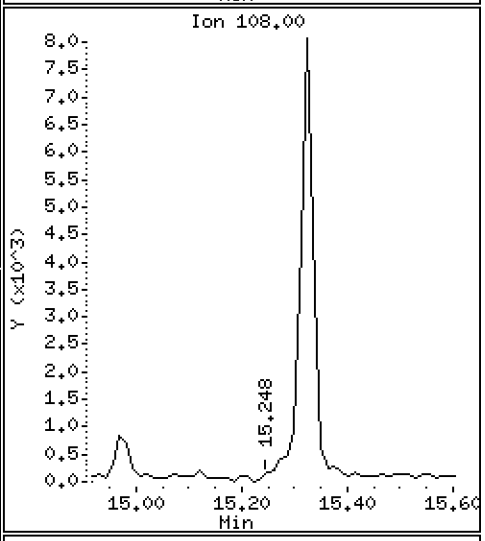
43 3-Nitroaniline

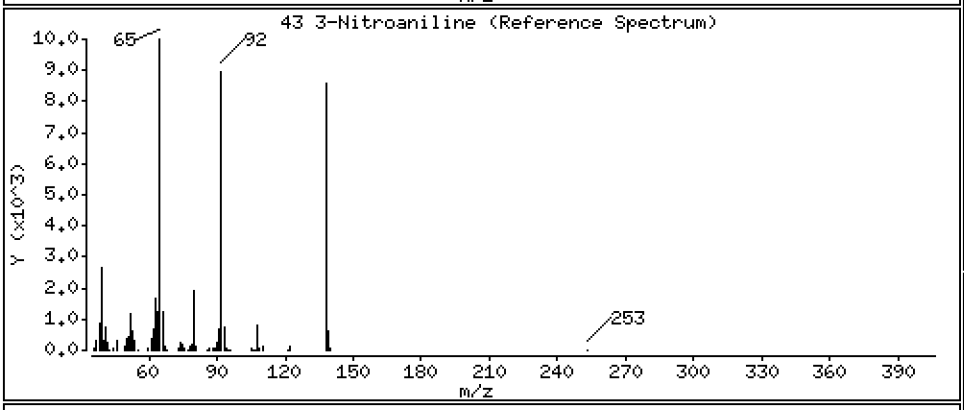
Concentration: 0.2660 ug/mL

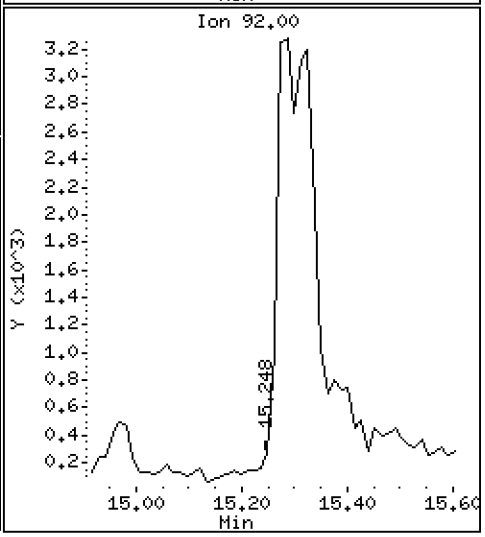


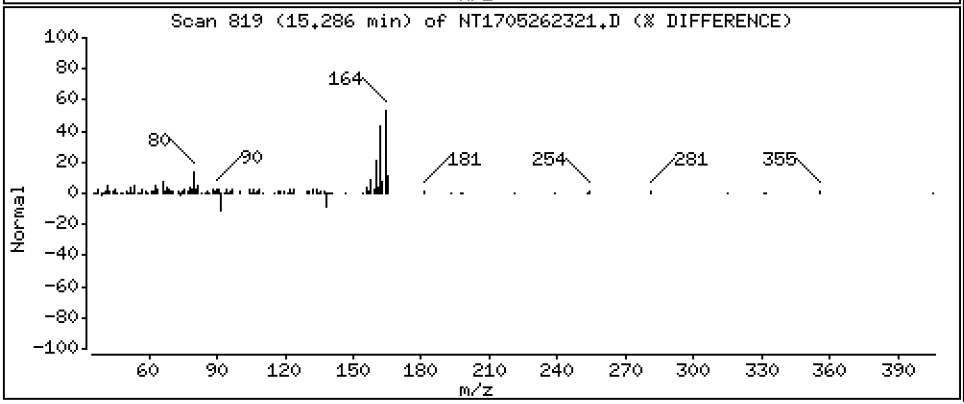












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

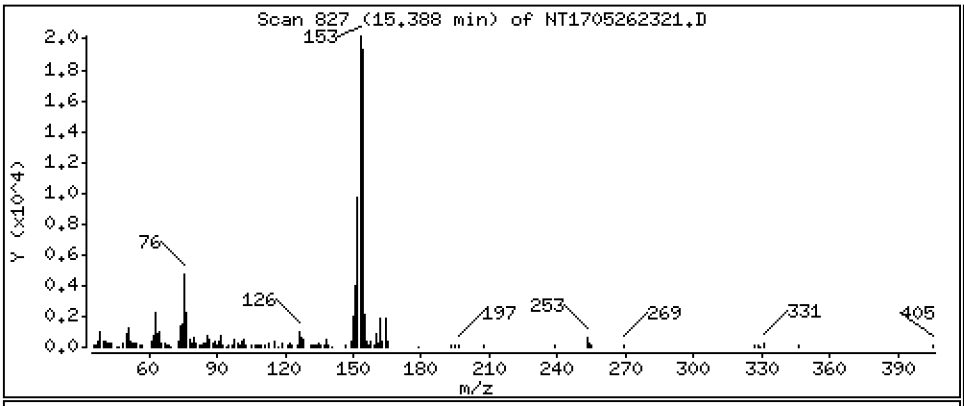
Operator: VTS

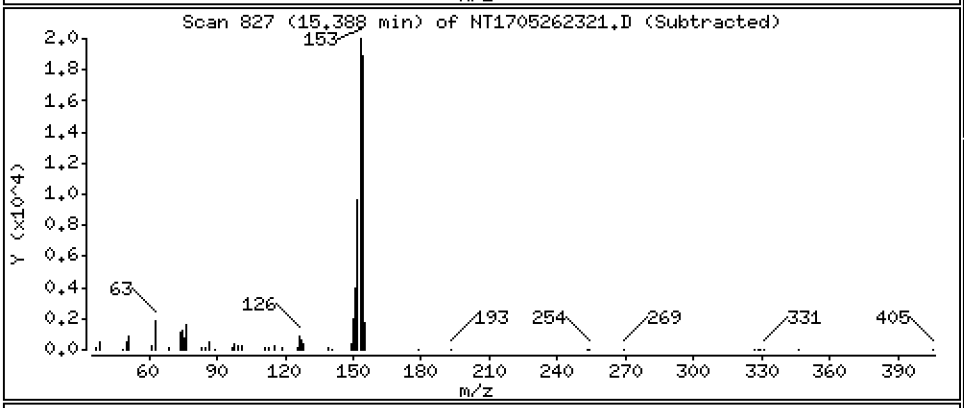
Column phase: ZB-5msi

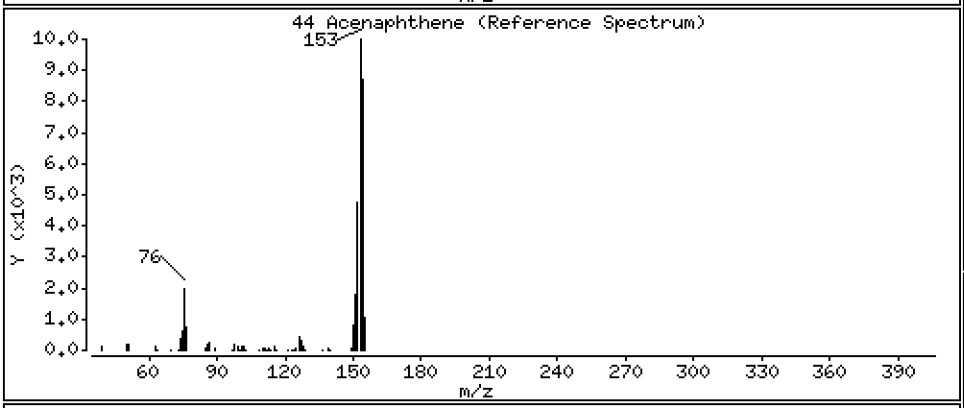
Column diameter: 0.25

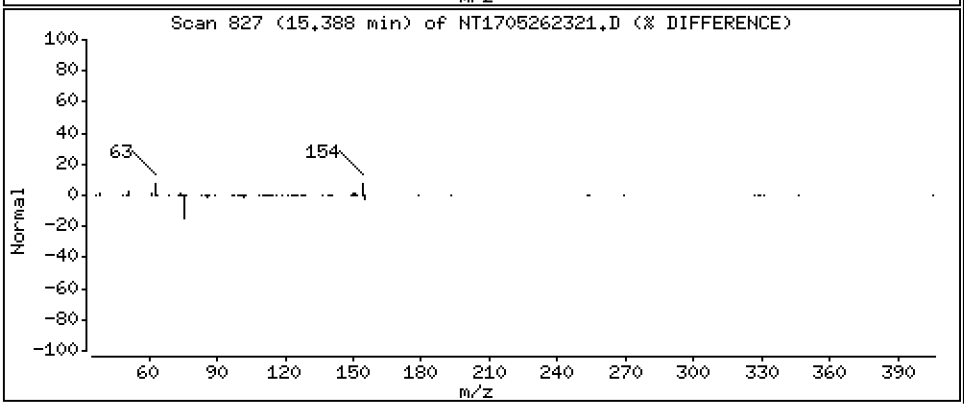
44 Acenaphthene

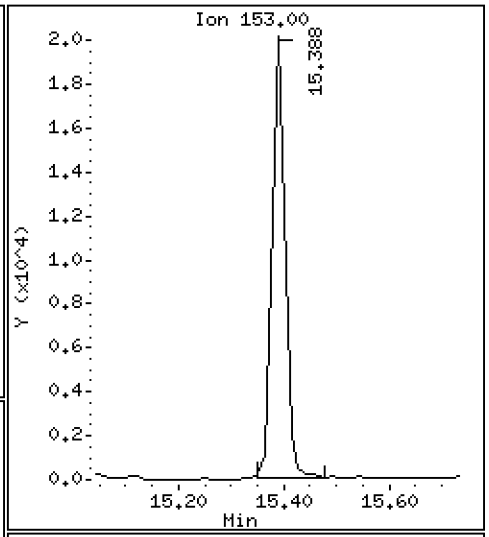
Concentration: 0.1994 ug/mL

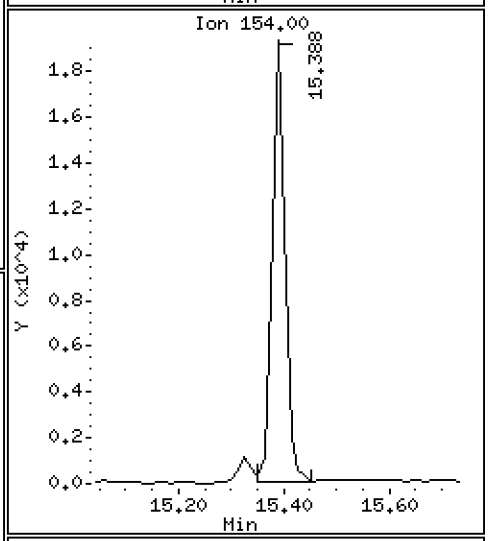


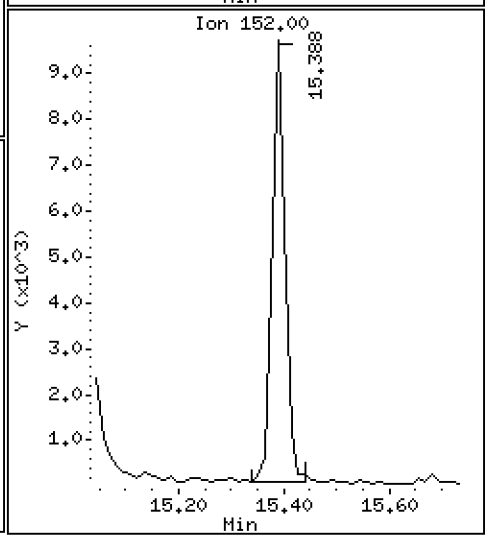












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

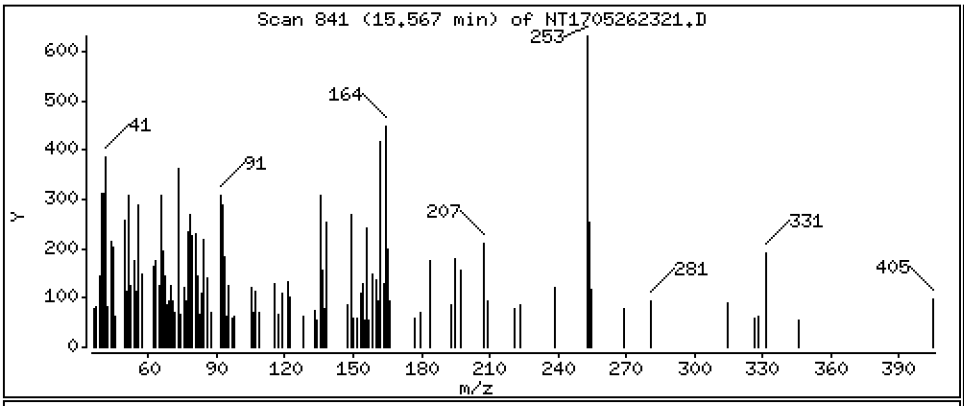
Operator: VTS

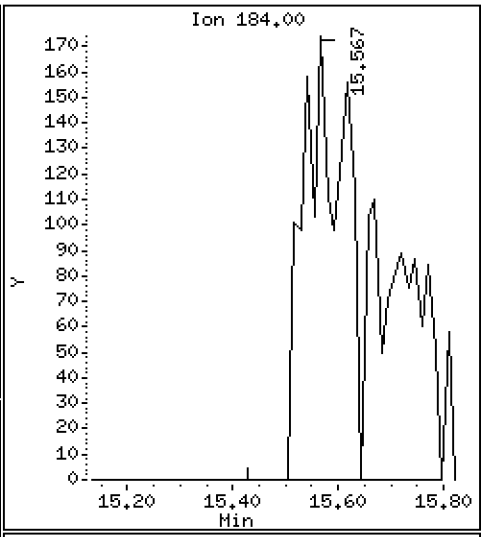
Column phase: ZB-5msi

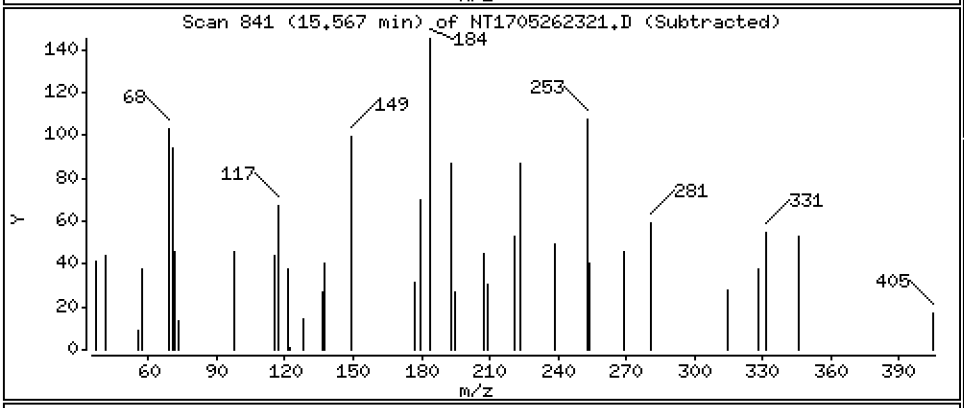
Column diameter: 0.25

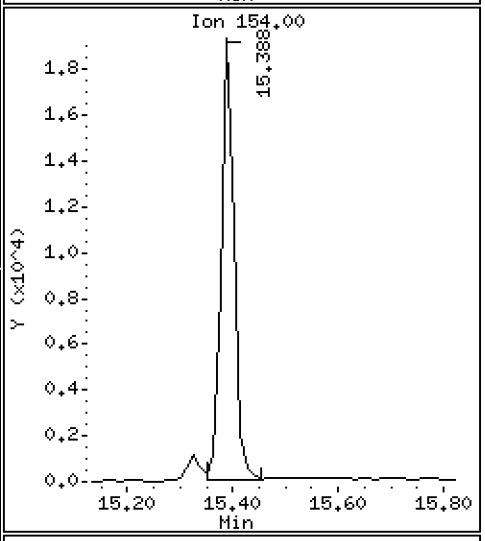
45 2,4-Dinitrophenol

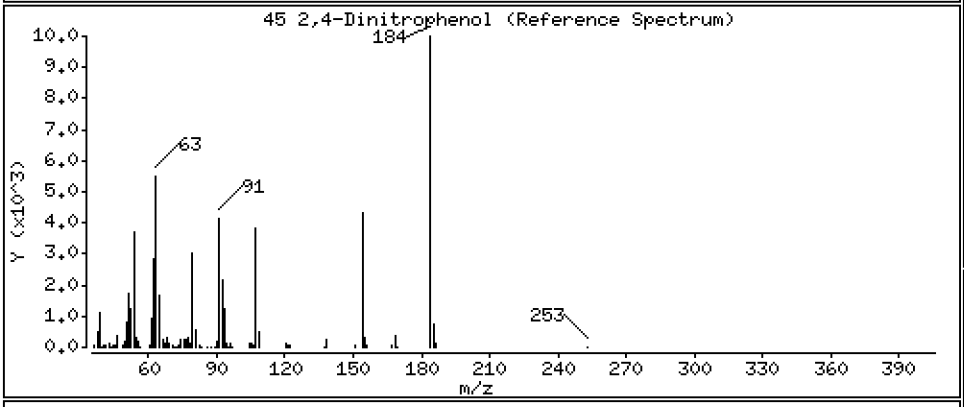
Concentration: 0.06089 ug/mL

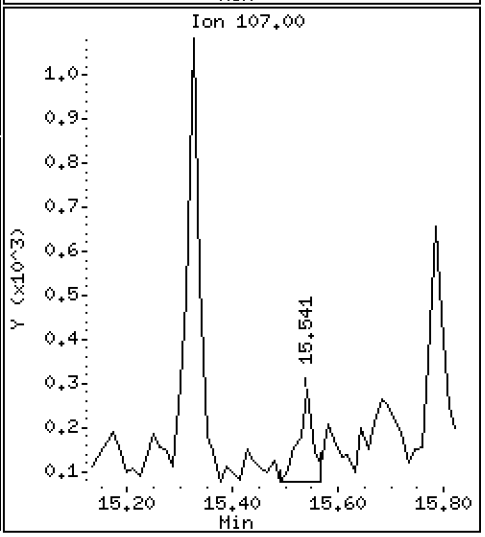


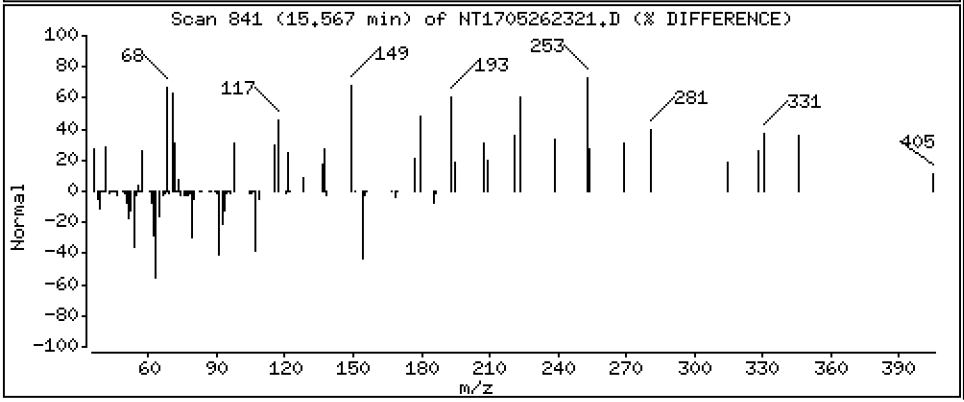












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

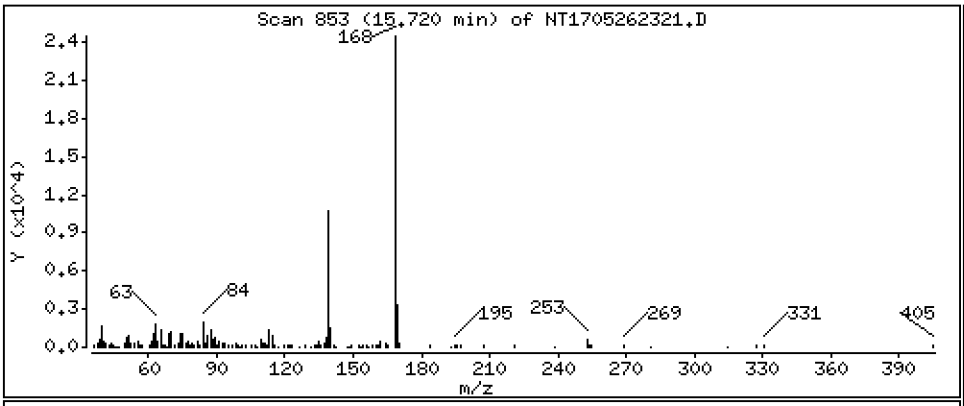
Operator: VTS

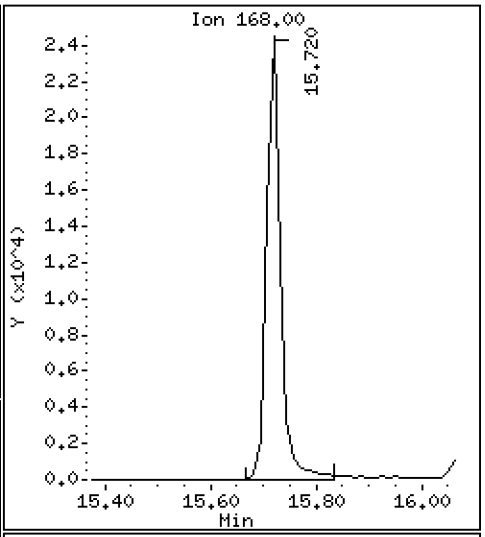
Column phase: ZB-5msi

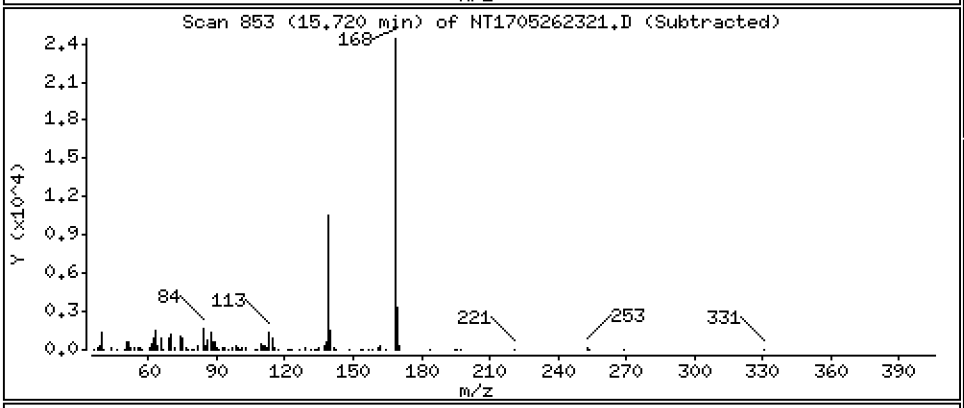
Column diameter: 0.25

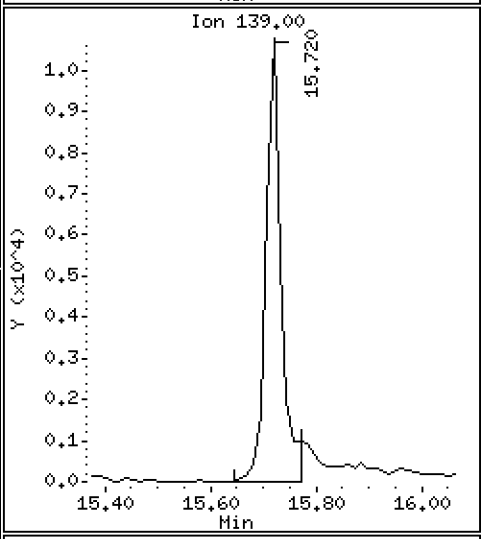
46 Dibenzofuran

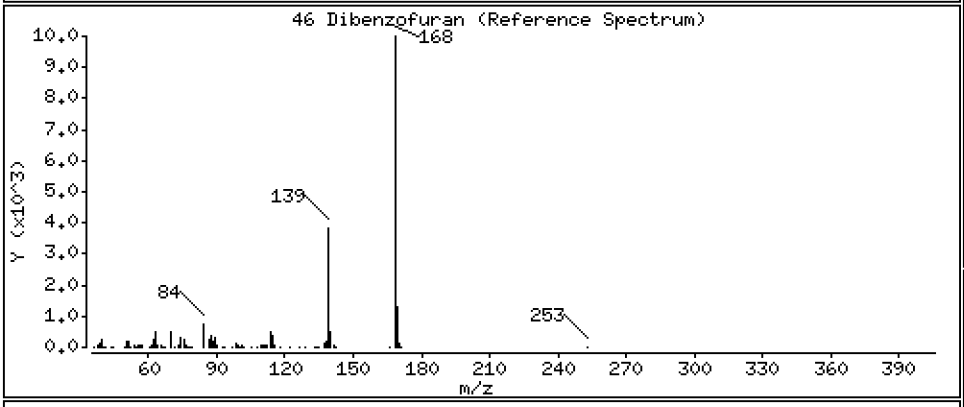
Concentration: 0.1948 ug/mL

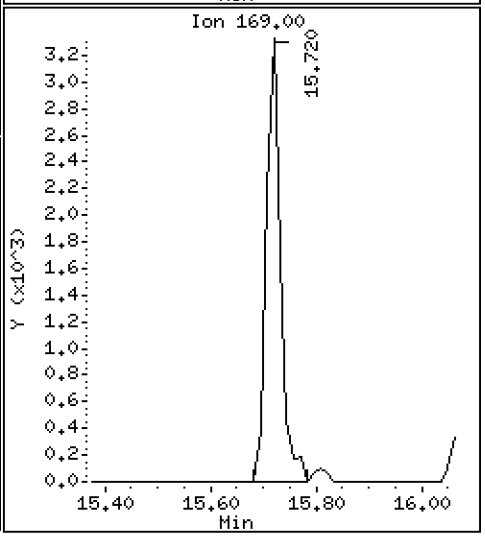


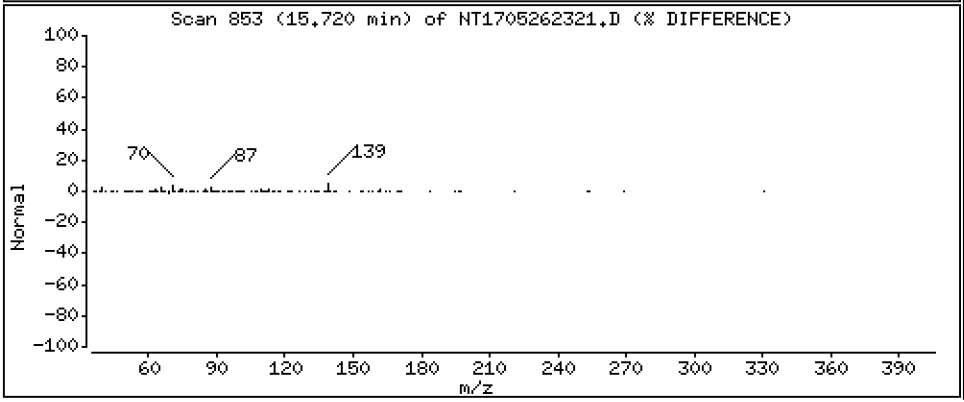












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

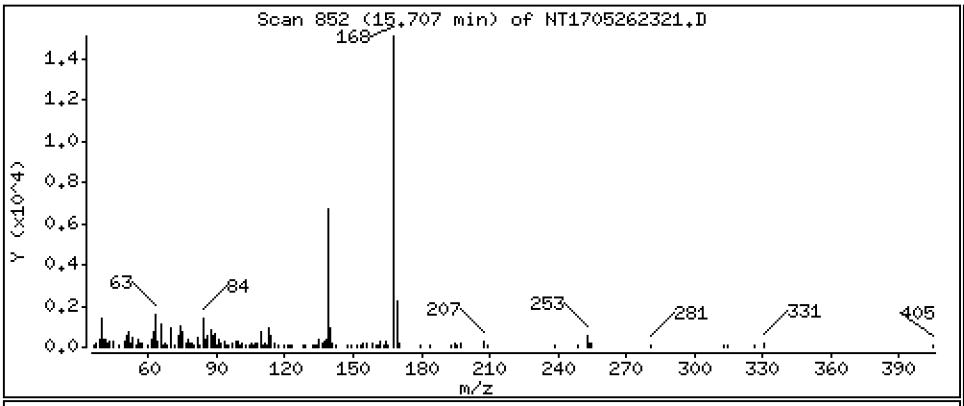
Operator: VTS

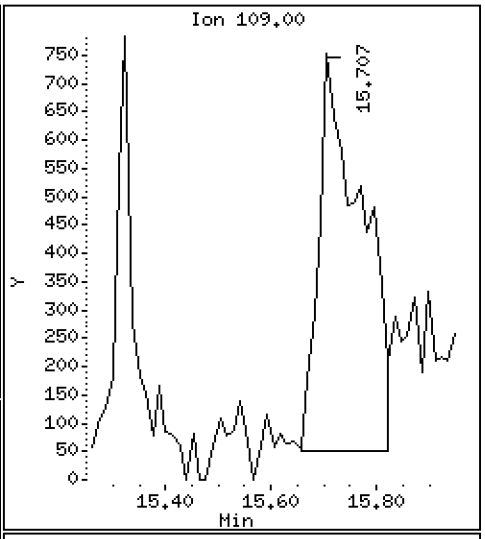
Column phase: ZB-5msi

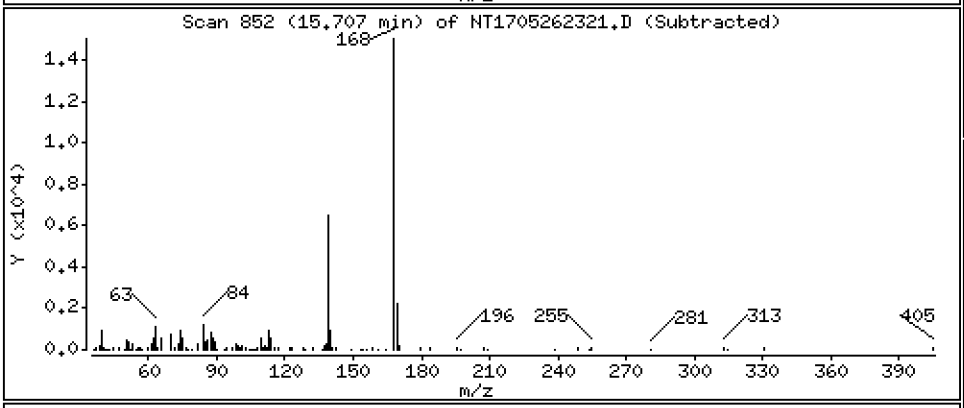
Column diameter: 0.25

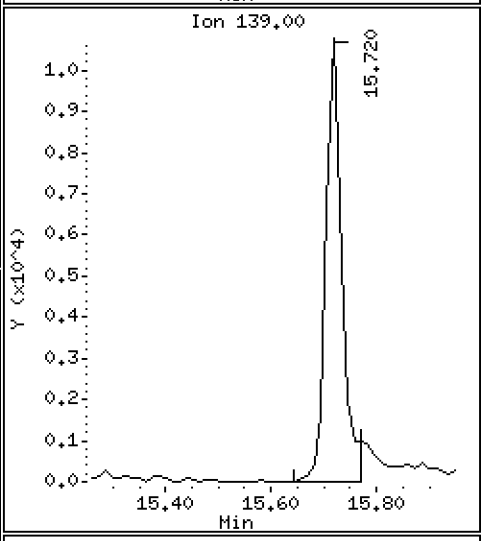
47 4-Nitrophenol

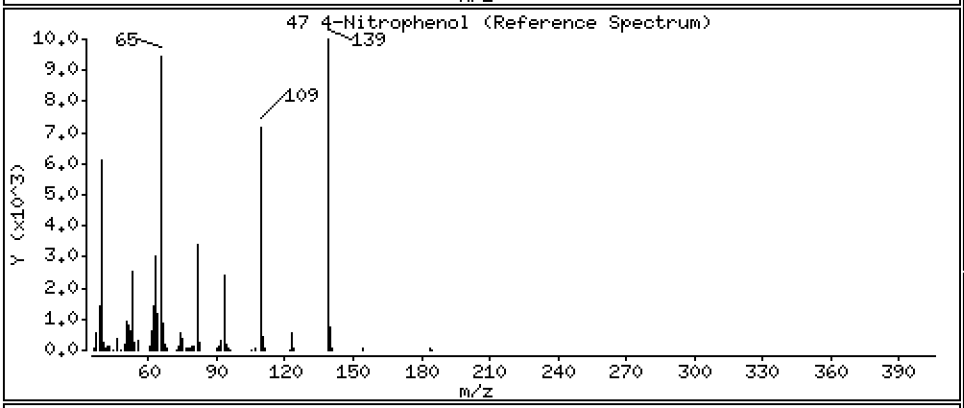
Concentration: 0.1478 ug/mL

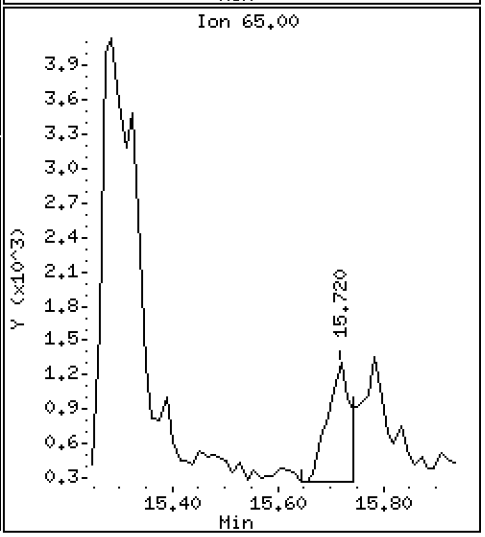


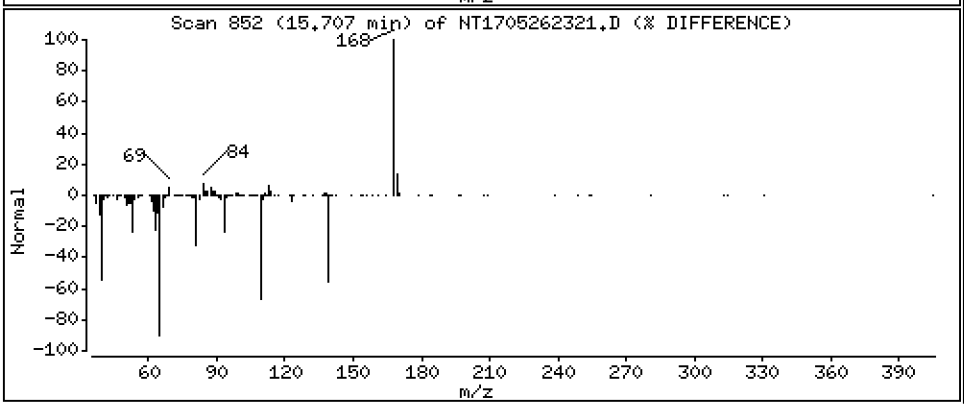












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

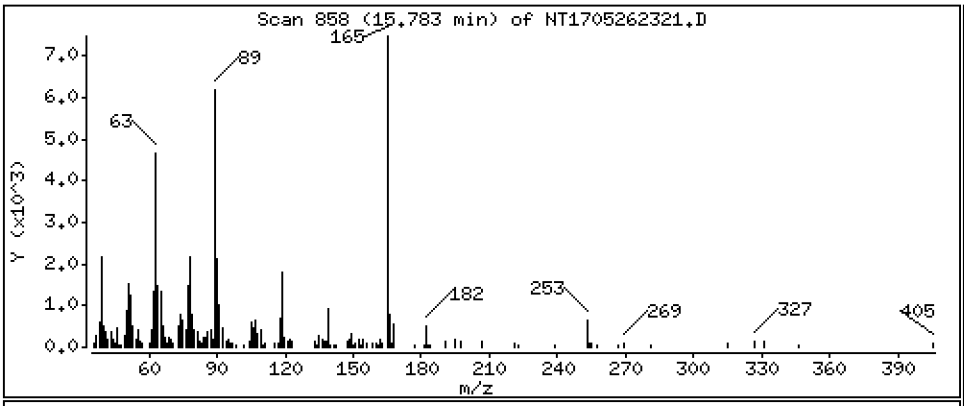
Operator: VTS

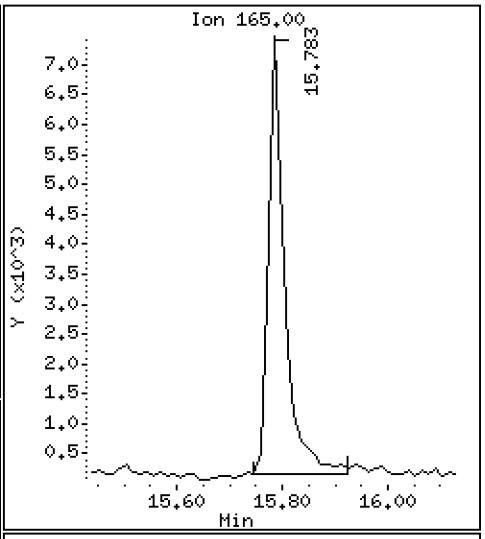
Column phase: ZB-5msi

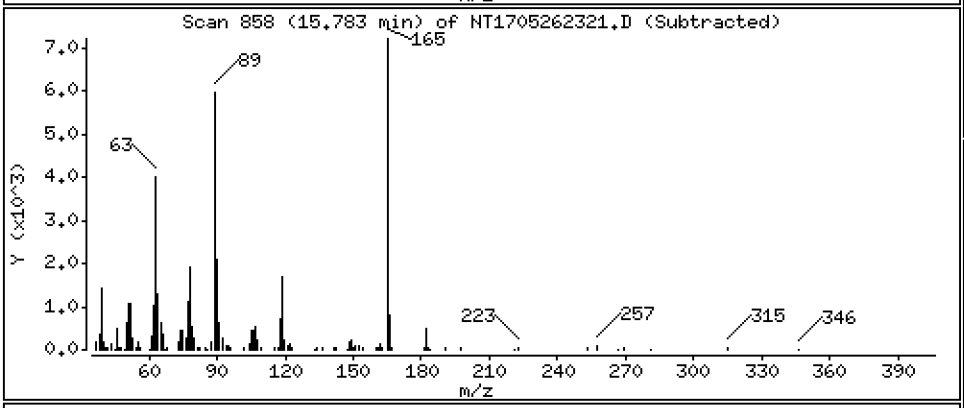
Column diameter: 0.25

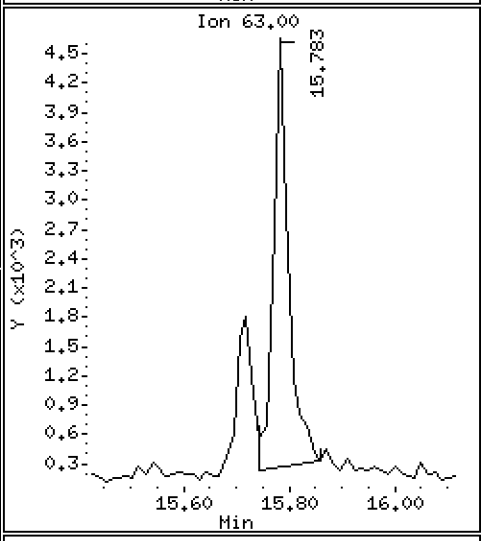
48 2,4-Dinitrotoluene

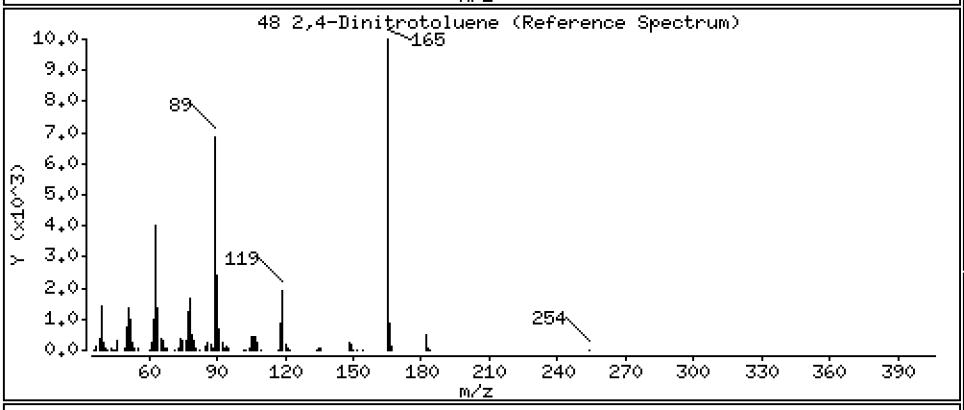
Concentration: 0.2750 ug/mL

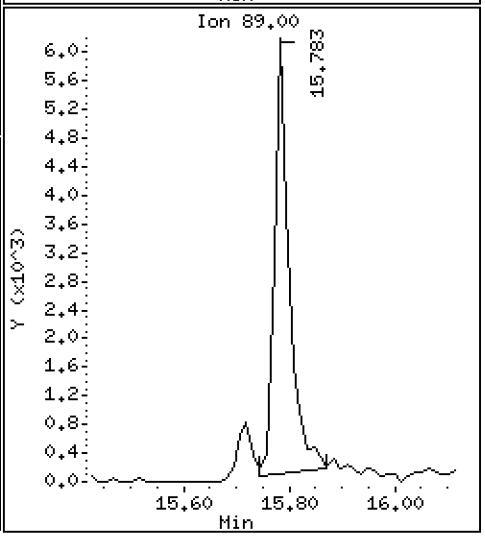


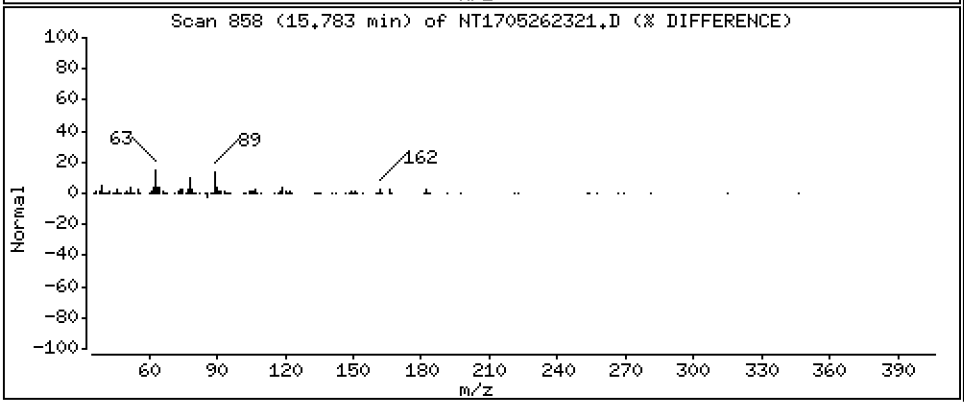












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

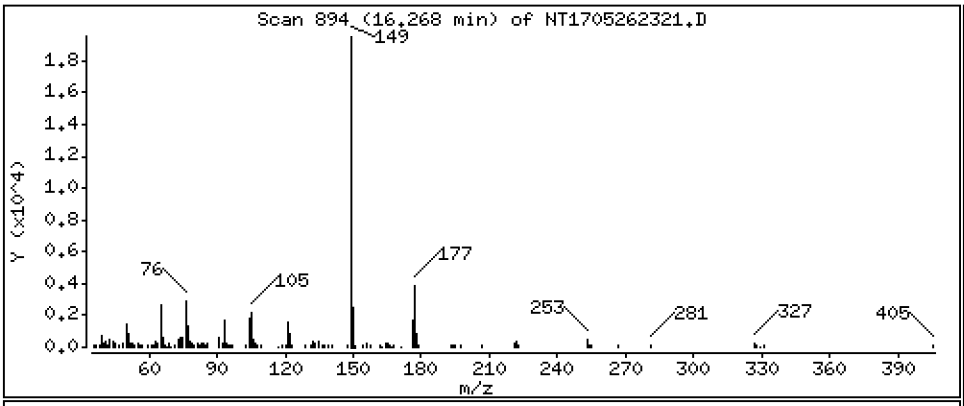
Operator: VTS

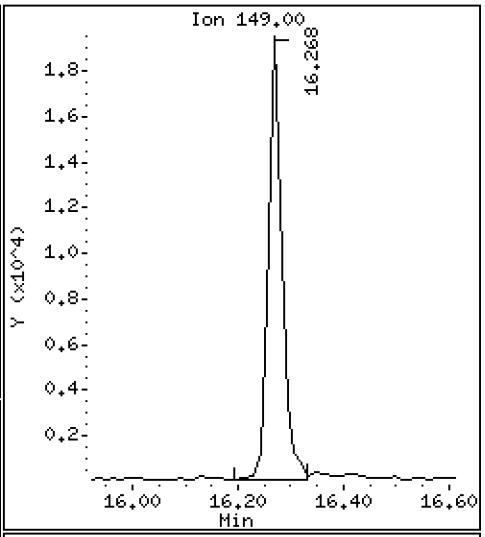
Column phase: ZB-5msi

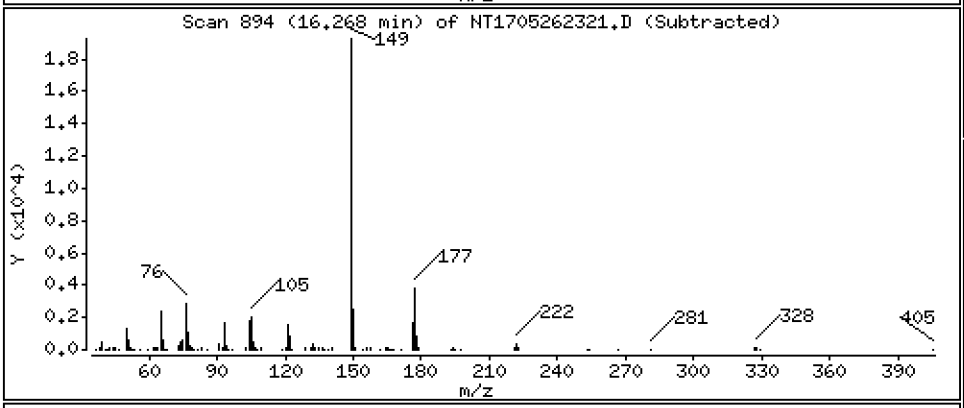
Column diameter: 0.25

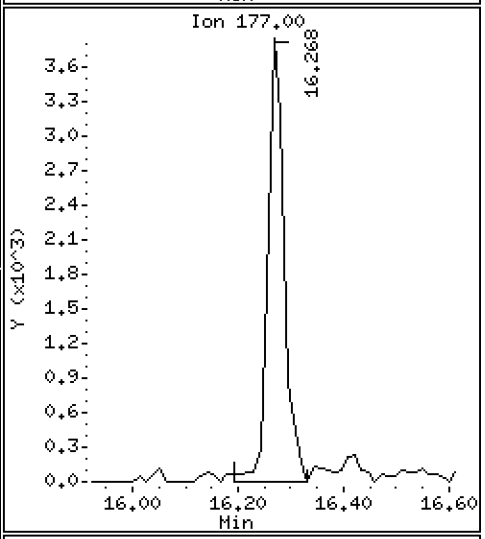
50 Diethylphthalate

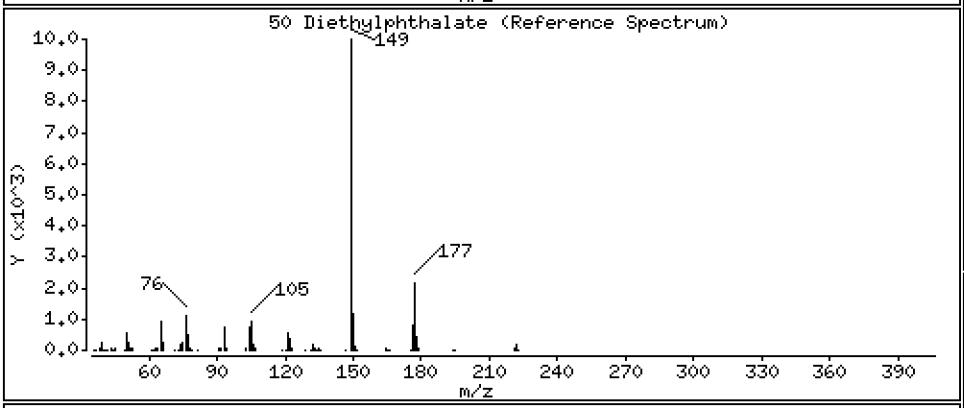
Concentration: 0.2357 ug/mL

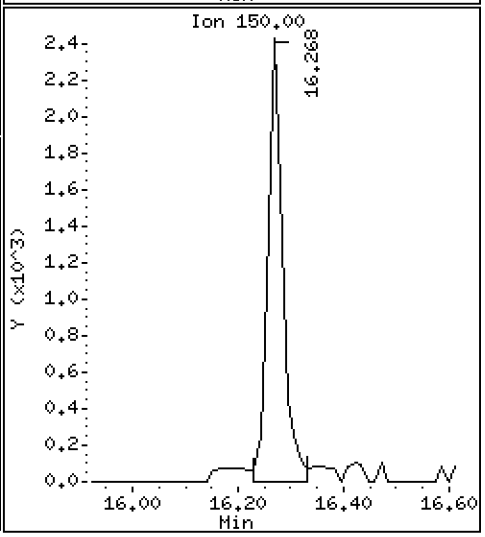


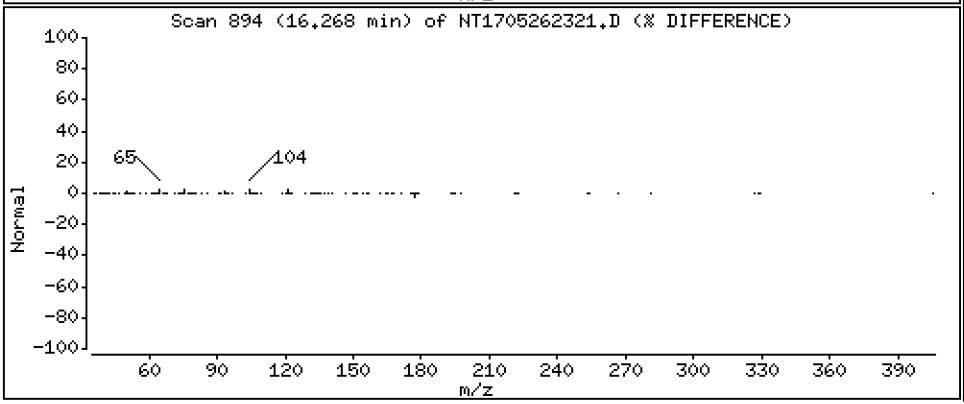












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

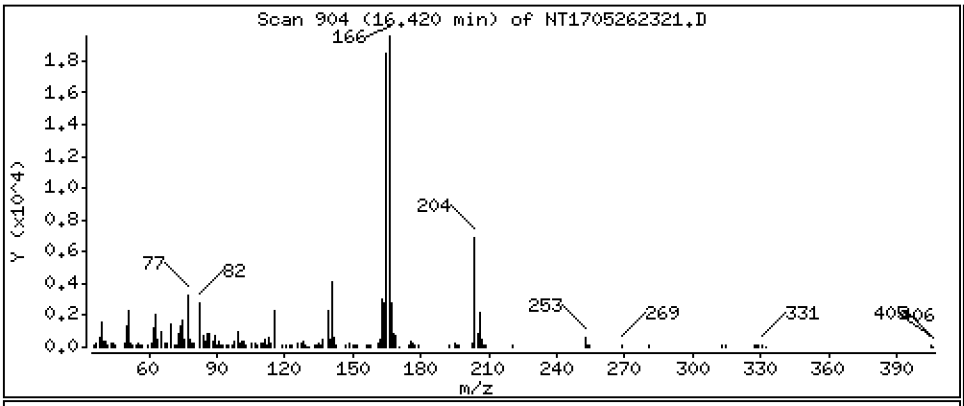
Operator: VTS

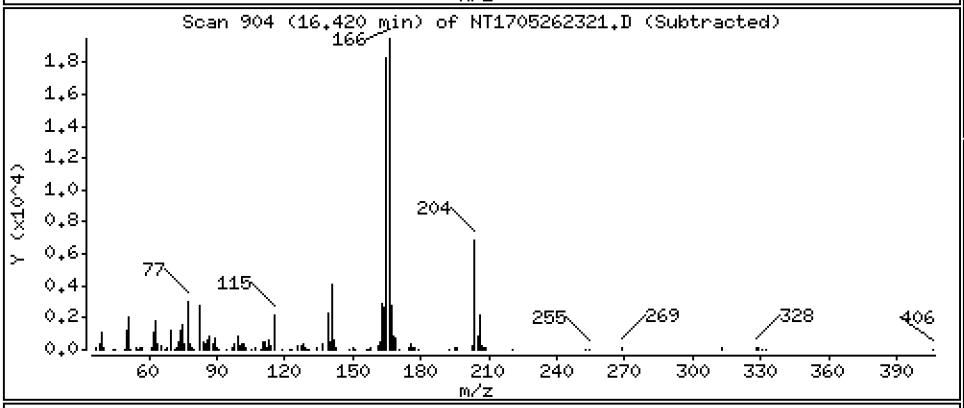
Column phase: ZB-5msi

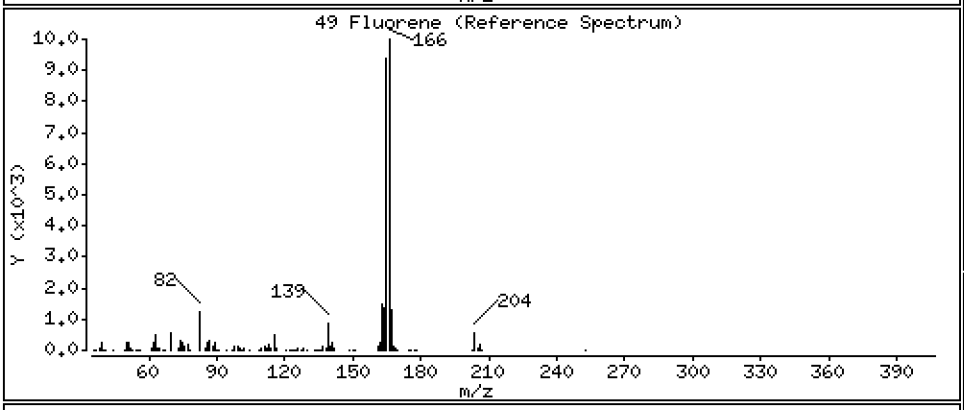
Column diameter: 0.25

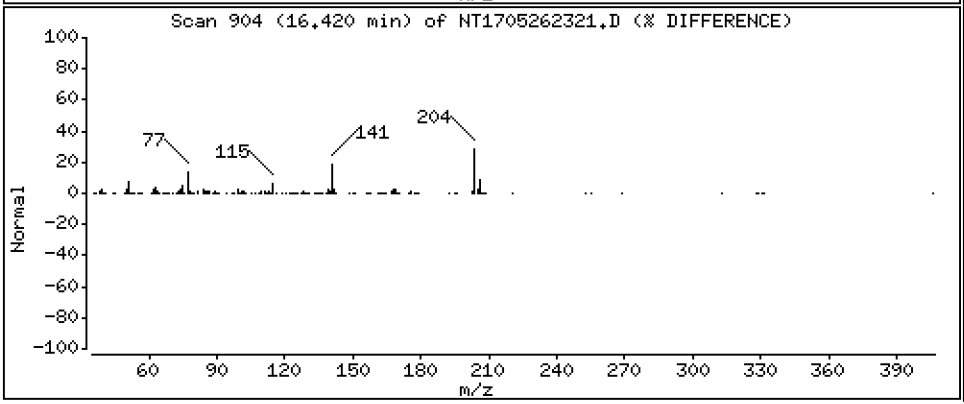
49 Fluorene

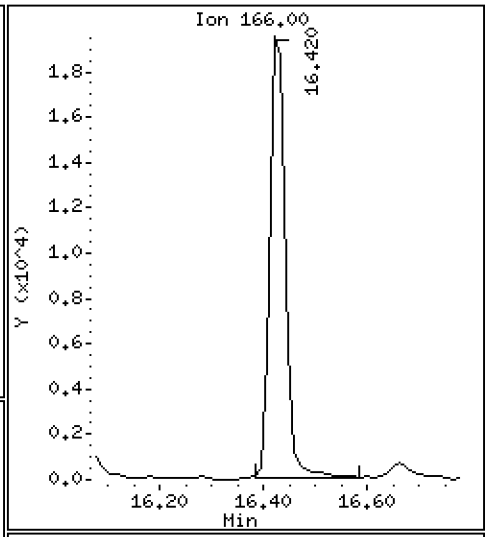
Concentration: 0.1749 ug/mL

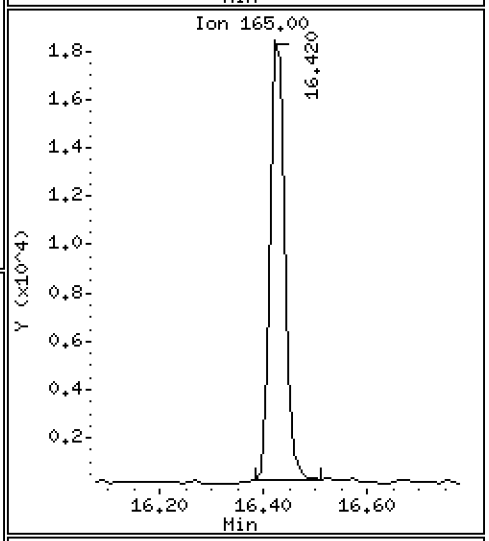


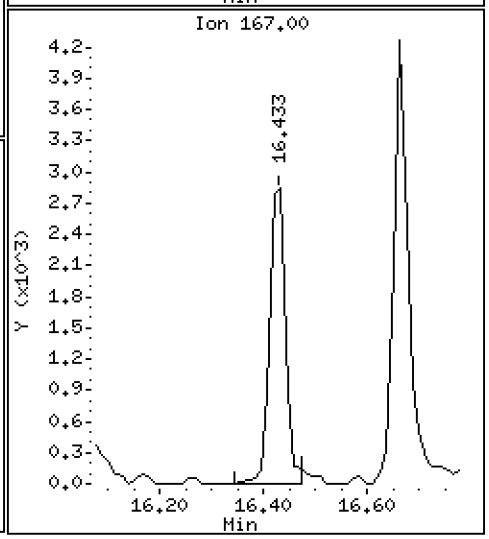












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

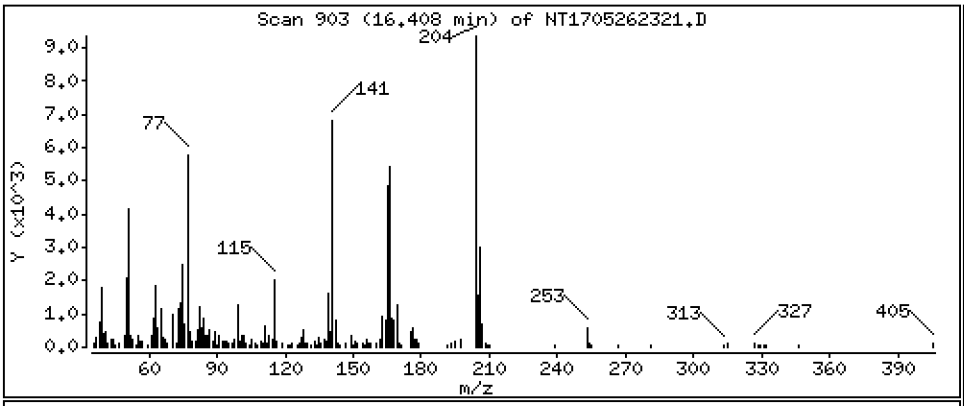
Operator: VTS

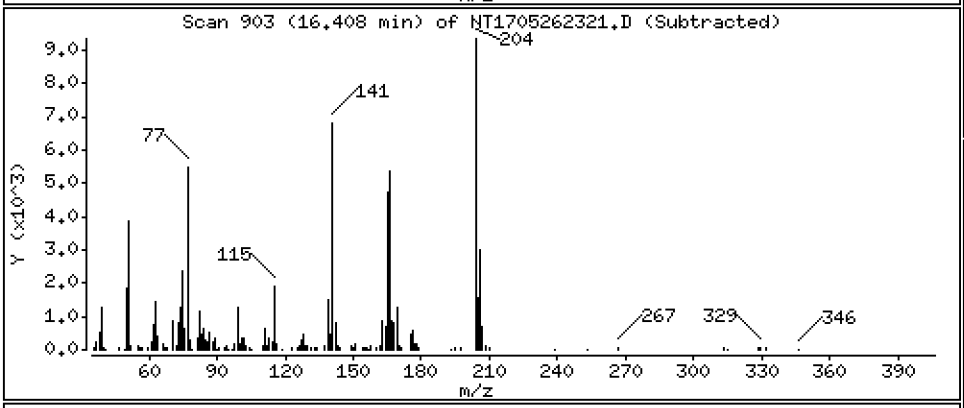
Column phase: ZB-5msi

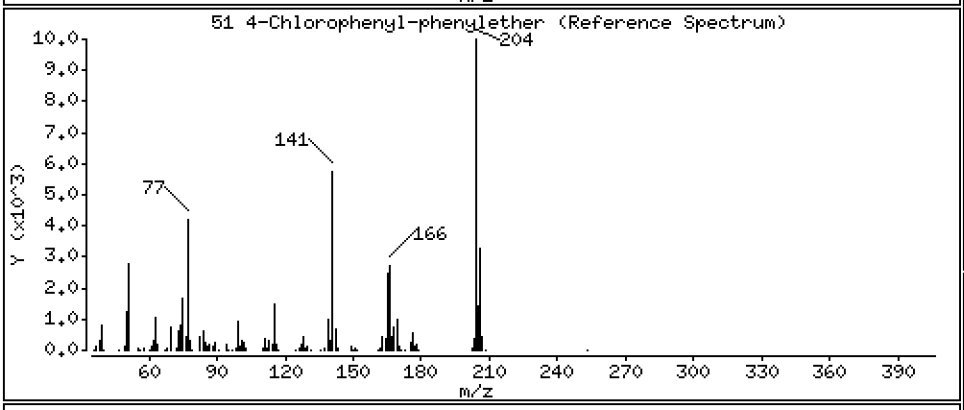
Column diameter: 0.25

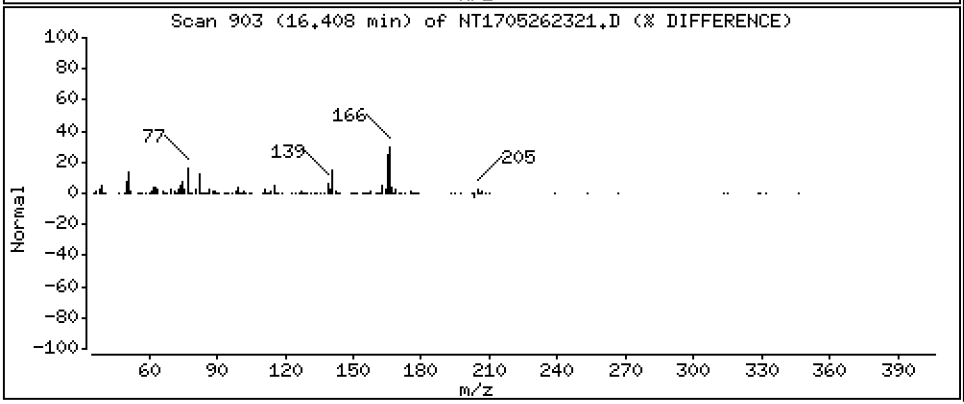
51 4-Chlorophenyl-phenylether

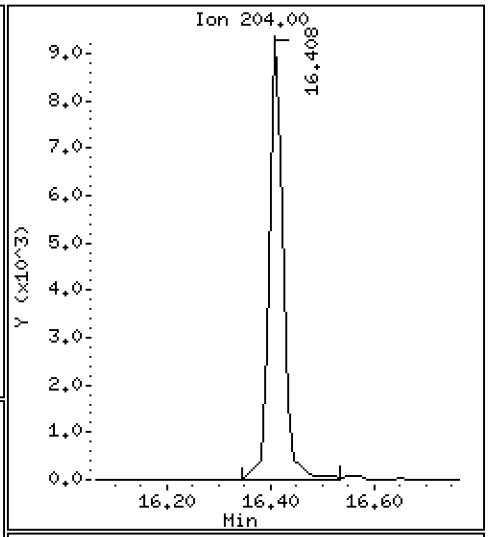
Concentration: 0.1866 ug/mL

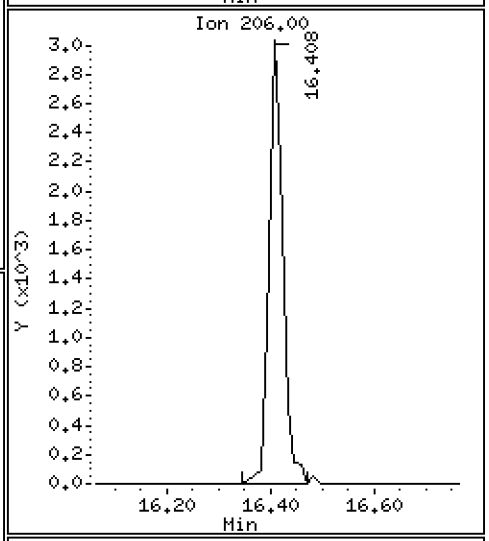


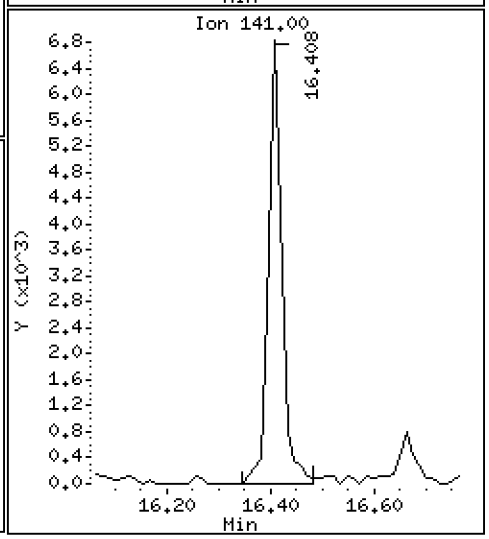












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

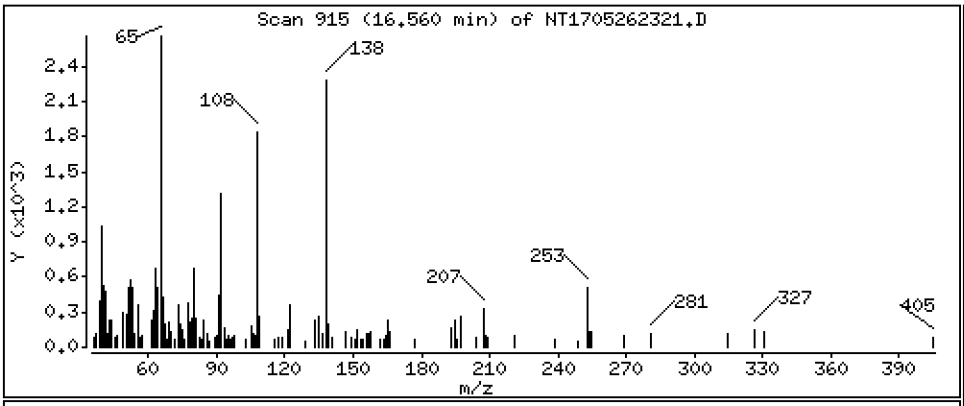
Operator: VTS

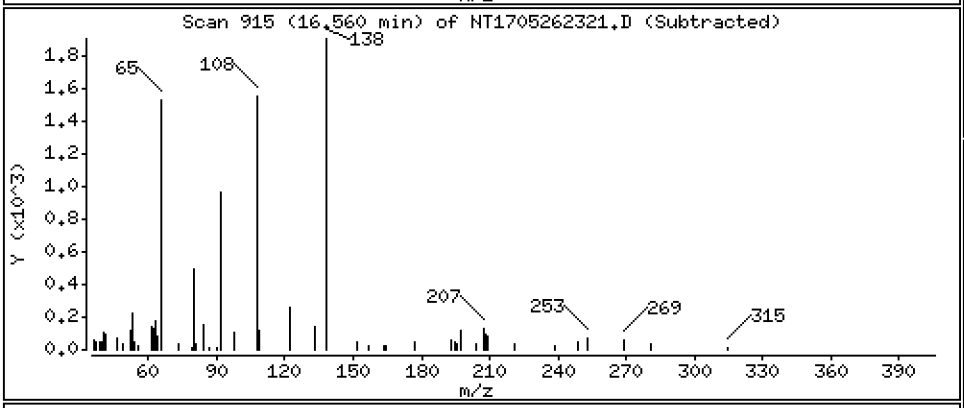
Column phase: ZB-5msi

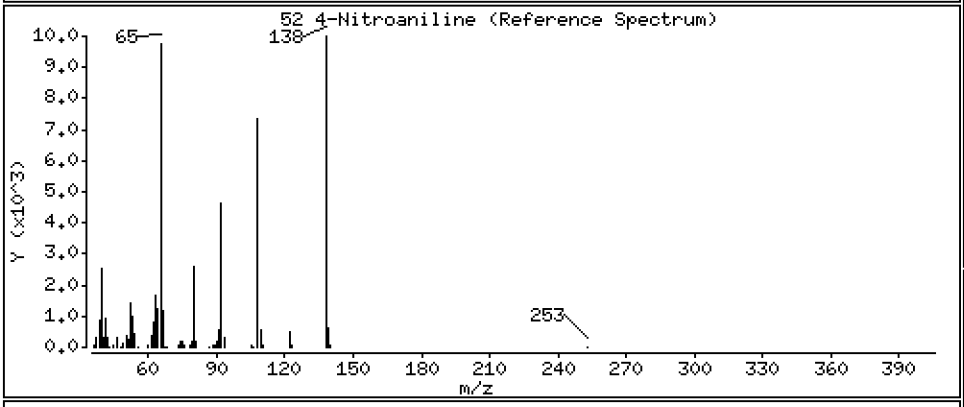
Column diameter: 0.25

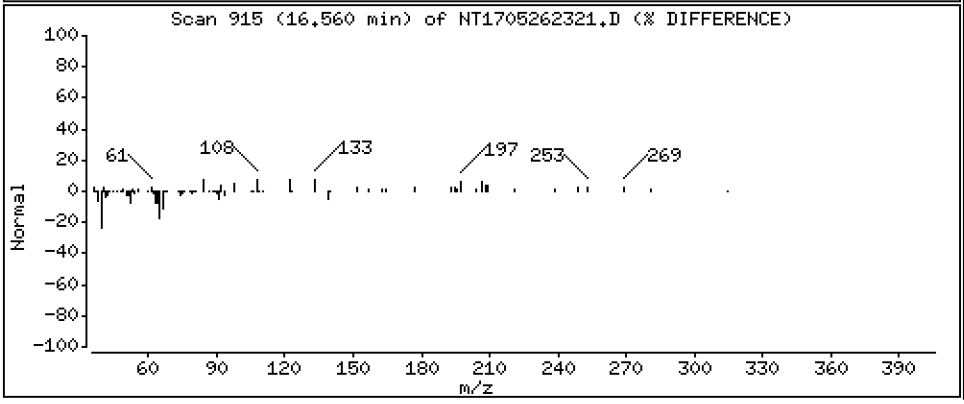
52 4-Nitroaniline

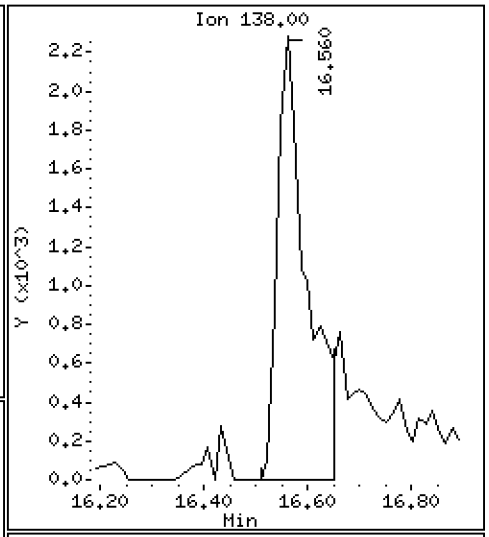
Concentration: 0.2364 ug/mL

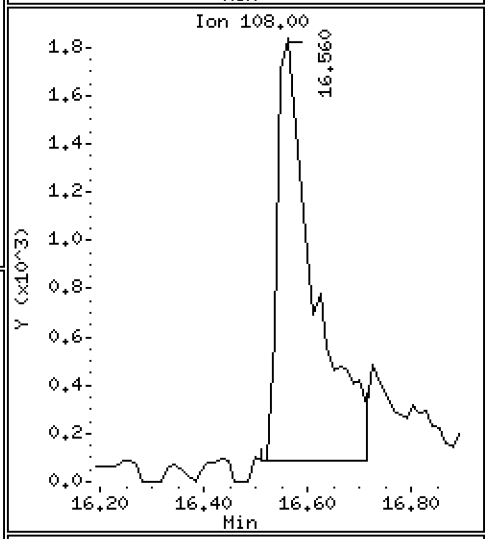


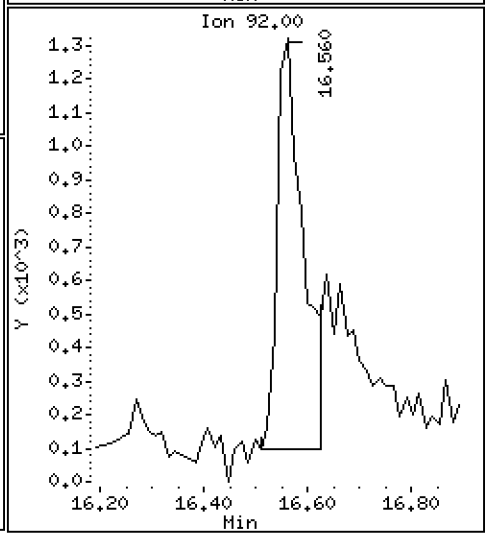












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

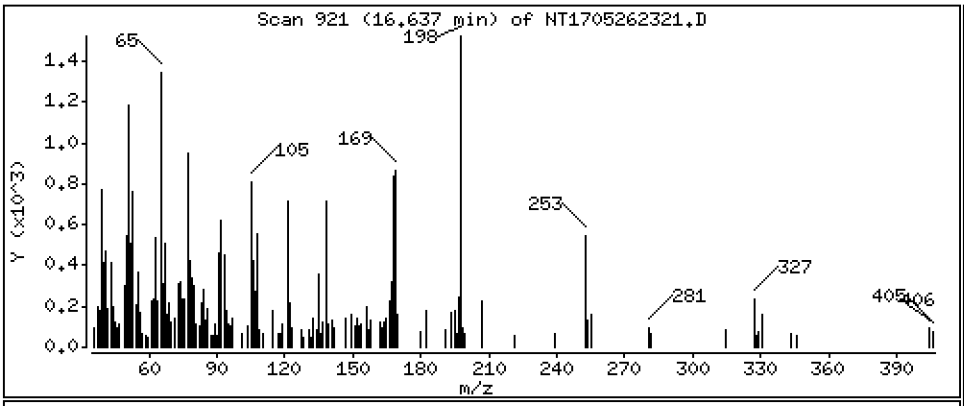
Operator: VTS

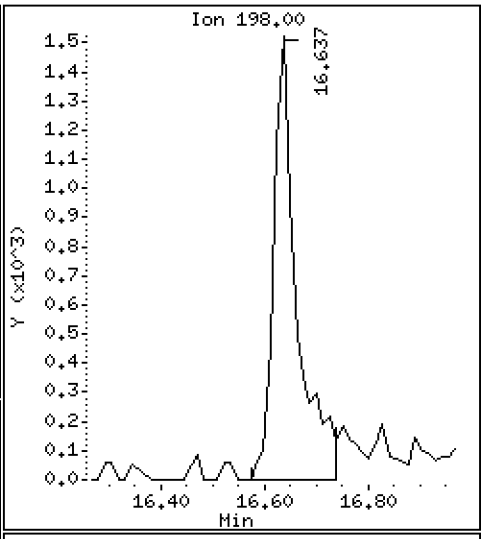
Column phase: ZB-5msi

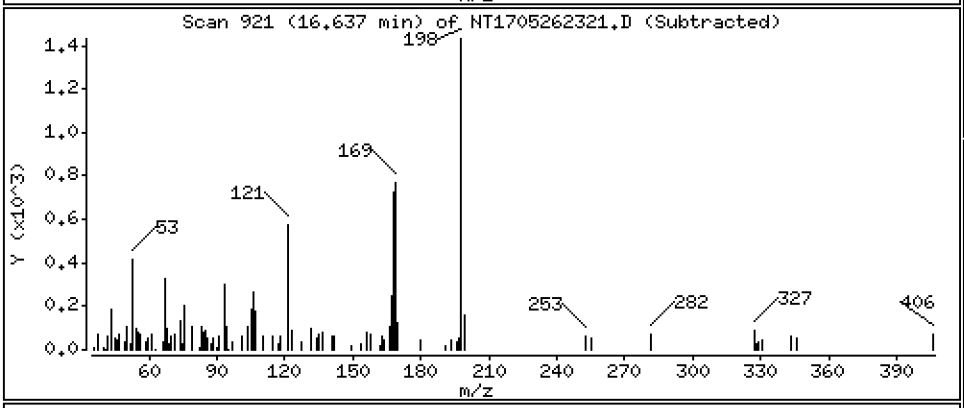
Column diameter: 0.25

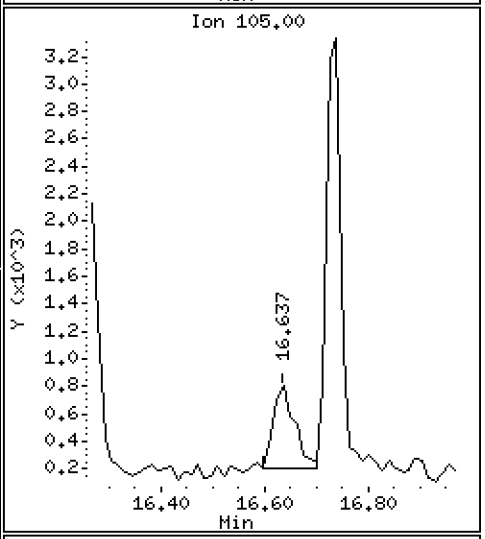
53 4,6-Dinitro-2-methylphenol

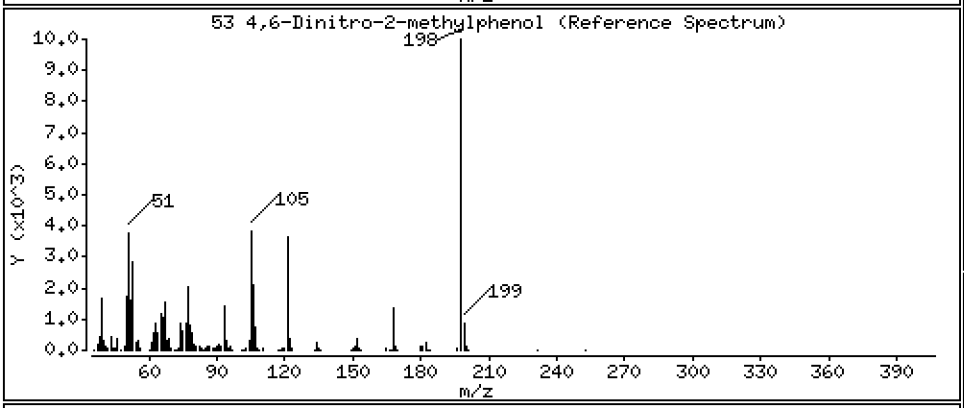
Concentration: 0.1349 ug/mL

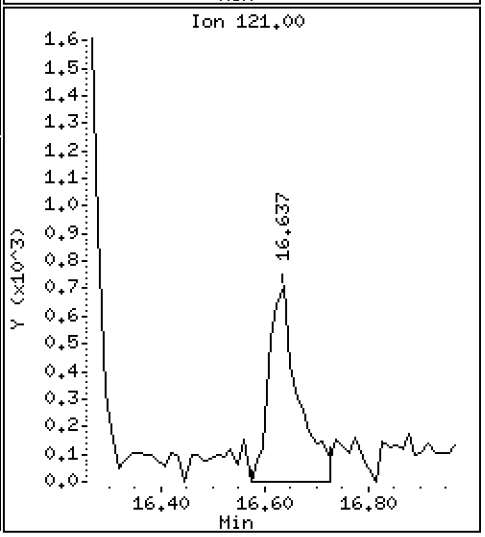


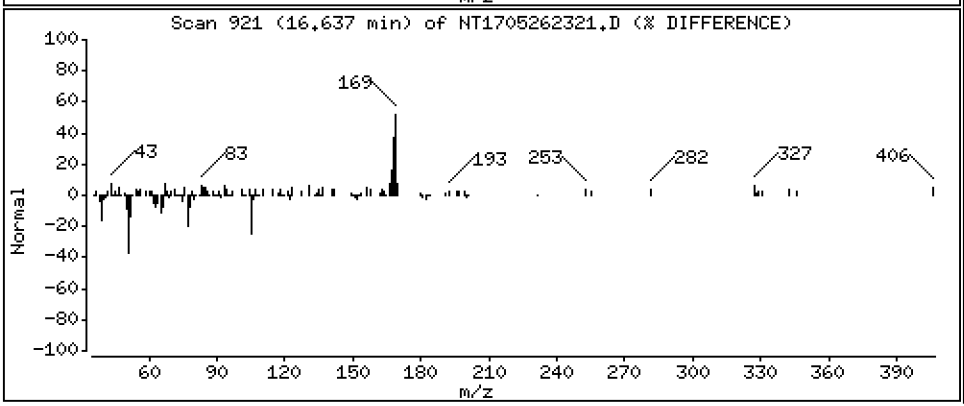












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

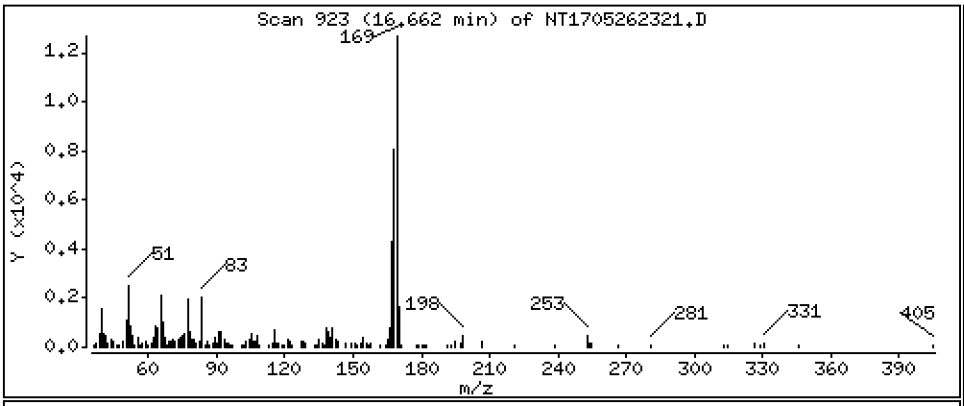
Operator: VTS

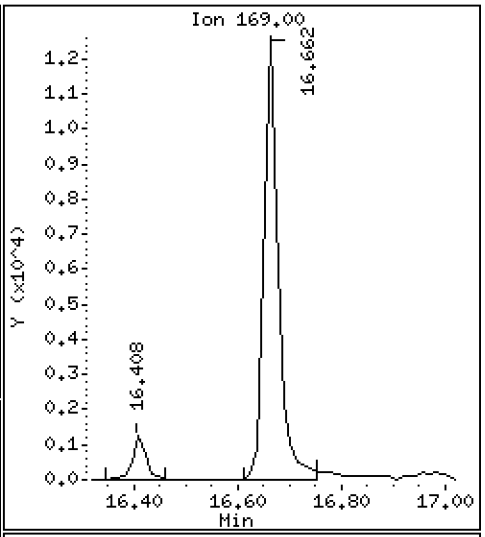
Column phase: ZB-5msi

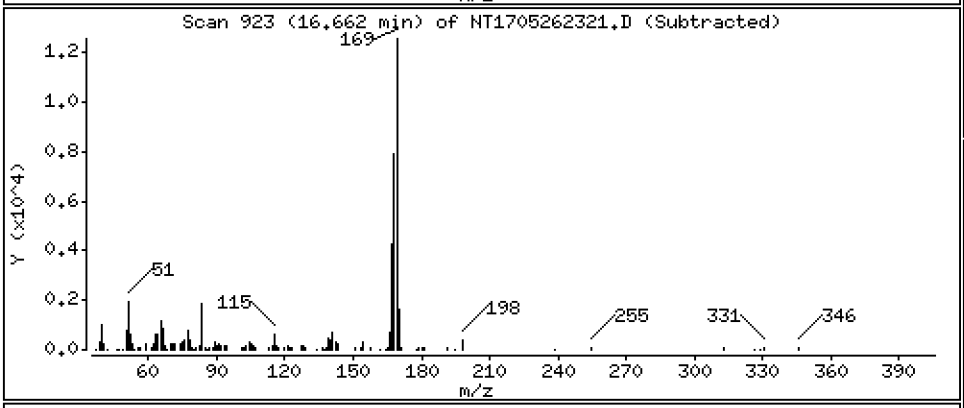
Column diameter: 0.25

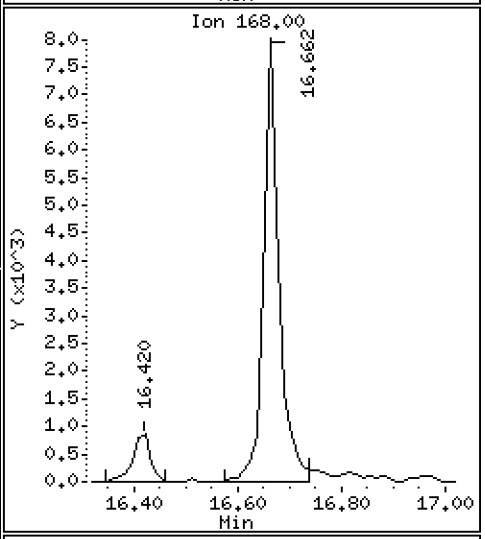
54 N-Nitrosodiphenylamine

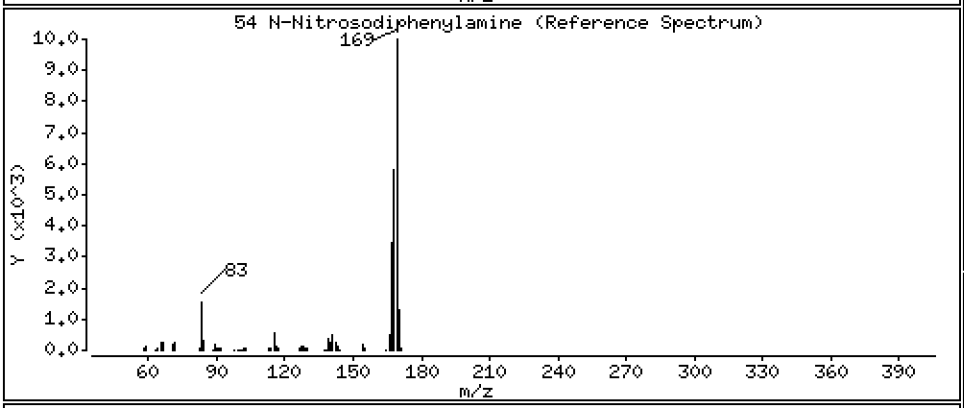
Concentration: 0.1967 ug/mL

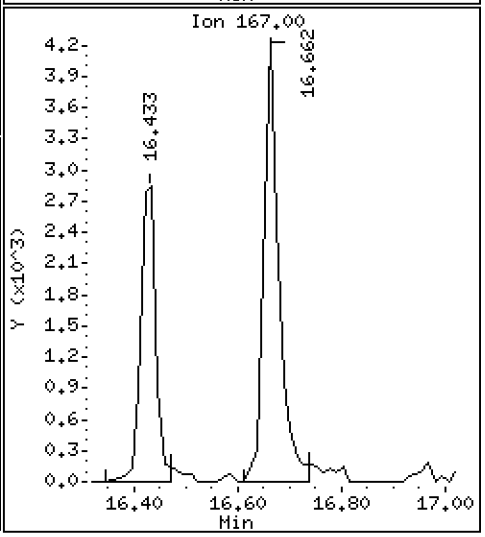


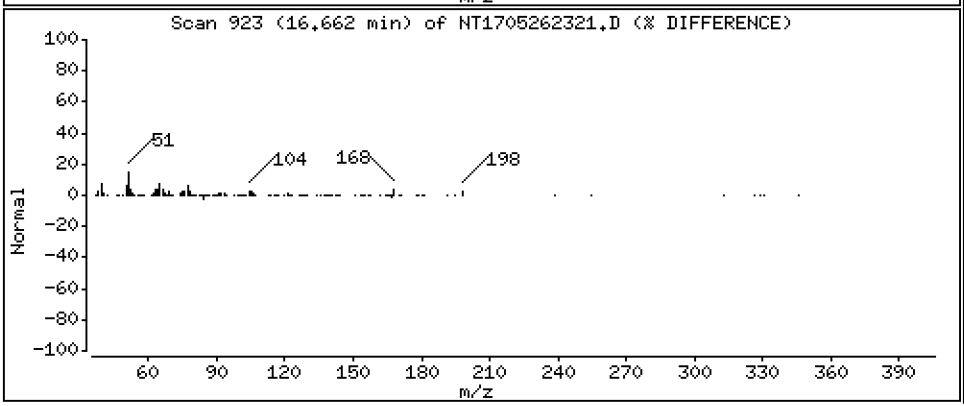












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

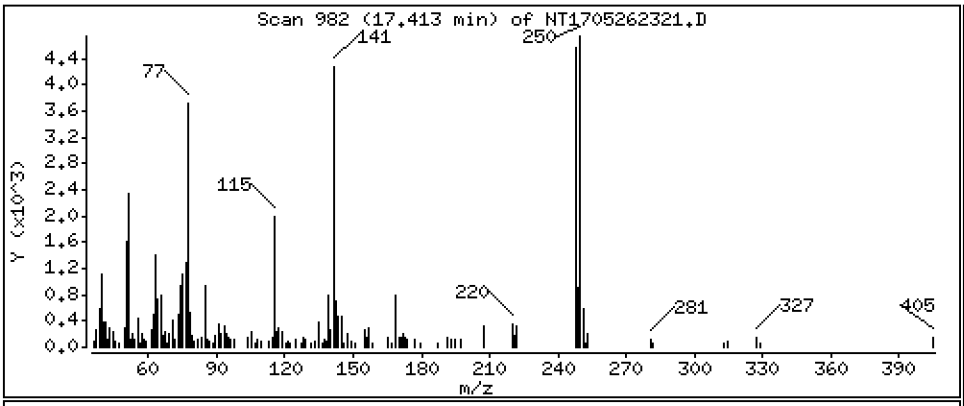
Operator: VTS

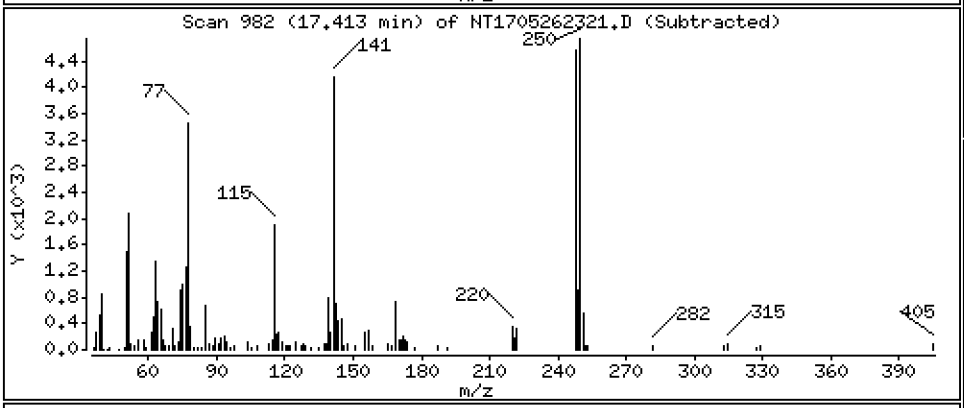
Column phase: ZB-5msi

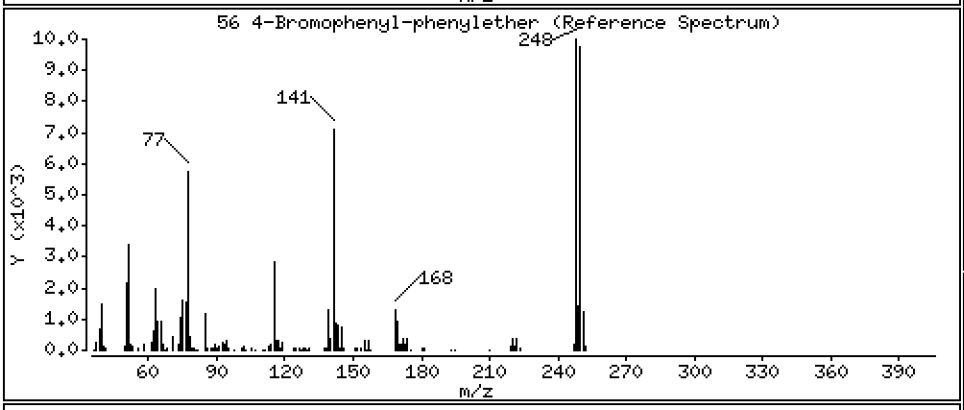
Column diameter: 0.25

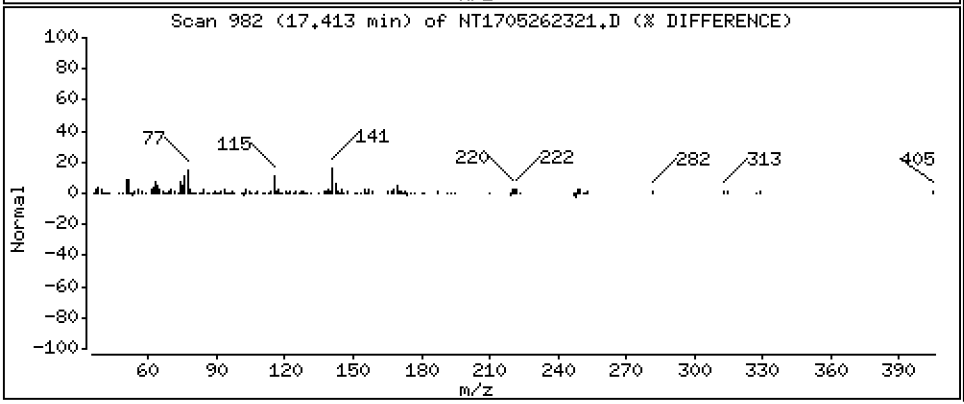
56 4-Bromophenyl-phenylether

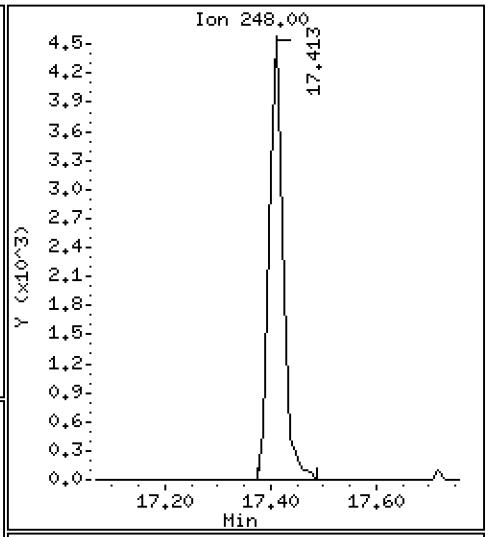
Concentration: 0.1950 ug/mL

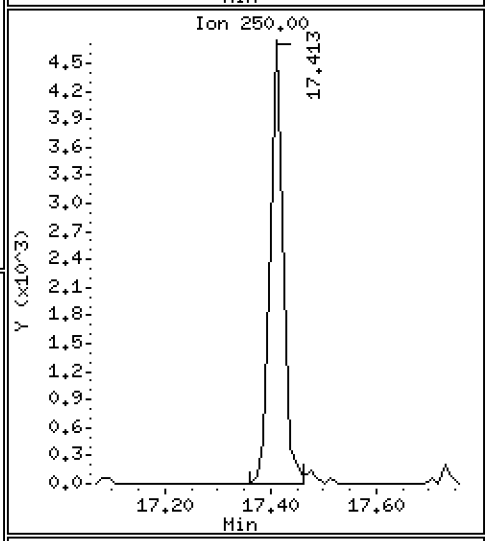


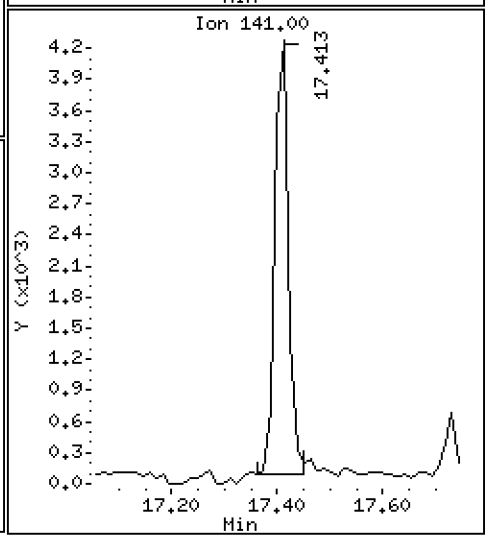












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

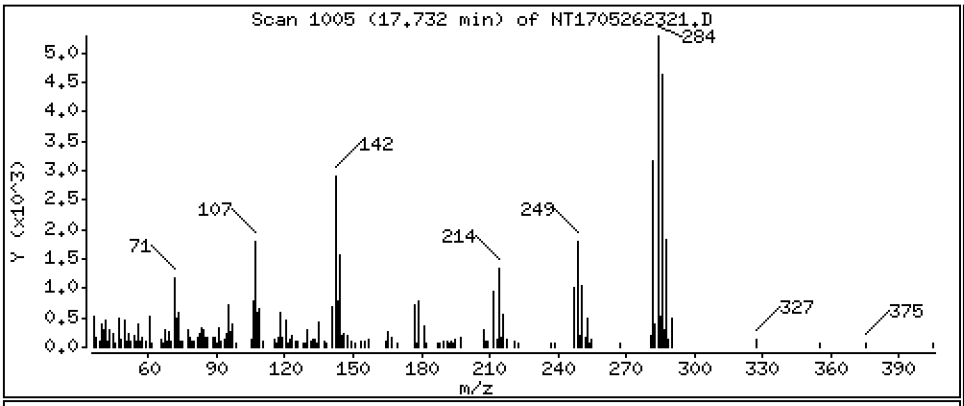
Operator: VTS

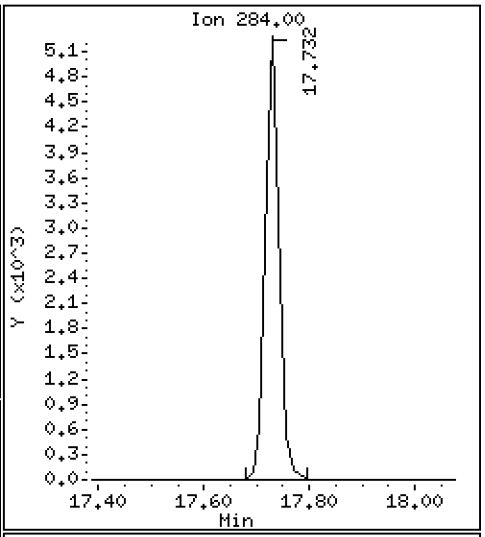
Column phase: ZB-5msi

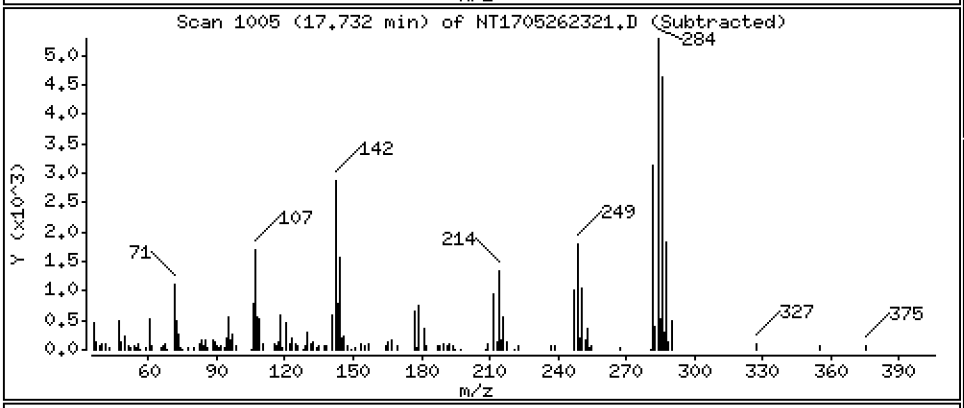
Column diameter: 0.25

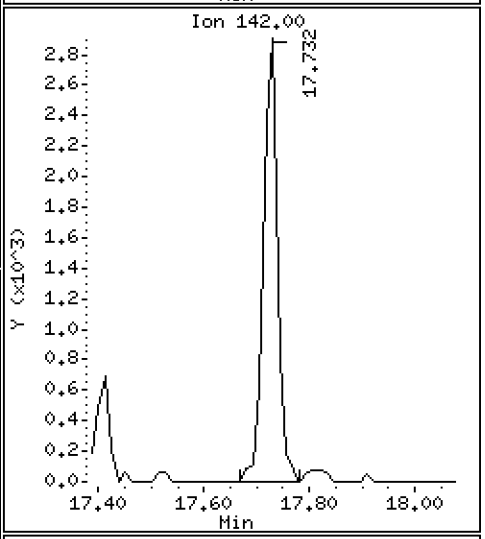
57 Hexachlorobenzene

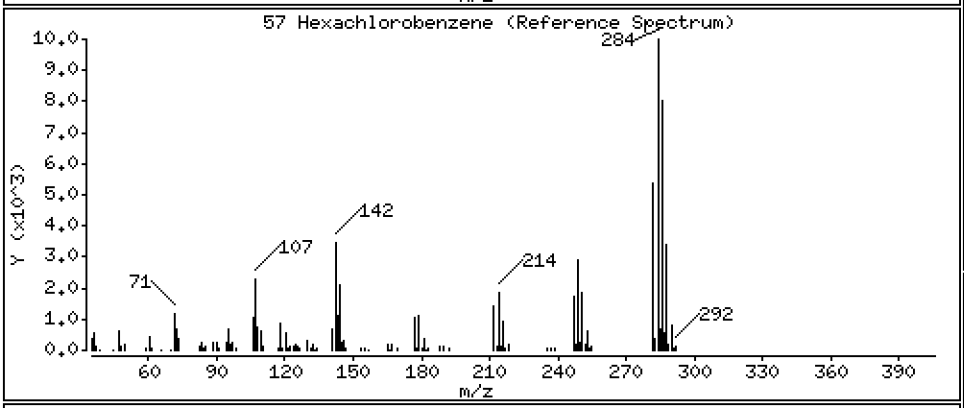
Concentration: 0.2192 ug/mL

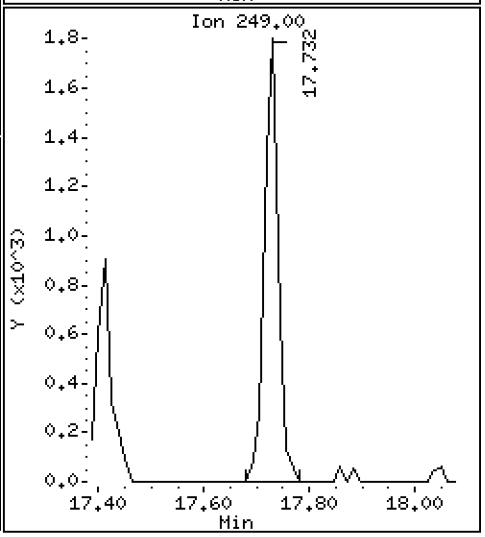


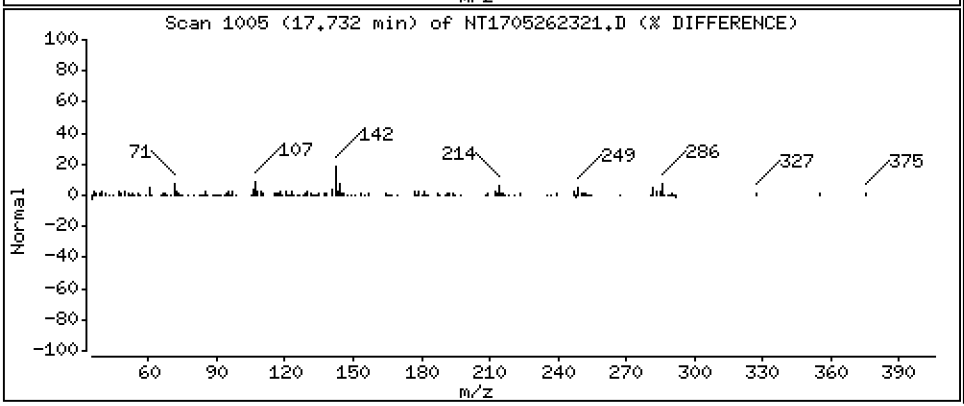












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

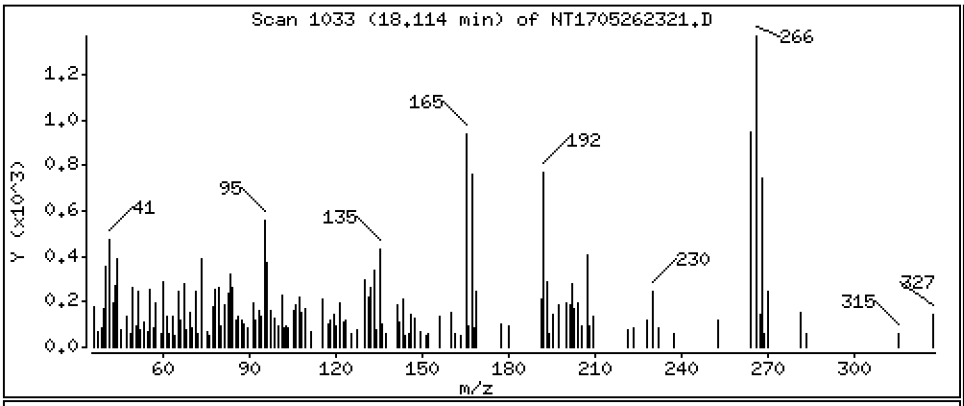
Operator: VTS

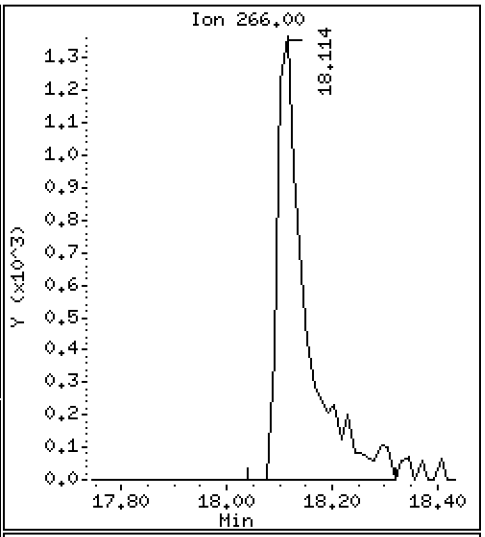
Column phase: ZB-5msi

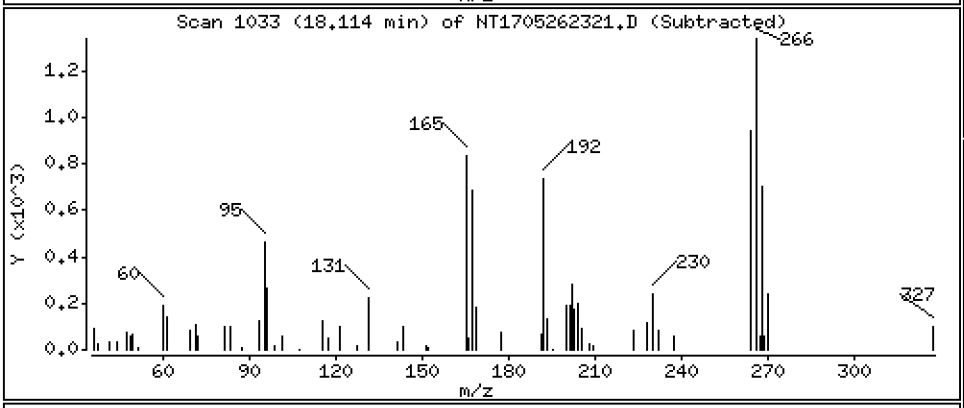
Column diameter: 0.25

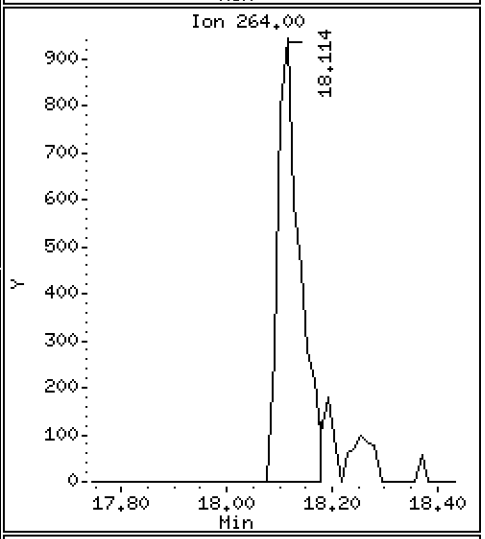
58 Pentachlorophenol

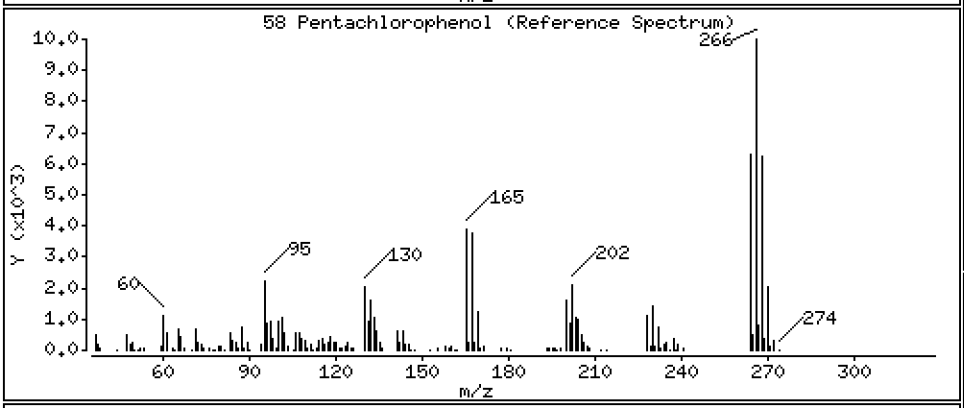
Concentration: 0.2038 ug/mL

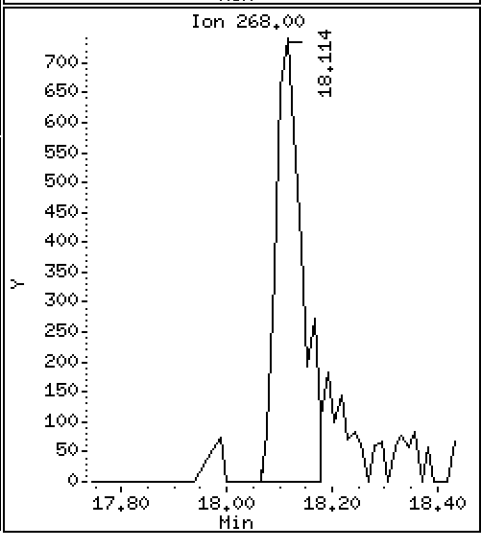


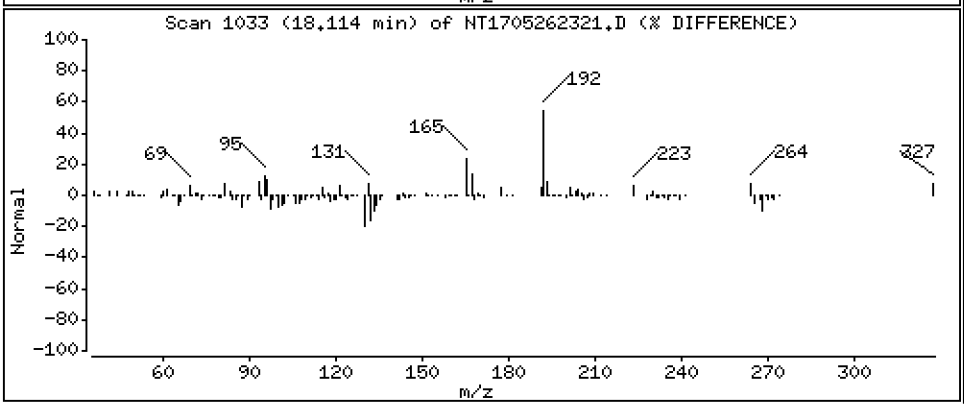












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

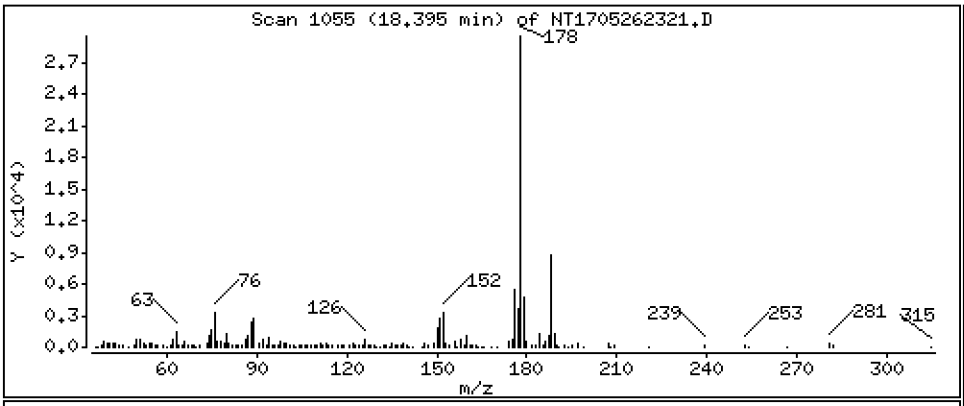
Operator: VTS

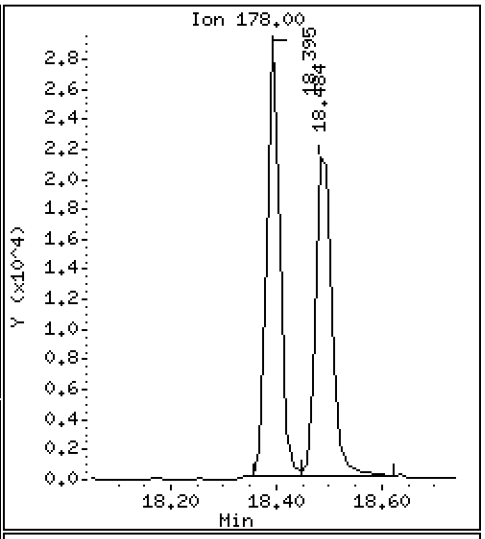
Column phase: ZB-5msi

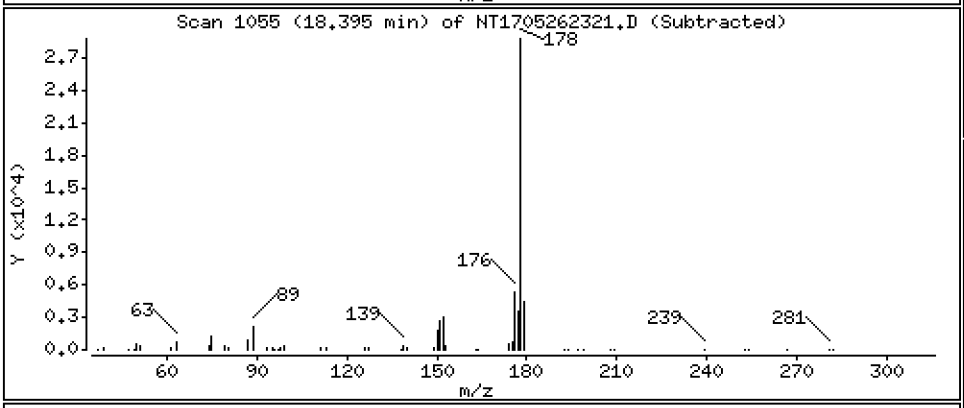
Column diameter: 0.25

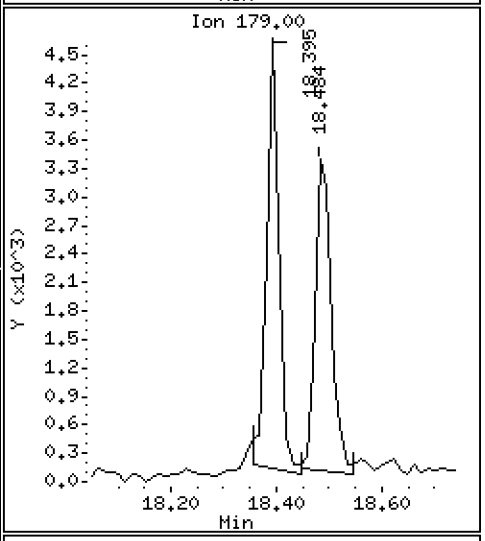
60 Phenanthrene

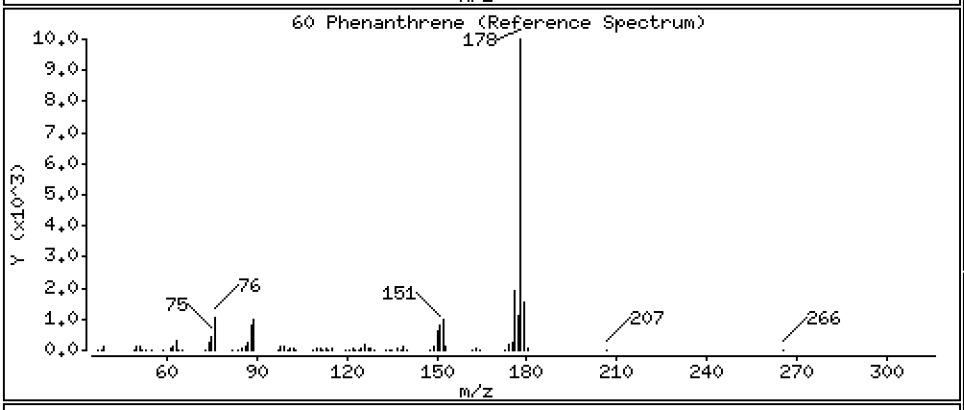
Concentration: 0.1948 ug/mL

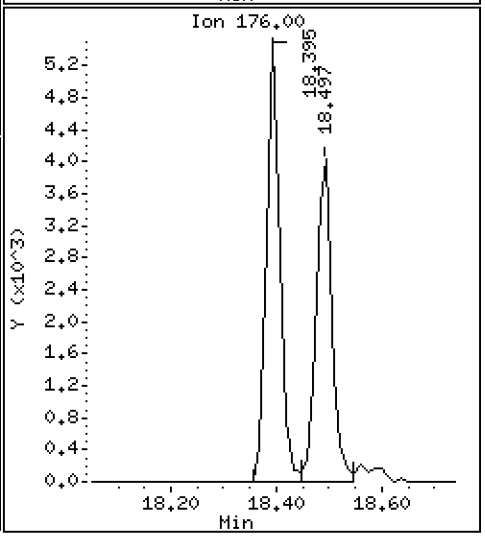


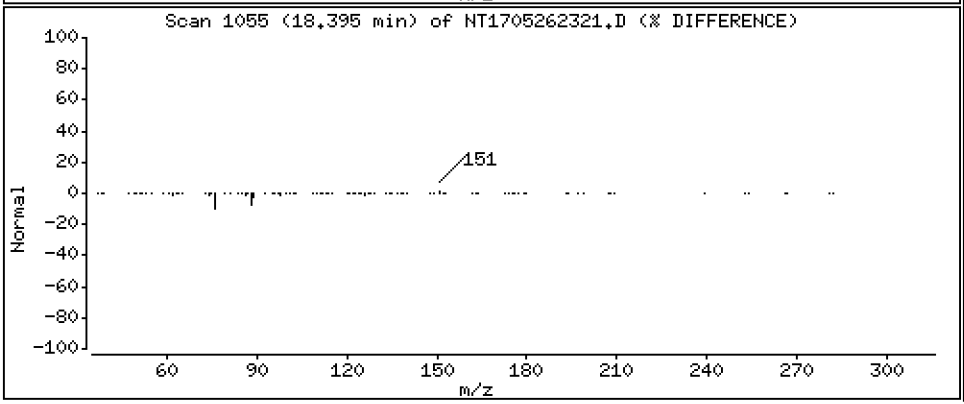












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

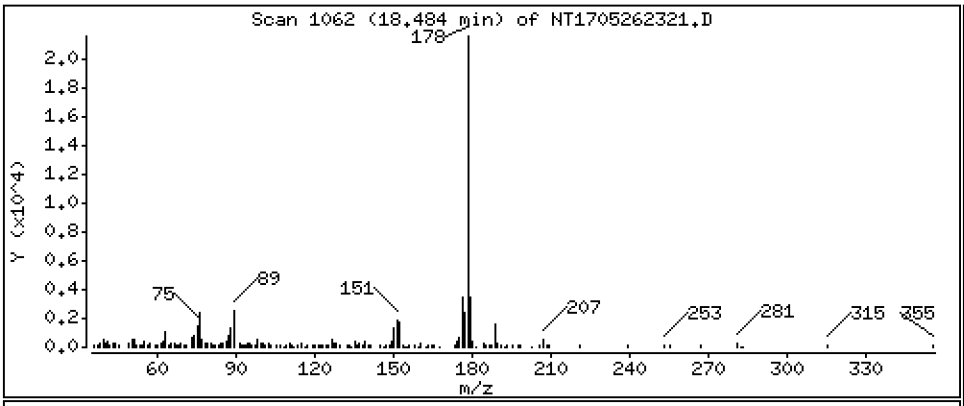
Operator: VTS

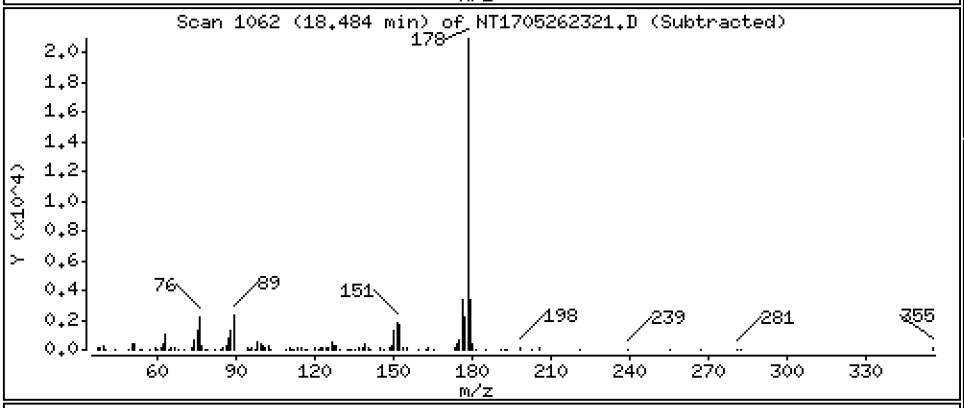
Column phase: ZB-5msi

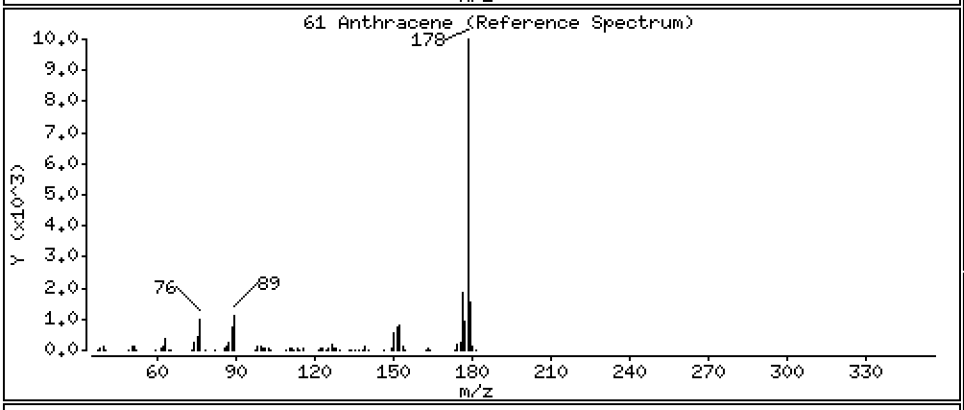
Column diameter: 0.25

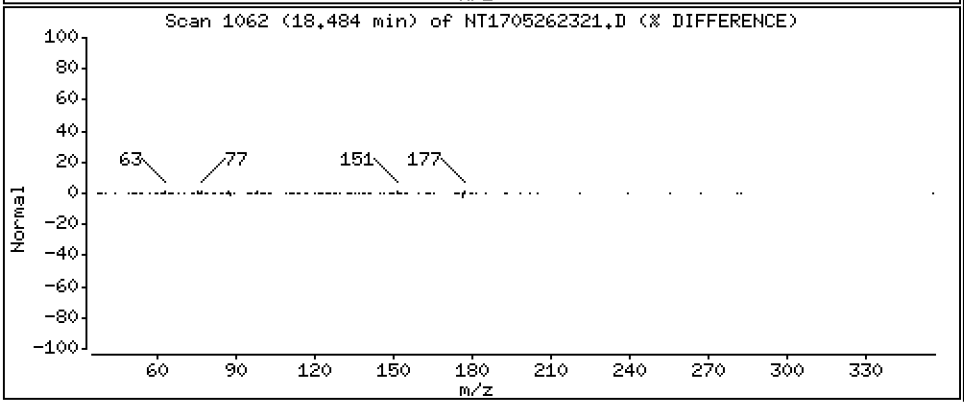
61 Anthracene

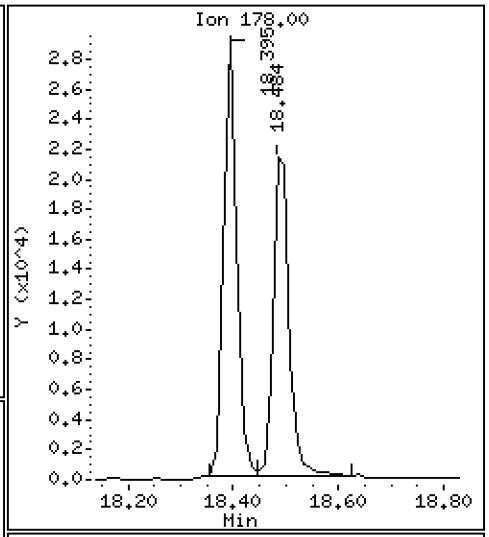
Concentration: 0.1950 ug/mL

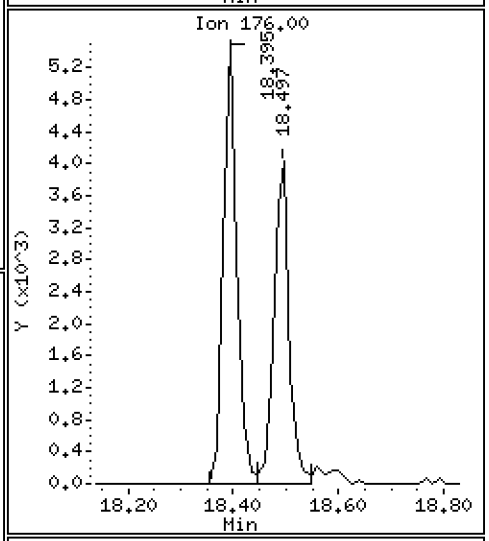


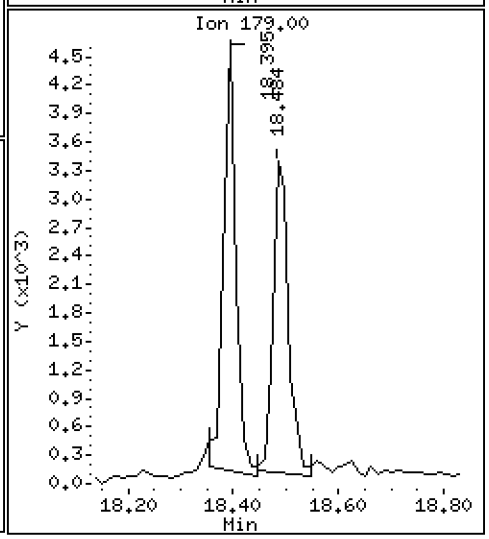












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

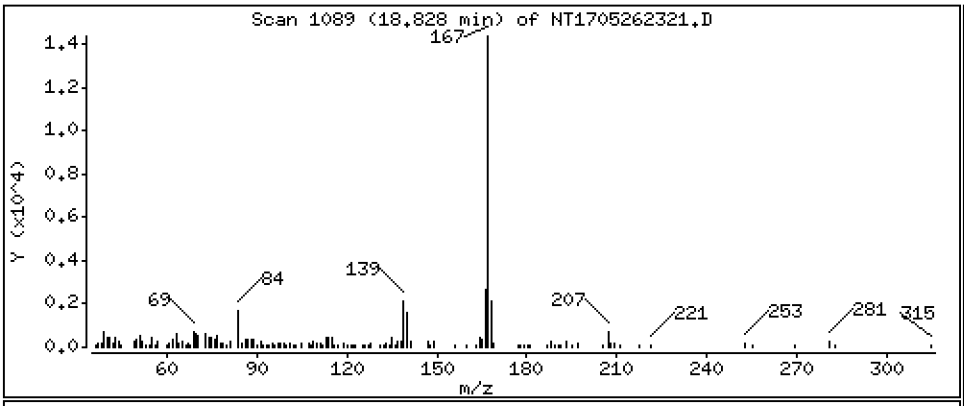
Operator: VTS

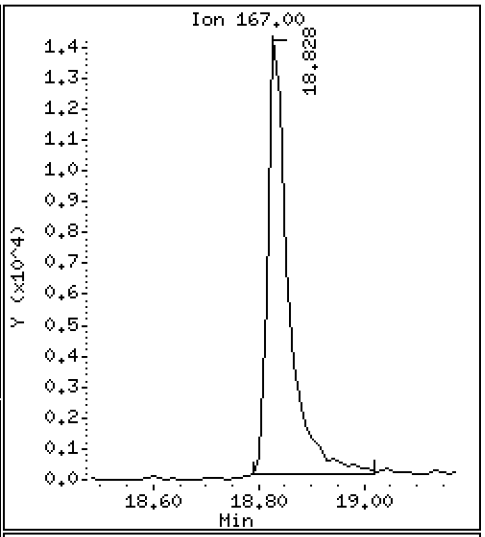
Column phase: ZB-5msi

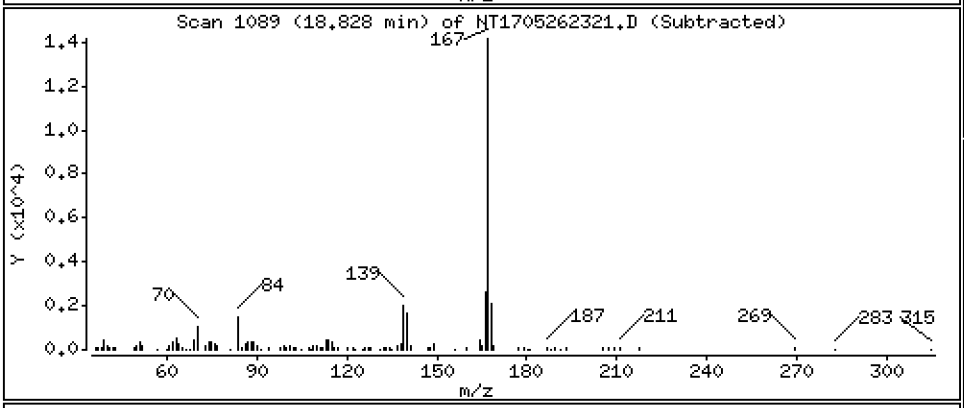
Column diameter: 0.25

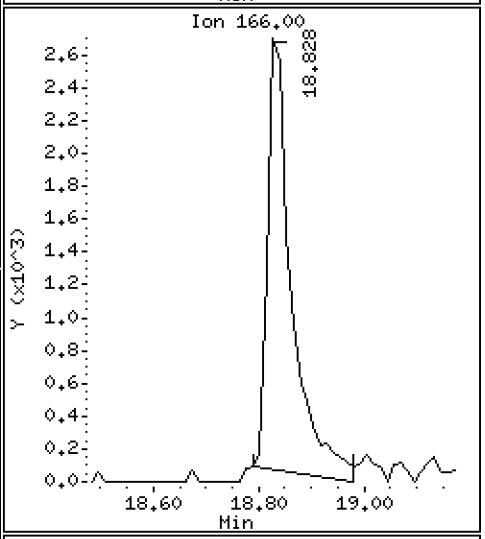
62 Carbazole

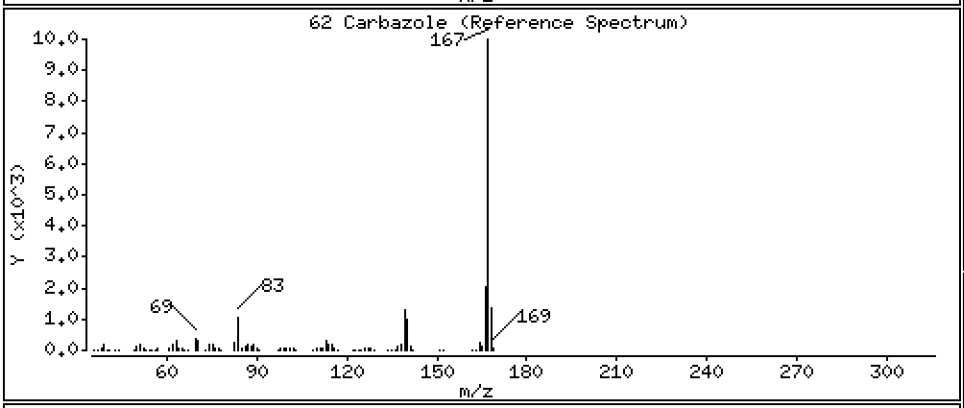
Concentration: 0.2639 ug/mL

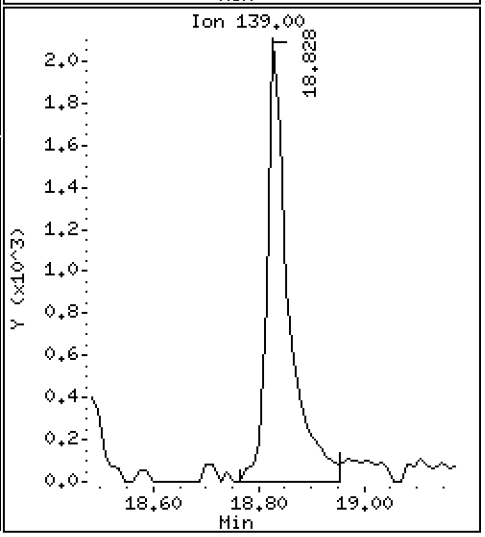


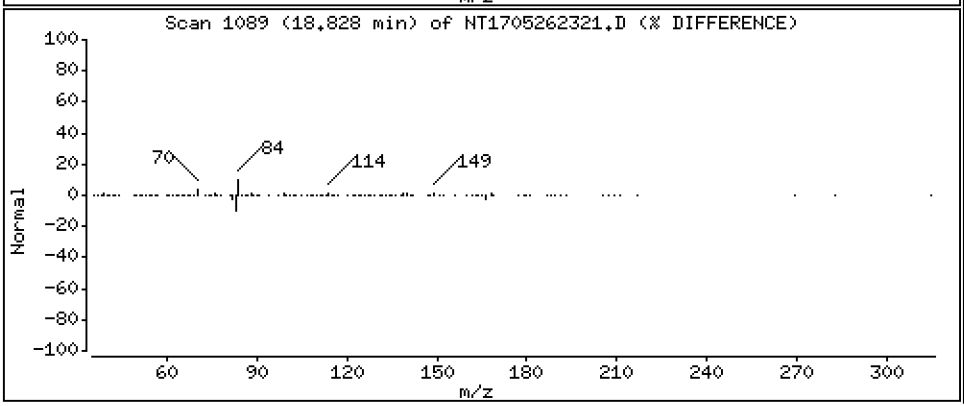












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

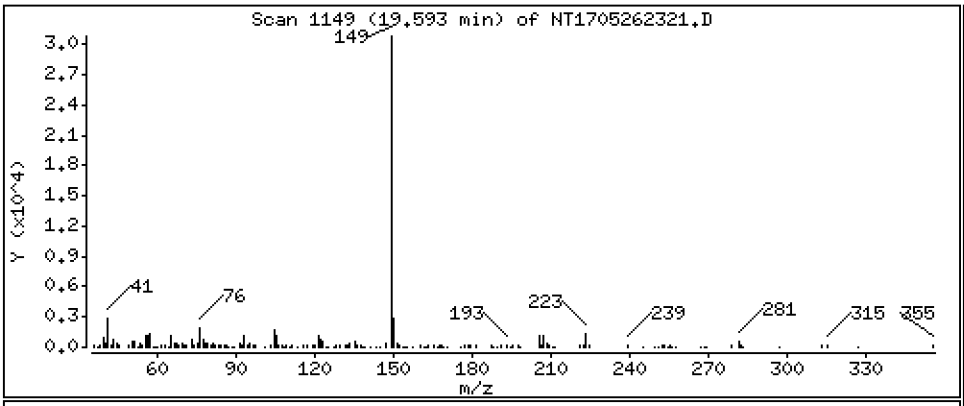
Operator: VTS

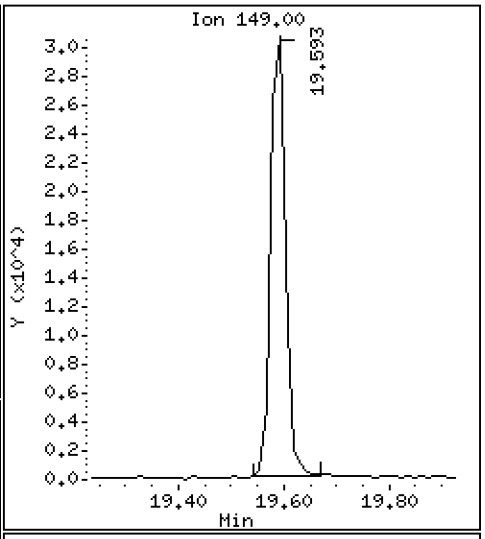
Column phase: ZB-5msi

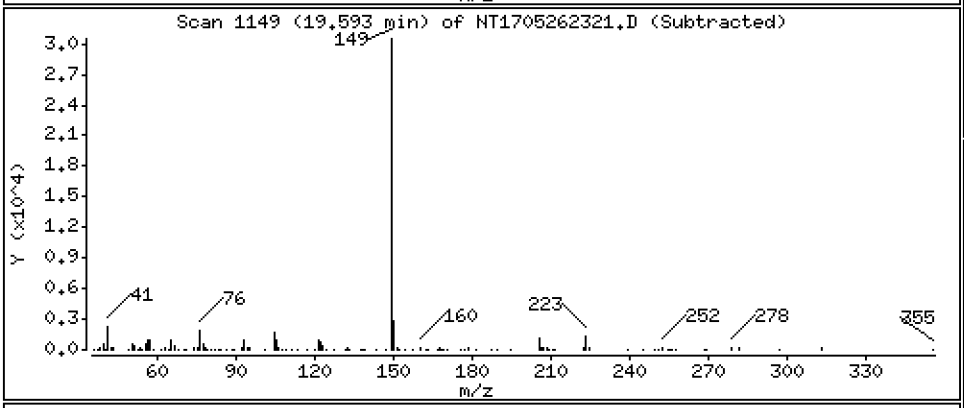
Column diameter: 0.25

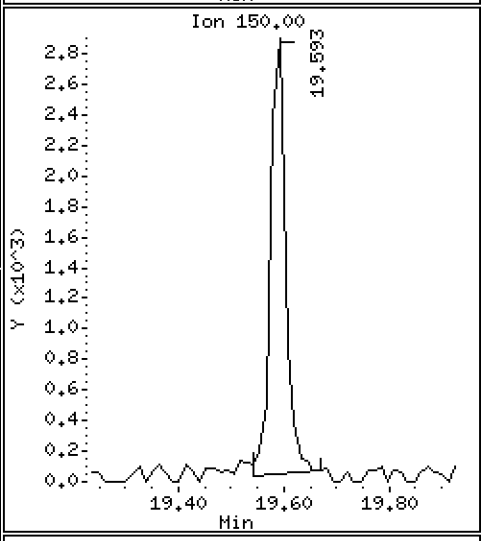
63 Di-n-butylphthalate

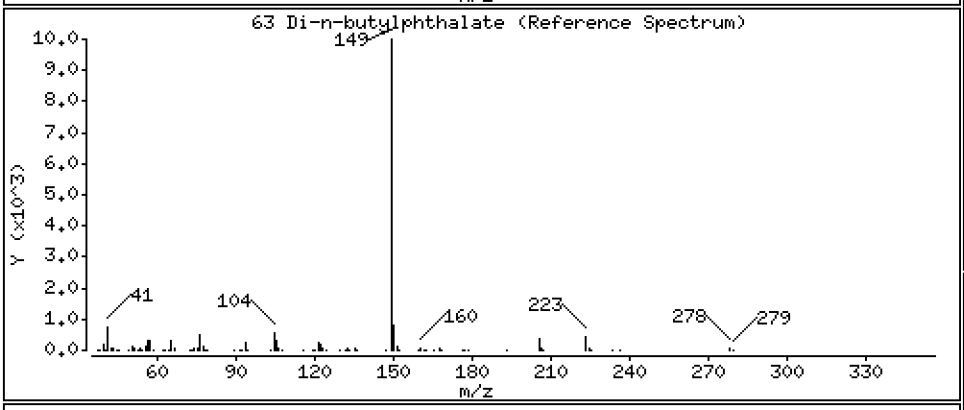
Concentration: 0.1972 ug/mL

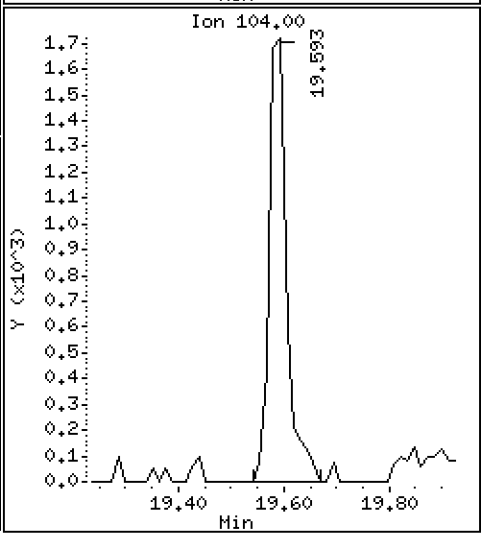


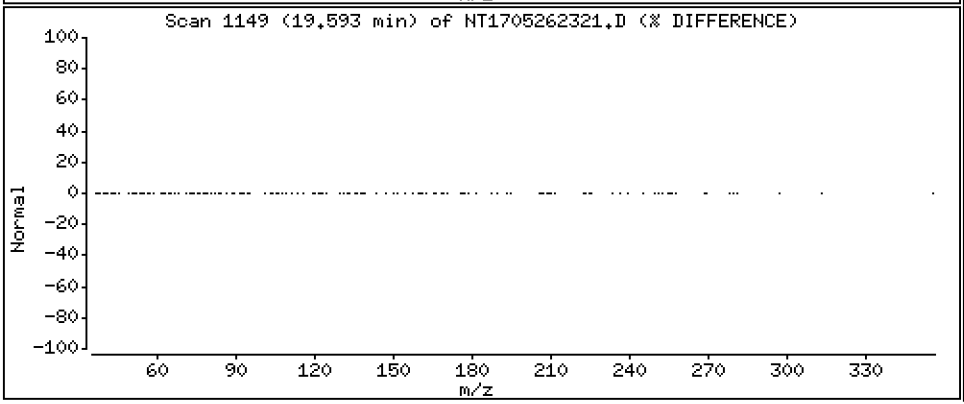












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

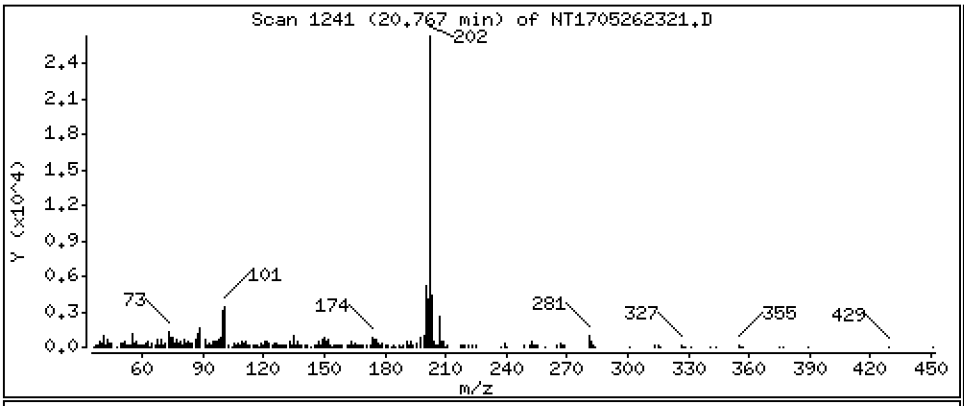
Operator: VTS

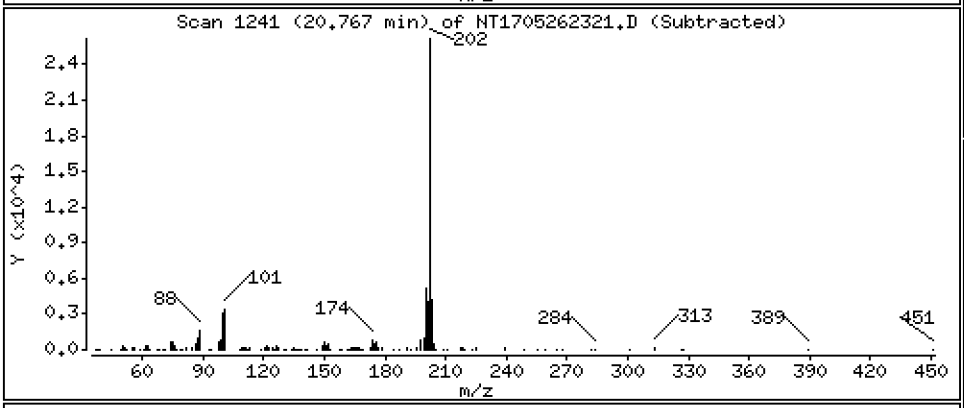
Column phase: ZB-5msi

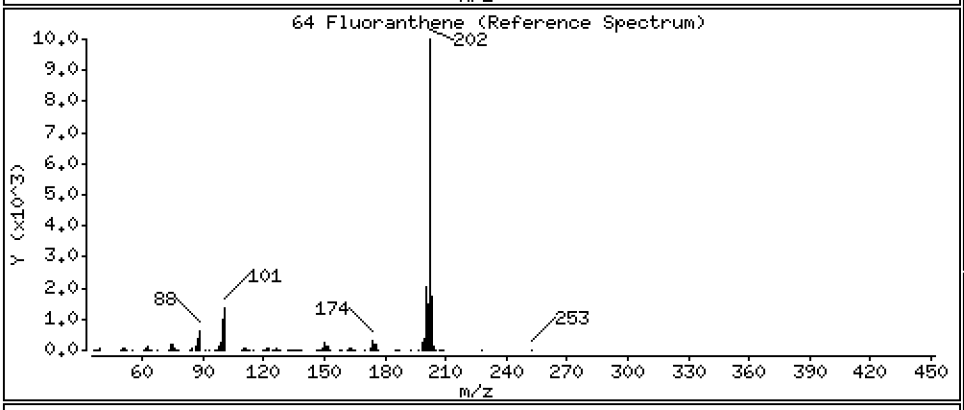
Column diameter: 0.25

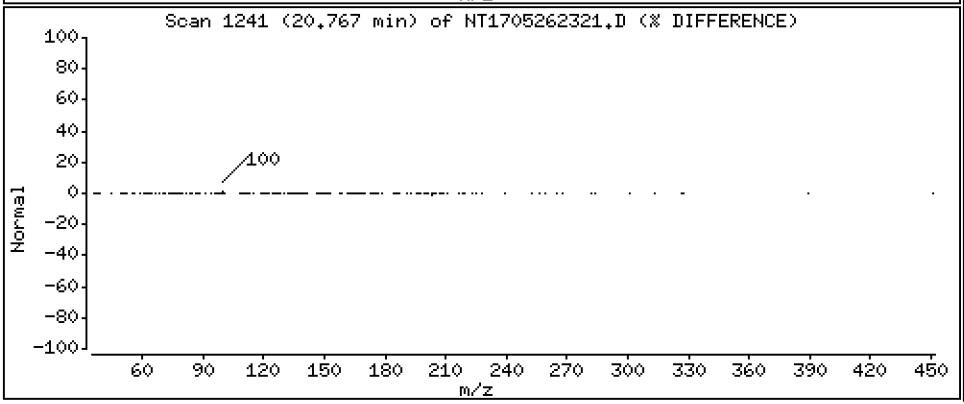
64 Fluoranthene

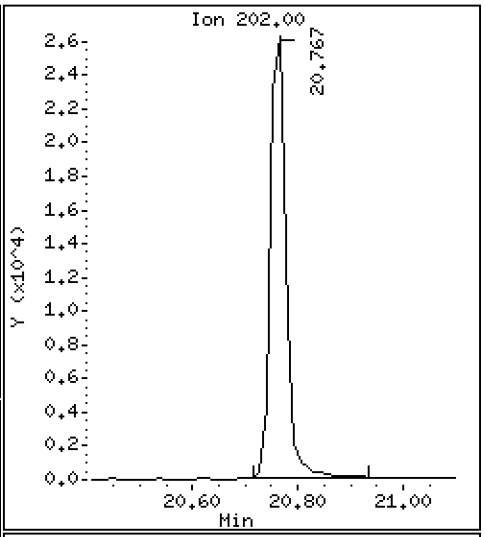
Concentration: 0.1745 ug/mL

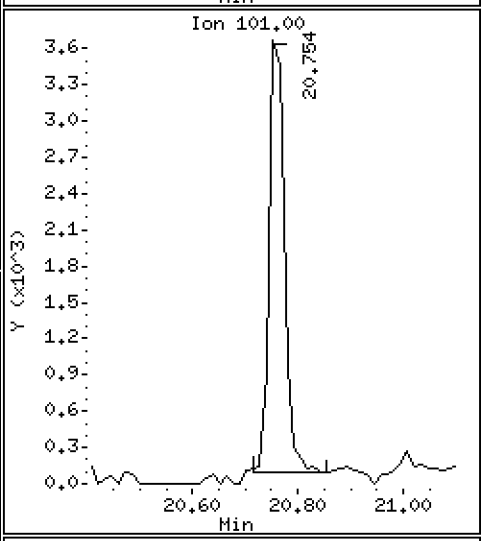


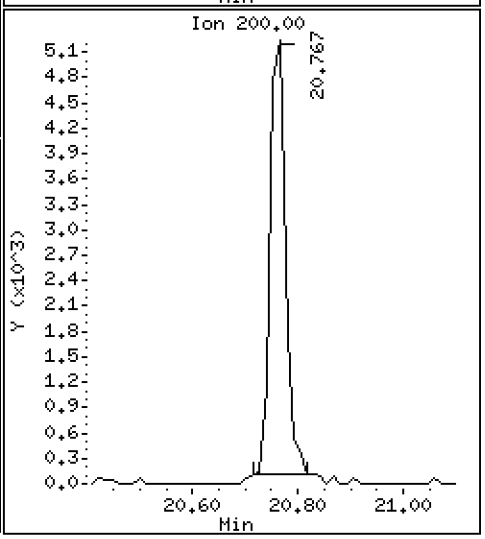












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

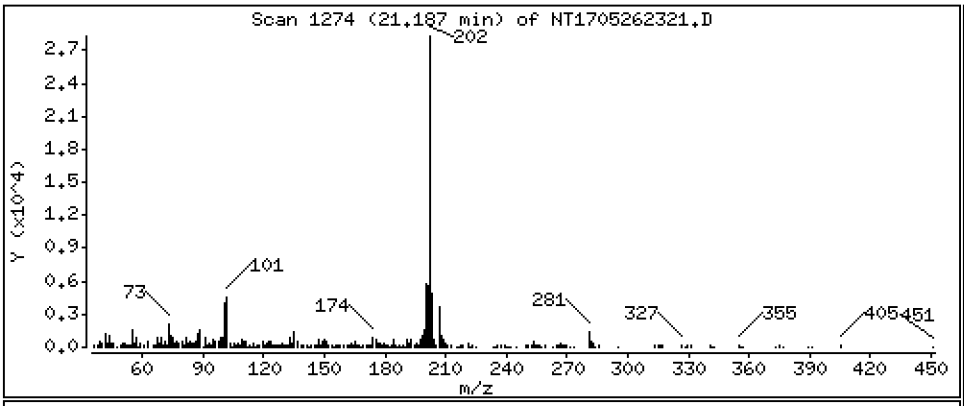
Operator: VTS

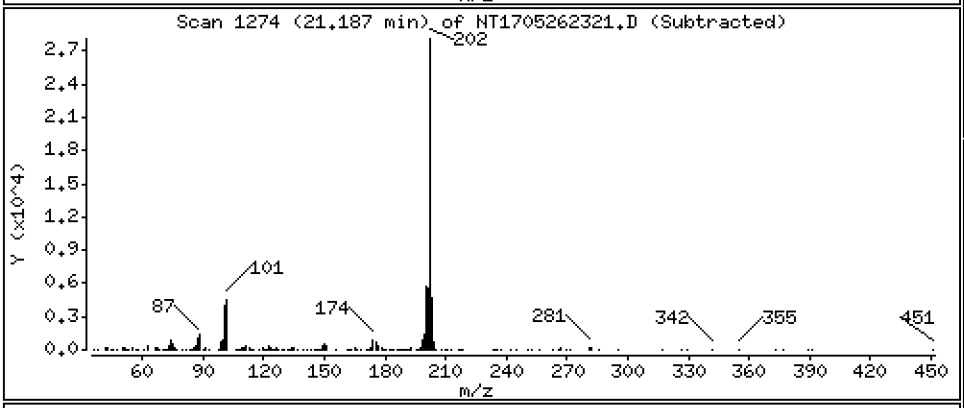
Column phase: ZB-5msi

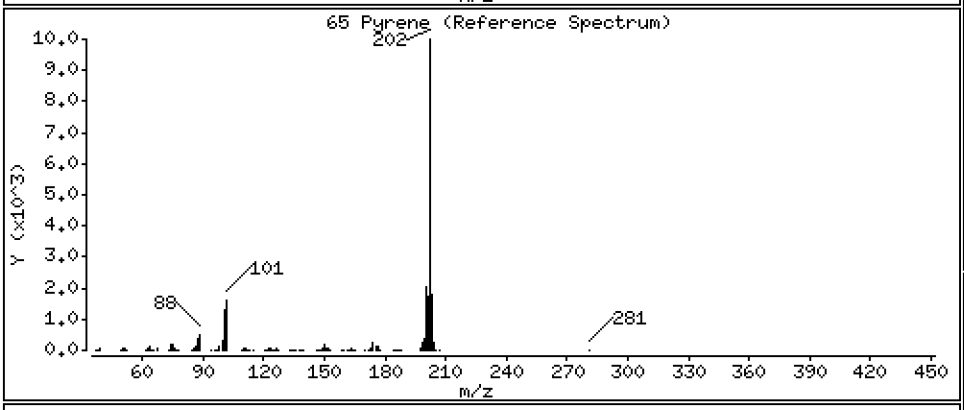
Column diameter: 0.25

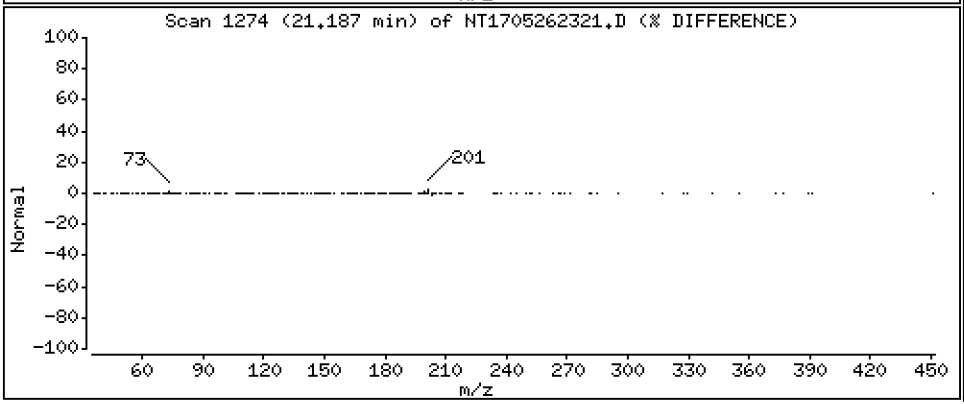
65 Pyrene

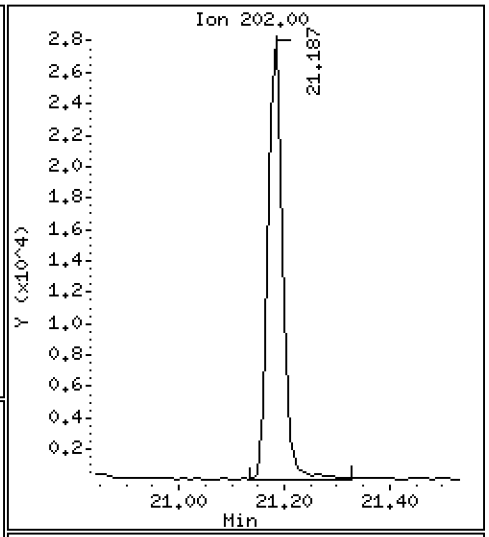
Concentration: 0.1827 ug/mL

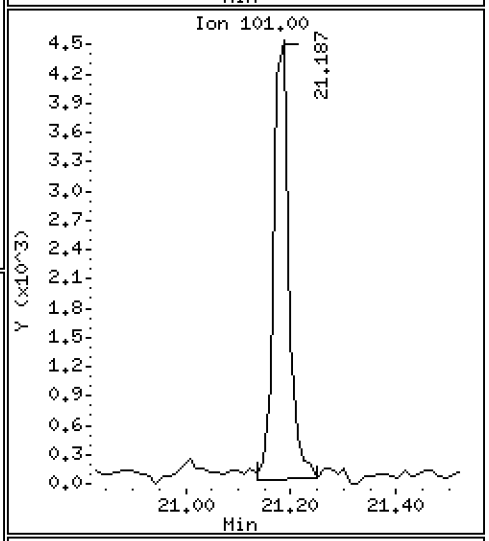


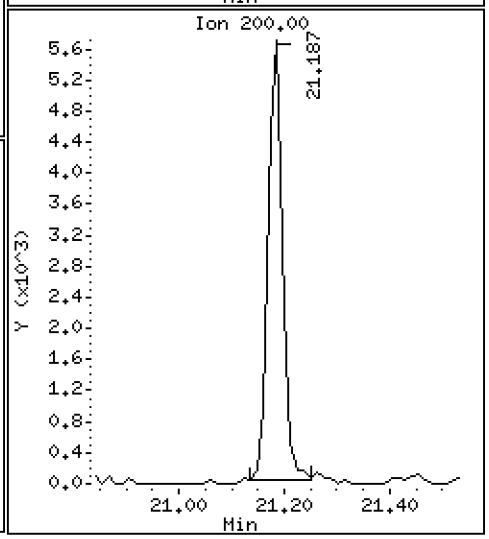












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

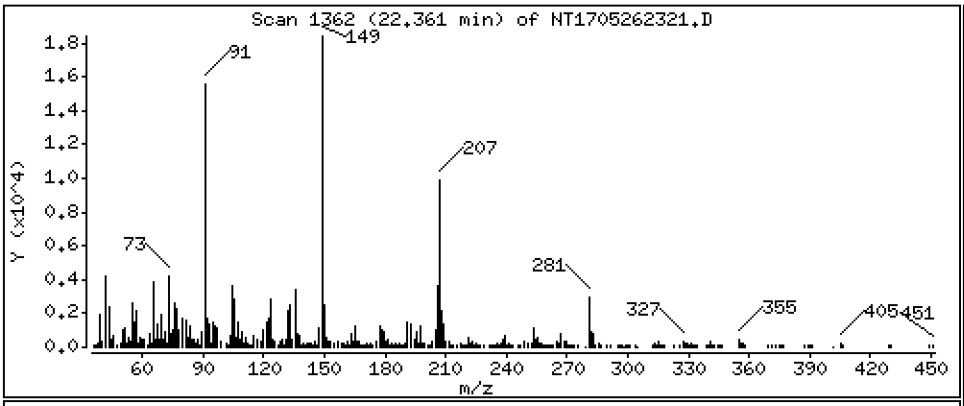
Operator: VTS

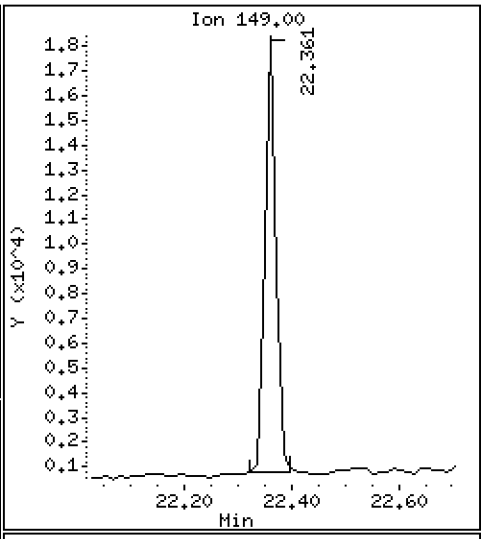
Column phase: ZB-5msi

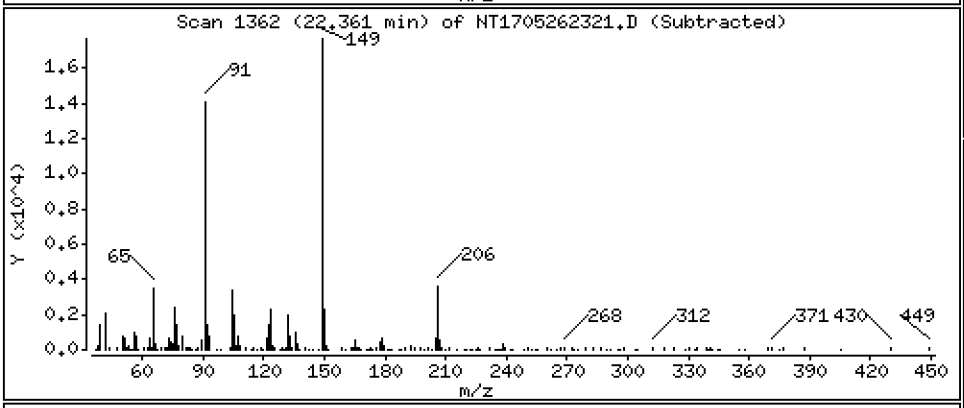
Column diameter: 0.25

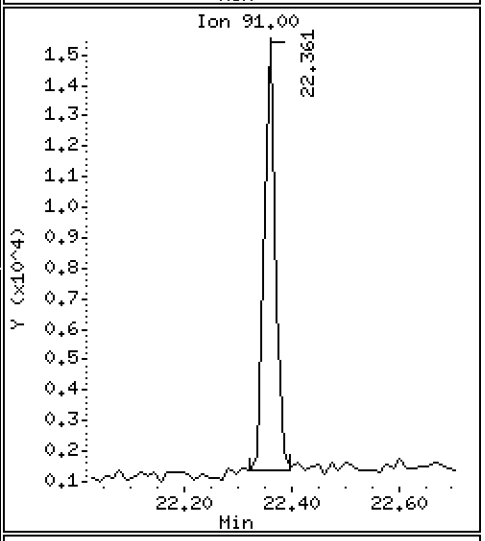
67 Butylbenzylphthalate

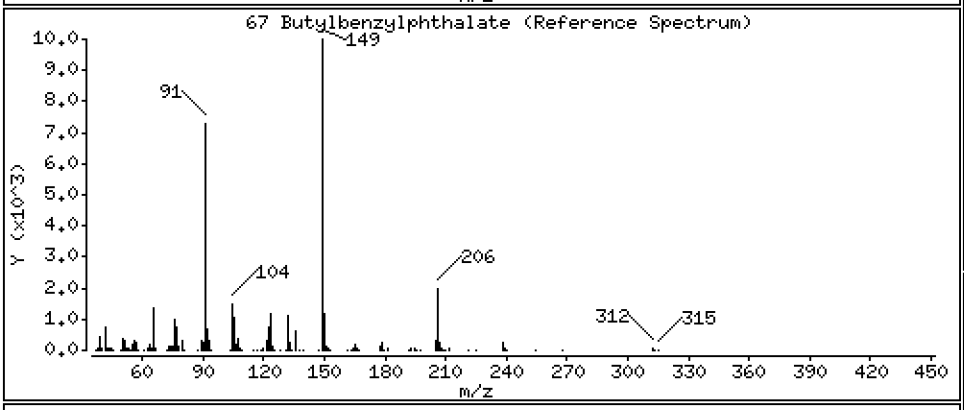
Concentration: 0.1899 ug/mL

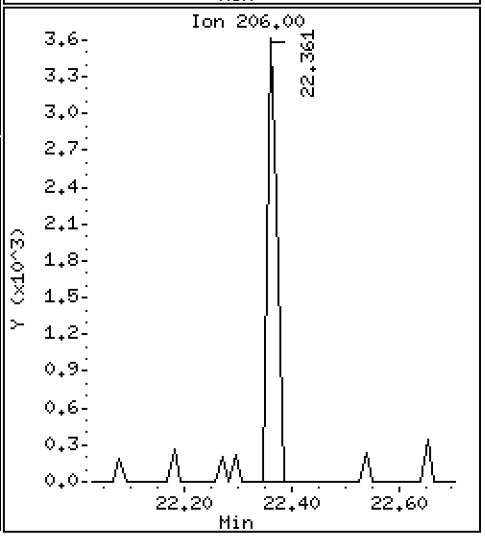


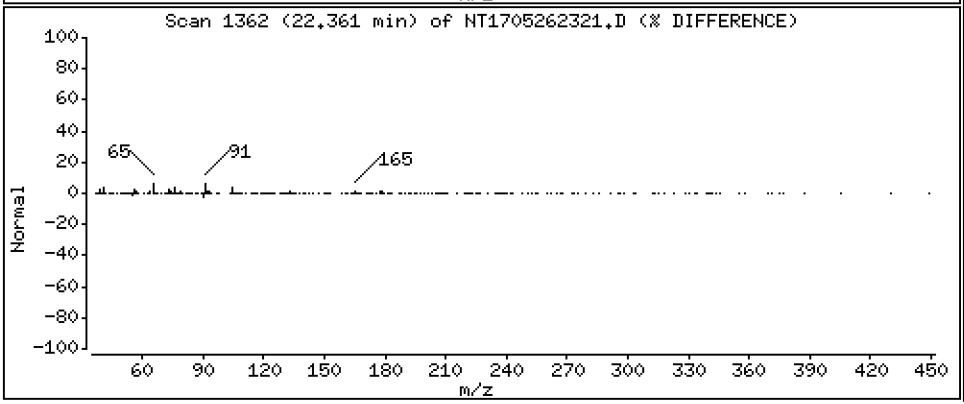












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

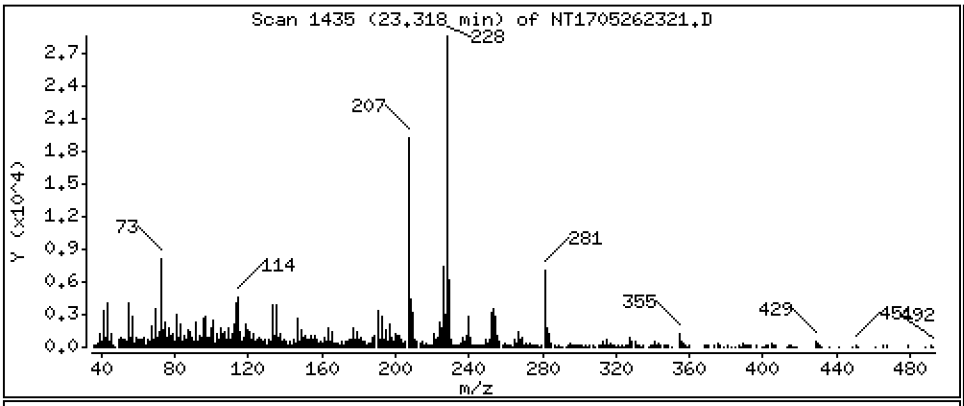
Operator: VTS

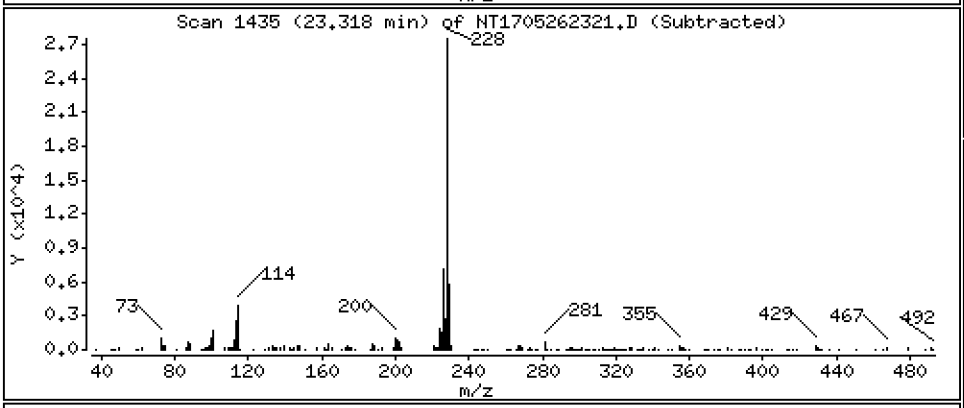
Column phase: ZB-5msi

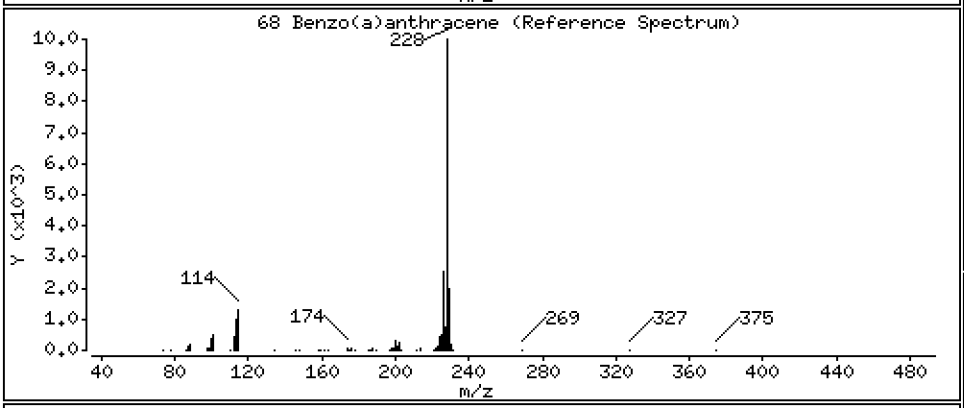
Column diameter: 0.25

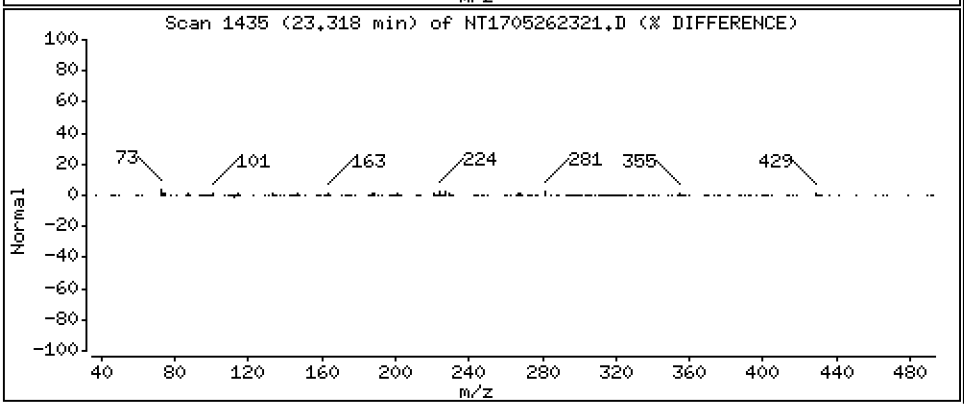
68 Benzo(a)anthracene

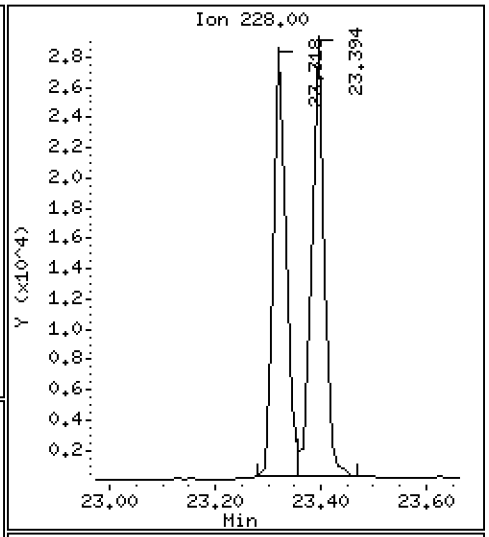
Concentration: 0.2084 ug/mL

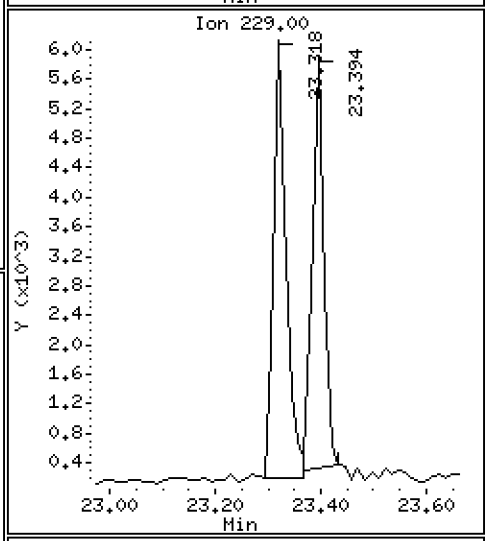


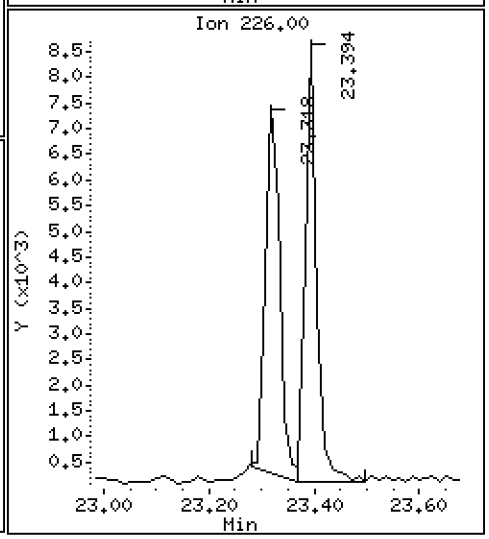












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

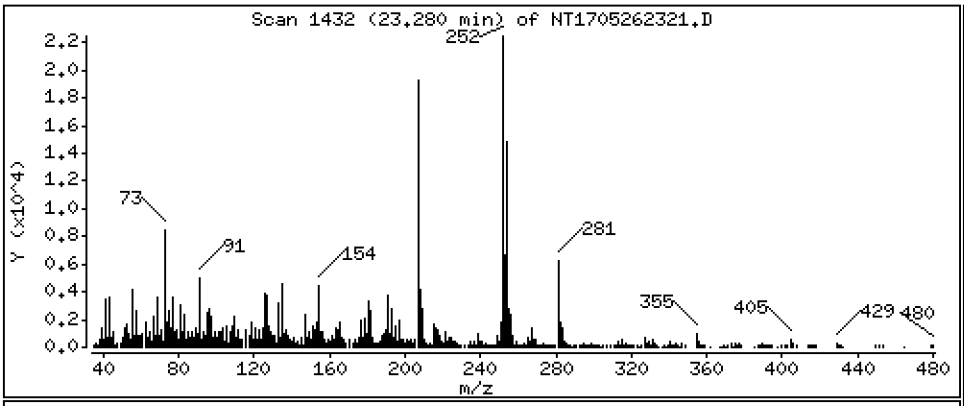
Operator: VTS

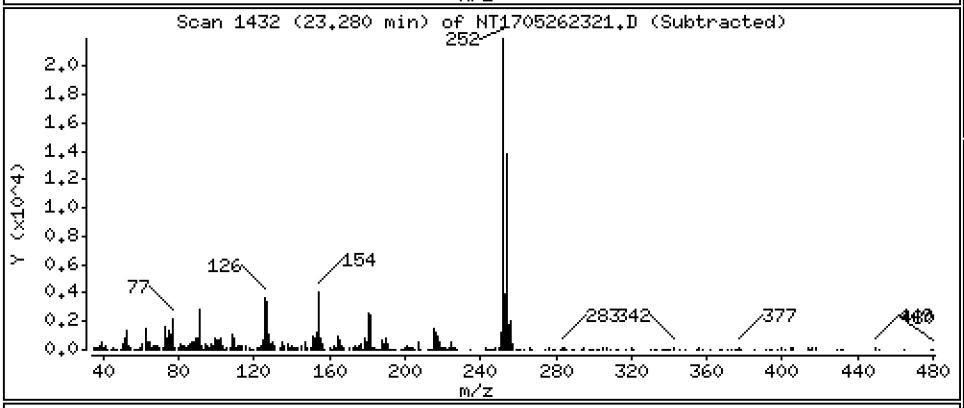
Column phase: ZB-5msi

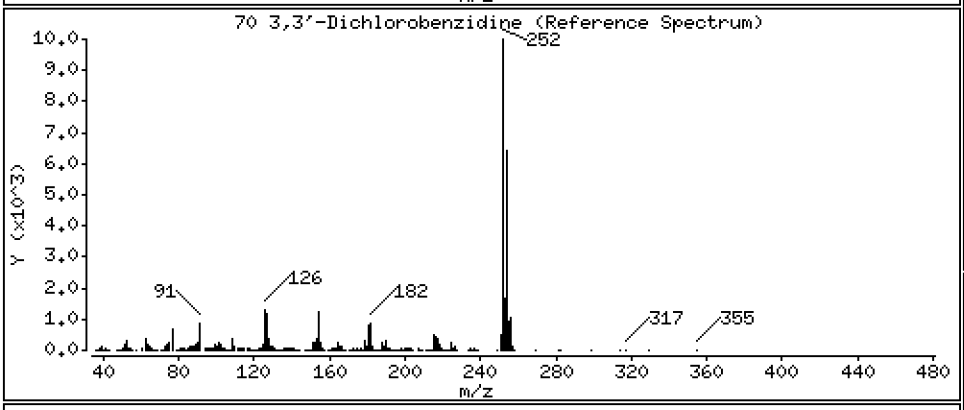
Column diameter: 0.25

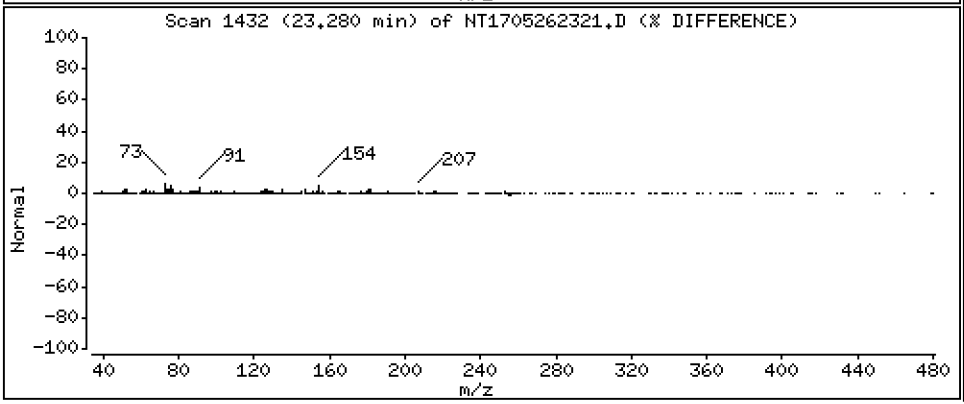
70 3,3'-Dichlorobenzidine

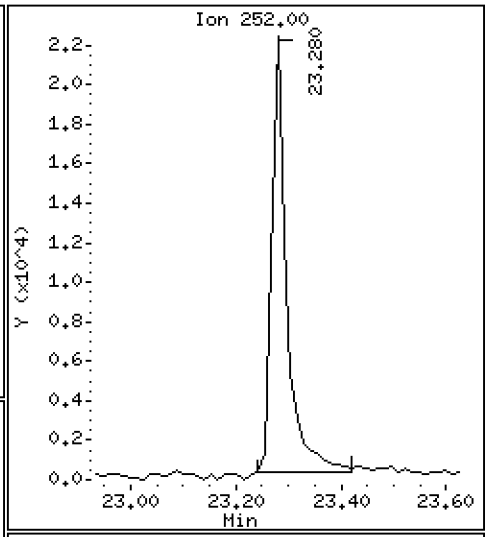
Concentration: 0.9960 ug/mL

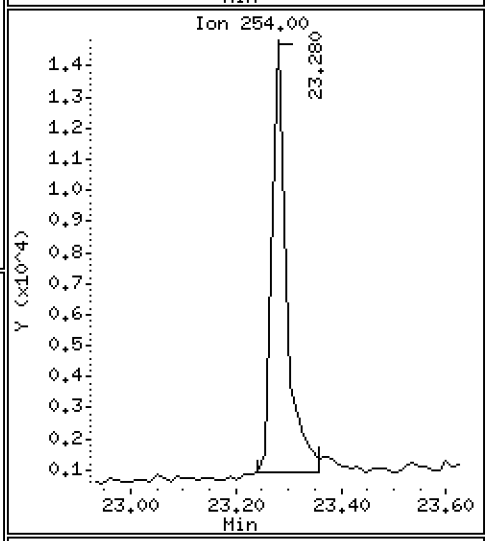


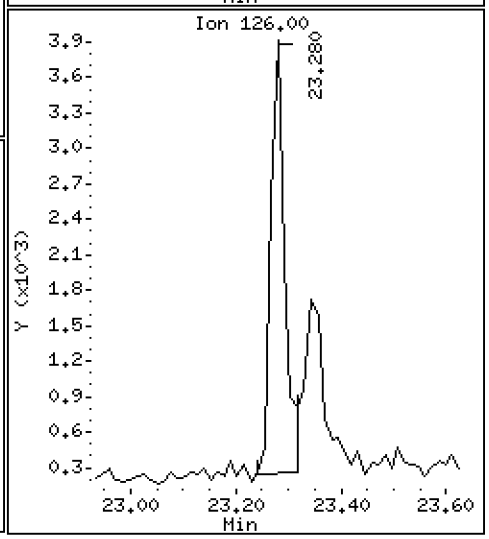












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

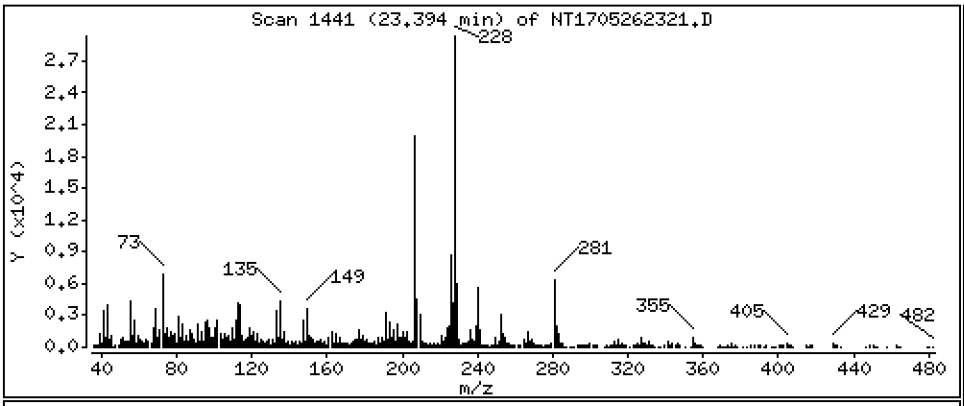
Operator: VTS

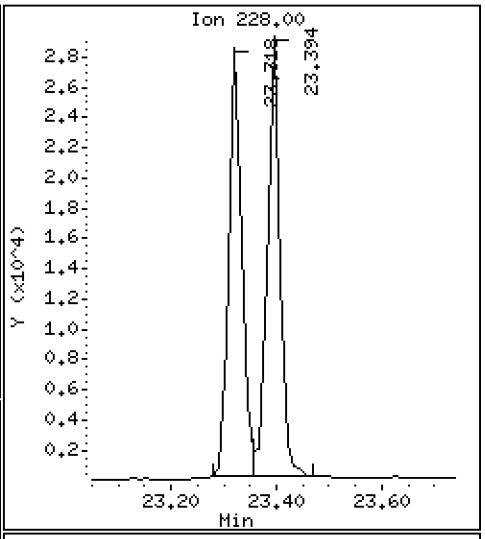
Column phase: ZB-5msi

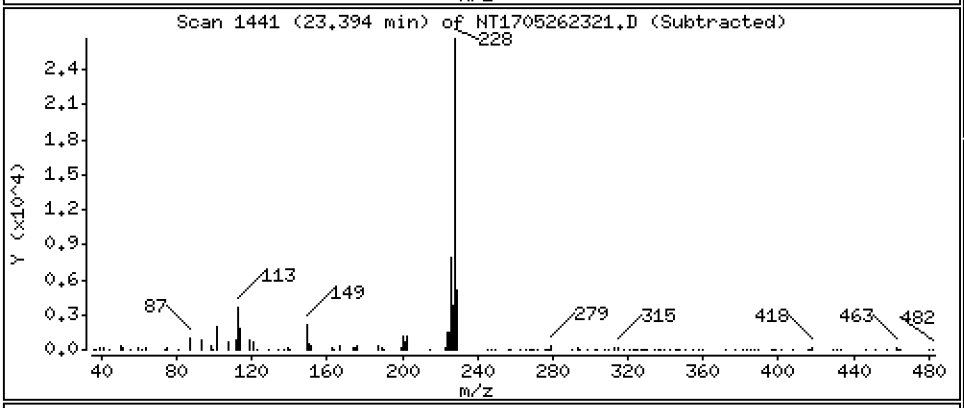
Column diameter: 0.25

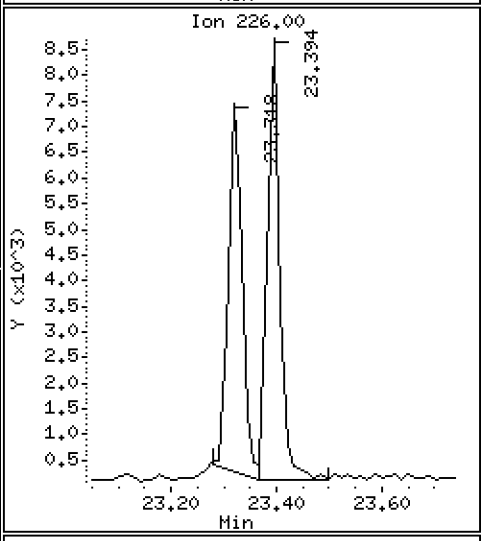
71 Chrysene

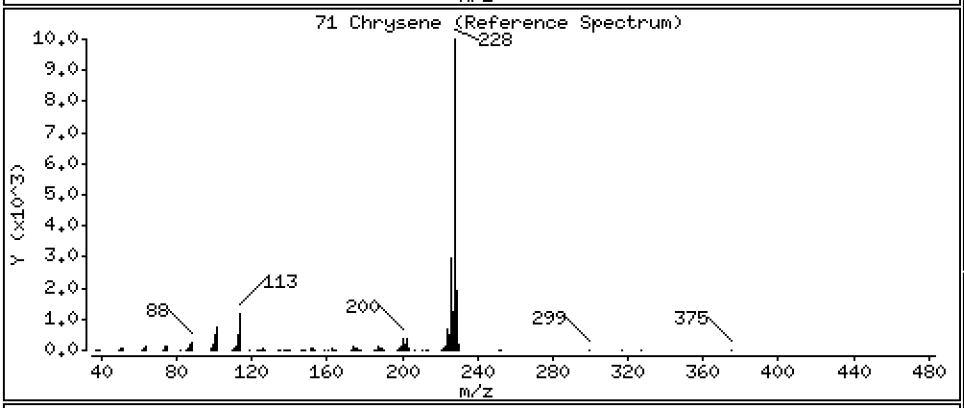
Concentration: 0.2172 ug/mL

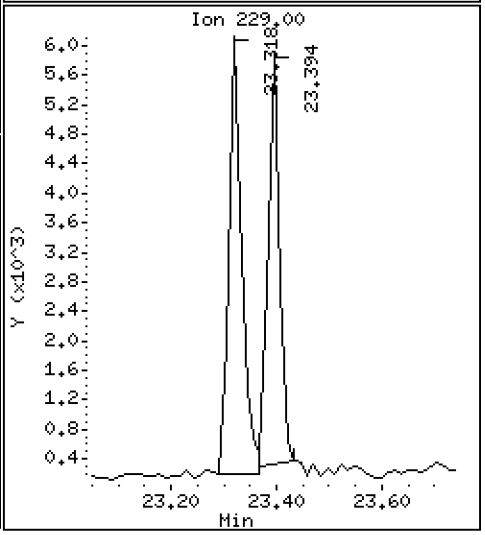


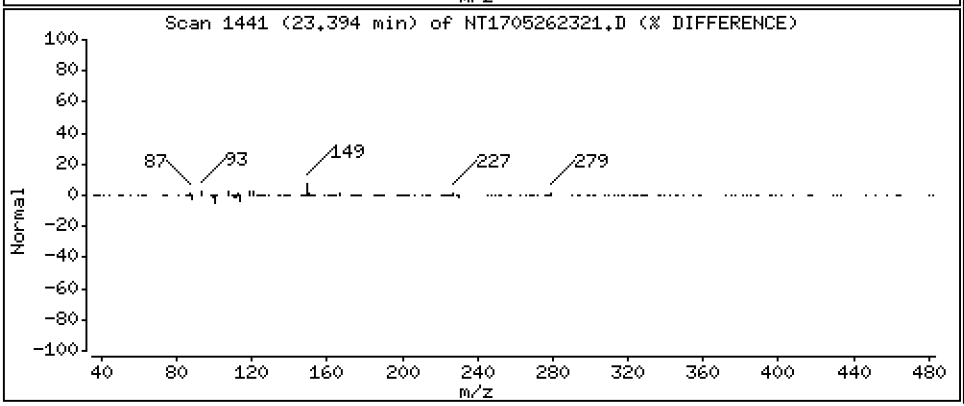












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

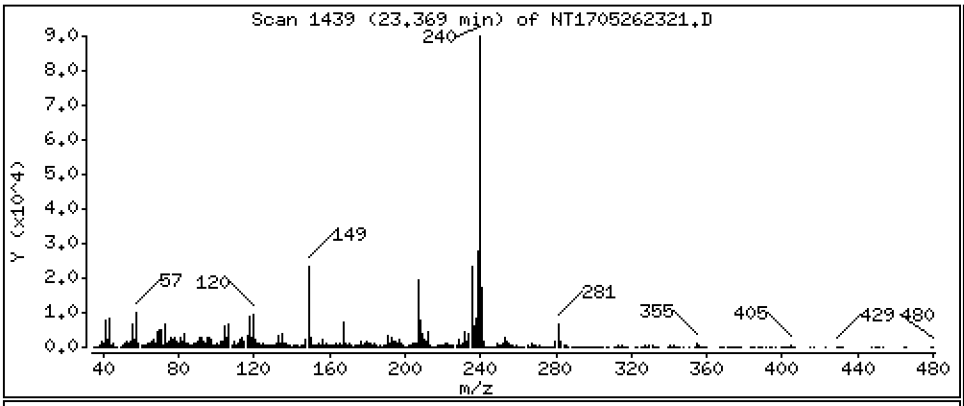
Operator: VTS

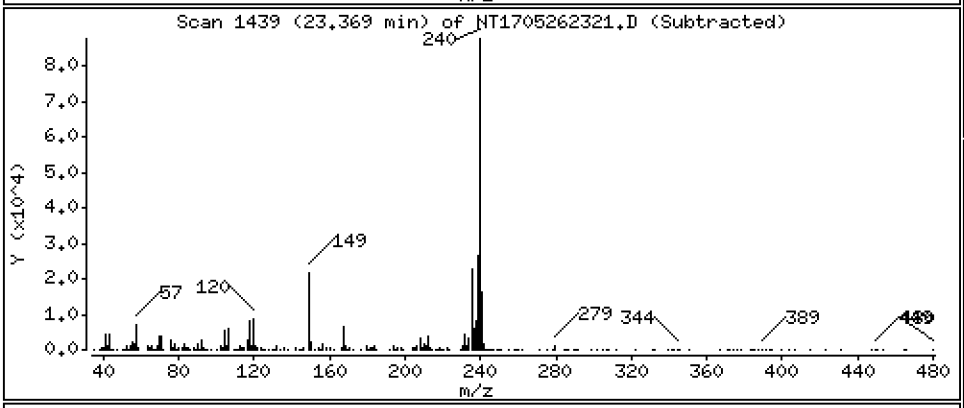
Column phase: ZB-5msi

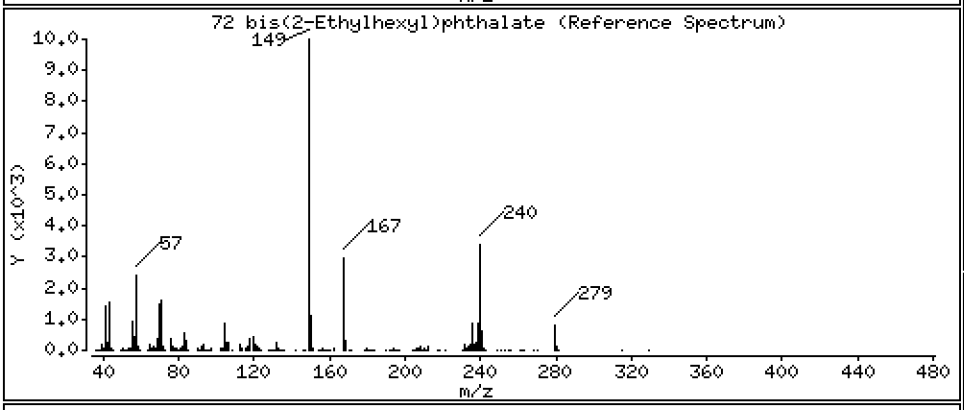
Column diameter: 0.25

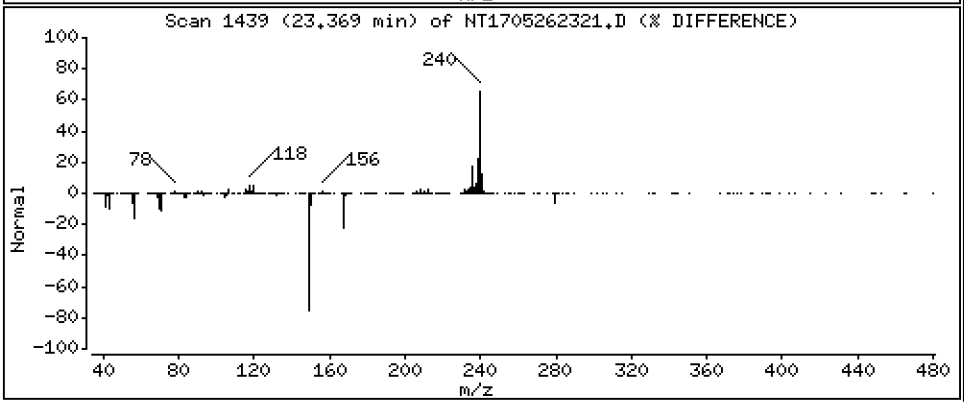
72 bis(2-Ethylhexyl)phthalate

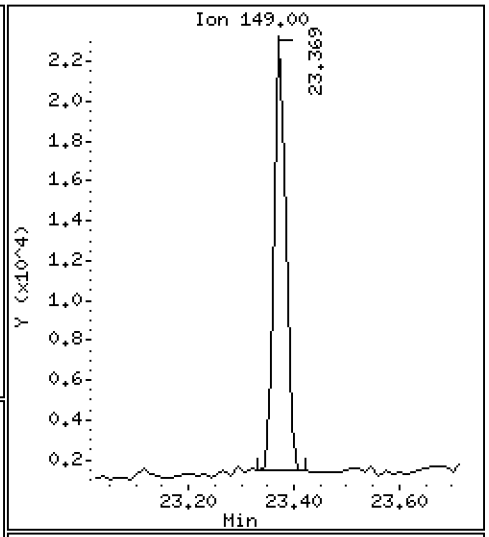
Concentration: 0.1810 ug/mL

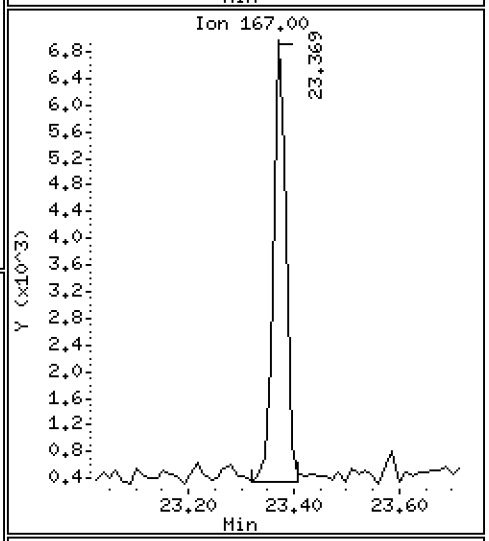


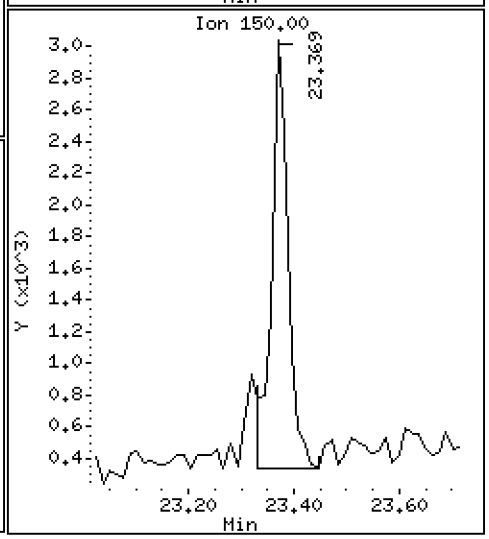












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

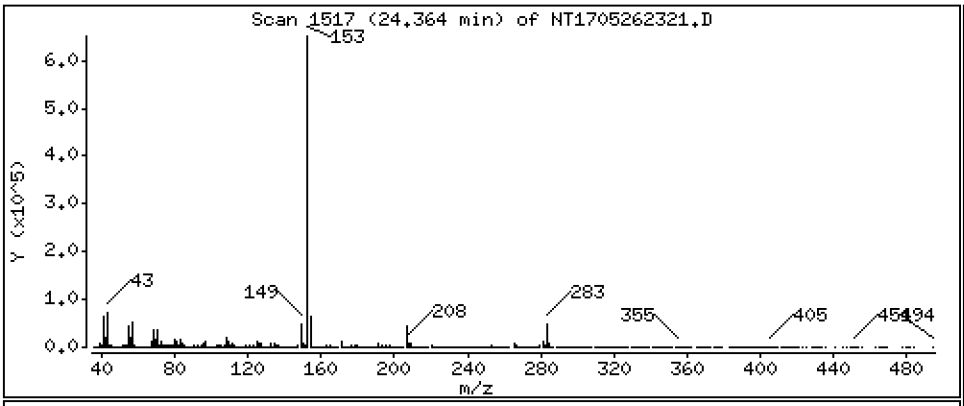
Operator: VTS

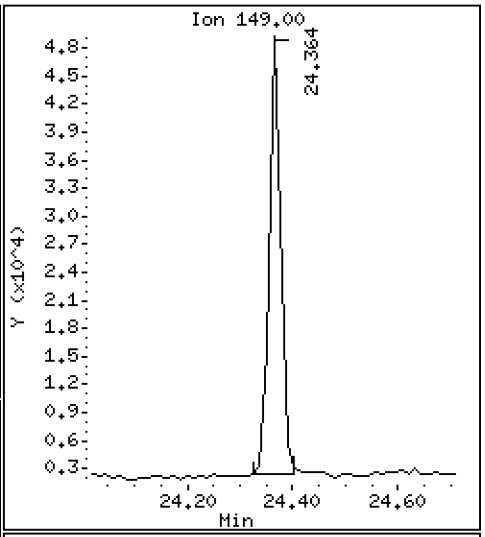
Column phase: ZB-5msi

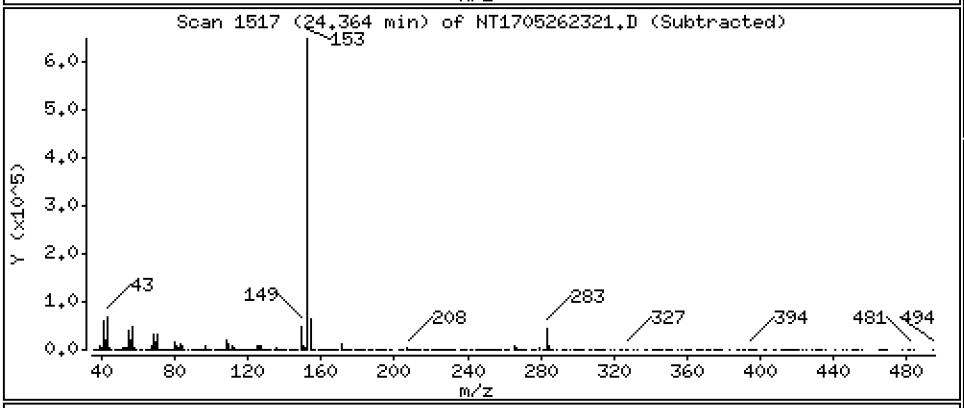
Column diameter: 0.25

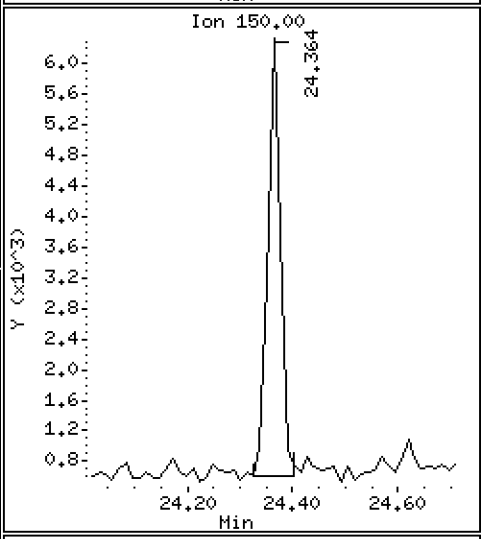
73 Di-n-octylphthalate

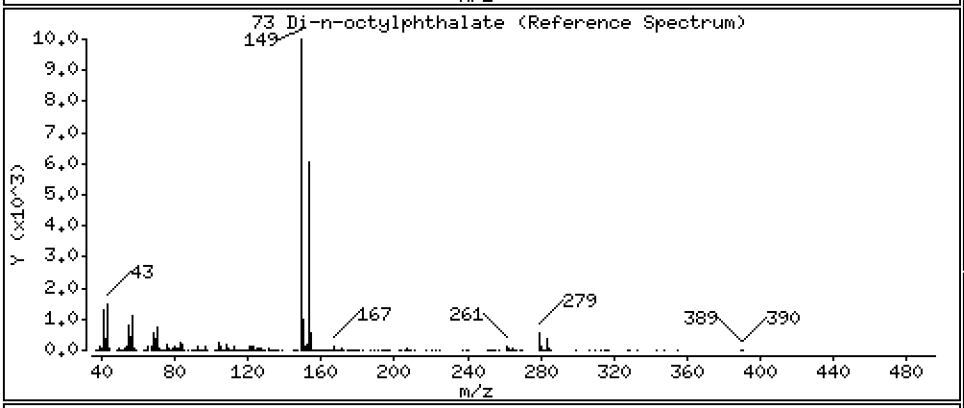
Concentration: 0.2125 ug/mL

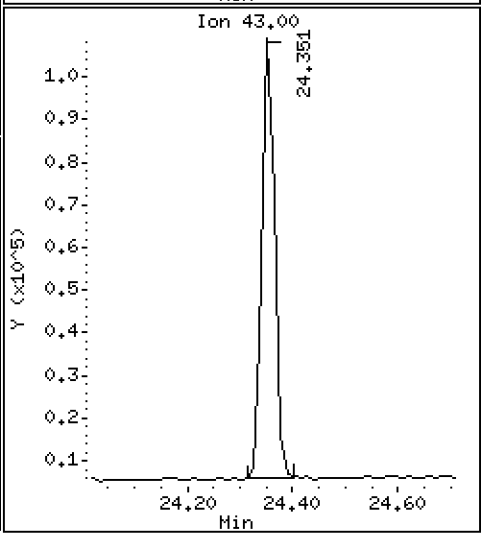


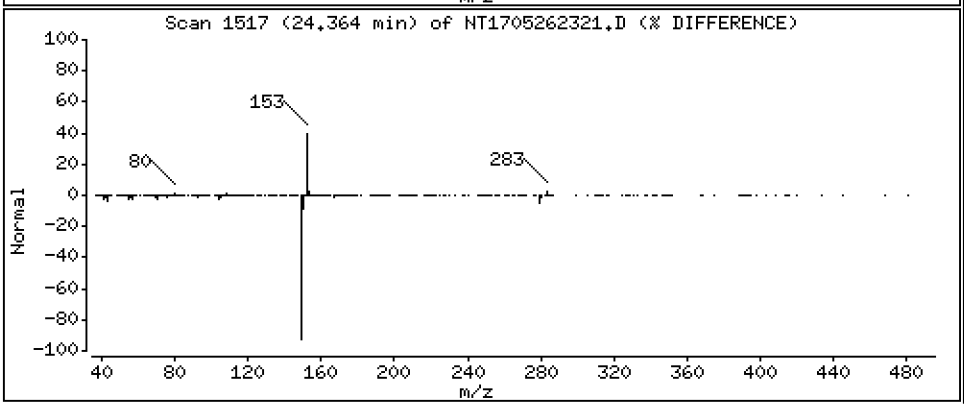












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

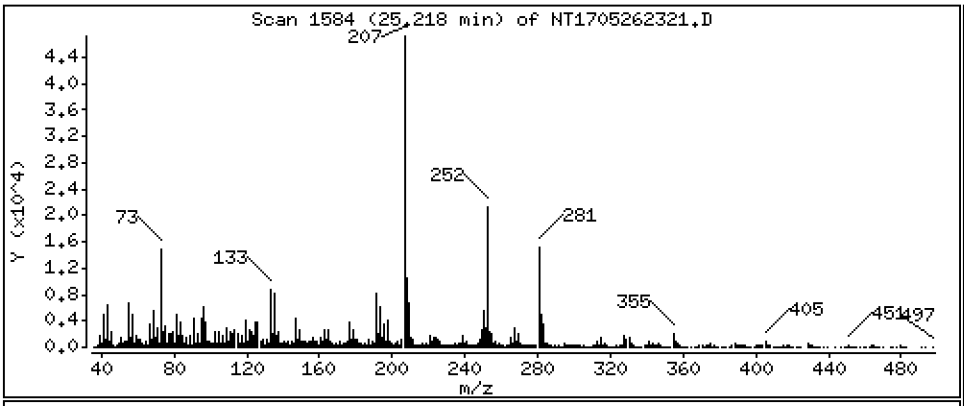
Operator: VTS

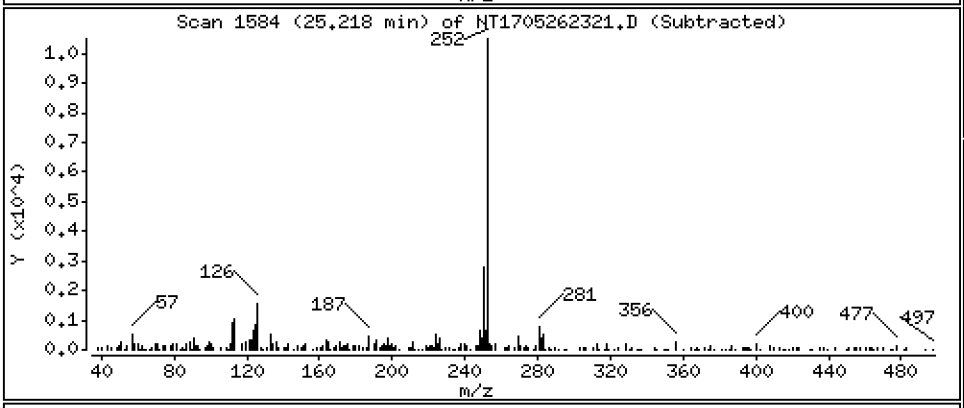
Column phase: ZB-5msi

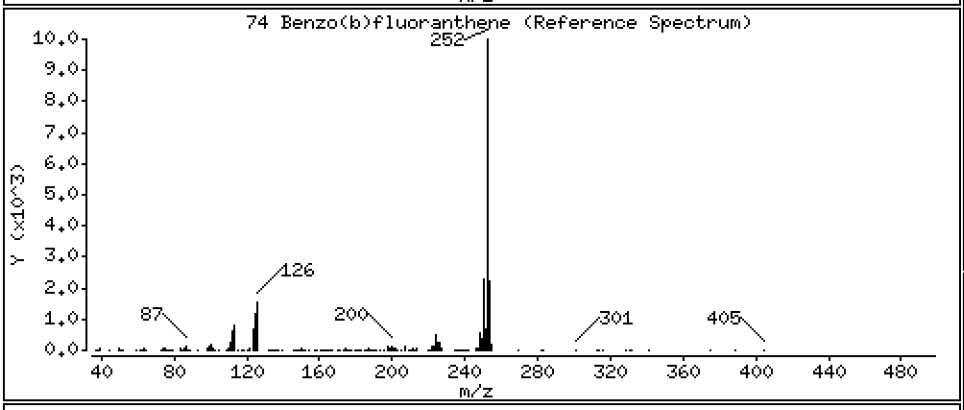
Column diameter: 0.25

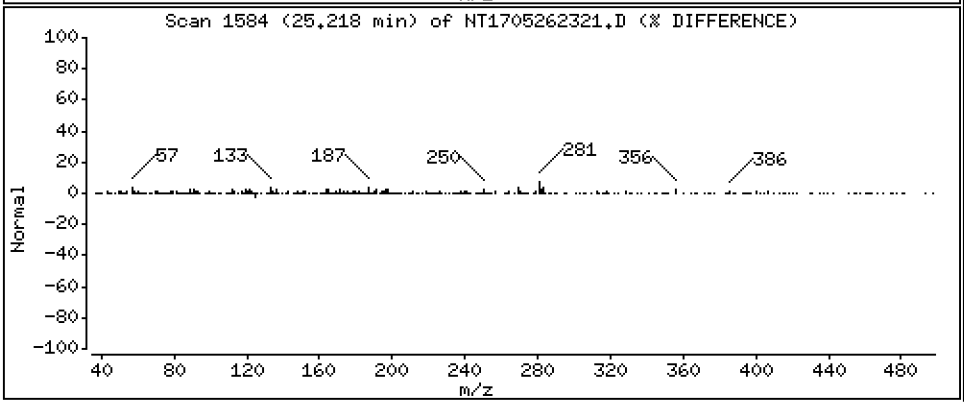
74 Benzo(b)fluoranthene

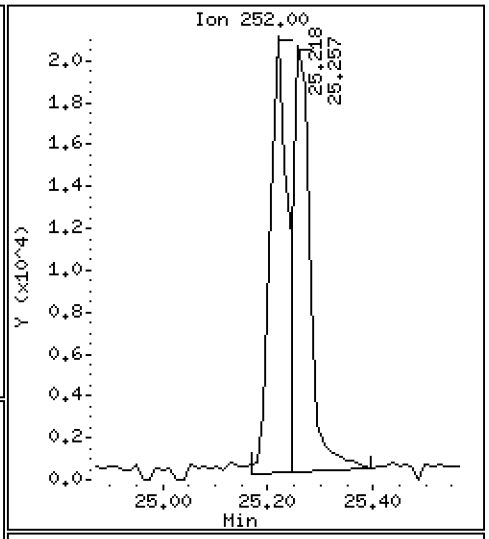
Concentration: 0.2243 ug/mL

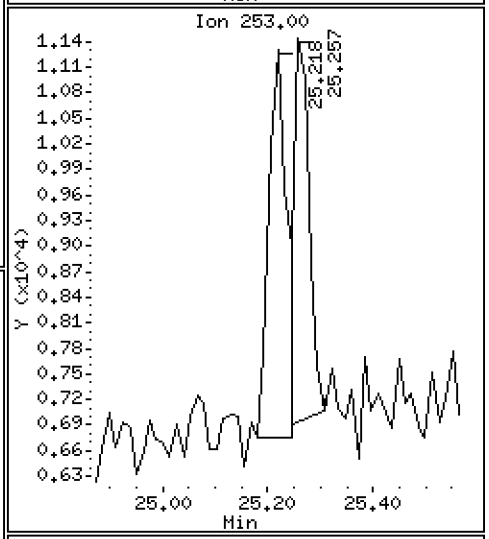


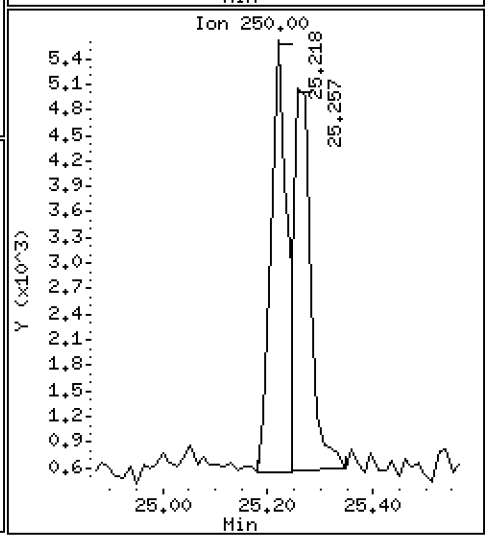












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

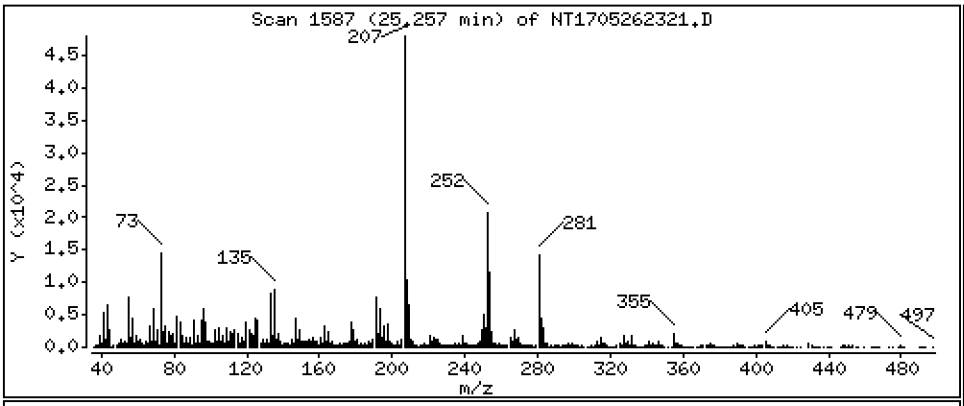
Operator: VTS

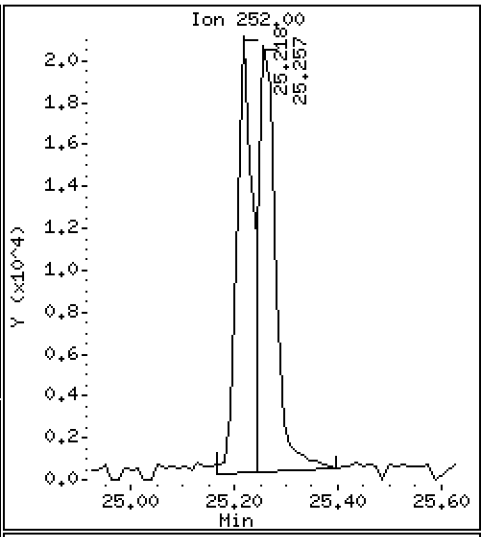
Column phase: ZB-5msi

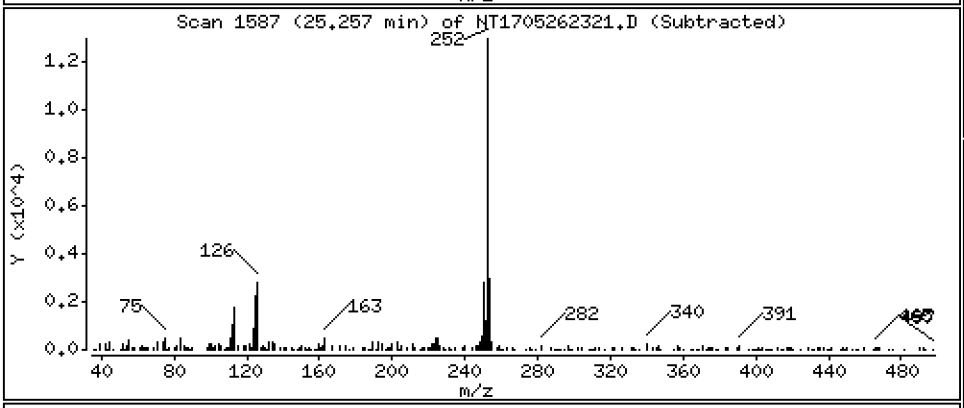
Column diameter: 0.25

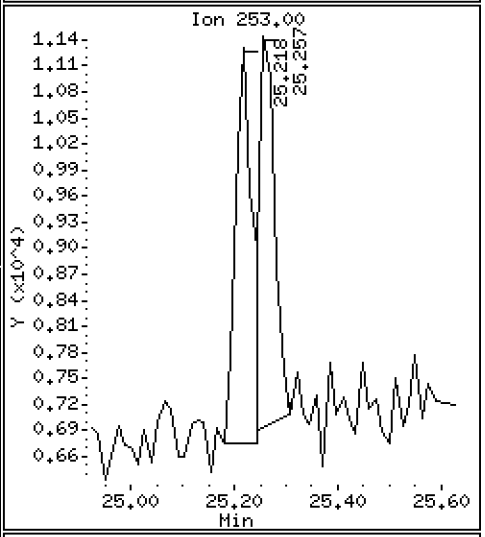
75 Benzo(k)fluoranthene

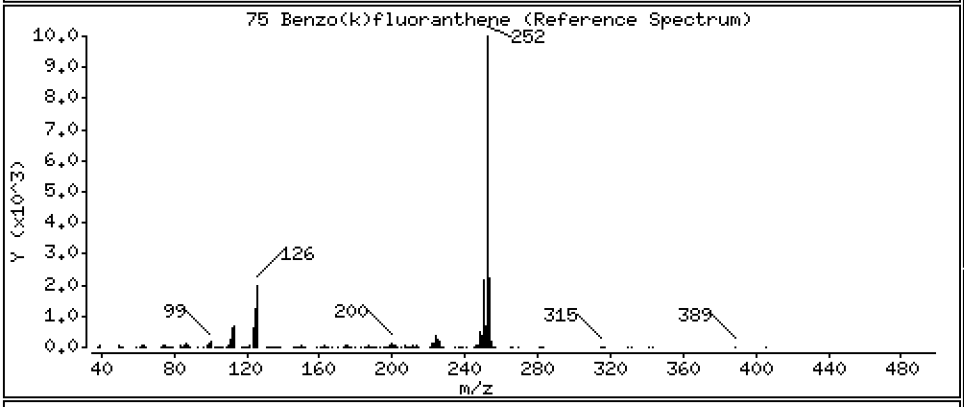
Concentration: 0.2410 ug/mL

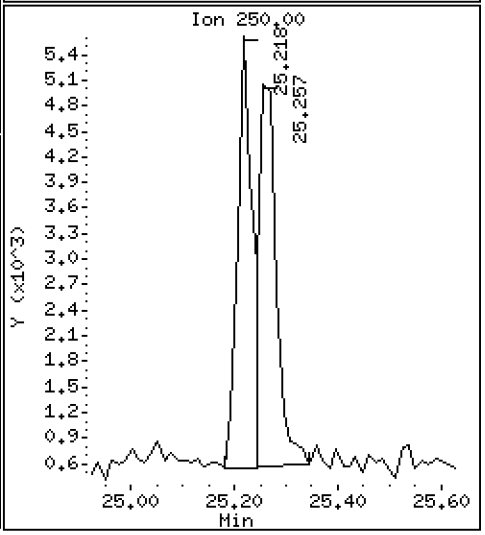


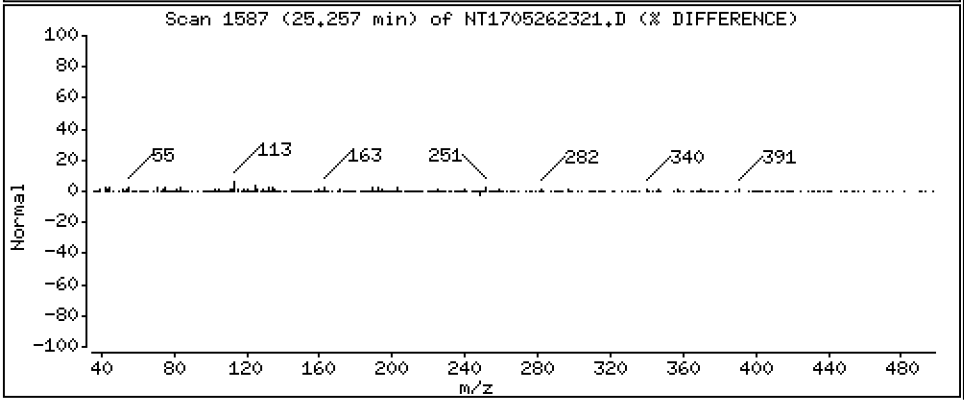












Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

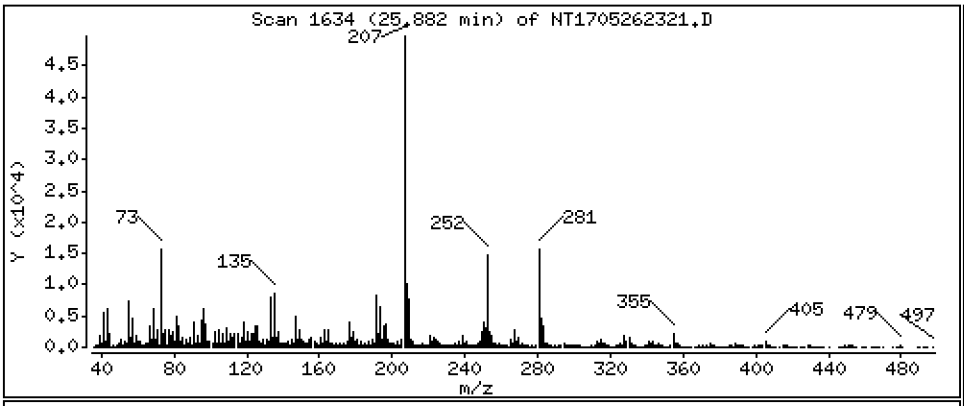
Operator: VTS

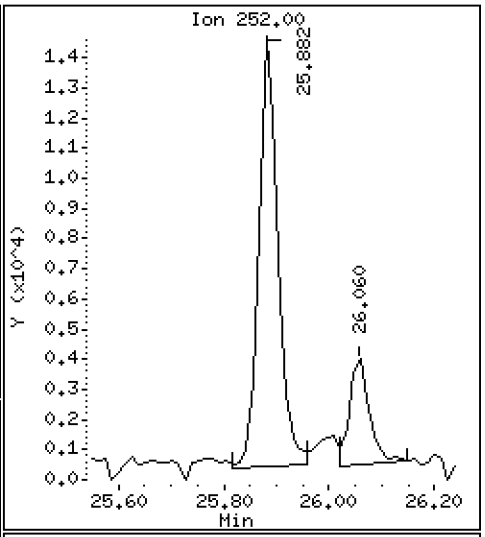
Column phase: ZB-5msi

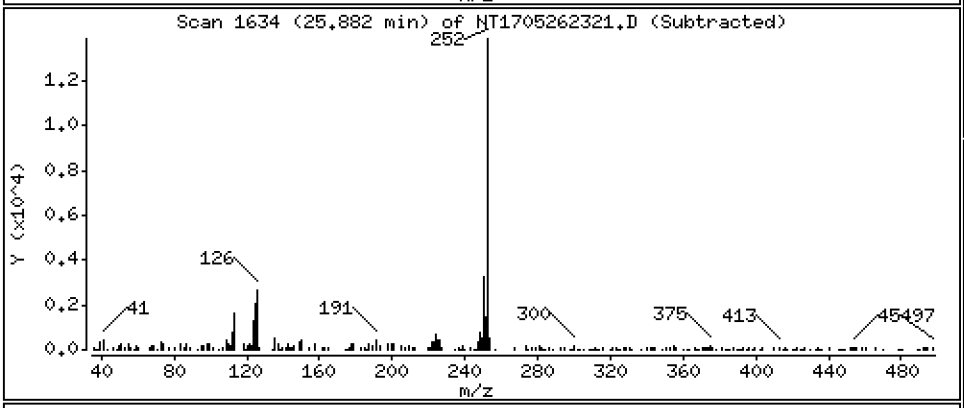
Column diameter: 0.25

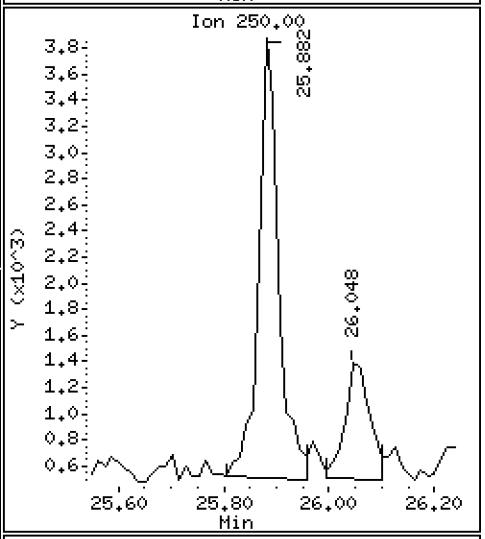
76 Benzo(a)pyrene

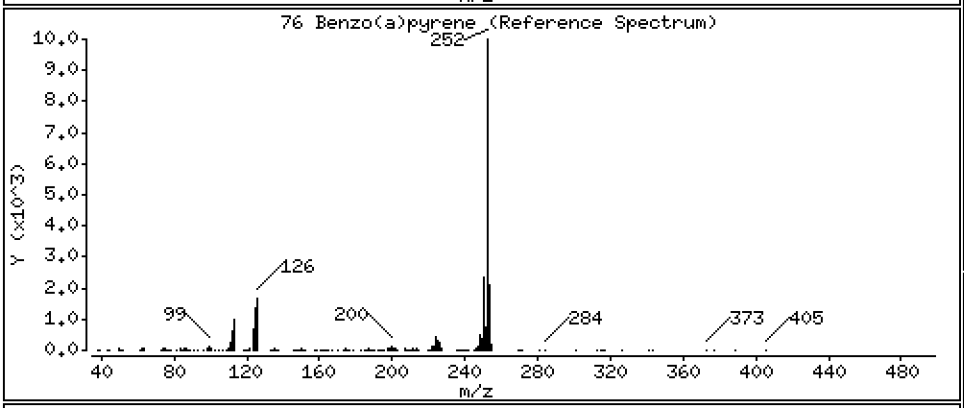
Concentration: 0.2121 ug/mL

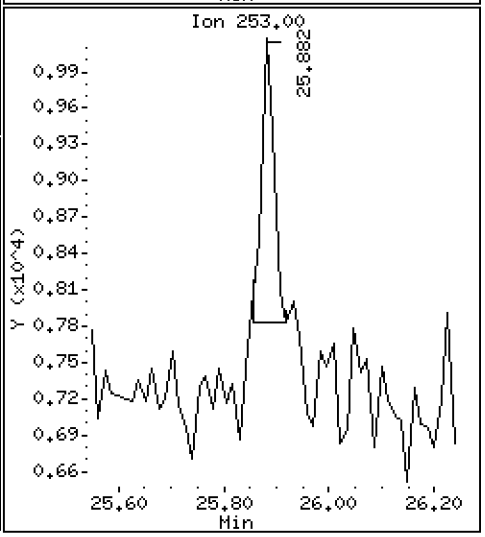


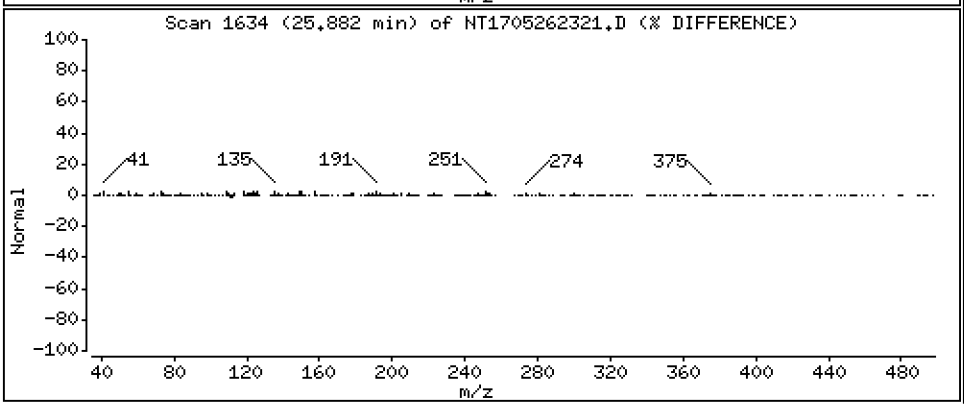












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

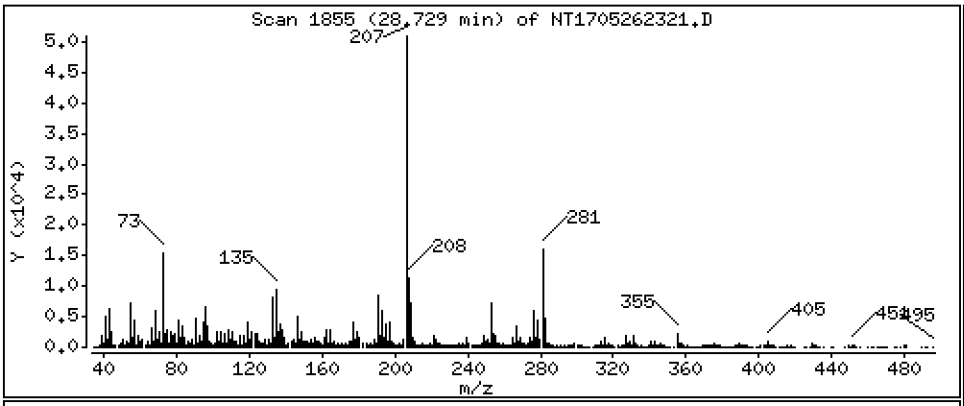
Operator: VTS

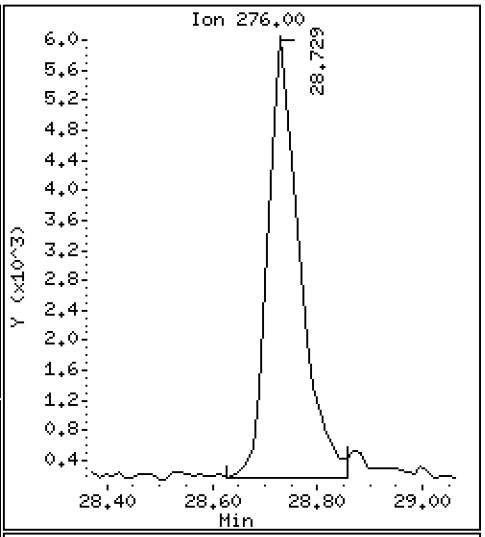
Column phase: ZB-5msi

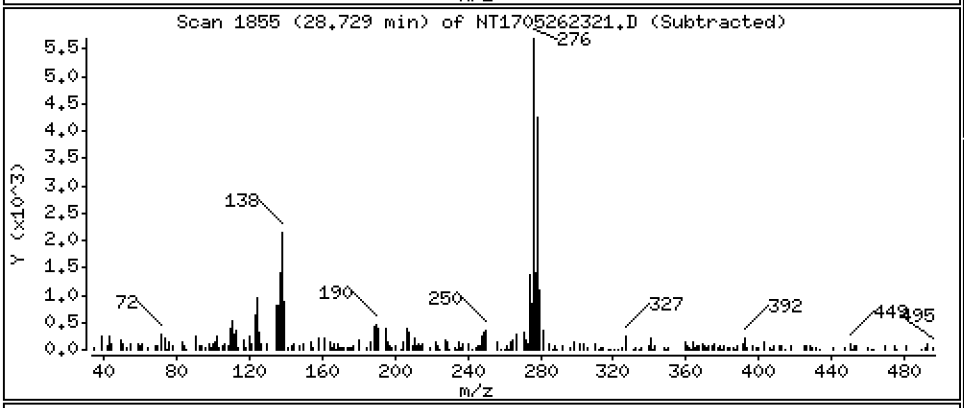
Column diameter: 0.25

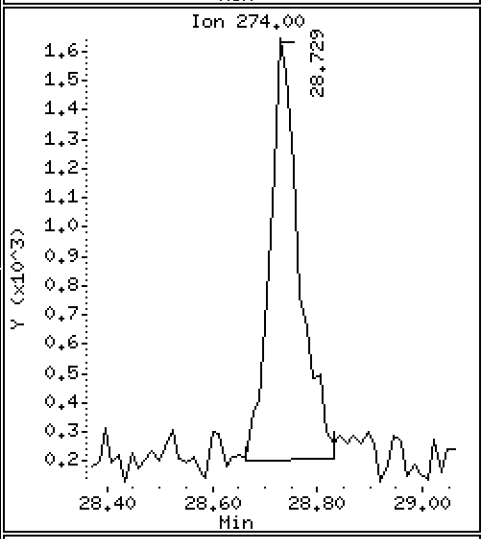
78 Indeno(1,2,3-cd)pyrene

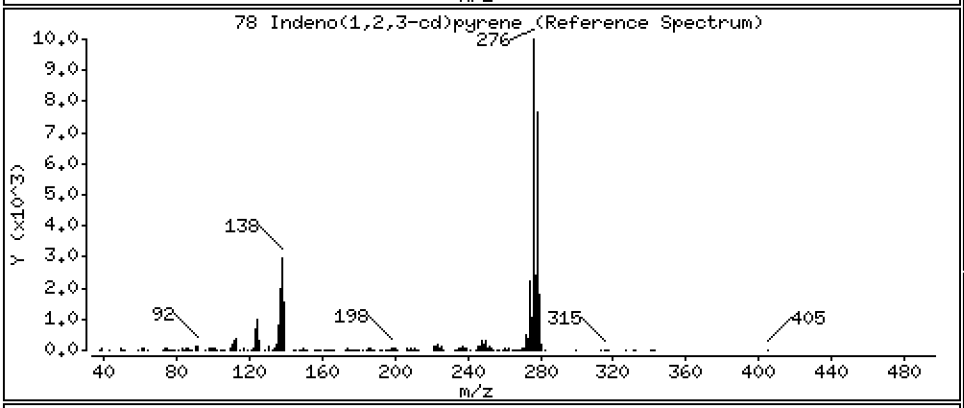
Concentration: 0.1276 ug/mL

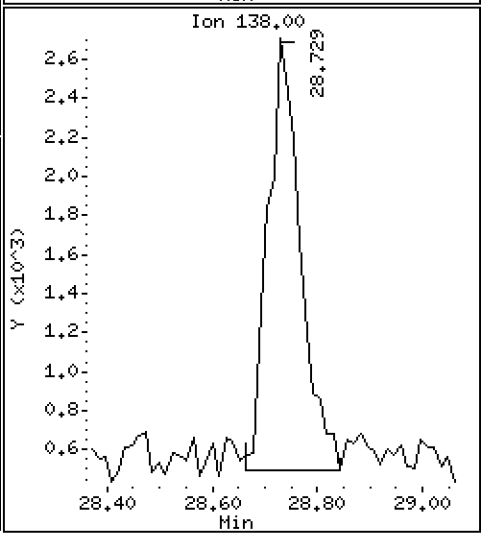


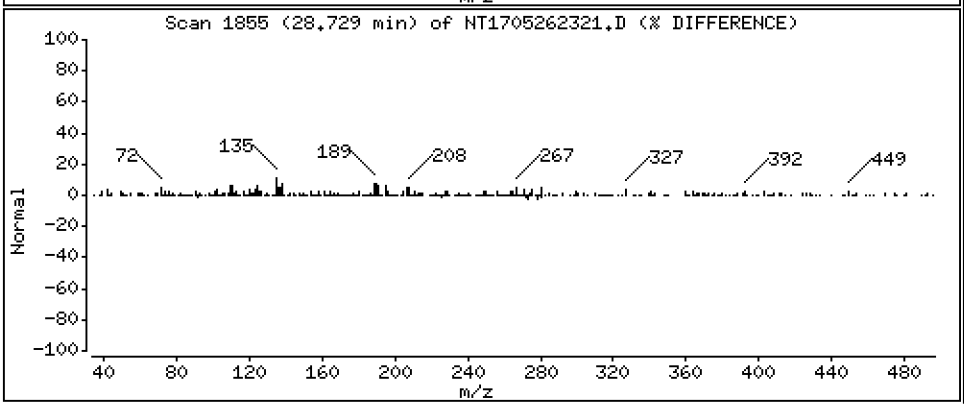












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

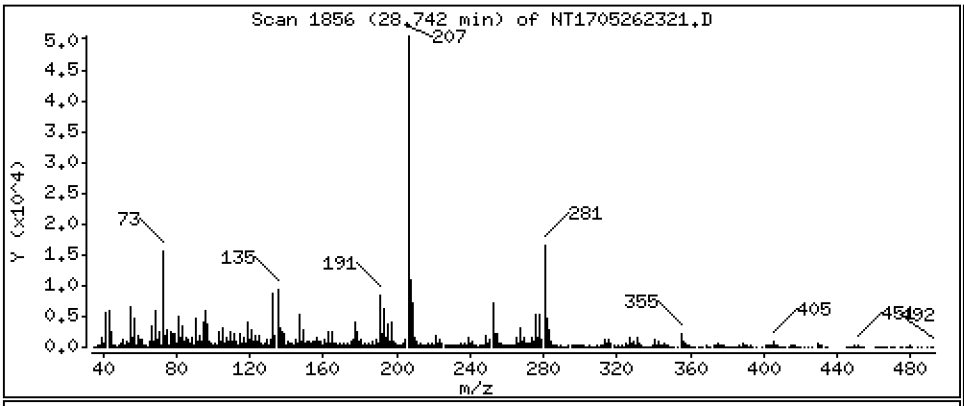
Operator: VTS

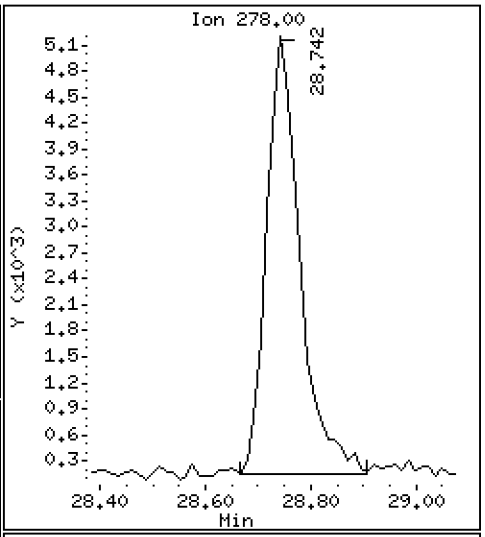
Column phase: ZB-5msi

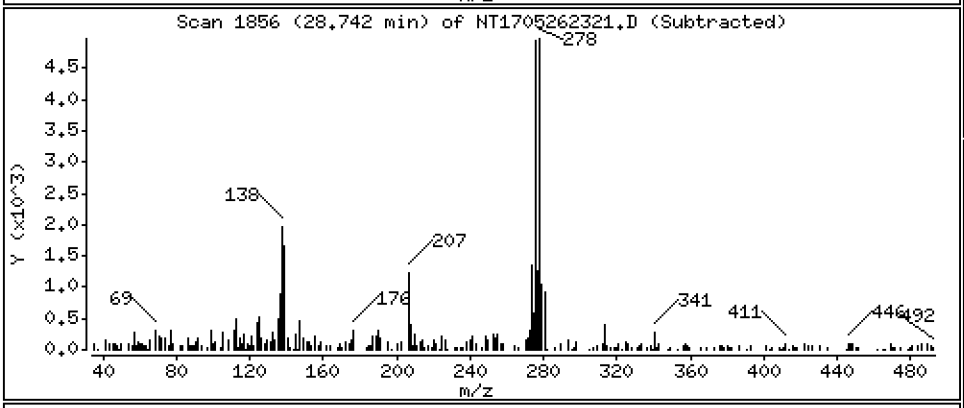
Column diameter: 0.25

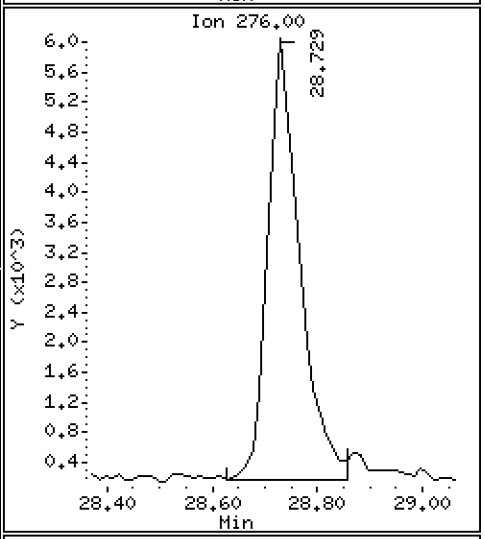
79 Dibenzo(a,h)anthracene

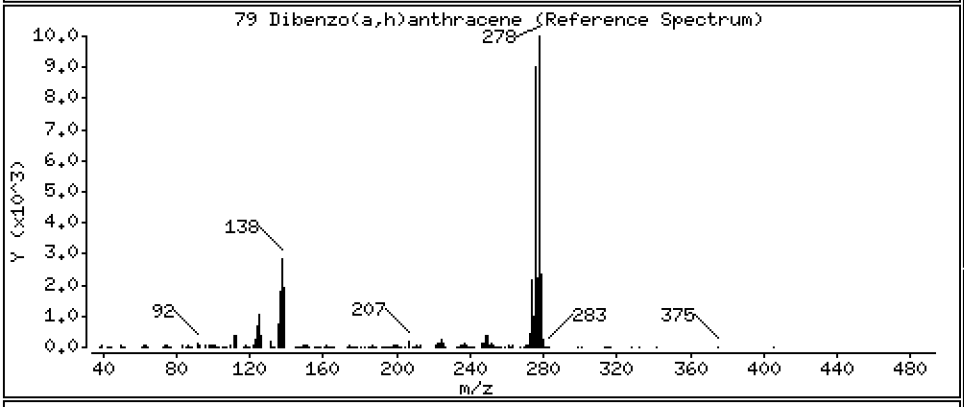
Concentration: 0.1378 ug/mL

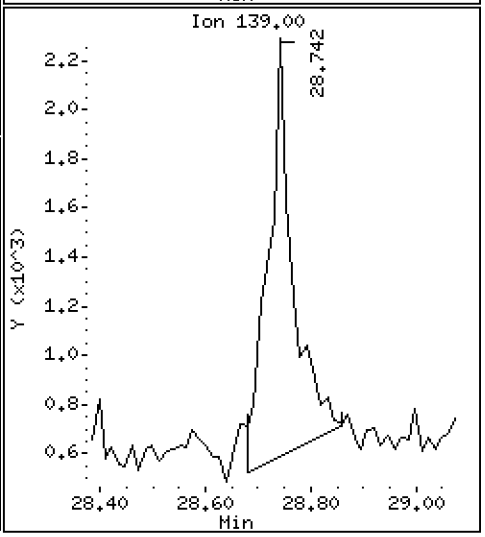


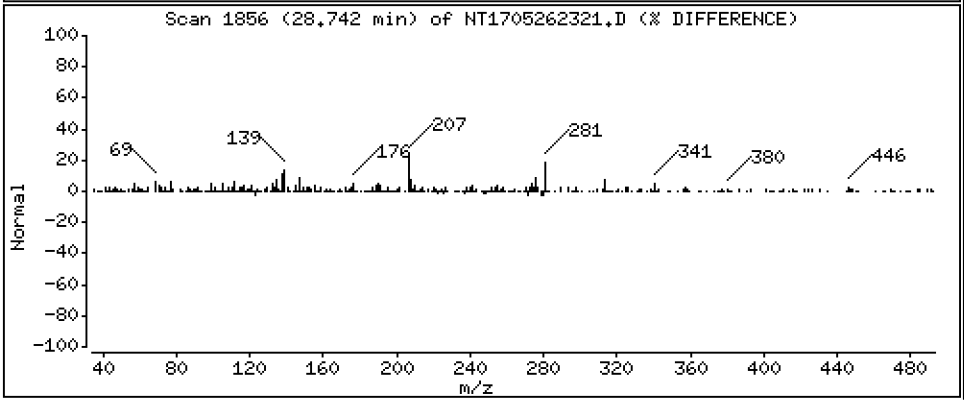












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

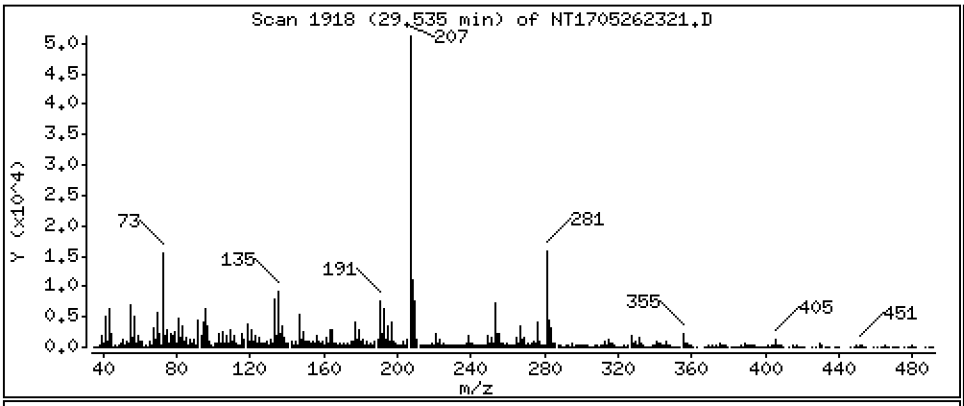
Operator: VTS

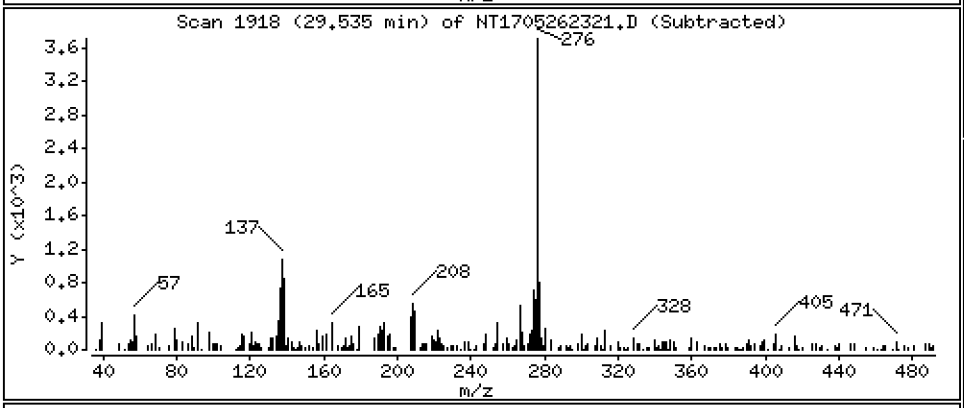
Column phase: ZB-5msi

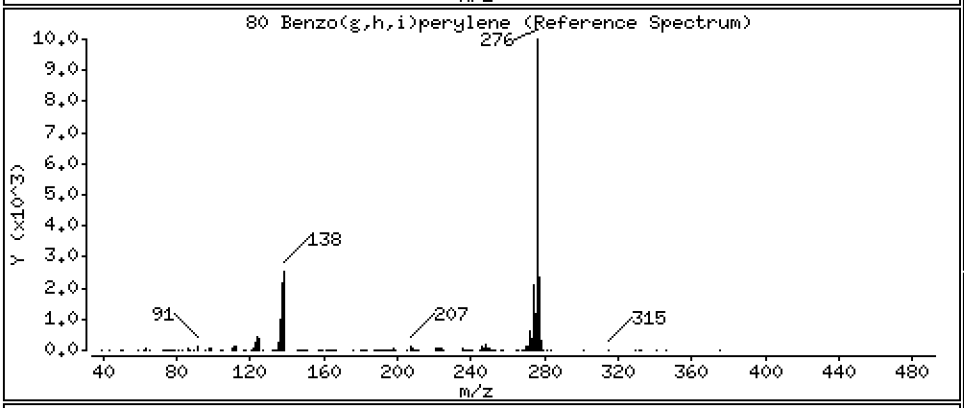
Column diameter: 0.25

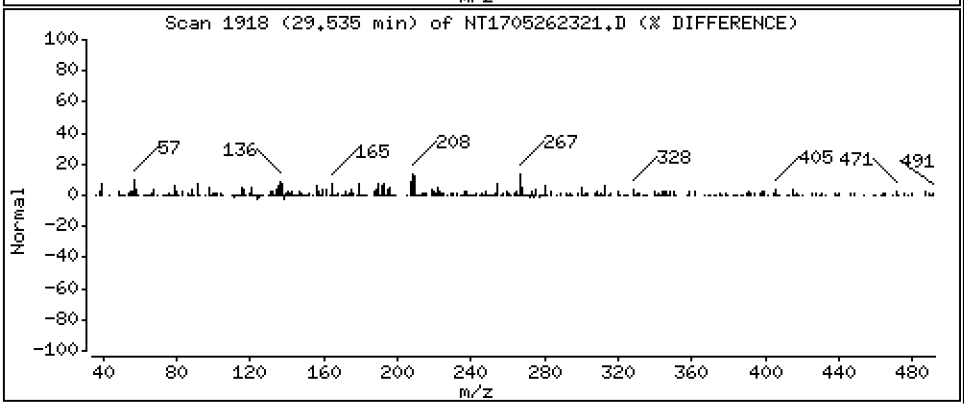
80 Benzo(g,h,i)perylene

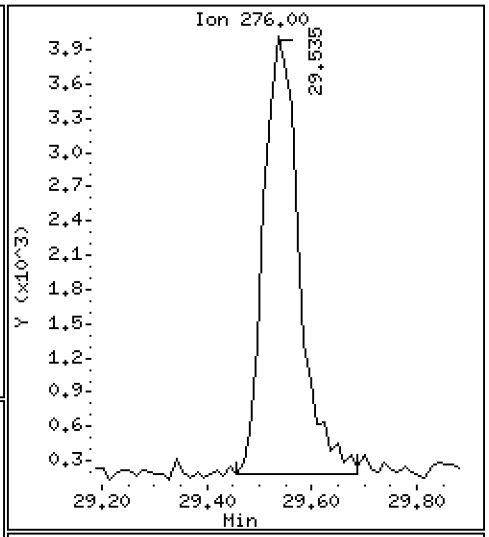
Concentration: 0.1105 ug/mL

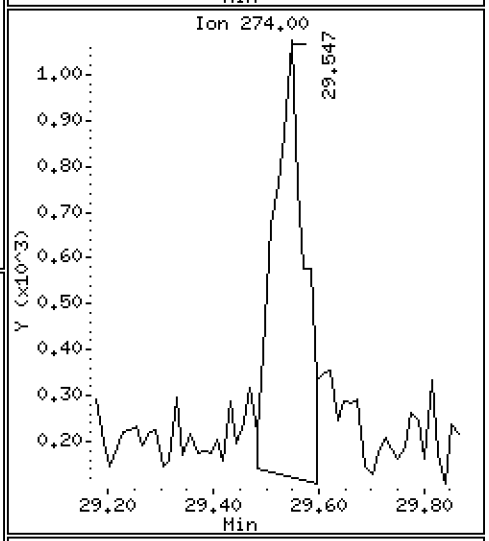


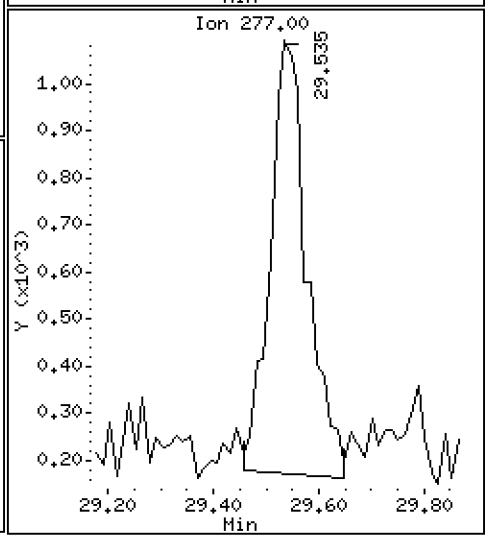












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

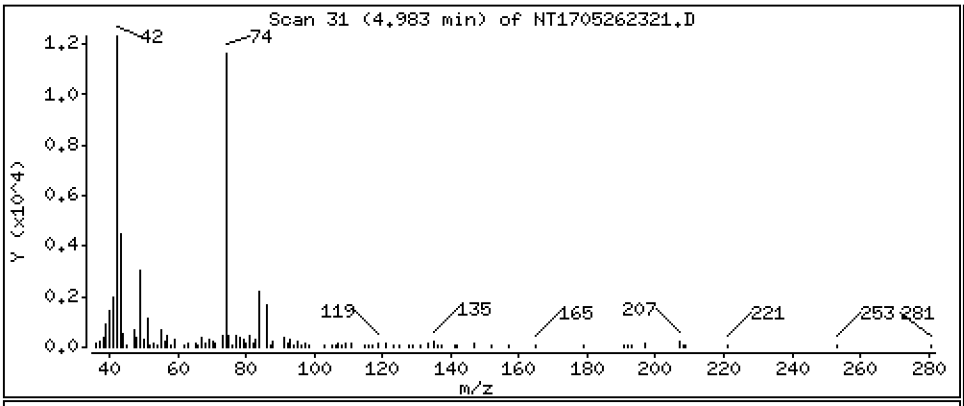
Operator: VTS

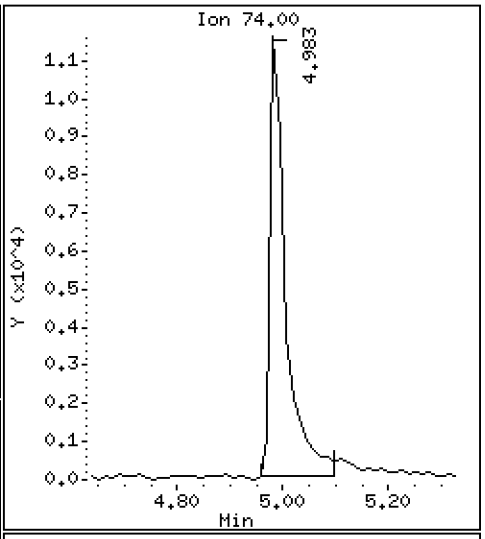
Column phase: ZB-5msi

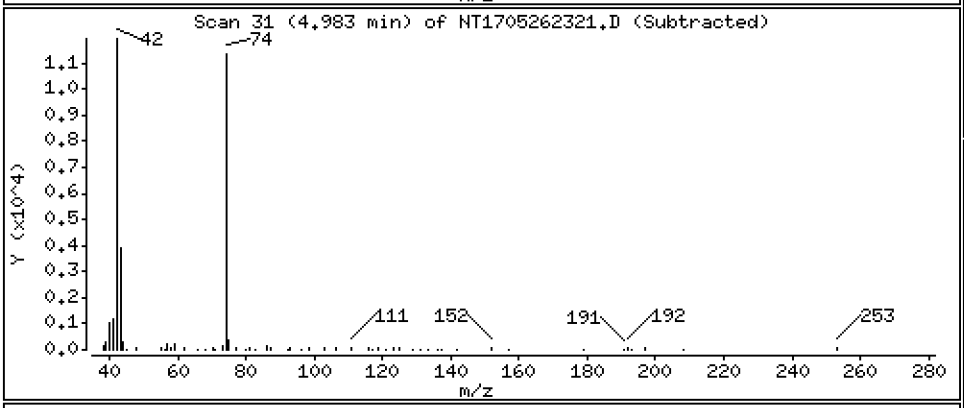
Column diameter: 0.25

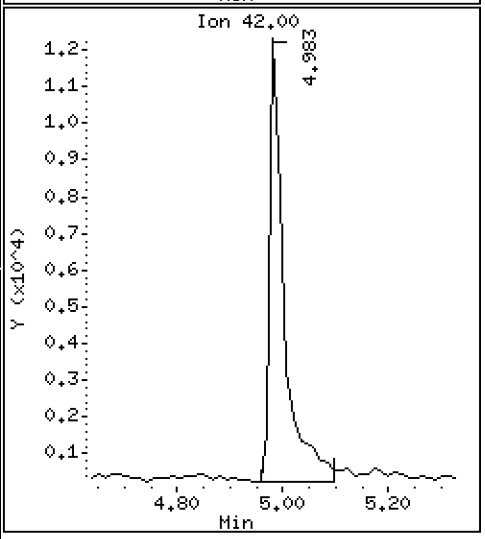
90 N-Nitrosodimethylamine

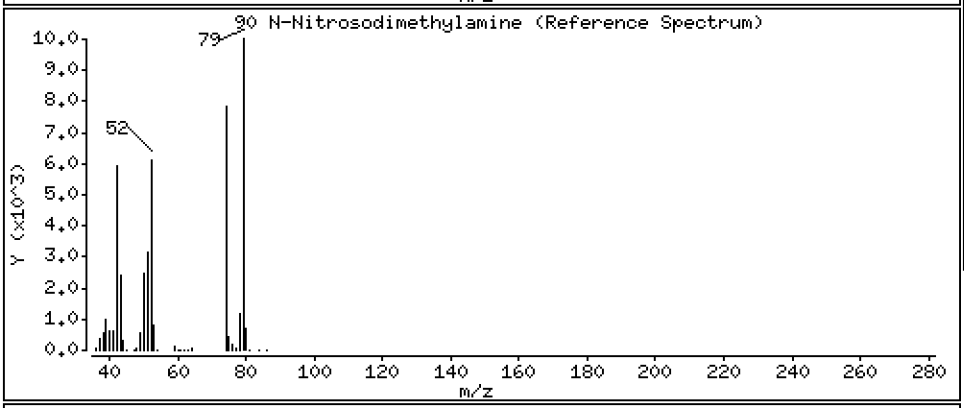
Concentration: 0.3074 ug/mL

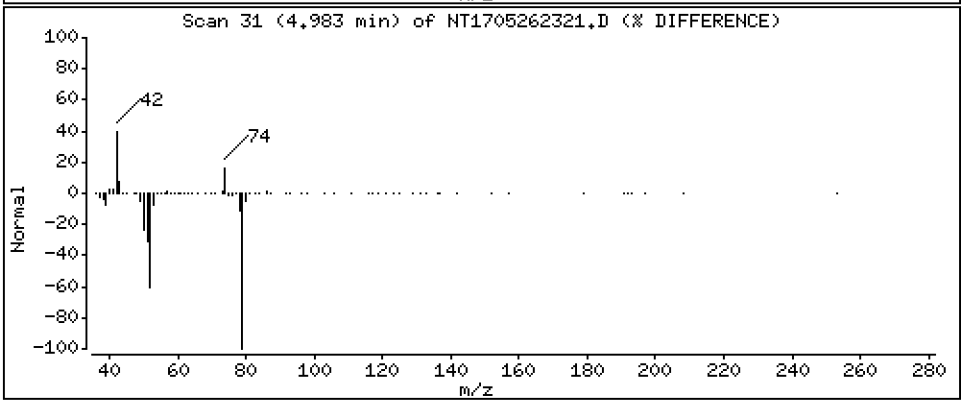












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

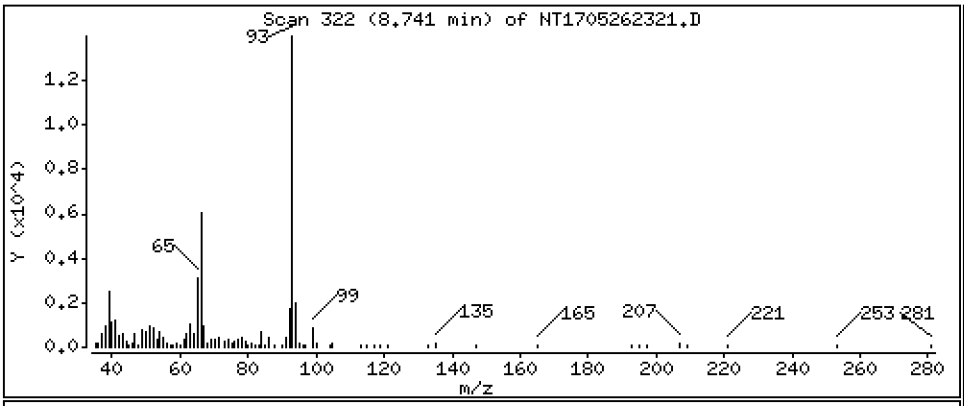
Operator: VTS

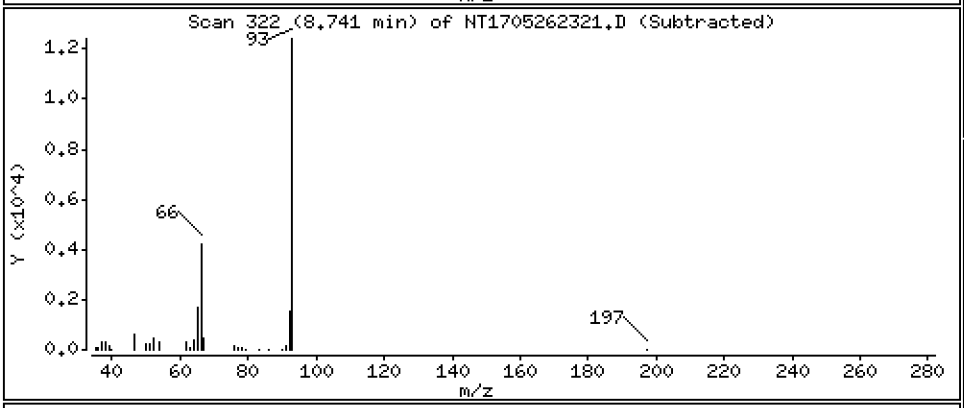
Column phase: ZB-5msi

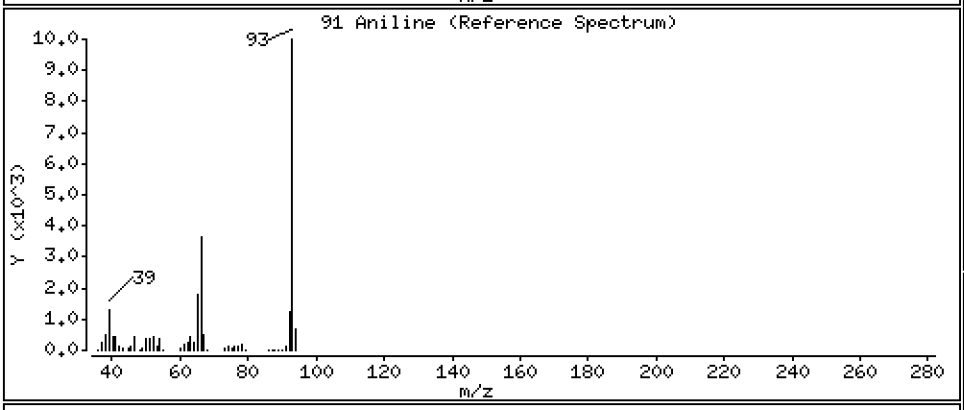
Column diameter: 0.25

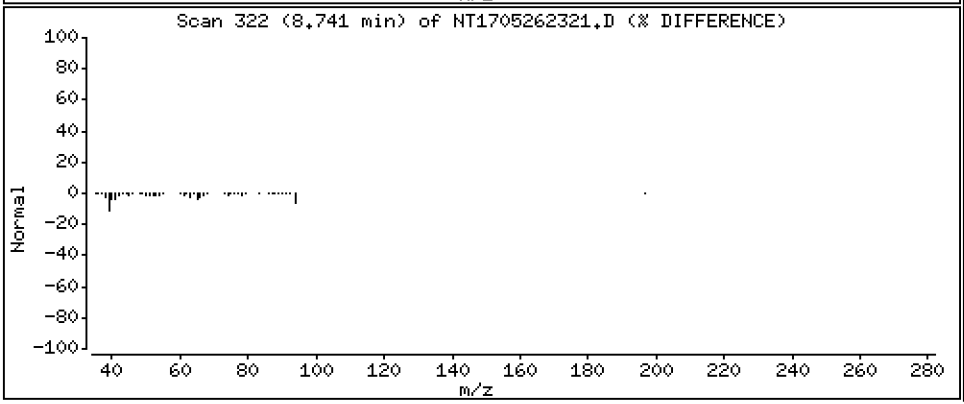
91 Aniline

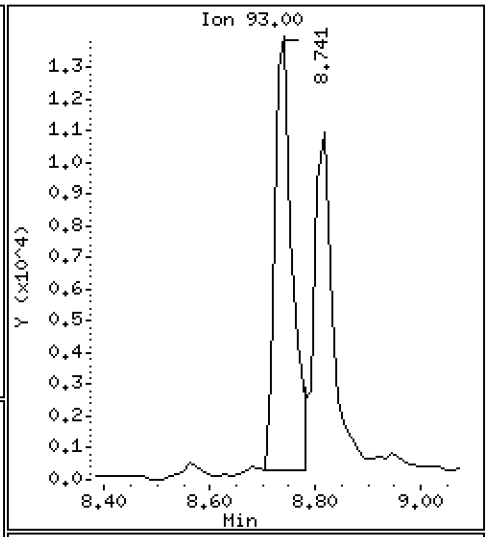
Concentration: 0.2362 ug/mL

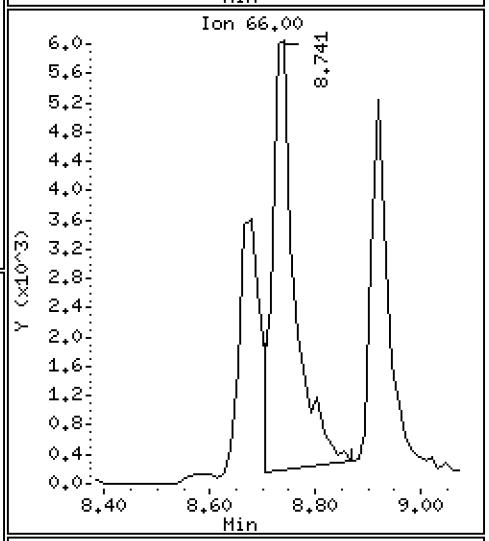


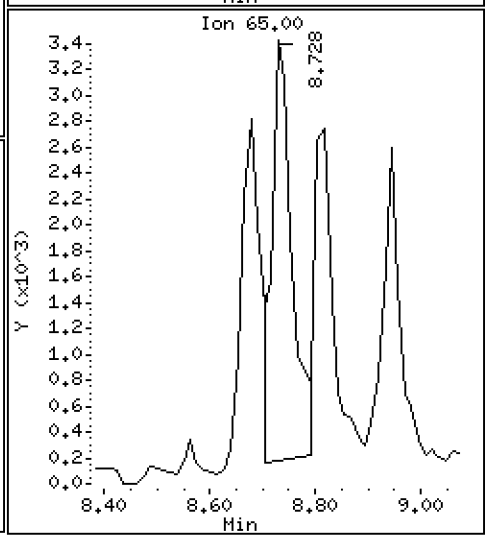












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

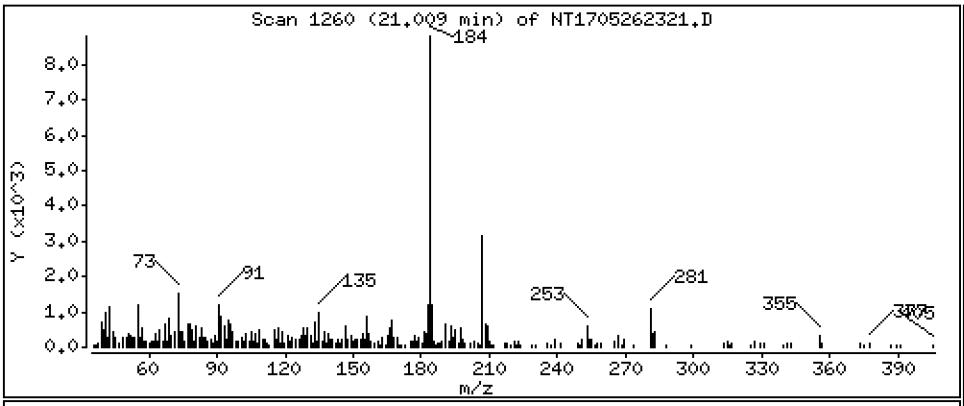
Operator: VTS

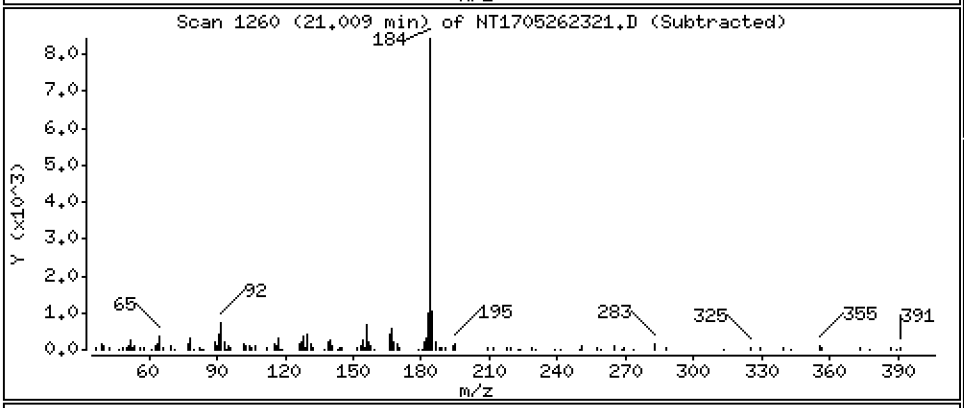
Column phase: ZB-5msi

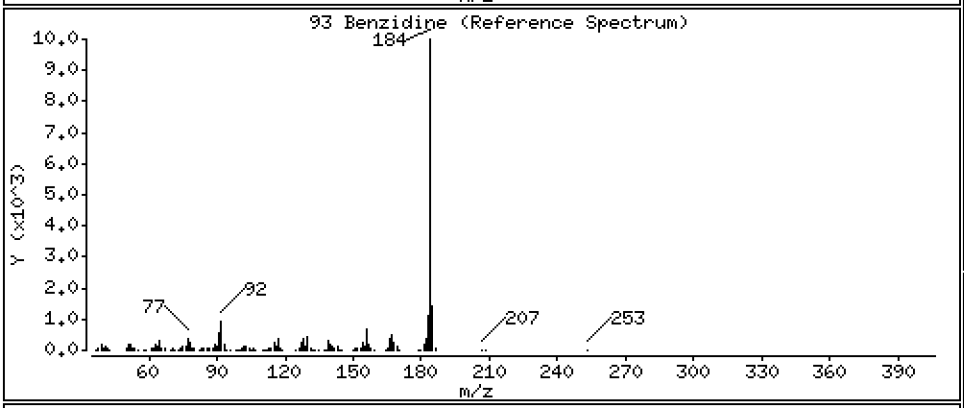
Column diameter: 0.25

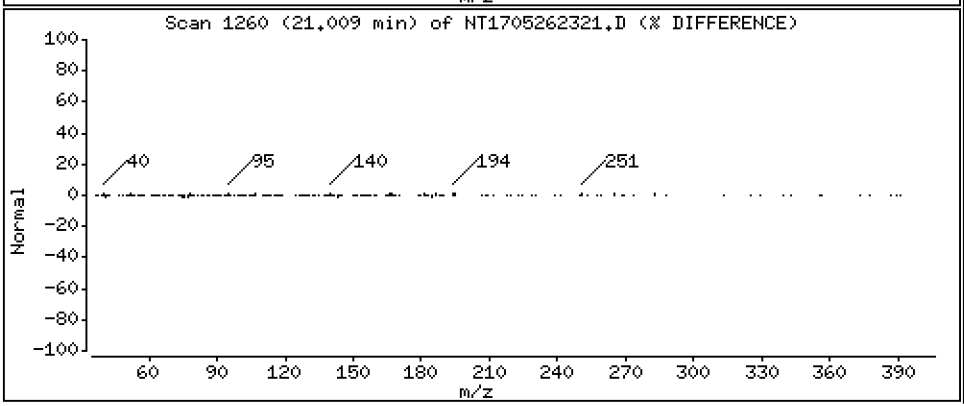
93 Benzidine

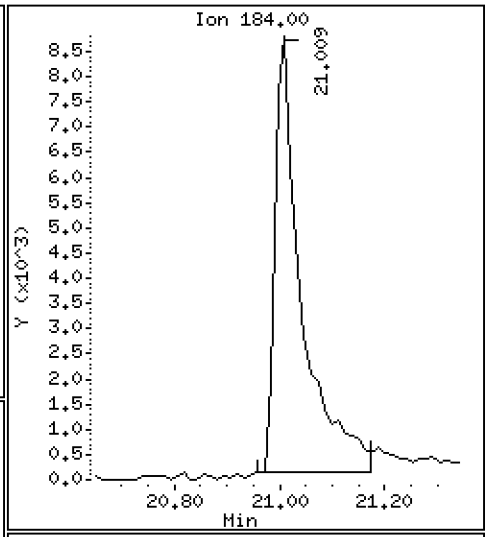
Concentration: 0.4249 ug/mL

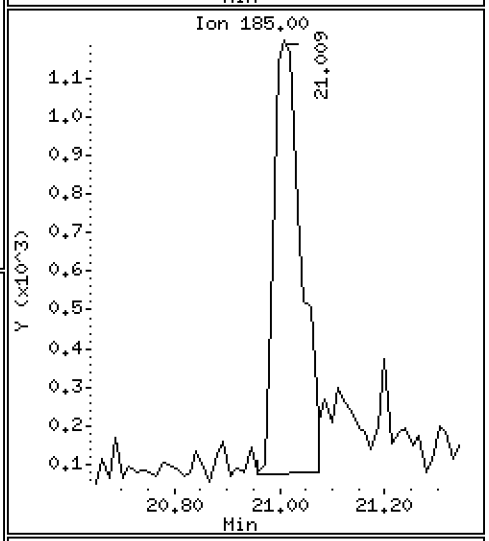


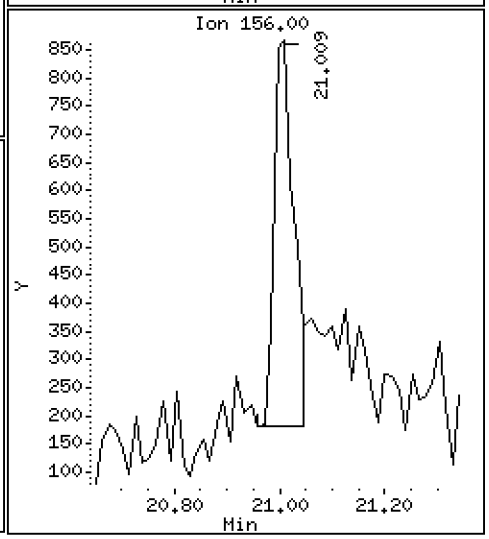












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

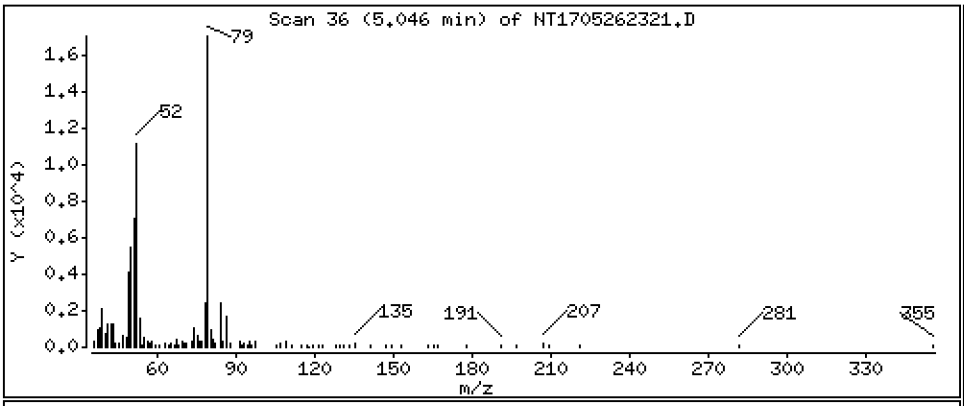
Operator: VTS

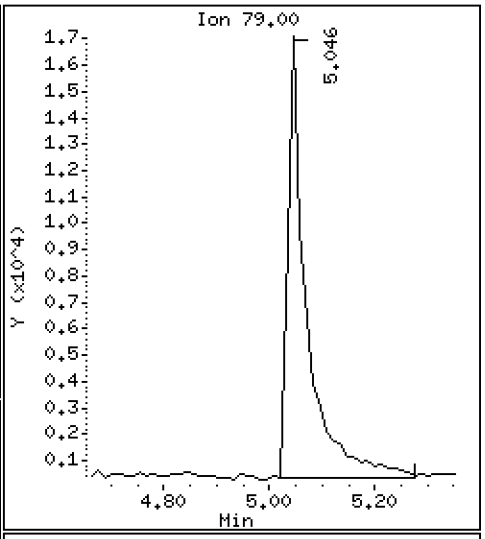
Column phase: ZB-5msi

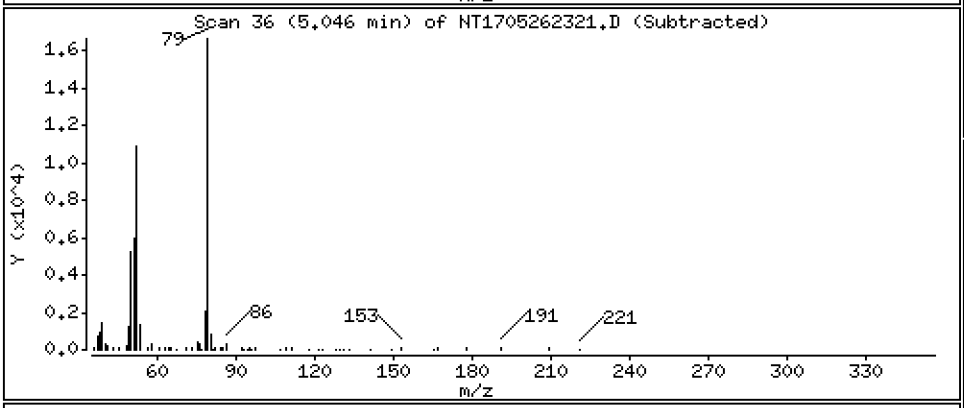
Column diameter: 0.25

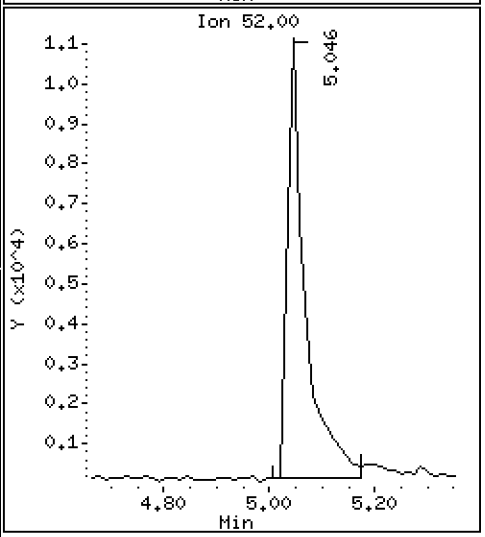
103 Pyridine

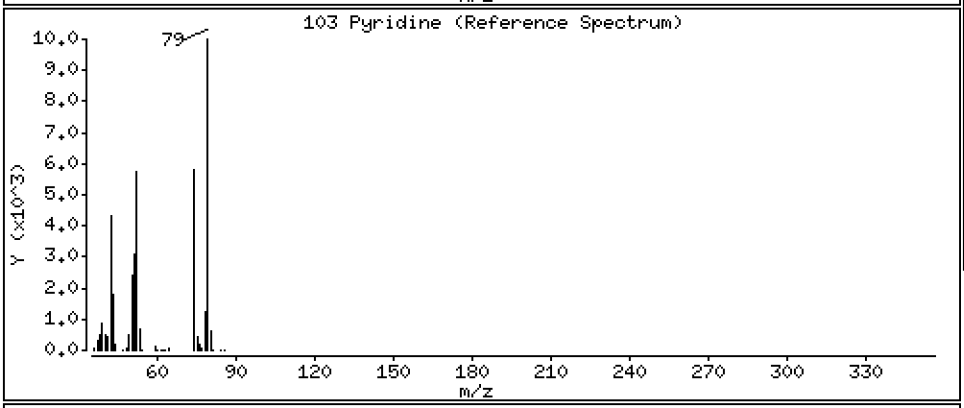
Concentration: 0.3488 ug/mL

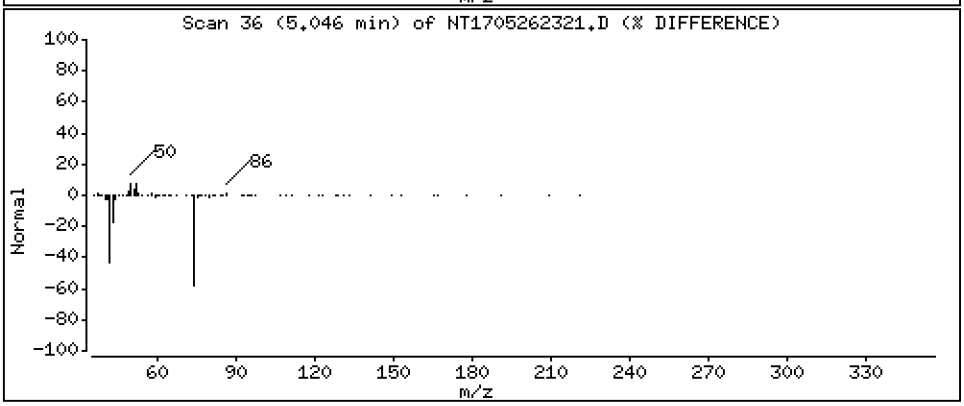












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

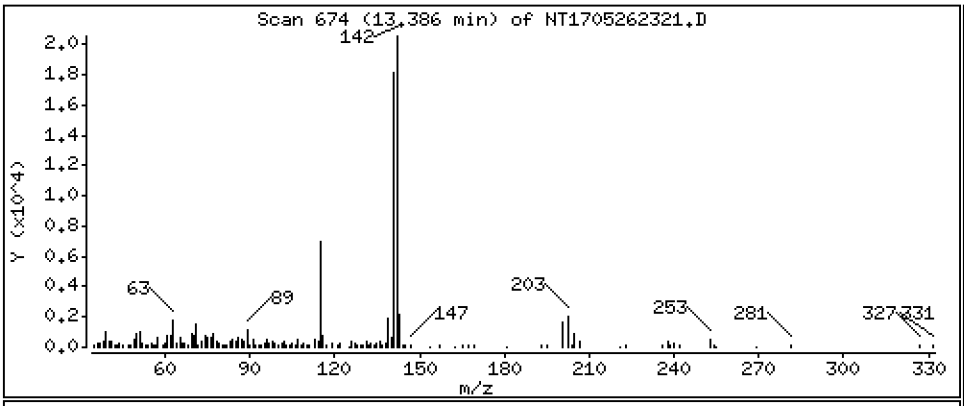
Operator: VTS

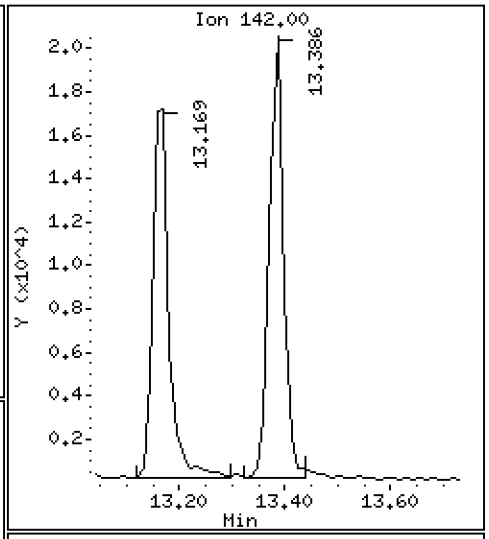
Column phase: ZB-5msi

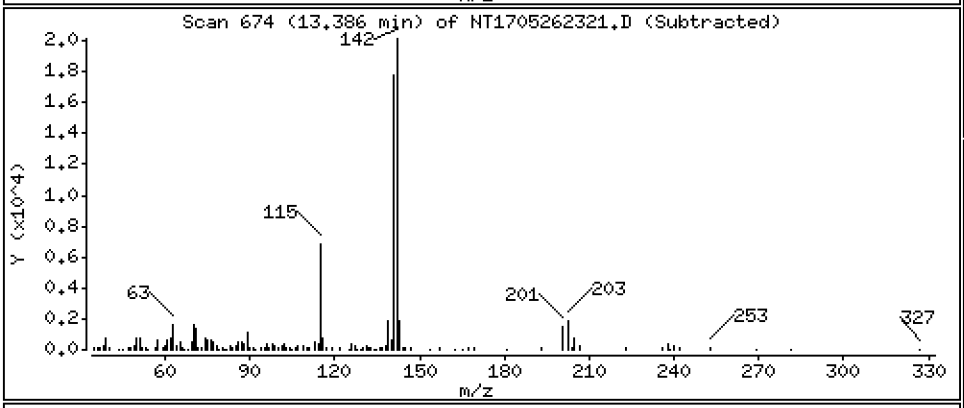
Column diameter: 0.25

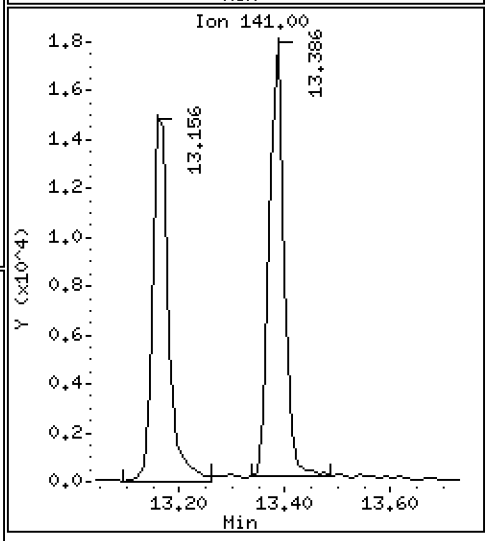
105 1-methylnaphthalene

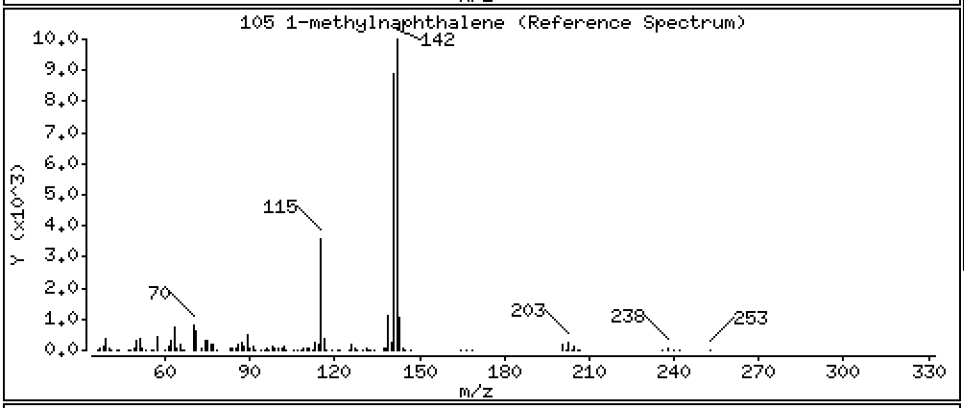
Concentration: 0.1960 ug/mL

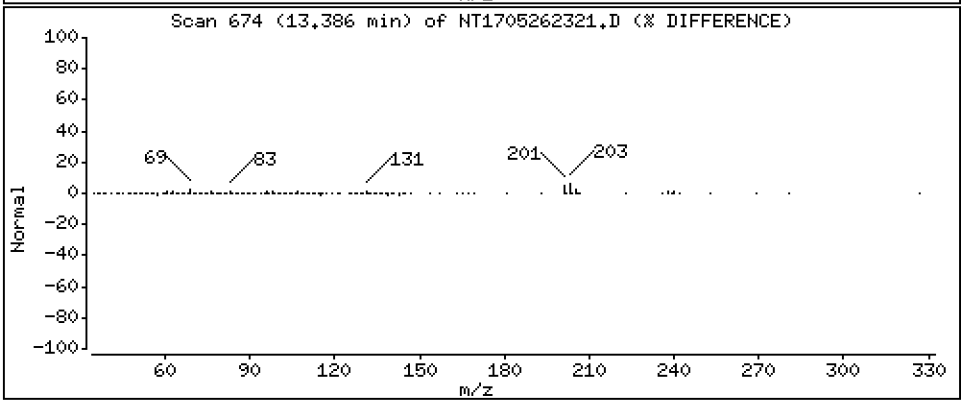












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

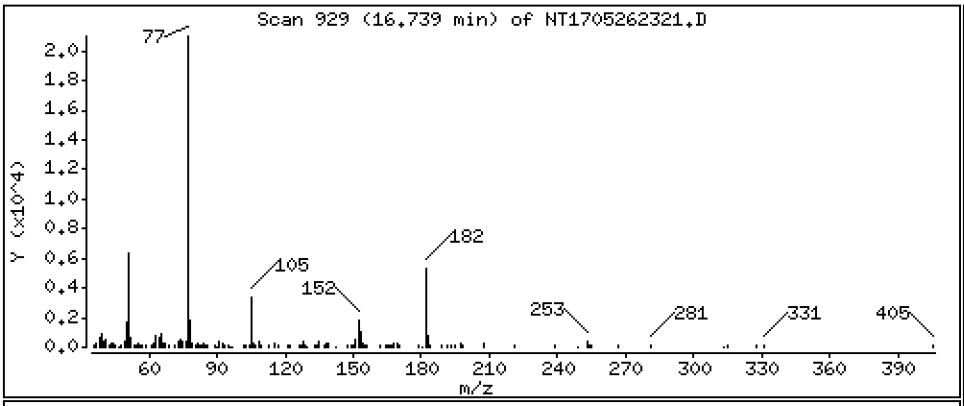
Operator: VTS

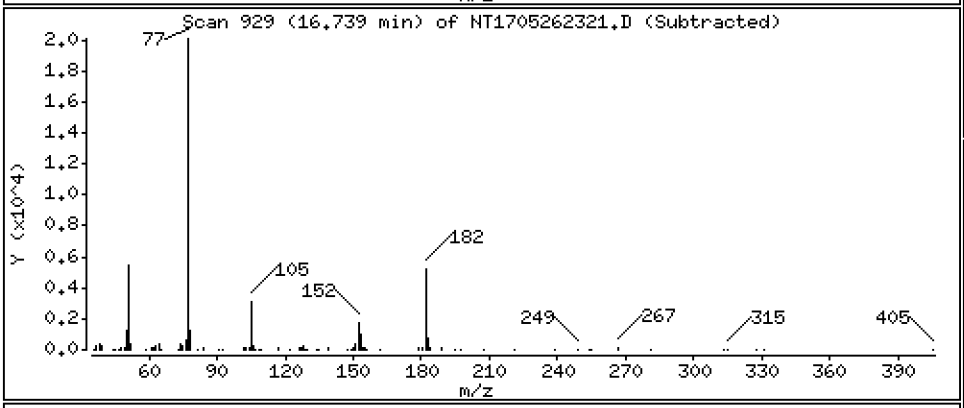
Column phase: ZB-5msi

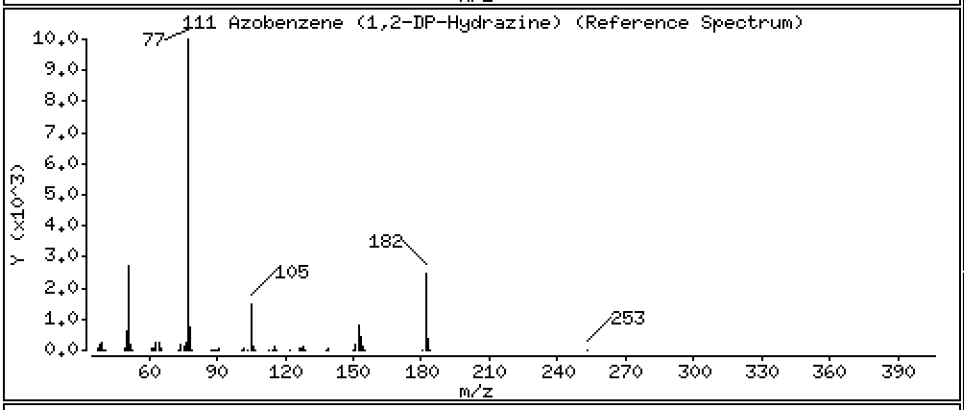
Column diameter: 0.25

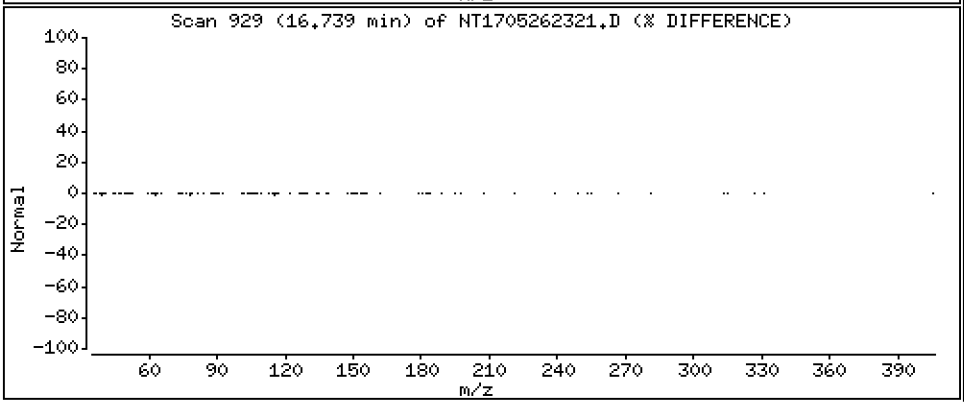
111 Azobenzene (1,2-DP-Hydrazine)

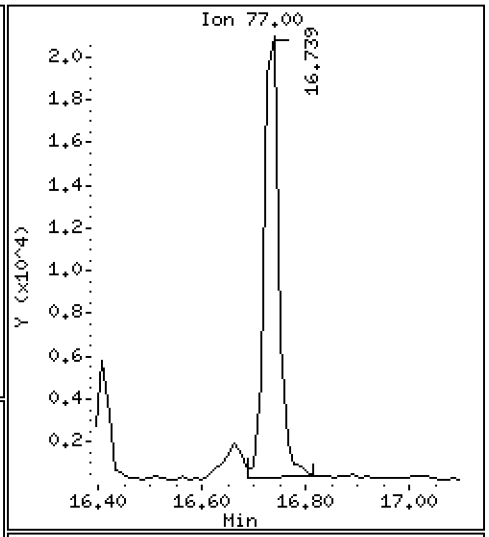
Concentration: 0.1930 ug/mL

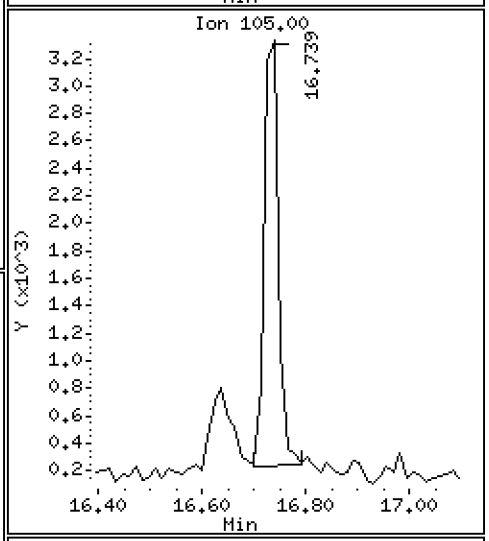


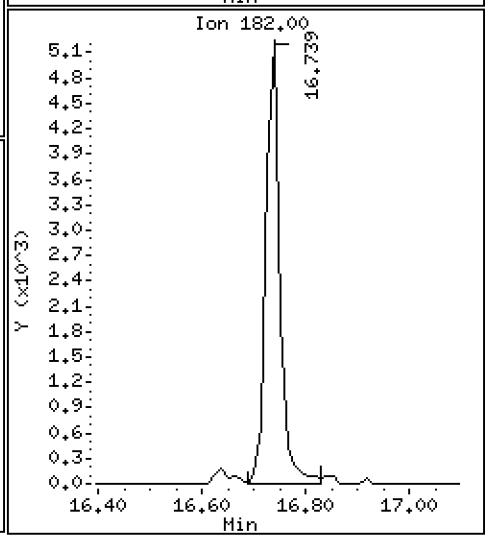












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Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

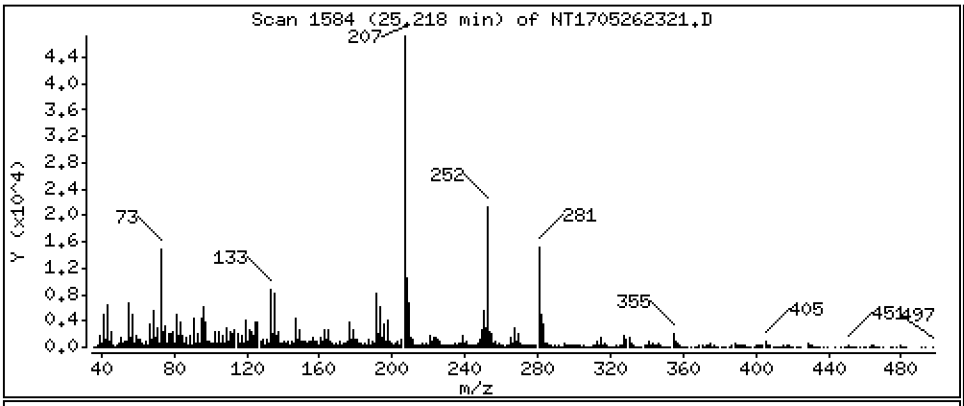
Operator: VTS

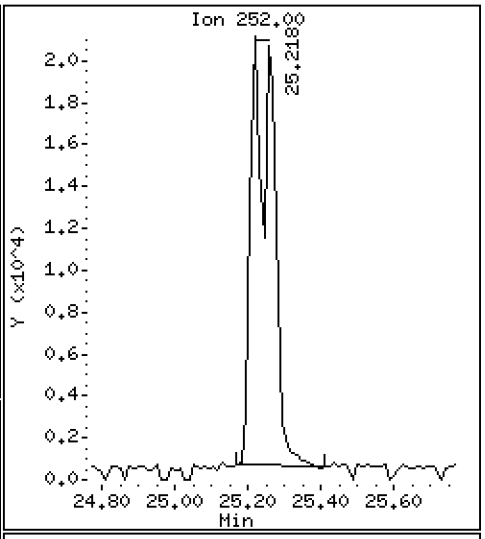
Column phase: ZB-5msi

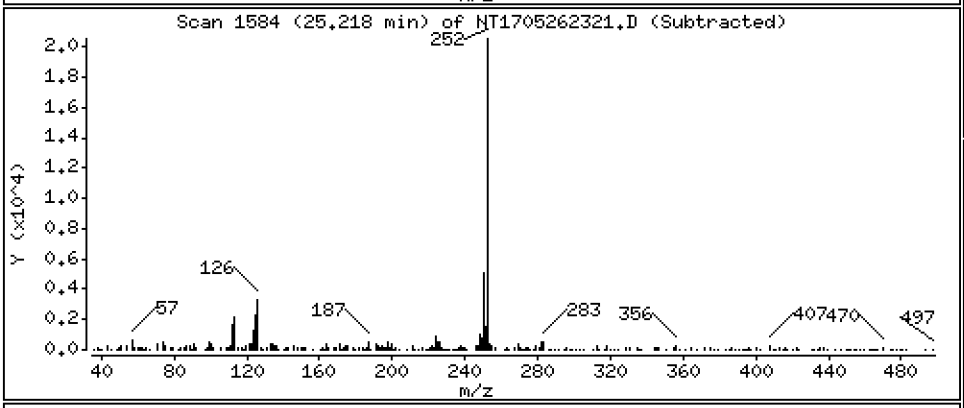
Column diameter: 0.25

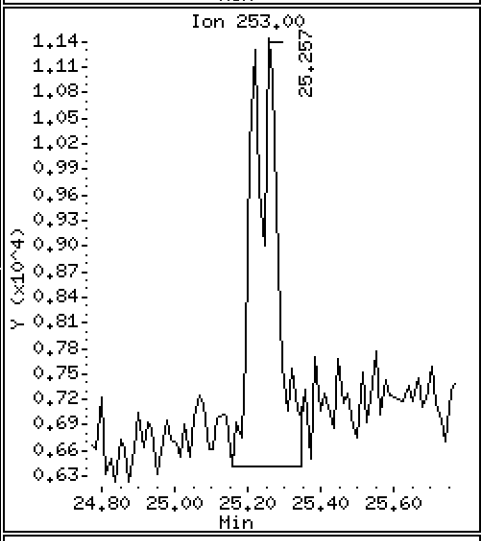
187 Total Benzofluoranthenes

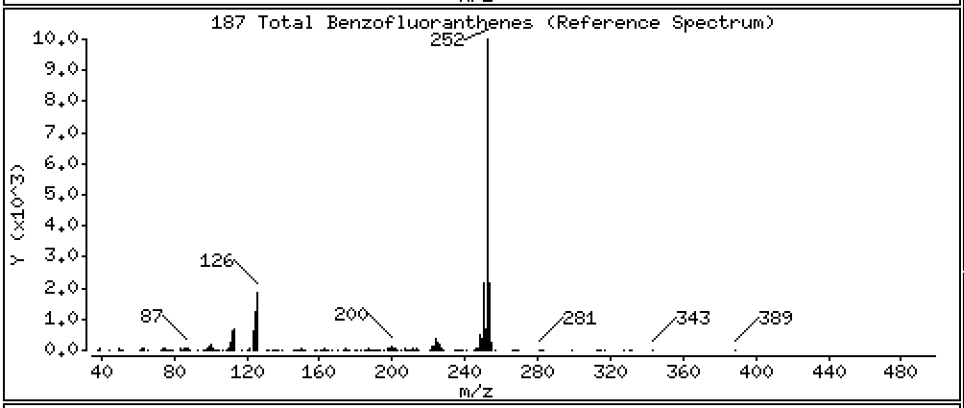
Concentration: 0.4404 ug/mL

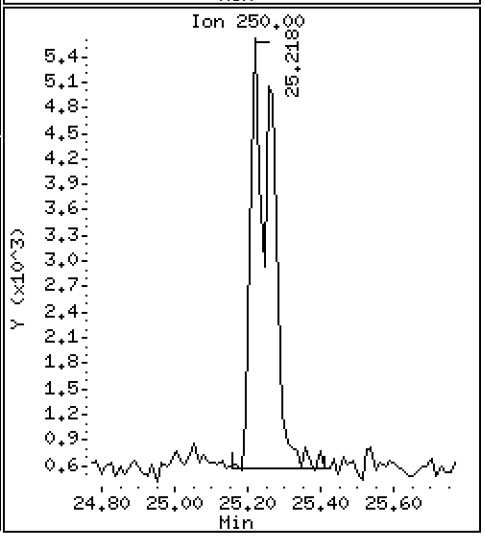


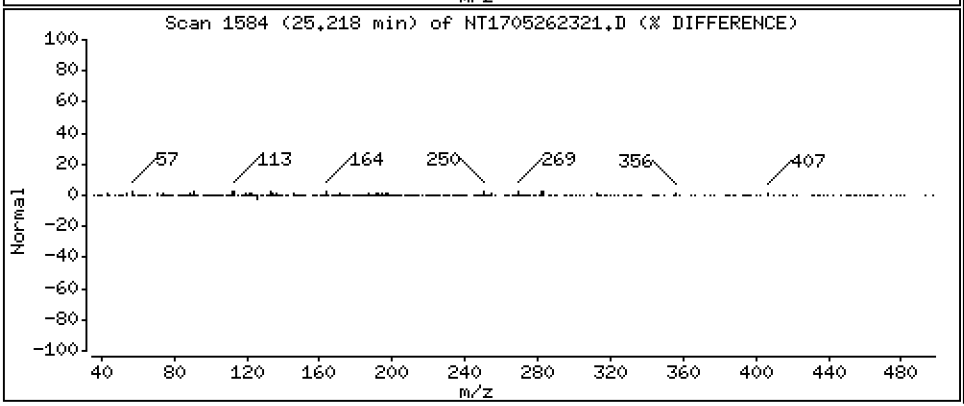












Data File: \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D

Date : 27-MAY-2023 01:10

Client ID:

Instrument: nt17.i

Sample Info: SLE0434-LCV2

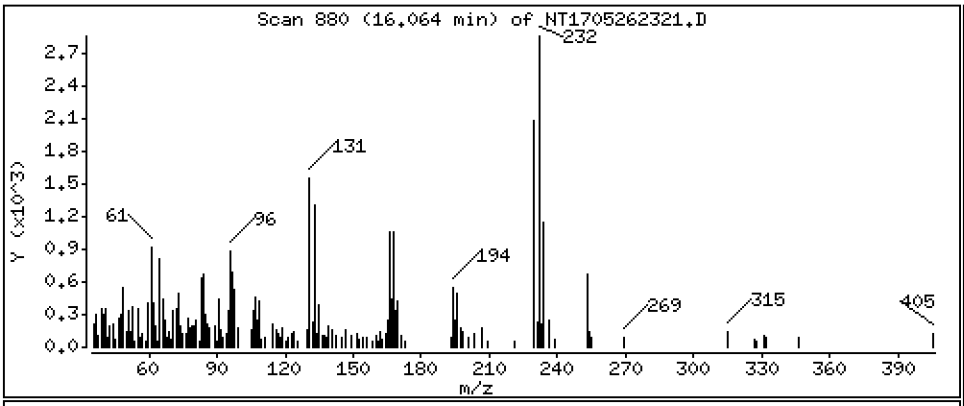
Operator: VTS

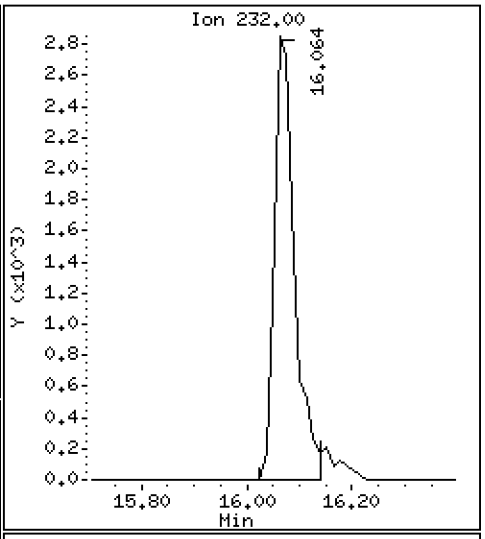
Column phase: ZB-5msi

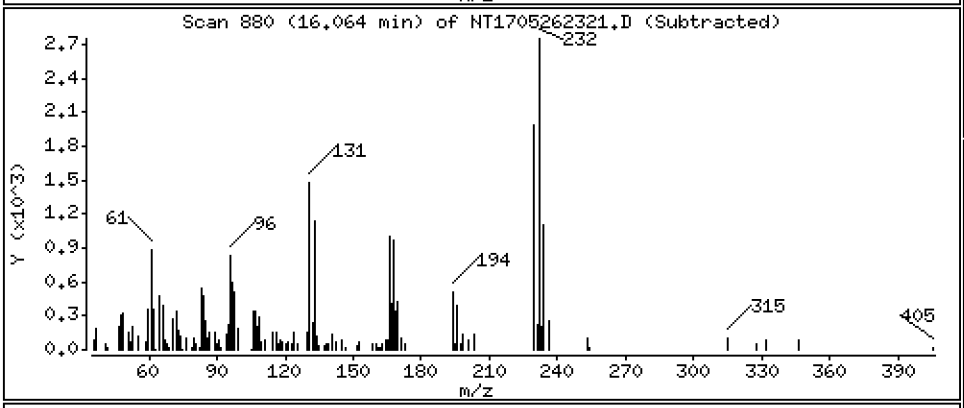
Column diameter: 0.25

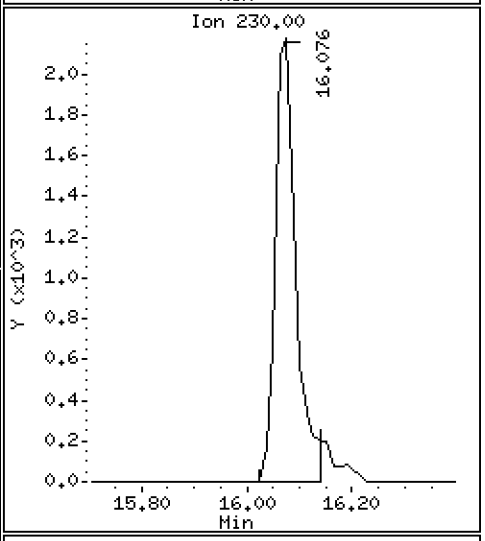
120 2,3,4,6-Tetrachlorophenol

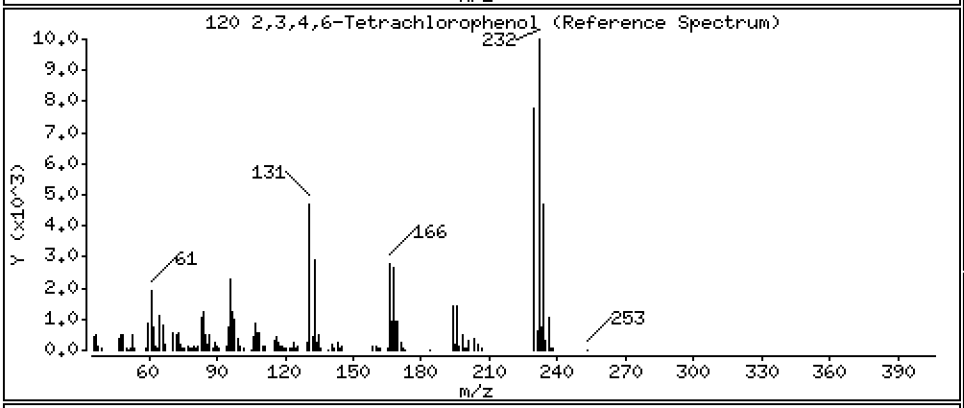
Concentration: 0.1117 ug/mL

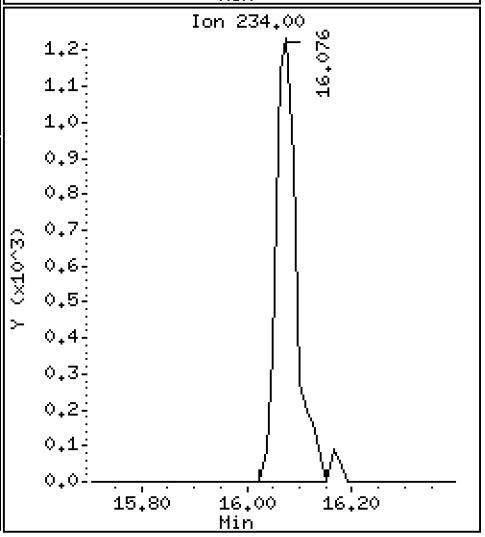


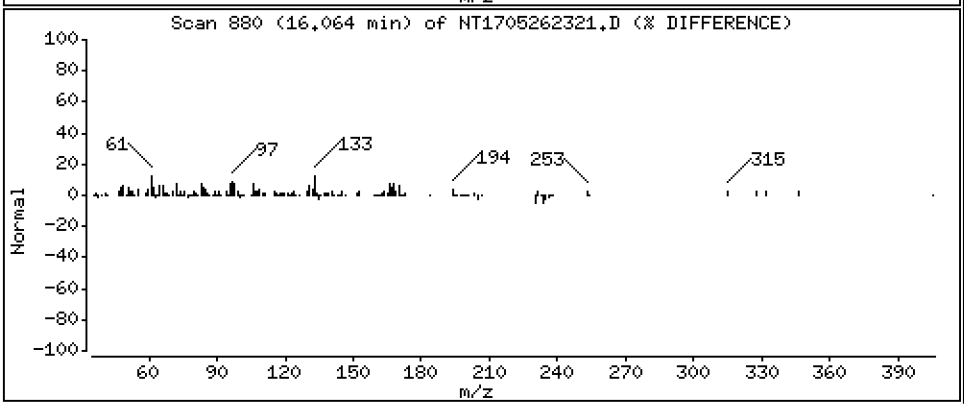












ARI Labs, Inc.

Semivolatile Report SW846 Method 8270D

Data file : \\target\share\chem3\nt17.i\20230526.b\NT1705262321.D
Lab Smp Id: SLE0434-LCV2
Inj Date : 27-MAY-2023 01:10
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0434-LCV2
Misc Info :
Comment : 1ul Injection
Method : \\target\share\chem3\nt17.i\20230526.b\ABN.m
Meth Date : 27-May-2023 13:34 van Quant Type: ISTD
Cal Date : 16-MAY-2023 22:37 Cal File: NT1705162308.D
Als bottle: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: ICAL.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS	
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.071	7.071	(0.763)	29103	0.24695	0.2470
$	2 Phenol-d5	99	8.651	8.639	(0.934)	33652	0.21578	0.2158
	3 Phenol	94	8.677	8.664	(0.937)	28758	0.17409	0.1741
$	5 2-Chlorophenol-d4	132	8.919	8.919	(0.963)	31099	0.24895	0.2489
	4 Bis(2-Chloroethyl)ether	93	8.817	8.817	(0.952)	26653	0.22133	0.2213
	6 2-Chlorophenol	128	8.944	8.944	(0.966)	21183	0.15356	0.1536
	7 1,3-Dichlorobenzene	146	9.199	9.199	(0.993)	26075	0.18677	0.1868
*	8 1,4-Dichlorobenzene-d4	152	9.263	9.263	(1.000)	360010	4.00000	
	9 1,4-Dichlorobenzene	146	9.301	9.301	(1.004)	25958	0.18643	0.1864
$	10 1,2-Dichlorobenzene-d4	152	9.621	9.621	(1.039)	15787	0.17980	0.1798
	12 1,2-Dichlorobenzene	146	9.646	9.646	(1.041)	25680	0.19619	0.1962
	11 Benzyl alcohol	108	9.570	9.544	(1.033)	11128	0.14469	0.1447
	14 2,2'-oxybis(1-Chloropropane)	121	9.825	9.825	(1.061)	6910	0.18729	0.1873
	13 2-Methylphenol	108	9.774	9.761	(1.055)	17719	0.14595	0.1460
	17 Hexachloroethane	117	10.234	10.234	(1.105)	8765	0.15736	0.1574
	16 N-Nitroso-di-n-propylamine	70	10.081	10.081	(1.088)	13862	0.14924	0.1492
	15 4-Methylphenol	108	10.055	10.030	(1.086)	13315	0.10772	0.1077
$	18 Nitrobenzene-d5	82	10.362	10.349	(0.884)	22372	0.18874	0.1887
	19 Nitrobenzene	77	10.387	10.387	(0.886)	22066	0.19512	0.1951
	20 Isophorone	82	10.834	10.835	(0.924)	30354	0.19608	0.1961
	21 2-Nitrophenol	139	11.026	11.013	(0.940)	12543	0.23017	0.2302
	22 2,4-Dimethylphenol	107	11.077	11.064	(0.945)	35391	0.33449	0.3345
	23 Bis(2-Chloroethoxy)methane	93	11.256	11.243	(0.960)	17192	0.18120	0.1812
	24 Benzoic acid	105	11.256	11.320	(0.960)	19189	0.26961	0.2696(M)
	25 2,4-Dichlorophenol	162	11.498	11.473	(0.980)	25801	0.30347	0.3035
	26 1,2,4-Trichlorobenzene	180	11.652	11.652	(0.993)	24101	0.26100	0.2610
*	27 Naphthalene-d8	136	11.728	11.728	(1.000)	1041490	4.00000	
	28 Naphthalene	128	11.779	11.779	(1.004)	57833	0.20193	0.2019
	29 4-Chloroaniline	127	11.919	11.906	(1.016)	27891	0.24705	0.2470
	30 Hexachlorobutadiene	225	12.123	12.123	(1.034)	9971	0.21799	0.2180
	31 4-Chloro-3-methylphenol	107	12.888	12.863	(1.099)	26265	0.28690	0.2869
	32 2-Methylnaphthalene	142	13.169	13.156	(1.123)	38173	0.18615	0.1861
	33 Hexachlorocyclopentadiene	237	13.615	13.615	(0.888)	999	0.01976	0.01976

			QUANT SIG					CONCENTRATIONS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)
	34	2,4,6-Trichlorophenol	196	13.793	13.781	(0.900)	17995	0.31639	0.3164
	35	2,4,5-Trichlorophenol	196	13.896	13.857	(0.907)	19980	0.33184	0.3318
$	36	2-Fluorobiphenyl	172	13.934	13.934	(0.909)	43233	0.20187	0.2019
	37	2-Chloronaphthalene	162	14.151	14.151	(0.923)	33979	0.19558	0.1956
	38	2-Nitroaniline	65	14.418	14.406	(0.941)	17844	0.30326	0.3033
	39	Dimethylphthalate	163	14.827	14.827	(0.968)	38730	0.20706	0.2071
	40	Acenaphthylene	152	15.018	15.018	(0.980)	56506	0.20481	0.2048
	41	2,6-Dinitrotoluene	165	14.967	14.967	(0.977)	15133	0.34557	0.3456
*	42	Acenaphthene-d10	164	15.324	15.324	(1.000)	543612	4.00000	
	43	3-Nitroaniline	138	15.286	15.260	(0.998)	10790	0.26603	0.2660(M)
	44	Acenaphthene	153	15.388	15.388	(1.004)	34386	0.19938	0.1994
	45	2,4-Dinitrophenol	184	15.566	15.477	(1.016)	1607	0.06089	0.06089(M)
	46	Dibenzofuran	168	15.719	15.719	(1.026)	46893	0.19481	0.1948
	47	4-Nitrophenol	109	15.706	15.604	(1.025)	3983	0.14785	0.1478(M)
	48	2,4-Dinitrotoluene	165	15.783	15.783	(1.030)	15766	0.27503	0.2750
	50	Diethylphthalate	149	16.267	16.267	(1.062)	42997	0.23572	0.2357
	49	Fluorene	166	16.420	16.420	(1.072)	40023	0.17489	0.1749
	51	4-Chlorophenyl-phenylether	204	16.407	16.407	(1.071)	19636	0.18663	0.1866
	52	4-Nitroaniline	138	16.560	16.535	(1.081)	9075	0.23639	0.2364
	53	4,6-Dinitro-2-methylphenol	198	16.636	16.611	(0.907)	4749	0.13493	0.1349
	54	N-Nitrosodiphenylamine	169	16.662	16.662	(0.908)	24301	0.19671	0.1967
$	55	2,4,6-Tribromophenol	330	16.967	16.967	(1.107)	5608	0.23650	0.2365
	56	4-Bromophenyl-phenylether	248	17.413	17.413	(0.949)	8440	0.19499	0.1950
	57	Hexachlorobenzene	284	17.731	17.731	(0.967)	9669	0.21922	0.2192
	58	Pentachlorophenol	266	18.114	18.088	(0.987)	5211	0.20380	0.2038(M)
*	59	Phenanthrene-d10	188	18.343	18.343	(1.000)	881915	4.00000	
	60	Phenanthrene	178	18.394	18.394	(1.003)	50134	0.19482	0.1948
	61	Anthracene	178	18.484	18.484	(1.008)	47119	0.19504	0.1950
	62	Carbazole	167	18.828	18.828	(1.026)	38631	0.26387	0.2639
	63	Di-n-butylphthalate	149	19.593	19.580	(1.068)	57536	0.19723	0.1972
	64	Fluoranthene	202	20.766	20.753	(0.889)	51598	0.17450	0.1745
	65	Pyrene	202	21.187	21.187	(0.907)	54771	0.18272	0.1827
$	66	Terphenyl-d14	244	21.455	21.455	(0.919)	37299	0.17504	0.1750
	67	Butylbenzylphthalate	149	22.360	22.361	(0.957)	25475	0.18989	0.1899
	68	Benzo(a)anthracene	228	23.317	23.317	(0.998)	48510	0.20840	0.2084
*	69	Chrysene-d12	240	23.356	23.356	(1.000)	632133	4.00000	
	70	3,3'-Dichlorobenzidine	252	23.279	23.279	(0.997)	44912	0.99601	0.9960
	71	Chrysene	228	23.394	23.394	(1.002)	47579	0.21722	0.2172
	72	bis(2-Ethylhexyl)phthalate	149	23.368	23.368	(0.960)	34281	0.18099	0.1810
*	134	Di-n-octylphthalate-d4	153	24.351	24.363	(1.000)	1309126	4.00000	
	73	Di-n-octylphthalate	149	24.363	24.363	(1.001)	70500	0.21246	0.2125
	74	Benzo(b)fluoranthene	252	25.218	25.218	(0.970)	48446	0.22428	0.2243
	75	Benzo(k)fluoranthene	252	25.256	25.269	(0.971)	49174	0.24095	0.2410
	76	Benzo(a)pyrene	252	25.881	25.894	(0.995)	36092	0.21211	0.2121
*	77	Perylene-d12	264	26.009	26.009	(1.000)	544824	4.00000	
	78	Indeno(1,2,3-cd)pyrene	276	28.729	28.716	(1.105)	25177	0.12756	0.1276
	79	Dibenzo(a,h)anthracene	278	28.742	28.729	(1.105)	22820	0.13776	0.1378
	80	Benzo(g,h,i)perylene	276	29.534	29.534	(1.136)	17997	0.11047	0.1105
	90	N-Nitrosodimethylamine	74	4.982	4.982	(0.538)	24167	0.30743	0.3074
	91	Aniline	93	8.740	8.728	(0.944)	32699	0.23622	0.2362
	93	Benzidine	184	21.008	20.996	(0.900)	31189	0.42486	0.4249
	103	Pyridine	79	5.046	5.008	(0.545)	43486	0.34876	0.3488
	105	1-methylnaphthalene	142	13.385	13.385	(1.141)	37286	0.19599	0.1960
	111	Azobenzene (1,2-DP-Hydrazine)	77	16.738	16.738	(1.092)	41103	0.19304	0.1930

Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
187 Total Benzofluoranthenes	252	25.218	25.269	(0.970)	85388	0.44036	0.4404(M)
120 2,3,4,6-Tetrachlorophenol	232	16.063	16.050	(1.048)	7602	0.11171	0.1117

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262321.D
Lab Smp Id: SLE0434-LCV2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\ABN.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 23:55
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	327251	163626	654502	360010	10.01
27 Naphthalene-d8	1151610	575805	2303220	1041490	-9.56
42 Acenaphthene-d10	581592	290796	1163184	543612	-6.53
59 Phenanthrene-d10	918371	459186	1836742	881915	-3.97
69 Chrysene-d12	690072	345036	1380144	632133	-8.40
134 Di-n-octylphthala	1461689	730845	2923378	1309126	-10.44
77 Perylene-d12	568726	284363	1137452	544824	-4.20

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.26	8.76	9.76	9.26	-0.00
27 Naphthalene-d8	11.73	11.23	12.23	11.73	-0.00
42 Acenaphthene-d10	15.32	14.82	15.82	15.32	-0.00
59 Phenanthrene-d10	18.34	17.84	18.84	18.34	-0.00
69 Chrysene-d12	23.36	22.86	23.86	23.36	-0.00
134 Di-n-octylphthala	24.36	23.86	24.86	24.35	-0.05
77 Perylene-d12	26.01	25.51	26.51	26.01	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262321.D

Lab ID: SLE0434-LCV2
nt17.i, ABN.m, 27-MAY-2023 01:10

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.960	0.965	-0.0054	Benzoic acid
1.016	1.010	0.0058	2,4-Dinitrophenol
1.025	1.018	0.0066	4-Nitrophenol

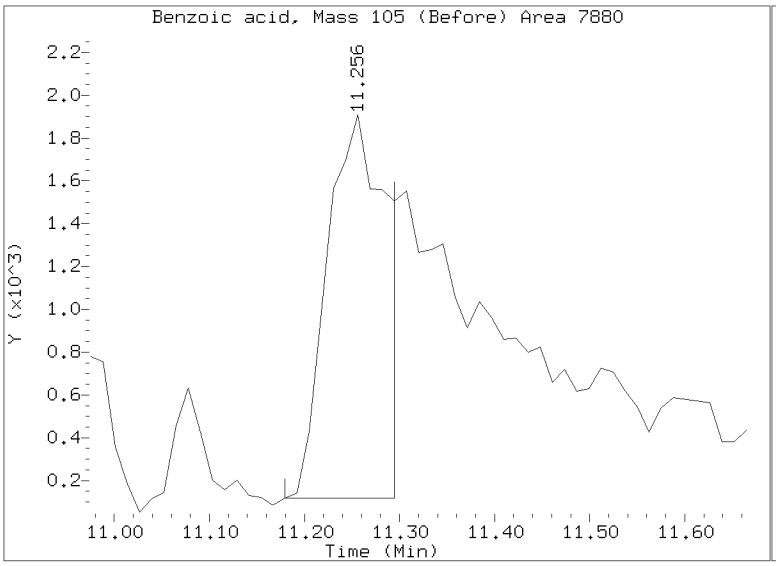
RRT check based on Ccal File: NT1705262319.D

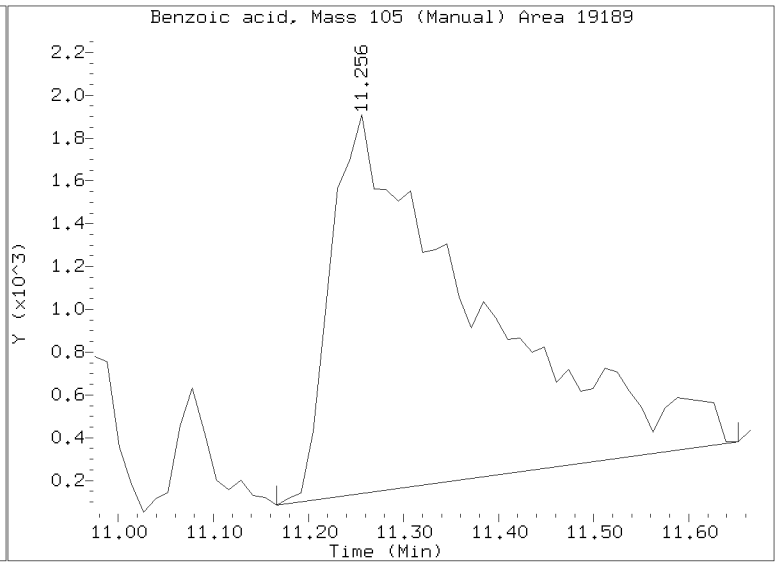
On Column LOD for nt17.i, ABN.m, ICAL.sub = 0.0000

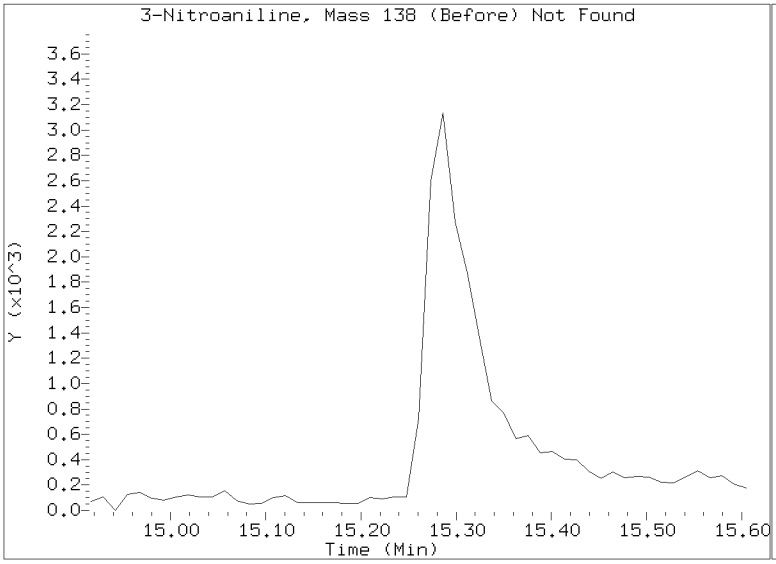
* Only compounds listed in the work order have been verified by the analyst *

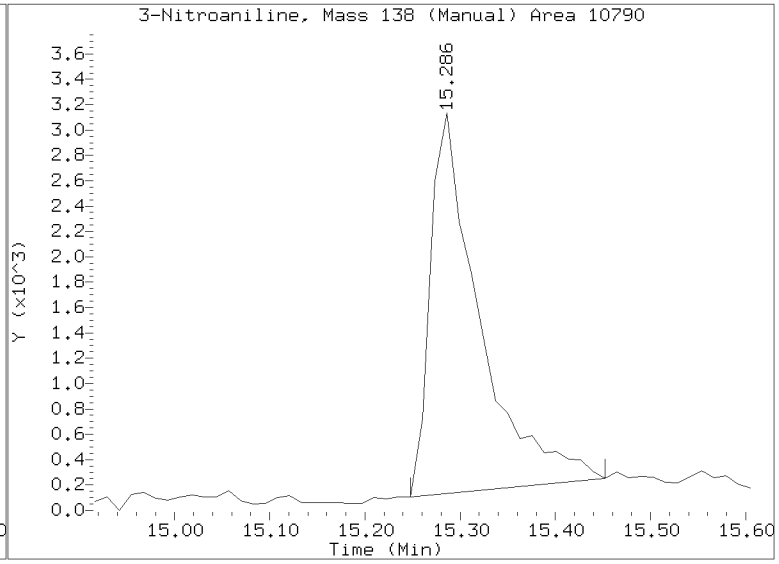
Quant Ion Manual Peak Adjustment Report

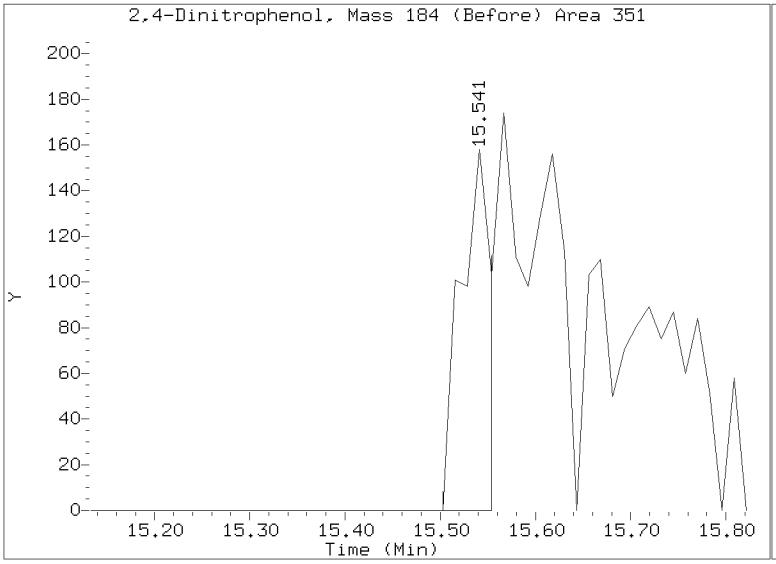
Datafile: //target/share/chem3/nt17.i/20230526.b/NT1705262321.D
Injection Date: 27-MAY-2023 01:10
Lab ID:SLE0434-LCV2 Client ID:
Report Date: 05/27/2023 13:34

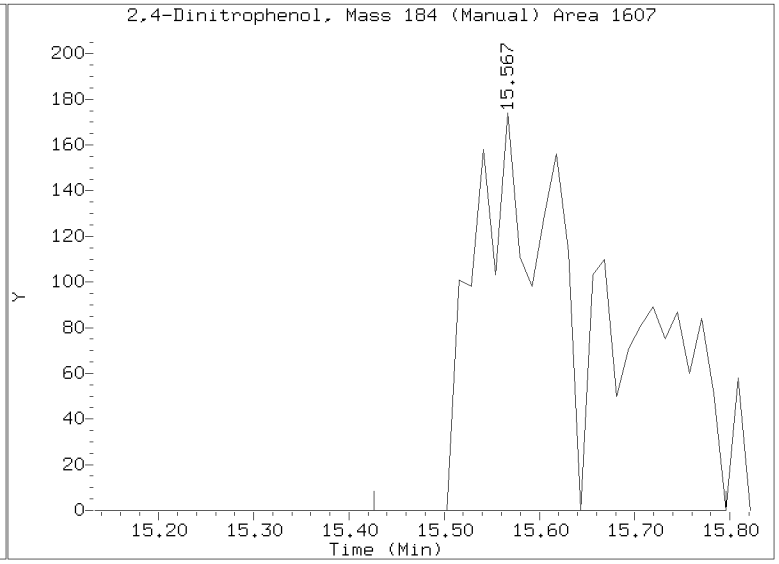












Quant Ion Manual Peak Adjustment Report

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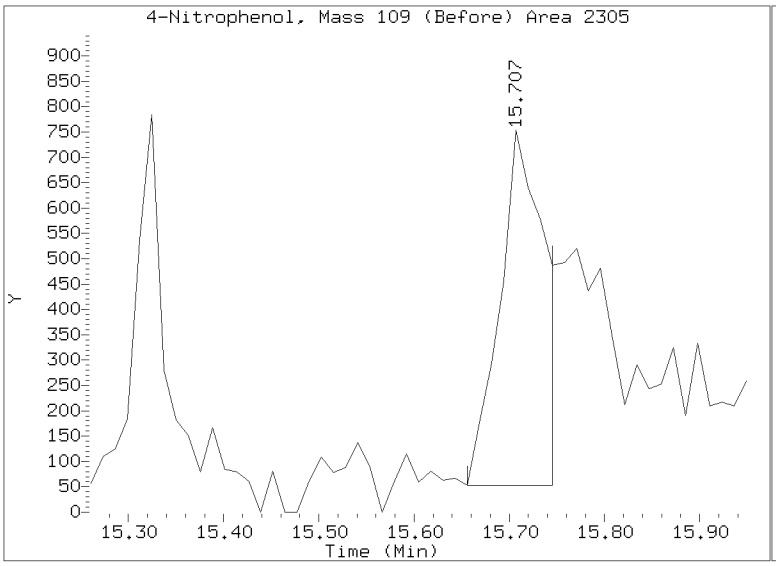
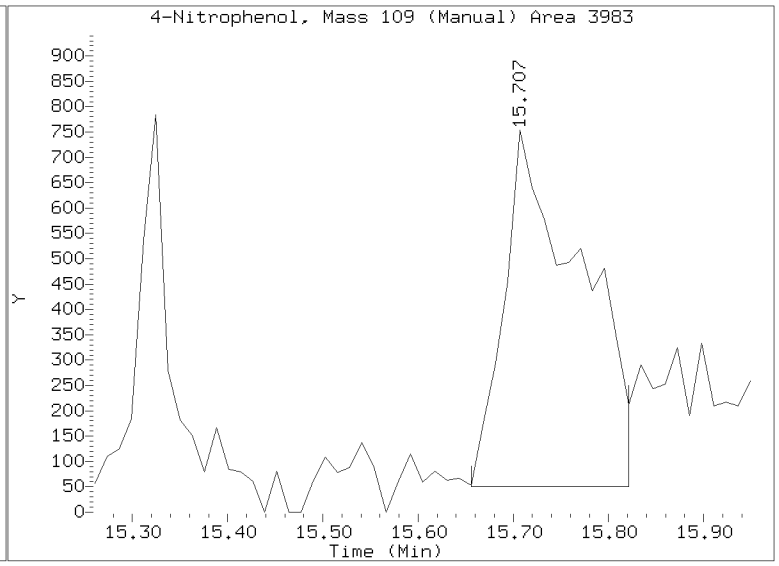
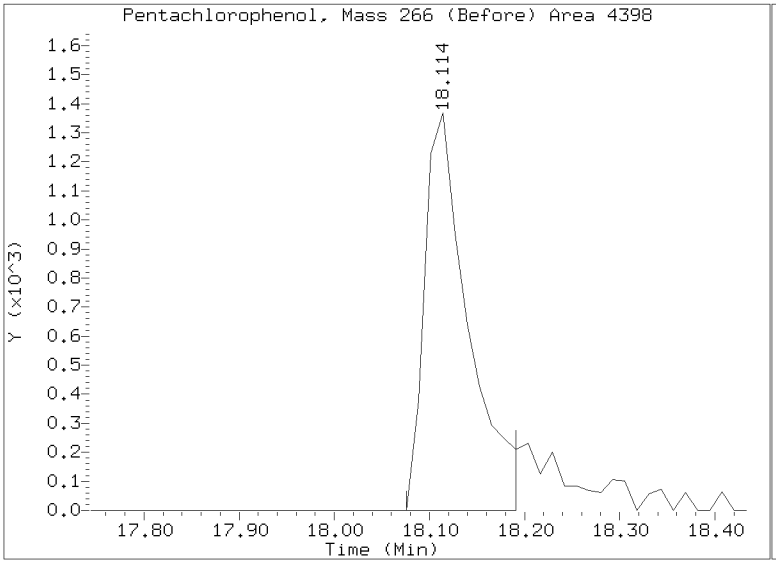
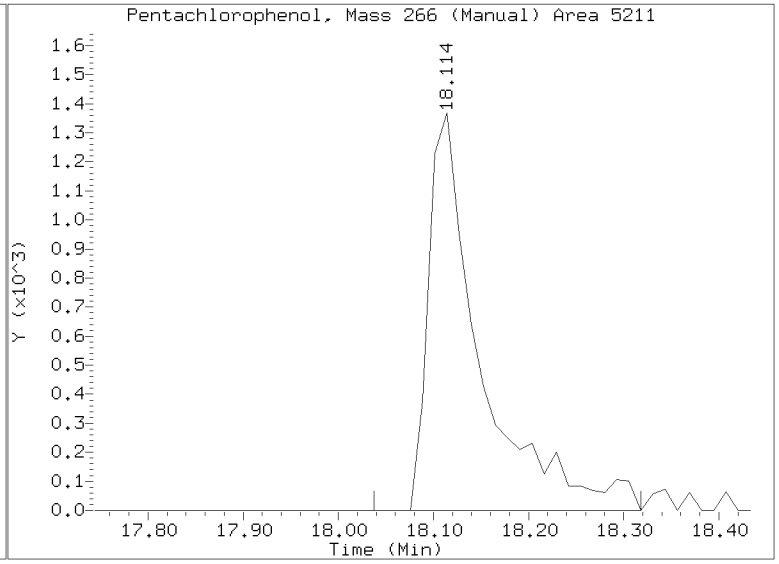
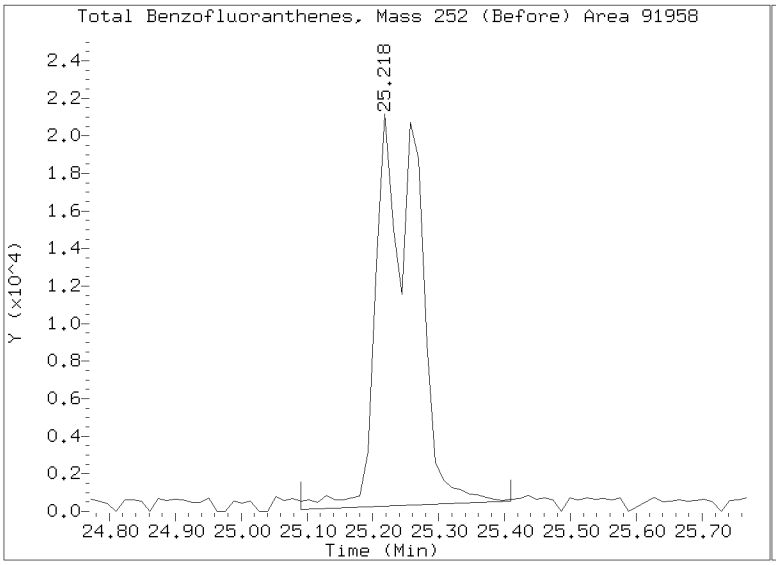
Injection Date: 27-MAY-2023 01:10
Lab ID:SLE0434-LCV2 Client ID:
Report Date: 05/27/2023 13:34

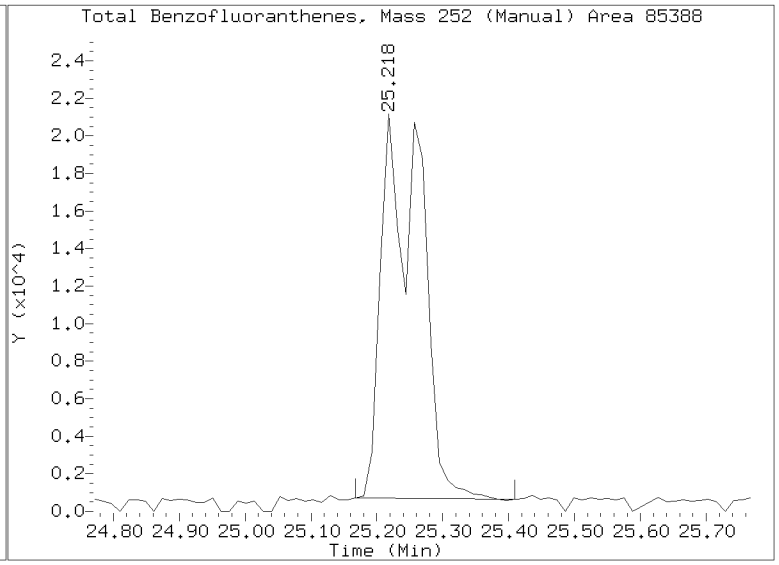












Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0338	Instrument:	NT17
		Calibration:	GE00065

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLE0338-TUN1	NT1705162301.D	NA	05/16/23 18:14
ABN 20	SLE0338-CAL7	NT1705162302.D	NA	05/16/23 18:52
ABN 10	SLE0338-CAL6	NT1705162303.D	NA	05/16/23 19:29
ABN 5	SLE0338-CAL5	NT1705162304.D	NA	05/16/23 20:07
ABN 2.5	SLE0338-CAL4	NT1705162305.D	NA	05/16/23 20:44
ABN 1.0	SLE0338-CAL3	NT1705162306.D	NA	05/16/23 21:22
ABN 0.5	SLE0338-CAL2	NT1705162307.D	NA	05/16/23 21:59
ABN 0.2	SLE0338-CAL1	NT1705162308.D	NA	05/16/23 22:37
SCV 5.0	SLE0338-SCV1	NT1705162311.D	NA	05/17/23 00:29
Initial Cal Blank	SLE0338-ICB1	NT1705162312.D	NA	05/17/23 01:07

ANALYSIS SEQUENCE

SLE0338

Instrument ID: NT17
Calibration ID: GE00065
MS EM Level: 1450 EV

GCMS Description: Agilent 7890B/5977B
GCMS Column ID: L004289

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLE0338-TUN1	MS Tune	QC		1	L005045		05/16/2023 18:14	NT1705162301.D	VTS	
SLE0338-CAL7	ABN 20	QC		2	K011111	K010831	05/16/2023 18:52	NT1705162302.D	JGR	
SLE0338-CAL6	ABN 10	QC		3	K011110	K010831	05/16/2023 19:29	NT1705162303.D	JGR	
SLE0338-CAL5	ABN 5	QC		4	K011109	K010831	05/16/2023 20:07	NT1705162304.D	JGR	
SLE0338-CAL4	ABN 2.5	QC		5	K011108	K010831	05/16/2023 20:44	NT1705162305.D	JGR	
SLE0338-CAL3	ABN 1.0	QC		6	K011107	K010831	05/16/2023 21:22	NT1705162306.D	JGR	
SLE0338-CAL2	ABN 0.5	QC		7	K011106	K010831	05/16/2023 21:59	NT1705162307.D	JGR	
SLE0338-CAL1	ABN 0.2	QC		8	K011105	K010831	05/16/2023 22:37	NT1705162308.D	JGR	
SLE0338-SCV1	SCV 5.0	QC		9	K010066	K010831	05/17/2023 00:29	NT1705162311.D	JGR	
SLE0338-ICB1	Initial Cal Blank	QC		10	K005156	K010831	05/17/2023 01:07	NT1705162312.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230516.b

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1	1814	NT1705162301.D	SLE0338-TUN1		1	|NO ISTDS FOUND||																
2	1852	NT1705162302.D	SLE0338-CAL7		1	| 9.38	262646	||11.84	972245	||15.44	531394	||18.47	858760	||23.47	584767	||26.16	454990	||24.47	1150423 |
3	1929	NT1705162303.D	SLE0338-CAL6		1	| 9.37	285800	||11.84	1067038	||15.44	581019	||18.47	929294	||23.46	582943	||26.16	481255	||24.47	1171304 |
4	2007	NT1705162304.D	SLE0338-CAL5		1	| 9.37	287078	||11.84	1056758	||15.44	587510	||18.46	933575	||23.46	576570	||26.15	491359	||24.47	1181651 |
5	2044	NT1705162305.D	SLE0338-CAL4		1	| 9.37	294275	||11.84	1079321	||15.44	588382	||18.46	983826	||23.46	618048	||26.15	536896	||24.47	1230644 |
6	2122	NT1705162306.D	SLE0338-CAL3		1	| 9.37	291199	||11.84	1069618	||15.44	576693	||18.46	946973	||23.46	570480	||26.15	514255	||24.47	1138779 |
7	2159	NT1705162307.D	SLE0338-CAL2		1	| 9.37	324107	||11.84	1038534	||15.44	548179	||18.46	888076	||23.45	524160	||26.15	482063	||24.45	1033662 |
8	2237	NT1705162308.D	SLE0338-CAL1		1	| 9.37	341484	||11.83	1094850	||15.43	579868	||18.46	948879	||23.45	564132	||26.15	504570	||24.47	1101082 |
9	2314	NT1705162309.D	SIM0.1		1	| 9.37	321301	||11.83	1156521	||15.44	625574	||18.46	1065678	||23.45	676035	||26.15	620220	||24.45	1323254 |
10	2351	NT1705162310.D	SIM 0.5		1	| 9.37	332506	||11.83	1064302	||15.43	556553	||18.46	907034	||23.45	531815	||26.15	492679	||24.45	1051214 |
11	0029	NT1705162311.D	SLE0338-SCV1		1	| 9.37	265705	||11.84	965231	||15.44	512787	||18.46	850147	||23.46	511511	||26.15	456008	||24.47	1044471 |
12	0107	NT1705162312.D	SLE0338-ICB1		1	| 9.37	287620	||11.83	1041050	||15.44	539097	||18.46	886060	||23.45	518615	||26.15	487385	||24.45	1011857 |

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230516.b

Instrument: nt17.i Date: 16-MAY-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1814	NT1705162301.D	SLE0338-TUN1	1	NO MANUAL INTEGRATION
1852	NT1705162302.D	SLE0338-CAL7	1	Benzoic acid, 2-Fluorophenol,
1929	NT1705162303.D	SLE0338-CAL6	1	Benzoic acid,
2007	NT1705162304.D	SLE0338-CAL5	1	NO MANUAL INTEGRATION
2044	NT1705162305.D	SLE0338-CAL4	1	Benzoic acid,
2122	NT1705162306.D	SLE0338-CAL3	1	NO MANUAL INTEGRATION
2159	NT1705162307.D	SLE0338-CAL2	1	NO MANUAL INTEGRATION
2237	NT1705162308.D	SLE0338-CAL1	1	Benzoic acid,
2314	NT1705162309.D	SIM0.1	1	Benzo(k)fluoranthene,
2351	NT1705162310.D	SIM 0.5	1	NO MANUAL INTEGRATION
0029	NT1705162311.D	SLE0338-SCV1	1	NO MANUAL INTEGRATION
0107	NT1705162312.D	SLE0338-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 20-May-2023 13:32

NT1705162301.D	Data Locked	van, 20-May-2023 13:32
NT1705162302.D	Data Locked	van, 20-May-2023 13:32
NT1705162303.D	Data Locked	van, 20-May-2023 13:32
NT1705162304.D	Data Locked	van, 20-May-2023 13:32
NT1705162305.D	Data Locked	van, 20-May-2023 13:32
NT1705162306.D	Data Locked	van, 20-May-2023 13:32
NT1705162307.D	Data Locked	van, 20-May-2023 13:32
NT1705162308.D	Data Locked	van, 20-May-2023 13:32
NT1705162309.D	Data Locked	van, 20-May-2023 13:32
NT1705162310.D	Data Locked	van, 20-May-2023 13:32
NT1705162311.D	Data Locked	van, 20-May-2023 13:32
NT1705162312.D	Data Locked	van, 20-May-2023 13:32

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0434
Instrument: NT17
Calibration: GE00065

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLE0434-TUN1	NT1705262301.D	NA	05/26/23 12:58
ABN 5	SLE0434-ICV1	NT1705262302.D	NA	05/26/23 13:16
ABN 0.2	SLE0434-LCV1	NT1705262304.D	NA	05/26/23 14:31
Blank	BLD0607-BLK1	NT1705262306.D	Solid	05/26/23 15:47
LCS	BLD0607-BS1	NT1705262307.D	Solid	05/26/23 16:25
LCS Dup	BLD0607-BSD1	NT1705262308.D	Solid	05/26/23 17:02
Reference	BLD0607-SRM1	NT1705262311.D	Solid	05/26/23 18:56
ZZZZZ	23D0394-01	NT1705262312.D	Solid	05/26/23 19:33
ZZZZZ	23D0394-02	NT1705262313.D	Solid	05/26/23 20:11
ZZZZZ	23D0394-04	NT1705262314.D	Solid	05/26/23 20:48
ZZZZZ	23D0394-06	NT1705262315.D	Solid	05/26/23 21:26
ZZZZZ	23D0394-08	NT1705262316.D	Solid	05/26/23 22:03
ZZZZZ	23D0394-11	NT1705262317.D	Solid	05/26/23 22:40
ZZZZZ	23D0394-12	NT1705262318.D	Solid	05/26/23 23:18
ABN 5	SLE0434-ICV2	NT1705262319.D	NA	05/26/23 23:55
ABN 0.2	SLE0434-LCV2	NT1705262321.D	NA	05/27/23 01:10
LDW23-SS1801	23D0396-01	NT1705262323.D	Solid	05/27/23 02:25
LDW23-SS1802	23D0396-03	NT1705262324.D	Solid	05/27/23 03:02
ZZZZZ	23C0109-03RE1	NT1705262325.D	Solid	05/27/23 03:40
ZZZZZ	23C0108-09RE1	NT1705262326.D	Solid	05/27/23 04:17
Blank	BLD0607-BLK3	NT1705262327.D	Solid	05/27/23 04:54
ABN 5	SLE0434-CCV1	NT1705262328.D	NA	05/27/23 05:31

ANALYSIS SEQUENCE

SLE0434

Instrument ID: NT17
Calibration ID: GE00065
MS EM Level: 1500 EV

GCMS Description: Agilent 7890B/5977B
GCMS Column ID: L004289

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLE0434-TUN1	MS Tune	QC		1	L005045		05/26/2023 12:58	NT1705262301.D	JGR	
SLE0434-ICV1	ABN 5	QC		2	L005950	L001570	05/26/2023 13:16	NT1705262302.D	VTS	
SLE0434-LCV1	ABN 0.2	QC		3	L005946	L001570	05/26/2023 14:31	NT1705262304.D	VTS	
BLD0607-BLK1	Blank	QC		4		L001570	05/26/2023 15:47	NT1705262306.D	VTS	
BLD0607-BS1	LCS	QC		5		L001570	05/26/2023 16:25	NT1705262307.D	VTS	
BLD0607-BSD1	LCS Dup	QC		6		L001570	05/26/2023 17:02	NT1705262308.D	VTS	
BLD0607-MS1	Matrix Spike	QC		7		L001570	05/26/2023 17:40	NT1705262309.D	VTS	
BLD0607-MSD1	Matrix Spike Dup	QC		8		L001570	05/26/2023 18:18	NT1705262310.D	VTS	
BLD0607-SRM1	Reference	QC		9		L001570	05/26/2023 18:56	NT1705262311.D	VTS	
23D0394-01	LDW23-SS1098	(20ug/kg solid or 0.2ug/L l	A 02	10		L001570	05/26/2023 19:33	NT1705262312.D	VTS	
23D0394-02	LDW23-SS1071	(20ug/kg solid or 0.2ug/L l	A 02	11		L001570	05/26/2023 20:11	NT1705262313.D	VTS	
23D0394-04	LDW23-SS1078	(20ug/kg solid or 0.2ug/L l	A 02	12		L001570	05/26/2023 20:48	NT1705262314.D	VTS	
23D0394-06	LDW23-SS1807	(20ug/kg solid or 0.2ug/L l	A 02	13		L001570	05/26/2023 21:26	NT1705262315.D	VTS	
23D0394-08	LDW23-SS1055	(20ug/kg solid or 0.2ug/L l	A 02	14		L001570	05/26/2023 22:03	NT1705262316.D	VTS	
23D0394-11	LDW23-SS1034	(20ug/kg solid or 0.2ug/L l	A 02	15		L001570	05/26/2023 22:40	NT1705262317.D	VTS	
23D0394-12	LDW23-SS1806	(20ug/kg solid or 0.2ug/L l	A 02	16		L001570	05/26/2023 23:18	NT1705262318.D	VTS	
SLE0434-ICV2	ABN 5	QC		17	L005950	L001570	05/26/2023 23:55	NT1705262319.D	VTS	
SLE0434-LCV2	ABN 0.2	QC		18	L005946	L001570	05/27/2023 01:10	NT1705262321.D	VTS	
23D0396-01	LDW23-SS1801	(20ug/kg solid or 0.2ug/L l	A 02	19		L001570	05/27/2023 02:25	NT1705262323.D	VTS	
23D0396-03	LDW23-SS1802	(20ug/kg solid or 0.2ug/L l	A 02	20		L001570	05/27/2023 03:02	NT1705262324.D	VTS	
23C0108-09RE1	LDW23-SS1118	(20ug/kg solid or 0.2ug/L l	A 02	21		L001570	05/27/2023 04:17	NT1705262326.D	VTS	Added 5/27/2023 by VTS
23C0109-03RE1	LDW23-SS1105	(20ug/kg solid or 0.2ug/L l	A 02	22		L001570	05/27/2023 03:40	NT1705262325.D	VTS	Added 5/27/2023 by VTS

ANALYSIS SEQUENCE

SLE0434

Instrument ID: NT17
Calibration ID: GE00065
MS EM Level: 1500 EV

GCMS Description: Agilent 7890B/5977B
GCMS Column ID: L004289

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLE0434-CCV1	ABN 5	QC		23	L005950	L001570	05/27/2023 05:31	NT1705262328.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b

	Time	Filename	LabID	ClientId	DF																			
1	1258	NT1705262301.D	SLE0434-TUN1		1	|NO ISTDS FOUND||																		
2	1316	NT1705262302.D	SLE0434-ICV1		1	| 9.26	303517	||11.73	1140476	||15.32	622461	||18.34	1074054	||23.36	723807	||26.00	666992	||24.36	1524055 |
3	1431	NT1705262304.D	SLE0434-LCV1		1	| 9.26	316449	||11.73	1142345	||15.32	576179	||18.34	958053	||23.34	600821	||26.00	617938	||24.35	1240881 |
4	1509	NT1705262305.D	SIM LCV		1	| 9.26	392510	||11.73	1272891	||15.32	633869	||18.34	1033436	||23.34	604550	||26.00	624810	||24.35	1241015 |
5	1547	NT1705262306.D	BLD0607-BLK1		1	| 9.26	269574	||11.73	1019925	||15.32	537378	||18.34	871516	||23.34	560318	||26.00	499749	||24.35	1157035 |
6	1625	NT1705262307.D	BLD0607-BS1		1	| 9.26	270705	||11.73	979437	||15.32	504985	||18.34	813869	||23.34	502451	||26.00	424472	||24.35	1064023 |
7	1702	NT1705262308.D	BLD0607-BSD1		1	| 9.26	274132	||11.73	1020740	||15.32	518733	||18.34	844493	||23.34	499547	||26.00	427148	||24.35	1058373 |
8	1740	NT1705262309.D	BLD0607-MS1		1	| 9.26	271968	||11.73	939956	||15.32	447496	||18.34	707304	||23.36	671174	||26.03	525393	||24.38	1642643 |
9	1818	NT1705262310.D	BLD0607-MSD1		1	| 9.26	287159	||11.73	1011804	||15.32	489313	||18.34	791605	||23.36	758343	||26.02	569703	||24.36	1822326 |
10	1856	NT1705262311.D	BLD0607-SRM1		1	| 9.26	303211	||11.73	1039513	||15.32	497514	||18.34	761526	||23.36	632418	||26.00	634142	||24.36	1379317 |
11	1933	NT1705262312.D	23D0394-01		1	| 9.26	303743	||11.73	1085418	||15.32	520191	||18.34	837196	||23.36	660583	||26.02	655161	||24.36	1472114 |
12	2011	NT1705262313.D	23D0394-02		1	| 9.26	299469	||11.73	1060356	||15.32	502108	||18.34	767944	||23.36	783737	||26.06	615979	||24.38	2016432 |
13	2048	NT1705262314.D	23D0394-04		1	| 9.28	304909	||11.73	1061244	||15.32	493793	||18.34	783670	||23.36	737749	||26.02	494226	||24.36	1698072 |
14	2126	NT1705262315.D	23D0394-06		1	| 9.26	301405	||11.73	1010477	||15.32	506561	||18.34	772575	||23.36	666675	||26.01	522592	||24.36	1418587 |
15	2203	NT1705262316.D	23D0394-08		1	| 9.26	303859	||11.73	1072420	||15.32	508913	||18.34	787959	||23.36	665266	||26.01	521405	||24.36	1414537 |
16	2240	NT1705262317.D	23D0394-11		1	| 9.26	311452	||11.73	1100726	||15.32	520993	||18.34	791976	||23.36	706389	||26.04	519498	||24.36	1657614 |
17	2318	NT1705262318.D	23D0394-12		1	| 9.26	312418	||11.73	1108028	||15.32	537868	||18.34	828519	||23.36	671055	||26.01	502096	||24.36	1395059 |
18	2355	NT1705262319.D	SLE0434-ICV2		1	| 9.26	327251	||11.73	1151610	||15.32	581592	||18.34	918371	||23.36	690072	||26.01	568726	||24.36	1461689 |
19	0033	NT1705262320.D	SIM-ICV2		1	| 9.26	365589	||11.73	1195826	||15.32	589770	||18.34	944374	||23.36	757498	||26.00	618753	||24.35	1558916 |
20	0110	NT1705262321.D	SLE0434-LCV2		1	| 9.26	360010	||11.73	1041490	||15.32	543612	||18.34	881915	||23.36	632133	||26.01	544824	||24.35	1309126 |

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b

	Time	Filename	LabID	ClientId	DF																				
21	0148	NT1705262322.D	SIM-LCV2		1	9.26	401129	11.73	1133970	15.32	560347	18.34	908054	23.36	718891	26.01	590210	24.35	1418694						
22	0225	NT1705262323.D	23D0396-01		1	9.26	294445	11.73	1052858	15.32	500193	18.34	820099	23.36	657803	26.02	504765	24.36	1455169						
23	0302	NT1705262324.D	23D0396-03		1	9.26	306165	11.73	1084556	15.32	528488	18.36	828842	23.36	668942	26.02	499764	24.36	1475136						
24	0340	NT1705262325.D	23C0109-03RE1		1	9.26	307641	11.73	1140166	15.32	562462	18.34	883290	23.36	683398	26.01	542966	24.36	1434453						
25	0417	NT1705262326.D	23C0108-09RE1		1	9.26	303458	11.73	1102108	15.32	546362	18.34	877674	23.36	651586	26.02	493084	24.36	1379744						
26	0454	NT1705262327.D	BLD0607-BLK2		1	9.26	308543	11.73	1052532	15.32	519310	18.34	793037	23.36	599277	26.01	437418	24.35	1180466						
27	0531	NT1705262328.D	SLE0434-CCV1		1	9.26	317699	11.73	1109251	15.32	572542	18.34	911027	23.36	675891	26.01	494128	24.35	1331493						

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b

Instrument: nt17.i Date: 26-MAY-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1258	NT1705262301.D	SLE0434-TUN1	1	NO MANUAL INTEGRATION
1316	NT1705262302.D	SLE0434-ICV1	1	NO MANUAL INTEGRATION
1431	NT1705262304.D	SLE0434-LCV1	1	NO MANUAL INTEGRATION
1509	NT1705262305.D	SIM LCV	1	NO MANUAL INTEGRATION
1547	NT1705262306.D	BLD0607-BLK1	1	NO MANUAL INTEGRATION
1625	NT1705262307.D	BLD0607-BS1	1	NO MANUAL INTEGRATION
1702	NT1705262308.D	BLD0607-BSD1	1	NO MANUAL INTEGRATION
1740	NT1705262309.D	BLD0607-MS1	1	NO MANUAL INTEGRATION
1818	NT1705262310.D	BLD0607-MSD1	1	3-Nitroaniline, 4-Nitroaniline,
1856	NT1705262311.D	BLD0607-SRM1	1	Benzyl alcohol,
1933	NT1705262312.D	23D0394-01	1	1,4-Dichlorobenzene,
2011	NT1705262313.D	23D0394-02	1	Benzo(k)fluoranthene, Indeno(1,2,3-cd)pyrene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
2048	NT1705262314.D	23D0394-04	1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
2126	NT1705262315.D	23D0394-06	1	Benzoic acid, Benzo(k)fluoranthene, Total Benzofluoranthenes,
2203	NT1705262316.D	23D0394-08	1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene, Total Benzofluoranthenes,
2240	NT1705262317.D	23D0394-11	1	NO MANUAL INTEGRATION
2318	NT1705262318.D	23D0394-12	1	Benzoic acid, Benzo(k)fluoranthene, Total Benzofluoranthenes,

Instrument: nt17.i Date: 26-MAY-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2355	NT1705262319.D	SLE0434-ICV2	1	NO MANUAL INTEGRATION
0033	NT1705262320.D	SIM-ICV2	1	NO MANUAL INTEGRATION
0110	NT1705262321.D	SLE0434-LCV2	1	Benzoic acid, 3-Nitroaniline, 2,4-Dinitrophenol, 4-Nitrophenol, Pentachlorophenol, Total Benzofluoranthenes,
0148	NT1705262322.D	SIM-LCV2	1	NO MANUAL INTEGRATION
0225	NT1705262323.D	23D0396-01	1	1,4-Dichlorobenzene, Dibenzo(a,h)anthracene,
0302	NT1705262324.D	23D0396-03	1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0340	NT1705262325.D	23C0109-03RE1	1	Fluorene, Benzo(k)fluoranthene, Total Benzofluoranthenes,
0417	NT1705262326.D	23C0108-09RE1	1	Benzo(k)fluoranthene, Dibenzo(a,h)anthracene,
0454	NT1705262327.D	BLD0607-BLK2	1	NO MANUAL INTEGRATION
0531	NT1705262328.D	SLE0434-CCV1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 27-May-2023 13:51

NT1705262301.D	Data Locked	van, 27-May-2023 13:51
NT1705262302.D	Data Locked	van, 27-May-2023 13:51
NT1705262304.D	Data Locked	van, 27-May-2023 13:51
NT1705262305.D	Data Locked	van, 27-May-2023 13:51
NT1705262306.D	Data Locked	van, 27-May-2023 13:51
NT1705262307.D	Data Locked	van, 27-May-2023 13:51
NT1705262308.D	Data Locked	van, 27-May-2023 13:51
NT1705262309.D	Data Locked	van, 27-May-2023 13:51
NT1705262310.D	Data Locked	van, 27-May-2023 13:51
NT1705262311.D	Data Locked	van, 27-May-2023 13:51
NT1705262312.D	Data Locked	van, 27-May-2023 13:51
NT1705262313.D	Data Locked	van, 27-May-2023 13:51
NT1705262314.D	Data Locked	van, 27-May-2023 13:51
NT1705262315.D	Data Locked	van, 27-May-2023 13:51
NT1705262316.D	Data Locked	van, 27-May-2023 13:51
NT1705262317.D	Data Locked	van, 27-May-2023 13:51
NT1705262318.D	Data Locked	van, 27-May-2023 13:51
NT1705262319.D	Data Locked	van, 27-May-2023 13:51
NT1705262320.D	Data Locked	van, 27-May-2023 13:51
NT1705262321.D	Data Locked	van, 27-May-2023 13:51
NT1705262322.D	Data Locked	van, 27-May-2023 13:51
NT1705262323.D	Data Locked	van, 27-May-2023 13:51
NT1705262324.D	Data Locked	van, 27-May-2023 13:51
NT1705262325.D	Data Locked	van, 27-May-2023 13:51
NT1705262326.D	Data Locked	van, 27-May-2023 13:51
NT1705262327.D	Data Locked	van, 27-May-2023 13:51
NT1705262328.D	Data Locked	van, 27-May-2023 13:51

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0338	Instrument:	NT17
Calibration:	GE00065	Calibration Date:	05/20/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0338-ICB1 (Water)			Lab File ID: NT1705162312.D			Analyzed: 05/17/23 01:07		
2-Fluorophenol	7.5000	104	30 - 160	7.148	7.157143	-0.0091	N/A	
Phenol-d5	7.5000	96.0	30 - 160	8.715	8.720429	-0.0054	N/A	
2-Chlorophenol-d4	7.5000	102	30 - 160	9.008	9.009857	-0.0019	N/A	
1,2-Dichlorobenzene-d4	5.0000	100	30 - 160	9.723	9.726714	-0.0037	N/A	
Nitrobenzene-d5	5.0000	98.8	30 - 160	10.451	10.45471	-0.0037	N/A	
2-Fluorobiphenyl	5.0000	103	30 - 160	14.036	14.03771	-0.0017	N/A	
2,4,6-Tribromophenol	7.5000	78.1	30 - 160	17.069	17.07271	-0.0037	N/A	
p-Terphenyl-d14	5.0000	109	30 - 160	21.557	21.557	0.0000	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG/WO:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0434	Instrument:	NT17
Calibration:	GE00065	Calibration Date:	05/20/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0434-ICV1 (Solid)			Lab File ID: NT1705262302.D			Analyzed: 05/26/23 13:16		
2-Fluorophenol	7.5000	109	80 - 120	7.071	7.157143	-0.0861	N/A	
Phenol-d5	7.5000	108	80 - 120	8.638	8.720429	-0.0824	N/A	
2-Chlorophenol-d4	7.5000	105	80 - 120	8.906	9.009857	-0.1039	N/A	
1,2-Dichlorobenzene-d4	5.0000	102	80 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	5.0000	105	80 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	5.0000	98.3	80 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	7.5000	93.6	80 - 120	16.954	17.07271	-0.1187	N/A	
p-Terphenyl-d14	5.0000	117	80 - 120	21.455	21.557	-0.1020	N/A	
SLE0434-LCV1 (Solid)			Lab File ID: NT1705262304.D			Analyzed: 05/26/23 14:31		
2-Fluorophenol	0.30000	91.9	50 - 150	7.071	7.157143	-0.0861	N/A	
Phenol-d5	0.30000	93.9	50 - 150	8.639	8.720429	-0.0814	N/A	
2-Chlorophenol-d4	0.30000	98.7	50 - 150	8.906	9.009857	-0.1039	N/A	
1,2-Dichlorobenzene-d4	0.20000	109	50 - 150	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	0.20000	92.9	50 - 150	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	0.20000	102	50 - 150	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	0.30000	80.9	50 - 150	16.954	17.07271	-0.1187	N/A	
p-Terphenyl-d14	0.20000	104	50 - 150	21.455	21.557	-0.1020	N/A	
BLD0607-BLK1 (Solid)			Lab File ID: NT1705262306.D			Analyzed: 05/26/23 15:47		
2-Fluorophenol	750.00	66.0	27 - 120	7.084	7.157143	-0.0731	N/A	
Phenol-d5	750.00	70.9	29 - 120	8.638	8.720429	-0.0824	N/A	
2-Chlorophenol-d4	750.00	74.4	31 - 120	8.906	9.009857	-0.1039	N/A	
1,2-Dichlorobenzene-d4	500.00	78.5	32 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	500.00	81.8	30 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	500.00	81.4	35 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	750.00	48.7	24 - 134	16.954	17.07271	-0.1187	N/A	
p-Terphenyl-d14	500.00	91.8	37 - 120	21.455	21.557	-0.1020	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0434
Instrument: NT17
Calibration: GE00065
Calibration Date: 05/20/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLD0607-BS1 (Solid)			Lab File ID: NT1705262307.D				Analyzed: 05/26/23 16:25	
2-Fluorophenol	750.00	80.0	27 - 120	7.084	7.157143	-0.0731	N/A	
Phenol-d5	750.00	78.6	29 - 120	8.638	8.720429	-0.0824	N/A	
2-Chlorophenol-d4	750.00	83.6	31 - 120	8.906	9.009857	-0.1039	N/A	
1,2-Dichlorobenzene-d4	500.00	79.9	32 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	500.00	86.4	30 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	500.00	84.7	35 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	750.00	74.1	24 - 134	16.954	17.07271	-0.1187	N/A	
p-Terphenyl-d14	500.00	115	37 - 120	21.455	21.557	-0.1020	N/A	
BLD0607-BSD1 (Solid)			Lab File ID: NT1705262308.D				Analyzed: 05/26/23 17:02	
2-Fluorophenol	750.00	81.6	27 - 120	7.084	7.157143	-0.0731	N/A	
Phenol-d5	750.00	80.0	29 - 120	8.639	8.720429	-0.0814	N/A	
2-Chlorophenol-d4	750.00	84.8	31 - 120	8.906	9.009857	-0.1039	N/A	
1,2-Dichlorobenzene-d4	500.00	80.9	32 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	500.00	85.6	30 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	500.00	86.2	35 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	750.00	74.4	24 - 134	16.954	17.07271	-0.1187	N/A	
p-Terphenyl-d14	500.00	96.4	37 - 120	21.455	21.557	-0.1020	N/A	
BLD0607-SRM1 (Solid)			Lab File ID: NT1705262311.D				Analyzed: 05/26/23 18:56	
2-Fluorophenol	7500.0	83.2	27 - 120	7.097	7.157143	-0.0601	N/A	
Phenol-d5	7500.0	79.6	29 - 120	8.639	8.720429	-0.0814	N/A	
2-Chlorophenol-d4	7500.0	84.9	31 - 120	8.919	9.009857	-0.0909	N/A	
1,2-Dichlorobenzene-d4	5000.0	79.7	32 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	5000.0	87.4	30 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	5000.0	92.7	35 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	7500.0	79.3	24 - 134	16.954	17.07271	-0.1187	N/A	
p-Terphenyl-d14	5000.0	75.6	37 - 120	21.455	21.557	-0.1020	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0434
Instrument: NT17
Calibration: GE00065
Calibration Date: 05/20/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0434-ICV2 (Solid)			Lab File ID: NT1705262319.D				Analyzed: 05/26/23 23:55	
2-Fluorophenol	7.5000	109	80 - 120	7.071	7.157143	-0.0861	N/A	
Phenol-d5	7.5000	107	80 - 120	8.639	8.720429	-0.0814	N/A	
2-Chlorophenol-d4	7.5000	104	80 - 120	8.919	9.009857	-0.0909	N/A	
1,2-Dichlorobenzene-d4	5.0000	103	80 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	5.0000	104	80 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	5.0000	106	80 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	7.5000	91.4	80 - 120	16.967	17.07271	-0.1057	N/A	
p-Terphenyl-d14	5.0000	84.1	80 - 120	21.455	21.557	-0.1020	N/A	
SLE0434-LCV2 (Solid)			Lab File ID: NT1705262321.D				Analyzed: 05/27/23 01:10	
2-Fluorophenol	0.30000	82.3	50 - 150	7.071	7.157143	-0.0861	N/A	
Phenol-d5	0.30000	71.9	50 - 150	8.651	8.720429	-0.0694	N/A	
2-Chlorophenol-d4	0.30000	83.0	50 - 150	8.919	9.009857	-0.0909	N/A	
1,2-Dichlorobenzene-d4	0.20000	89.9	50 - 150	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	0.20000	94.4	50 - 150	10.362	10.45471	-0.0927	N/A	
2-Fluorobiphenyl	0.20000	101	50 - 150	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	0.30000	78.8	50 - 150	16.967	17.07271	-0.1057	N/A	
p-Terphenyl-d14	0.20000	87.5	50 - 150	21.455	21.557	-0.1020	N/A	
23D0396-01 (Solid)			Lab File ID: NT1705262323.D				Analyzed: 05/27/23 02:25	
2-Fluorophenol	750.01	72.6	27 - 120	7.122	7.157143	-0.0351	N/A	
Phenol-d5	750.01	72.3	29 - 120	8.651	8.720429	-0.0694	N/A	
2-Chlorophenol-d4	750.01	76.5	31 - 120	8.919	9.009857	-0.0909	N/A	
1,2-Dichlorobenzene-d4	500.01	71.6	32 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	500.01	77.6	30 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	500.01	87.5	35 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	750.01	77.7	24 - 134	16.967	17.07271	-0.1057	N/A	
p-Terphenyl-d14	500.01	66.1	37 - 120	21.455	21.557	-0.1020	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0434
Instrument: NT17
Calibration: GE00065
Calibration Date: 05/20/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23D0396-03 (Solid)			Lab File ID: NT1705262324.D				Analyzed: 05/27/23 03:02	
2-Fluorophenol	749.98	69.2	27 - 120	7.122	7.157143	-0.0351	N/A	
Phenol-d5	749.98	70.8	29 - 120	8.651	8.720429	-0.0694	N/A	
2-Chlorophenol-d4	749.98	73.2	31 - 120	8.919	9.009857	-0.0909	N/A	
1,2-Dichlorobenzene-d4	499.99	65.8	32 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	499.99	74.9	30 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	499.99	82.6	35 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	749.98	76.2	24 - 134	16.967	17.07271	-0.1057	N/A	
p-Terphenyl-d14	499.99	63.8	37 - 120	21.455	21.557	-0.1020	N/A	
BLD0607-BLK3 (Solid)			Lab File ID: NT1705262327.D				Analyzed: 05/27/23 04:54	
2-Fluorophenol	750.00	65.4	27 - 120	7.084	7.157143	-0.0731	N/A	
Phenol-d5	750.00	68.2	29 - 120	8.638	8.720429	-0.0824	N/A	
2-Chlorophenol-d4	750.00	71.7	31 - 120	8.919	9.009857	-0.0909	N/A	
1,2-Dichlorobenzene-d4	500.00	77.3	32 - 120	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	500.00	85.0	30 - 120	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	500.00	83.6	35 - 120	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	750.00	48.5	24 - 134	16.967	17.07271	-0.1057	N/A	
p-Terphenyl-d14	500.00	76.5	37 - 120	21.455	21.557	-0.1020	N/A	
SLE0434-CCV1 (Solid)			Lab File ID: NT1705262328.D				Analyzed: 05/27/23 05:31	
2-Fluorophenol	7.5000	108	50 - 150	7.071	7.157143	-0.0861	N/A	
Phenol-d5	7.5000	106	50 - 150	8.639	8.720429	-0.0814	N/A	
2-Chlorophenol-d4	7.5000	103	50 - 150	8.906	9.009857	-0.1039	N/A	
1,2-Dichlorobenzene-d4	5.0000	101	50 - 150	9.621	9.726714	-0.1057	N/A	
Nitrobenzene-d5	5.0000	105	50 - 150	10.349	10.45471	-0.1057	N/A	
2-Fluorobiphenyl	5.0000	105	50 - 150	13.934	14.03771	-0.1037	N/A	
2,4,6-Tribromophenol	7.5000	95.1	50 - 150	16.967	17.07271	-0.1057	N/A	
p-Terphenyl-d14	5.0000	87.2	50 - 150	21.455	21.557	-0.1020	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0338
Instrument: NT17
Calibration: GE00065

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLE0338-SCV1)		(Water)		Lab File ID: NT1705162311.D				Analyzed: 05/17/23 00:29	
1,4-Dichlorobenzene-d4	265705	9.365	287078	9.365	93	50 - 200	0.000	+/-0.50	
Naphthalene-d8	965231	11.842	1056758	11.843	91	50 - 200	-0.001	+/-0.50	
Acenaphthene-d10	512787	15.438	587510	15.439	87	50 - 200	-0.001	+/-0.50	
Phenanthrene-d10	850147	18.458	933575	18.458	91	50 - 200	0.000	+/-0.50	
Chrysene-d12	511511	23.457	576570	23.458	89	50 - 200	-0.001	+/-0.50	
Di-n-Octylphthalate-d4	1044471	24.465	1181651	24.465	88	50 - 200	0.000	+/-0.50	
Perylene-d12	456008	26.149	491359	26.149	93	50 - 200	0.000	+/-0.50	
Initial Cal Blank (SLE0338-ICB1)		(Water)		Lab File ID: NT1705162312.D				Analyzed: 05/17/23 01:07	
1,4-Dichlorobenzene-d4	287620	9.365	287078	9.365	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1041050	11.83	1056758	11.843	99	50 - 200	-0.013	+/-0.50	
Acenaphthene-d10	539097	15.439	587510	15.439	92	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	886060	18.458	933575	18.458	95	50 - 200	0.000	+/-0.50	
Chrysene-d12	518615	23.445	576570	23.458	90	50 - 200	-0.013	+/-0.50	
Di-n-Octylphthalate-d4	1011857	24.452	1181651	24.465	86	50 - 200	-0.013	+/-0.50	
Perylene-d12	487385	26.149	491359	26.149	99	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0434	Instrument:	NT17
		Calibration:	GE00065

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLE0434-ICV1)		(Solid)	Lab File ID: NT1705262302.D				Analyzed: 05/26/23 13:16		
1,4-Dichlorobenzene-d4	303517	9.263	303517	9.263	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1140476	11.728	1140476	11.728	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	622461	15.324	622461	15.324	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	1074054	18.343	1074054	18.343	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	723807	23.355	723807	23.355	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1524055	24.363	1524055	24.363	100	50 - 200	0.000	+/-0.50	
Perylene-d12	666992	25.996	666992	25.996	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLE0434-LCV1)		(Solid)	Lab File ID: NT1705262304.D				Analyzed: 05/26/23 14:31		
1,4-Dichlorobenzene-d4	316449	9.263	303517	9.263	104	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1142345	11.728	1140476	11.728	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	576179	15.324	622461	15.324	93	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	958053	18.343	1074054	18.343	89	50 - 200	0.000	+/-0.50	
Chrysene-d12	600821	23.343	723807	23.355	83	50 - 200	-0.012	+/-0.50	
Di-n-Octylphthalate-d4	1240881	24.351	1524055	24.363	81	50 - 200	-0.012	+/-0.50	
Perylene-d12	617938	25.996	666992	25.996	93	50 - 200	0.000	+/-0.50	
Blank (BLD0607-BLK1)		(Solid)	Lab File ID: NT1705262306.D				Analyzed: 05/26/23 15:47		
1,4-Dichlorobenzene-d4	269574	9.263	303517	9.263	89	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1019925	11.728	1140476	11.728	89	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	537378	15.324	622461	15.324	86	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	871516	18.343	1074054	18.343	81	50 - 200	0.000	+/-0.50	
Chrysene-d12	560318	23.343	723807	23.355	77	50 - 200	-0.012	+/-0.50	
Di-n-Octylphthalate-d4	1157035	24.35	1524055	24.363	76	50 - 200	-0.013	+/-0.50	
Perylene-d12	499749	25.996	666992	25.996	75	50 - 200	0.000	+/-0.50	
LCS (BLD0607-BS1)		(Solid)	Lab File ID: NT1705262307.D				Analyzed: 05/26/23 16:25		
1,4-Dichlorobenzene-d4	270705	9.263	303517	9.263	89	50 - 200	0.000	+/-0.50	
Naphthalene-d8	979437	11.728	1140476	11.728	86	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	504985	15.324	622461	15.324	81	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	813869	18.343	1074054	18.343	76	50 - 200	0.000	+/-0.50	
Chrysene-d12	502451	23.343	723807	23.355	69	50 - 200	-0.012	+/-0.50	
Di-n-Octylphthalate-d4	1064023	24.35	1524055	24.363	70	50 - 200	-0.013	+/-0.50	
Perylene-d12	424472	25.996	666992	25.996	64	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0434	Instrument:	NT17
		Calibration:	GE00065

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LCS Dup (BLD0607-BSD1)		(Solid)	Lab File ID: NT1705262308.D					Analyzed: 05/26/23 17:02	
1,4-Dichlorobenzene-d4	274132	9.263	303517	9.263	90	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1020740	11.728	1140476	11.728	90	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	518733	15.324	622461	15.324	83	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	844493	18.343	1074054	18.343	79	50 - 200	0.000	+/-0.50	
Chrysene-d12	499547	23.343	723807	23.355	69	50 - 200	-0.012	+/-0.50	
Di-n-Octylphthalate-d4	1058373	24.351	1524055	24.363	69	50 - 200	-0.012	+/-0.50	
Perylene-d12	427148	25.996	666992	25.996	64	50 - 200	0.000	+/-0.50	
Reference (BLD0607-SRM1)		(Solid)	Lab File ID: NT1705262311.D					Analyzed: 05/26/23 18:56	
1,4-Dichlorobenzene-d4	303211	9.263	303517	9.263	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1039513	11.728	1140476	11.728	91	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	497514	15.324	622461	15.324	80	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	761526	18.343	1074054	18.343	71	50 - 200	0.000	+/-0.50	
Chrysene-d12	632418	23.356	723807	23.355	87	50 - 200	0.001	+/-0.50	
Di-n-Octylphthalate-d4	1379317	24.363	1524055	24.363	91	50 - 200	0.000	+/-0.50	
Perylene-d12	634142	25.996	666992	25.996	95	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLE0434-ICV2)		(Solid)	Lab File ID: NT1705262319.D					Analyzed: 05/26/23 23:55	
1,4-Dichlorobenzene-d4	327251	9.263	327251	9.263	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1151610	11.728	1151610	11.728	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	581592	15.324	581592	15.324	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	918371	18.343	918371	18.343	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	690072	23.356	690072	23.356	100	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1461689	24.363	1461689	24.363	100	50 - 200	0.000	+/-0.50	
Perylene-d12	568726	26.009	568726	26.009	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLE0434-LCV2)		(Solid)	Lab File ID: NT1705262321.D					Analyzed: 05/27/23 01:10	
1,4-Dichlorobenzene-d4	360010	9.263	327251	9.263	110	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1041490	11.728	1151610	11.728	90	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	543612	15.324	581592	15.324	93	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	881915	18.343	918371	18.343	96	50 - 200	0.000	+/-0.50	
Chrysene-d12	632133	23.356	690072	23.356	92	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1309126	24.351	1461689	24.363	90	50 - 200	-0.012	+/-0.50	
Perylene-d12	544824	26.009	568726	26.009	96	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0434	Instrument:	NT17
		Calibration:	GE00065

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1801 (23D0396-01)		(Solid)		Lab File ID: NT1705262323.D				Analyzed: 05/27/23 02:25	
1,4-Dichlorobenzene-d4	294445	9.263	327251	9.263	90	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1052858	11.728	1151610	11.728	91	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	500193	15.324	581592	15.324	86	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	820099	18.343	918371	18.343	89	50 - 200	0.000	+/-0.50	
Chrysene-d12	657803	23.356	690072	23.356	95	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1455169	24.363	1461689	24.363	100	50 - 200	0.000	+/-0.50	
Perylene-d12	504765	26.022	568726	26.009	89	50 - 200	0.013	+/-0.50	
LDW23-SS1802 (23D0396-03)		(Solid)		Lab File ID: NT1705262324.D				Analyzed: 05/27/23 03:02	
1,4-Dichlorobenzene-d4	306165	9.263	327251	9.263	94	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1084556	11.728	1151610	11.728	94	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	528488	15.324	581592	15.324	91	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	828842	18.356	918371	18.343	90	50 - 200	0.013	+/-0.50	
Chrysene-d12	668942	23.355	690072	23.356	97	50 - 200	-0.001	+/-0.50	
Di-n-Octylphthalate-d4	1475136	24.363	1461689	24.363	101	50 - 200	0.000	+/-0.50	
Perylene-d12	499764	26.022	568726	26.009	88	50 - 200	0.013	+/-0.50	
Blank (BLD0607-BLK3)		(Solid)		Lab File ID: NT1705262327.D				Analyzed: 05/27/23 04:54	
1,4-Dichlorobenzene-d4	308543	9.263	327251	9.263	94	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1052532	11.728	1151610	11.728	91	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	519310	15.324	581592	15.324	89	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	793037	18.343	918371	18.343	86	50 - 200	0.000	+/-0.50	
Chrysene-d12	599277	23.355	690072	23.356	87	50 - 200	-0.001	+/-0.50	
Di-n-Octylphthalate-d4	1180466	24.35	1461689	24.363	81	50 - 200	-0.013	+/-0.50	
Perylene-d12	437418	26.009	568726	26.009	77	50 - 200	0.000	+/-0.50	
Calibration Check (SLE0434-CCV1)		(Water)		Lab File ID: NT1705262328.D				Analyzed: 05/27/23 05:31	
1,4-Dichlorobenzene-d4	317699	9.263	327251	9.263	97	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1109251	11.728	1151610	11.728	96	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	572542	15.324	581592	15.324	98	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	911027	18.343	918371	18.343	99	50 - 200	0.000	+/-0.50	
Chrysene-d12	675891	23.356	690072	23.356	98	50 - 200	0.000	+/-0.50	
Di-n-Octylphthalate-d4	1331493	24.351	1461689	24.363	91	50 - 200	-0.012	+/-0.50	
Perylene-d12	494128	26.009	568726	26.009	87	50 - 200	0.000	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E

Laboratory: Analytical Resources, LLC SDG: 23D0396

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	04/24/23 16:38	12	14	05/27/23 02:25	32	40	
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	04/24/23 16:38	12	14	05/27/23 03:02	32	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT17

Analyte	MDL	RL	Units
Phenol	4.4	20.0	ug/kg
Benzyl Alcohol	16.3	20.0	ug/kg
4-Methylphenol	7.4	20.0	ug/kg
Naphthalene	4.2	20.0	ug/kg
2-Methylnaphthalene	4.5	20.0	ug/kg
Acenaphthylene	6.2	20.0	ug/kg
Dibenzofuran	14.1	20.0	ug/kg
Fluorene	14.6	20.0	ug/kg
Phenanthrene	8.7	20.0	ug/kg
Anthracene	7.2	20.0	ug/kg
Fluoranthene	6.1	20.0	ug/kg
Pyrene	5.7	20.0	ug/kg
Butylbenzylphthalate	9.4	20.0	ug/kg
Benzo(a)anthracene	6.0	20.0	ug/kg
Chrysene	6.1	20.0	ug/kg
bis(2-Ethylhexyl)phthalate	5.5	50.0	ug/kg
Benzofluoranthenes, Total	10.0	40.0	ug/kg
Benzo(a)pyrene	4.2	20.0	ug/kg
Indeno(1,2,3-cd)pyrene	14.7	20.0	ug/kg
Dibenzo(a,h)anthracene	17.2	20.0	ug/kg
Benzo(g,h,i)perylene	13.6	20.0	ug/kg

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: bEH 502 I

Purity: 90 ~ 94%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

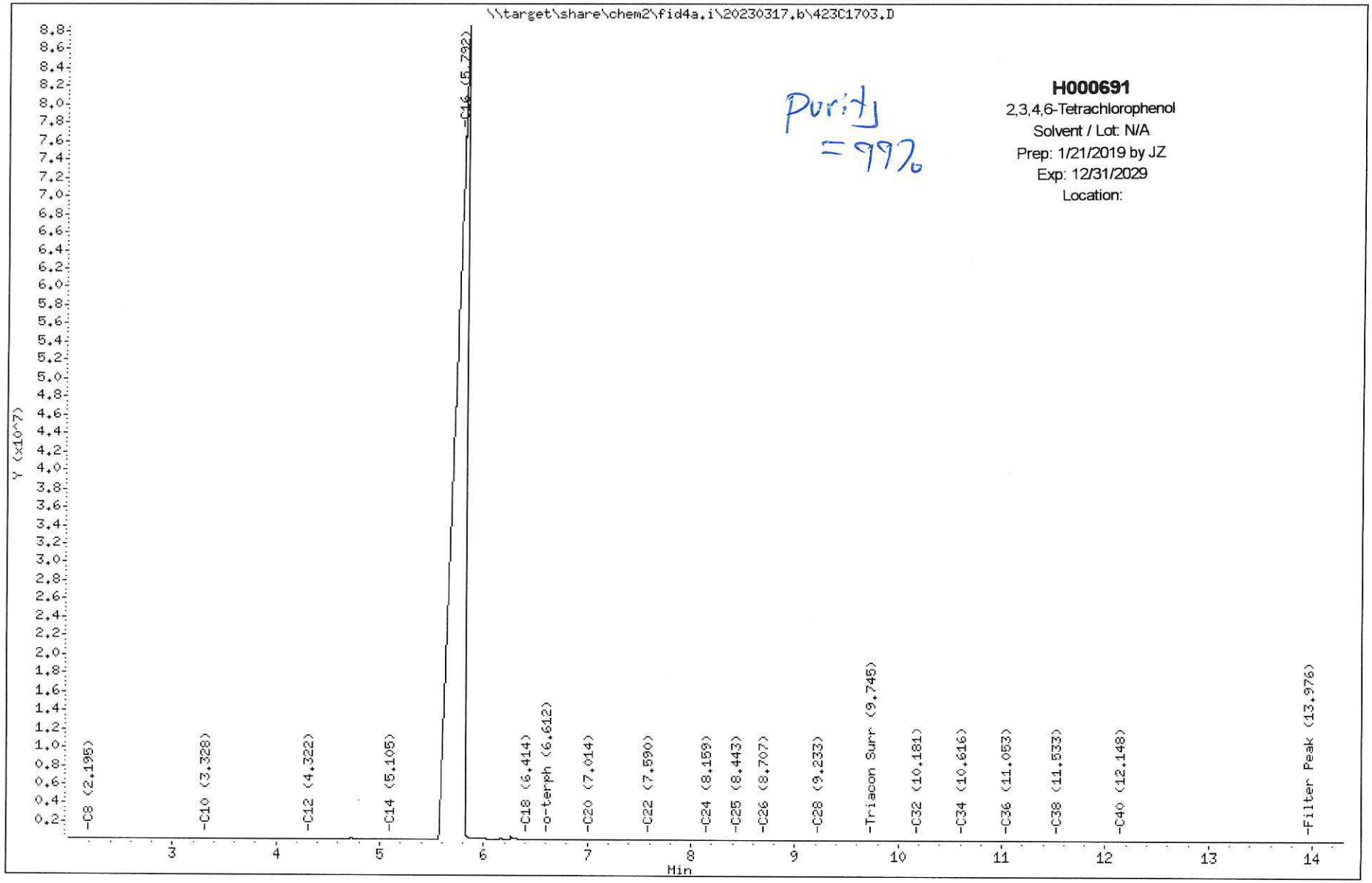
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

Supelco®

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Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Agilent

Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Lot Number: CL16062
Description: Benzidines Standard
Certification Date: November 19, 2020
Storage: 4 °C
Expiration Date: November 30, 2030
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Accredited to 17025 & Guide 34 ISO Certified to 9001

ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Lot No. AA210126005

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021

Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

Legal Notice:

SPEX CertiPrep Certified Reference Materials are not for any cosmetic, drug, or household application and are to be used only by qualified individuals who are trained in appropriate procedures. No claims against SPEX CertiPrep of any kind whatsoever, whether based on breech of warranty, alleged negligence, or otherwise, with respect to this Reference Material shall be greater than the purchase price. In no event shall SPEX CertiPrep be liable for any loss of profits or any incidental, special, or consequential damages.

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Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50					
				+/-	53.3632	µg/mL	Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/-	8.9689	µg/mL	Gravimetric
				+/-	44.1050	µg/mL	Unstressed
				+/-	53.5049	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
				+/-	29.3255	µg/mL	Unstressed
				+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
				+/-	29.4423	µg/mL	Unstressed
				+/-	35.7172	µg/mL	Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
				+/-	29.3839	µg/mL	Unstressed
				+/-	35.6463	µg/mL	Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101246	**Lot Number:**	CL17953
Description:	Benzoic Acid	**Certification Date:**	January 31, 2022
Storage:	4 °C	**Expiration Date:**	January 31, 2032
Provided As:	1 mL in 2 mL Ampoule in Methylene Chloride		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

Certificate of Analysis

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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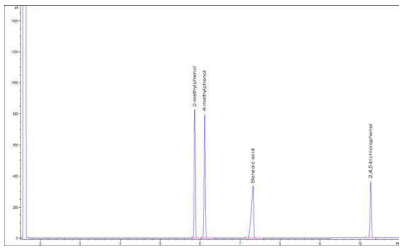
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

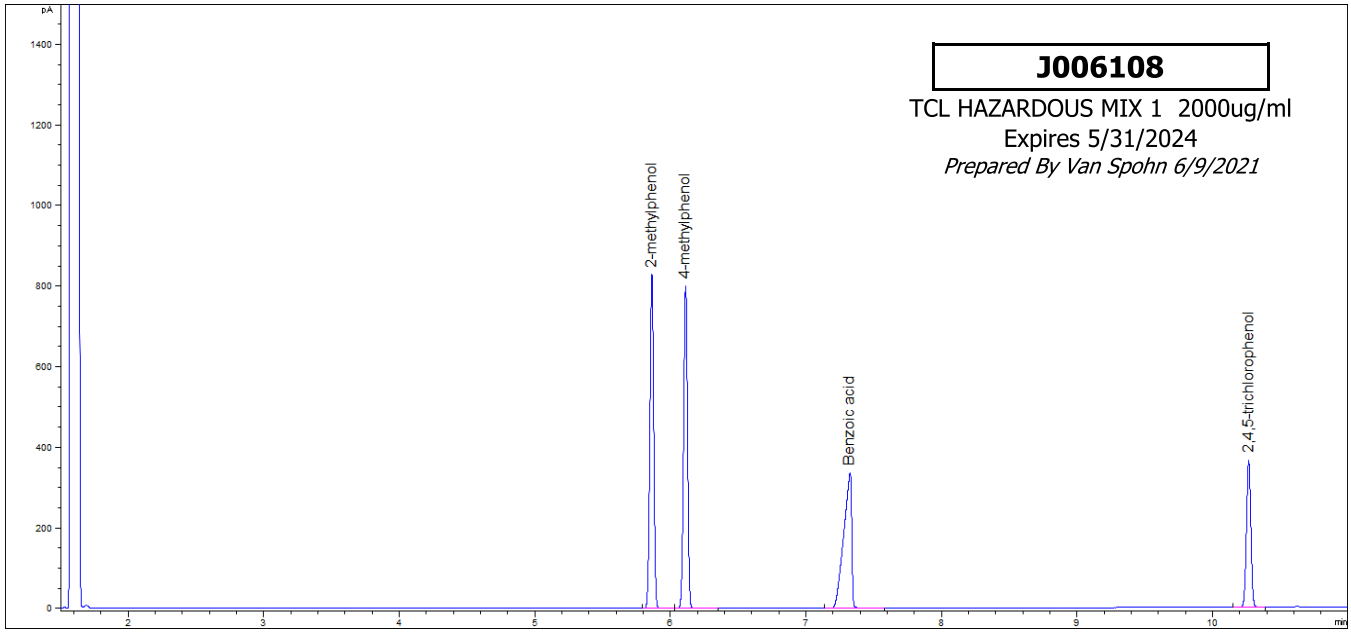
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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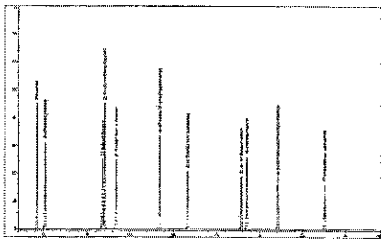
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



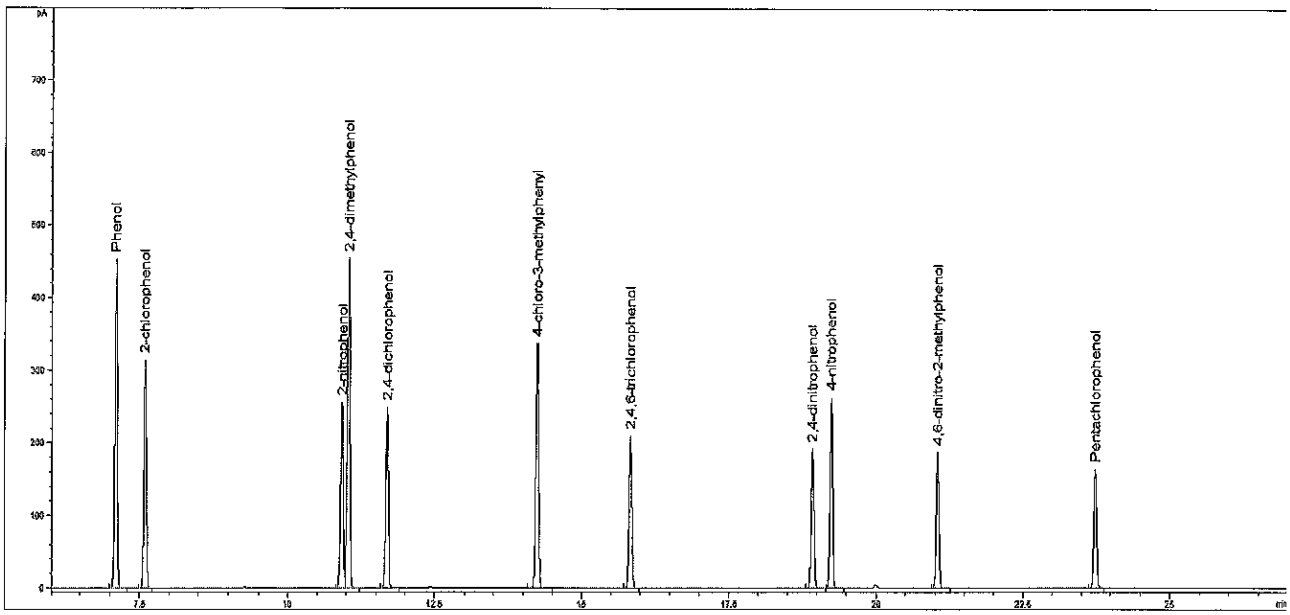
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

Aaron Dukes, Certified Reference Materials Manager

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at:* www.sigma-aldrich.com *for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

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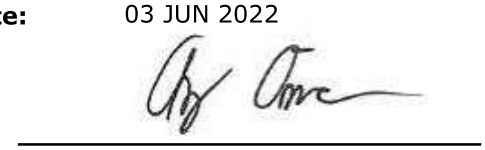
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022



Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

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Certificate of Composition - Analytical Standard

ACID STOCK

Product no.: 22523046
Lot no.: LRAD2750
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2750.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	800	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	800	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	801	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1799	µg/mL	66.9	STBJ5751
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	800	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	800	µg/mL	100.0	BCCD4461
4-NITROPHENOL CAS# 100-02-7	800	µg/mL	100.0	MKCN1089
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1800	µg/mL	100.0	BCBX5762
PENTACHLOROPHENOL CAS# 87-86-5	800	µg/mL	99.0	23614-01
BENZOIC ACID CAS# 65-85-0	1800	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2750.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL18939
Certification Date: September 7, 2022
Expiration Date: August 31, 2032

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 3.812%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.419%

L001288
Benzidines std @2000ug/ml
Solvent / Lot: CL18939
Prep: 2/7/2023 by VS
Exp: 8/31/2032
Location: GC

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64631018 us

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Lot Number: CL18741
Description: Aniline
Certification Date: July 21, 2022
Storage: 4 °C
Expiration Date: July 31, 2030
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 1.719%

L001290
Anline-1000ug/mL
Solvent / Lot: CL18741
Prep: 2/7/2023 by VS
Exp: 7/31/2030
Location: GC

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18811
Certification Date: August 9, 2022
Expiration Date: November 30, 2023

Aaron Dukes, Certified Reference Materials Manager

L001291
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: CL18811
Prep: 2/7/2023 by VS
Exp: 11/30/2023
Location: FREEZER 44

Component	CAS #	µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 1.643%
Acenaphthylene	208-96-8	1000	± 1.317%
Anthracene	120-12-7	1000	± 2.136%
Azobenzene	103-33-3	1000	± 1.630%
Benzo(a)anthracene	56-55-3	1000	± 2.372%
Benzo(a)pyrene	50-32-8	1000	± 3.028%
Benzo(b)fluoranthene	205-99-2	1000	± 2.377%
Benzo(k)fluoranthene	207-08-9	1000	± 2.286%
Benzo(g,h,i)perylene	191-24-2	1000	± 2.561%
Benzyl alcohol	100-51-6	1000	± 1.803%
Benzyl butyl phthalate	85-68-7	1000	± 1.855%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 1.626%
bis(2-Chloroethyl) ether	111-44-4	1000	± 1.776%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 2.406%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 2.415%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 2.350%
4-Bromophenyl phenyl ether	101-55-3	1000	± 1.708%
Carbazole	86-74-8	1000	± 1.844%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18811
Certification Date: August 9, 2022
Expiration Date: November 30, 2023

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 2.831%
4-Chloro-3-methylphenol	59-50-7	1000	± 1.571%
2-Chloronaphthalene	91-58-7	1000	± 2.022%
2-Chlorophenol	95-57-8	1000	± 2.001%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 1.634%
Chrysene	218-01-9	1000	± 2.358%
Dibenz(a,h)anthracene	53-70-3	1000	± 2.452%
Dibenzofuran	132-64-9	1000	± 0.310%
Di-n-butyl phthalate	84-74-2	1000	± 2.347%
1,2-Dichlorobenzene	95-50-1	1000	± 1.803%
1,3-Dichlorobenzene	541-73-1	1000	± 1.808%
1,4-Dichlorobenzene	106-46-7	1000	± 1.503%
2,4-Dichlorophenol	120-83-2	1000	± 1.393%
Diethyl phthalate	84-66-2	1000	± 1.870%
2,4-Dimethylphenol	105-67-9	1000	± 2.495%
Dimethyl phthalate	131-11-3	1000	± 2.113%
1,2-Dinitrobenzene	528-29-0	1000	± 0.240%
1,3-Dinitrobenzene	99-65-0	1000	± 1.221%
1,4-Dinitrobenzene	100-25-4	1000	± 0.246%
2,4-Dinitrophenol	51-28-5	1000	± 0.519%
2,4-Dinitrotoluene	121-14-2	1000	± 2.242%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18811
Description: 8270 Calibration Standard
Certification Date: August 9, 2022
Storage: -18 °C
Expiration Date: November 30, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 2.154%
Di-n-octyl phthalate	117-84-0	1000	± 2.670%
Fluoranthene	206-44-0	1000	± 2.103%
Fluorene	86-73-7	1000	± 0.890%
Hexachlorobenzene	118-74-1	1000	± 1.210%
Hexachlorobutadiene	87-68-3	1000	± 1.304%
Hexachlorocyclopentadiene	77-47-4	1000	± 1.510%
Hexachloroethane	67-72-1	1000	± 3.281%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 1.921%
Isophorone	78-59-1	1000	± 2.022%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 1.661%
1-Methylnaphthalene	90-12-0	1000	± 1.929%
2-Methylnaphthalene	91-57-6	1000	± 2.220%
2-Methylphenol	95-48-7	1000	± 2.168%
3-Methylphenol	108-39-4	500	± 1.025%
4-Methylphenol	106-44-5	500	± 1.064%
Naphthalene	91-20-3	1000	± 1.199%
2-Nitroaniline	88-74-4	1000	± 1.874%
3-Nitroaniline	99-09-2	1000	± 2.146%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 1.704%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18811
Certification Date: August 9, 2022
Expiration Date: November 30, 2023

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 2.051%
4-Nitrophenol	100-02-7	1000	± 1.413%
N-Nitrosodimethylamine	62-75-9	1000	± 0.545%
N-Nitrosodiphenylamine	86-30-6	1000	± 1.669%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.712%
Pentachlorophenol	87-86-5	1000	± 2.454%
Phenanthrene	85-01-8	1000	± 2.072%
Phenol	108-95-2	1000	± 2.140%
Pyrene	129-00-0	1000	± 1.869%
Pyridine	110-86-1	1000	± 0.545%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 2.552%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 2.220%
1,2,4-Trichlorobenzene	120-82-1	1000	± 1.632%
2,4,5-Trichlorophenol	95-95-4	1000	± 1.596%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.481%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101291	**Lot Number:**	CL11000
Description:	GC/MS Tuning Mix	**Certification Date:**	May 9, 2014
Storage:	4 °C	**Expiration Date:**	December 31, 2023
Provided As:	1 mL in 2 mL Ampoule in Methylene chloride	**Revision Date:**	August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

LOO 1648

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Reference Material Producer
Certificate No. 2427.02

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Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
Certificate No. 2427.03

IL111110613_US

Certificate of Analysis

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101291
Description: GC/MS Tuning Mix
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene chloride

Lot Number: CL11000
Certification Date: May 9, 2014
Expiration Date: December 31, 2023
Revision Date: August 5, 2015

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty (%)
Benzidine	92-87-5	1000	± 0.208%
Decafluorotriphenylphosphine (DFTPP)	5074-71-5	1000	± 0.057%
4,4'-DDT	50-29-3	1000	± 0.056%
Pentachlorophenol	87-86-5	1000	± 0.061%

LOO1648

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Reference Material Producer
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Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC Guide 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC Guide 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC Guide 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC Guide 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certificate No. 2427.02

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Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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IL_111106.13_us

LDW23-SS1801

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-01 A	SDG:	23D0396
Sampled:	04/12/23 09:56	Prepared:	04/24/23 16:38	File ID:	NT1705262323S.D
% Solids:	43.01	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/27/23 02:25
Batch:	BLD0607	Sequence:	SLE0442	Initial/Final:	23.25 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GE00070
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	2.2	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
65-85-0	Benzoic acid	1	83.7	J	13.4	100
105-67-9	2,4-Dimethylphenol	1	2.5	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	5.0	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	750.01	556	74.1	27 - 120	
p-Terphenyl-d14	500.01	373	74.6	37 - 120	

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623235.D

Date : 27-MAY-2023 02:25

Client ID:

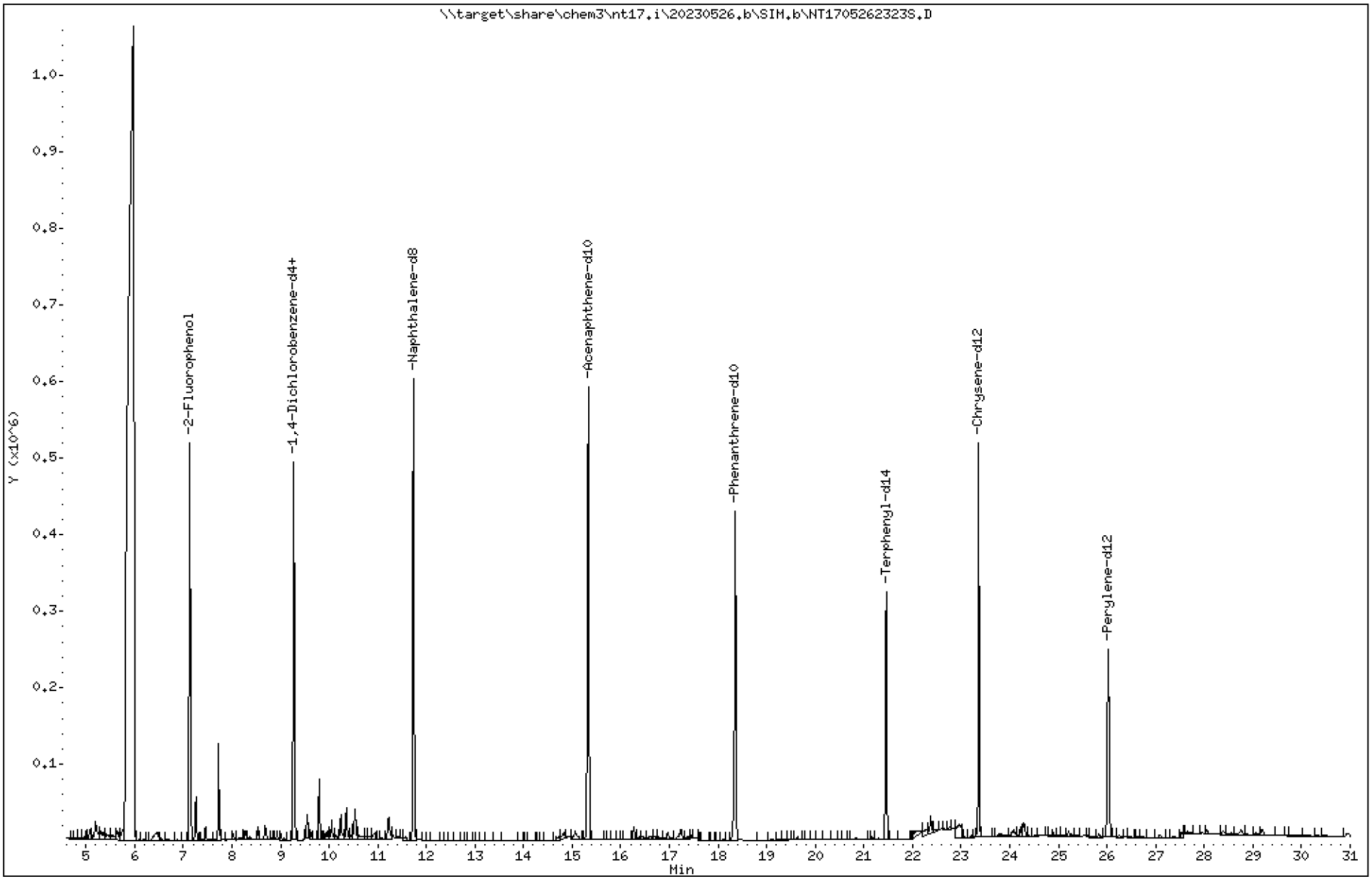
Sample Info: 23D0396-01

Instrument: nt17.i

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

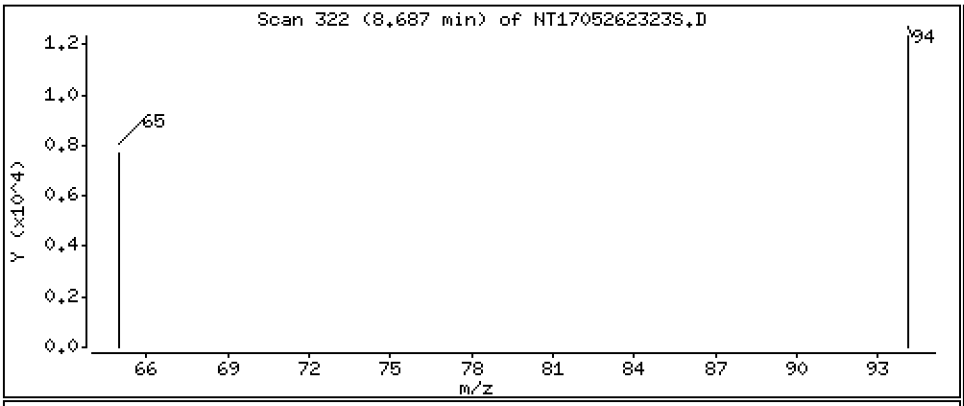
Operator: VTS

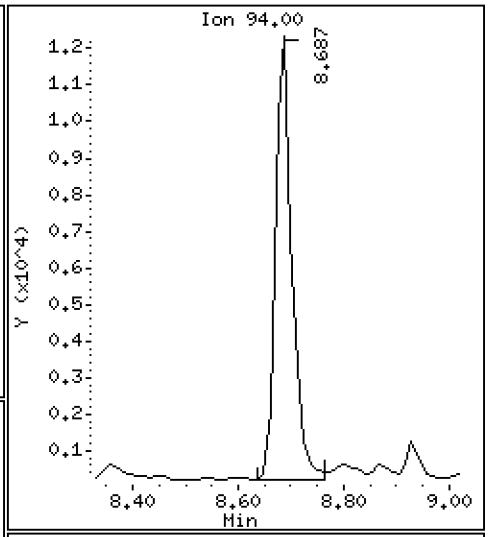
Column phase: ZB-5msi

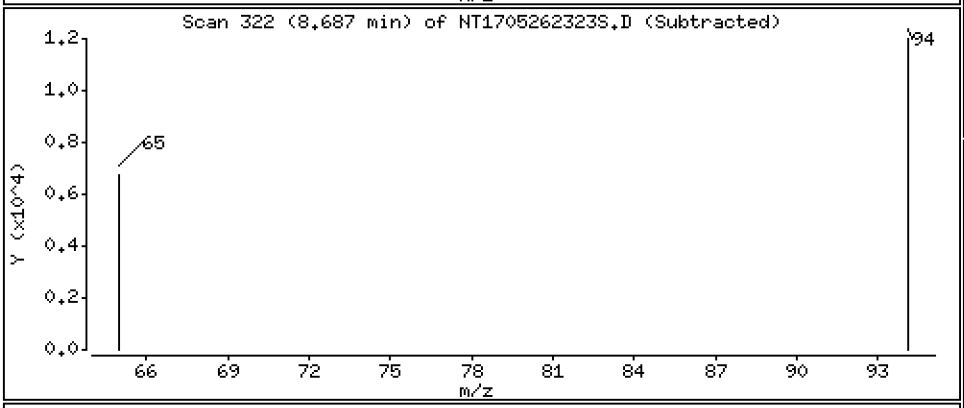
Column diameter: 0.25

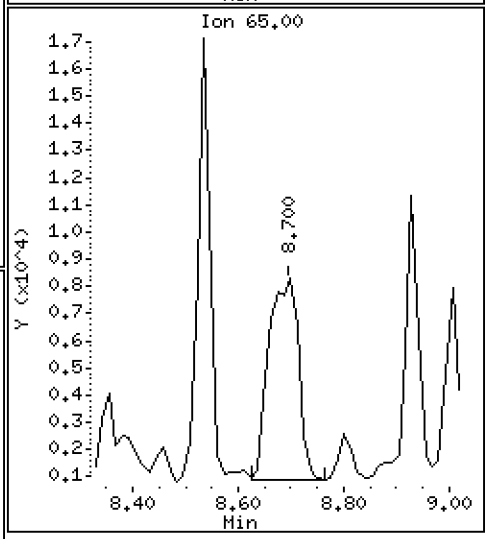
3 Phenol

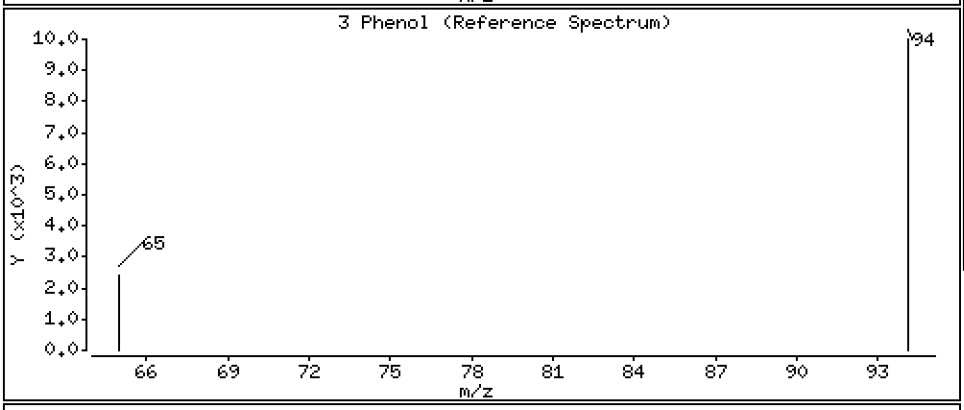
Concentration: 0.1993 ug/mL

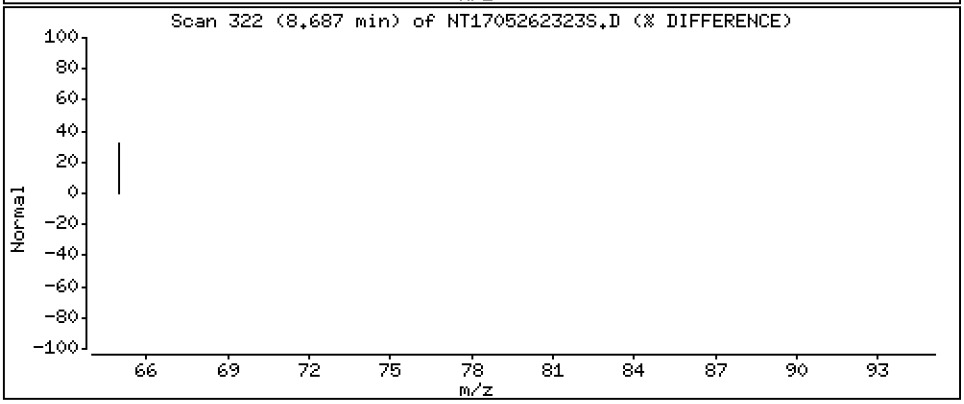












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

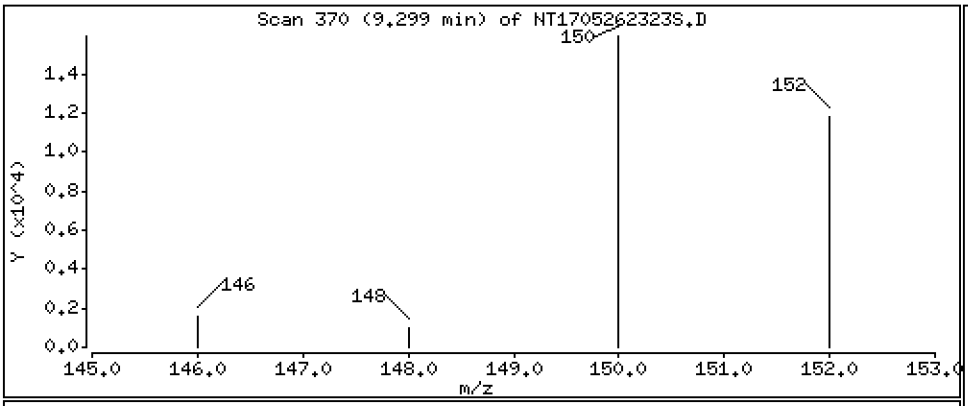
Operator: VTS

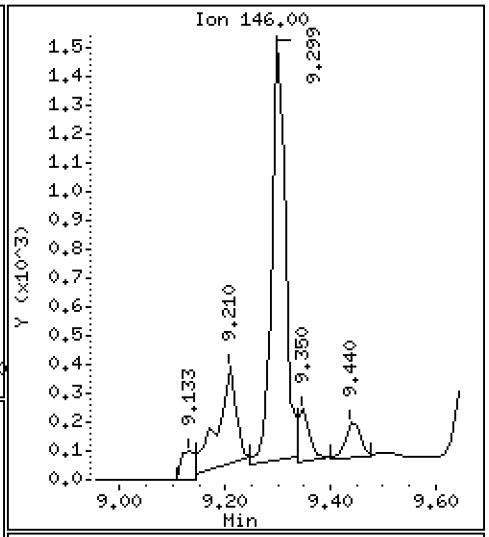
Column phase: ZB-5msi

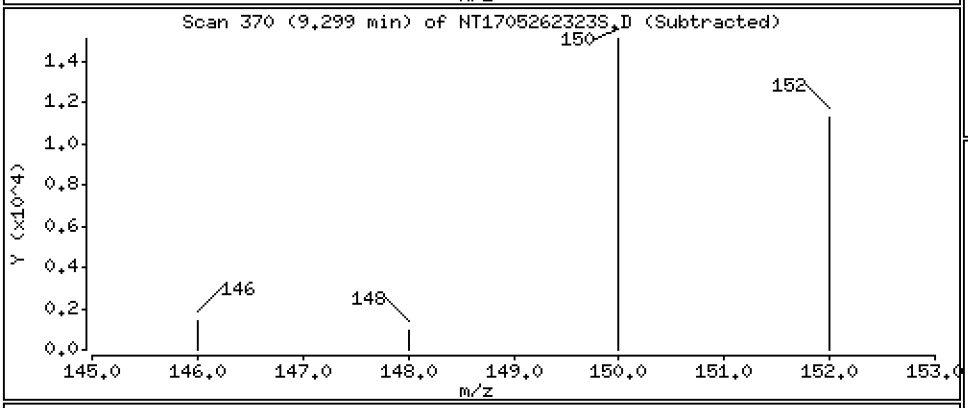
Column diameter: 0.25

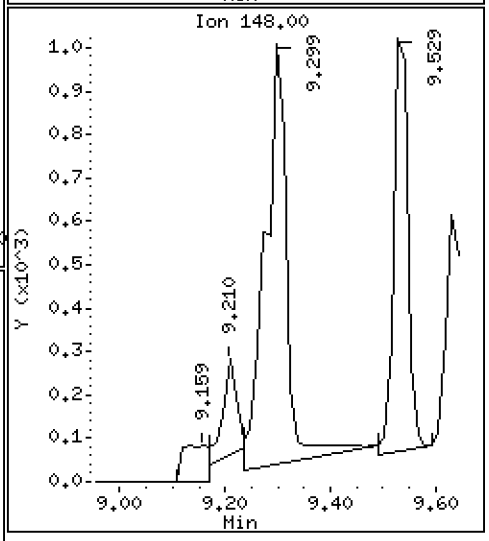
9 1,4-Dichlorobenzene

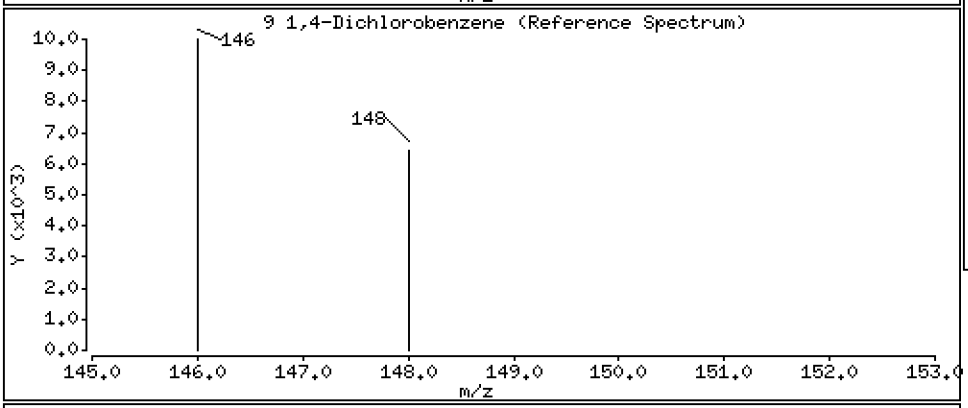
Concentration: 0.02234 ug/mL

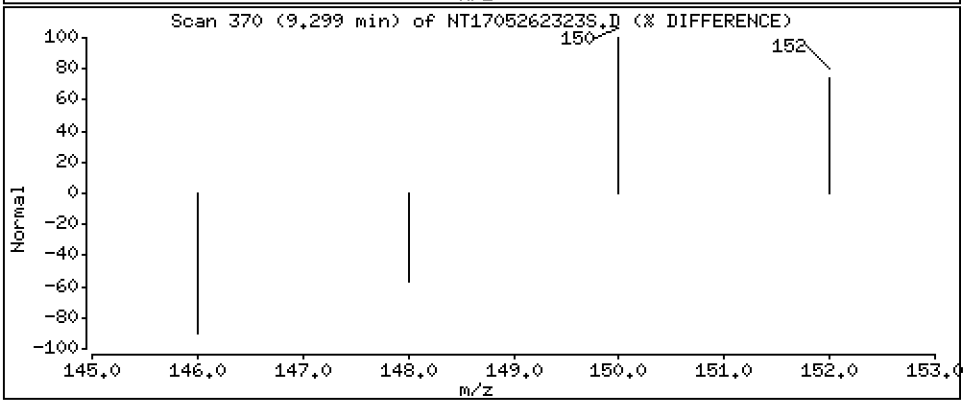












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262323S.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

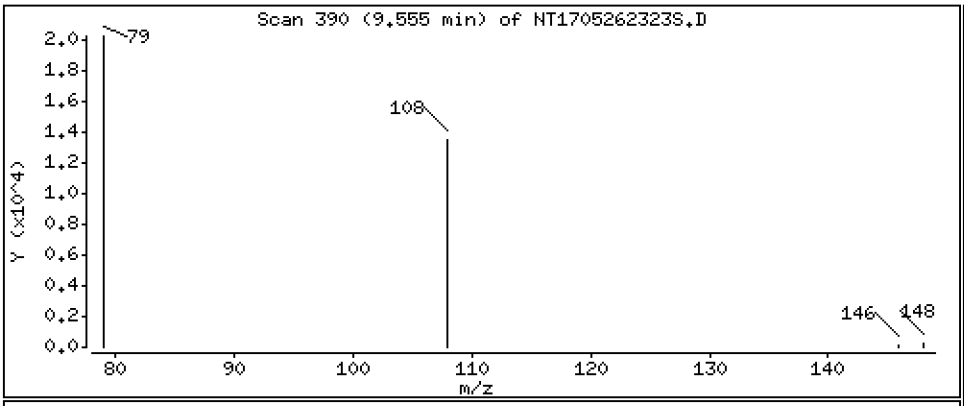
Operator: VTS

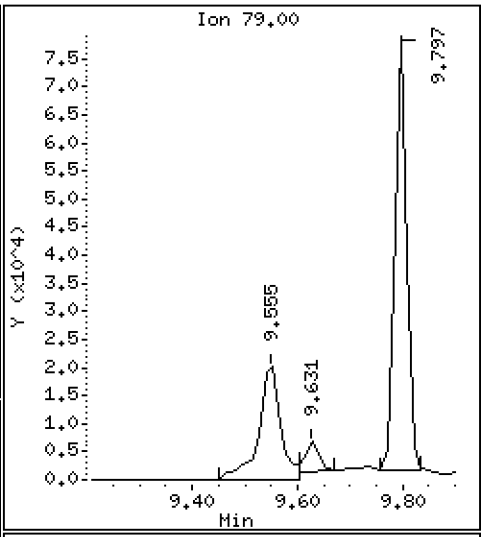
Column phase: ZB-5msi

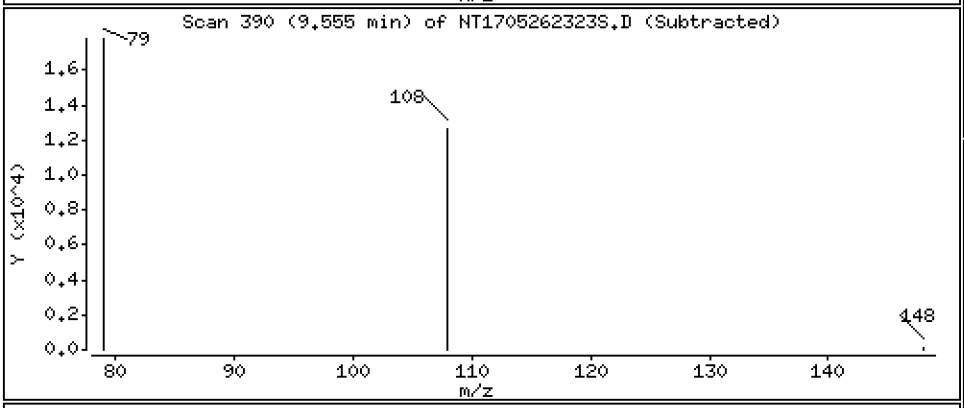
Column diameter: 0.25

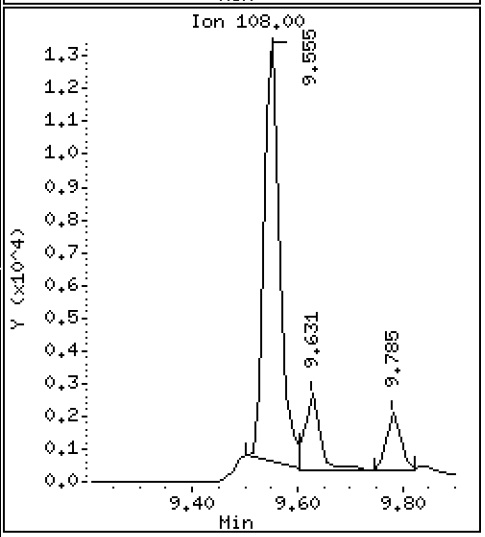
11 Benzyl alcohol

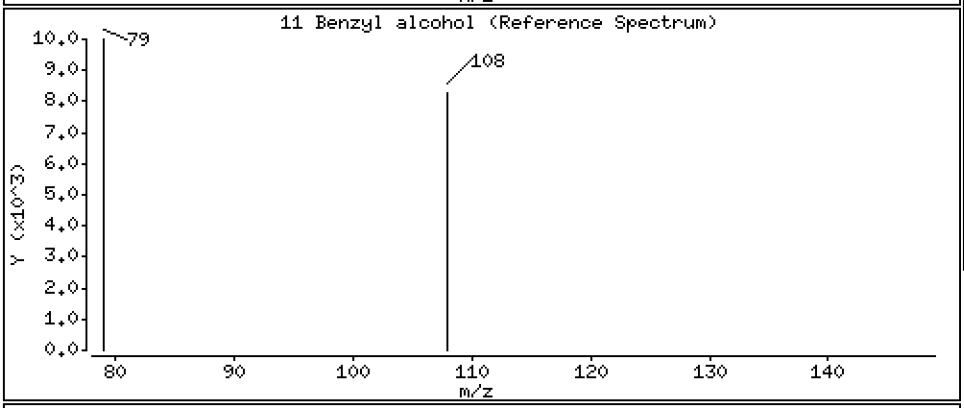
Concentration: 0.7730 ug/mL

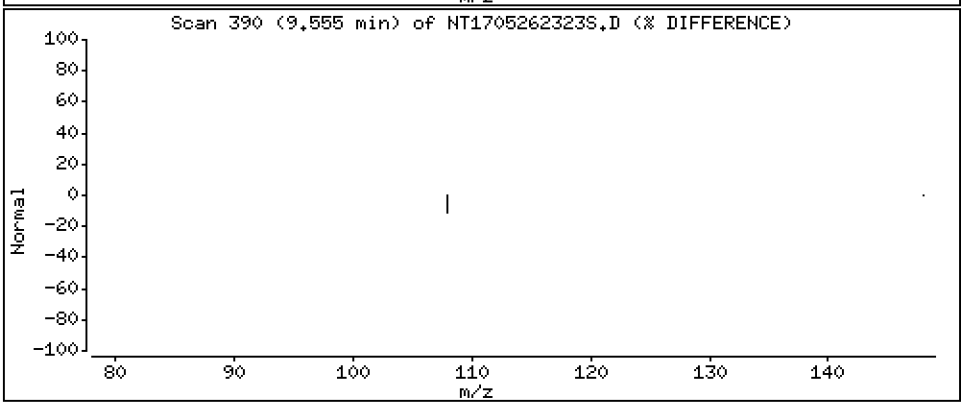












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262323S.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

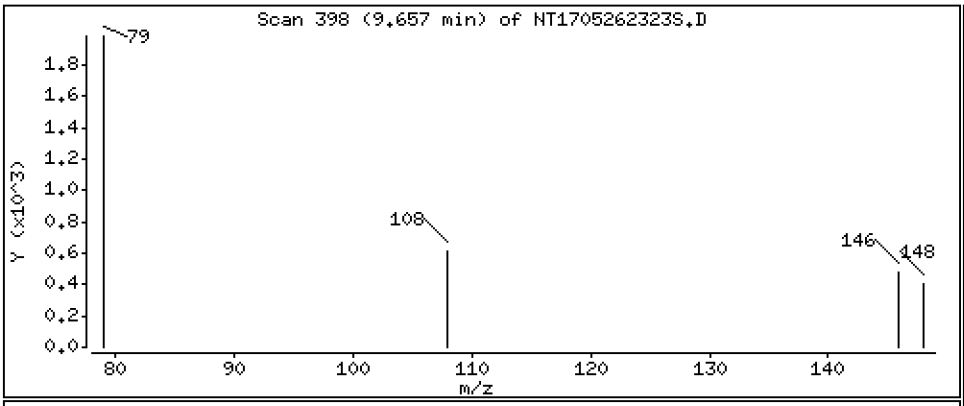
Operator: VTS

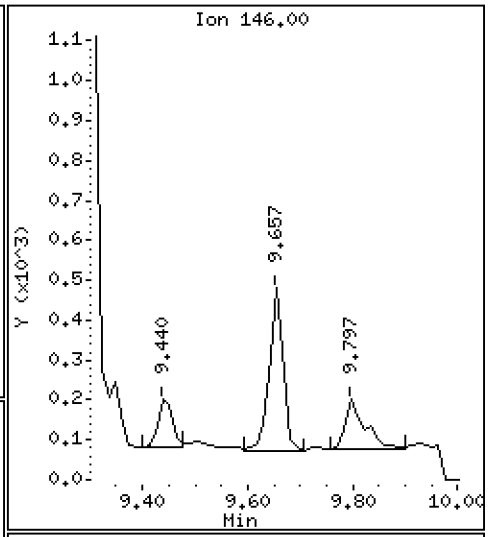
Column phase: ZB-5msi

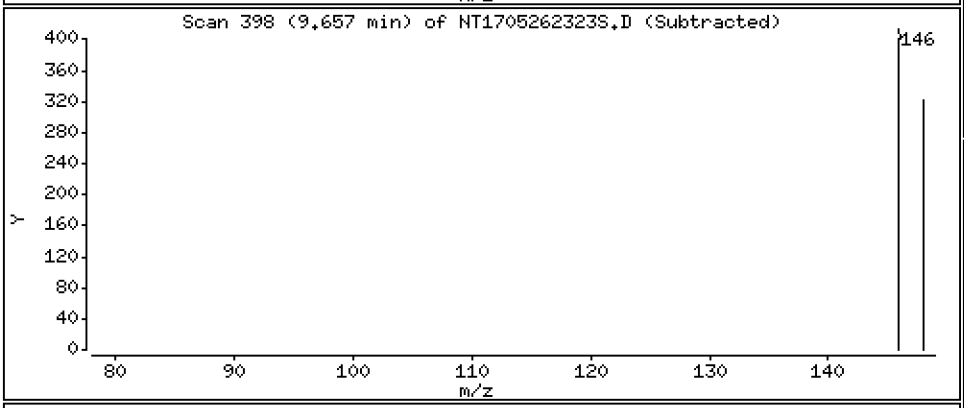
Column diameter: 0.25

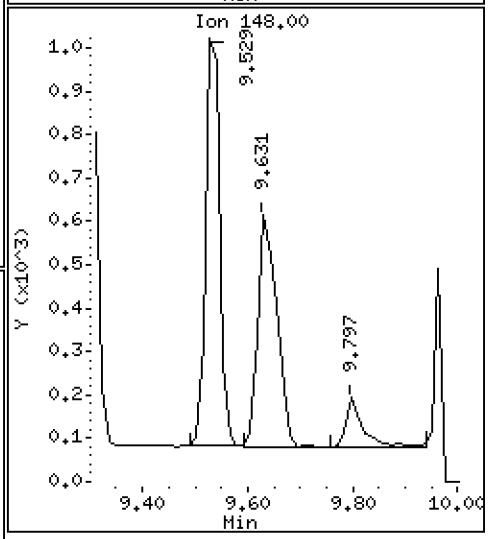
12 1,2-Dichlorobenzene

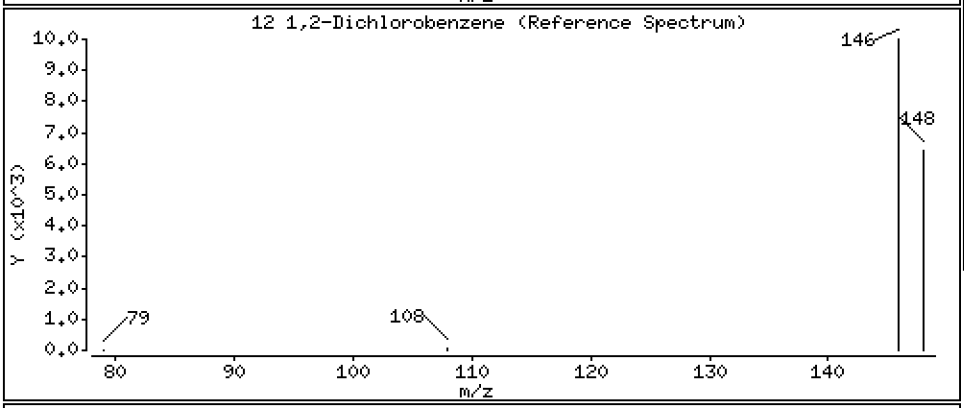
Concentration: 0.006282 ug/mL

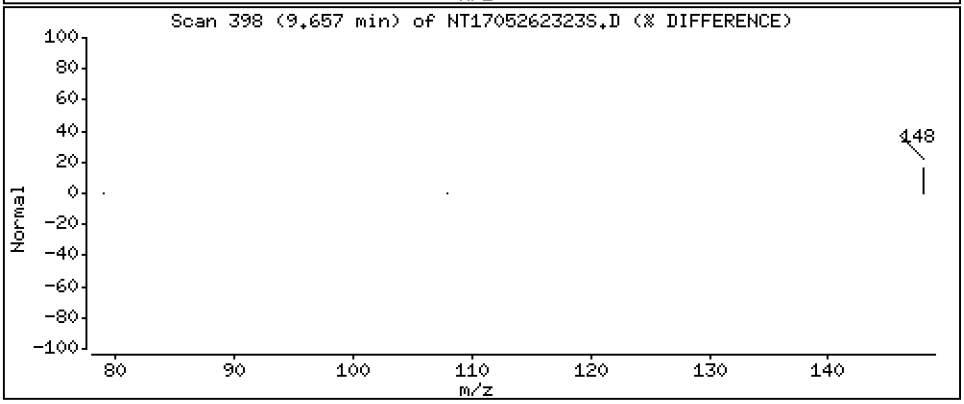












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

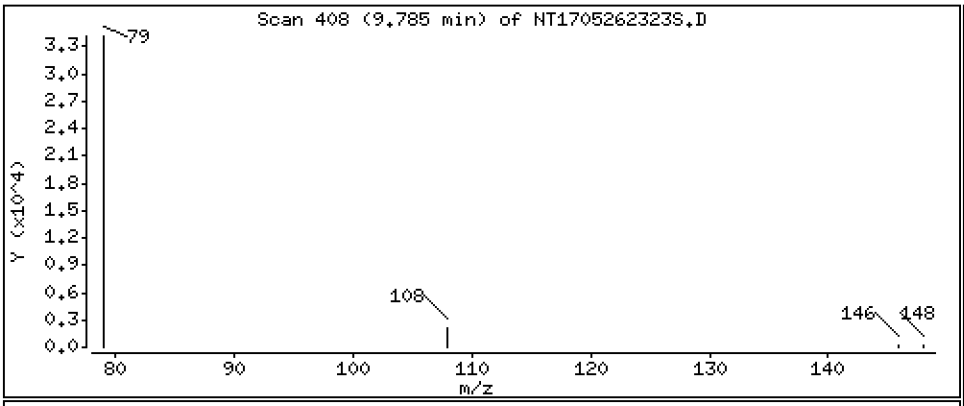
Operator: VTS

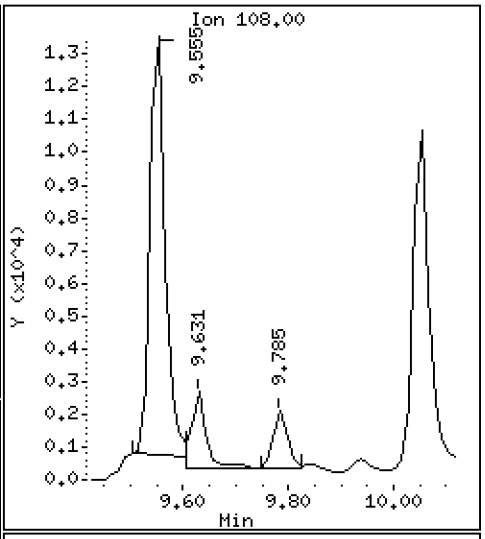
Column phase: ZB-5msi

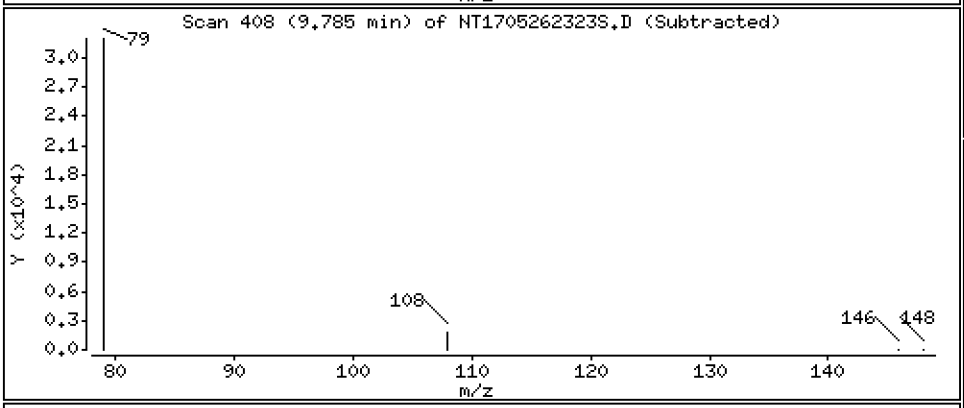
Column diameter: 0.25

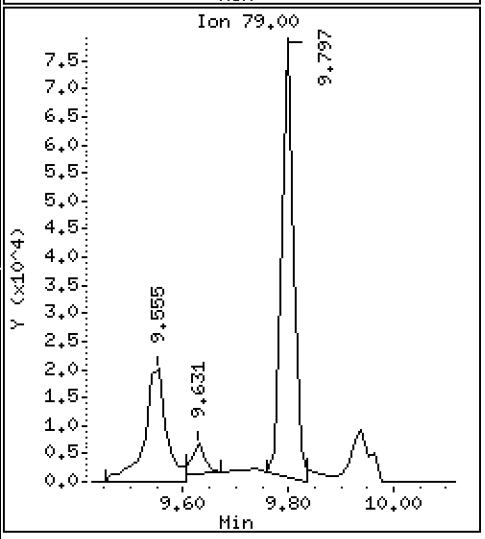
13 2-Methylphenol

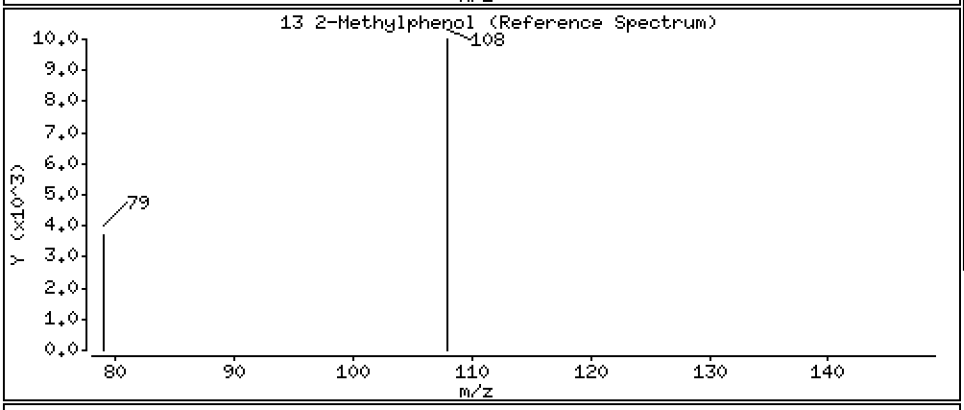
Concentration: 0.03560 ug/mL

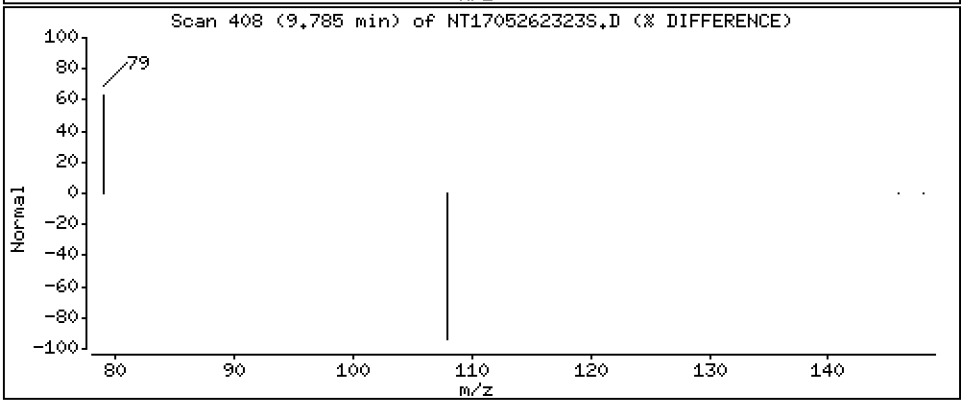












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262323S.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

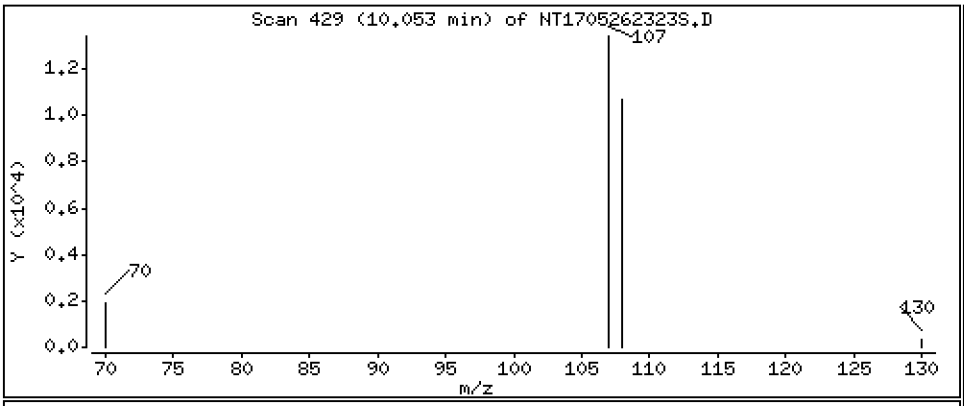
Operator: VTS

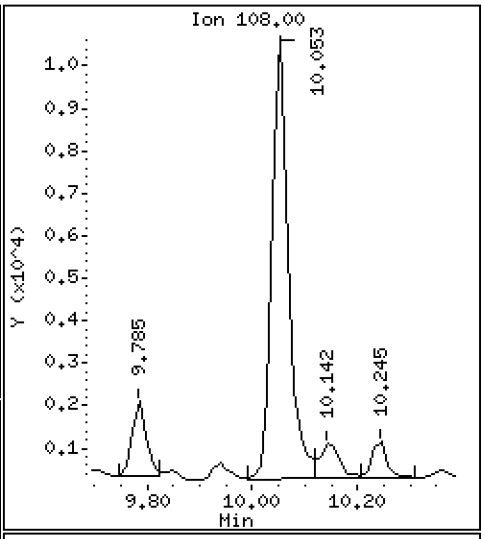
Column phase: ZB-5msi

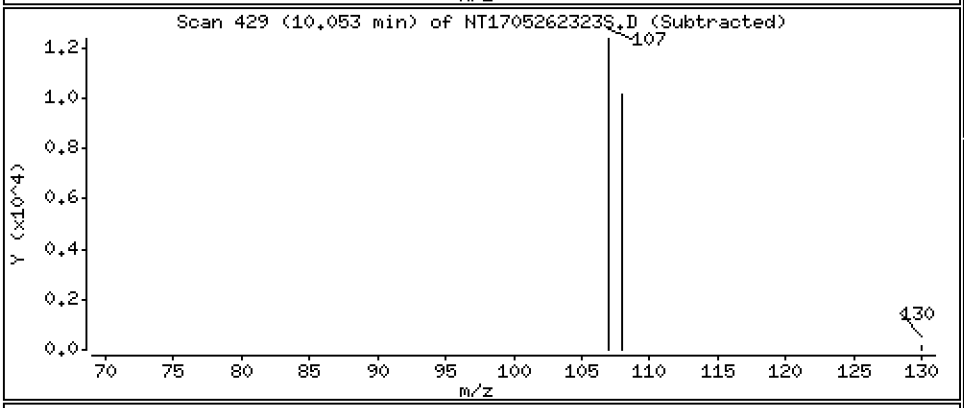
Column diameter: 0.25

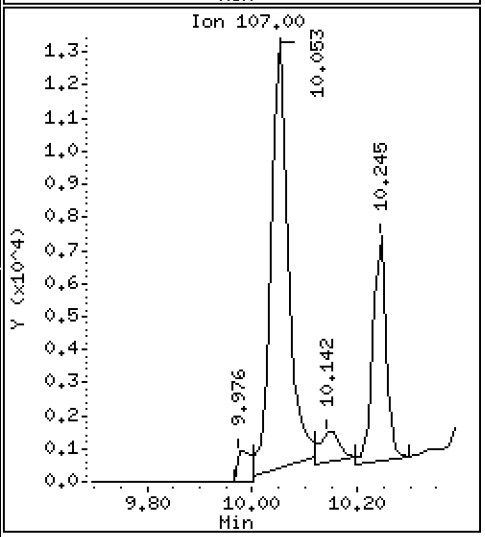
15 4-Methylphenol

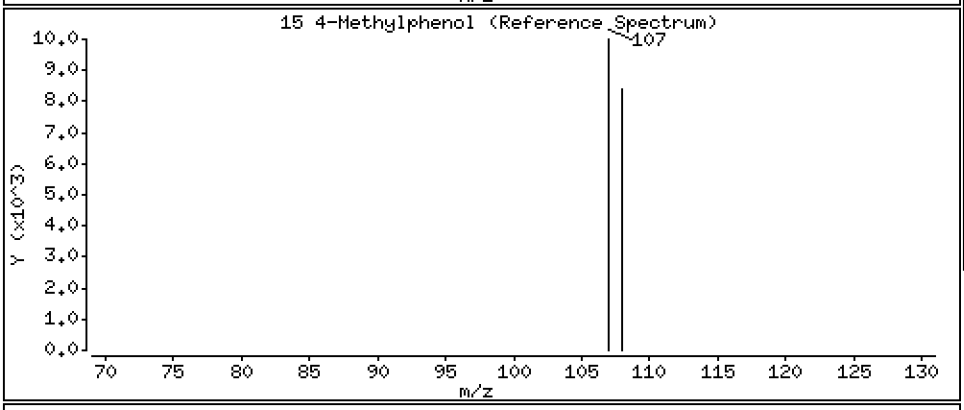
Concentration: 0.2393 ug/mL

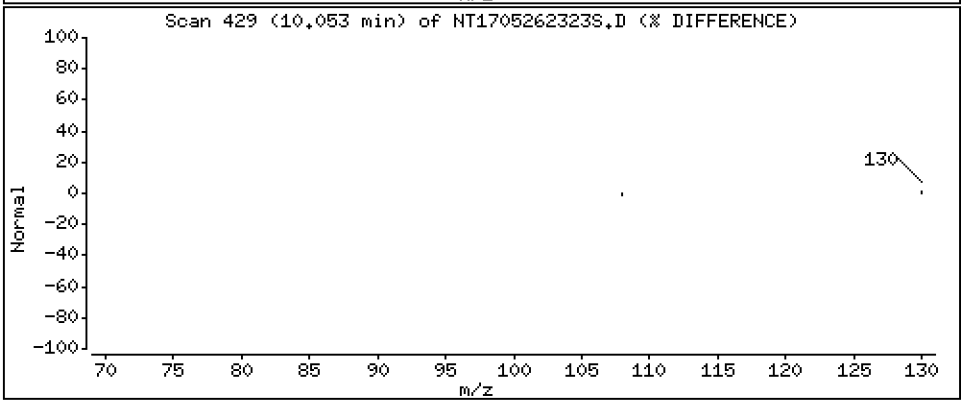












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

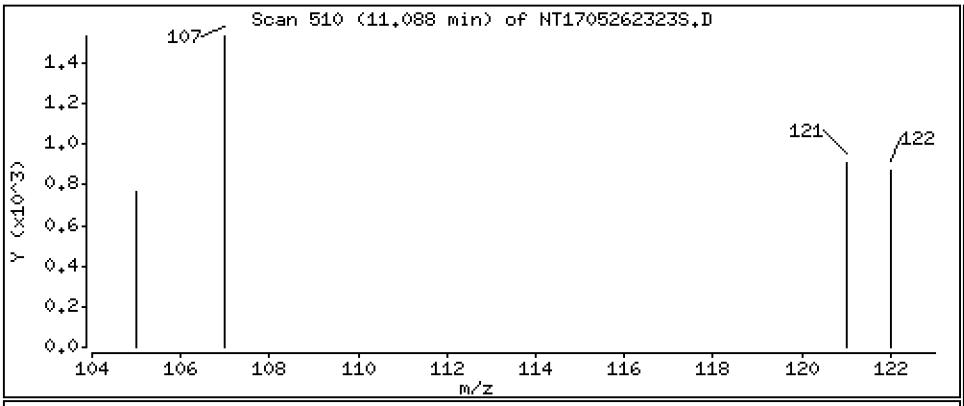
Operator: VTS

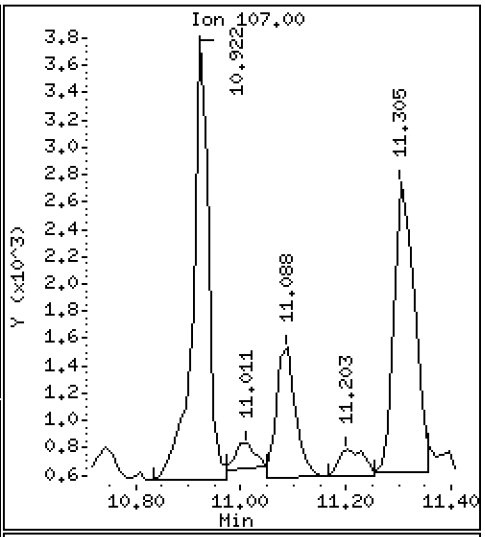
Column phase: ZB-5msi

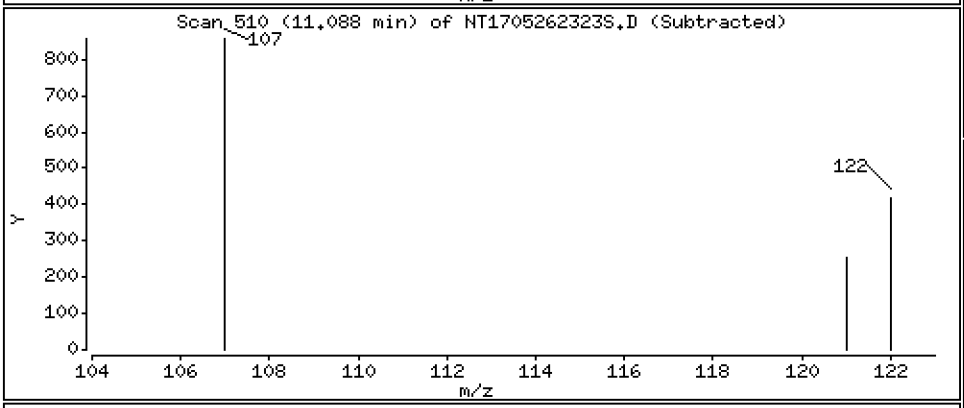
Column diameter: 0.25

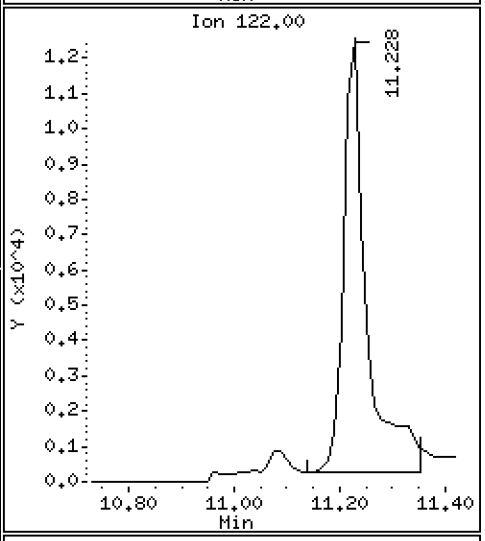
22 2,4-Dimethylphenol

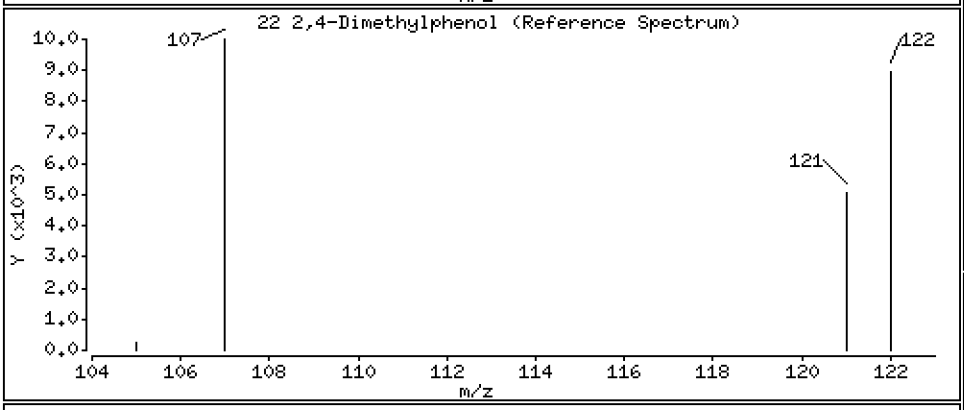
Concentration: 0.02474 ug/mL

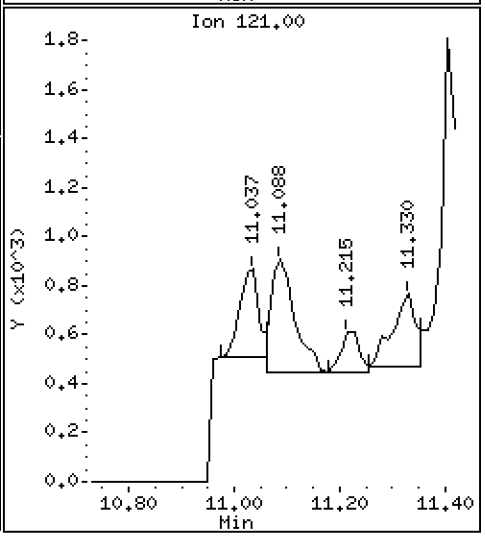


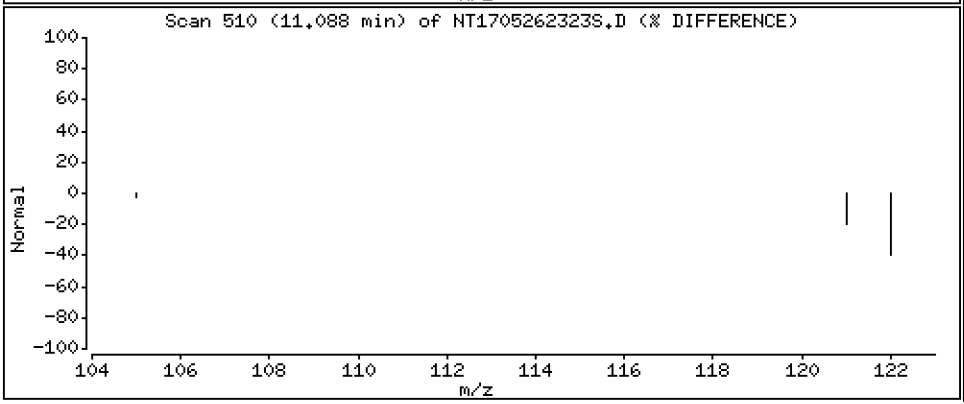












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

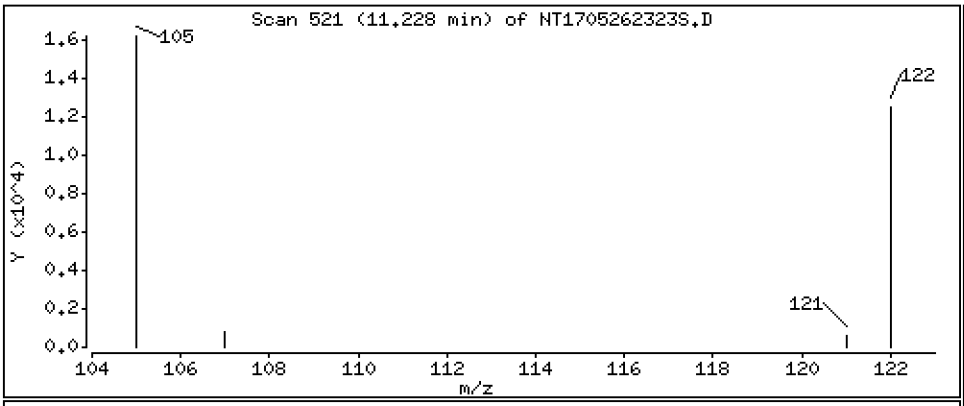
Operator: VTS

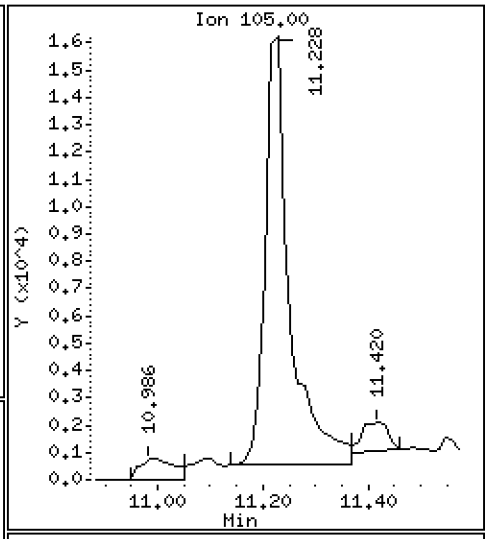
Column phase: ZB-5msi

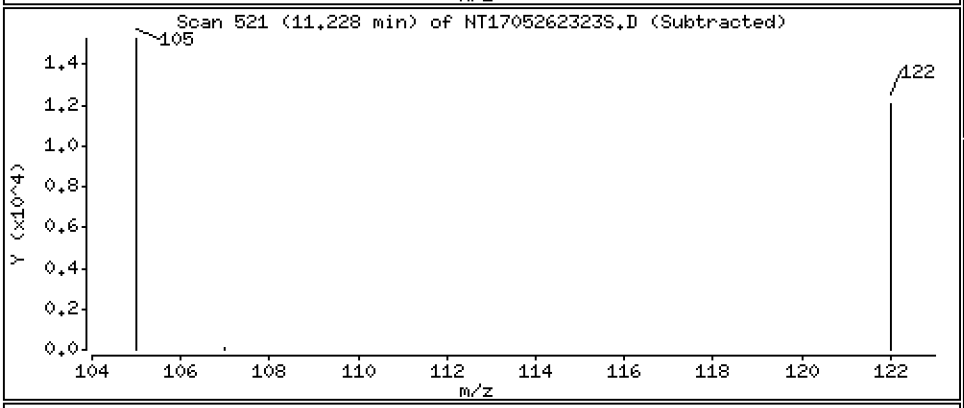
Column diameter: 0.25

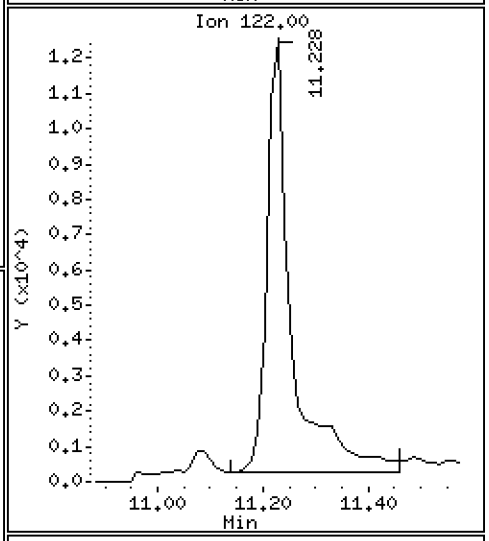
24 Benzoic acid

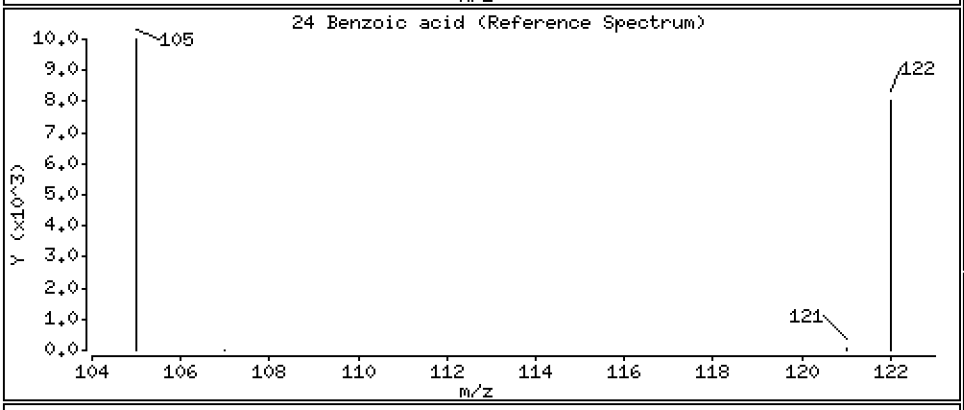
Concentration: 0.8366 ug/mL

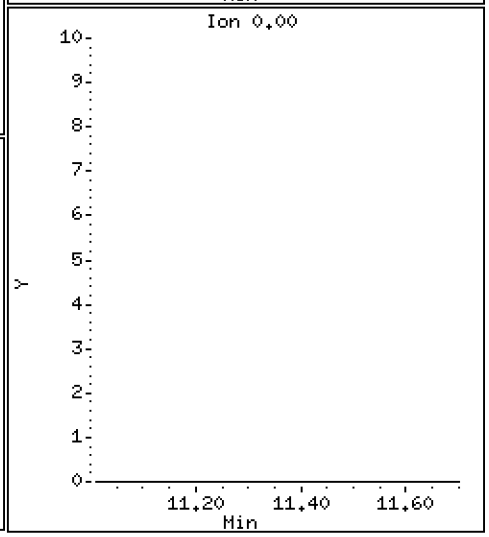


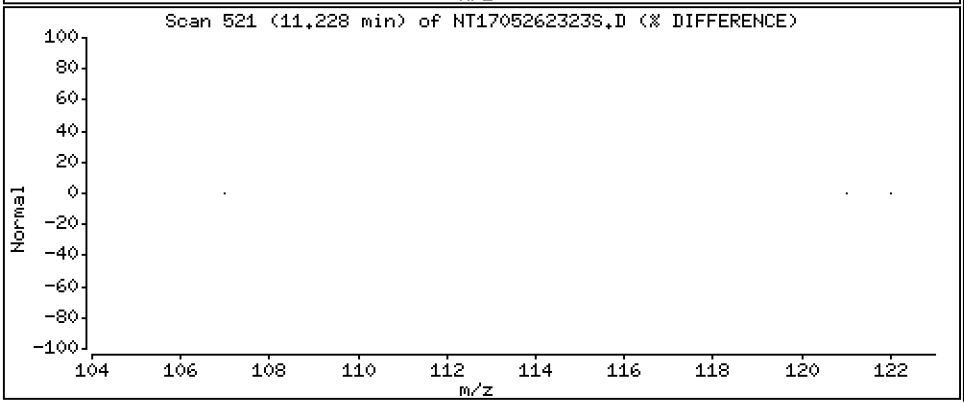












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Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

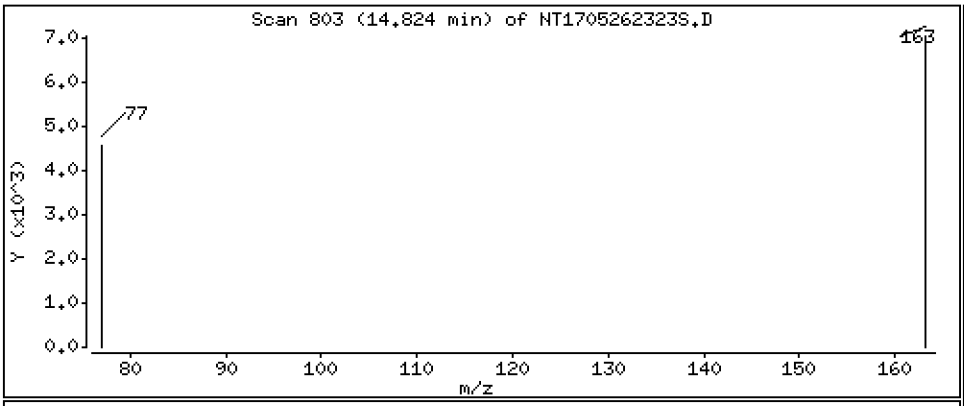
Operator: VTS

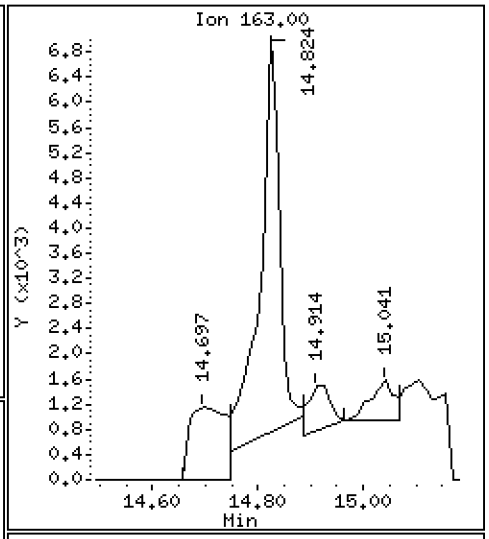
Column phase: ZB-5msi

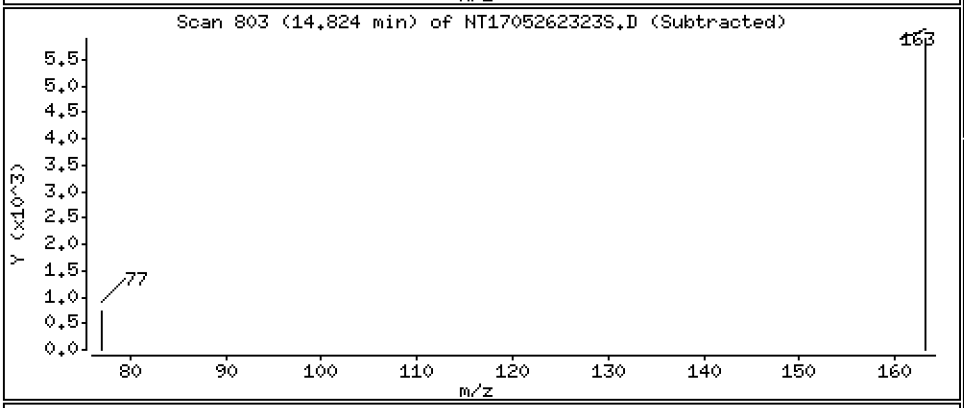
Column diameter: 0.25

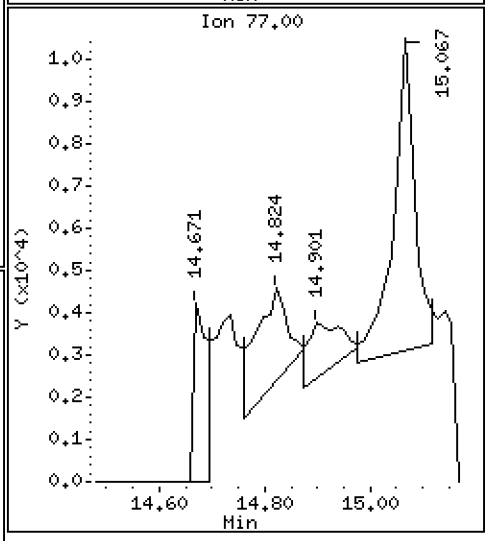
39 Dimethylphthalate

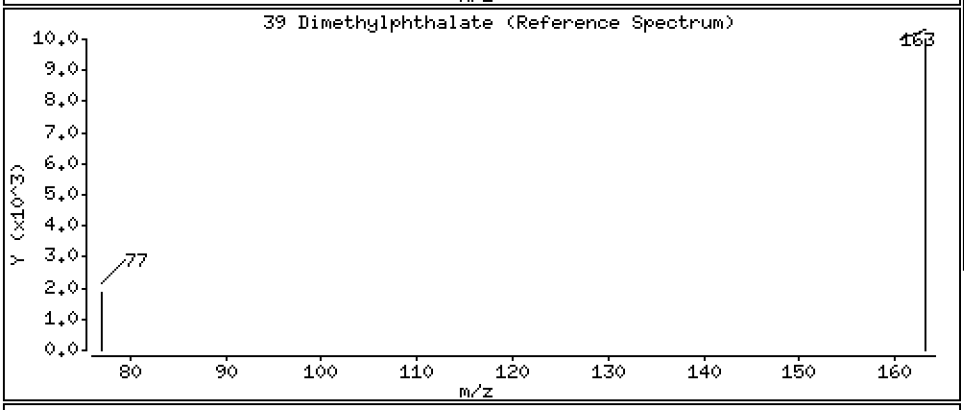
Concentration: 0.08193 ug/mL

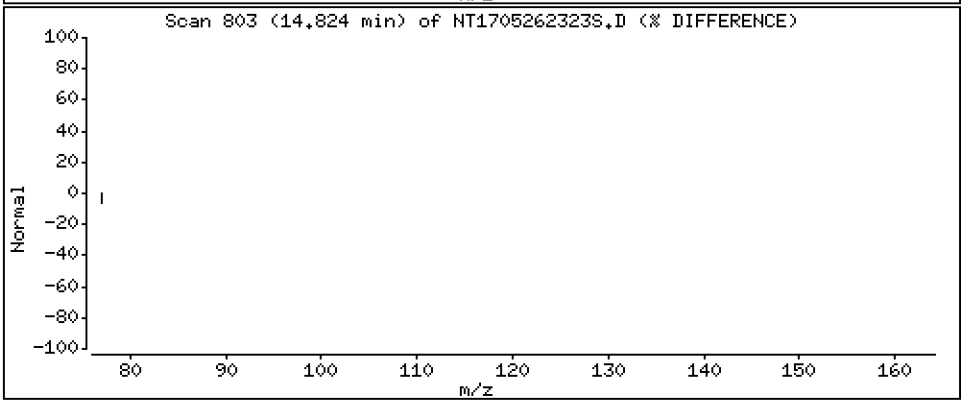












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262323S.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

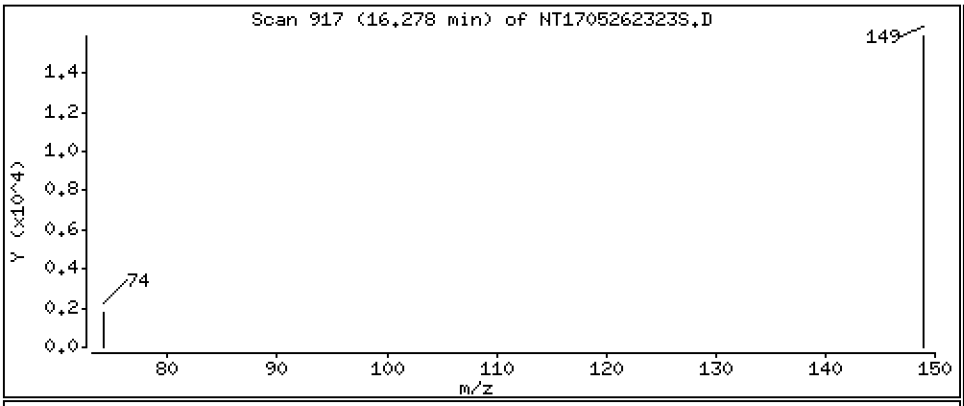
Operator: VTS

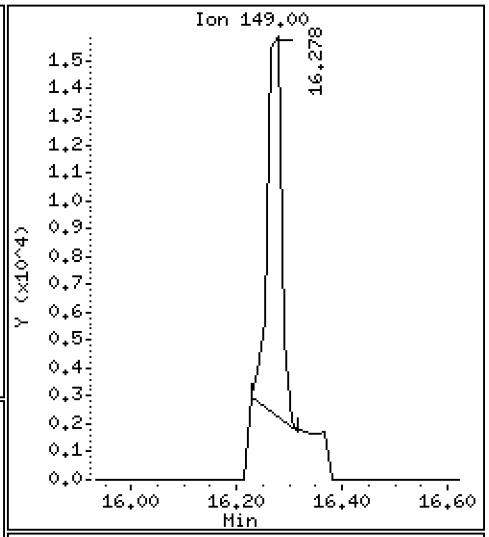
Column phase: ZB-5msi

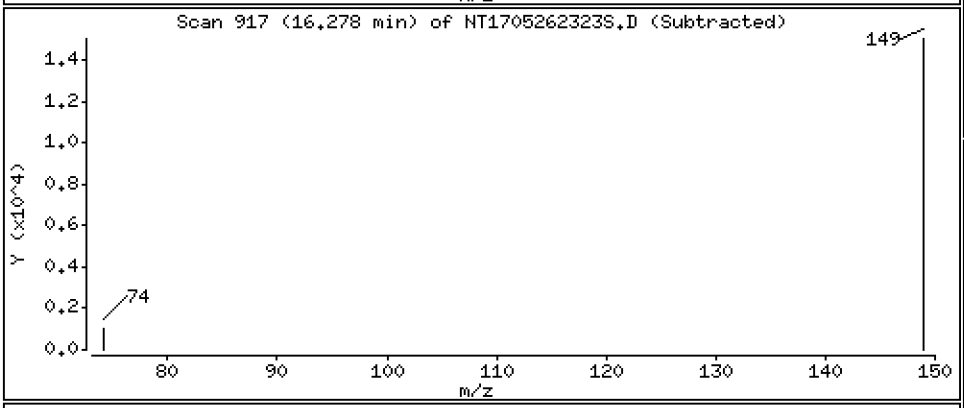
Column diameter: 0.25

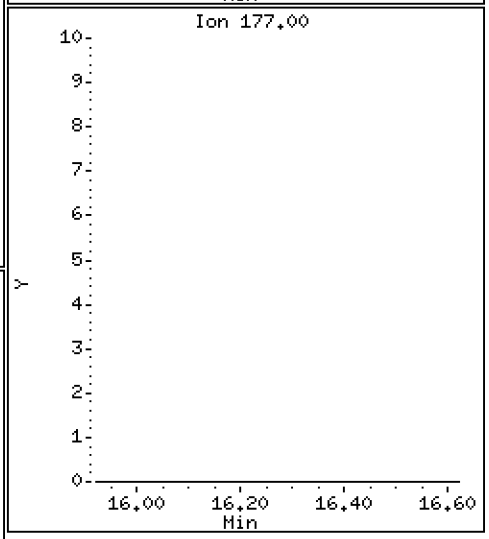
50 Diethylphthalate

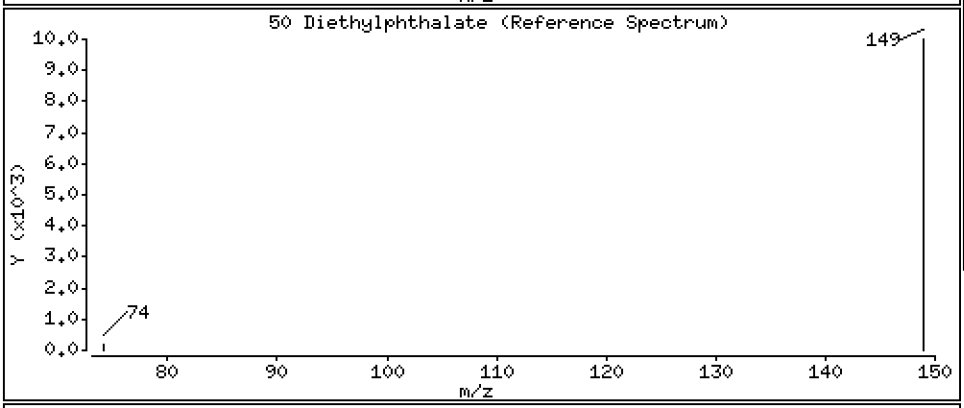
Concentration: 0.1445 ug/mL

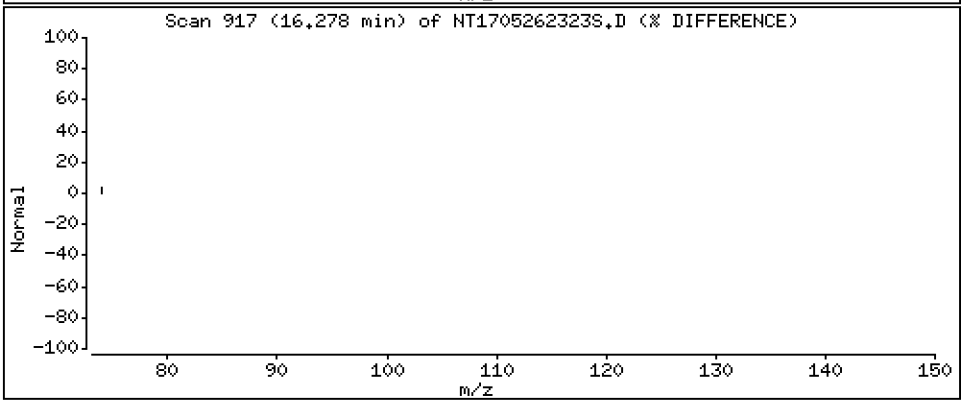












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262323S.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

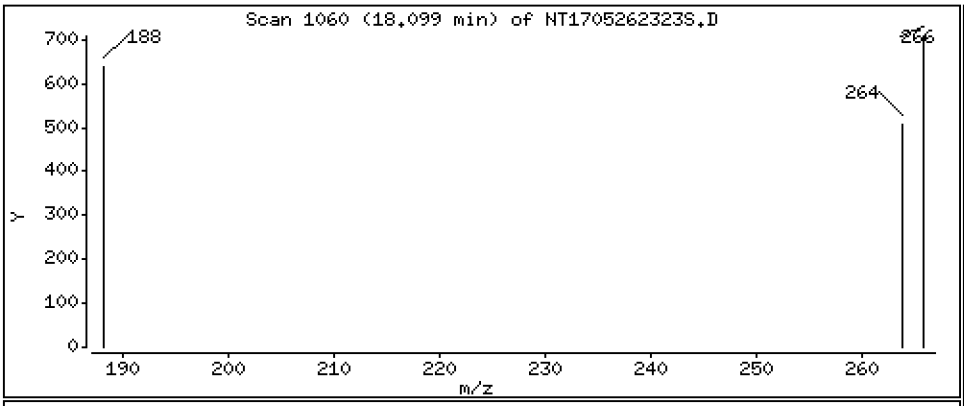
Operator: VTS

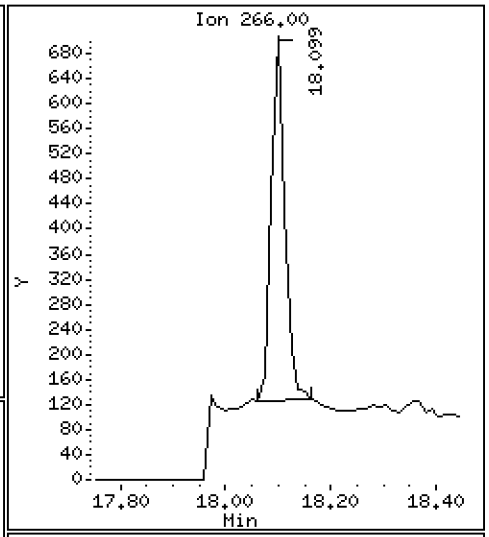
Column phase: ZB-5msi

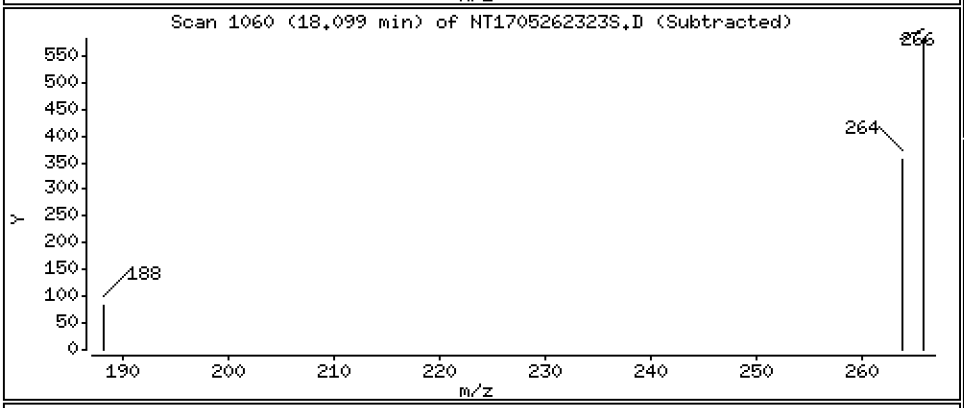
Column diameter: 0.25

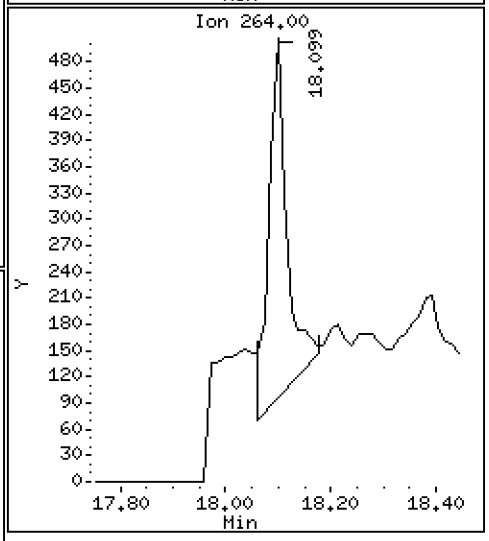
58 Pentachlorophenol

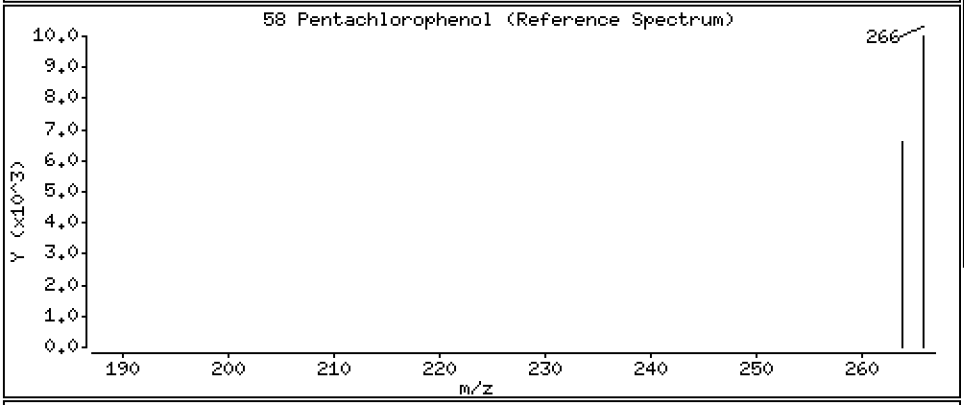
Concentration: 0.04966 ug/mL

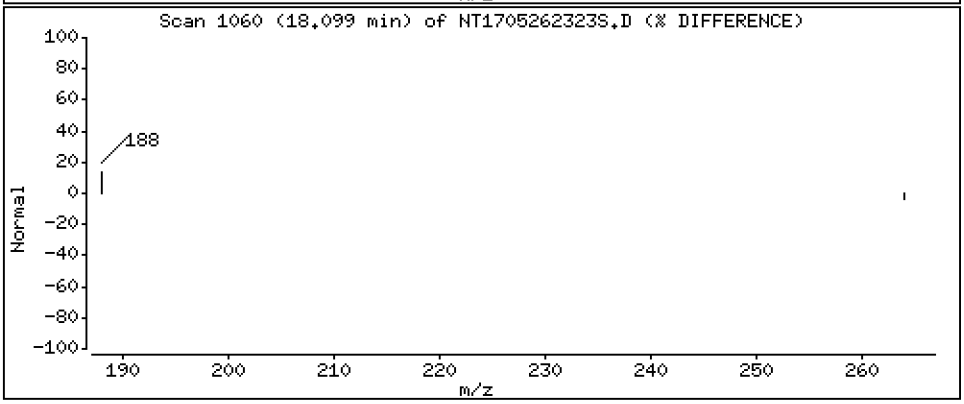












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262323S.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

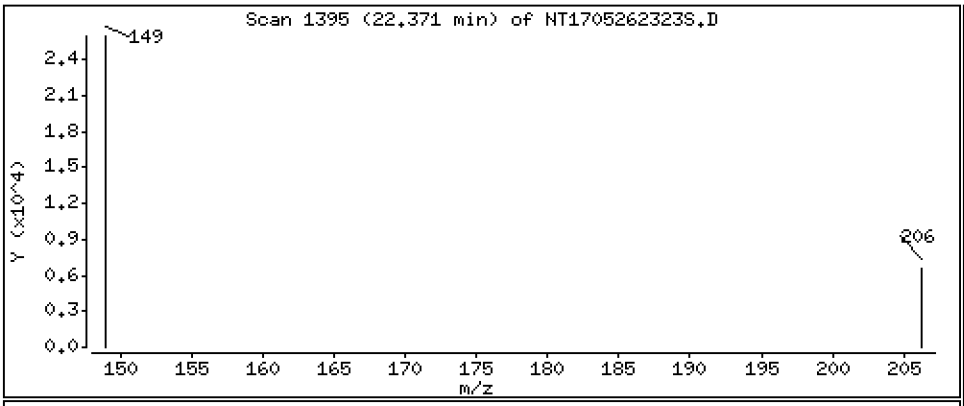
Operator: VTS

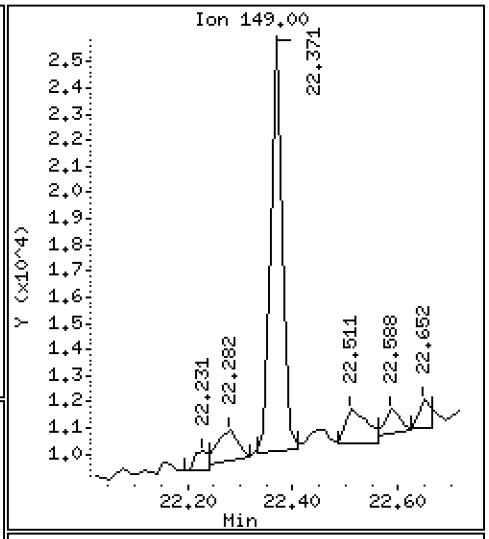
Column phase: ZB-5msi

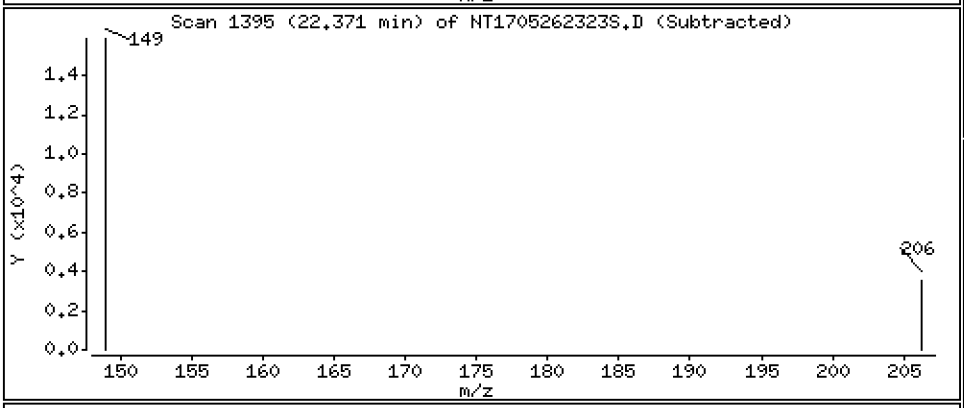
Column diameter: 0.25

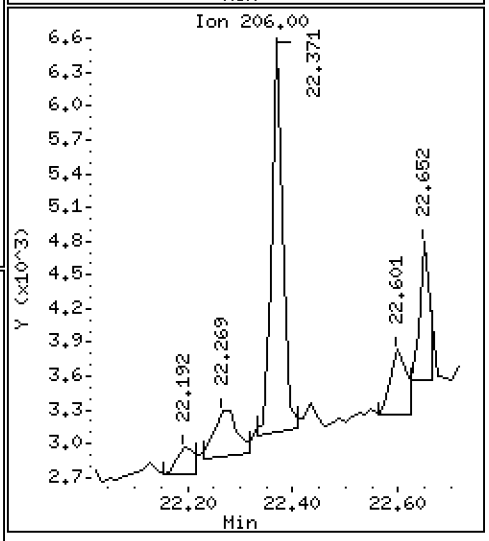
67 Butylbenzylphthalate

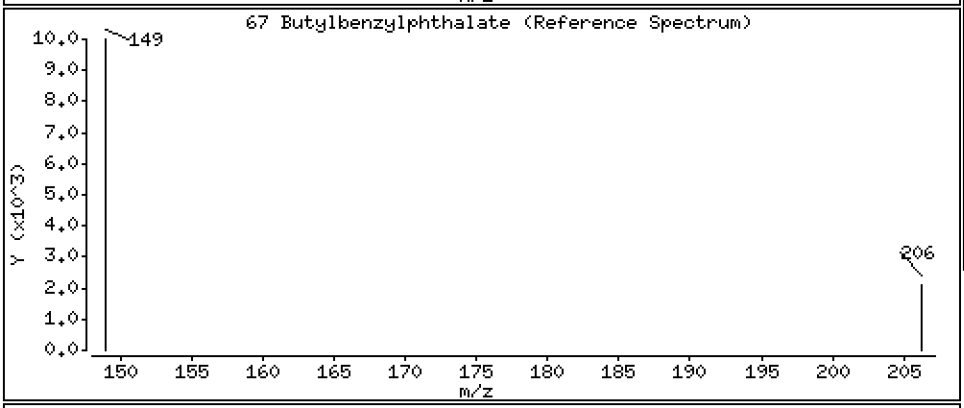
Concentration: 0.1732 ug/mL

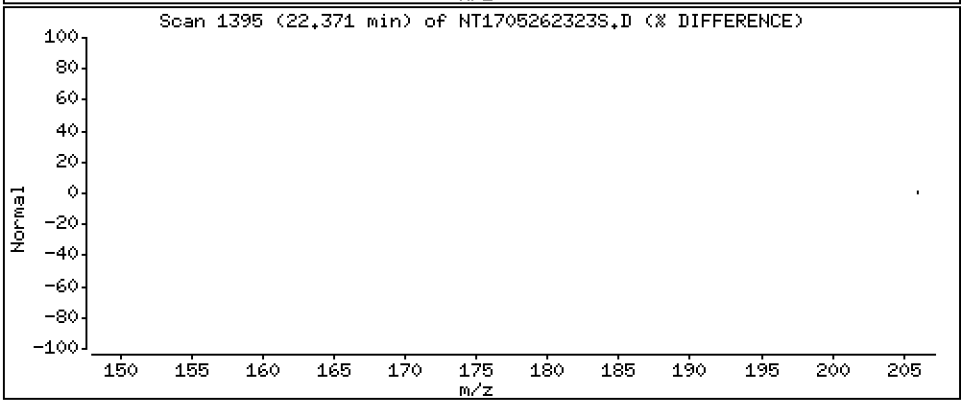












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262323S.D

Date : 27-MAY-2023 02:25

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-01

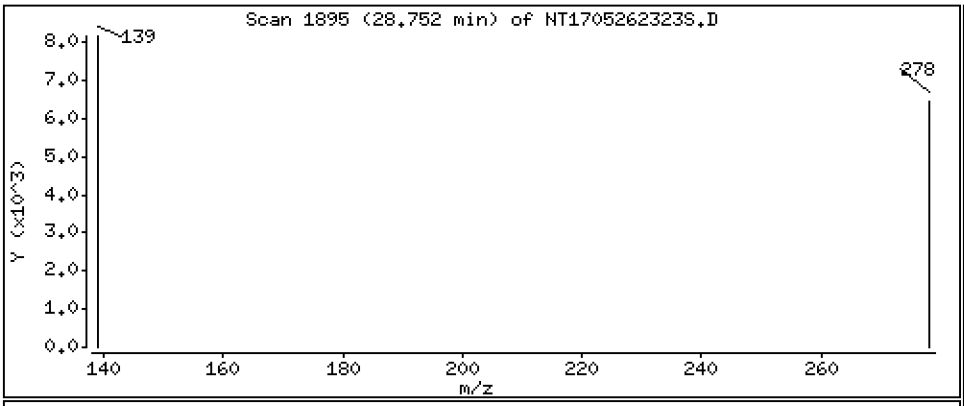
Operator: VTS

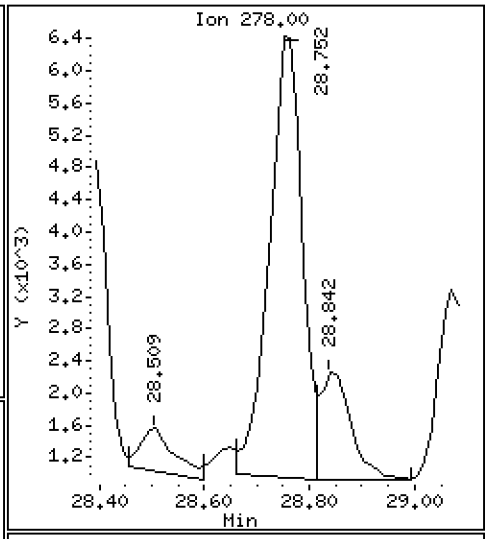
Column phase: ZB-5msi

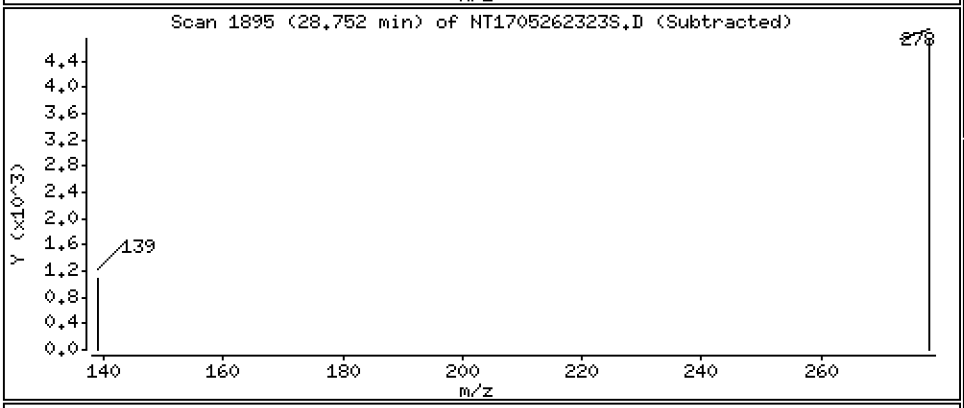
Column diameter: 0.25

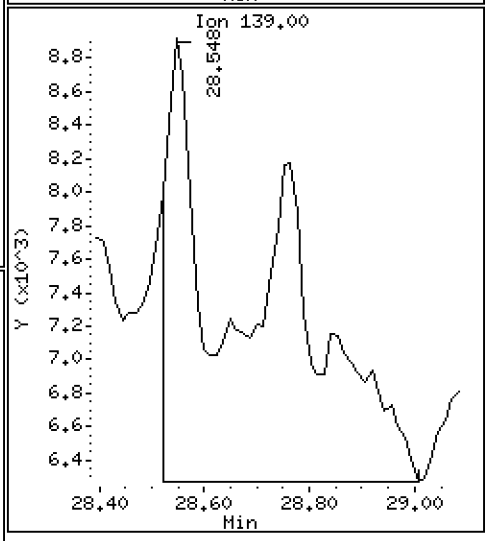
79 Dibenzo(a,h)anthracene

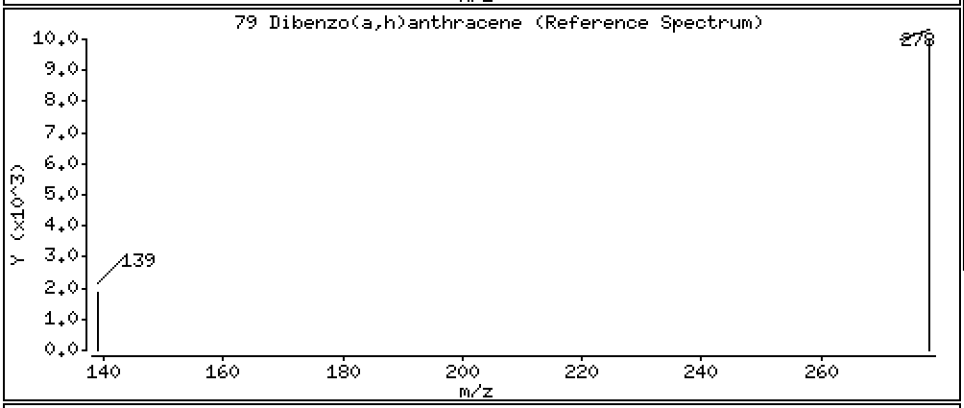
Concentration: 0.1718 ug/mL

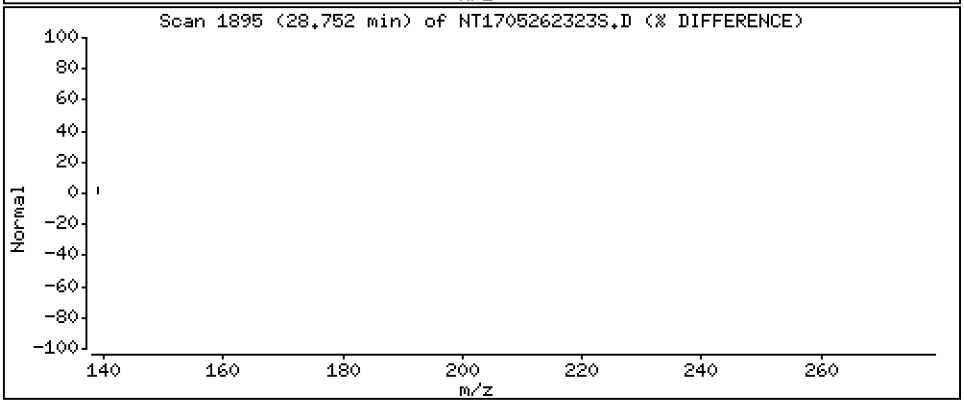












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262323S.D
Lab Smp Id: 23D0396-01
Inj Date : 27-MAY-2023 02:25
Operator : VTS Inst ID: nt17.i
Smp Info : 23D0396-01
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 07-Jun-2023 07:26 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 20
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.132	7.081	(0.769)	510341	5.55620	5.556(R)
	3 Phenol	94	8.687	8.674	(0.937)	27277	0.19930	0.1993
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	303678	4.00000	
	9 1,4-Dichlorobenzene	146	9.299	9.299	(1.003)	2671	0.02234	0.02234
	11 Benzyl alcohol	79	9.554	9.554	(1.030)	60279	0.77295	0.7730
	12 1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	736	0.00628	0.006282
	13 2-Methylphenol	108	9.784	9.771	(1.055)	3376	0.03560	0.03560
	15 4-Methylphenol	108	10.053	10.040	(1.084)	22939	0.23933	0.2393
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	11.087	11.062	(0.945)	2460	0.02474	0.02474
	24 Benzoic acid	105	11.228	11.228	(0.957)	51814	0.83659	0.8366
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.738	11.738	(1.000)	1033510	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.824	14.837	(0.967)	16324	0.08193	0.08193
*	42 Acenaphthene-d10	162	15.334	15.334	(1.000)	542573	4.00000	
	50 Diethylphthalate	149	16.277	16.277	(1.062)	26141	0.14447	0.1445(M)
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.098	18.098	(0.986)	1033	0.04966	0.04966(M)
*	59 Phenanthrene-d10	188	18.353	18.353	(1.000)	773140	4.00000	
$	66 Terphenyl-d14	244	21.465	21.452	(0.919)	478498	3.73026	3.730(R)
	67 Butylbenzylphthalate	149	22.371	22.370	(0.957)	24149	0.17324	0.1732
*	69 Chrysene-d12	240	23.366	23.353	(1.000)	676021	4.00000	
*	77 Perylene-d12	264	26.032	26.006	(1.000)	507114	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.752	28.739	(1.104)	24577	0.17182	0.1718
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262323S.D
Lab Smp Id: 23D0396-01
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-MAY-2023
Calibration Time: 00:33
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375423	187712	750846	303678	-19.11
27 Naphthalene-d8	1173037	586519	2346074	1033510	-11.89
42 Acenaphthene-d10	638940	319470	1277880	542573	-15.08
59 Phenanthrene-d10	901788	450894	1803576	773140	-14.27
69 Chrysene-d12	767966	383983	1535932	676021	-11.97
77 Perylene-d12	642149	321075	1284298	507114	-21.03

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	0.00
69 Chrysene-d12	23.35	22.85	23.85	23.37	0.05
77 Perylene-d12	26.01	25.51	26.51	26.03	0.10

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

REVIEW SUMMARY FOR FILE - NT1705262323S.D

Lab ID: 23D0396-01
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   27-MAY-2023 02:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.769	0.764	0.0055	2-Fluorophenol

RRT check based on Ccal File: SIM.b/NT1705262320S.D

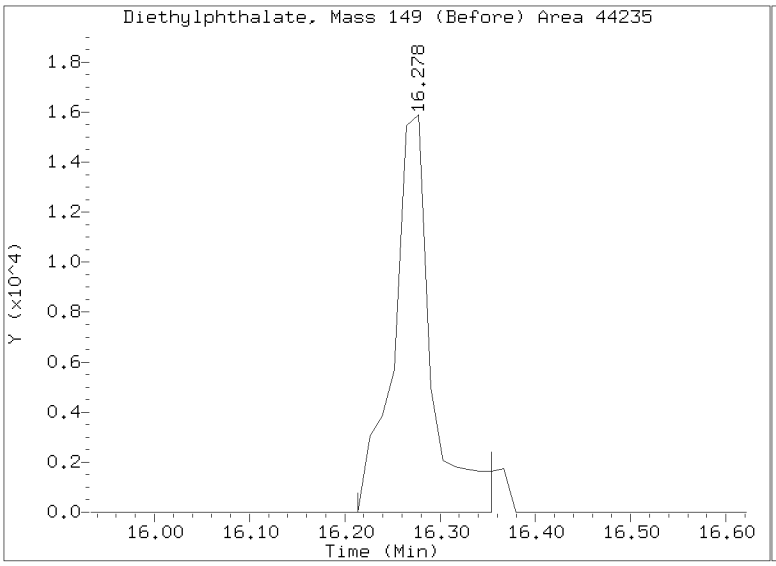
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

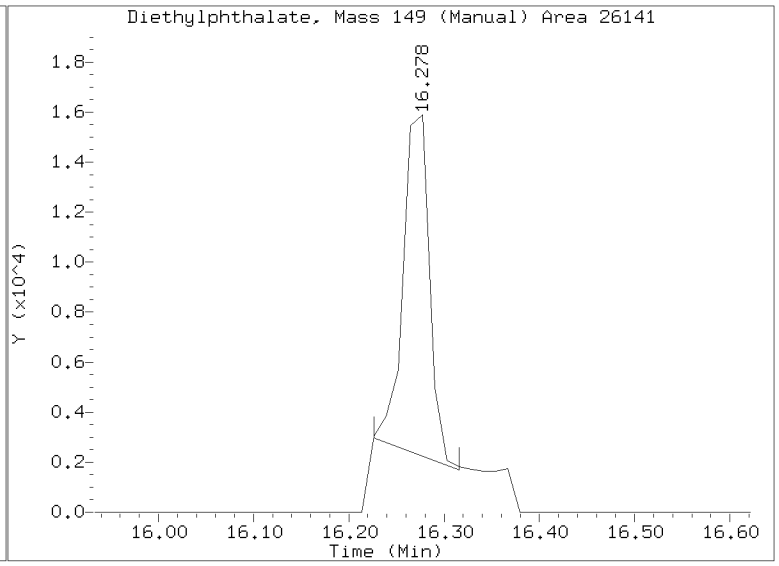
Exception: 1,2,4-Trichlorobenzene 0.0010

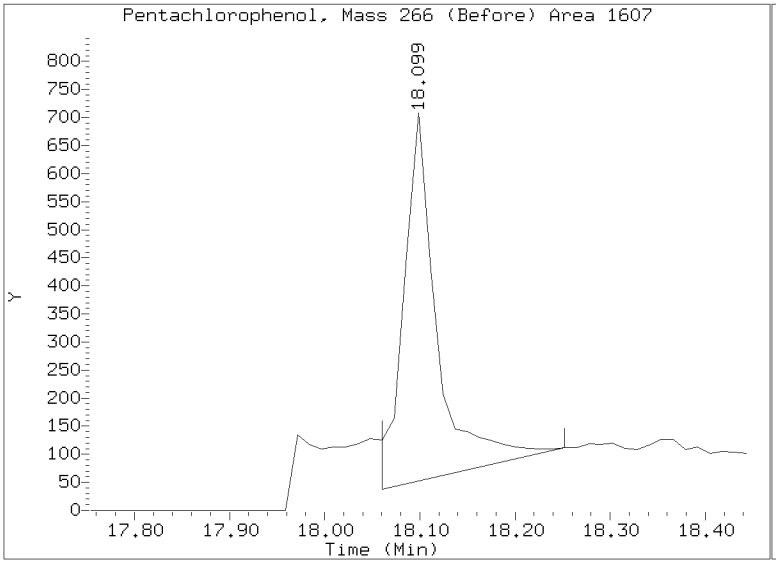
* Only compounds listed in the work order have been verified by the analyst *

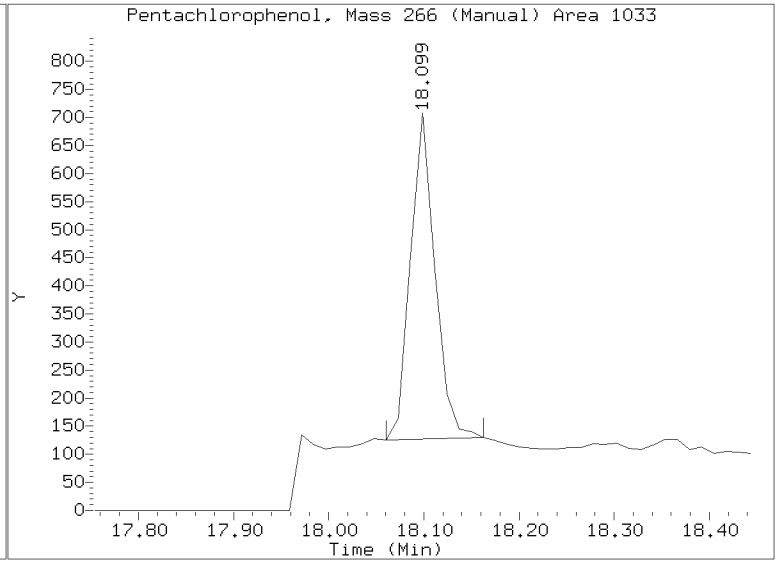
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230526.b/SIM.b/NT1705262323S.D
Injection Date: 27-MAY-2023 02:25
Lab ID:23D0396-01 Client ID:
Report Date: 06/07/2023 07:57









Analytical Resources, LLC
Analytical Chemists and Consultants

LDW23-SS1802

Form I

ORGANIC ANALYSIS DATA SHEET

EPA 8270E-SIM

SIM SVOC Organics (Dual scan list)

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-03 A	SDG:	23D0396
Sampled:	04/12/23 15:03	Prepared:	04/24/23 16:38	File ID:	NT1705262324S.D
% Solids:	43.88	Preparation:	EPA 3546 (Microwave)	Analyzed:	05/27/23 03:02
Batch:	BLD0607	Sequence:	SLE0442	Initial/Final:	22.79 g Wet / 1 mL
Instrument:	NT17	Column:	ZB-5MS	Calibration:	GE00070
Cleanups:	GPC				

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg dry)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	1.9	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	5.0	U	0.7	5.0
65-85-0	Benzoic acid	1	64.4	J	13.4	100
105-67-9	2,4-Dimethylphenol	1	2.4	J	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	2.8	J	2.1	20.0

SURROGATES	ADDED: (ug/kg dry)	FOUND: (ug/kg dry)	% REC	QC LIMITS	Q
2-Fluorophenol	749.98	540	72.0	27 - 120	
p-Terphenyl-d14	499.99	356	71.2	37 - 120	

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623248.D

Date : 27-MAY-2023 03:02

Client ID:

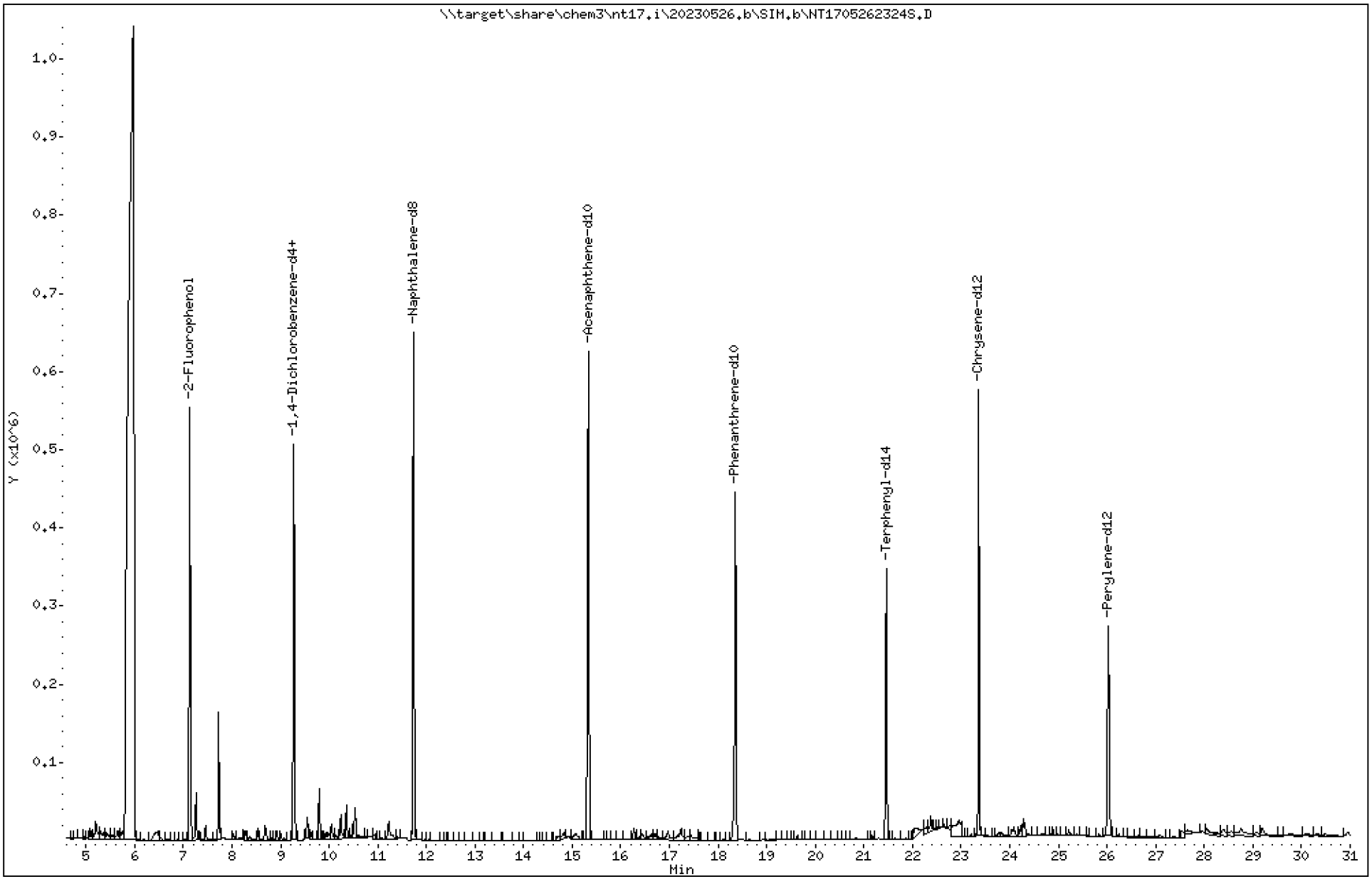
Sample Info: 23D0396-03

Column phase: ZB-5msi

Instrument: nt17.i

Operator: VTS

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262324S.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

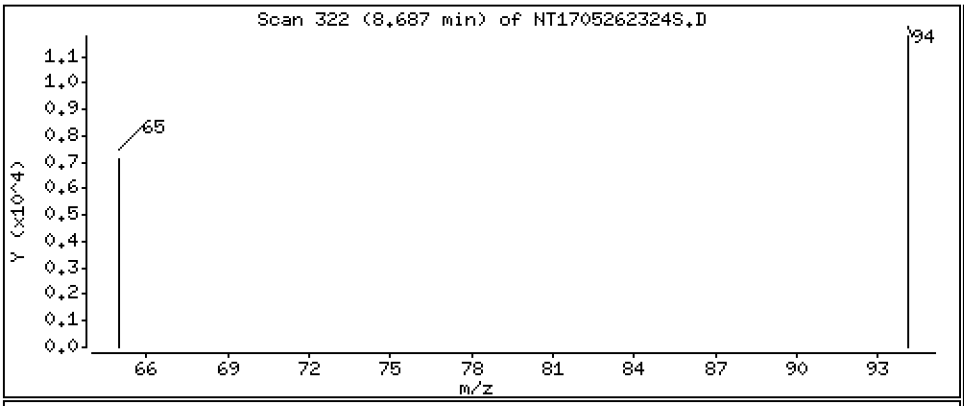
Operator: VTS

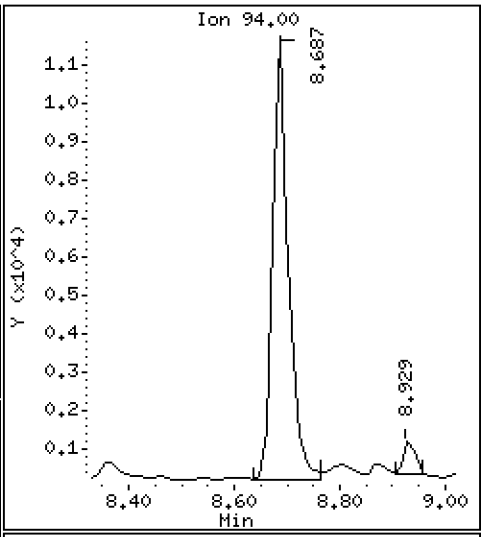
Column phase: ZB-5msi

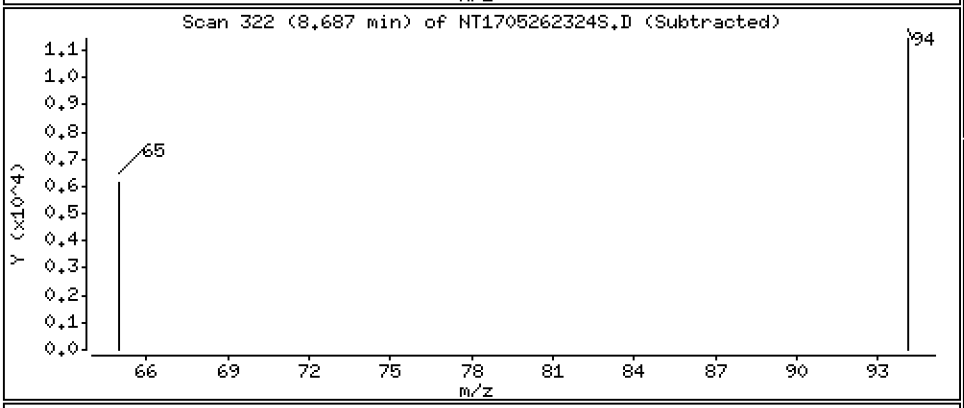
Column diameter: 0.25

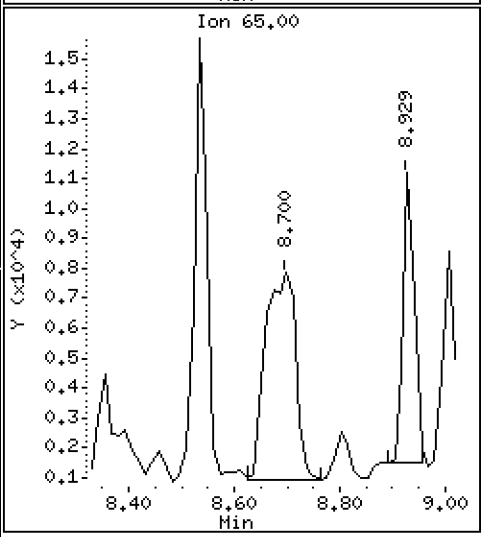
3 Phenol

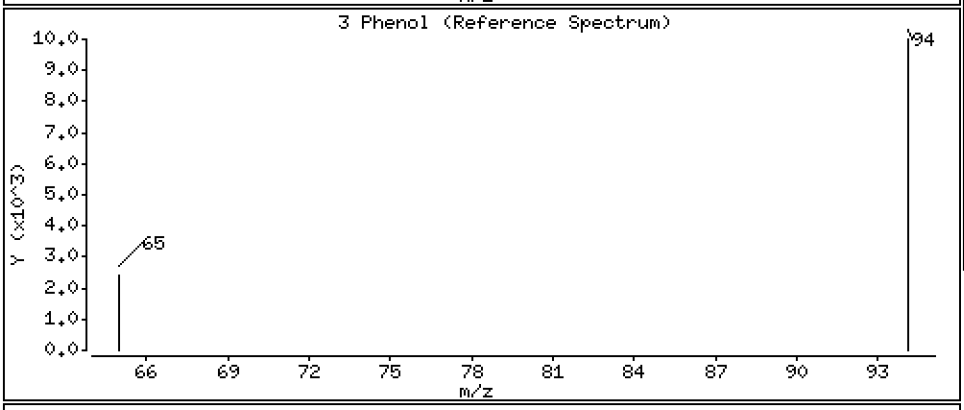
Concentration: 0.1773 ug/mL

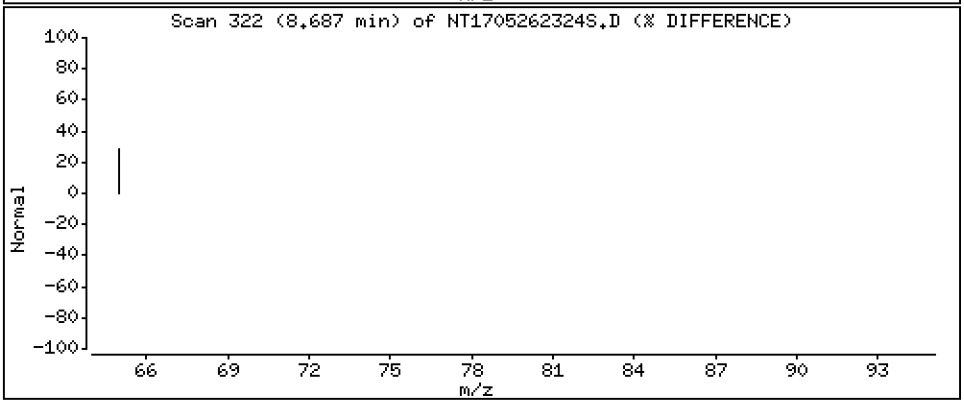












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262324S.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

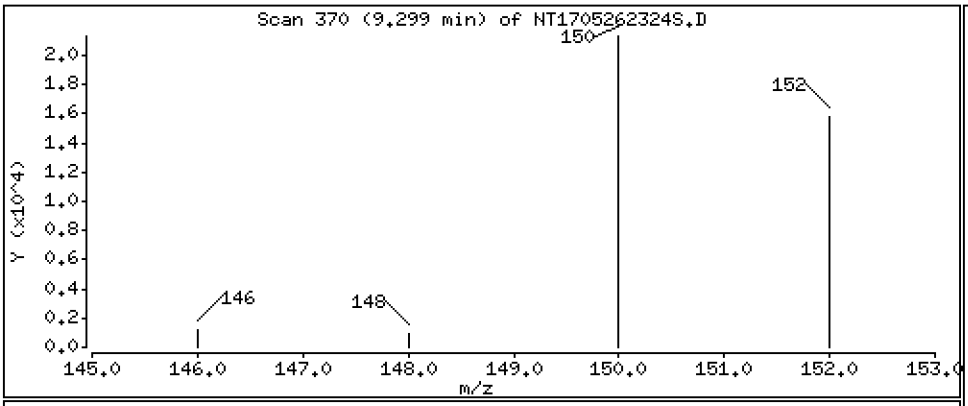
Operator: VTS

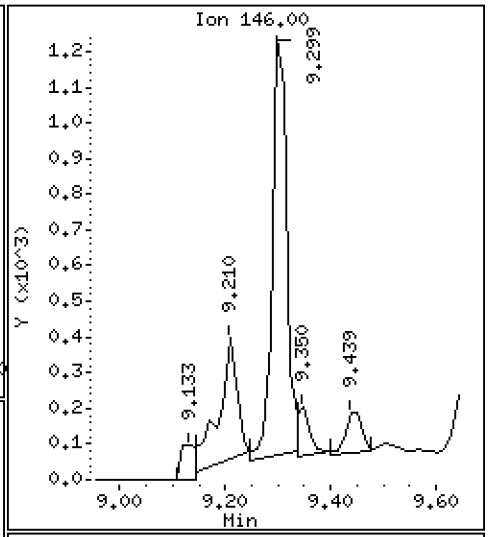
Column phase: ZB-5msi

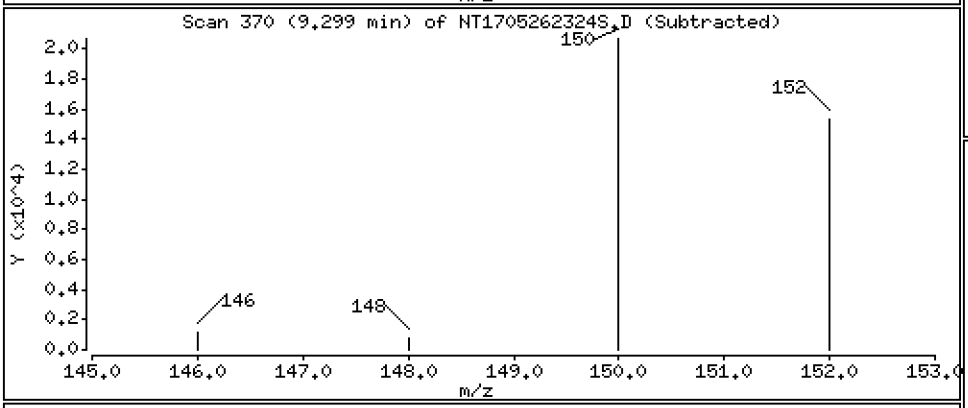
Column diameter: 0.25

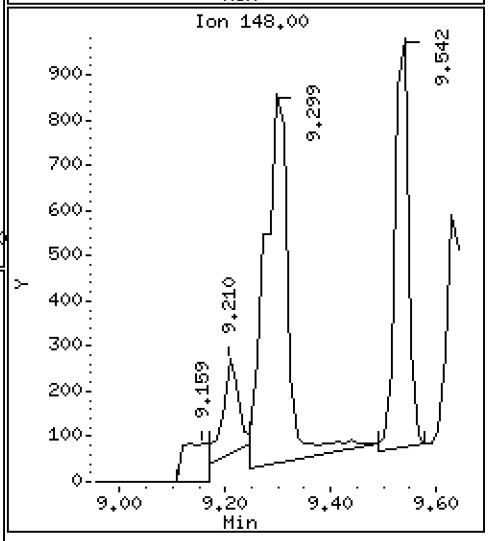
9 1,4-Dichlorobenzene

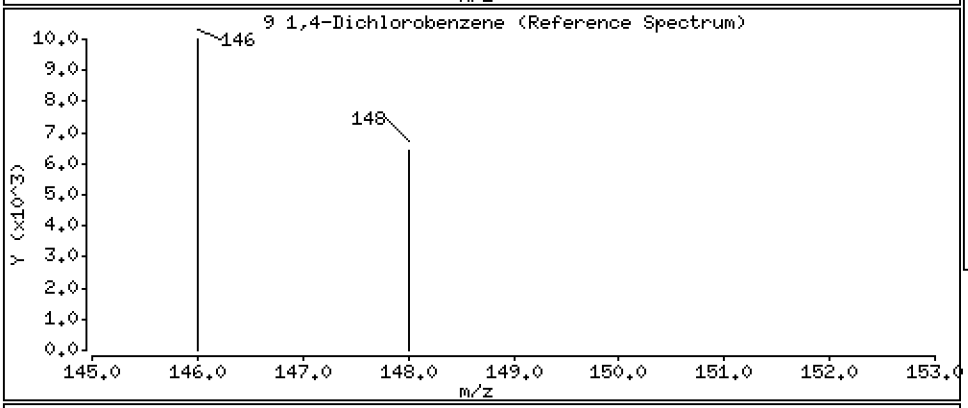
Concentration: 0.01856 ug/mL

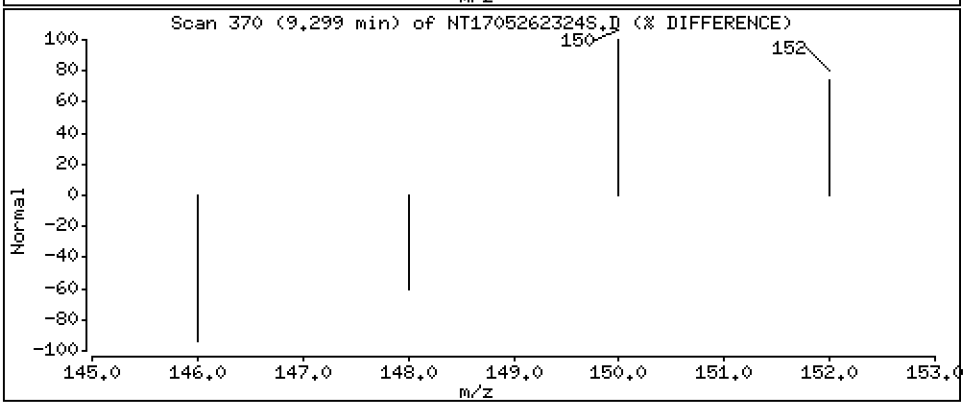












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

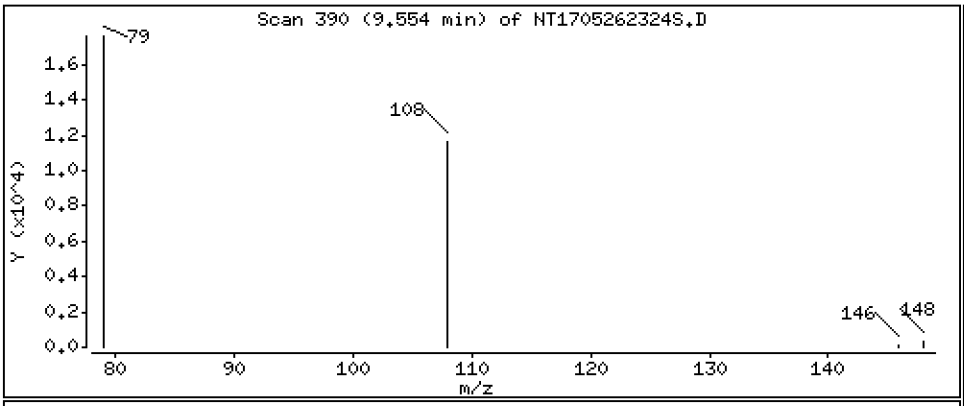
Operator: VTS

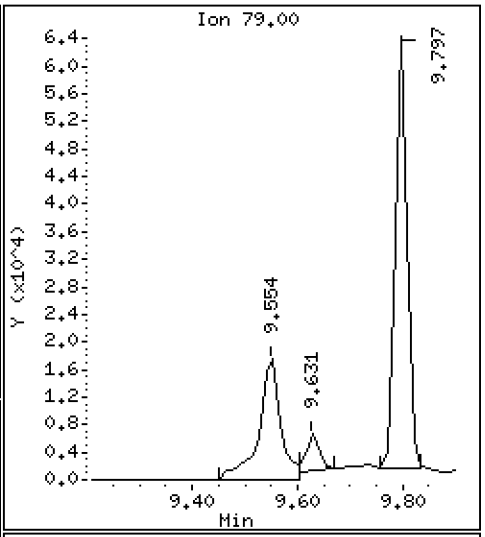
Column phase: ZB-5msi

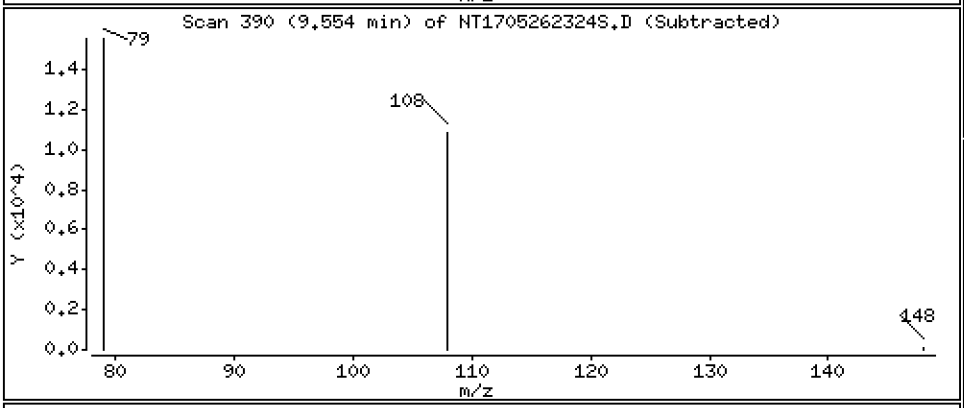
Column diameter: 0.25

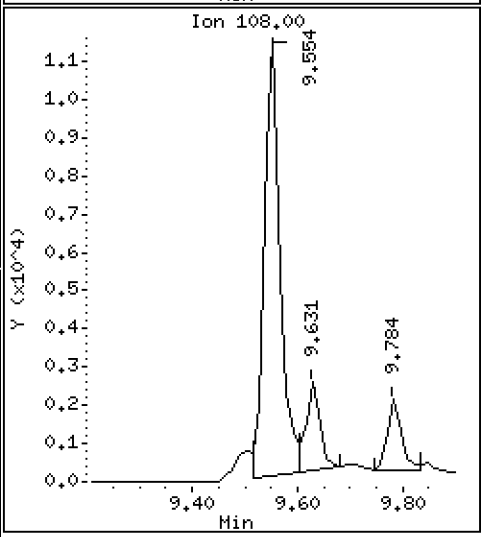
11 Benzyl alcohol

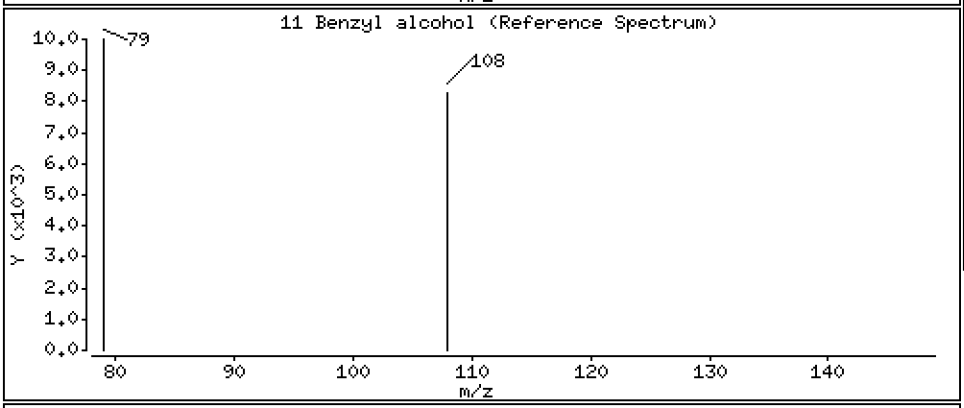
Concentration: 0.6494 ug/mL

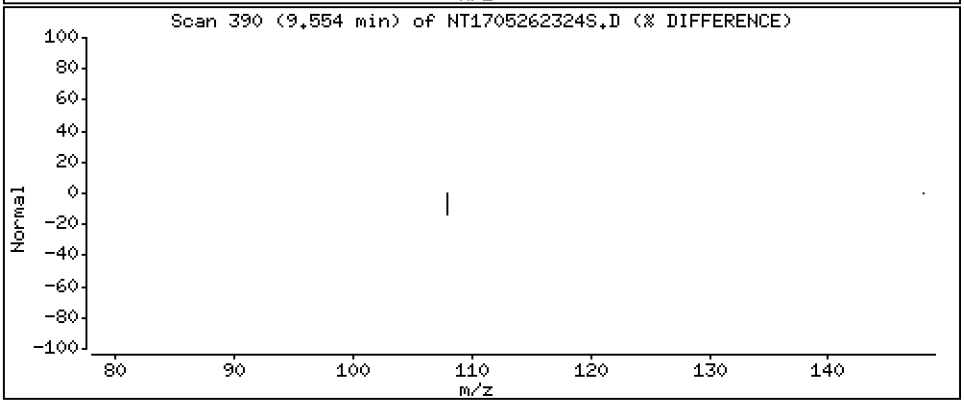












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

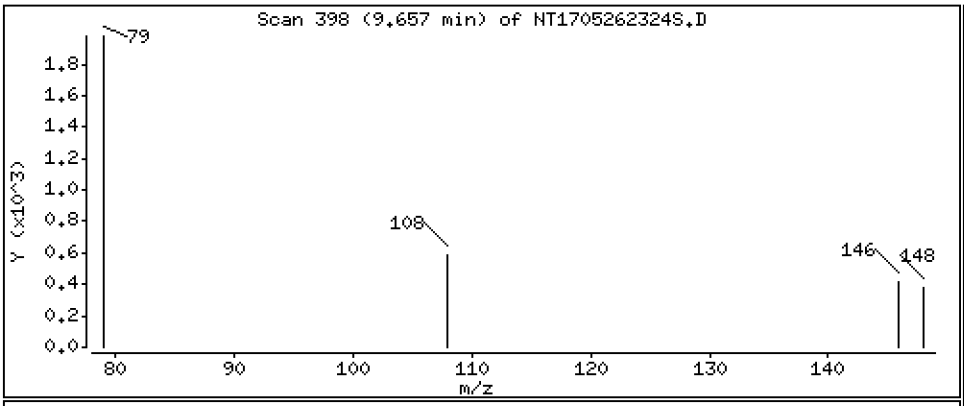
Operator: VTS

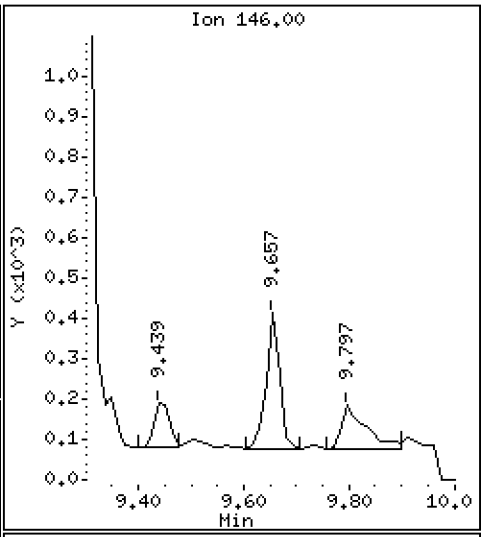
Column phase: ZB-5msi

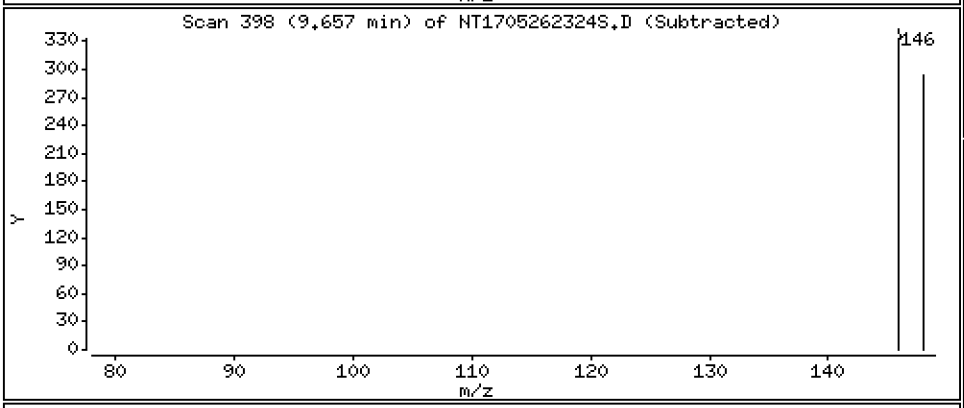
Column diameter: 0.25

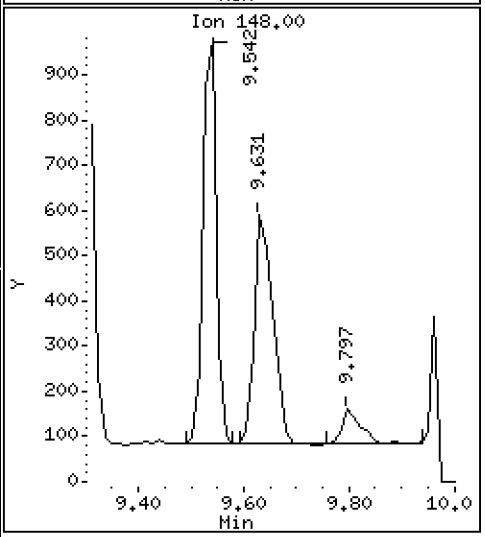
12 1,2-Dichlorobenzene

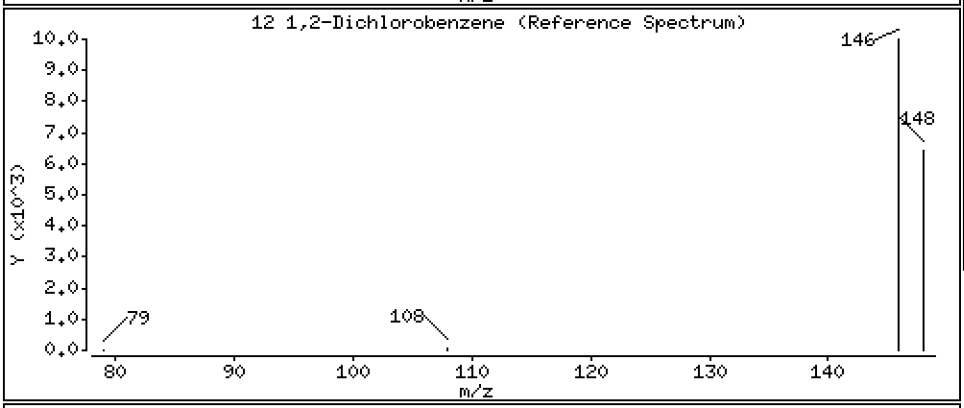
Concentration: 0.005003 ug/mL

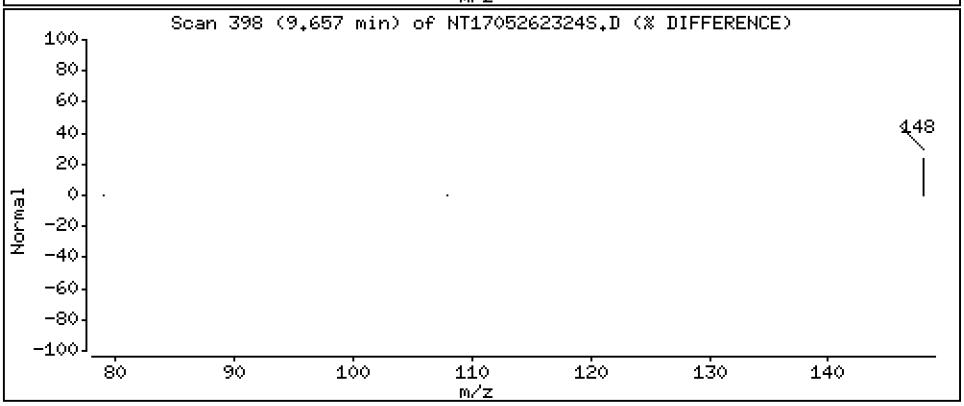












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

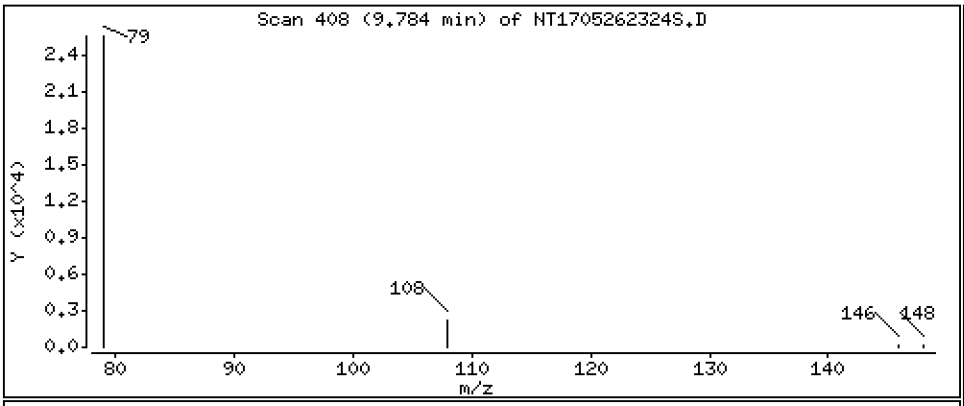
Operator: VTS

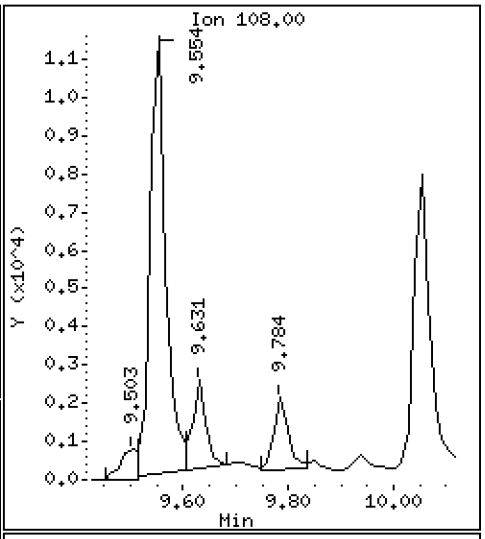
Column phase: ZB-5msi

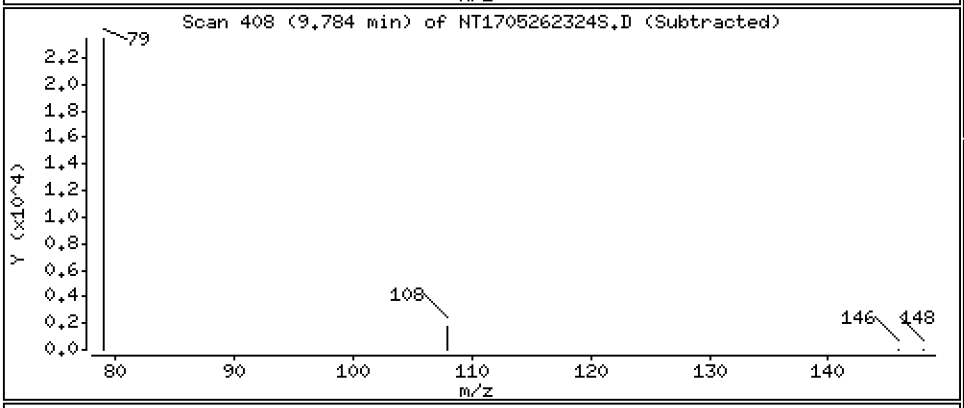
Column diameter: 0.25

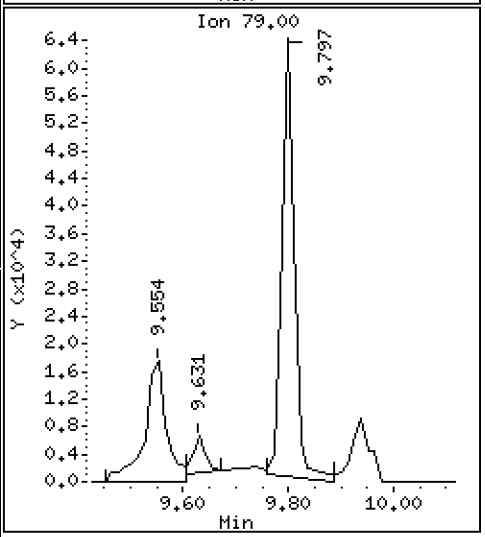
13 2-Methylphenol

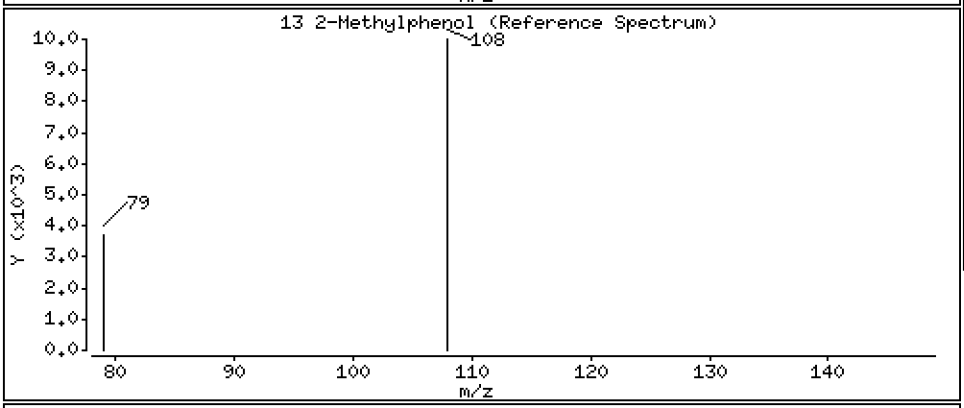
Concentration: 0.03802 ug/mL

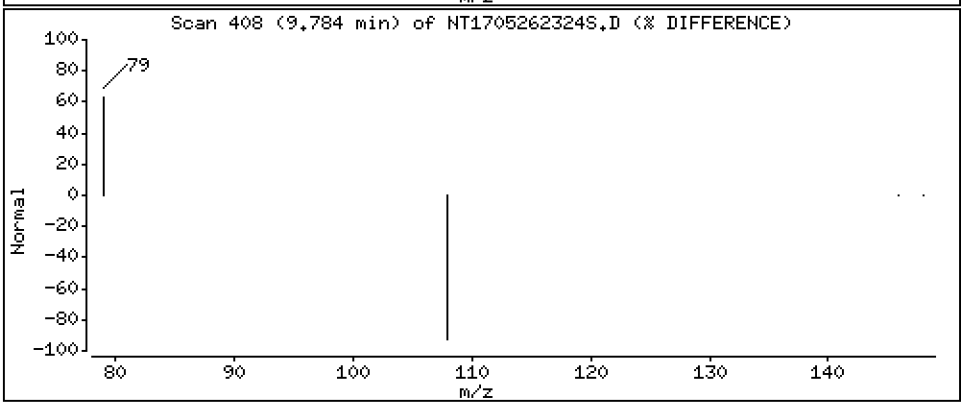












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

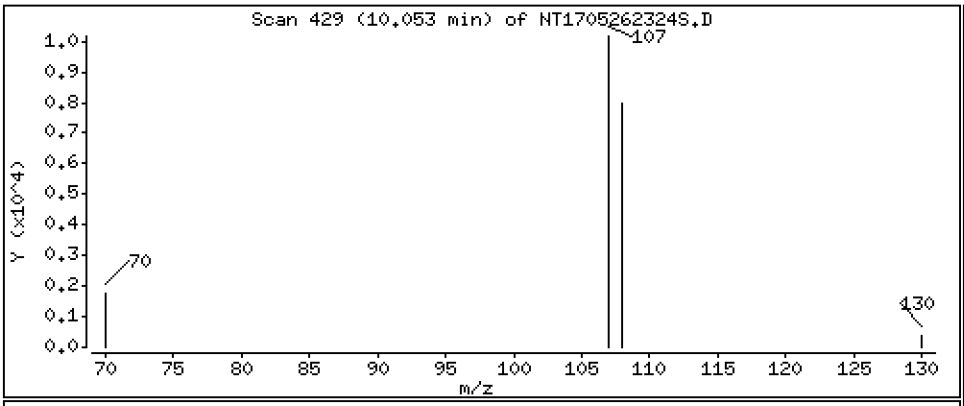
Operator: VTS

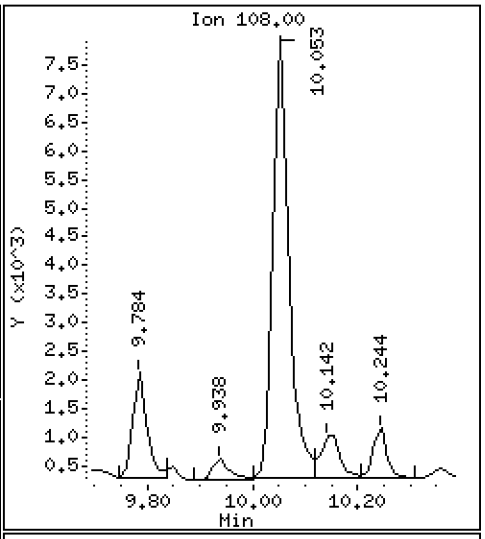
Column phase: ZB-5msi

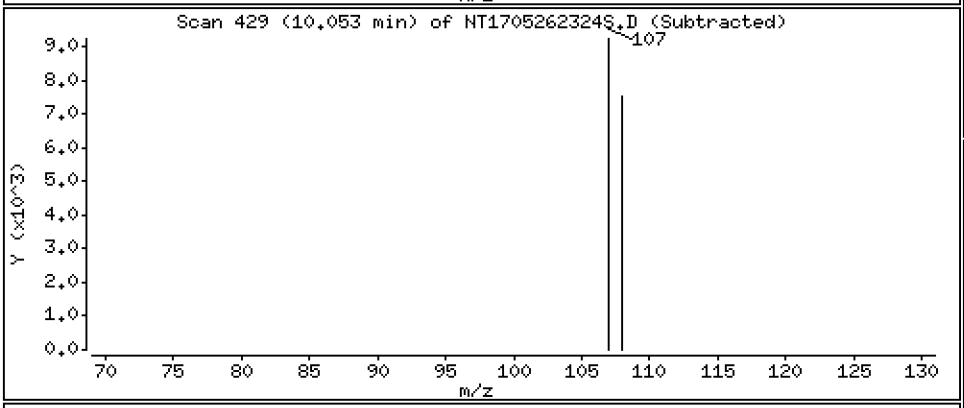
Column diameter: 0.25

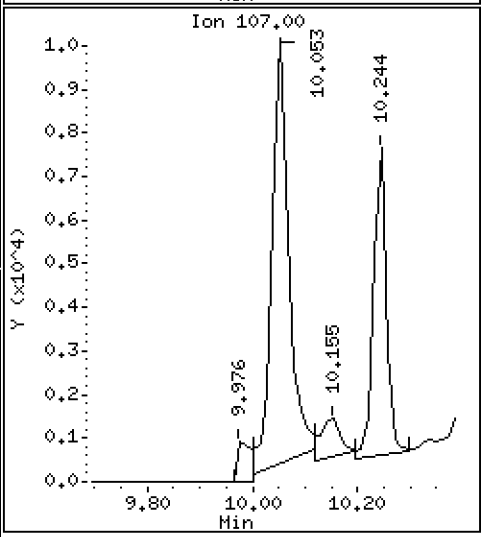
15 4-Methylphenol

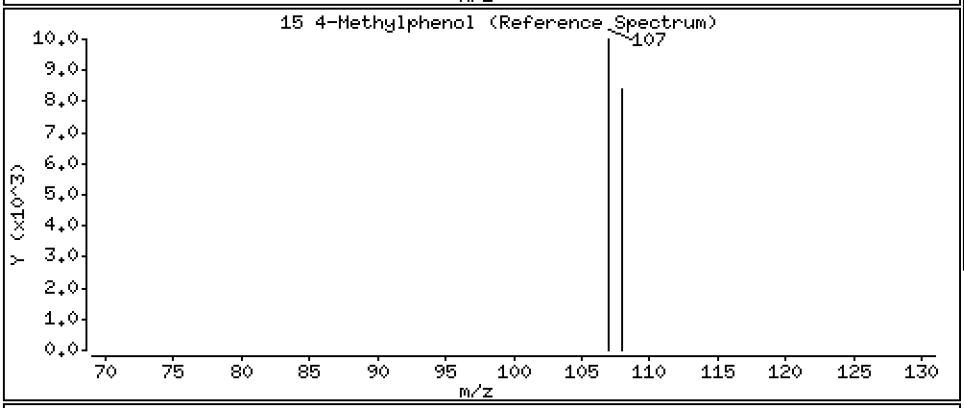
Concentration: 0.1680 ug/mL

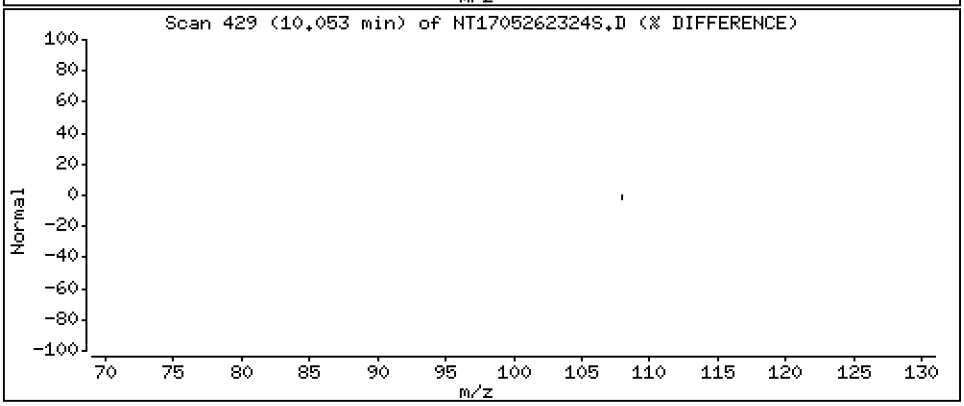












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

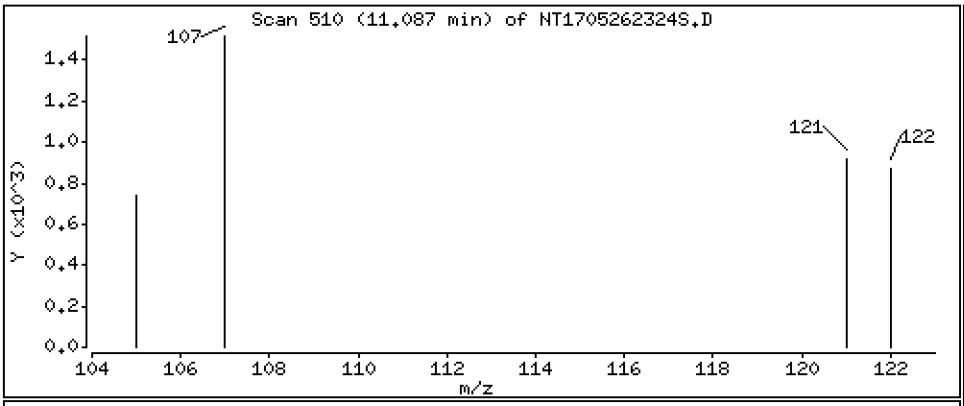
Operator: VTS

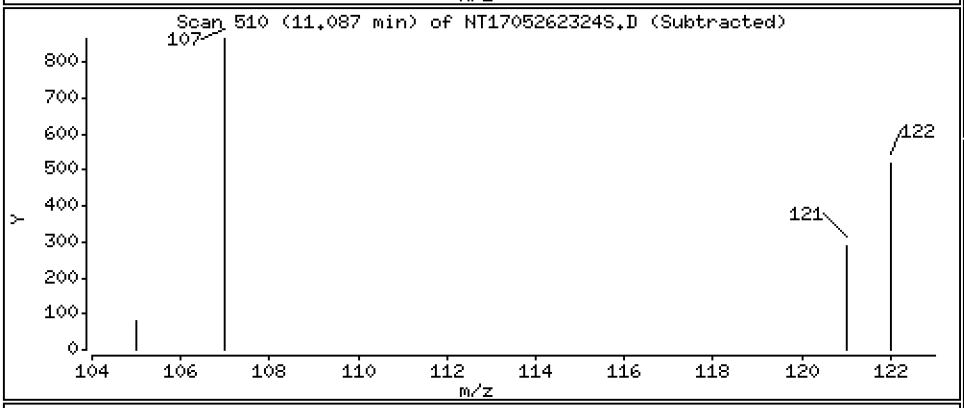
Column phase: ZB-5msi

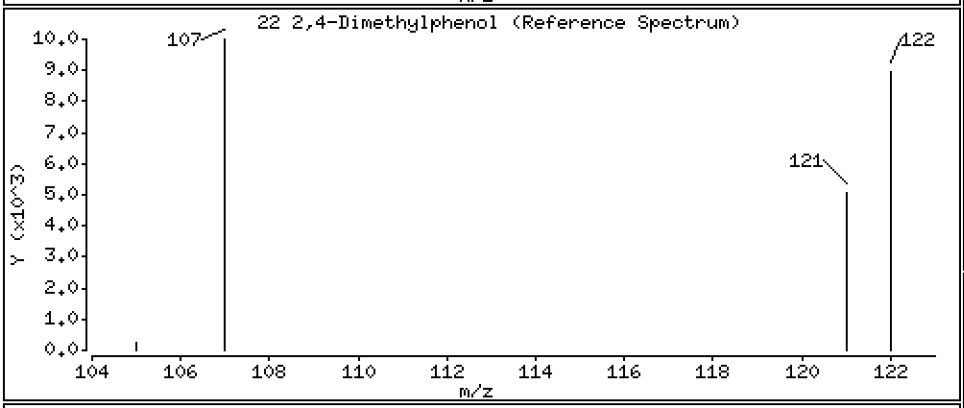
Column diameter: 0.25

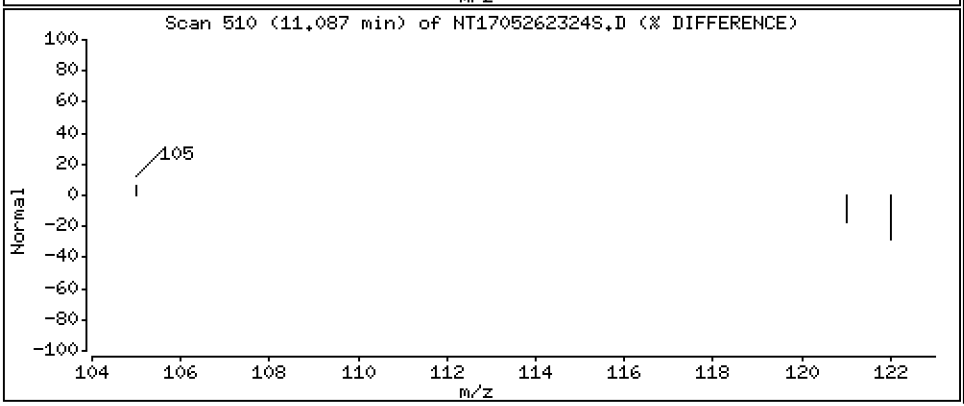
22 2,4-Dimethylphenol

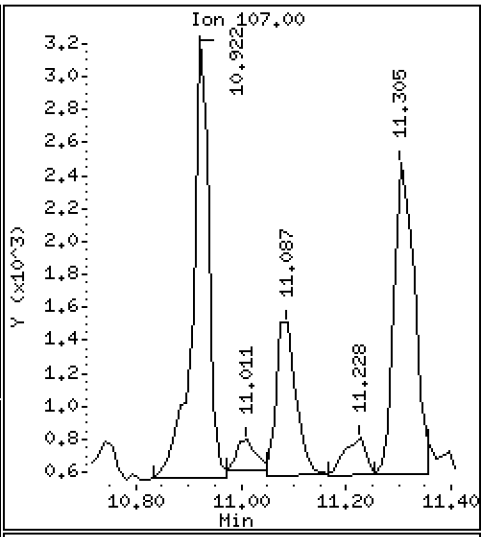
Concentration: 0.02363 ug/mL

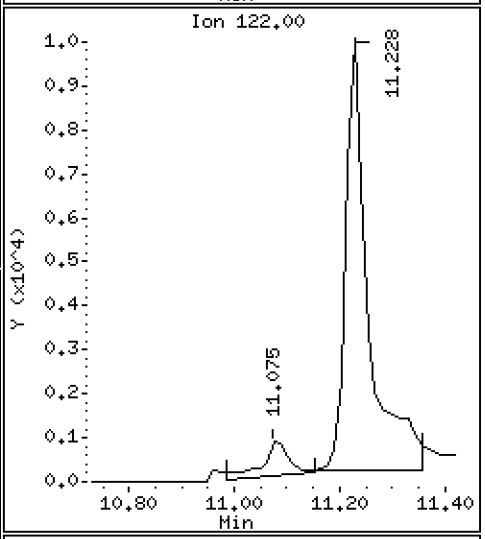


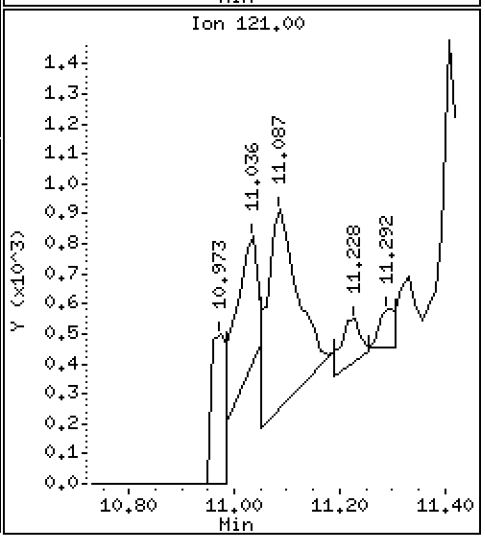












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

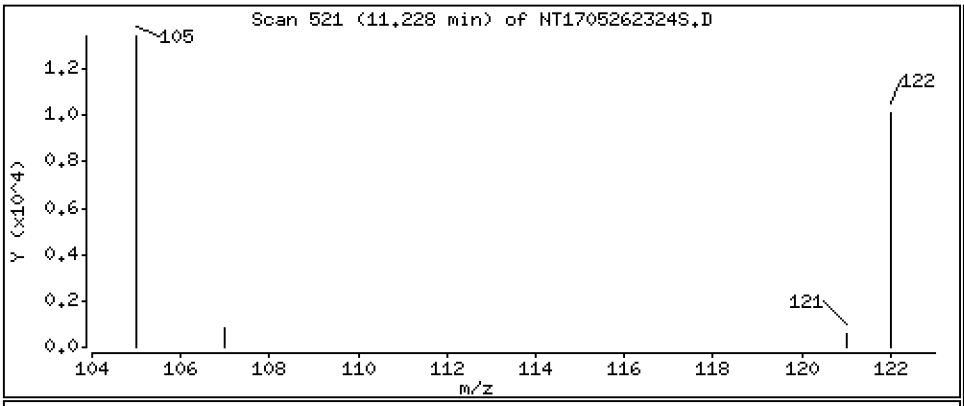
Operator: VTS

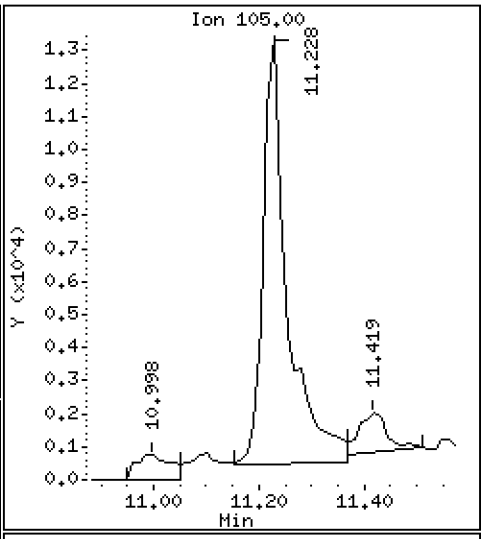
Column phase: ZB-5msi

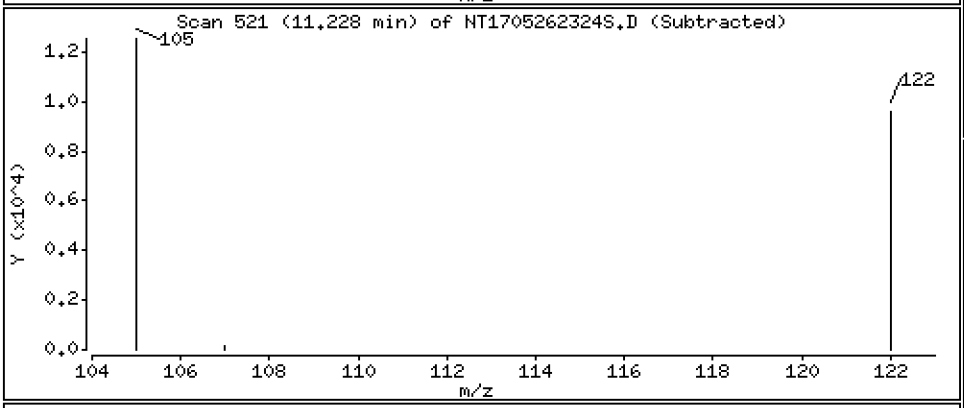
Column diameter: 0.25

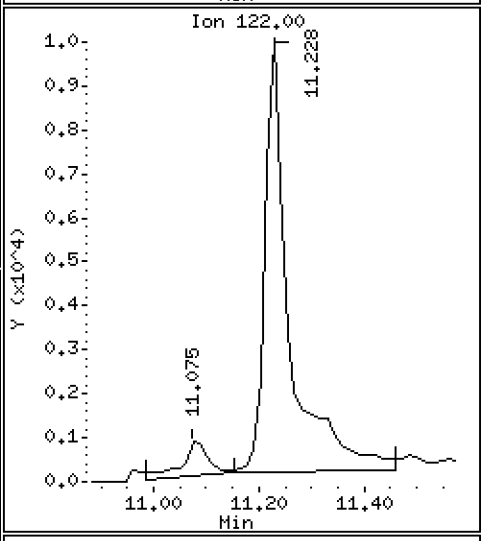
24 Benzoic acid

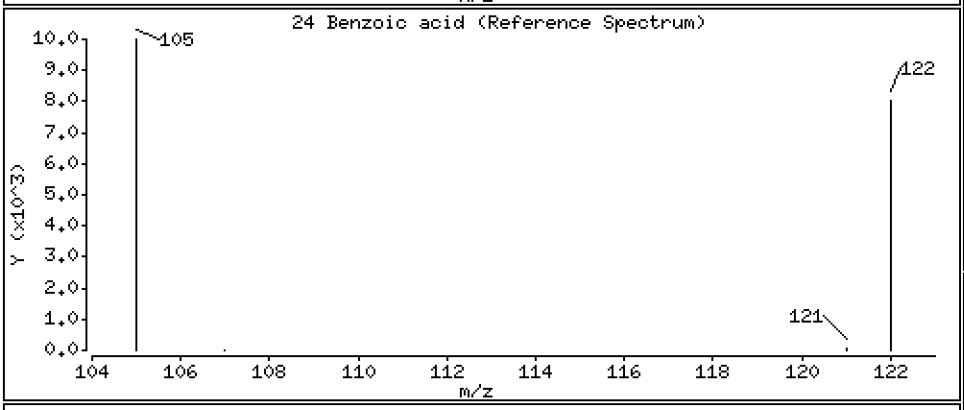
Concentration: 0.6439 ug/mL

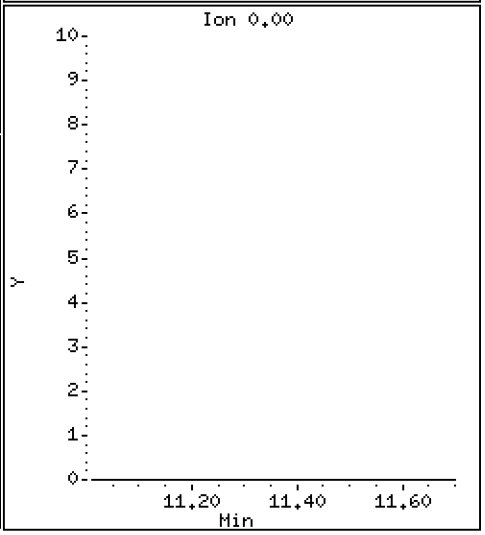


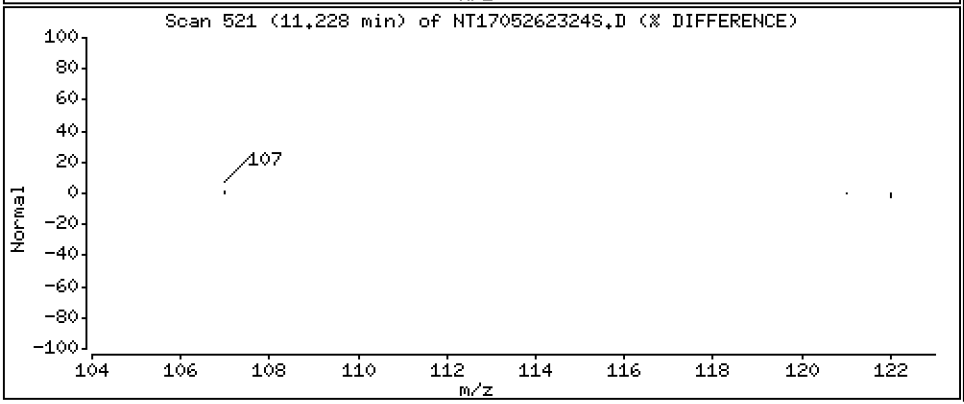












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Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

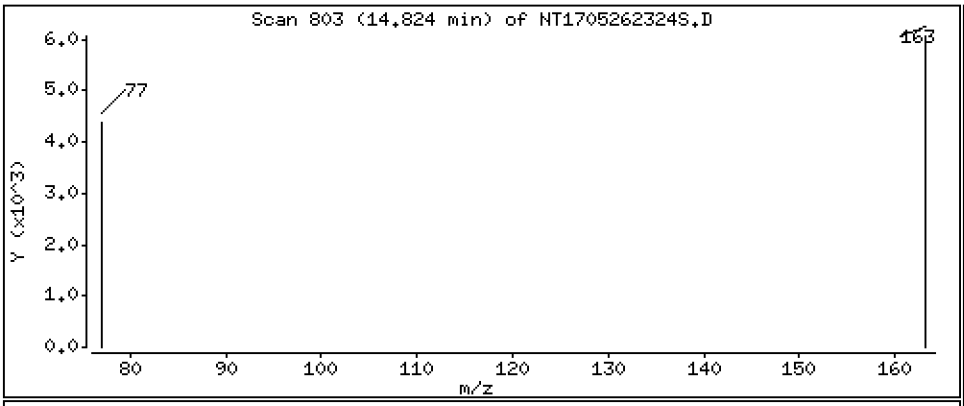
Operator: VTS

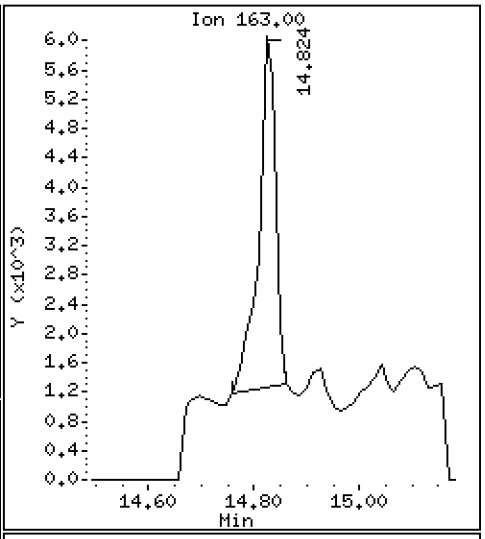
Column phase: ZB-5msi

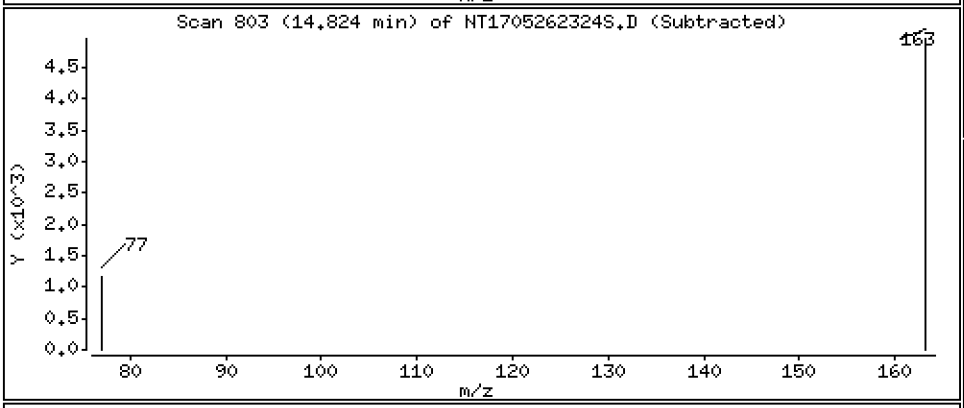
Column diameter: 0.25

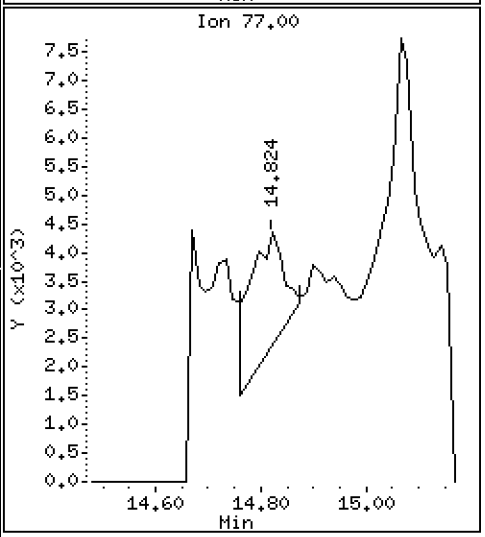
39 Dimethylphthalate

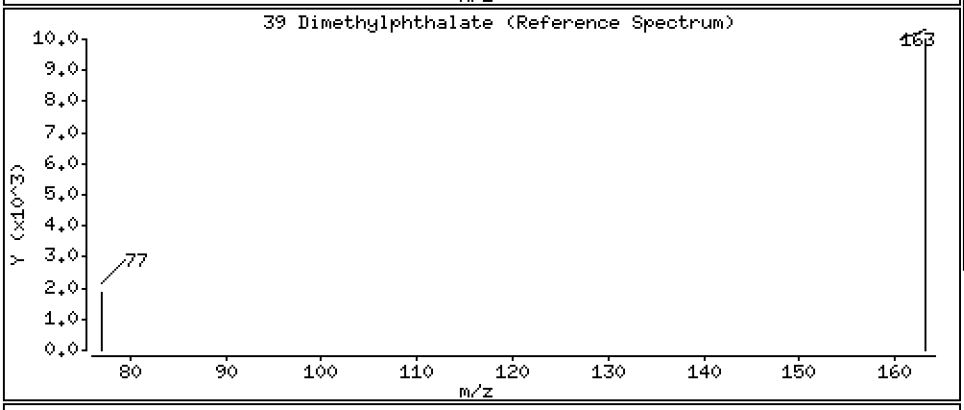
Concentration: 0.05163 ug/mL

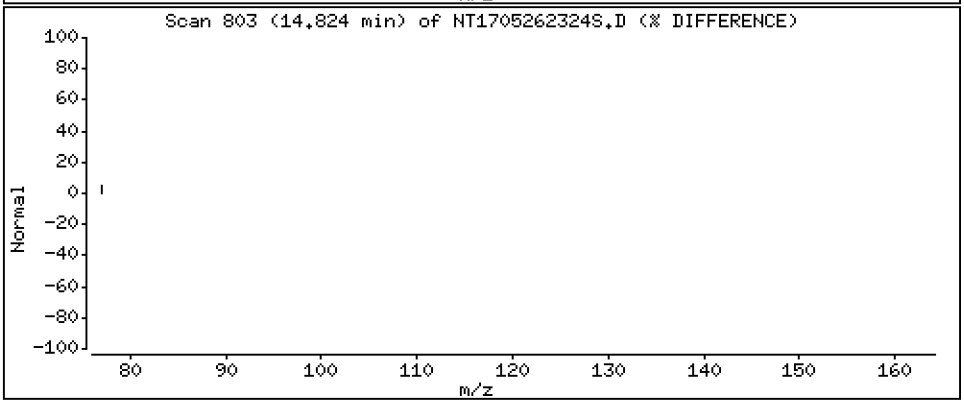












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262324S.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

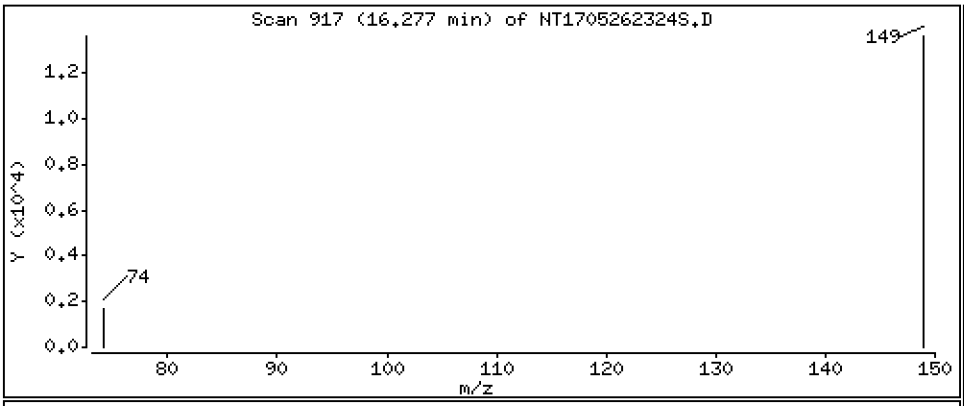
Operator: VTS

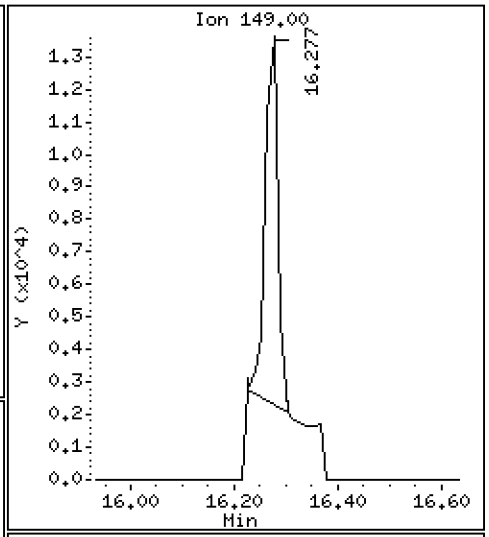
Column phase: ZB-5msi

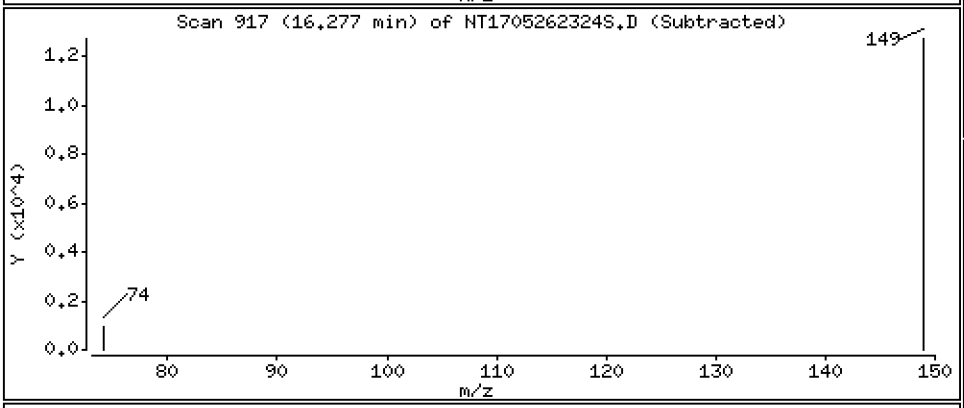
Column diameter: 0.25

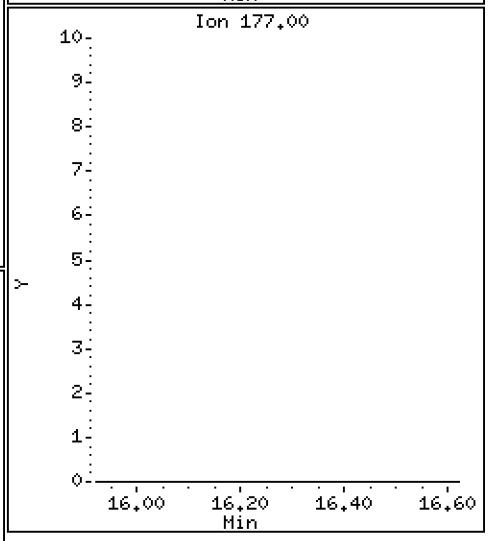
50 Diethylphthalate

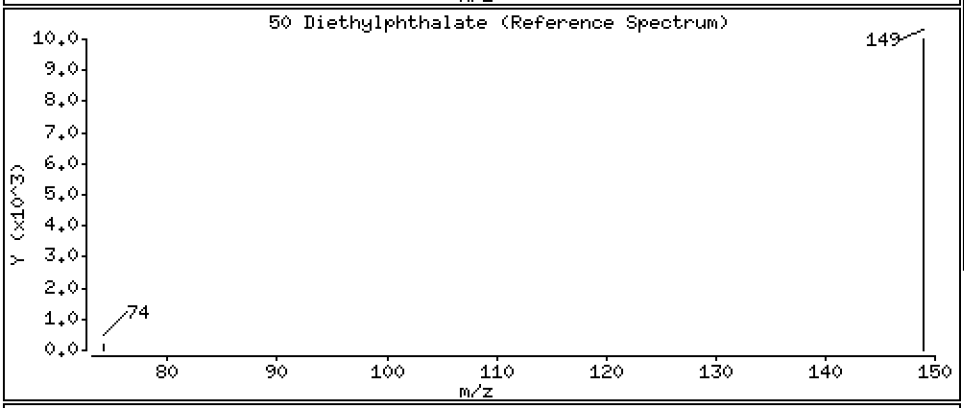
Concentration: 0.1041 ug/mL

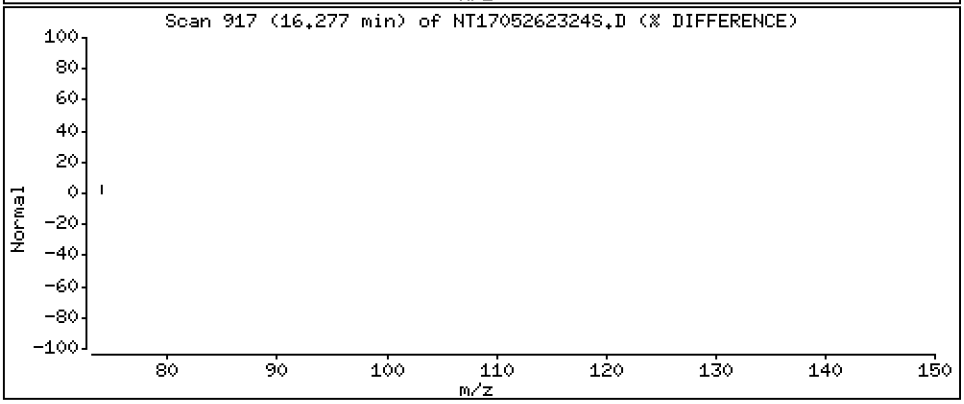












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262324S.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

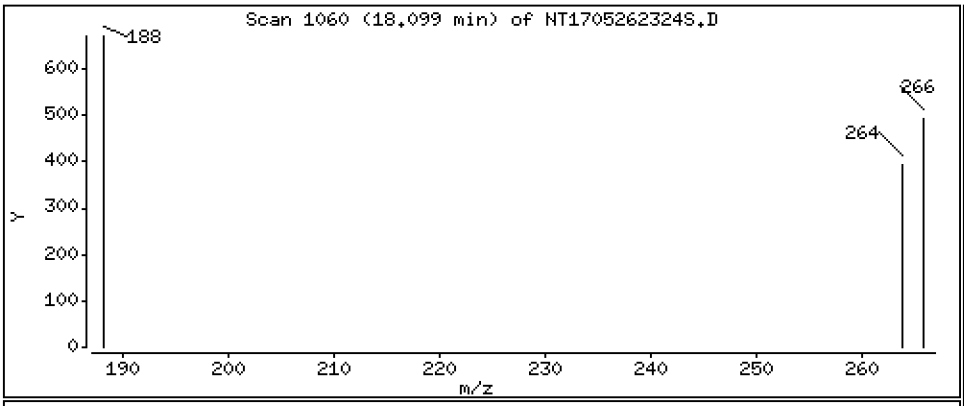
Operator: VTS

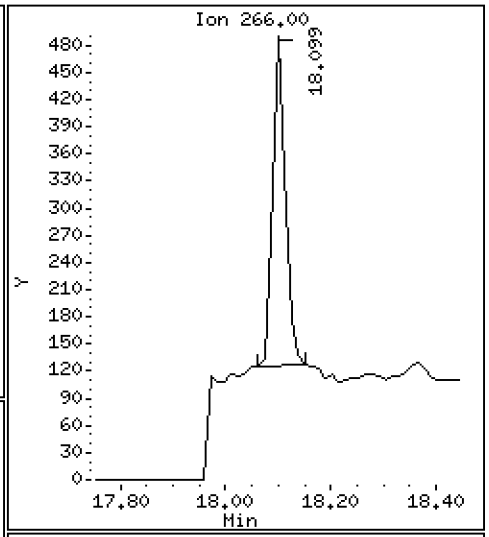
Column phase: ZB-5msi

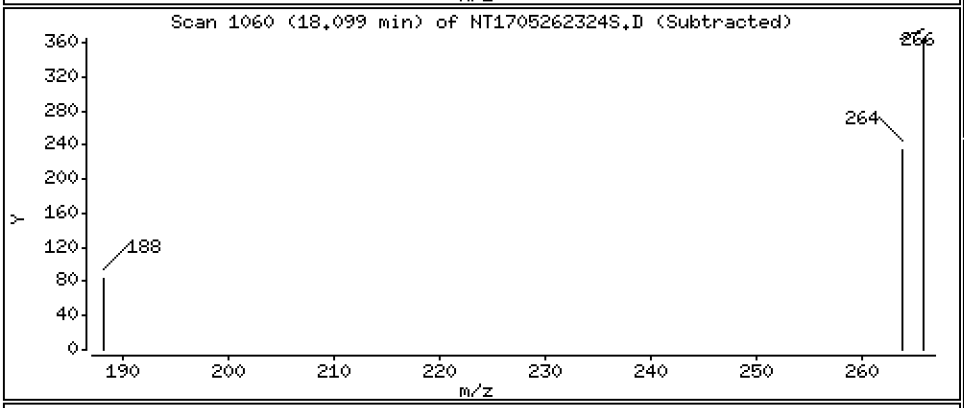
Column diameter: 0.25

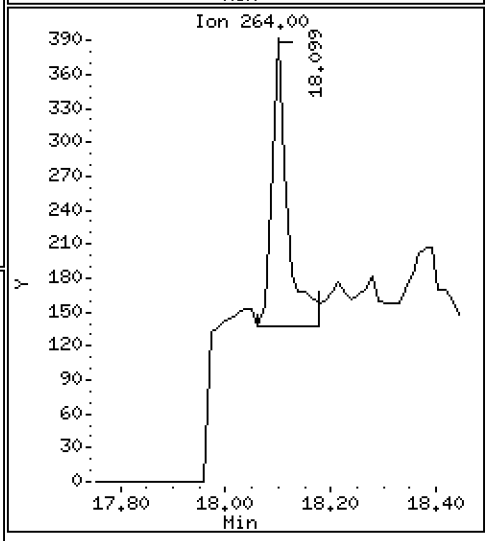
58 Pentachlorophenol

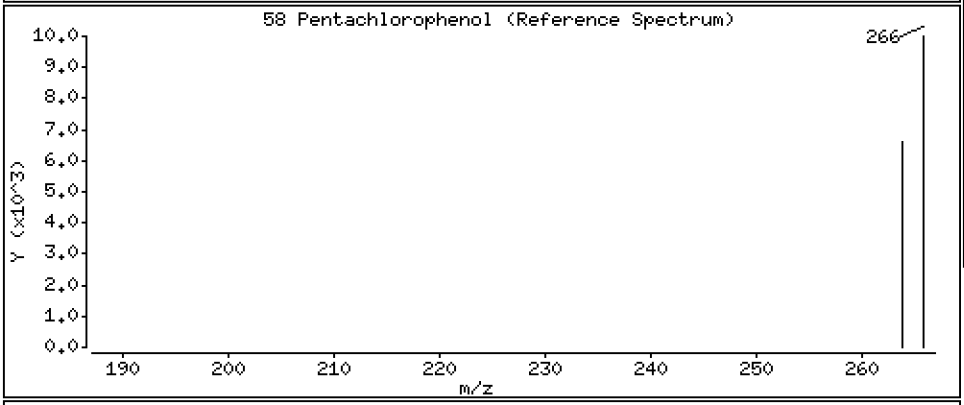
Concentration: 0.02825 ug/mL

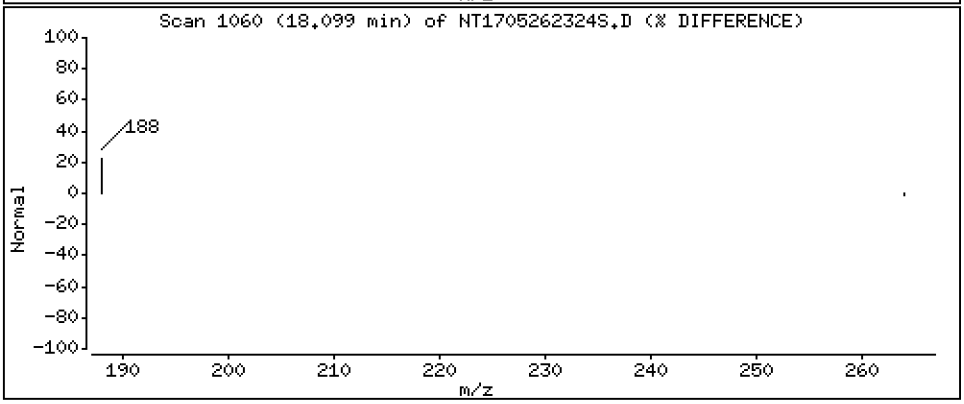












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262324S.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

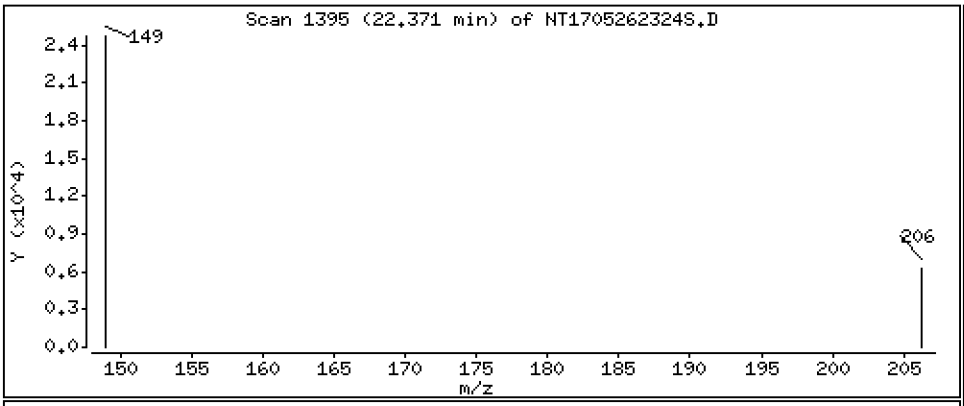
Operator: VTS

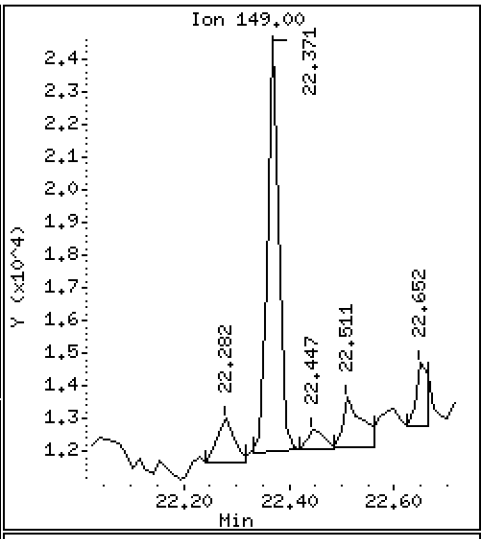
Column phase: ZB-5msi

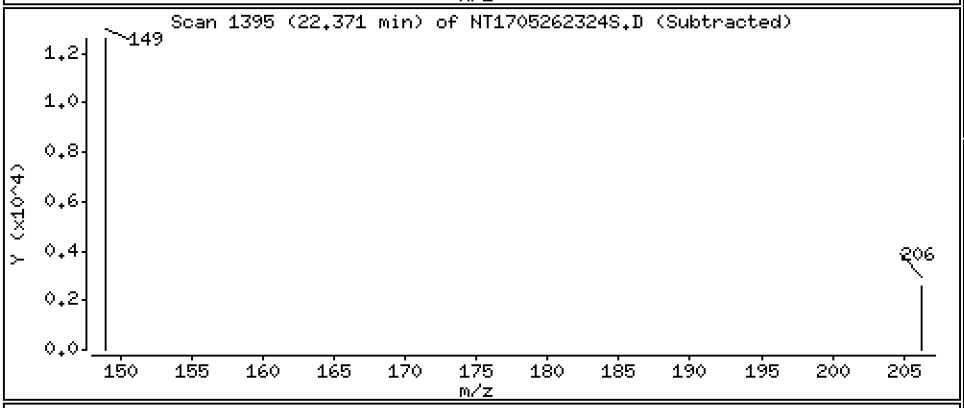
Column diameter: 0.25

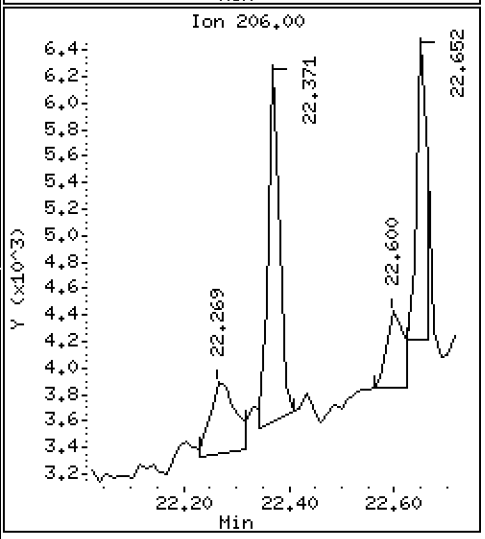
67 Butylbenzylphthalate

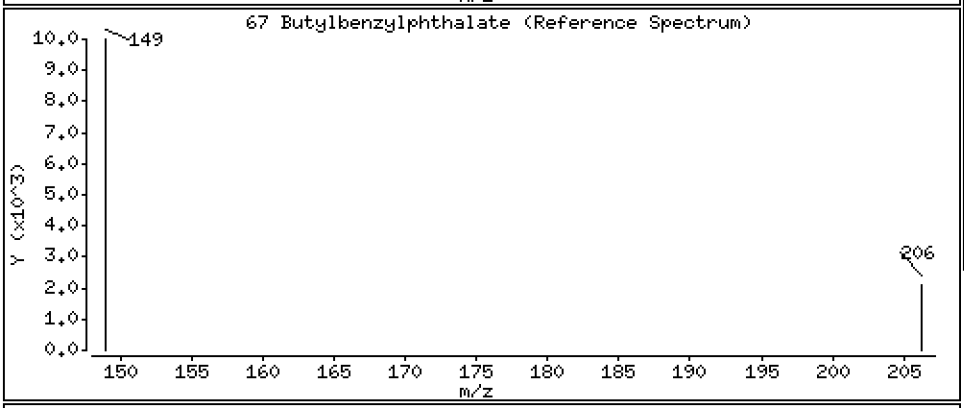
Concentration: 0.1310 ug/mL

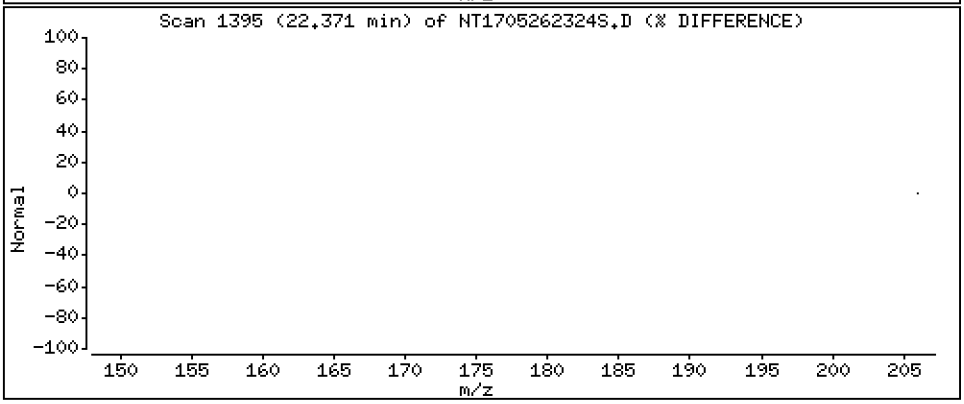












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262324S.D

Date : 27-MAY-2023 03:02

Client ID:

Instrument: nt17.i

Sample Info: 23D0396-03

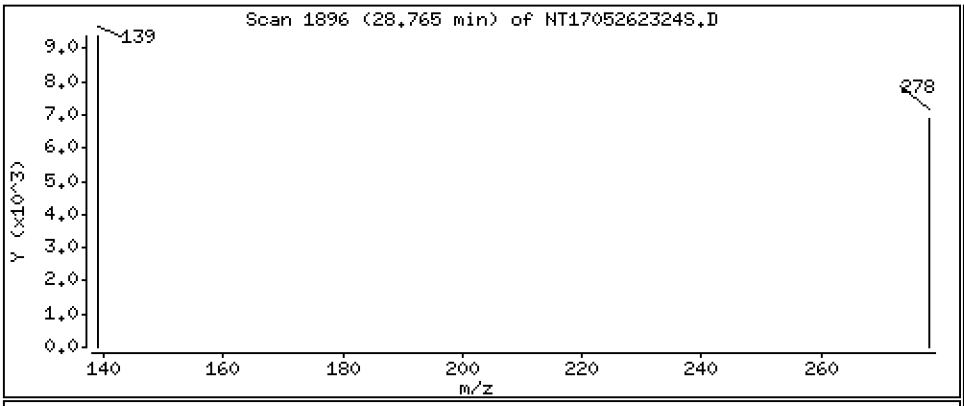
Operator: VTS

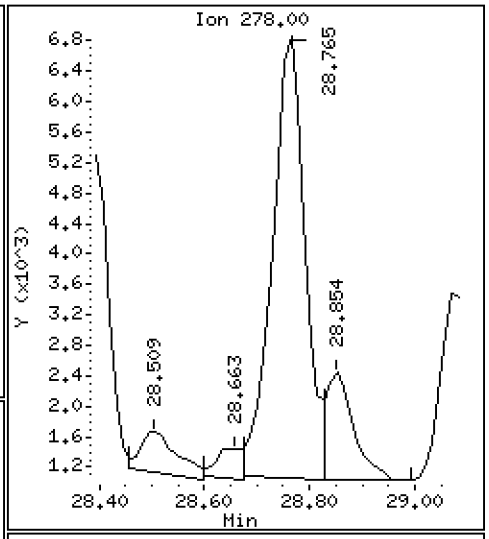
Column phase: ZB-5msi

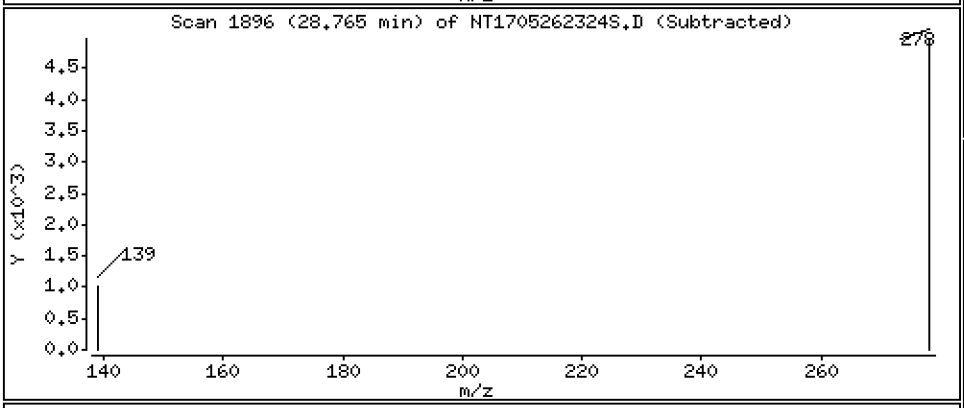
Column diameter: 0.25

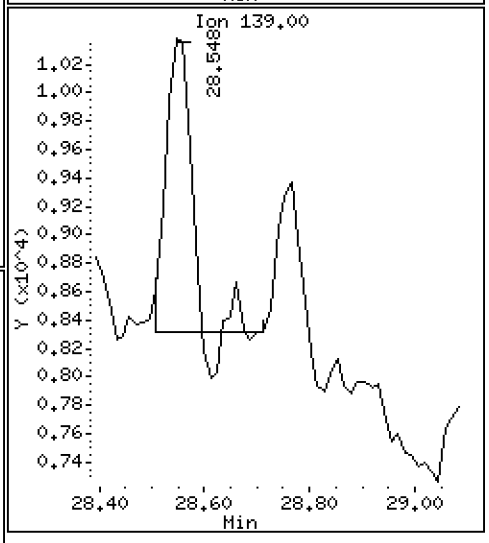
79 Dibenzo(a,h)anthracene

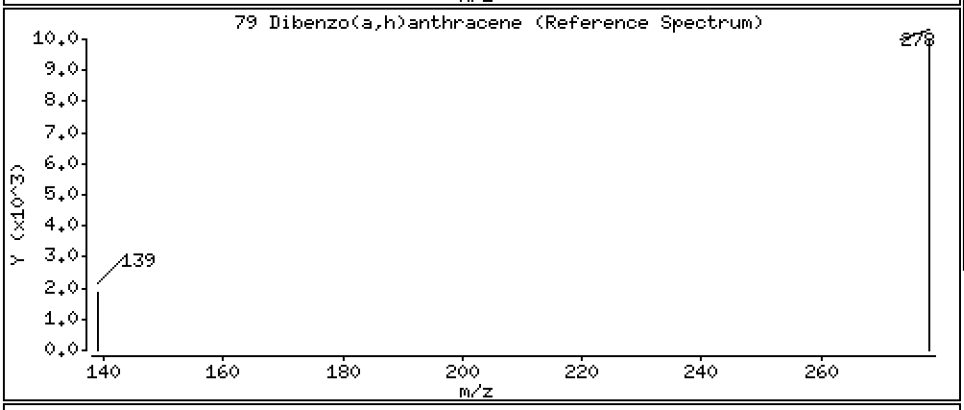
Concentration: 0.1767 ug/mL

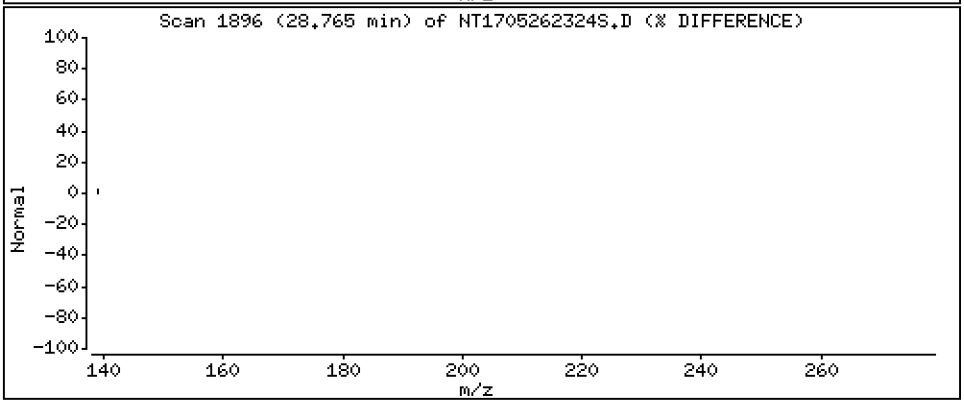












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262324S.D
Lab Smp Id: 23D0396-03
Inj Date : 27-MAY-2023 03:02
Operator : VTS Inst ID: nt17.i
Smp Info : 23D0396-03
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 07-Jun-2023 07:26 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 21
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.132	7.081	(0.769)	510281	5.40009	5.400(R)
	3 Phenol	94	8.687	8.674	(0.937)	24970	0.17734	0.1773
	7 1,3-Dichlorobenzene	146	Compound Not Detected.					
*	8 1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	312420	4.00000	
	9 1,4-Dichlorobenzene	146	9.298	9.299	(1.003)	2282	0.01856	0.01856
	11 Benzyl alcohol	79	9.554	9.554	(1.030)	52101	0.64939	0.6494
	12 1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	603	0.00500	0.005003
	13 2-Methylphenol	108	9.784	9.771	(1.055)	3710	0.03802	0.03802
	15 4-Methylphenol	108	10.052	10.040	(1.084)	16563	0.16797	0.1680
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	11.087	11.062	(0.945)	2445	0.02363	0.02363
	24 Benzoic acid	105	11.227	11.228	(0.957)	41495	0.64387	0.6439
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.738	11.738	(1.000)	1075428	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.824	14.837	(0.967)	10616	0.05163	0.05163(M)
*	42 Acenaphthene-d10	162	15.334	15.334	(1.000)	559877	4.00000	
	50 Diethylphthalate	149	16.277	16.277	(1.062)	19442	0.10413	0.1041(M)
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.098	18.098	(0.986)	605	0.02825	0.02825(M)
*	59 Phenanthrene-d10	188	18.353	18.353	(1.000)	796135	4.00000	
$	66 Terphenyl-d14	244	21.465	21.452	(0.919)	472932	3.56050	3.561(R)
	67 Butylbenzylphthalate	149	22.370	22.370	(0.957)	18913	0.13103	0.1310
*	69 Chrysene-d12	240	23.365	23.353	(1.000)	700013	4.00000	
*	77 Perylene-d12	264	26.032	26.006	(1.000)	516440	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.764	28.739	(1.105)	25740	0.17670	0.1767
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262324S.D
Lab Smp Id: 23D0396-03
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-MAY-2023
Calibration Time: 00:33
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375423	187712	750846	312420	-16.78
27 Naphthalene-d8	1173037	586519	2346074	1075428	-8.32
42 Acenaphthene-d10	638940	319470	1277880	559877	-12.37
59 Phenanthrene-d10	901788	450894	1803576	796135	-11.72
69 Chrysene-d12	767966	383983	1535932	700013	-8.85
77 Perylene-d12	642149	321075	1284298	516440	-19.58

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	-0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	-0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	-0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	-0.00
69 Chrysene-d12	23.35	22.85	23.85	23.37	0.05
77 Perylene-d12	26.01	25.51	26.51	26.03	0.10

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

REVIEW SUMMARY FOR FILE - NT1705262324S.D

Lab ID: 23D0396-03
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   27-MAY-2023 03:02

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.769	0.764	0.0055	2-Fluorophenol

RRT check based on Ccal File: SIM.b/NT1705262320S.D

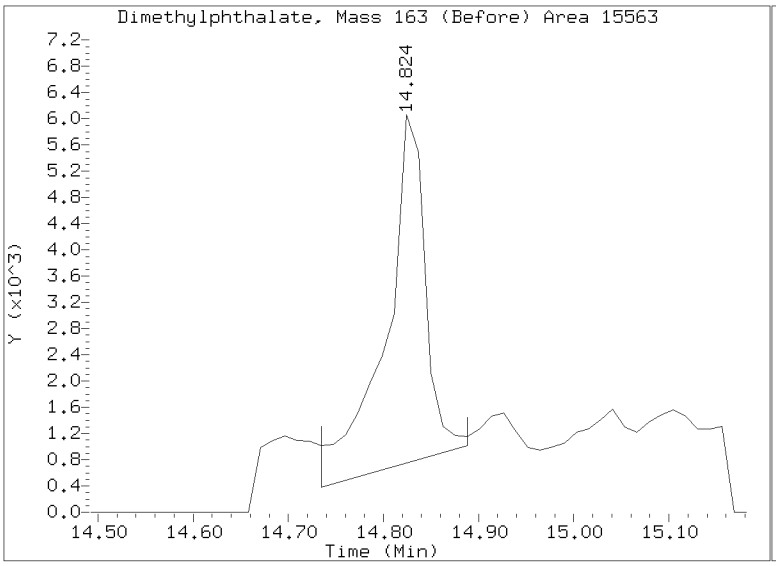
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

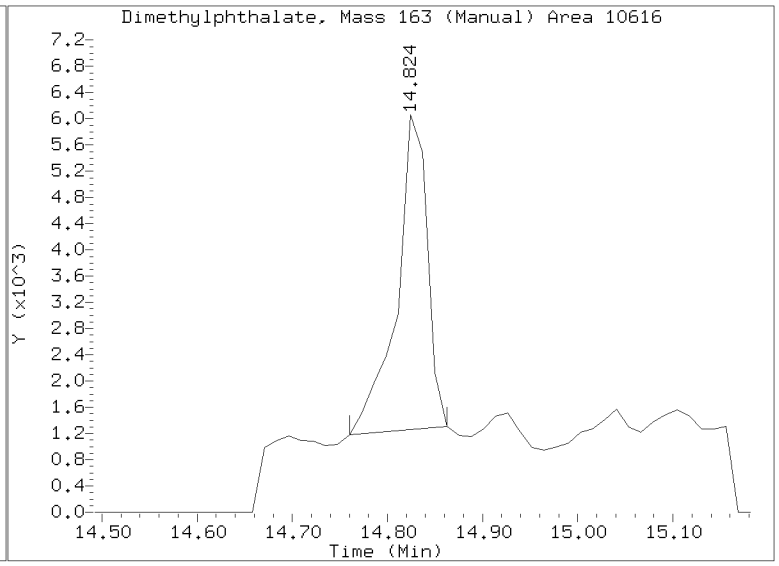
Exception: 1,2,4-Trichlorobenzene 0.0010

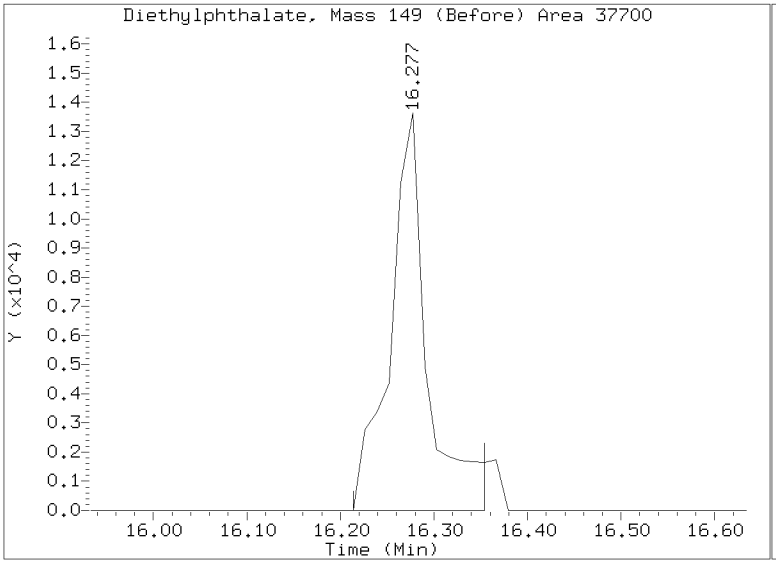
* Only compounds listed in the work order have been verified by the analyst *

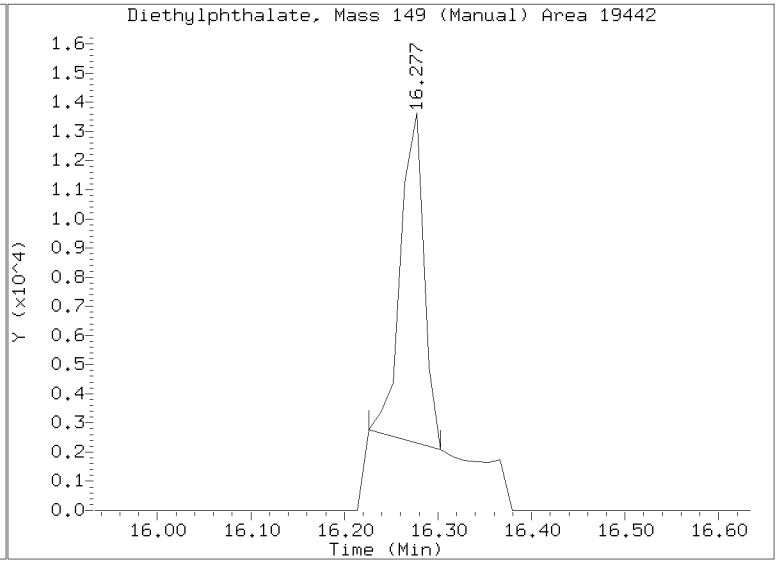
Quant Ion Manual Peak Adjustment Report

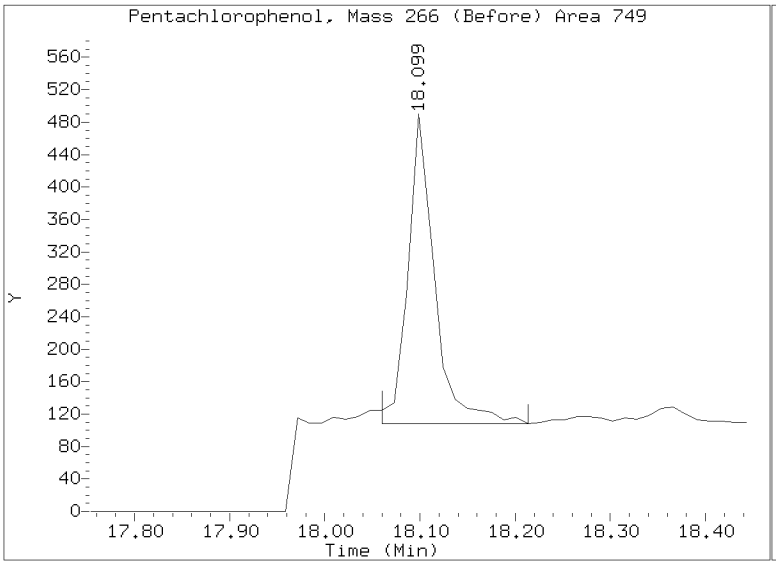
Datafile: //target/share/chem3/nt17.i/20230526.b/SIM.b/NT1705262324S.D
Injection Date: 27-MAY-2023 03:02
Lab ID:23D0396-03 Client ID:
Report Date: 06/07/2023 07:57

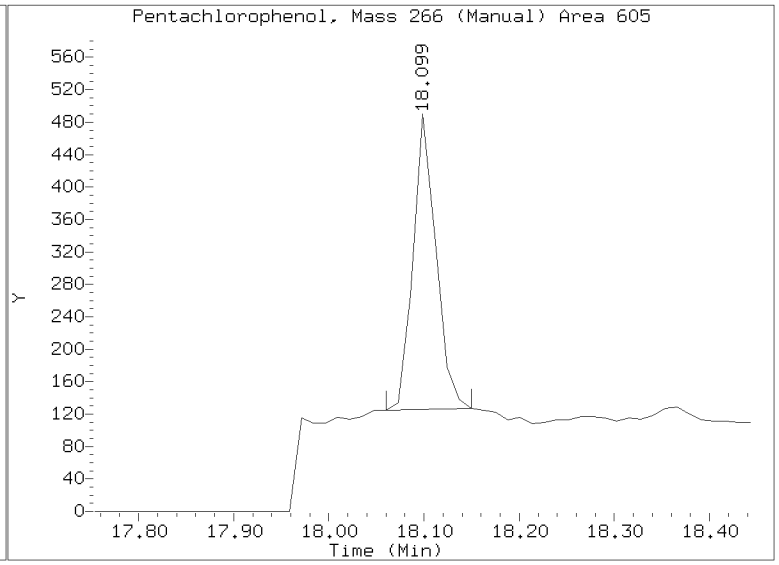












PREPARATION BATCH SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0607 Batch Matrix: Solid
Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	NT1705262323S.D	04/24/23 16:38	
LDW23-SS1802	23D0396-03	NT1705262324S.D	04/24/23 16:38	
Blank	BLD0607-BLK2	NT1705262306S.D	04/24/23 16:38	
Blank	BLD0607-BLK4	NT1705262327S.D	04/24/23 16:38	sim rerun
LCS	BLD0607-BS2	NT1705262307S.D	04/24/23 16:38	
LCS Dup	BLD0607-BSD2	NT1705262308S.D	04/24/23 16:38	
Reference	BLD0607-SRM2	NT1705262311S.D	04/24/23 16:38	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0607

Prepared using: EPA 3546 (Microwave)

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

Matrix: Solid **Date Prepared:** 04/24/23 **Balance ID:** B146462614 **Set Up By:** CTD 4/24/23

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)
23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

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

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

Lab Number & Container	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23D0394-01 A	46.4	(21.57) 21.57	(1:1)	1mL	1 ____	0.5 ____	
23D0394-02 A	76.2	(13.13) 13.23	(1:1)	1mL	1 ____	0.5 ____	
23D0394-04 A	76.8	(13.03) 13.06	(1:1)	1mL	1 ____	0.5 ____	
23D0394-06 A	90.3	(11.07) 11.08	(1:1)	1mL	1 ____	0.5 ____	
23D0394-08 A	78.3	(12.77) 12.78	(1:1)	1mL	1 ____	0.5 ____	
23D0394-11 A	77.4	(12.92) 12.97	(1:1)	1mL	1 ____	0.5 ____	
23D0394-12 A	80.4	(12.44) 12.46	(1:1)	1mL	1 ____	0.5 ____	
23D0396-01 A	43.0	(23.25) 23.25	(1:1)	1mL	1 ____	0.5 ____	
23D0396-03 A	43.9	(22.79) 22.79	(1:1)	1mL	1 ____	0.5 ____	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 10 (Wet) Actual	(REQ) GPC C/U (1:1) 1 2 3	Water Wash 1mL	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLD0607-BLK1	100.0	(10.00) 10.00	(1:1)	1mL	1 ____	0.5 ____	Use 5g Neutral Sodium Sulfate for Blanks
BLD0607-BS1	100.0	(10.00) 10.00	(1:1)	1mL	1 ____	0.5 ____	Use 5g Neutral Sodium Sulfate for Blanks
BLD0607-BSD1	100.0	(10.00) 10.00	(1:1)	1mL	1 ____	0.5 ____	Use 5g Neutral Sodium Sulfate for Blanks
BLD0607-MS1	76.8	(13.03) 13.03	(1:1)	1mL	1 ____	0.5 ____	Use 23D0394-04
BLD0607-MSD1	76.8	(13.03) 13.03	(1:1)	1mL	1 ____	0.5 ____	Use 23D0394-04
BLD0607-SRM1	100.0	~~(10.00)~~ (1.00) 1.00 +1g DI WATER	(1:1)	1mL	1 ____	0.5 ____	Use K003477

04/24/23
Client ID Verified By — Date

NRS 5/15/23
Preparation Reviewed By — Date

04/24/23 16:38
Extraction Date and Time

Printed: 4/21/2023 12:03:42PM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0607

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)
23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

Prep Steps	Reagents Used	
Microwave GT 1 2 3 4/25/23 Analyst/Date	**Station/Reagent**	**Standard ID**
	Microwave **Analyst:** GT **Date:** 4/25/23	
	Anhydrous Sodium Sulfate	L004875
	1:1 Methylene Chloride/Acetone	L004178
	Methylene Chloride	K004941
	Pre-Deactivated Glass Wool	L001924
Pre-GPC KD 100°C **Exchange to Hexane** **(add 10 mL to KD)** 0 2 4 5 6 LJ 5/3/23 Analyst/Date	**Pre GPC KD** **Analyst:** LJ **Date:** 5/3/23	
	~~Pre-Deactivated Glass Wool~~	
	~~Anhydrous Sodium Sulfate~~ SH 5/11/23	
TurboVap **Pre GPC** SH 1 2 3 4 5 5/11/23 Analyst/Date	Methylene Chloride	L004175
	Hexane	L003500
	GPC Filter Prep **Analyst:** MRS **Date:** 5/10/23	
Post GPC KD 80-85°C 0 2 4 5 6 VR 5/24/23 Analyst/Date	Methylene Chloride	L004175
	GPC Filter	L001799
	GPC **Analyst:** SH **Date:** 5/11/23	
TurboVap 1 2 3 4 5 MRS 5/25/23 Analyst/Date	Methylene Chloride	K004941
	GPC Calibration File	CLB0132~GPC2
	Post GPC KD **Analyst:** VR **Date:** 5/24/23	
Water Wash MRS 5/15/23 Analyst/Date	Methylene Chloride	K004941
	Vialing **Analyst:** MRS **Date:** 5/25/23	
	Methylene Chloride	K004941

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 100/150µg/mL	A L001153 Exp Date: 8/12023	50µL	GT	
Full List Spike (Freezer) 100µg/mL	7 L001812 (V) Exp L004781 Date: 8/4/2023	50µL	GT	
Base Spike 200µg/mL	56 L001812 (V) Exp L004778 Date: 8/24/2023	50µL	GT	
Acid Spike 100/200µg/mL	38 L001812 (V) Exp L004779 Date: 8/24/2023	50µL	GT	

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0607

Prepared using: EPA 3546 (Microwave)

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

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

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

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Organic Extractions Laboratory
Analyst Notes

Extraction Parameter: SVOA Extraction Batch: BL0607

Total Solids Batch: BLD0431 Work Order(s): 23D0394

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 01-13	CR 4/18/23
[X] Standing Water Decanted (Not shared)= 01-05, 07-13	CR 4/18/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 01-13	CR 4/18/23
[ ] Other (Details)=	
Aqueous:	
[-] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[ ] Other Notes/Comments= (Note problems, concerns, corrective actions).	
[X] Share Samples Y / (N)	CR 4/18/23
[X] Multiple Jars Y / (N)	CR 4/18/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

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Organic Extractions Laboratory
Analyst Notes

Extraction Parameter: GVOA Extraction Batch BLD0697

Total Solids Batch: BLD0432 Work Order(s): 23D0396

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-04	CR 4/18/23
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-04	CR 4/18/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 4/18/23
☒ Multiple Jars Y / (N)	CR 4/18/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0214	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8270E-SIM

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	NT1705262323S.D	05/25/2023	
Reference	BLD0607-SRM2	NT1705262311S.D	05/25/2023	
LDW23-SS1802	23D0396-03	NT1705262324S.D	05/25/2023	
Blank	BLD0607-BLK2	NT1705262306S.D	05/25/2023	
LCS Dup	BLD0607-BSD2	NT1705262308S.D	05/25/2023	
LCS	BLD0607-BS2	NT1705262307S.D	05/25/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLE0214

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLC0092-GPC1** **Printed: 5/25/2023 3:38:04PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23D0394-01	A	LDW23-SS1098	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-01	A	LDW23-SS1098	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-02	A	LDW23-SS1071	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-02	A	LDW23-SS1071	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-04	A	LDW23-SS1078	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-04	A	LDW23-SS1078	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-06	A	LDW23-SS1807	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-06	A	LDW23-SS1807	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-08	A	LDW23-SS1055	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-08	A	LDW23-SS1055	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-11	A	LDW23-SS1034	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-11	A	LDW23-SS1034	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0394-12	A	LDW23-SS1806	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0394-12	A	LDW23-SS1806	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0396-01	A	LDW23-SS1801	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0396-01	A	LDW23-SS1801	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
23D0396-03	A	LDW23-SS1802	A 02	1	1	SVOC (20ug/kg solid or 0.2ug/L low H2	5/25/2023	NRB	
23D0396-03	A	LDW23-SS1802	A 03	1	1	8270E-SIM Dual Scan SVOC	5/25/2023	NRB	
BLD0607-BLK1	-	Blank	-	1	1	-	5/25/2023	NRB	
BLD0607-BLK2	-	Blank	-	1	1	-	5/25/2023	NRB	
BLD0607-BS1	-	LCS	-	1	1	-	5/25/2023	NRB	
BLD0607-BS2	-	LCS	-	1	1	-	5/25/2023	NRB	

Analytical Resources, LLC
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CLEANUP BENCH SHEET

CLE0214

Matrix: Solid **Cleanup using: Organics - EPA 3640A GPC Cleanup 1:1** **Check Standard: CLC0092-GPC1** **Printed: 5/25/2023 3:38:04PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLD0607-BSD1	-	LCS Dup	-	1	1	-	5/25/2023	NRB	
BLD0607-BSD2	-	LCS Dup	-	1	1	-	5/25/2023	NRB	
BLD0607-MS1	-	Matrix Spike	-	1	1	-	5/25/2023	NRB	
BLD0607-MS2	-	Matrix Spike	-	1	1	-	5/25/2023	NRB	
BLD0607-MSD1	-	Matrix Spike Dup	-	1	1	-	5/25/2023	NRB	
BLD0607-MSD2	-	Matrix Spike Dup	-	1	1	-	5/25/2023	NRB	
BLD0607-SRM1	-	Reference	-	1	1	-	5/25/2023	NRB	
BLD0607-SRM2	-	Reference	-	1	1	-	5/25/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLD0607-BLK2	File ID:	NT1705262306S.D
Sampled:	N/A	Prepared:	04/24/23 16:38	Analyzed:	05/26/23 15:47
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLD0607	Sequence:	SLE0442	Calibration:	GE00070
Instrument:	NT17	Column:	ZB-5MS	Cleanups:	GPC

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	0.9	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	0.9	J	0.7	5.0
100-51-6	Benzyl Alcohol	1	27.0		2.5	20.0
65-85-0	Benzoic acid	1	100	U	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	507	67.6	27 - 120	
p-Terphenyl-d14	500.00	509	102	37 - 120	

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623065.D

Date : 26-MAY-2023 15:47

Client ID:

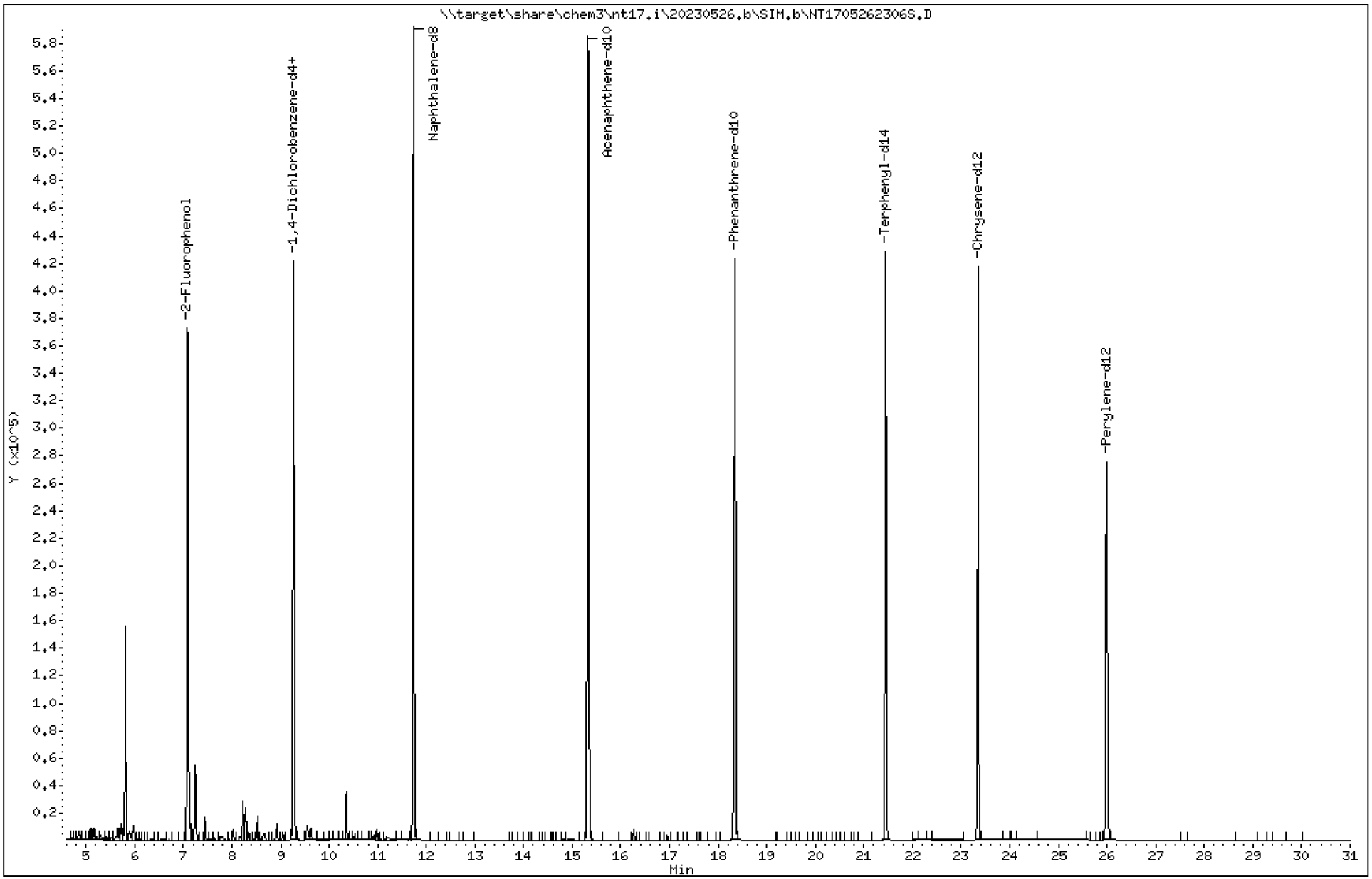
Sample Info: BLD0607-BLK2

Instrument: nt17.i

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

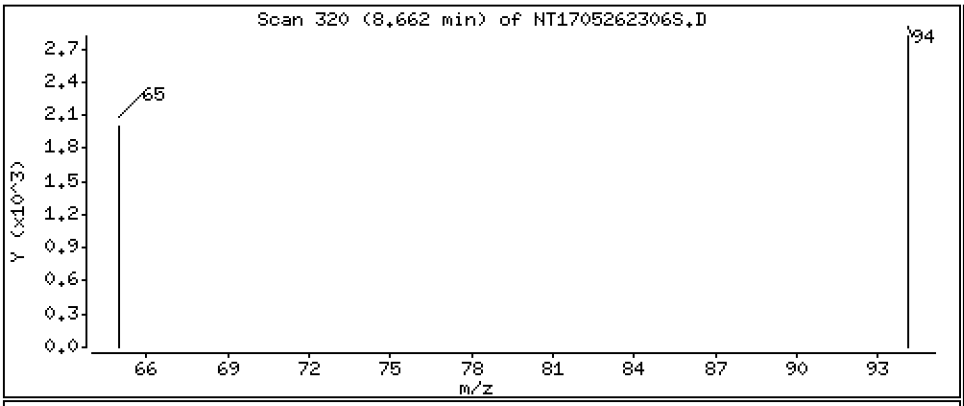
Operator: VTS

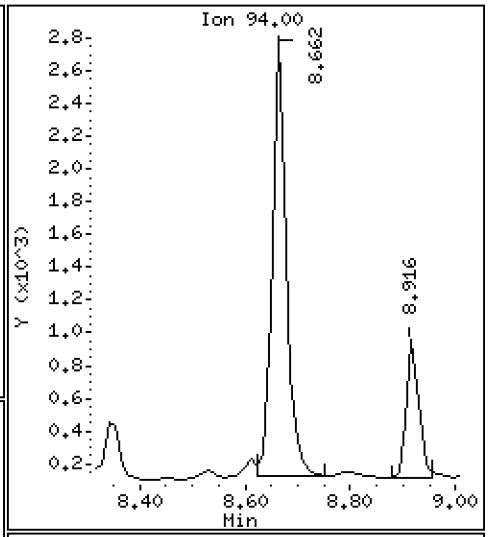
Column phase: ZB-5msi

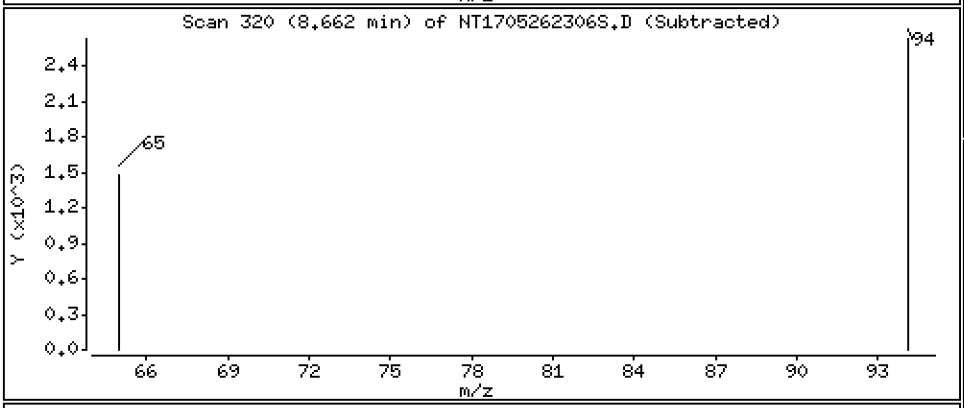
Column diameter: 0.25

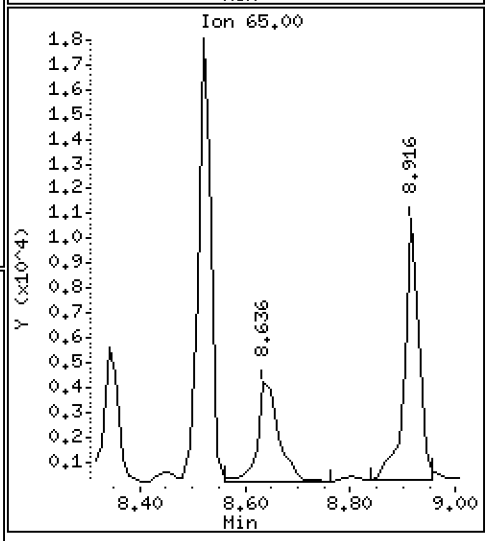
3 Phenol

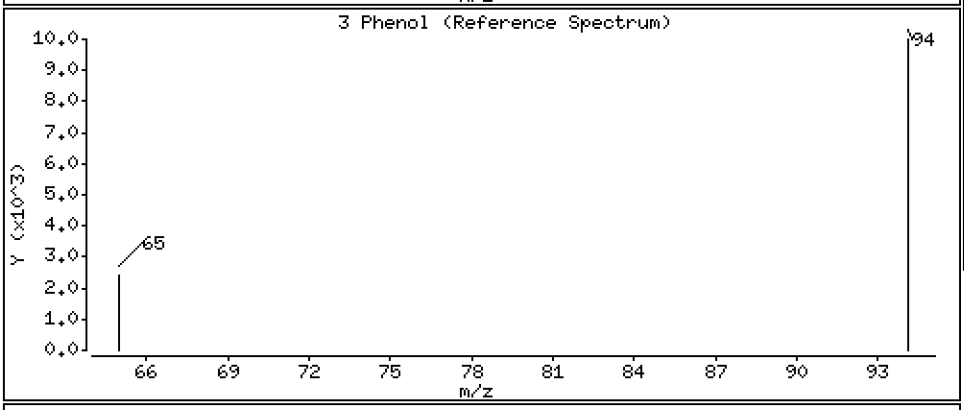
Concentration: 0.03985 ug/mL

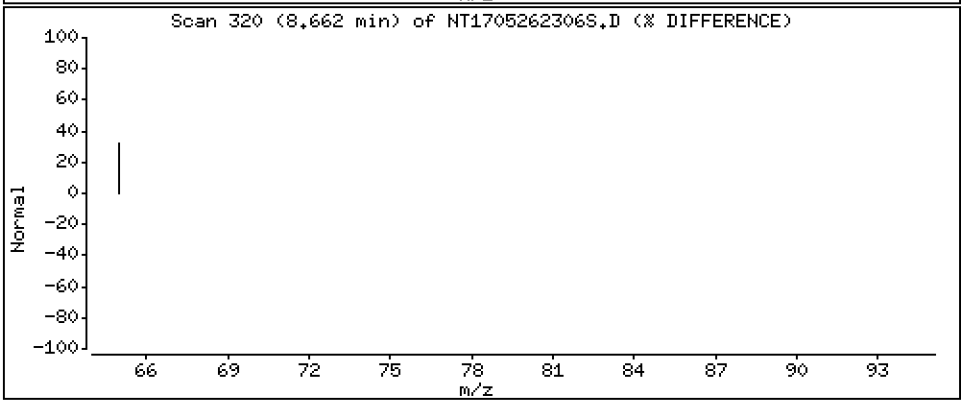












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262306S.D

Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

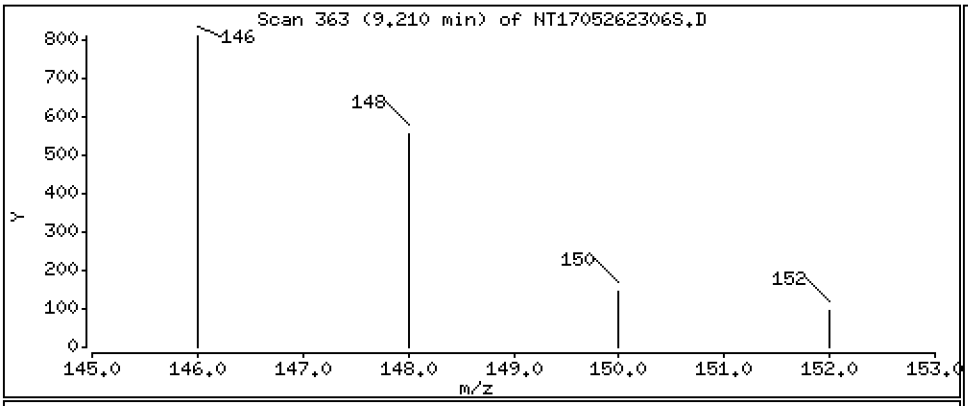
Operator: VTS

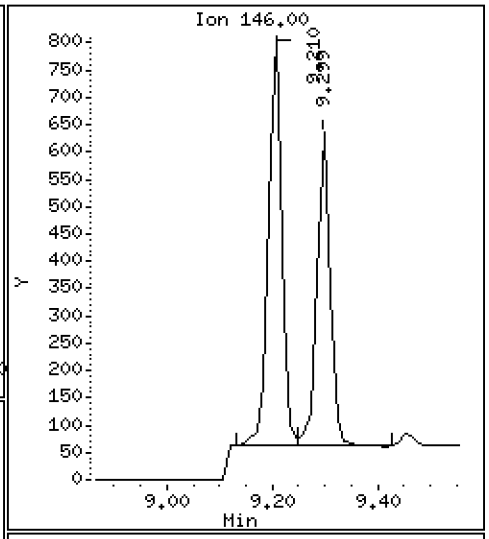
Column phase: ZB-5msi

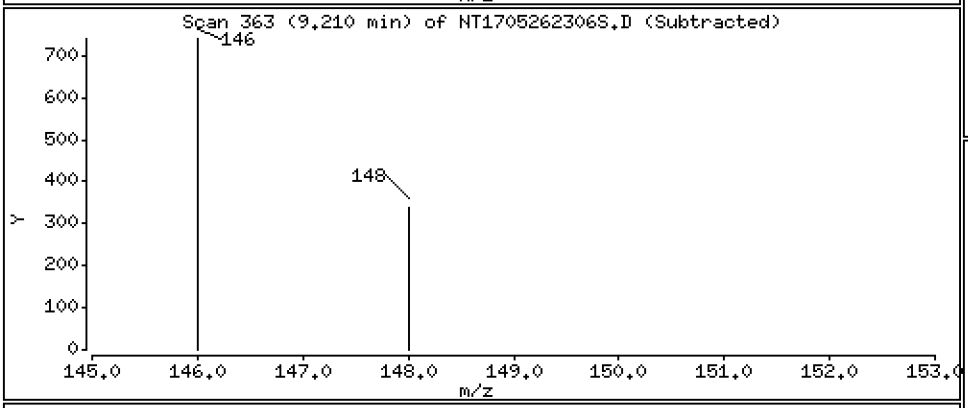
Column diameter: 0.25

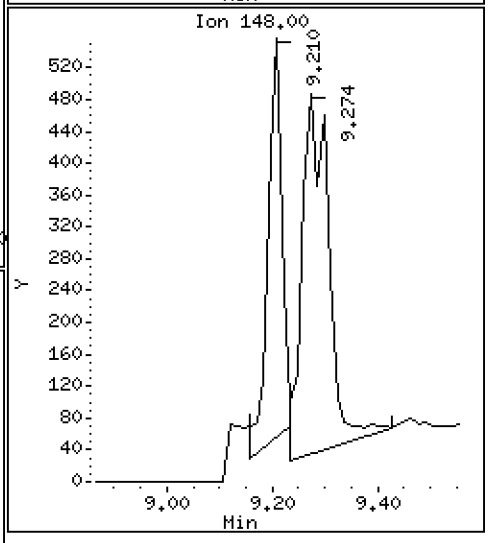
7 1,3-Dichlorobenzene

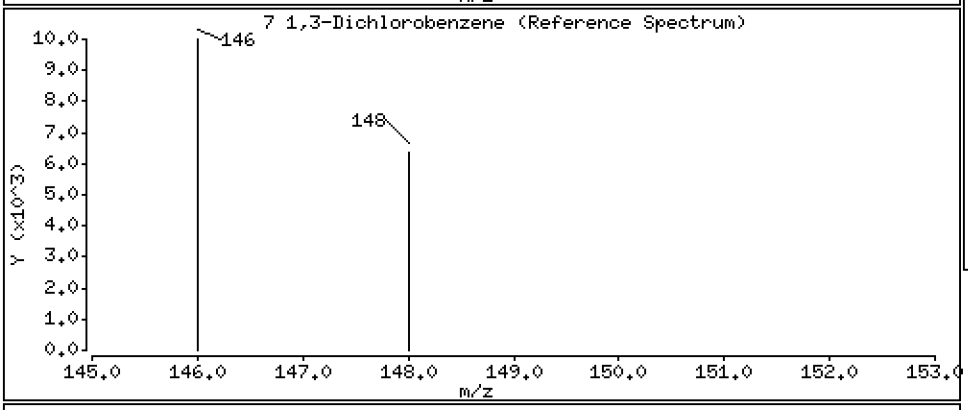
Concentration: 0.01158 ug/mL

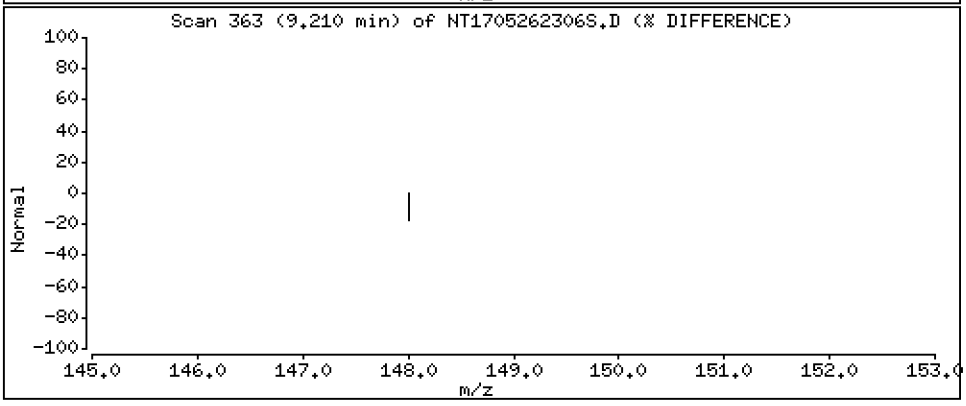












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262306S.D

Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

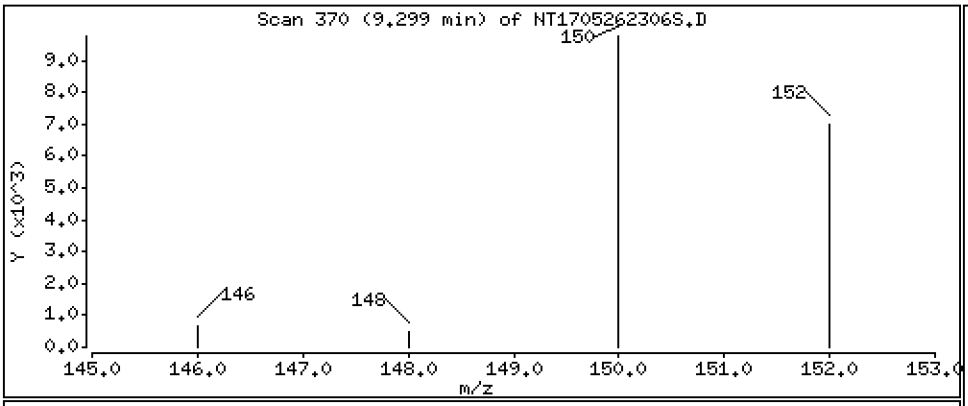
Operator: VTS

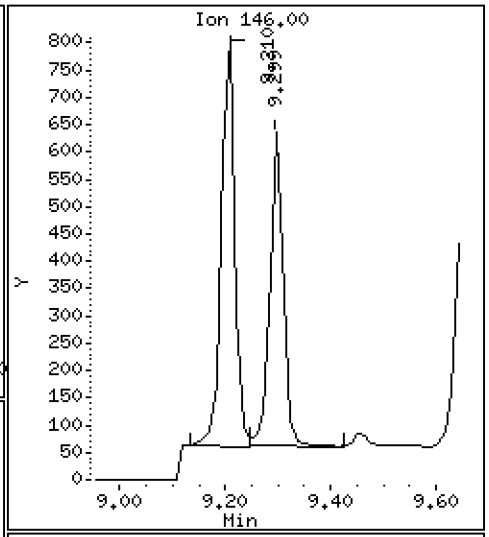
Column phase: ZB-5msi

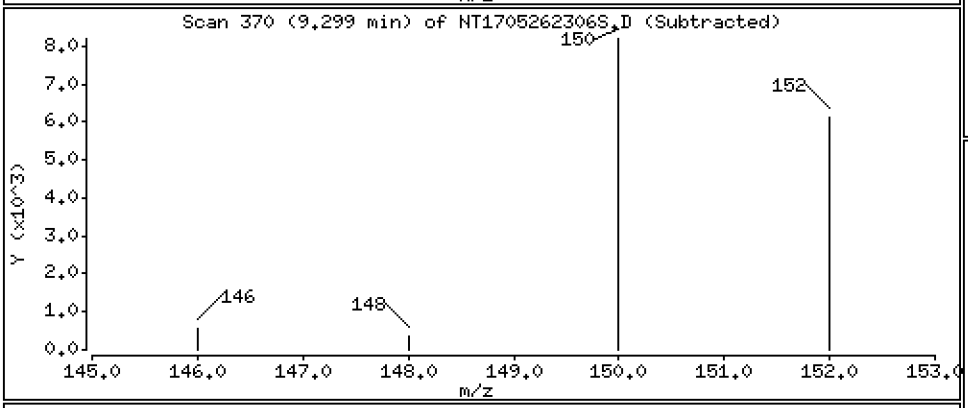
Column diameter: 0.25

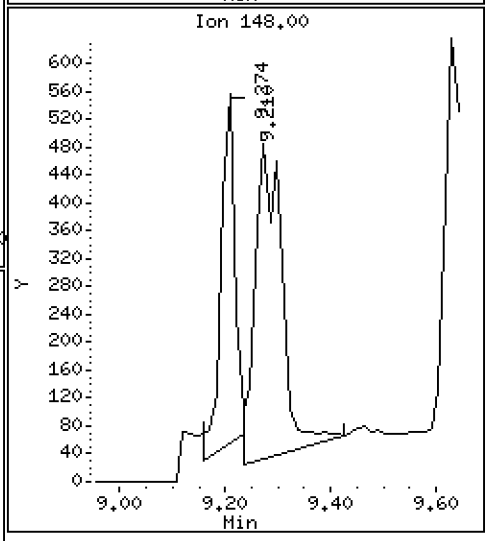
9 1,4-Dichlorobenzene

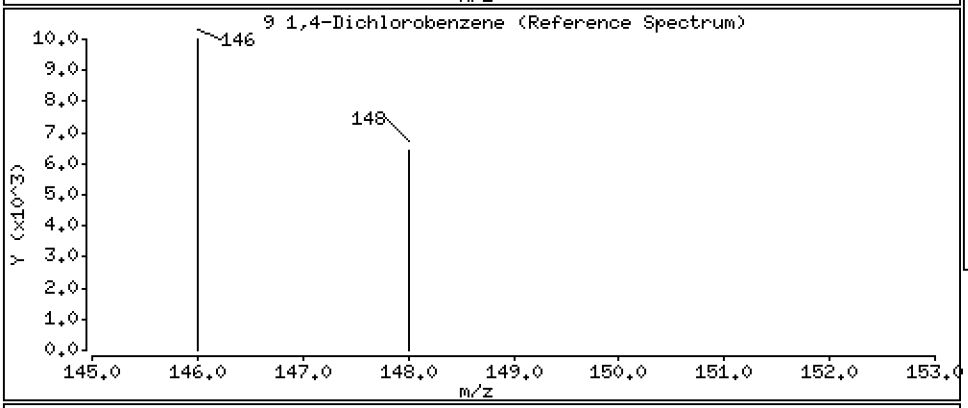
Concentration: 0.009274 ug/mL

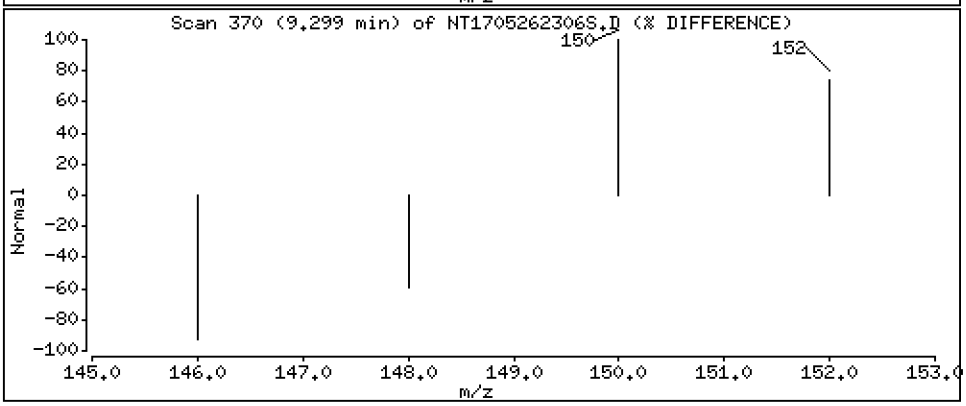












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262306S.D

Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

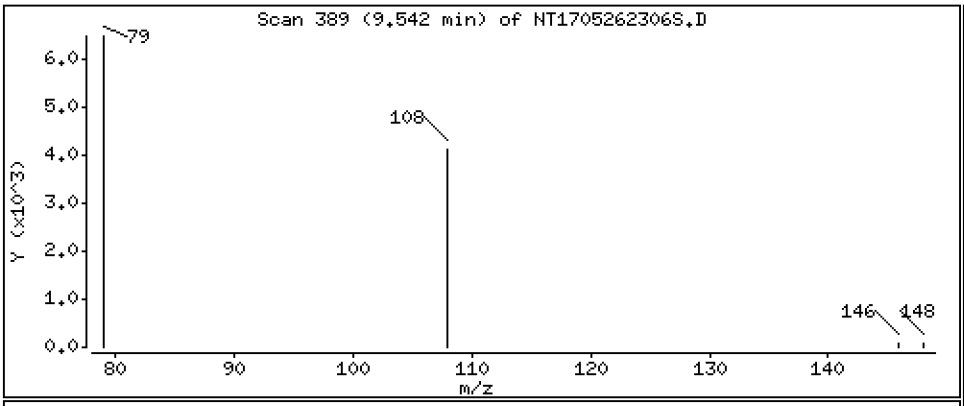
Operator: VTS

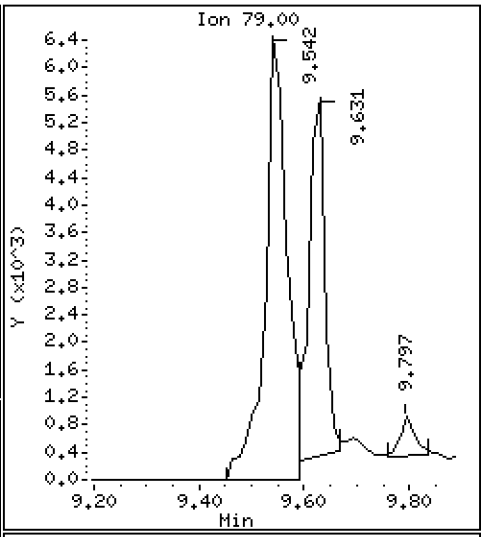
Column phase: ZB-5msi

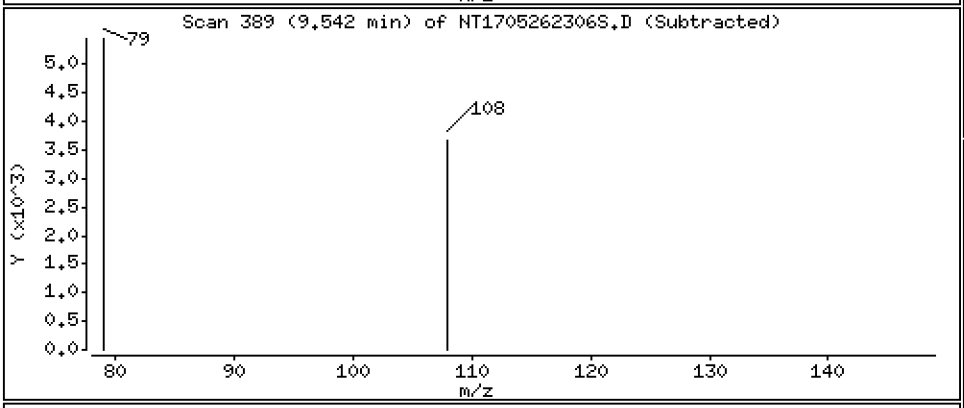
Column diameter: 0.25

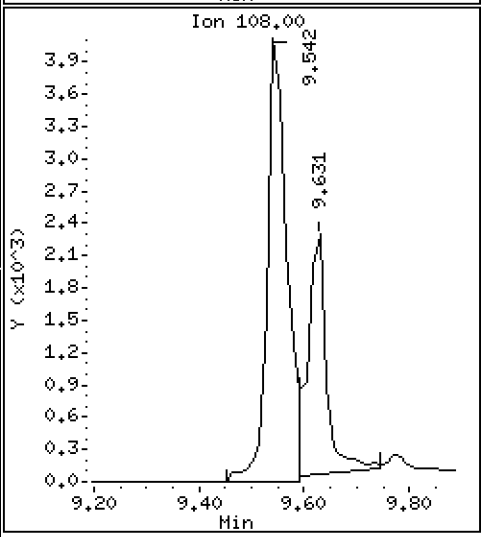
11 Benzyl alcohol

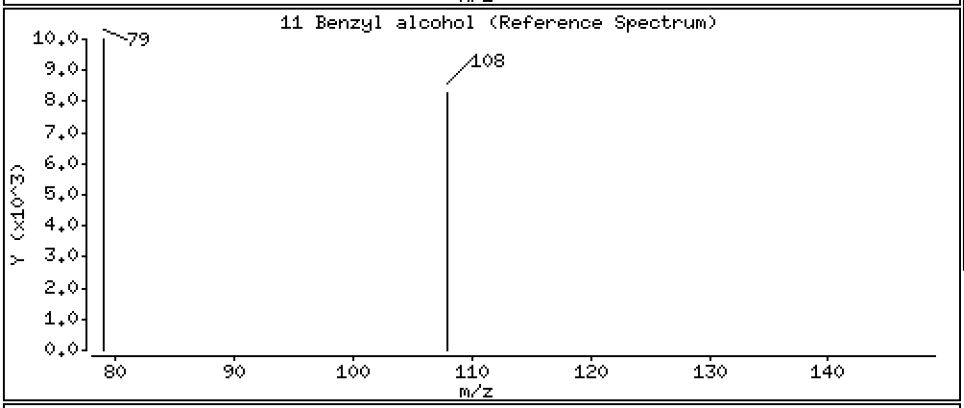
Concentration: 0.2701 ug/mL

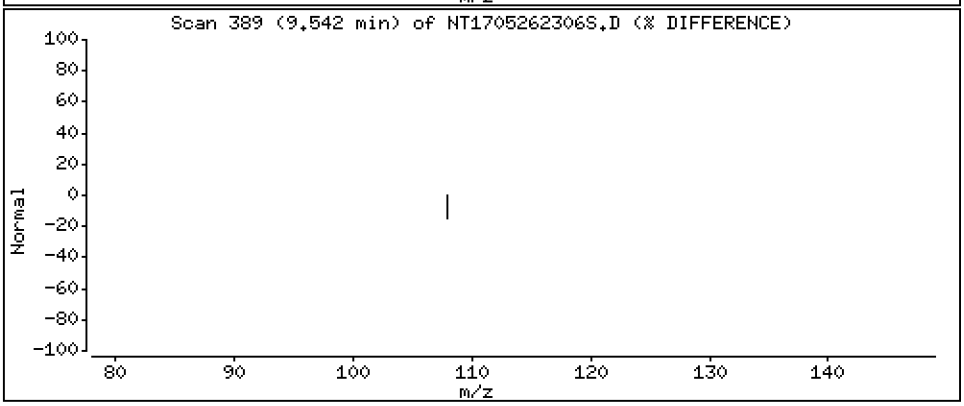












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262306S.D

Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

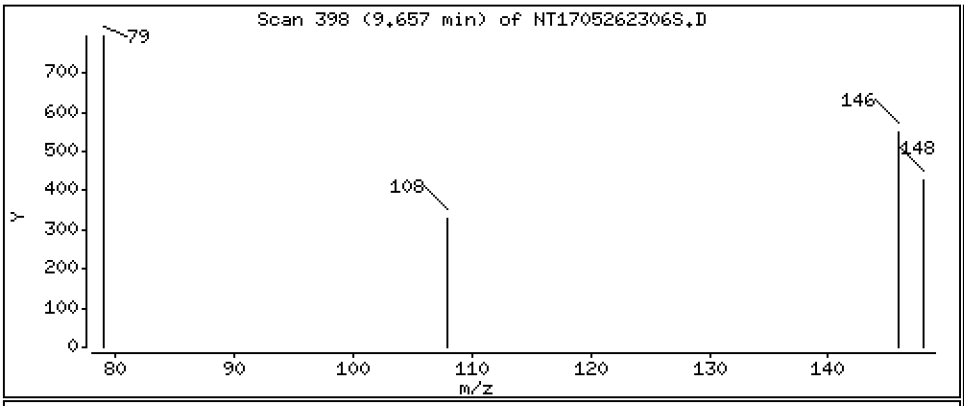
Operator: VTS

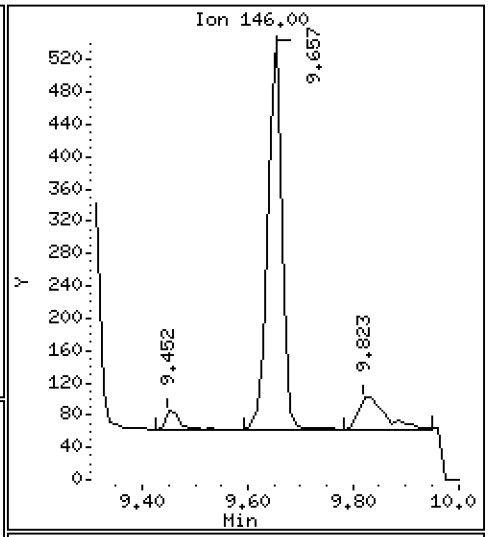
Column phase: ZB-5msi

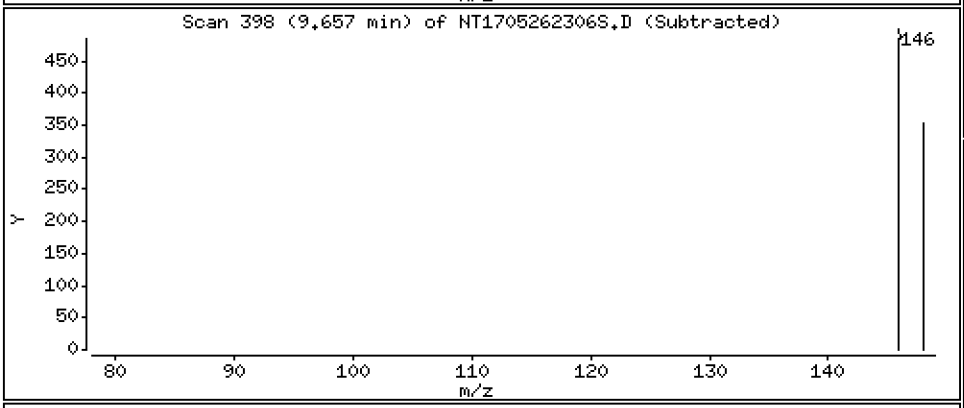
Column diameter: 0.25

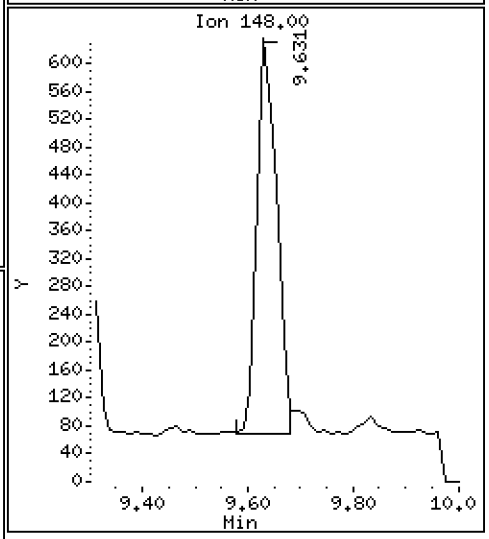
12 1,2-Dichlorobenzene

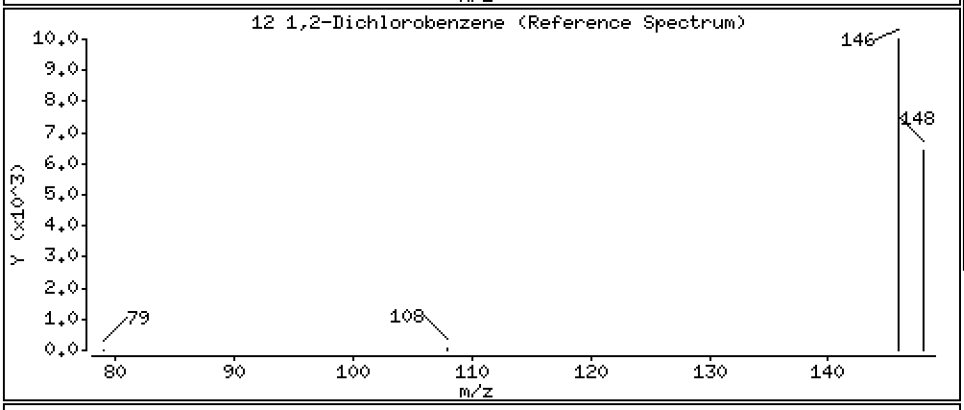
Concentration: 0.008508 ug/mL

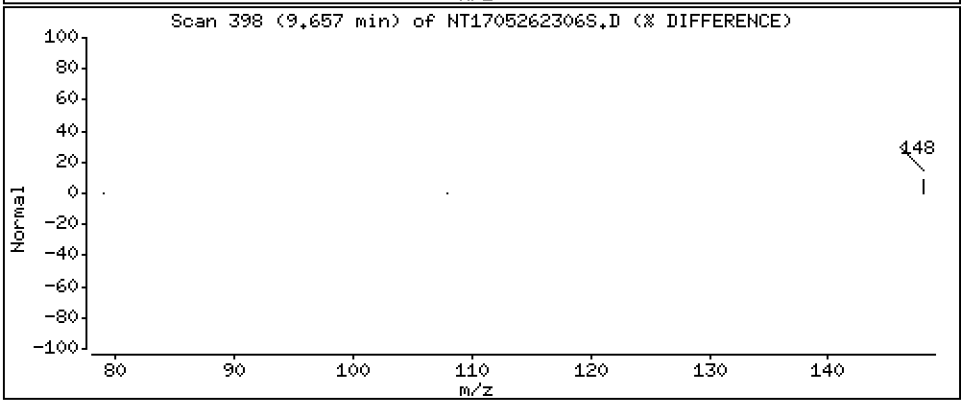












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

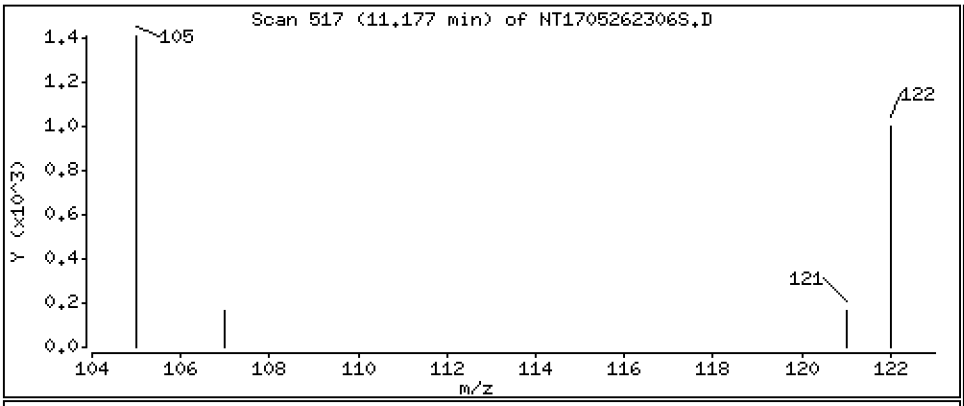
Operator: VTS

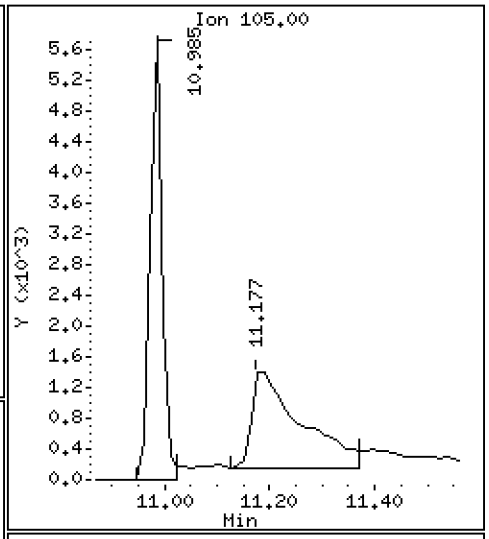
Column phase: ZB-5msi

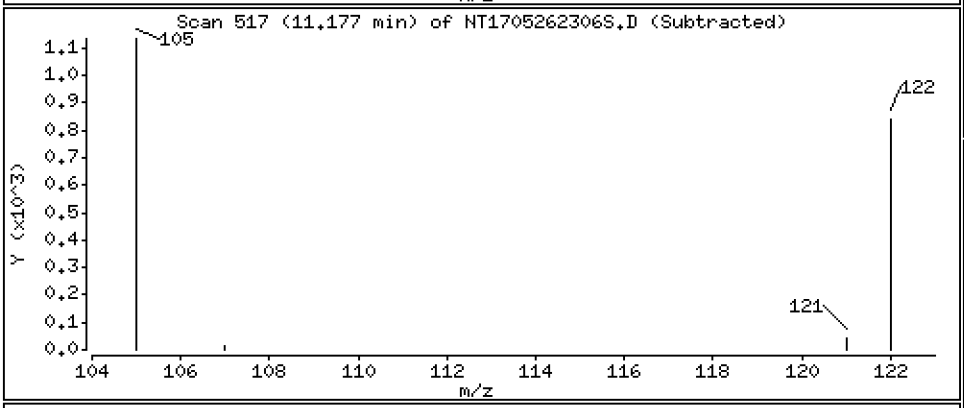
Column diameter: 0.25

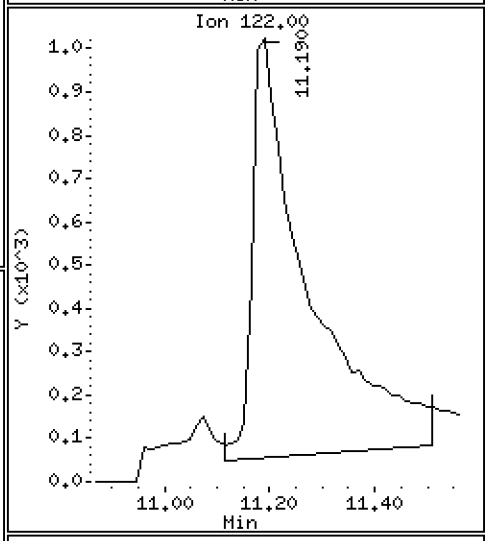
24 Benzoic acid

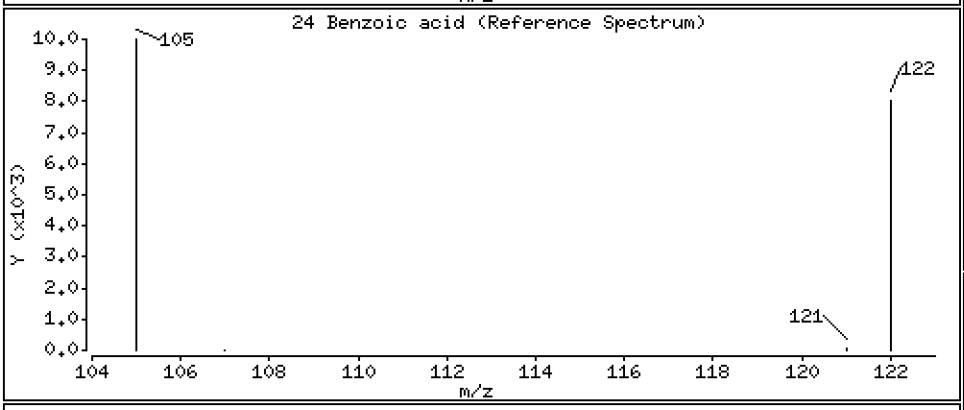
Concentration: 0.1322 ug/mL

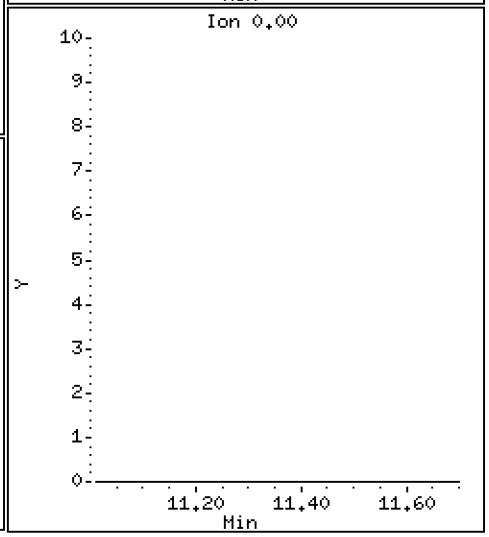


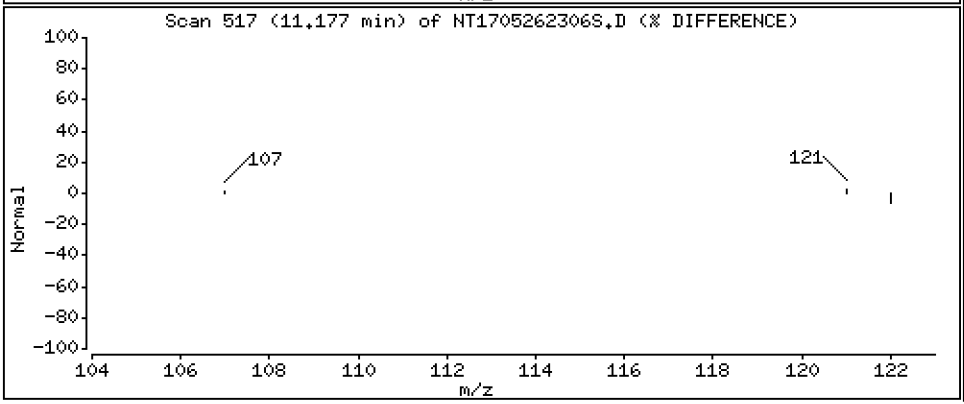












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Date : 26-MAY-2023 15:47

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK2

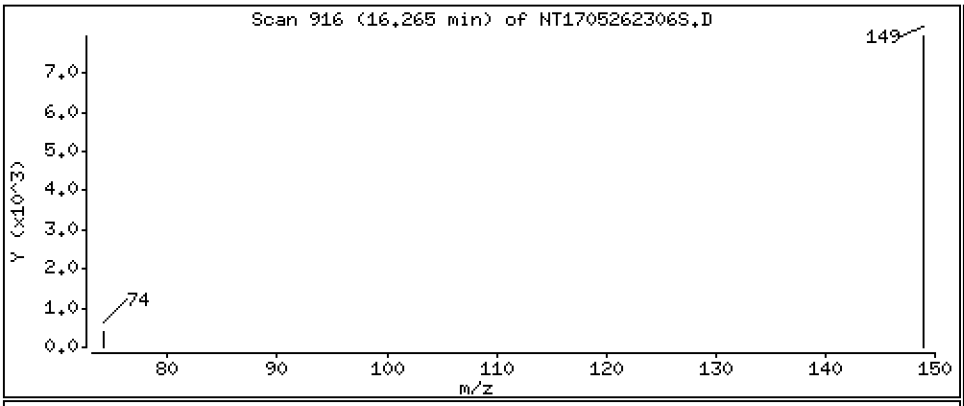
Operator: VTS

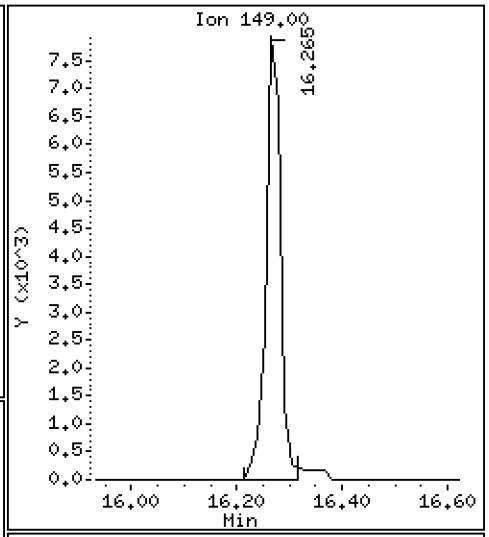
Column phase: ZB-5msi

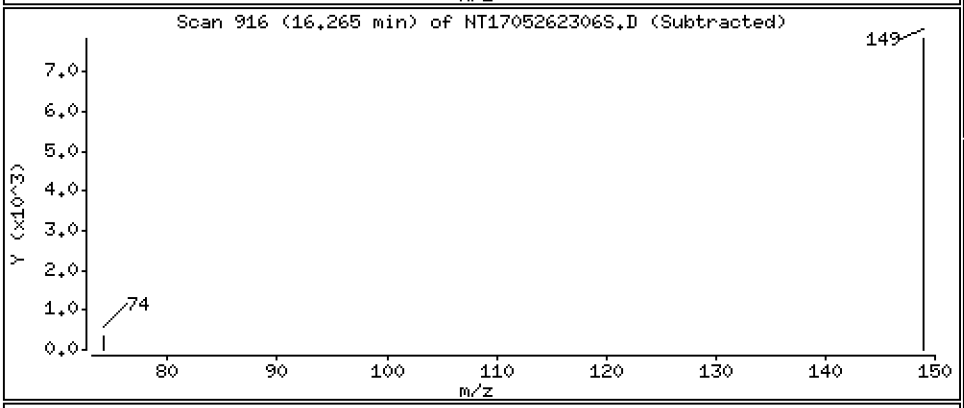
Column diameter: 0.25

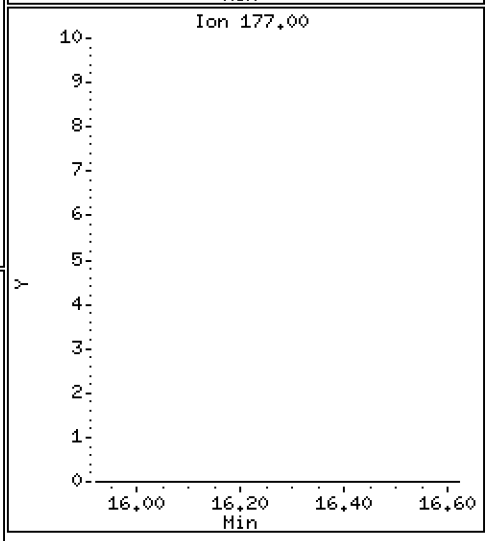
50 Diethylphthalate

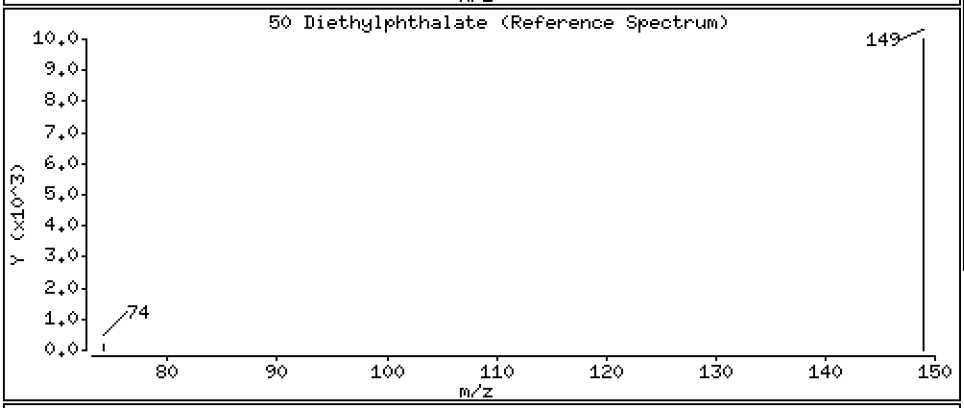
Concentration: 0.08112 ug/mL

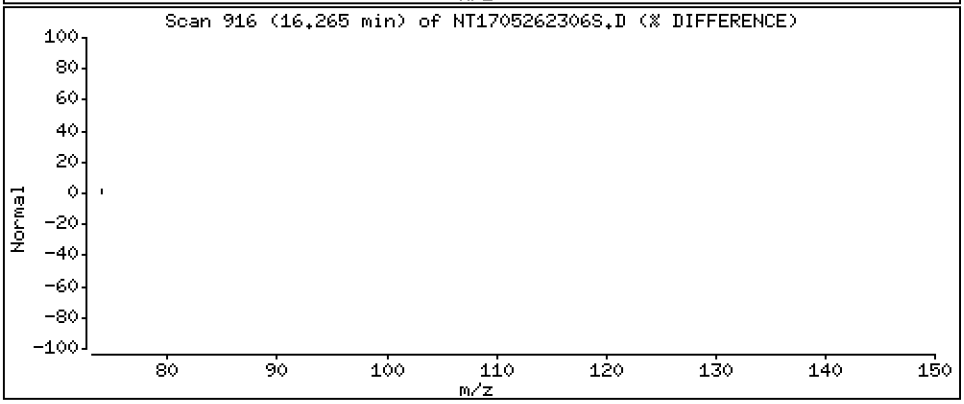












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262306S.D
Lab Smp Id: BLD0607-BLK2
Inj Date : 26-MAY-2023 15:47
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-BLK2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 06-Jun-2023 14:52 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					CONCENTRATIONS ON-COLUMN	FINAL
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	(ug/mL)	(ug/mL)
$	1	2-Fluorophenol	112	7.094	7.069	(0.765)	429243	5.06932	5.069(R)
	3	Phenol	94	8.661	8.661	(0.934)	5028	0.03985	0.03985
	7	1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	1310	0.01158	0.01158
*	8	1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	279952	4.00000	
	9	1,4-Dichlorobenzene	146	9.299	9.299	(1.003)	1022	0.00927	0.009274
	11	Benzyl alcohol	79	9.541	9.541	(1.029)	19415	0.27006	0.2701
	12	1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	919	0.00851	0.008508
	13	2-Methylphenol	108	Compound Not Detected.					
	15	4-Methylphenol	108	Compound Not Detected.					
	16	N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22	2,4-Dimethylphenol	107	Compound Not Detected.					
	24	Benzoic acid	105	11.176	11.215	(0.952)	8043	0.13225	0.1322
	26	1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27	Naphthalene-d8	136	11.738	11.738	(1.000)	1014860	4.00000	
	30	Hexachlorobutadiene	225	Compound Not Detected.					
	39	Dimethylphthalate	163	Compound Not Detected.					
*	42	Acenaphthene-d10	162	15.321	15.334	(1.000)	570372	4.00000	
	50	Diethylphthalate	149	16.264	16.277	(1.062)	15430	0.08112	0.08112
	54	N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57	Hexachlorobenzene	284	Compound Not Detected.					
	58	Pentachlorophenol	266	Compound Not Detected.					
*	59	Phenanthrene-d10	188	18.341	18.353	(1.000)	845585	4.00000	
$	66	Terphenyl-d14	244	21.452	21.452	(0.919)	549251	5.08546	5.085(R)
	67	Butylbenzylphthalate	149	Compound Not Detected.					
*	69	Chrysene-d12	240	23.353	23.353	(1.000)	569193	4.00000	
*	77	Perylene-d12	264	25.993	25.994	(1.000)	513712	4.00000	
	79	Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90	N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262306S.D
Lab Smp Id: BLD0607-BLK2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:53
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	354937	177469	709874	279952	-21.13
27 Naphthalene-d8	1204481	602241	2408962	1014860	-15.74
42 Acenaphthene-d10	658677	329339	1317354	570372	-13.41
59 Phenanthrene-d10	965415	482708	1930830	845585	-12.41
69 Chrysene-d12	615102	307551	1230204	569193	-7.46
77 Perylene-d12	580660	290330	1161320	513712	-11.53

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	-0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	-0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.32	-0.08
59 Phenanthrene-d10	18.35	17.85	18.85	18.34	-0.07
69 Chrysene-d12	23.35	22.85	23.85	23.35	-0.00
77 Perylene-d12	25.99	25.49	26.49	25.99	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262306S.D

Lab ID: BLD0607-BLK2
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   26-MAY-2023 15:47

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1705262303S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8270E-SIM

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLD0607-BLK4	File ID:	NT1705262327S.D
Sampled:	N/A	Prepared:	04/24/23 16:38	Analyzed:	05/27/23 04:54
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	10 g / 1 mL
Batch:	BLD0607	Sequence:	SLE0442	Calibration:	GE00070
Instrument:	NT17	Column:	ZB-5MS		

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
106-46-7	1,4-Dichlorobenzene	1	0.8	J	0.6	5.0
95-50-1	1,2-Dichlorobenzene	1	0.9	J	0.7	5.0
100-51-6	Benzyl Alcohol	1	16.8	J	2.5	20.0
65-85-0	Benzoic acid	1	100	U	13.4	100
105-67-9	2,4-Dimethylphenol	1	20.0	U	2.2	20.0
120-82-1	1,2,4-Trichlorobenzene	1	5.0	U	2.7	5.0
86-30-6	N-Nitrosodiphenylamine	1	5.0	U	1.3	5.0
87-86-5	Pentachlorophenol	1	20.0	U	2.1	20.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
2-Fluorophenol	750.00	504	67.1	27 - 120	
p-Terphenyl-d14	500.00	428	85.7	37 - 120	

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623275.D

Date : 27-MAY-2023 04:54

Client ID:

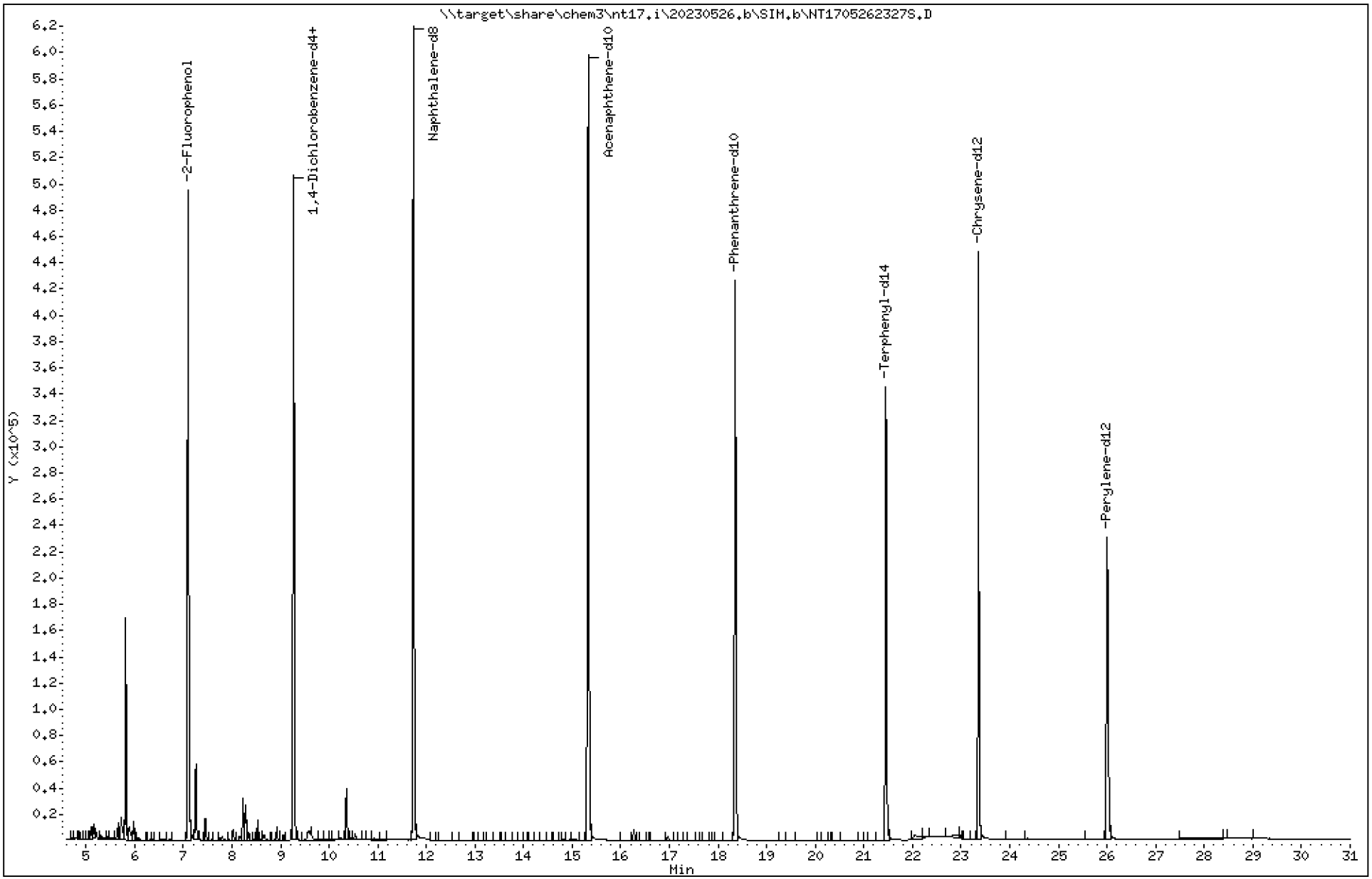
Sample Info: BLD0607-BLK4

Column phase: ZB-5msi

Instrument: nt17.i

Operator: VTS

Column diameter: 0.25



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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK4

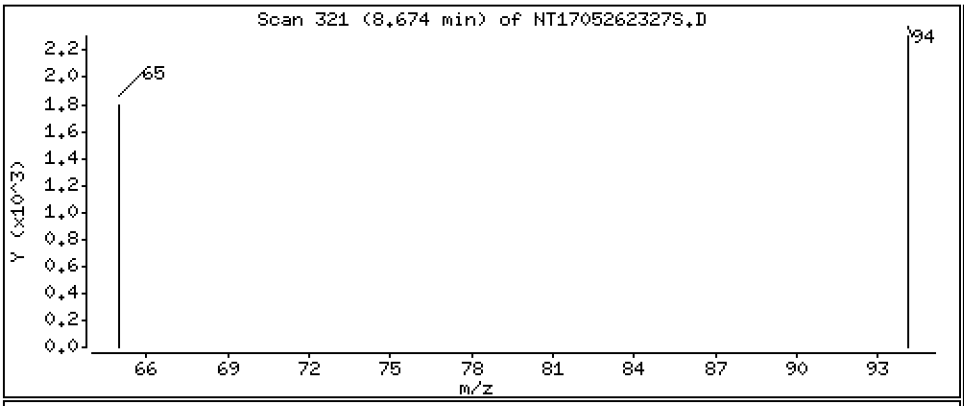
Operator: VTS

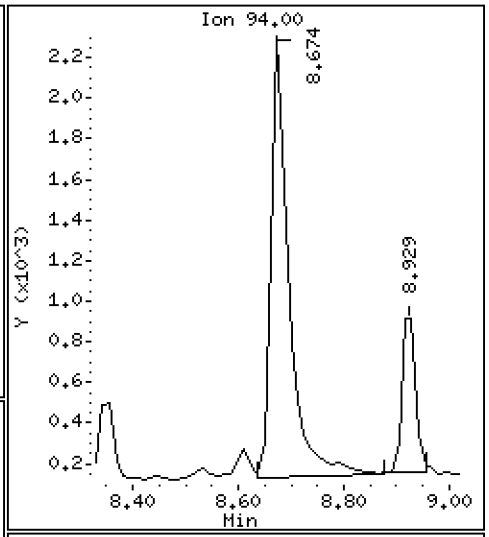
Column phase: ZB-5msi

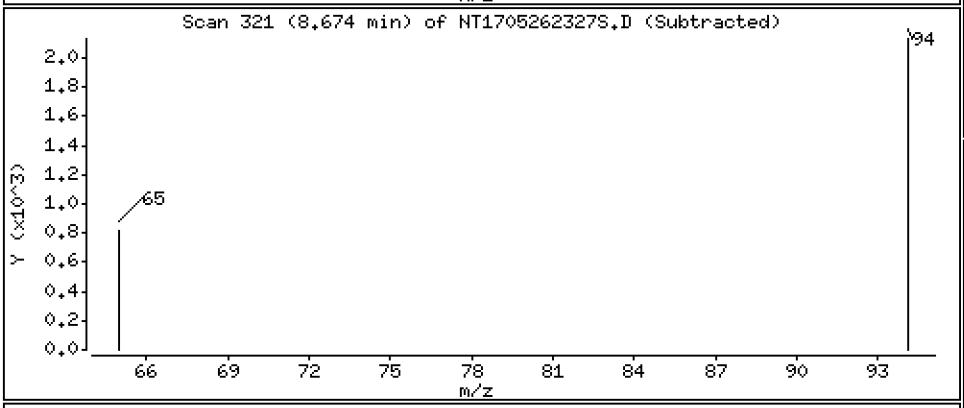
Column diameter: 0.25

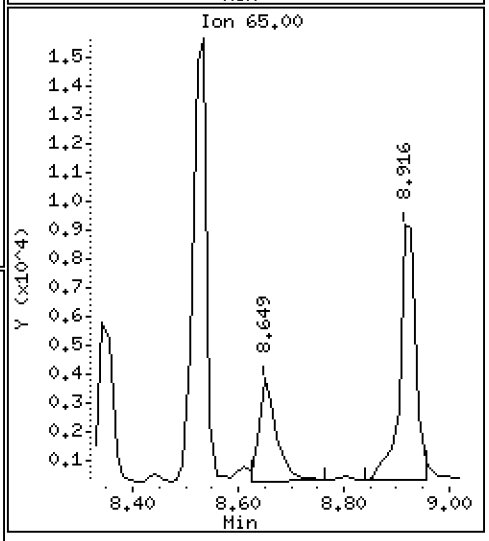
3 Phenol

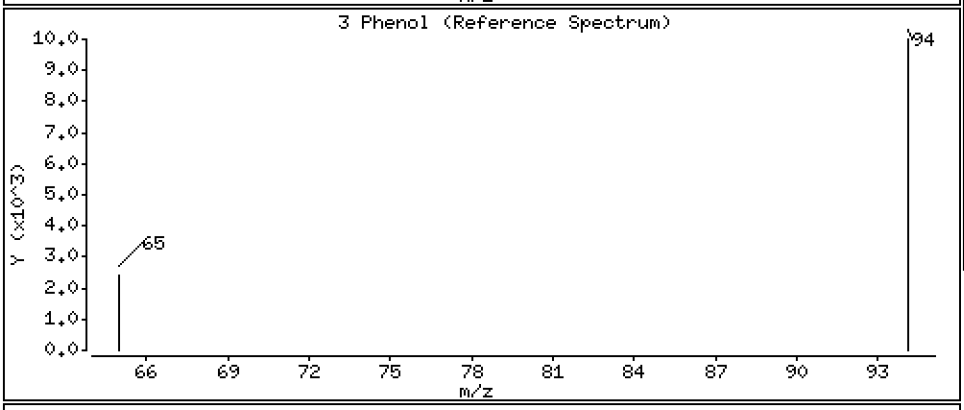
Concentration: 0.03524 ug/mL

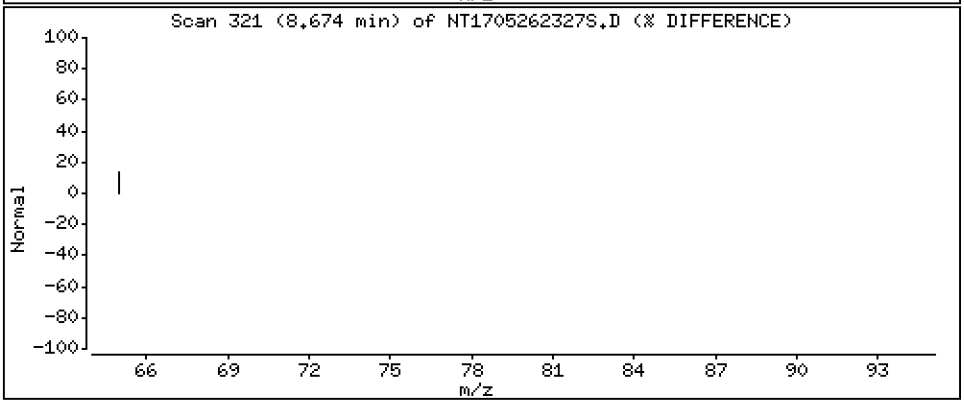












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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK4

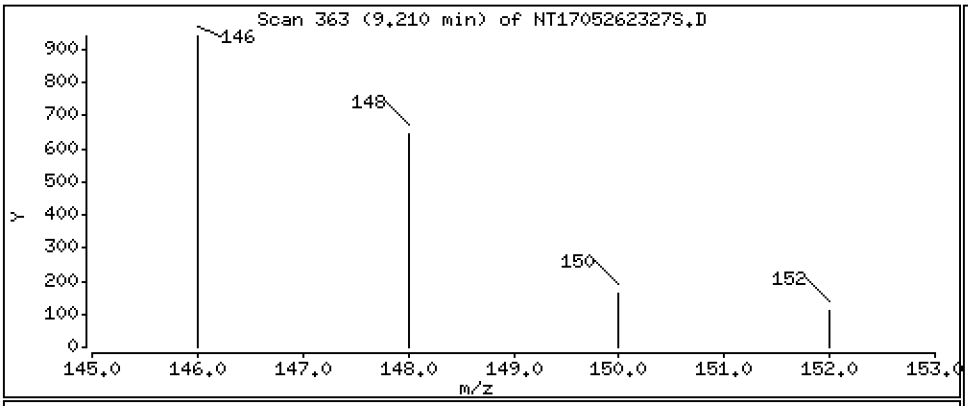
Operator: VTS

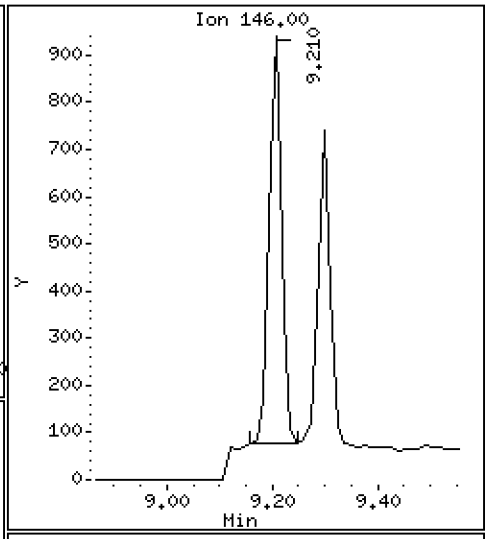
Column phase: ZB-5msi

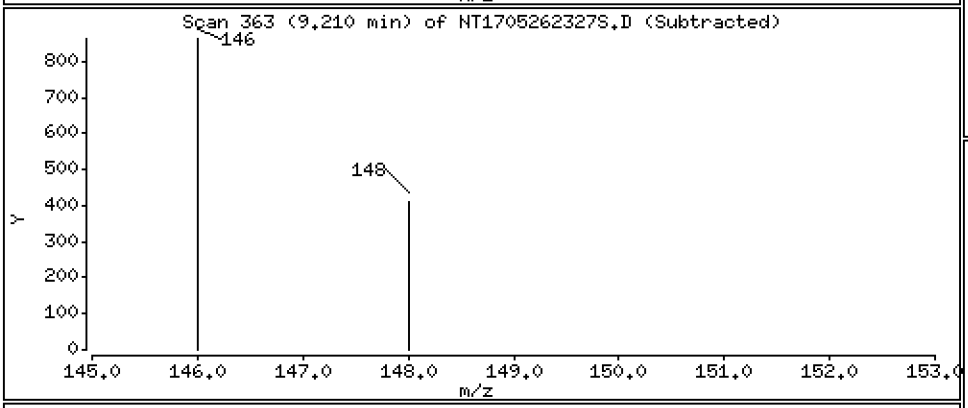
Column diameter: 0.25

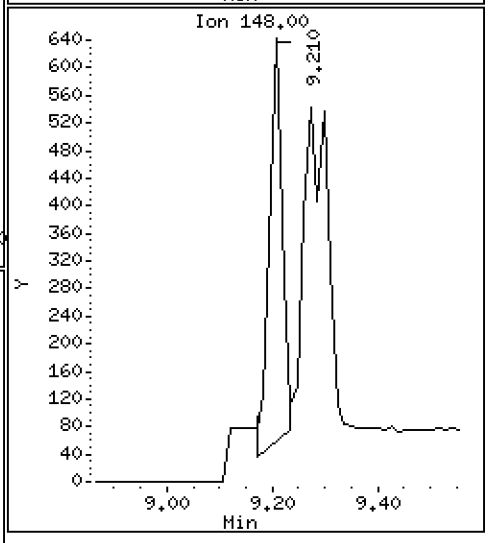
7 1,3-Dichlorobenzene

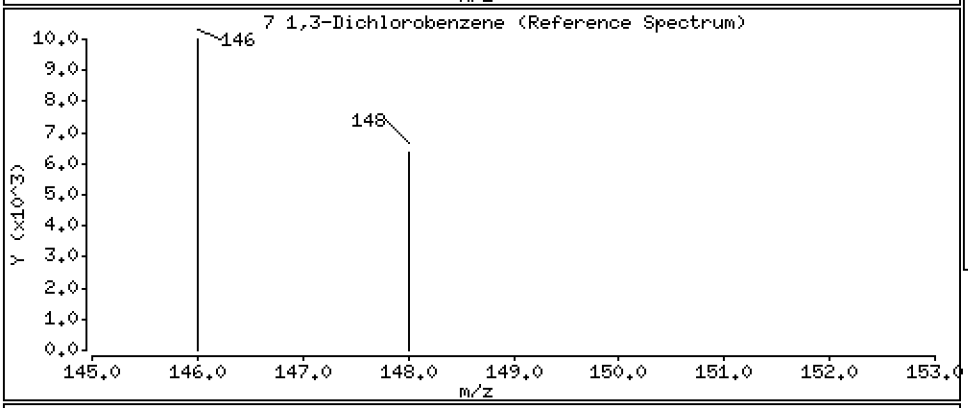
Concentration: 0.01104 ug/mL

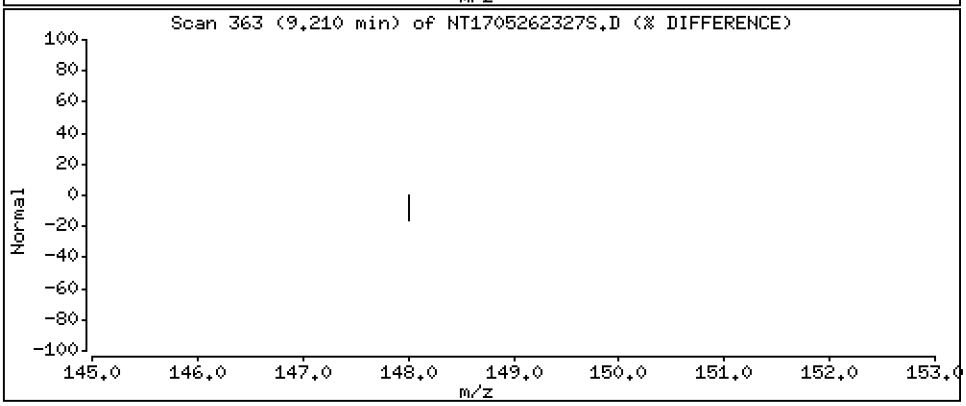












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262327S.D

Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK4

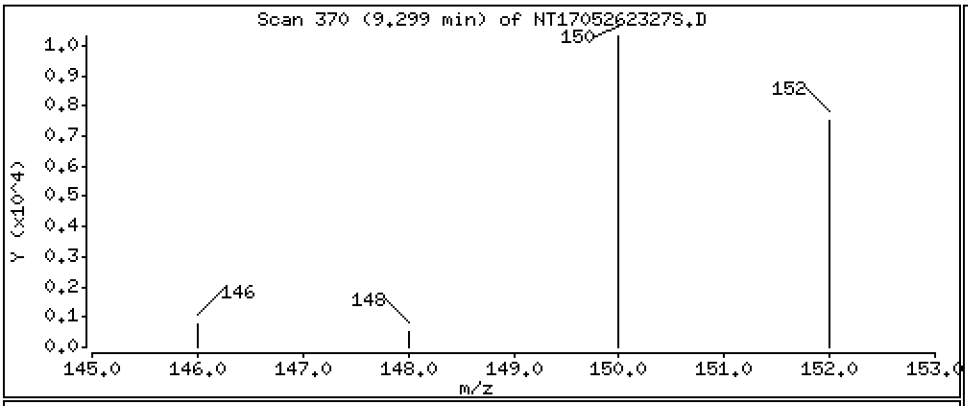
Operator: VTS

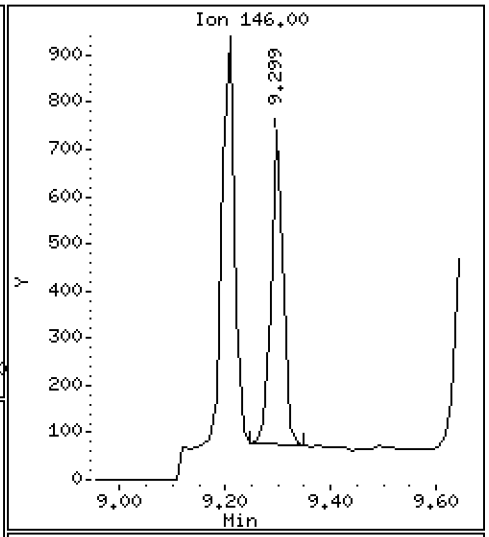
Column phase: ZB-5msi

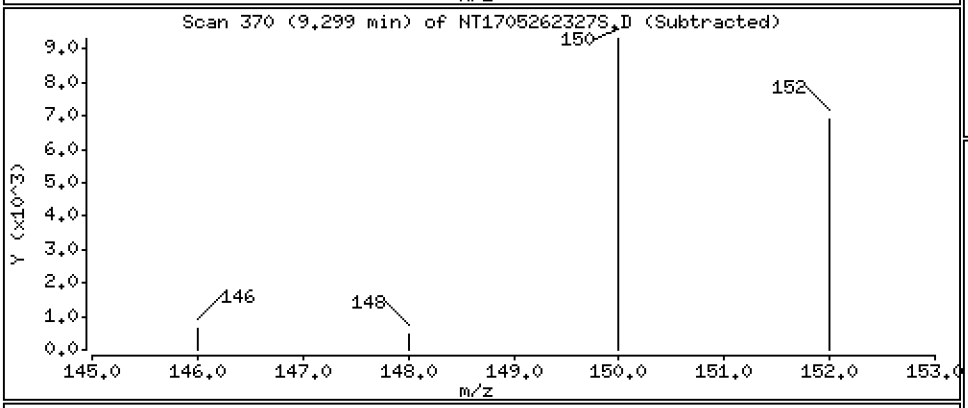
Column diameter: 0.25

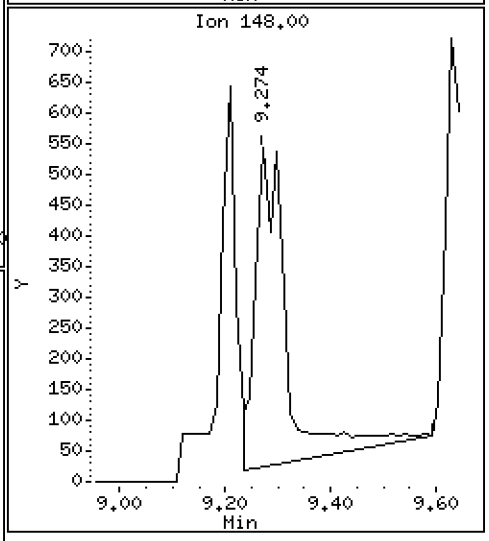
9 1,4-Dichlorobenzene

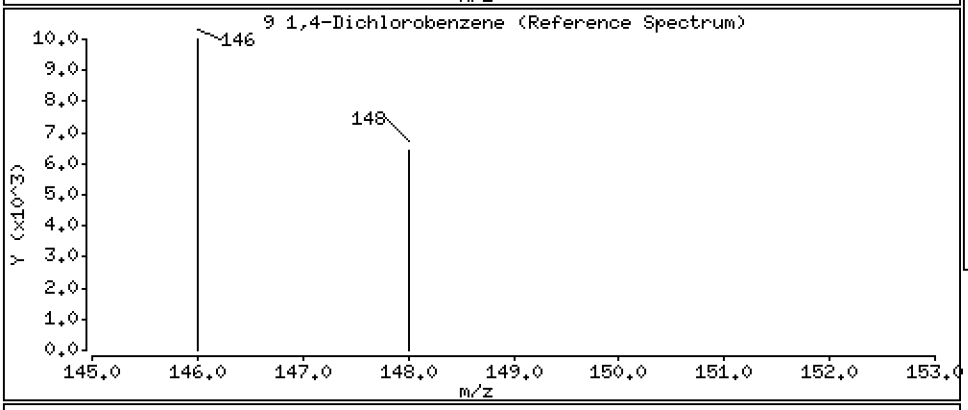
Concentration: 0.008306 ug/mL

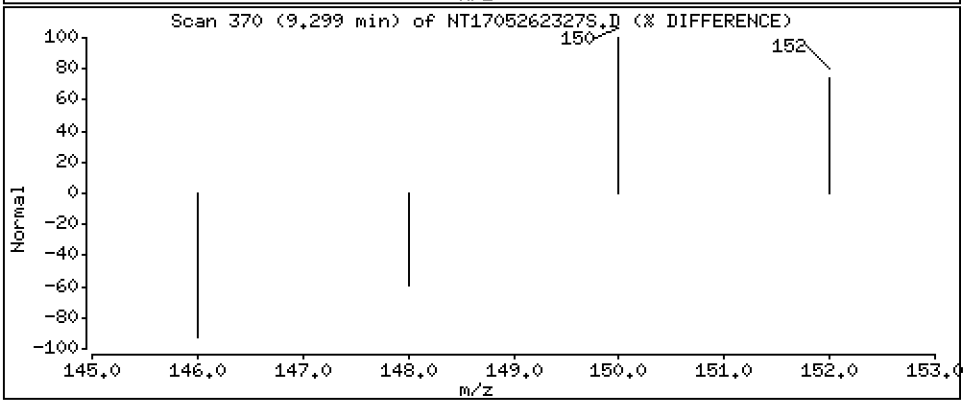












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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK4

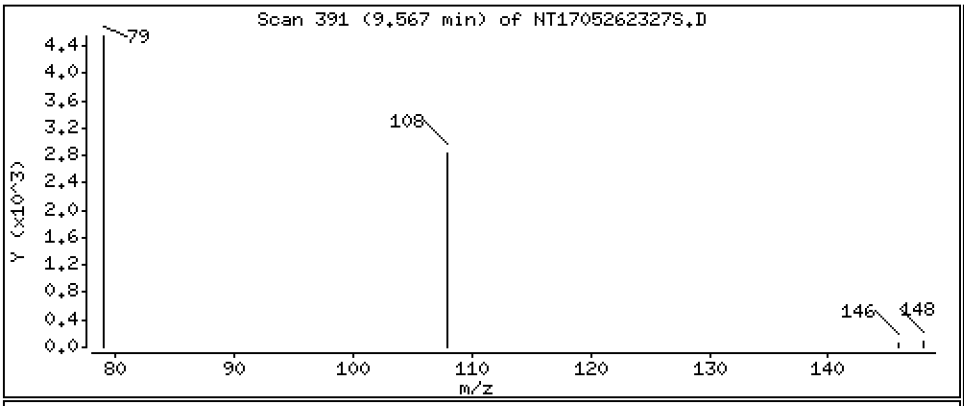
Operator: VTS

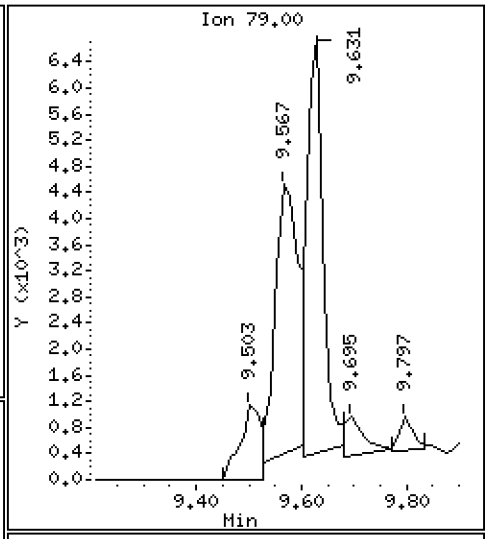
Column phase: ZB-5msi

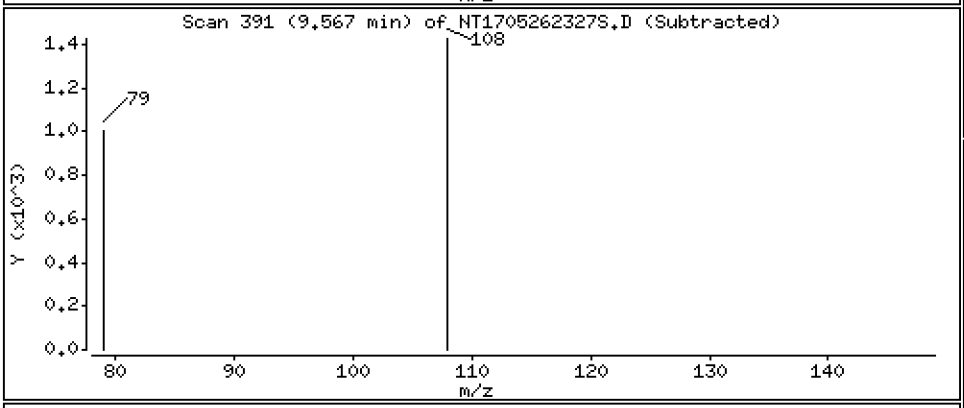
Column diameter: 0.25

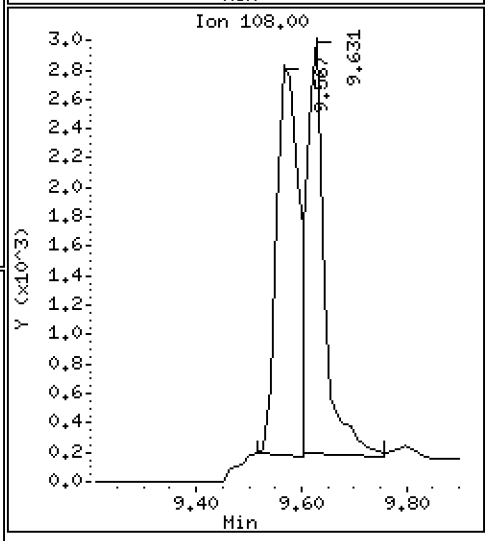
11 Benzyl alcohol

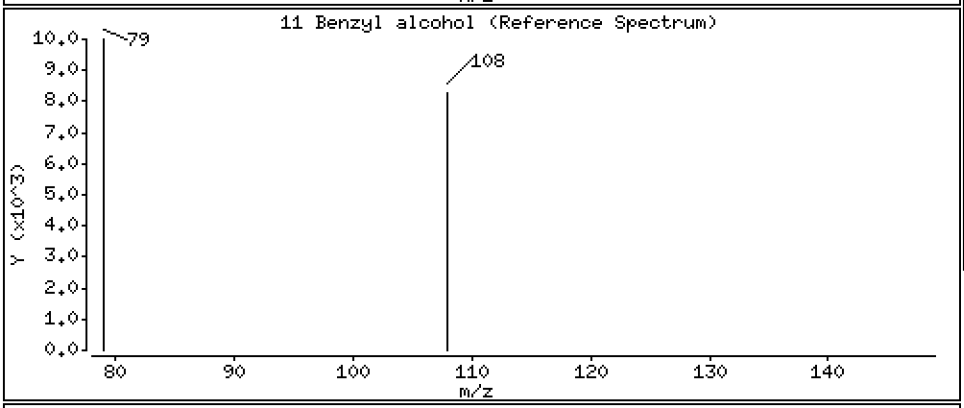
Concentration: 0.1681 ug/mL

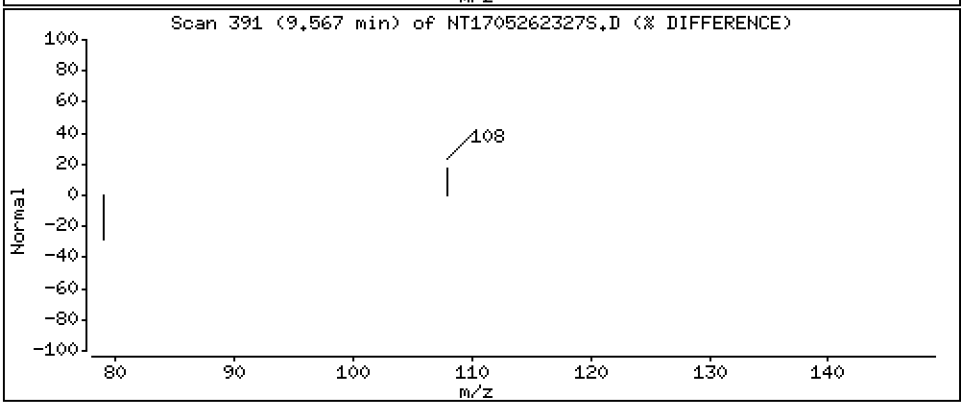












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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK4

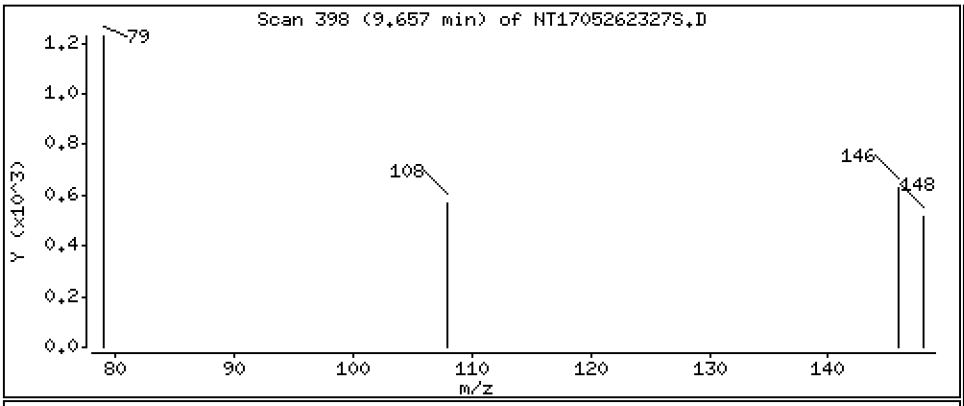
Operator: VTS

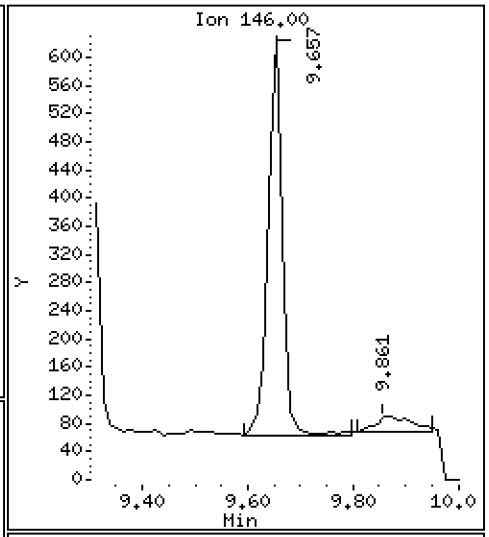
Column phase: ZB-5msi

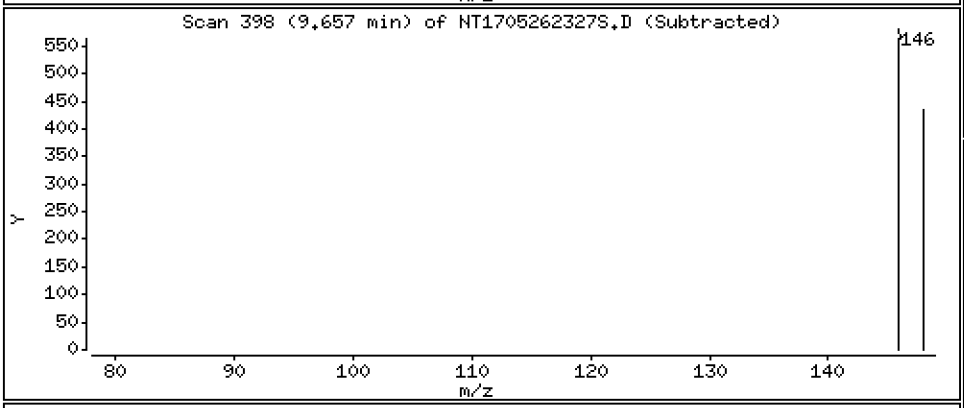
Column diameter: 0.25

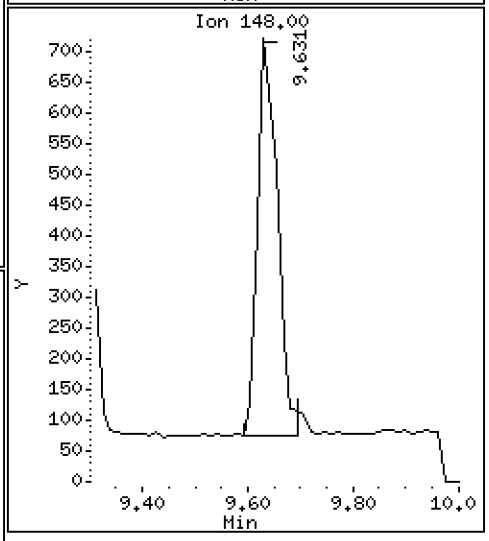
12 1,2-Dichlorobenzene

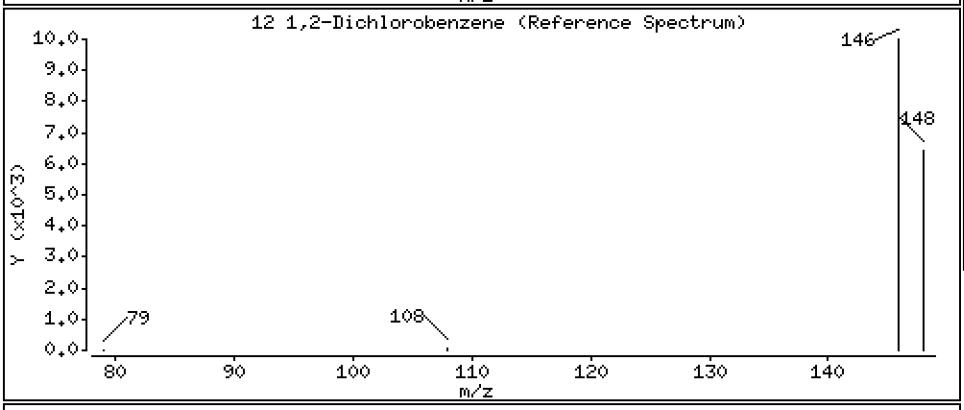
Concentration: 0.008555 ug/mL

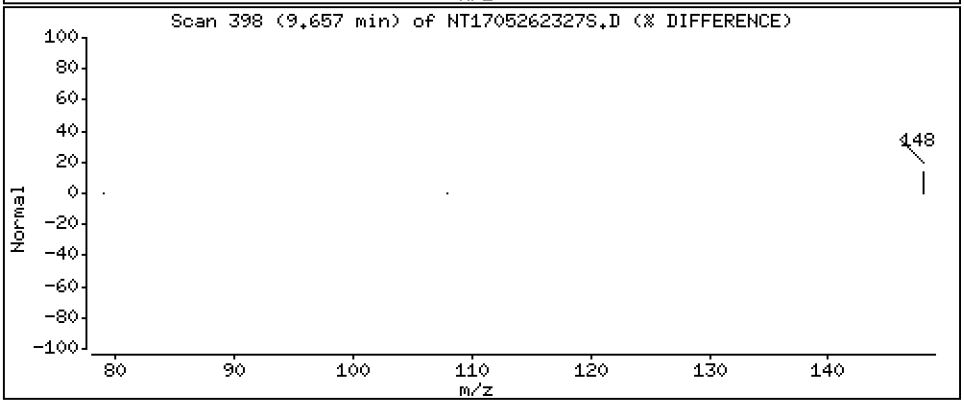












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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK4

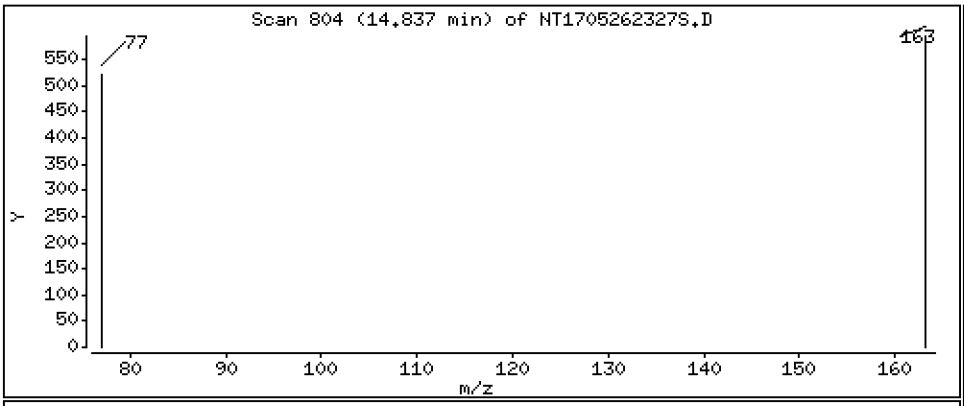
Operator: VTS

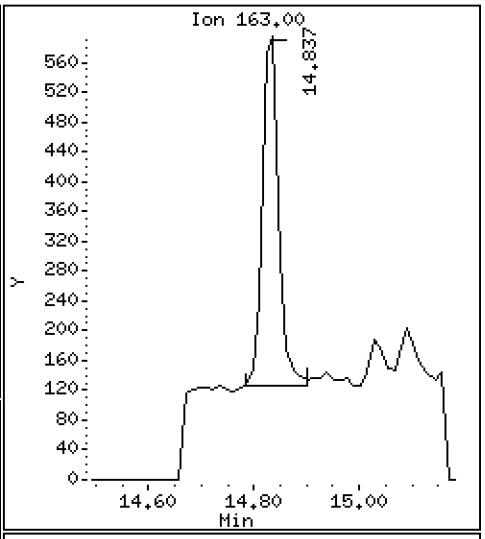
Column phase: ZB-5msi

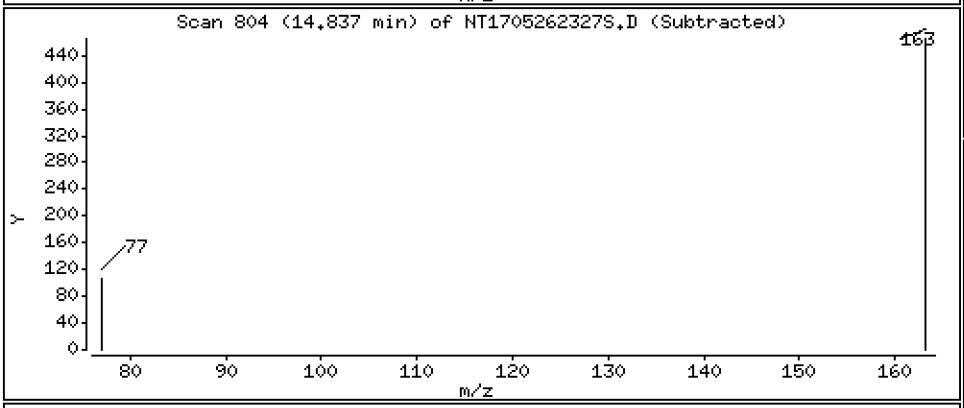
Column diameter: 0.25

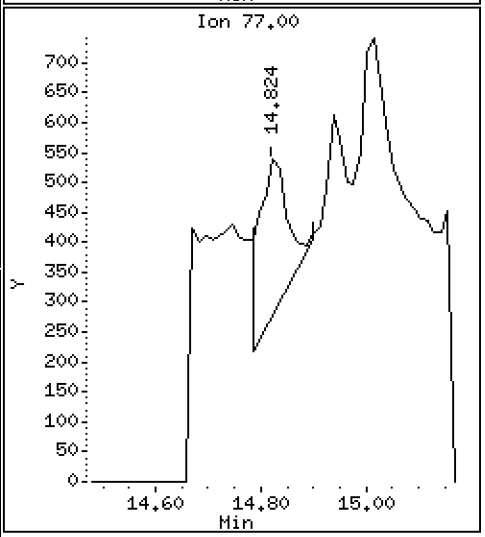
39 Dimethylphthalate

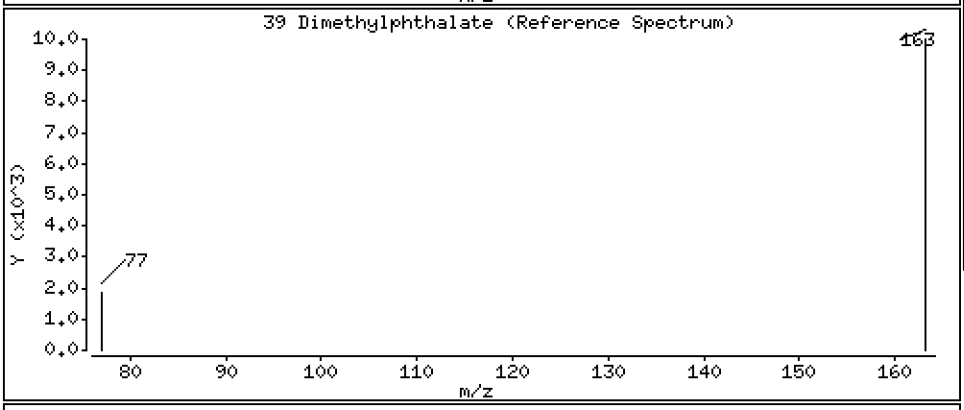
Concentration: 0.004890 ug/mL

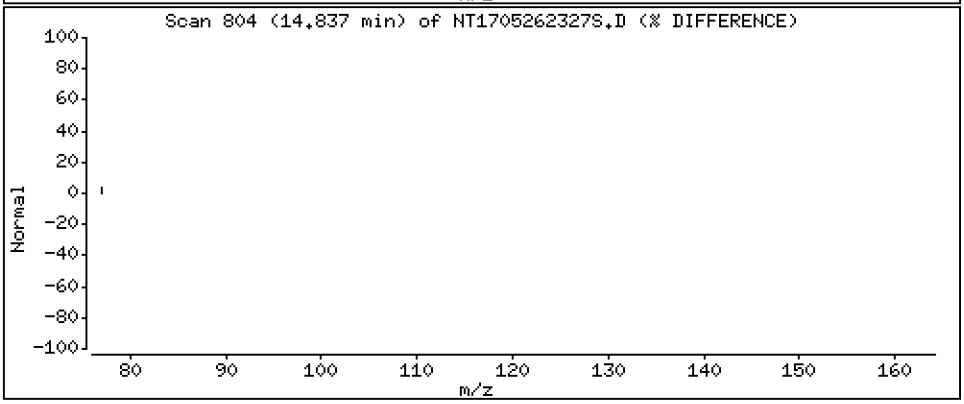












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Date : 27-MAY-2023 04:54

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BLK4

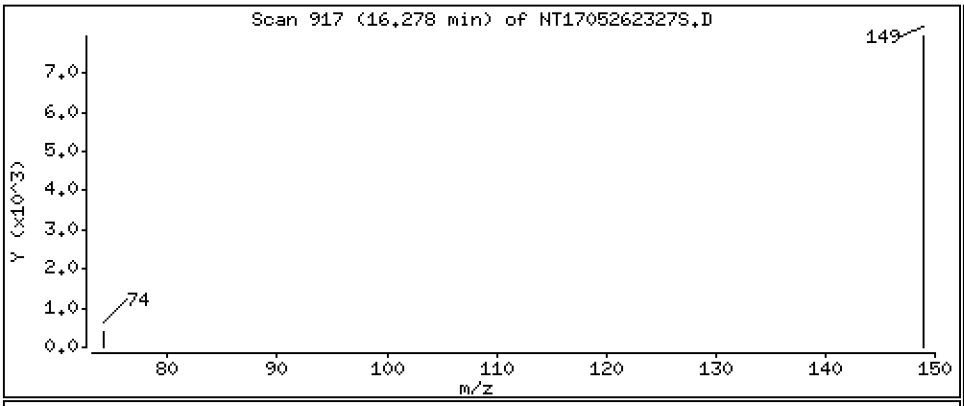
Operator: VTS

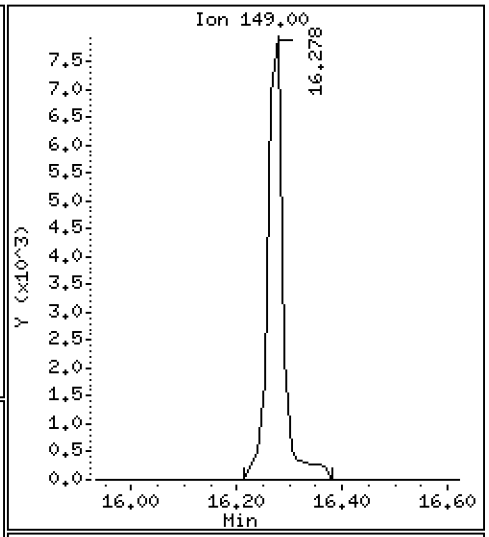
Column phase: ZB-5msi

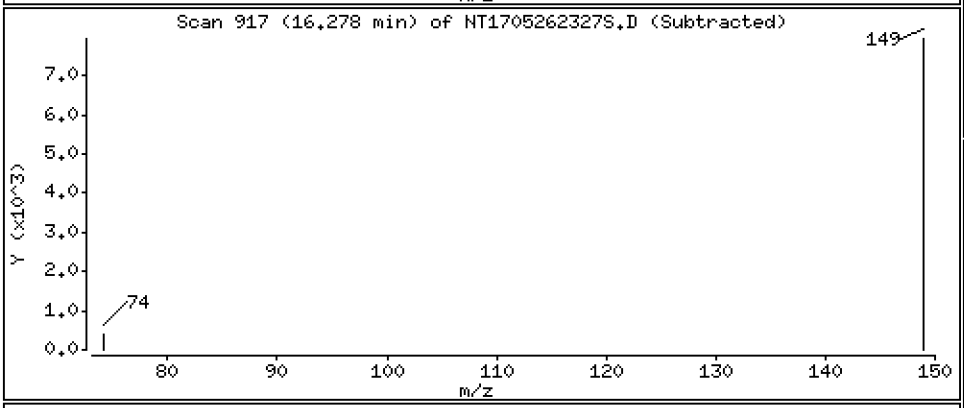
Column diameter: 0.25

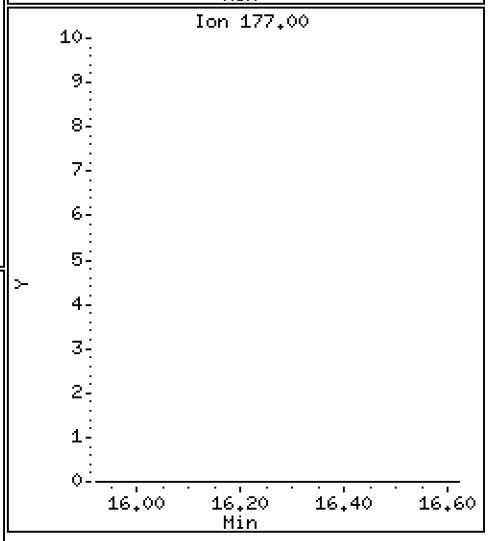
50 Diethylphthalate

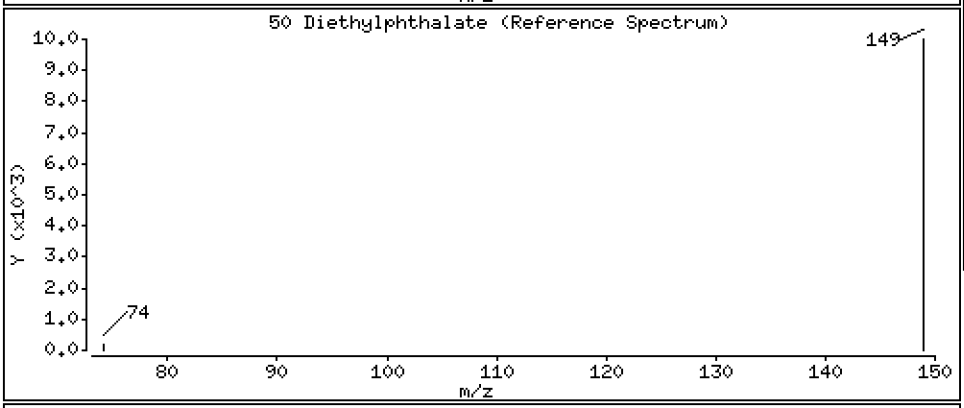
Concentration: 0.08821 ug/mL

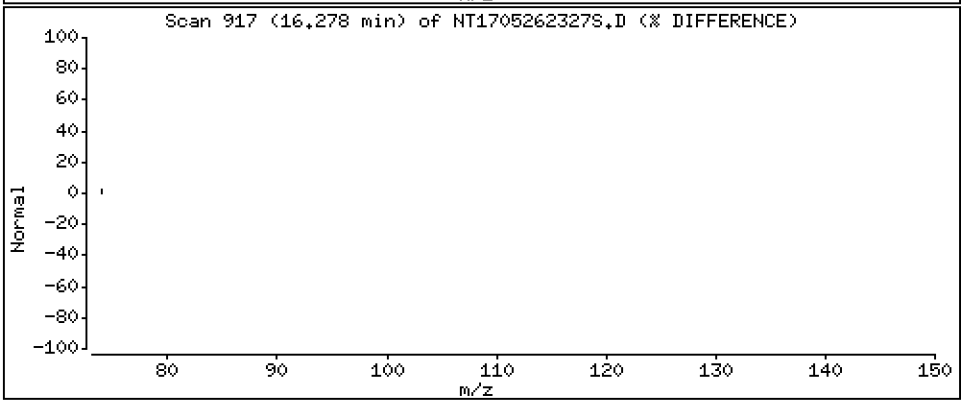












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262327S.D
Lab Smp Id: BLD0607-BLK4
Inj Date : 27-MAY-2023 04:54
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-BLK4
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 07-Jun-2023 07:26 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.094	7.081	(0.765)	485833	5.03514	5.035(R)
	3 Phenol	94	8.674	8.674	(0.935)	5066	0.03524	0.03524
	7 1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	1423	0.01104	0.01104(M)
*	8 1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	319011	4.00000	
	9 1,4-Dichlorobenzene	146	9.299	9.299	(1.003)	1043	0.00831	0.008306(M)
	11 Benzyl alcohol	79	9.567	9.554	(1.032)	13769	0.16807	0.1681
	12 1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	1053	0.00856	0.008555
	13 2-Methylphenol	108	Compound Not Detected.					
	15 4-Methylphenol	108	Compound Not Detected.					
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	Compound Not Detected.					
	24 Benzoic acid	105	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.					
*	27 Naphthalene-d8	136	11.738	11.738	(1.000)	1068298	4.00000	
	30 Hexachlorobutadiene	225	Compound Not Detected.					
	39 Dimethylphthalate	163	14.837	14.837	(0.968)	1006	0.00489	0.004890(M)
*	42 Acenaphthene-d10	162	15.334	15.334	(1.000)	560262	4.00000	
	50 Diethylphthalate	149	16.277	16.277	(1.062)	16481	0.08821	0.08821
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.					
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	Compound Not Detected.					
*	59 Phenanthrene-d10	188	18.353	18.353	(1.000)	759069	4.00000	
$	66 Terphenyl-d14	244	21.452	21.452	(0.919)	498952	4.28453	4.285(R)
	67 Butylbenzylphthalate	149	Compound Not Detected.					
*	69 Chrysene-d12	240	23.353	23.353	(1.000)	613725	4.00000	
*	77 Perylene-d12	264	26.006	26.006	(1.000)	449111	4.00000	
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.					
	90 N-Nitrosodimethylamine	74	Compound Not Detected.					

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262327S.D
Lab Smp Id: BLD0607-BLK4
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-MAY-2023
Calibration Time: 00:33
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375423	187712	750846	319011	-15.03
27 Naphthalene-d8	1173037	586519	2346074	1068298	-8.93
42 Acenaphthene-d10	638940	319470	1277880	560262	-12.31
59 Phenanthrene-d10	901788	450894	1803576	759069	-15.83
69 Chrysene-d12	767966	383983	1535932	613725	-20.08
77 Perylene-d12	642149	321075	1284298	449111	-30.06

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	-0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	-0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	-0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	-0.00
69 Chrysene-d12	23.35	22.85	23.85	23.35	-0.00
77 Perylene-d12	26.01	25.51	26.51	26.01	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262327S.D

Lab ID: BLD0607-BLK4
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   27-MAY-2023 04:54

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1705262320S.D

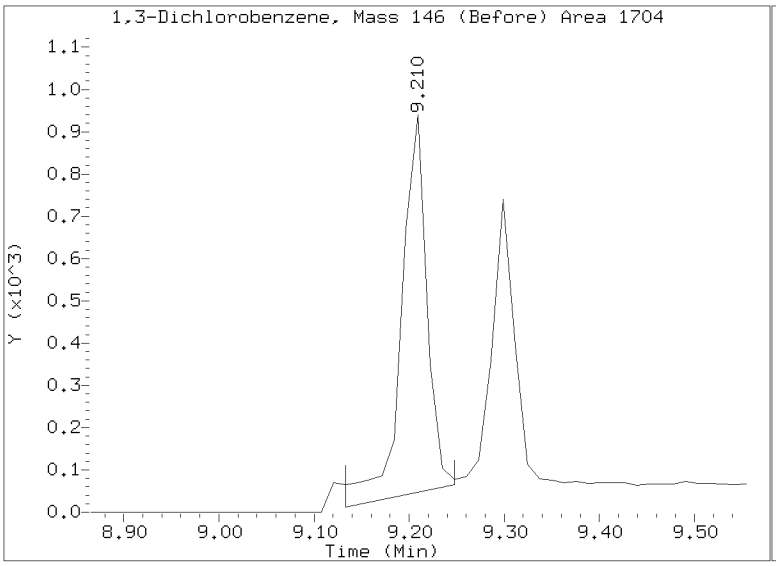
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

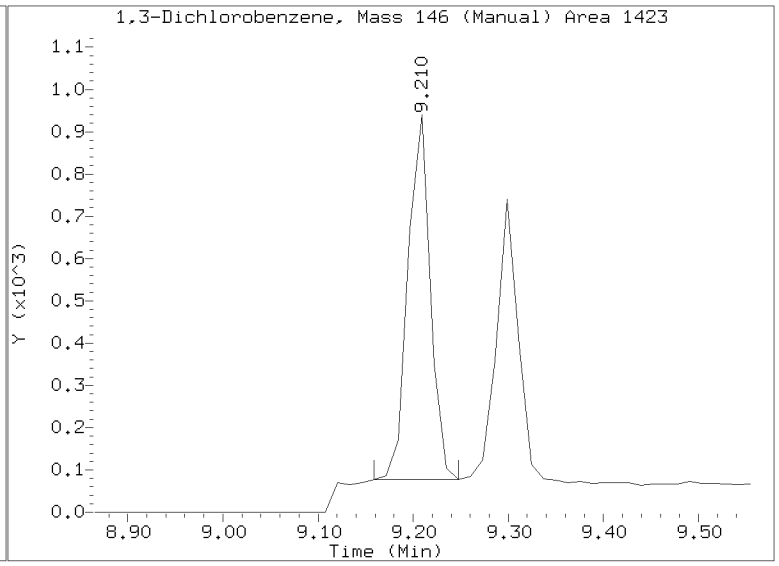
Exception: 1,2,4-Trichlorobenzene 0.0010

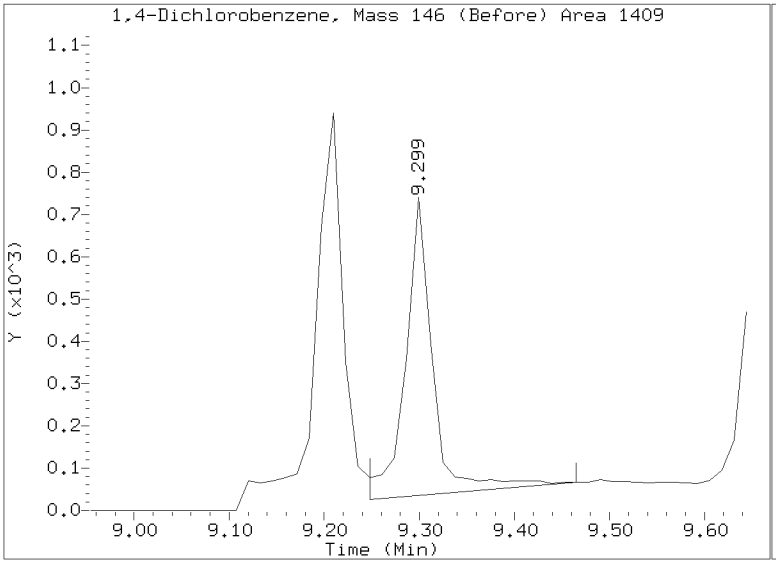
* Only compounds listed in the work order have been verified by the analyst *

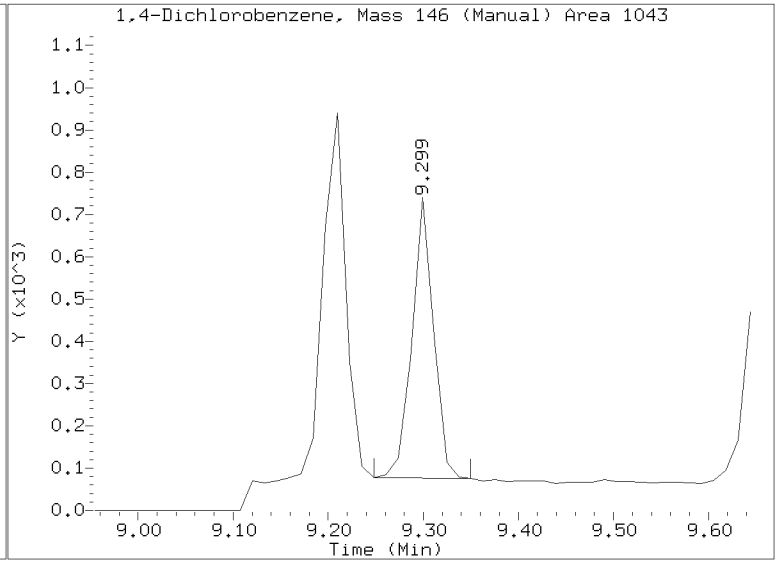
Quant Ion Manual Peak Adjustment Report

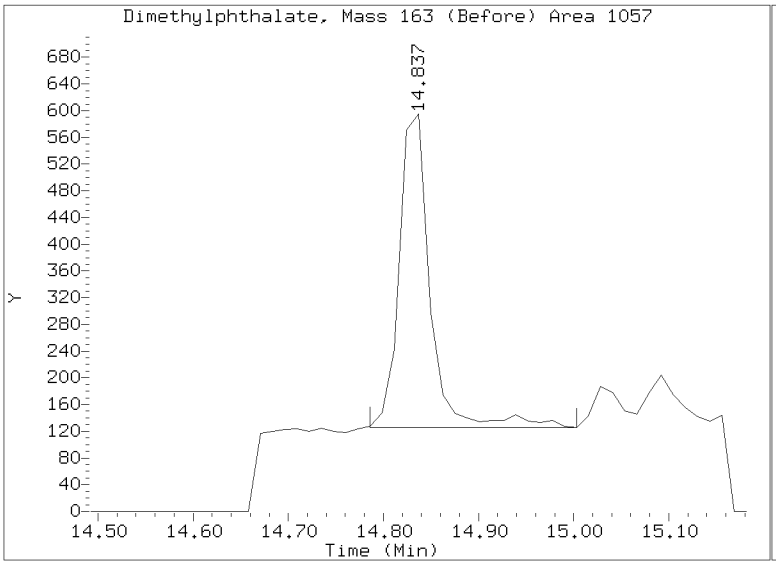
Datafile: //target/share/chem3/nt17.i/20230526.b/SIM.b/NT1705262327S.D
Injection Date: 27-MAY-2023 04:54
Lab ID:BLD0607-BLK4 Client ID:
Report Date: 06/07/2023 07:57

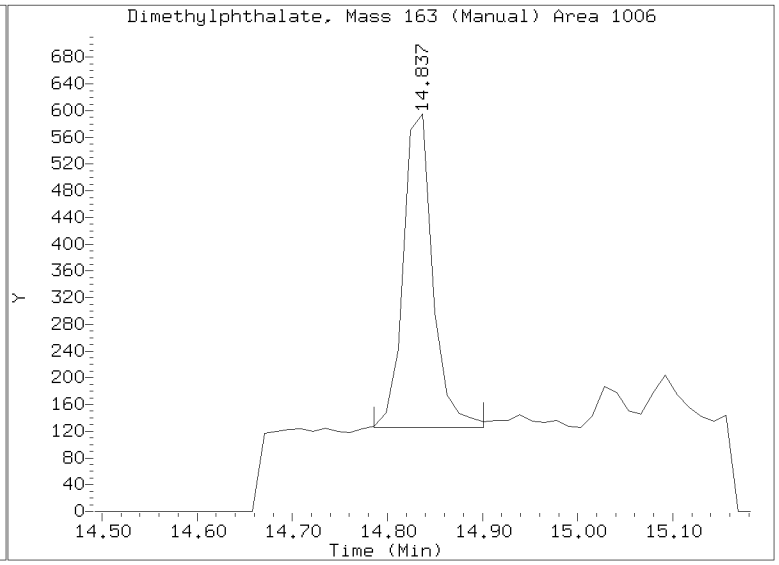












LCS / LCS DUPLICATE RECOVERY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/26/23 16:25
Batch:	BLD0607	Laboratory ID:	BLD0607-BS2
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	10 g / 1 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
1,4-Dichlorobenzene	500	386		77.3	36 - 120
1,2-Dichlorobenzene	500	389		77.9	36 - 120
Benzyl Alcohol	500	460	B	91.9	25 - 123
Benzoic acid	2300	2820		123	10 - 160
2,4-Dimethylphenol	1300	90.4	*	6.96 *	10 - 120
1,2,4-Trichlorobenzene	500	359		71.9	35 - 120
N-Nitrosodiphenylamine	500	243		48.5	27 - 120
Pentachlorophenol	1300	1350		104	26 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
1,4-Dichlorobenzene	500	385		77.0	0.410	30	36 - 120
1,2-Dichlorobenzene	500	390		78.1	0.253	30	36 - 120
Benzyl Alcohol	500	506	B	101	9.62	30	25 - 123
Benzoic acid	2300	2850		124	0.912	30	10 - 160
2,4-Dimethylphenol	1300	86.1	*	6.63 *	4.85	30	10 - 120
1,2,4-Trichlorobenzene	500	359		71.8	0.0543	30	35 - 120
N-Nitrosodiphenylamine	500	252		50.3	3.64	30	27 - 120
Pentachlorophenol	1300	1310		101	2.75	30	26 - 120

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623075.D

Page 1

Date : 26-MAY-2023 16:25

Client ID:

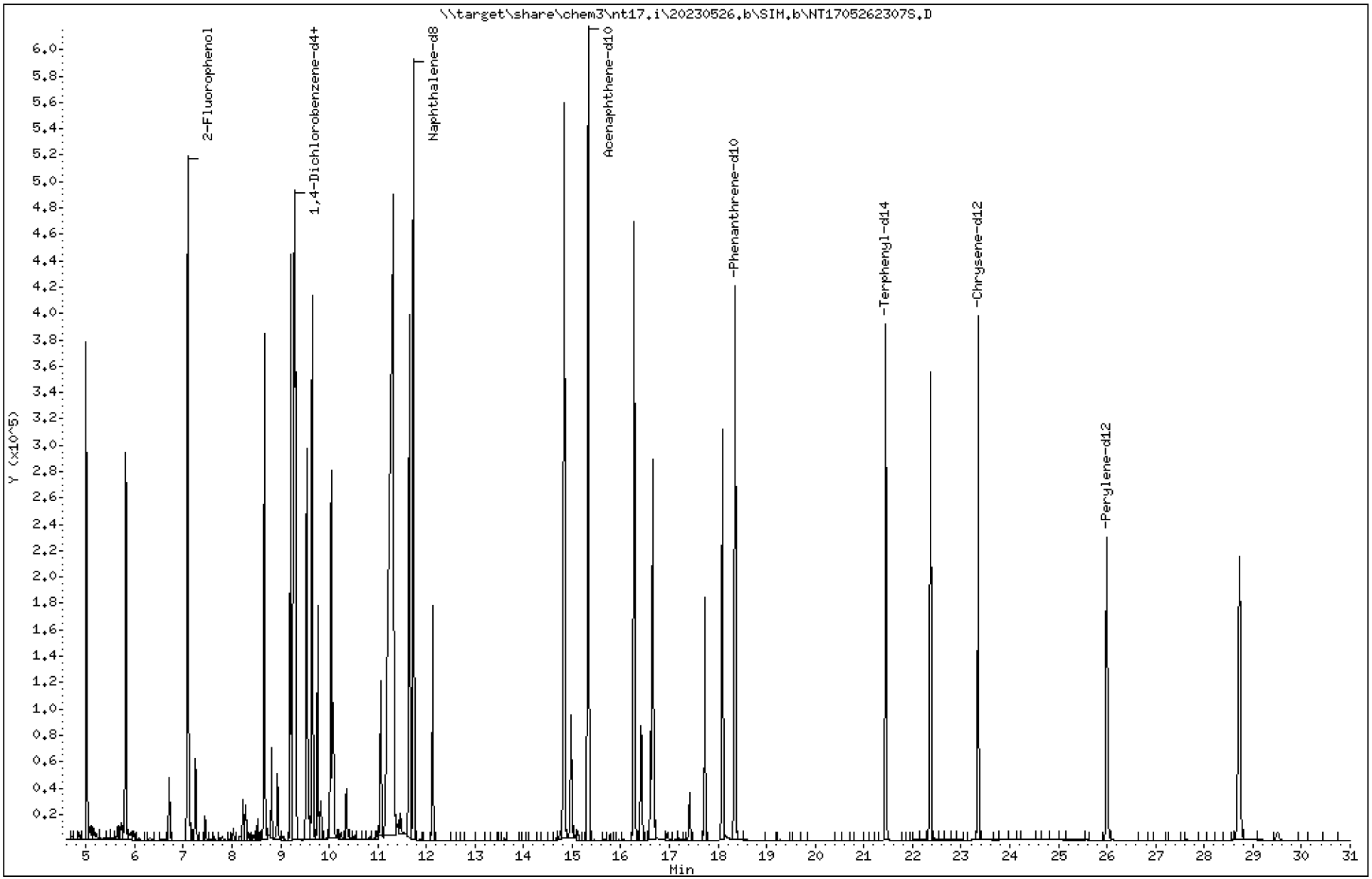
Instrument: nt17.i

Sample Info: BLD0607-BS2

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

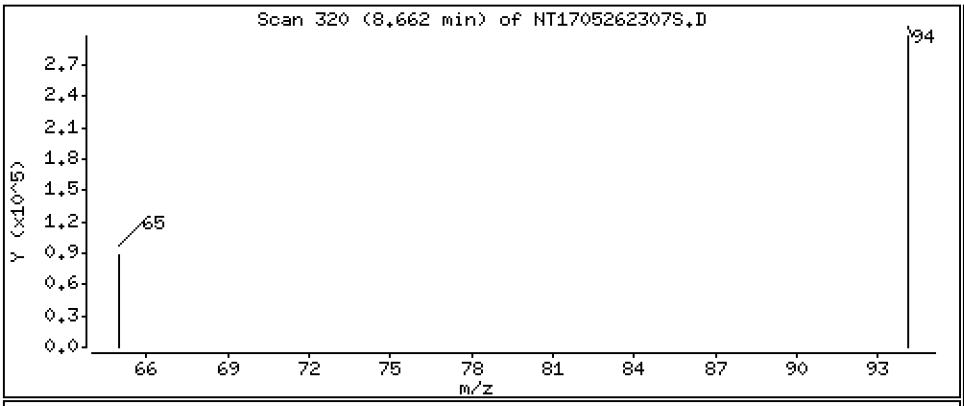
Operator: VTS

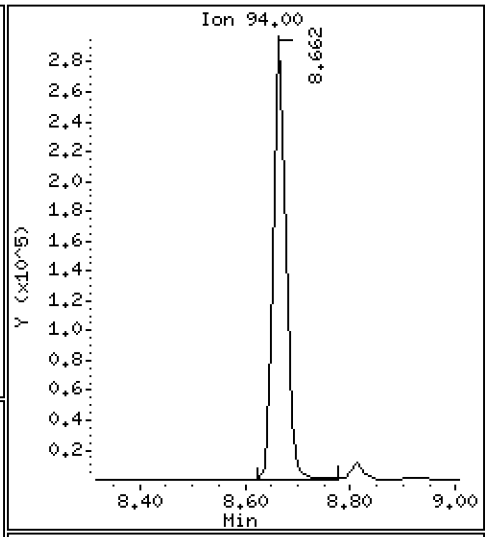
Column phase: ZB-5msi

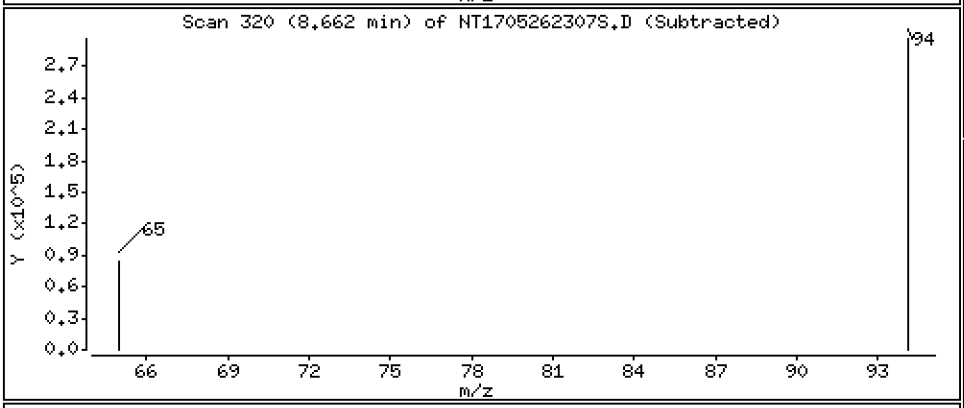
Column diameter: 0.25

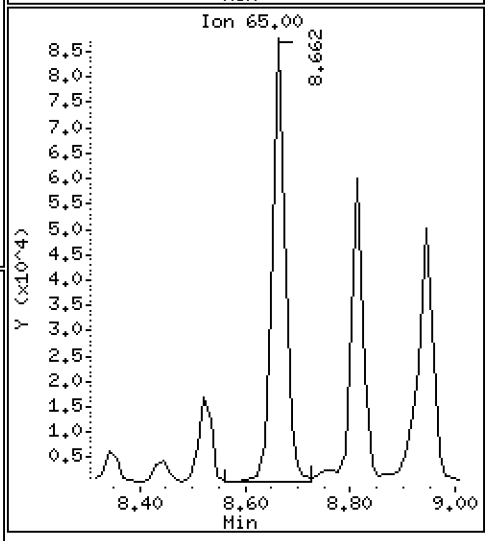
3 Phenol

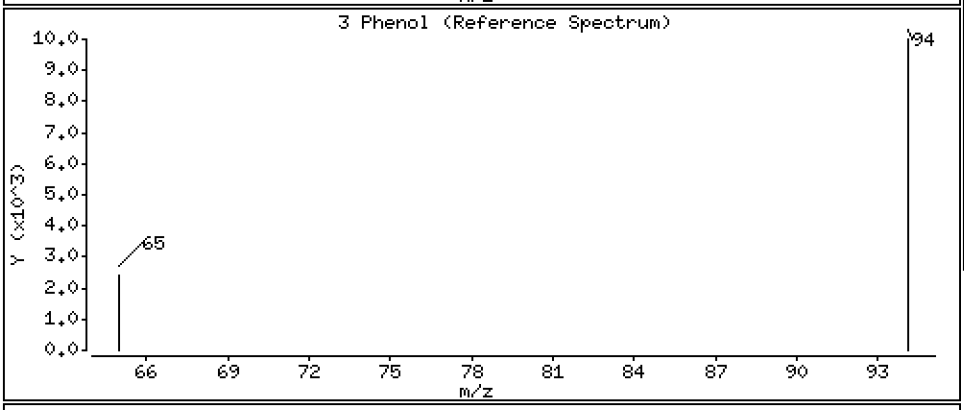
Concentration: 3.982 ug/mL

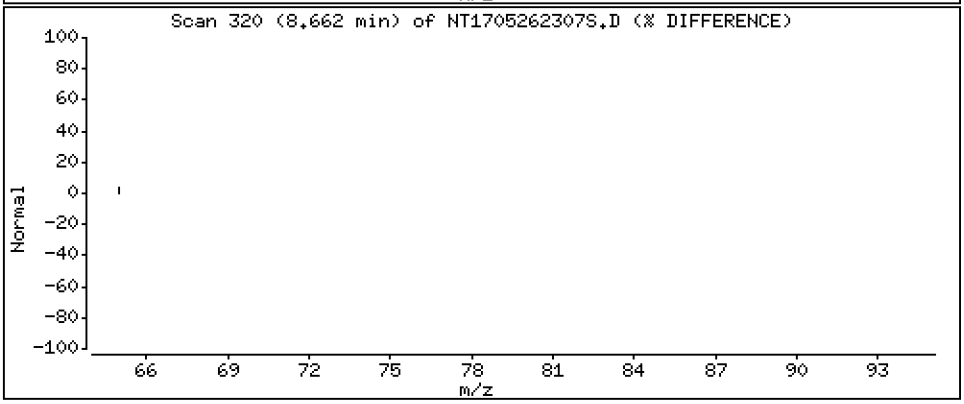












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

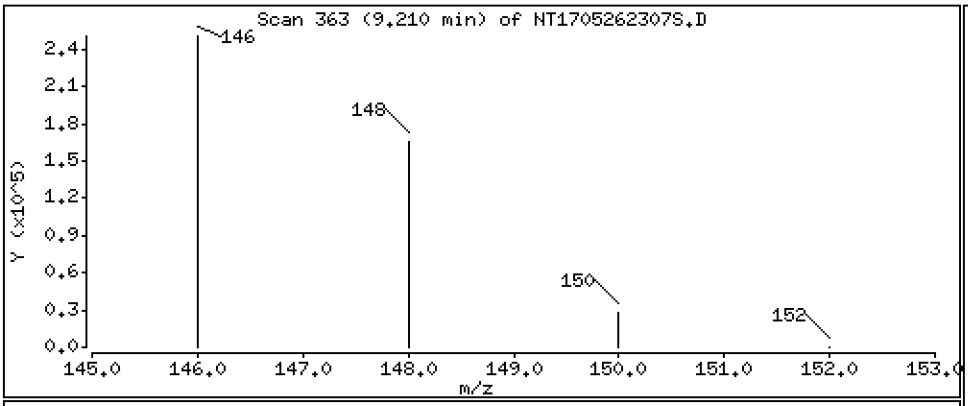
Operator: VTS

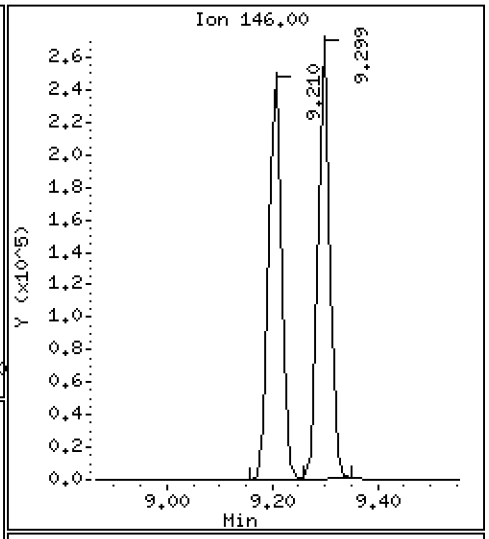
Column phase: ZB-5msi

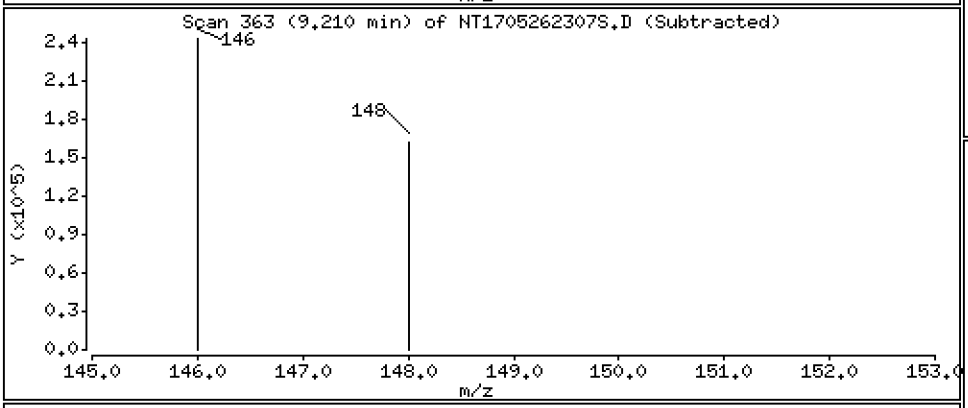
Column diameter: 0.25

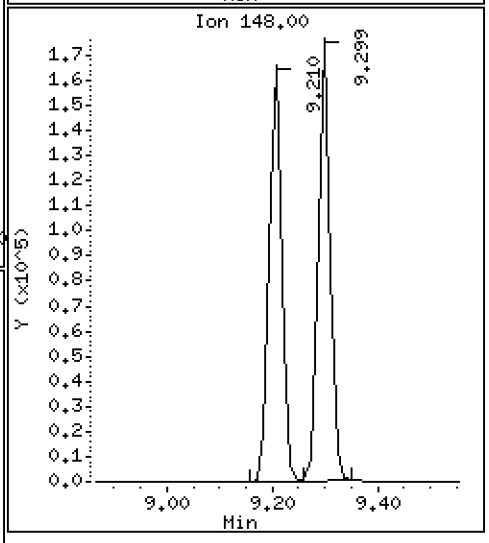
7 1,3-Dichlorobenzene

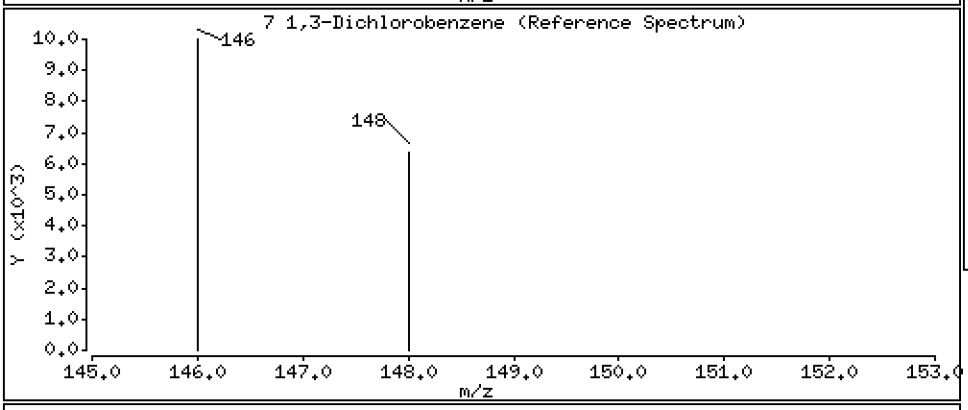
Concentration: 3.848 ug/mL

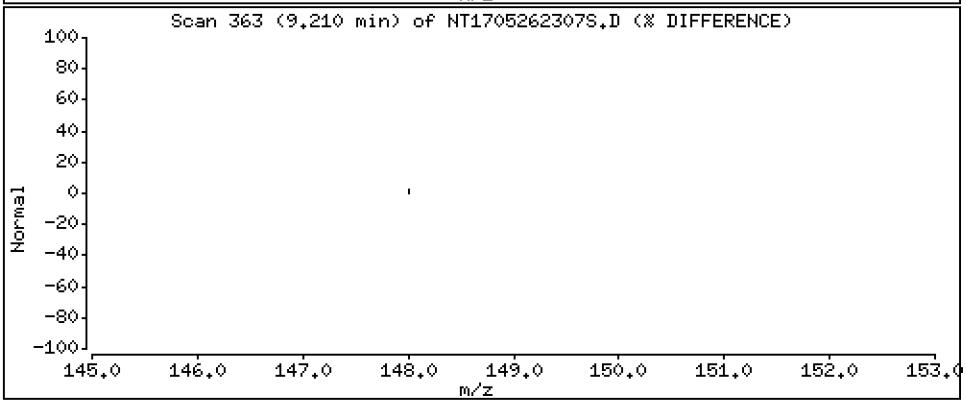












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

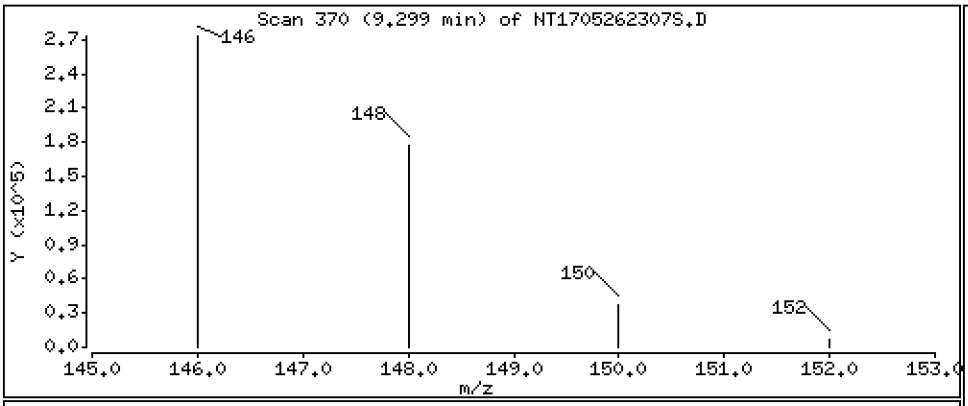
Operator: VTS

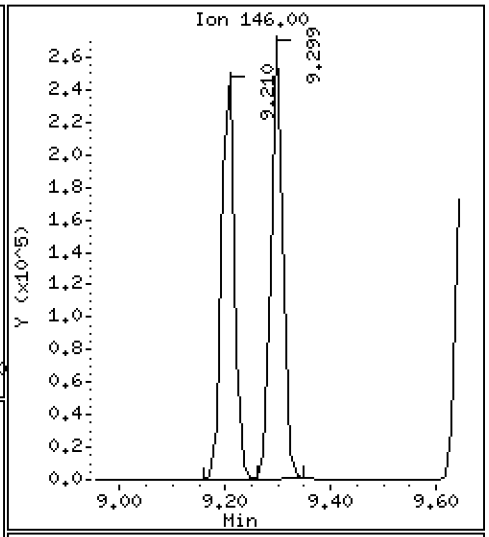
Column phase: ZB-5msi

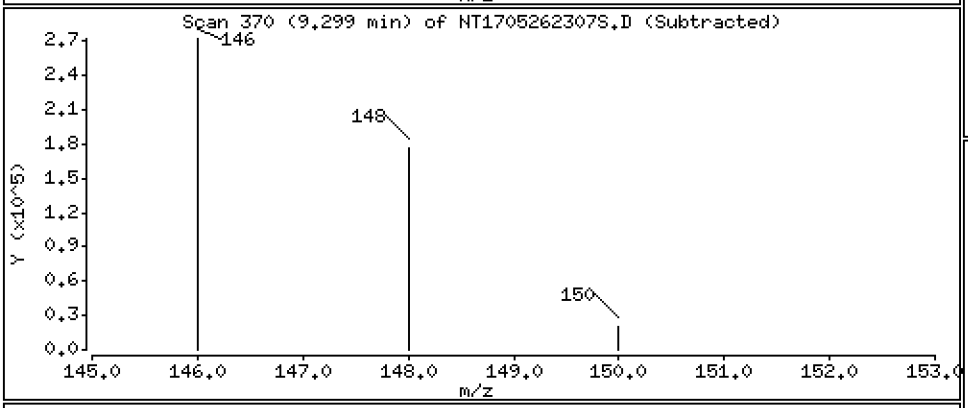
Column diameter: 0.25

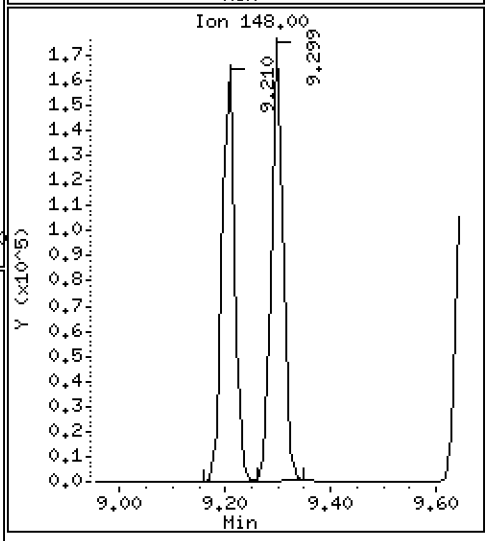
9 1,4-Dichlorobenzene

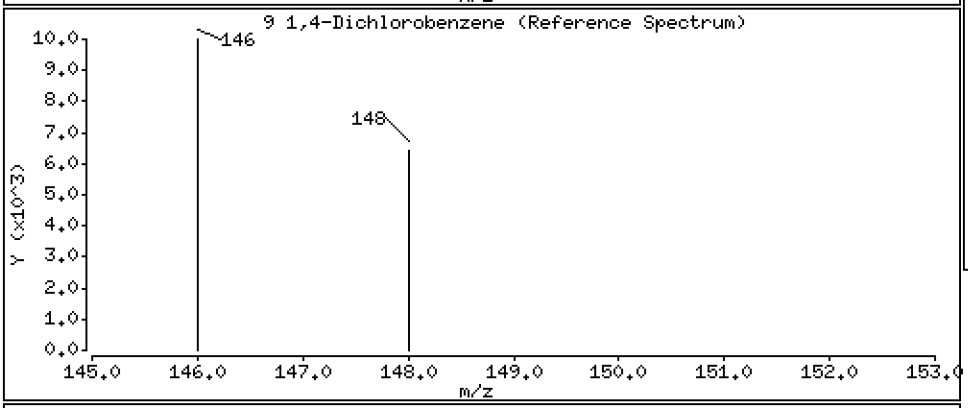
Concentration: 3.863 ug/mL

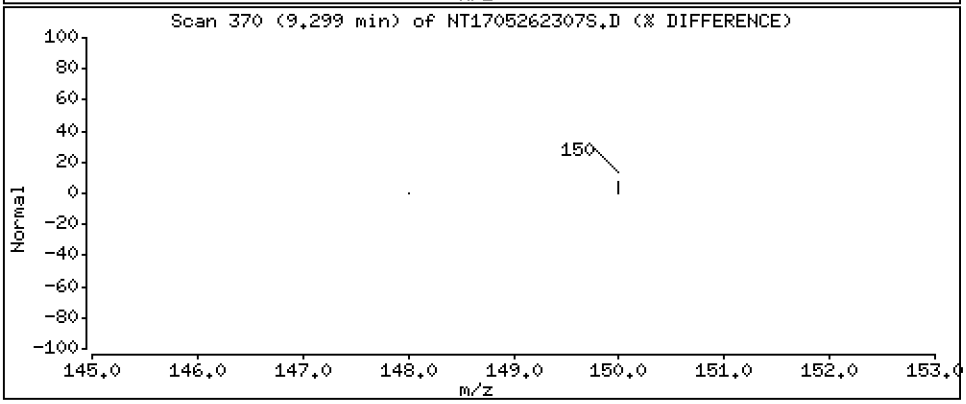












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

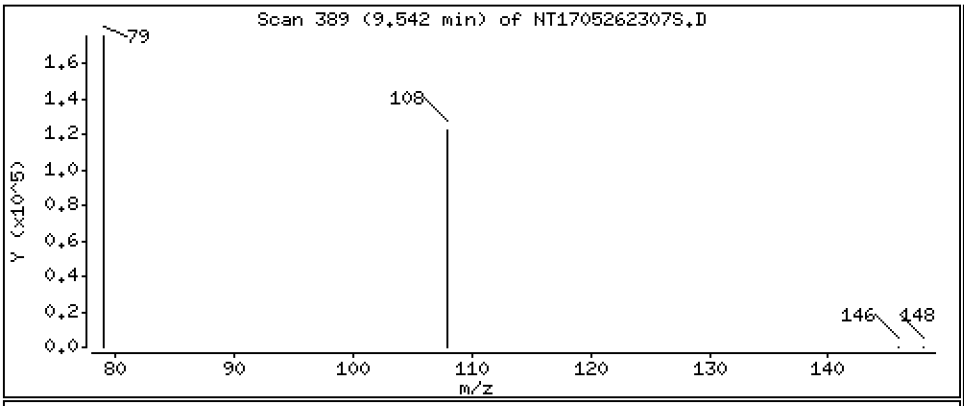
Operator: VTS

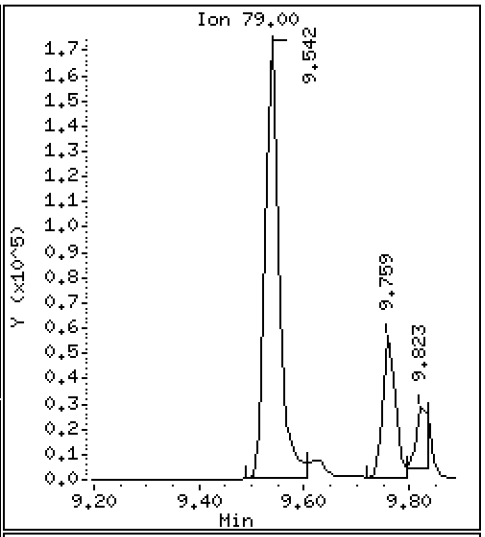
Column phase: ZB-5msi

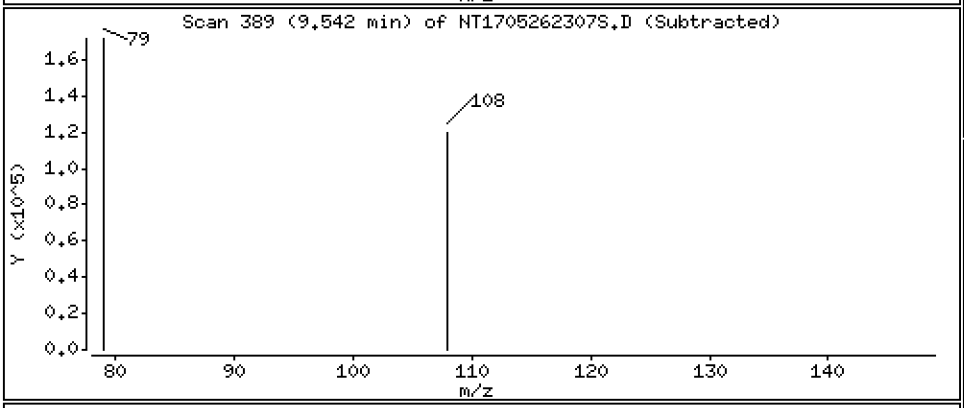
Column diameter: 0.25

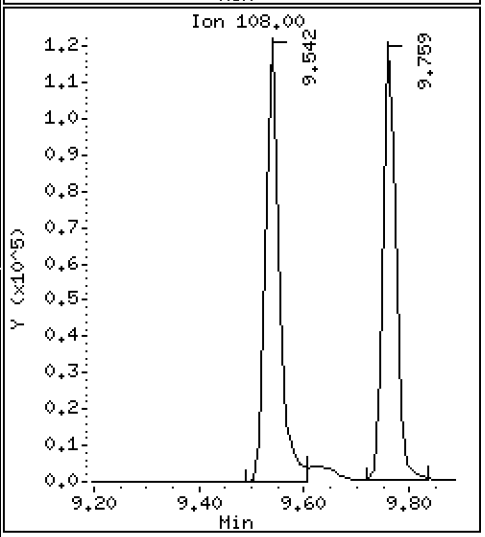
11 Benzyl alcohol

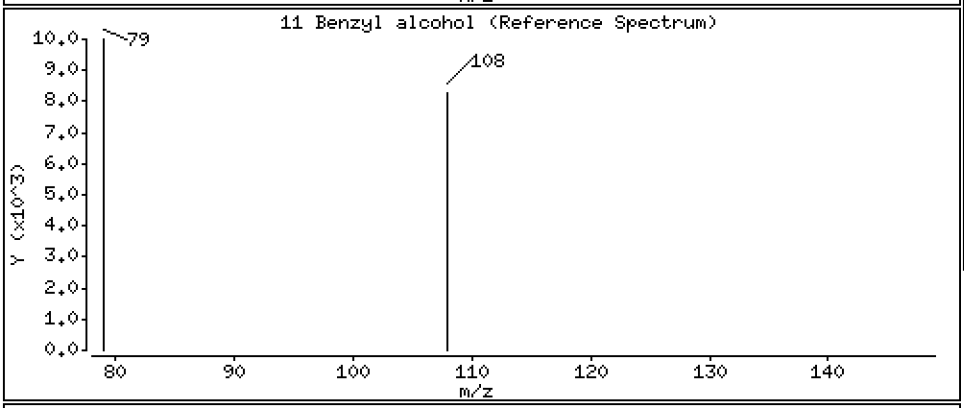
Concentration: 4.597 ug/mL

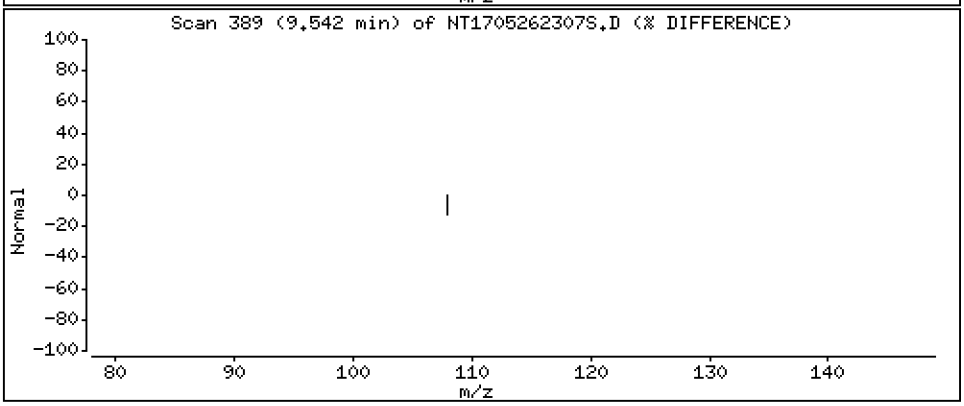












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

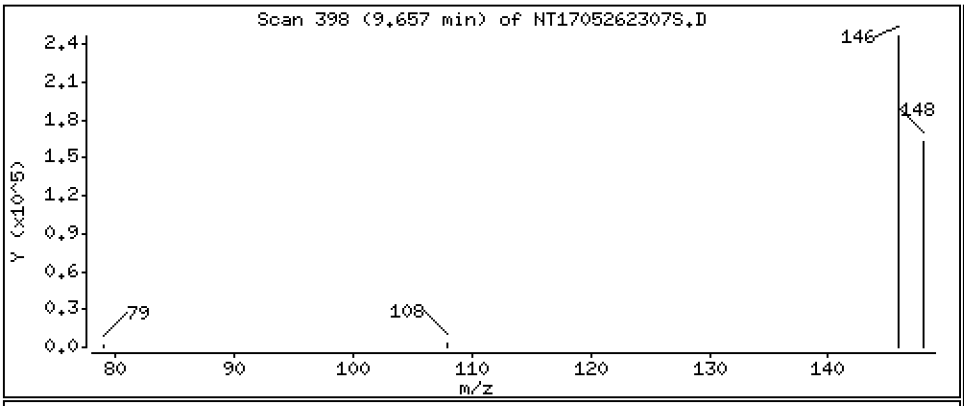
Operator: VTS

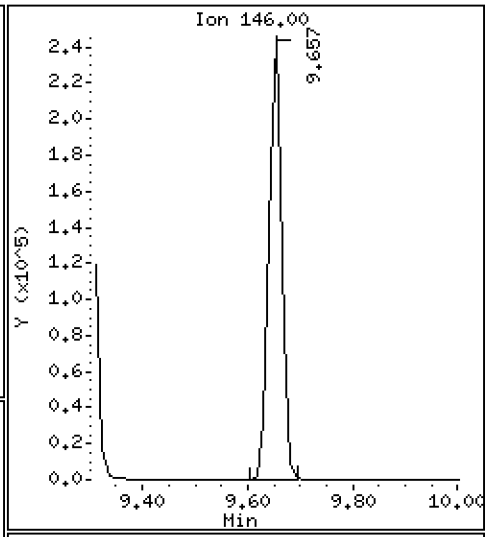
Column phase: ZB-5msi

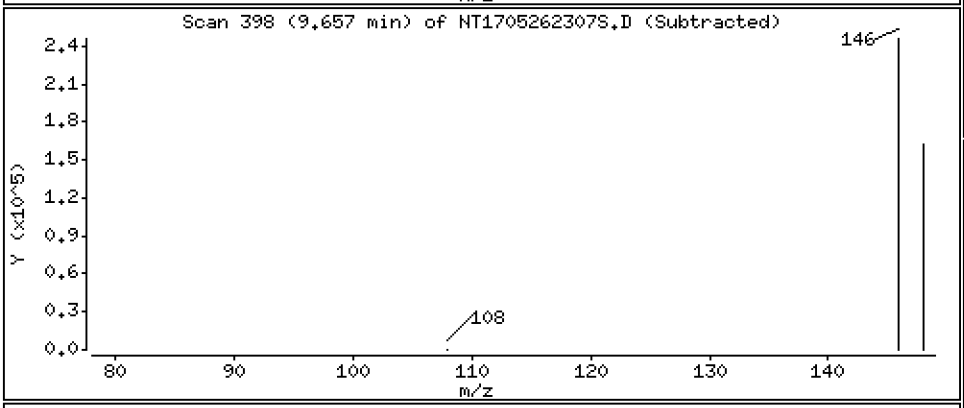
Column diameter: 0.25

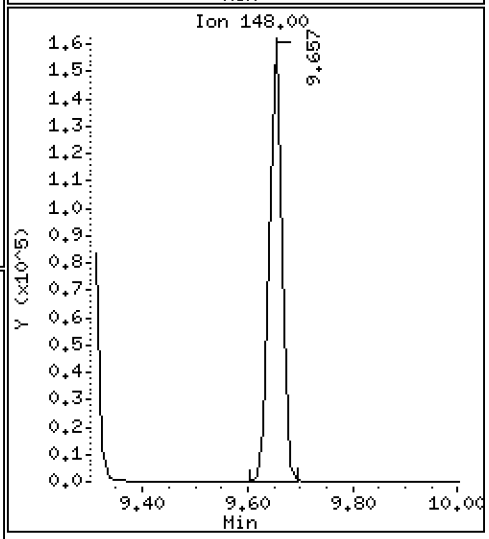
12 1,2-Dichlorobenzene

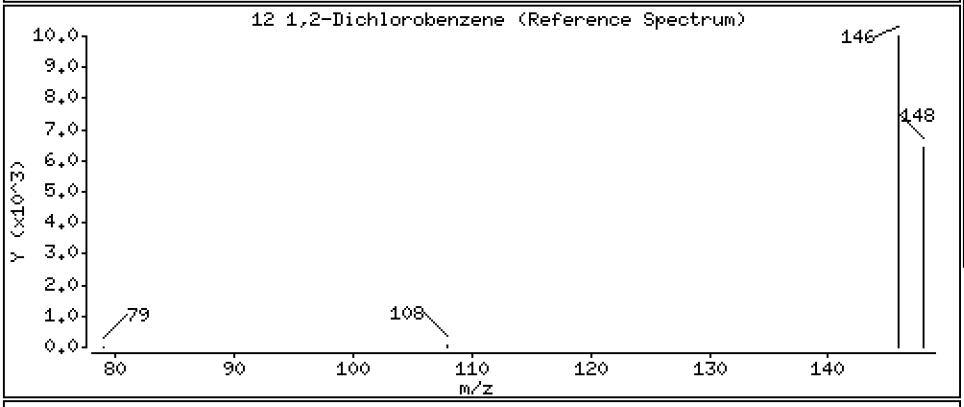
Concentration: 3.894 ug/mL

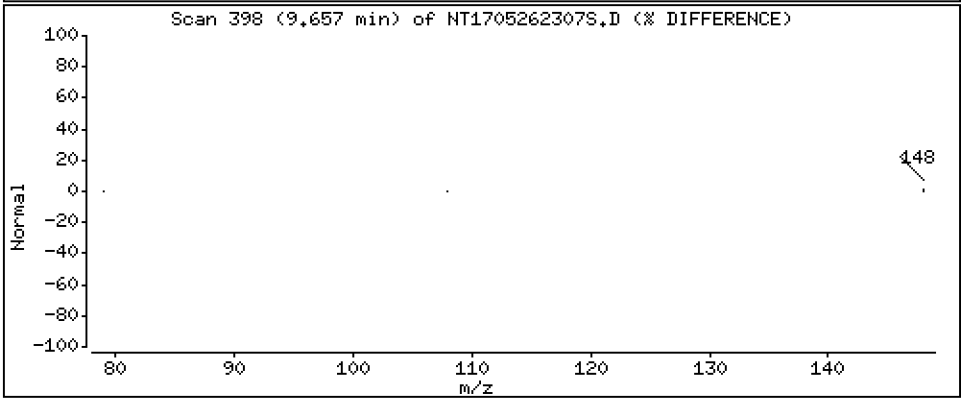












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262307S.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

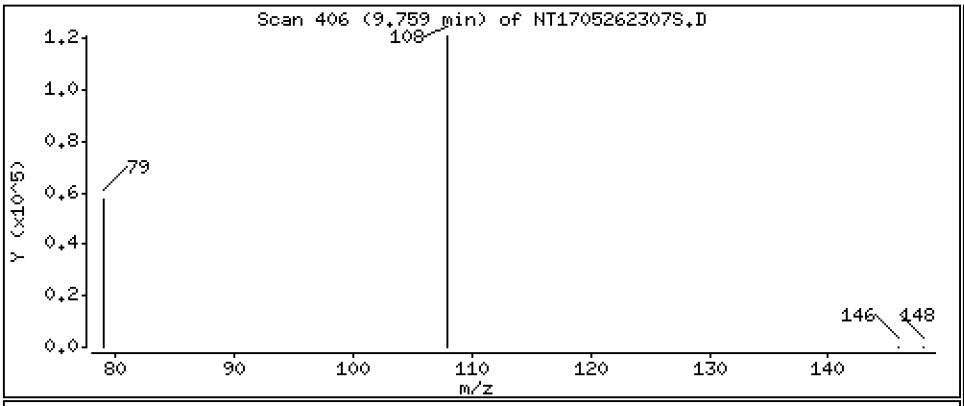
Operator: VTS

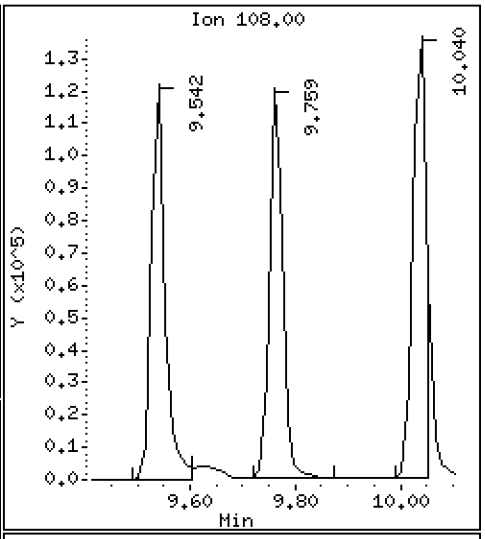
Column phase: ZB-5msi

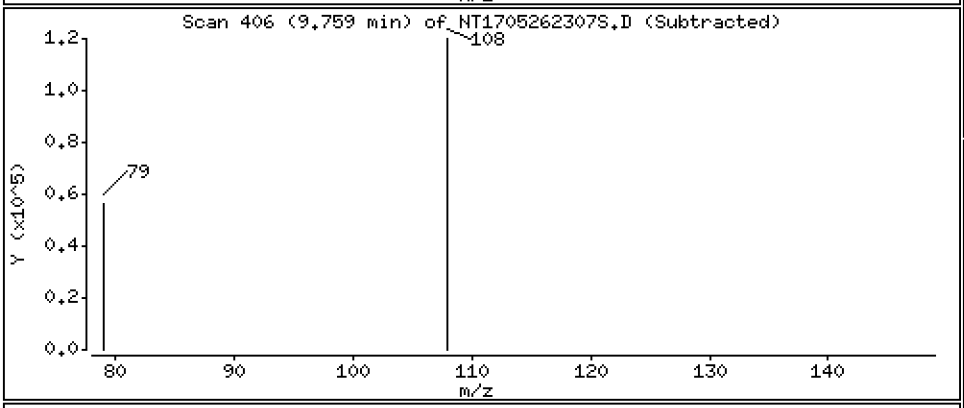
Column diameter: 0.25

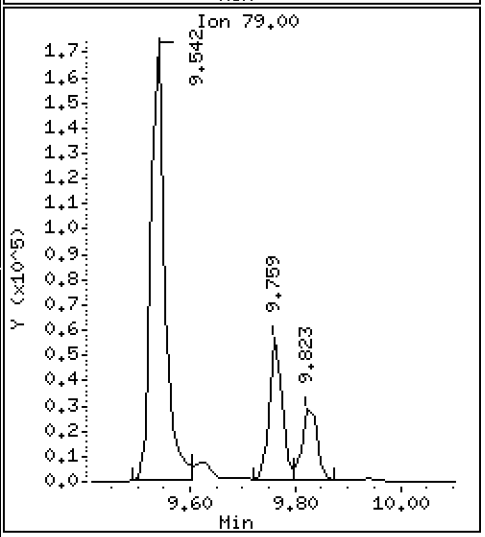
13 2-Methylphenol

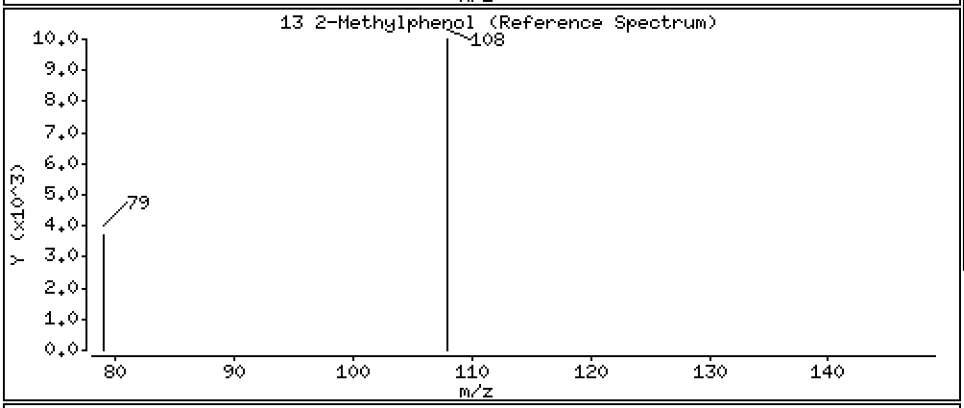
Concentration: 2.405 ug/mL

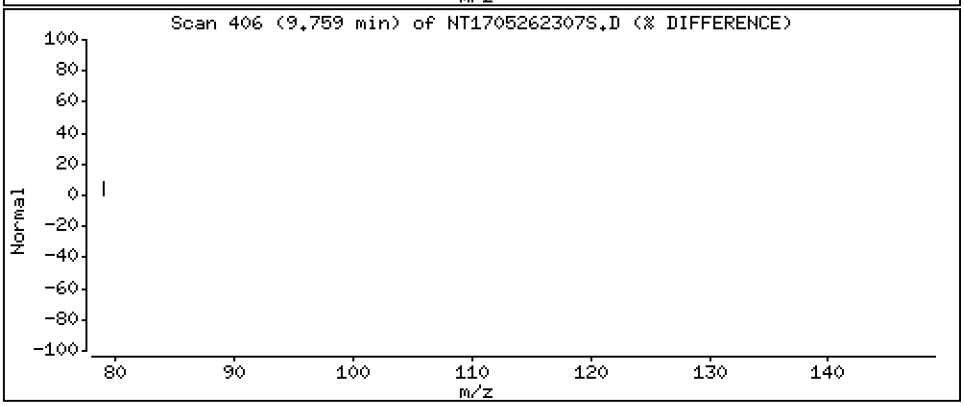












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

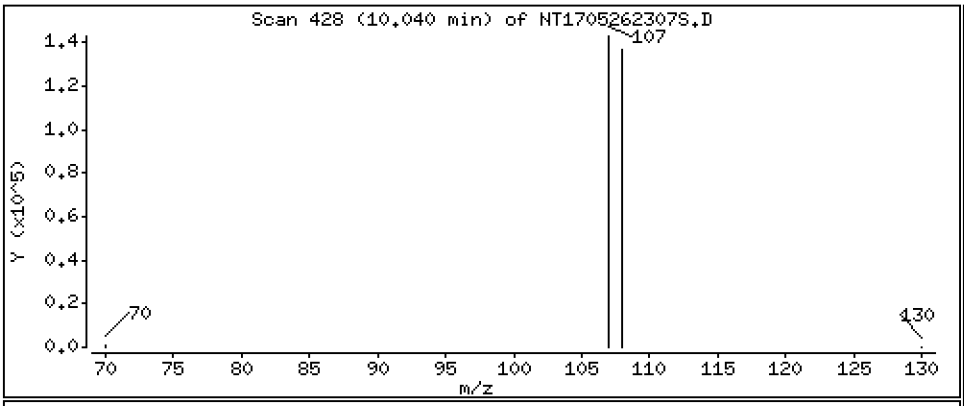
Operator: VTS

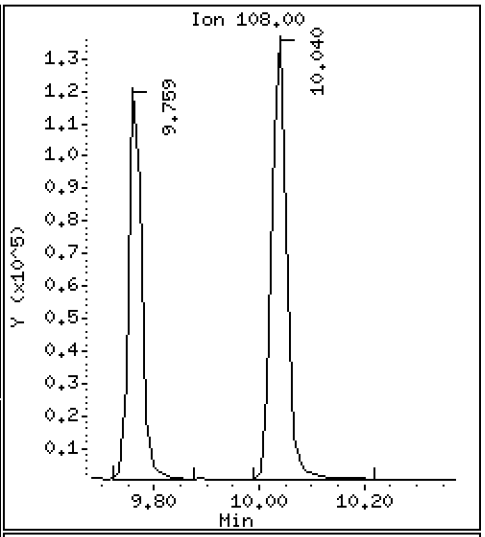
Column phase: ZB-5msi

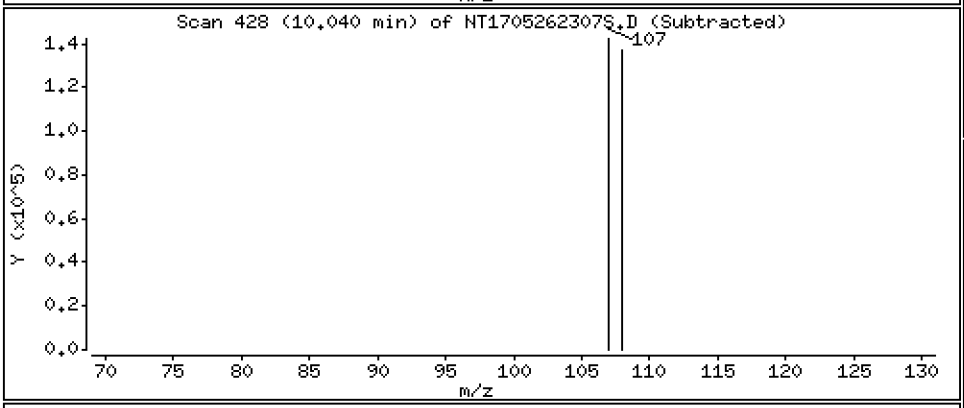
Column diameter: 0.25

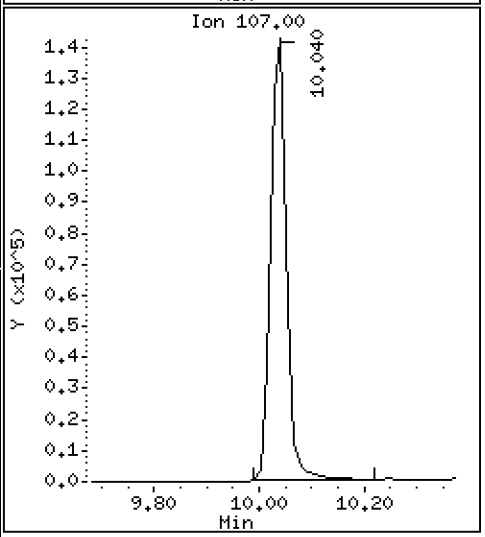
15 4-Methylphenol

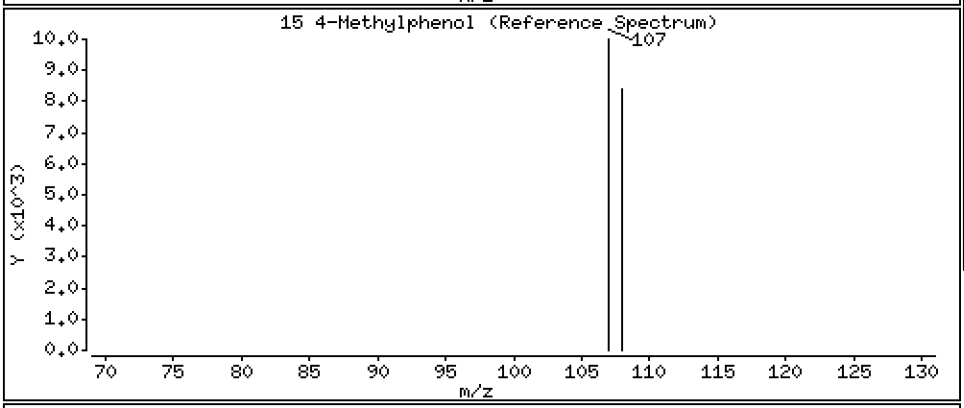
Concentration: 3.130 ug/mL

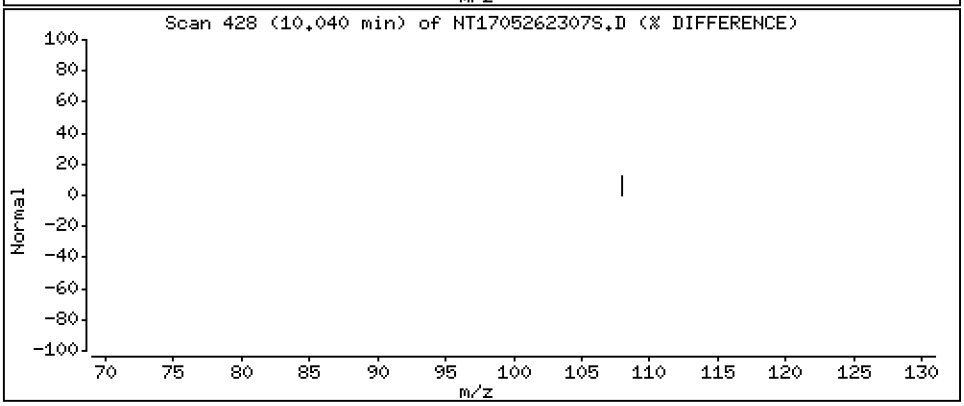












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262307S.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

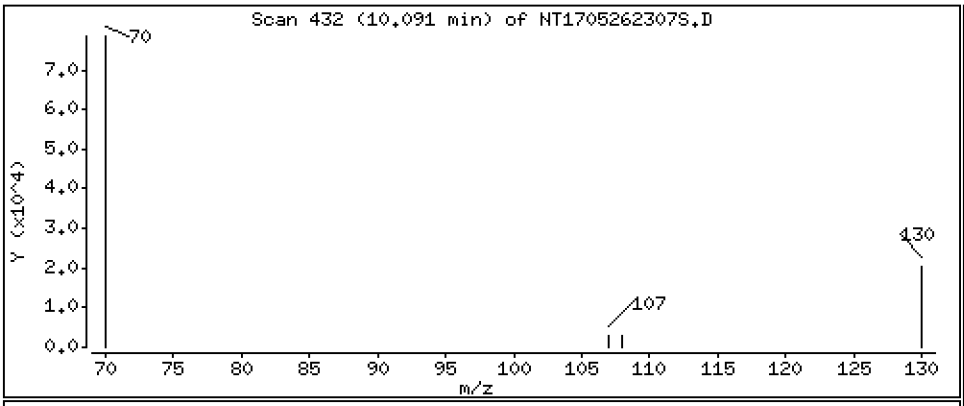
Operator: VTS

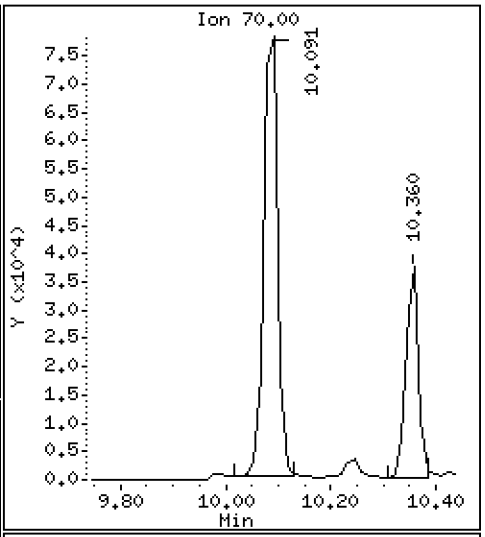
Column phase: ZB-5msi

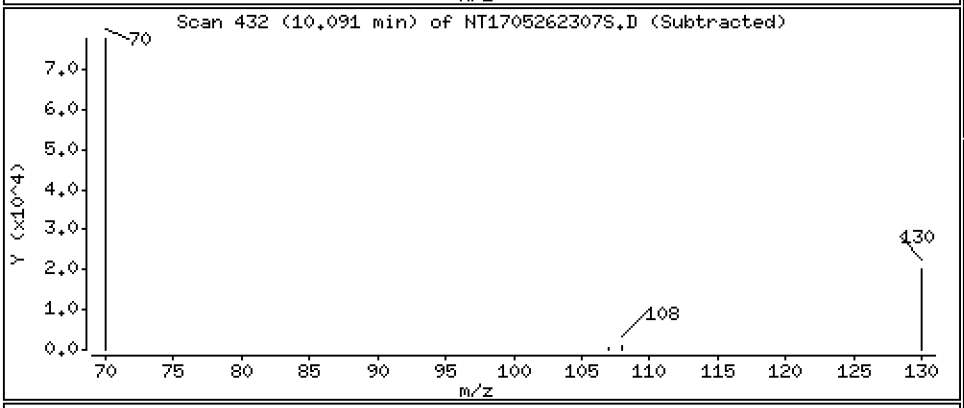
Column diameter: 0.25

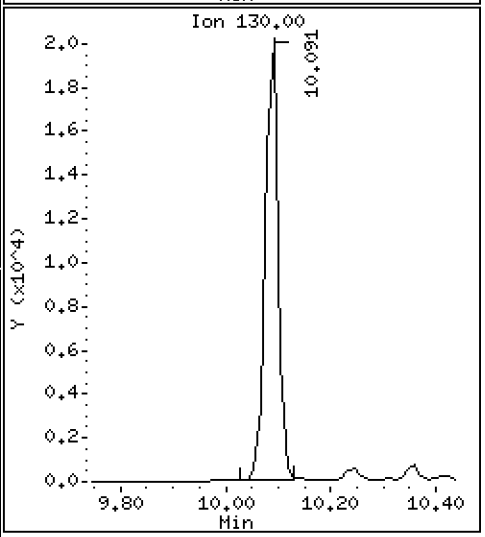
16 N-Nitroso-di-n-propylamine

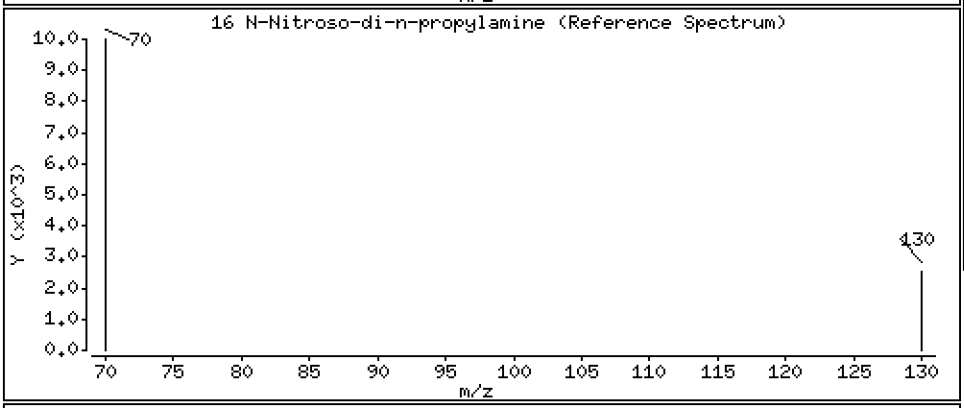
Concentration: 2.324 ug/mL

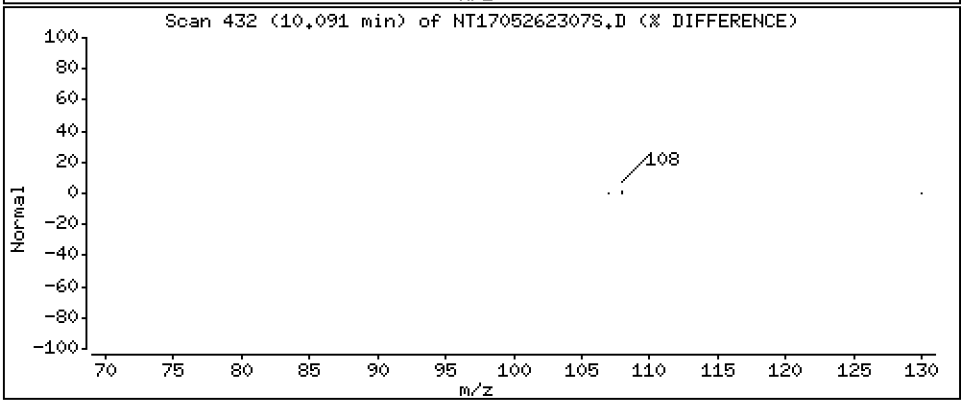












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

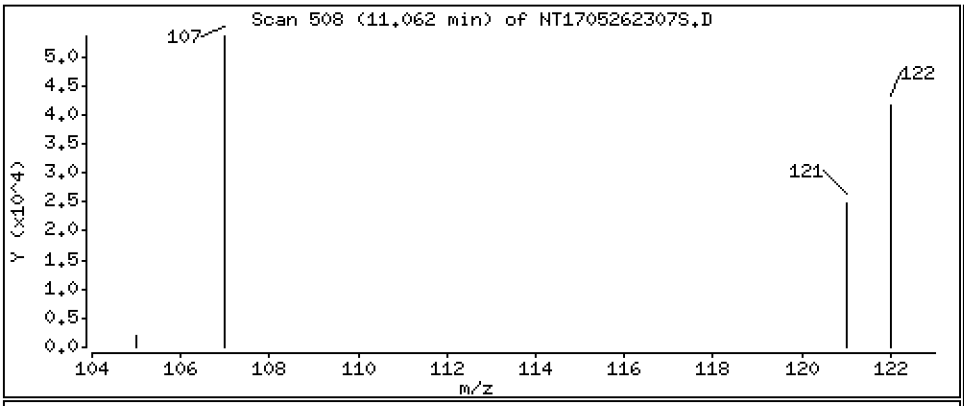
Operator: VTS

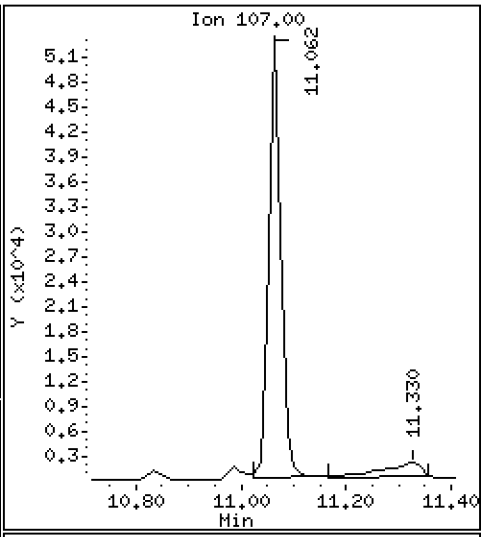
Column phase: ZB-5msi

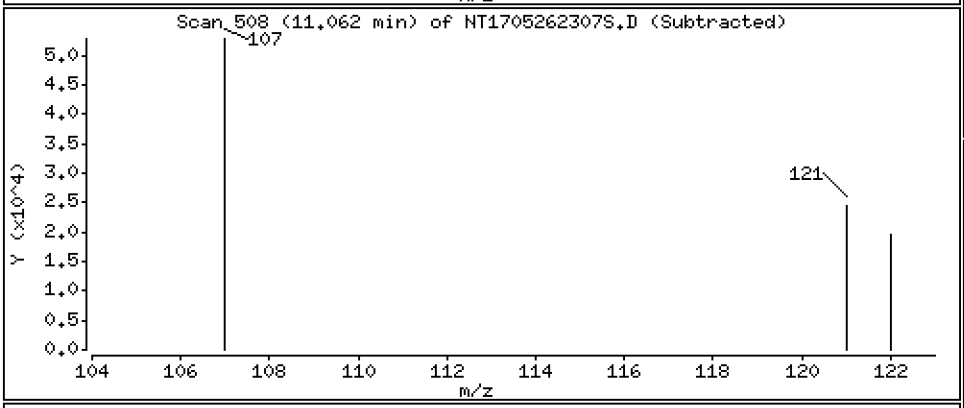
Column diameter: 0.25

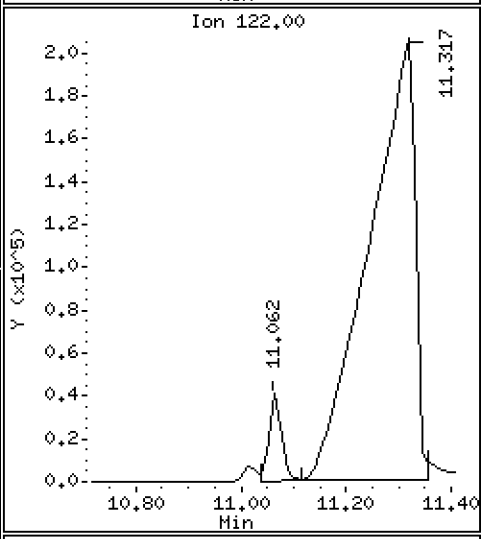
22 2,4-Dimethylphenol

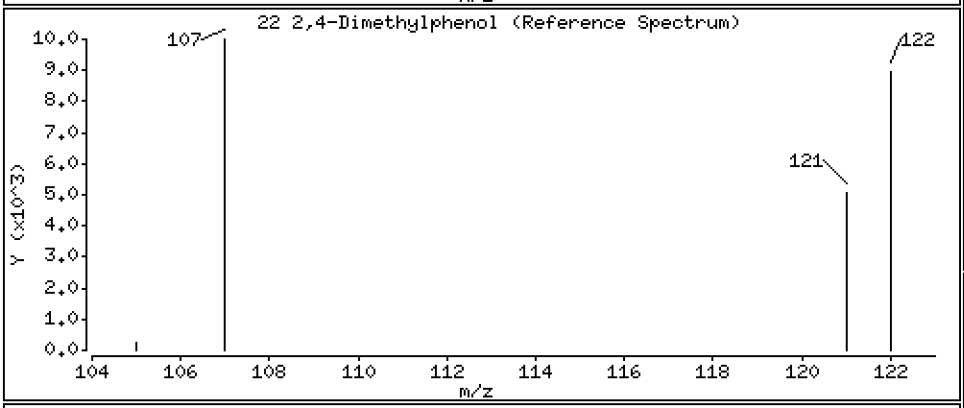
Concentration: 0.9043 ug/mL

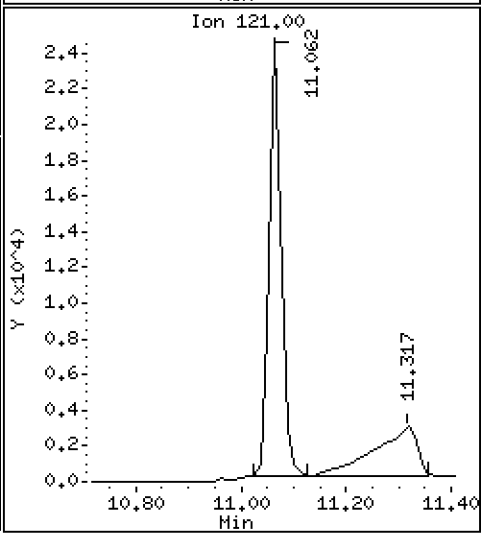


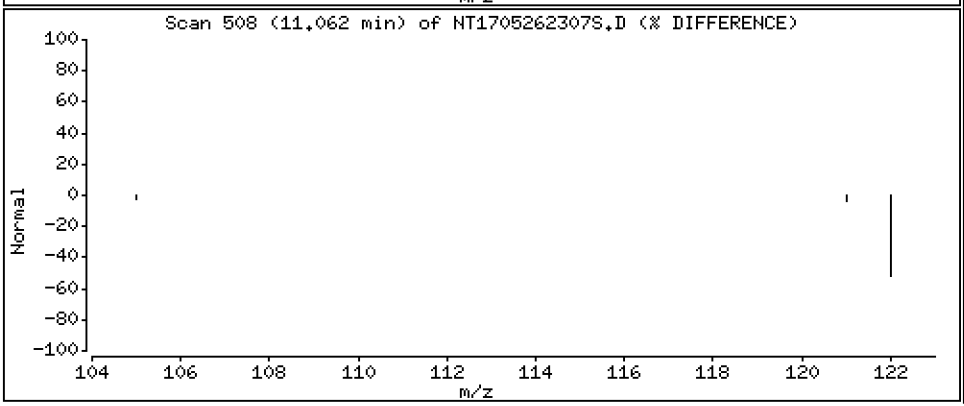












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

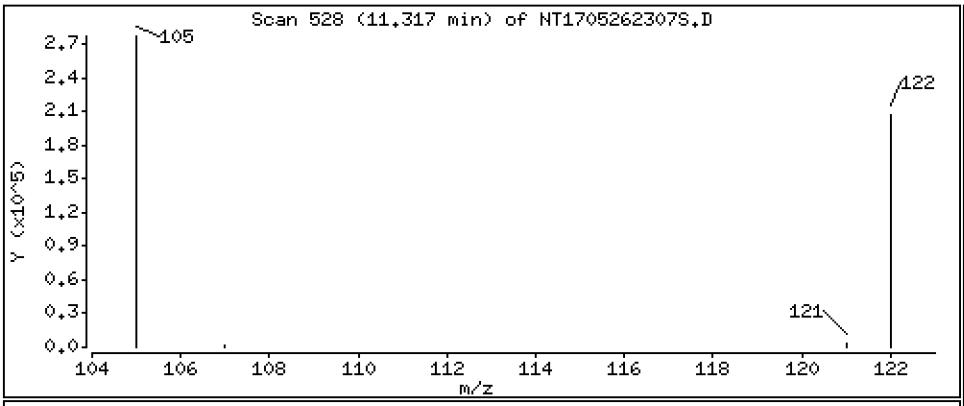
Operator: VTS

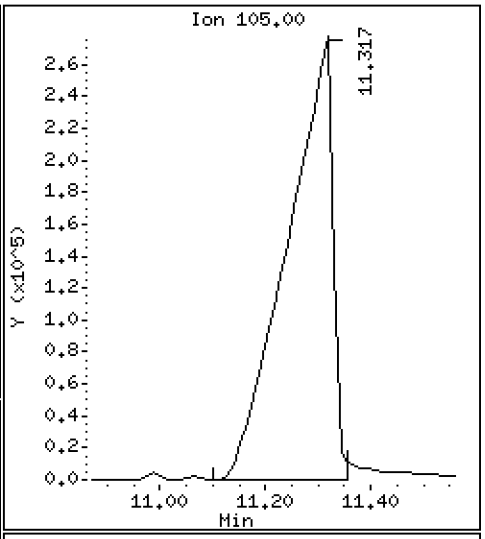
Column phase: ZB-5msi

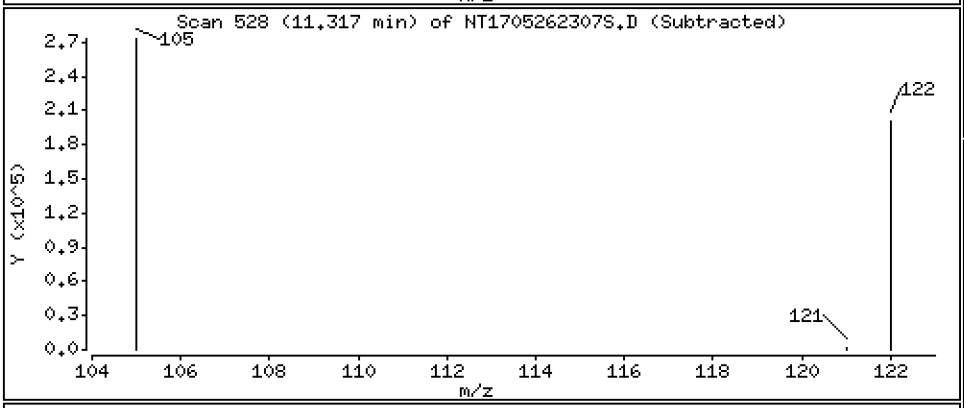
Column diameter: 0.25

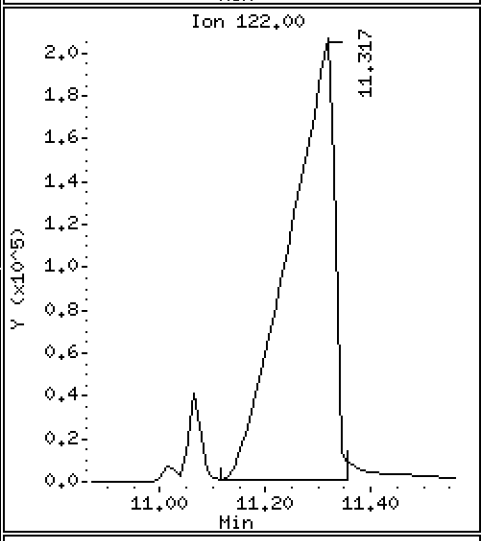
24 Benzoic acid

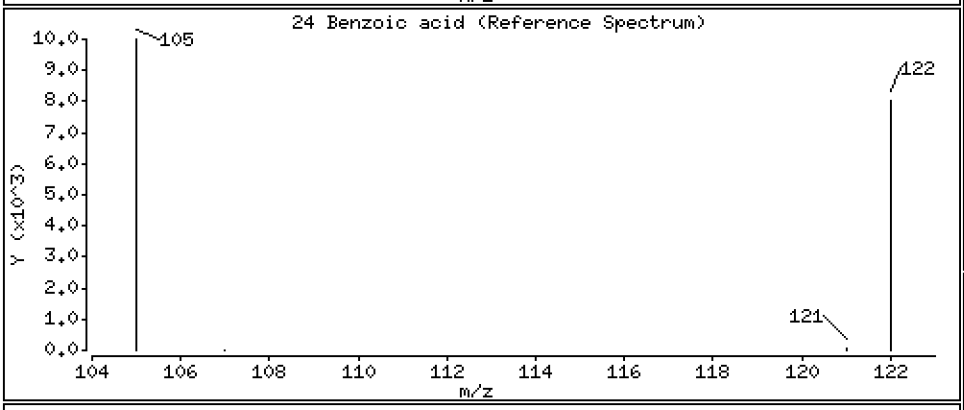
Concentration: 28.24 ug/mL

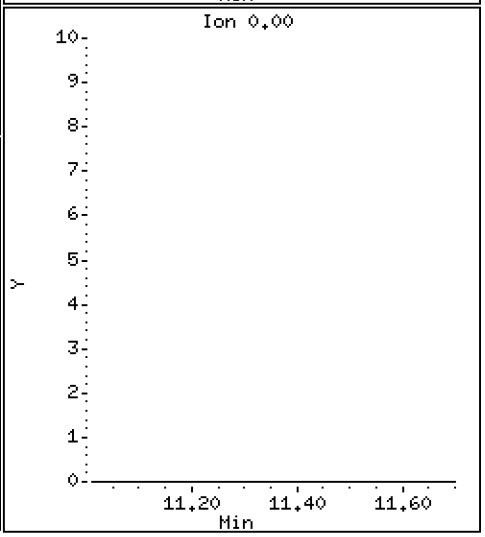


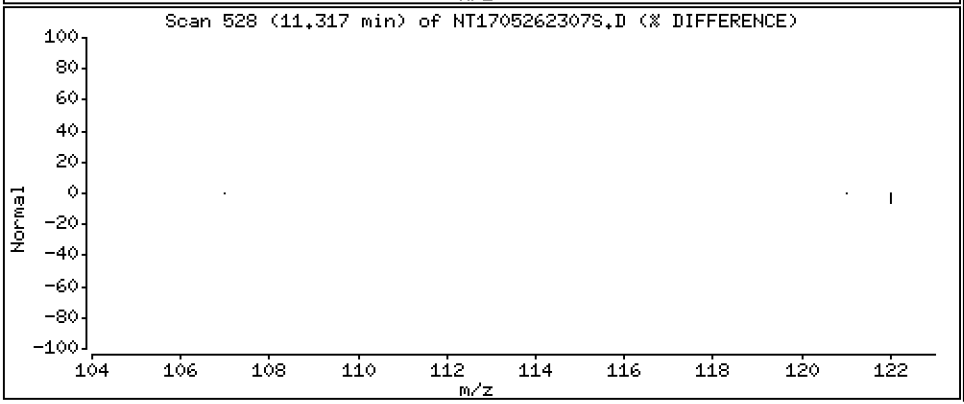












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

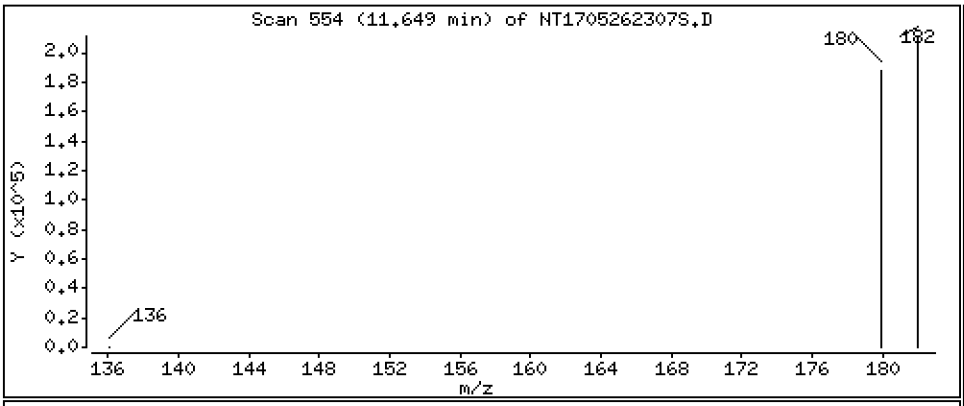
Operator: VTS

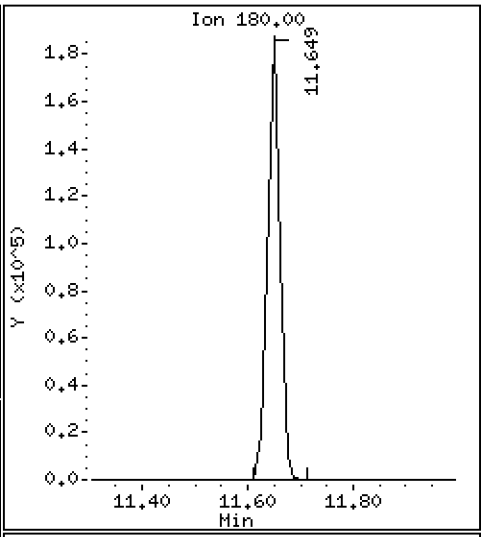
Column phase: ZB-5msi

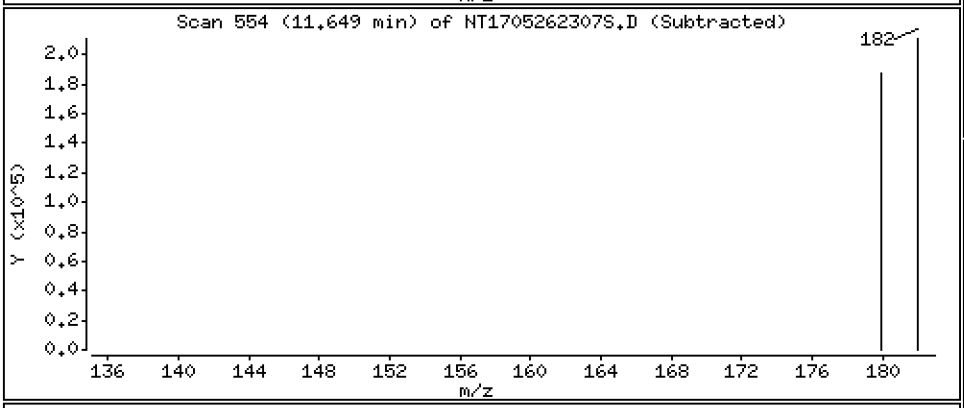
Column diameter: 0.25

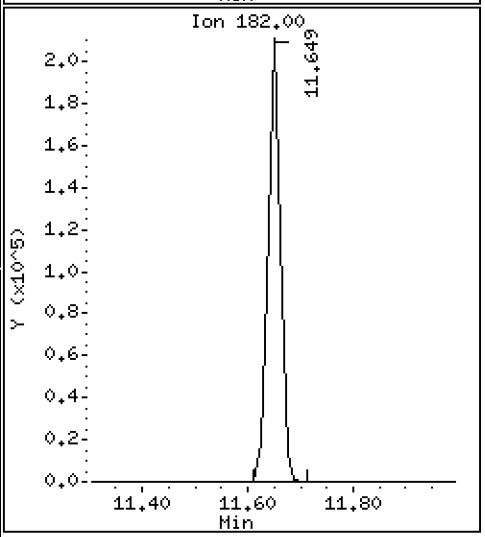
26 1,2,4-Trichlorobenzene

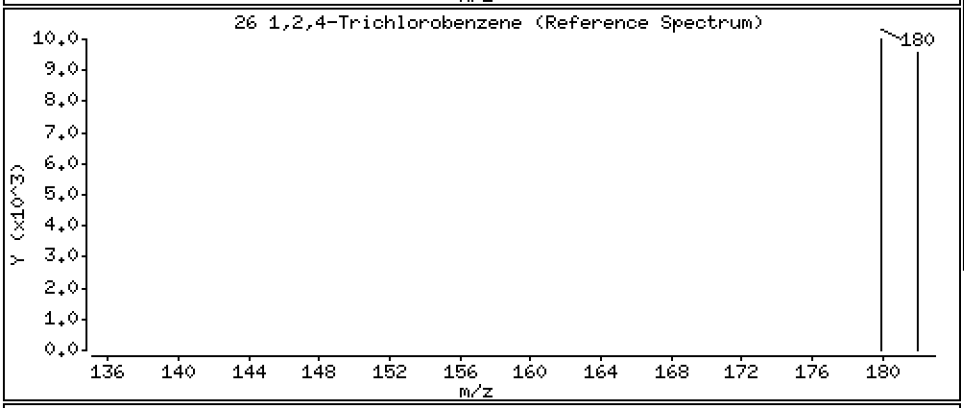
Concentration: 3.594 ug/mL

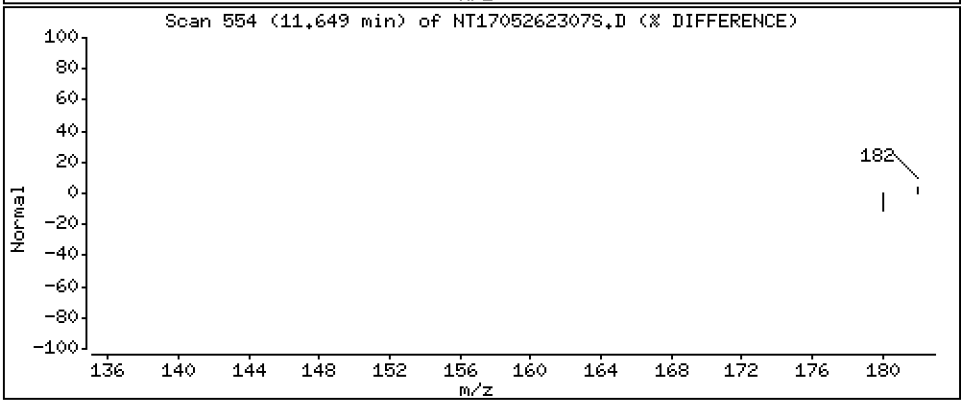












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

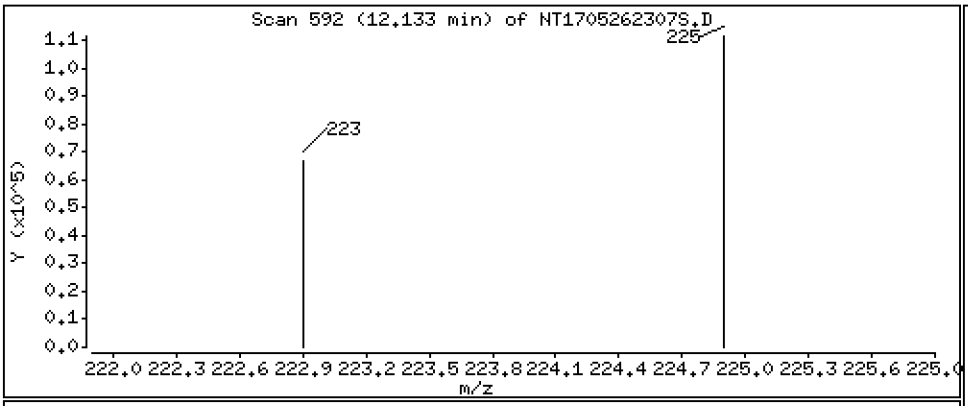
Operator: VTS

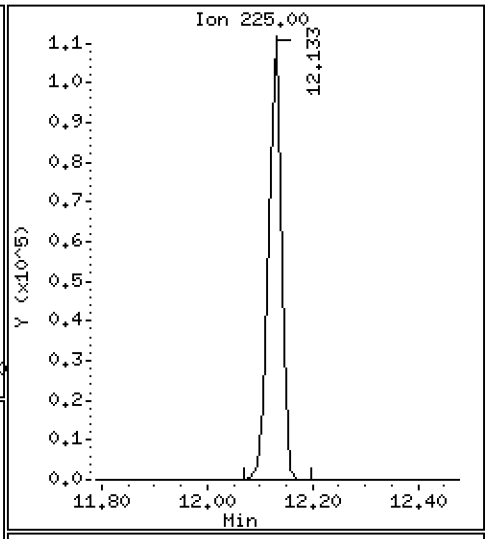
Column phase: ZB-5msi

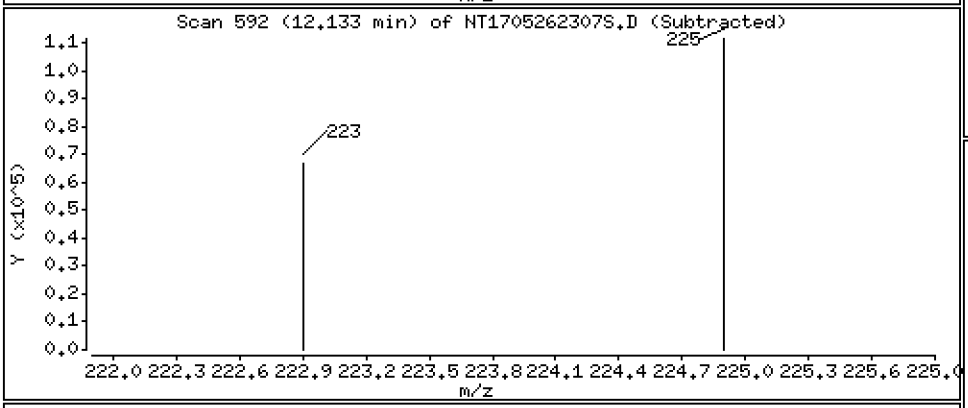
Column diameter: 0.25

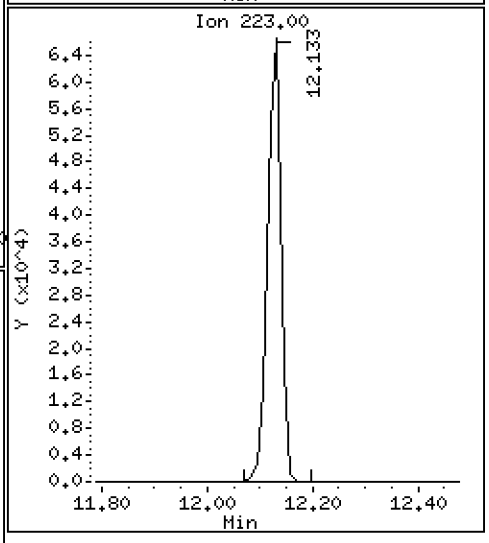
30 Hexachlorobutadiene

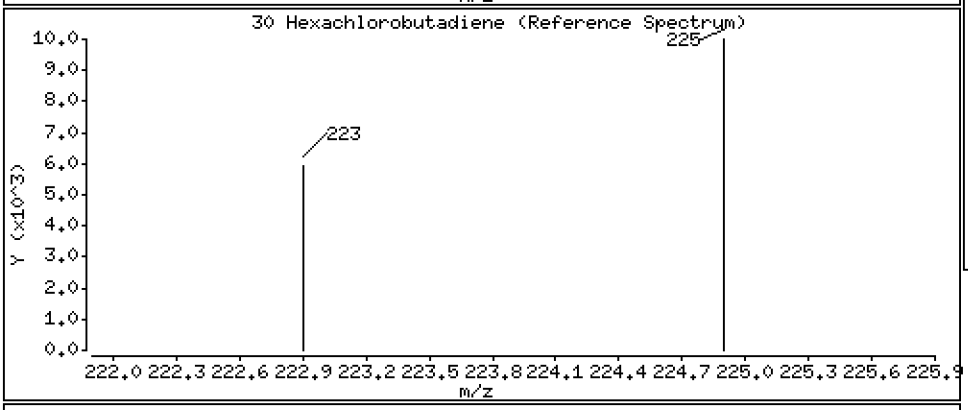
Concentration: 4.215 ug/mL

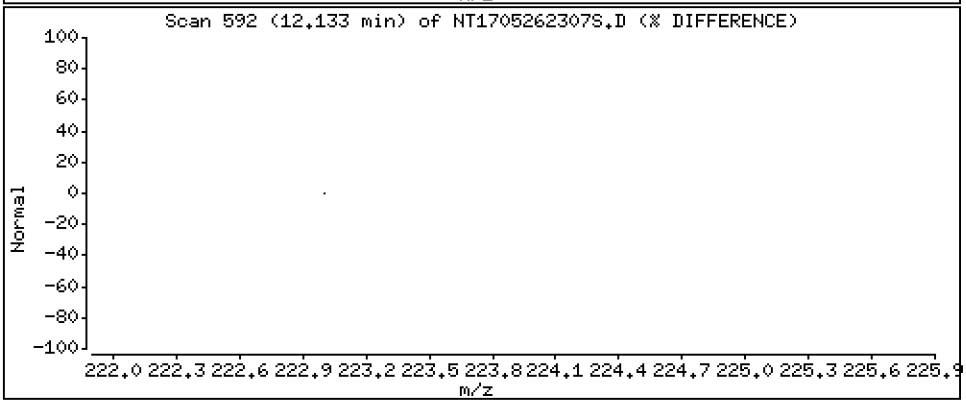












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262307S.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

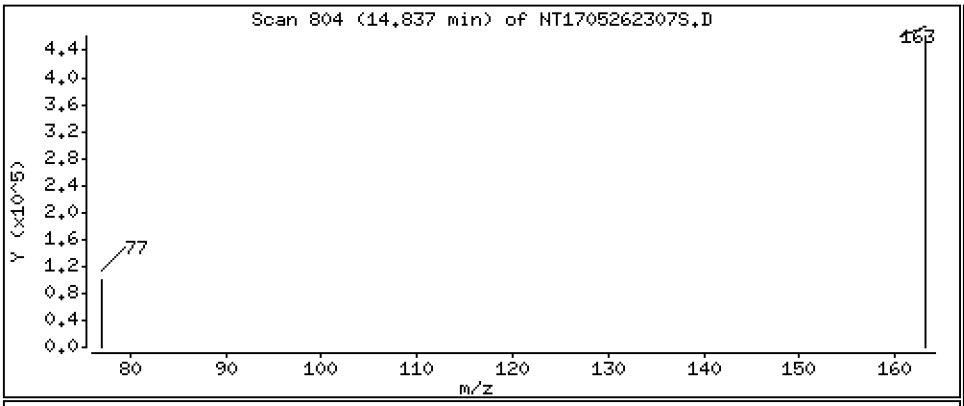
Operator: VTS

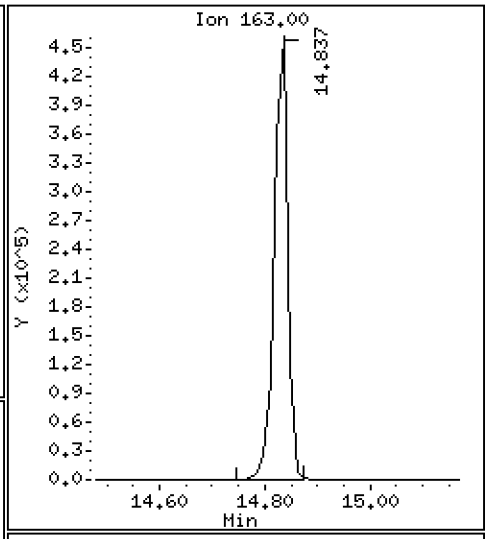
Column phase: ZB-5msi

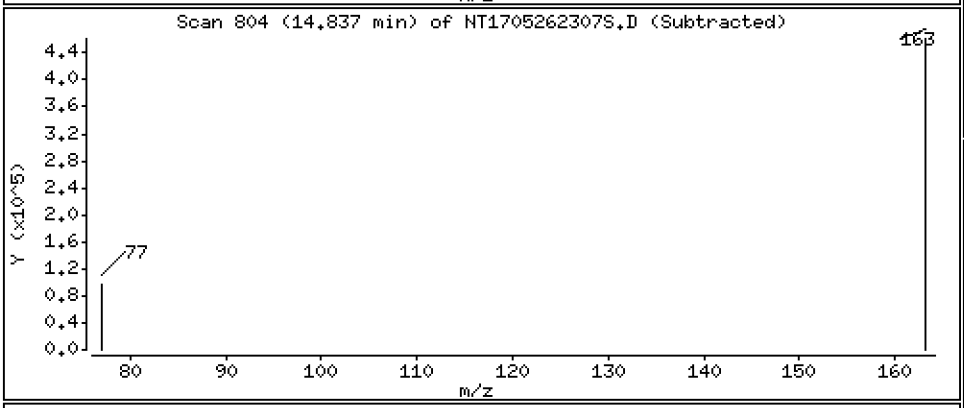
Column diameter: 0.25

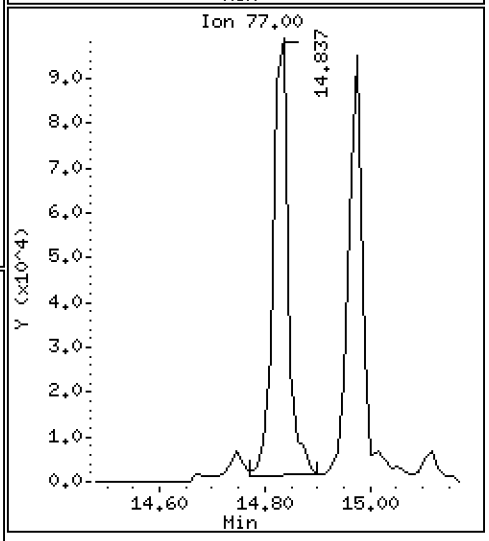
39 Dimethylphthalate

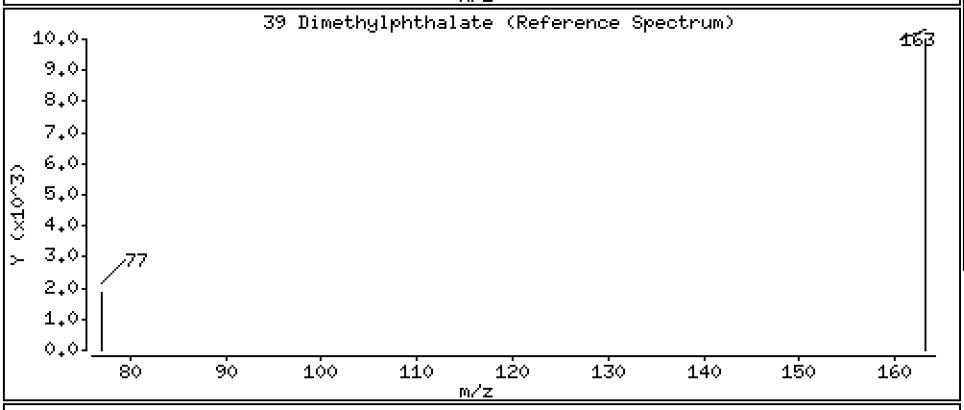
Concentration: 4.166 ug/mL

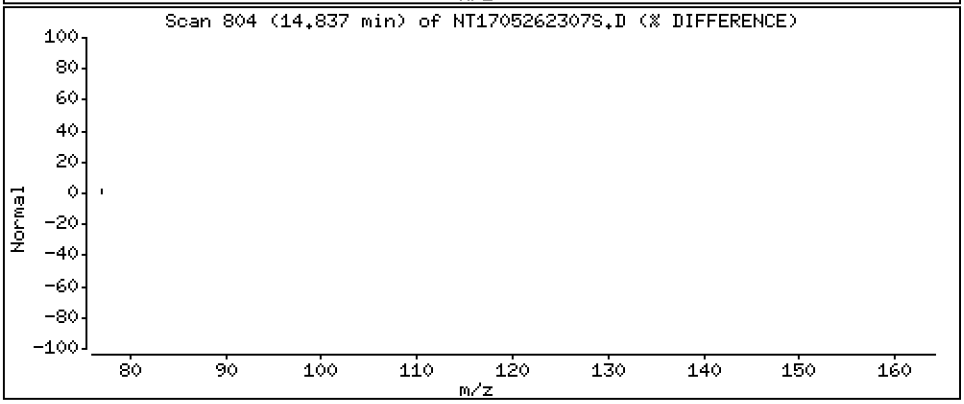












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262307S.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

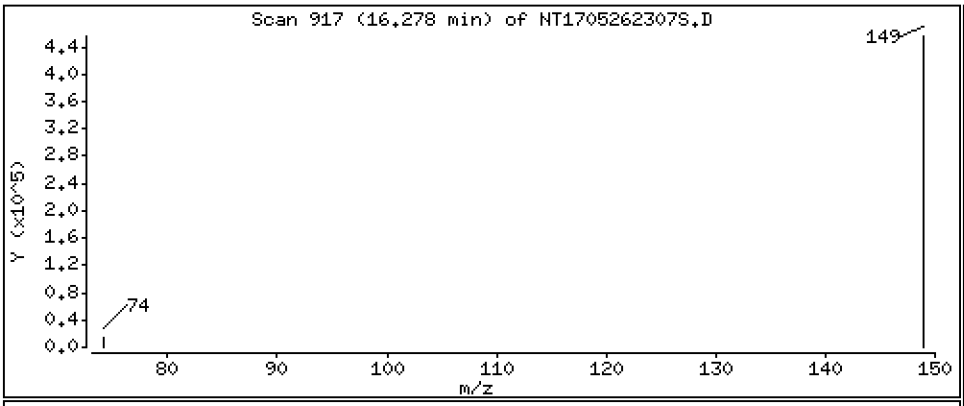
Operator: VTS

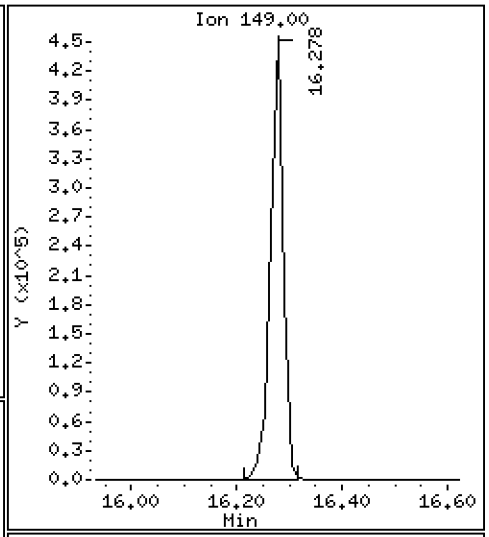
Column phase: ZB-5msi

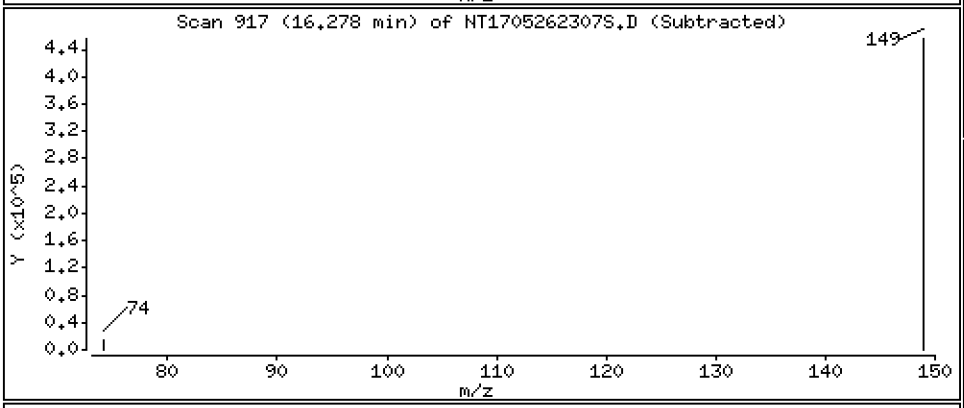
Column diameter: 0.25

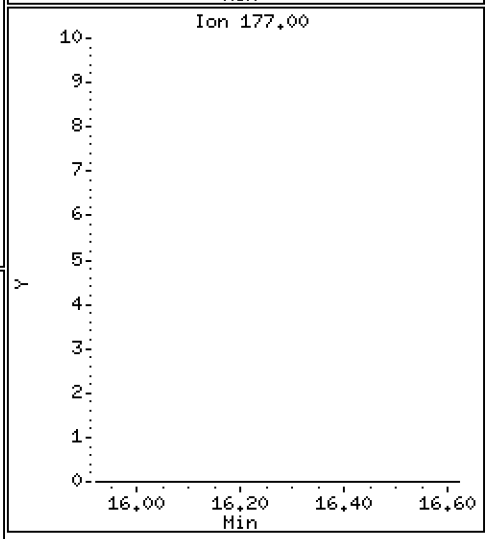
50 Diethylphthalate

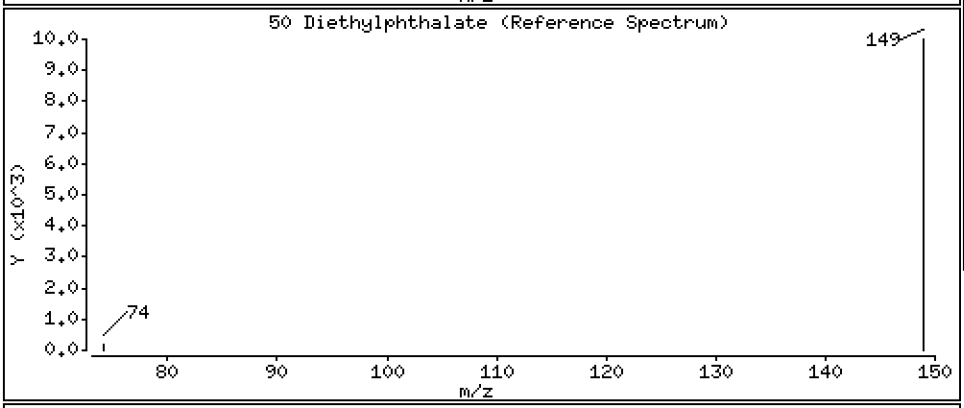
Concentration: 4.293 ug/mL

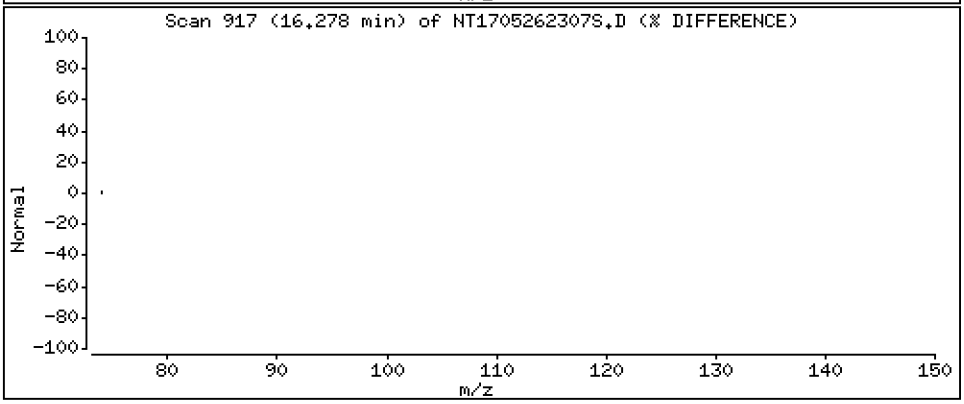












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262307S.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

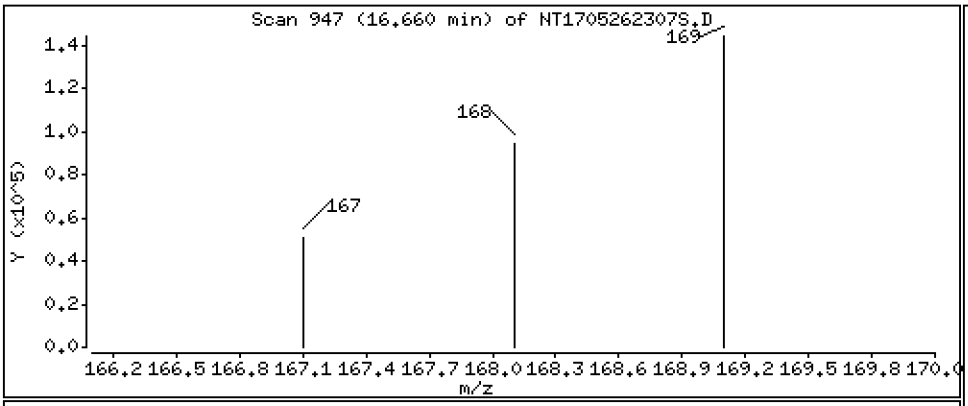
Operator: VTS

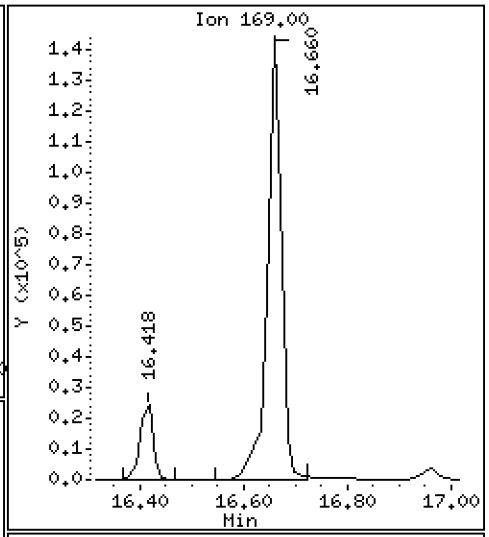
Column phase: ZB-5msi

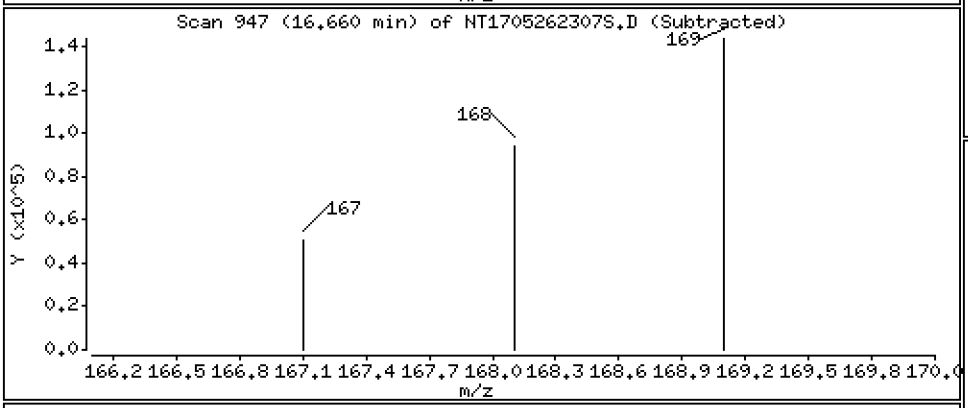
Column diameter: 0.25

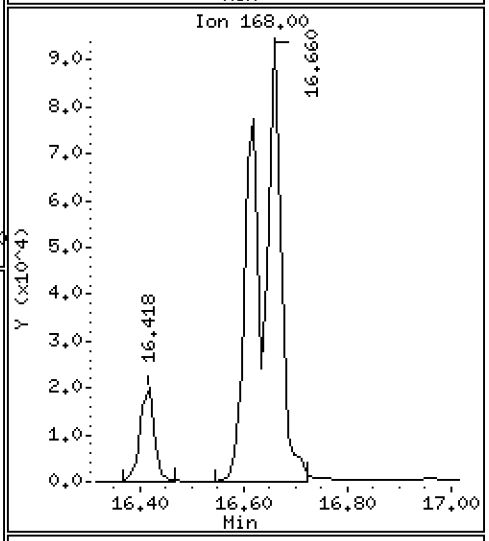
54 N-Nitrosodiphenylamine

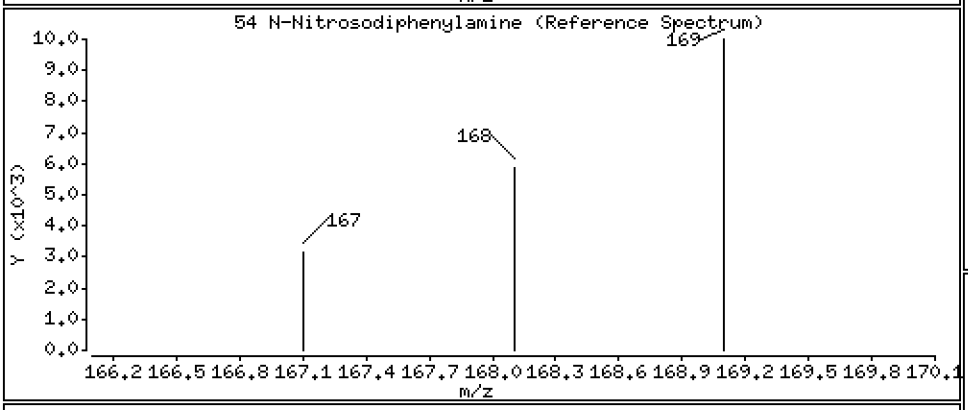
Concentration: 2.426 ug/mL

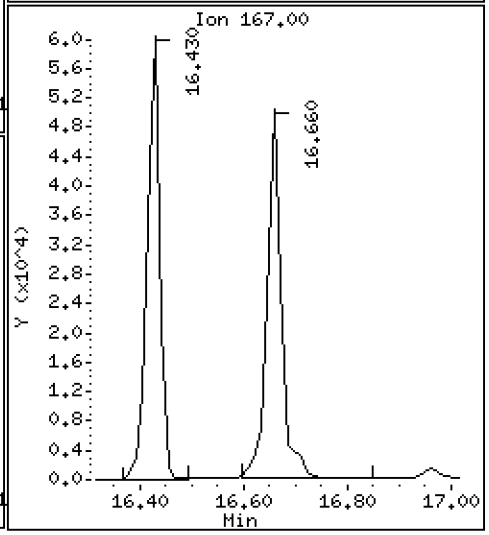


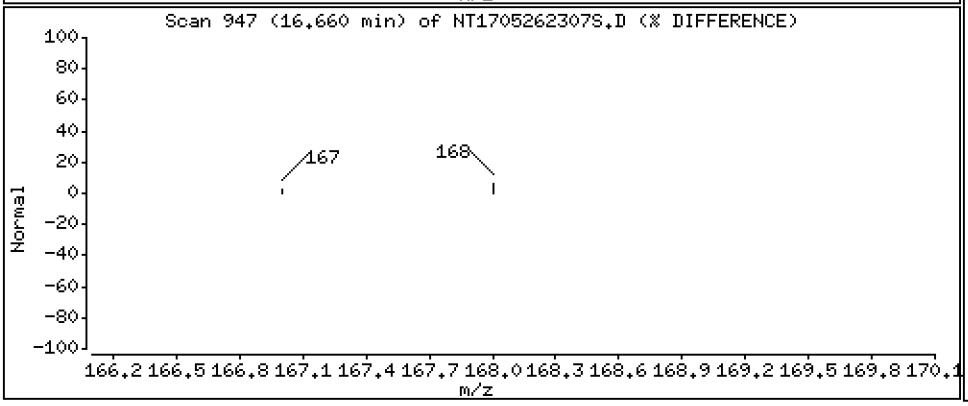












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

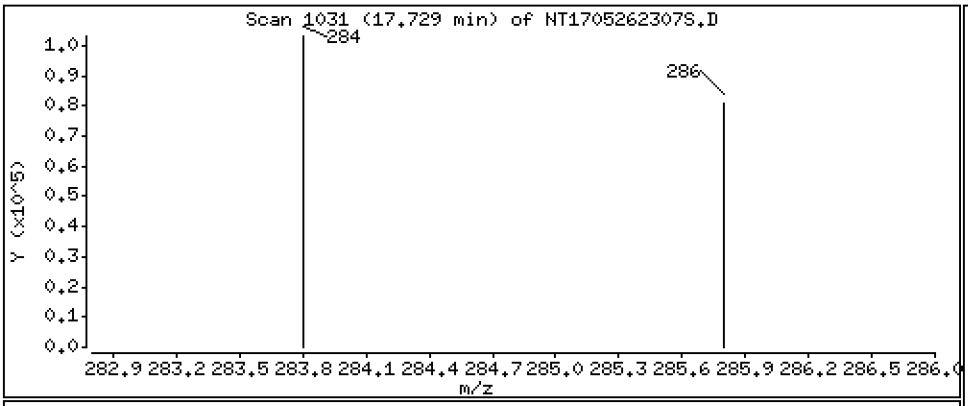
Operator: VTS

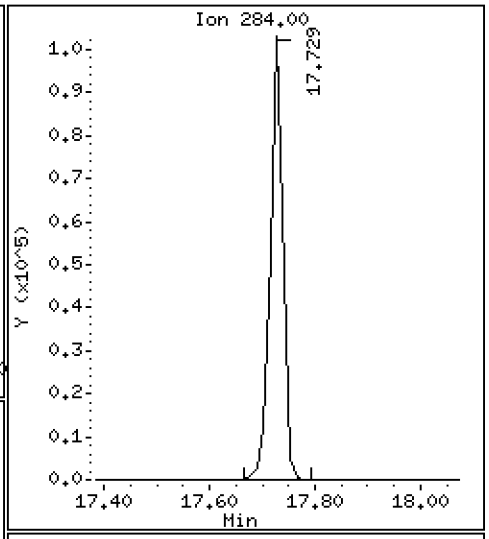
Column phase: ZB-5msi

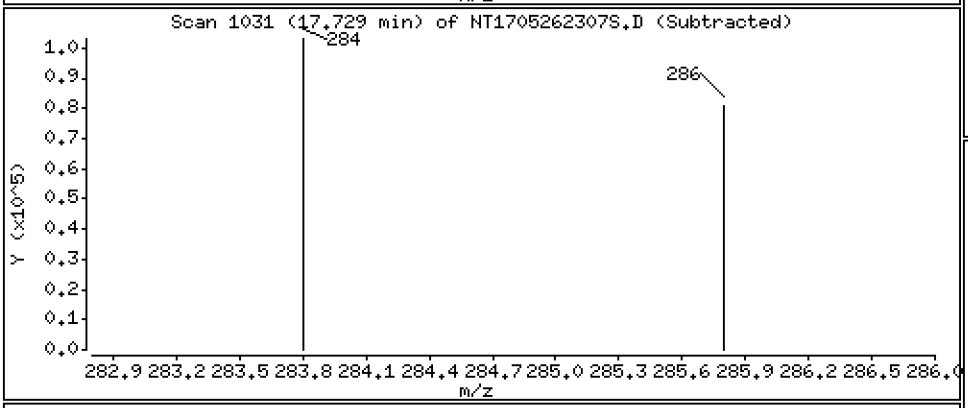
Column diameter: 0.25

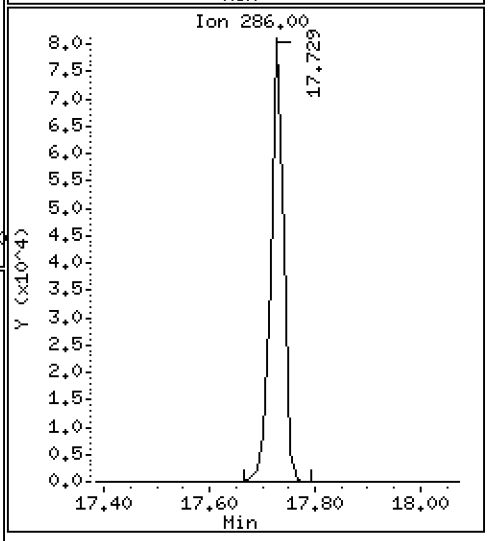
57 Hexachlorobenzene

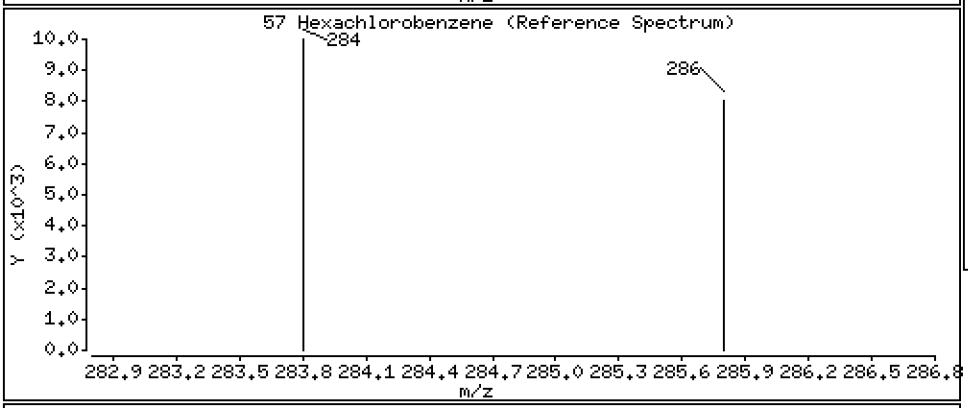
Concentration: 4.611 ug/mL

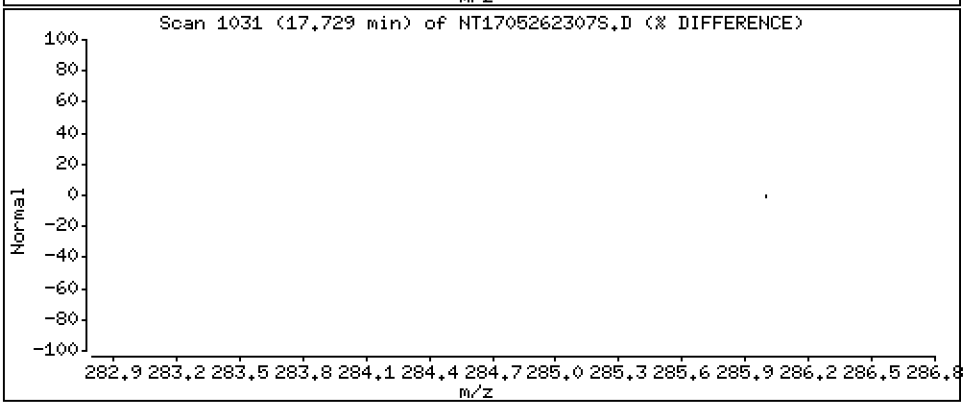












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262307S.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

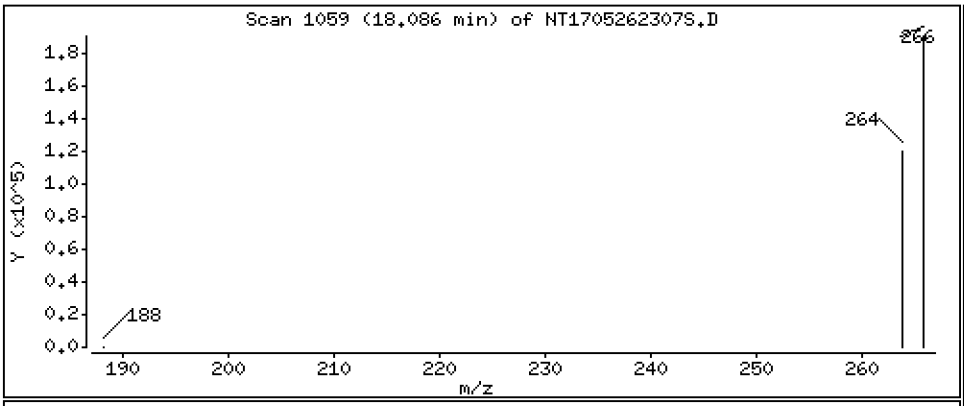
Operator: VTS

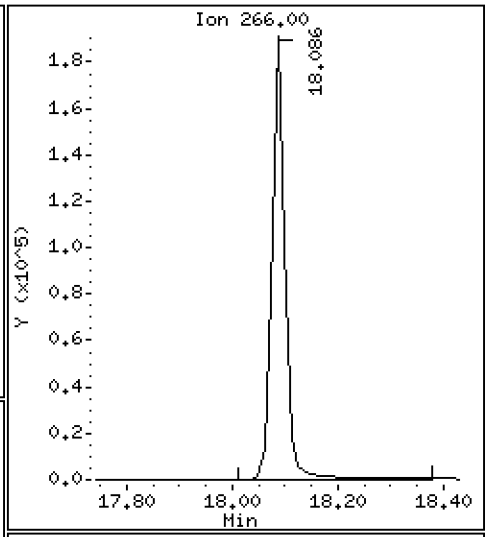
Column phase: ZB-5msi

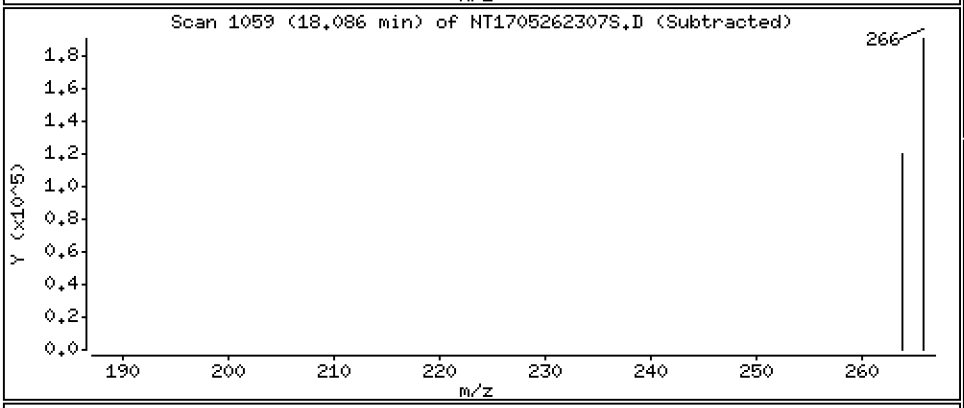
Column diameter: 0.25

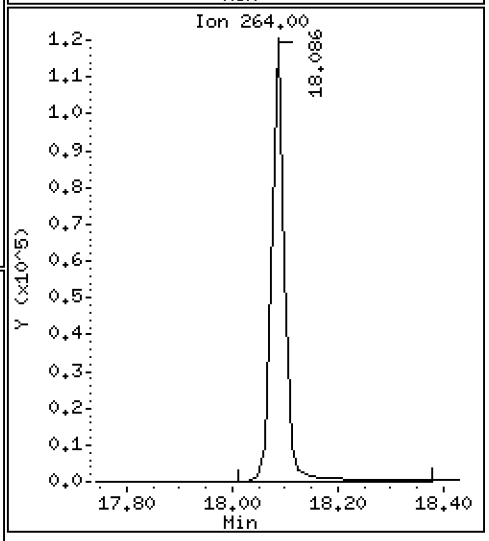
58 Pentachlorophenol

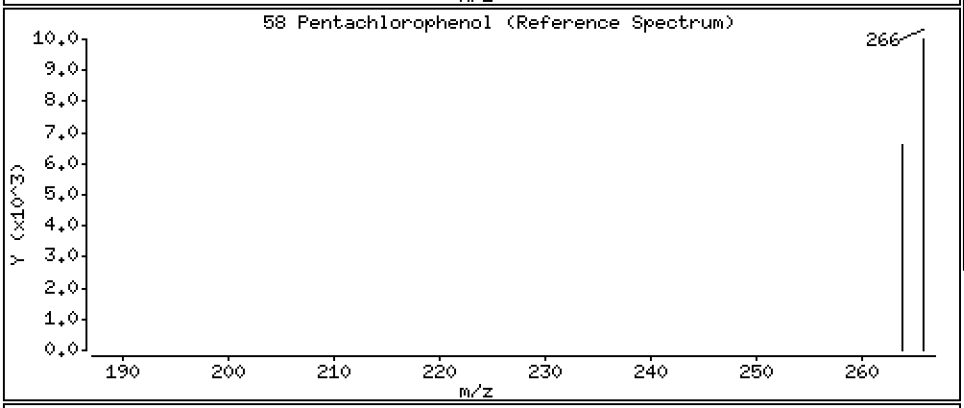
Concentration: 13.51 ug/mL

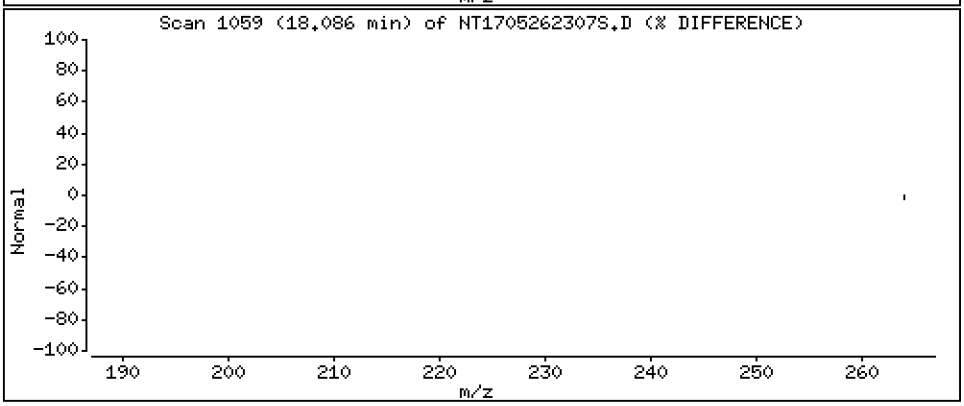












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

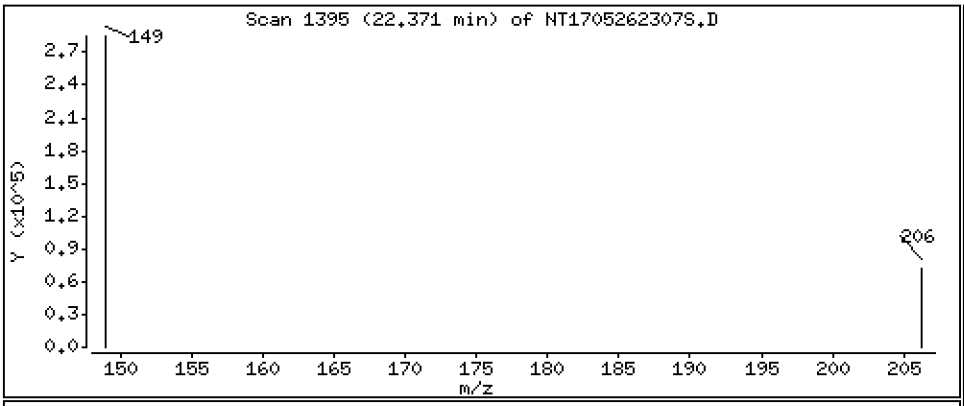
Operator: VTS

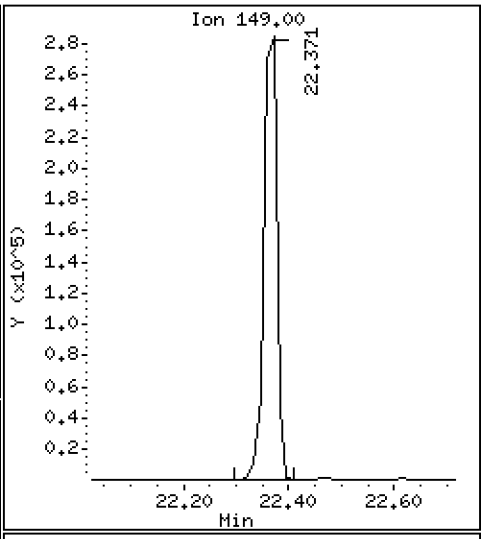
Column phase: ZB-5msi

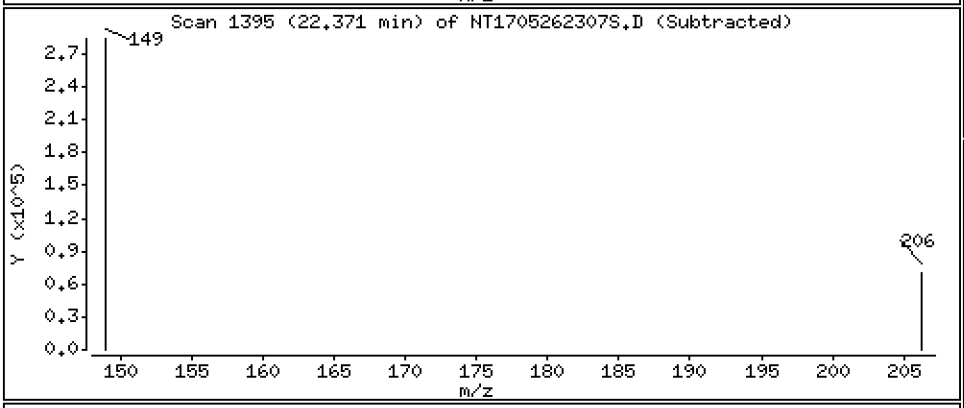
Column diameter: 0.25

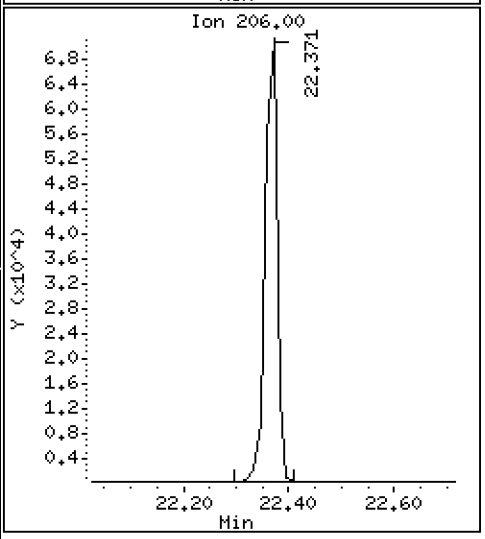
67 Butylbenzylphthalate

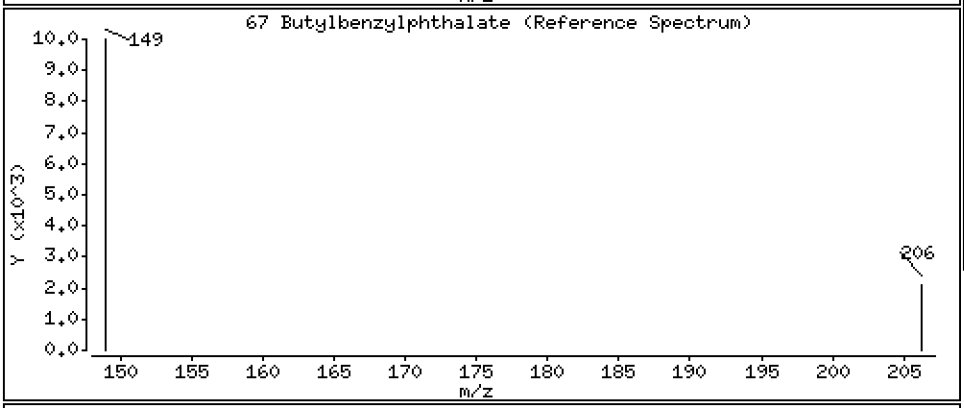
Concentration: 4.873 ug/mL

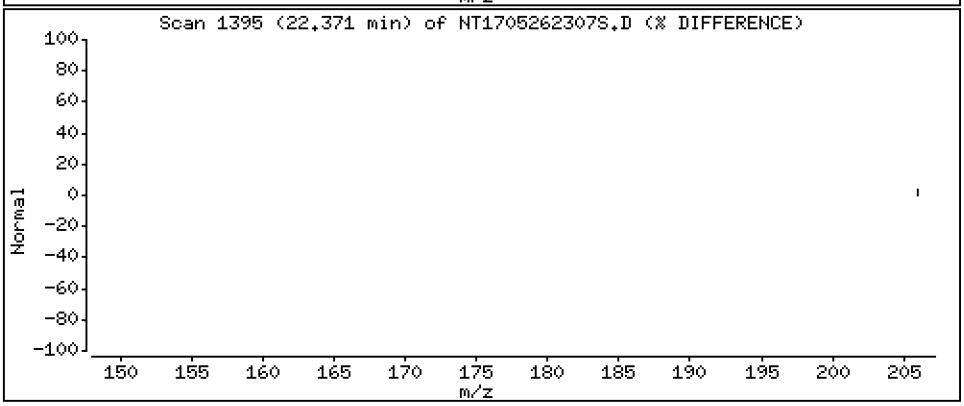












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Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

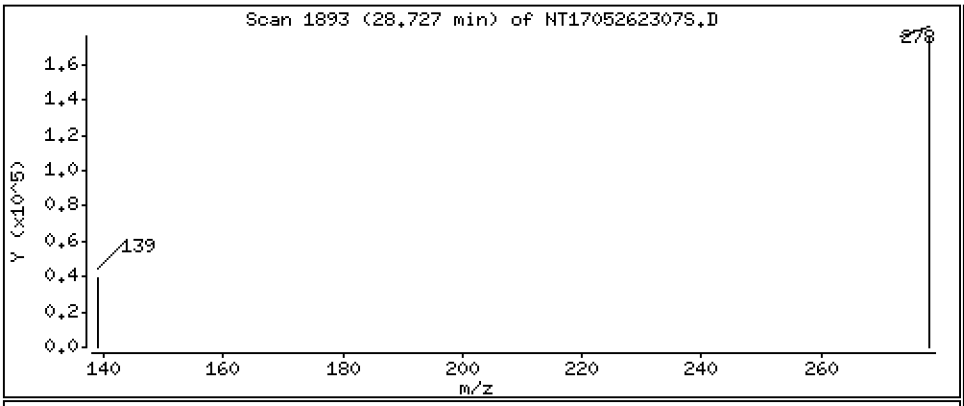
Operator: VTS

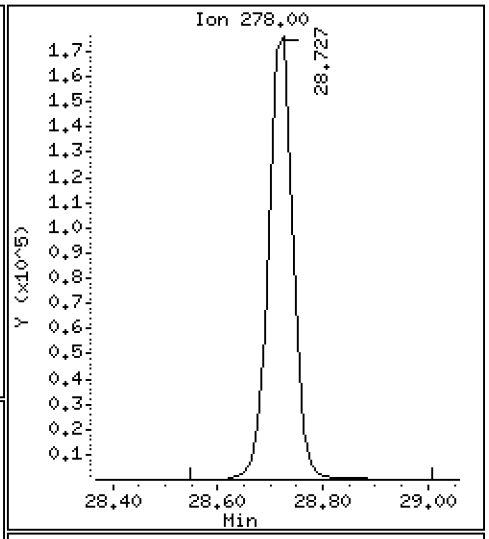
Column phase: ZB-5msi

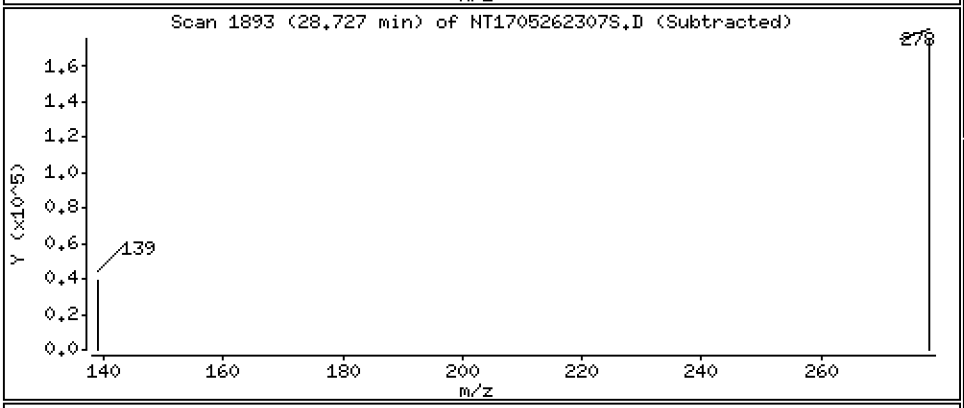
Column diameter: 0.25

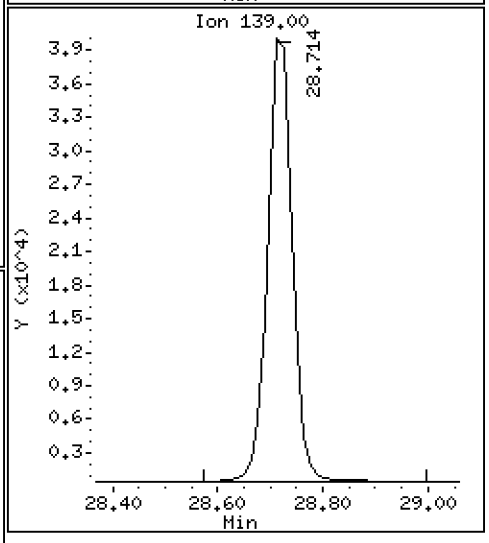
79 Dibenzo(a,h)anthracene

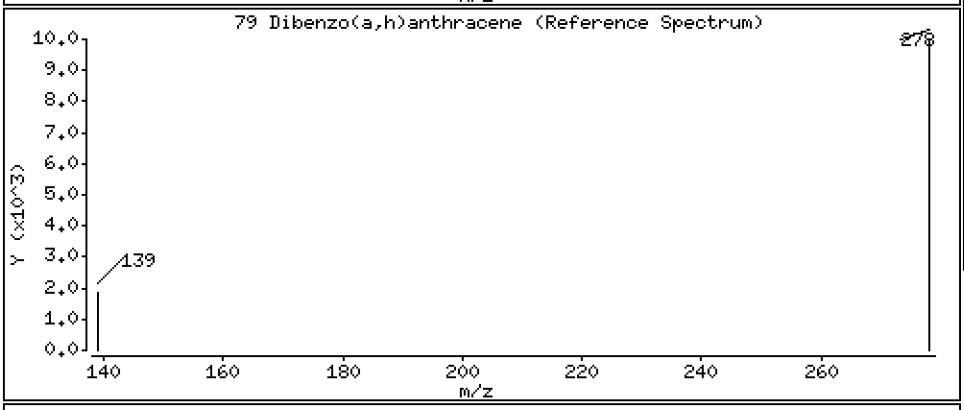
Concentration: 4.895 ug/mL

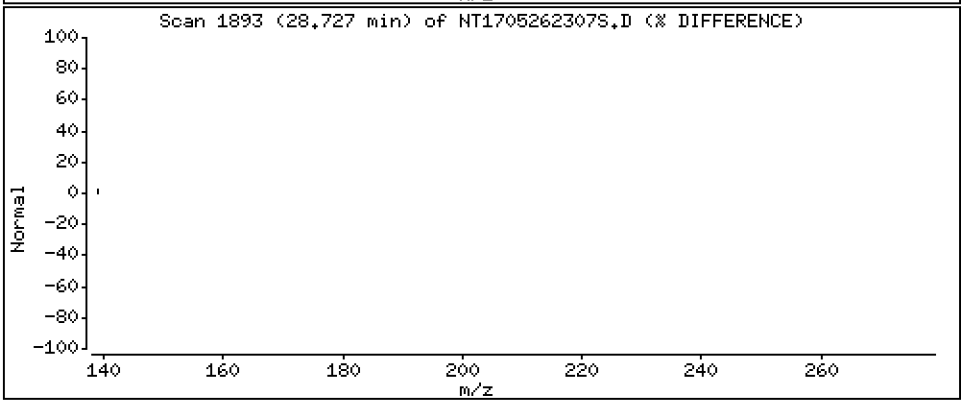












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262307S.D

Date : 26-MAY-2023 16:25

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BS2

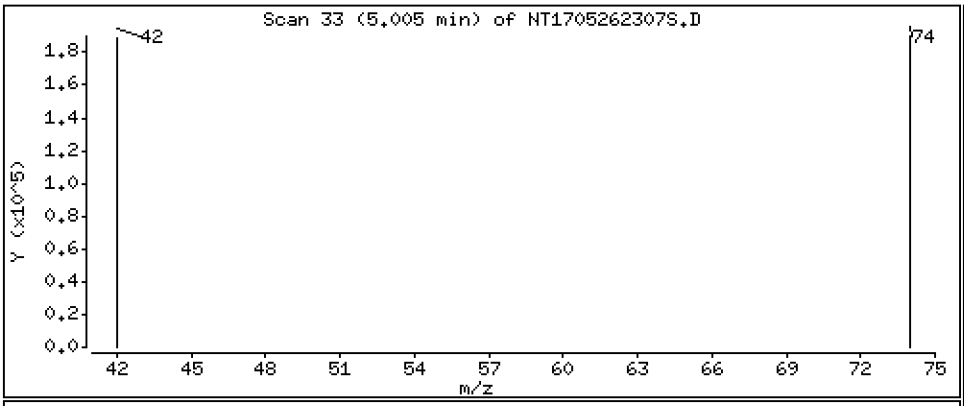
Operator: VTS

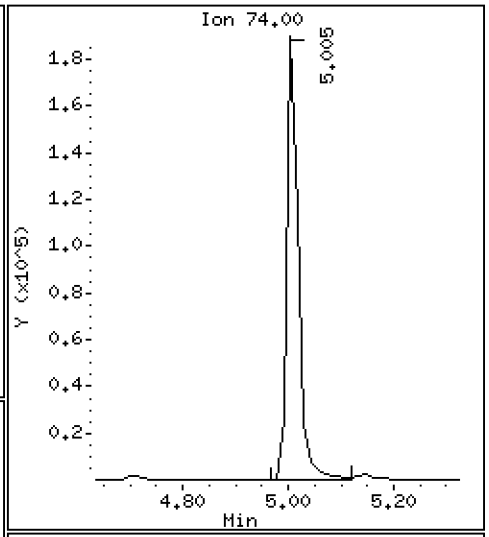
Column phase: ZB-5msi

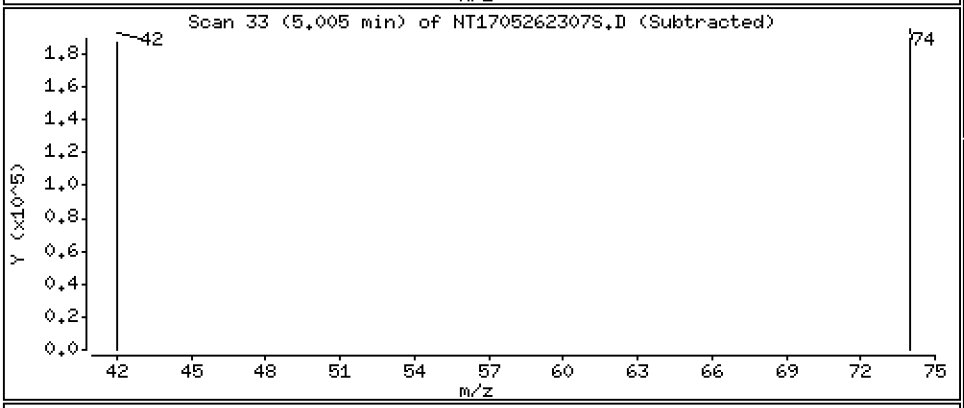
Column diameter: 0.25

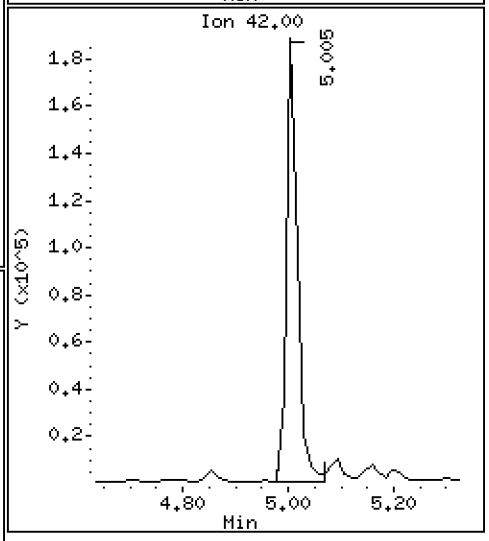
90 N-Nitrosodimethylamine

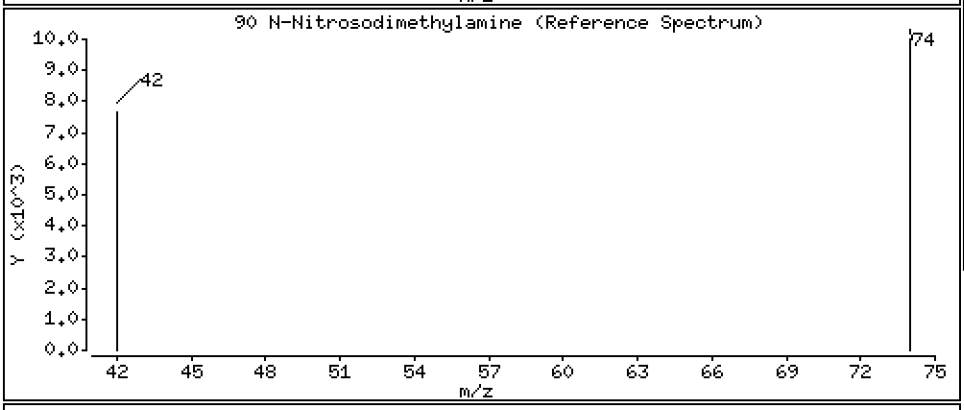
Concentration: 5.271 ug/mL

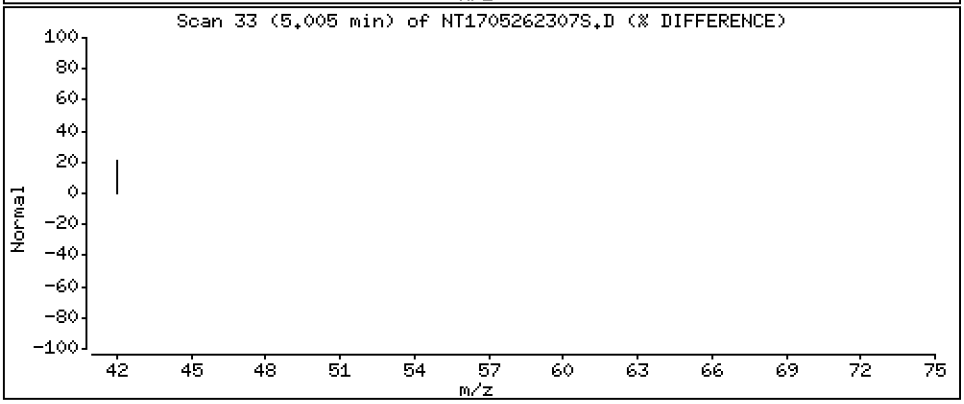












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262307S.D
Lab Smp Id: BLD0607-BS2
Inj Date : 26-MAY-2023 16:25
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-BS2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 06-Jun-2023 14:52 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.094	7.069	(0.765)	524922	6.26325	6.263(R)
	3 Phenol	94	8.661	8.661	(0.934)	497238	3.98171	3.982
	7 1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	430742	3.84815	3.848
*	8 1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	277093	4.00000	
	9 1,4-Dichlorobenzene	146	9.299	9.299	(1.003)	421397	3.86339	3.863
	11 Benzyl alcohol	79	9.541	9.541	(1.029)	327107	4.59690	4.597
	12 1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	416262	3.89367	3.894
	13 2-Methylphenol	108	9.759	9.759	(1.052)	208107	2.40484	2.405
	15 4-Methylphenol	108	10.040	10.027	(1.083)	273707	3.12966	3.130
	16 N-Nitroso-di-n-propylamine	70	10.091	10.091	(1.088)	146474	2.32389	2.324
	22 2,4-Dimethylphenol	107	11.062	11.062	(0.942)	85068	0.90427	0.9043
	24 Benzoic acid	105	11.317	11.215	(0.964)	1655009	28.2397	28.24
	26 1,2,4-Trichlorobenzene	180	11.649	11.649	(0.992)	306735	3.59386	3.594
*	27 Naphthalene-d8	136	11.738	11.738	(1.000)	977960	4.00000	
	30 Hexachlorobutadiene	225	12.133	12.133	(1.034)	189422	4.21494	4.215
	39 Dimethylphthalate	163	14.837	14.824	(0.968)	827367	4.16650	4.166
*	42 Acenaphthene-d10	162	15.334	15.334	(1.000)	540748	4.00000	
	50 Diethylphthalate	149	16.277	16.277	(1.062)	774246	4.29330	4.293
	54 N-Nitrosodiphenylamine	169	16.659	16.659	(0.908)	265730	2.42616	2.426
	57 Hexachlorobenzene	284	17.728	17.728	(0.966)	171330	4.61130	4.611
	58 Pentachlorophenol	266	18.086	18.086	(0.985)	329489	13.5080	13.51
*	59 Phenanthrene-d10	188	18.353	18.353	(1.000)	777447	4.00000	
$	66 Terphenyl-d14	244	21.452	21.452	(0.919)	495918	5.14311	5.143(R)
	67 Butylbenzylphthalate	149	22.370	22.371	(0.958)	510553	4.87251	4.873
*	69 Chrysene-d12	240	23.353	23.353	(1.000)	508163	4.00000	
*	77 Perylene-d12	264	25.993	25.994	(1.000)	427670	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.726	28.713	(1.105)	590443	4.89473	4.895
	90 N-Nitrosodimethylamine	74	5.005	4.979	(0.540)	285124	5.27112	5.271

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262307S.D
Lab Smp Id: BLD0607-BS2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:53
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	354937	177469	709874	277093	-21.93
27 Naphthalene-d8	1204481	602241	2408962	977960	-18.81
42 Acenaphthene-d10	658677	329339	1317354	540748	-17.90
59 Phenanthrene-d10	965415	482708	1930830	777447	-19.47
69 Chrysene-d12	615102	307551	1230204	508163	-17.39
77 Perylene-d12	580660	290330	1161320	427670	-26.35

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	-0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	-0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	-0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	-0.00
69 Chrysene-d12	23.35	22.85	23.85	23.35	-0.00
77 Perylene-d12	25.99	25.49	26.49	25.99	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262307S.D

Lab ID: BLD0607-BS2
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   26-MAY-2023 16:25

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.964	0.955	0.0087	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705262303S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623085.D

Page 1

Date : 26-MAY-2023 17:02

Client ID:

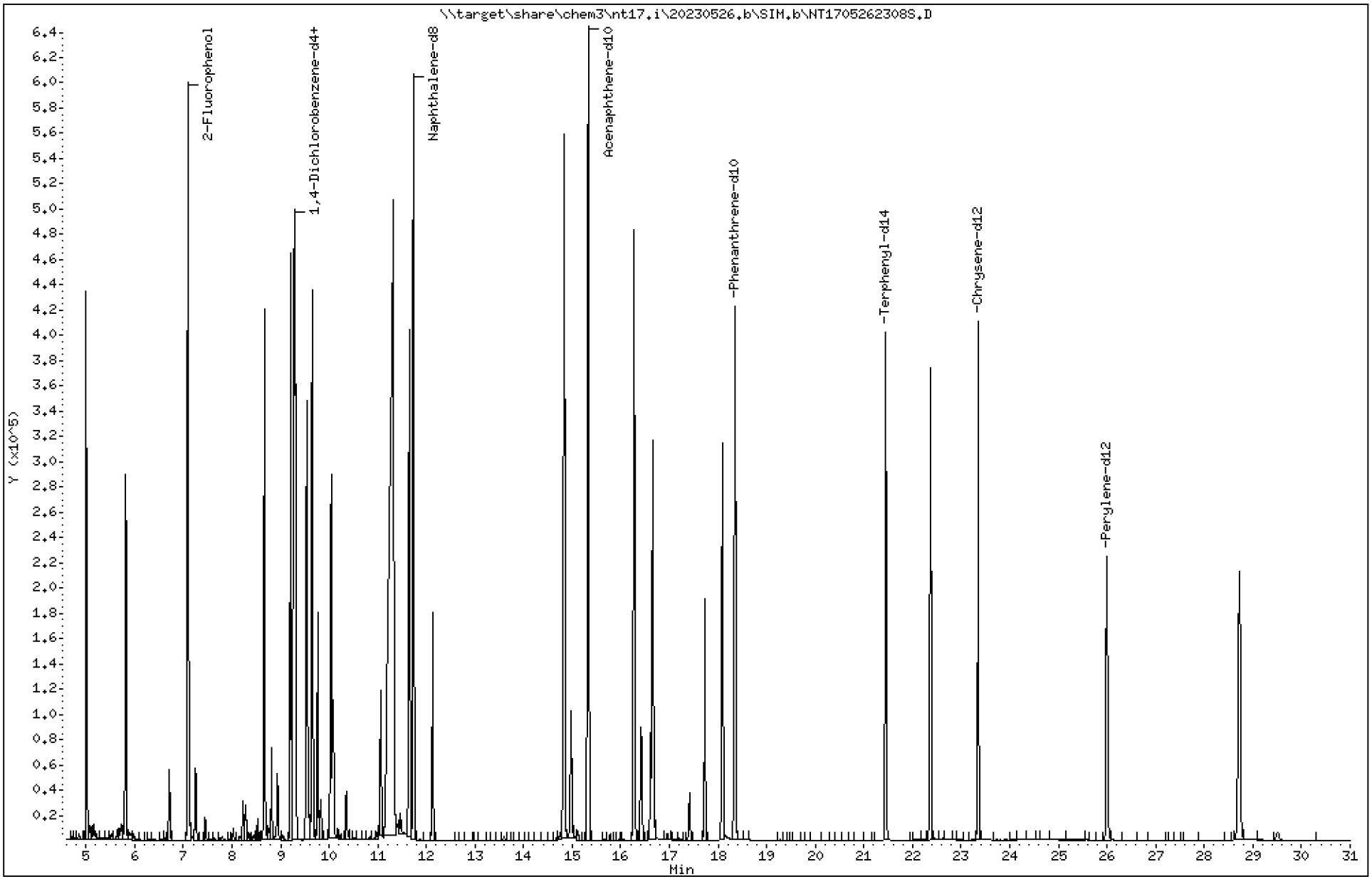
Instrument: nt17.i

Sample Info: BLD0607-BSD2

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

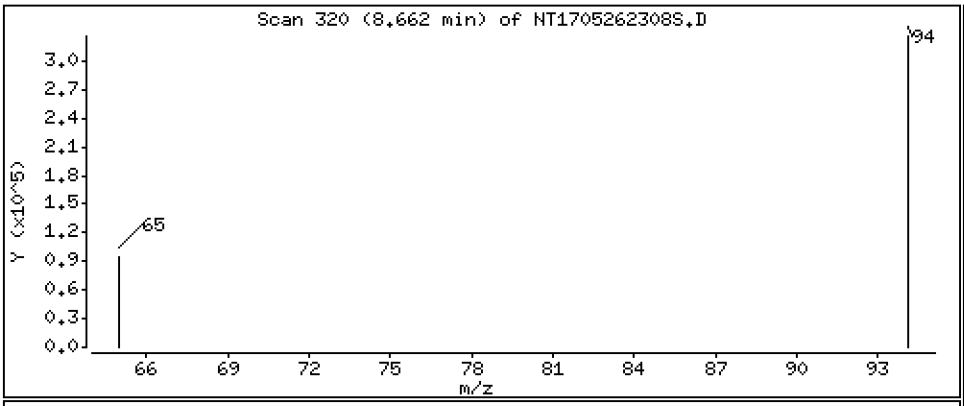
Operator: VTS

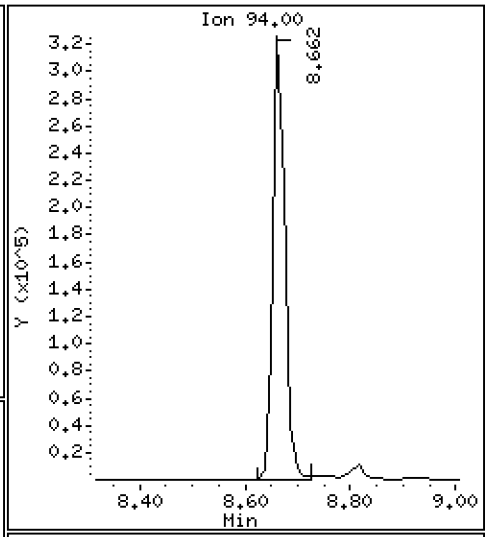
Column phase: ZB-5msi

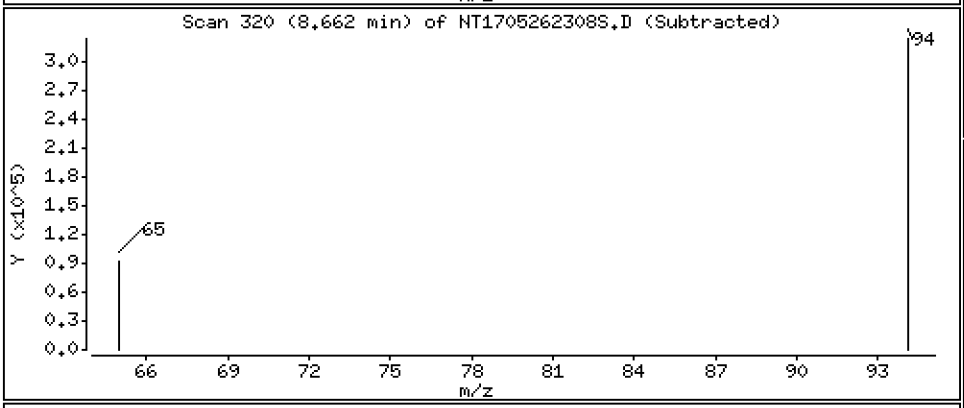
Column diameter: 0.25

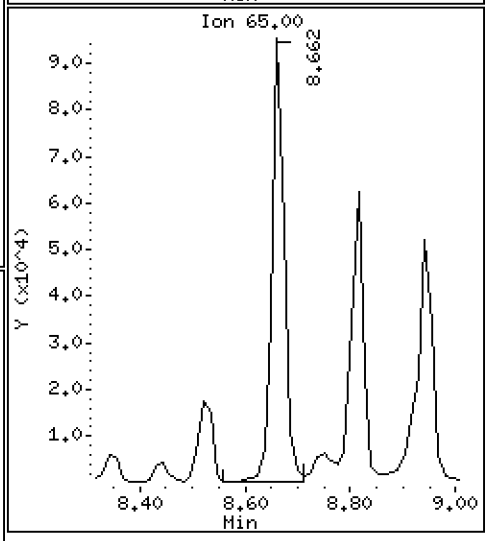
3 Phenol

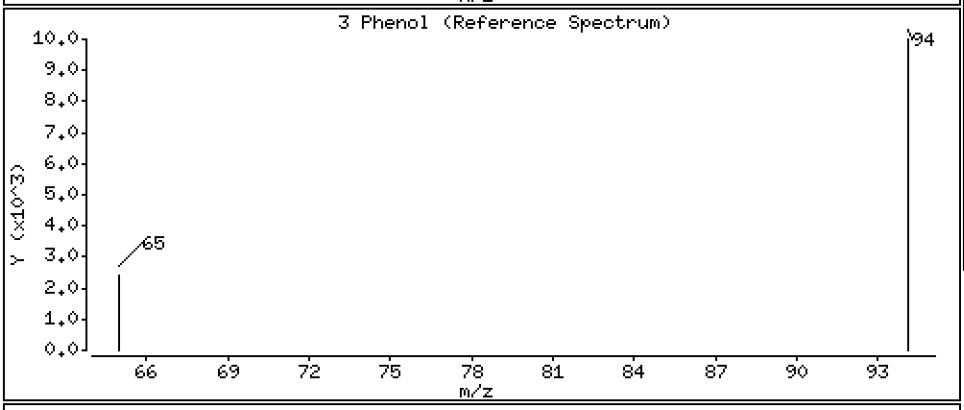
Concentration: 4.111 ug/mL

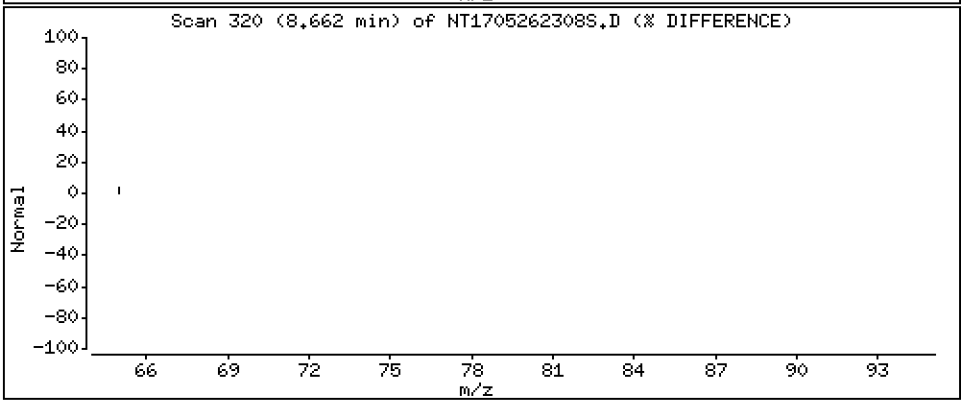












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

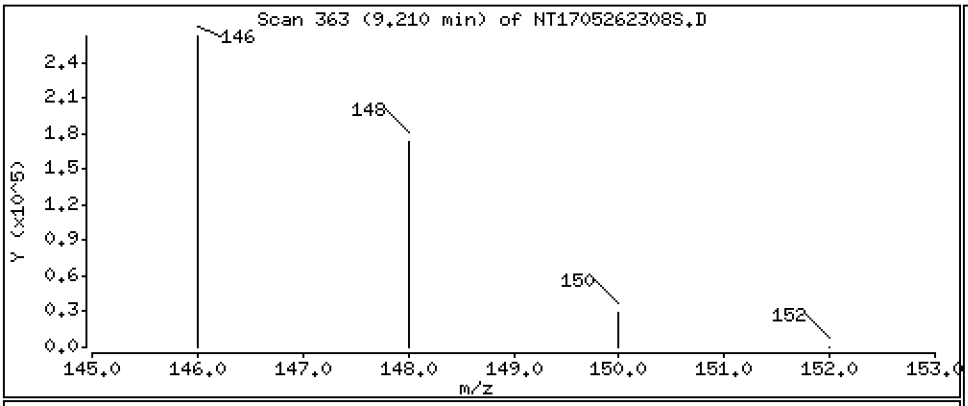
Operator: VTS

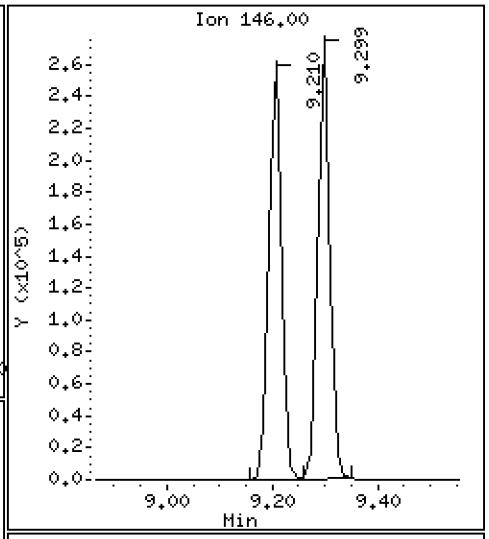
Column phase: ZB-5msi

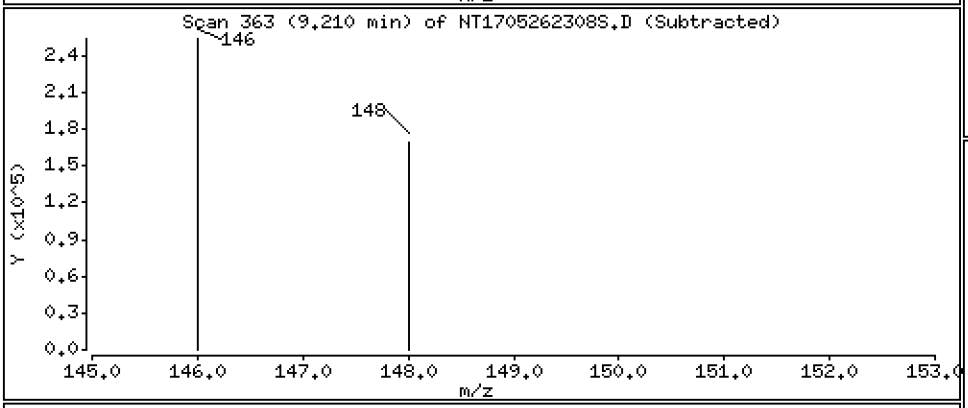
Column diameter: 0.25

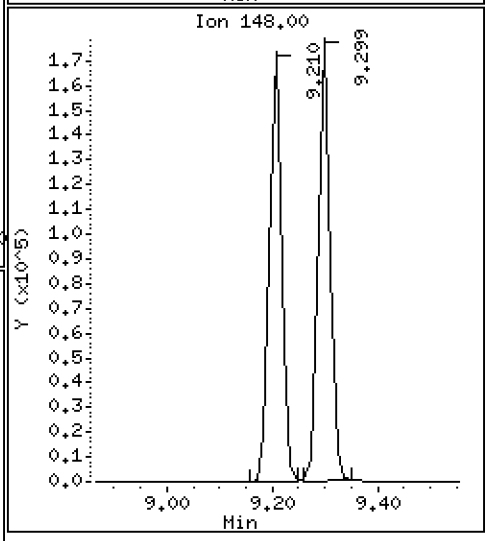
7 1,3-Dichlorobenzene

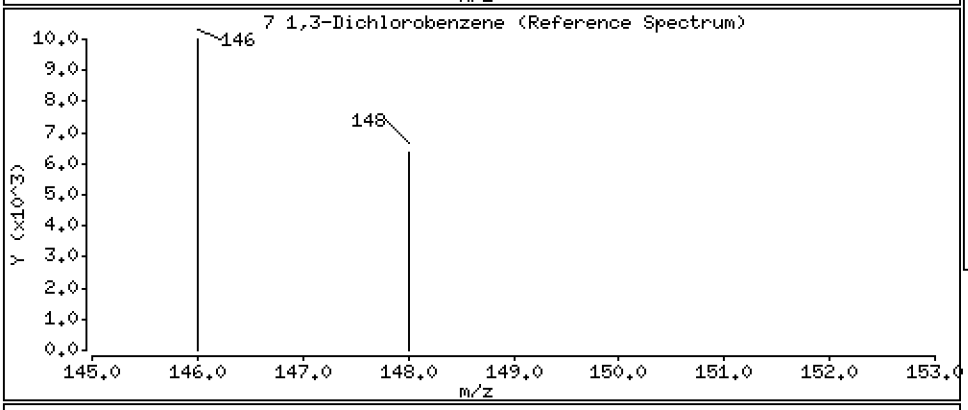
Concentration: 3.808 ug/mL

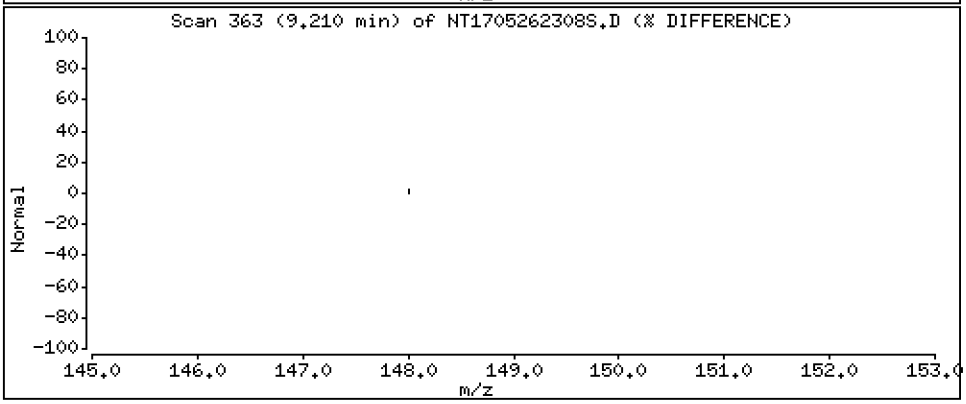












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

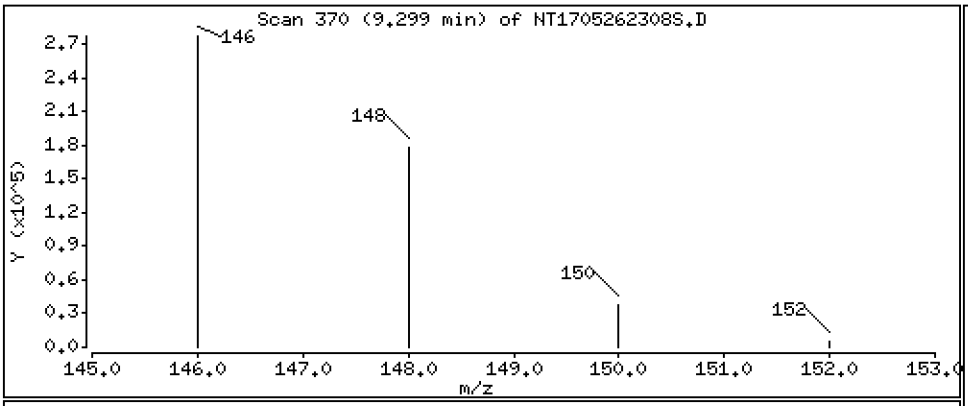
Operator: VTS

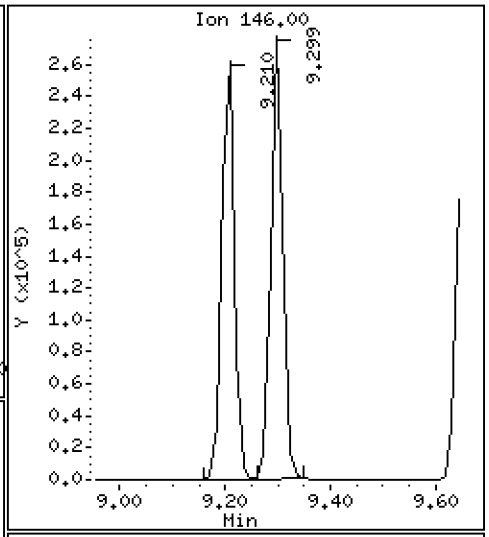
Column phase: ZB-5msi

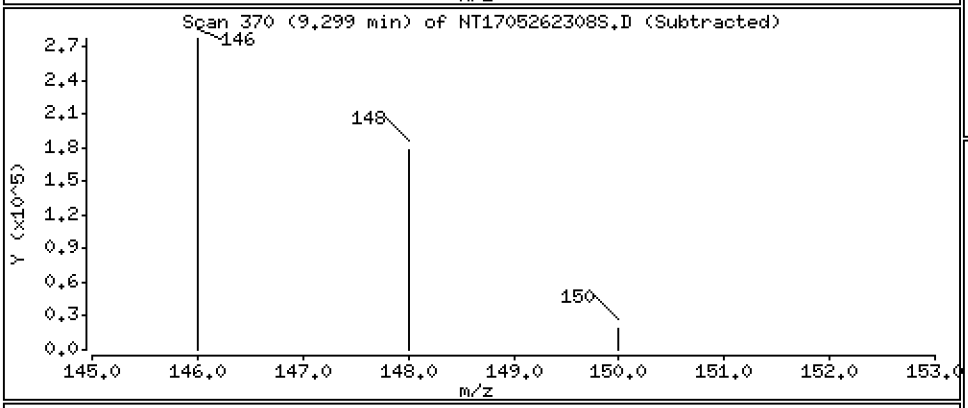
Column diameter: 0.25

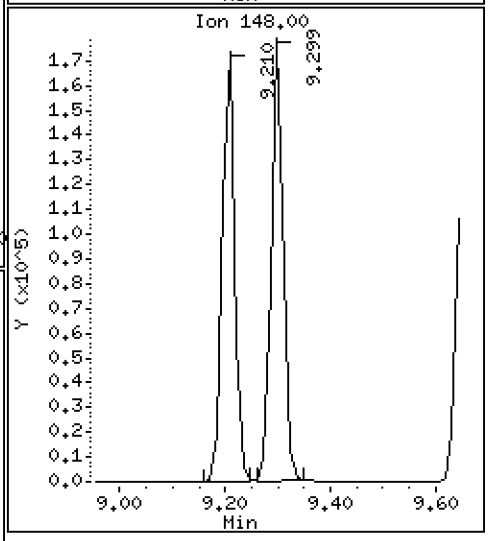
9 1,4-Dichlorobenzene

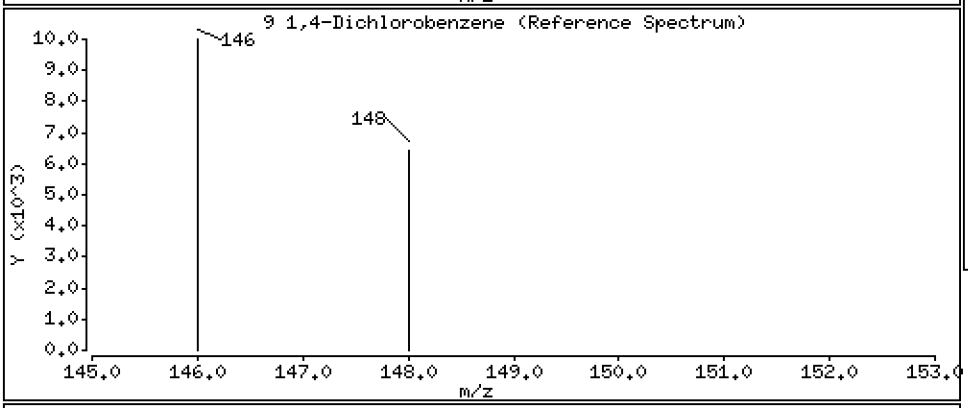
Concentration: 3.848 ug/mL

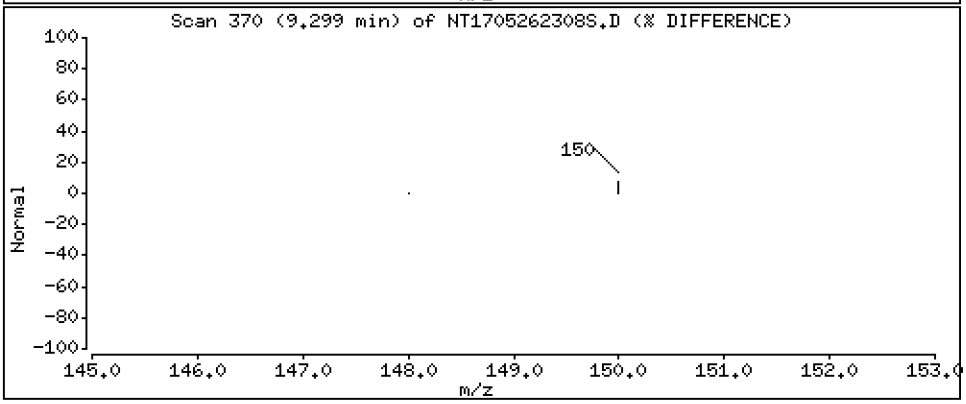












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

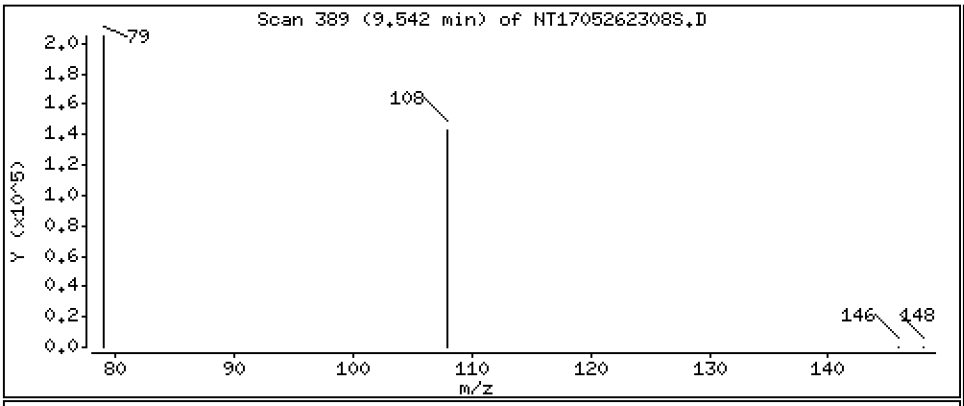
Operator: VTS

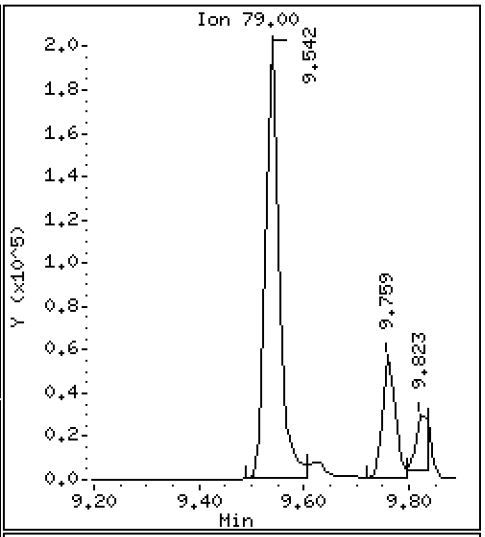
Column phase: ZB-5msi

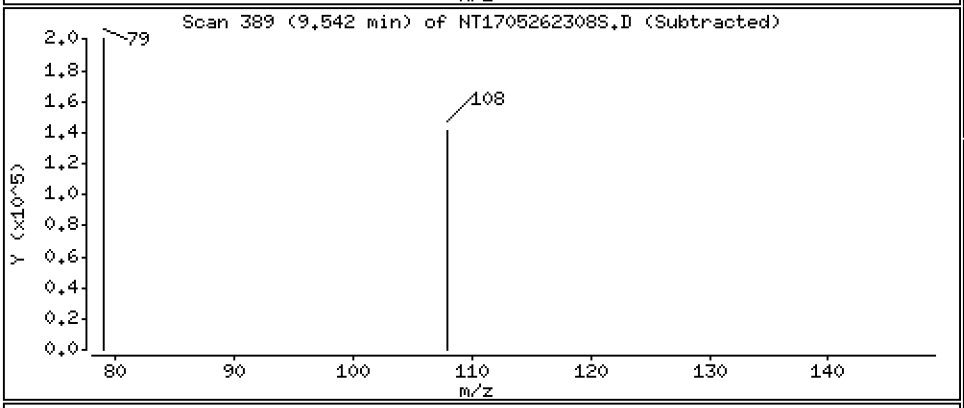
Column diameter: 0.25

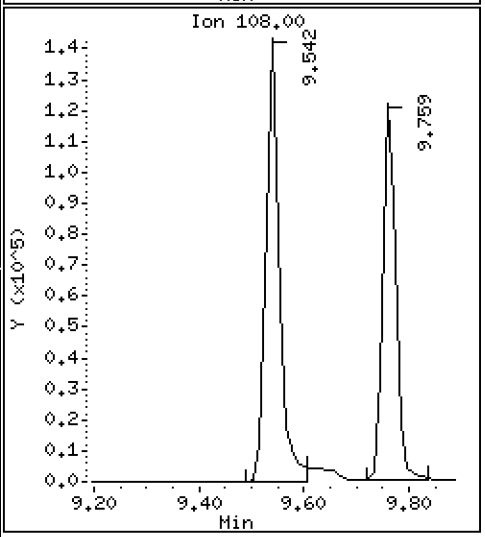
11 Benzyl alcohol

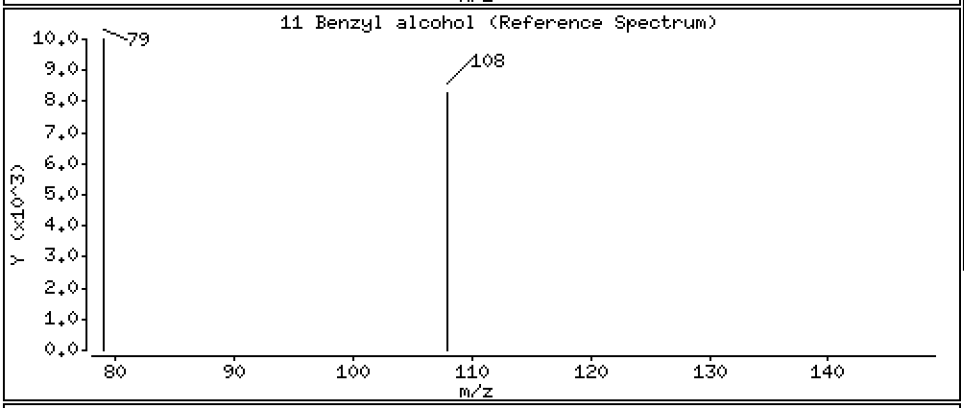
Concentration: 5.062 ug/mL

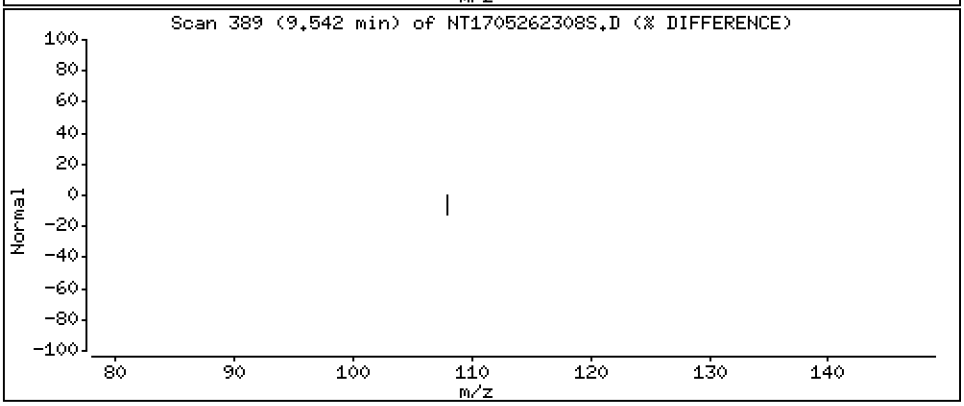












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

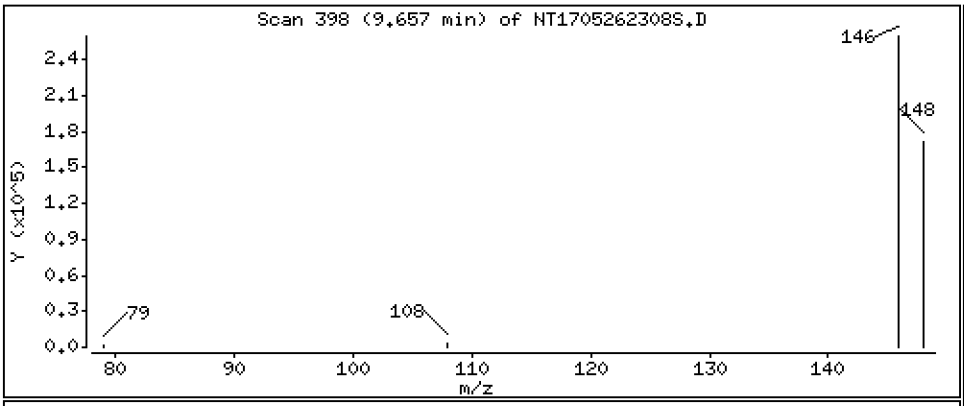
Operator: VTS

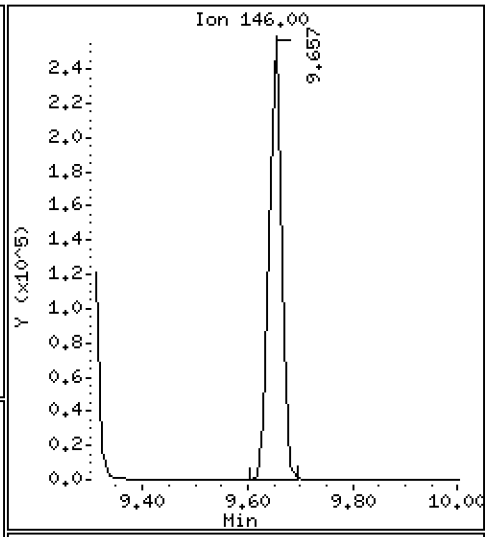
Column phase: ZB-5msi

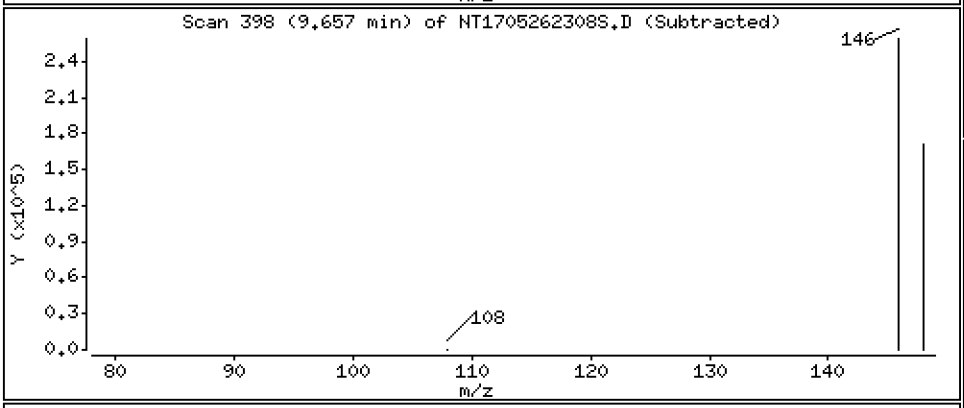
Column diameter: 0.25

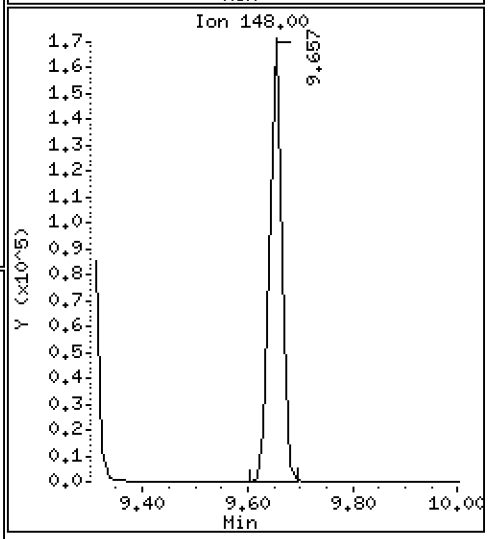
12 1,2-Dichlorobenzene

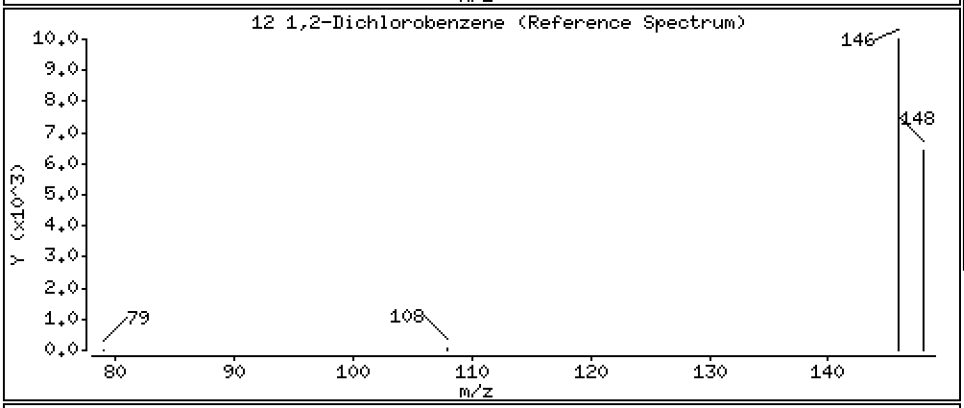
Concentration: 3.904 ug/mL

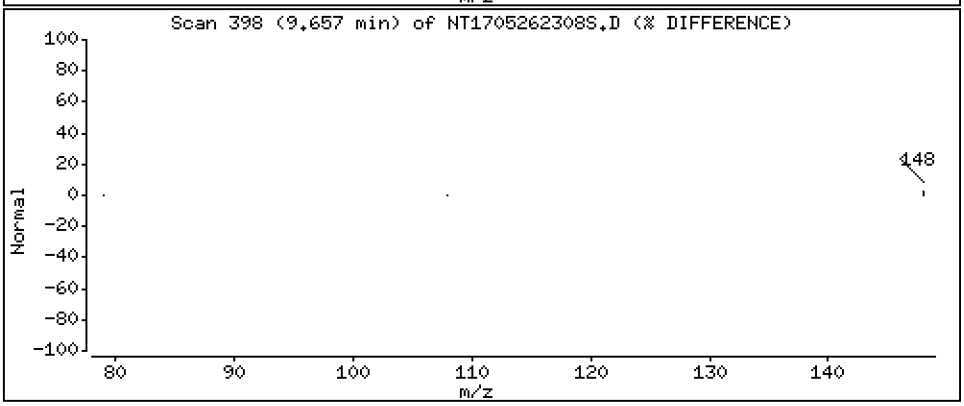












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

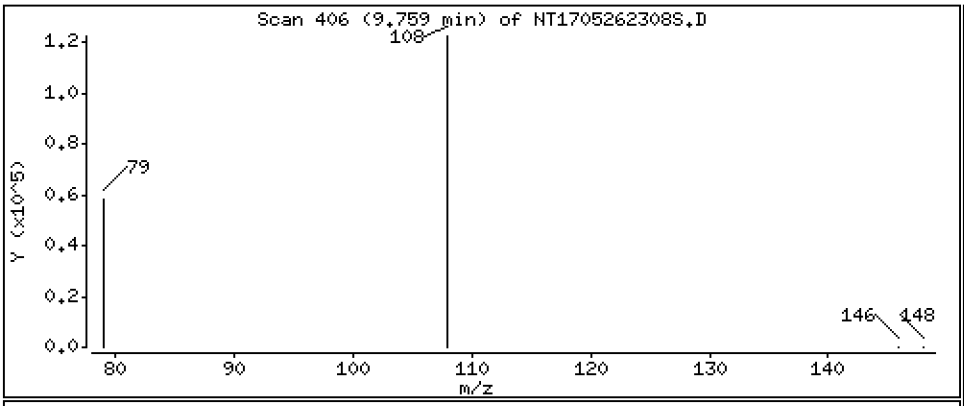
Operator: VTS

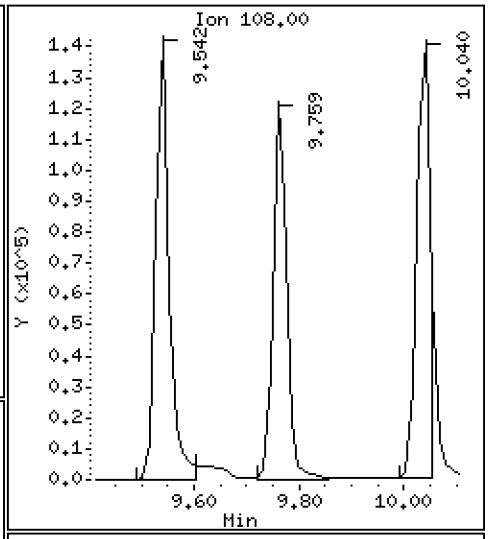
Column phase: ZB-5msi

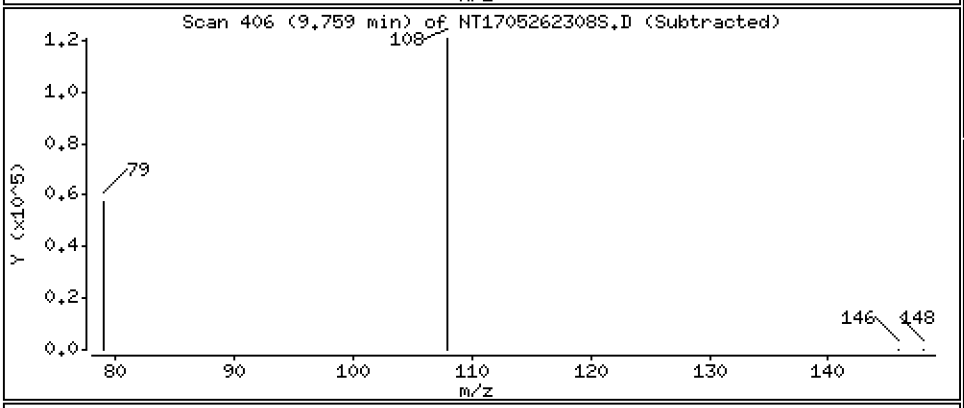
Column diameter: 0.25

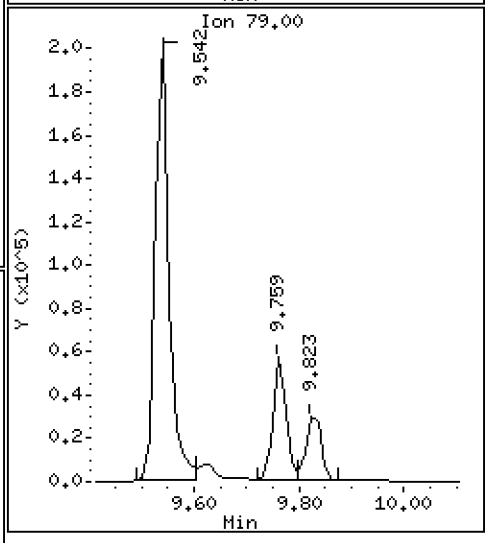
13 2-Methylphenol

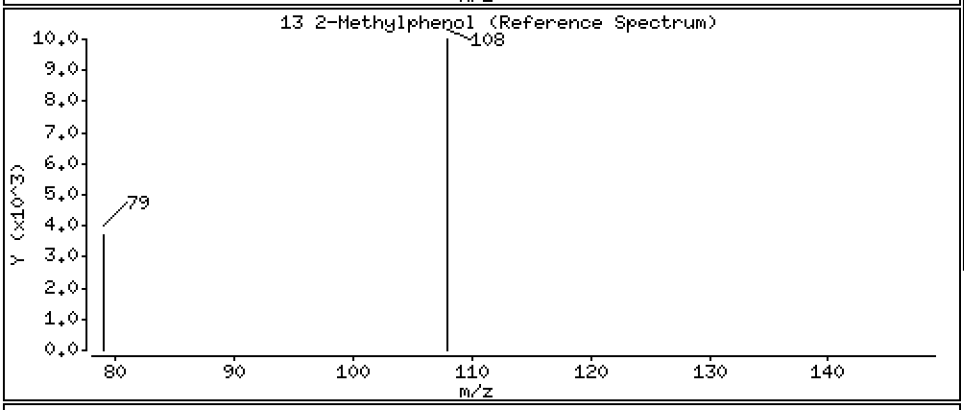
Concentration: 2.389 ug/mL

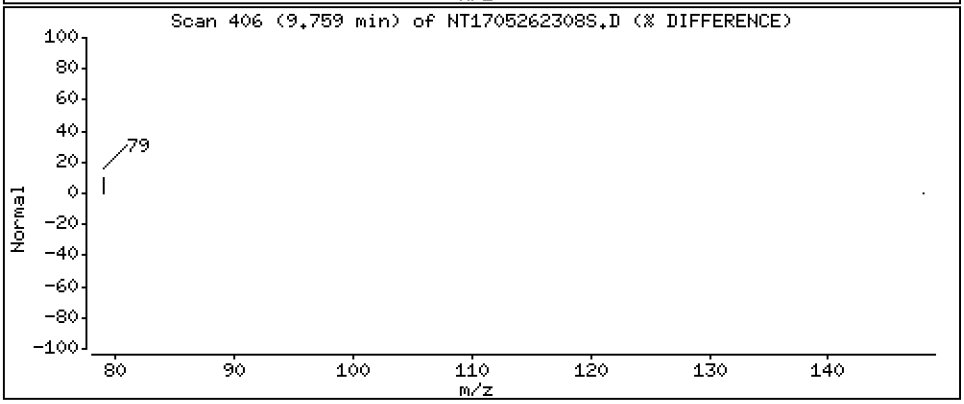












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

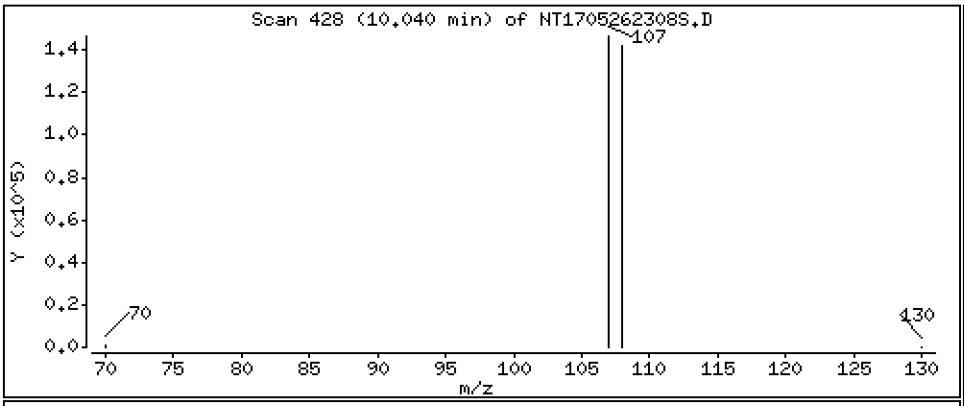
Operator: VTS

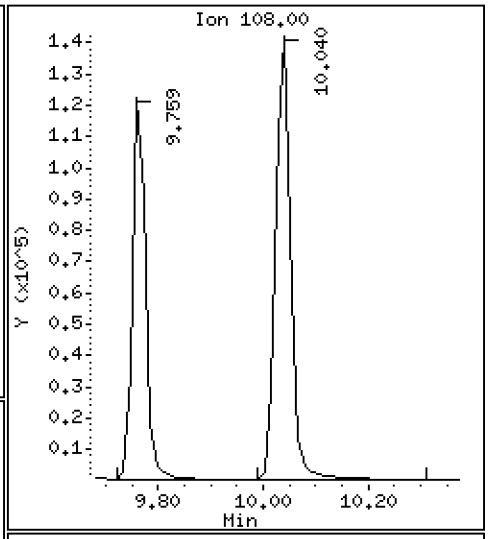
Column phase: ZB-5msi

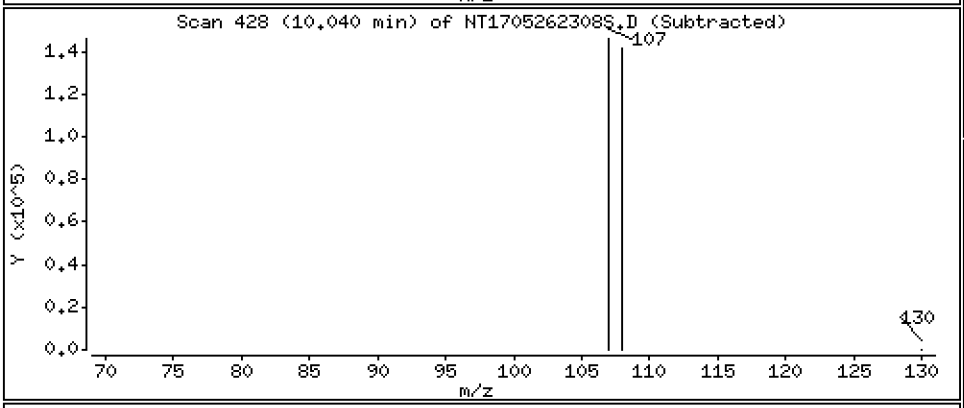
Column diameter: 0.25

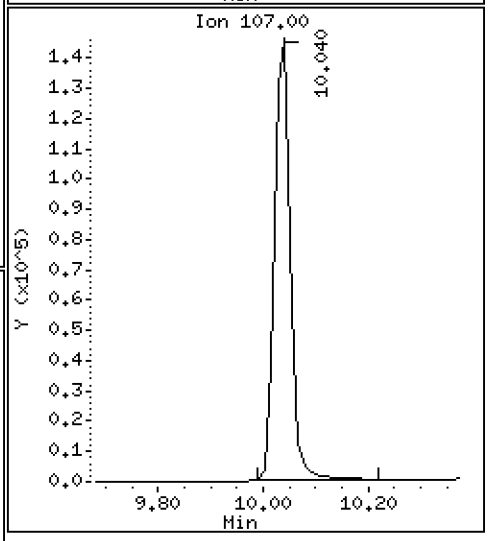
15 4-Methylphenol

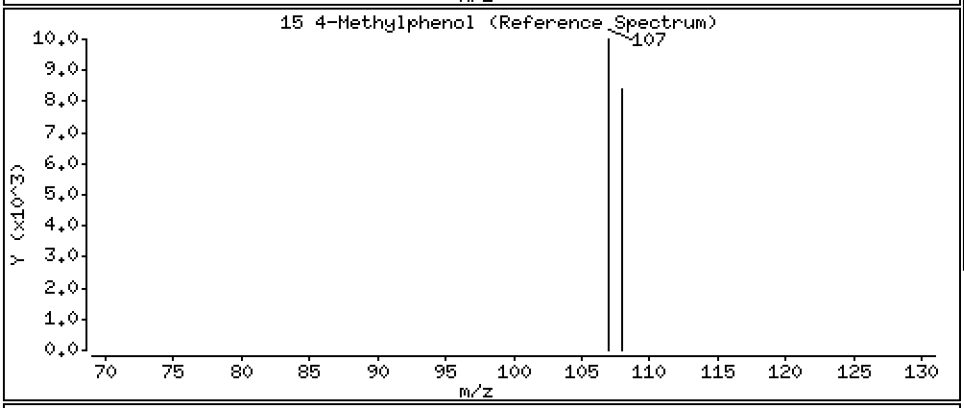
Concentration: 3.153 ug/mL

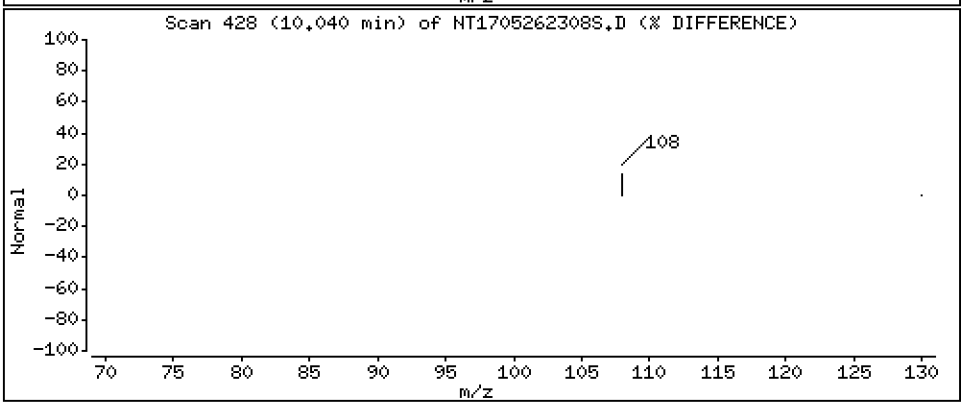












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

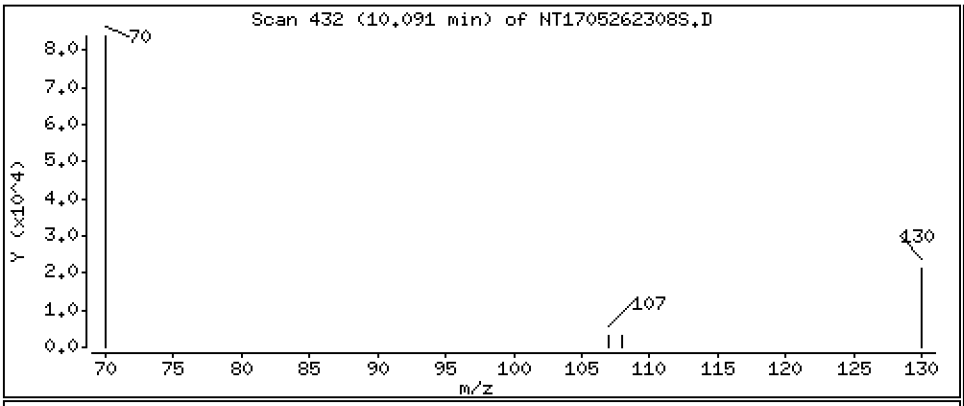
Operator: VTS

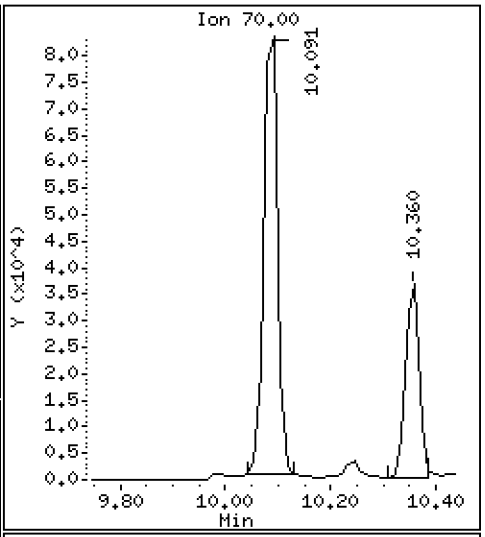
Column phase: ZB-5msi

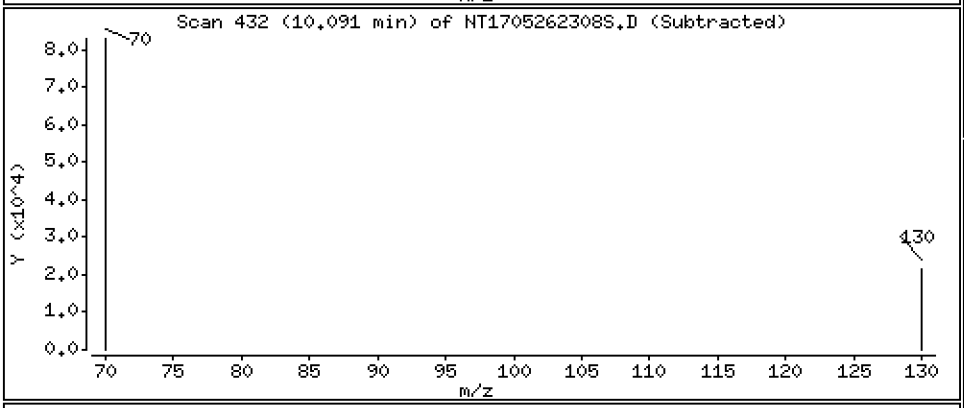
Column diameter: 0.25

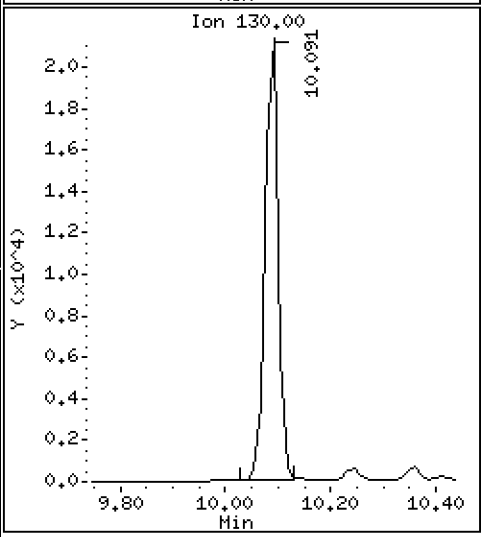
16 N-Nitroso-di-n-propylamine

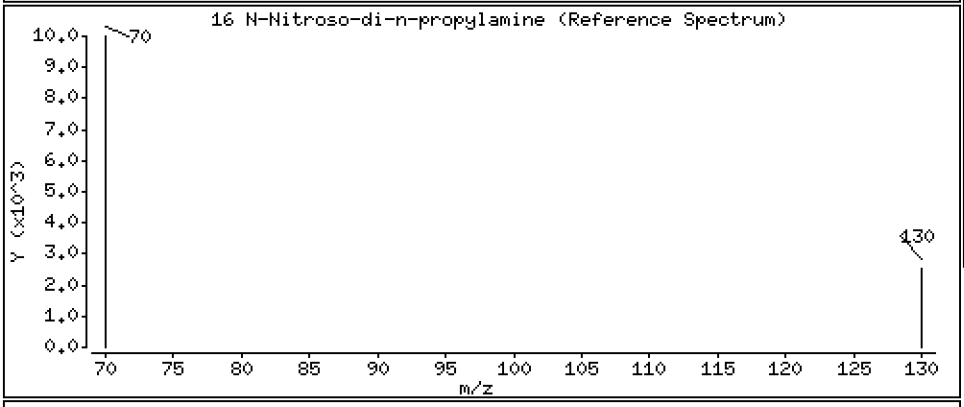
Concentration: 2.386 ug/mL

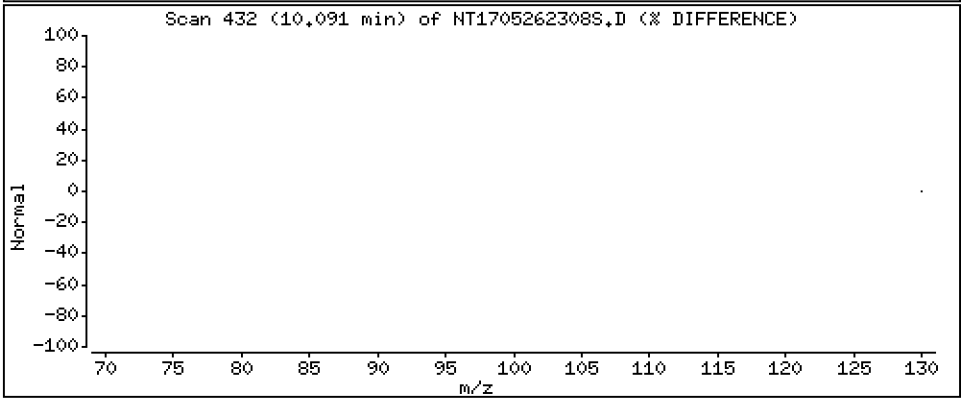












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

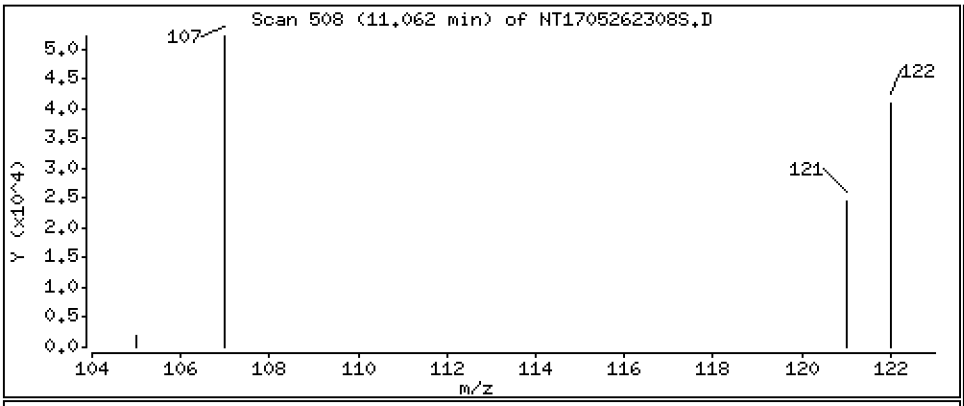
Operator: VTS

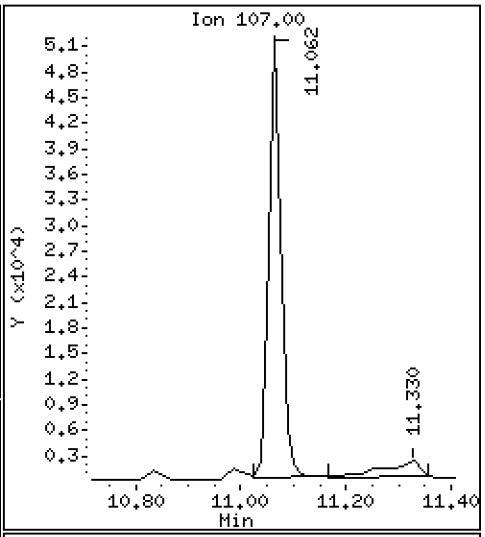
Column phase: ZB-5msi

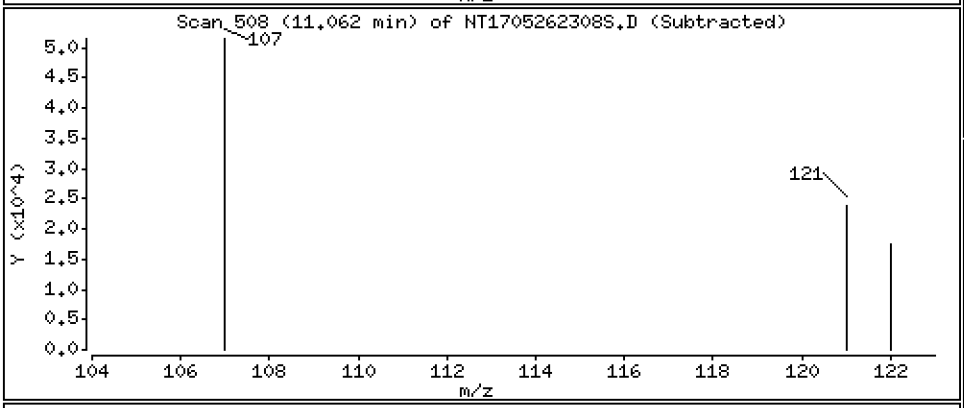
Column diameter: 0.25

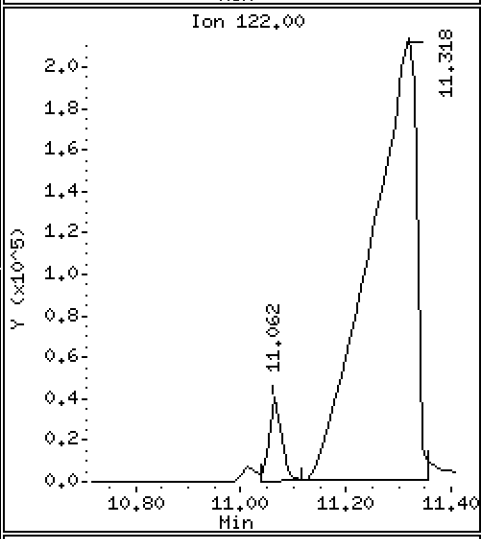
22 2,4-Dimethylphenol

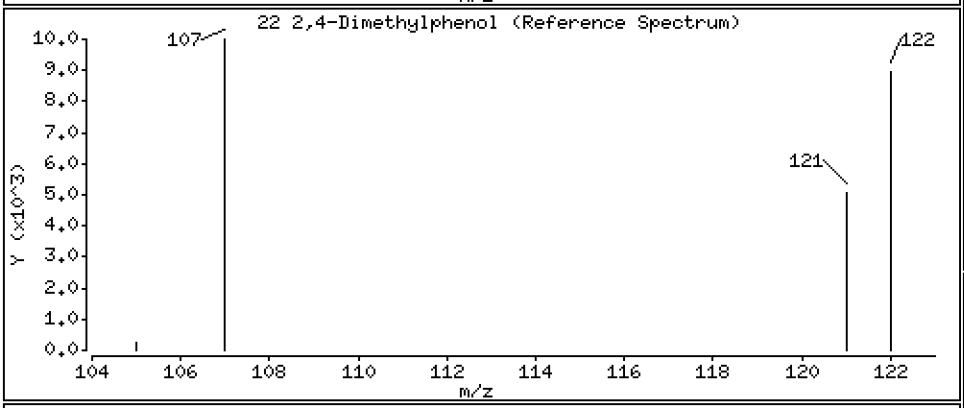
Concentration: 0.8615 ug/mL

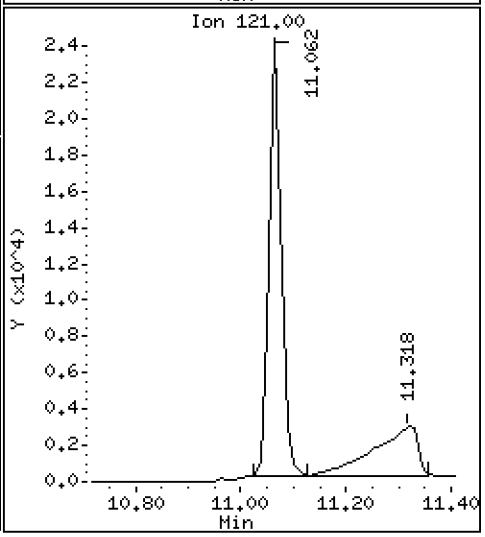


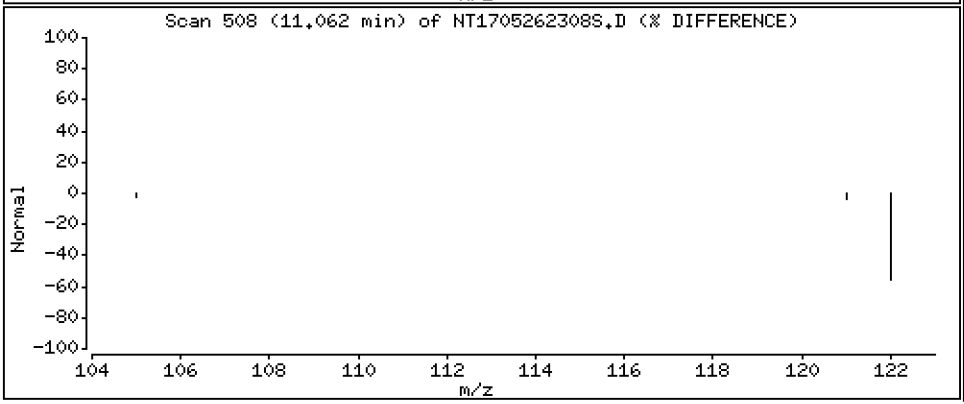












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

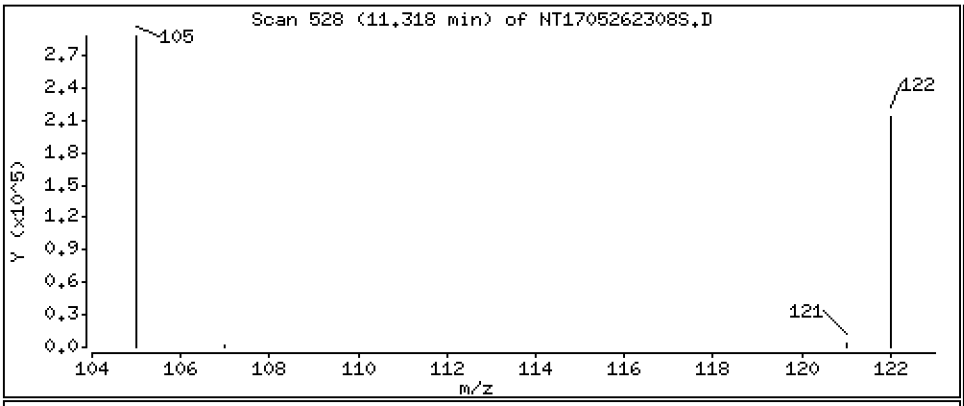
Operator: VTS

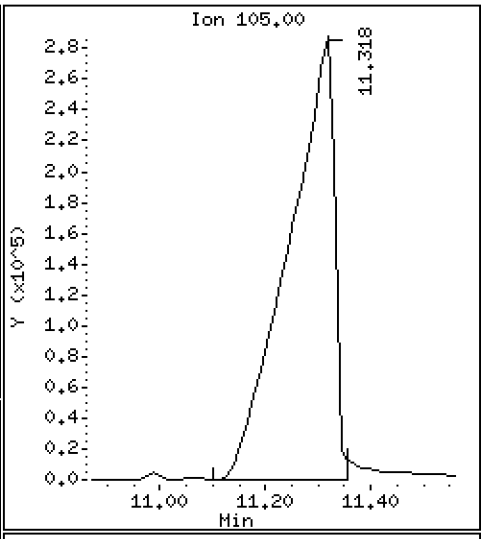
Column phase: ZB-5msi

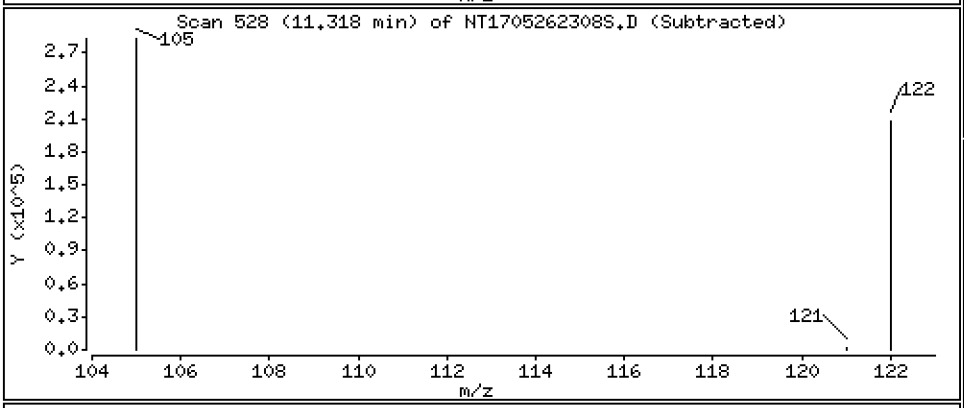
Column diameter: 0.25

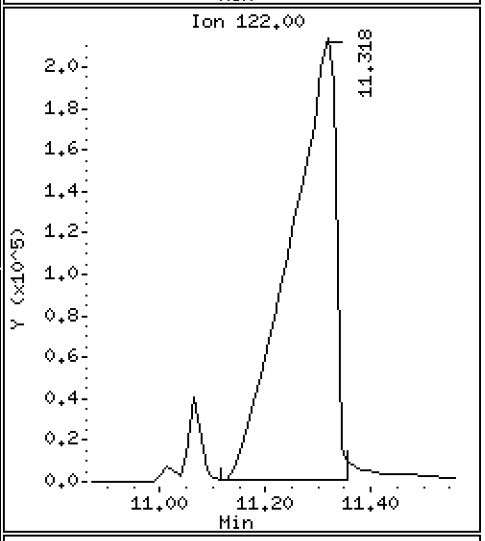
24 Benzoic acid

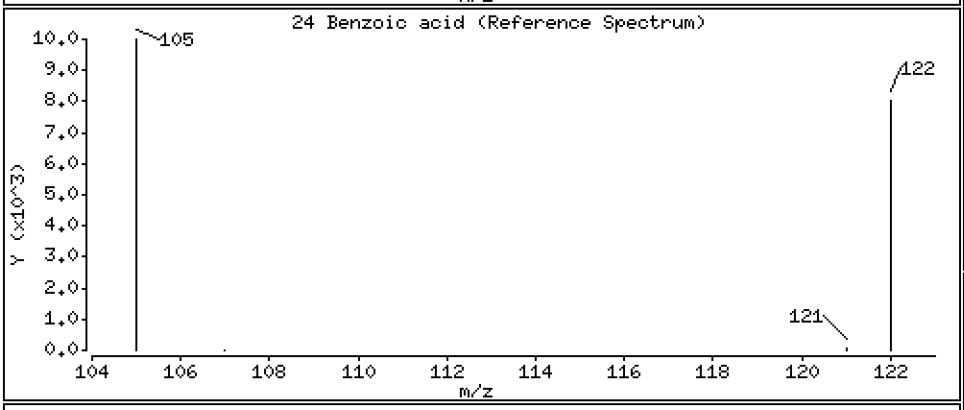
Concentration: 28.50 ug/mL

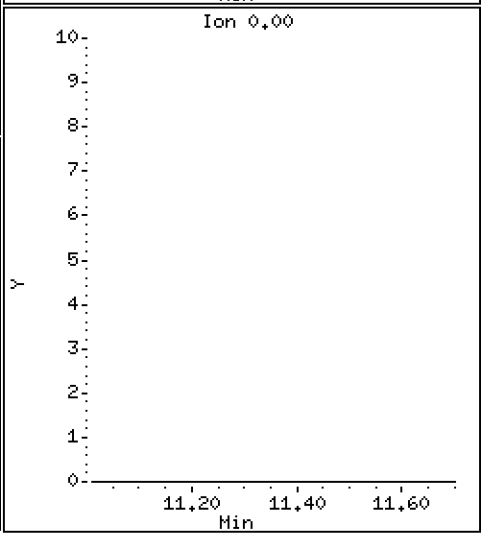


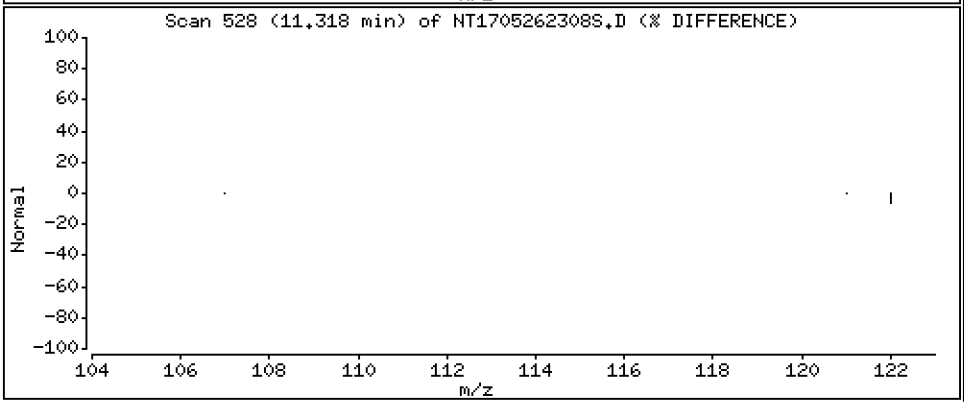












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

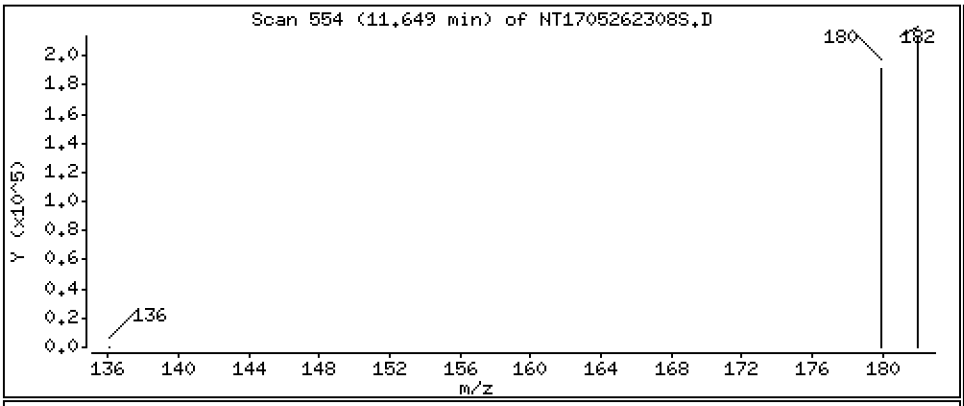
Operator: VTS

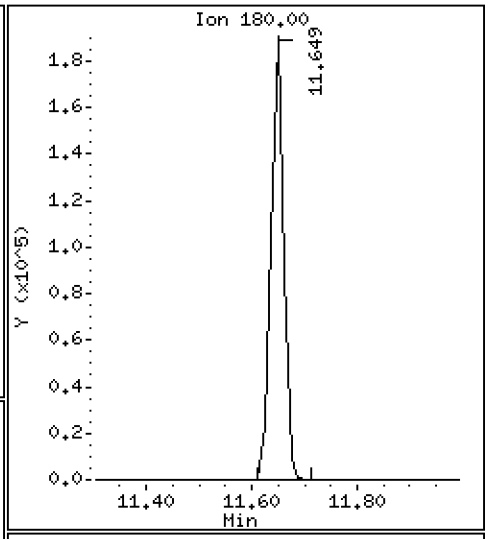
Column phase: ZB-5msi

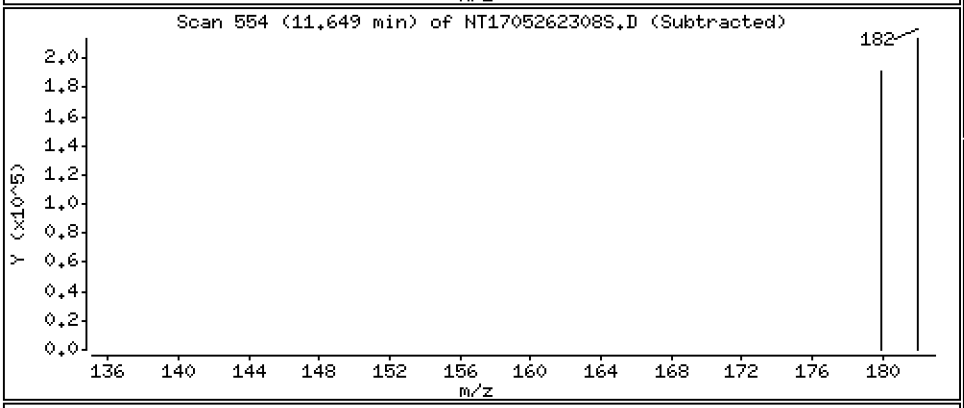
Column diameter: 0.25

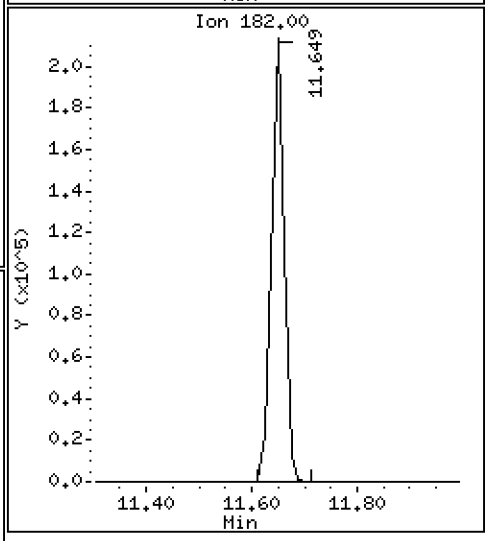
26 1,2,4-Trichlorobenzene

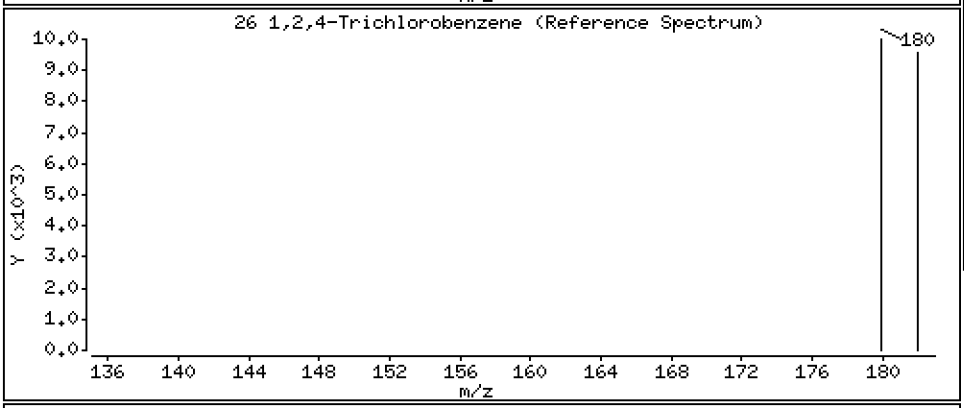
Concentration: 3.592 ug/mL

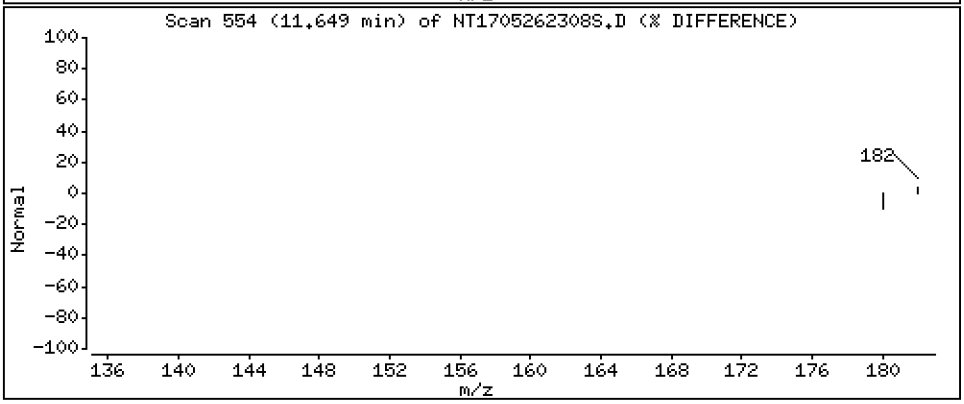












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

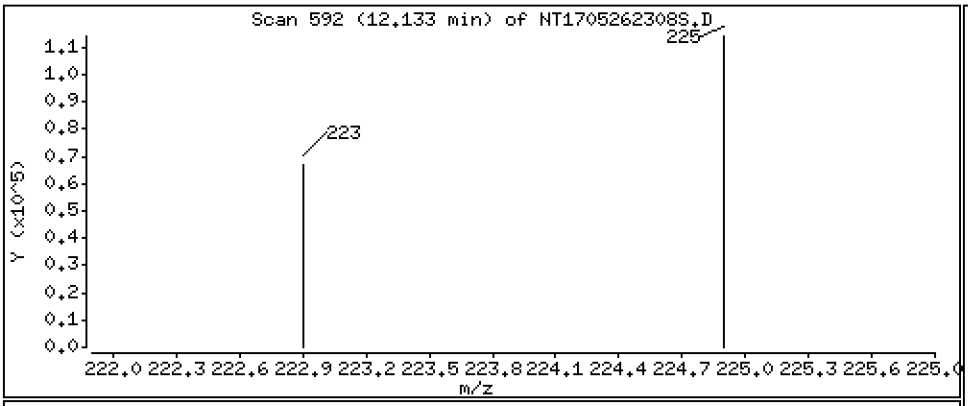
Operator: VTS

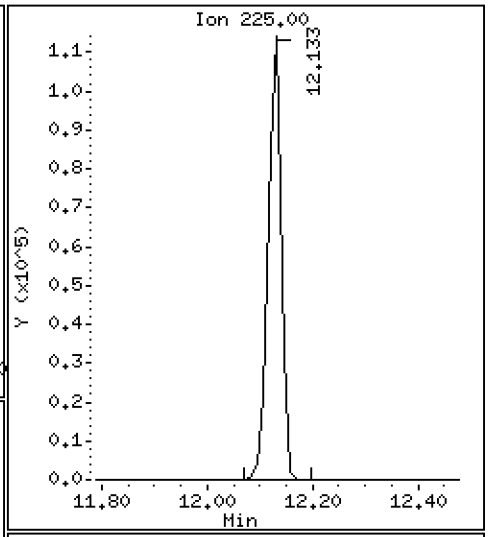
Column phase: ZB-5msi

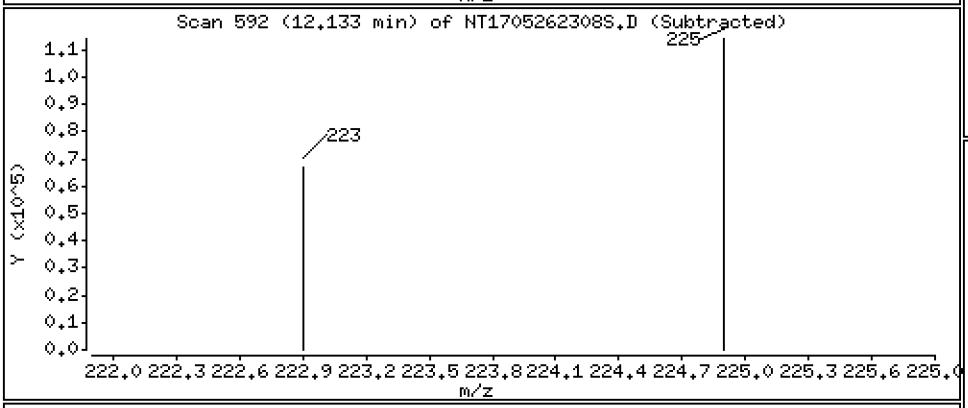
Column diameter: 0.25

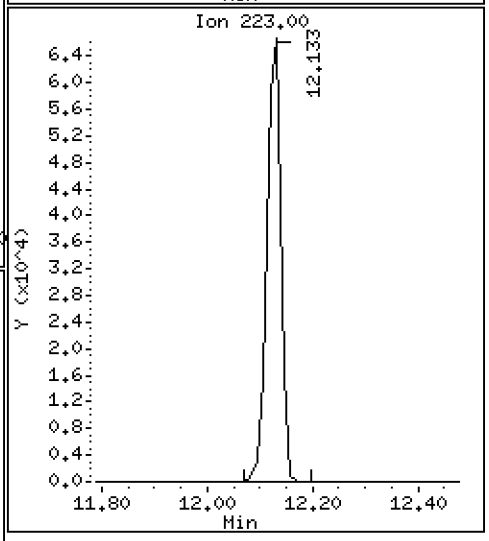
30 Hexachlorobutadiene

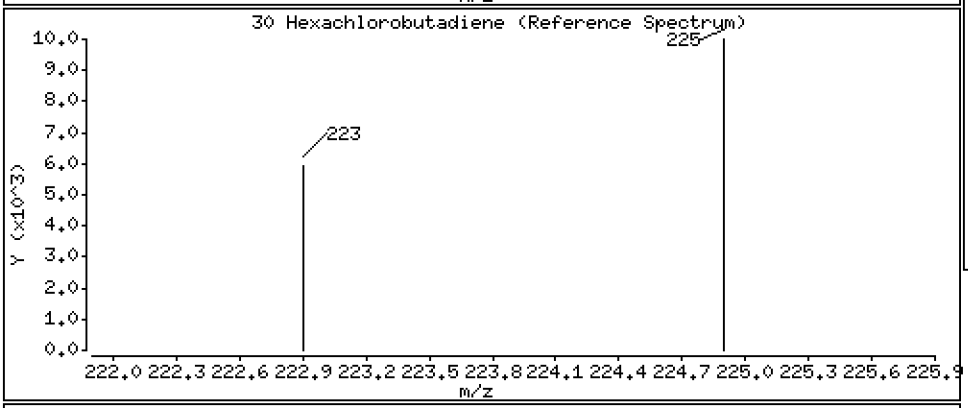
Concentration: 4.232 ug/mL

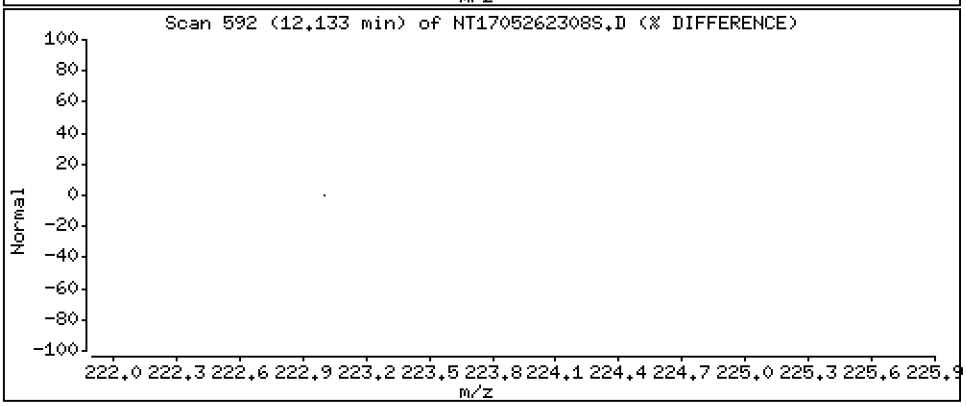












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

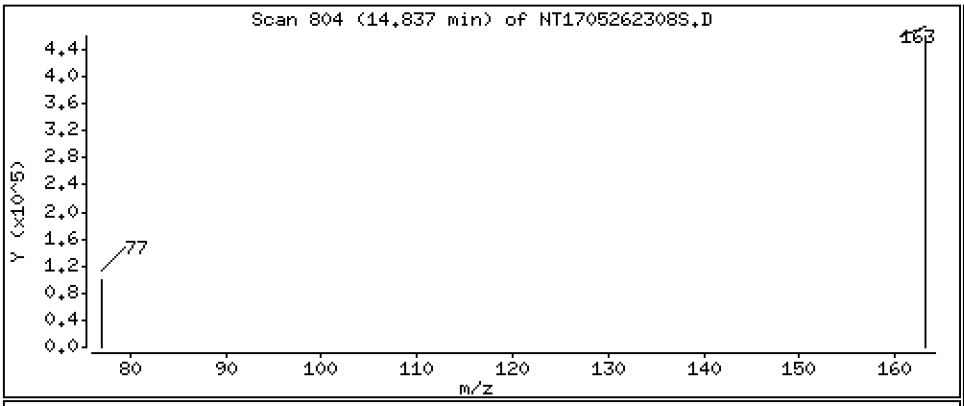
Operator: VTS

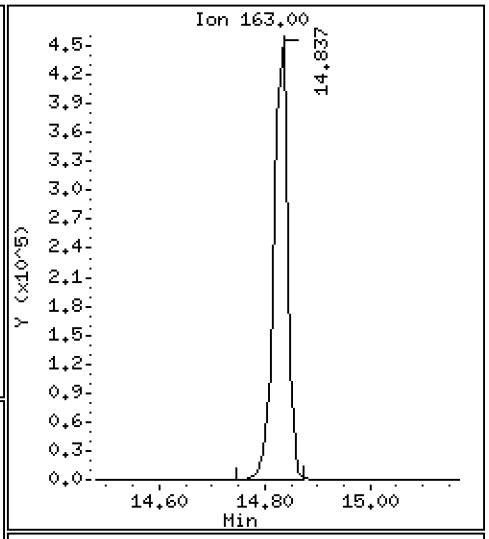
Column phase: ZB-5msi

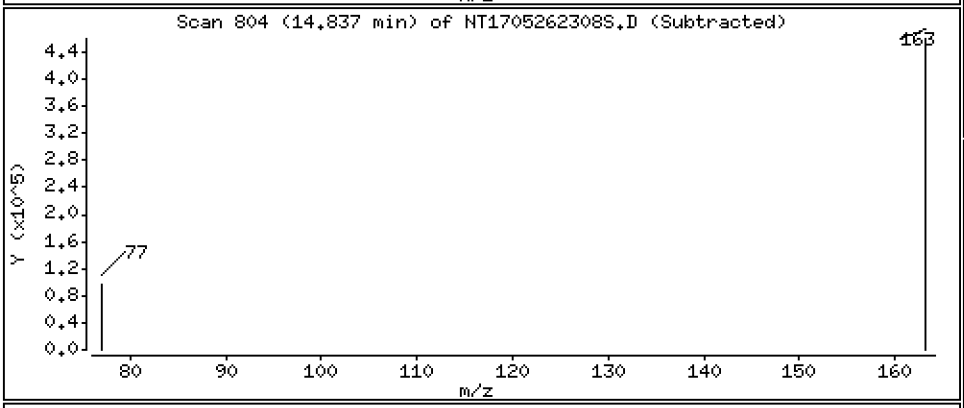
Column diameter: 0.25

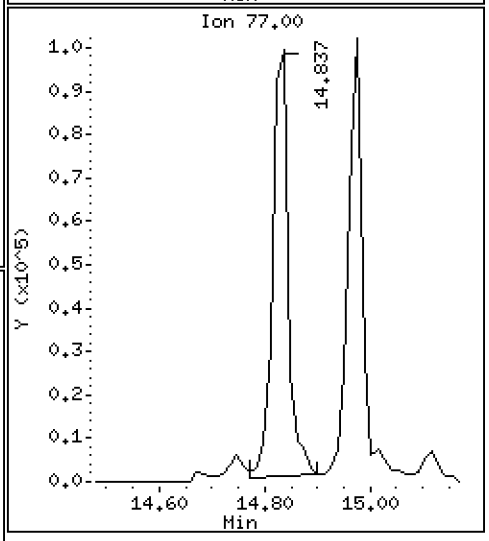
39 Dimethylphthalate

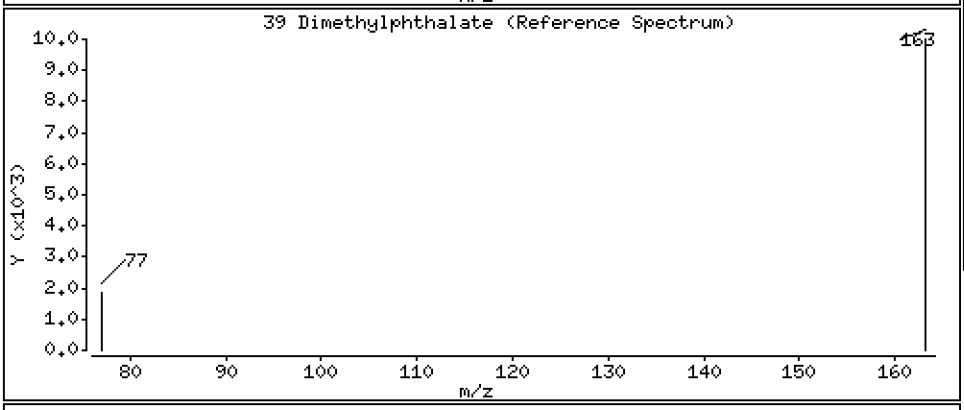
Concentration: 4.097 ug/mL

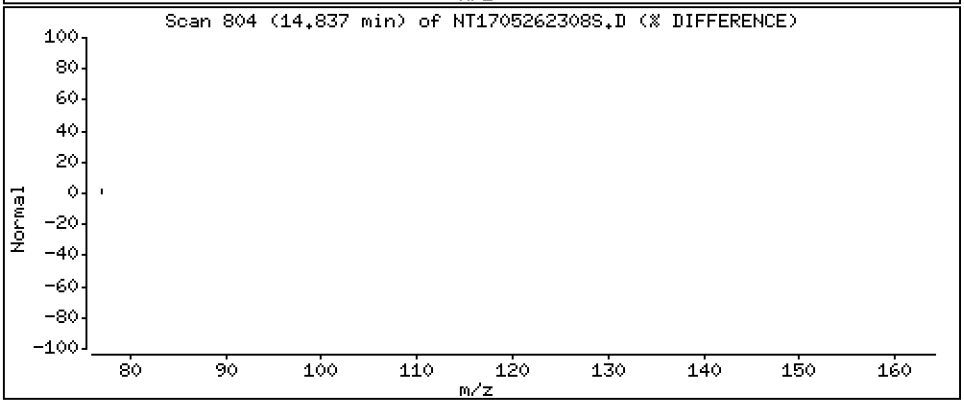












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

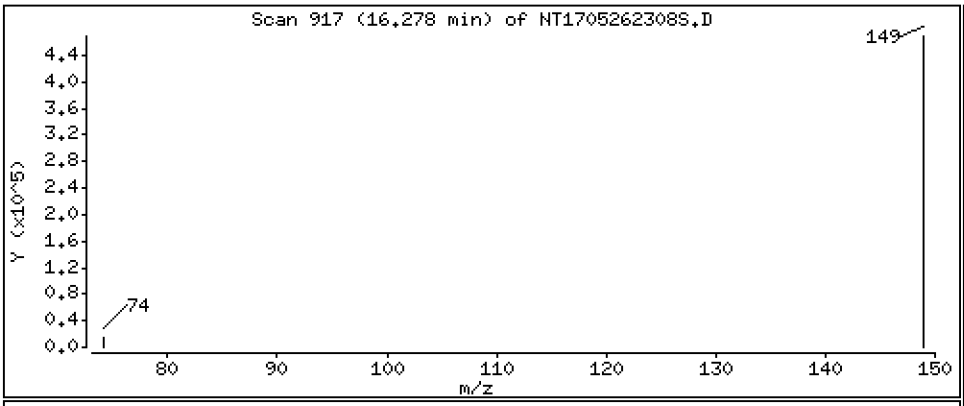
Operator: VTS

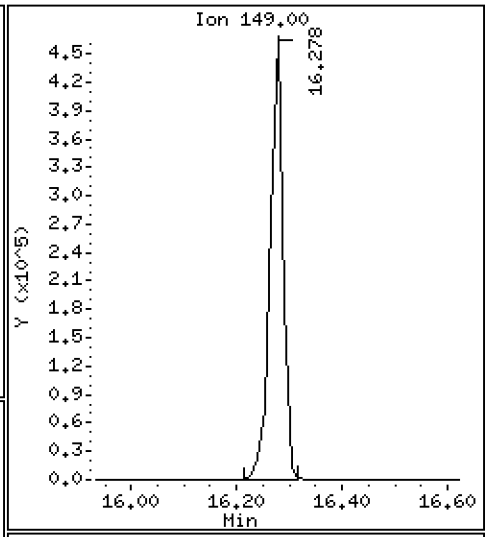
Column phase: ZB-5msi

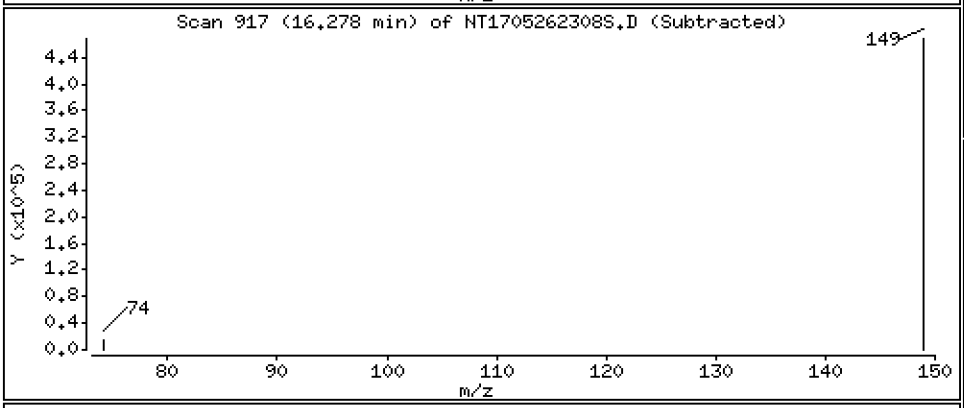
Column diameter: 0.25

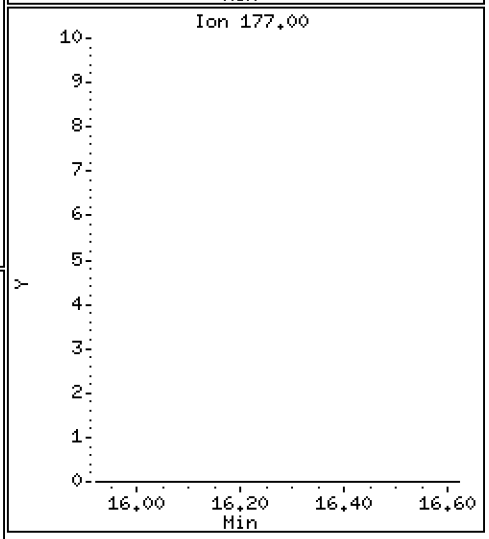
50 Diethylphthalate

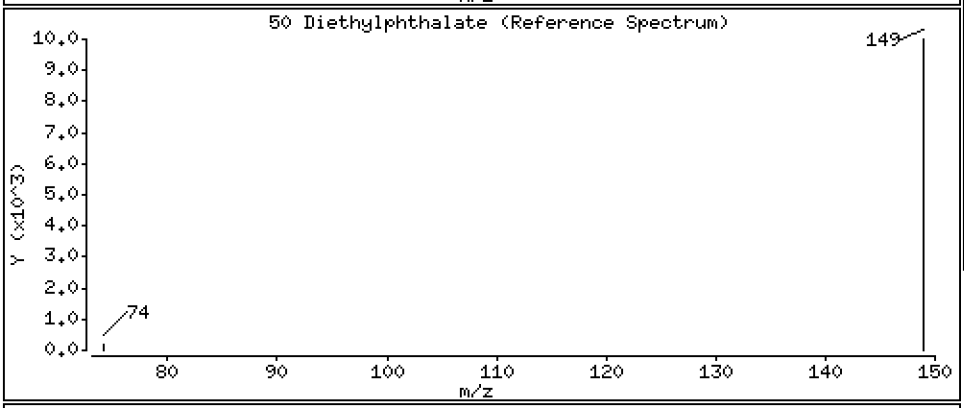
Concentration: 4.272 ug/mL

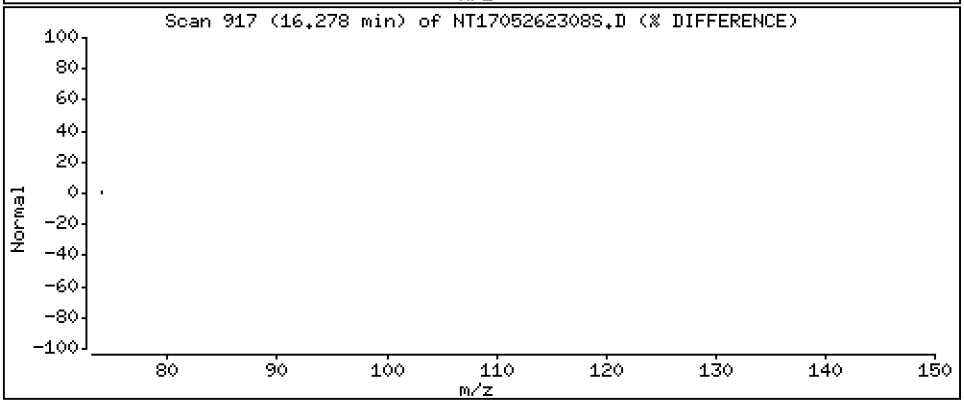












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

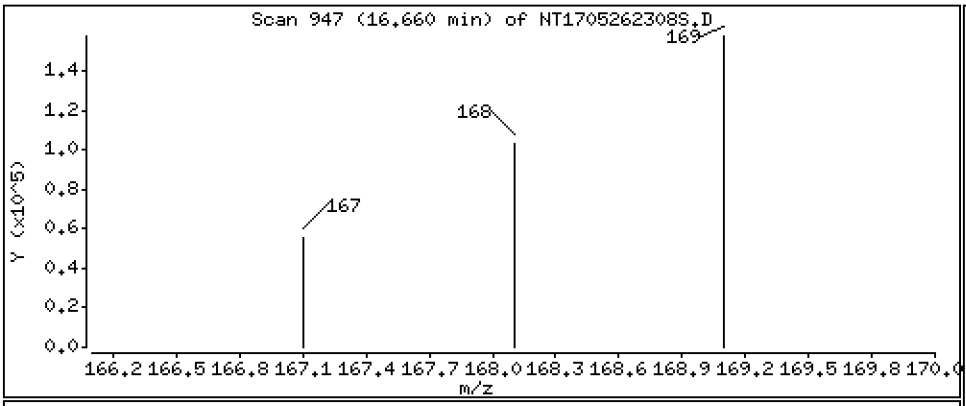
Operator: VTS

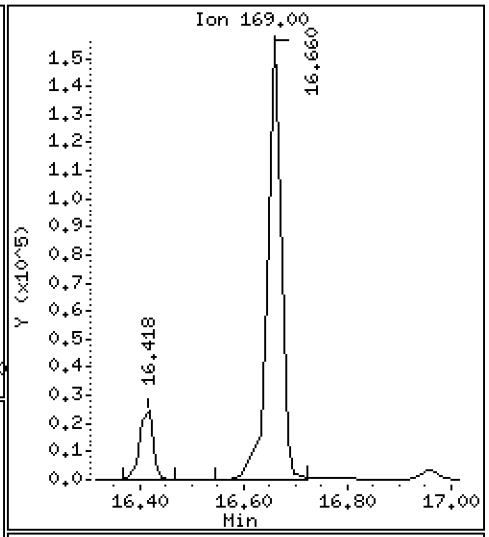
Column phase: ZB-5msi

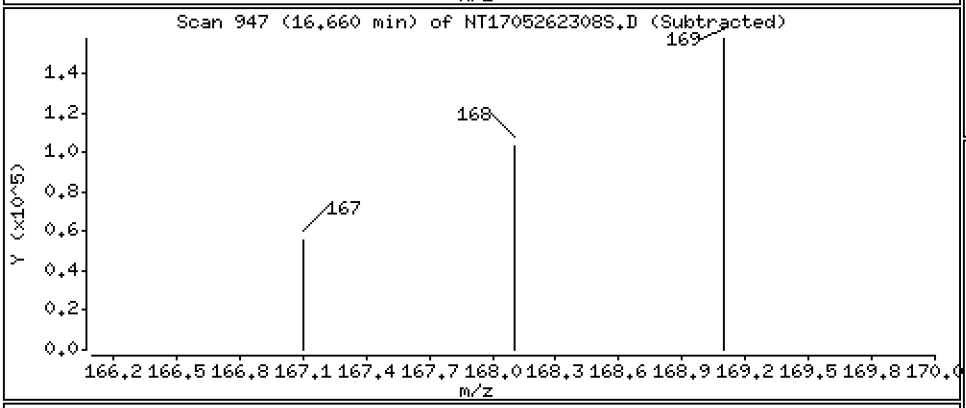
Column diameter: 0.25

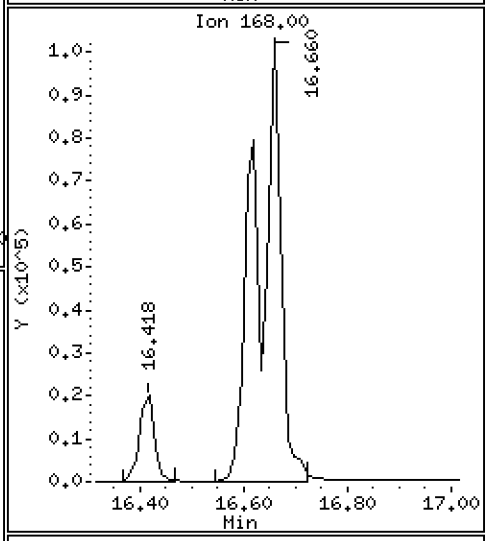
54 N-Nitrosodiphenylamine

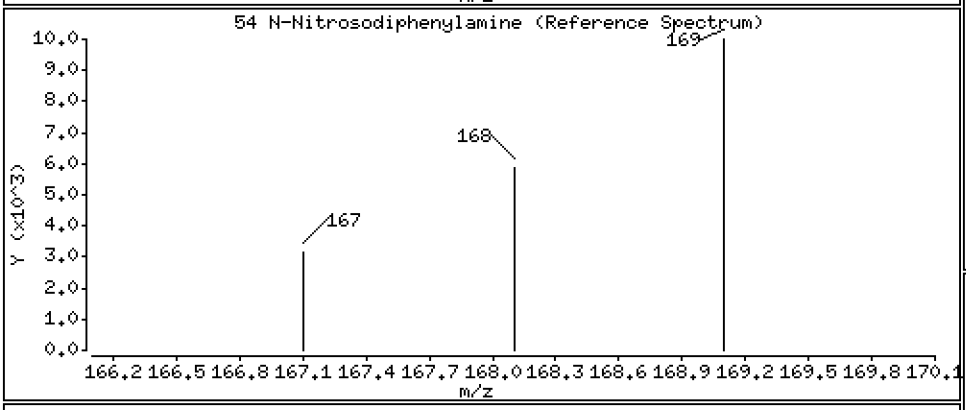
Concentration: 2.516 ug/mL

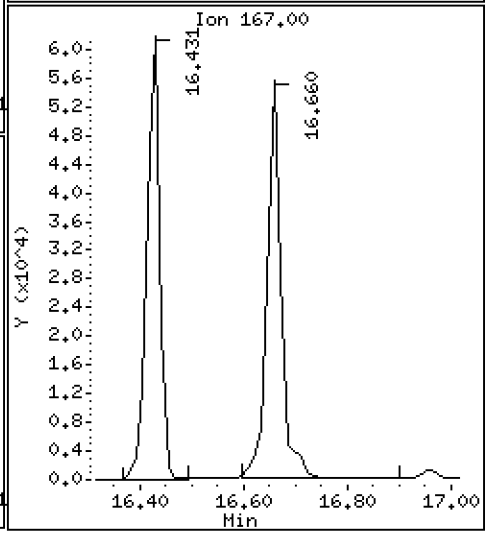


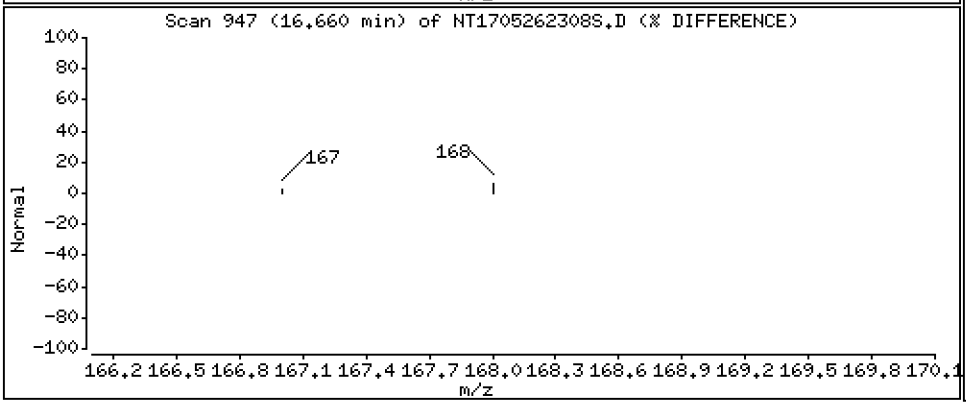












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

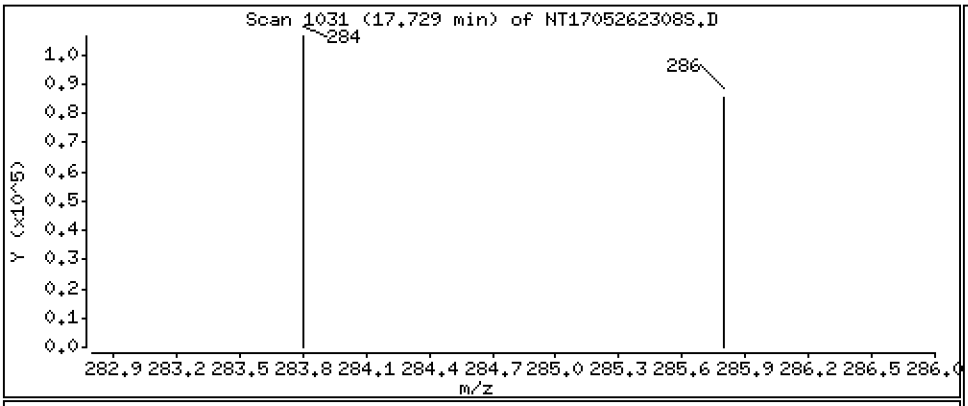
Operator: VTS

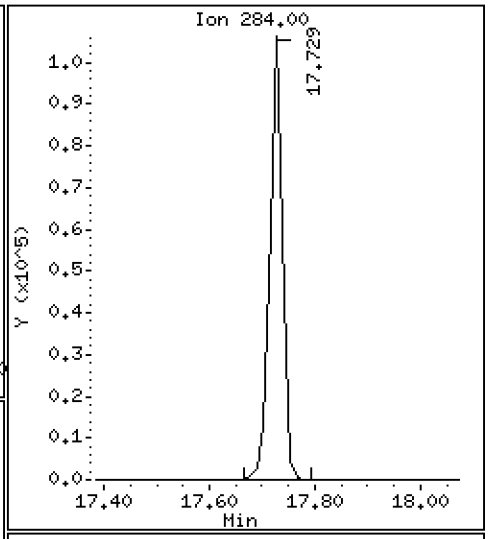
Column phase: ZB-5msi

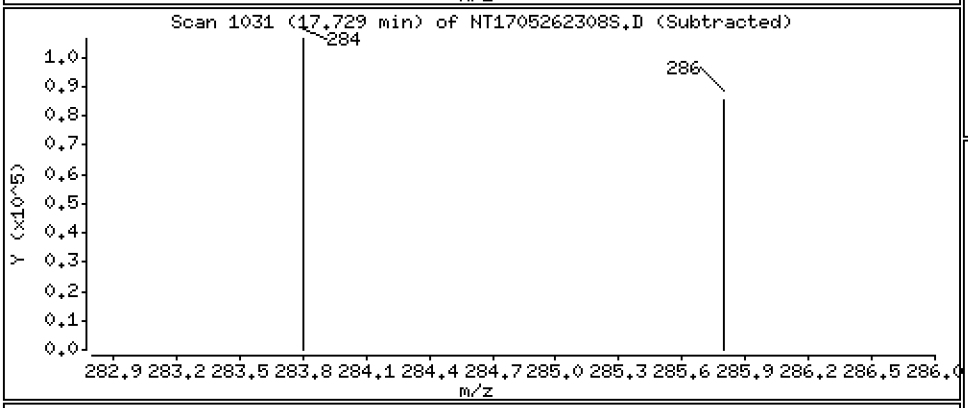
Column diameter: 0.25

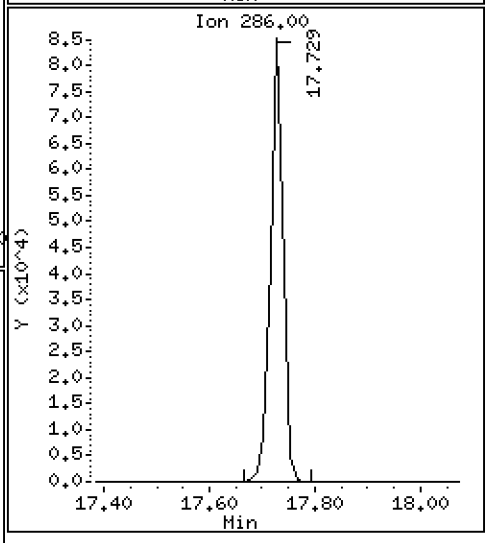
57 Hexachlorobenzene

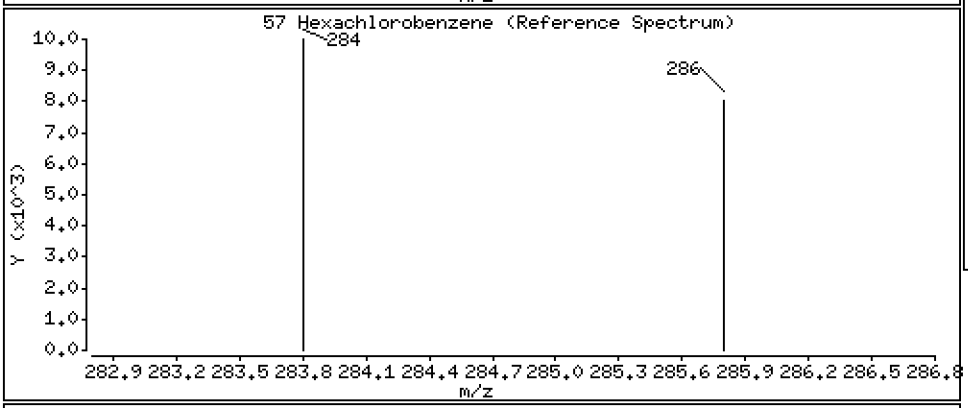
Concentration: 4.567 ug/mL

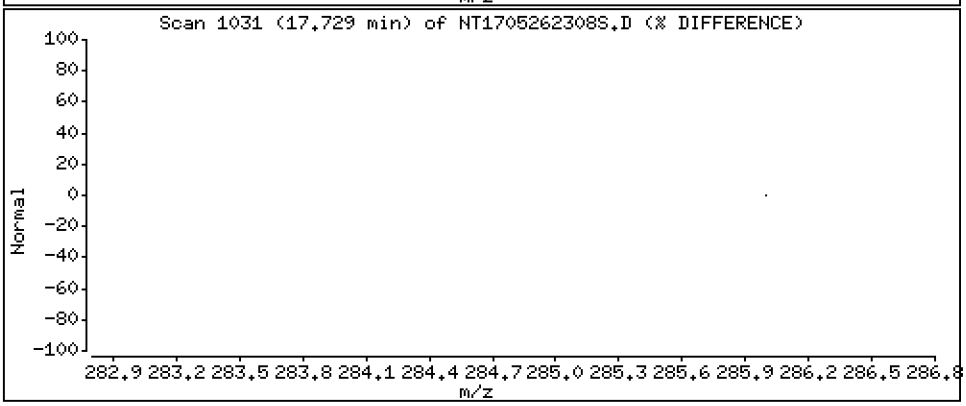












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

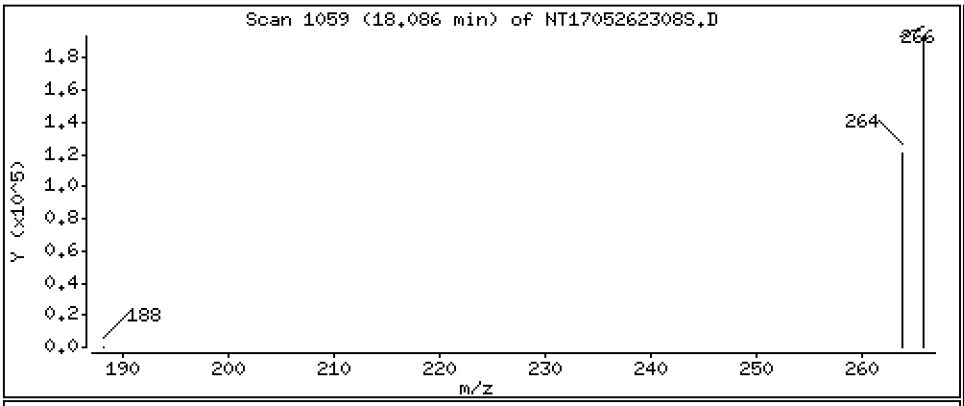
Operator: VTS

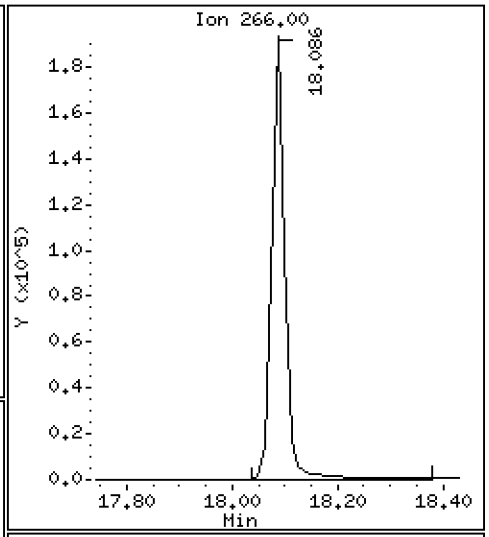
Column phase: ZB-5msi

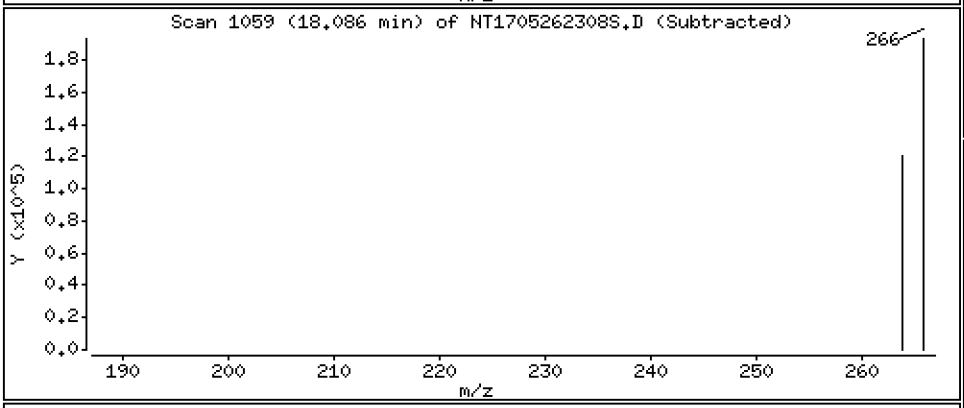
Column diameter: 0.25

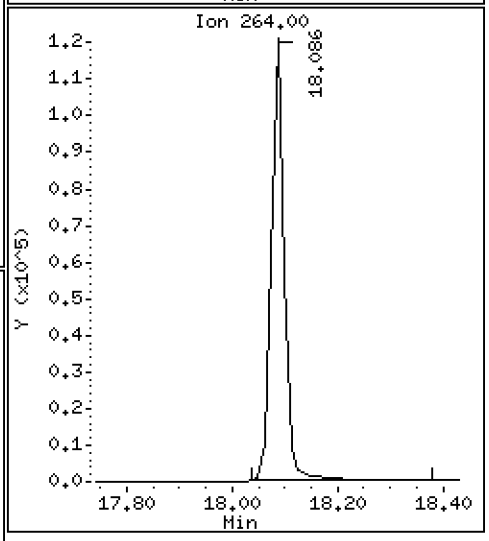
58 Pentachlorophenol

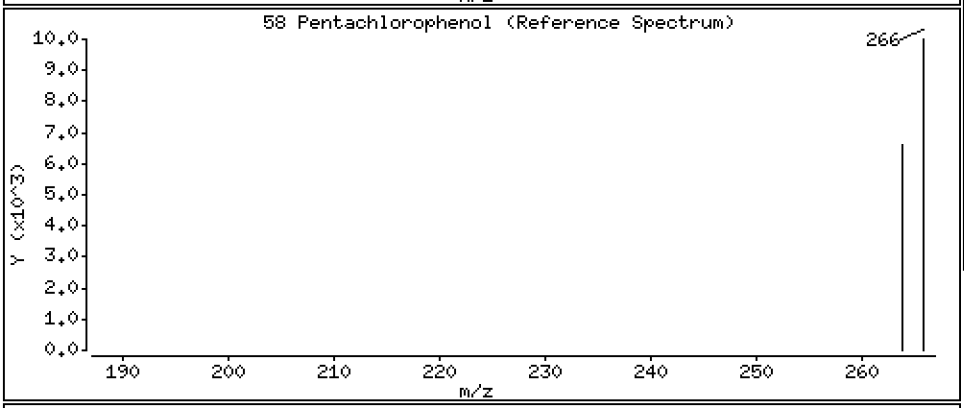
Concentration: 13.14 ug/mL

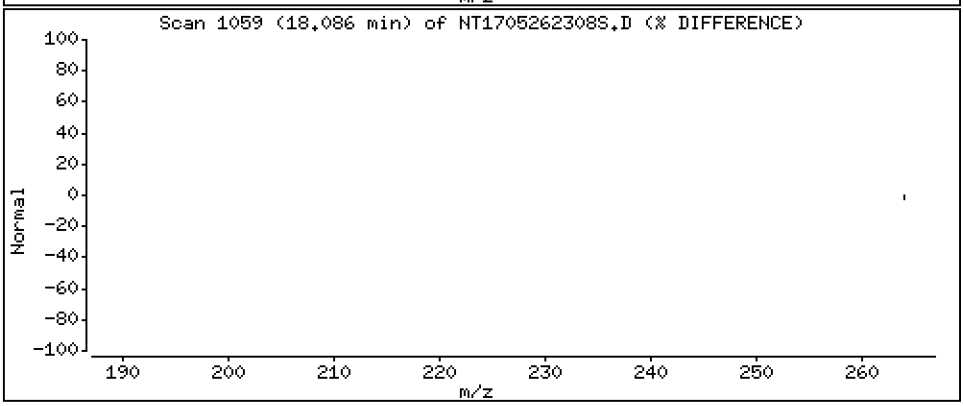












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

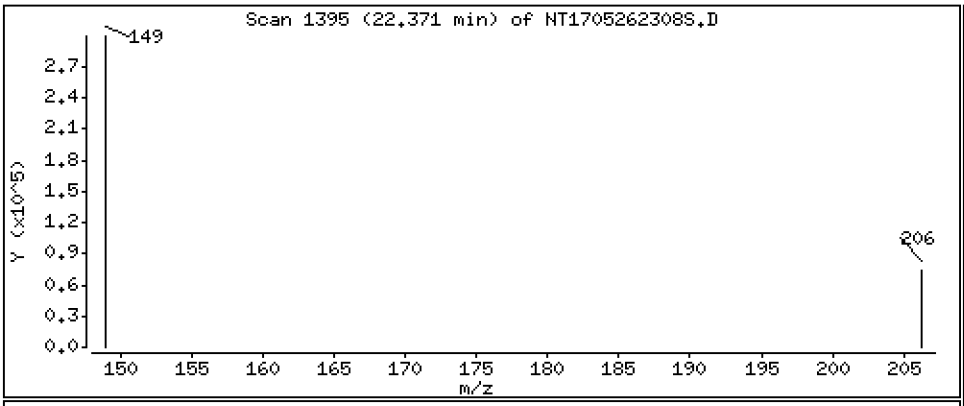
Operator: VTS

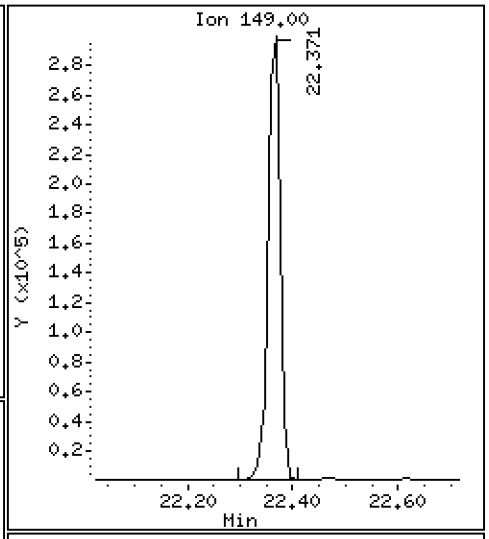
Column phase: ZB-5msi

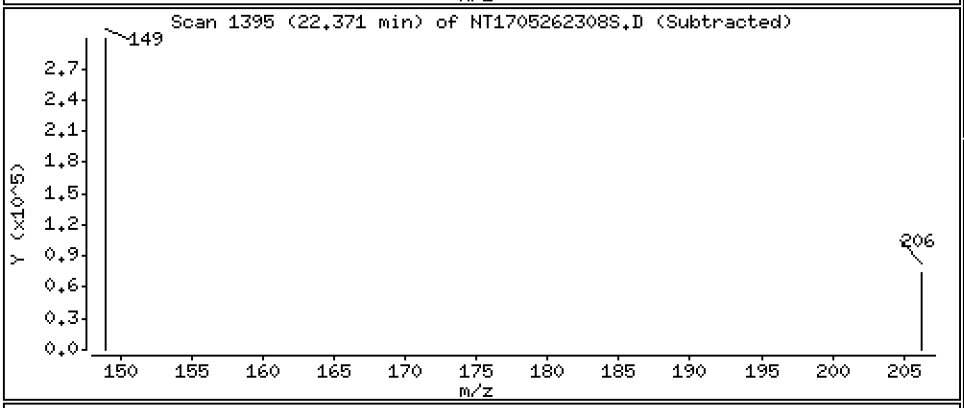
Column diameter: 0.25

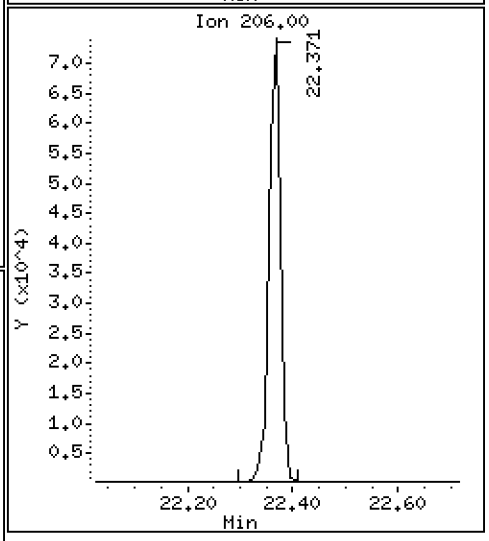
67 Butylbenzylphthalate

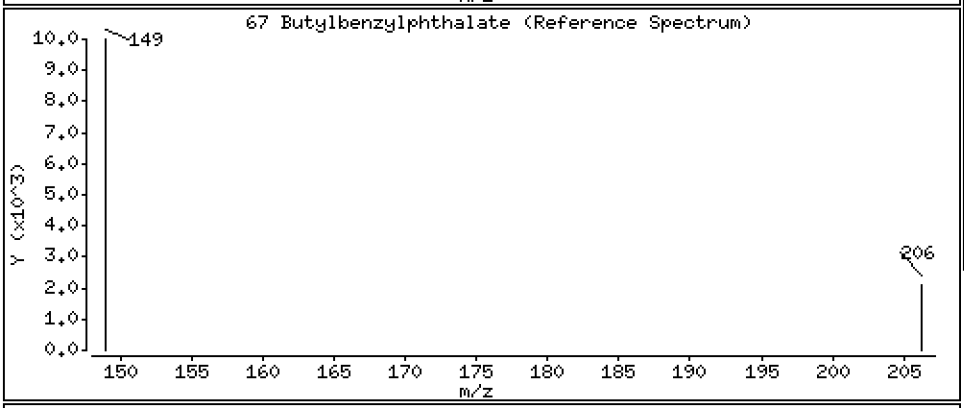
Concentration: 4.847 ug/mL

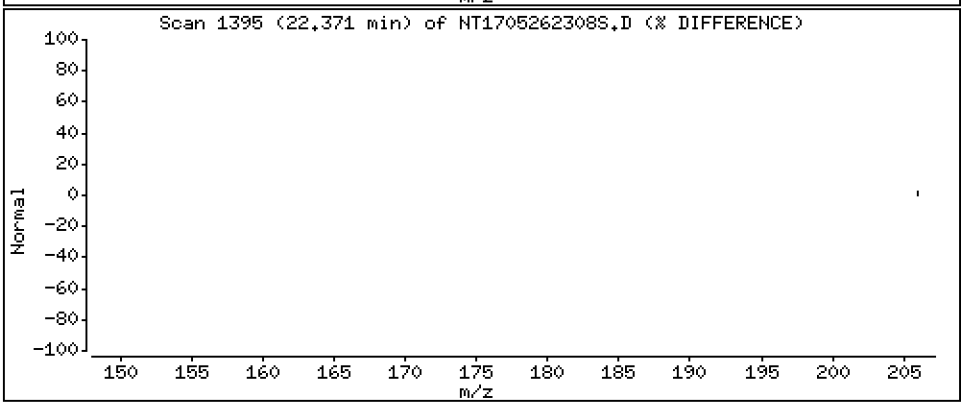












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Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

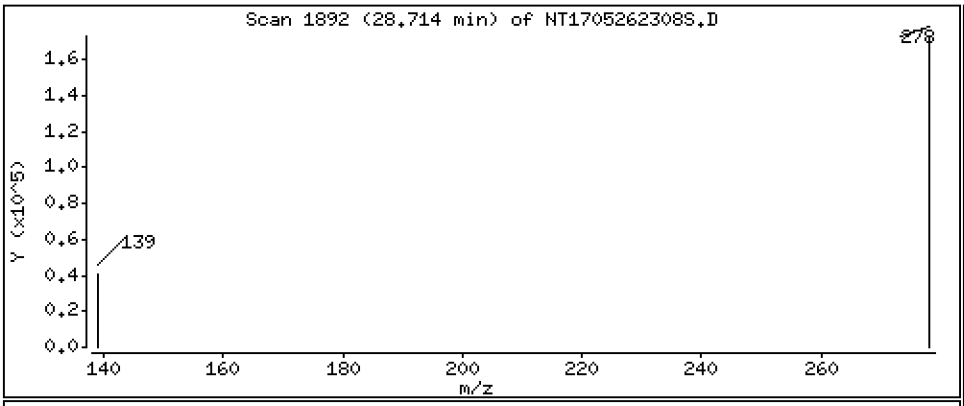
Operator: VTS

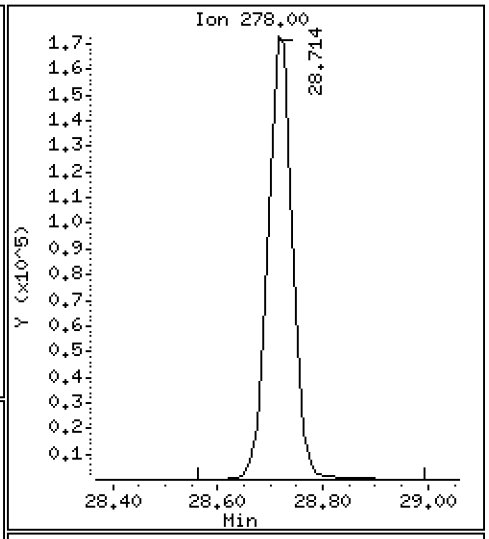
Column phase: ZB-5msi

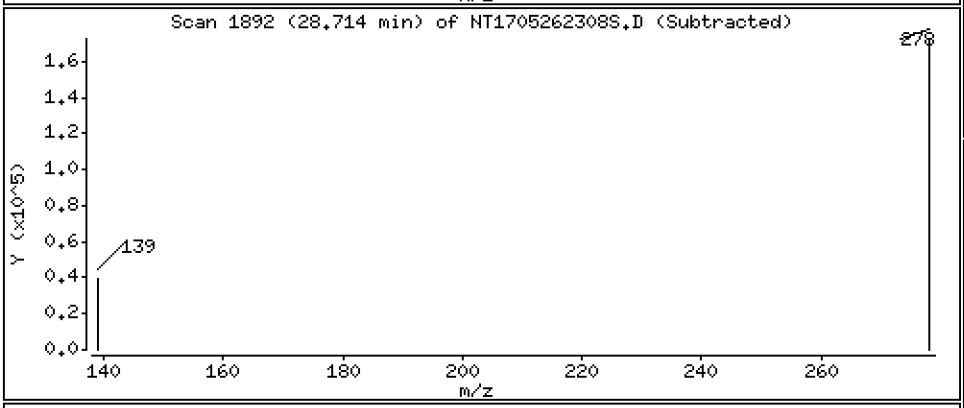
Column diameter: 0.25

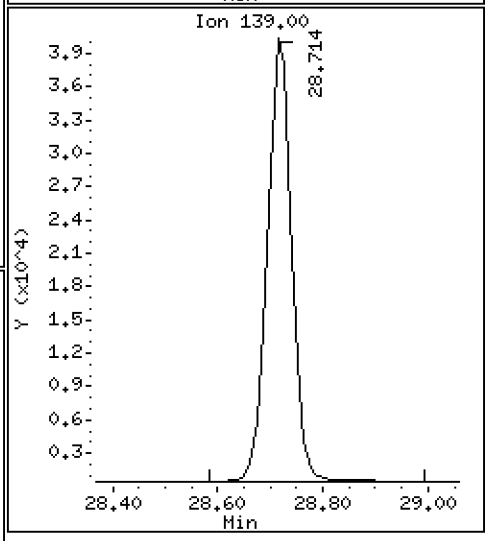
79 Dibenzo(a,h)anthracene

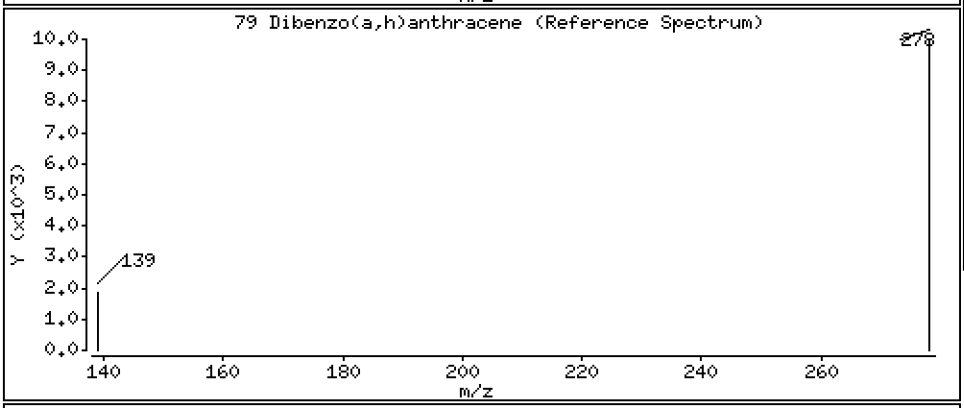
Concentration: 4.674 ug/mL

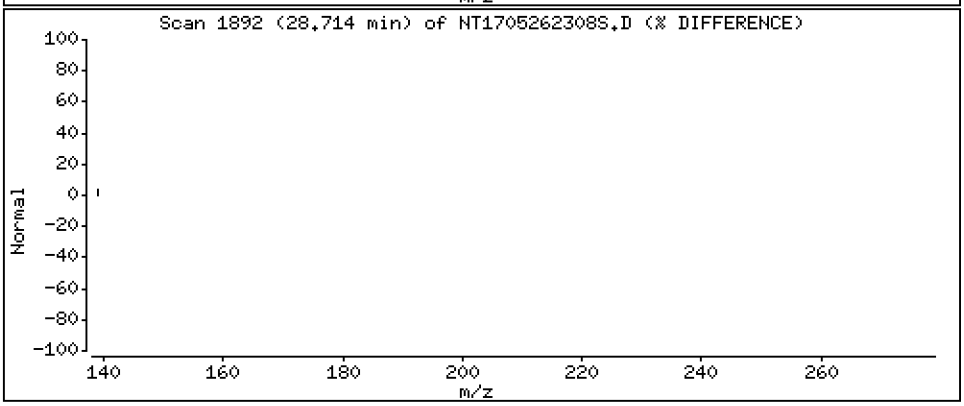












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D

Date : 26-MAY-2023 17:02

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-BSD2

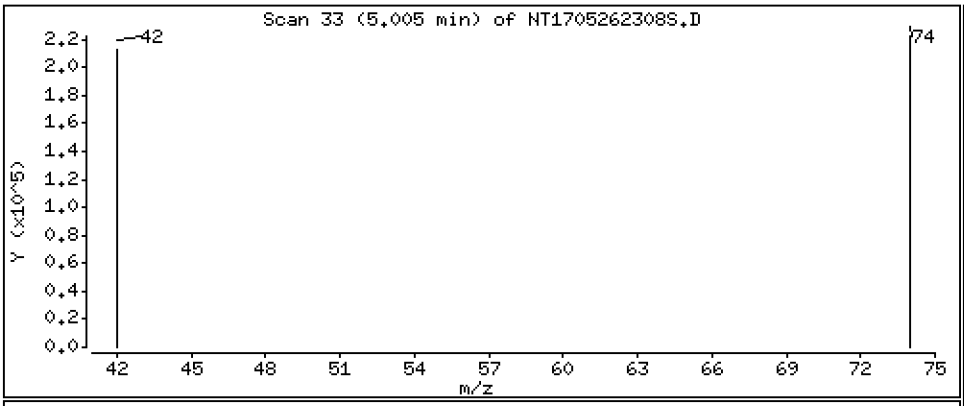
Operator: VTS

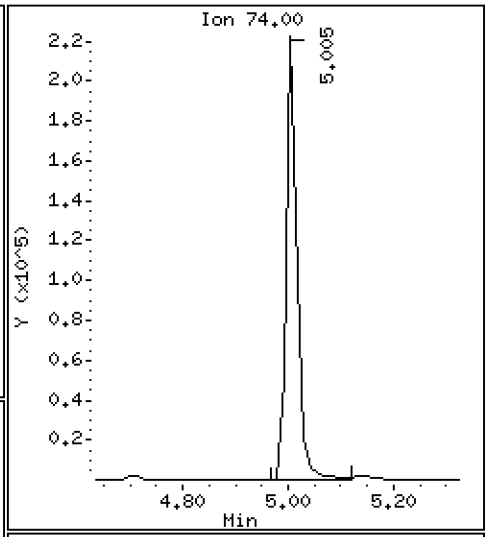
Column phase: ZB-5msi

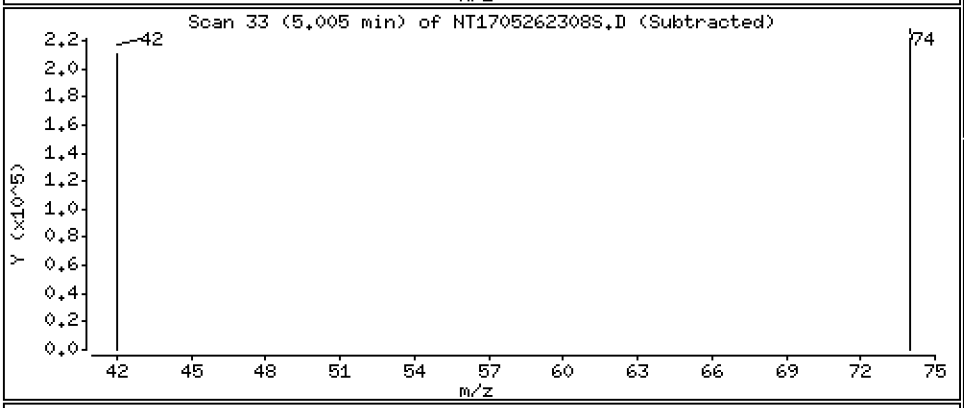
Column diameter: 0.25

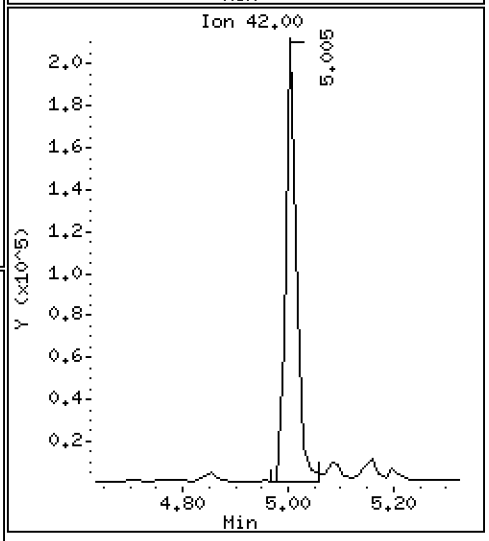
90 N-Nitrosodimethylamine

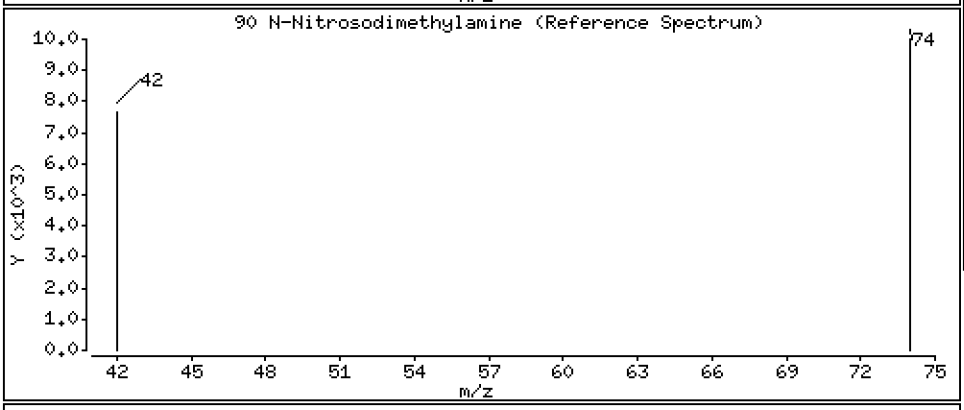
Concentration: 5.641 ug/mL

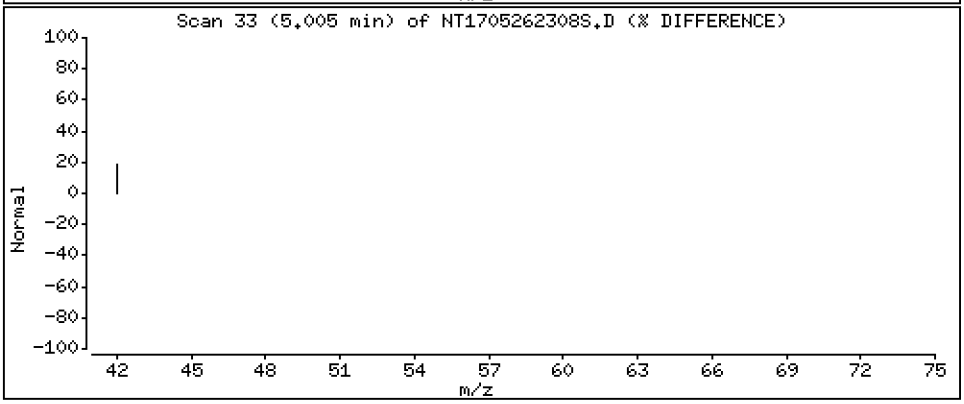












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262308S.D
Lab Smp Id: BLD0607-BSD2
Inj Date : 26-MAY-2023 17:02
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-BSD2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 06-Jun-2023 14:52 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 9
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.094	7.069	(0.765)	533490	6.18061	6.181(R)
	3 Phenol	94	8.661	8.661	(0.934)	528690	4.11061	4.111
	7 1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	438990	3.80794	3.808
*	8 1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	285381	4.00000	
	9 1,4-Dichlorobenzene	146	9.299	9.299	(1.003)	432226	3.84759	3.848
	11 Benzyl alcohol	79	9.541	9.541	(1.029)	370948	5.06161	5.062
	12 1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	429798	3.90352	3.904
	13 2-Methylphenol	108	9.759	9.759	(1.052)	212942	2.38925	2.389
	15 4-Methylphenol	108	10.040	10.027	(1.083)	283972	3.15274	3.153
	16 N-Nitroso-di-n-propylamine	70	10.091	10.091	(1.088)	154898	2.38617	2.386
	22 2,4-Dimethylphenol	107	11.062	11.062	(0.942)	84269	0.86149	0.8615
	24 Benzoic acid	105	11.317	11.215	(0.964)	1736646	28.4983	28.50
	26 1,2,4-Trichlorobenzene	180	11.649	11.649	(0.992)	318772	3.59191	3.592
*	27 Naphthalene-d8	136	11.738	11.738	(1.000)	1016889	4.00000	
	30 Hexachlorobutadiene	225	12.133	12.133	(1.034)	197739	4.23156	4.232
	39 Dimethylphthalate	163	14.837	14.824	(0.968)	847884	4.09699	4.097
*	42 Acenaphthene-d10	162	15.334	15.334	(1.000)	563559	4.00000	
	50 Diethylphthalate	149	16.277	16.277	(1.062)	802810	4.27150	4.272
	54 N-Nitrosodiphenylamine	169	16.659	16.659	(0.908)	286669	2.51602	2.516
	57 Hexachlorobenzene	284	17.728	17.728	(0.966)	176511	4.56684	4.567
	58 Pentachlorophenol	266	18.086	18.086	(0.985)	331676	13.1417	13.14
*	59 Phenanthrene-d10	188	18.353	18.353	(1.000)	808753	4.00000	
$	66 Terphenyl-d14	244	21.452	21.452	(0.919)	506614	5.16192	5.162(R)
	67 Butylbenzylphthalate	149	22.371	22.371	(0.958)	516950	4.84707	4.847
*	69 Chrysene-d12	240	23.353	23.353	(1.000)	517231	4.00000	
*	77 Perylene-d12	264	25.994	25.994	(1.000)	436120	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.713	28.713	(1.105)	574931	4.67379	4.674
	90 N-Nitrosodimethylamine	74	5.005	4.979	(0.540)	314258	5.64100	5.641

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262308S.D
Lab Smp Id: BLD0607-BSD2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:53
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	354937	177469	709874	285381	-19.60
27 Naphthalene-d8	1204481	602241	2408962	1016889	-15.57
42 Acenaphthene-d10	658677	329339	1317354	563559	-14.44
59 Phenanthrene-d10	965415	482708	1930830	808753	-16.23
69 Chrysene-d12	615102	307551	1230204	517231	-15.91
77 Perylene-d12	580660	290330	1161320	436120	-24.89

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	-0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	-0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	0.00
69 Chrysene-d12	23.35	22.85	23.85	23.35	-0.00
77 Perylene-d12	25.99	25.49	26.49	25.99	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262308S.D

Lab ID: BLD0607-BSD2
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   26-MAY-2023 17:02

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.964	0.955	0.0087	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705262303S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0607-SRM2
Batch: BLD0607
Initial/Final: 1 g / 1 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 05/26/2023 18:56
Standard ID: K003477
Expires: 01/31/2024
Standard Lot#: CRM 143 (LRAC8918)
Description: CRM 143 BNAs - Sandy Loam

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
2,4-Dimethylphenol	6357.0	1950	21.7	200		30.7	0 - 220
1,2,4-Trichlorobenzene	1477.0	1290	26.8	50.0		87.6	10 - 193
N-Nitrosodiphenylamine	2854.0	2620	13.1	50.0		91.8	40 - 160
Pentachlorophenol	3411.0	3210	21.3	200		94.0	10 - 206

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623115.D

Date : 26-MAY-2023 18:56

Client ID:

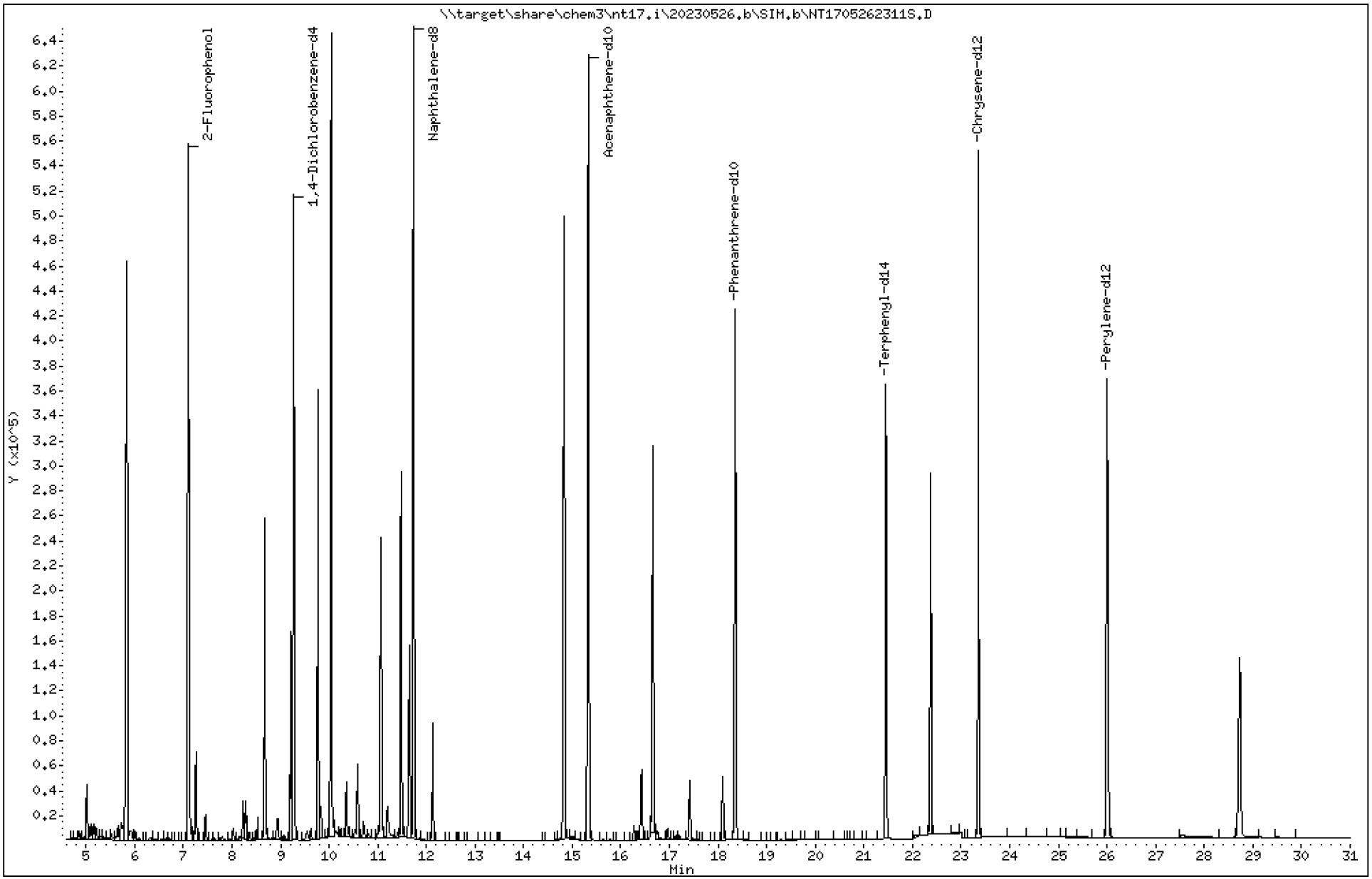
Instrument: nt17.i

Sample Info: BLD0607-SRM2

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262311S.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

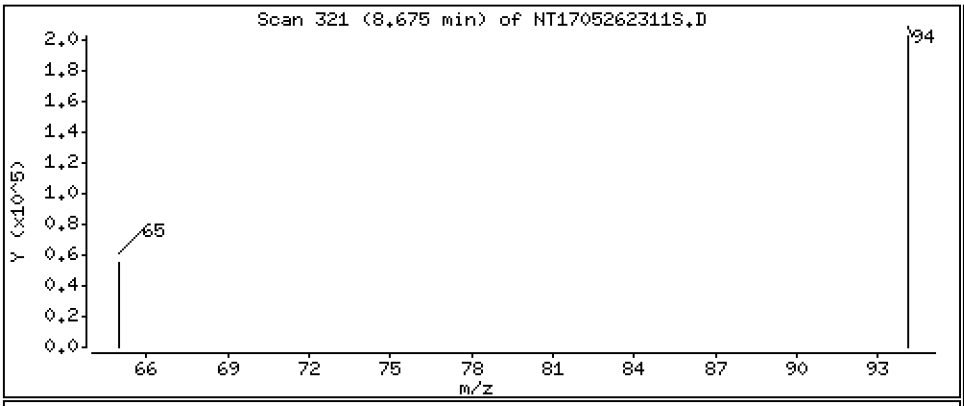
Operator: VTS

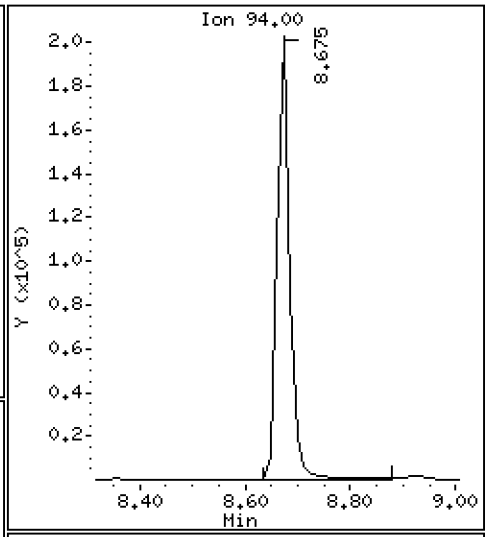
Column phase: ZB-5msi

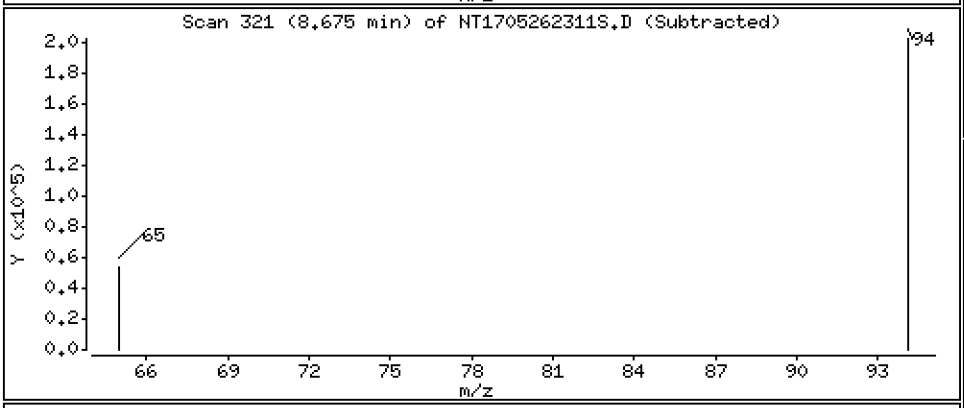
Column diameter: 0.25

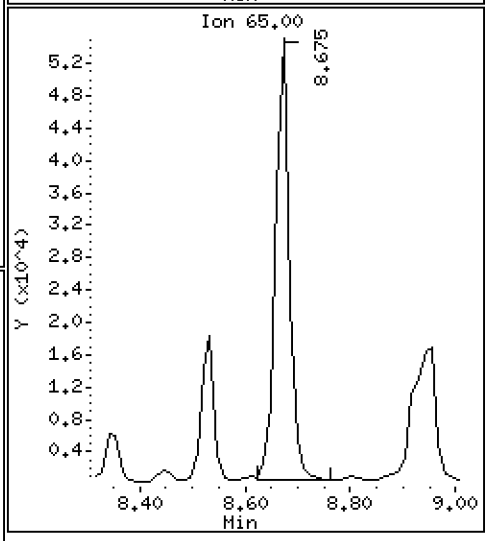
3 Phenol

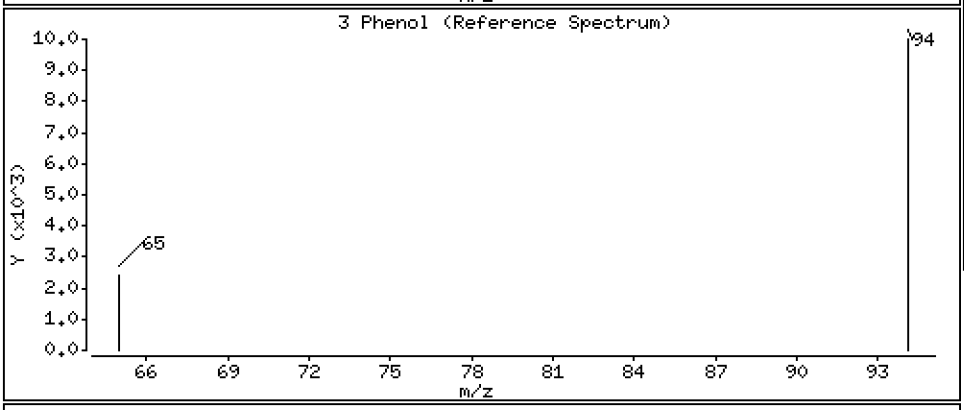
Concentration: 2.398 ug/mL

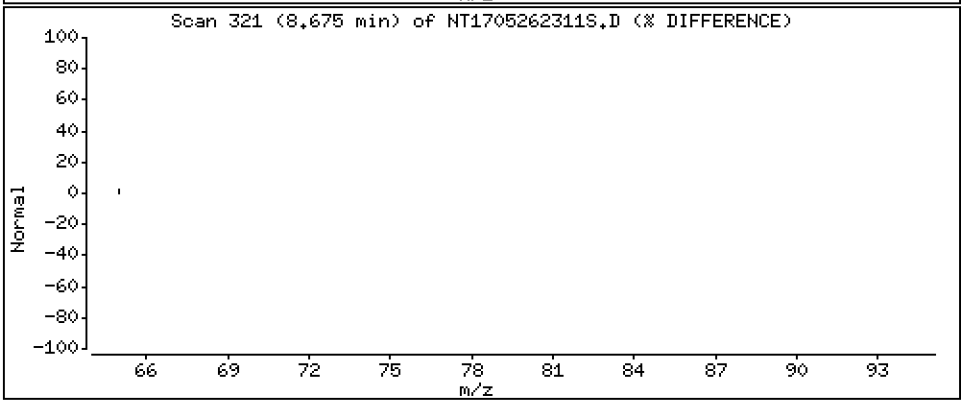












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262311S.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

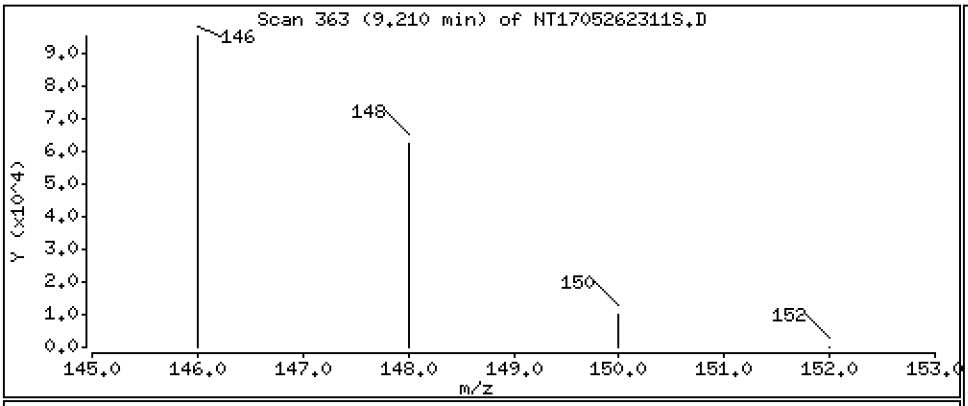
Operator: VTS

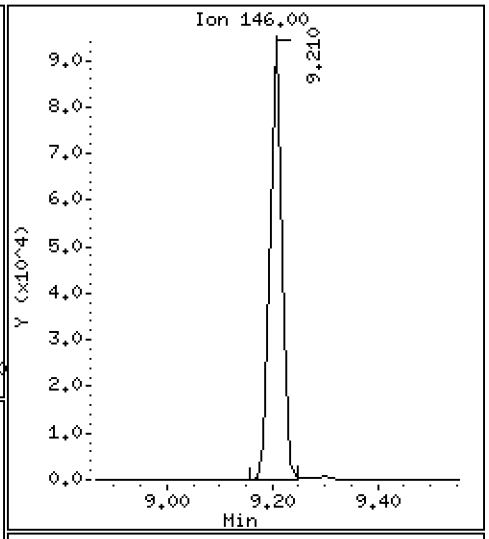
Column phase: ZB-5msi

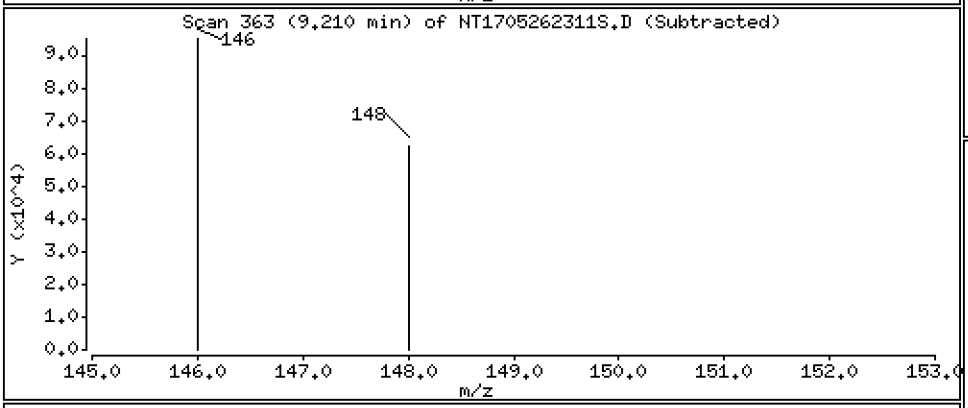
Column diameter: 0.25

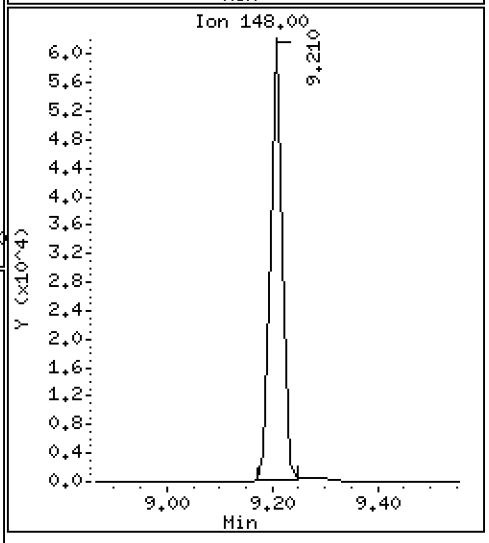
7 1,3-Dichlorobenzene

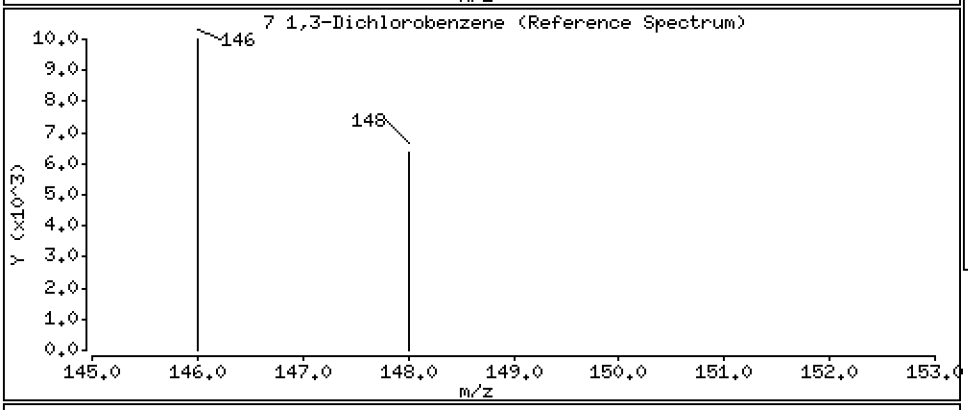
Concentration: 1.195 ug/mL

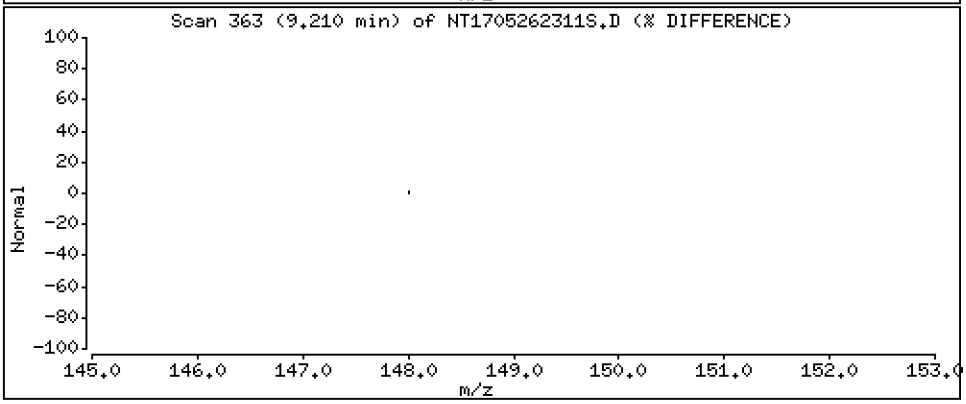












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262311S.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

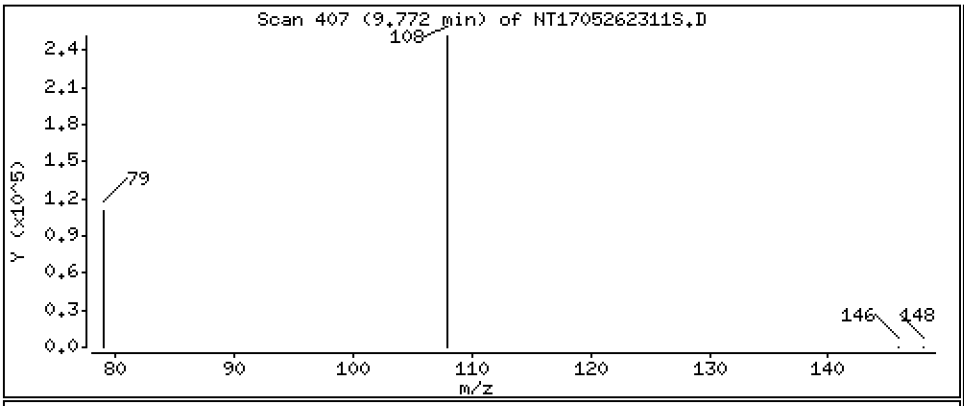
Operator: VTS

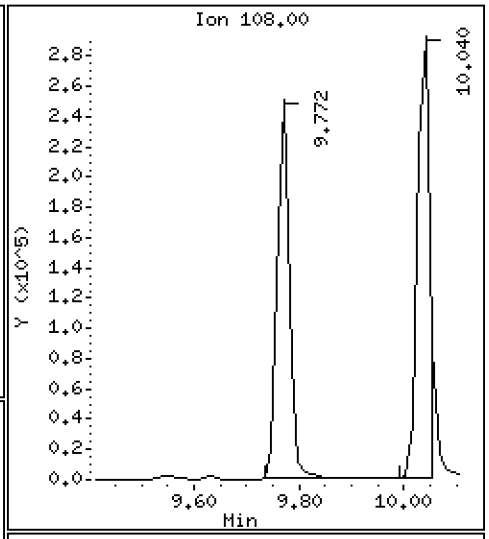
Column phase: ZB-5msi

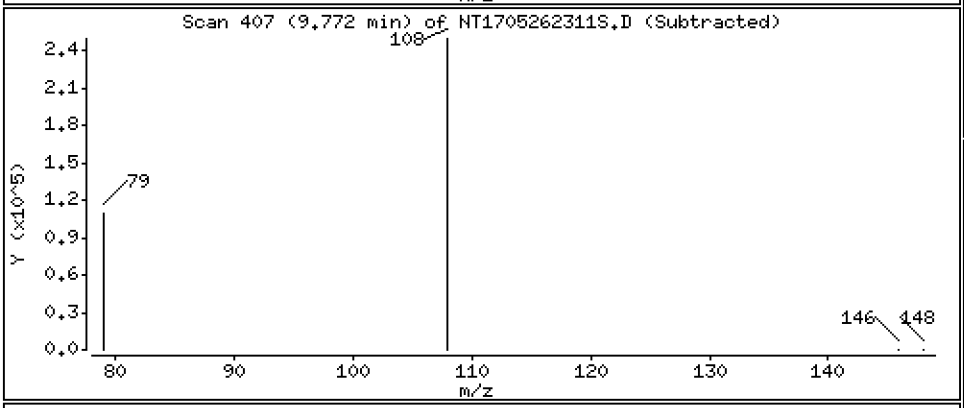
Column diameter: 0.25

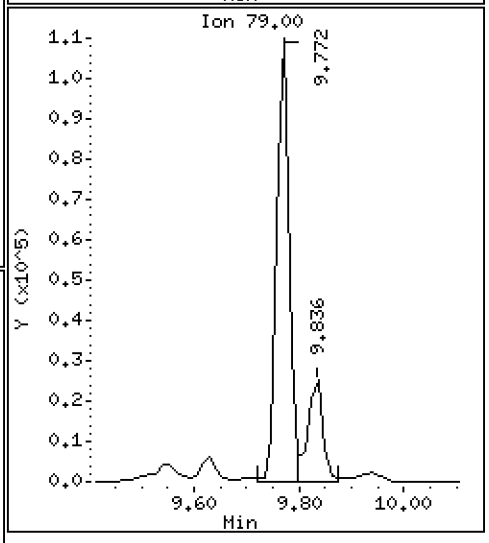
13 2-Methylphenol

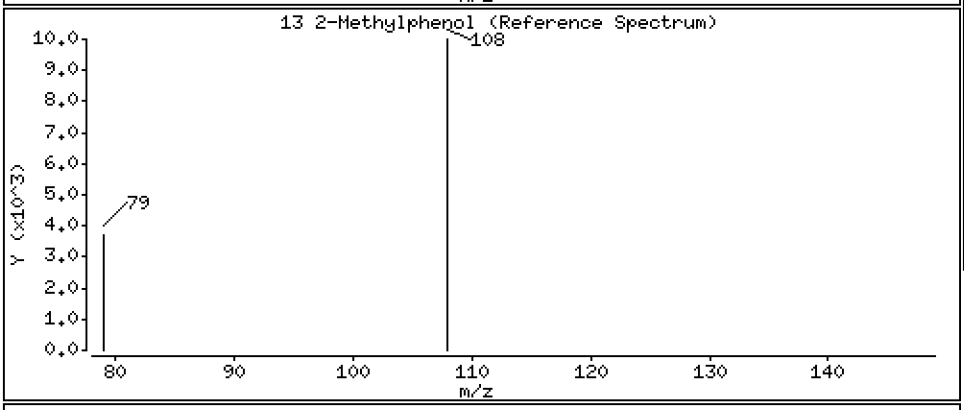
Concentration: 4.231 ug/mL

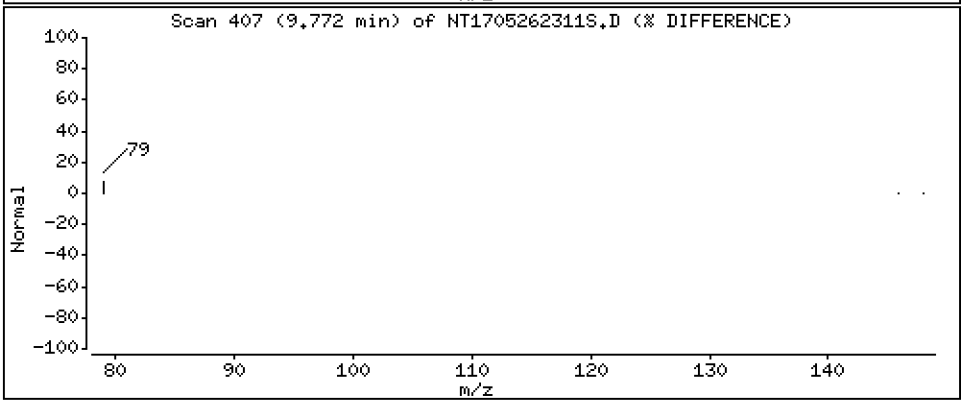












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262311S.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

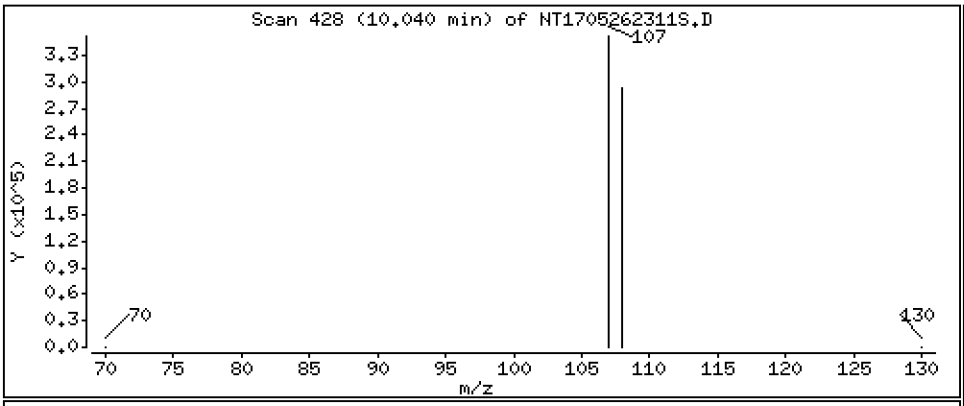
Operator: VTS

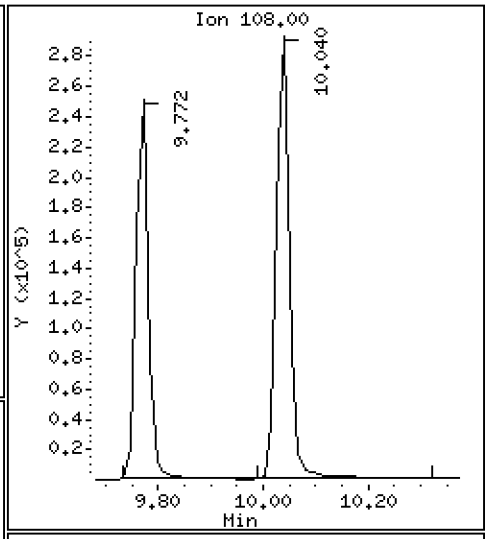
Column phase: ZB-5msi

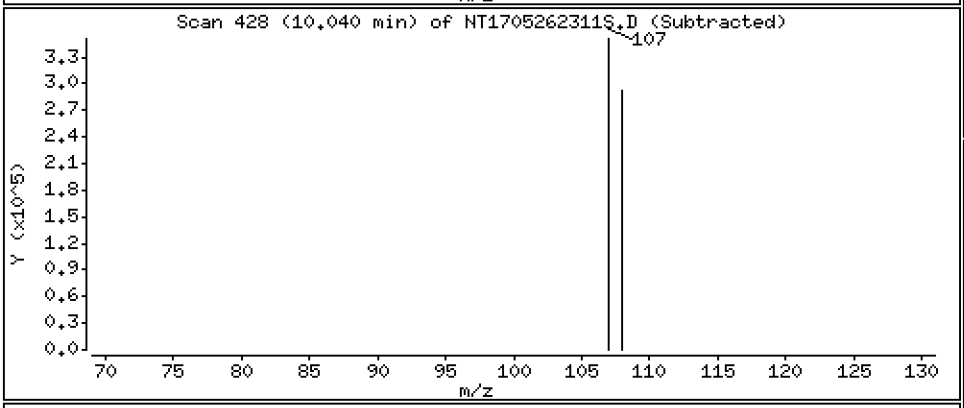
Column diameter: 0.25

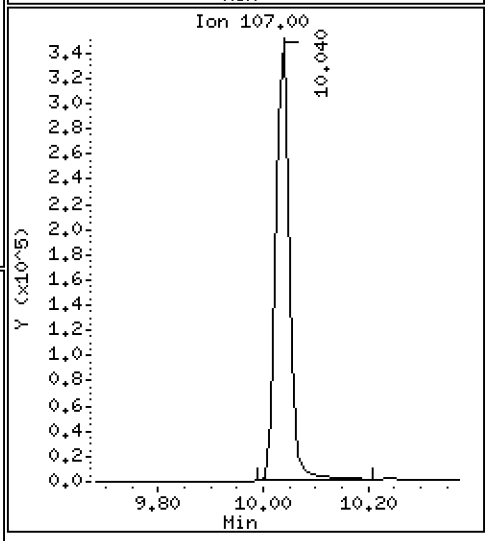
15 4-Methylphenol

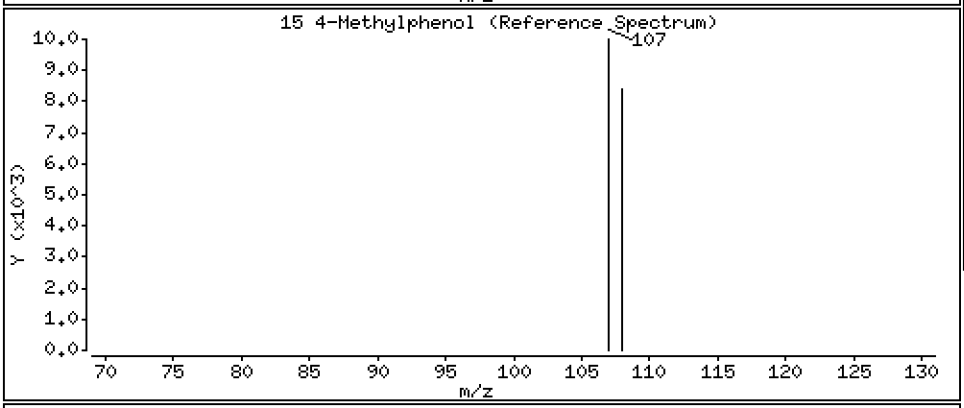
Concentration: 5.353 ug/mL

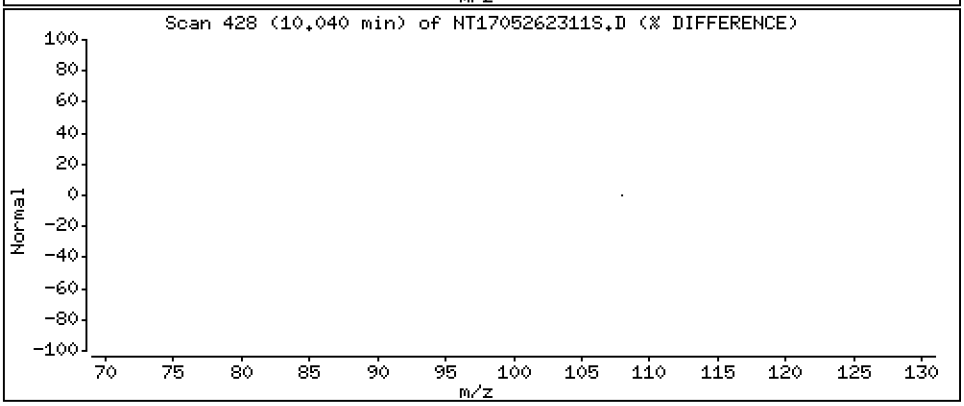












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623115.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

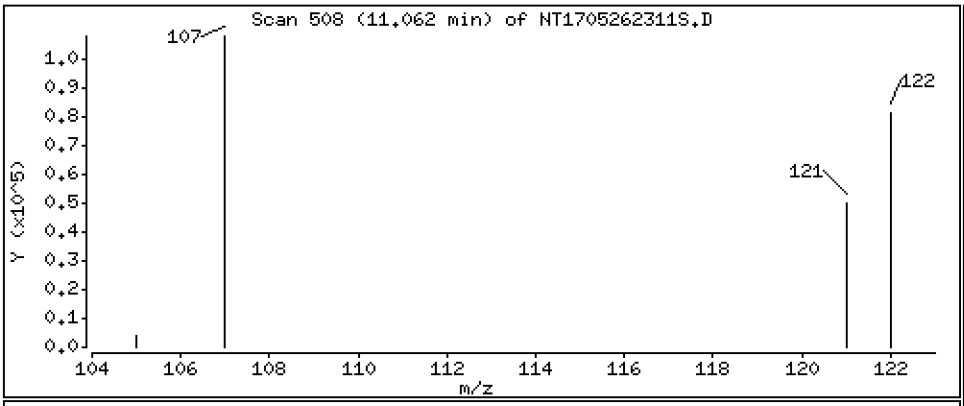
Operator: VTS

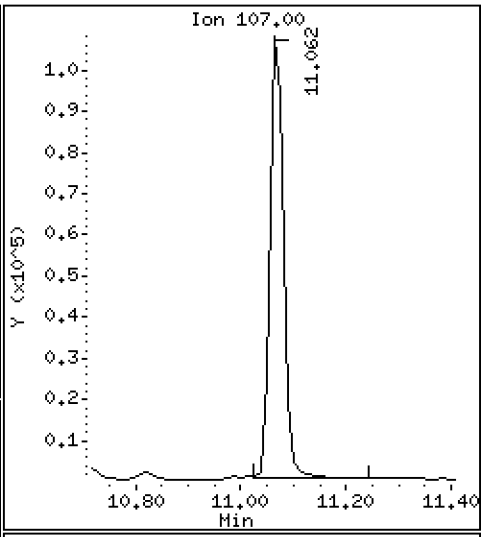
Column phase: ZB-5msi

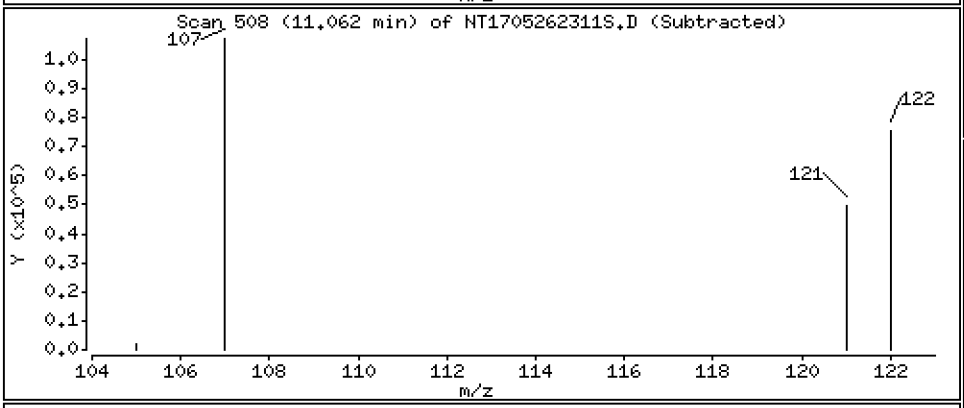
Column diameter: 0.25

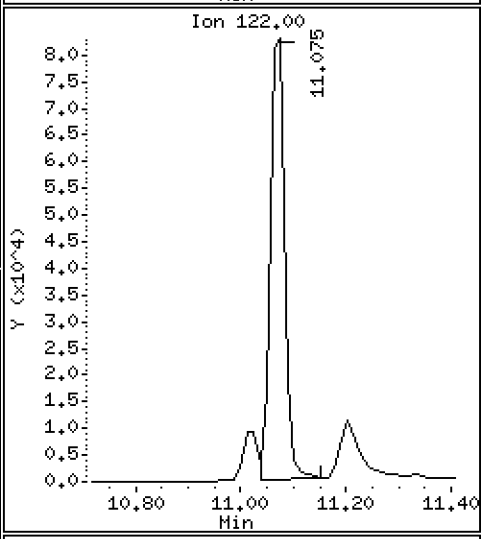
22 2,4-Dimethylphenol

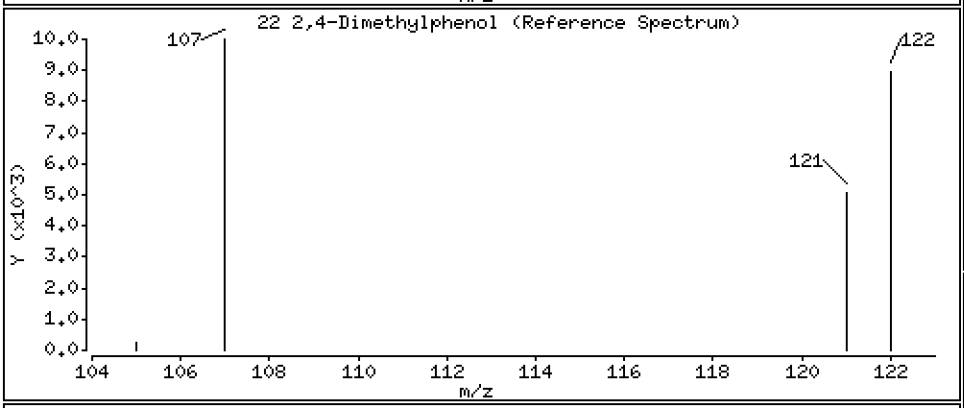
Concentration: 1.952 ug/mL

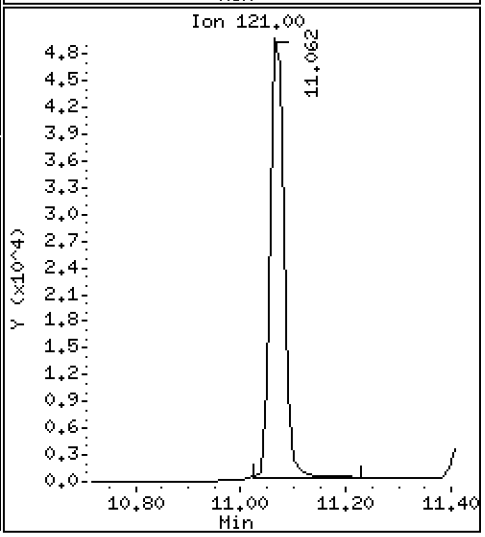


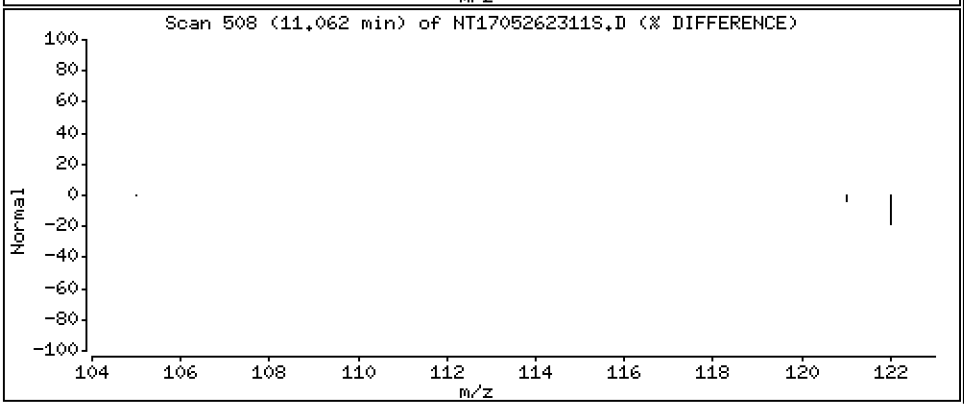












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

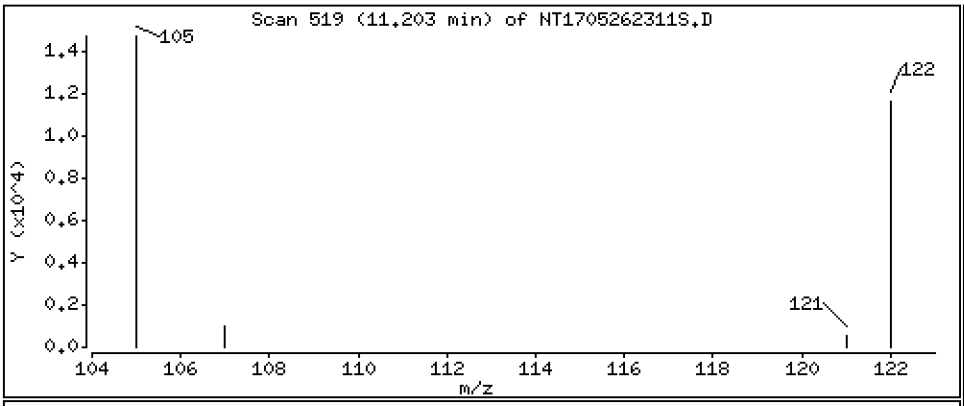
Operator: VTS

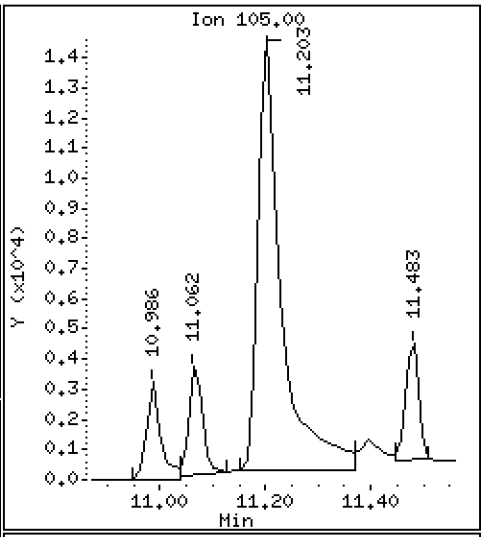
Column phase: ZB-5msi

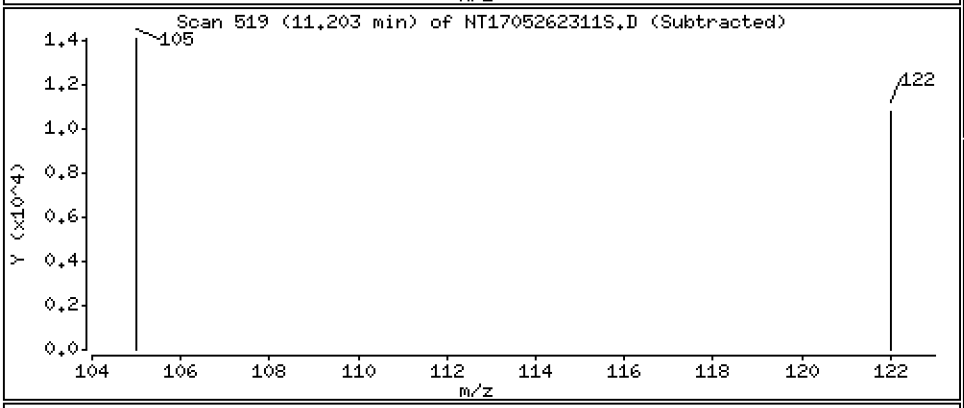
Column diameter: 0.25

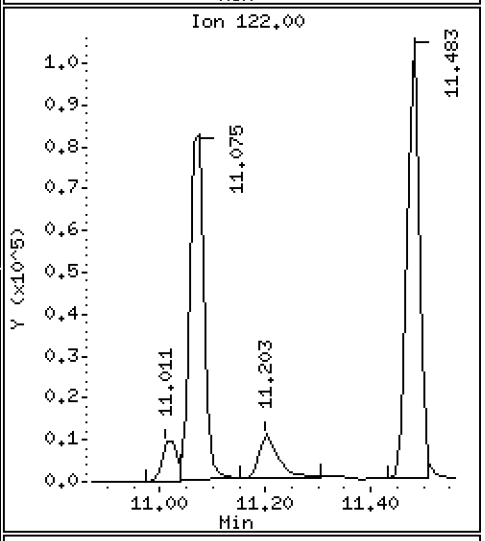
24 Benzoic acid

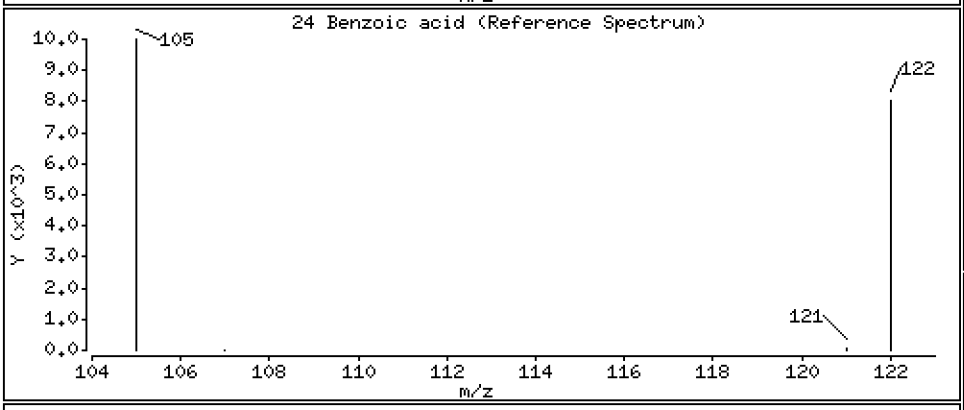
Concentration: 0.7125 ug/mL

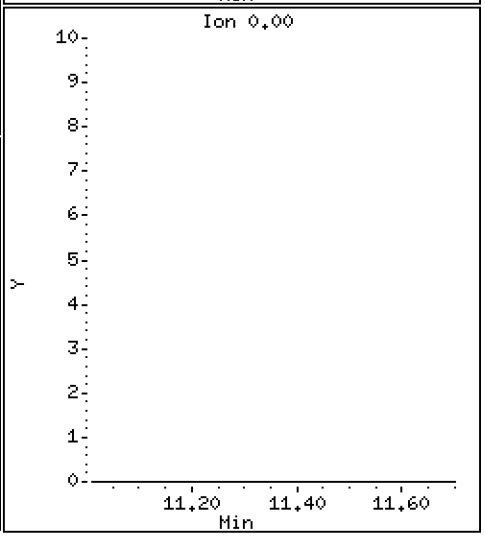


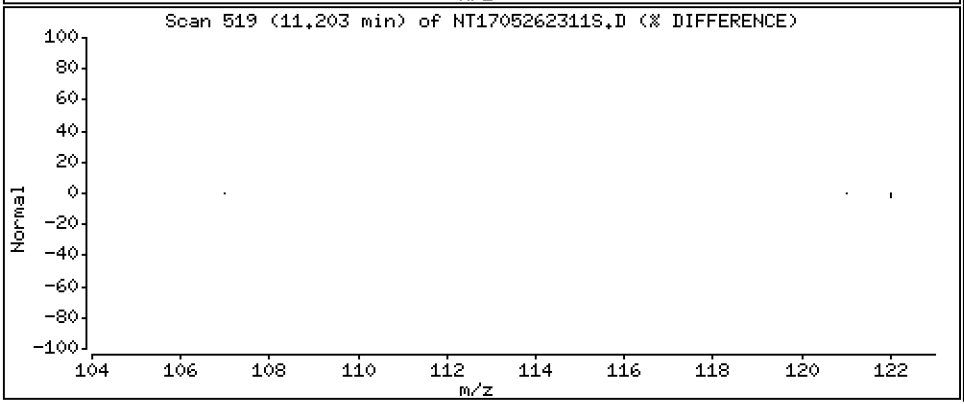












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

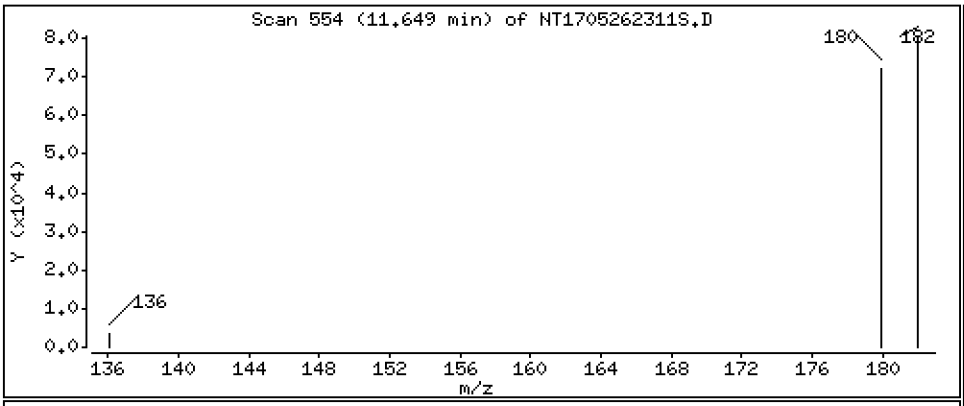
Operator: VTS

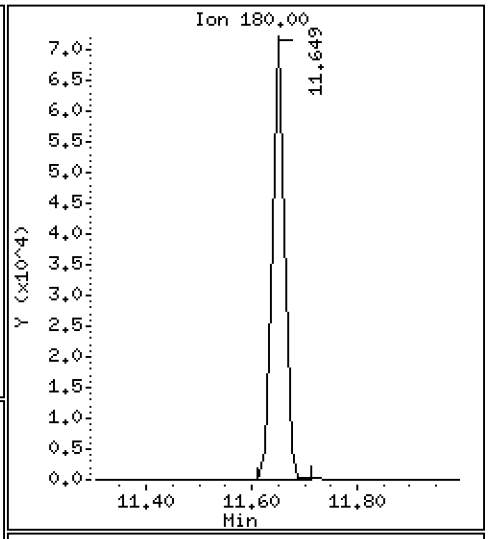
Column phase: ZB-5msi

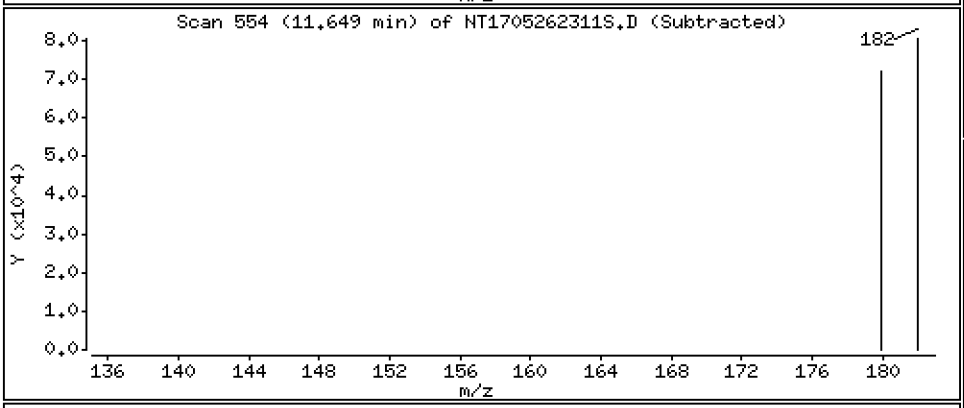
Column diameter: 0.25

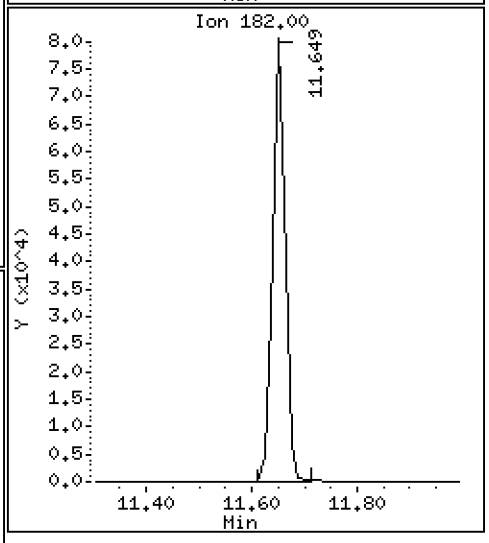
26 1,2,4-Trichlorobenzene

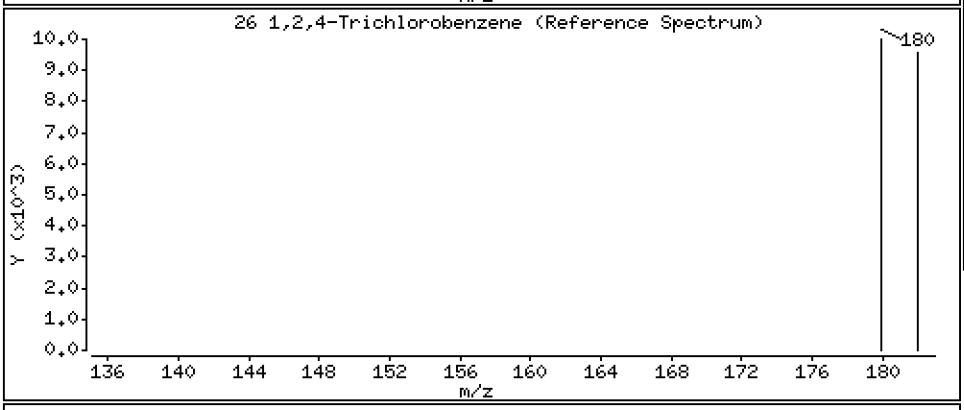
Concentration: 1.294 ug/mL

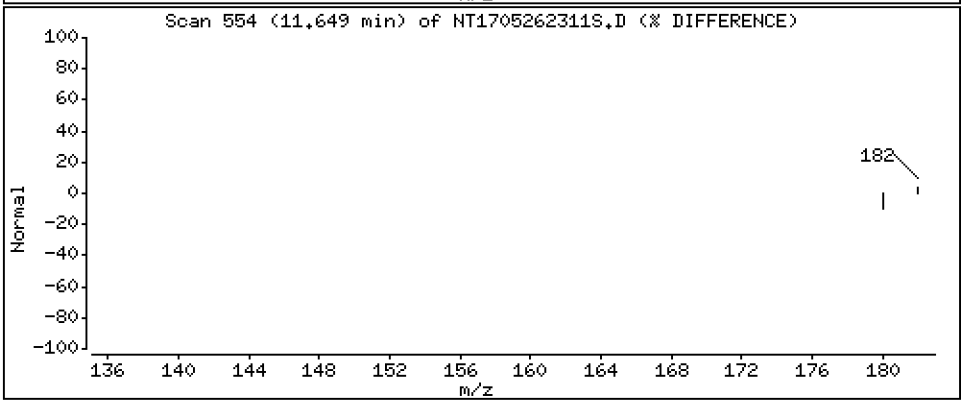












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

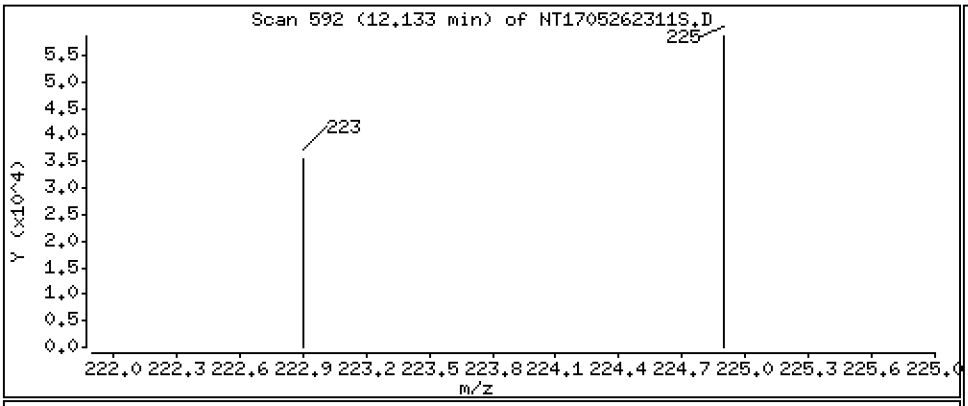
Operator: VTS

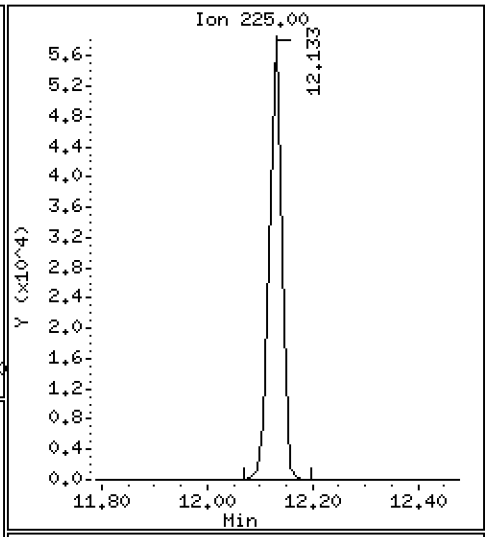
Column phase: ZB-5msi

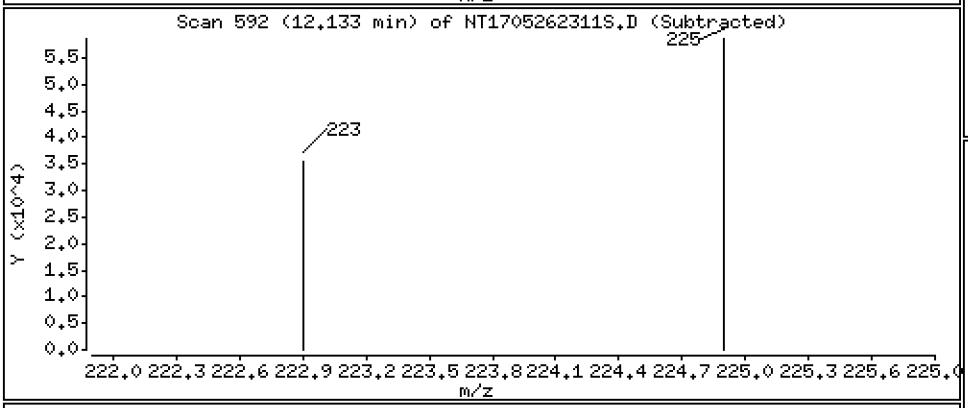
Column diameter: 0.25

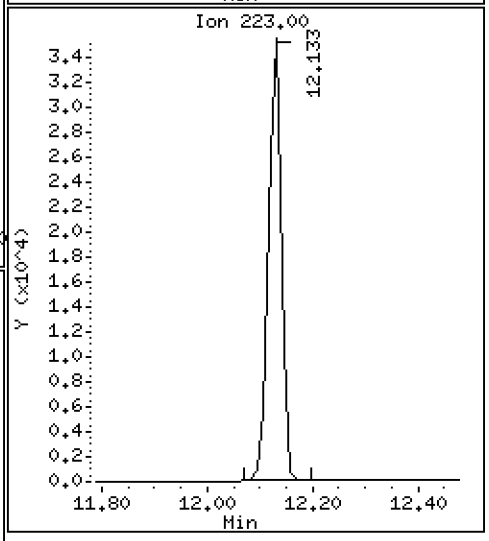
30 Hexachlorobutadiene

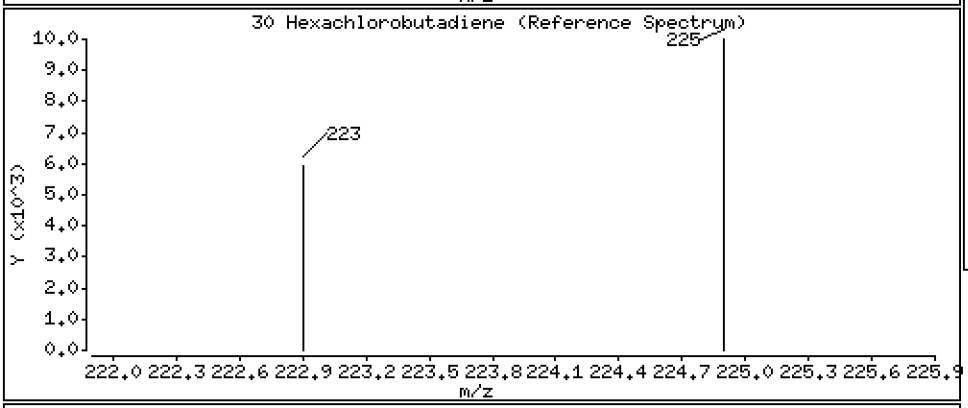
Concentration: 2.029 ug/mL

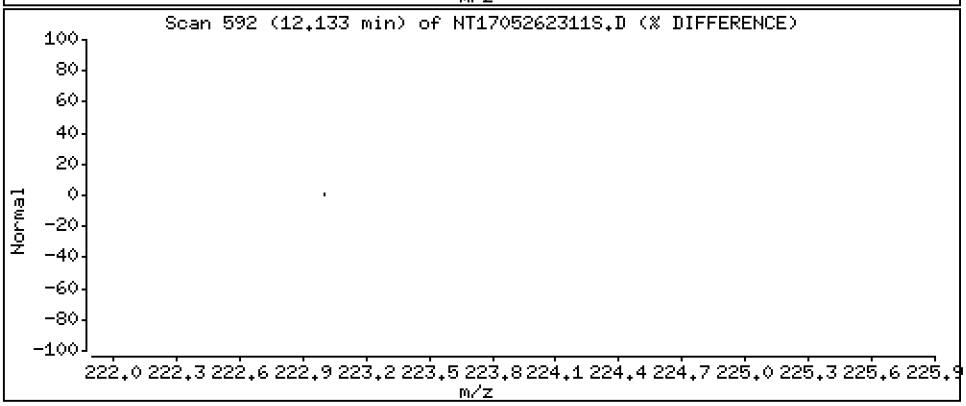












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

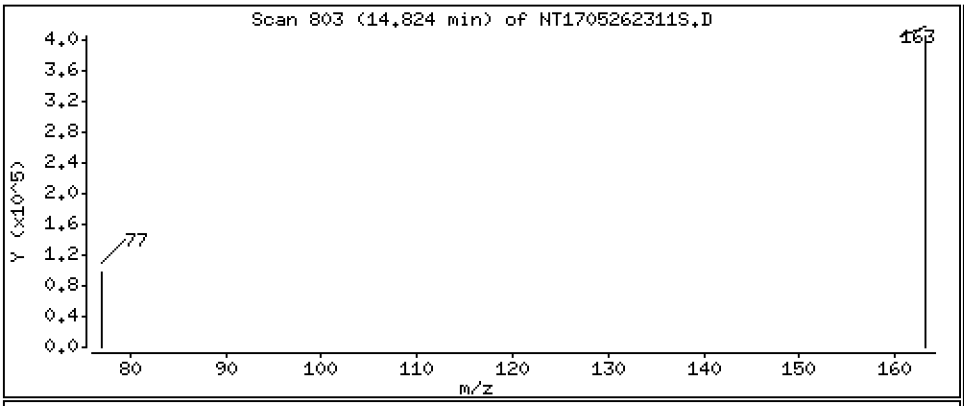
Operator: VTS

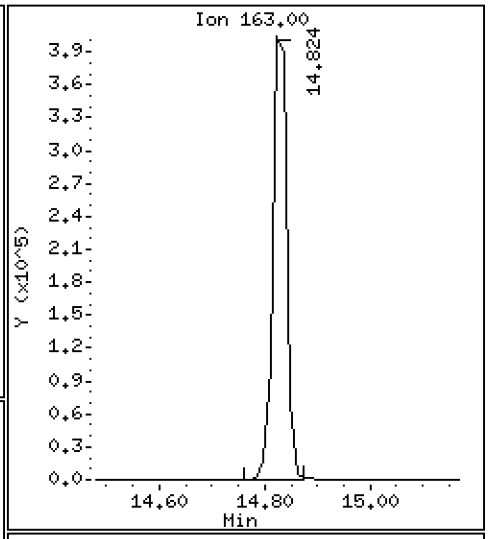
Column phase: ZB-5msi

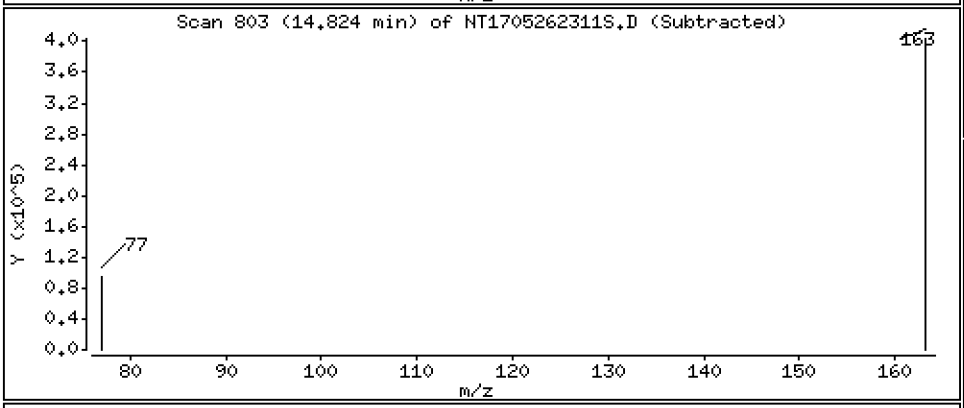
Column diameter: 0.25

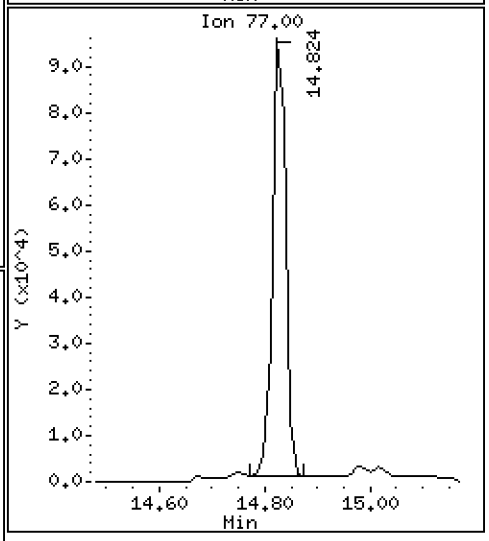
39 Dimethylphthalate

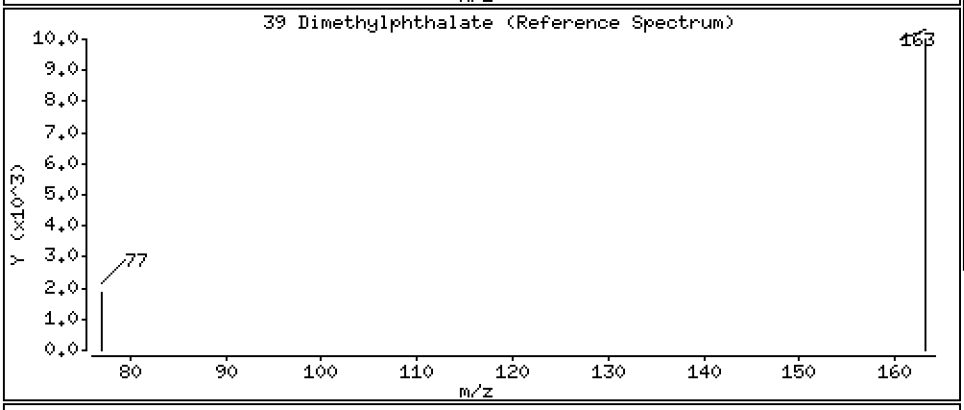
Concentration: 3.892 ug/mL

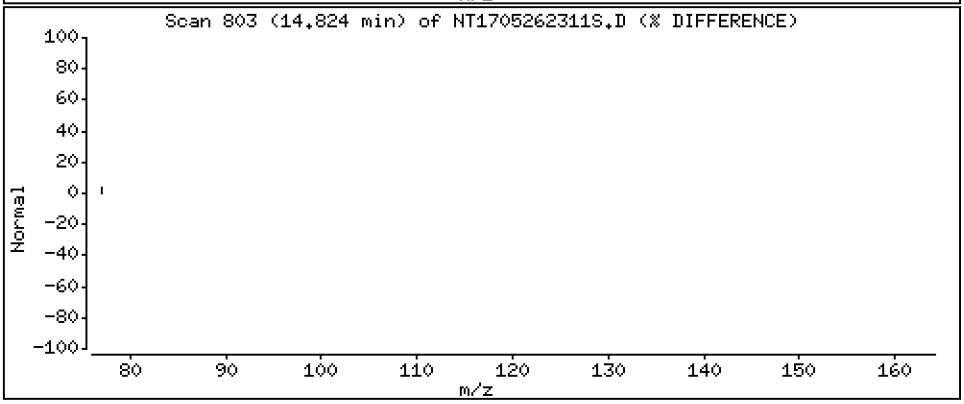












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

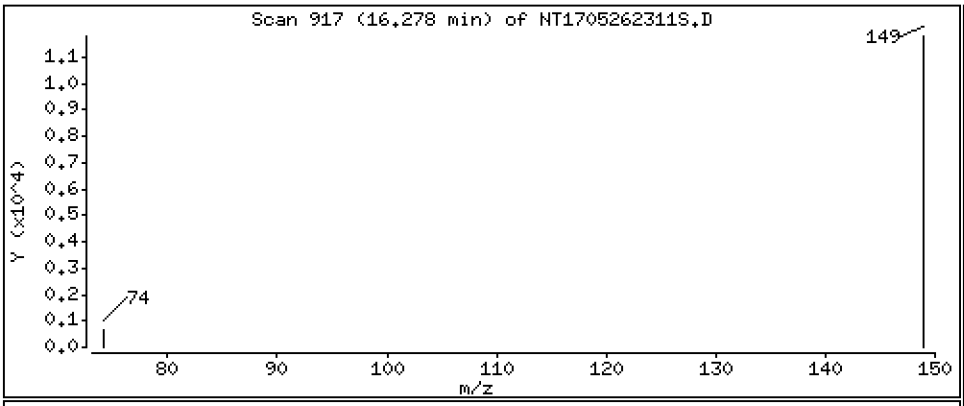
Operator: VTS

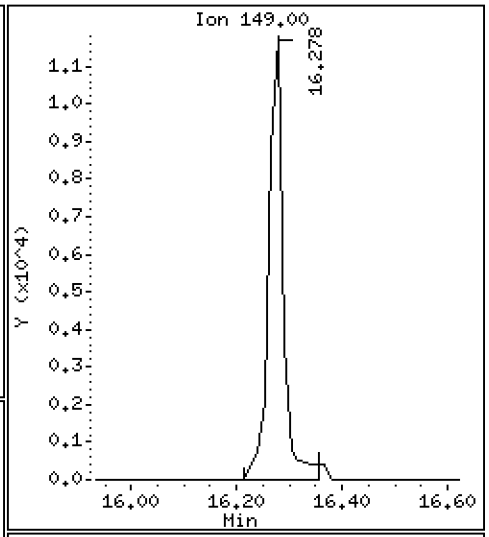
Column phase: ZB-5msi

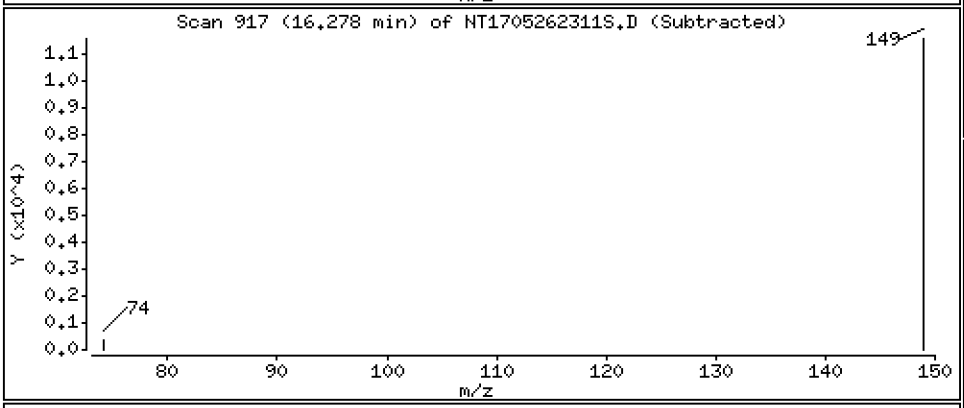
Column diameter: 0.25

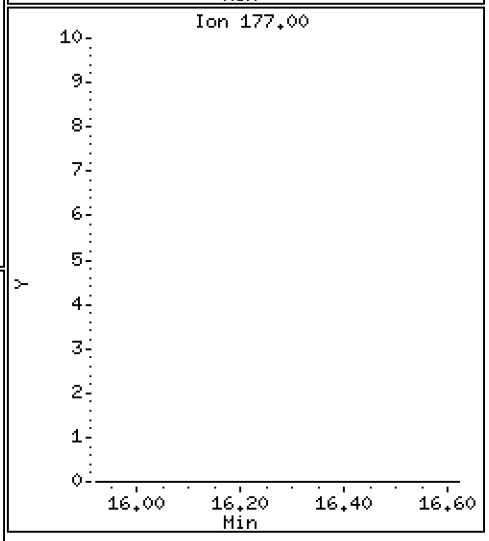
50 Diethylphthalate

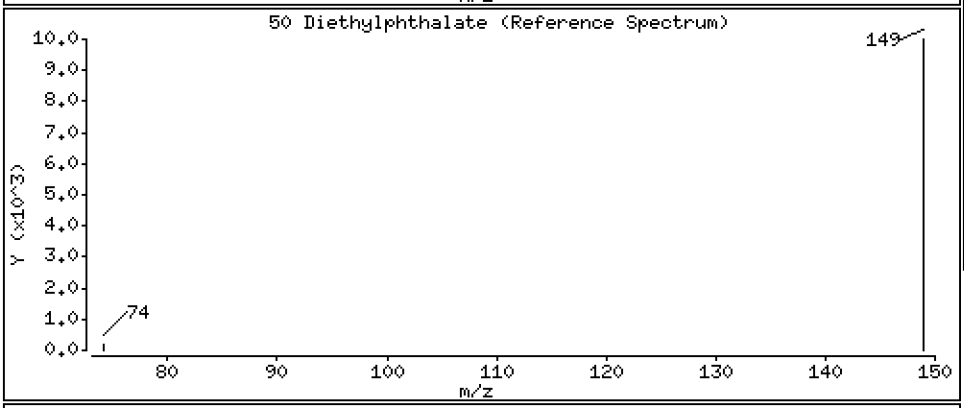
Concentration: 0.1297 ug/mL

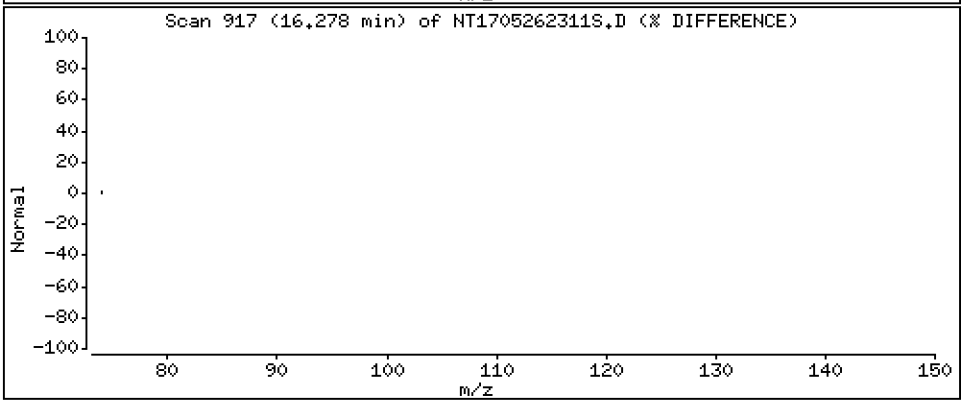












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

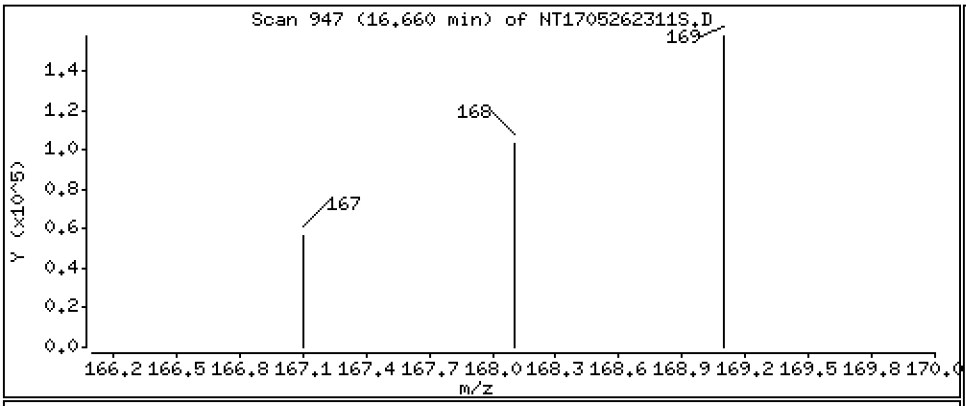
Operator: VTS

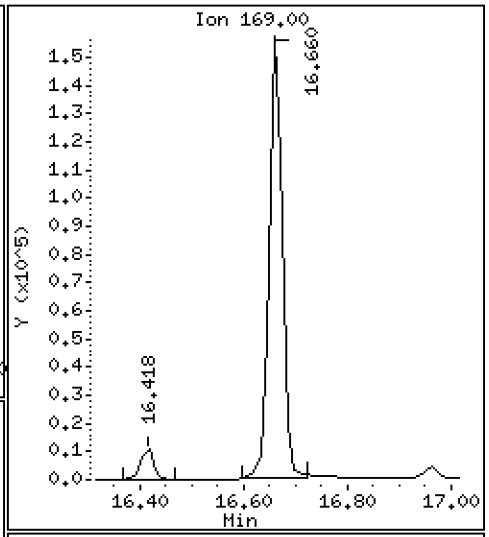
Column phase: ZB-5msi

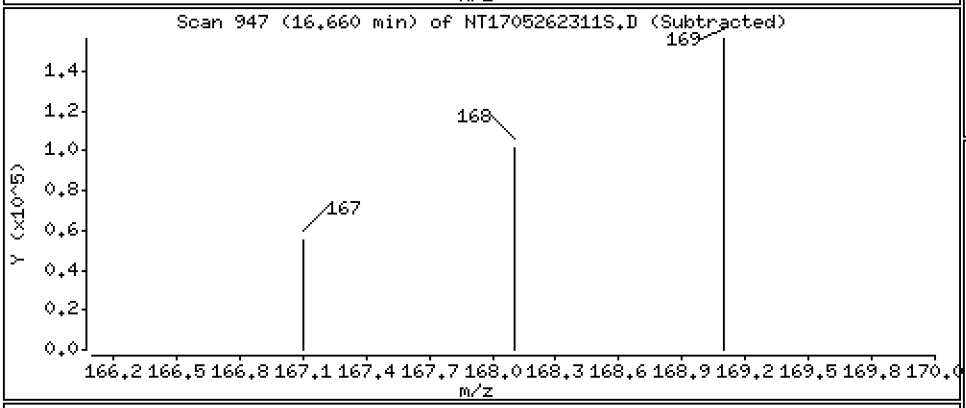
Column diameter: 0.25

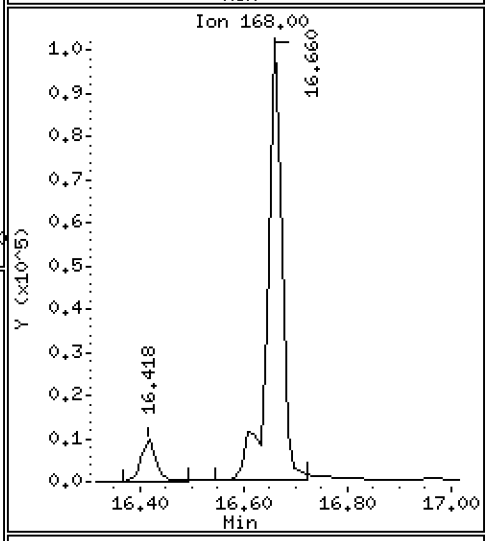
54 N-Nitrosodiphenylamine

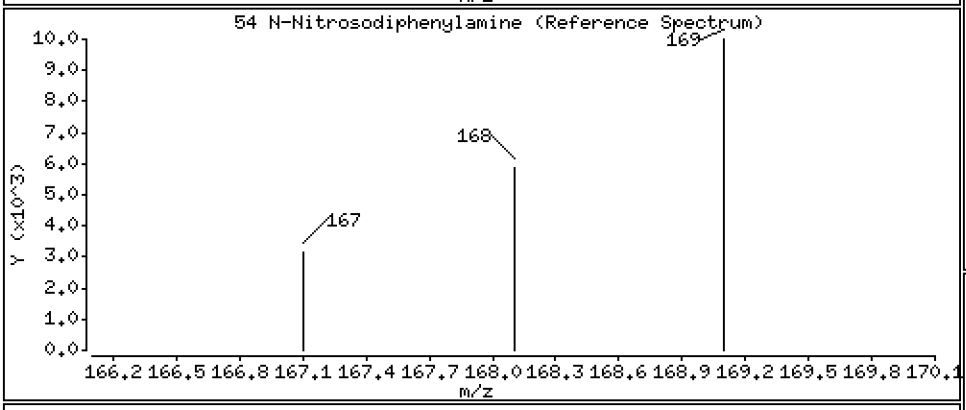
Concentration: 2.620 ug/mL

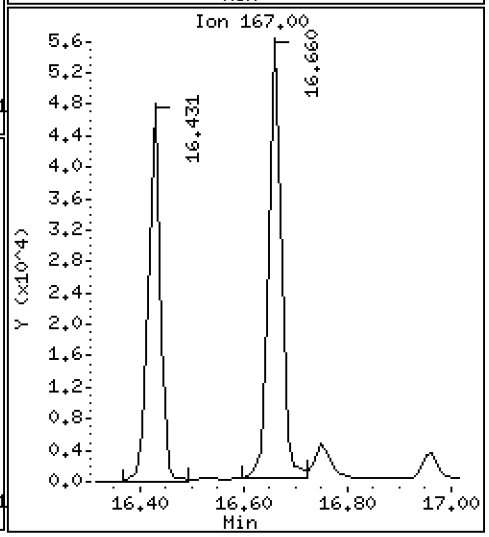


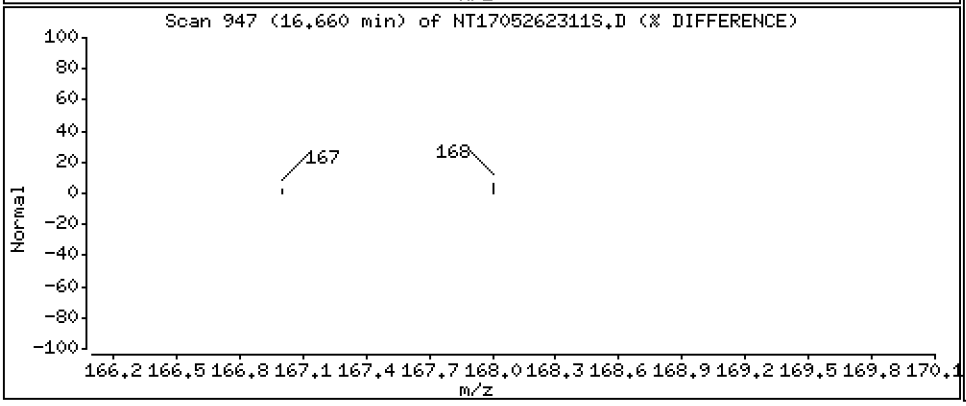












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

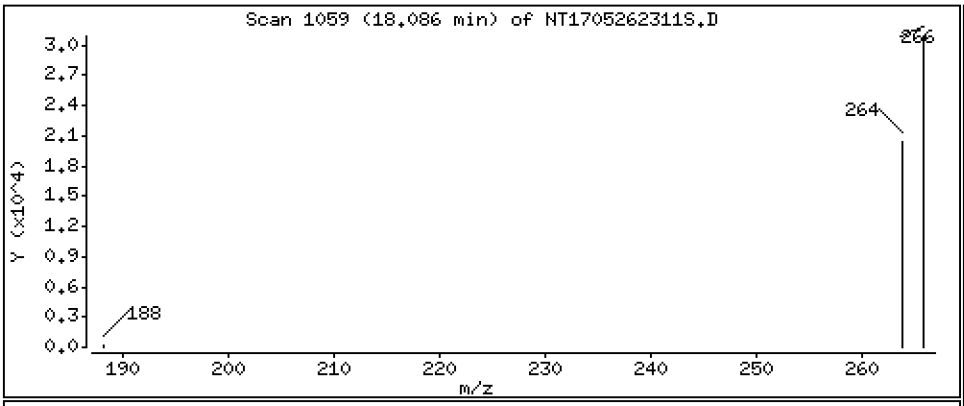
Operator: VTS

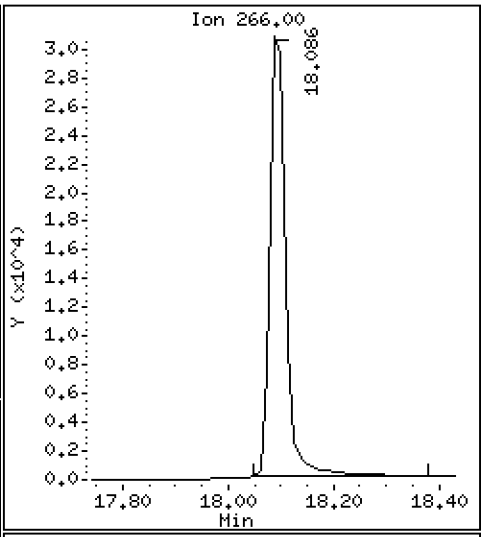
Column phase: ZB-5msi

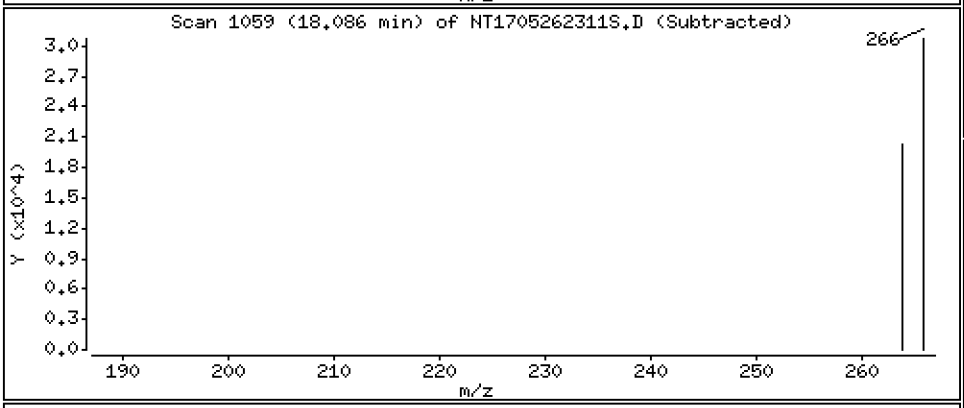
Column diameter: 0.25

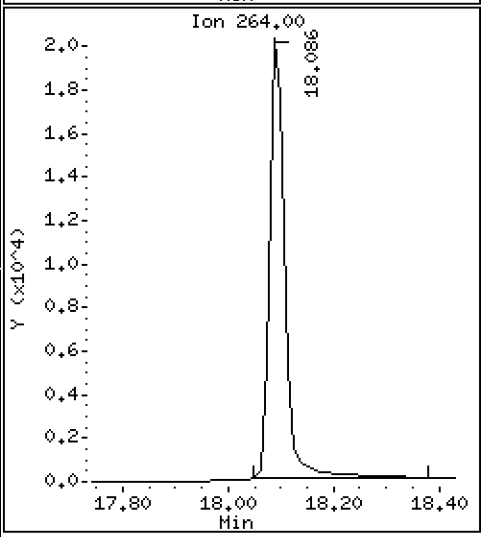
58 Pentachlorophenol

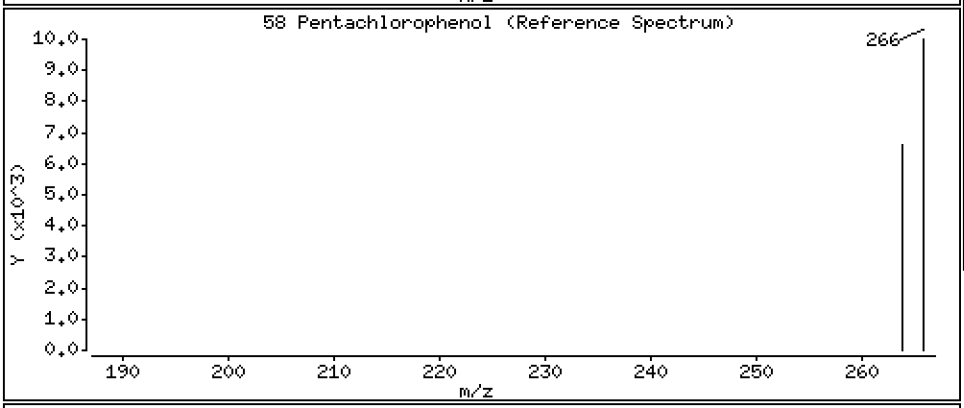
Concentration: 3.206 ug/mL

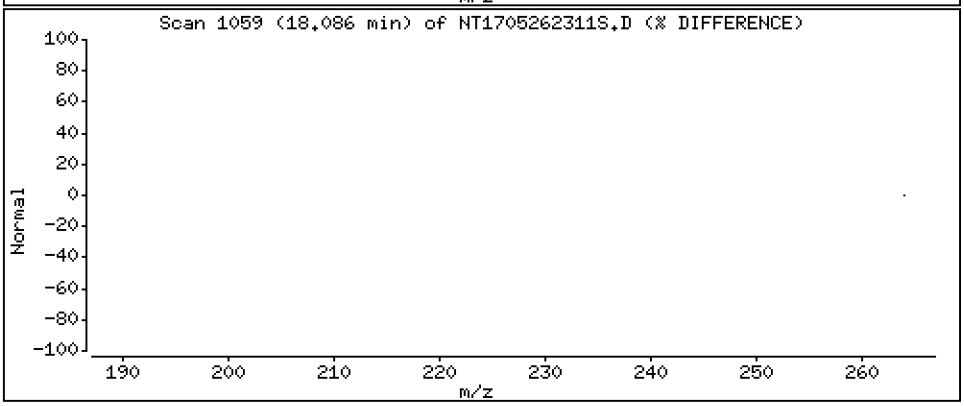












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Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

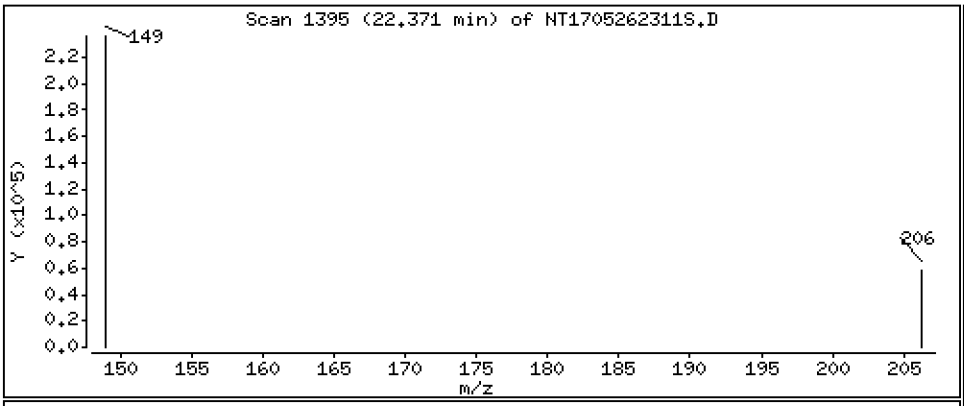
Operator: VTS

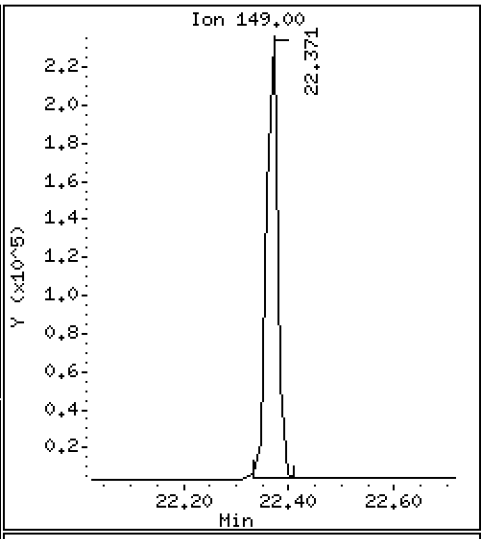
Column phase: ZB-5msi

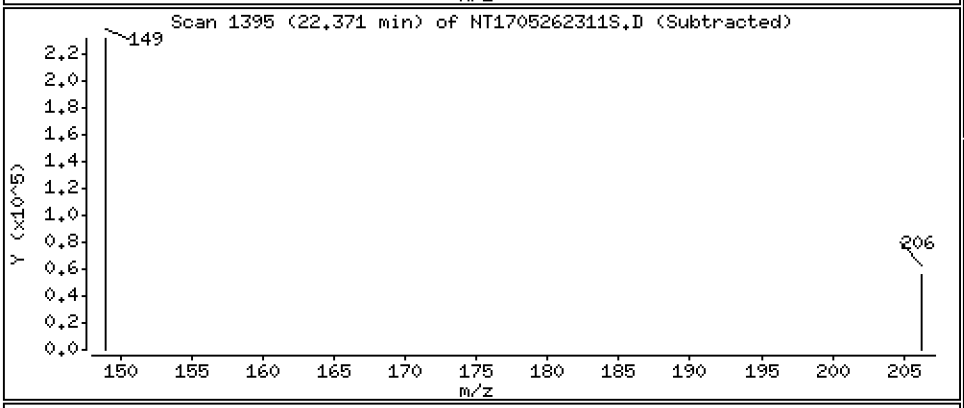
Column diameter: 0.25

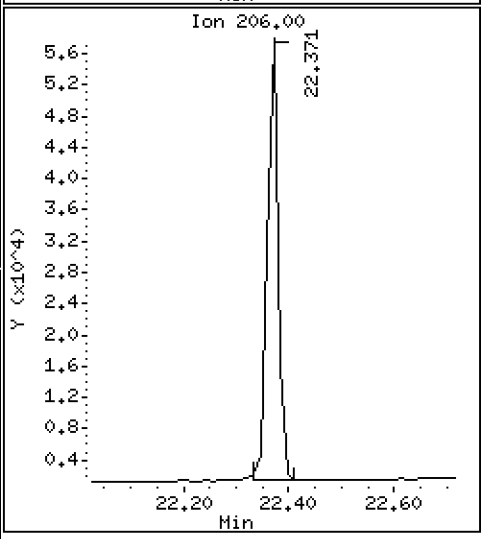
67 Butylbenzylphthalate

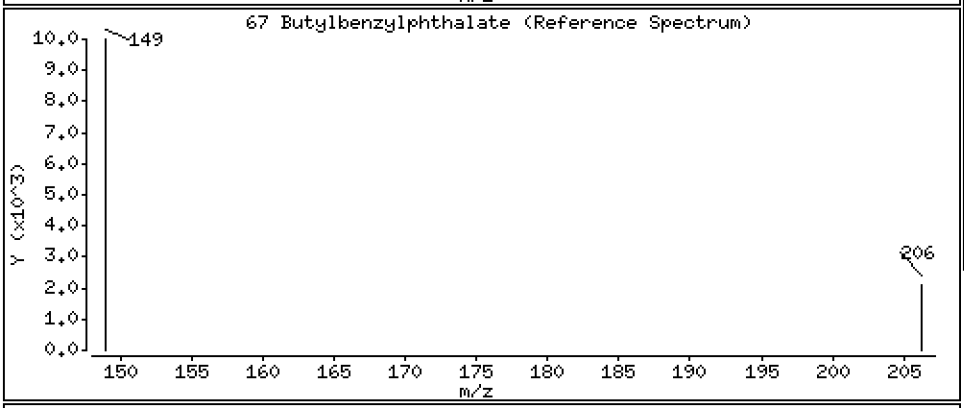
Concentration: 2.672 ug/mL

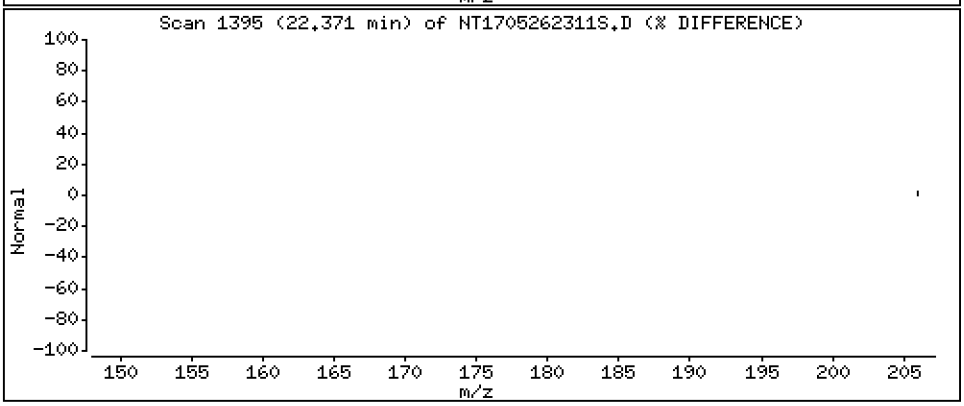












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262311S.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

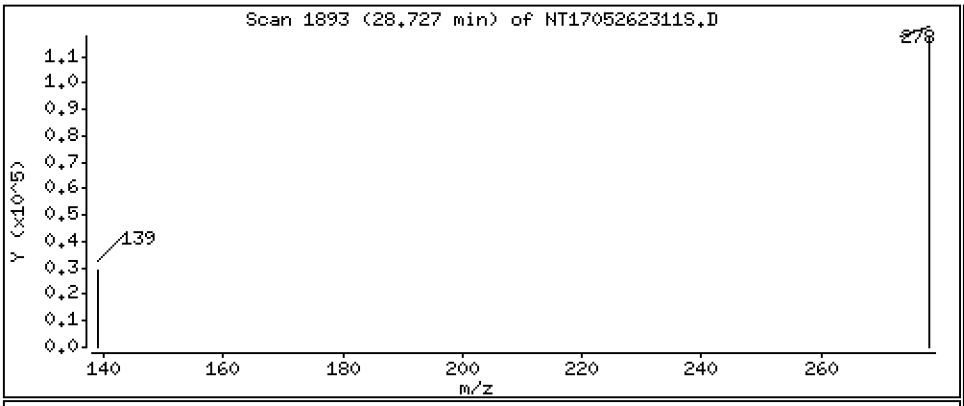
Operator: VTS

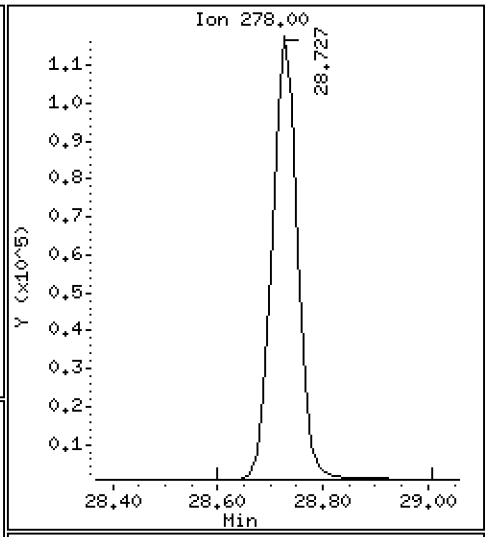
Column phase: ZB-5msi

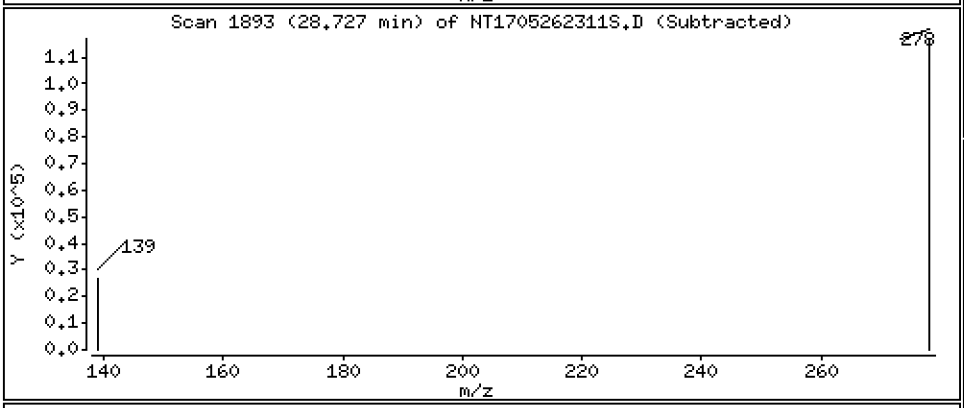
Column diameter: 0.25

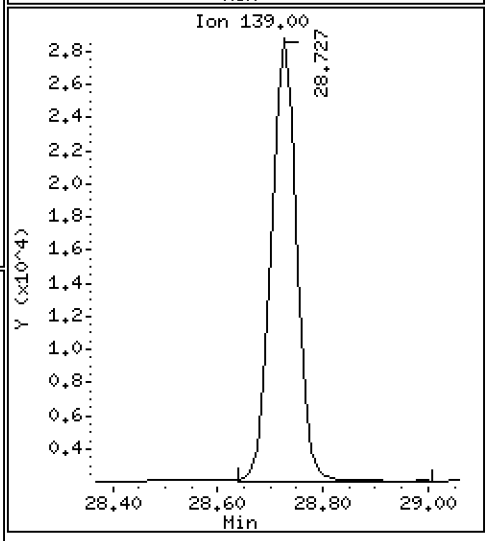
79 Dibenzo(a,h)anthracene

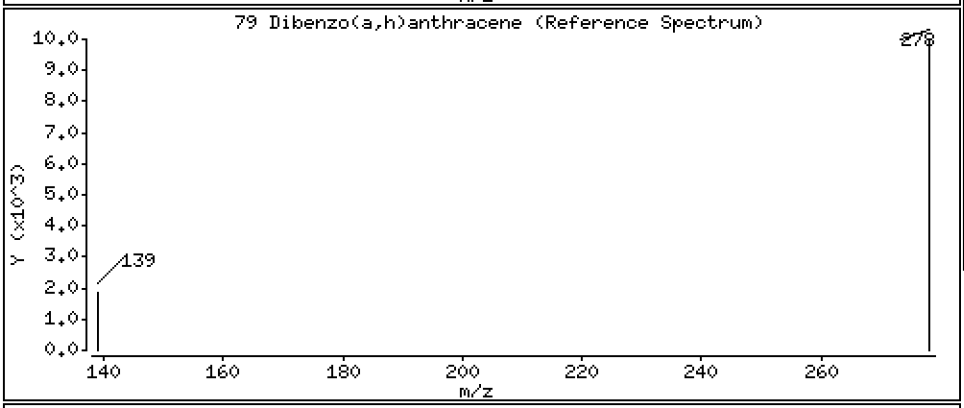
Concentration: 2.090 ug/mL

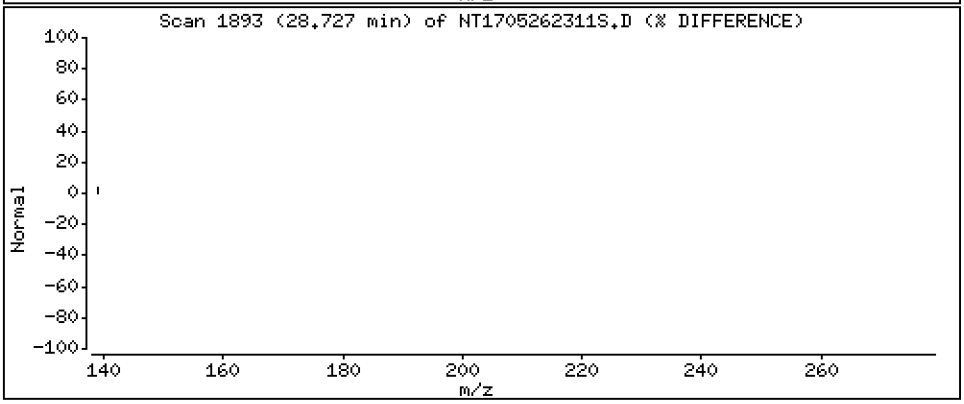












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262311S.D

Date : 26-MAY-2023 18:56

Client ID:

Instrument: nt17.i

Sample Info: BLD0607-SRM2

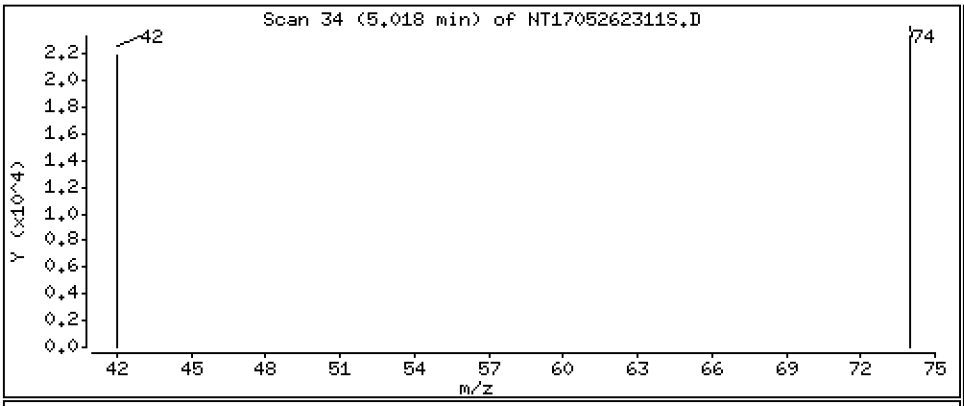
Operator: VTS

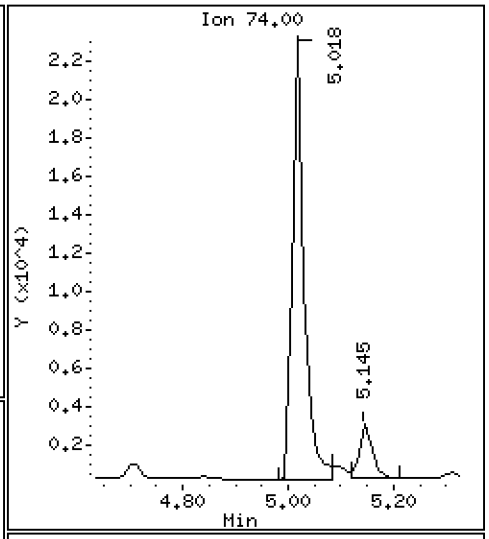
Column phase: ZB-5msi

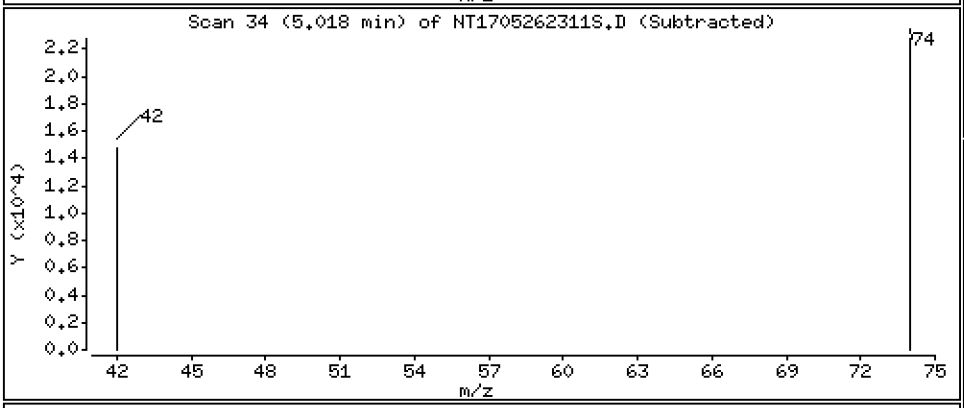
Column diameter: 0.25

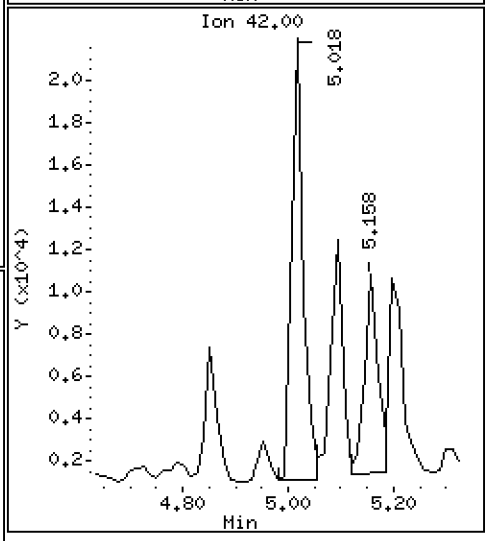
90 N-Nitrosodimethylamine

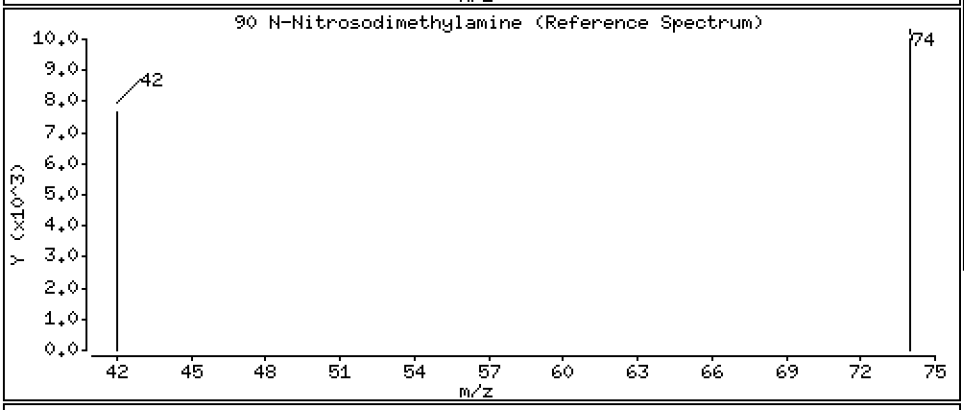
Concentration: 0.6319 ug/mL

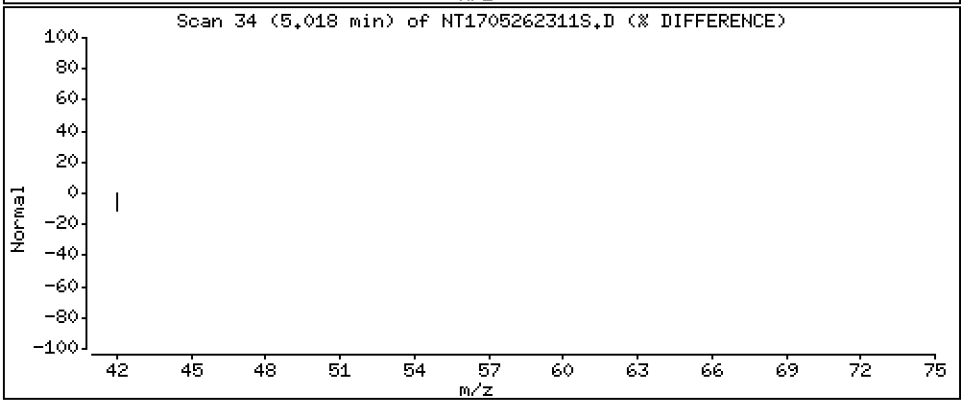












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262311S.D
Lab Smp Id: BLD0607-SRM2
Inj Date : 26-MAY-2023 18:56
Operator : VTS Inst ID: nt17.i
Smp Info : BLD0607-SRM2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 06-Jun-2023 14:52 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.107	7.069	(0.766)	603145	6.45320	6.453(R)
	3 Phenol	94	8.674	8.661	(0.935)	333898	2.39755	2.398
	7 1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	149110	1.19451	1.195
*	8 1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	309013	4.00000	
	9 1,4-Dichlorobenzene	146	Compound Not Detected.					
	11 Benzyl alcohol	79	Compound Not Detected.					
	12 1,2-Dichlorobenzene	146	Compound Not Detected.					
	13 2-Methylphenol	108	9.771	9.759	(1.054)	408280	4.23065	4.231
	15 4-Methylphenol	108	10.040	10.027	(1.083)	522037	5.35256	5.353
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.					
	22 2,4-Dimethylphenol	107	11.062	11.062	(0.942)	194784	1.95209	1.952
	24 Benzoic acid	105	11.202	11.215	(0.954)	44288	0.71246	0.7125
	26 1,2,4-Trichlorobenzene	180	11.649	11.649	(0.992)	117146	1.29401	1.294
*	27 Naphthalene-d8	136	11.738	11.738	(1.000)	1037311	4.00000	
	30 Hexachlorobutadiene	225	12.133	12.133	(1.034)	96730	2.02924	2.029
	39 Dimethylphthalate	163	14.824	14.824	(0.967)	757643	3.89176	3.892
*	42 Acenaphthene-d10	162	15.334	15.334	(1.000)	530135	4.00000	
	50 Diethylphthalate	149	16.277	16.277	(1.062)	22929	0.12969	0.1297
	54 N-Nitrosodiphenylamine	169	16.659	16.659	(0.908)	272203	2.61958	2.620
	57 Hexachlorobenzene	284	Compound Not Detected.					
	58 Pentachlorophenol	266	18.086	18.086	(0.985)	65560	3.20604	3.206
*	59 Phenanthrene-d10	188	18.353	18.353	(1.000)	737581	4.00000	
$	66 Terphenyl-d14	244	21.452	21.452	(0.919)	492762	4.08903	4.089(R)
	67 Butylbenzylphthalate	149	22.371	22.371	(0.958)	349901	2.67193	2.672
*	69 Chrysene-d12	240	23.353	23.353	(1.000)	635091	4.00000	
*	77 Perylene-d12	264	26.006	25.994	(1.000)	660695	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.726	28.713	(1.105)	389540	2.09031	2.090
	90 N-Nitrosodimethylamine	74	5.018	4.979	(0.541)	38116	0.63187	0.6319

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i Calibration Date: 26-MAY-2023
Lab File ID: NT1705262311S.D Calibration Time: 13:53
Lab Smp Id: BLD0607-SRM2
Analysis Type: SV Level:
Quant Type: ISTD Sample Type:
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	354937	177469	709874	309013	-12.94
27 Naphthalene-d8	1204481	602241	2408962	1037311	-13.88
42 Acenaphthene-d10	658677	329339	1317354	530135	-19.52
59 Phenanthrene-d10	965415	482708	1930830	737581	-23.60
69 Chrysene-d12	615102	307551	1230204	635091	3.25
77 Perylene-d12	580660	290330	1161320	660695	13.78

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	-0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	-0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	-0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	-0.00
69 Chrysene-d12	23.35	22.85	23.85	23.35	-0.00
77 Perylene-d12	25.99	25.49	26.49	26.01	0.05

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

REVIEW SUMMARY FOR FILE - NT1705262311S.D

Lab ID: BLD0607-SRM2
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   26-MAY-2023 18:56

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1705262303S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

MASS SPECTROMETER
INSTRUMENT PERFORMANCE CHECK
EPA 8270E-SIM

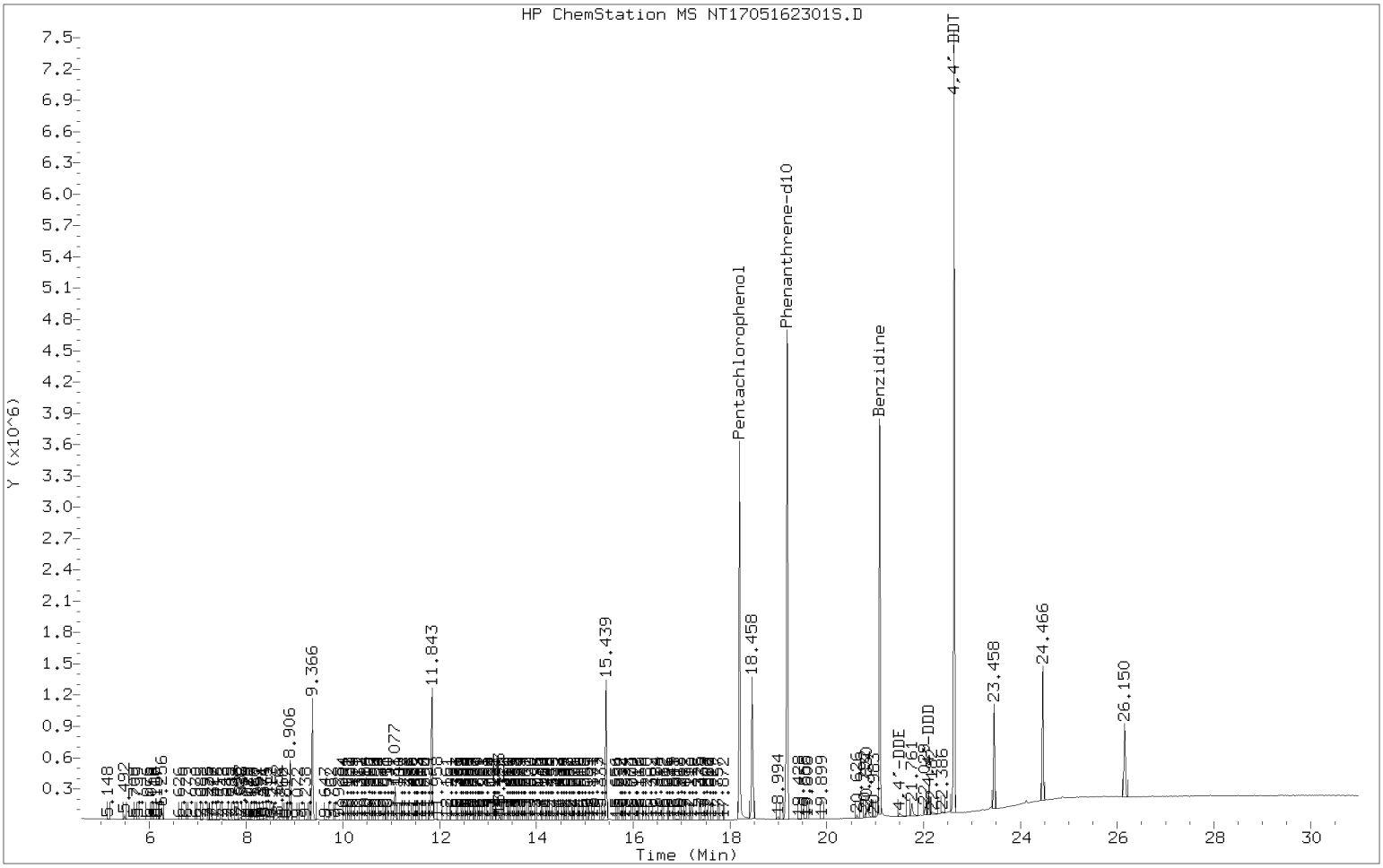
Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Lab File ID:	NT1705162301S.D	Injection Date:	05/16/23
Instrument ID:	NT17	Injection Time:	18:14
Sequence:	SLE0339	Lab Sample ID:	SLE0339-TUN1

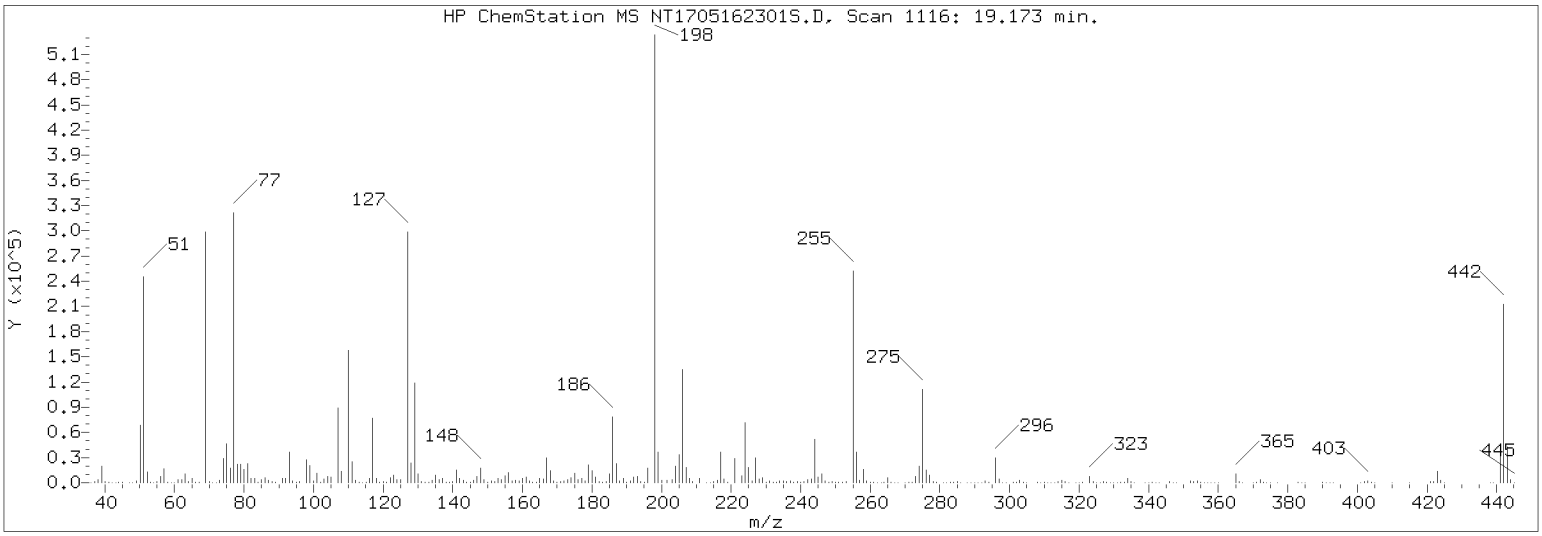
m/z	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE	
68	Less than 2% of 69	0	PASS
69	Less than 100% of 198	55.7	PASS
70	Less than 2% of 69	0.497	PASS
197	Less than 2% of 198	0	PASS
198	Base peak, 100% relative abundance	100	PASS
199	5 - 9% of 198	6.89	PASS
365	1 - 100% of 198	2.01	PASS
441	Less than 150% of 443	80.7	PASS
442	1 - 200% of 198	39.8	PASS
443	15 - 24% of 442	20.1	PASS
4,4'-DDD	Less than 20% of 4,4'-DDT		
4,4'-DDE	Less than 20% of 4,4'-DDT		
4,4'-DDT	Less than 200% of		

Client Sample ID	Lab Sample ID	Lab File ID	Date Analyzed	Time Analyzed
MS Tune	SLE0339-TUN1	NT1705162301S.D	05/16/2023	18:14
Cal Standard	SLE0339-CAL8	NT1705162303S.D	05/16/2023	19:29
Cal Standard	SLE0339-CAL7	NT1705162304S.D	05/16/2023	20:07
Cal Standard	SLE0339-CAL6	NT1705162305S.D	05/16/2023	20:44
Cal Standard	SLE0339-CAL5	NT1705162306S.D	05/16/2023	21:22
Cal Standard	SLE0339-CAL4	NT1705162307S.D	05/16/2023	21:59
Cal Standard	SLE0339-CAL3	NT1705162308S.D	05/16/2023	22:37
Cal Standard	SLE0339-CAL2	NT1705162309S.D	05/16/2023	23:14
Cal Standard	SLE0339-CAL1	NT1705162310S.D	05/16/2023	23:51
Secondary Cal Check	SLE0339-SCV1	NT1705162311S.D	05/17/2023	0:29
Initial Cal Blank	SLE0339-ICB1	NT1705162312S.D	05/17/2023	1:07

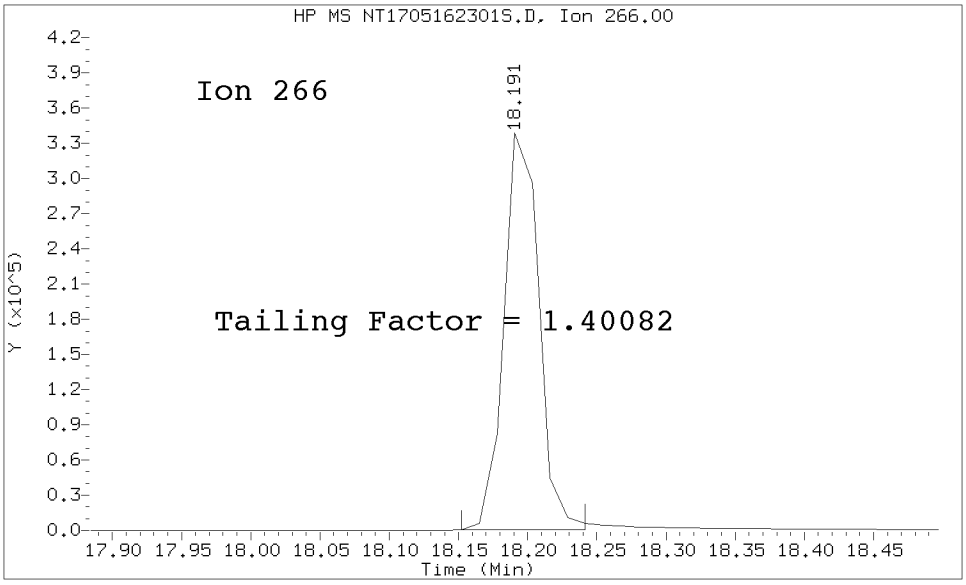
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230516.b/SIM.b/NT1705162301S.D/NT1705162301S.D
Method Used: \20230516.b\SIM.b\DFTPP8270E.m Inst: nt17
Injection Date: 16-MAY-2023 18:14 Operator: VTS
Sample Info: SLE0339-TUN1 SLE0339-TUN1
Report Date: 05/24/2023 06:46



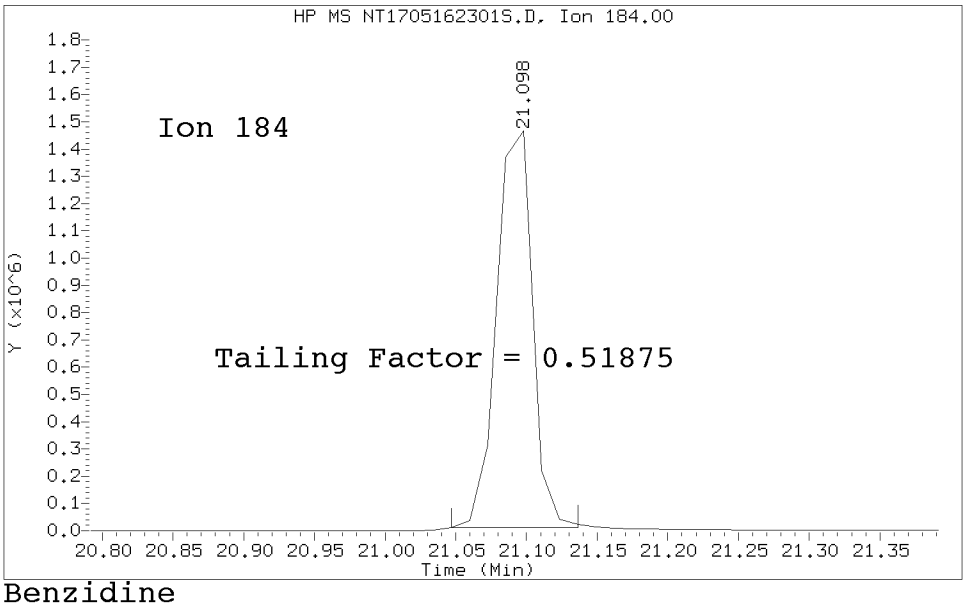


Datafile Analyzed: /20230516.b/SIM.b/NT1705162301S.D/NT1705162301S.D
Method Used: \20230516.b\DFTPP8270E.m\sw846ddt.m Inst: nt17
Injection Date: 16-MAY-2023 18:14 Operator: JGR
Sample Info: NT1705162301
Report Date: 05/24/2023 06:46



Pentachlorophenol
==========
Exp. RT = 18.191
Found RT = 18.191

Tail Factor = 1.401 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 21.098
Found RT = 21.098

Tail Factor = 0.519 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.4008163	2.000	PASS
Benzidine	0.5187468	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1797024			N/A
4,4-DDE	5899	0.3	20.0	PASS
4,4-DDD	55596	3.0	20.0	PASS
4,4-DDD + DDE	61495	3.3	20.0	PASS

Tuning Sample, nt17.i/20230516.b/SIM.b/NT1705162301S.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	55.71
70	Less than 2.00% of mass 69	0.28 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.89
365	1.00 - 100.00% of mass 198	2.01
441	Less than 150.00% of mass 443	6.45 (80.67)
442	Less than 200.00% of mass 198	39.79
443	15.00 - 24.00% of mass 442	8.00 (20.10)

Data File: NT1705162301S.D
Spectrum: HP ChemStation MS NT1705162301.D, Scan 1116: 19.173 min.
Location of Maximum: 198.00
Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	373	125.00	3764	212.90	378	304.10	870
37.10	1236	127.00	299008	214.00	187	304.90	93
38.10	3574	128.00	23768	215.00	1418	308.00	456
39.10	19776	129.00	119136	216.10	3082	309.00	262
40.10	1147	130.00	10361	217.00	36592	310.00	402
41.10	878	131.00	1814	218.00	4762	311.00	86
42.00	117	132.00	965	219.00	396	312.00	116
43.10	290	133.10	535	221.00	29232	313.00	219
44.00	563	134.00	3393	223.00	8299	314.00	1504
45.00	582	135.00	9407	224.00	71792	315.00	3072
47.00	97	136.00	3952	225.00	17928	316.00	1521
48.00	170	137.00	4988	226.10	2276	317.00	314
49.10	2254	138.00	1078	227.00	30000	319.10	73
50.10	68392	139.00	652	228.00	4583	320.10	106
51.10	245312	140.00	1657	229.00	6282	321.00	853
52.10	13090	141.00	15600	230.00	812	323.00	7992
53.10	590	142.00	5275	231.00	2667	324.10	1422
54.10	108	143.00	3193	232.00	430	325.00	180
55.00	1424	144.00	947	233.00	547	326.10	206
56.00	7762	145.00	844	234.00	1964	327.00	1582
57.00	17056	146.00	3027	235.00	2156	328.00	897
58.00	866	147.00	7959	236.00	1308	329.00	186
59.10	293	148.00	17552	237.00	2222	329.90	82
60.00	267	149.00	3605	237.90	416	331.10	85
61.00	3445	150.00	847	239.00	1164	332.00	681
62.10	3924	151.10	1978	240.00	951	333.00	829
63.10	10682	152.00	1250	241.00	1482	334.00	5269
64.00	1343	153.00	5043	242.00	3506	335.00	1251
65.10	5380	154.00	3616	243.10	4237	335.90	192
66.00	439	155.00	8310	244.00	51672	339.00	128
67.10	548	156.00	12288	245.00	7098	340.10	147
69.00	297216	157.00	2390	246.00	10908	341.00	859
70.00	1476	158.00	3197	247.00	2147	342.00	240
70.90	268	159.00	2124	248.10	405	343.10	69
72.10	180	160.00	4998	249.00	1791	346.00	1668
73.00	2846	161.00	6841	250.00	400	347.00	375
74.10	28912	162.00	1948	250.90	471	348.00	75
75.00	46408	163.00	565	252.00	547	352.00	2294
76.10	17424	164.00	677	253.00	1432	353.00	1625
77.10	321920	165.00	5602	255.00	252288	354.10	2225
78.10	22048	166.00	4612	256.00	36264	355.00	516
79.00	22016	167.00	29864	257.00	3077	356.00	63
80.00	16324	168.00	14362	258.00	15639	356.90	53
81.00	22800	169.00	2523	259.00	2592	358.00	71
82.00	5387	170.00	957	260.10	431	359.00	210
83.00	5076	171.00	1311	261.00	461	360.10	57
84.00	563	172.00	2519	262.00	108	365.00	10733
85.00	4136	173.00	3591	263.10	161	366.00	1640
86.00	6323	174.00	6157	264.00	692	366.90	121

87.00	3104	175.00	11592	265.00	6219	370.00	199
88.00	1154	176.00	3445	266.00	980	371.00	691
89.00	552	177.00	5417	267.00	143	372.00	3968
91.00	5210	178.00	1917	267.90	329	373.00	1018
92.00	5631	179.00	21584	270.00	364	374.00	88
93.00	36336	180.00	14393	271.00	614	375.00	64
94.00	2258	181.00	6949	272.00	778	377.00	178
95.10	602	182.00	1161	273.00	7503	382.90	939
96.00	1677	183.00	749	274.00	19672	384.00	273
98.00	27664	184.00	1652	275.00	111592	385.00	126
99.00	20856	185.00	10677	276.00	15342	390.00	425
100.00	1939	186.00	78320	277.00	9319	391.00	350
101.00	11566	187.00	22896	278.00	1573	392.10	253
102.00	831	188.00	2244	279.00	451	393.00	72
103.00	4398	189.00	5077	281.00	219	401.00	268
104.00	7600	190.00	951	282.00	285	402.00	1410
105.00	7080	191.00	2327	283.00	1010	403.00	2061
107.00	89200	192.00	6979	284.00	690	404.00	774
108.00	13702	193.00	7409	285.00	1524	405.00	123
110.00	158144	194.00	1633	286.00	314	410.00	81
111.00	25024	195.10	1054	287.90	160	414.90	77
112.00	3002	196.00	17264	289.00	314	421.00	1760
113.00	864	198.00	533504	290.00	311	422.00	1730
114.00	302	199.00	36760	291.00	191	423.00	13610
115.10	463	200.00	2858	292.00	365	424.00	2795
116.00	5300	201.50	3067	293.00	1946	425.00	303
117.00	76832	203.00	3883	294.00	397	438.30	74
118.00	5637	204.00	19736	296.00	30016	439.10	152
119.00	739	205.00	33208	297.00	4246	441.10	34424
120.00	1147	206.00	134656	297.90	294	442.00	212288
121.00	584	207.00	18008	299.00	90	443.00	42672
122.00	6244	208.00	5001	301.10	394	444.00	3817
123.00	9329	209.00	1511	302.00	506	445.10	229
124.00	4061	211.00	5429	303.00	3269		

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00070	Instrument:	NT17
Calibration Date:	05/16/2023	Column (1):	ZB-5MS

Calibration Comments: SIM ABN DUAL SCAN

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Phenol	0.05	1.510233	0.1	1.700245	0.2	1.726023	0.5	1.829147	1	1.894452	2.5	1.954116
1,3-Dichlorobenzene	0.05	1.694413	0.1	1.7069	0.2	1.637621	0.5	1.615017	1	1.595717	2.5	1.583886
1,4-Dichlorobenzene	0.05	1.691138	0.1	1.655409	0.2	1.598139	0.5	1.570033	1	1.553587	2.5	1.530901
1,2-Dichlorobenzene	0.05	1.593379	0.1	1.752436	0.2	1.537622	0.5	1.56151	1	1.490372	2.5	1.471163
Benzyl Alcohol	0.05	0.7992089	0.1	0.9533373	0.2	0.9961691	0.5	1.057984	1	1.009194	2.5	1.109553
Benzoic acid	0.2		0.4		0.8	1.818224E-02	2	7.882056E-02	4	0.1440004	10	0.2083584
2-Methylphenol	0.05	1.180924	0.1	1.246986	0.2	1.236575	0.5	1.251541	1	1.271279	2.5	1.296297
N-Nitroso-di-n-Propylamine	0.05	0.8324672	0.1	0.8964756	0.2	0.9011666	0.5	0.8930603	1	0.9204786	2.5	0.953399
4-Methylphenol	0.05	1.058725	0.1	1.175296	0.2	1.207827	0.5	1.261068	1	1.315801	2.5	1.358173
2,4-Dimethylphenol	0.1	0.3686173	0.2	0.3926927	0.4	0.3929127	1	0.3983172	2	0.3920884	5	0.3936473
1,2,4-Trichlorobenzene	0.05	0.3693107	0.1	0.3657439	0.2	0.3594776	0.5	0.3516595	1	0.3453927	2.5	0.3405857
Hexachlorobutadiene	0.05	0.186699	0.1	0.1839466	0.2	0.1823744	0.5	0.1822806	1	0.1812693	2.5	0.1833965
N-Nitrosodimethylamine	0.1	0.6584906	0.2	0.7286346	0.4	0.7589404	1	0.8005047	2	0.8265679	5	0.850121
Dimethylphthalate	0.05	1.554171	0.1	1.499869	0.2	1.466813	0.5	1.457694	1	1.490163	2.5	1.460173
Diethyl phthalate	0.05	1.293663	0.1	1.340785	0.2	1.32948	0.5	1.343468	1	1.373197	2.5	1.364108
N-Nitrosodiphenylamine	0.05	0.5374742	0.1	0.5686295	0.2	0.5611377	0.5	0.5779646	1	0.5846267	2.5	0.5733399
Hexachlorobenzene	0.05	0.194297	0.1	0.1901746	0.2	0.1890891	0.5	0.1911384	1	0.1887741	2.5	0.1887438
Pentachlorophenol	0.1	2.188652E-02	0.2	4.148927E-02	0.4	4.372929E-02	1	5.895972E-02	2	7.925497E-02	5	0.1089373
Butylbenzylphthalate	0.05	0.744036	0.1	0.7766521	0.2	0.8029298	0.5	0.847431	1	0.8492773	2.5	0.8770343
Dibenzo(a,h)anthracene	0.05	1.106936	0.1	1.108218	0.2	1.111978	0.5	1.134107	1	1.136012	2.5	1.124346
2-Fluorophenol	0.075	0.934426	0.15	1.041412	0.3	1.133285	0.75	1.236632	1.5	1.306622	3.75	1.344967
p-Terphenyl-d14	0.05	0.8616656	0.1	0.7406533	0.2	0.7424803	0.5	0.7399778	1	0.7493396	2.5	0.7470775

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00070	Instrument:	NT17
Calibration Date:	05/16/2023	Column (1):	ZB-5MS

Calibration Comments: SIM ABN DUAL SCAN

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Phenol	5	1.923621	10	1.883962								
1,3-Dichlorobenzene	5	1.564741	10	1.52845								
1,4-Dichlorobenzene	5	1.526751	10	1.470473								
1,2-Dichlorobenzene	5	1.480587	10	1.45911								
Benzyl Alcohol	5	1.139568	10	1.15267								
Benzoic acid	20	0.2280701	40	0.244783								
2-Methylphenol	5	1.257426	10	1.252625								
N-Nitroso-di-n-Propylamine	5	0.9455376	10	0.9363708								
4-Methylphenol	5	1.373195	10	1.349716								
2,4-Dimethylphenol	10	0.3743479	20	0.365561								
1,2,4-Trichlorobenzene	5	0.3329241	10	0.3276487								
Hexachlorobutadiene	5	0.1839531	10	0.1865901								
N-Nitrosodimethylamine	10	0.8243177	20	0.7991862								
Dimethylphthalate	5	1.431934	10	1.39038								
Diethyl phthalate	5	1.333062	10	1.294163								
N-Nitrosodiphenylamine	5	0.5489592	10	0.5560433								
Hexachlorobenzene	5	0.1927298	10	0.1943424								
Pentachlorophenol	10	0.1232907	20	0.1406918								
Butylbenzylphthalate	5	0.8755105	10	0.825469								
Dibenzo(a,h)anthracene	5	1.143859	10	1.160435								
2-Fluorophenol	7.5	1.354833	15	1.326579								
p-Terphenyl-d14	5	0.7515412	10	0.7392585								

INITIAL CALIBRATION DATA

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00070	Instrument:	NT17
Calibration Date:	05/16/2023	Column (1):	ZB-5MS

Calibration Comments: SIM ABN DUAL SCAN

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Phenol	1.802725	8.3			RSD (15)	
1,3-Dichlorobenzene	1.615843	3.8			RSD (15)	
1,4-Dichlorobenzene	1.574554	4.6			RSD (15)	
1,2-Dichlorobenzene	1.543272	6.3			RSD (15)	
Benzyl Alcohol	1.027211	11.3			RSD (15)	
Benzoic acid	0.1537024	58.8	0.9927		LCOD (0.99)	
2-Methylphenol	1.249207	2.6			RSD (15)	
N-Nitroso-di-n-Propylamine	0.9098695	4.3			RSD (15)	
4-Methylphenol	1.262475	8.7			RSD (15)	
2,4-Dimethylphenol	0.3847731	3.4			RSD (15)	
1,2,4-Trichlorobenzene	0.3490929	4.3			RSD (15)	
Hexachlorobutadiene	0.1838137	1.1			RSD (15)	
N-Nitrosodimethylamine	0.7808454	8.1			RSD (15)	
Dimethylphthalate	1.4689	3.3			RSD (15)	
Diethyl phthalate	1.333991	2.2			RSD (15)	
N-Nitrosodiphenylamine	0.5635219	2.8			RSD (15)	
Hexachlorobenzene	0.1911612	1.2			RSD (15)	
Pentachlorophenol	7.727995E-02	55.7		0.9980	QCOD (0.99)	
Butylbenzylphthalate	0.8247925	5.7			RSD (15)	
Dibenzo(a,h)anthracene	1.128236	1.7			RSD (15)	
2-Fluorophenol	1.209845	13.0			RSD (15)	
p-Terphenyl-d14	0.7589992	5.5			RSD (15)	

ANALYSIS SEQUENCE

SLE0339

Instrument ID: NT17
Calibration ID: GE00070
MS EM Level: 1450 EV

GCMS Description: Agilent 7890B/5977B
GCMS Column ID: L004289

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLE0339-TUN1	MS Tune	QC		1	L005516		05/16/2023 18:14	NT1705162301S.D	VTS	
SLE0339-CAL8	CAL 10.0	QC		2	K011110	K010831	05/16/2023 19:29	NT1705162303S.D	JGR	
SLE0339-CAL7	CAL 5.0	QC		3	K011109	K010831	05/16/2023 20:07	NT1705162304S.D	JGR	
SLE0339-CAL6	CAL 2.5	QC		4	K011108	K010831	05/16/2023 20:44	NT1705162305S.D	JGR	
SLE0339-CAL5	CAL 1.0	QC		5	K011107	K010831	05/16/2023 21:22	NT1705162306S.D	JGR	
SLE0339-CAL4	CAL 0.50	QC		6	K011106	K010831	05/16/2023 21:59	NT1705162307S.D	JGR	
SLE0339-CAL3	CAL 0.20	QC		7	K011105	K010831	05/16/2023 22:37	NT1705162308S.D	JGR	
SLE0339-CAL2	CAL 0.10	QC		8	L002877	K010831	05/16/2023 23:14	NT1705162309S.D	JGR	
SLE0339-CAL1	CAL 0.05	QC		9	L002878	K010831	05/16/2023 23:51	NT1705162310S.D	JGR	
SLE0339-SCV1	SCV 5.0	QC		10	K010066	K010831	05/17/2023 00:29	NT1705162311S.D	JGR	
SLE0339-ICB1	Initial Cal Blank	QC		11	K005156	K010831	05/17/2023 01:07	NT1705162312S.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230516.b\SIM.b

	Time	Filename	LabID	ClientId	DF												
1	1814	NT1705162301S.D	SLE0339-TUN1		1	|NO ISTDS FOUND||											
2	1929	NT1705162303S.D	SLE0339-CAL8		1	| 9.38	304989||11.85	1098933||15.45	590948||18.47	969131||23.47	604233||26.16	501580|					
3	2007	NT1705162304S.D	SLE0339-CAL7		1	| 9.38	303993||11.84	1096471||15.44	588455||18.47	962811||23.46	594121||26.16	517800|					
4	2044	NT1705162305S.D	SLE0339-CAL6		1	| 9.38	312779||11.84	1112850||15.44	600559||18.47	997102||23.46	638760||26.16	569257|					
5	2122	NT1705162306S.D	SLE0339-CAL5		1	| 9.38	316066||11.84	1102073||15.44	583826||18.47	970917||23.46	590568||26.16	537938|					
6	2159	NT1705162307S.D	SLE0339-CAL4		1	| 9.38	310689||11.84	1075836||15.44	560079||18.46	909163||23.46	547811||26.16	508065|					
7	2237	NT1705162308S.D	SLE0339-CAL3		1	| 9.38	324202||11.84	1123074||15.44	587914||18.46	972346||23.46	582965||26.15	529057|					
8	2314	NT1705162309S.D	SLE0339-CAL2		1	| 9.38	342586||11.84	1209699||15.44	635389||18.46	1076905||23.46	694468||26.16	649331|					
9	2351	NT1705162310S.D	SLE0339-CAL1		1	| 9.38	317514||11.84	1096096||15.44	567814||18.46	924770||23.46	560403||26.15	515224|					
10	0029	NT1705162311S.D	SLE0339-SCV1		1	| 9.38	280298||11.84	999390||15.44	527927||18.47	860054||23.46	527529||26.16	475440|					
11	0107	NT1705162312S.D	SLE0339-ICB1		1	| 9.38	302680||11.84	1065796||15.44	551880||18.46	903730||23.46	538208||26.15	508161|					

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230516.b\SIM.b

Instrument: nt17.i Date: 16-MAY-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1814	NT1705162301S.D	SLE0339-TUN1	1	NO MANUAL INTEGRATION
1929	NT1705162303S.D	SLE0339-CAL8	1	Benzoic acid,
2007	NT1705162304S.D	SLE0339-CAL7	1	Benzoic acid,
2044	NT1705162305S.D	SLE0339-CAL6	1	Benzoic acid,
2122	NT1705162306S.D	SLE0339-CAL5	1	Benzoic acid,
2159	NT1705162307S.D	SLE0339-CAL4	1	Benzoic acid,
2237	NT1705162308S.D	SLE0339-CAL3	1	Benzoic acid,
2314	NT1705162309S.D	SLE0339-CAL2	1	NO MANUAL INTEGRATION
2351	NT1705162310S.D	SLE0339-CAL1	1	Benzyl alcohol, Pentachlorophenol,
0029	NT1705162311S.D	SLE0339-SCV1	1	NO MANUAL INTEGRATION
0107	NT1705162312S.D	SLE0339-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 24-May-2023 07:10

NT1705162301S.D	Data Locked	van, 24-May-2023 07:10
NT1705162303S.D	Data Locked	van, 24-May-2023 07:10
NT1705162304S.D	Data Locked	van, 24-May-2023 07:10
NT1705162305S.D	Data Locked	van, 24-May-2023 07:10
NT1705162306S.D	Data Locked	van, 24-May-2023 07:10
NT1705162307S.D	Data Locked	van, 24-May-2023 07:10
NT1705162308S.D	Data Locked	van, 24-May-2023 07:10
NT1705162309S.D	Data Locked	van, 24-May-2023 07:10
NT1705162310S.D	Data Locked	van, 24-May-2023 07:10
NT1705162311S.D	Data Locked	van, 24-May-2023 07:10
NT1705162312S.D	Data Locked	van, 24-May-2023 07:10

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-MAY-2023 19:29
End Cal Date : 16-MAY-2023 23:51
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Last Edit : 23-May-2023 12:59 van

Calibration File Names:
Level 1: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162310S.D
Level 2: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162309S.D
Level 3: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162308S.D
Level 4: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162307S.D
Level 5: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162306S.D
Level 6: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162305S.D
Level 7: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162304S.D
Level 8: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162303S.D

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-MAY-2023 19:29
End Cal Date : 16-MAY-2023 23:51
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Last Edit : 23-May-2023 12:59 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
141 Diallate B	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
142 1,2-Dibromo-3-Chloropropane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
135 2,3,5,6-Tetrachlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
136 2,3,4,5-tetrachlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
137 NewCpnd_131	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
133 Butylatedhydroxytoluene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
132 3,6-Dimethylphenanthrene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-MAY-2023 19:29
End Cal Date : 16-MAY-2023 23:51
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Last Edit : 23-May-2023 12:59 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-MAY-2023 19:29
End Cal Date : 16-MAY-2023 23:51
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Last Edit : 23-May-2023 12:59 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
144 alpha-Terpineol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
125 Safrole	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
124 3,4-Dimethylphenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
123 Acetophenone	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
122 Furfuraldehyde	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
143 1,4-Dioxane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
121 Quinoline	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
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Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
120 2,3,4,6-Tetrachlorophenol	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
119 7,12-Dimethylbenz(a)anthracen	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
118 Triphenyl Phosphate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
117 Butyl Diphenyl Phosphate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
116 Dibutyl Phenyl Phosphate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
115 Tributyl Phosphate	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
114 Beta-Pinene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
113 Diphenyl Oxide	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
112 Biphenyl	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
111 Azobenzene (1,2-DP-Hydrazine)	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
110 Tetrachloroguaiacol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
109 3,4,5-Trichloroguaiacol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
108 4,5,6-Trichloroguaiacol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
107 4,5-Dichloro-2-Methoxyphenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
3 Phenol	1.51023	1.70024	1.72602	1.82915	1.89445	1.95412					
	1.92362	1.88396					AVRG		1.80272		8.25933
4 Bis(2-Chloroethyl)ether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
7 1,3-Dichlorobenzene	1.69441	1.70690	1.63762	1.61502	1.59572	1.58389					
	1.56474	1.52845					AVRG		1.61584		3.81605
9 1,4-Dichlorobenzene	1.69114	1.65541	1.59814	1.57003	1.55359	1.53090					
	1.52675	1.47047					AVRG		1.57455		4.56524

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
11 Benzyl alcohol	0.79921	0.95334	0.99617	1.05798	1.00919	1.10955					
	1.13957	1.15267					AVRG		1.02721		11.33041
12 1,2-Dichlorobenzene	1.59338	1.75244	1.53762	1.56151	1.49037	1.47116					
	1.48059	1.45911					AVRG		1.54327		6.27449
13 2-Methylphenol	1.18092	1.24699	1.23657	1.25154	1.27128	1.29630					
	1.25743	1.25262					AVRG		1.24921		2.64052
14 2,2'-oxybis(1-Chloropropane)	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
15 4-Methylphenol	1.05872	1.17530	1.20783	1.26107	1.31580	1.35817					
	1.37319	1.34972					AVRG		1.26248		8.67563
16 N-Nitroso-di-n-propylamine	0.83247	0.89648	0.90117	0.89306	0.92048	0.95340					
	0.94554	0.93637					AVRG		0.90987		4.25881
17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
19 Nitrobenzene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
20 Isophorone	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
21 2-Nitrophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
22 2,4-Dimethylphenol	0.36862	0.39269	0.39291	0.39832	0.39209	0.39365					
	0.37435	0.36556					AVRG		0.38477		3.37930
23 Bis(2-Chloroethoxy)methane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
24 Benzoic acid	*****	*****	4084	42399	158699	579679					
	1250361	2690001					LINR	0.000e+000	0.23971		0.99273
25 2,4-Dichlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
26 1,2,4-Trichlorobenzene	0.36931	0.36574	0.35948	0.35166	0.34539	0.34059					
	0.33292	0.32765					AVRG		0.34909		4.34135
28 Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
29 4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
30 Hexachlorobutadiene	0.18670	0.18395	0.18237	0.18228	0.18127	0.18340					
	0.18395	0.18659					AVRG		0.18381		1.07122
31 4-Chloro-3-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
32 2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
33 Hexachlorocyclopentadiene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
34 2,4,6-Trichlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
35 2,4,5-Trichlorophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
37 2-Chloronaphthalene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
38 2-Nitroaniline	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
39 Dimethylphthalate	1.55417	1.49987	1.46681	1.45769	1.49016	1.46017					
	1.43193	1.39038					AVRG		1.46890		3.29723
40 Acenaphthylene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
41 2,6-Dinitrotoluene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
43 3-Nitroaniline	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
44 Acenaphthene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
45 2,4-Dinitrophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
46 Dibenzofuran	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
47 4-Nitrophenol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
48 2,4-Dinitrotoluene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
49 Fluorene	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
50 Diethylphthalate	1.29366	1.34078	1.32948	1.34347	1.37320	1.36411					
	1.33306	1.29416					AVRG		1.33399		2.16040
51 4-Chlorophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
53 4,6-Dinitro-2-methylphenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
54 N-Nitrosodiphenylamine	0.53747	0.56863	0.56114	0.57796	0.58463	0.57334					
	0.54896	0.55604					AVRG		0.56352		2.78865
56 4-Bromophenyl-phenylether	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
57 Hexachlorobenzene	0.19430	0.19017	0.18909	0.19114	0.18877	0.18874					
	0.19273	0.19434					AVRG		0.19116		1.23829

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	5.0000 Level 7	10.0000 Level 8									
58 Pentachlorophenol	+++++	2234	4252	13401	38475	135777					
	296764	681744					QUAD	0.000e+000	9.29579	-3.13248	0.99908
60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
67 Butylbenzylphthalate	0.74404	0.77665	0.80293	0.84743	0.84928	0.87703					
	0.87551	0.82547					AVRG		0.82479		5.74759
68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
72 bis(2-Ethylhexyl)phthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
79 Dibenzo(a,h)anthracene	1.10694	1.10822	1.11198	1.13411	1.13601	1.12435					
	1.14386	1.16044					AVRG		1.12824		1.67827
80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
90 N-Nitrosodimethylamine	0.65849	0.72863	0.75894	0.80050	0.82657	0.85012					
	0.82432	0.79919					AVRG		0.78085		8.05304
91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

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	5.0000 Level 7	10.0000 Level 8									
92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-MAY-2023 19:29
End Cal Date : 16-MAY-2023 23:51
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Last Edit : 23-May-2023 12:59 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
101 Cholesterol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
102 beta-Sitosterol	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
103 Pyridine	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 1 2-Fluorophenol	0.93443	1.04141	1.13329	1.23663	1.30662	1.34497					
	1.35483	1.32658					AVRG		1.20984		12.99690
$ 145 d8-1,4-Dioxane	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 2 Phenol-d5	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000
$ 5 2-Chlorophenol-d4	*****	*****	*****	*****	*****	*****					
	*****	*****					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-MAY-2023 19:29
End Cal Date : 16-MAY-2023 23:51
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Last Edit : 23-May-2023 12:59 van

Compound	0.0500000 Level 1	0.1000000 Level 2	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
	5.0000 Level 7	10.0000 Level 8									
$ 10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 36 2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 66 Terphenyl-d14	0.86167	0.74065	0.74248	0.73998	0.74934	0.74708					
	0.75154	0.73926					AVRG		0.75900		5.49863
$ 85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000
$ 86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++					
	+++++	+++++					AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-MAY-2023 19:29
End Cal Date : 16-MAY-2023 23:51
Quant Method : ISTD
Origin : Force
Target Version : 4.14
Integrator : HP RTE
Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Last Edit : 23-May-2023 12:59 van

Compound	0.0500000 Level 1 / 5.0000 Level 7	0.1000000 Level 2 / 10.0000 Level 8	0.2000000 Level 3	0.5000000 Level 4	1.0000 Level 5	2.5000 Level 6	Curve	Coefficients b	m1	m2	%RSD or R^2
$ 87 Fluoranthene-d10	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 88 Dibenz(a,h)anthracene-d14	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 89 Diphenyl-d10	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000
$ 95 D10-1-methylnaphthalene	+++++ / +++++	+++++ / +++++	+++++	+++++	+++++	+++++	AVRG		0.000e+000		0.000e+000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 16-MAY-2023 19:29
End Cal Date : 16-MAY-2023 23:51
Quant Method : ISTD
Origin : Force
Target Version : 4.14
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Method file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Last Edit : 23-May-2023 12:59 van

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt17.i\20230516.b\SIM.b
Inst ID: nt17.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08
FILENAME:	NT1705162303S	NT1705162304S	NT1705162305S	NT1705162306S	NT1705162307S	NT1705162308S	NT1705162309S	NT1705162310S
INJ.DATE:	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023	16-MAY-2023
INJ.TIME:	19:29	20:07	20:44	21:22	21:59	22:37	23:14	23:51

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
$ 1 2-Fluorophenol	7.171	7.158	7.158	7.158	7.171	7.171	7.171	7.171	7.171	6.671-7.671	7.166	0.007
138 Chlorobenzilate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	33.580	33.080-34.080	+++++	+++++
139 Isodrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	30.873	30.373-31.373	+++++	+++++
140 Diallate A	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
141 Diallate B	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.300	30.800-31.800	+++++	+++++
142 1,2-Dibromo-3-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.496	14.996-15.996	+++++	+++++
135 2,3,5,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.428	19.928-20.928	+++++	+++++
136 2,3,4,5-tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.471	19.971-20.971	+++++	+++++
137 NewCpnd_131	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.828	7.328-8.328	+++++	+++++
* 134 Di-n-octylphthalate-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.904	23.404-24.404	+++++	+++++
133 Butylatedhydroxytoluen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.190	13.690-14.690	+++++	+++++
132 3,6-Dimethylphenanthre	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	31.262	30.762-31.762	+++++	+++++
131 1-Methylphenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.954	29.454-30.454	+++++	+++++
146 Benzo(j)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.752	23.252-24.252	+++++	+++++
130 Dibenzothiophene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.717	27.217-28.217	+++++	+++++
129 1-Methylfluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.566	20.066-21.066	+++++	+++++
128 N-Hexadecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.796	19.296-20.296	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt17.i\20230516.b\SIM.b
Inst ID: nt17.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
127 2-Isopropylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.349	22.849-23.849	+++++	+++++
126 N-Tetradecane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.474	21.974-22.974	+++++	+++++
144 alpha-Terpineol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.191	10.691-11.691	+++++	+++++
125 Safrole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.779	17.279-18.279	+++++	+++++
124 3,4-Dimethylphenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.310	15.810-16.810	+++++	+++++
123 Acetophenone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.707	17.207-18.207	+++++	+++++
122 Furfuraldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.921	8.421-9.421	+++++	+++++
143 1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.736	3.236-4.236	+++++	+++++
$ 145 d8-1,4-Dioxane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.914	2.414-3.414	+++++	+++++
121 Quinoline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.148	19.648-20.648	+++++	+++++
120 2,3,4,6-Tetrachlorophe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.588	15.088-16.088	+++++	+++++
119 7,12-Dimethylbenz(a)an	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	38.587	38.087-39.087	+++++	+++++
118 Triphenyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.382	19.882-20.882	+++++	+++++
117 Butyl Diphenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.734	18.234-19.234	+++++	+++++
116 Dibutyl Phenyl Phospha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.987	16.487-17.487	+++++	+++++
115 Tributyl Phosphate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.204	14.704-15.704	+++++	+++++
114 Beta-Pinene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
113 Diphenyl Oxide	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.586	21.086-22.086	+++++	+++++
112 Biphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.692	17.192-18.192	+++++	+++++
111 Azobenzene (1,2-DP-Hyd	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.247	15.747-16.747	+++++	+++++
110 Tetrachloroguaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.055	17.555-18.555	+++++	+++++
109 3,4,5-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.228	16.728-17.728	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt17.i\20230516.b\SIM.b
Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	108 4,5,6-Trichloroguaiaco	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.517	16.017-17.017	+++++	+++++
	107 4,5-Dichloro-2-Methoxy	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.803	14.303-15.303	+++++	+++++
	106 Guaiacol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.843	11.343-12.343	+++++	+++++
	105 1-methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.899	12.399-13.399	+++++	+++++
$	2 Phenol-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.219	7.719-8.719	+++++	+++++
	3 Phenol	8.764	8.751	8.751	8.751	8.751	8.751	8.751	8.751	8.751	8.251-9.251	8.753	0.005
	4 Bis(2-Chloroethyl)ethe	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.381	7.881-8.881	+++++	+++++
$	5 2-Chlorophenol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.466	7.966-8.966	+++++	+++++
	6 2-Chlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.490	7.990-8.990	+++++	+++++
	7 1,3-Dichlorobenzene	9.312	9.312	9.312	9.312	9.312	9.312	9.312	9.312	9.312	8.812-9.812	9.312	0.000
*	8 1,4-Dichlorobenzene-d4	9.376	9.376	9.376	9.376	9.376	9.376	9.376	9.376	9.376	8.876-9.876	9.376	0.000
	9 1,4-Dichlorobenzene	9.401	9.401	9.401	9.401	9.401	9.401	9.401	9.401	9.401	8.901-9.901	9.401	0.000
$	10 1,2-Dichlorobenzene-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.164	8.664-9.664	+++++	+++++
	11 Benzyl alcohol	9.644	9.644	9.631	9.631	9.644	9.644	9.644	9.657	9.657	9.157-10.157	9.642	0.008
	12 1,2-Dichlorobenzene	9.759	9.759	9.759	9.759	9.759	9.759	9.759	9.759	9.759	9.259-10.259	9.759	0.000
	13 2-Methylphenol	9.861	9.848	9.848	9.848	9.848	9.848	9.861	9.861	9.861	9.361-10.361	9.853	0.007
	14 2,2'-oxybis(1-Chloropr	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.381	8.881-9.881	+++++	+++++
	15 4-Methylphenol	10.129	10.117	10.117	10.117	10.117	10.117	10.129	10.130	10.130	9.630-10.630	10.122	0.007
	16 N-Nitroso-di-n-propyla	10.206	10.193	10.181	10.181	10.181	10.181	10.181	10.181	10.181	9.681-10.681	10.185	0.010
	17 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.769	9.269-10.269	+++++	+++++
$	18 Nitrobenzene-d5	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.893	9.393-10.393	+++++	+++++
	19 Nitrobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.932	9.432-10.432	+++++	+++++
	20 Isophorone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.375	9.875-10.875	+++++	+++++
	21 2-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.549	10.049-11.049	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

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Batch File: \\target\share\chem3\nt17.i\20230516.b\SIM.b
Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
22	2,4-Dimethylphenol	11.164	11.164	11.164	11.151	11.151	11.151	11.151	11.164	11.164	10.664-11.664	11.158	0.007
23	Bis(2-Chloroethoxy)met	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.804	10.304-11.304	+++++	+++++
24	Benzoic acid	11.471	11.407	11.356	11.305	11.279	11.356	+++++	+++++	11.356	10.856-11.856	11.362	0.069
25	2,4-Dichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.007	10.507-11.507	+++++	+++++
26	1,2,4-Trichlorobenzene	11.764	11.764	11.751	11.751	11.751	11.751	11.751	11.751	11.751	11.251-12.251	11.754	0.006
* 27	Naphthalene-d8	11.853	11.840	11.840	11.840	11.840	11.840	11.840	11.841	11.841	11.341-12.341	11.842	0.004
28	Naphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.297	10.797-11.797	+++++	+++++
29	4-Chloroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.436	10.936-11.936	+++++	+++++
30	Hexachlorobutadiene	12.235	12.235	12.235	12.235	12.235	12.235	12.235	12.235	12.235	11.735-12.735	12.235	0.000
31	4-Chloro-3-methylpheno	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.411	11.911-12.911	+++++	+++++
32	2-Methylnaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.682	12.182-13.182	+++++	+++++
33	Hexachlorocyclopentadi	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.146	12.646-13.646	+++++	+++++
34	2,4,6-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.309	12.809-13.809	+++++	+++++
35	2,4,5-Trichlorophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.386	12.886-13.886	+++++	+++++
$ 36	2-Fluorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.456	12.956-13.956	+++++	+++++
37	2-Chloronaphthalene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.665	13.165-14.165	+++++	+++++
38	2-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.928	13.428-14.428	+++++	+++++
39	Dimethylphthalate	14.952	14.939	14.939	14.939	14.926	14.926	14.926	14.926	14.926	14.426-15.426	14.934	0.009
40	Acenaphthylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.524	14.024-15.024	+++++	+++++
41	2,6-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.501	14.001-15.001	+++++	+++++
* 42	Acenaphthene-d10	15.449	15.437	15.436	15.436	15.437	15.436	15.436	15.437	15.437	14.937-15.937	15.438	0.005
43	3-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.779	14.279-15.279	+++++	+++++
44	Acenaphthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.895	14.395-15.395	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt17.i\20230516.b\SIM.b
Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	45 2,4-Dinitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.003	14.503-15.503	+++++	+++++
	46 Dibenzofuran	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.220	14.720-15.720	+++++	+++++
	47 4-Nitrophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.135	14.635-15.635	+++++	+++++
	48 2,4-Dinitrotoluene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.305	14.805-15.805	+++++	+++++
	49 Fluorene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.931	15.431-16.431	+++++	+++++
	50 Diethylphthalate	16.392	16.380	16.380	16.380	16.380	16.380	16.380	16.380	16.380	15.880-16.880	16.381	0.005
	51 4-Chlorophenyl-phenyle	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	15.923	15.423-16.423	+++++	+++++
	52 4-Nitroaniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.039	15.539-16.539	+++++	+++++
	53 4,6-Dinitro-2-methylph	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.139	15.639-16.639	+++++	+++++
	54 N-Nitrosodiphenylamine	16.787	16.774	16.774	16.774	16.762	16.762	16.762	16.774	16.774	16.274-17.274	16.771	0.009
$	55 2,4,6-Tribromophenol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.463	15.963-16.963	+++++	+++++
	56 4-Bromophenyl-phenylet	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.918	16.418-17.418	+++++	+++++
	57 Hexachlorobenzene	17.844	17.844	17.844	17.844	17.844	17.844	17.844	17.844	17.844	17.344-18.344	17.844	0.000
	58 Pentachlorophenol	18.201	18.201	18.201	18.201	18.201	18.201	18.201	18.214	18.214	17.714-18.714	18.202	0.005
*	59 Phenanthrene-d10	18.469	18.469	18.469	18.469	18.456	18.456	18.456	18.456	18.456	17.956-18.956	18.462	0.007
	60 Phenanthrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.885	17.385-18.385	+++++	+++++
	61 Anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.978	17.478-18.478	+++++	+++++
	62 Carbazole	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	18.311	17.811-18.811	+++++	+++++
	63 Di-n-butylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.123	18.623-19.623	+++++	+++++
	64 Fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.276	19.776-20.776	+++++	+++++
	65 Pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.694	20.194-21.194	+++++	+++++
$	66 Terphenyl-d14	21.567	21.555	21.555	21.554	21.555	21.554	21.554	21.555	21.555	21.055-22.055	21.556	0.005
	67 Butylbenzylphthalate	22.473	22.473	22.460	22.460	22.460	22.460	22.460	22.460	22.460	21.960-22.960	22.463	0.006
	68 Benzo(a)anthracene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.854	22.354-23.354	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt17.i\20230516.b\SIM.b
Inst ID: nt17.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
*	69 Chrysene-d12	23.468	23.455	23.455	23.455	23.455	23.455	23.455	23.455	23.455	22.955-23.955	23.457	0.005
	70 3,3'-Dichlorobenzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.815	22.315-23.315	+++++	+++++
	71 Chrysene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.923	22.423-23.423	+++++	+++++
	72 bis(2-Ethylhexyl)phtha	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	22.947	22.447-23.447	+++++	+++++
	73 Di-n-octylphthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	23.930	23.430-24.430	+++++	+++++
	74 Benzo(b)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.650	24.150-25.150	+++++	+++++
	75 Benzo(k)fluoranthene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	24.688	24.188-25.188	+++++	+++++
	76 Benzo(a)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.238	24.738-25.738	+++++	+++++
*	77 Perylene-d12	26.160	26.160	26.160	26.160	26.160	26.147	26.160	26.147	26.147	25.647-26.647	26.157	0.006
	78 Indeno(1,2,3-cd)pyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	27.736	27.236-28.236	+++++	+++++
	79 Dibenzo(a,h)anthracene	28.969	28.957	28.957	28.944	28.944	28.944	28.944	28.944	28.944	28.444-29.444	28.950	0.010
	80 Benzo(g,h,i)perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	28.435	27.935-28.935	+++++	+++++
$	85 p-Cresol-d4	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.238	16.738-17.738	+++++	+++++
$	86 Anthracene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	29.316	28.816-29.816	+++++	+++++
$	87 Fluoranthene-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.007	25.507-26.507	+++++	+++++
$	88 Dibenz(a,h)anthracene-	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	44.609	44.109-45.109	+++++	+++++
$	89 Diphenyl-d10	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	16.085	15.585-16.585	+++++	+++++
	90 N-Nitrosodimethylamine	5.095	5.082	5.069	5.082	5.082	5.082	5.082	5.095	5.095	4.595-5.595	5.083	0.008
	91 Aniline	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.289	7.789-8.789	+++++	+++++
	92 1,2-Diphenylhydrazine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.615	21.115-22.115	+++++	+++++
	93 Benzidine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.516	20.016-21.016	+++++	+++++
$	95 D10-1-methylnaphthalen	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	17.686	17.186-18.186	+++++	+++++
	96 p-Cymene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.540	14.040-15.040	+++++	+++++
	97 Caffeine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.957	26.457-27.457	+++++	+++++

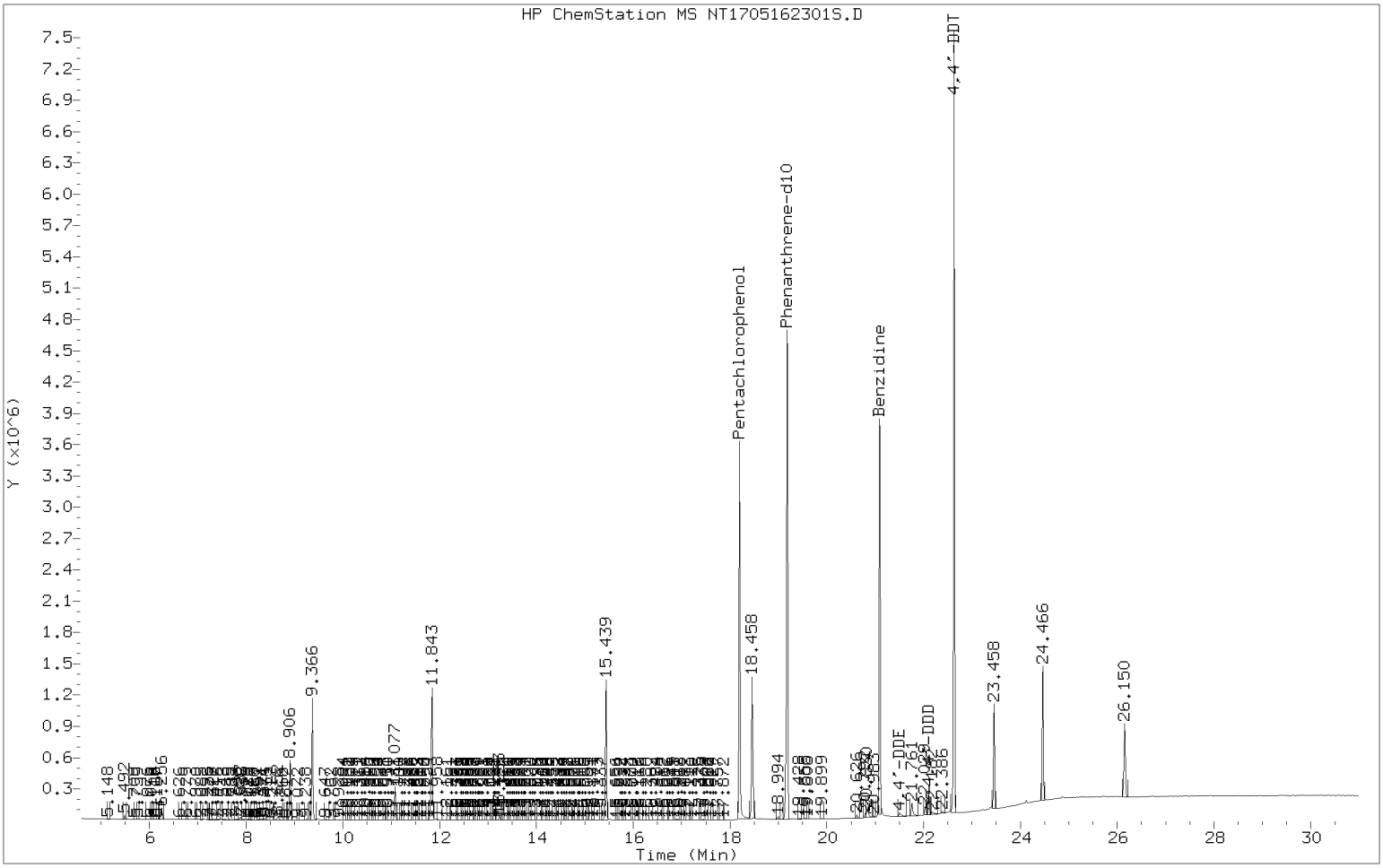
ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

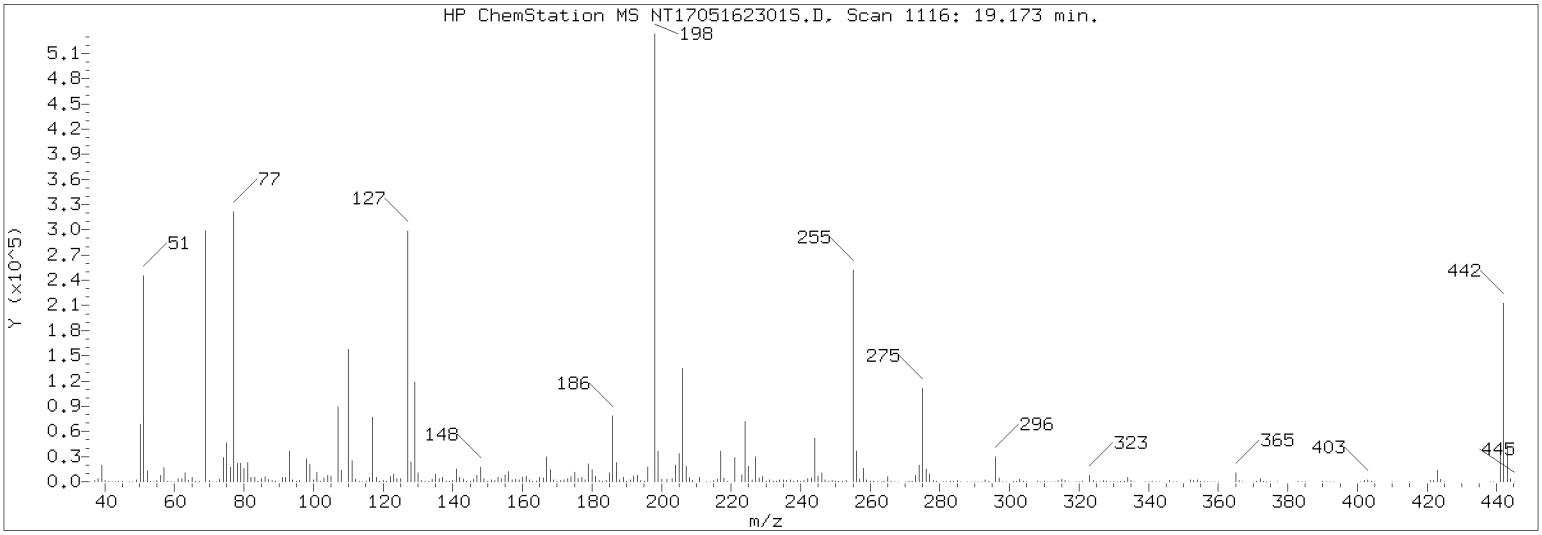
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Batch File: \\target\share\chem3\nt17.i\20230516.b\SIM.b
Inst ID: nt17.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	RT08	EXPEC RT	RT WINDOW	AVG RT	STD DEV
98 Retene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	19.609	19.109-20.109	+++++	+++++
99 Perylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	25.438	24.938-25.938	+++++	+++++
100 3-beta-Coprostanol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	26.384	25.884-26.884	+++++	+++++
101 Cholesterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	43.881	43.381-44.381	+++++	+++++
102 beta-Sitosterol	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	45.573	45.073-46.073	+++++	+++++
103 Pyridine	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.589	4.089-5.089	+++++	+++++

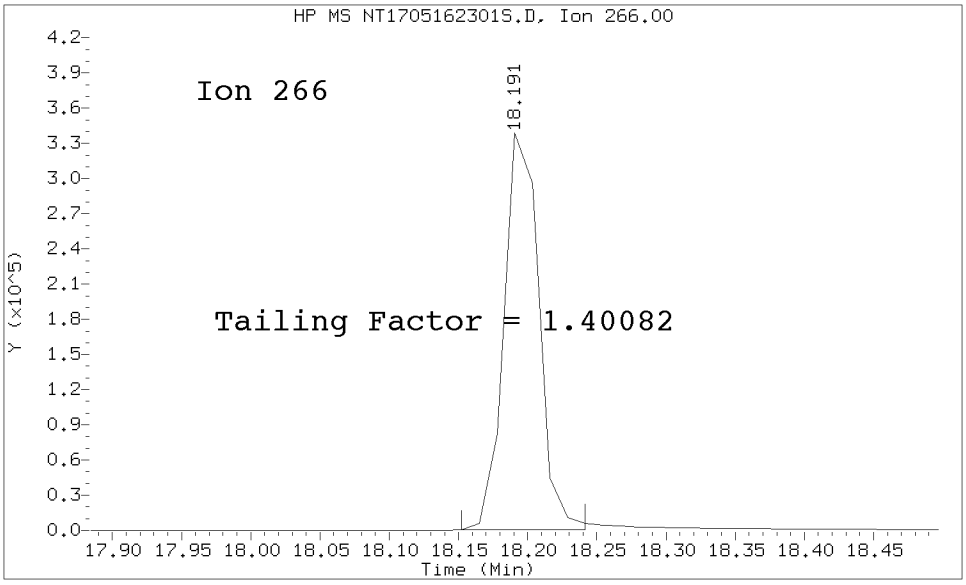
DFTPP TAILING FACTOR AND BREAKDOWN GRAPHIC REPORT

Datafile Analyzed: /20230516.b/SIM.b/NT1705162301S.D/NT1705162301S.D
Method Used: \20230516.b\SIM.b\DFTPP8270E.m Inst: nt17
Injection Date: 16-MAY-2023 18:14 Operator: VTS
Sample Info: SLE0339-TUN1 SLE0339-TUN1
Report Date: 05/24/2023 06:46



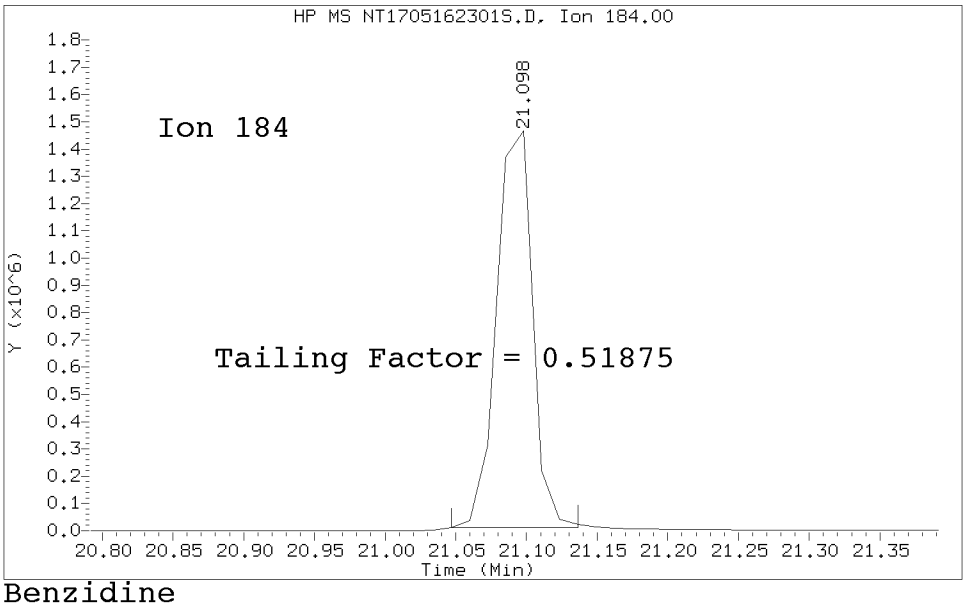


Datafile Analyzed: /20230516.b/SIM.b/NT1705162301S.D/NT1705162301S.D
Method Used: \20230516.b\DFTPP8270E.m\sw846ddt.m Inst: nt17
Injection Date: 16-MAY-2023 18:14 Operator: JGR
Sample Info: NT1705162301
Report Date: 05/24/2023 06:46



Pentachlorophenol
==========
Exp. RT = 18.191
Found RT = 18.191

Tail Factor = 1.401 Maximum Allowed = 2.0



Benzidine
==========
Exp. RT = 21.098
Found RT = 21.098

Tail Factor = 0.519 Maximum Allowed = 2.0

8270 TAILING FACTOR/BREAKDOWN SUMMARY RESULTS

TAILING ANALYSIS SUMMARY

Compound	Tail Factor	Max Allowed	Test
Pentachlorophenol	1.4008163	2.000	PASS
Benzidine	0.5187468	2.000	PASS

DDT DEGRADATION BREAKDOWN ANALYSIS SUMMARY

Compound	Response	%Breakdown	Max Allowed	Test
4,4-DDT	1797024			N/A
4,4-DDE	5899	0.3	20.0	PASS
4,4-DDD	55596	3.0	20.0	PASS
4,4-DDD + DDE	61495	3.3	20.0	PASS

Tuning Sample, nt17.i/20230516.b/SIM.b/NT1705162301S.D, *** PASSED ***

m/e	ION ABUNDANCE CRITERIA	% RELATIVE ABUNDANCE
198	Base Peak, 100% relative abundance	100.00
68	Less than 2.00% of mass 69	0.00 (0.00)
69	Mass 69 relative abundance	55.71
70	Less than 2.00% of mass 69	0.28 (0.50)
197	Less than 2.00% of mass 198	0.00
199	5.00 - 9.00% of mass 198	6.89
365	1.00 - 100.00% of mass 198	2.01
441	Less than 150.00% of mass 443	6.45 (80.67)
442	Less than 200.00% of mass 198	39.79
443	15.00 - 24.00% of mass 442	8.00 (20.10)

Data File: NT1705162301S.D
Spectrum: HP ChemStation MS NT1705162301.D, Scan 1116: 19.173 min.
Location of Maximum: 198.00
Number of points: 331

m/z	Y	m/z	Y	m/z	Y	m/z	Y
36.00	373	125.00	3764	212.90	378	304.10	870
37.10	1236	127.00	299008	214.00	187	304.90	93
38.10	3574	128.00	23768	215.00	1418	308.00	456
39.10	19776	129.00	119136	216.10	3082	309.00	262
40.10	1147	130.00	10361	217.00	36592	310.00	402
41.10	878	131.00	1814	218.00	4762	311.00	86
42.00	117	132.00	965	219.00	396	312.00	116
43.10	290	133.10	535	221.00	29232	313.00	219
44.00	563	134.00	3393	223.00	8299	314.00	1504
45.00	582	135.00	9407	224.00	71792	315.00	3072
47.00	97	136.00	3952	225.00	17928	316.00	1521
48.00	170	137.00	4988	226.10	2276	317.00	314
49.10	2254	138.00	1078	227.00	30000	319.10	73
50.10	68392	139.00	652	228.00	4583	320.10	106
51.10	245312	140.00	1657	229.00	6282	321.00	853
52.10	13090	141.00	15600	230.00	812	323.00	7992
53.10	590	142.00	5275	231.00	2667	324.10	1422
54.10	108	143.00	3193	232.00	430	325.00	180
55.00	1424	144.00	947	233.00	547	326.10	206
56.00	7762	145.00	844	234.00	1964	327.00	1582
57.00	17056	146.00	3027	235.00	2156	328.00	897
58.00	866	147.00	7959	236.00	1308	329.00	186
59.10	293	148.00	17552	237.00	2222	329.90	82
60.00	267	149.00	3605	237.90	416	331.10	85
61.00	3445	150.00	847	239.00	1164	332.00	681
62.10	3924	151.10	1978	240.00	951	333.00	829
63.10	10682	152.00	1250	241.00	1482	334.00	5269
64.00	1343	153.00	5043	242.00	3506	335.00	1251
65.10	5380	154.00	3616	243.10	4237	335.90	192
66.00	439	155.00	8310	244.00	51672	339.00	128
67.10	548	156.00	12288	245.00	7098	340.10	147
69.00	297216	157.00	2390	246.00	10908	341.00	859
70.00	1476	158.00	3197	247.00	2147	342.00	240
70.90	268	159.00	2124	248.10	405	343.10	69
72.10	180	160.00	4998	249.00	1791	346.00	1668
73.00	2846	161.00	6841	250.00	400	347.00	375
74.10	28912	162.00	1948	250.90	471	348.00	75
75.00	46408	163.00	565	252.00	547	352.00	2294
76.10	17424	164.00	677	253.00	1432	353.00	1625
77.10	321920	165.00	5602	255.00	252288	354.10	2225
78.10	22048	166.00	4612	256.00	36264	355.00	516
79.00	22016	167.00	29864	257.00	3077	356.00	63
80.00	16324	168.00	14362	258.00	15639	356.90	53
81.00	22800	169.00	2523	259.00	2592	358.00	71
82.00	5387	170.00	957	260.10	431	359.00	210
83.00	5076	171.00	1311	261.00	461	360.10	57
84.00	563	172.00	2519	262.00	108	365.00	10733
85.00	4136	173.00	3591	263.10	161	366.00	1640
86.00	6323	174.00	6157	264.00	692	366.90	121

87.00	3104	175.00	11592	265.00	6219	370.00	199
88.00	1154	176.00	3445	266.00	980	371.00	691
89.00	552	177.00	5417	267.00	143	372.00	3968
91.00	5210	178.00	1917	267.90	329	373.00	1018
92.00	5631	179.00	21584	270.00	364	374.00	88
93.00	36336	180.00	14393	271.00	614	375.00	64
94.00	2258	181.00	6949	272.00	778	377.00	178
95.10	602	182.00	1161	273.00	7503	382.90	939
96.00	1677	183.00	749	274.00	19672	384.00	273
98.00	27664	184.00	1652	275.00	111592	385.00	126
99.00	20856	185.00	10677	276.00	15342	390.00	425
100.00	1939	186.00	78320	277.00	9319	391.00	350
101.00	11566	187.00	22896	278.00	1573	392.10	253
102.00	831	188.00	2244	279.00	451	393.00	72
103.00	4398	189.00	5077	281.00	219	401.00	268
104.00	7600	190.00	951	282.00	285	402.00	1410
105.00	7080	191.00	2327	283.00	1010	403.00	2061
107.00	89200	192.00	6979	284.00	690	404.00	774
108.00	13702	193.00	7409	285.00	1524	405.00	123
110.00	158144	194.00	1633	286.00	314	410.00	81
111.00	25024	195.10	1054	287.90	160	414.90	77
112.00	3002	196.00	17264	289.00	314	421.00	1760
113.00	864	198.00	533504	290.00	311	422.00	1730
114.00	302	199.00	36760	291.00	191	423.00	13610
115.10	463	200.00	2858	292.00	365	424.00	2795
116.00	5300	201.50	3067	293.00	1946	425.00	303
117.00	76832	203.00	3883	294.00	397	438.30	74
118.00	5637	204.00	19736	296.00	30016	439.10	152
119.00	739	205.00	33208	297.00	4246	441.10	34424
120.00	1147	206.00	134656	297.90	294	442.00	212288
121.00	584	207.00	18008	299.00	90	443.00	42672
122.00	6244	208.00	5001	301.10	394	444.00	3817
123.00	9329	209.00	1511	302.00	506	445.10	229
124.00	4061	211.00	5429	303.00	3269		

Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623033.D

Date : 16-MAY-2023 19:29

Client ID:

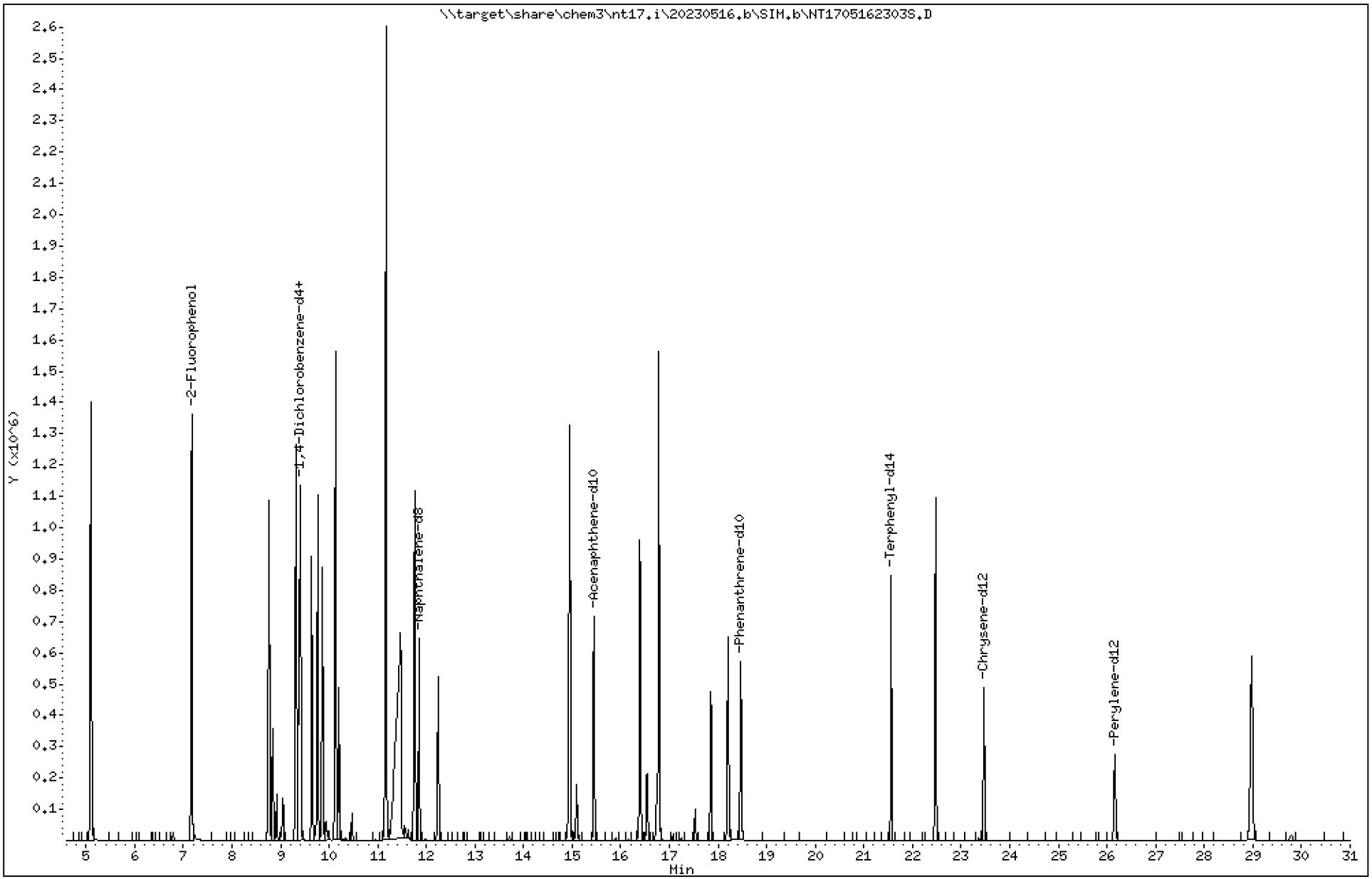
Sample Info: SLE0339-CAL8

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

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Inj Date : 16-MAY-2023 19:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-CAL8
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 3 Calibration Sample, Level: 8
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.171	7.171	(0.765)	1517220	15.0000	16.45
	3 Phenol	94	8.763	8.751	(0.935)	1436469	10.0000	10.45
	7 1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	1165401	10.0000	9.459
*	8 1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	304989	4.00000	
	9 1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	1121195	10.0000	9.339
	11 Benzyl alcohol	79	9.643	9.656	(1.029)	878879	10.0000	11.22
	12 1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	1112531	10.0000	9.455
	13 2-Methylphenol	108	9.861	9.861	(1.052)	955092	10.0000	10.03
	15 4-Methylphenol	108	10.129	10.129	(1.080)	1029121	10.0000	10.69
	16 N-Nitroso-di-n-propylamine	70	10.206	10.180	(1.089)	713957	10.0000	10.29
	22 2,4-Dimethylphenol	107	11.164	11.164	(0.942)	2008635	20.0000	19.00
	24 Benzoic acid	105	11.470	11.356	(0.968)	2690001	40.0000	40.85(M)
	26 1,2,4-Trichlorobenzene	180	11.763	11.751	(0.992)	900160	10.0000	9.386
*	27 Naphthalene-d8	136	11.853	11.840	(1.000)	1098933	4.00000	
	30 Hexachlorobutadiene	225	12.235	12.235	(1.032)	512625	10.0000	10.15
	39 Dimethylphthalate	163	14.951	14.926	(0.968)	2054105	10.0000	9.465
*	42 Acenaphthene-d10	162	15.449	15.436	(1.000)	590948	4.00000	
	50 Diethylphthalate	149	16.392	16.379	(1.061)	1911957	10.0000	9.701
	54 N-Nitrosodiphenylamine	169	16.787	16.774	(0.909)	1347197	10.0000	9.867
	57 Hexachlorobenzene	284	17.843	17.843	(0.966)	470858	10.0000	10.17
	58 Pentachlorophenol	266	18.200	18.214	(0.986)	681744	20.0000	19.96
*	59 Phenanthrene-d10	188	18.468	18.455	(1.000)	969131	4.00000	
$	66 Terphenyl-d14	244	21.567	21.554	(0.919)	1116711	10.0000	9.740
	67 Butylbenzylphthalate	149	22.472	22.460	(0.958)	1246939	10.0000	10.01
*	69 Chrysene-d12	240	23.468	23.455	(1.000)	604233	4.00000	
*	77 Perylene-d12	264	26.159	26.147	(1.000)	501580	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.969	28.943	(1.107)	1455128	10.0000	10.29
	90 N-Nitrosodimethylamine	74	5.094	5.094	(0.543)	1218715	20.0000	20.47

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162303S.D
Lab Smp Id: SLE0339-CAL8
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	304989	-3.50
27 Naphthalene-d8	1102073	551037	2204146	1098933	-0.28
42 Acenaphthene-d10	583826	291913	1167652	590948	1.22
59 Phenanthrene-d10	970917	485459	1941834	969131	-0.18
69 Chrysene-d12	590568	295284	1181136	604233	2.31
77 Perylene-d12	537938	268969	1075876	501580	-6.76

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.85	0.11
42 Acenaphthene-d10	15.44	14.94	15.94	15.45	0.08
59 Phenanthrene-d10	18.47	17.97	18.97	18.47	0.00
69 Chrysene-d12	23.46	22.96	23.96	23.47	0.05
77 Perylene-d12	26.16	25.66	26.66	26.16	0.00

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

REVIEW SUMMARY FOR FILE - NT1705162303S.D

Lab ID: SLE0339-CAL8
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   16-MAY-2023 19:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.968	0.000	0.9677	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

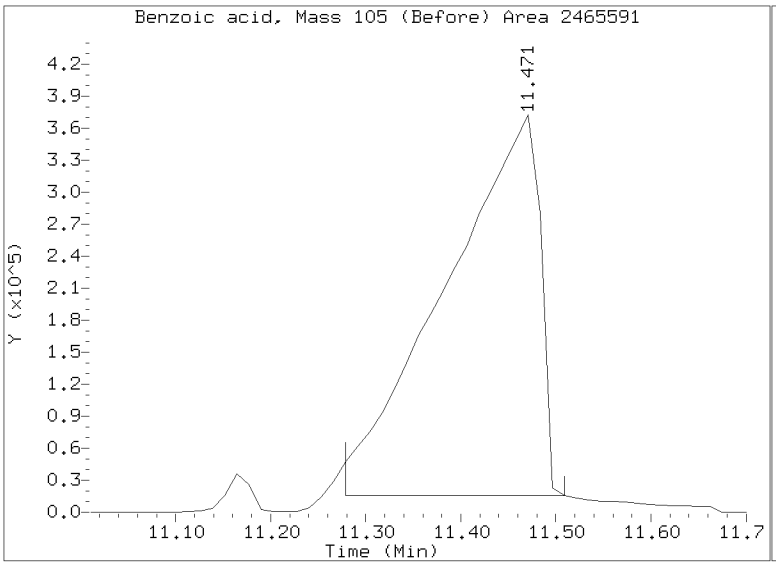
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

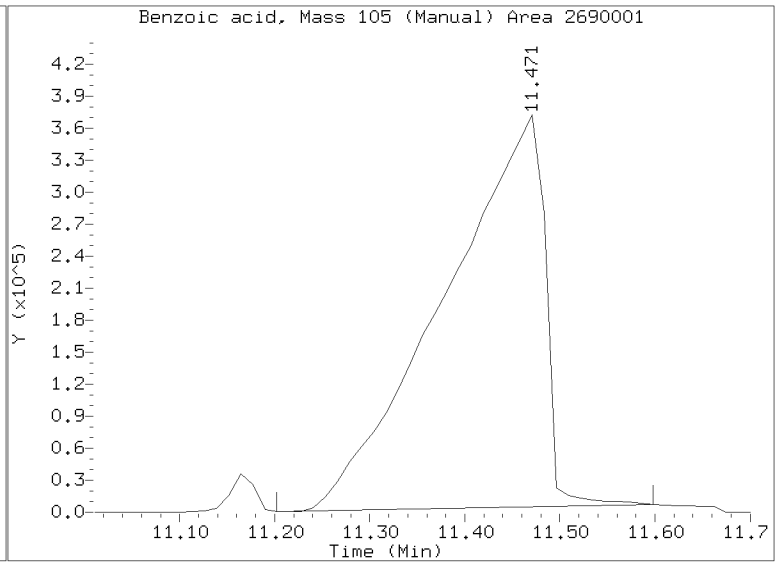
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/SIM.b/NT1705162303S.D
Injection Date: 16-MAY-2023 19:29
Lab ID:SLE0339-CAL8 Client ID:
Report Date: 05/24/2023 06:44





Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623045.D

Date : 16-MAY-2023 20:07

Client ID:

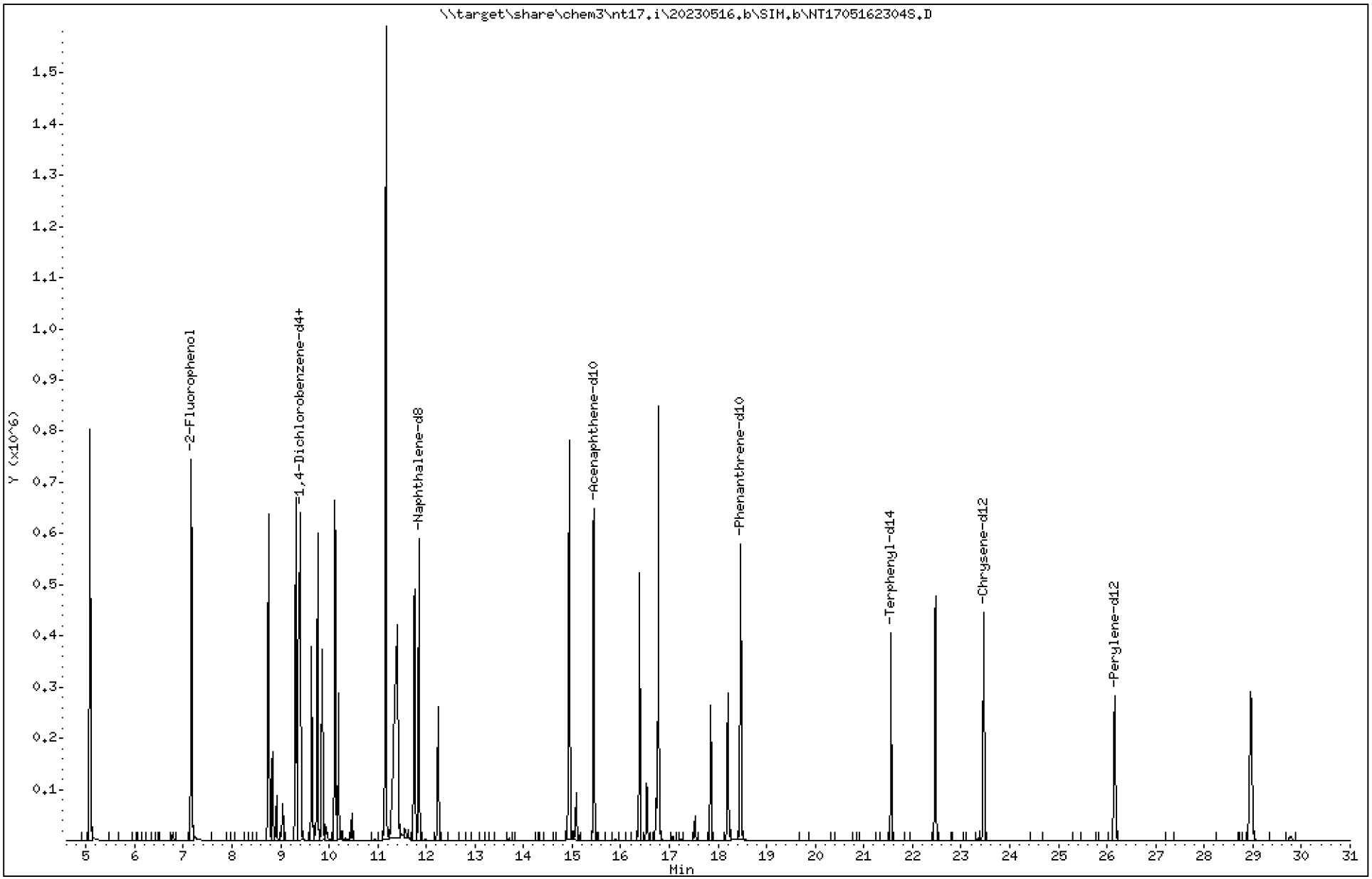
Instrument: nt17.i

Sample Info: SLE0339-CAL7

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162304S.D
Lab Smp Id: SLE0339-CAL7
Inj Date : 16-MAY-2023 20:07
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-CAL7
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 4 Calibration Sample, Level: 7
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

								AMOUNTS	
		QUANT SIG						CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	7.158	7.171	(0.764)	772237		7.50000	8.399
	3 Phenol	94	8.751	8.751	(0.933)	730959		5.00000	5.335
	7 1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	594588		5.00000	4.842
*	8 1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	303993		4.00000	
	9 1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	580152		5.00000	4.848
	11 Benzyl alcohol	79	9.643	9.656	(1.029)	433026		5.00000	5.547
	12 1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	562610		5.00000	4.797
	13 2-Methylphenol	108	9.848	9.861	(1.050)	477811		5.00000	5.033
	15 4-Methylphenol	108	10.116	10.129	(1.079)	521802		5.00000	5.439
	16 N-Nitroso-di-n-propylamine	70	10.193	10.180	(1.087)	359296		5.00000	5.196
	22 2,4-Dimethylphenol	107	11.164	11.164	(0.943)	1026154		10.0000	9.729
	24 Benzoic acid	105	11.406	11.356	(0.963)	1250361		20.0000	19.03(M)
	26 1,2,4-Trichlorobenzene	180	11.764	11.751	(0.994)	456302		5.00000	4.768
*	27 Naphthalene-d8	136	11.840	11.840	(1.000)	1096471		4.00000	
	30 Hexachlorobutadiene	225	12.235	12.235	(1.033)	252124		5.00000	5.004
	39 Dimethylphthalate	163	14.939	14.926	(0.968)	1053286		5.00000	4.874
*	42 Acenaphthene-d10	162	15.436	15.436	(1.000)	588455		4.00000	
	50 Diethylphthalate	149	16.379	16.379	(1.061)	980559		5.00000	4.997
	54 N-Nitrosodiphenylamine	169	16.774	16.774	(0.908)	660680		5.00000	4.871
	57 Hexachlorobenzene	284	17.843	17.843	(0.966)	231953		5.00000	5.041
	58 Pentachlorophenol	266	18.200	18.214	(0.986)	296764		10.0000	10.27
*	59 Phenanthrene-d10	188	18.468	18.455	(1.000)	962811		4.00000	
$	66 Terphenyl-d14	244	21.554	21.554	(0.919)	558133		5.00000	4.951
	67 Butylbenzylphthalate	149	22.473	22.460	(0.958)	650199		5.00000	5.307
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	594121		4.00000	
*	77 Perylene-d12	264	26.159	26.147	(1.000)	517800		4.00000	
	79 Dibenzo(a,h)anthracene	278	28.956	28.943	(1.107)	740363		5.00000	5.069
	90 N-Nitrosodimethylamine	74	5.081	5.094	(0.542)	626467		10.0000	10.56

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162304S.D
Lab Smp Id: SLE0339-CAL7
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	303993	-3.82
27 Naphthalene-d8	1102073	551037	2204146	1096471	-0.51
42 Acenaphthene-d10	583826	291913	1167652	588455	0.79
59 Phenanthrene-d10	970917	485459	1941834	962811	-0.83
69 Chrysene-d12	590568	295284	1181136	594121	0.60
77 Perylene-d12	537938	268969	1075876	517800	-3.74

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.47	0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	0.00

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

REVIEW SUMMARY FOR FILE - NT1705162304S.D

Lab ID: SLE0339-CAL7
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   16-MAY-2023 20:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.963	0.000	0.9634	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

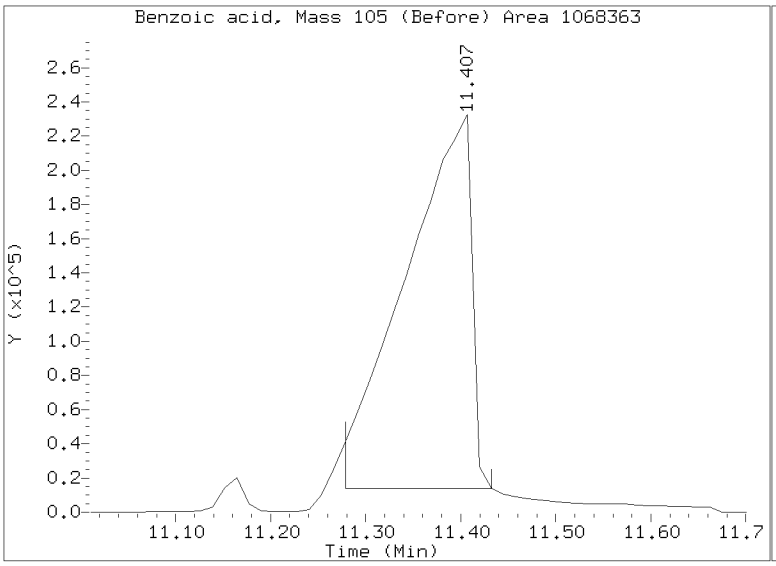
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

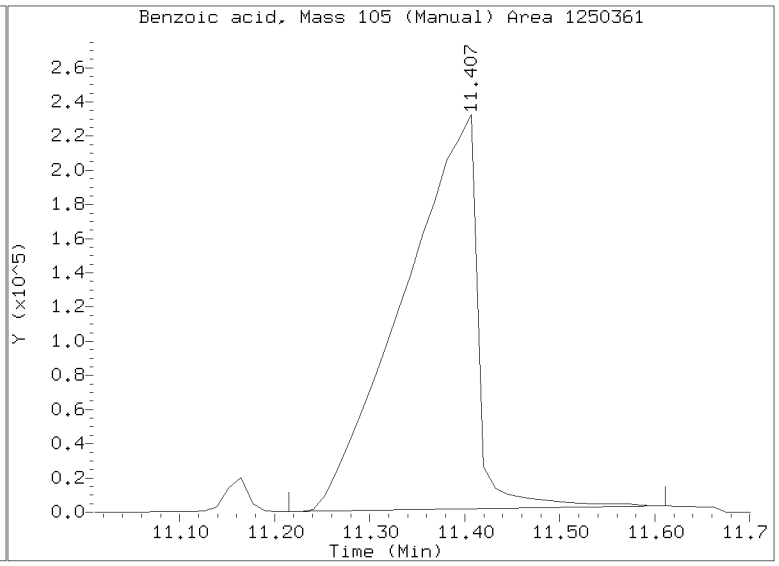
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/SIM.b/NT1705162304S.D
Injection Date: 16-MAY-2023 20:07
Lab ID:SLE0339-CAL7 Client ID:
Report Date: 05/24/2023 06:44





Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623058.D

Page 1

Date : 16-MAY-2023 20:44

Client ID:

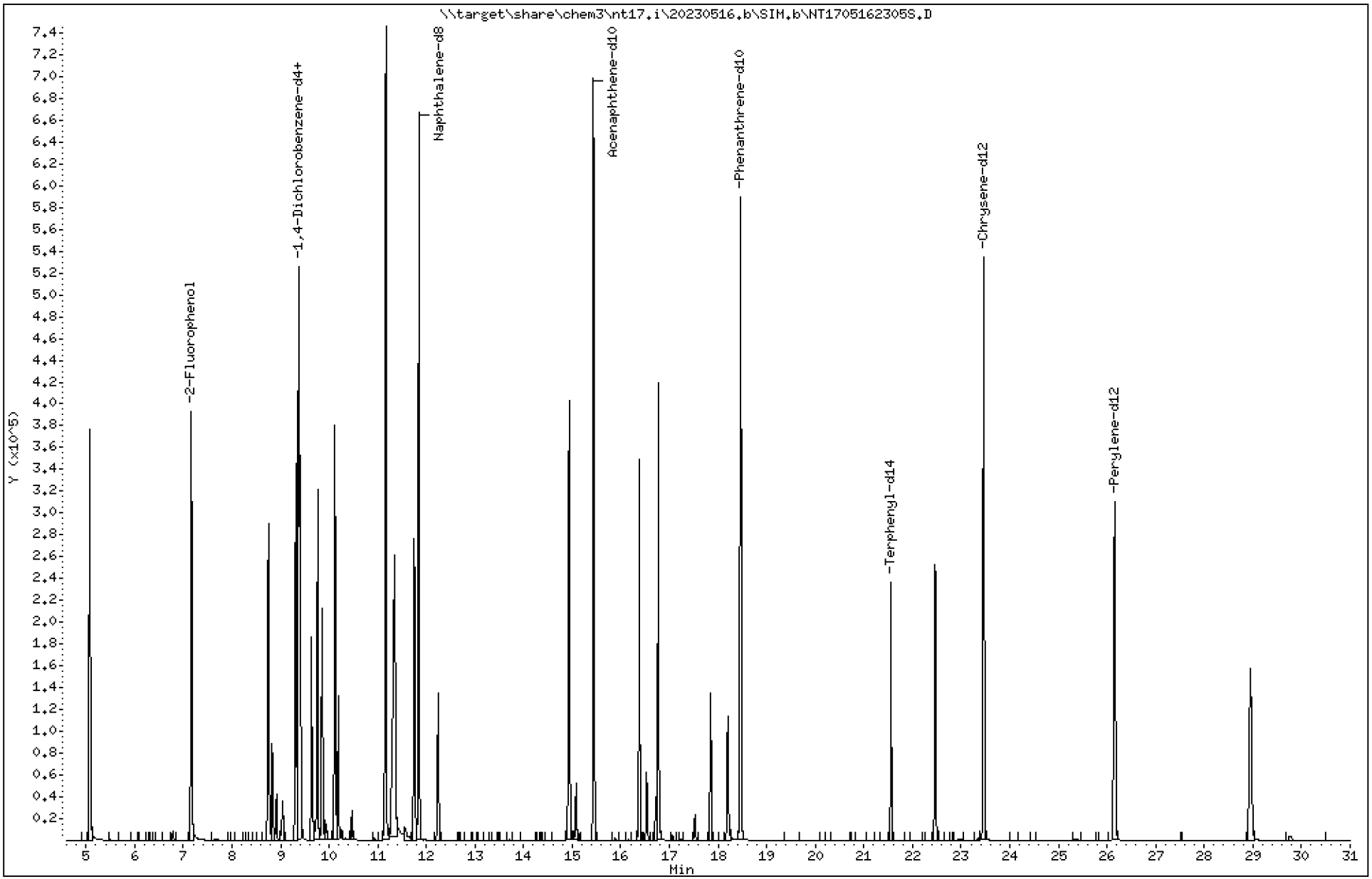
Instrument: nt17.i

Sample Info: SLE0339-CAL6

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162305S.D
Lab Smp Id: SLE0339-CAL6
Inj Date : 16-MAY-2023 20:44
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-CAL6
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 5 Calibration Sample, Level: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

								AMOUNTS	
		QUANT SIG						CAL-AMT	ON-COL
	Compounds	MASS	RT	EXP RT	REL RT	RESPONSE		(ug/mL)	(ug/mL)
$	1 2-Fluorophenol	112	7.158	7.171	(0.764)	394385		3.75000	4.169
	3 Phenol	94	8.751	8.751	(0.933)	382004		2.50000	2.710
	7 1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	309629		2.50000	2.451
*	8 1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	312779		4.00000	
	9 1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	299271		2.50000	2.431
	11 Benzyl alcohol	79	9.631	9.656	(1.027)	216903		2.50000	2.700
	12 1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	287593		2.50000	2.383
	13 2-Methylphenol	108	9.848	9.861	(1.050)	253409		2.50000	2.594
	15 4-Methylphenol	108	10.116	10.129	(1.079)	265505		2.50000	2.690
	16 N-Nitroso-di-n-propylamine	70	10.180	10.180	(1.086)	186377		2.50000	2.620
	22 2,4-Dimethylphenol	107	11.164	11.164	(0.943)	547588		5.00000	5.115
	24 Benzoic acid	105	11.355	11.356	(0.959)	579679		10.0000	8.692(M)
	26 1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	236888		2.50000	2.439
*	27 Naphthalene-d8	136	11.840	11.840	(1.000)	1112850		4.00000	
	30 Hexachlorobutadiene	225	12.235	12.235	(1.033)	127558		2.50000	2.494
	39 Dimethylphthalate	163	14.939	14.926	(0.968)	548075		2.50000	2.485
*	42 Acenaphthene-d10	162	15.436	15.436	(1.000)	600559		4.00000	
	50 Diethylphthalate	149	16.379	16.379	(1.061)	512017		2.50000	2.556
	54 N-Nitrosodiphenylamine	169	16.774	16.774	(0.908)	357299		2.50000	2.544
	57 Hexachlorobenzene	284	17.843	17.843	(0.966)	117623		2.50000	2.468
	58 Pentachlorophenol	266	18.200	18.214	(0.986)	135777		5.00000	4.831
*	59 Phenanthrene-d10	188	18.468	18.455	(1.000)	997102		4.00000	
$	66 Terphenyl-d14	244	21.554	21.554	(0.919)	298252		2.50000	2.461
	67 Butylbenzylphthalate	149	22.460	22.460	(0.958)	350134		2.50000	2.658
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	638760		4.00000	
*	77 Perylene-d12	264	26.159	26.147	(1.000)	569257		4.00000	
	79 Dibenzo(a,h)anthracene	278	28.956	28.943	(1.107)	400026		2.50000	2.491
	90 N-Nitrosodimethylamine	74	5.069	5.094	(0.541)	332375		5.00000	5.444

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162305S.D
Lab Smp Id: SLE0339-CAL6
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	312779	-1.04
27 Naphthalene-d8	1102073	551037	2204146	1112850	0.98
42 Acenaphthene-d10	583826	291913	1167652	600559	2.87
59 Phenanthrene-d10	970917	485459	1941834	997102	2.70
69 Chrysene-d12	590568	295284	1181136	638760	8.16
77 Perylene-d12	537938	268969	1075876	569257	5.82

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.47	0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	0.00

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

REVIEW SUMMARY FOR FILE - NT1705162305S.D

Lab ID: SLE0339-CAL6
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   16-MAY-2023 20:44

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.000	0.9590	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

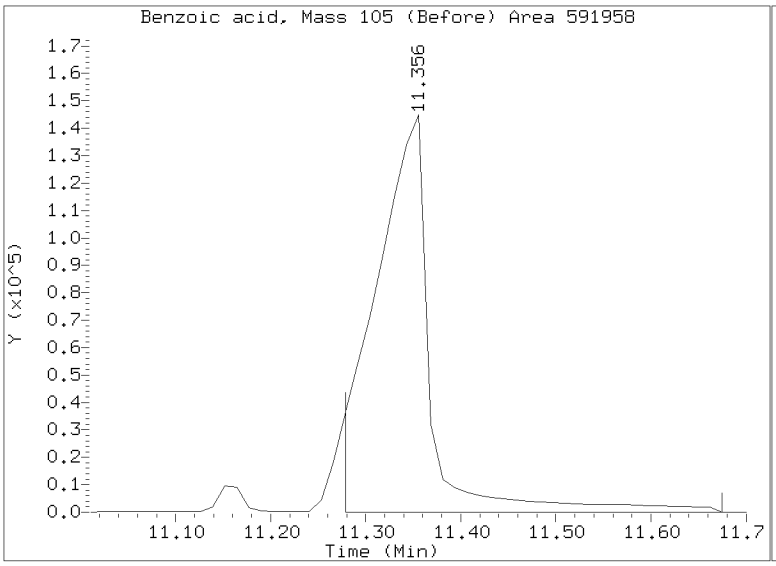
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

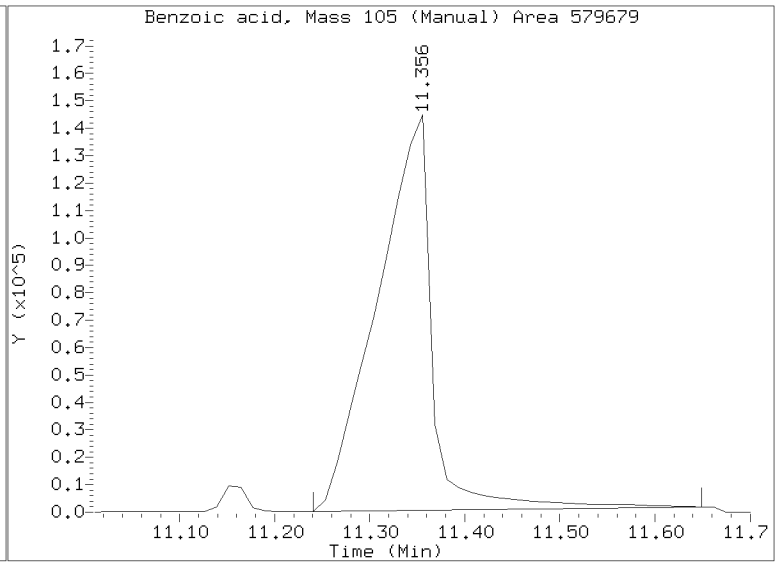
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/SIM.b/NT1705162305S.D
Injection Date: 16-MAY-2023 20:44
Lab ID:SLE0339-CAL6 Client ID:
Report Date: 05/24/2023 06:44





Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623065.D

Date : 16-MAY-2023 21:22

Client ID:

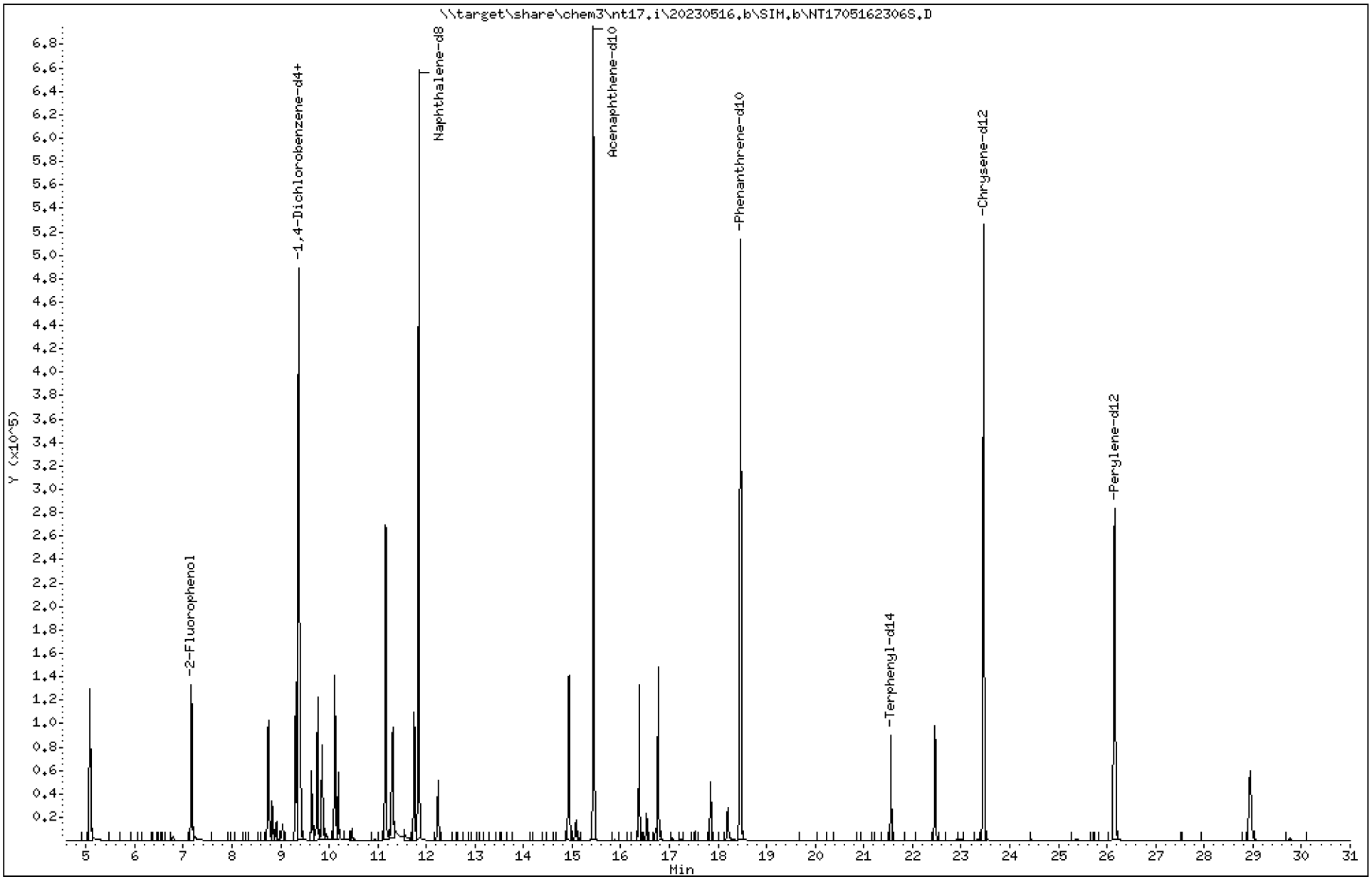
Instrument: nt17.i

Sample Info: SLE0339-CAL5

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162306S.D
Lab Smp Id: SLE0339-CAL5
Inj Date : 16-MAY-2023 21:22
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-CAL5
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 6 Calibration Sample, Level: 5
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.158	7.171	(0.764)	154867	1.50000	1.620
	3	Phenol	94	8.750	8.751	(0.933)	149693	1.00000	1.051
	7	1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	126088	1.00000	0.9875
*	8	1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	316066	4.00000	
	9	1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	122759	1.00000	0.9867
	11	Benzyl alcohol	79	9.631	9.656	(1.027)	79743	1.00000	0.9825
	12	1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	117764	1.00000	0.9657
	13	2-Methylphenol	108	9.848	9.861	(1.050)	100452	1.00000	1.018
	15	4-Methylphenol	108	10.116	10.129	(1.079)	103970	1.00000	1.042
	16	N-Nitroso-di-n-propylamine	70	10.180	10.180	(1.086)	72733	1.00000	1.012
	22	2,4-Dimethylphenol	107	11.151	11.164	(0.942)	216055	2.00000	2.038
	24	Benzoic acid	105	11.304	11.356	(0.955)	158699	4.00000	2.403(M)
	26	1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	95162	1.00000	0.9894
*	27	Naphthalene-d8	136	11.840	11.840	(1.000)	1102073	4.00000	
	30	Hexachlorobutadiene	225	12.235	12.235	(1.033)	49943	1.00000	0.9862
	39	Dimethylphthalate	163	14.939	14.926	(0.968)	217499	1.00000	1.014
*	42	Acenaphthene-d10	162	15.436	15.436	(1.000)	583826	4.00000	
	50	Diethylphthalate	149	16.379	16.379	(1.061)	200427	1.00000	1.029
	54	N-Nitrosodiphenylamine	169	16.774	16.774	(0.908)	141906	1.00000	1.037
	57	Hexachlorobenzene	284	17.843	17.843	(0.966)	45821	1.00000	0.9875
	58	Pentachlorophenol	266	18.200	18.214	(0.986)	38475	2.00000	1.454
*	59	Phenanthrene-d10	188	18.468	18.455	(1.000)	970917	4.00000	
$	66	Terphenyl-d14	244	21.554	21.554	(0.919)	110634	1.00000	0.9873
	67	Butylbenzylphthalate	149	22.460	22.460	(0.958)	125389	1.00000	1.030
*	69	Chrysene-d12	240	23.455	23.455	(1.000)	590568	4.00000	
*	77	Perylene-d12	264	26.159	26.147	(1.000)	537938	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.943	28.943	(1.106)	152776	1.00000	1.007
	90	N-Nitrosodimethylamine	74	5.081	5.094	(0.542)	130625	2.00000	2.117

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162306S.D
Lab Smp Id: SLE0339-CAL5
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	316066	0.00
27 Naphthalene-d8	1102073	551037	2204146	1102073	0.00
42 Acenaphthene-d10	583826	291913	1167652	583826	0.00
59 Phenanthrene-d10	970917	485459	1941834	970917	0.00
69 Chrysene-d12	590568	295284	1181136	590568	0.00
77 Perylene-d12	537938	268969	1075876	537938	0.00

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.47	0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	0.00

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

REVIEW SUMMARY FOR FILE - NT1705162306S.D

Lab ID: SLE0339-CAL5
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   16-MAY-2023 21:22

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.955	0.000	0.9547	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

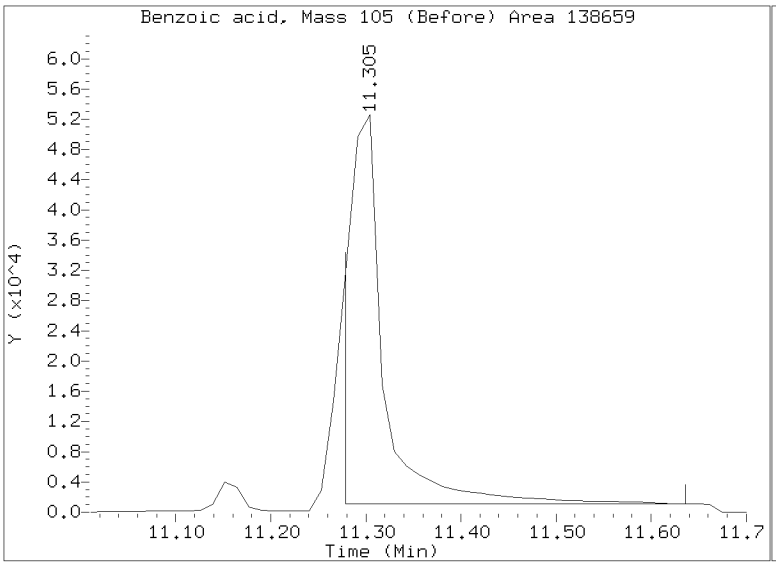
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

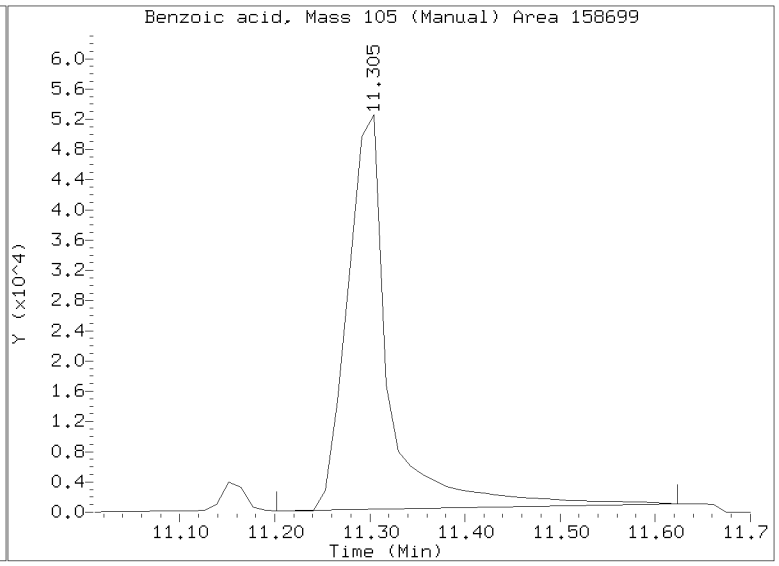
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/SIM.b/NT1705162306S.D
Injection Date: 16-MAY-2023 21:22
Lab ID:SLE0339-CAL5 Client ID:
Report Date: 05/24/2023 06:44





Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623075.D

Date : 16-MAY-2023 21:59

Client ID:

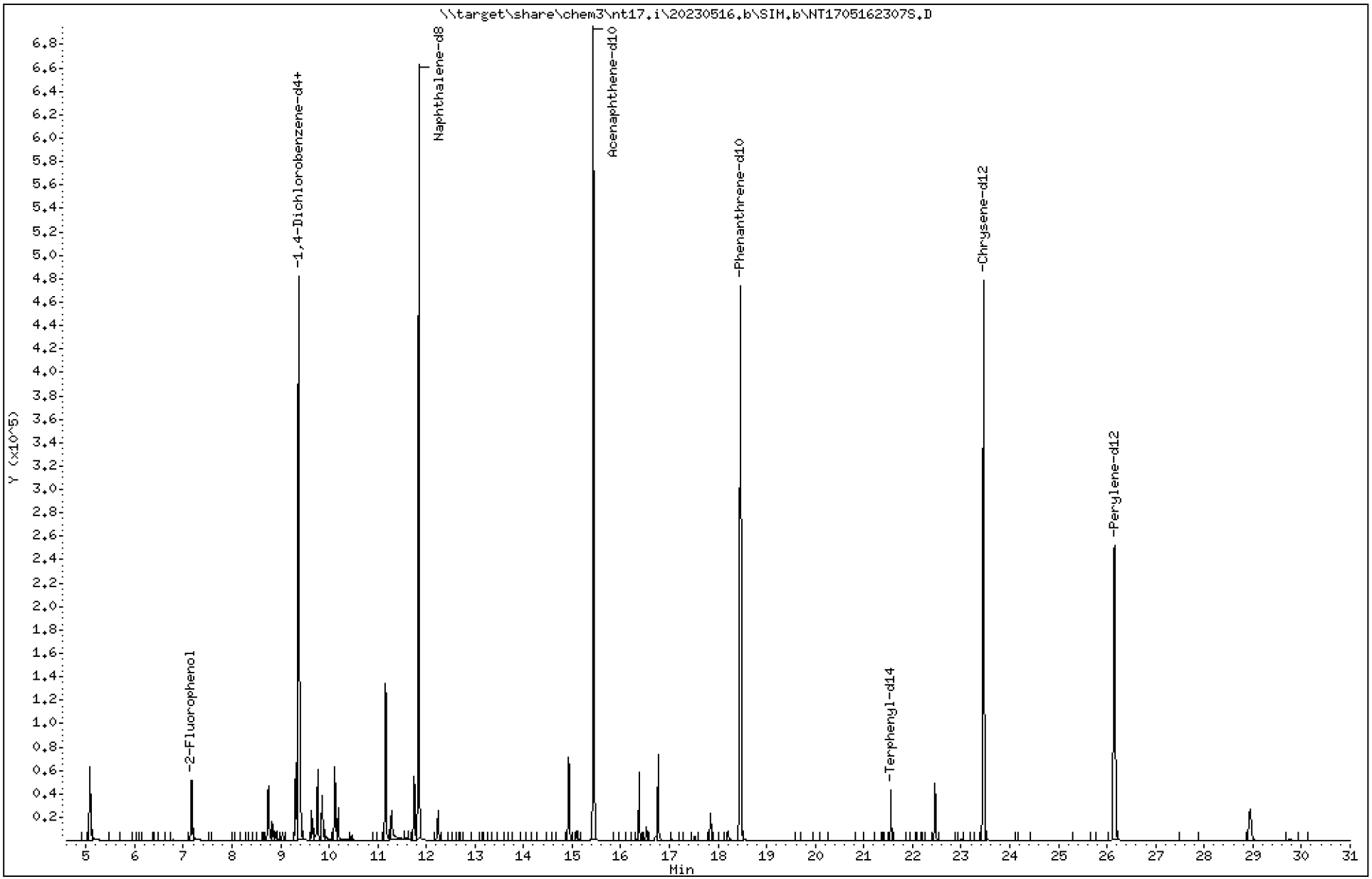
Instrument: nt17.i

Sample Info: SLE0339-CAL4

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162307S.D
Lab Smp Id: SLE0339-CAL4
Inj Date : 16-MAY-2023 21:59
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-CAL4
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 7 Calibration Sample, Level: 4
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.171	7.171	(0.765)	72039	0.75000	0.7666
	3	Phenol	94	8.751	8.751	(0.933)	71037	0.50000	0.5073
	7	1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	62721	0.50000	0.4997
*	8	1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	310689	4.00000	
	9	1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	60974	0.50000	0.4986
	11	Benzyl alcohol	79	9.643	9.656	(1.029)	41088	0.50000	0.5150
	12	1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	60643	0.50000	0.5059
	13	2-Methylphenol	108	9.848	9.861	(1.050)	48605	0.50000	0.5009
	15	4-Methylphenol	108	10.116	10.129	(1.079)	48975	0.50000	0.4994
	16	N-Nitroso-di-n-propylamine	70	10.180	10.180	(1.086)	34683	0.50000	0.4908
	22	2,4-Dimethylphenol	107	11.151	11.164	(0.942)	107131	1.00000	1.035
	24	Benzoic acid	105	11.279	11.356	(0.953)	42399	2.00000	0.6576(M)
	26	1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	47291	0.50000	0.5037
*	27	Naphthalene-d8	136	11.840	11.840	(1.000)	1075836	4.00000	
	30	Hexachlorobutadiene	225	12.235	12.235	(1.033)	24513	0.50000	0.4958
	39	Dimethylphthalate	163	14.926	14.926	(0.967)	102053	0.50000	0.4962
*	42	Acenaphthene-d10	162	15.436	15.436	(1.000)	560079	4.00000	
	50	Diethylphthalate	149	16.379	16.379	(1.061)	94056	0.50000	0.5036
	54	N-Nitrosodiphenylamine	169	16.761	16.774	(0.908)	65683	0.50000	0.5128
	57	Hexachlorobenzene	284	17.843	17.843	(0.967)	21722	0.50000	0.4999
	58	Pentachlorophenol	266	18.200	18.214	(0.986)	13401	1.00000	0.5454
*	59	Phenanthrene-d10	188	18.455	18.455	(1.000)	909163	4.00000	
$	66	Terphenyl-d14	244	21.554	21.554	(0.919)	50671	0.50000	0.4875
	67	Butylbenzylphthalate	149	22.460	22.460	(0.958)	58029	0.50000	0.5137
*	69	Chrysene-d12	240	23.455	23.455	(1.000)	547811	4.00000	
*	77	Perylene-d12	264	26.159	26.147	(1.000)	508065	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.943	28.943	(1.106)	72025	0.50000	0.5026
	90	N-Nitrosodimethylamine	74	5.081	5.094	(0.542)	62177	1.00000	1.025

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162307S.D
Lab Smp Id: SLE0339-CAL4
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	310689	-1.70
27 Naphthalene-d8	1102073	551037	2204146	1075836	-2.38
42 Acenaphthene-d10	583826	291913	1167652	560079	-4.07
59 Phenanthrene-d10	970917	485459	1941834	909163	-6.36
69 Chrysene-d12	590568	295284	1181136	547811	-7.24
77 Perylene-d12	537938	268969	1075876	508065	-5.55

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.46	-0.07
69 Chrysene-d12	23.46	22.96	23.96	23.46	0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	0.00

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

REVIEW SUMMARY FOR FILE - NT1705162307S.D

Lab ID: SLE0339-CAL4
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   16-MAY-2023 21:59

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.953	0.000	0.9526	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

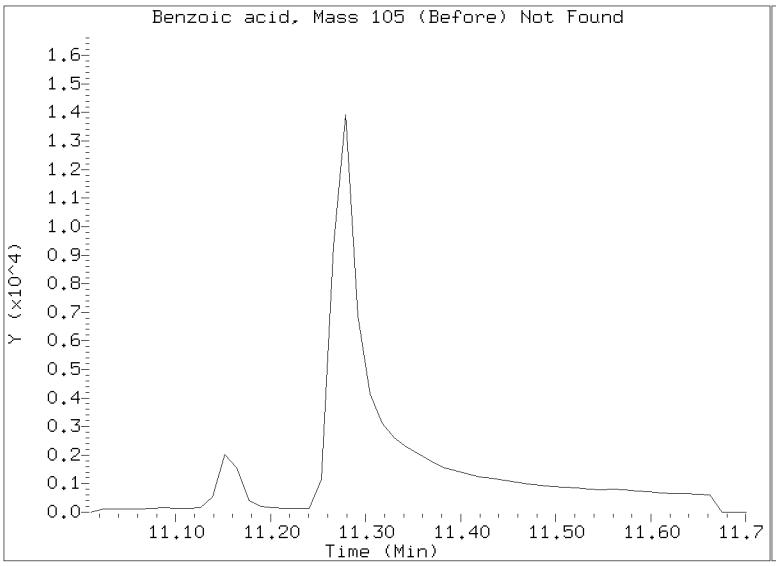
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

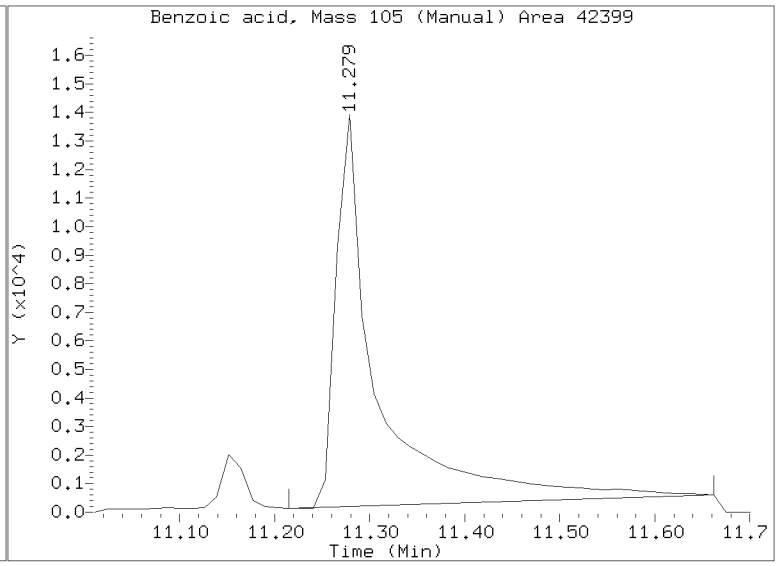
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/SIM.b/NT1705162307S.D
Injection Date: 16-MAY-2023 21:59
Lab ID:SLE0339-CAL4 Client ID:
Report Date: 05/24/2023 06:44





Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623085.D

Page 1

Date : 16-MAY-2023 22:37

Client ID:

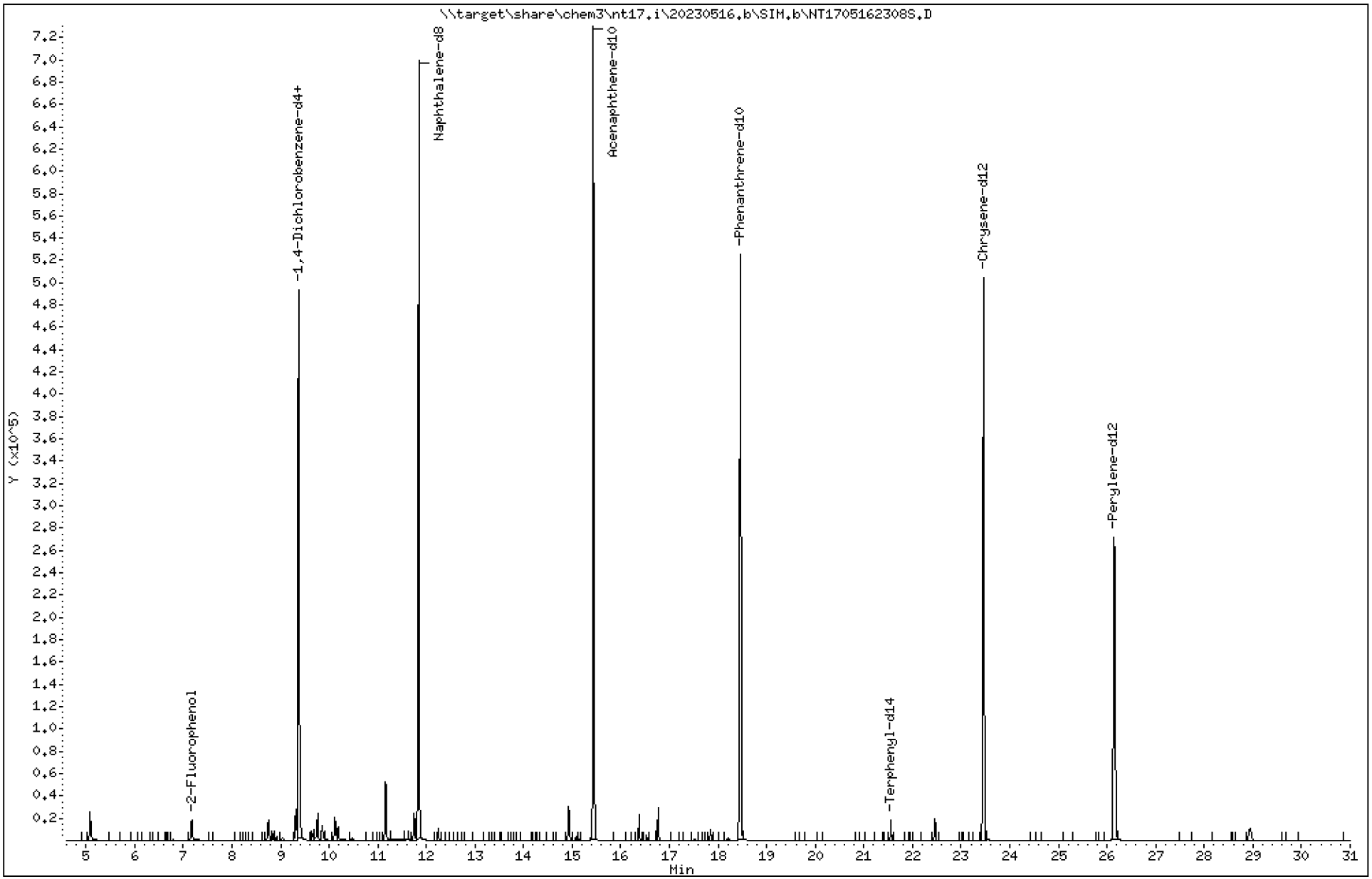
Instrument: nt17.i

Sample Info: SLE0339-CAL3

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162308S.D
Lab Smp Id: SLE0339-CAL3
Inj Date : 16-MAY-2023 22:37
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-CAL3
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 8 Calibration Sample, Level: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.171	7.171	(0.765)	27556	0.30000	0.2810
	3 Phenol	94	8.750	8.751	(0.933)	27979	0.20000	0.1915
	7 1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	26546	0.20000	0.2027
*	8 1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	324202	4.00000	
	9 1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	25906	0.20000	0.2030
	11 Benzyl alcohol	79	9.643	9.656	(1.029)	16148	0.20000	0.1940
	12 1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	24925	0.20000	0.1993
	13 2-Methylphenol	108	9.848	9.861	(1.050)	20045	0.20000	0.1980
	15 4-Methylphenol	108	10.116	10.129	(1.079)	19579	0.20000	0.1913
	16 N-Nitroso-di-n-propylamine	70	10.180	10.180	(1.086)	14608	0.20000	0.1981
	22 2,4-Dimethylphenol	107	11.151	11.164	(0.942)	44127	0.40000	0.4085
	24 Benzoic acid	105	11.355	11.356	(0.959)	4084	0.80000	0.06068(M)
	26 1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	20186	0.20000	0.2059
*	27 Naphthalene-d8	136	11.840	11.840	(1.000)	1123074	4.00000	
	30 Hexachlorobutadiene	225	12.235	12.235	(1.033)	10241	0.20000	0.1984
	39 Dimethylphthalate	163	14.926	14.926	(0.967)	43118	0.20000	0.1997
*	42 Acenaphthene-d10	162	15.436	15.436	(1.000)	587914	4.00000	
	50 Diethylphthalate	149	16.379	16.379	(1.061)	39081	0.20000	0.1993
	54 N-Nitrosodiphenylamine	169	16.761	16.774	(0.908)	27281	0.20000	0.1992
	57 Hexachlorobenzene	284	17.843	17.843	(0.967)	9193	0.20000	0.1978
	58 Pentachlorophenol	266	18.200	18.214	(0.986)	4252	0.40000	0.1624
*	59 Phenanthrene-d10	188	18.455	18.455	(1.000)	972346	4.00000	
$	66 Terphenyl-d14	244	21.554	21.554	(0.919)	21642	0.20000	0.1956
	67 Butylbenzylphthalate	149	22.460	22.460	(0.958)	23404	0.20000	0.1947
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	582965	4.00000	
*	77 Perylene-d12	264	26.146	26.147	(1.000)	529057	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.943	28.943	(1.107)	29415	0.20000	0.1971
	90 N-Nitrosodimethylamine	74	5.081	5.094	(0.542)	24605	0.40000	0.3888

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162308S.D
Lab Smp Id: SLE0339-CAL3
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	324202	2.57
27 Naphthalene-d8	1102073	551037	2204146	1123074	1.91
42 Acenaphthene-d10	583826	291913	1167652	587914	0.70
59 Phenanthrene-d10	970917	485459	1941834	972346	0.15
69 Chrysene-d12	590568	295284	1181136	582965	-1.29
77 Perylene-d12	537938	268969	1075876	529057	-1.65

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.46	-0.07
69 Chrysene-d12	23.46	22.96	23.96	23.46	0.00
77 Perylene-d12	26.16	25.66	26.66	26.15	-0.05

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

REVIEW SUMMARY FOR FILE - NT1705162308S.D

Lab ID: SLE0339-CAL3
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   16-MAY-2023 22:37

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.959	0.000	0.9590	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

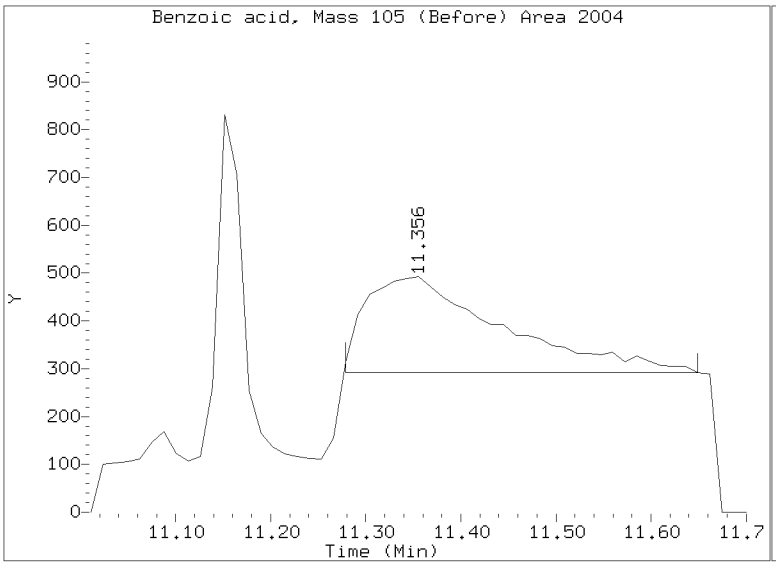
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

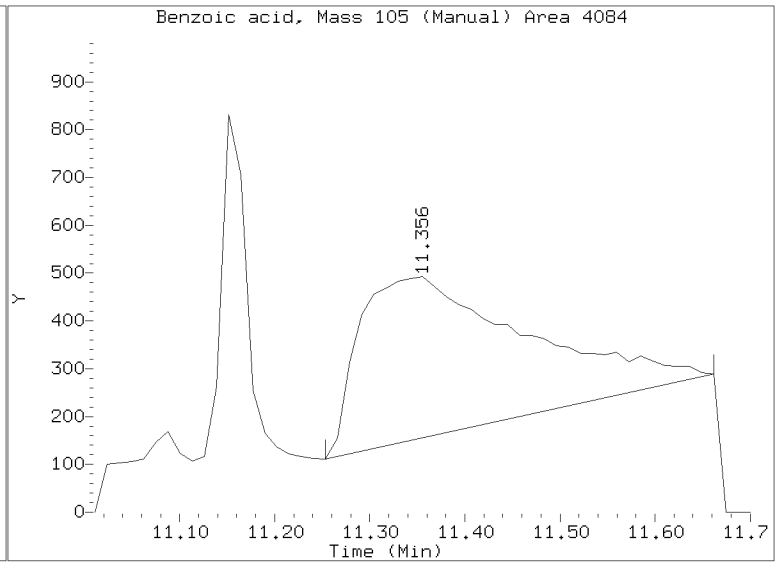
Exception: 1,2,4-Trichlorobenzene 0.0010

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

Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/SIM.b/NT1705162308S.D
Injection Date: 16-MAY-2023 22:37
Lab ID:SLE0339-CAL3 Client ID:
Report Date: 05/24/2023 06:44





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Date : 16-MAY-2023 23:14

Client ID:

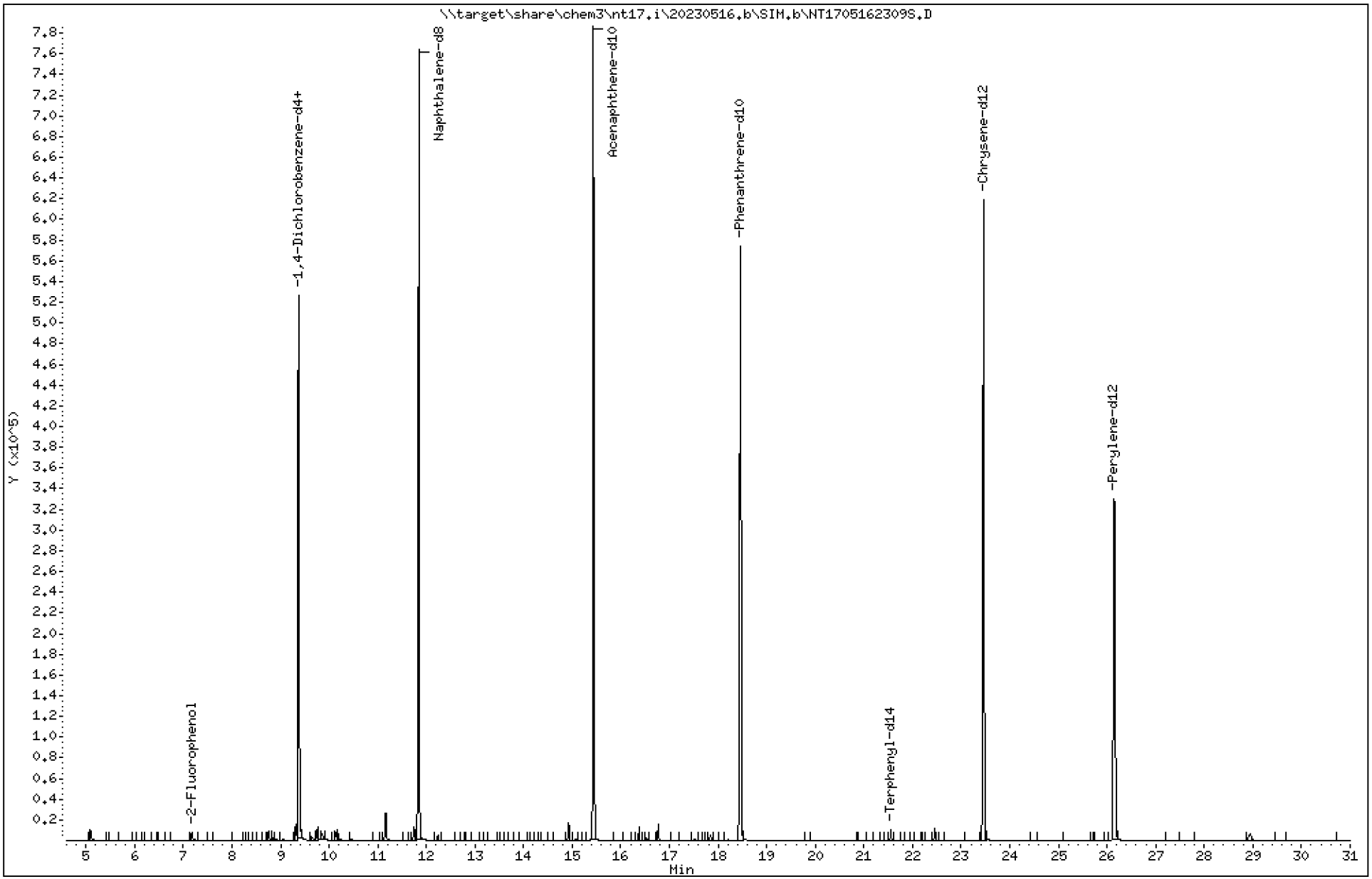
Instrument: nt17.i

Sample Info: SLE0339-CAL2

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162309S.D
Lab Smp Id: SLE0339-CAL2
Inj Date : 16-MAY-2023 23:14
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-CAL2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 9 Calibration Sample, Level: 2
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.171	7.171	(0.765)	13379	0.15000	0.1291
	3	Phenol	94	8.750	8.751	(0.933)	14562	0.10000	0.09432
	7	1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	14619	0.10000	0.1056
*	8	1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	342586	4.00000	
	9	1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	14178	0.10000	0.1051
	11	Benzyl alcohol	79	9.643	9.656	(1.029)	8165	0.10000	0.09281
	12	1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	15009	0.10000	0.1136
	13	2-Methylphenol	108	9.861	9.861	(1.052)	10680	0.10000	0.09982
	15	4-Methylphenol	108	10.129	10.129	(1.080)	10066	0.10000	0.09309
	16	N-Nitroso-di-n-propylamine	70	10.180	10.180	(1.086)	7678	0.10000	0.09853
	22	2,4-Dimethylphenol	107	11.151	11.164	(0.942)	23752	0.20000	0.2041
	24	Benzoic acid	105	Compound Not Detected.					
	26	1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	11061	0.10000	0.1048
*	27	Naphthalene-d8	136	11.840	11.840	(1.000)	1209699	4.00000	
	30	Hexachlorobutadiene	225	12.235	12.235	(1.033)	5563	0.10000	0.1001
	39	Dimethylphthalate	163	14.926	14.926	(0.967)	23825	0.10000	0.1021
*	42	Acenaphthene-d10	162	15.436	15.436	(1.000)	635389	4.00000	
	50	Diethylphthalate	149	16.379	16.379	(1.061)	21298	0.10000	0.1005
	54	N-Nitrosodiphenylamine	169	16.761	16.774	(0.908)	15309	0.10000	0.1009
	57	Hexachlorobenzene	284	17.843	17.843	(0.967)	5120	0.10000	0.09948
	58	Pentachlorophenol	266	18.200	18.214	(0.986)	2234	0.20000	0.07708
*	59	Phenanthrene-d10	188	18.455	18.455	(1.000)	1076905	4.00000	
$	66	Terphenyl-d14	244	21.554	21.554	(0.919)	12859	0.10000	0.09758
	67	Butylbenzylphthalate	149	22.460	22.460	(0.958)	13484	0.10000	0.09416
*	69	Chrysene-d12	240	23.455	23.455	(1.000)	694468	4.00000	
*	77	Perylene-d12	264	26.159	26.147	(1.000)	649331	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.943	28.943	(1.106)	17990	0.10000	0.09823
	90	N-Nitrosodimethylamine	74	5.081	5.094	(0.542)	12481	0.20000	0.1866

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162309S.D
Lab Smp Id: SLE0339-CAL2
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	342586	8.39
27 Naphthalene-d8	1102073	551037	2204146	1209699	9.77
42 Acenaphthene-d10	583826	291913	1167652	635389	8.83
59 Phenanthrene-d10	970917	485459	1941834	1076905	10.92
69 Chrysene-d12	590568	295284	1181136	694468	17.59
77 Perylene-d12	537938	268969	1075876	649331	20.71

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.46	-0.07
69 Chrysene-d12	23.46	22.96	23.96	23.46	0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	0.00

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

REVIEW SUMMARY FOR FILE - NT1705162309S.D

Lab ID: SLE0339-CAL2
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   16-MAY-2023 23:14

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1705162310S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623105.D

Page 1

Date : 16-MAY-2023 23:51

Client ID:

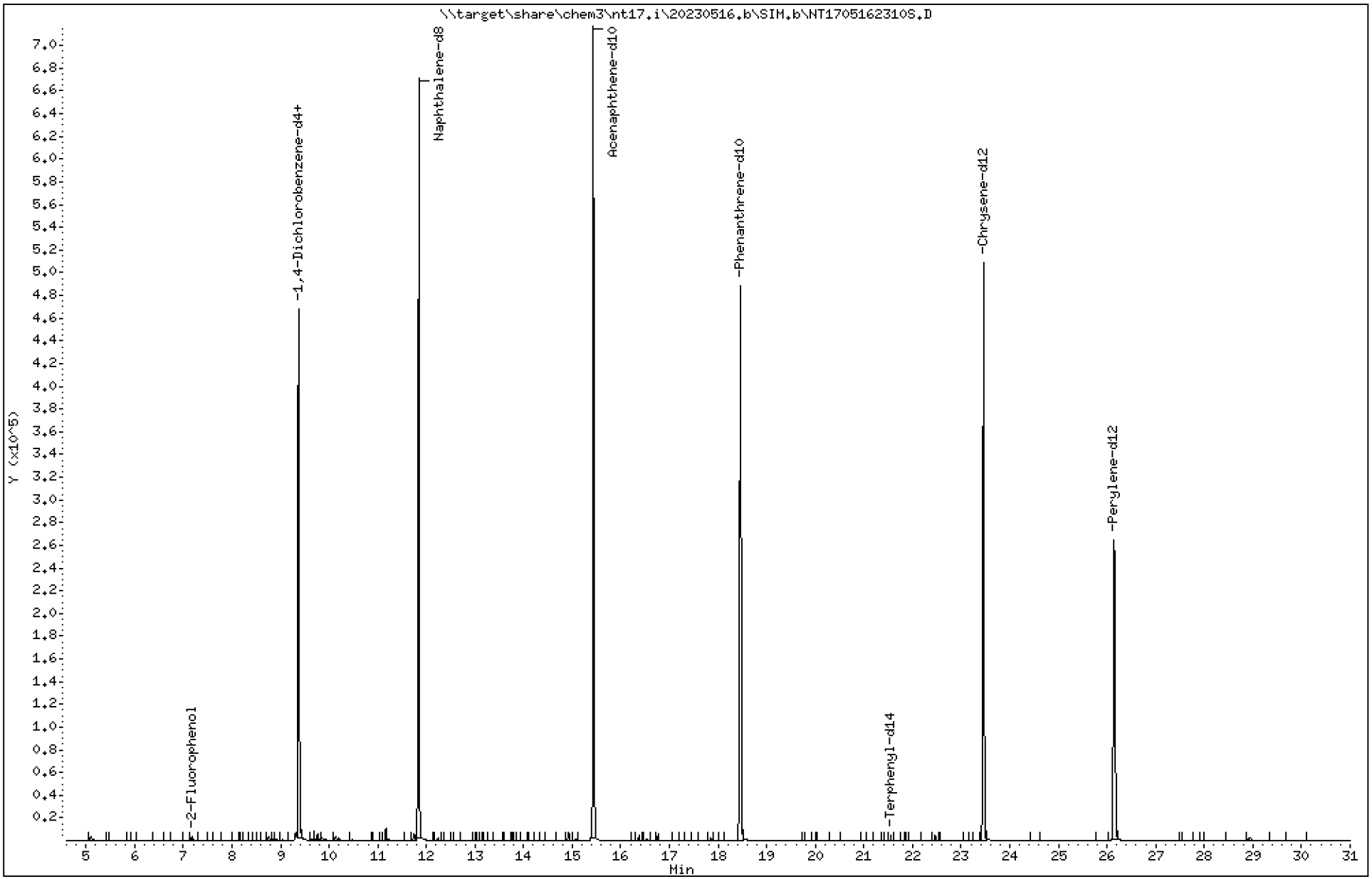
Instrument: nt17.i

Sample Info: SLE0339-CAL1

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162310S.D
Lab Smp Id: SLE0339-CAL1
Inj Date : 16-MAY-2023 23:51
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-CAL1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 10 Calibration Sample, Level: 1
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	AMOUNTS CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1 2-Fluorophenol	112	7.171	7.171	(0.765)	5563	0.07500	0.05793
	3 Phenol	94	8.751	8.751	(0.933)	5994	0.05000	0.04189
	7 1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	6725	0.05000	0.05243
*	8 1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	317514	4.00000	
	9 1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	6712	0.05000	0.05370
	11 Benzyl alcohol	79	9.656	9.656	(1.030)	3172	0.05000	0.03890(M)
	12 1,2-Dichlorobenzene	146	9.759	9.759	(1.041)	6324	0.05000	0.05162
	13 2-Methylphenol	108	9.861	9.861	(1.052)	4687	0.05000	0.04727
	15 4-Methylphenol	108	10.129	10.129	(1.080)	4202	0.05000	0.04193
	16 N-Nitroso-di-n-propylamine	70	10.180	10.180	(1.086)	3304	0.05000	0.04575
	22 2,4-Dimethylphenol	107	11.164	11.164	(0.943)	10101	0.10000	0.09580
	24 Benzoic acid	105	Compound Not Detected.					
	26 1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	5060	0.05000	0.05290
*	27 Naphthalene-d8	136	11.840	11.840	(1.000)	1096096	4.00000	
	30 Hexachlorobutadiene	225	12.235	12.235	(1.033)	2558	0.05000	0.05078
	39 Dimethylphthalate	163	14.926	14.926	(0.967)	11031	0.05000	0.05290
*	42 Acenaphthene-d10	162	15.436	15.436	(1.000)	567814	4.00000	
	50 Diethylphthalate	149	16.379	16.379	(1.061)	9182	0.05000	0.04849
	54 N-Nitrosodiphenylamine	169	16.774	16.774	(0.909)	6213	0.05000	0.04769
	57 Hexachlorobenzene	284	17.843	17.843	(0.967)	2246	0.05000	0.05082
	58 Pentachlorophenol	266	18.213	18.214	(0.987)	506	0.10000	0.02034(M)
*	59 Phenanthrene-d10	188	18.455	18.455	(1.000)	924770	4.00000	
$	66 Terphenyl-d14	244	21.554	21.554	(0.919)	6036	0.05000	0.05676
	67 Butylbenzylphthalate	149	22.460	22.460	(0.958)	5212	0.05000	0.04510
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	560403	4.00000	
*	77 Perylene-d12	264	26.147	26.147	(1.000)	515224	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.943	28.943	(1.107)	7129	0.05000	0.04906
	90 N-Nitrosodimethylamine	74	5.094	5.094	(0.543)	5227	0.10000	0.08433

QC Flag Legend

M - Compound response manually integrated.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162310S.D
Lab Smp Id: SLE0339-CAL1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	317514	0.46
27 Naphthalene-d8	1102073	551037	2204146	1096096	-0.54
42 Acenaphthene-d10	583826	291913	1167652	567814	-2.74
59 Phenanthrene-d10	970917	485459	1941834	924770	-4.75
69 Chrysene-d12	590568	295284	1181136	560403	-5.11
77 Perylene-d12	537938	268969	1075876	515224	-4.22

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.46	-0.07
69 Chrysene-d12	23.46	22.96	23.96	23.46	0.00
77 Perylene-d12	26.16	25.66	26.66	26.15	-0.05

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

REVIEW SUMMARY FOR FILE - NT1705162310S.D

Lab ID: SLE0339-CAL1
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   16-MAY-2023 23:51

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1705162310S.D

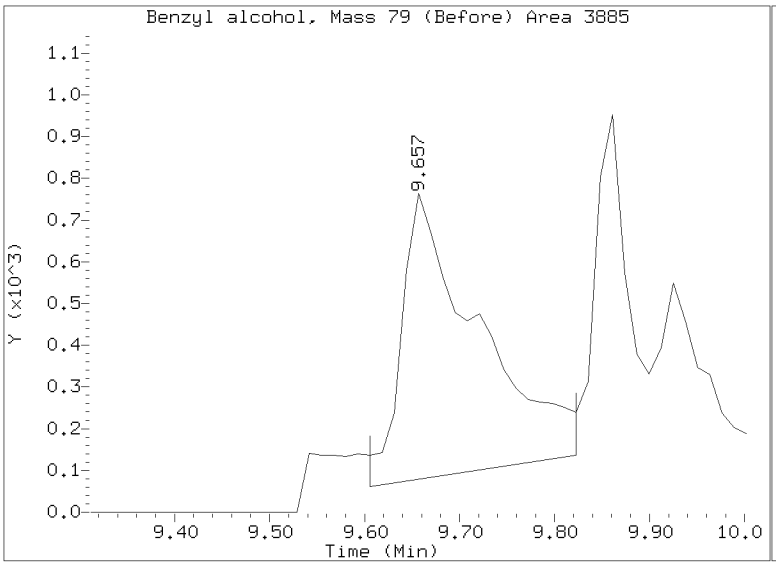
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

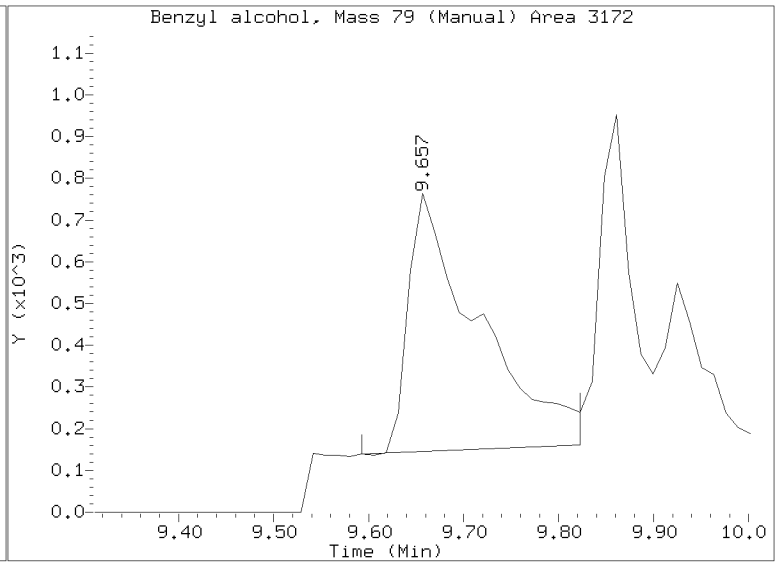
Exception: 1,2,4-Trichlorobenzene 0.0010

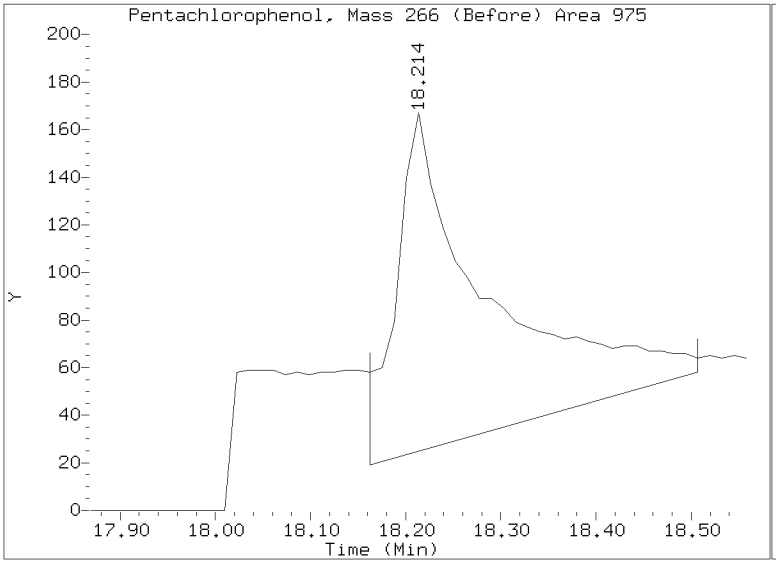
* Only compounds listed in the work order have been verified by the analyst *

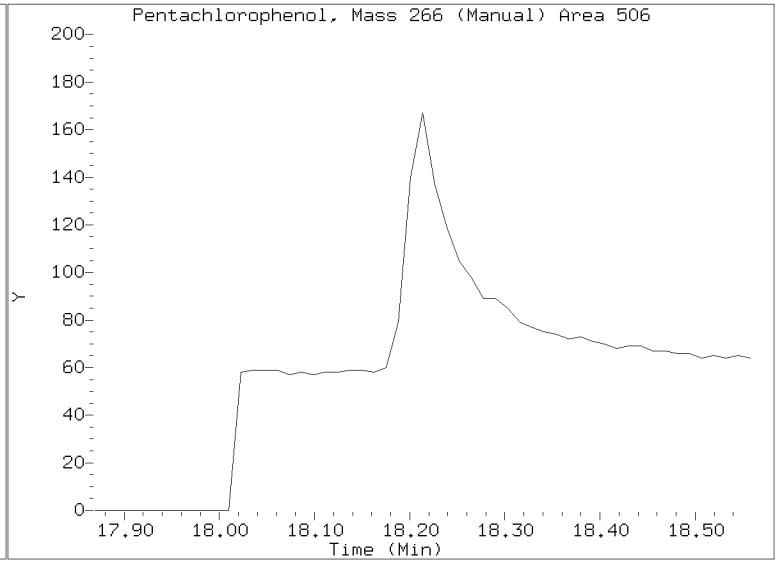
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230516.b/SIM.b/NT1705162310S.D
Injection Date: 16-MAY-2023 23:51
Lab ID:SLE0339-CAL1 Client ID:
Report Date: 05/24/2023 06:45









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Date : 17-MAY-2023 00:29

Client ID:

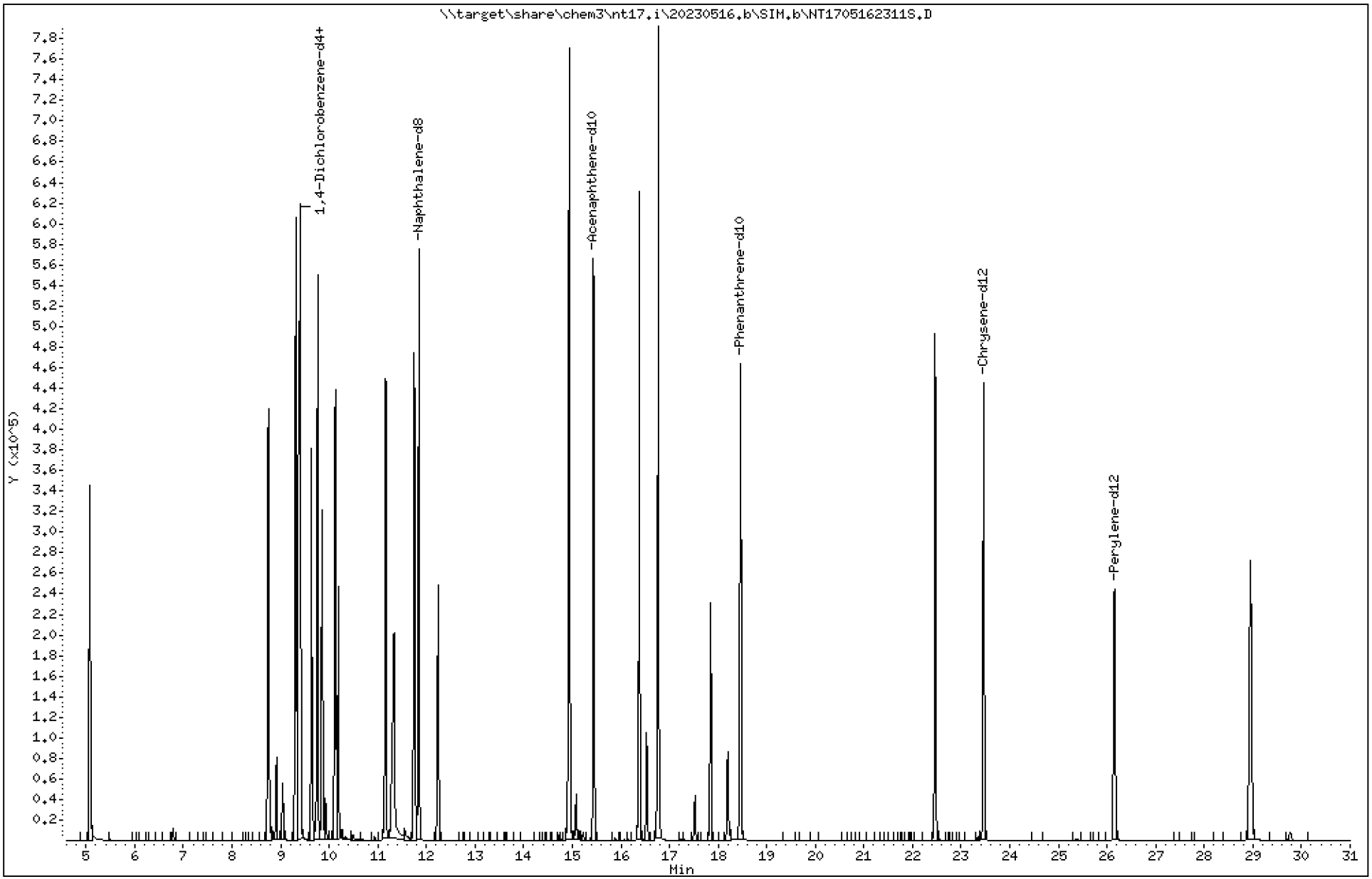
Instrument: nt17.i

Sample Info: SLE0339-SCV1

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

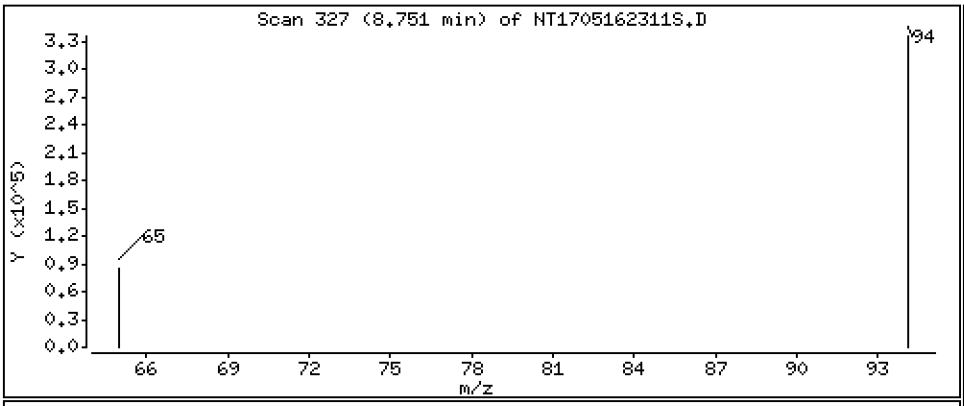
Operator: JGR

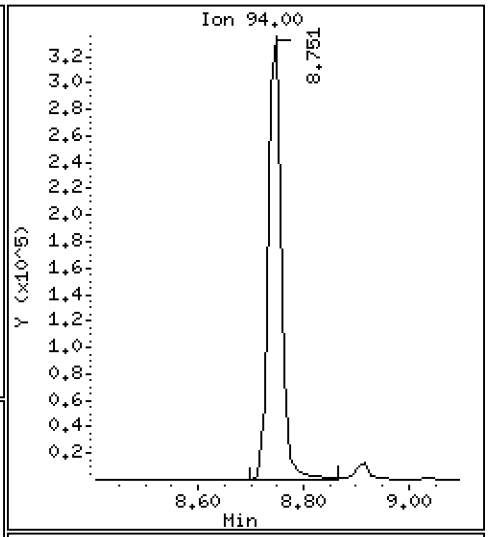
Column phase: ZB-5msi

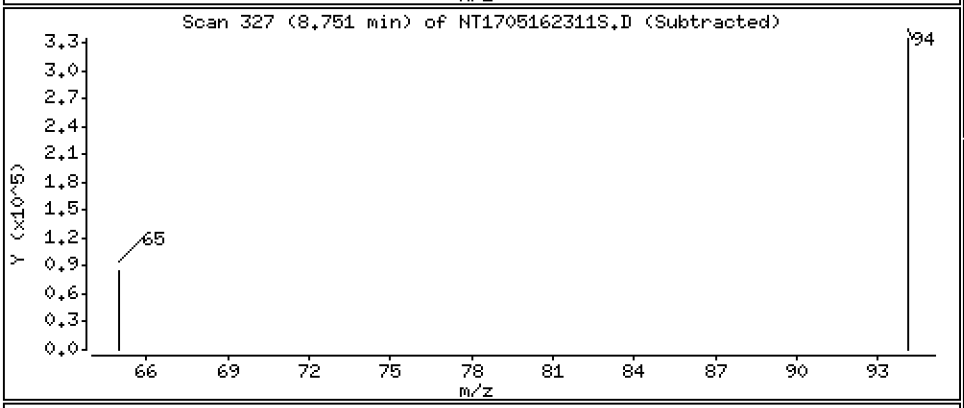
Column diameter: 0.25

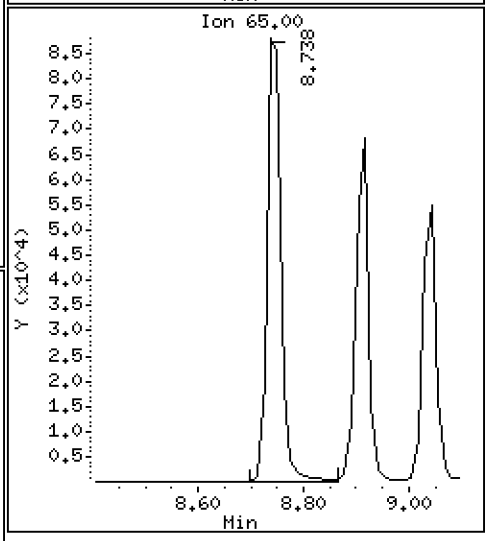
3 Phenol

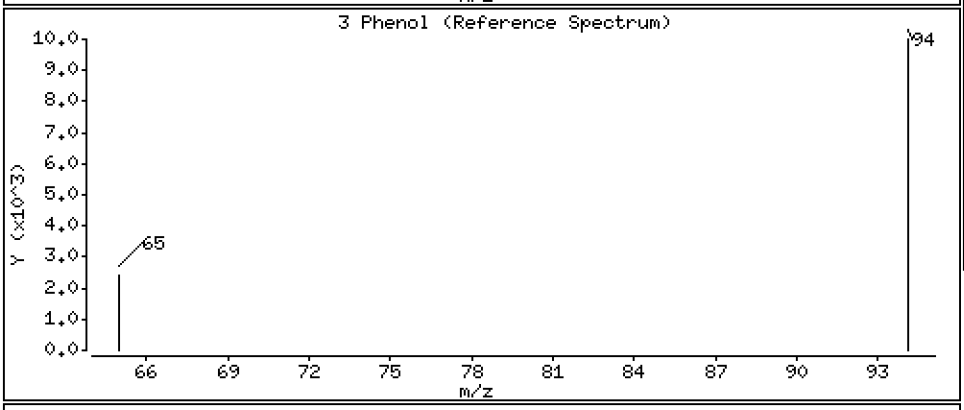
Concentration: 4.884 ug/mL

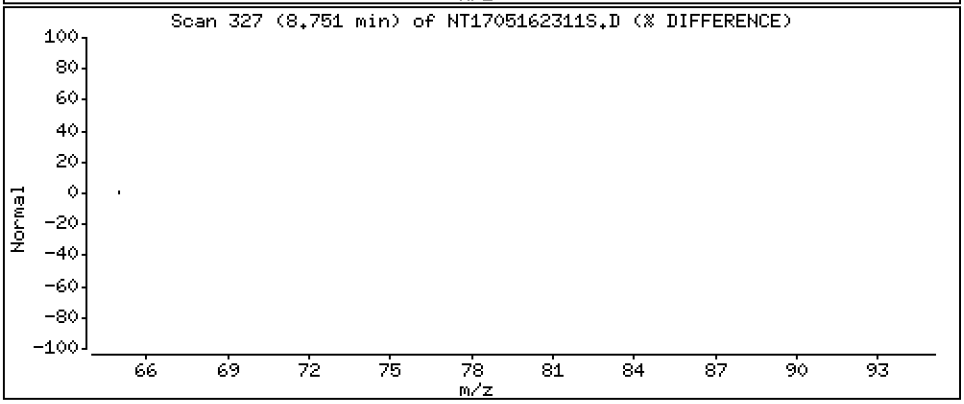












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

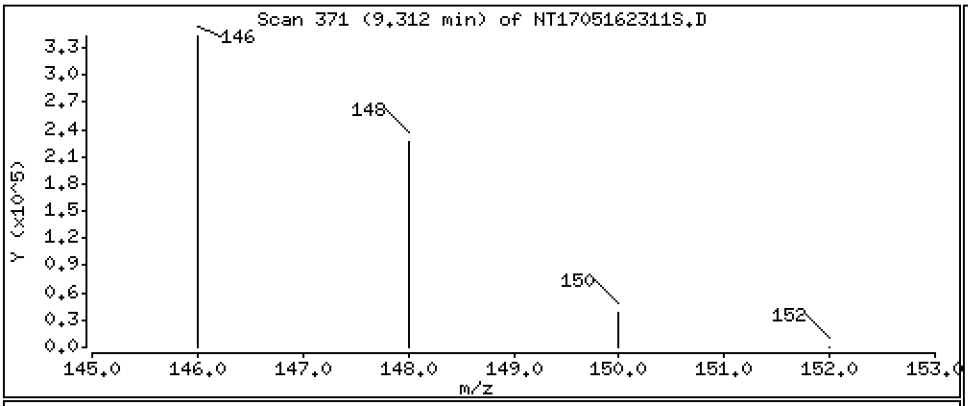
Operator: JGR

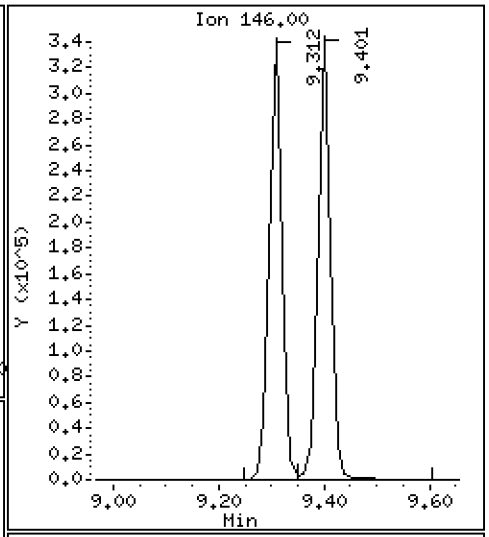
Column phase: ZB-5msi

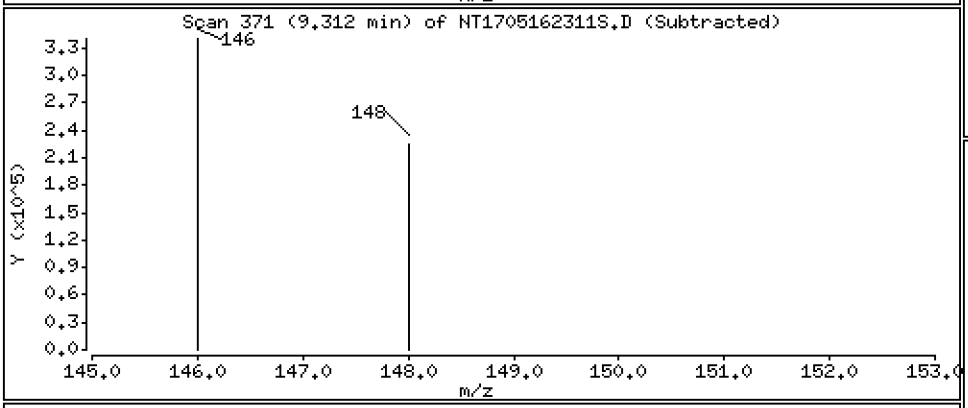
Column diameter: 0.25

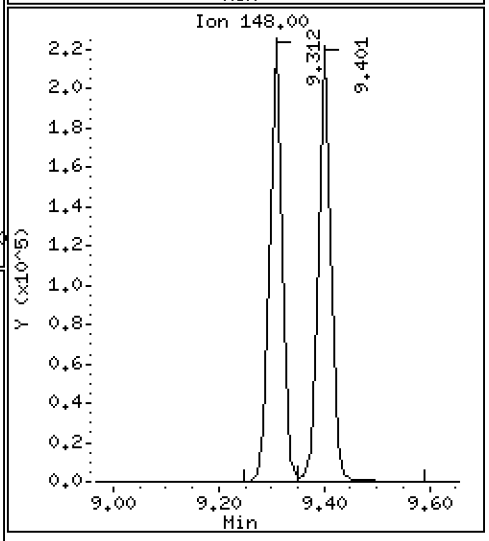
7 1,3-Dichlorobenzene

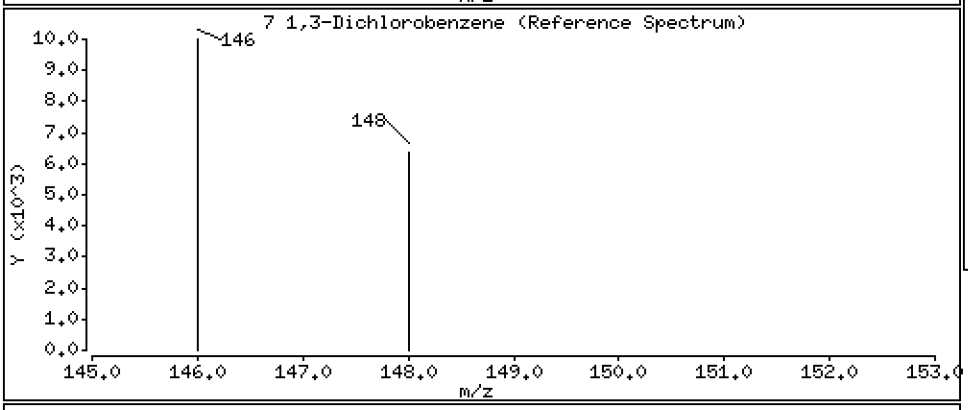
Concentration: 5.087 ug/mL

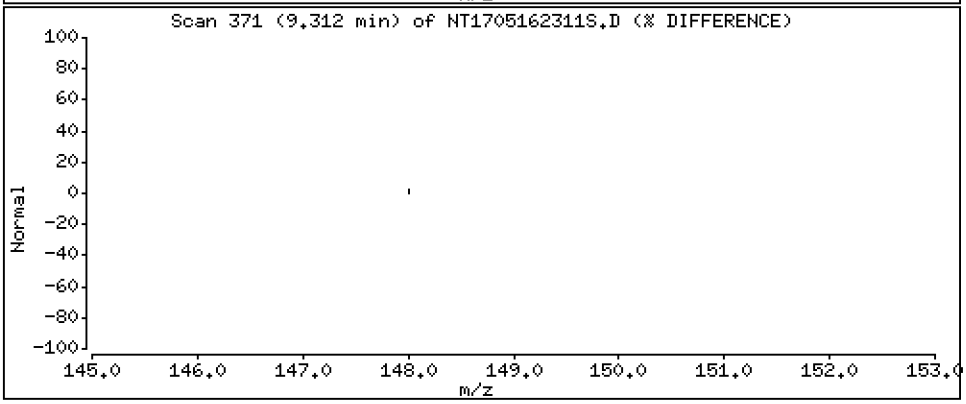












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

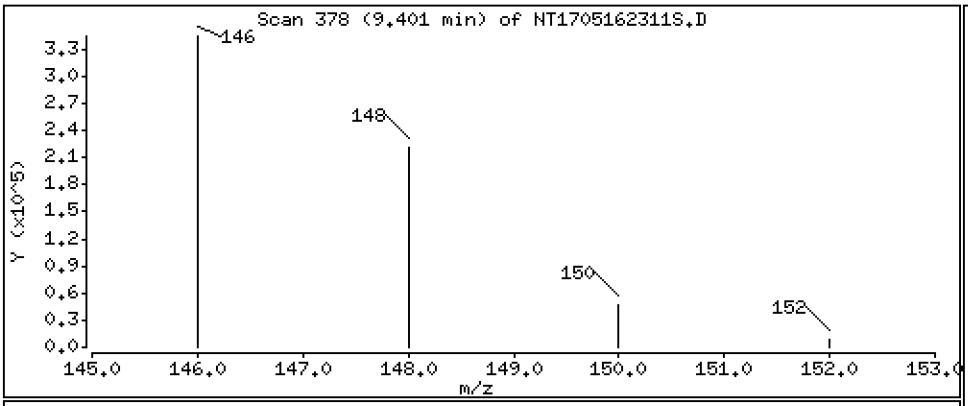
Operator: JGR

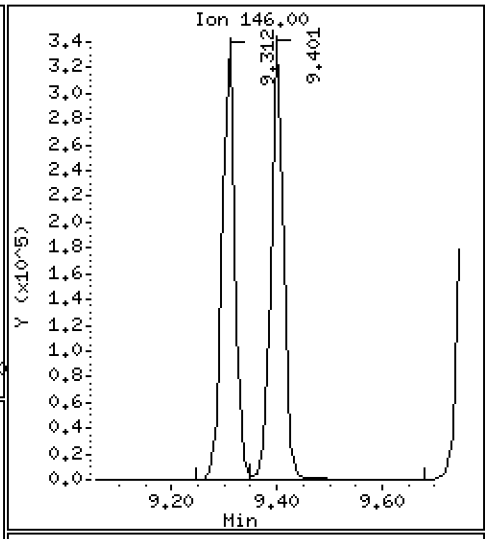
Column phase: ZB-5msi

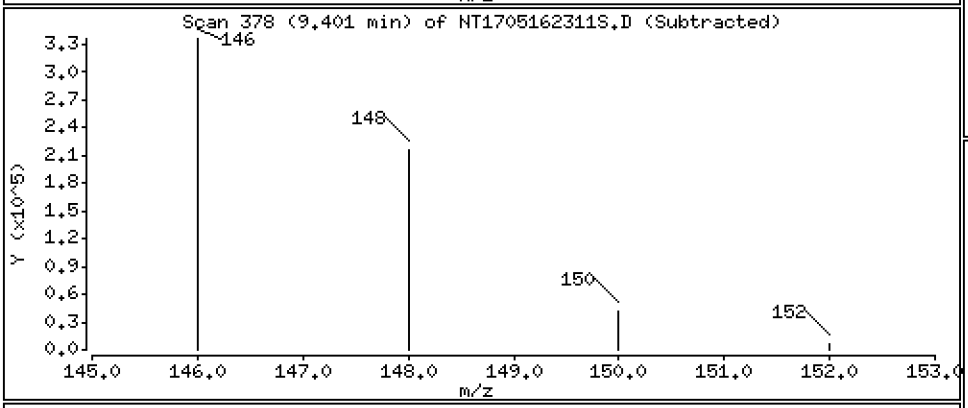
Column diameter: 0.25

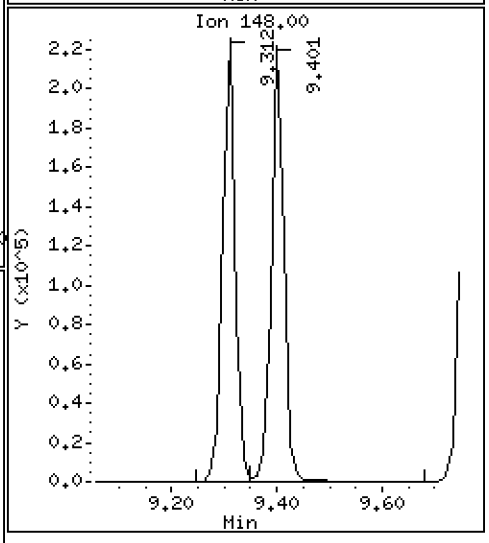
9 1,4-Dichlorobenzene

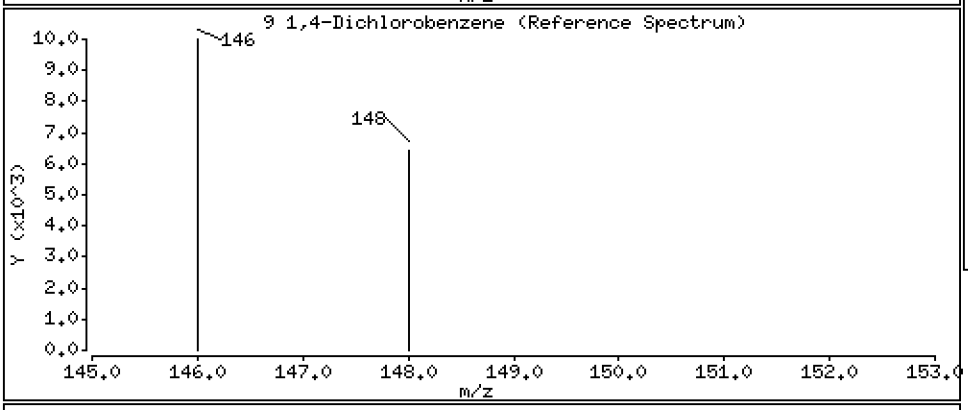
Concentration: 5.132 ug/mL

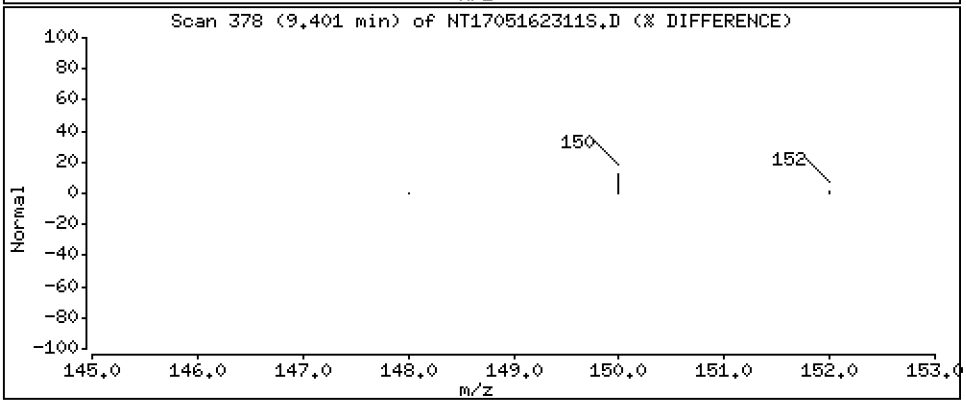












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

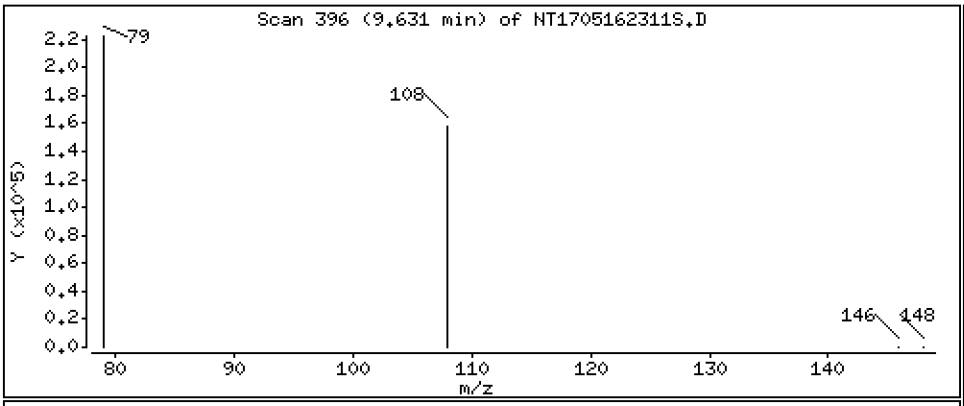
Operator: JGR

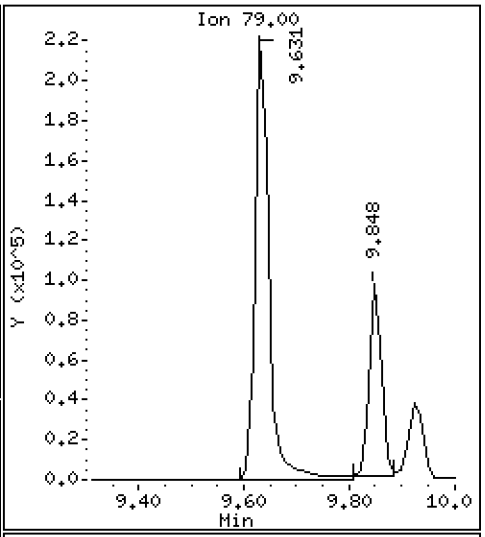
Column phase: ZB-5msi

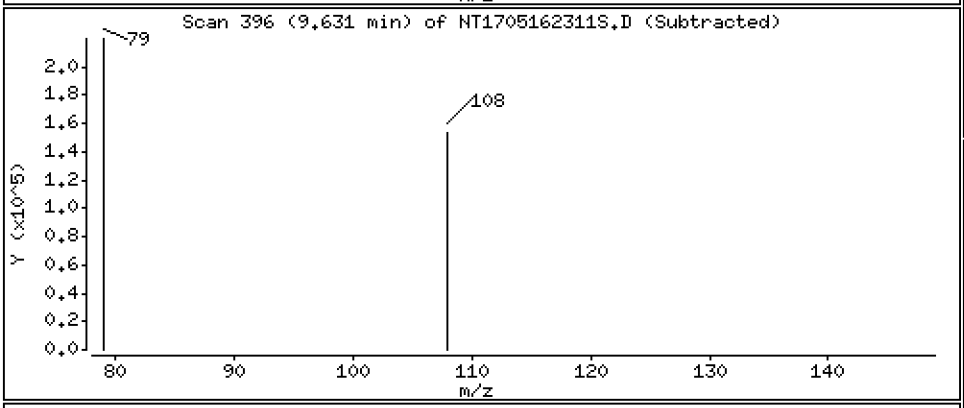
Column diameter: 0.25

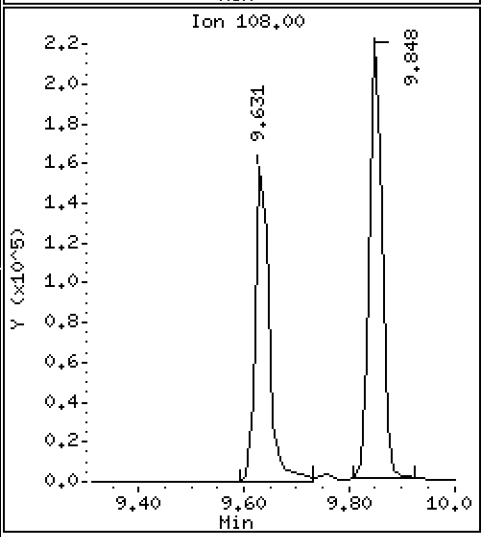
11 Benzyl alcohol

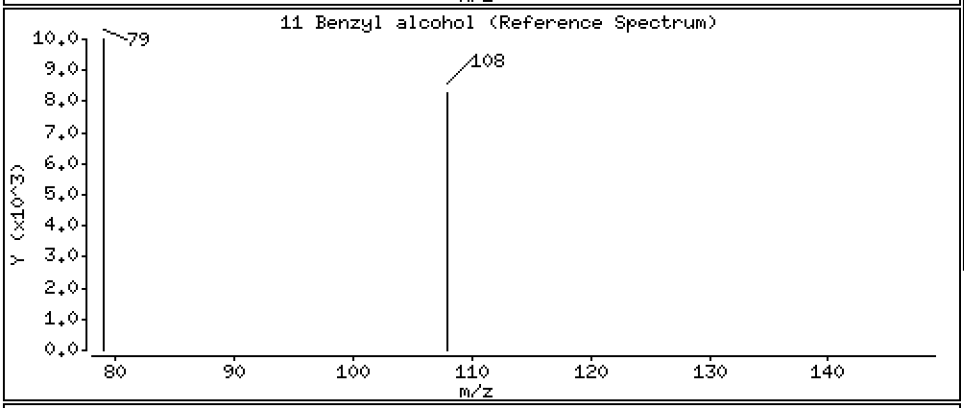
Concentration: 5.706 ug/mL

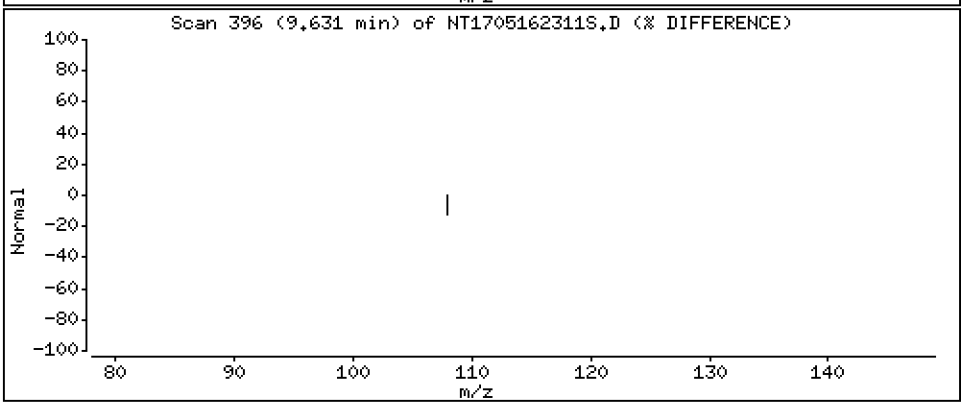












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

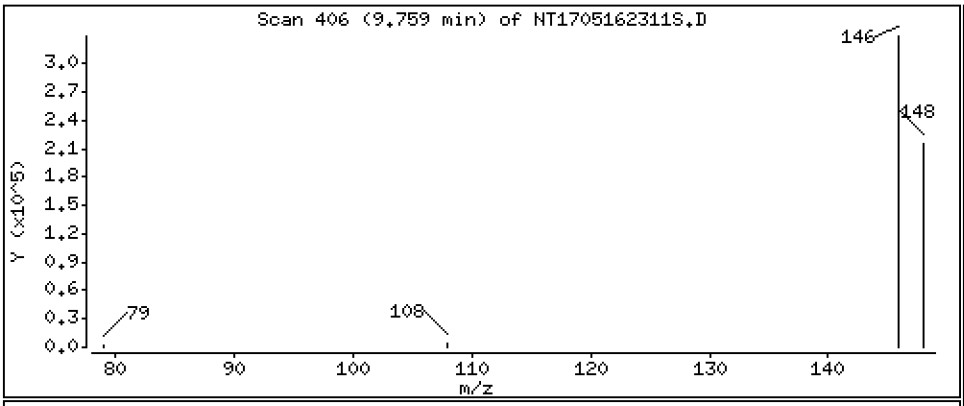
Operator: JGR

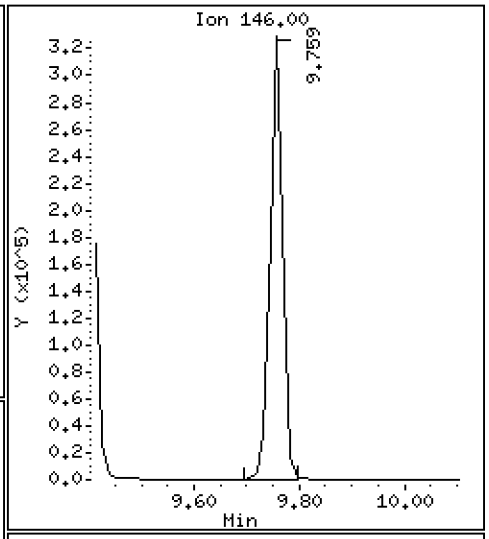
Column phase: ZB-5msi

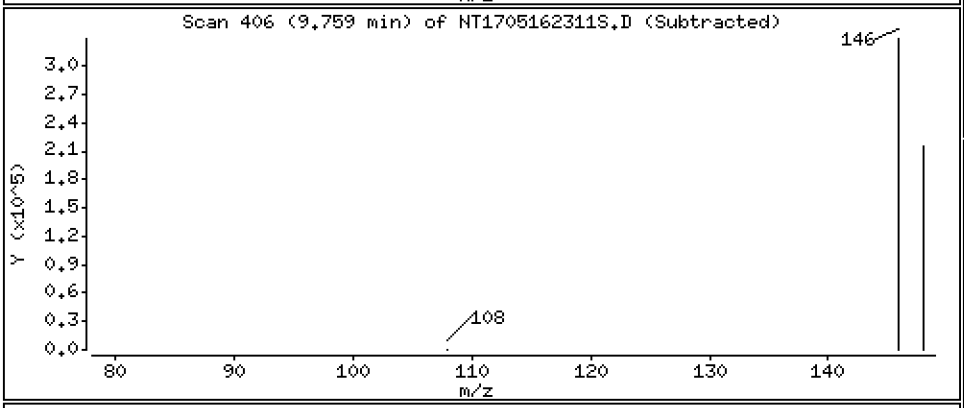
Column diameter: 0.25

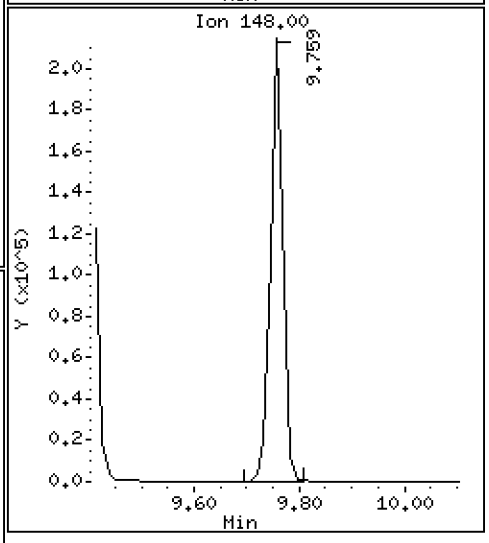
12 1,2-Dichlorobenzene

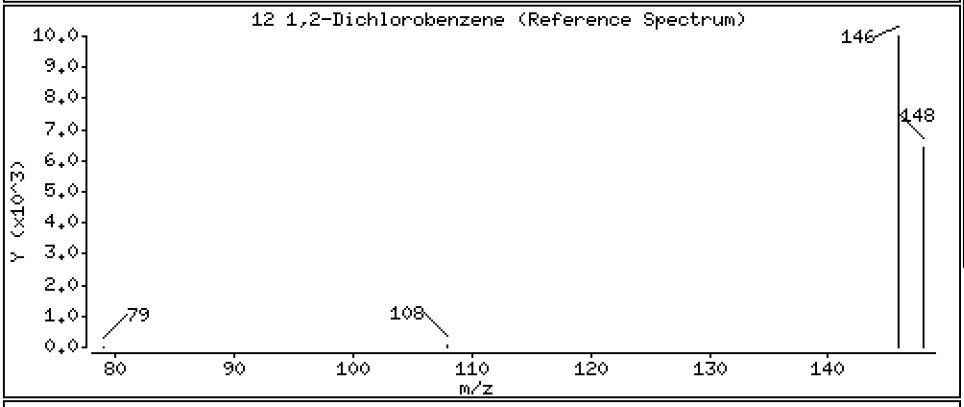
Concentration: 5.007 ug/mL

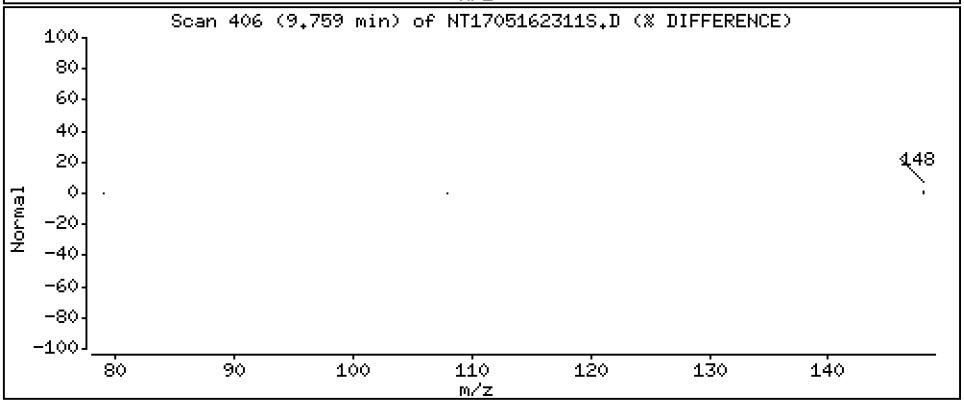












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

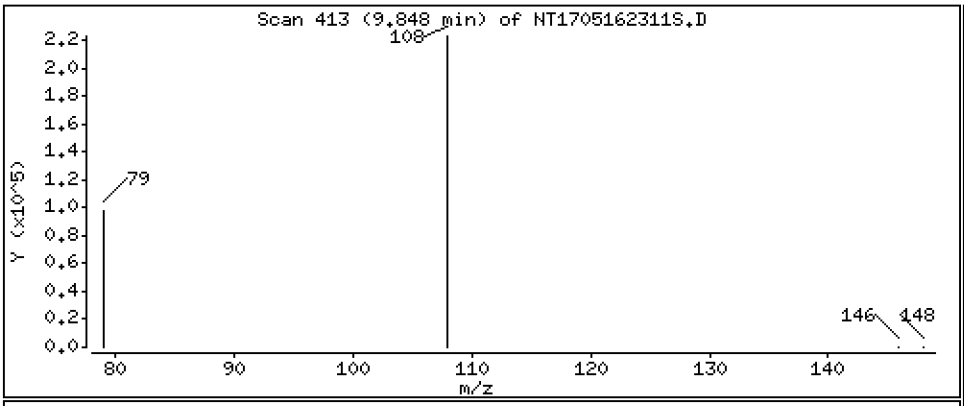
Operator: JGR

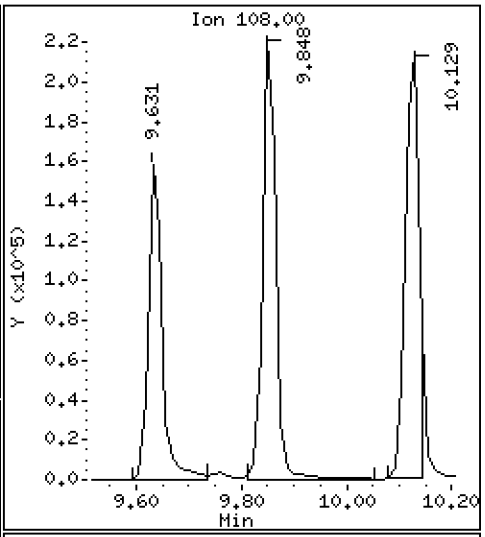
Column phase: ZB-5msi

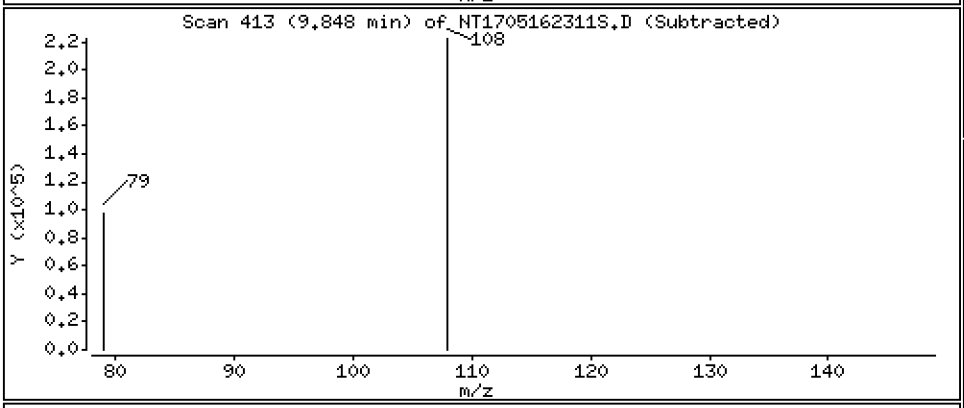
Column diameter: 0.25

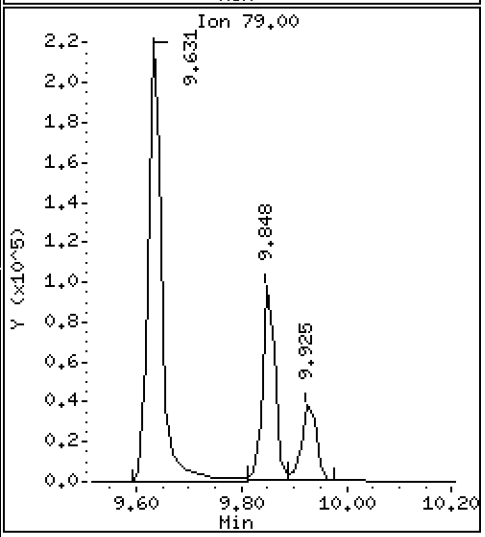
13 2-Methylphenol

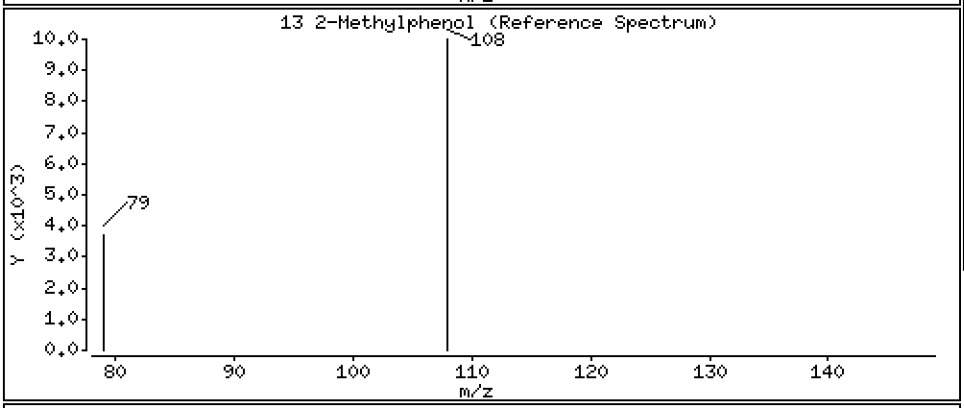
Concentration: 4.408 ug/mL

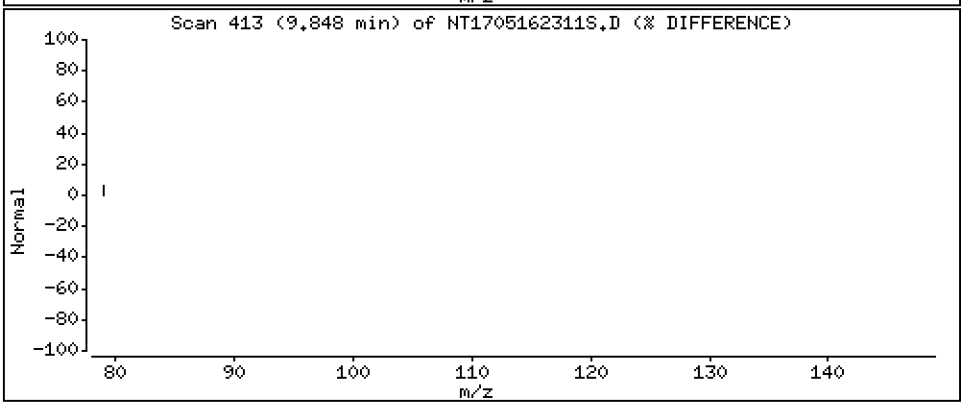












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

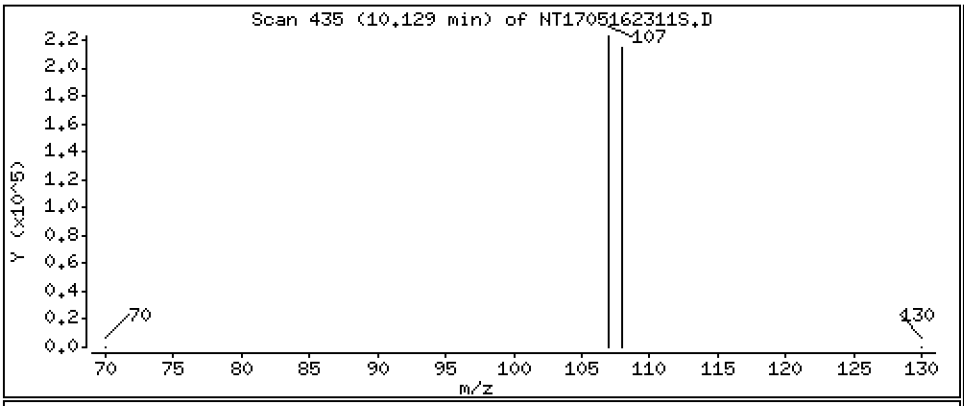
Operator: JGR

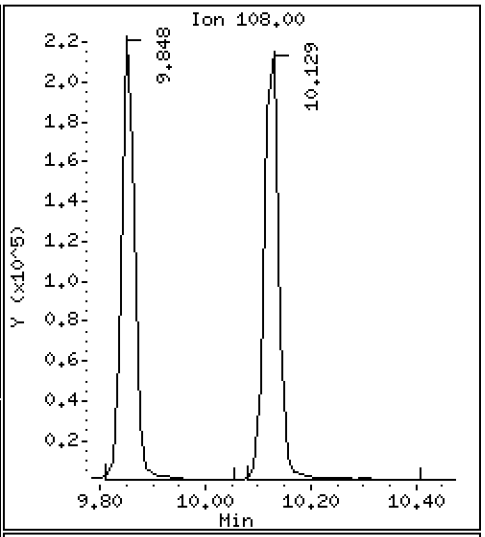
Column phase: ZB-5msi

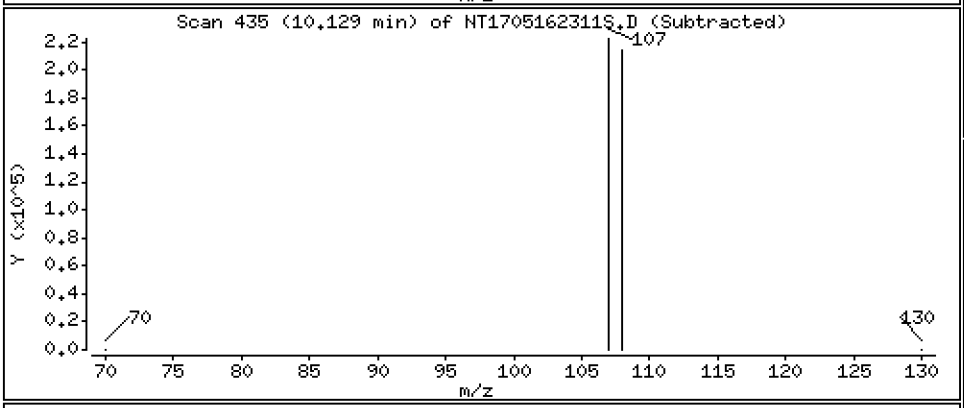
Column diameter: 0.25

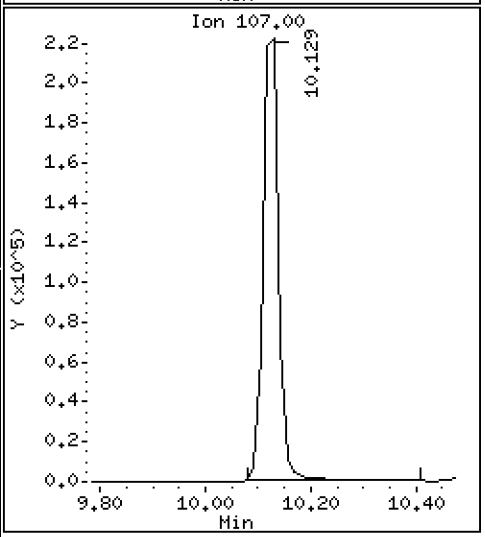
15 4-Methylphenol

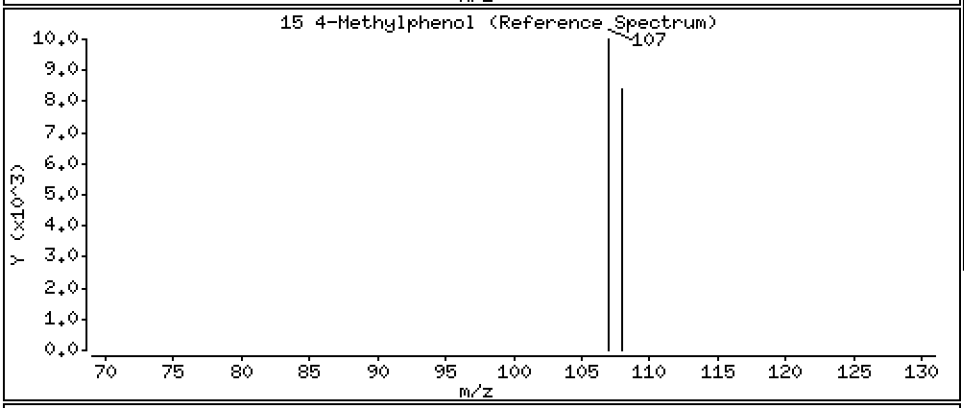
Concentration: 4.788 ug/mL

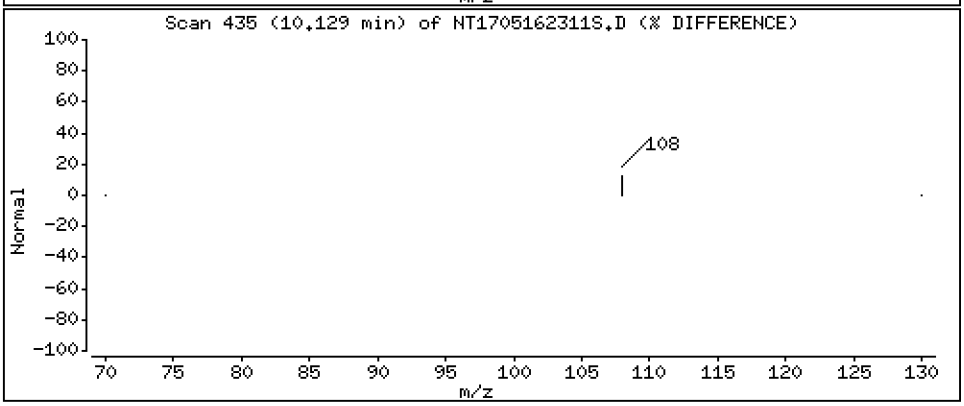












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

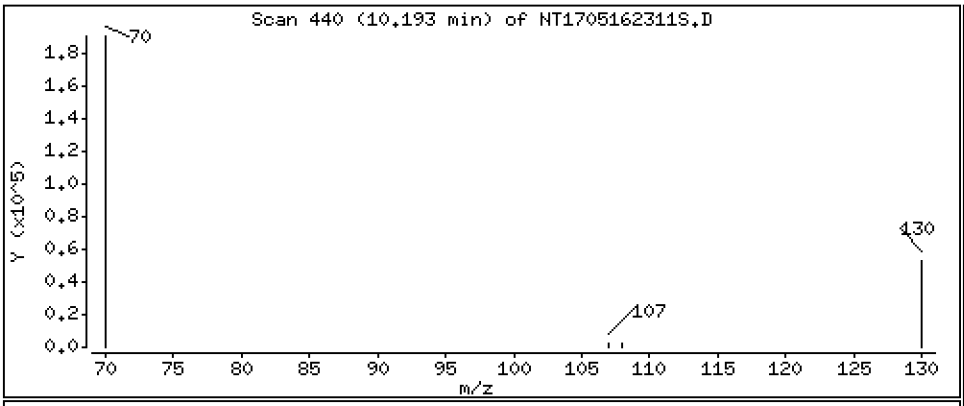
Operator: JGR

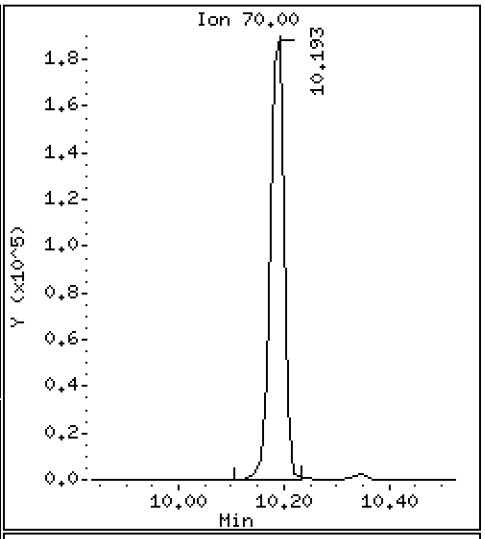
Column phase: ZB-5msi

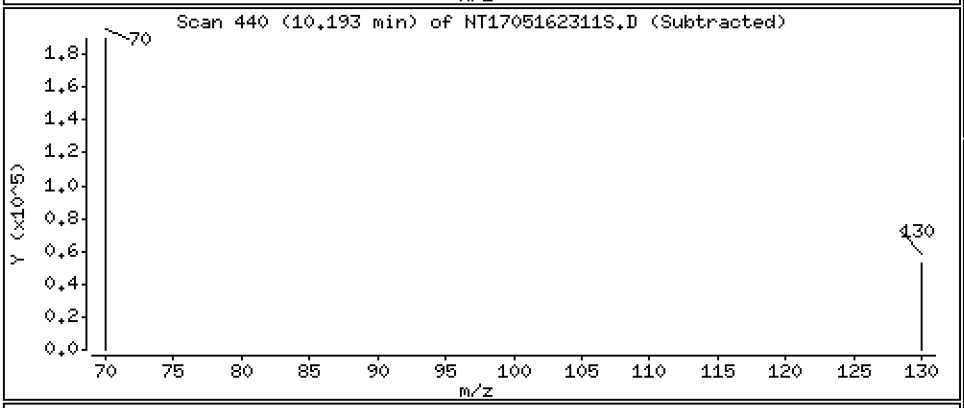
Column diameter: 0.25

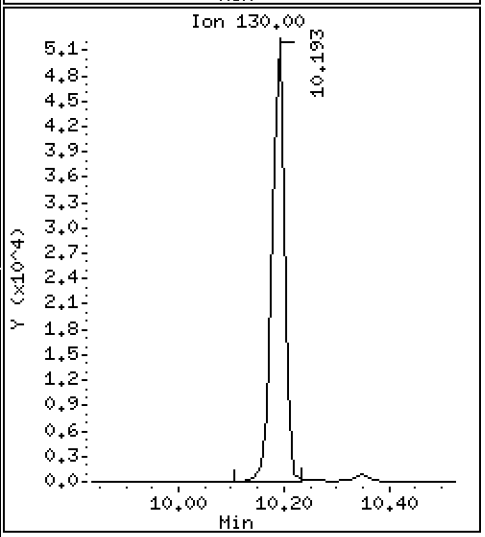
16 N-Nitroso-di-n-propylamine

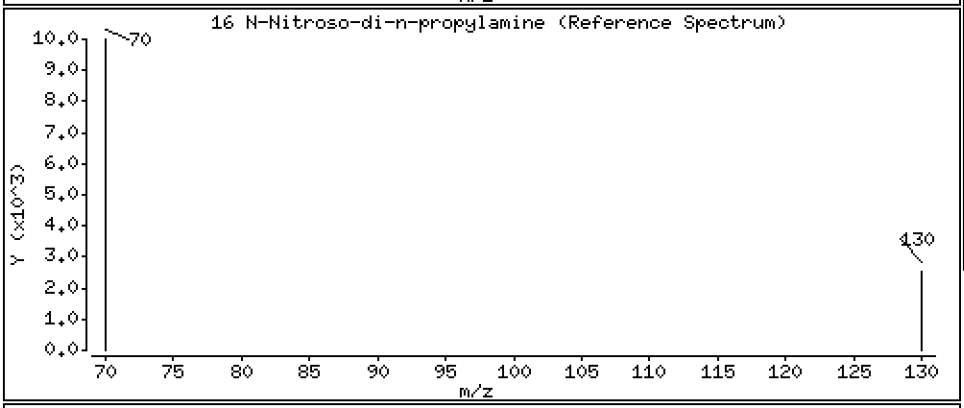
Concentration: 5.479 ug/mL

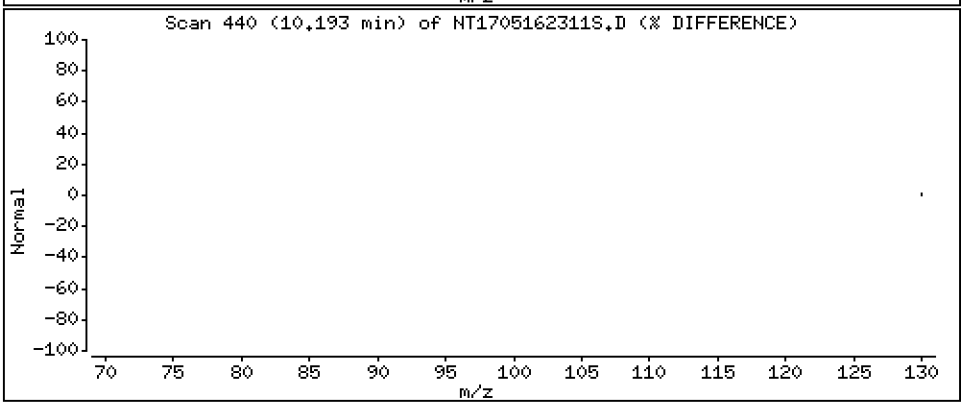












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

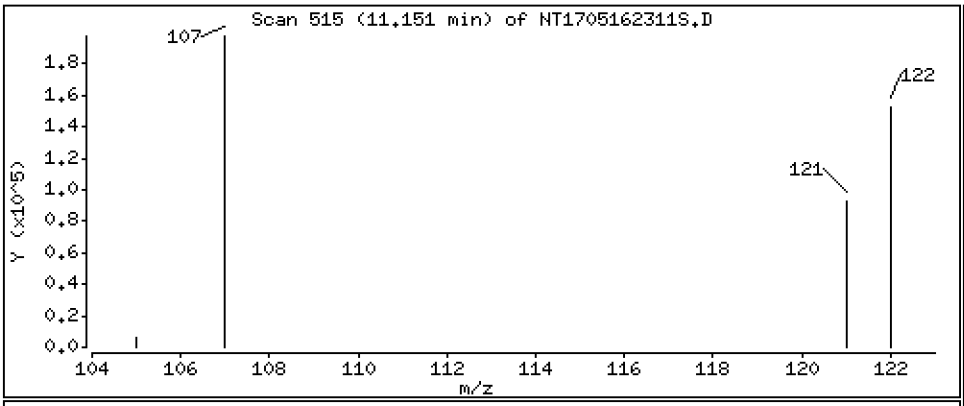
Operator: JGR

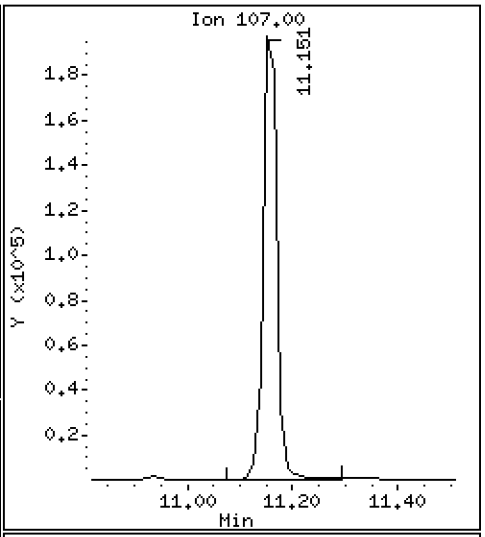
Column phase: ZB-5msi

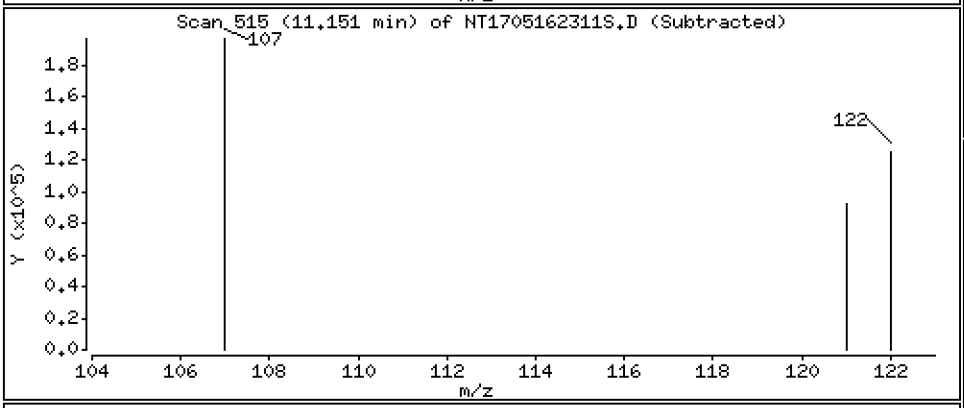
Column diameter: 0.25

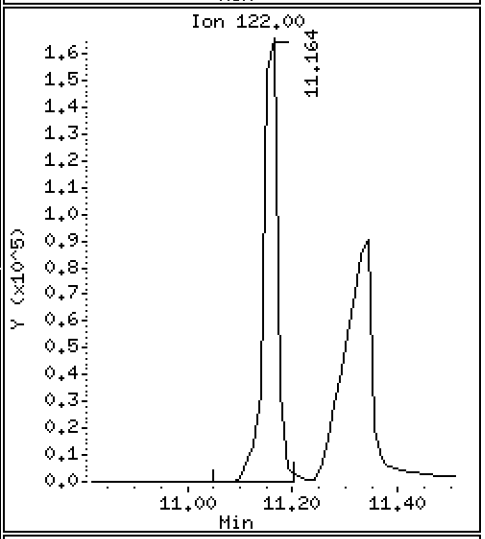
22 2,4-Dimethylphenol

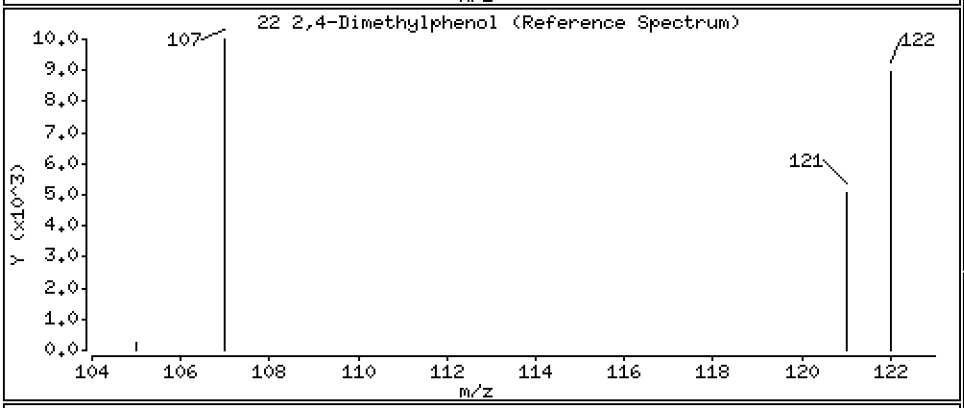
Concentration: 3.816 ug/mL

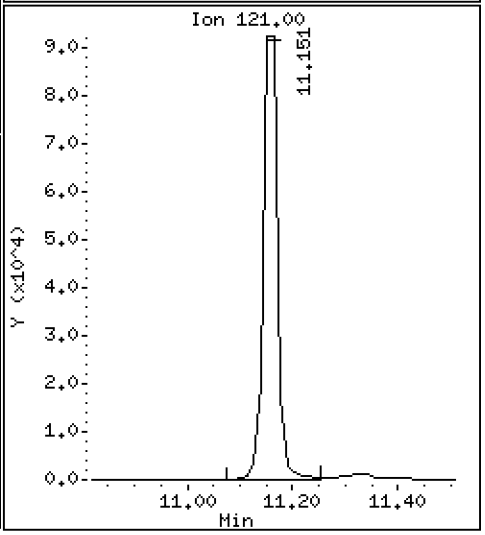


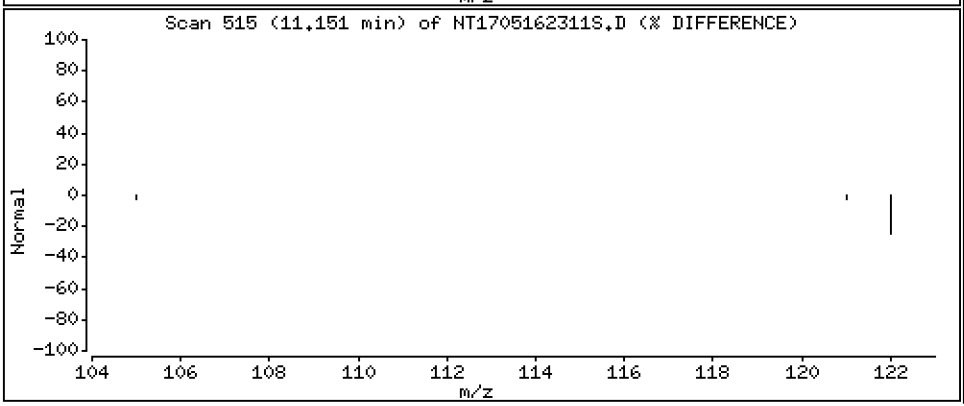












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

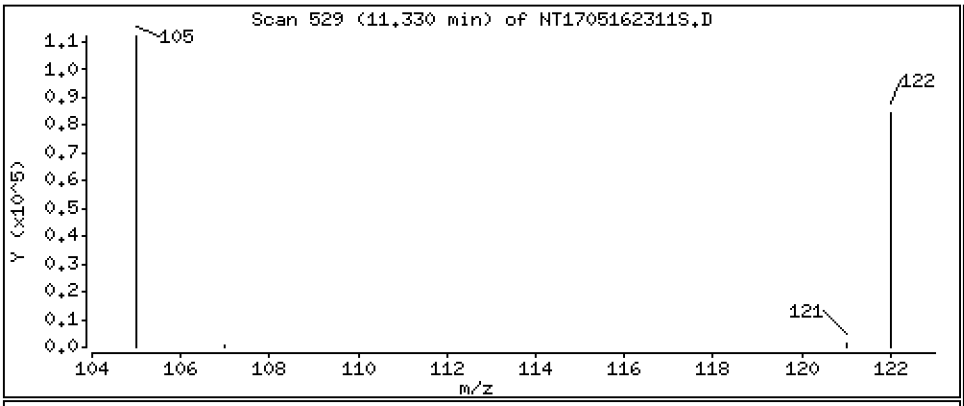
Operator: JGR

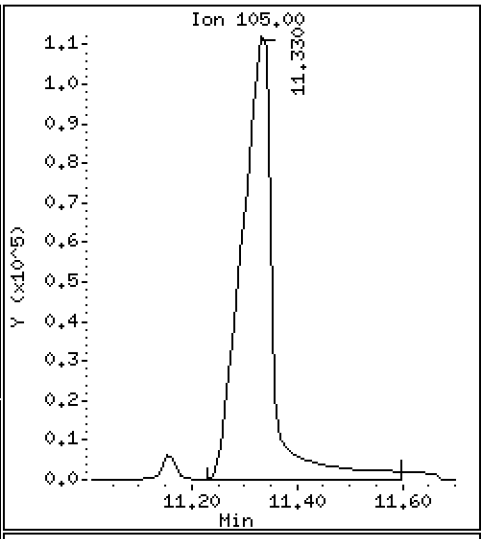
Column phase: ZB-5msi

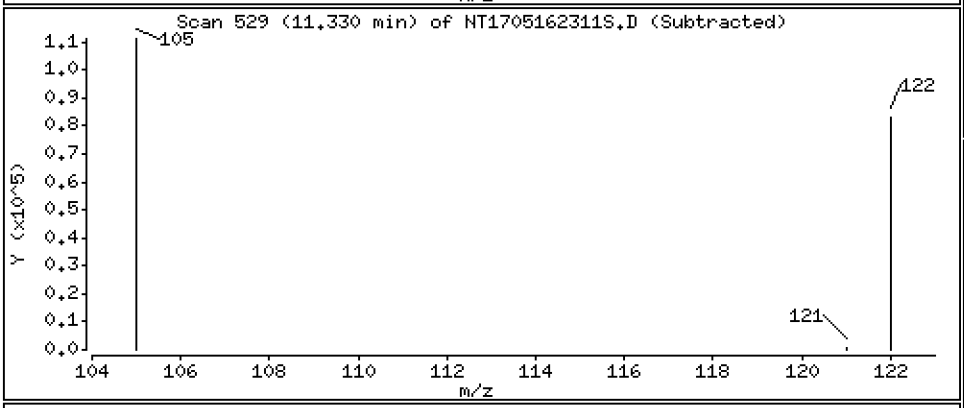
Column diameter: 0.25

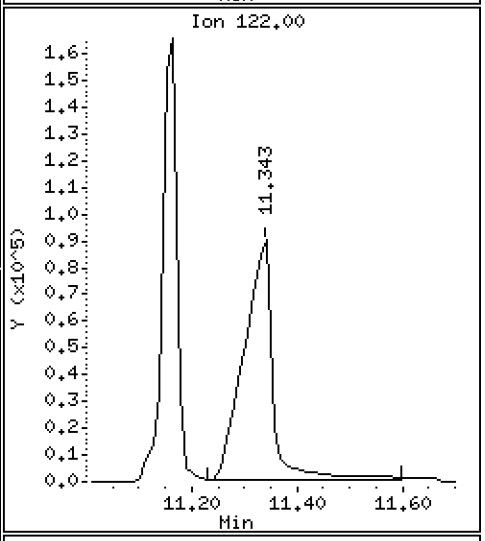
24 Benzoic acid

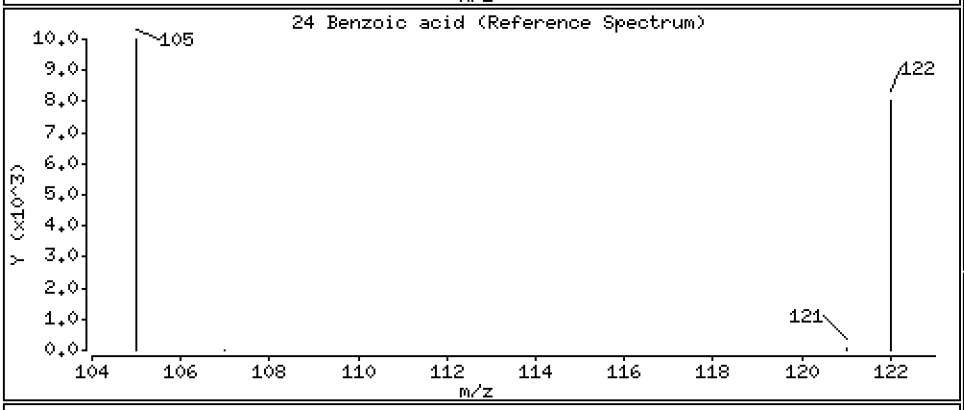
Concentration: 7.777 ug/mL

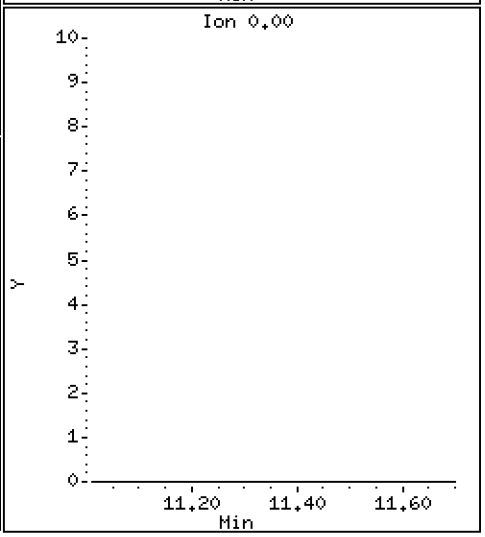


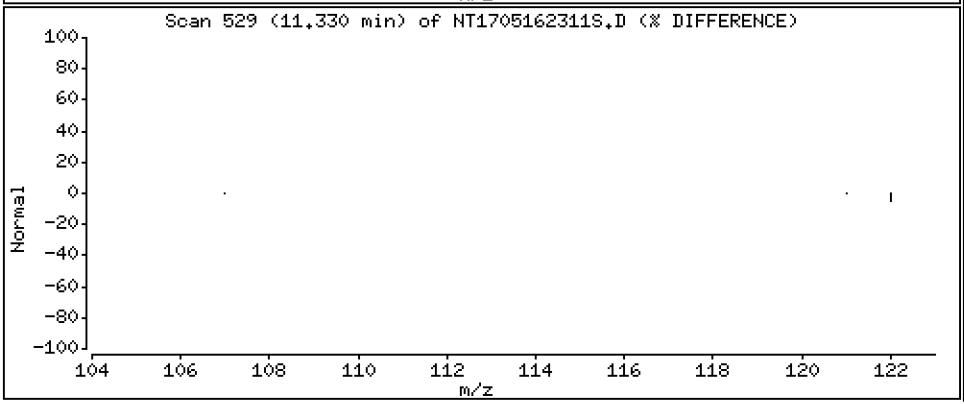












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

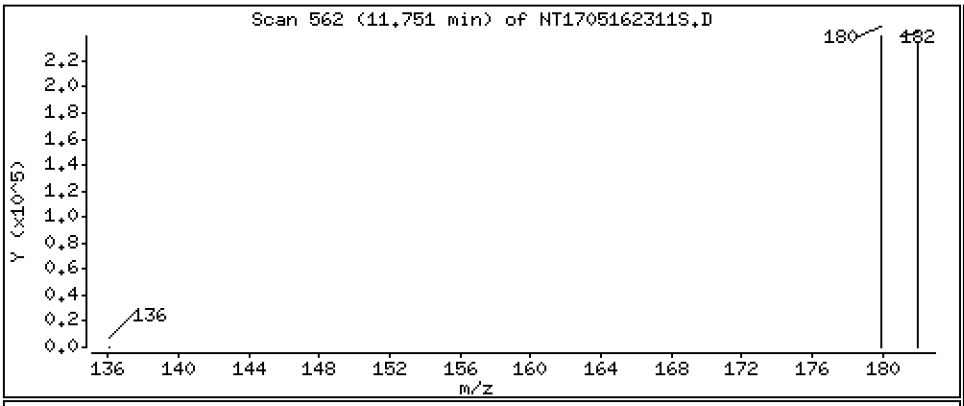
Operator: JGR

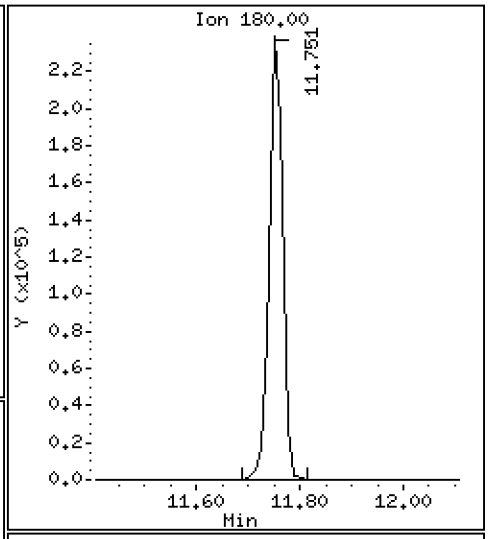
Column phase: ZB-5msi

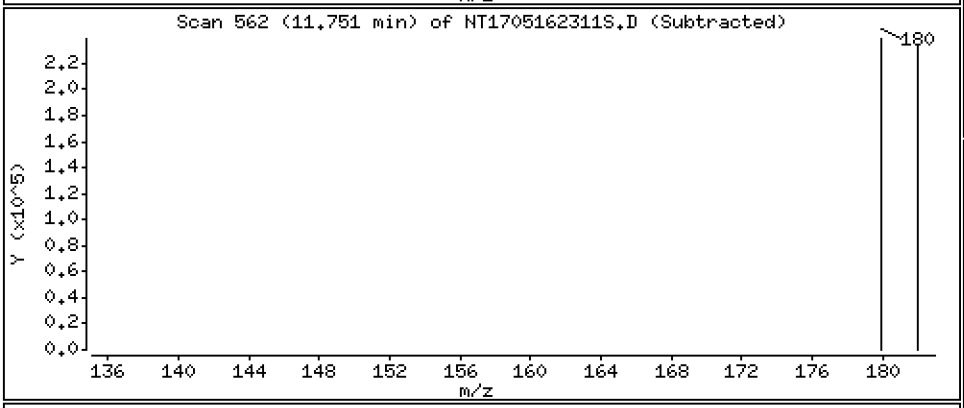
Column diameter: 0.25

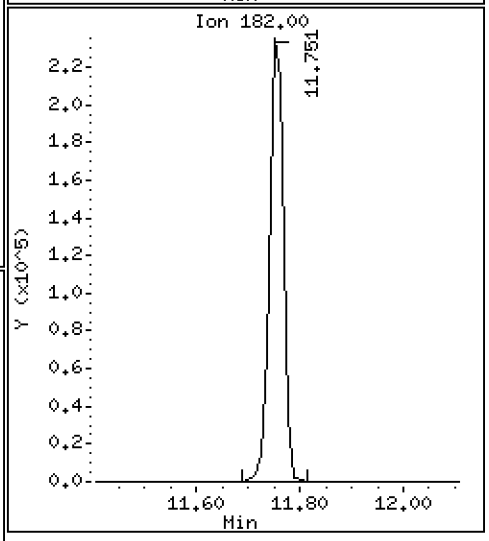
26 1,2,4-Trichlorobenzene

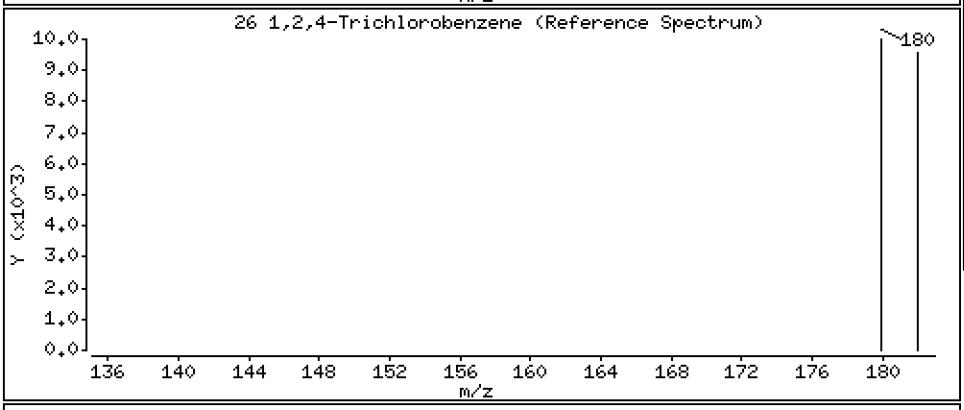
Concentration: 4.906 ug/mL

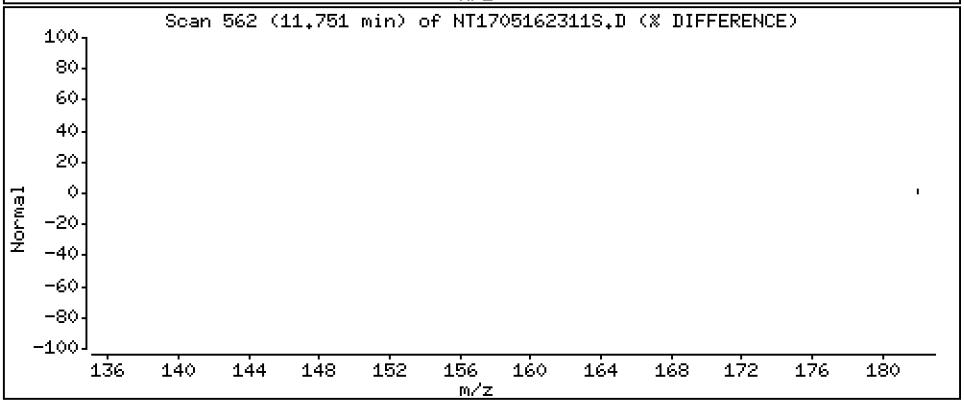












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

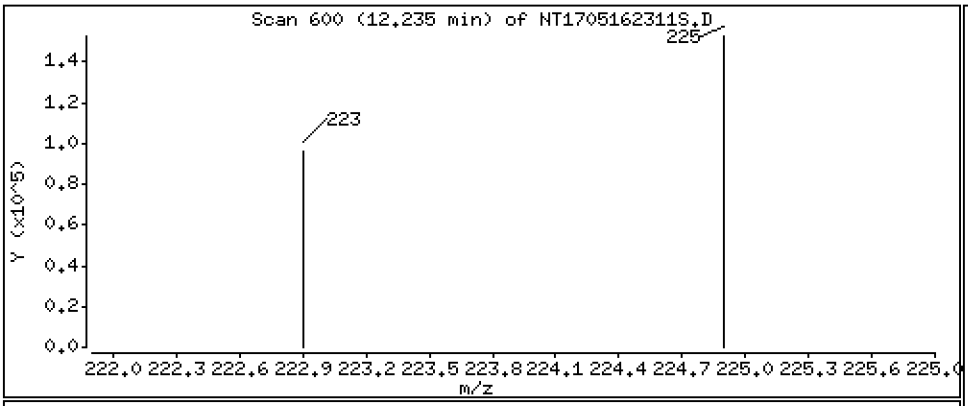
Operator: JGR

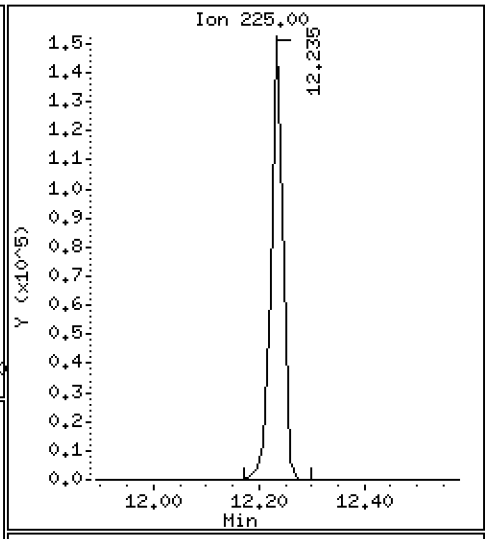
Column phase: ZB-5msi

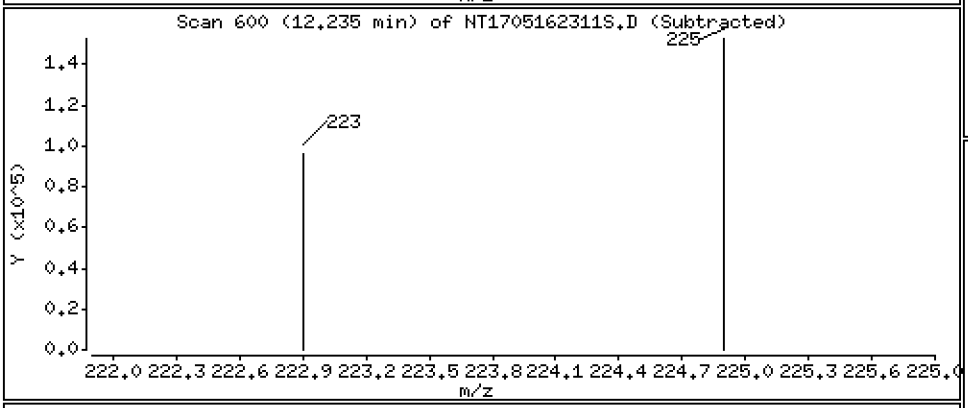
Column diameter: 0.25

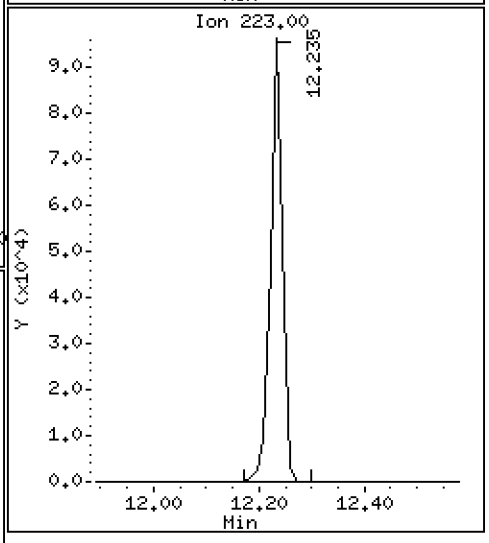
30 Hexachlorobutadiene

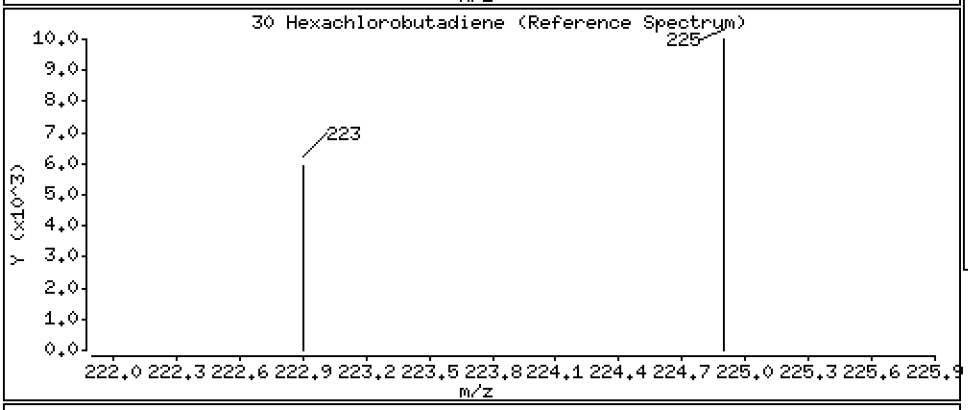
Concentration: 5.201 ug/mL

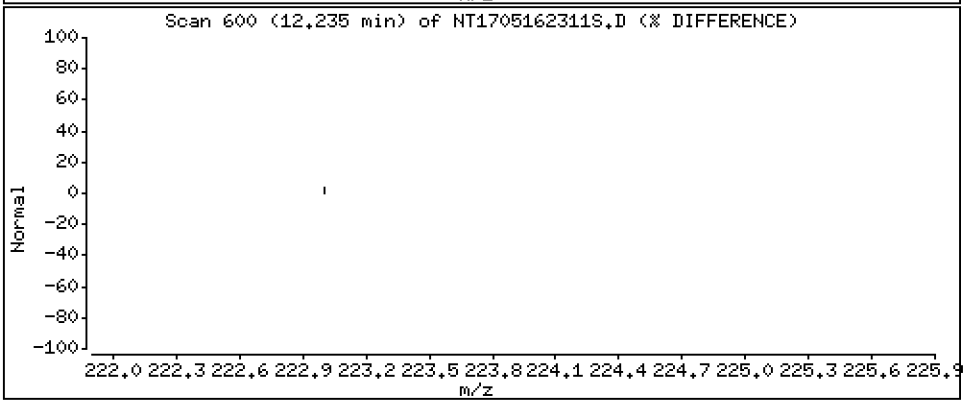












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

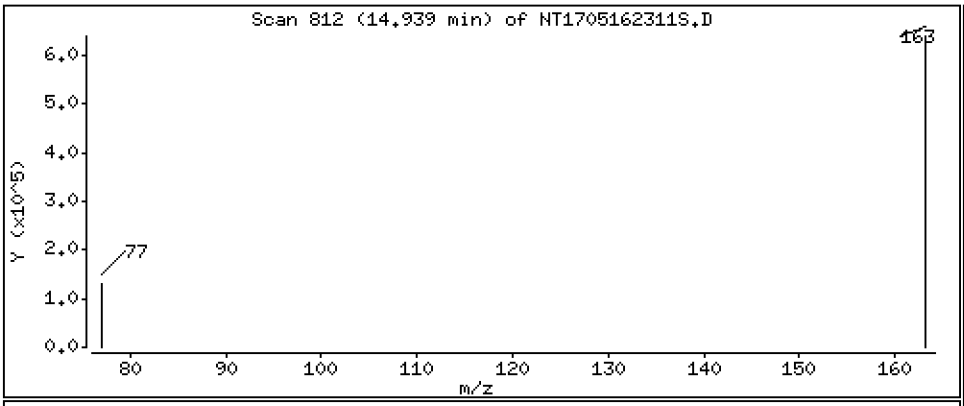
Operator: JGR

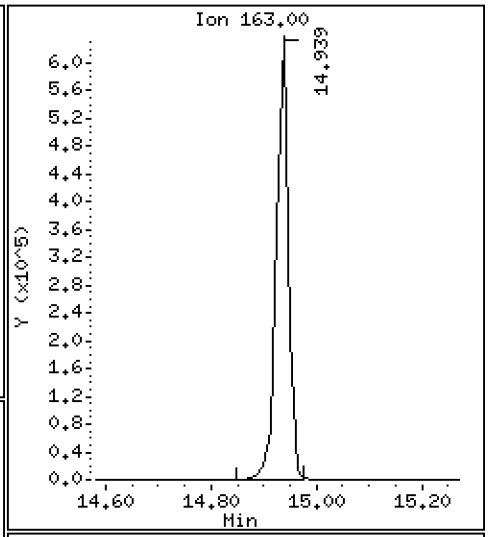
Column phase: ZB-5msi

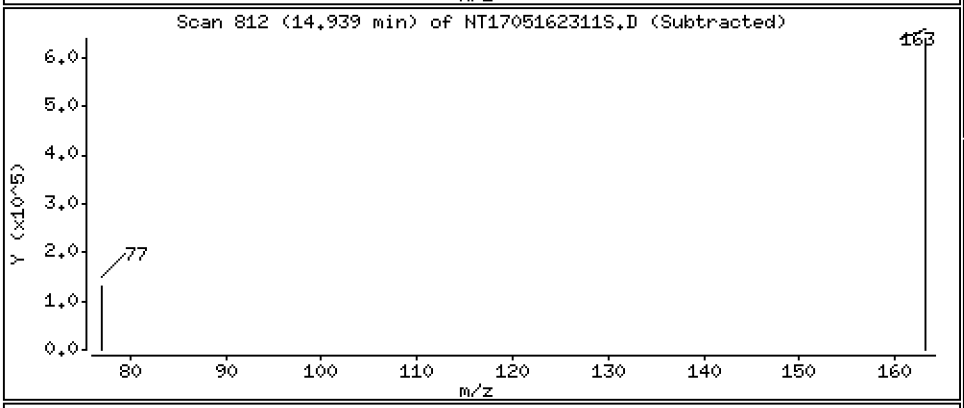
Column diameter: 0.25

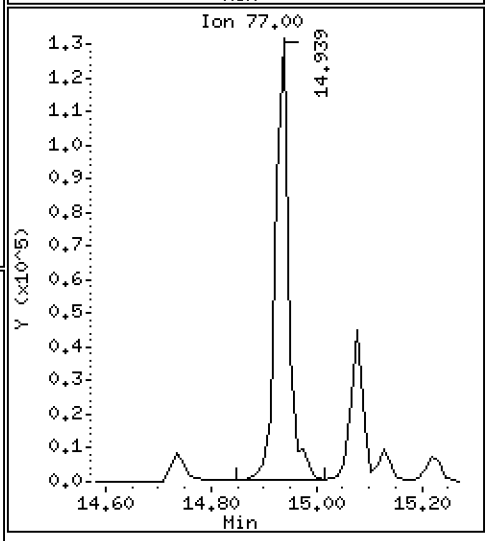
39 Dimethylphthalate

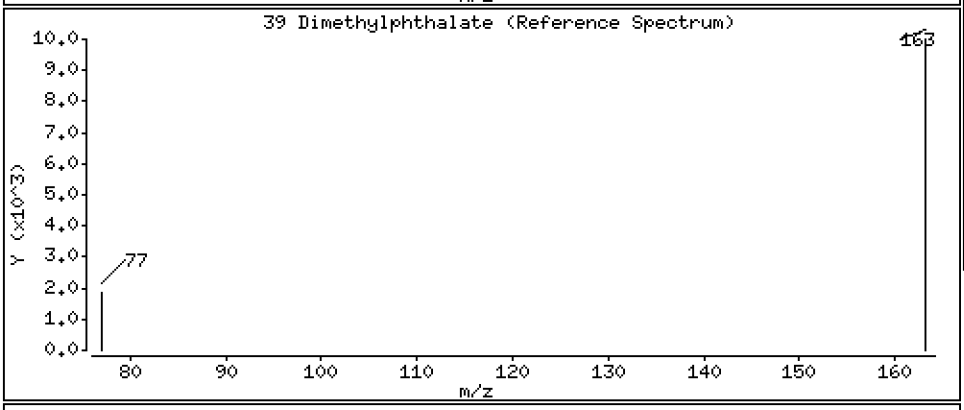
Concentration: 5.240 ug/mL

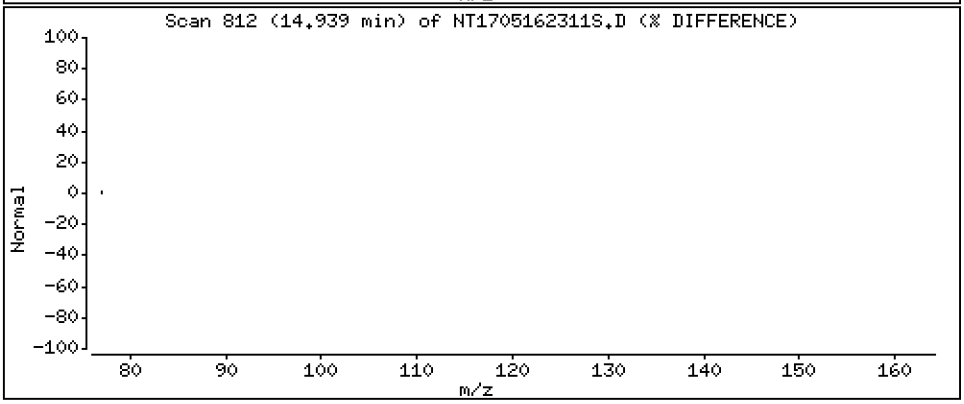












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

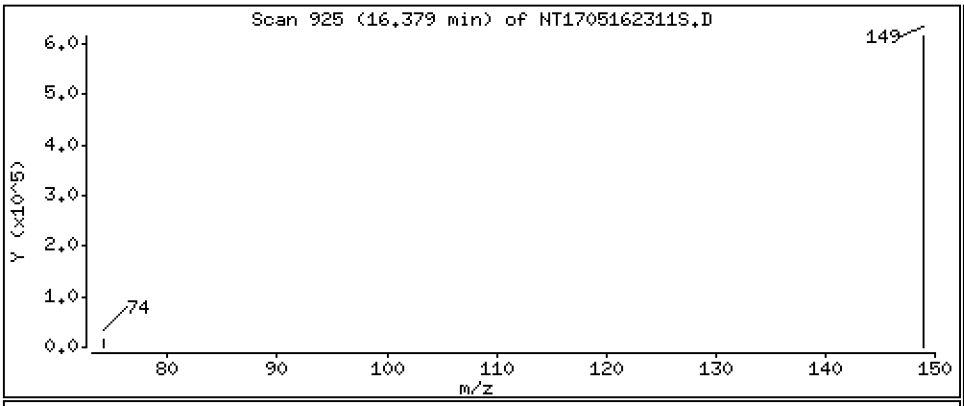
Operator: JGR

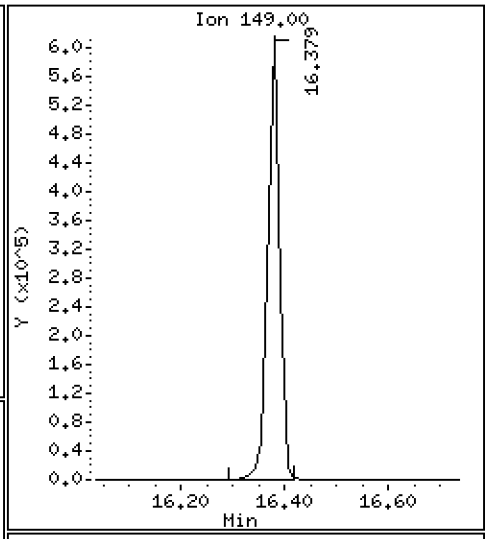
Column phase: ZB-5msi

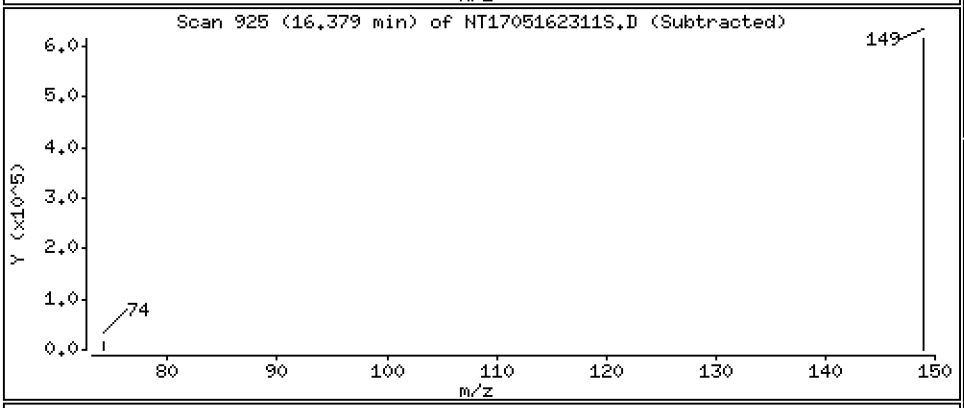
Column diameter: 0.25

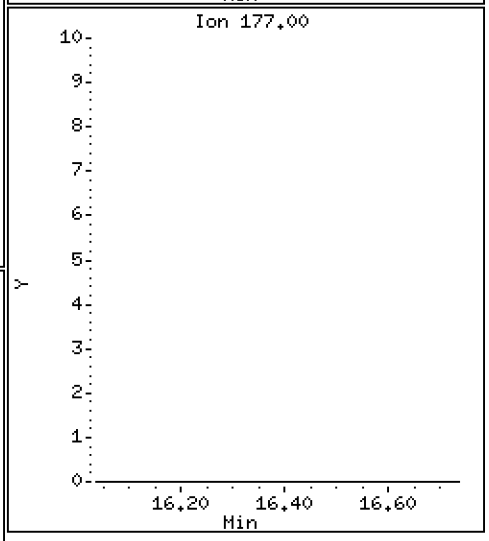
50 Diethylphthalate

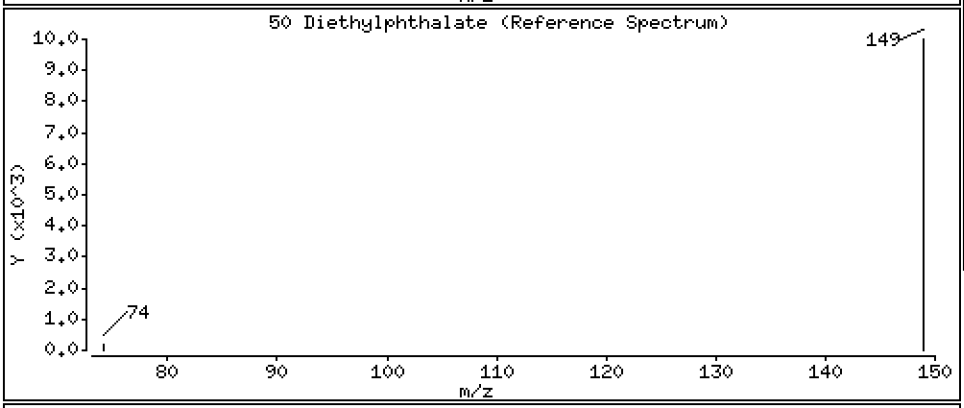
Concentration: 5.478 ug/mL

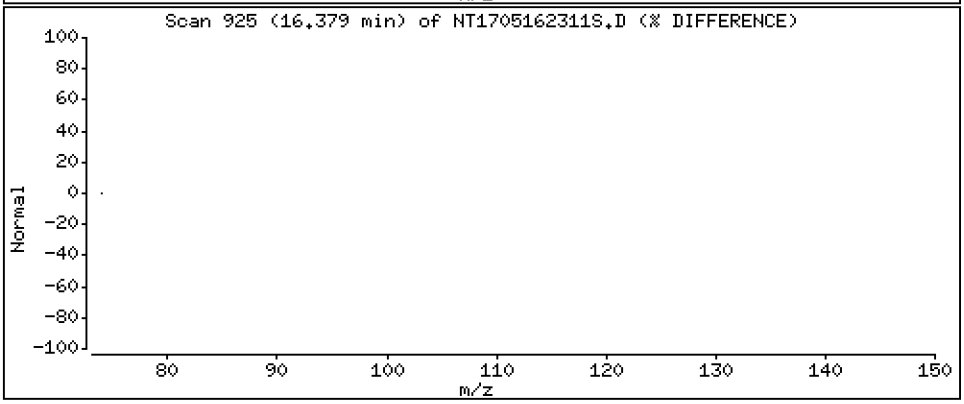












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

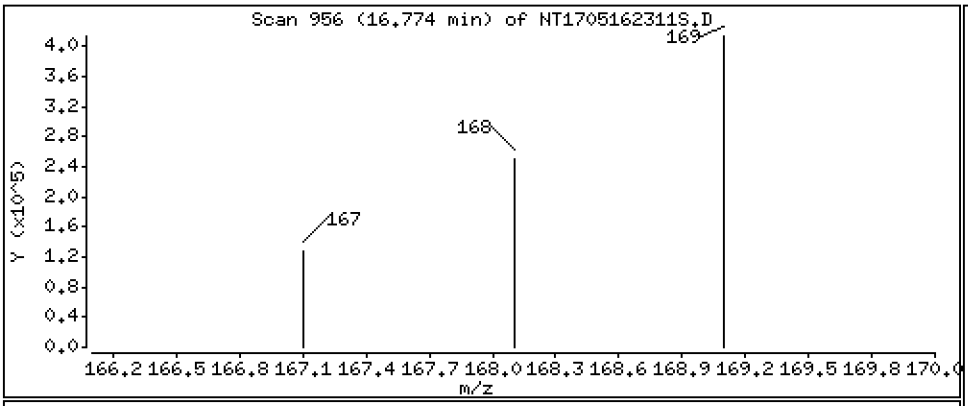
Operator: JGR

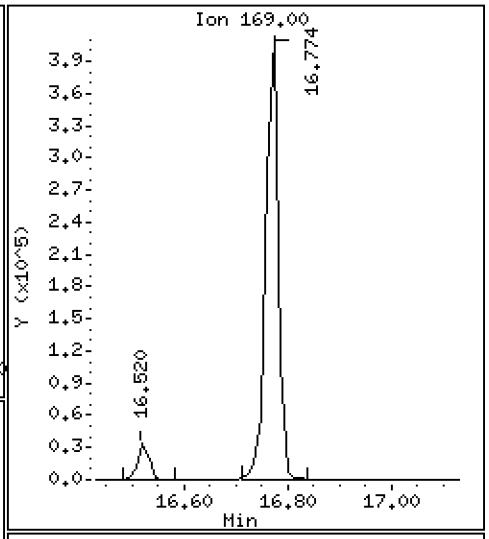
Column phase: ZB-5msi

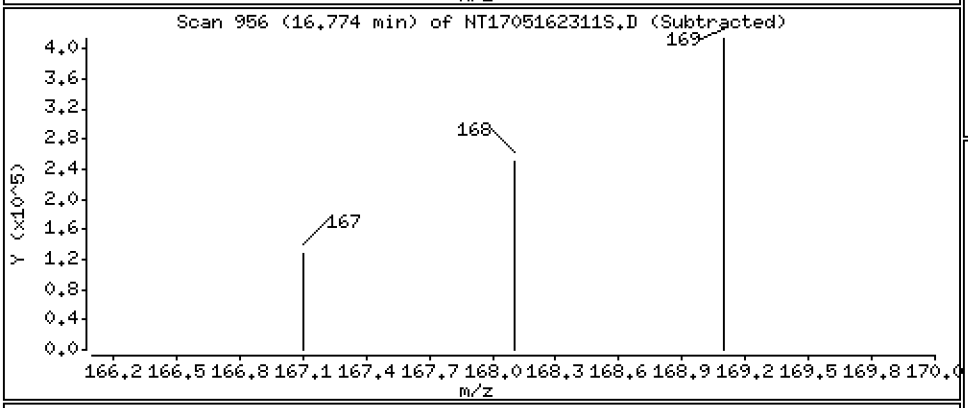
Column diameter: 0.25

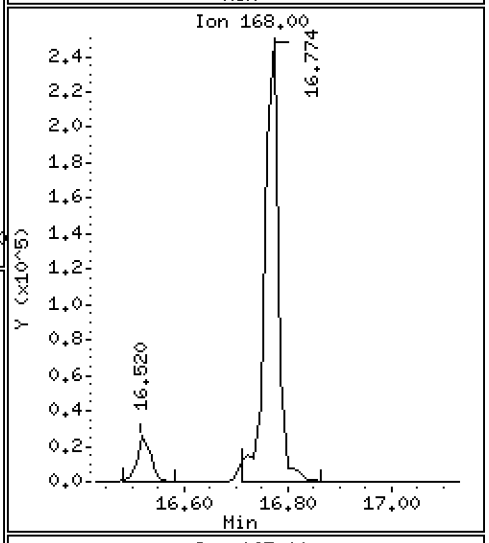
54 N-Nitrosodiphenylamine

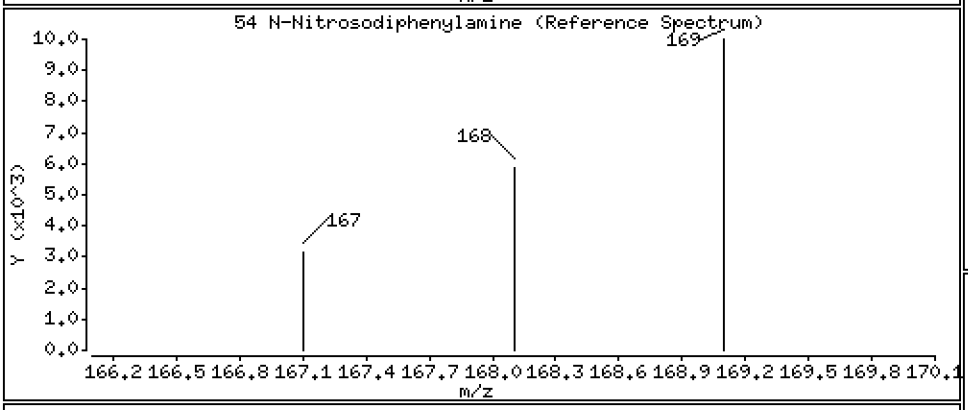
Concentration: 5.627 ug/mL

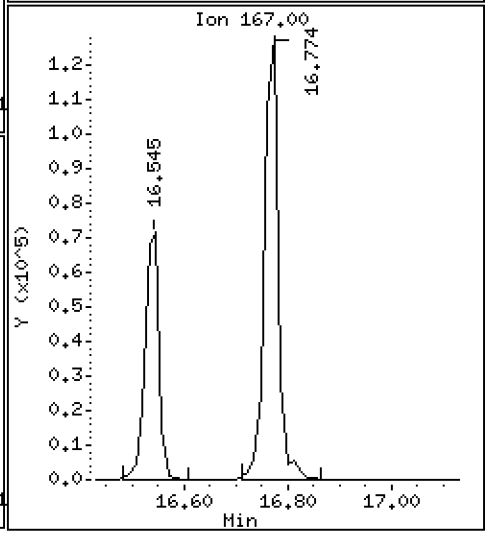


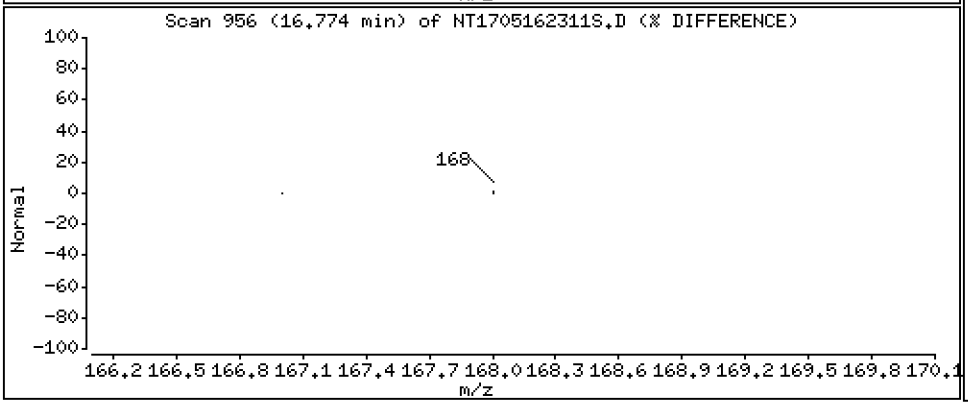












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

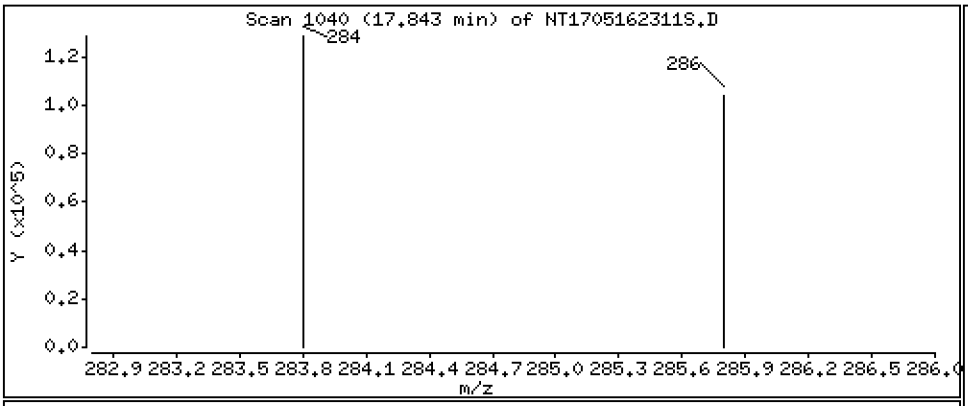
Operator: JGR

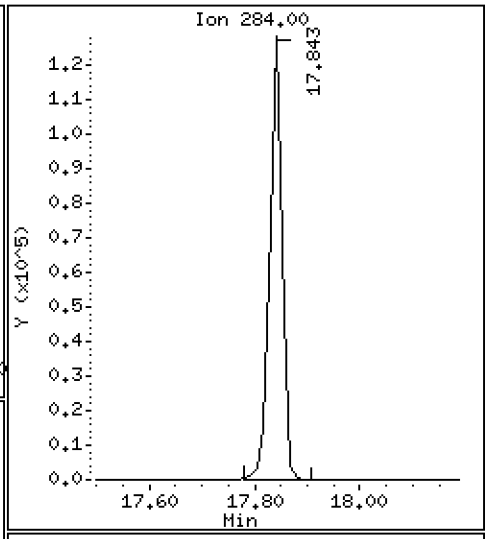
Column phase: ZB-5msi

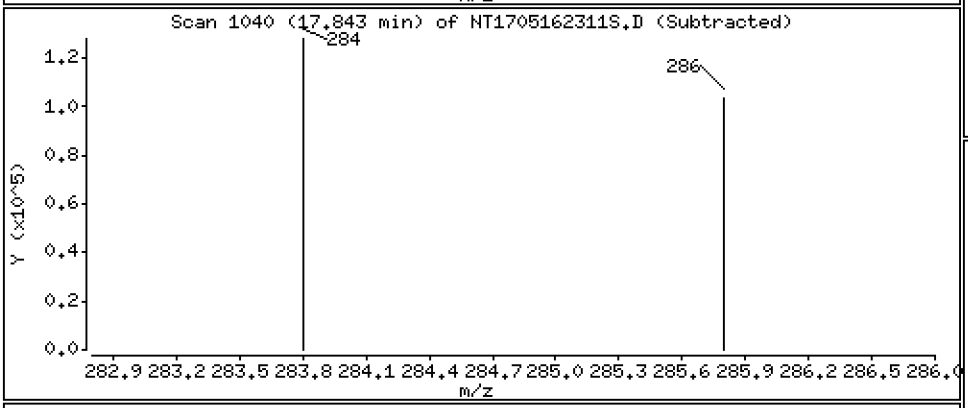
Column diameter: 0.25

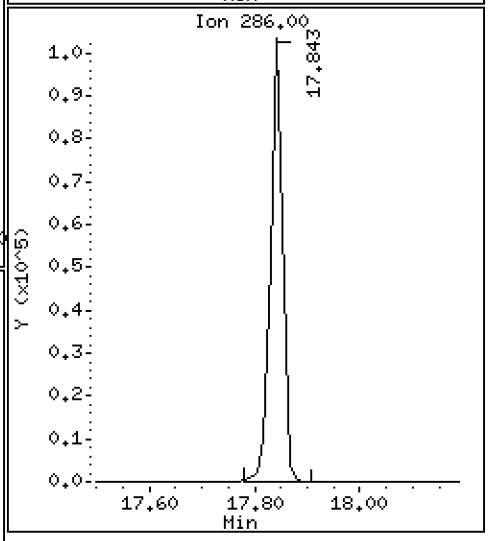
57 Hexachlorobenzene

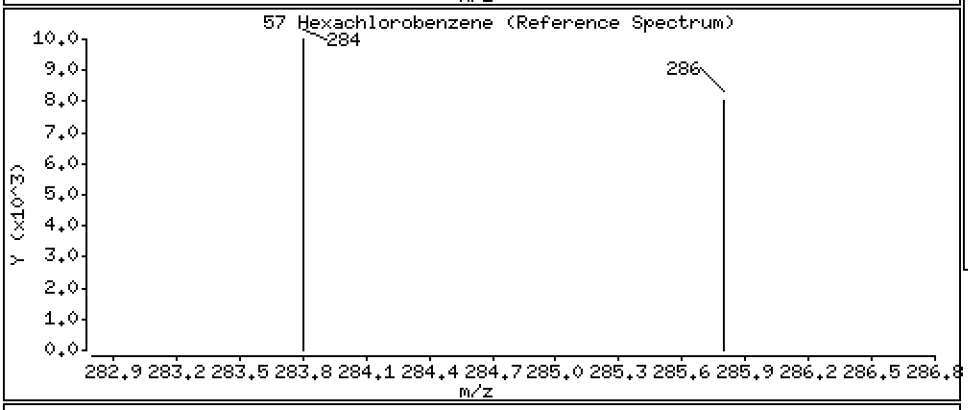
Concentration: 5.081 ug/mL

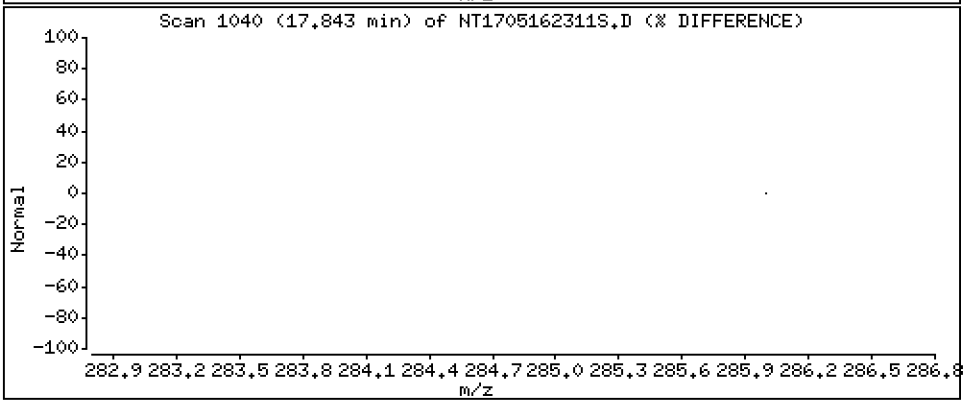












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

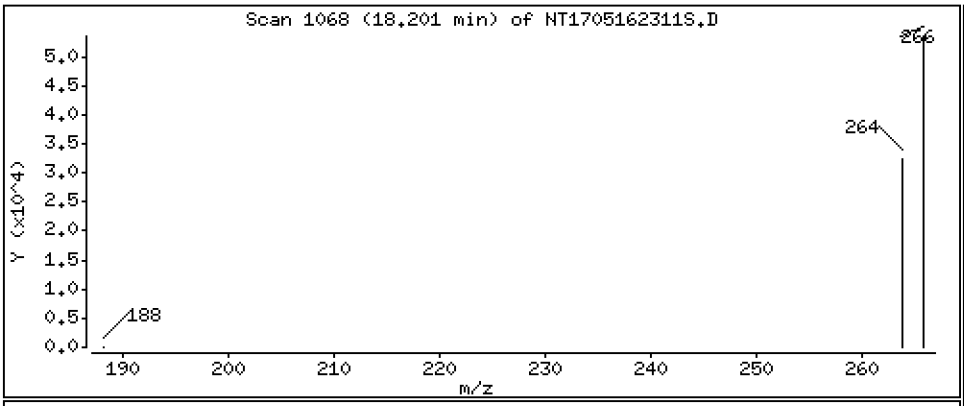
Operator: JGR

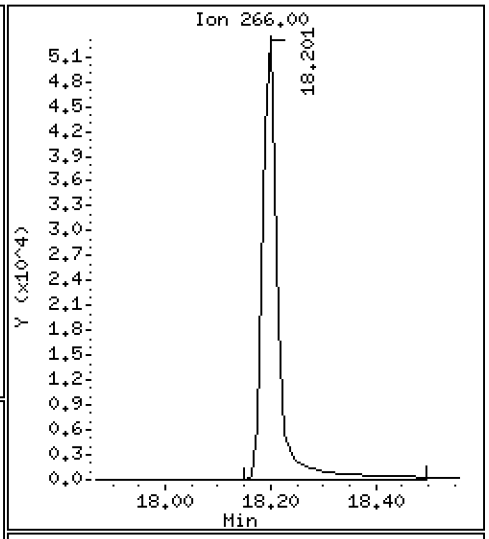
Column phase: ZB-5msi

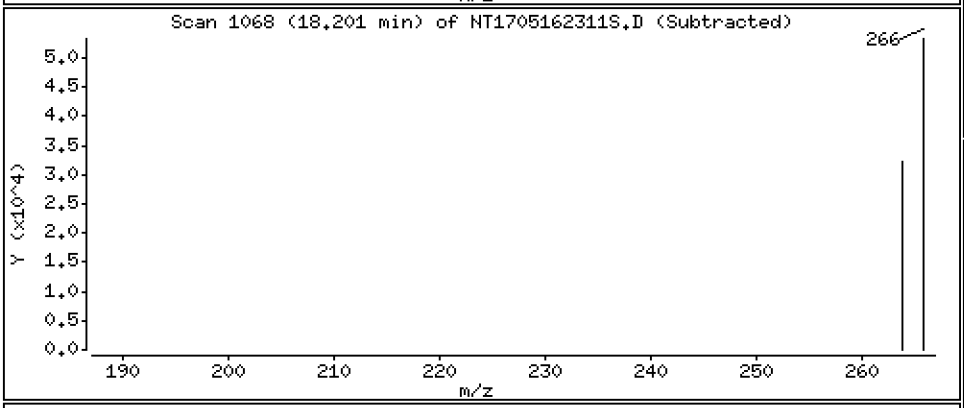
Column diameter: 0.25

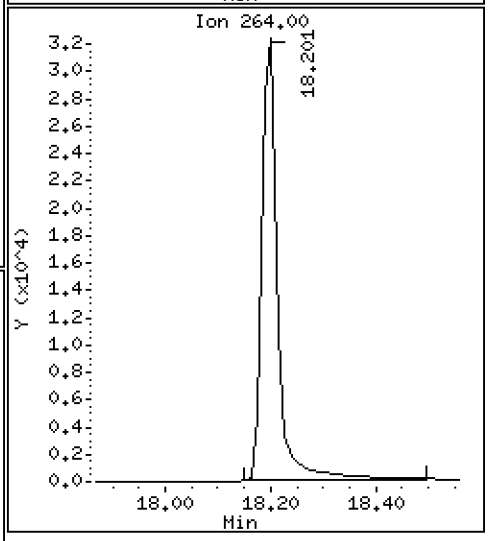
58 Pentachlorophenol

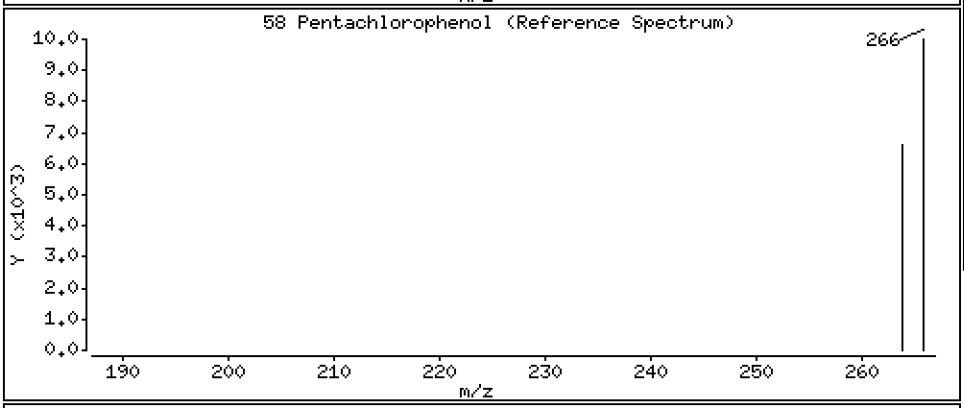
Concentration: 4.506 ug/mL

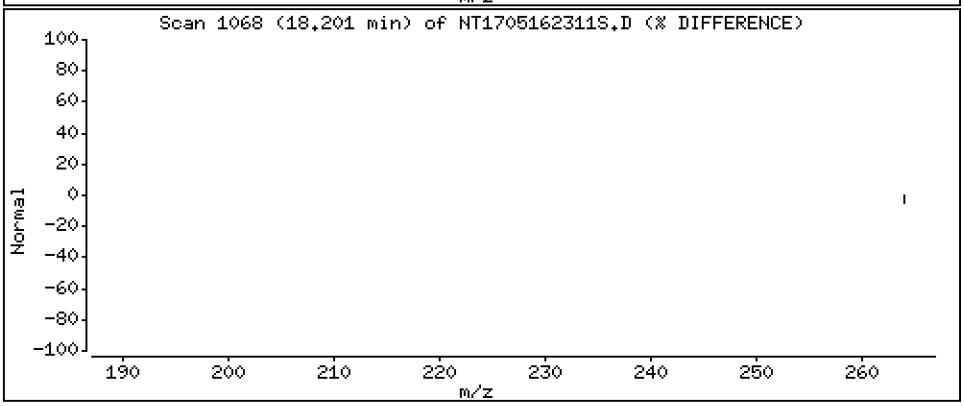












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

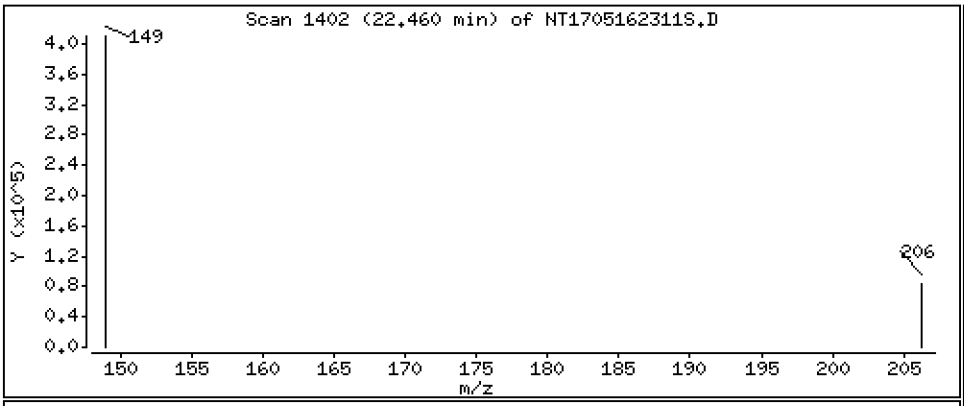
Operator: JGR

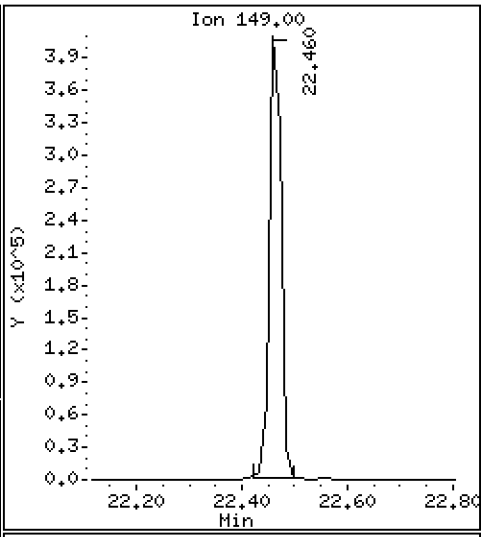
Column phase: ZB-5msi

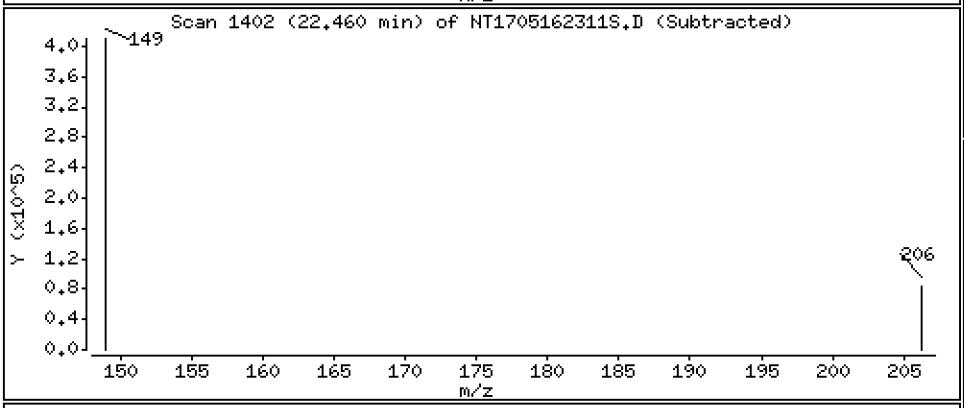
Column diameter: 0.25

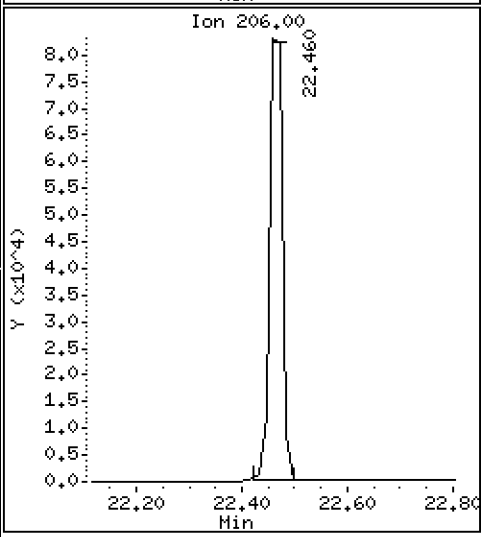
67 Butylbenzylphthalate

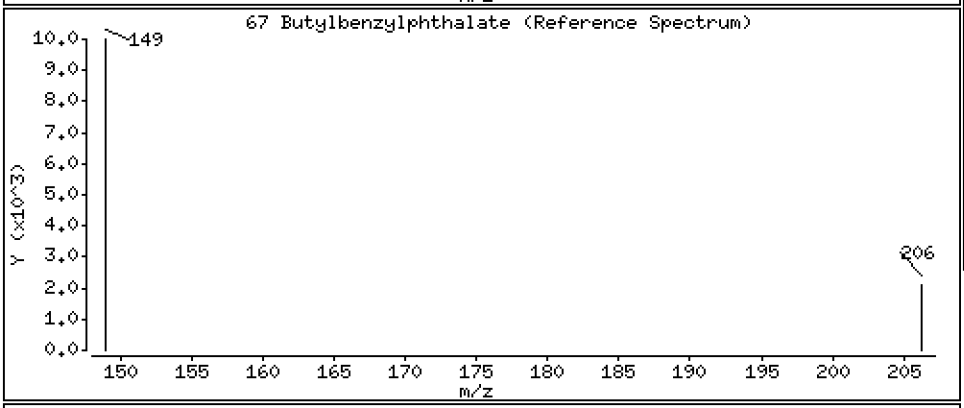
Concentration: 5.905 ug/mL

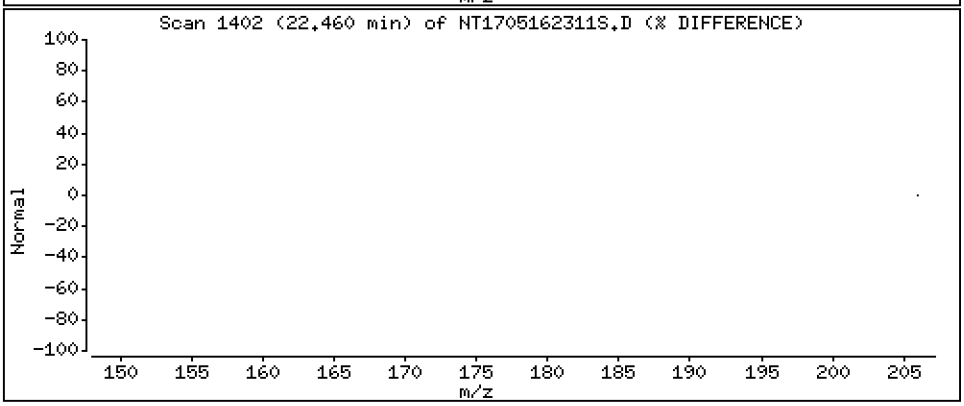












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

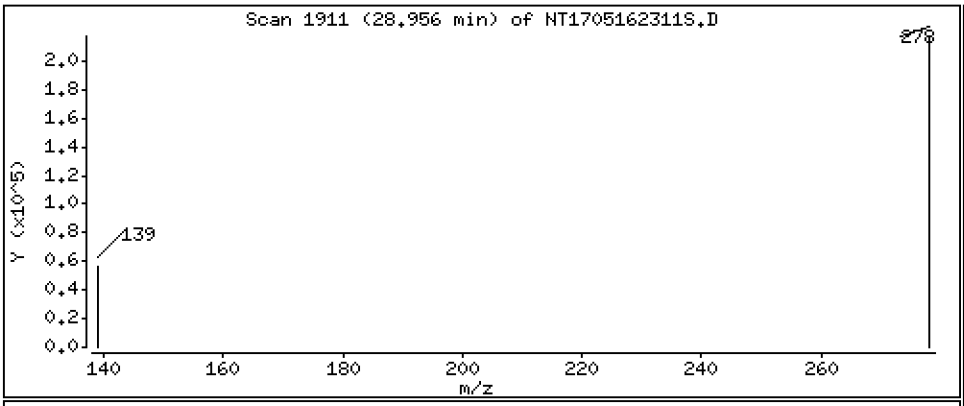
Operator: JGR

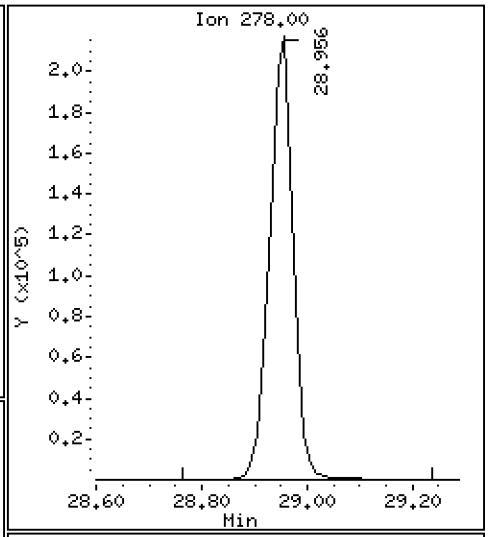
Column phase: ZB-5msi

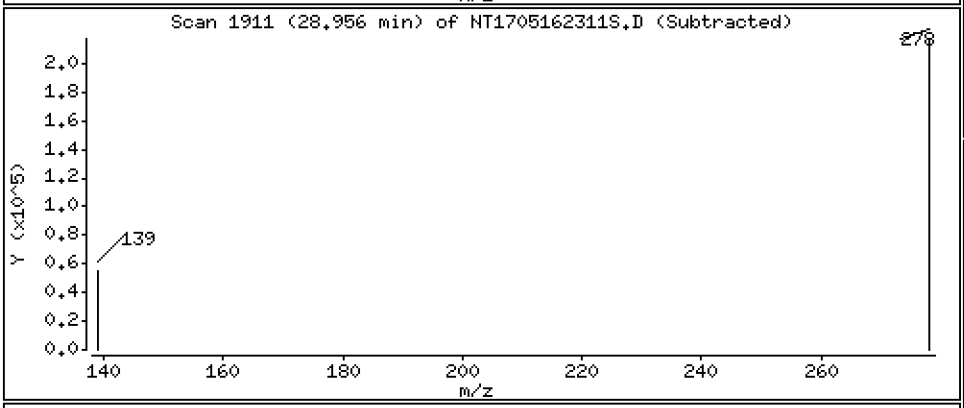
Column diameter: 0.25

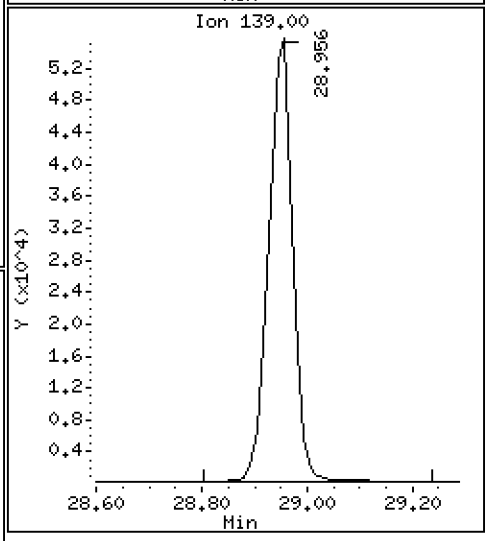
79 Dibenzo(a,h)anthracene

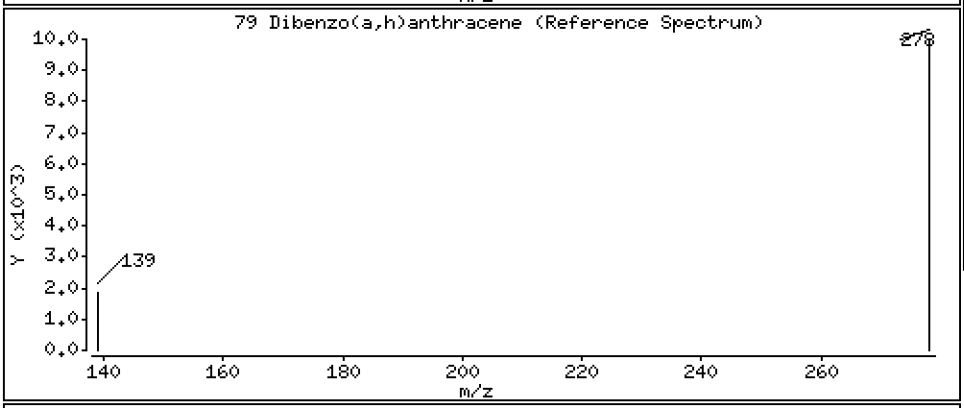
Concentration: 5.149 ug/mL

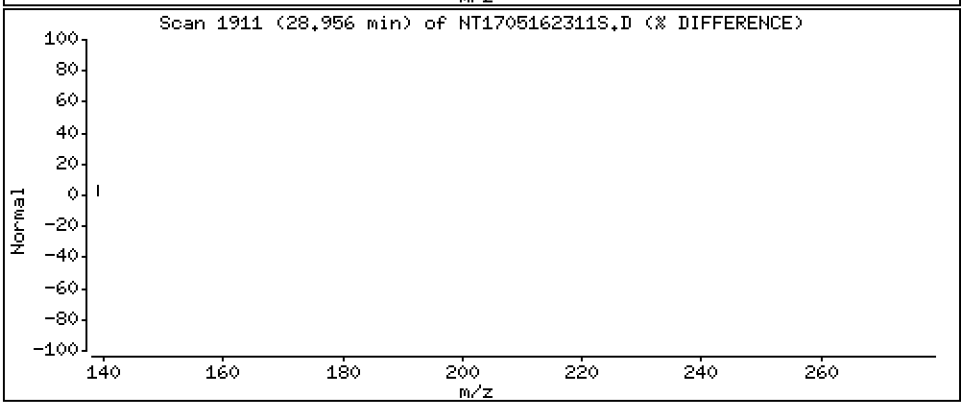












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

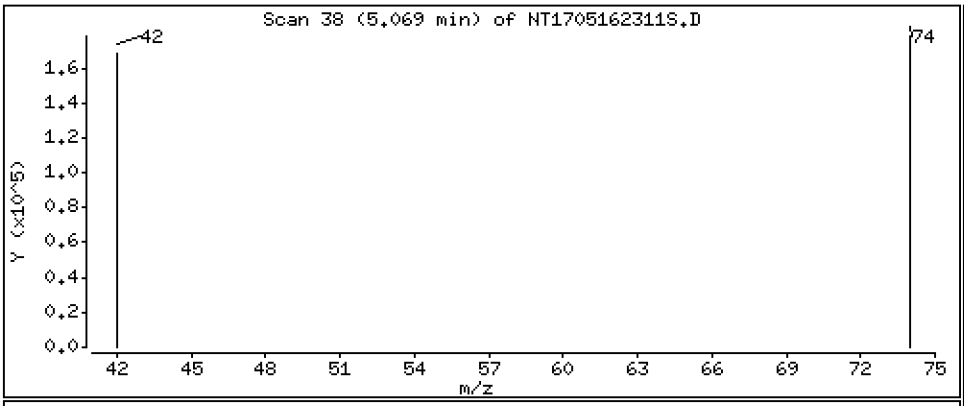
Operator: JGR

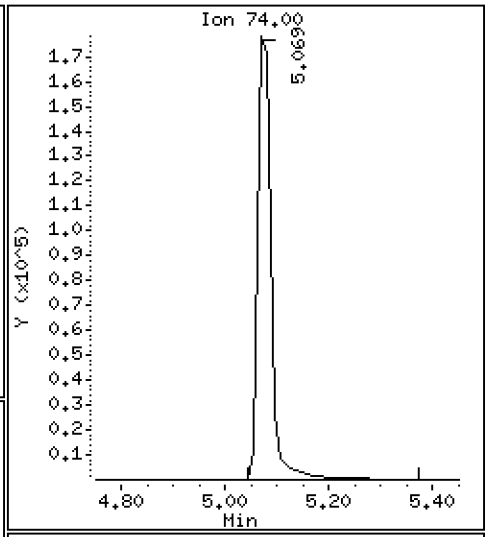
Column phase: ZB-5msi

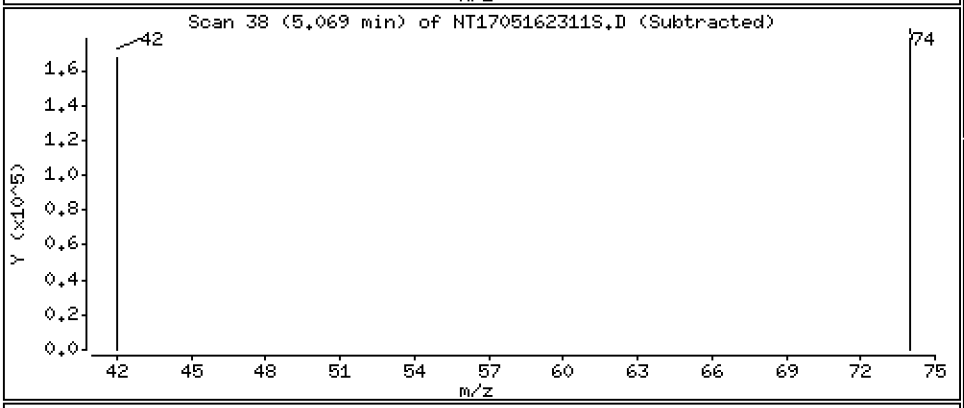
Column diameter: 0.25

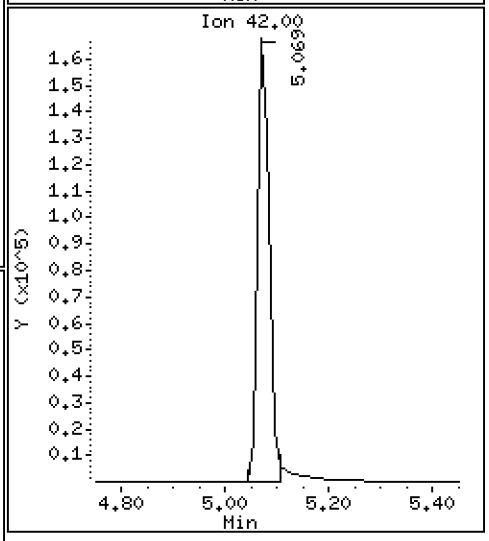
90 N-Nitrosodimethylamine

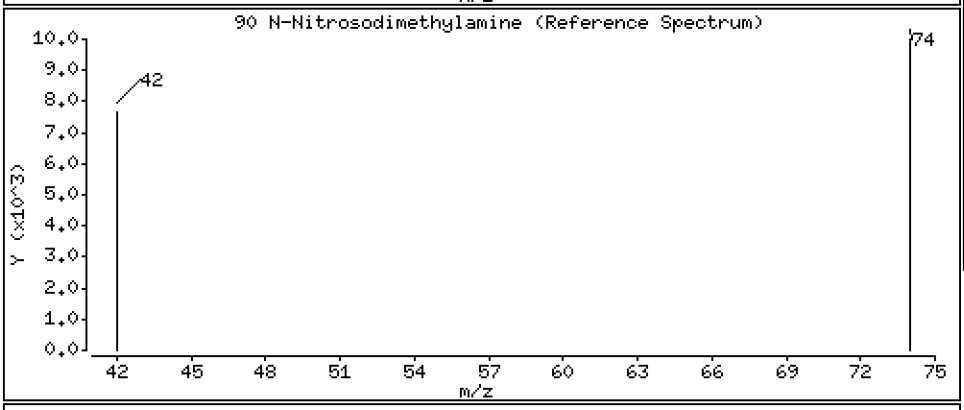
Concentration: 5.868 ug/mL

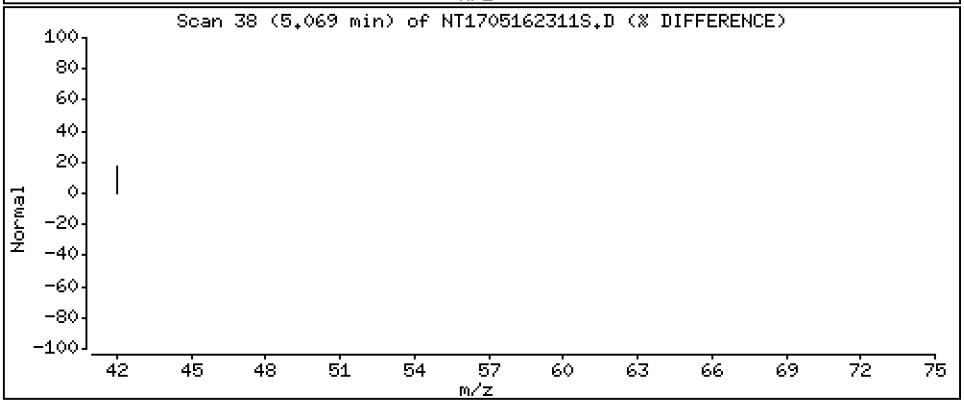












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D
Lab Smp Id: SLE0339-SCV1
Inj Date : 17-MAY-2023 00:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.					
	3	Phenol	94	8.750	8.751	(0.933)	616997	4.88420	4.884
	7	1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	575988	5.08691	5.087
*	8	1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	280298	4.00000	
	9	1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	566257	5.13211	5.132
	11	Benzyl alcohol	79	9.630	9.656	(1.027)	410745	5.70628	5.706
	12	1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	541461	5.00685	5.007
	13	2-Methylphenol	108	9.848	9.861	(1.050)	385832	4.40762	4.408
	15	4-Methylphenol	108	10.129	10.129	(1.080)	423610	4.78832	4.788
	16	N-Nitroso-di-n-propylamine	70	10.193	10.180	(1.087)	349317	5.47874	5.479
	22	2,4-Dimethylphenol	107	11.151	11.164	(0.942)	366886	3.81638	3.816
	24	Benzoic acid	105	11.329	11.356	(0.957)	465783	7.77732	7.777
	26	1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	427934	4.90638	4.906
*	27	Naphthalene-d8	136	11.840	11.840	(1.000)	999390	4.00000	
	30	Hexachlorobutadiene	225	12.235	12.235	(1.033)	238867	5.20120	5.201
	39	Dimethylphthalate	163	14.938	14.926	(0.968)	1015804	5.23967	5.240
*	42	Acenaphthene-d10	162	15.436	15.436	(1.000)	527927	4.00000	
	50	Diethylphthalate	149	16.379	16.379	(1.061)	964439	5.47782	5.478
	54	N-Nitrosodiphenylamine	169	16.774	16.774	(0.908)	681829	5.62729	5.627
	57	Hexachlorobenzene	284	17.843	17.843	(0.966)	208857	5.08140	5.081
	58	Pentachlorophenol	266	18.200	18.214	(0.986)	108866	4.50590	4.506
*	59	Phenanthrene-d10	188	18.468	18.455	(1.000)	860054	4.00000	
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.460	22.460	(0.958)	642329	5.90509	5.905
*	69	Chrysene-d12	240	23.455	23.455	(1.000)	527529	4.00000	
*	77	Perylene-d12	264	26.159	26.147	(1.000)	475440	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.956	28.943	(1.107)	690513	5.14916	5.149
	90	N-Nitrosodimethylamine	74	5.068	5.094	(0.541)	321072	5.86783	5.868

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162311S.D
Lab Smp Id: SLE0339-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	280298	-11.32
27 Naphthalene-d8	1102073	551037	2204146	999390	-9.32
42 Acenaphthene-d10	583826	291913	1167652	527927	-9.57
59 Phenanthrene-d10	970917	485459	1941834	860054	-11.42
69 Chrysene-d12	590568	295284	1181136	527529	-10.67
77 Perylene-d12	537938	268969	1075876	475440	-11.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.47	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162311S.D

Lab ID: SLE0339-SCV1
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   17-MAY-2023 00:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.000	0.9569	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623125.D

Page 1

Date : 17-MAY-2023 01:07

Client ID:

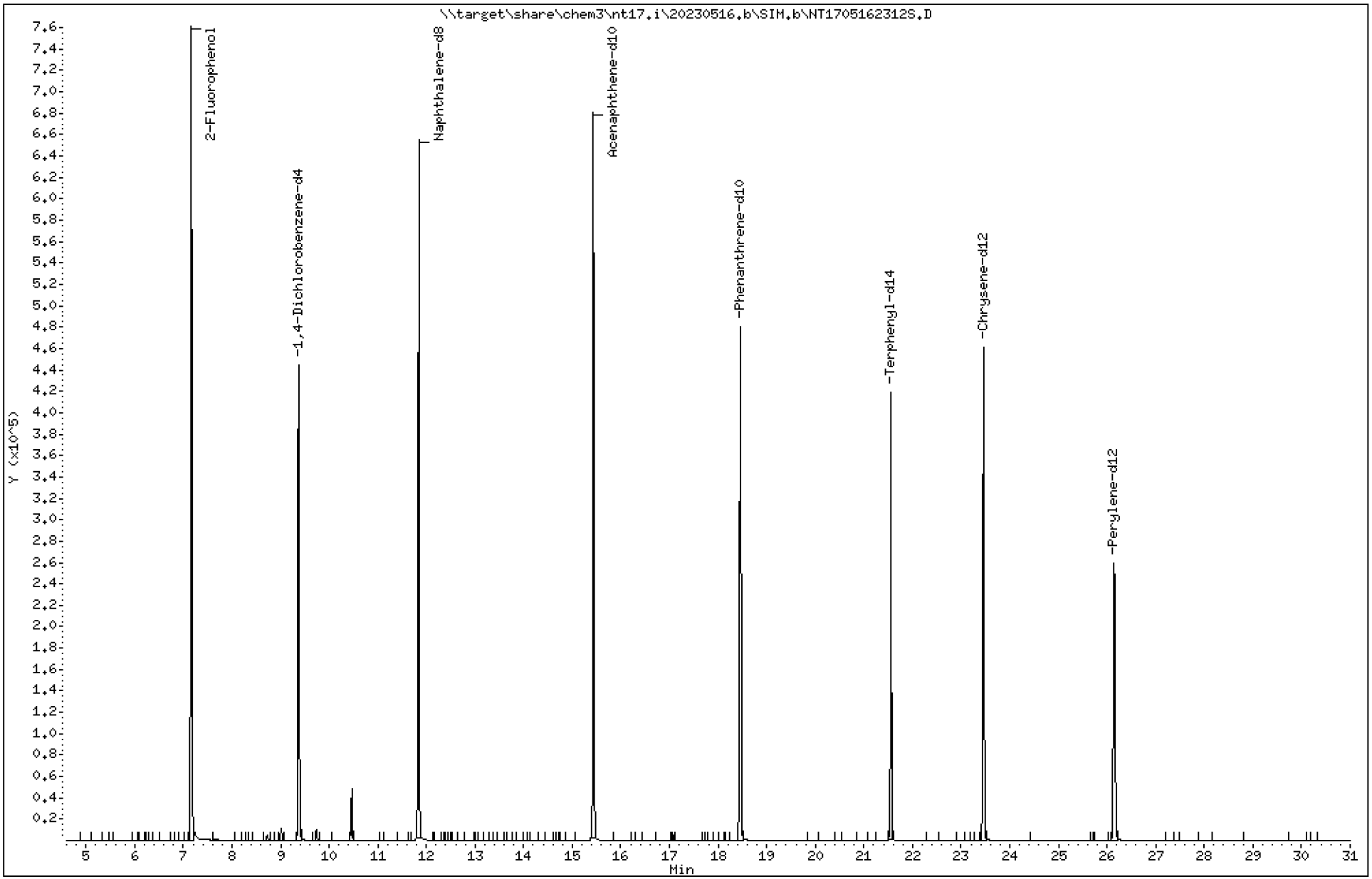
Instrument: nt17.i

Sample Info: SLE0339-ICB1

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162312S.D
Lab Smp Id: SLE0339-ICB1
Inj Date : 17-MAY-2023 01:07
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-ICB1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 12
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

							CONCENTRATIONS		
	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	ON-COLUMN (ug/mL)	FINAL (ug/mL)	
$	1 2-Fluorophenol	112	7.158	7.171	(0.764)	743464	8.12095	8.121(R)	
	3 Phenol	94	Compound Not Detected.						
	7 1,3-Dichlorobenzene	146	Compound Not Detected.						
*	8 1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	302680	4.00000		
	9 1,4-Dichlorobenzene	146	Compound Not Detected.						
	11 Benzyl alcohol	79	Compound Not Detected.						
	12 1,2-Dichlorobenzene	146	Compound Not Detected.						
	13 2-Methylphenol	108	Compound Not Detected.						
	15 4-Methylphenol	108	Compound Not Detected.						
	16 N-Nitroso-di-n-propylamine	70	Compound Not Detected.						
	22 2,4-Dimethylphenol	107	Compound Not Detected.						
	24 Benzoic acid	105	Compound Not Detected.						
	26 1,2,4-Trichlorobenzene	180	Compound Not Detected.						
*	27 Naphthalene-d8	136	11.840	11.840	(1.000)	1065796	4.00000		
	30 Hexachlorobutadiene	225	Compound Not Detected.						
	39 Dimethylphthalate	163	Compound Not Detected.						
*	42 Acenaphthene-d10	162	15.436	15.436	(1.000)	551880	4.00000		
	50 Diethylphthalate	149	Compound Not Detected.						
	54 N-Nitrosodiphenylamine	169	Compound Not Detected.						
	57 Hexachlorobenzene	284	Compound Not Detected.						
	58 Pentachlorophenol	266	Compound Not Detected.						
*	59 Phenanthrene-d10	188	18.455	18.455	(1.000)	903730	4.00000		
$	66 Terphenyl-d14	244	21.554	21.554	(0.919)	538056	5.26861	5.269(R)	
	67 Butylbenzylphthalate	149	Compound Not Detected.						
*	69 Chrysene-d12	240	23.455	23.455	(1.000)	538208	4.00000		
*	77 Perylene-d12	264	26.146	26.147	(1.000)	508161	4.00000		
	79 Dibenzo(a,h)anthracene	278	Compound Not Detected.						
	90 N-Nitrosodimethylamine	74	Compound Not Detected.						

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162312S.D
Lab Smp Id: SLE0339-ICB1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	302680	-4.24
27 Naphthalene-d8	1102073	551037	2204146	1065796	-3.29
42 Acenaphthene-d10	583826	291913	1167652	551880	-5.47
59 Phenanthrene-d10	970917	485459	1941834	903730	-6.92
69 Chrysene-d12	590568	295284	1181136	538208	-8.87
77 Perylene-d12	537938	268969	1075876	508161	-5.54

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.46	-0.07
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
77 Perylene-d12	26.16	25.66	26.66	26.15	-0.05

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

REVIEW SUMMARY FOR FILE - NT1705162312S.D

Lab ID: SLE0339-ICB1
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   17-MAY-2023 01:07

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1705162310S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00070
Laboratory ID: SLE0339-SCV1
Sequence: SLE0339
Sequence Name: SCV 5.0
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	5.1	2.6	20.00
1,2-Dichlorobenzene	5.0000	5.0	0.1	20.00
Benzyl Alcohol	5.0000	5.7	14.1	20.00
Benzoic acid	10.000	7.8	-22.2 *	20.00
2,4-Dimethylphenol	5.0000	3.8	-23.7 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-1.9	20.00
N-Nitrosodiphenylamine	5.0000	5.6	12.5	20.00
Pentachlorophenol	5.0000	4.5	-9.9	20.00
2-Fluorophenol	7.5000	0.00		
p-Terphenyl-d14	5.0000	0.00		

* Indicates values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Page 1

Date : 17-MAY-2023 00:29

Client ID:

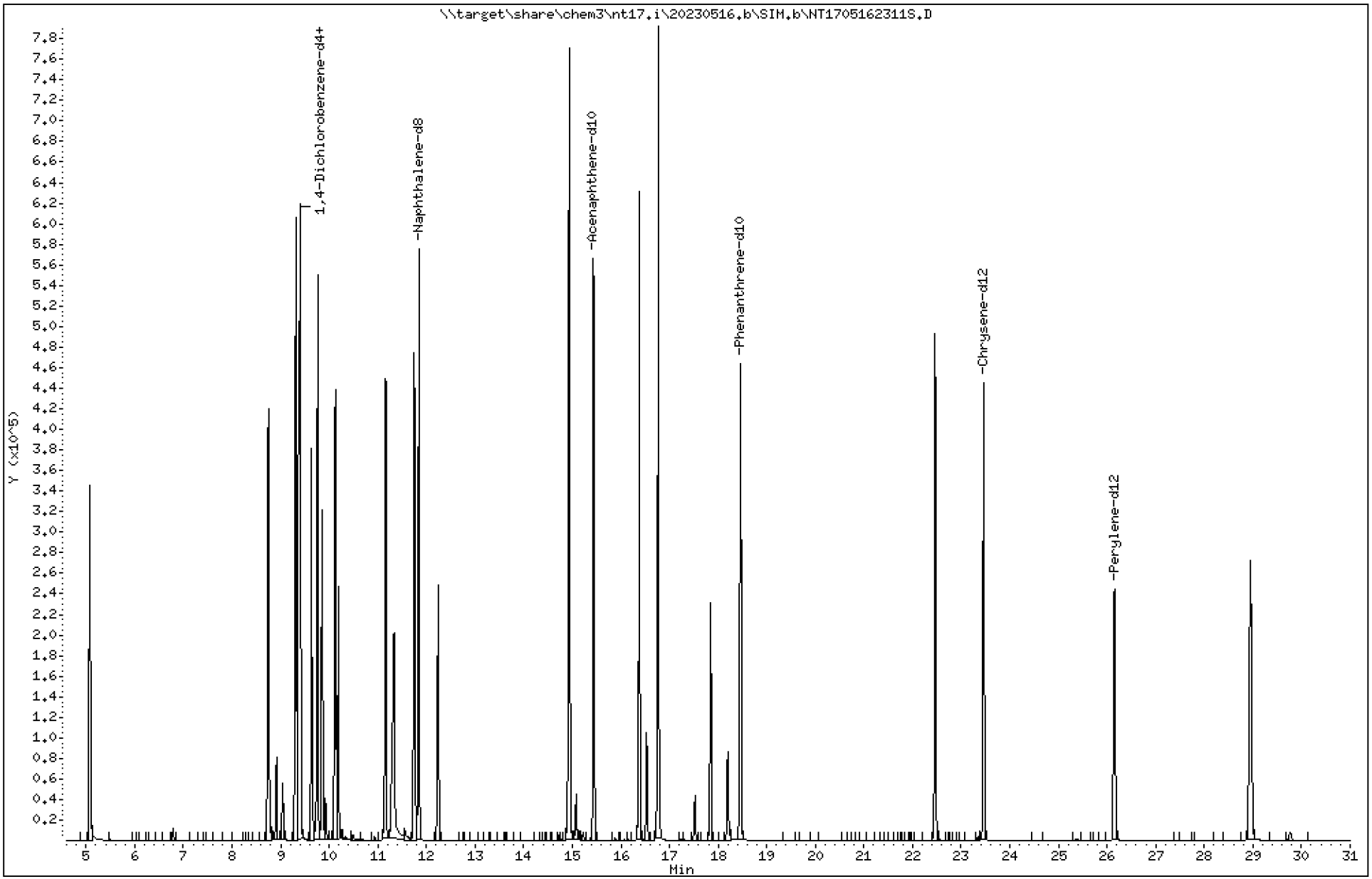
Instrument: nt17.i

Sample Info: SLE0339-SCV1

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

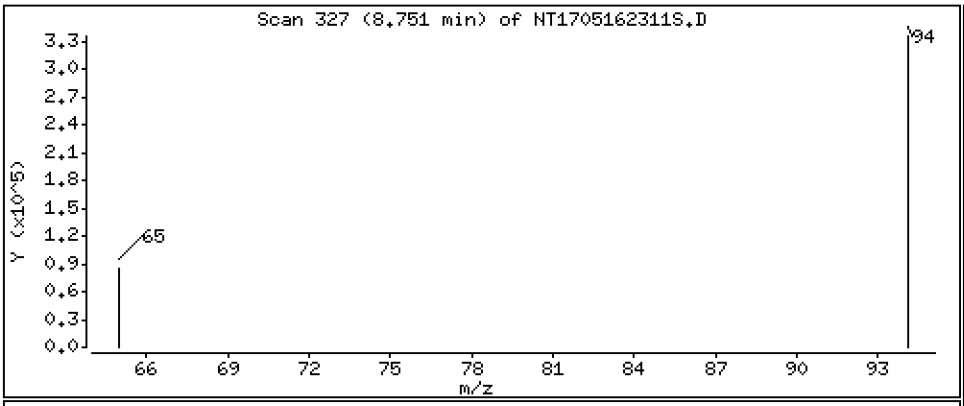
Operator: JGR

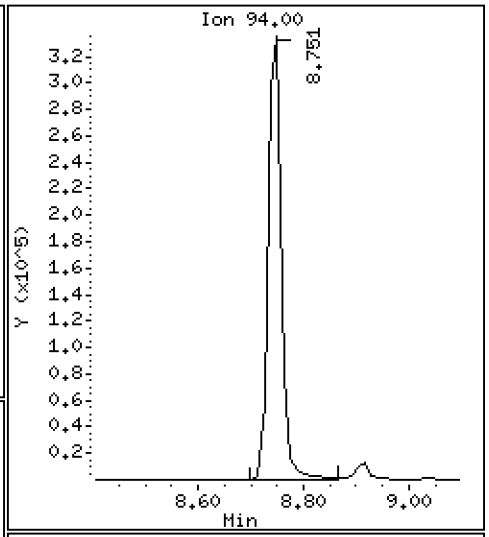
Column phase: ZB-5msi

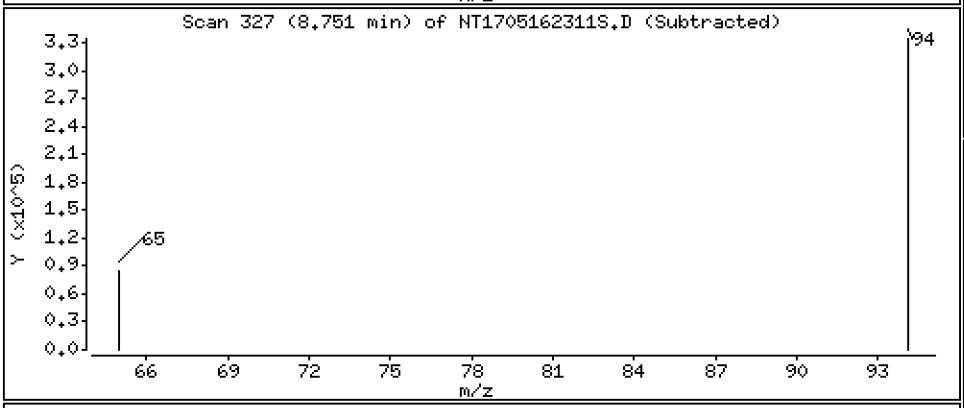
Column diameter: 0.25

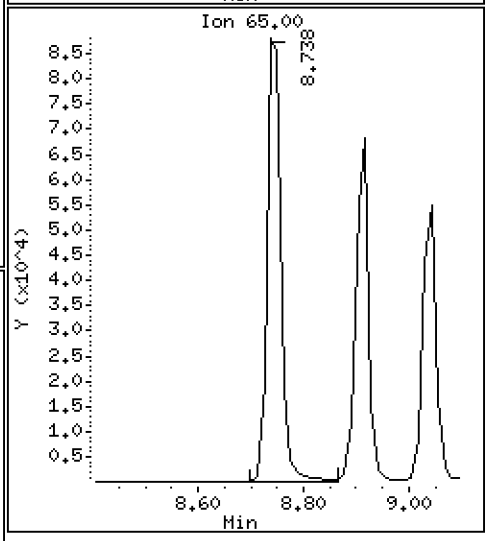
3 Phenol

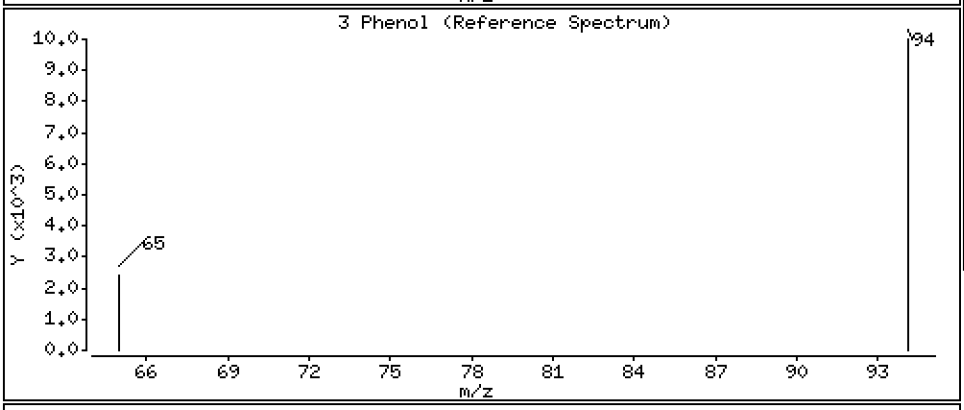
Concentration: 4.884 ug/mL

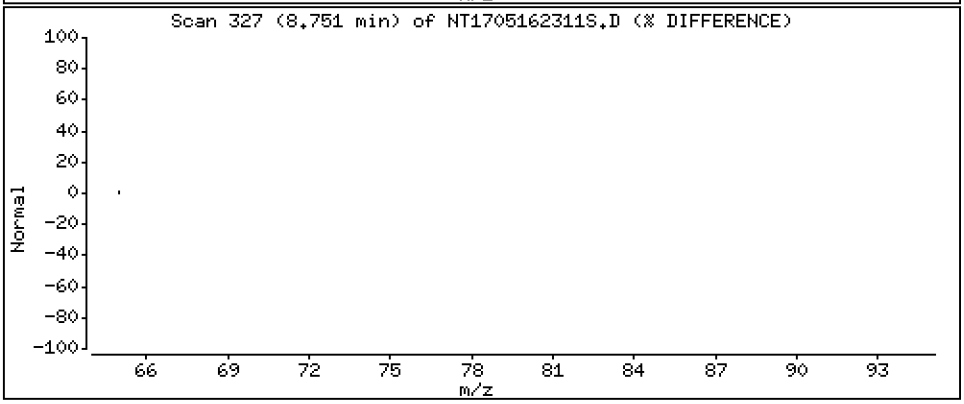












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

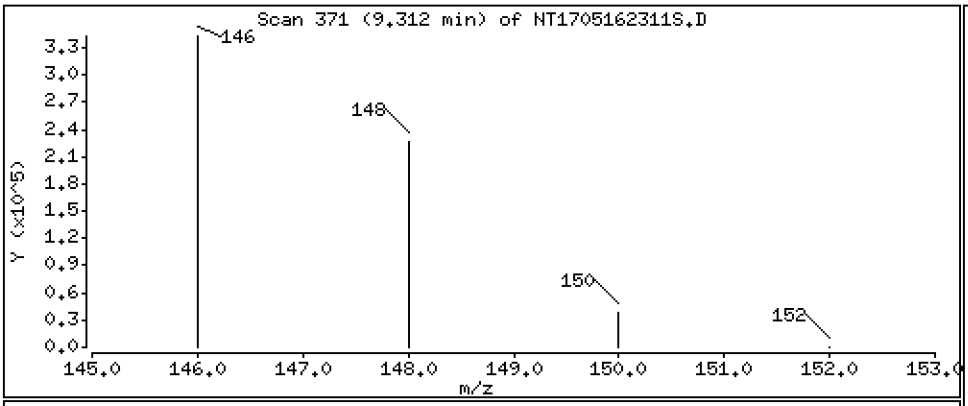
Operator: JGR

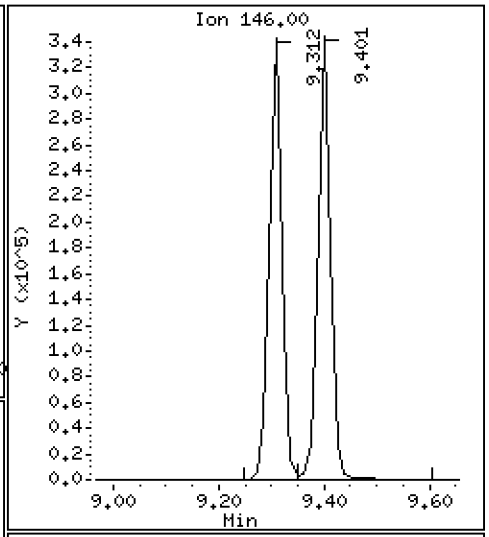
Column phase: ZB-5msi

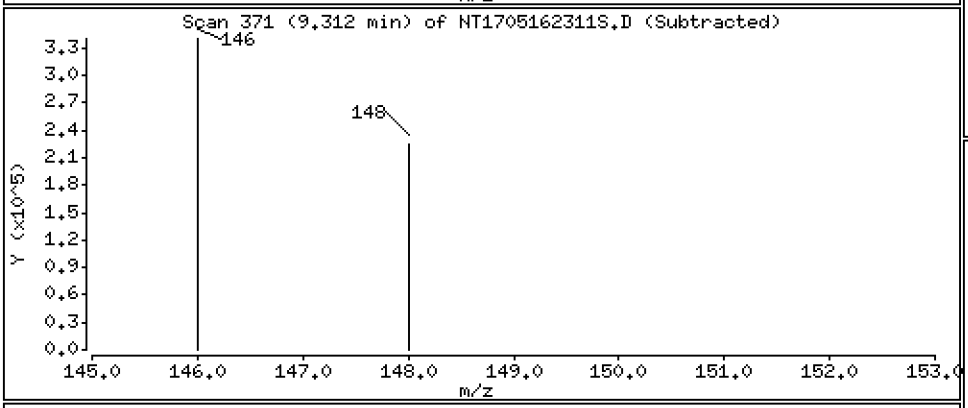
Column diameter: 0.25

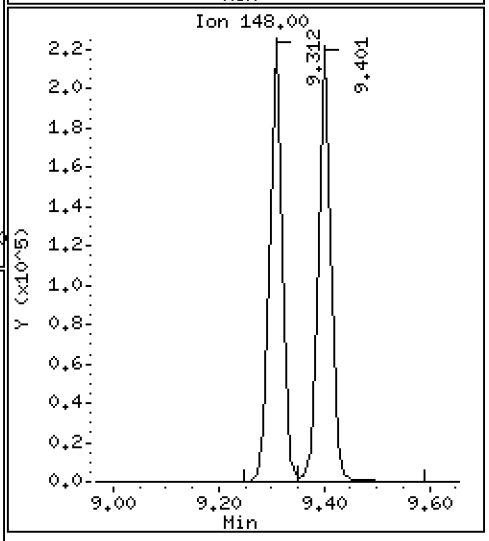
7 1,3-Dichlorobenzene

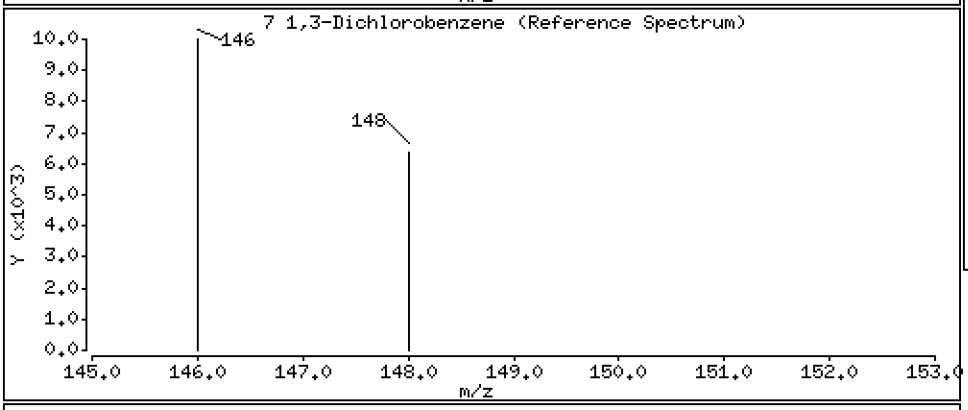
Concentration: 5.087 ug/mL

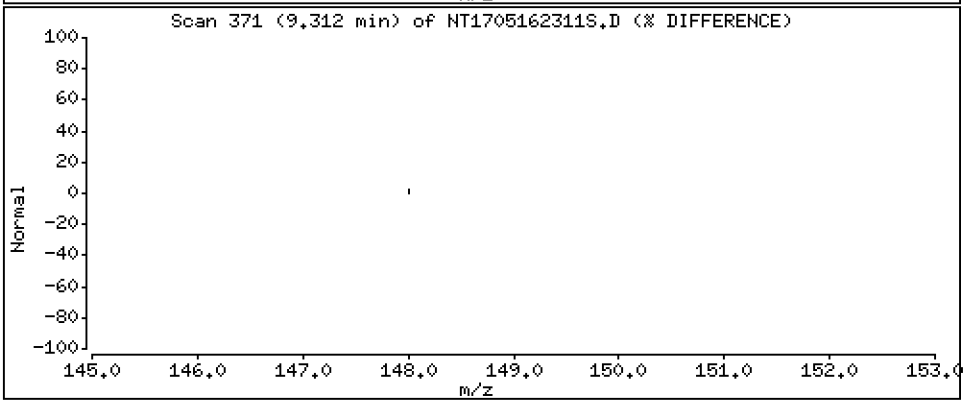












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

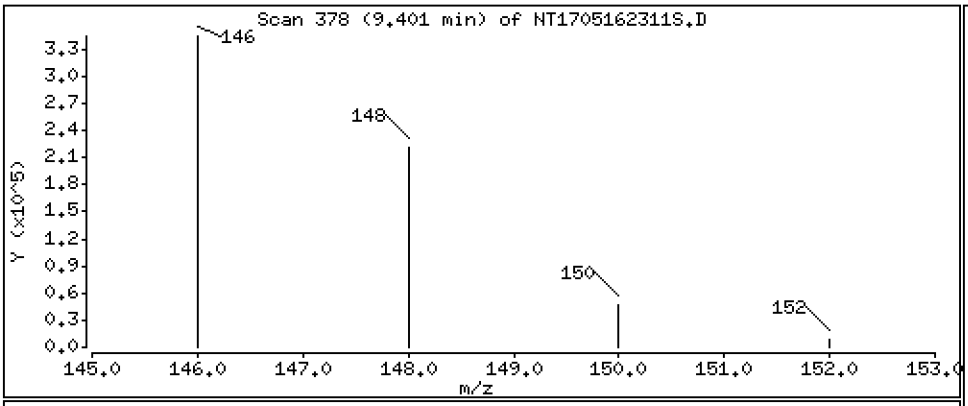
Operator: JGR

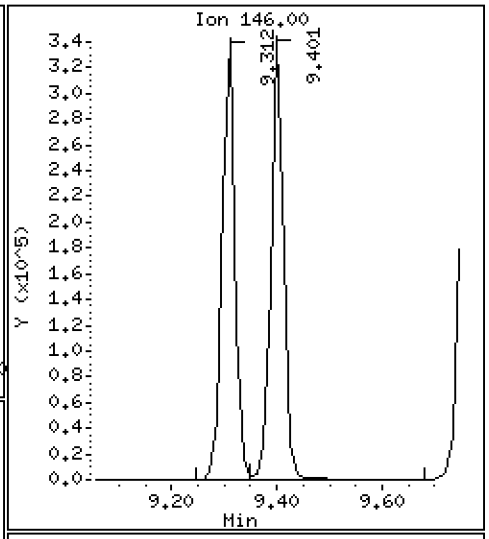
Column phase: ZB-5msi

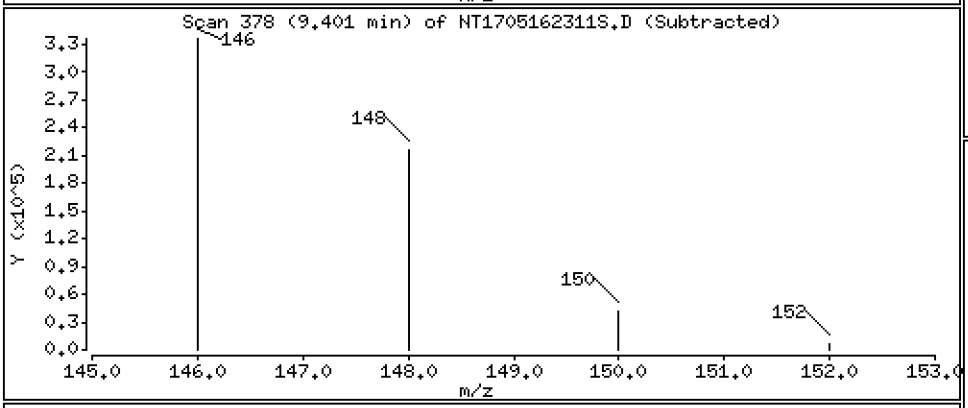
Column diameter: 0.25

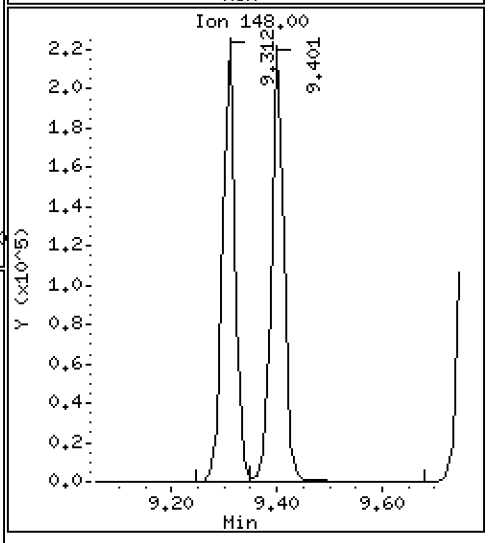
9 1,4-Dichlorobenzene

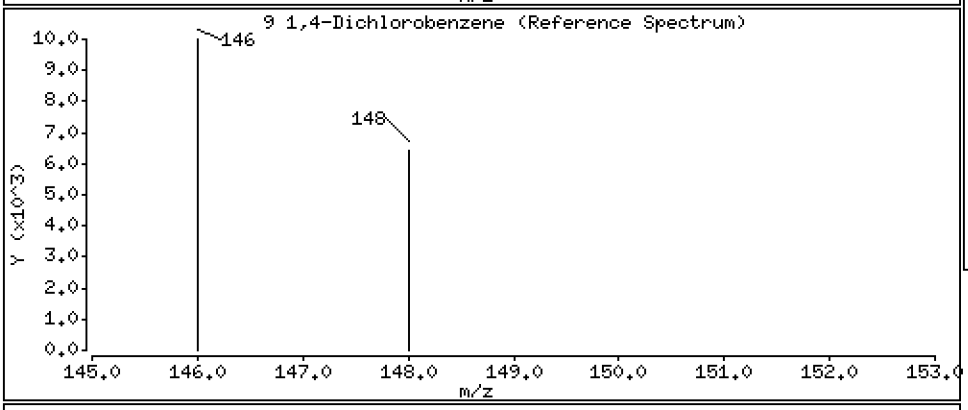
Concentration: 5.132 ug/mL

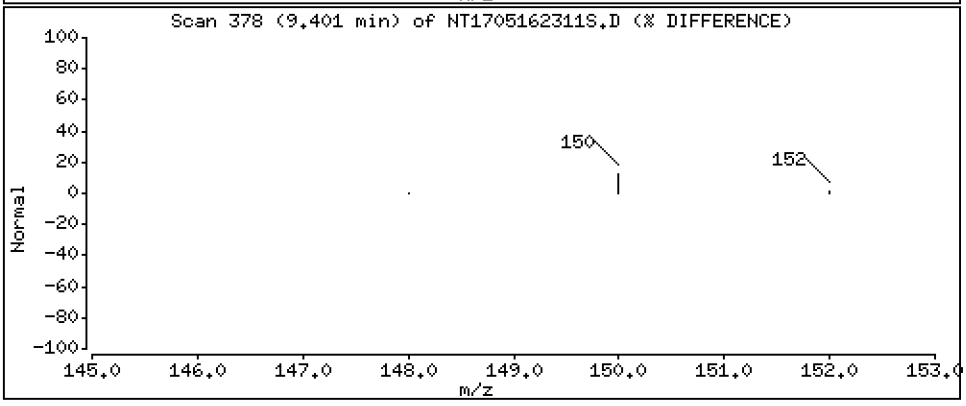












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

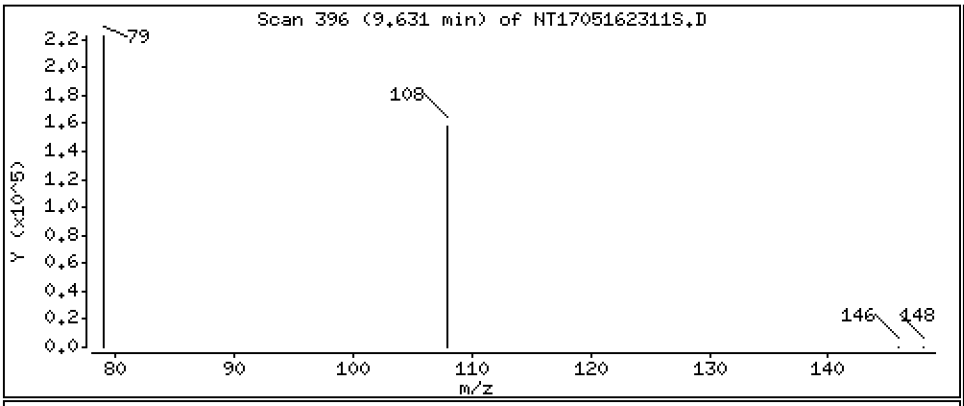
Operator: JGR

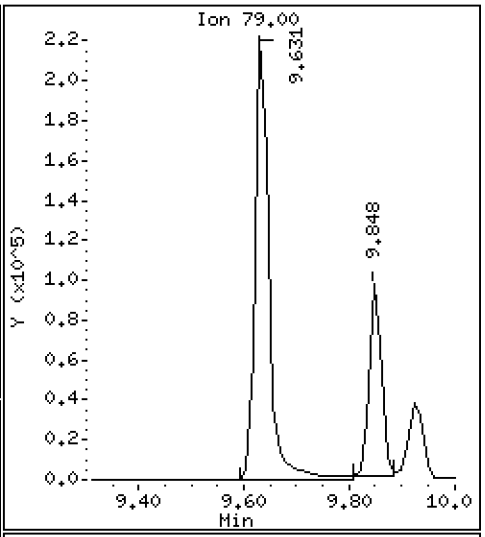
Column phase: ZB-5msi

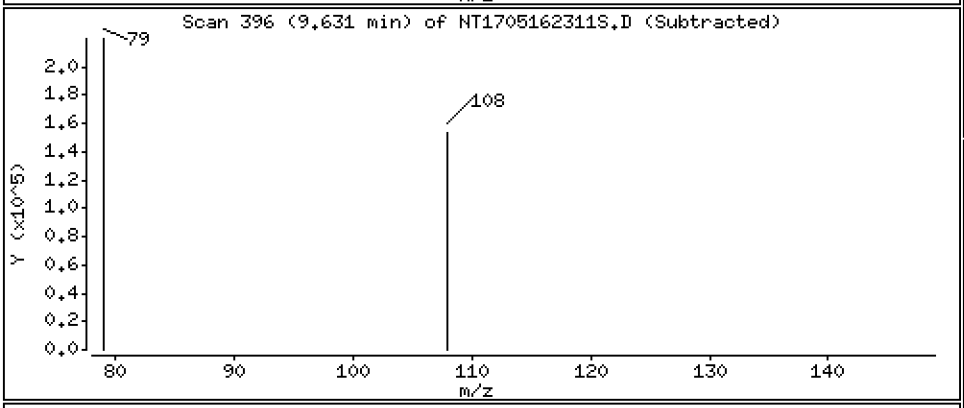
Column diameter: 0.25

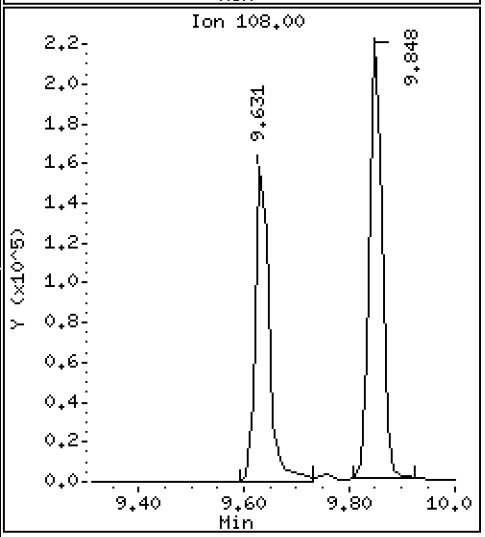
11 Benzyl alcohol

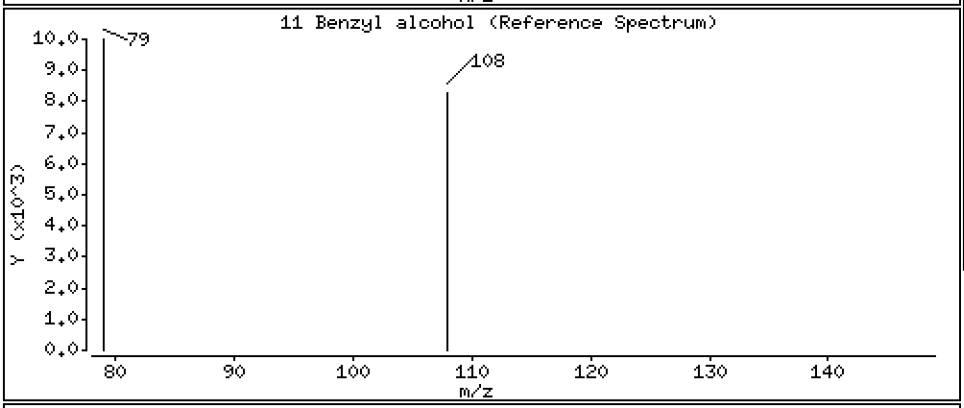
Concentration: 5.706 ug/mL

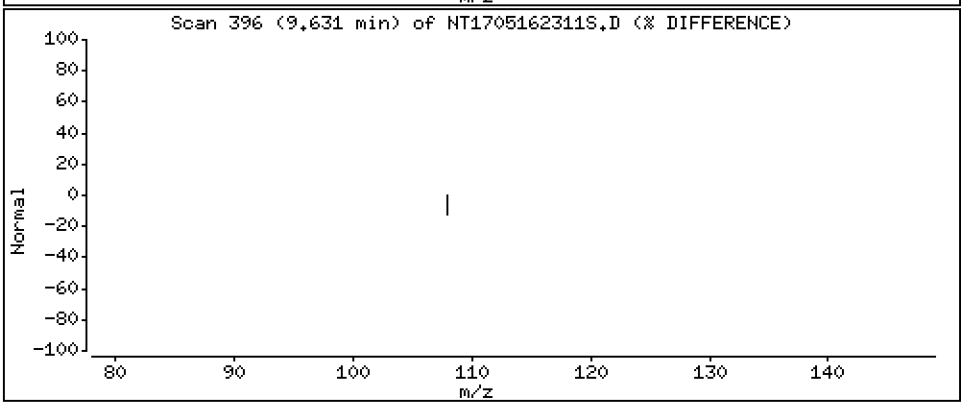












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

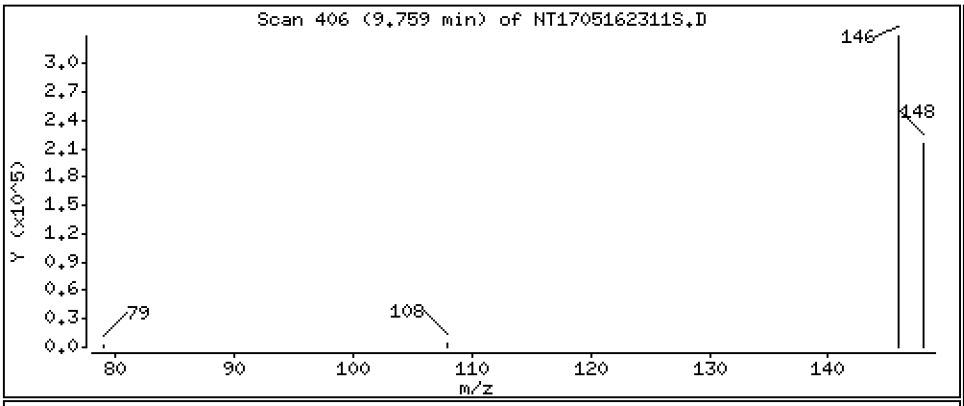
Operator: JGR

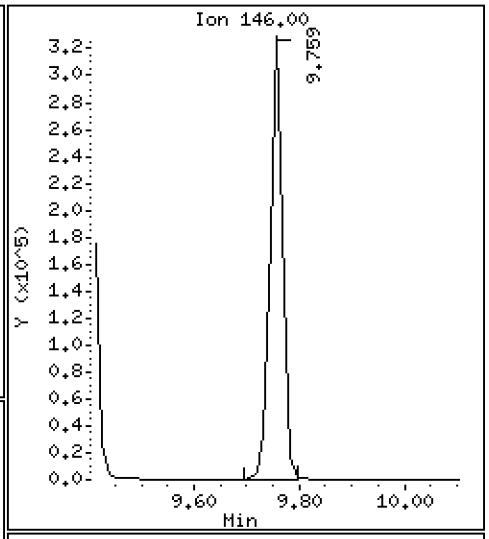
Column phase: ZB-5msi

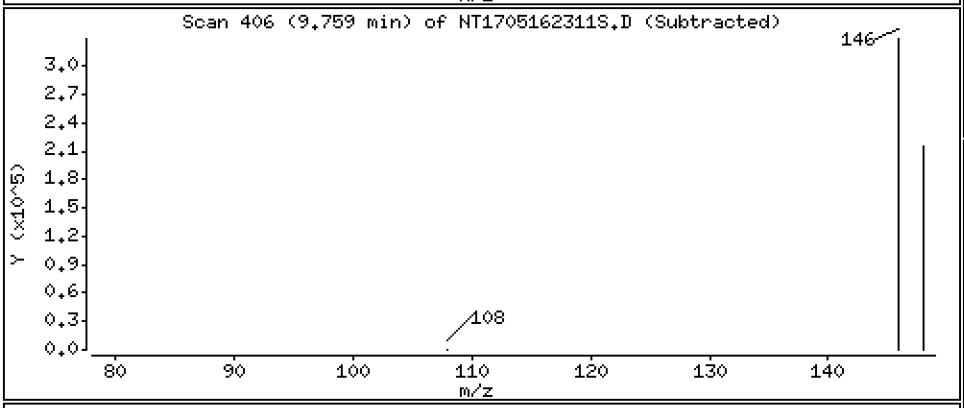
Column diameter: 0.25

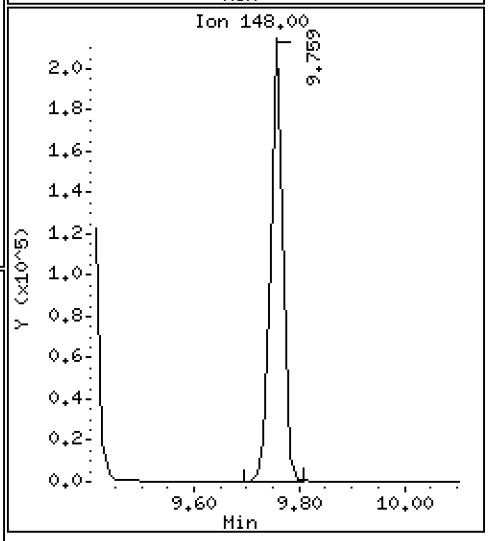
12 1,2-Dichlorobenzene

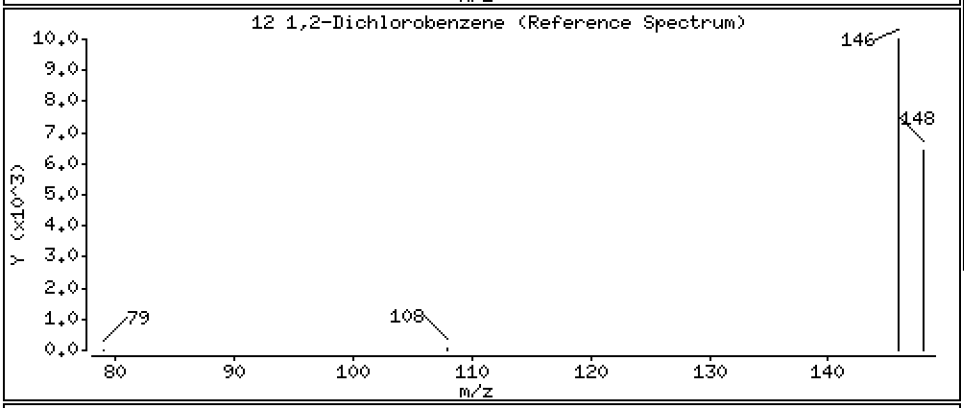
Concentration: 5.007 ug/mL

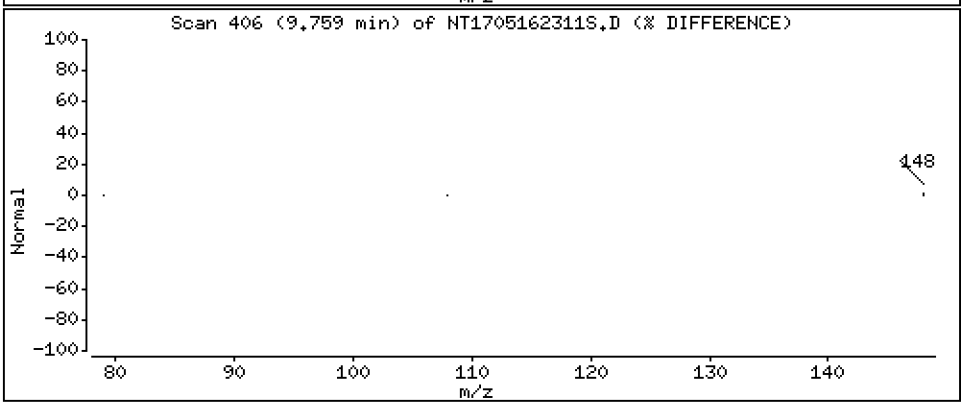












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

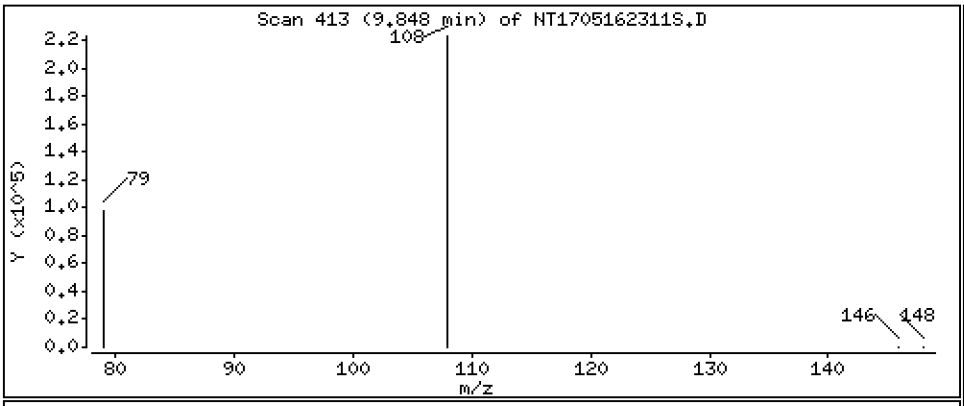
Operator: JGR

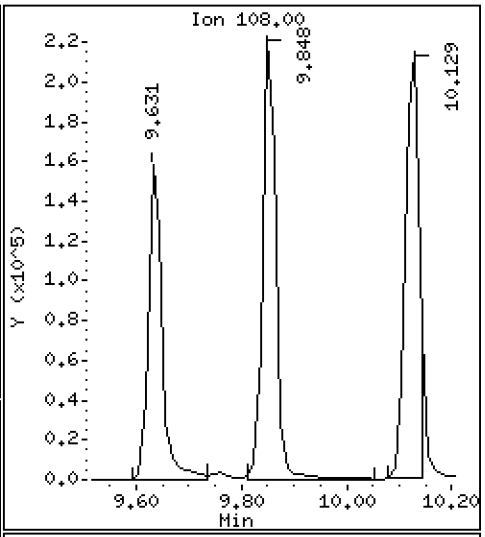
Column phase: ZB-5msi

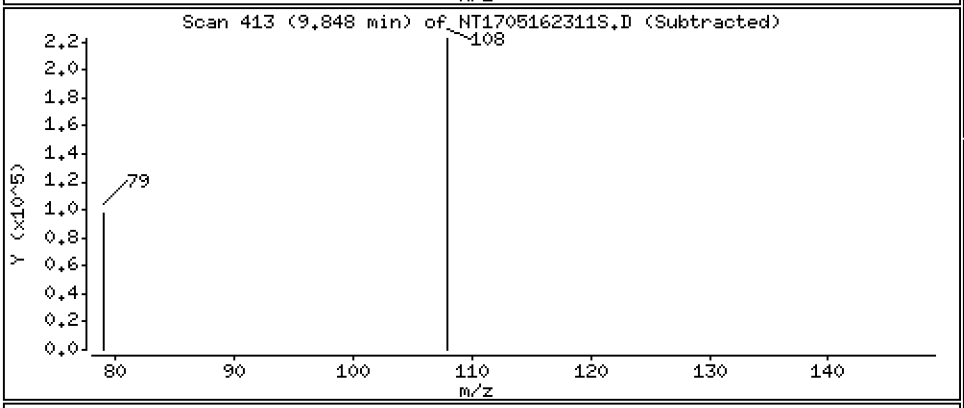
Column diameter: 0.25

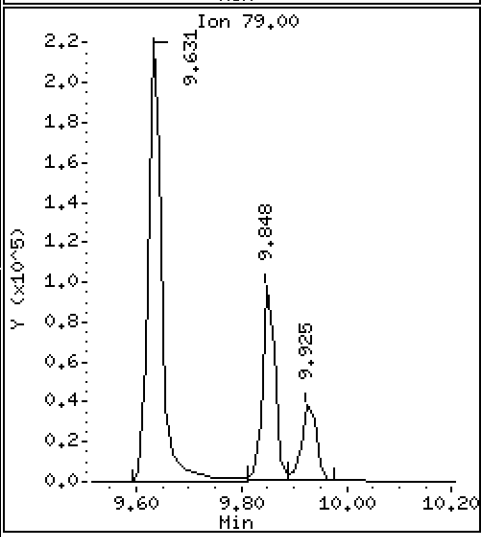
13 2-Methylphenol

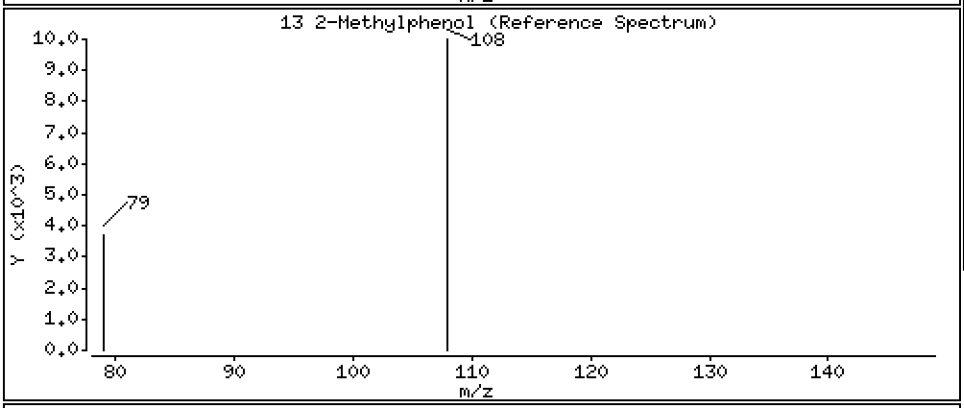
Concentration: 4.408 ug/mL

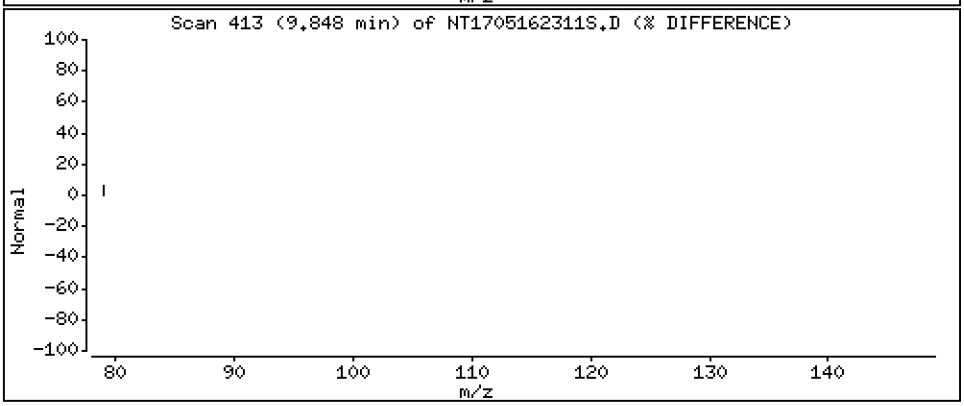












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

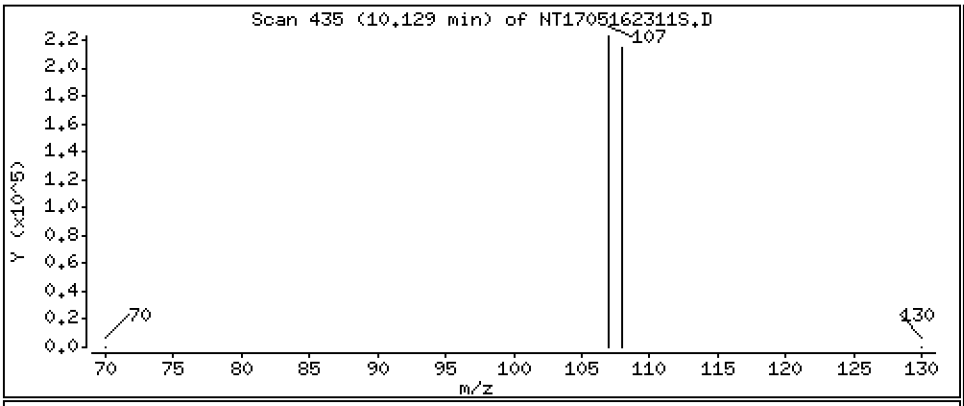
Operator: JGR

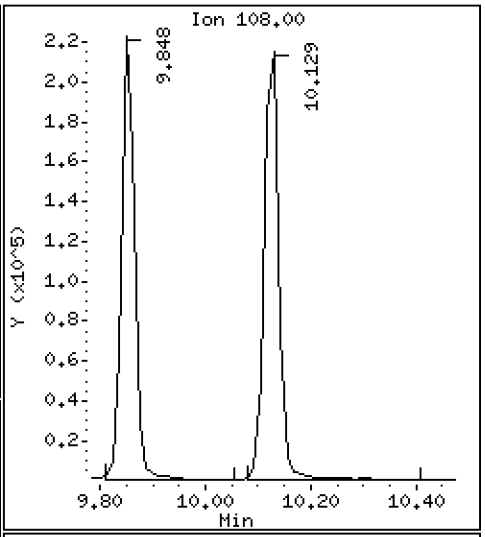
Column phase: ZB-5msi

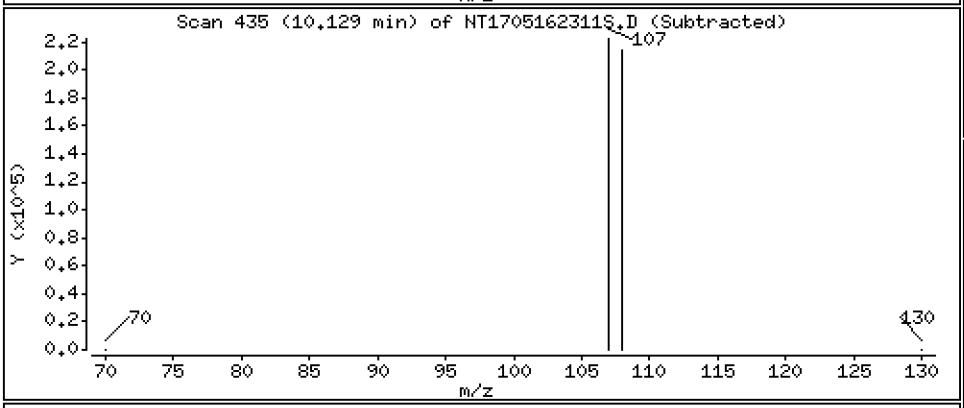
Column diameter: 0.25

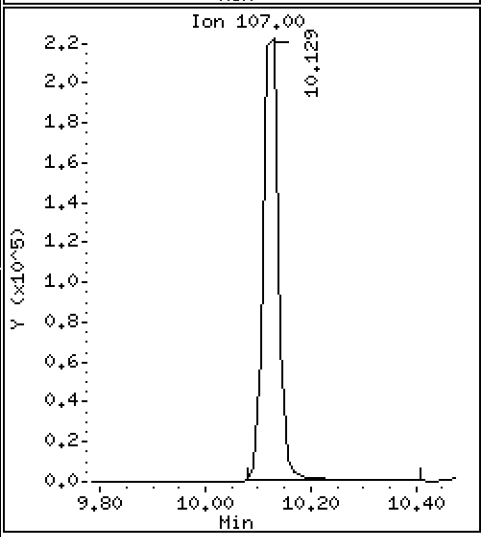
15 4-Methylphenol

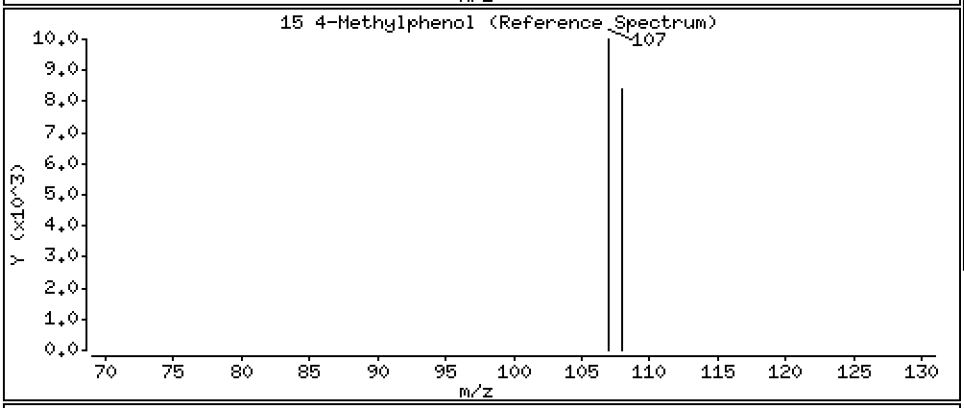
Concentration: 4.788 ug/mL

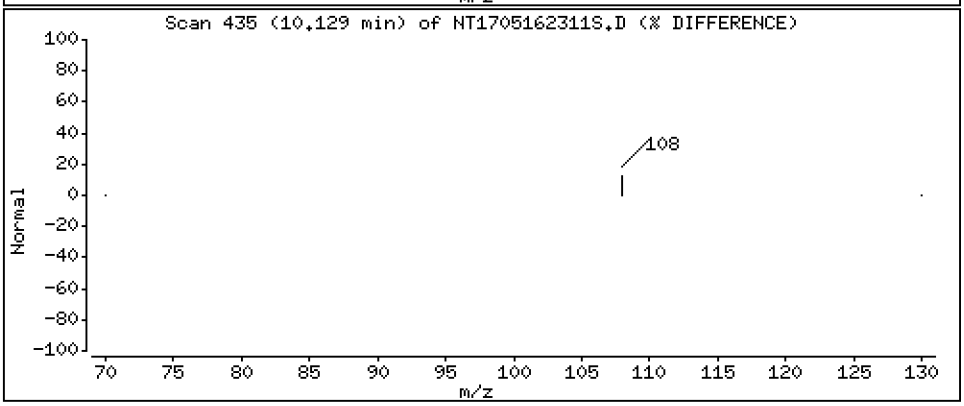












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

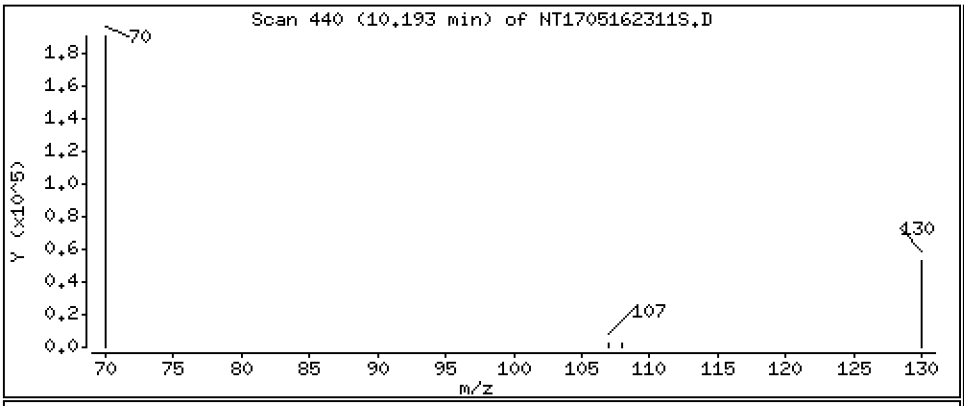
Operator: JGR

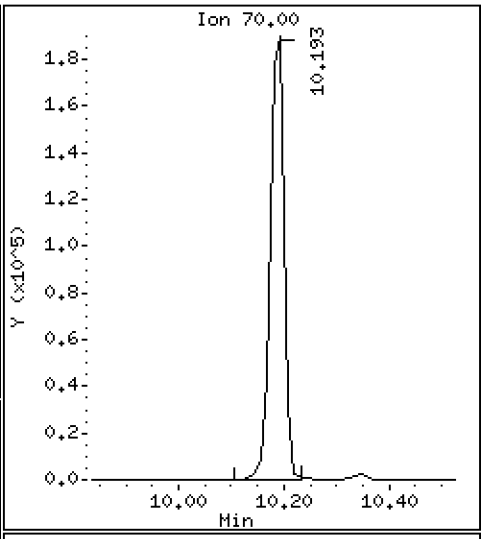
Column phase: ZB-5msi

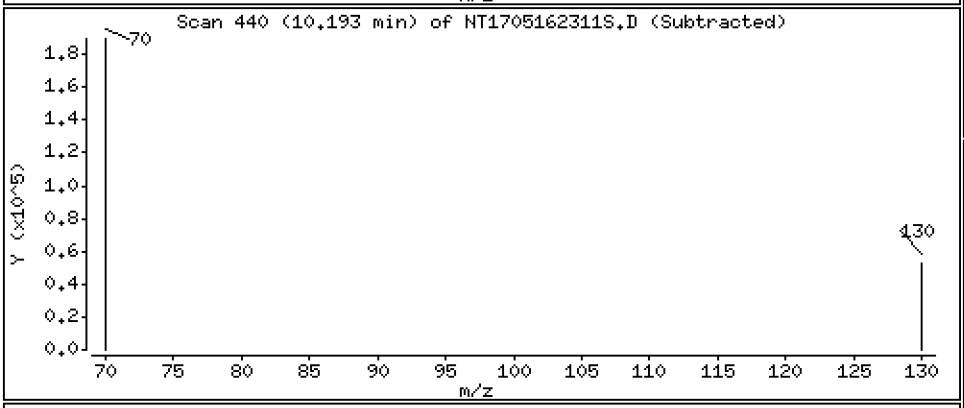
Column diameter: 0.25

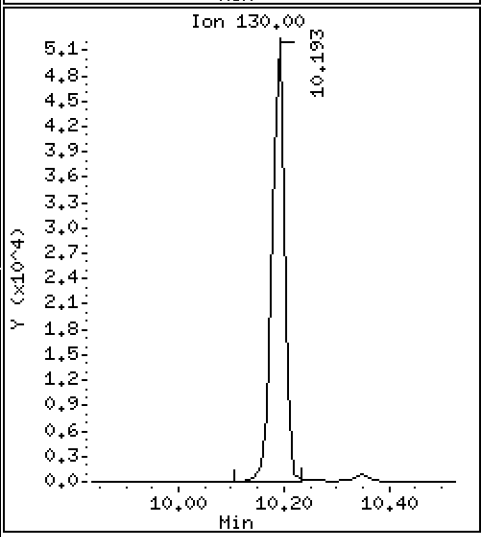
16 N-Nitroso-di-n-propylamine

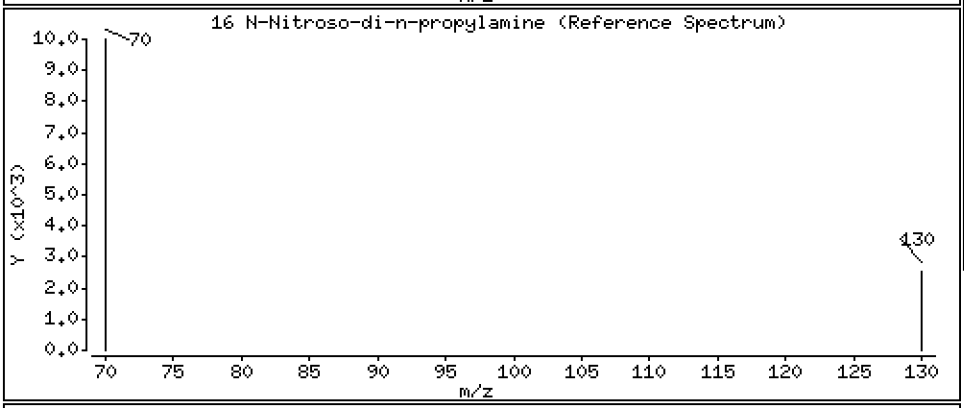
Concentration: 5.479 ug/mL

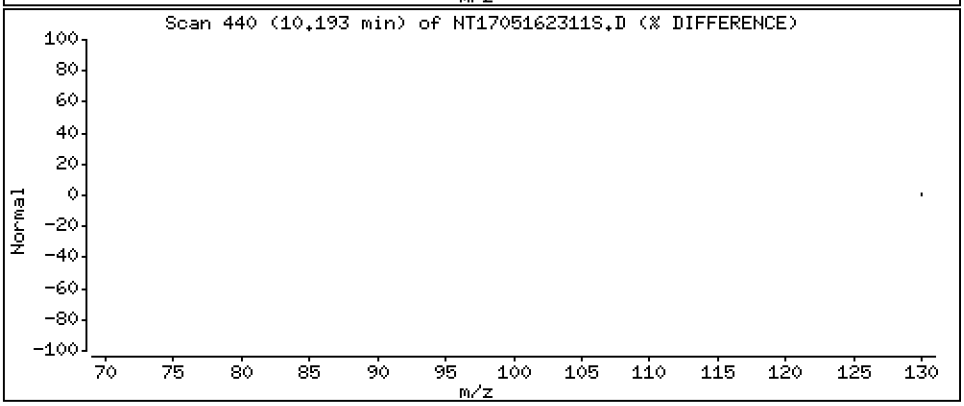












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

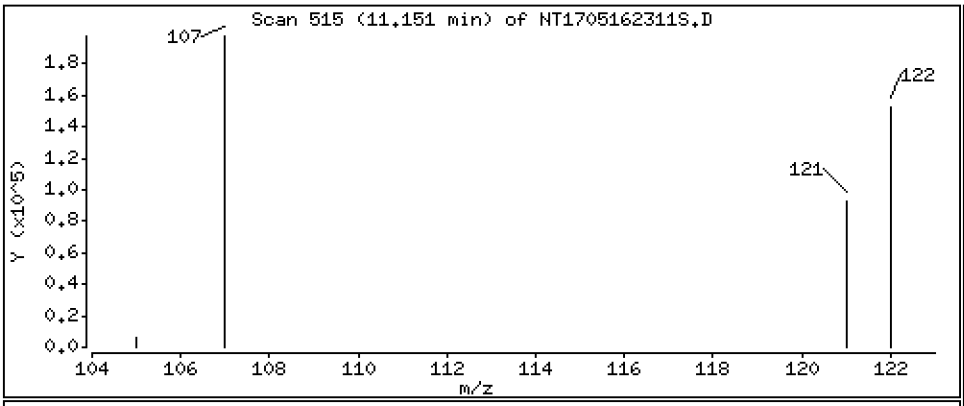
Operator: JGR

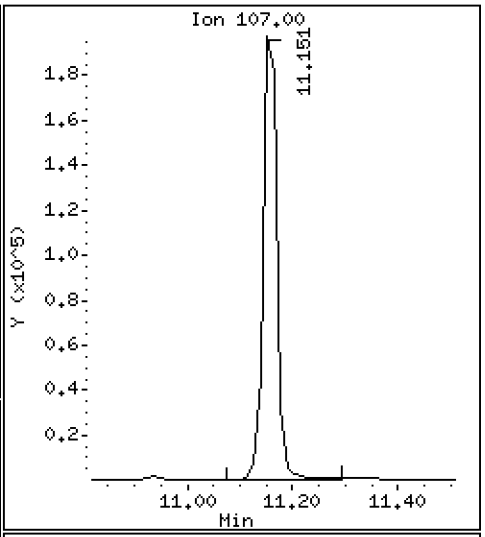
Column phase: ZB-5msi

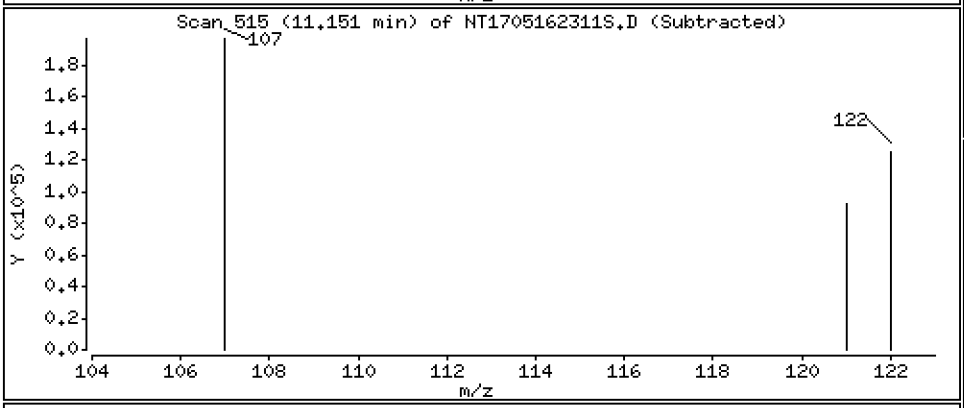
Column diameter: 0.25

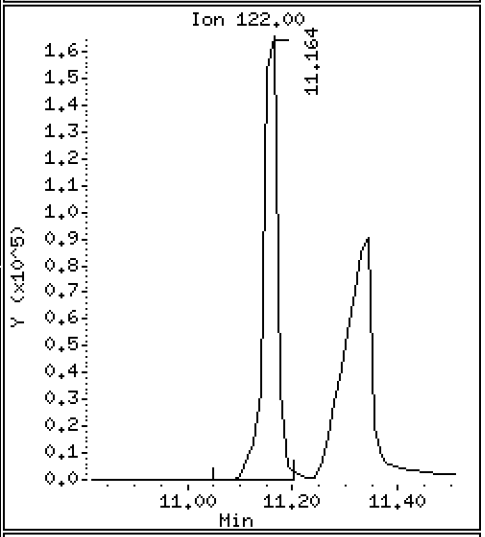
22 2,4-Dimethylphenol

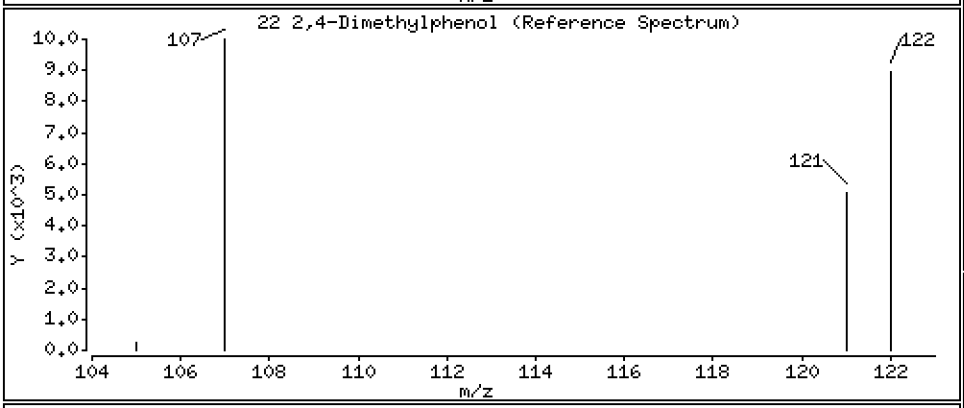
Concentration: 3.816 ug/mL

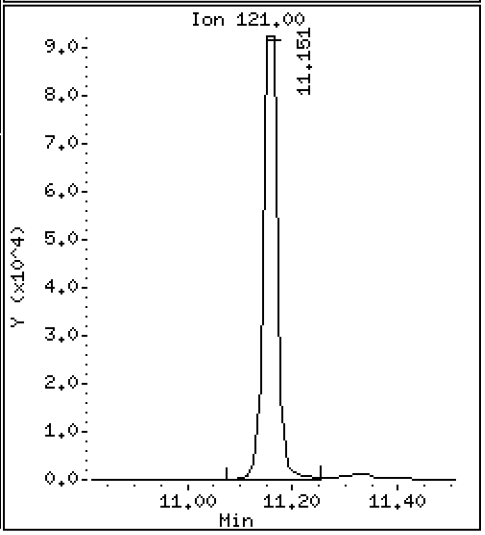


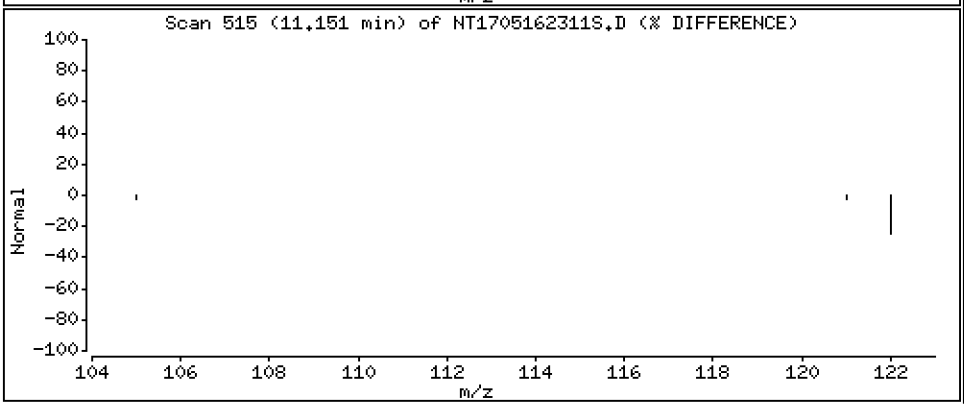












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

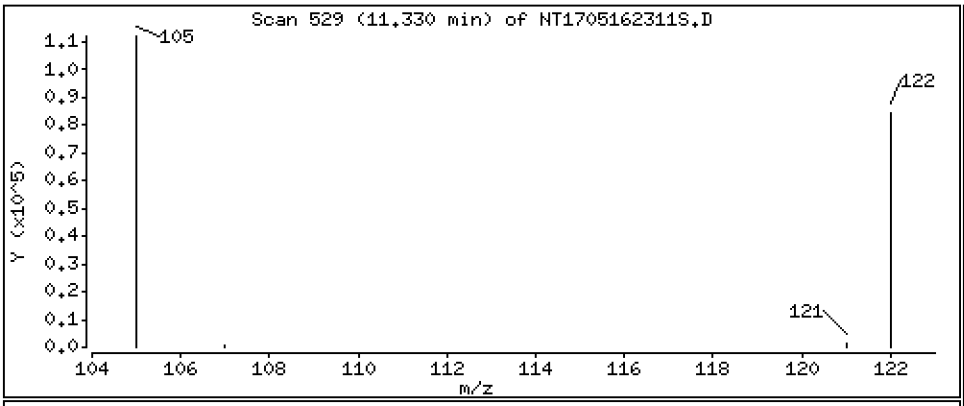
Operator: JGR

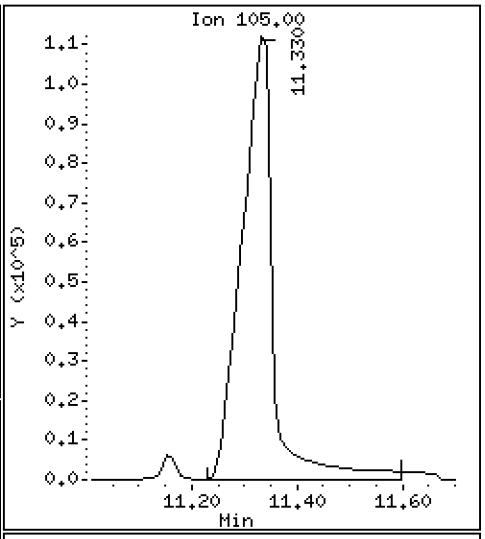
Column phase: ZB-5msi

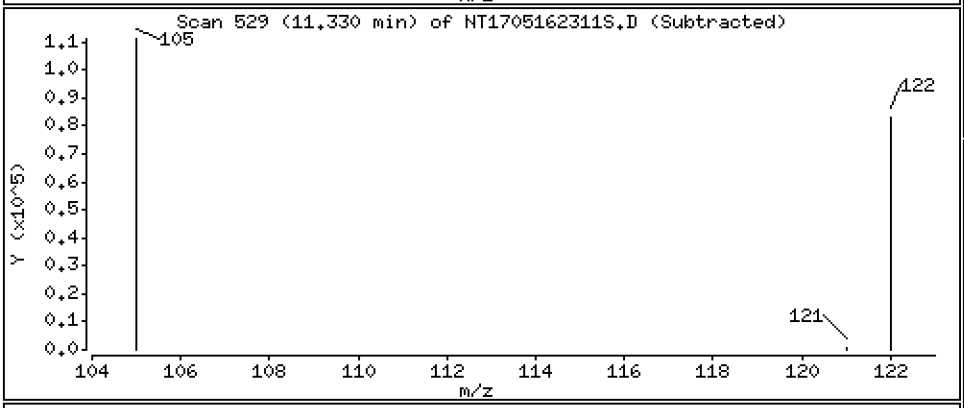
Column diameter: 0.25

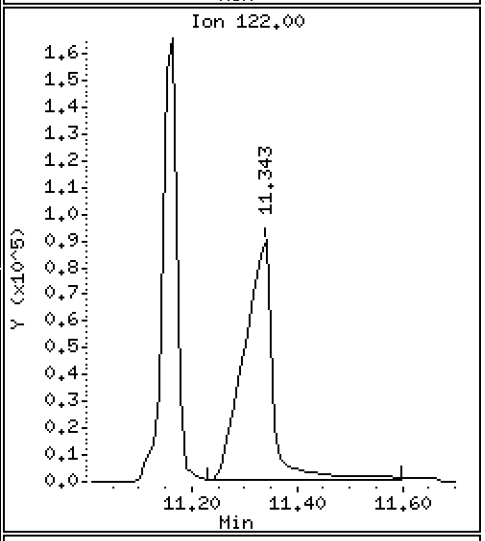
24 Benzoic acid

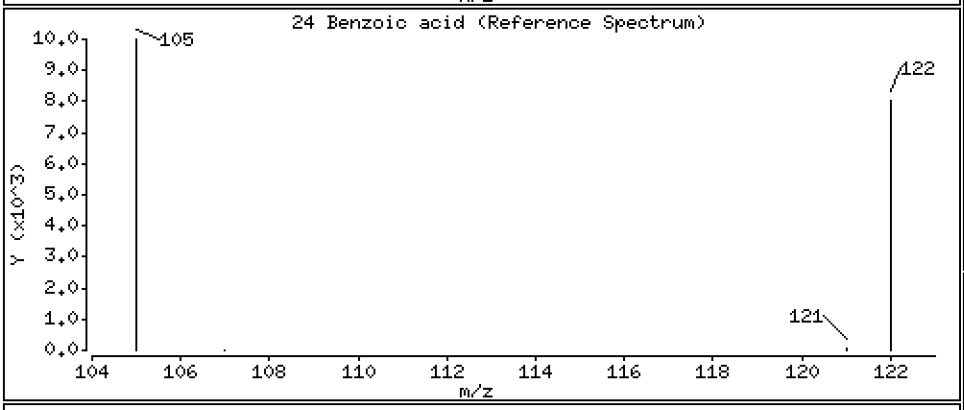
Concentration: 7.777 ug/mL

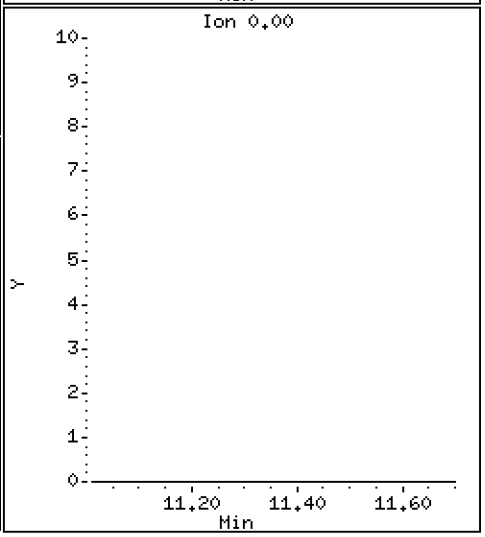


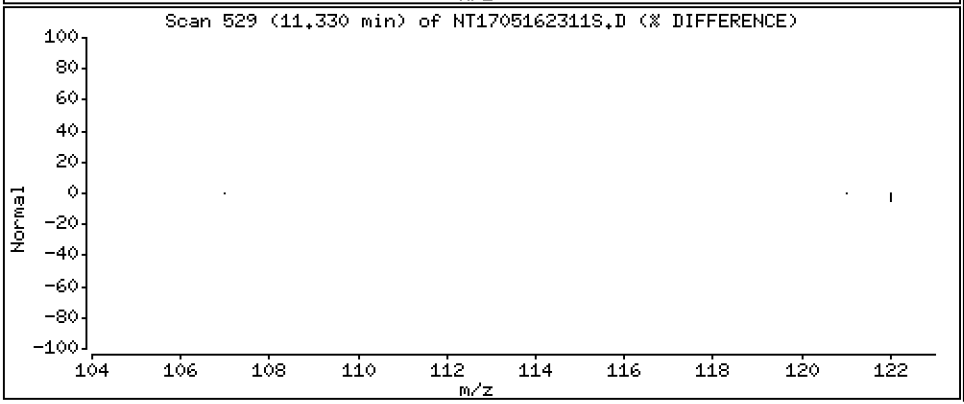












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

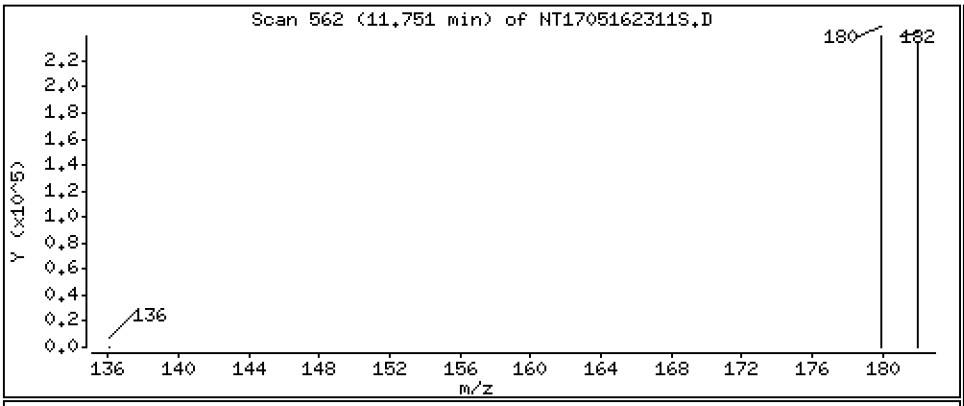
Operator: JGR

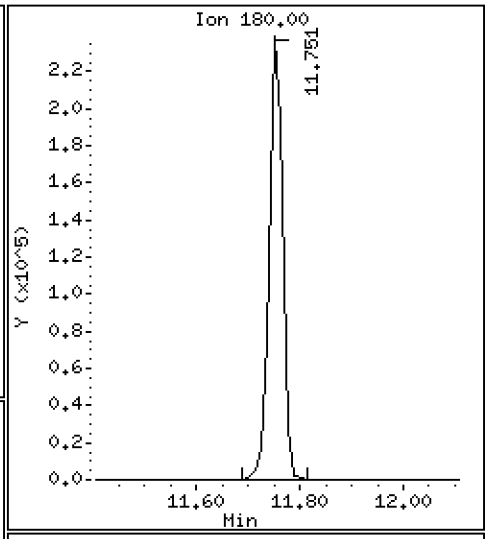
Column phase: ZB-5msi

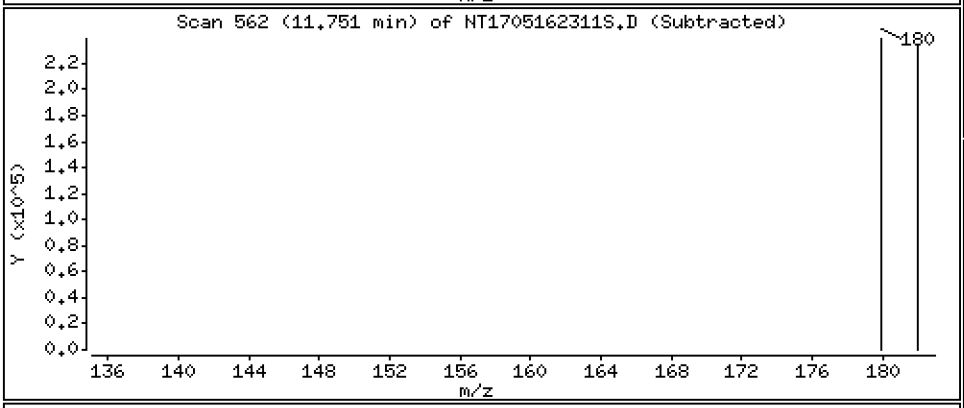
Column diameter: 0.25

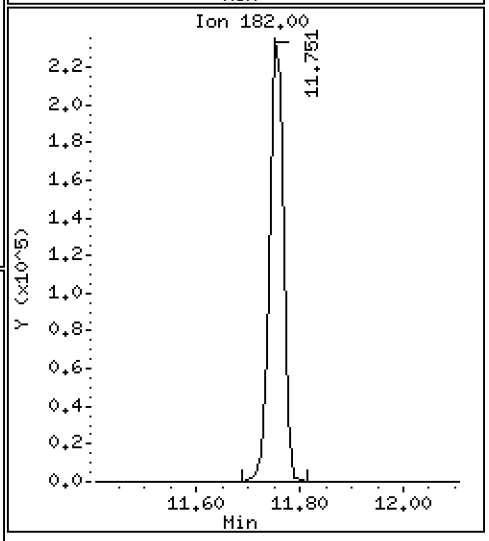
26 1,2,4-Trichlorobenzene

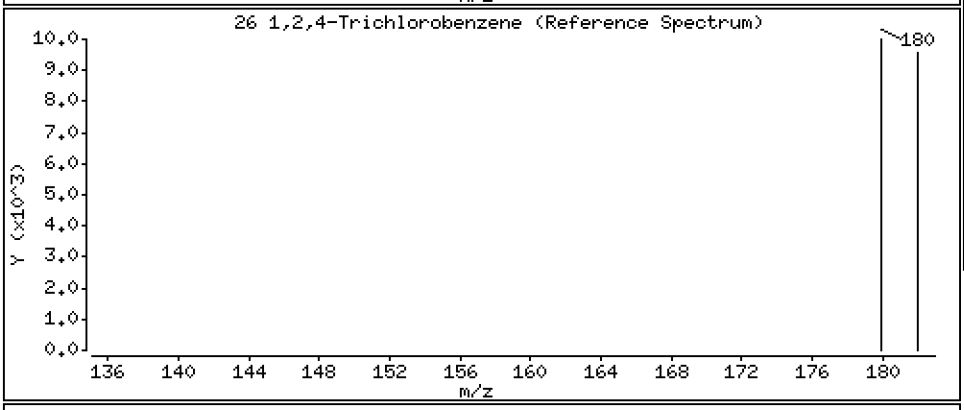
Concentration: 4.906 ug/mL

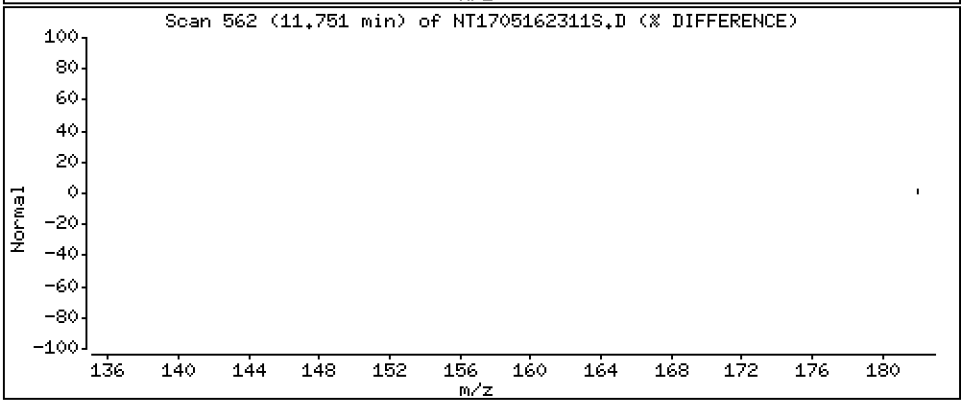












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

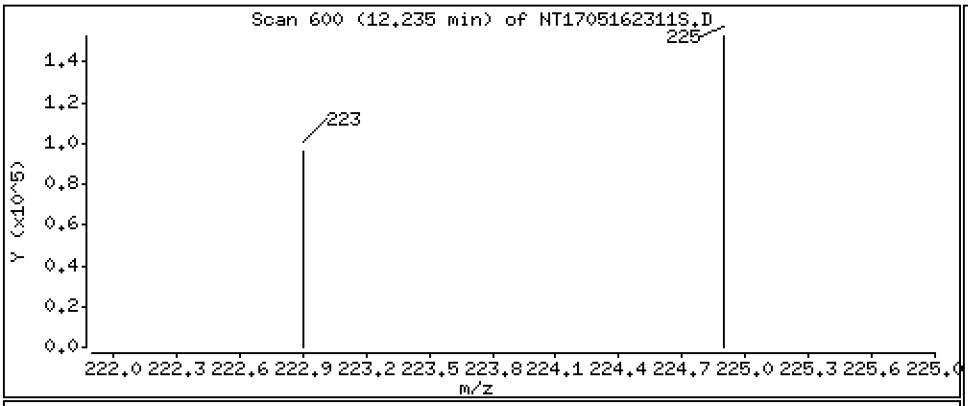
Operator: JGR

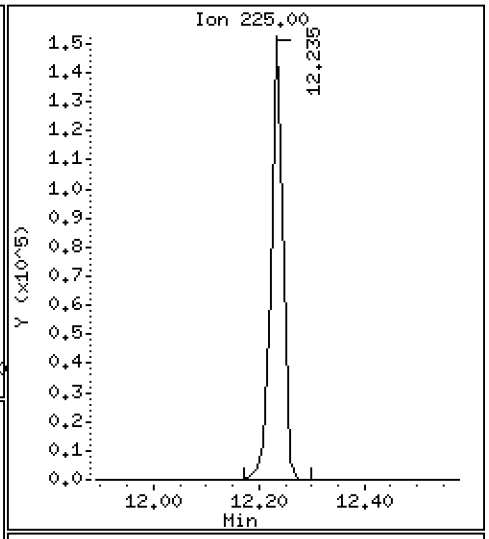
Column phase: ZB-5msi

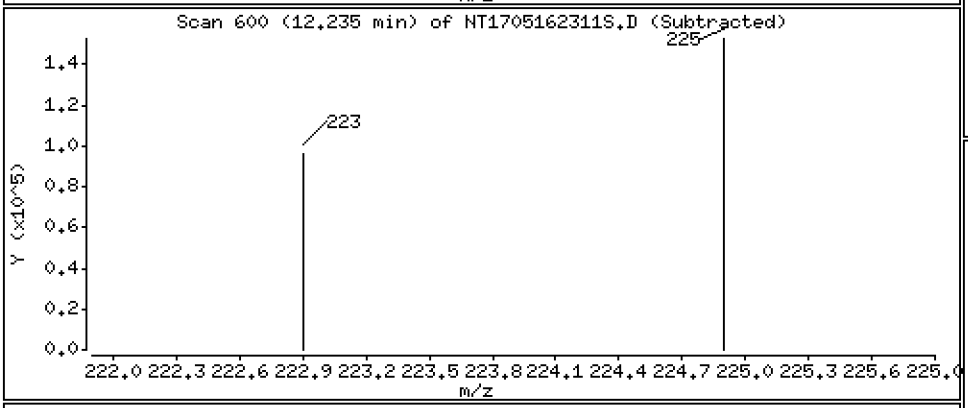
Column diameter: 0.25

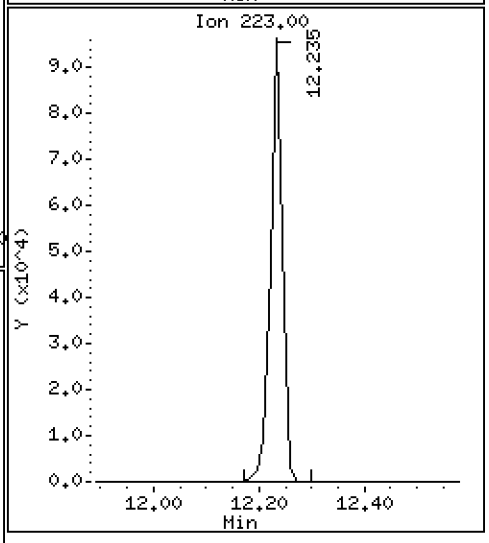
30 Hexachlorobutadiene

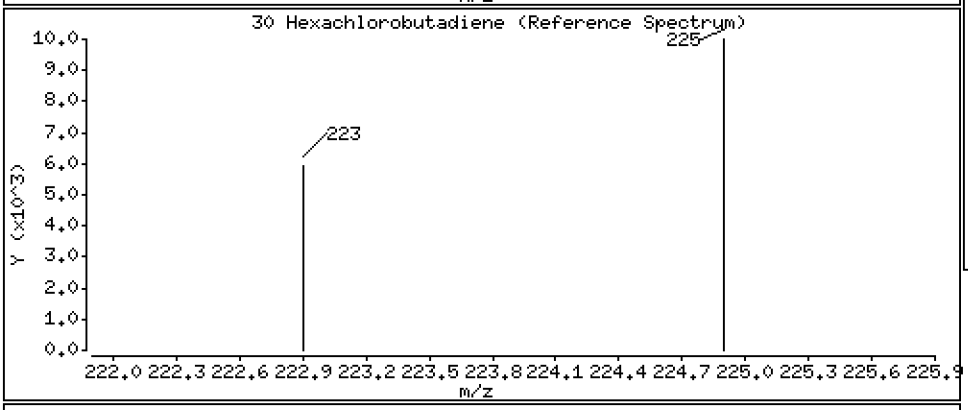
Concentration: 5.201 ug/mL

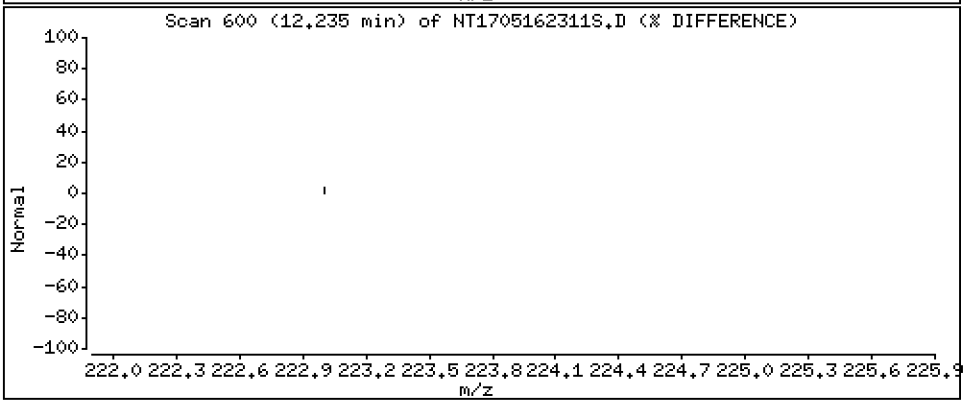












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

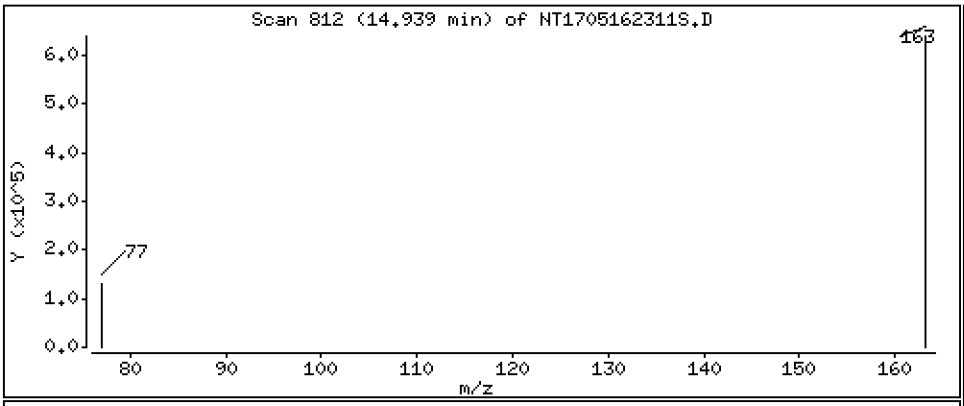
Operator: JGR

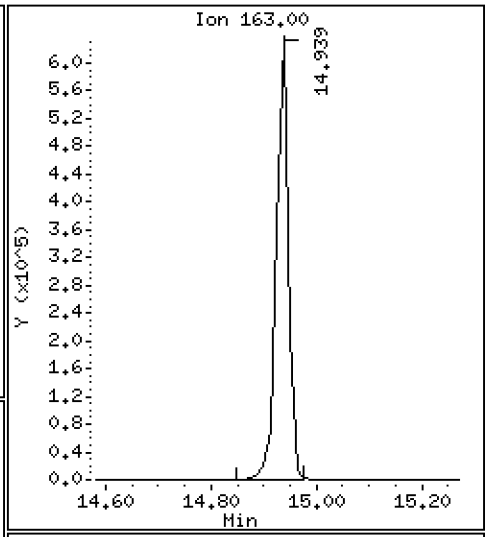
Column phase: ZB-5msi

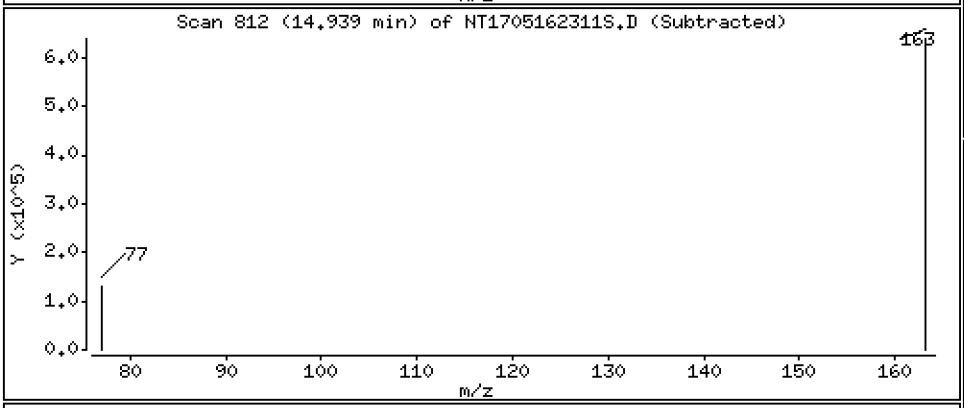
Column diameter: 0.25

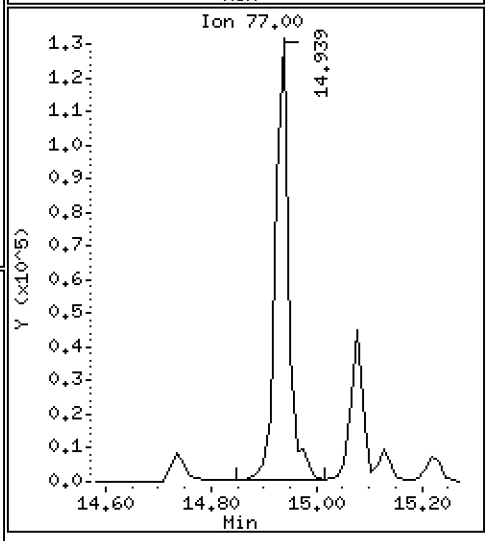
39 Dimethylphthalate

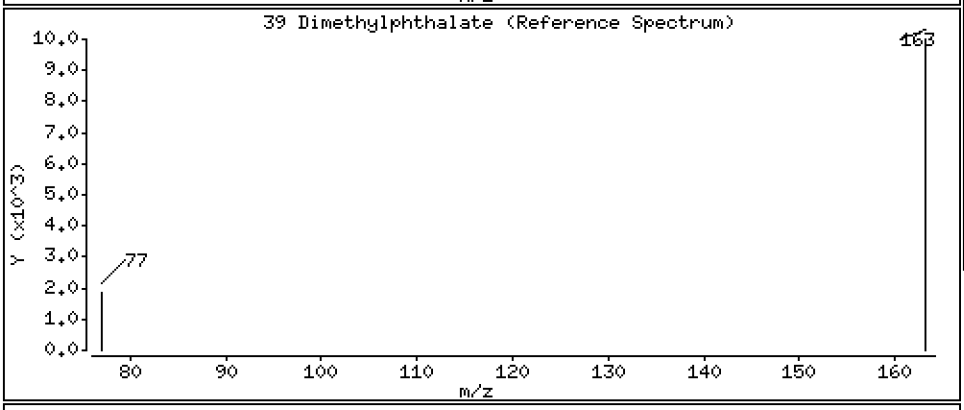
Concentration: 5.240 ug/mL

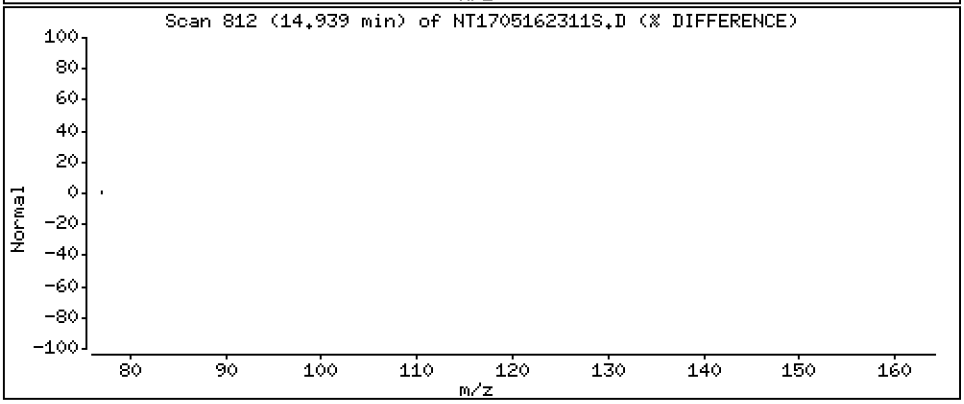












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

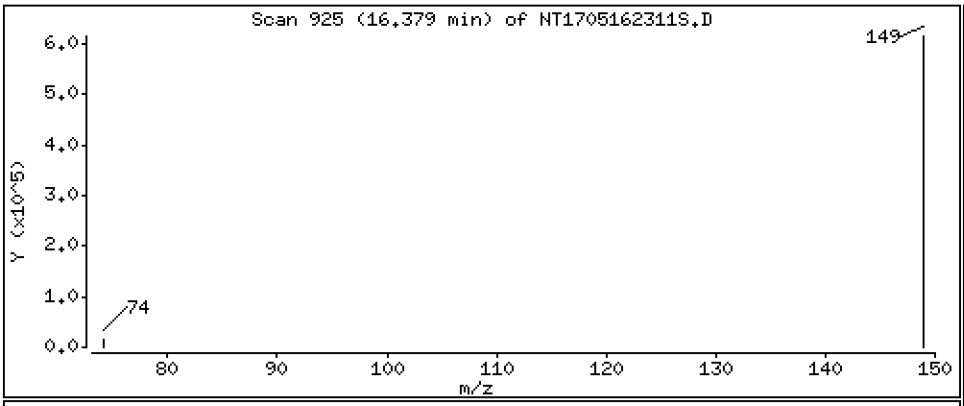
Operator: JGR

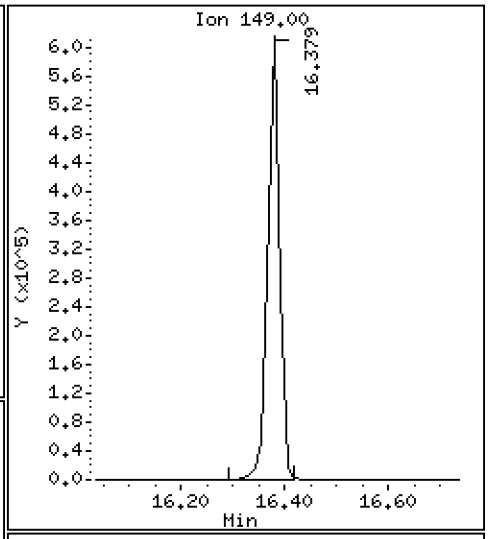
Column phase: ZB-5msi

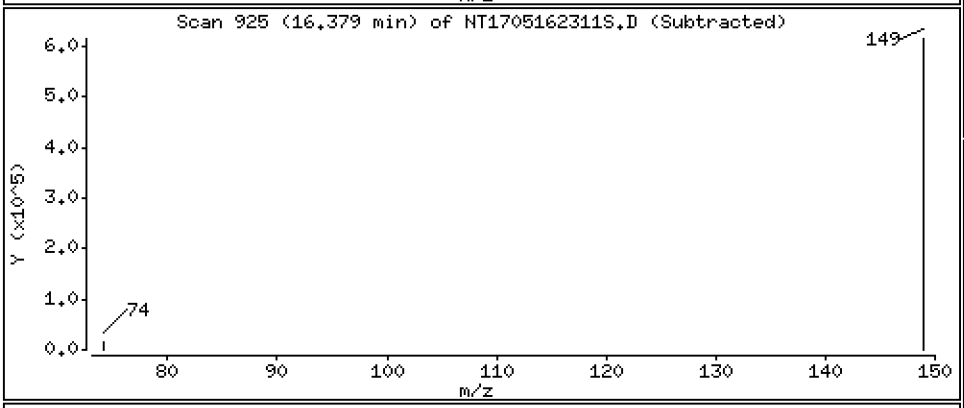
Column diameter: 0.25

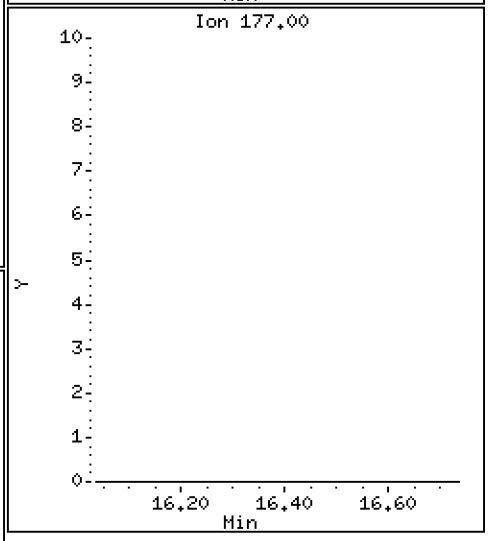
50 Diethylphthalate

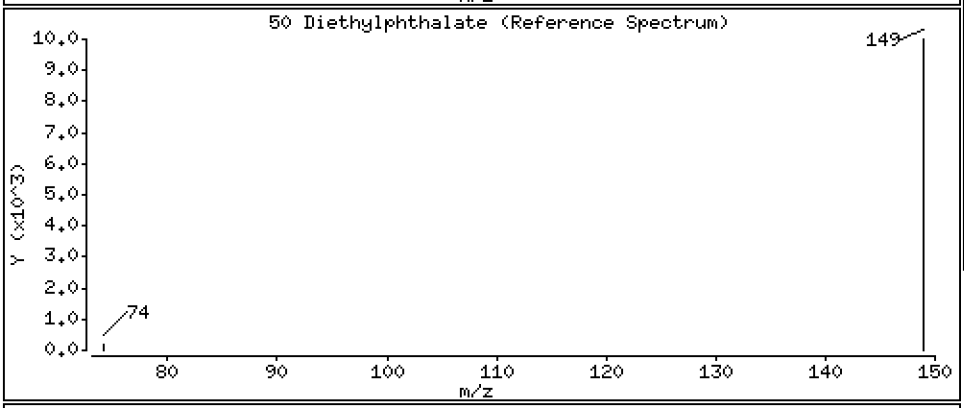
Concentration: 5.478 ug/mL

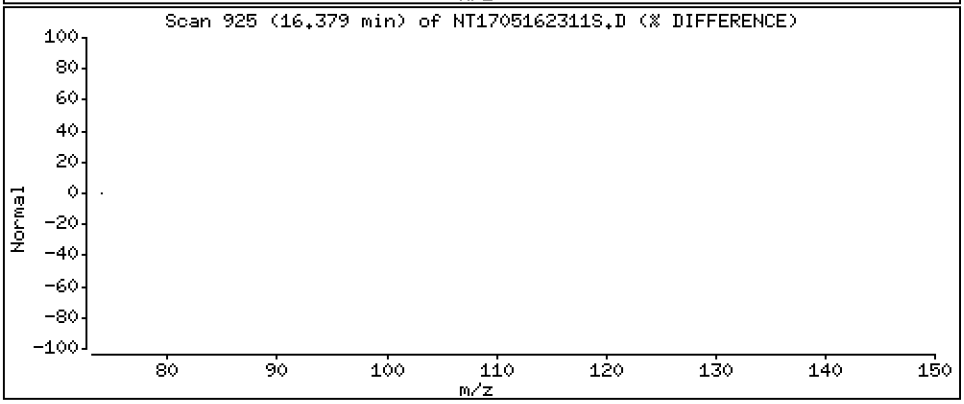












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

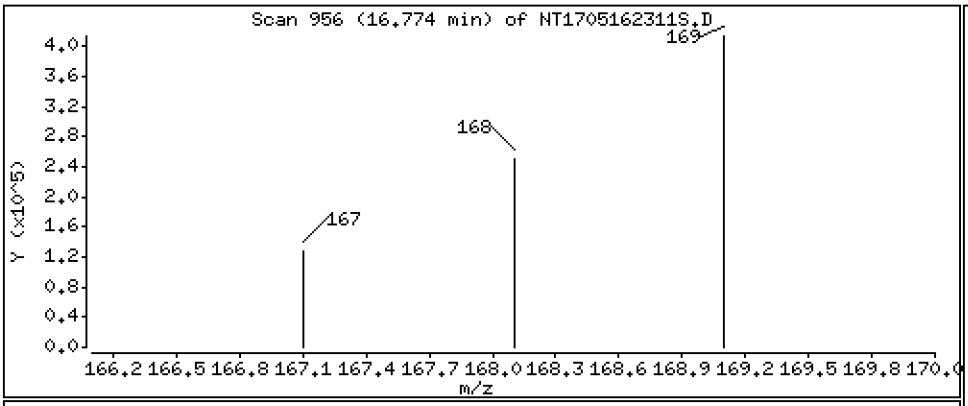
Operator: JGR

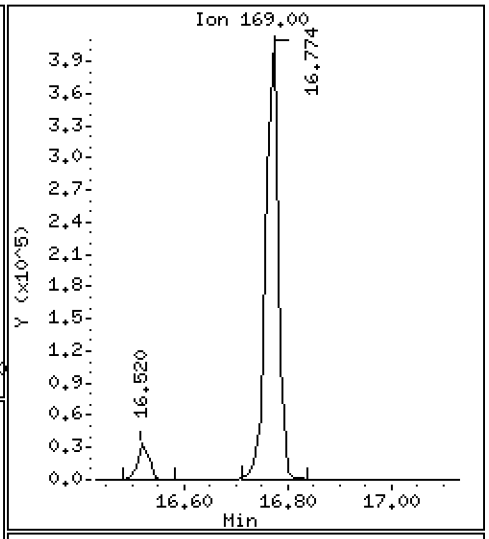
Column phase: ZB-5msi

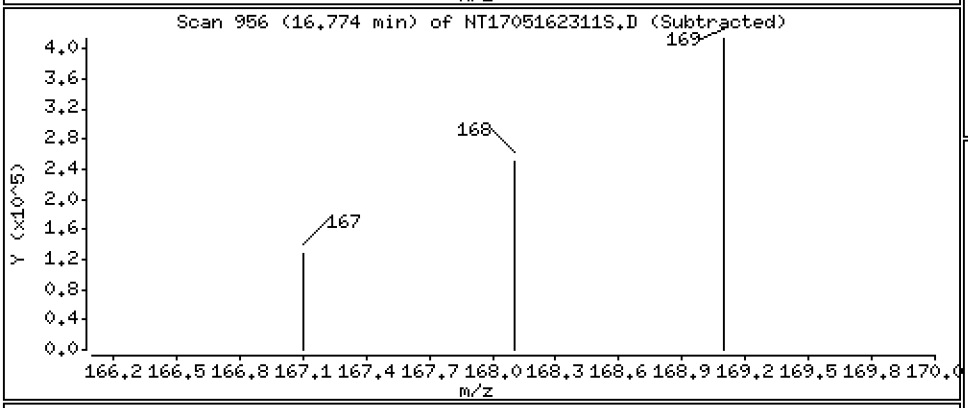
Column diameter: 0.25

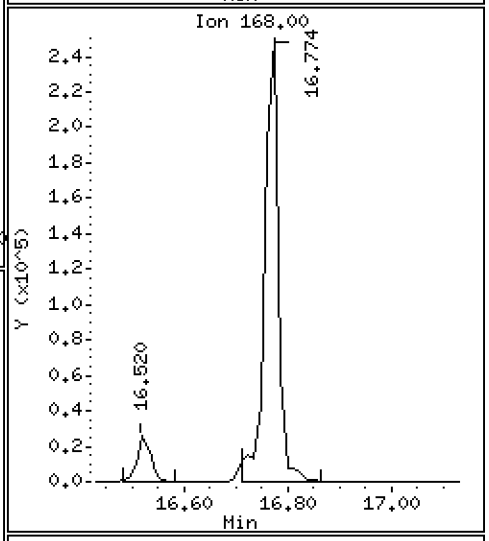
54 N-Nitrosodiphenylamine

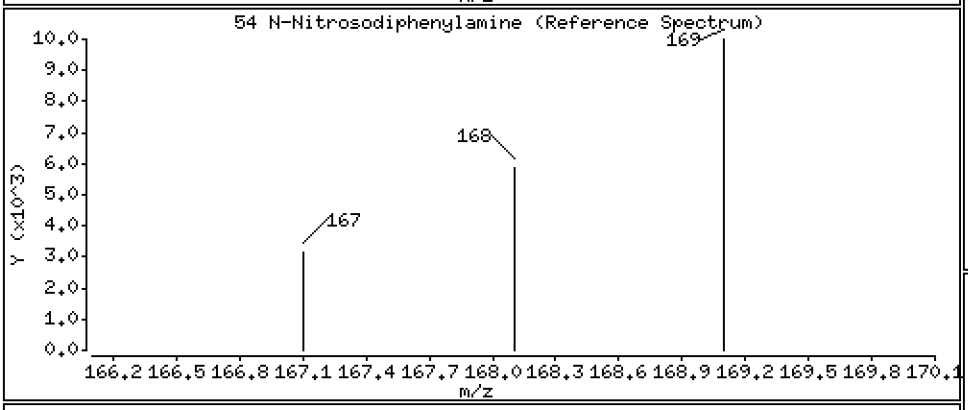
Concentration: 5.627 ug/mL

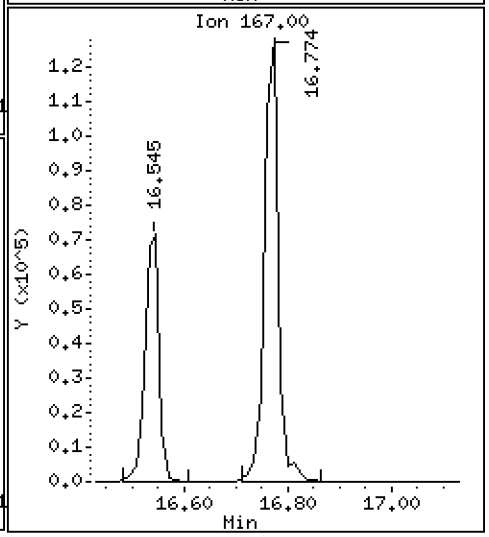


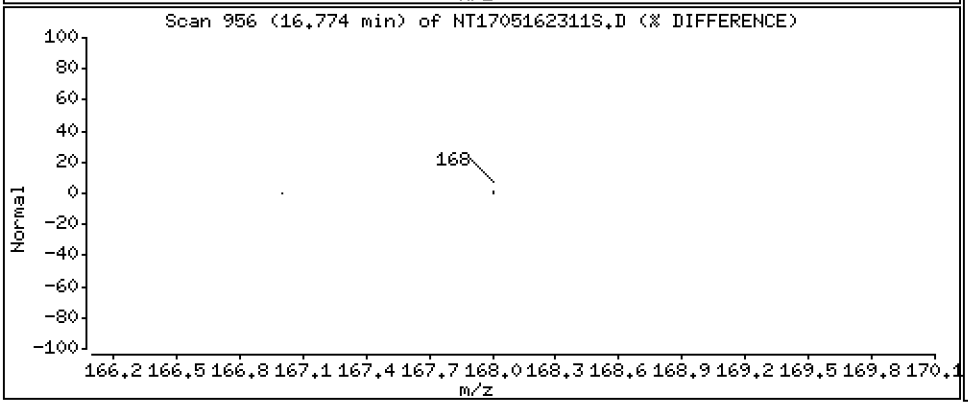












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

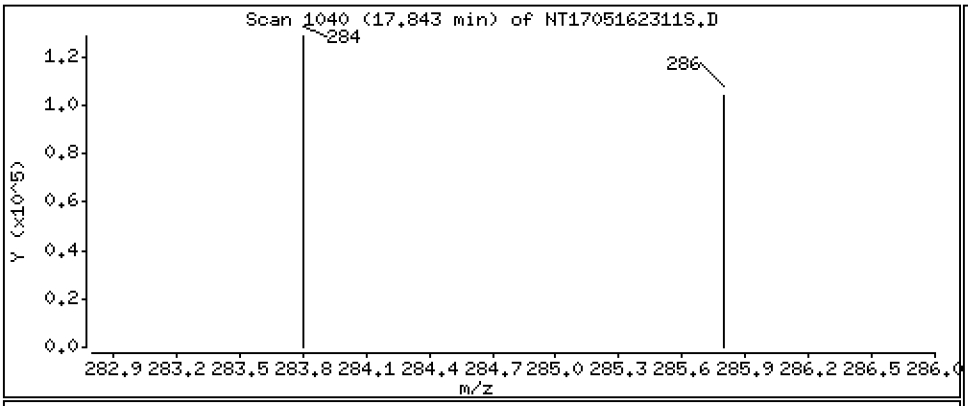
Operator: JGR

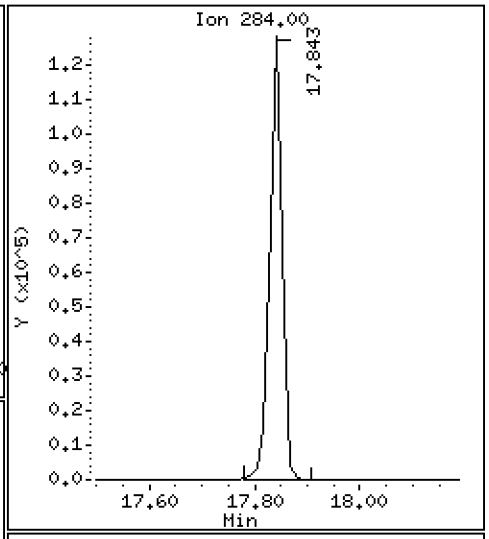
Column phase: ZB-5msi

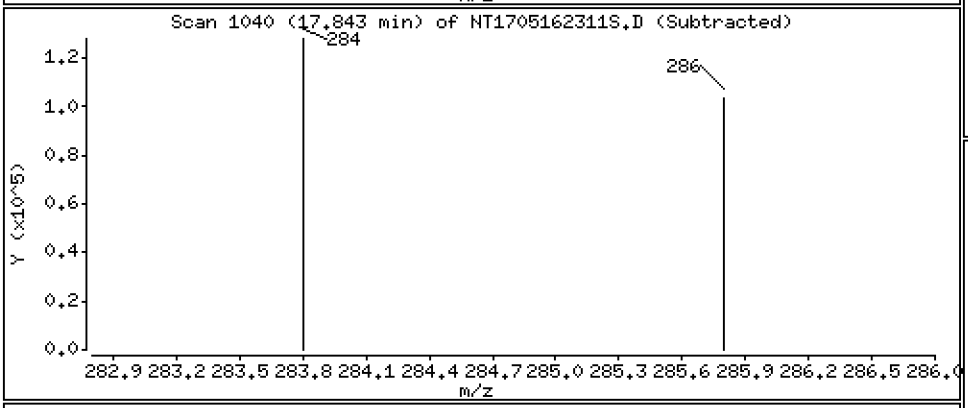
Column diameter: 0.25

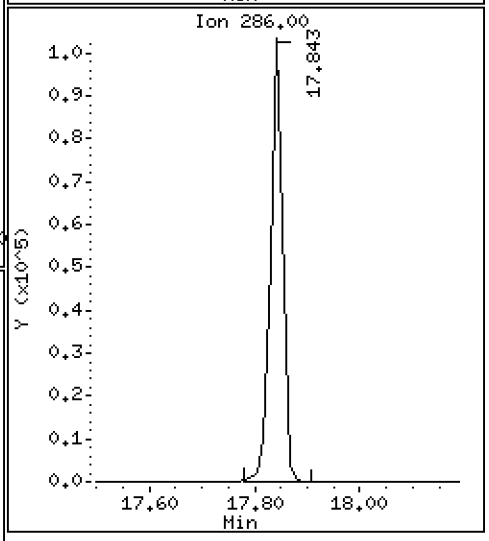
57 Hexachlorobenzene

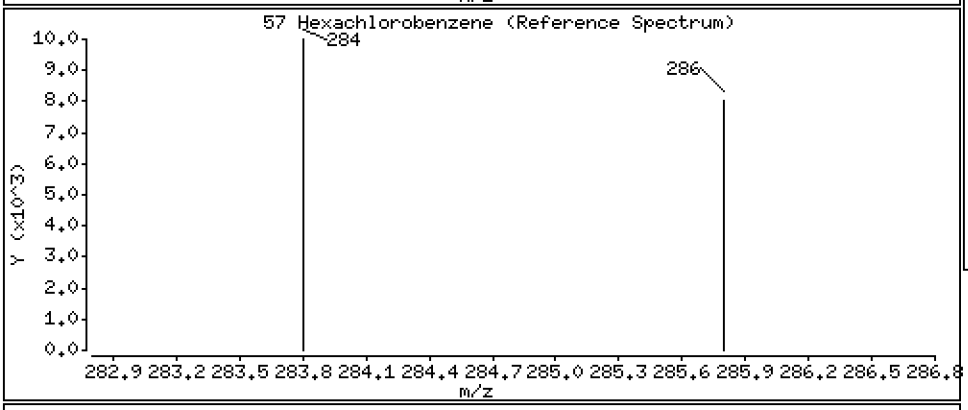
Concentration: 5.081 ug/mL

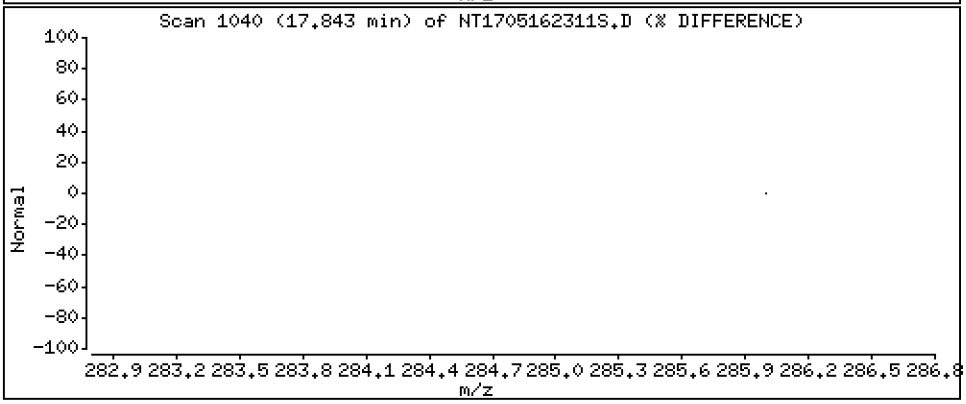












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

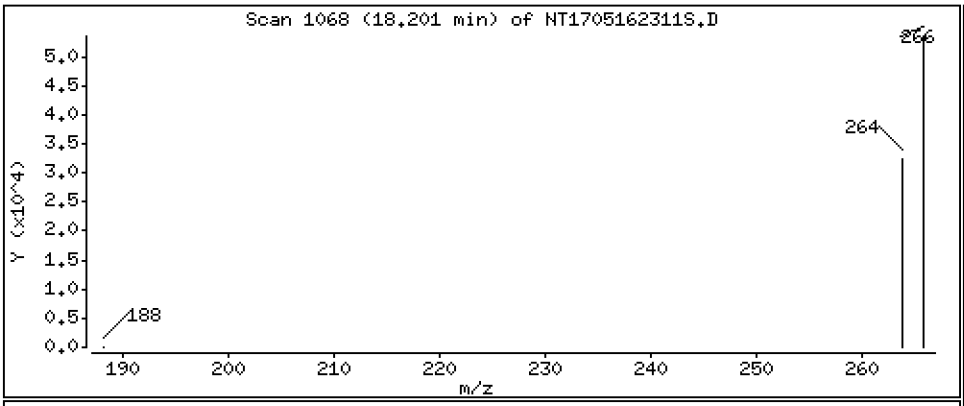
Operator: JGR

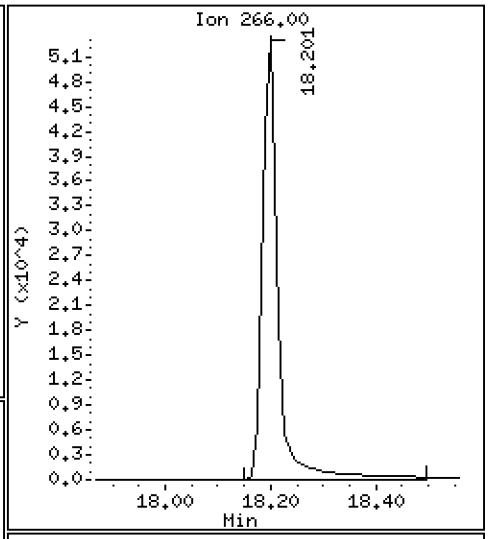
Column phase: ZB-5msi

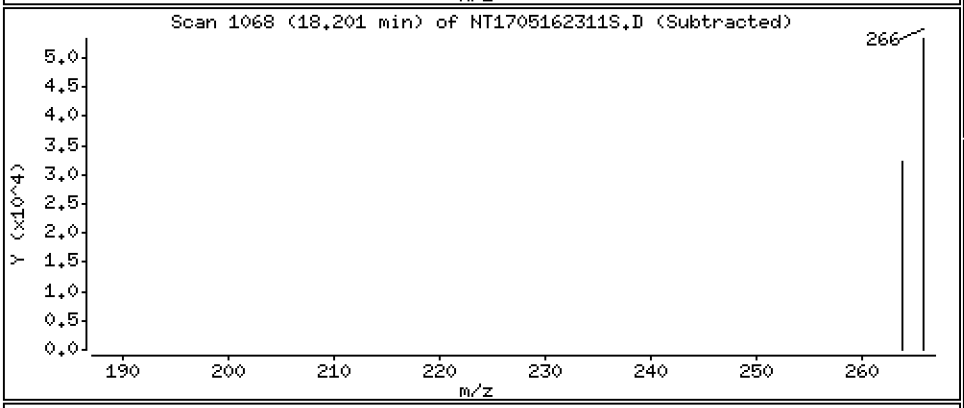
Column diameter: 0.25

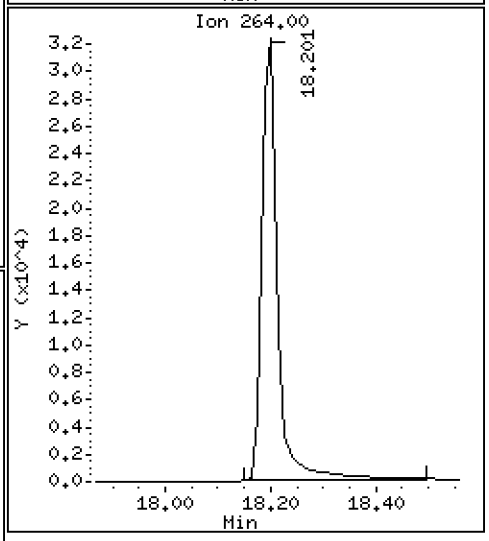
58 Pentachlorophenol

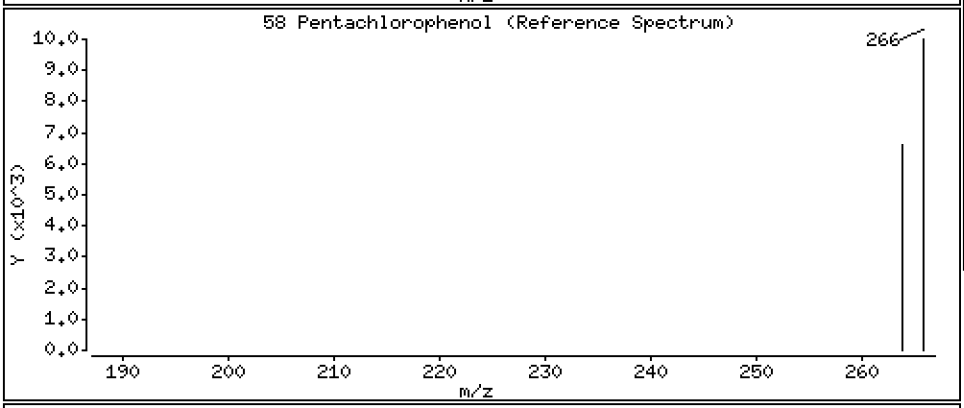
Concentration: 4.506 ug/mL

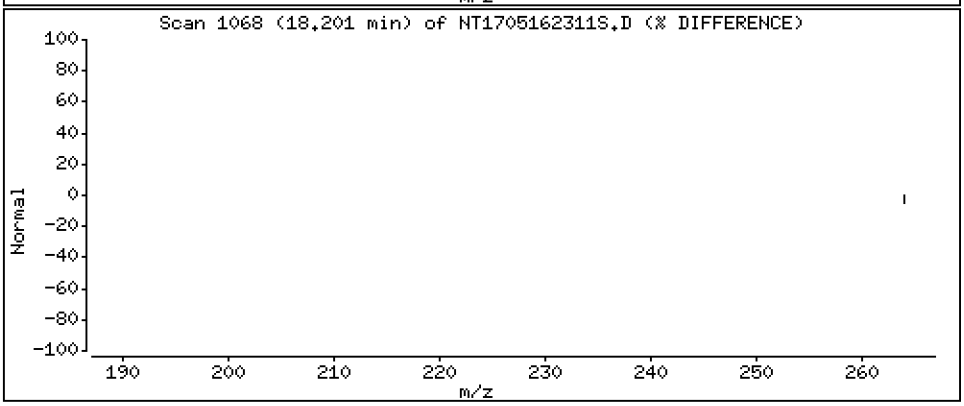












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

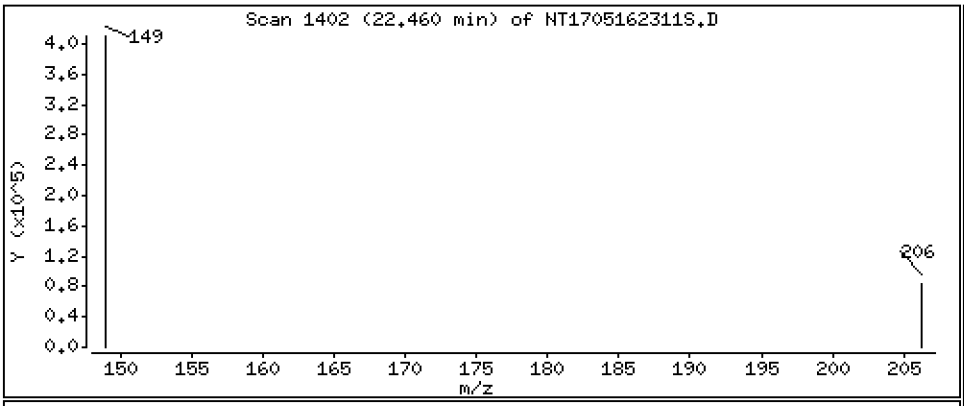
Operator: JGR

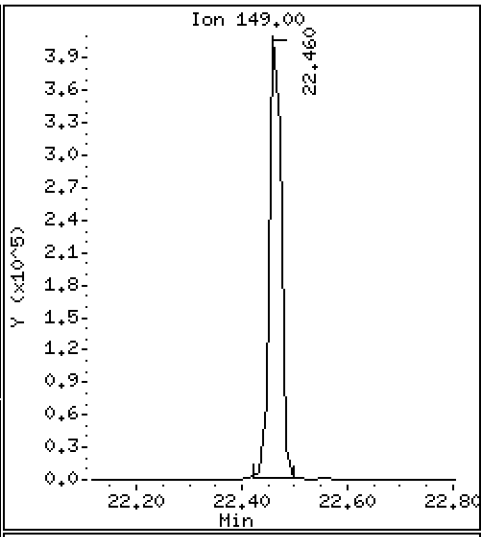
Column phase: ZB-5msi

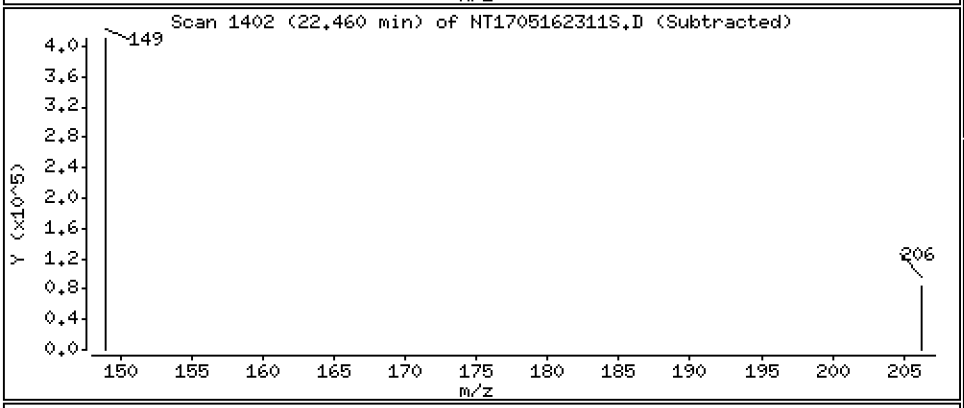
Column diameter: 0.25

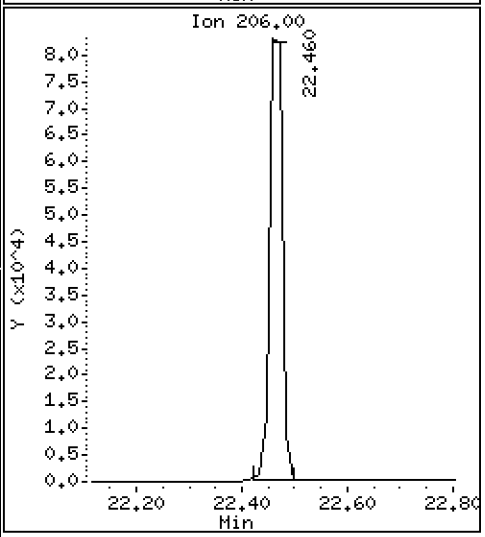
67 Butylbenzylphthalate

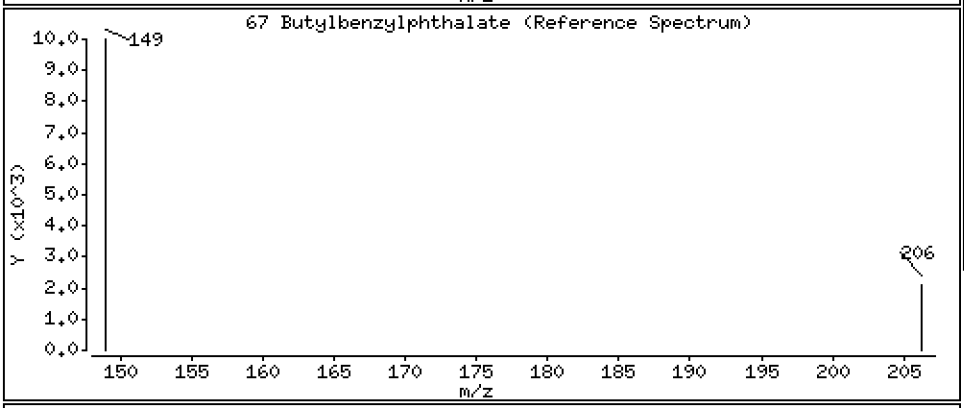
Concentration: 5.905 ug/mL

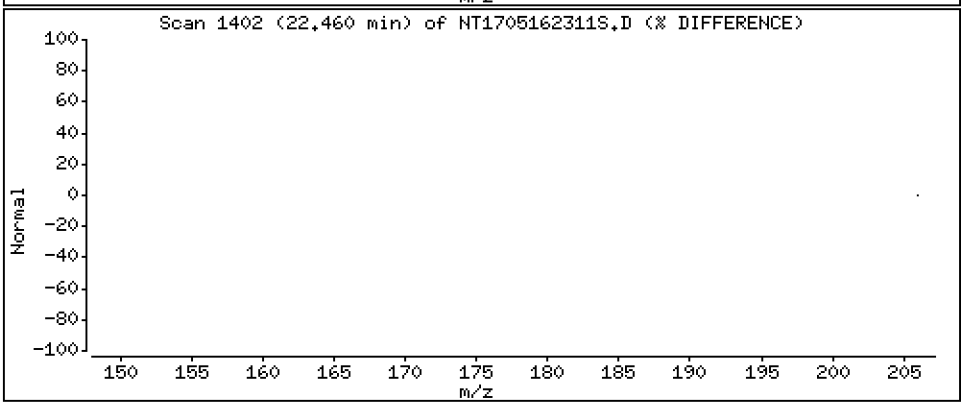












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

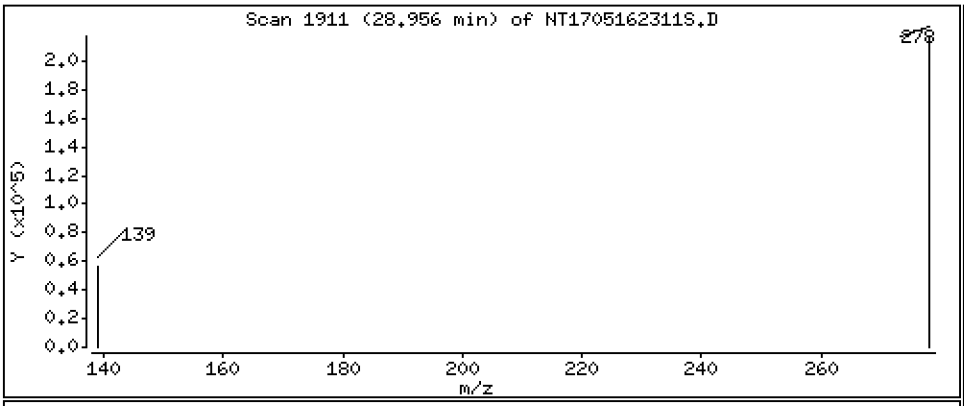
Operator: JGR

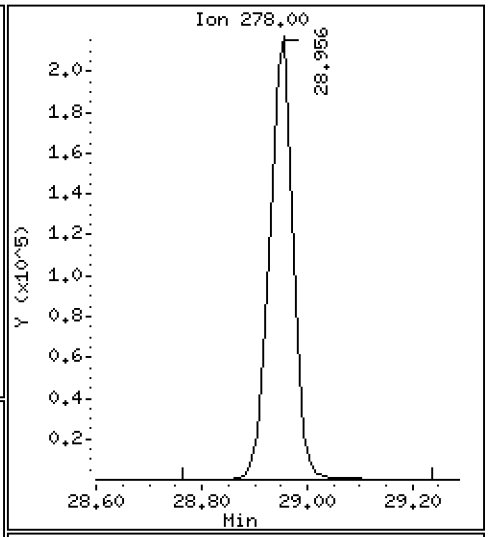
Column phase: ZB-5msi

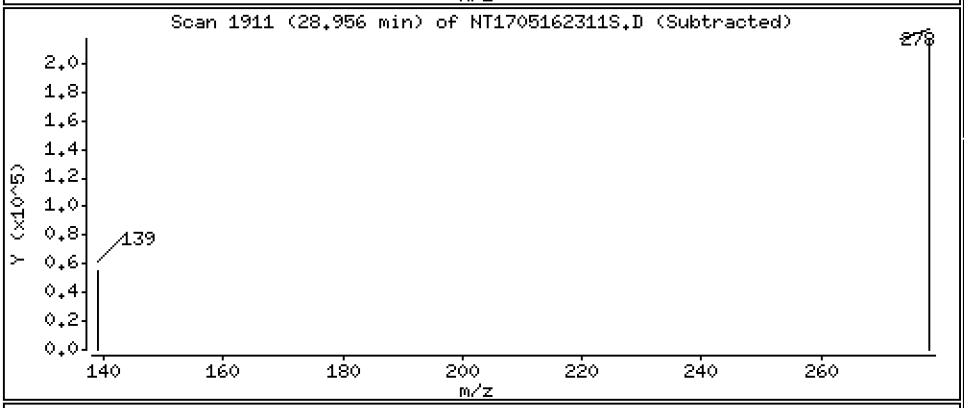
Column diameter: 0.25

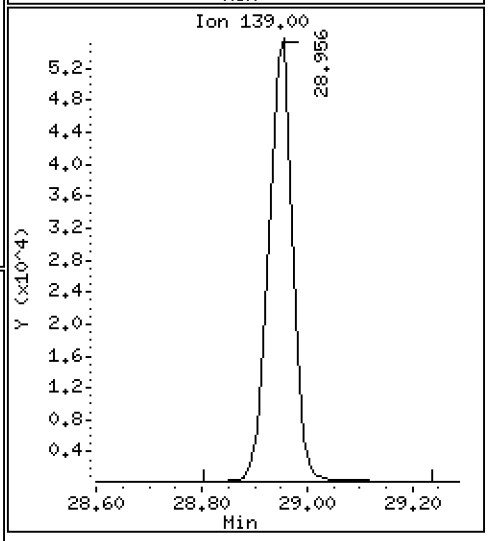
79 Dibenzo(a,h)anthracene

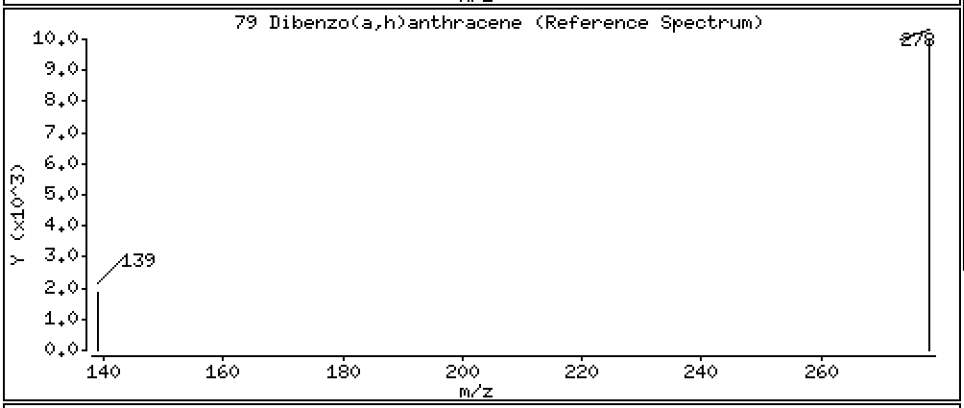
Concentration: 5.149 ug/mL

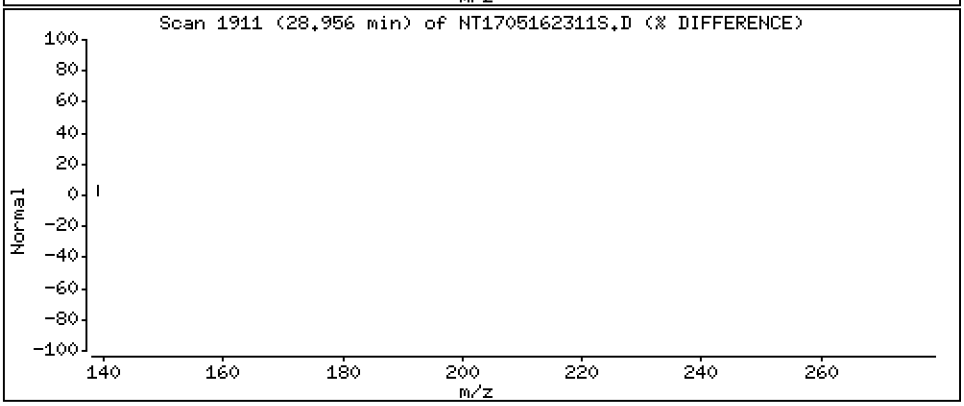












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

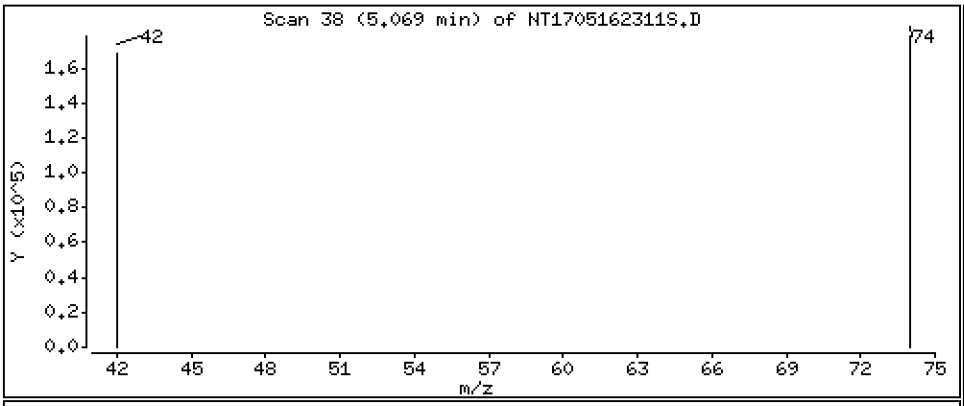
Operator: JGR

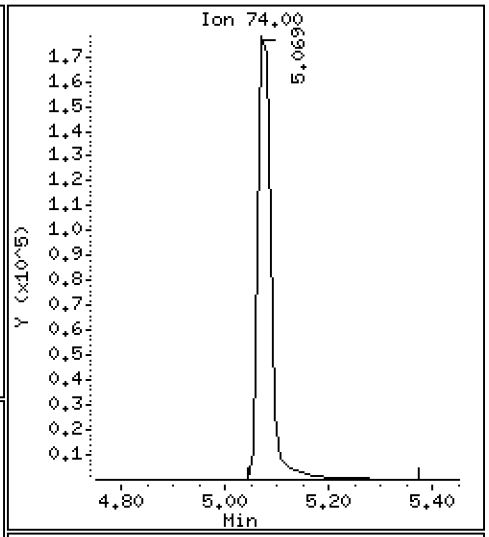
Column phase: ZB-5msi

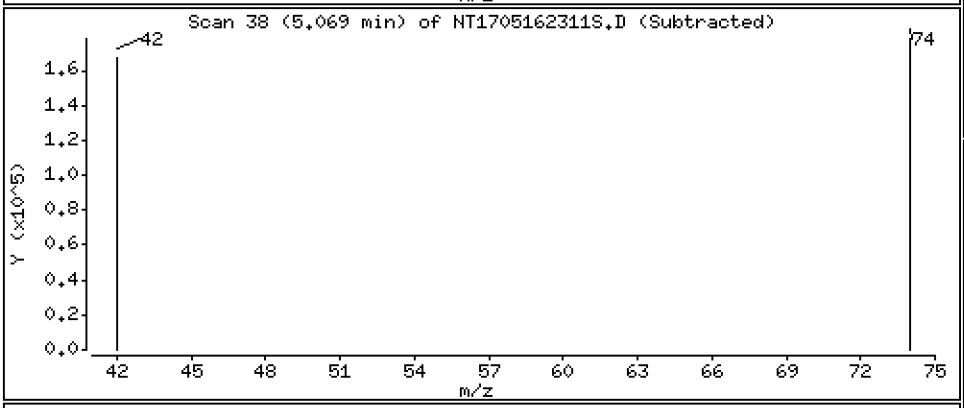
Column diameter: 0.25

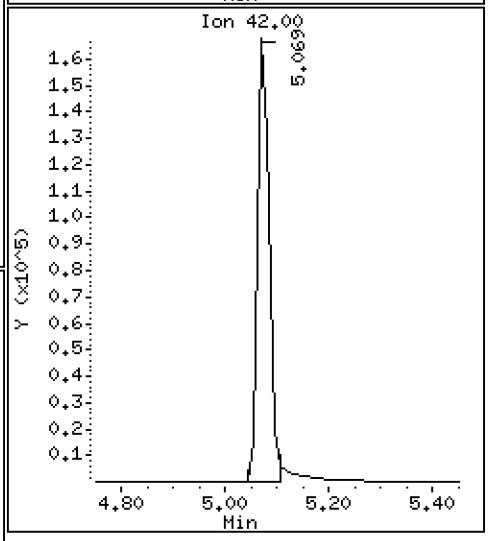
90 N-Nitrosodimethylamine

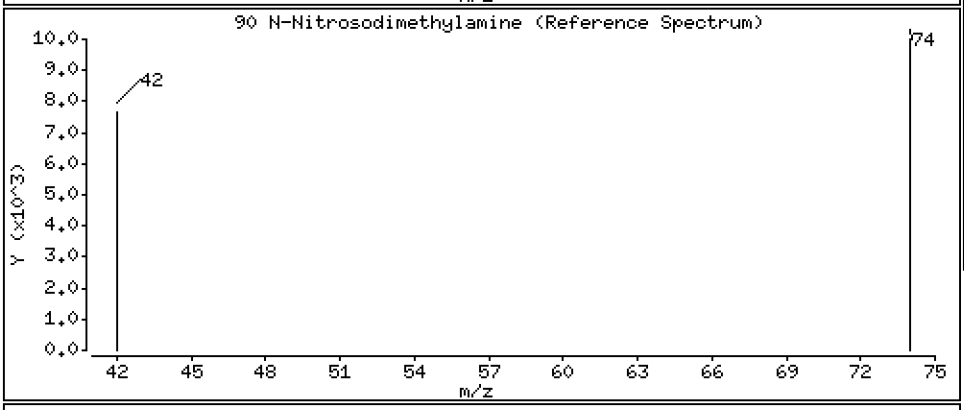
Concentration: 5.868 ug/mL

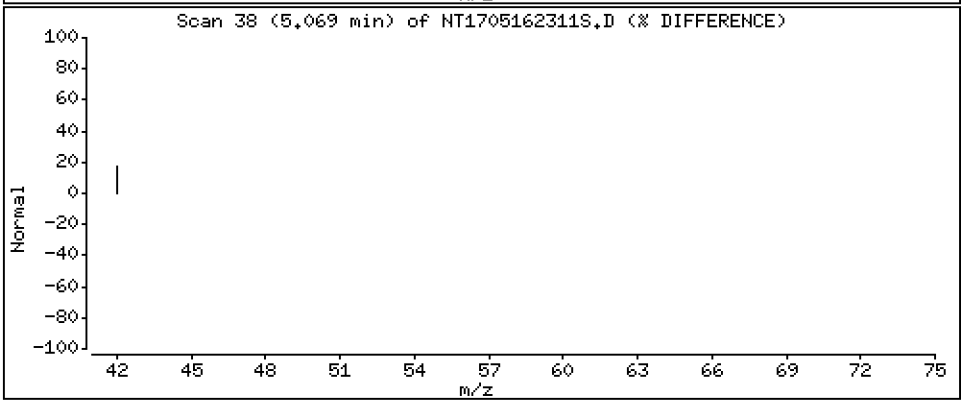












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D
Lab Smp Id: SLE0339-SCV1
Inj Date : 17-MAY-2023 00:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.					
	3	Phenol	94	8.750	8.751	(0.933)	616997	4.88420	4.884
	7	1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	575988	5.08691	5.087
*	8	1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	280298	4.00000	
	9	1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	566257	5.13211	5.132
	11	Benzyl alcohol	79	9.630	9.656	(1.027)	410745	5.70628	5.706
	12	1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	541461	5.00685	5.007
	13	2-Methylphenol	108	9.848	9.861	(1.050)	385832	4.40762	4.408
	15	4-Methylphenol	108	10.129	10.129	(1.080)	423610	4.78832	4.788
	16	N-Nitroso-di-n-propylamine	70	10.193	10.180	(1.087)	349317	5.47874	5.479
	22	2,4-Dimethylphenol	107	11.151	11.164	(0.942)	366886	3.81638	3.816
	24	Benzoic acid	105	11.329	11.356	(0.957)	465783	7.77732	7.777
	26	1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	427934	4.90638	4.906
*	27	Naphthalene-d8	136	11.840	11.840	(1.000)	999390	4.00000	
	30	Hexachlorobutadiene	225	12.235	12.235	(1.033)	238867	5.20120	5.201
	39	Dimethylphthalate	163	14.938	14.926	(0.968)	1015804	5.23967	5.240
*	42	Acenaphthene-d10	162	15.436	15.436	(1.000)	527927	4.00000	
	50	Diethylphthalate	149	16.379	16.379	(1.061)	964439	5.47782	5.478
	54	N-Nitrosodiphenylamine	169	16.774	16.774	(0.908)	681829	5.62729	5.627
	57	Hexachlorobenzene	284	17.843	17.843	(0.966)	208857	5.08140	5.081
	58	Pentachlorophenol	266	18.200	18.214	(0.986)	108866	4.50590	4.506
*	59	Phenanthrene-d10	188	18.468	18.455	(1.000)	860054	4.00000	
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.460	22.460	(0.958)	642329	5.90509	5.905
*	69	Chrysene-d12	240	23.455	23.455	(1.000)	527529	4.00000	
*	77	Perylene-d12	264	26.159	26.147	(1.000)	475440	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.956	28.943	(1.107)	690513	5.14916	5.149
	90	N-Nitrosodimethylamine	74	5.068	5.094	(0.541)	321072	5.86783	5.868

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162311S.D
Lab Smp Id: SLE0339-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	280298	-11.32
27 Naphthalene-d8	1102073	551037	2204146	999390	-9.32
42 Acenaphthene-d10	583826	291913	1167652	527927	-9.57
59 Phenanthrene-d10	970917	485459	1941834	860054	-11.42
69 Chrysene-d12	590568	295284	1181136	527529	-10.67
77 Perylene-d12	537938	268969	1075876	475440	-11.62

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.47	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162311S.D

Lab ID: SLE0339-SCV1
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   17-MAY-2023 00:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.000	0.9569	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00070
Laboratory ID: SLE0339-SCV1
Sequence: SLE0339
Standard ID: K010066

ANALYTE	EXPECTED (ug/mL)	FOUND (ug/mL)	% DRIFT	QC LIMIT
1,4-Dichlorobenzene	5.0000	5.1	2.6	20.00
1,2-Dichlorobenzene	5.0000	5.0	0.1	20.00
Benzyl Alcohol	5.0000	5.7	14.1	20.00
Benzoic acid	10.000	7.8	-22.2 *	20.00
2,4-Dimethylphenol	5.0000	3.8	-23.7 *	20.00
1,2,4-Trichlorobenzene	5.0000	4.9	-1.9	20.00
N-Nitrosodiphenylamine	5.0000	5.6	12.5	20.00
Pentachlorophenol	5.0000	4.5	-9.9	20.00
2-Fluorophenol	7.5000	0.00		
p-Terphenyl-d14	5.0000	0.00		

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

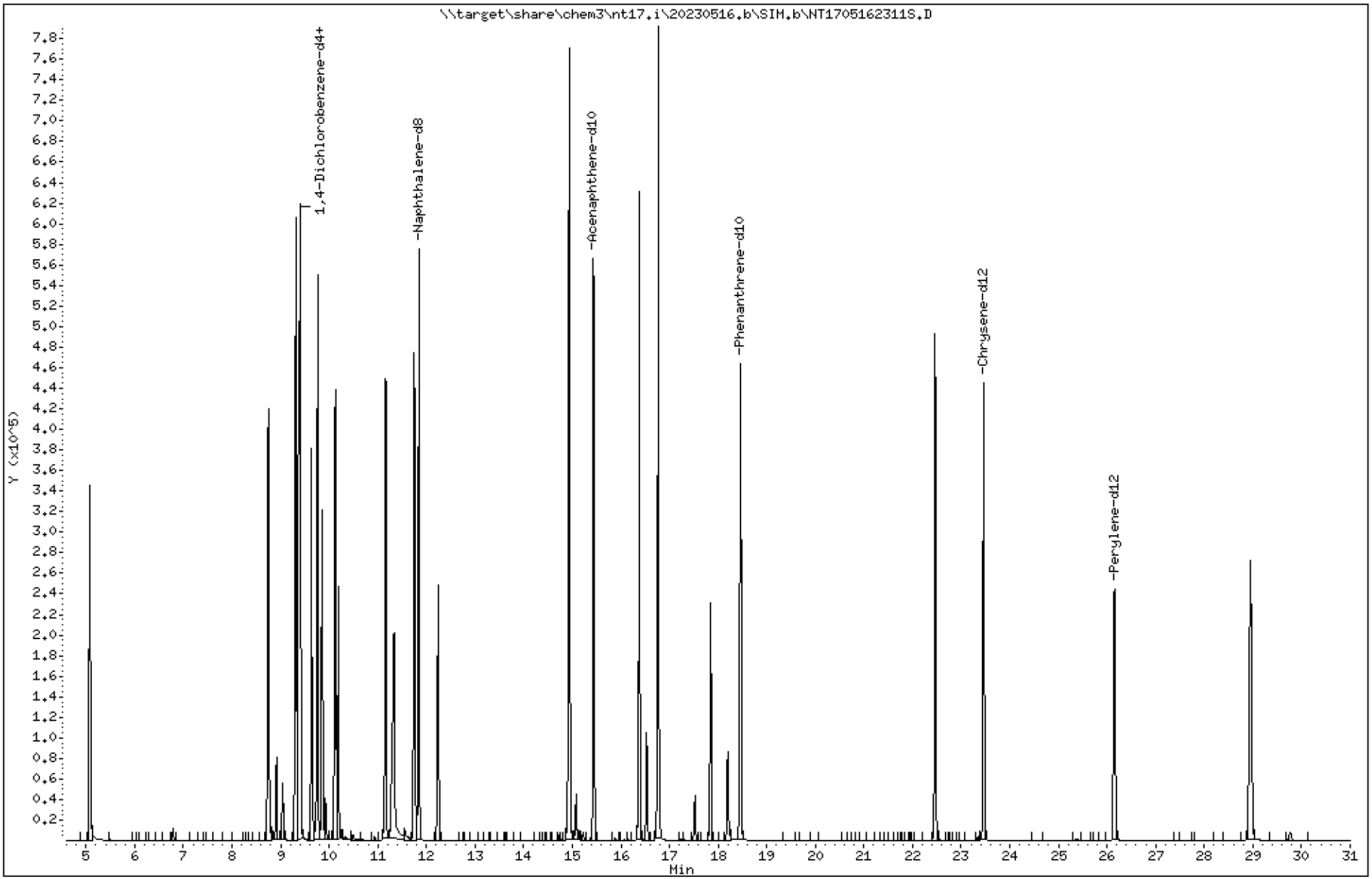
Instrument: nt17.i

Sample Info: SLE0339-SCV1

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

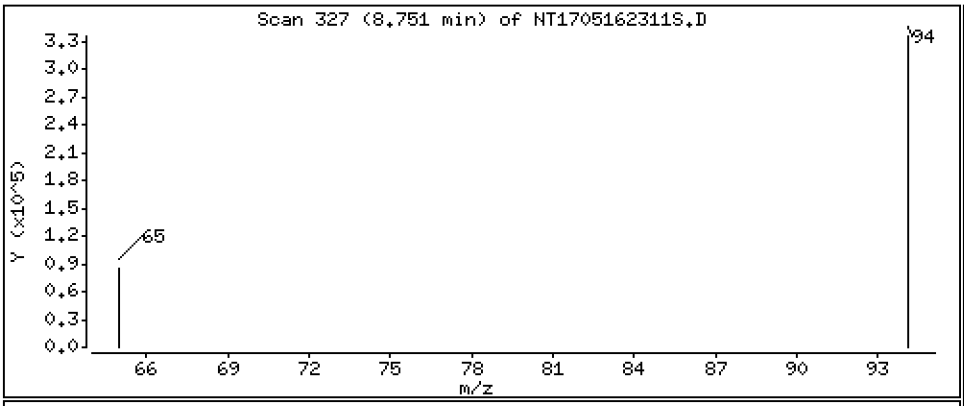
Operator: JGR

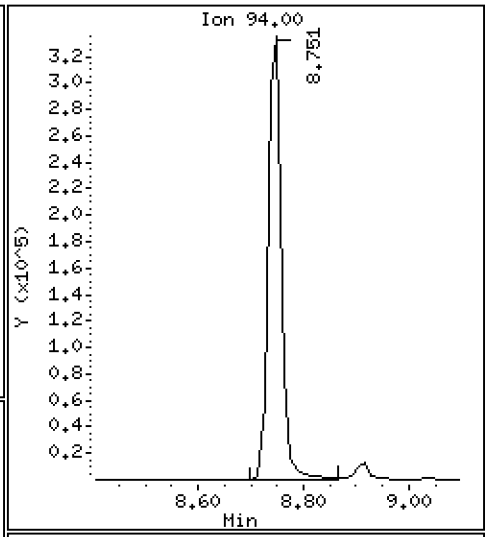
Column phase: ZB-5msi

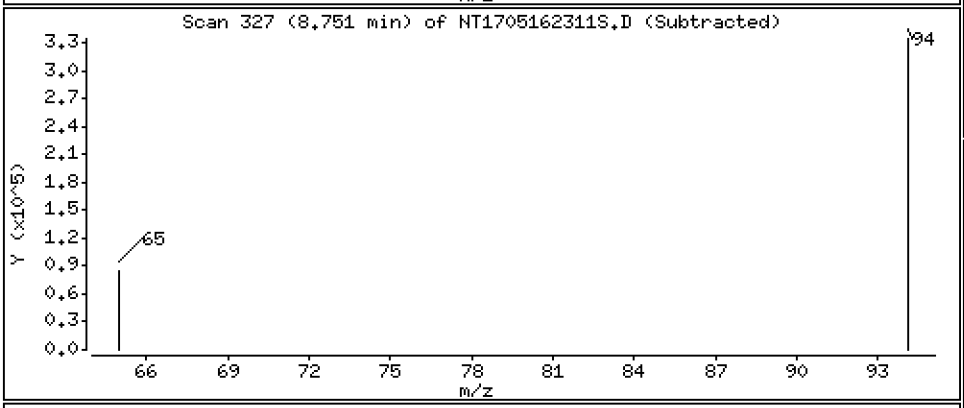
Column diameter: 0.25

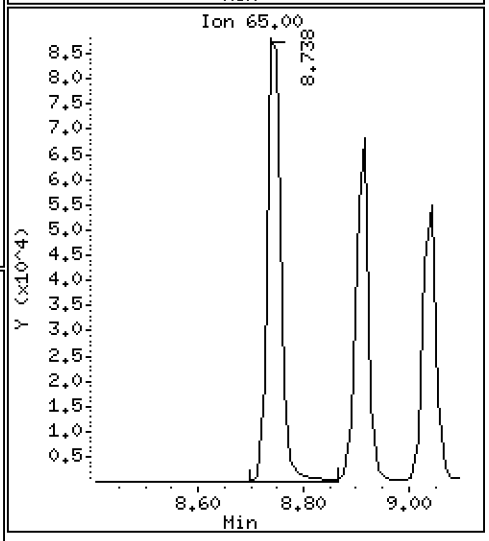
3 Phenol

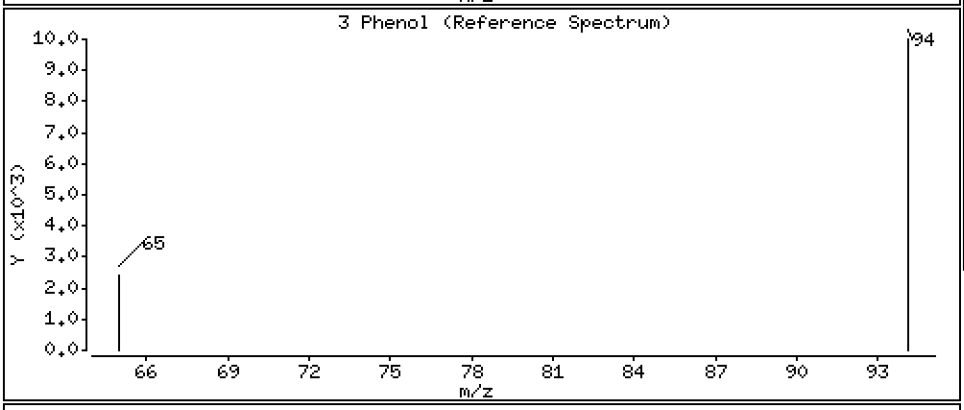
Concentration: 4.884 ug/mL

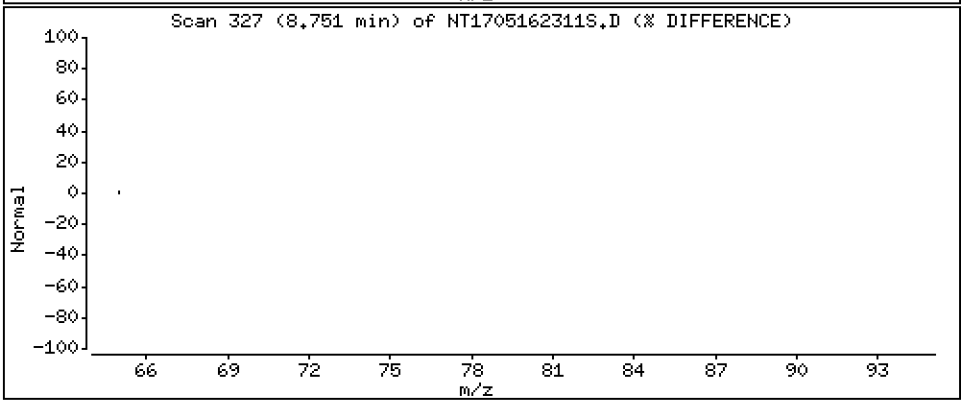












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

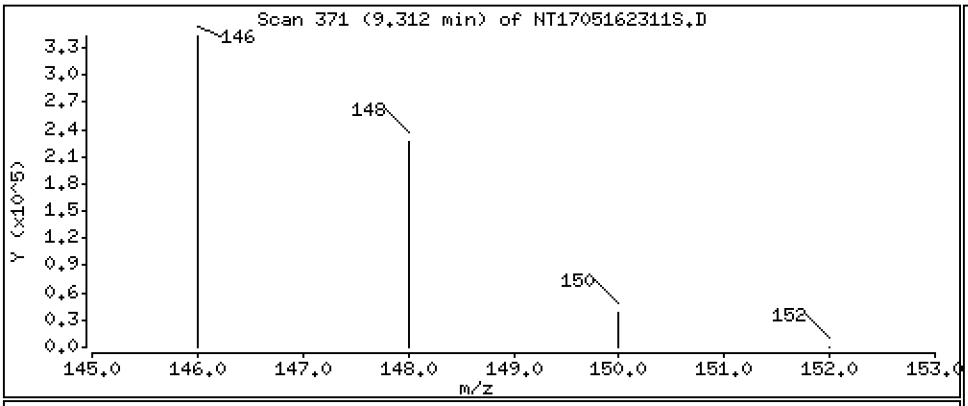
Operator: JGR

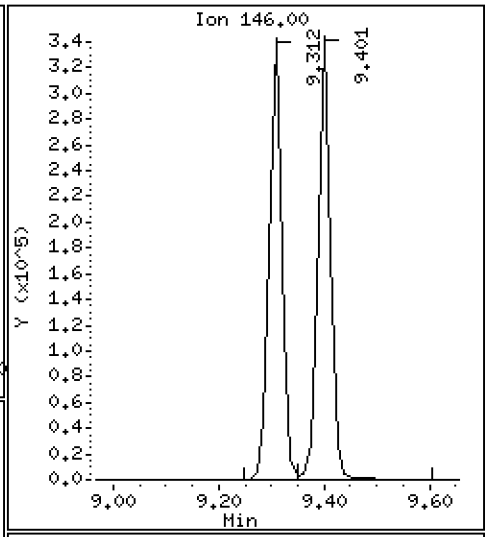
Column phase: ZB-5msi

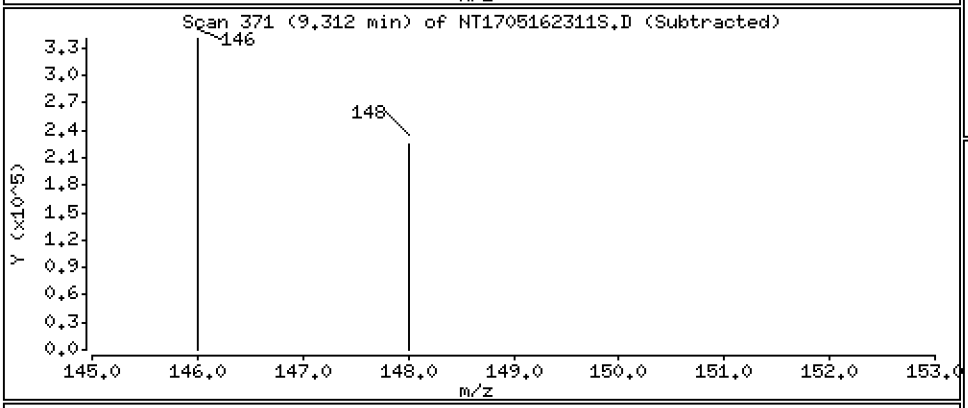
Column diameter: 0.25

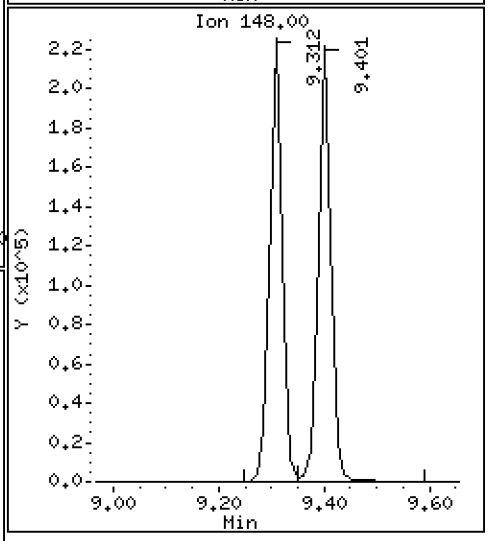
7 1,3-Dichlorobenzene

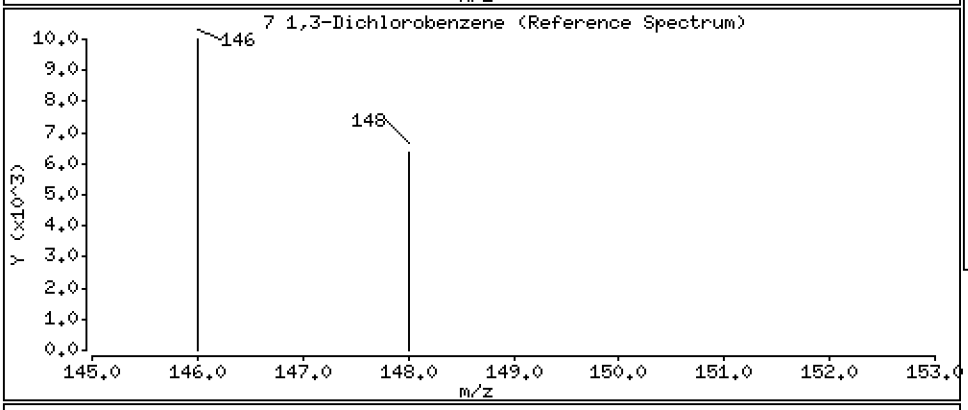
Concentration: 5.087 ug/mL

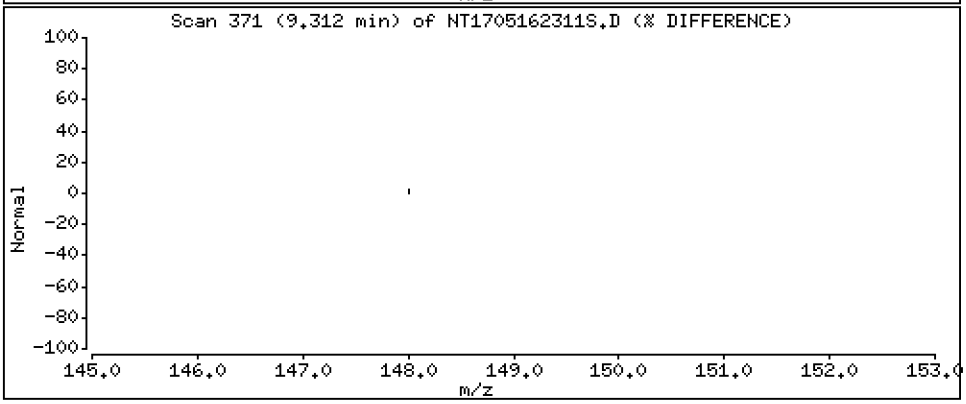












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

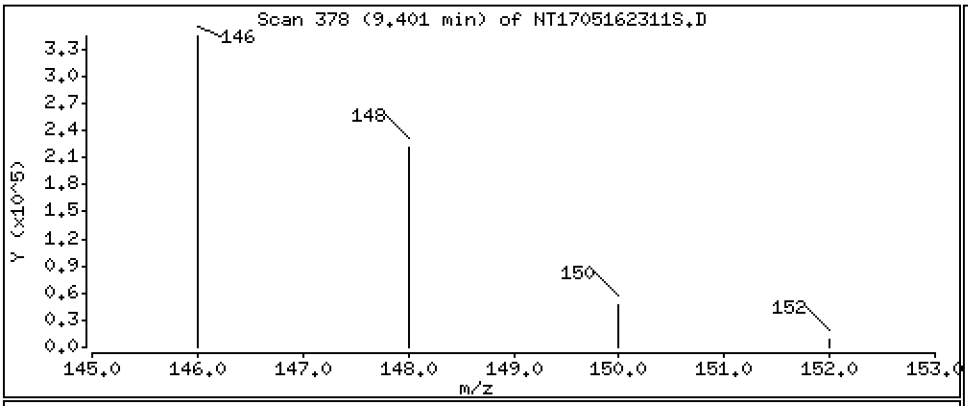
Operator: JGR

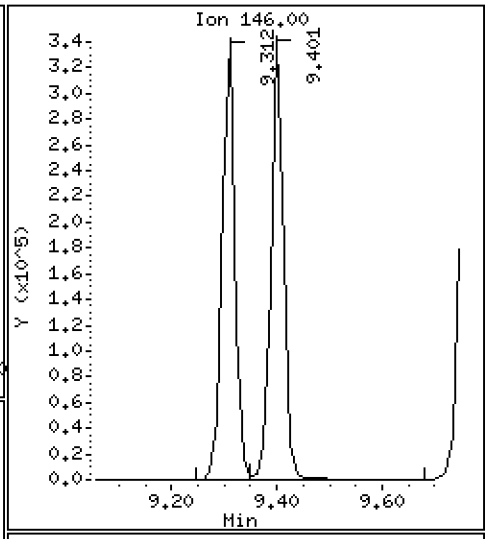
Column phase: ZB-5msi

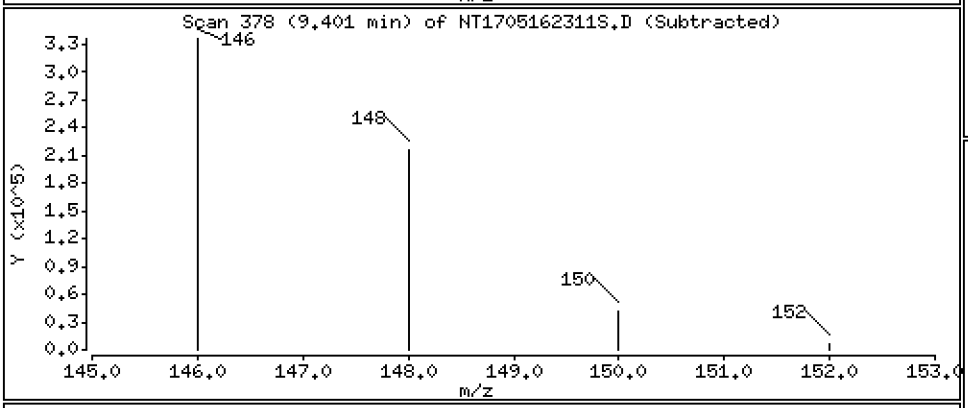
Column diameter: 0.25

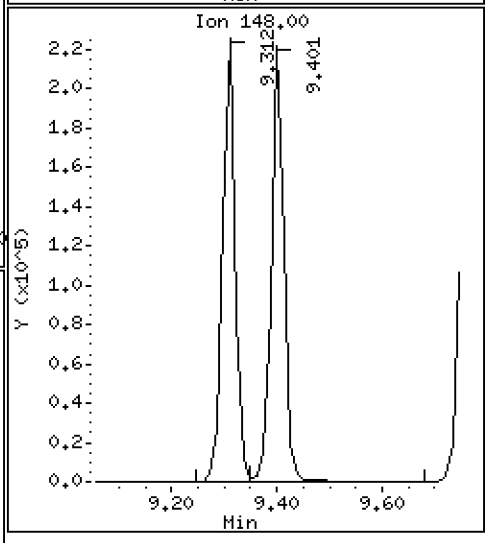
9 1,4-Dichlorobenzene

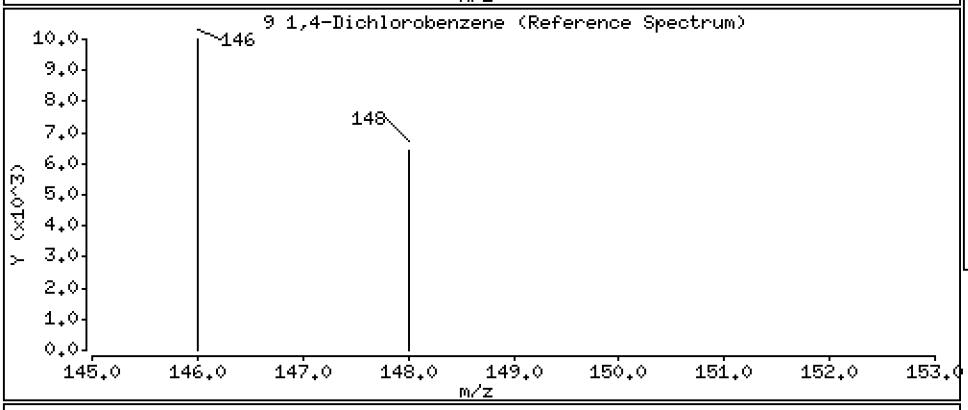
Concentration: 5.132 ug/mL

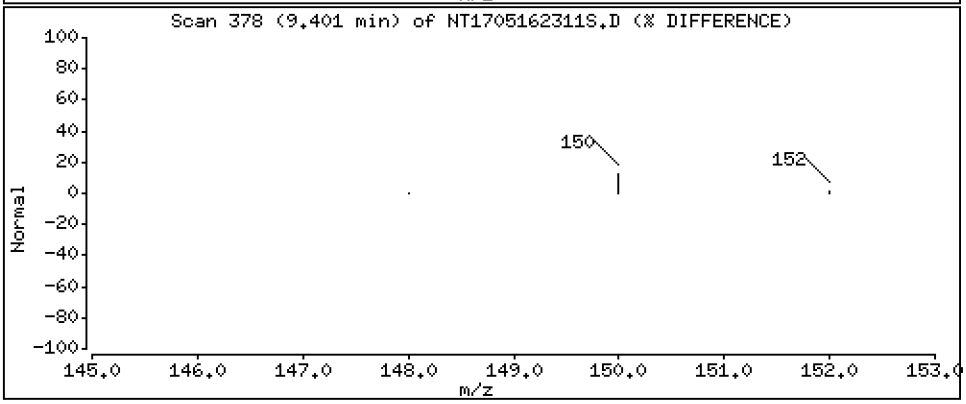












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

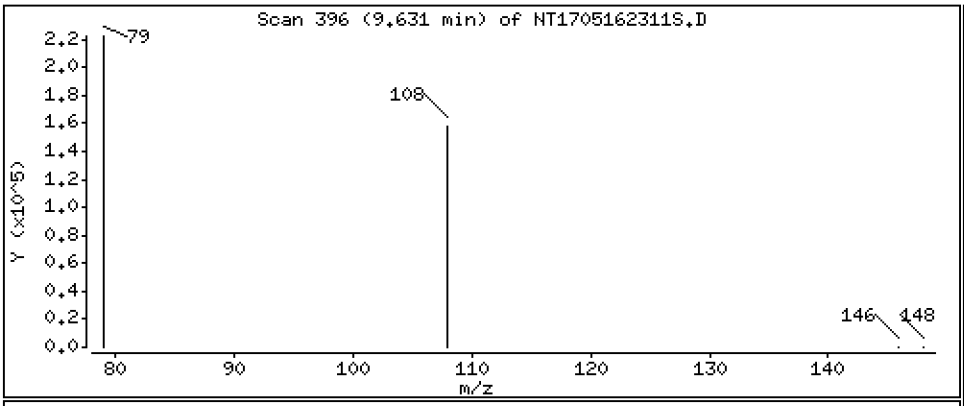
Operator: JGR

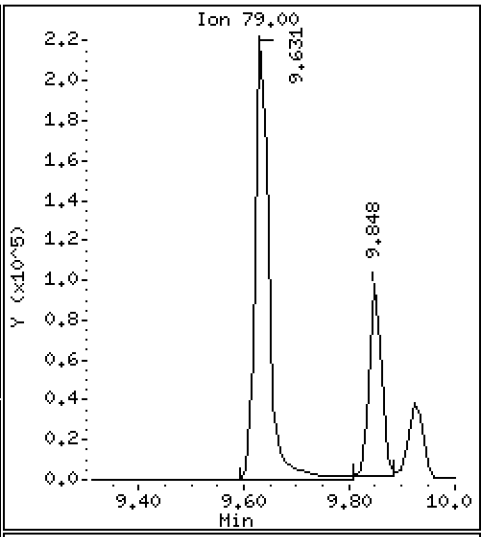
Column phase: ZB-5msi

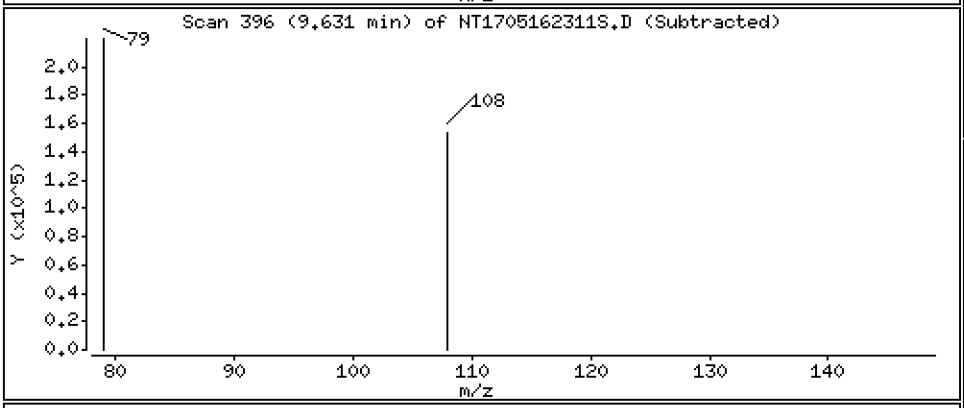
Column diameter: 0.25

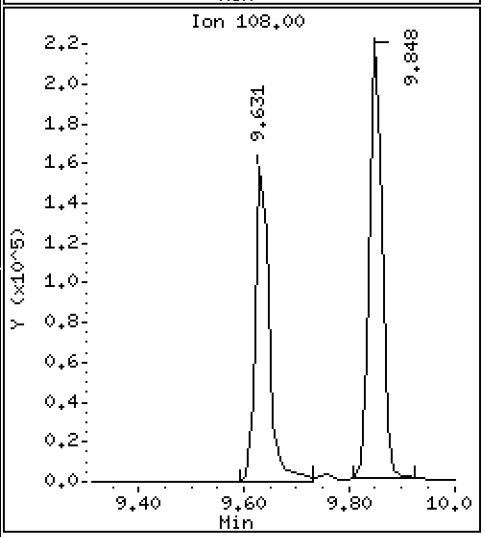
11 Benzyl alcohol

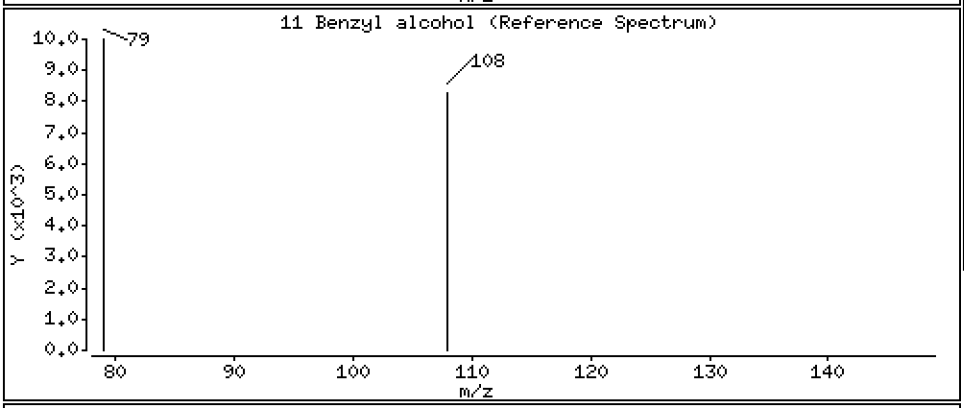
Concentration: 5.706 ug/mL

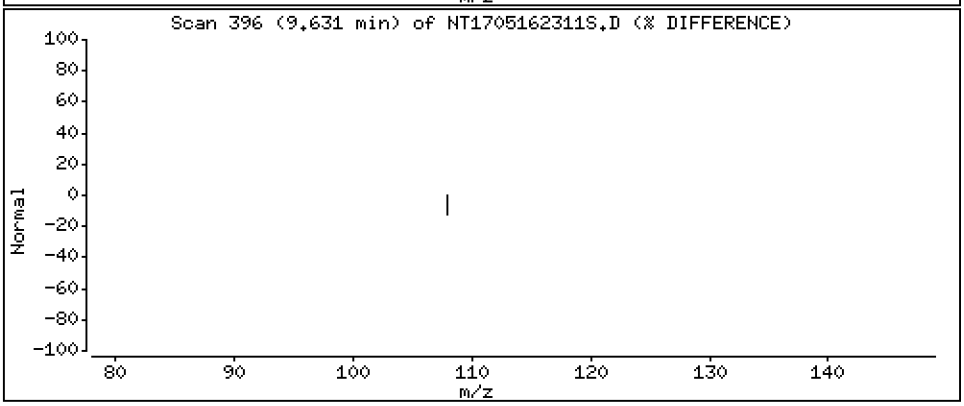












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

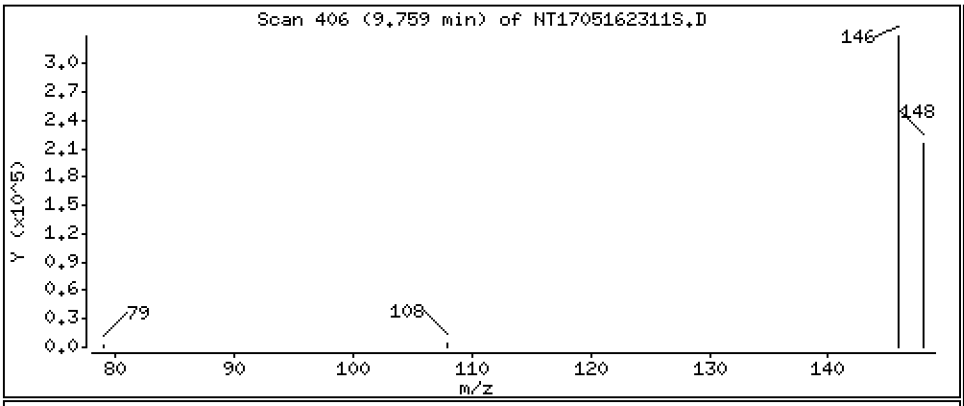
Operator: JGR

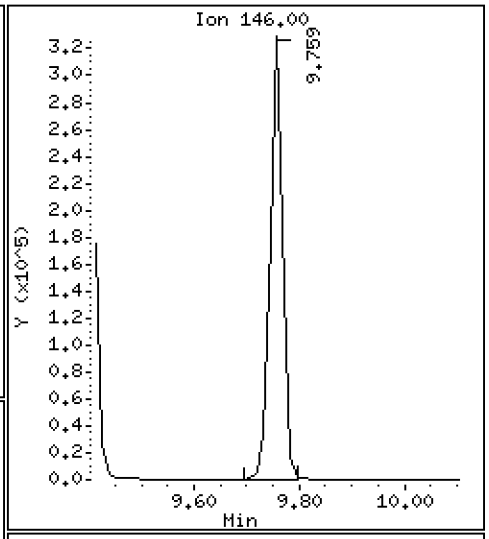
Column phase: ZB-5msi

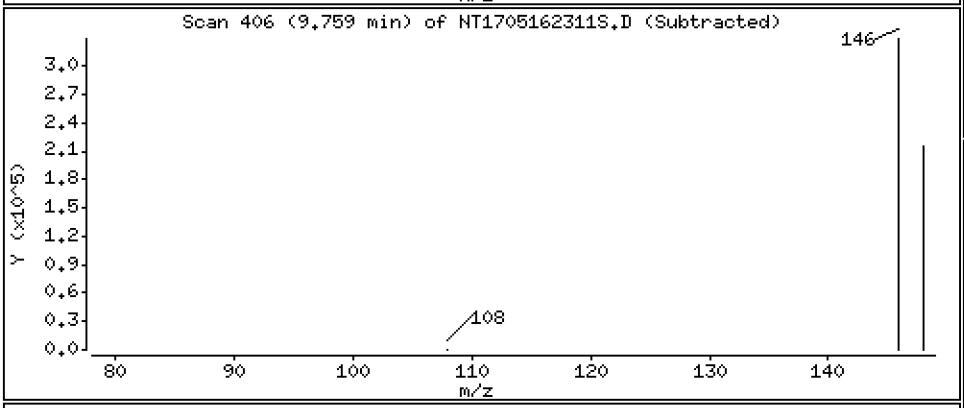
Column diameter: 0.25

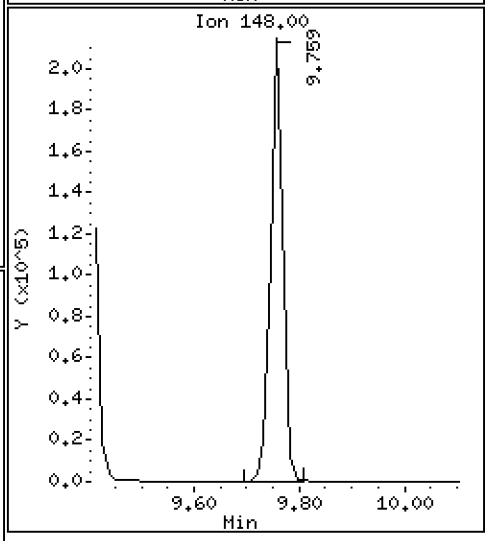
12 1,2-Dichlorobenzene

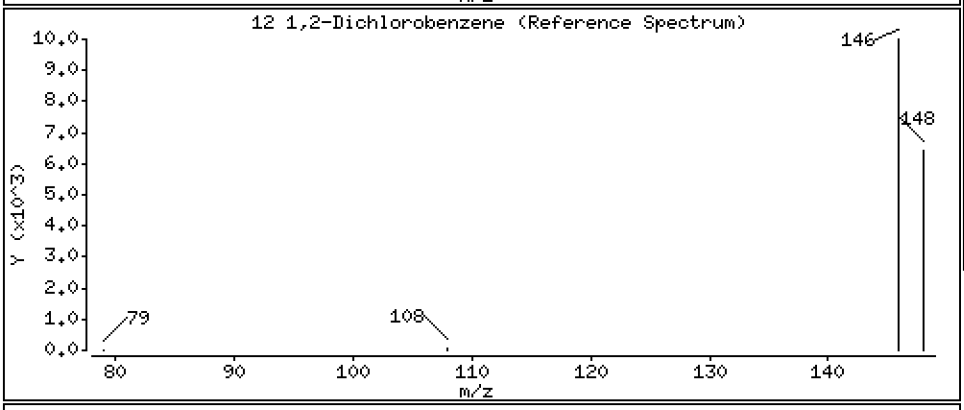
Concentration: 5.007 ug/mL

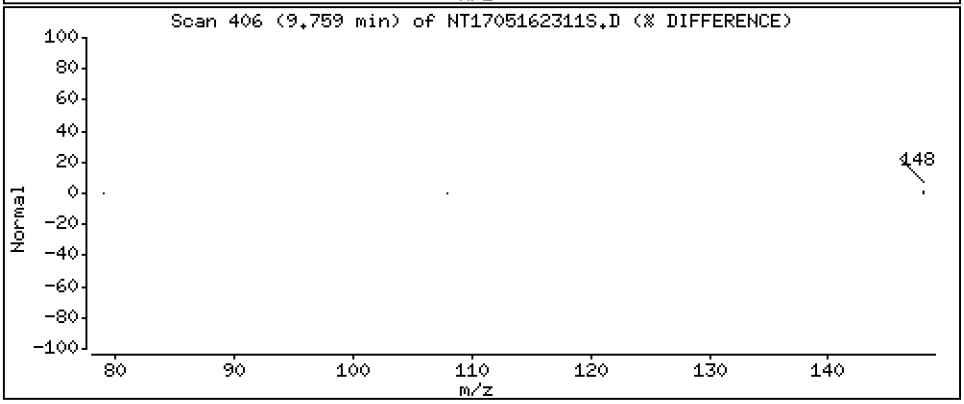












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

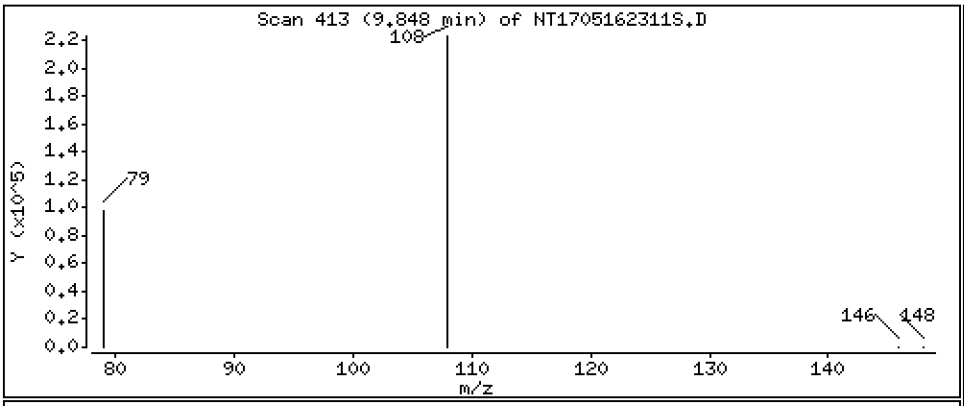
Operator: JGR

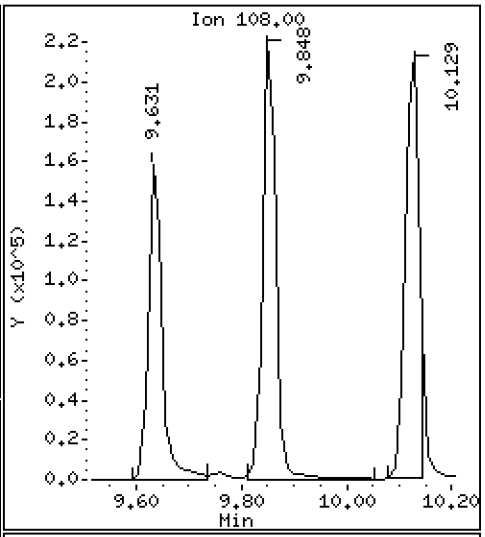
Column phase: ZB-5msi

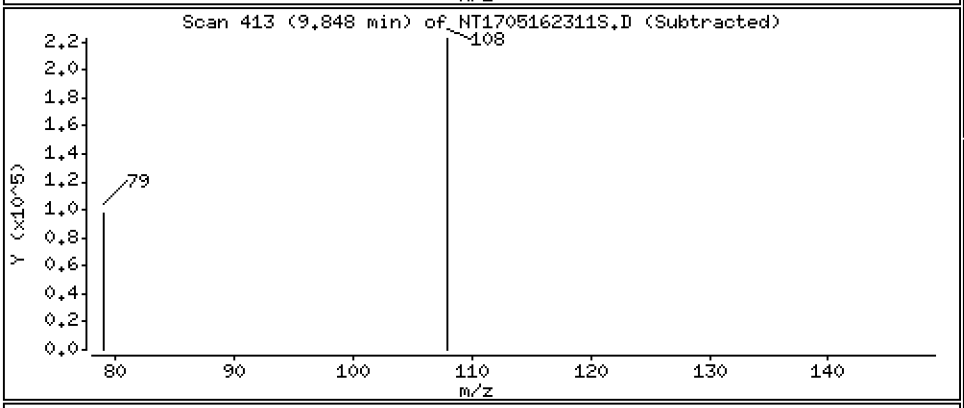
Column diameter: 0.25

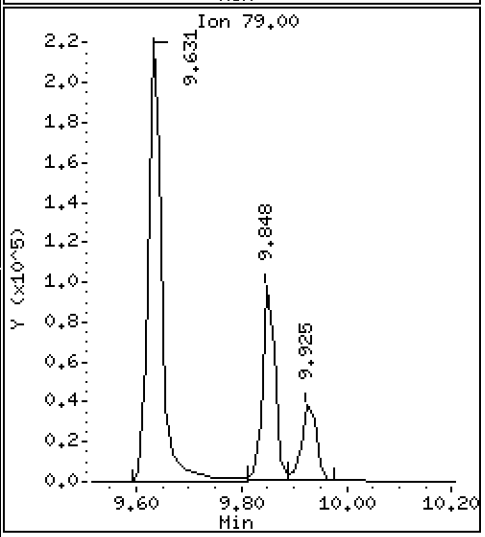
13 2-Methylphenol

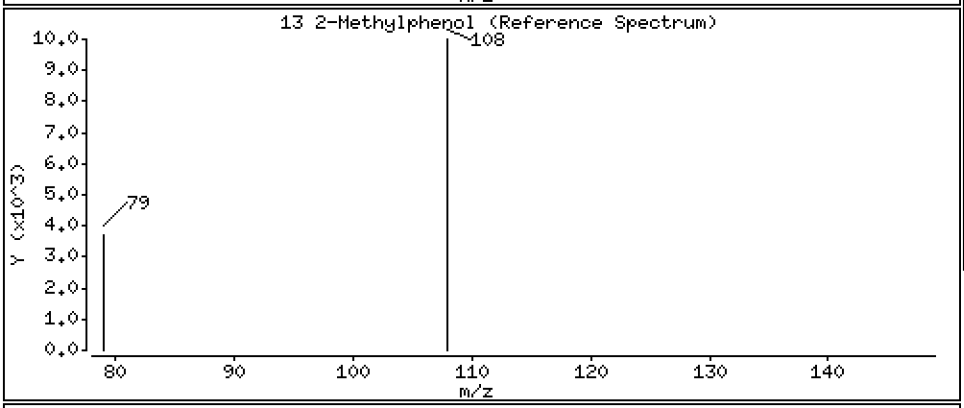
Concentration: 4.408 ug/mL

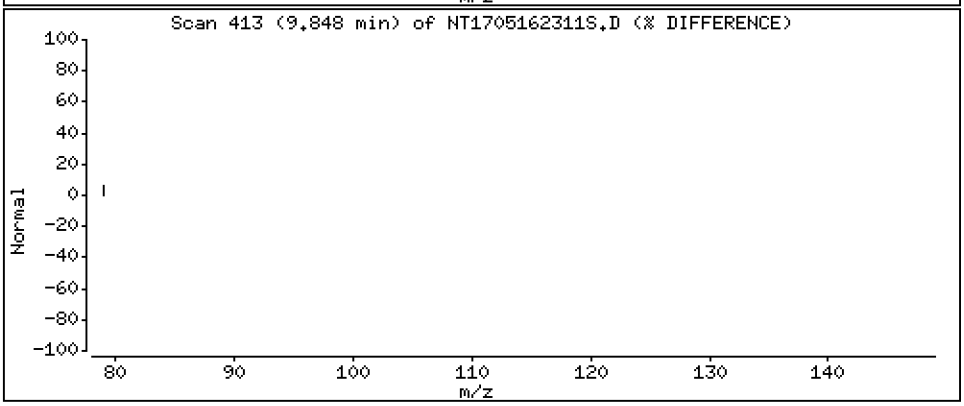












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

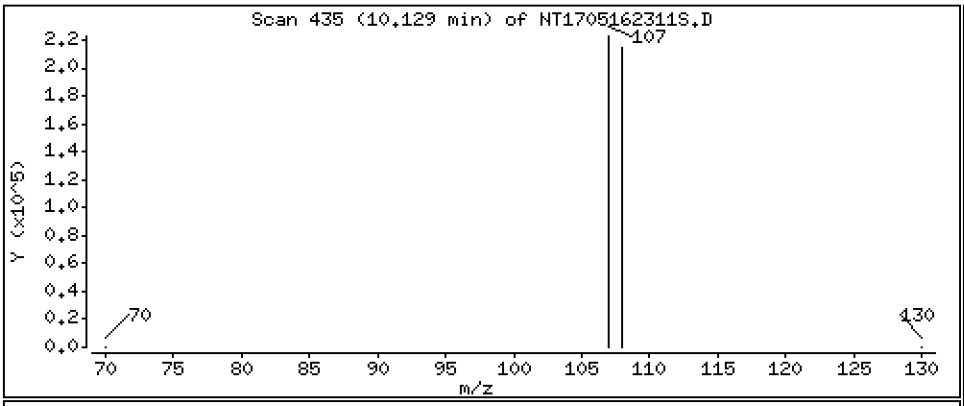
Operator: JGR

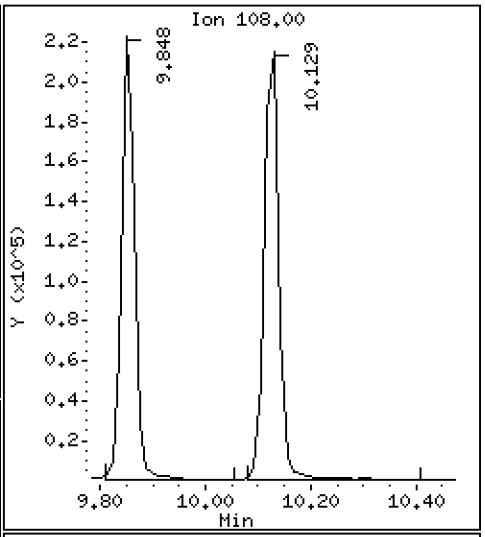
Column phase: ZB-5msi

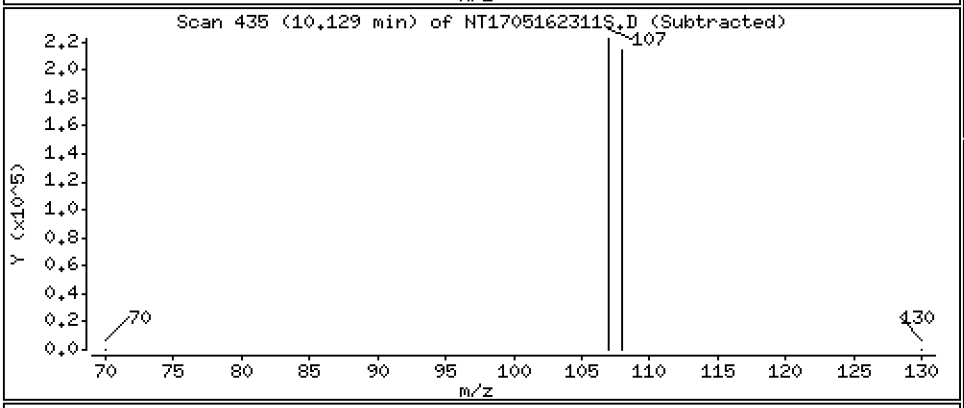
Column diameter: 0.25

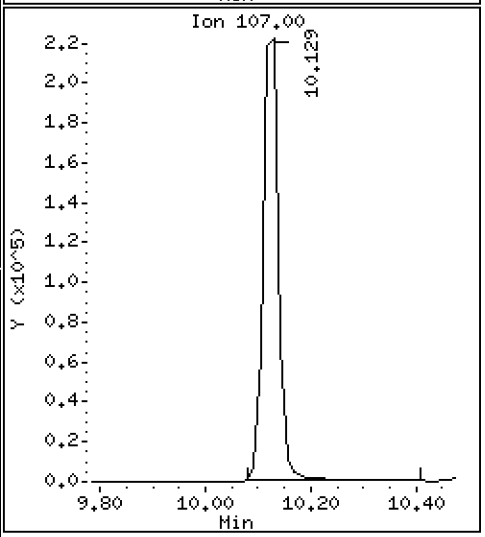
15 4-Methylphenol

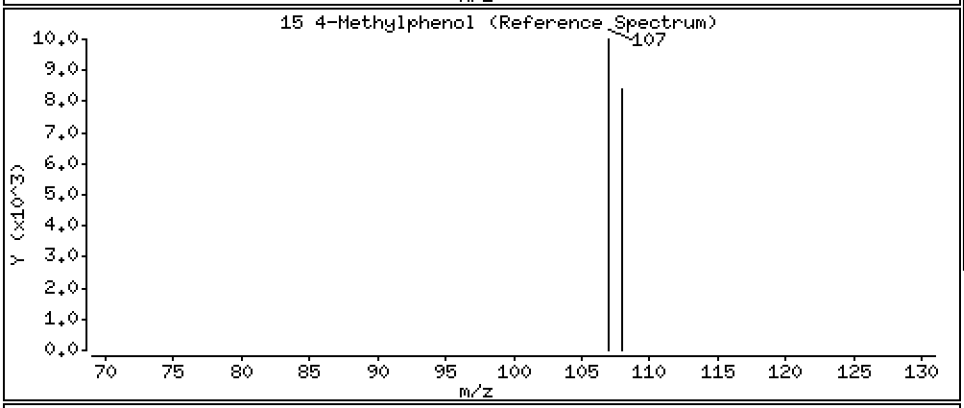
Concentration: 4.788 ug/mL

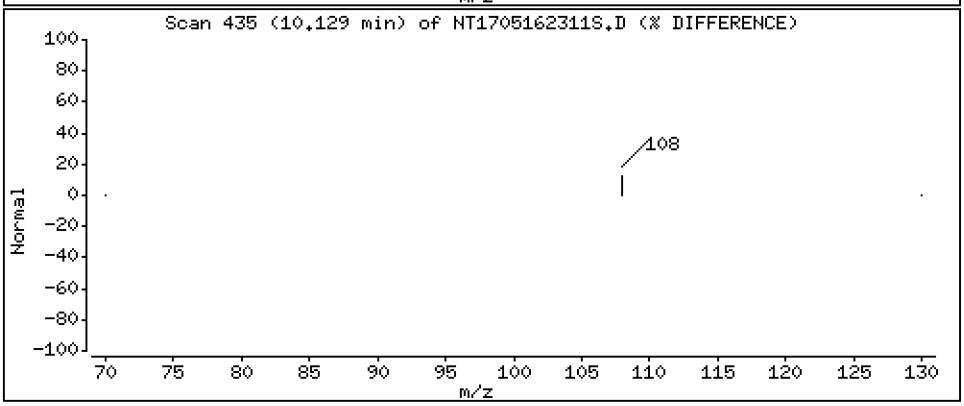












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

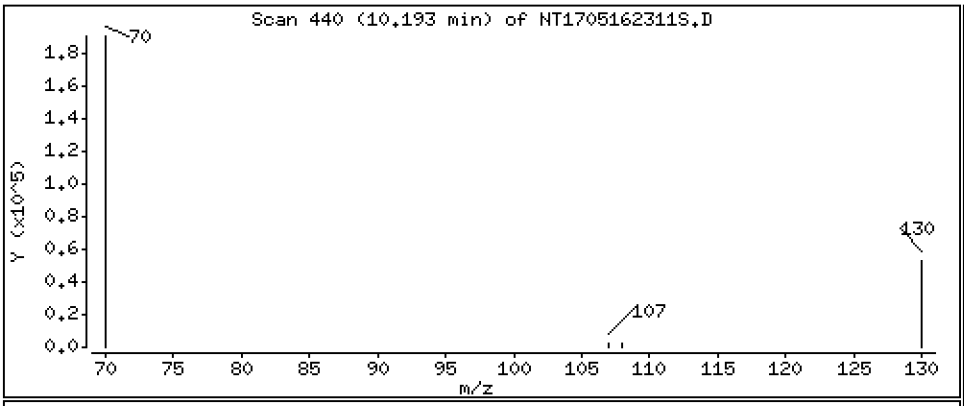
Operator: JGR

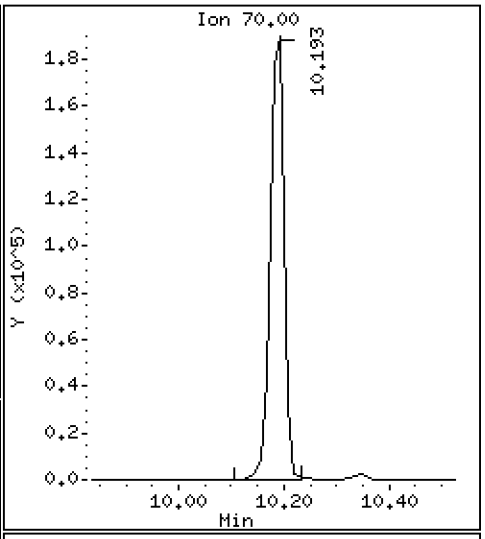
Column phase: ZB-5msi

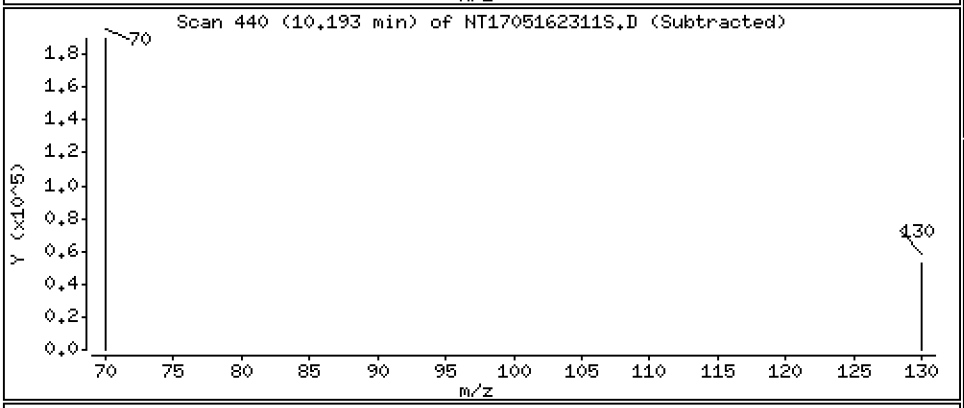
Column diameter: 0.25

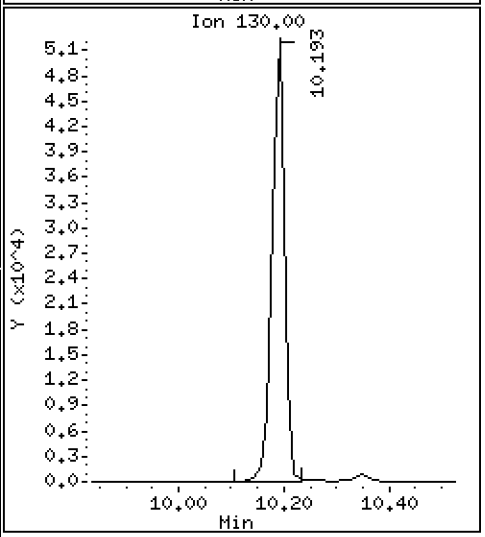
16 N-Nitroso-di-n-propylamine

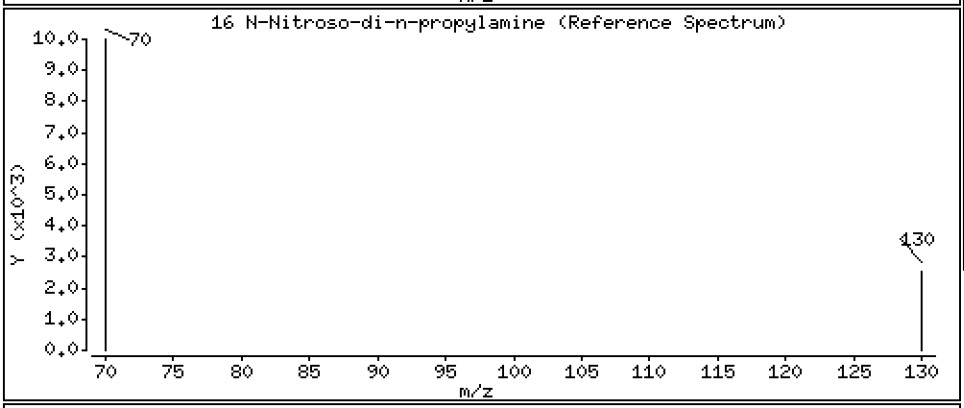
Concentration: 5.479 ug/mL

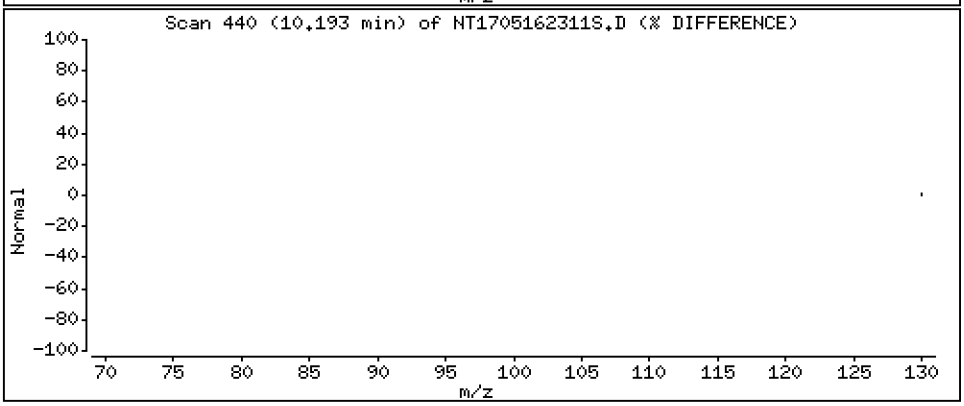












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

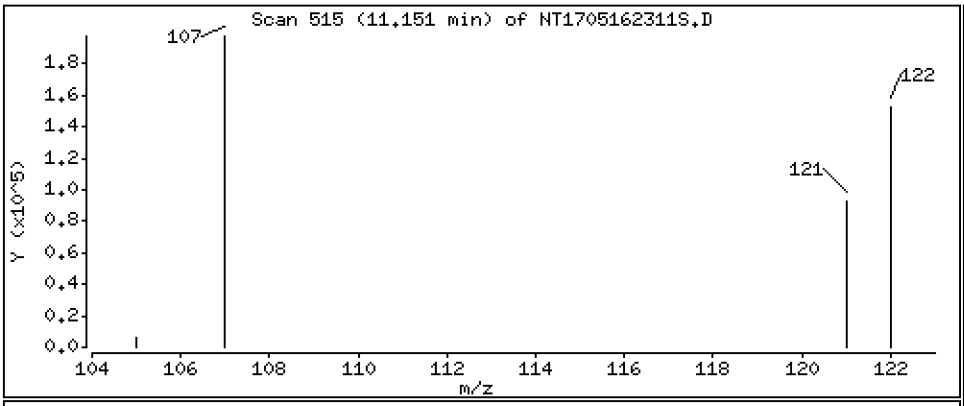
Operator: JGR

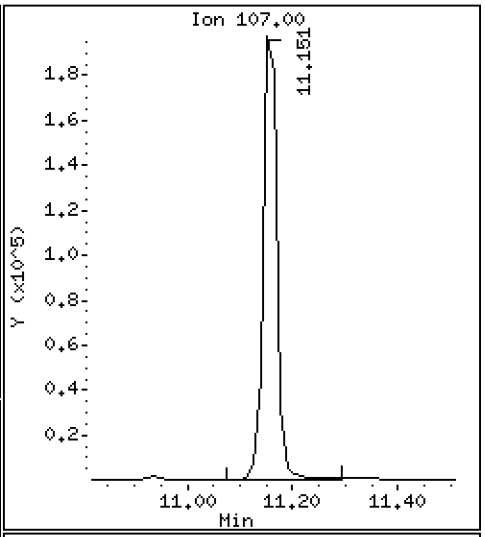
Column phase: ZB-5msi

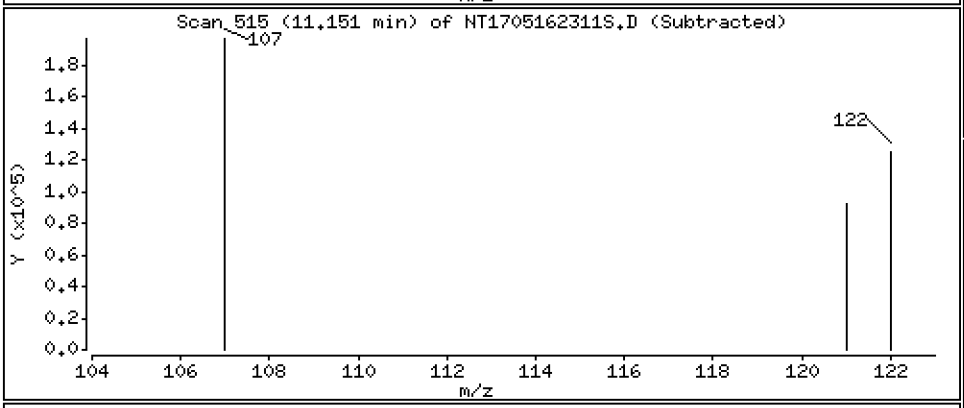
Column diameter: 0.25

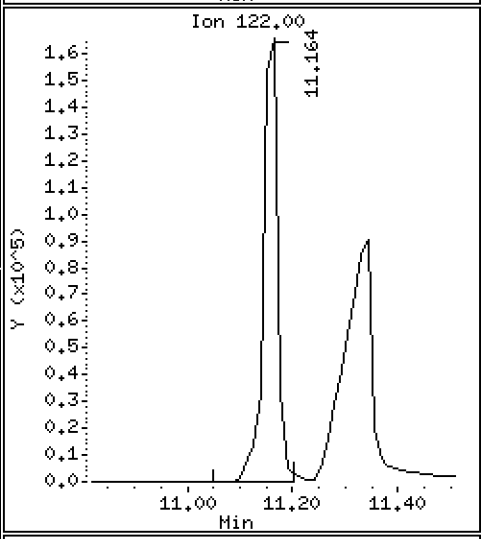
22 2,4-Dimethylphenol

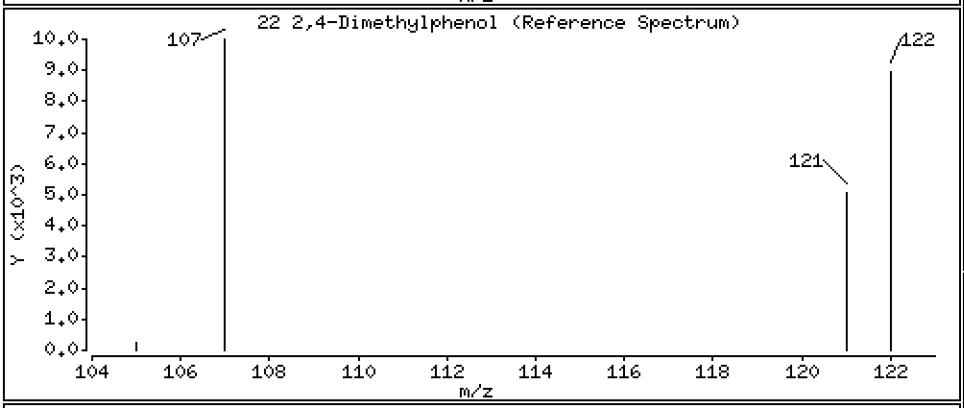
Concentration: 3.816 ug/mL

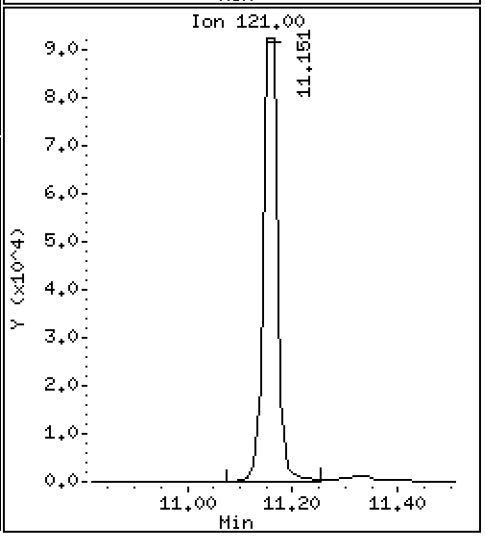


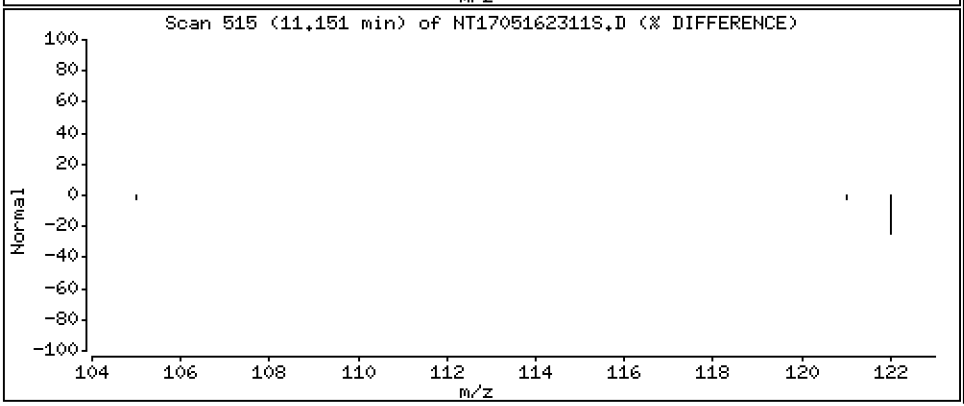












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

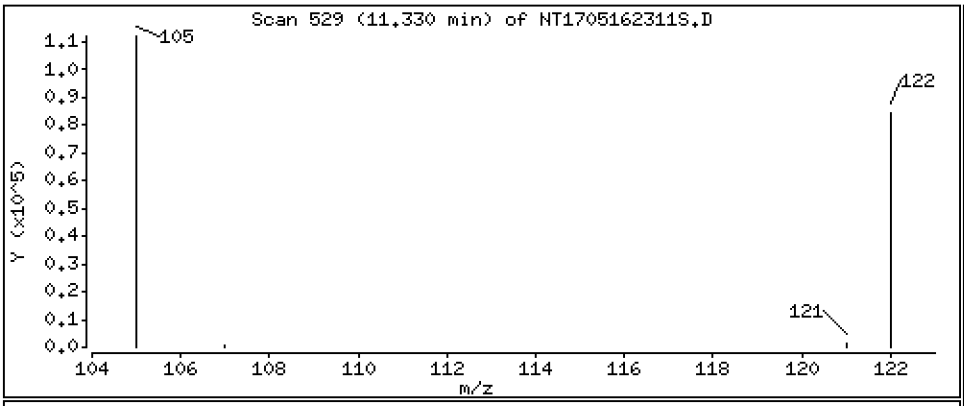
Operator: JGR

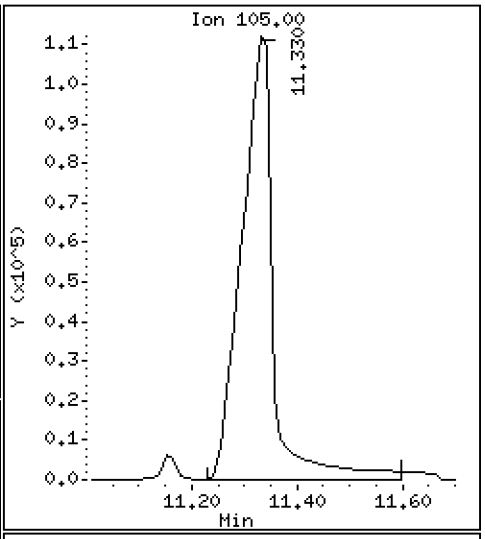
Column phase: ZB-5msi

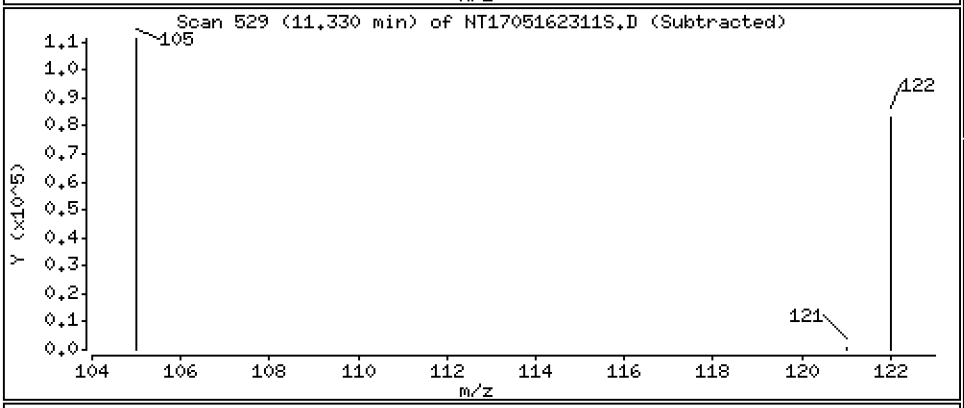
Column diameter: 0.25

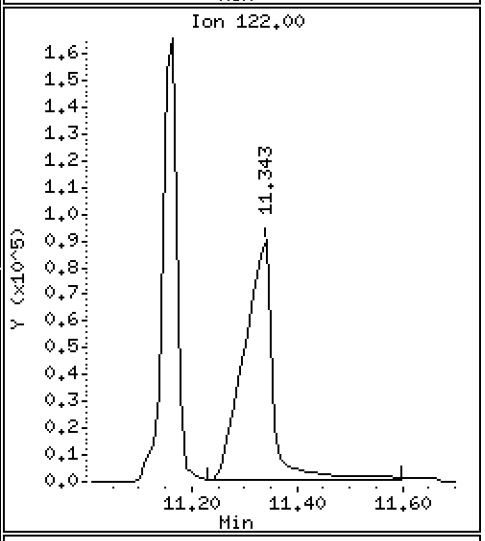
24 Benzoic acid

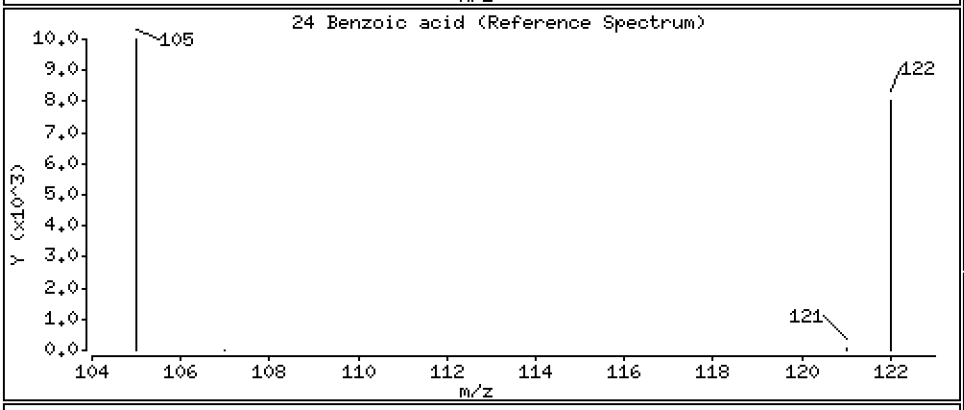
Concentration: 7.777 ug/mL

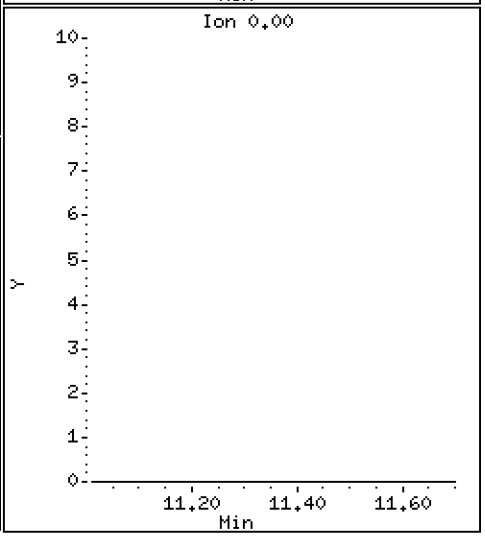


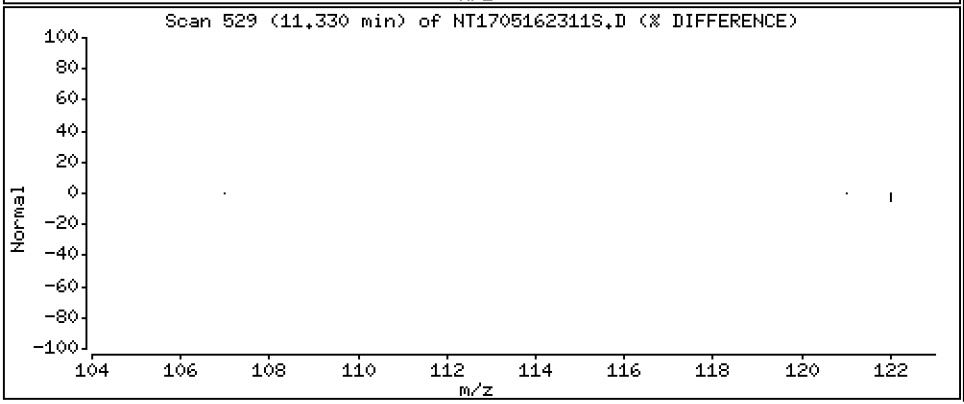












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

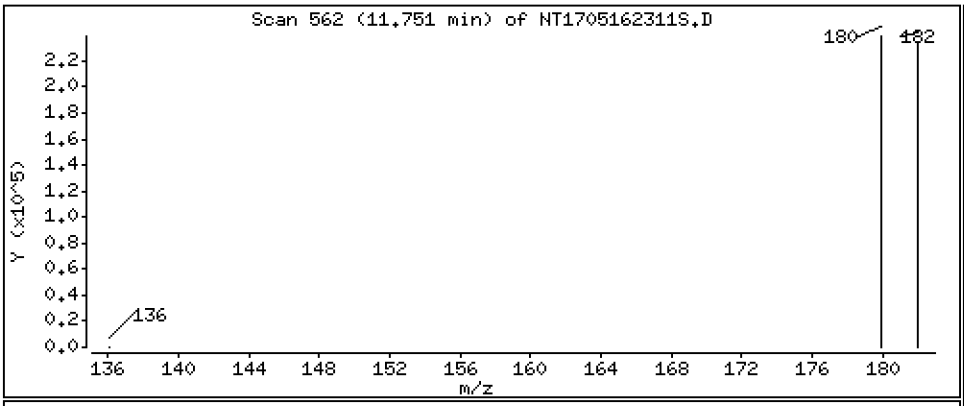
Operator: JGR

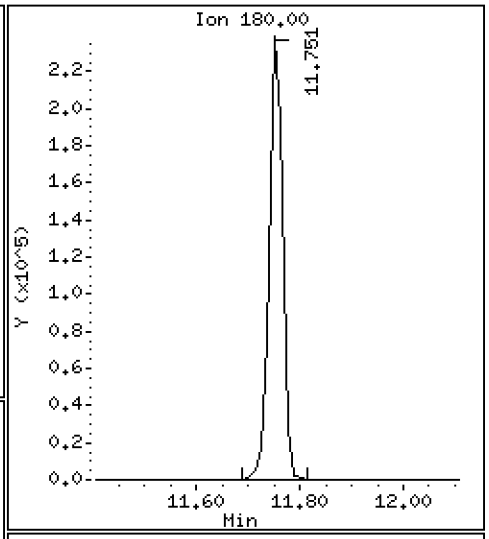
Column phase: ZB-5msi

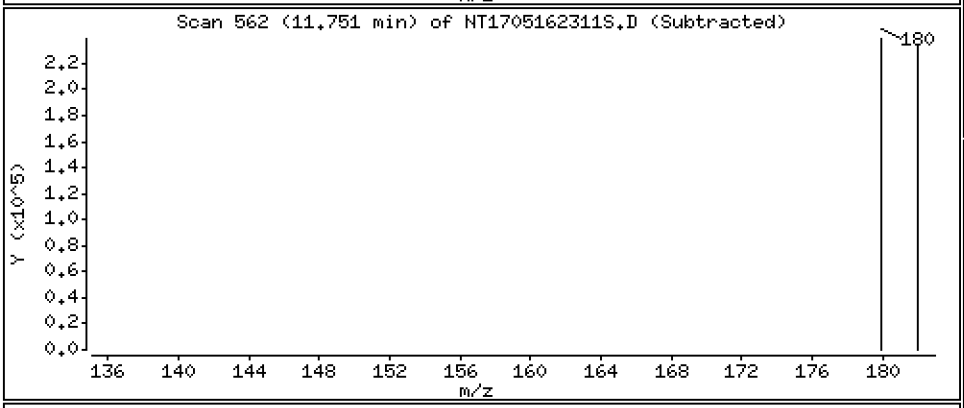
Column diameter: 0.25

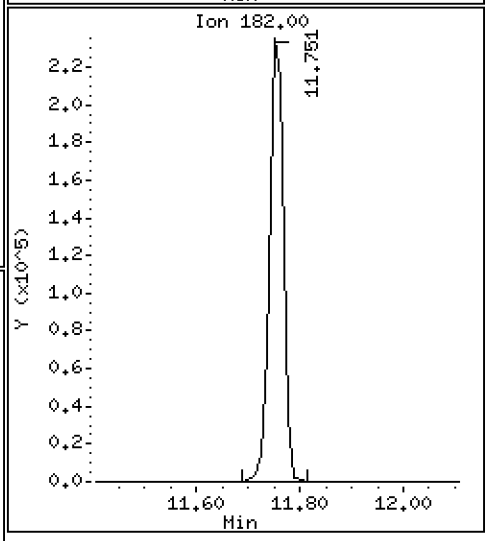
26 1,2,4-Trichlorobenzene

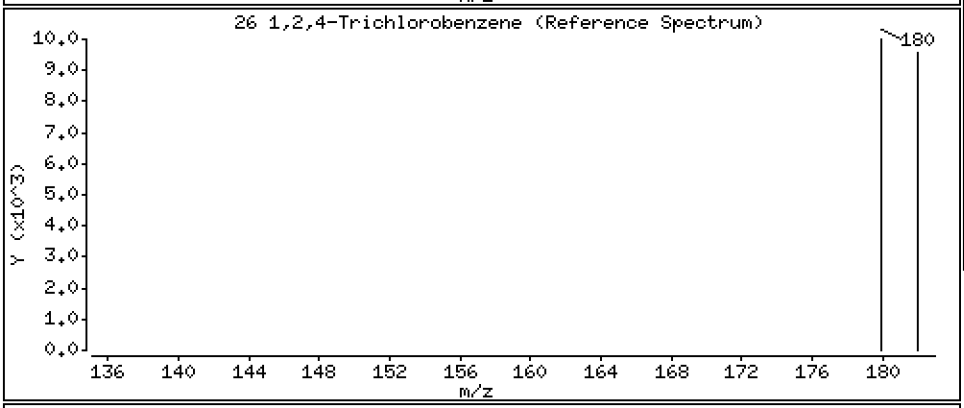
Concentration: 4.906 ug/mL

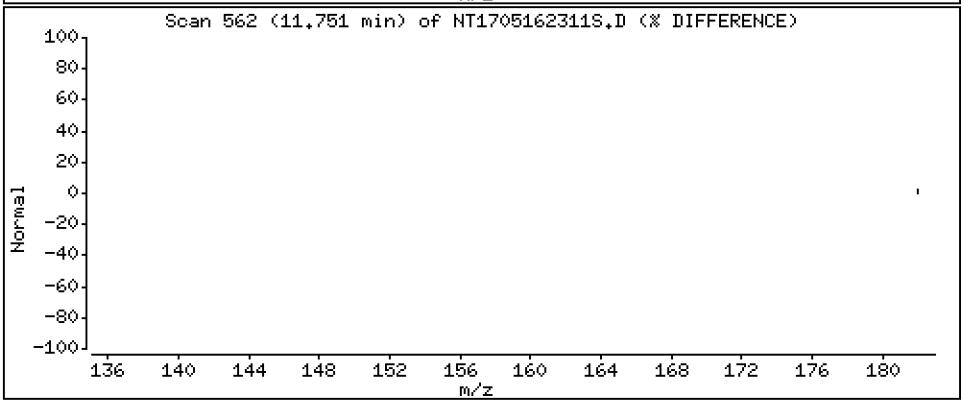












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

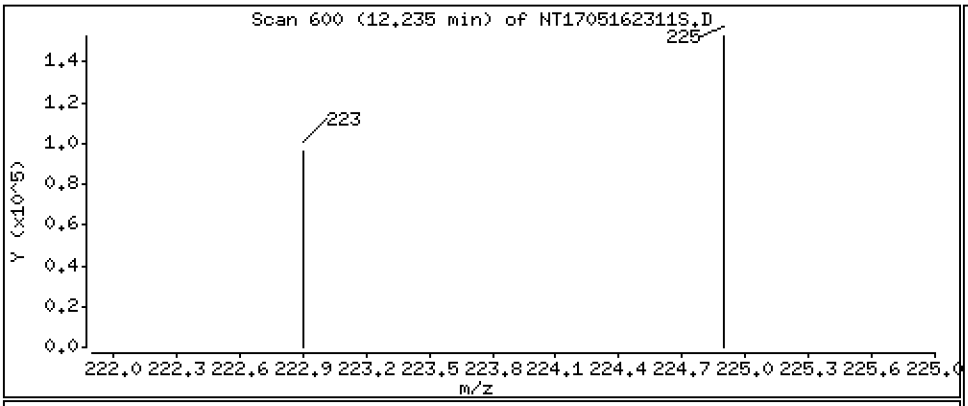
Operator: JGR

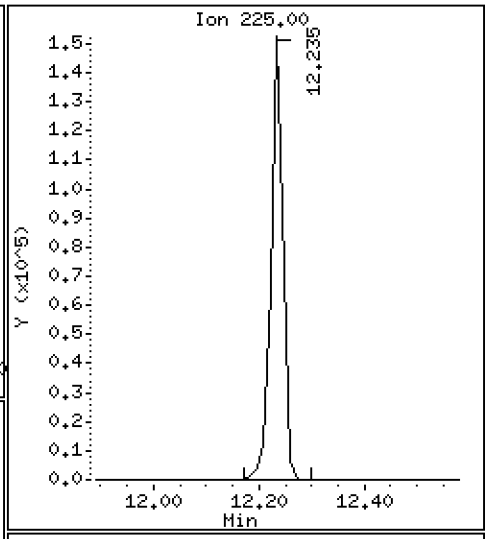
Column phase: ZB-5msi

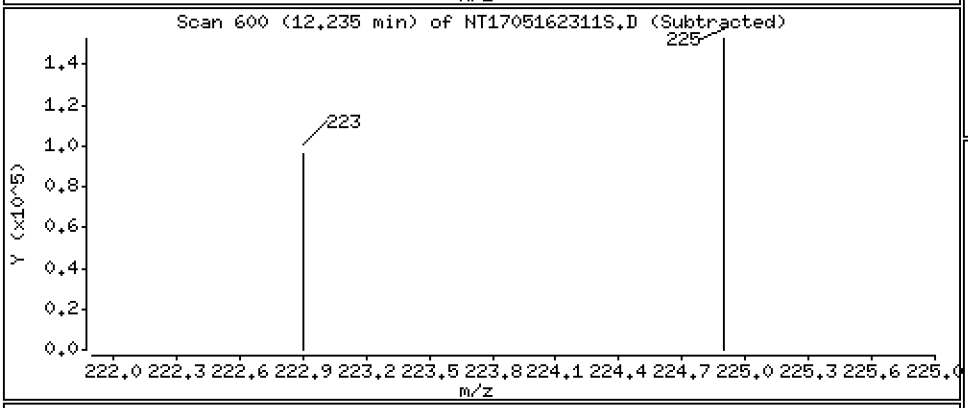
Column diameter: 0.25

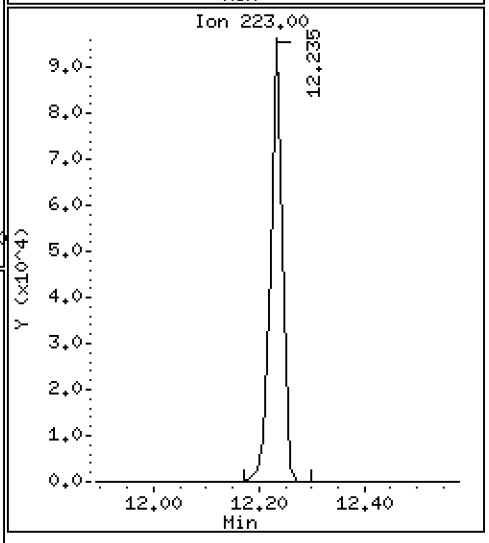
30 Hexachlorobutadiene

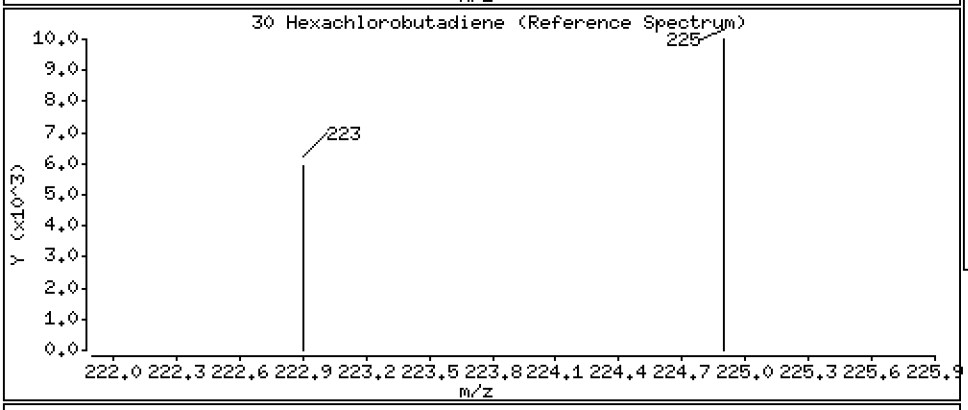
Concentration: 5.201 ug/mL

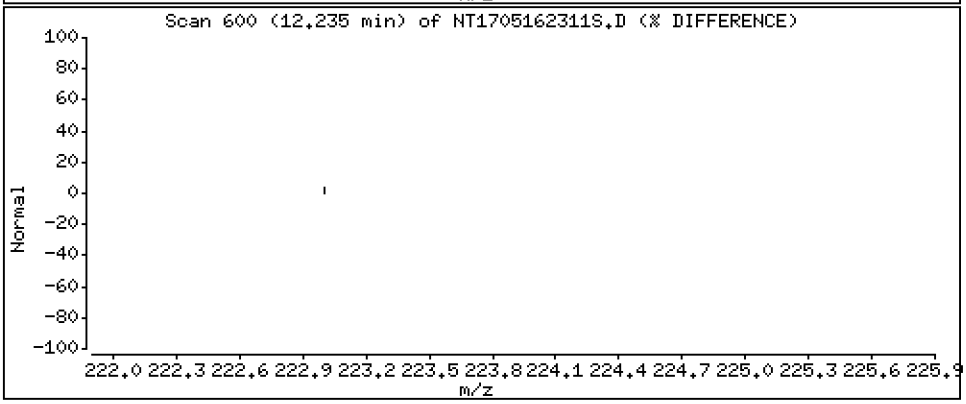












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

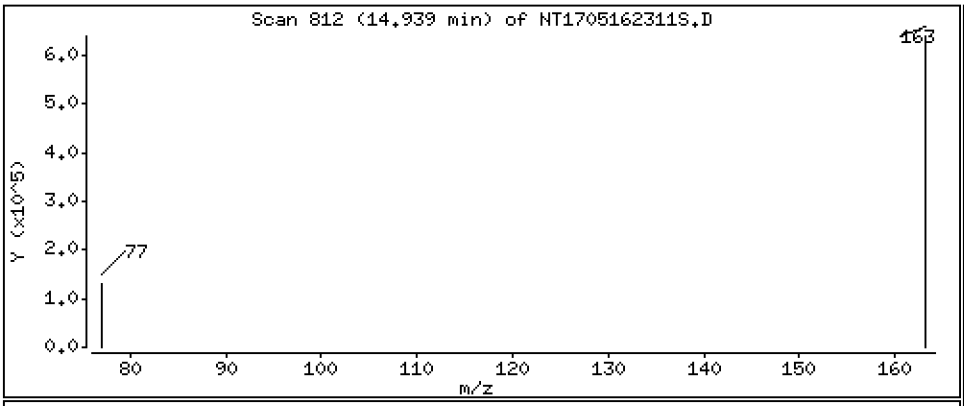
Operator: JGR

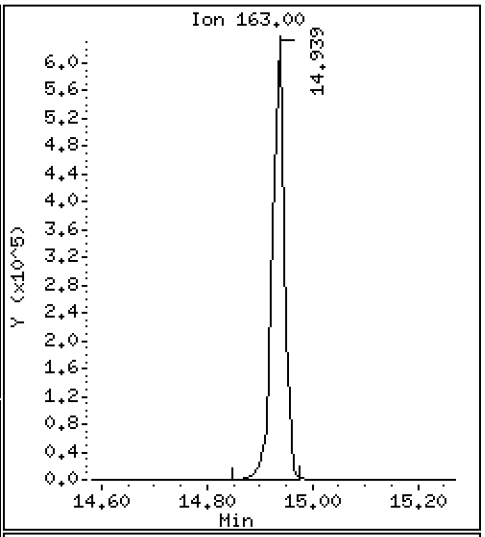
Column phase: ZB-5msi

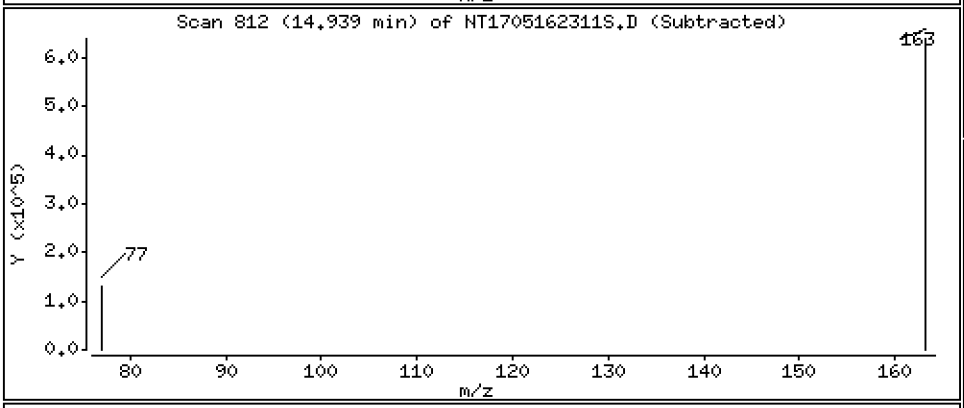
Column diameter: 0.25

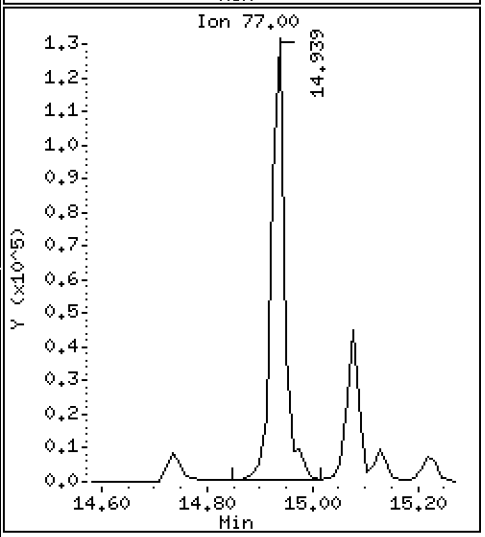
39 Dimethylphthalate

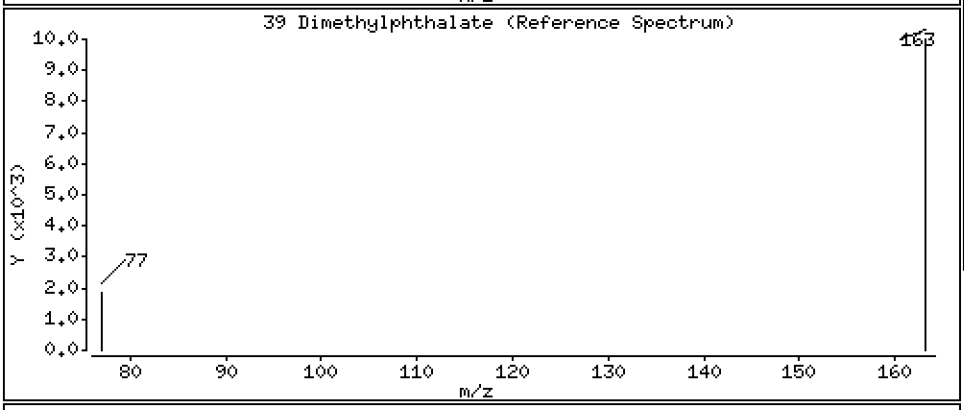
Concentration: 5.240 ug/mL

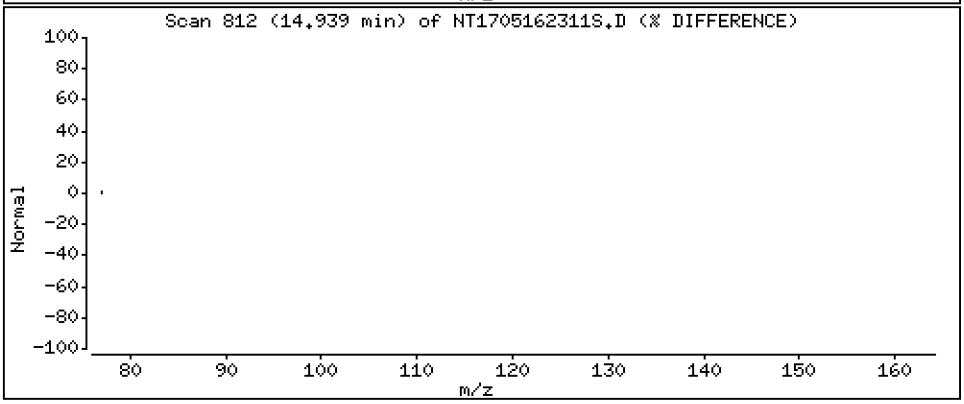












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

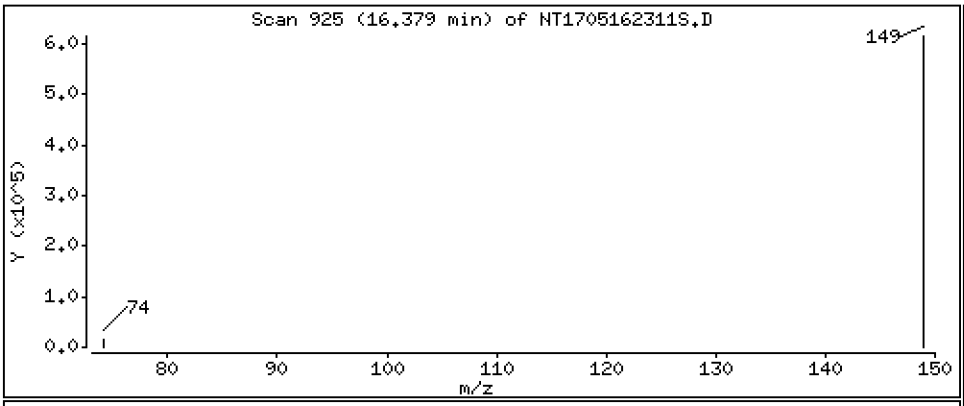
Operator: JGR

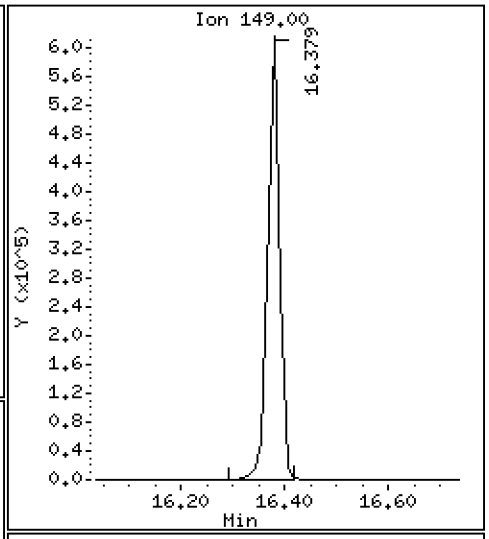
Column phase: ZB-5msi

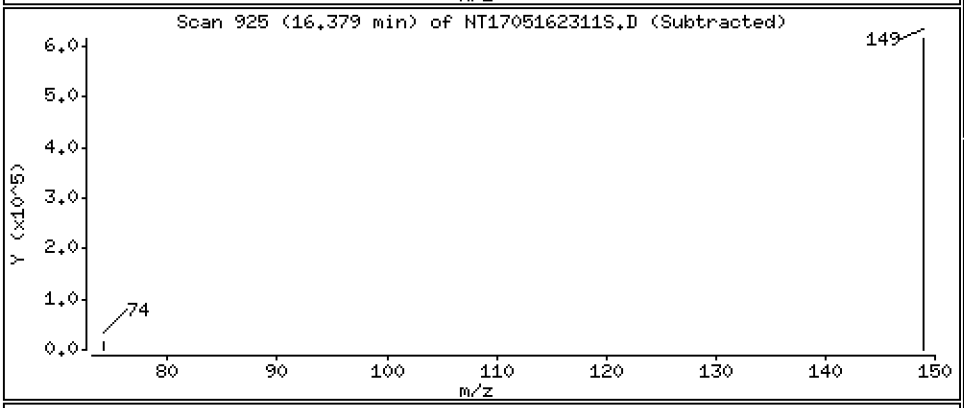
Column diameter: 0.25

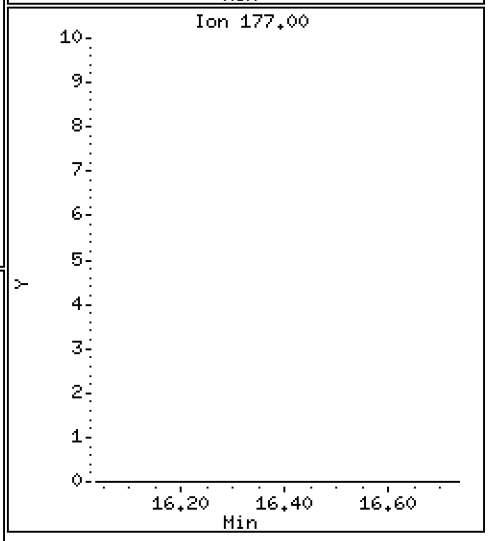
50 Diethylphthalate

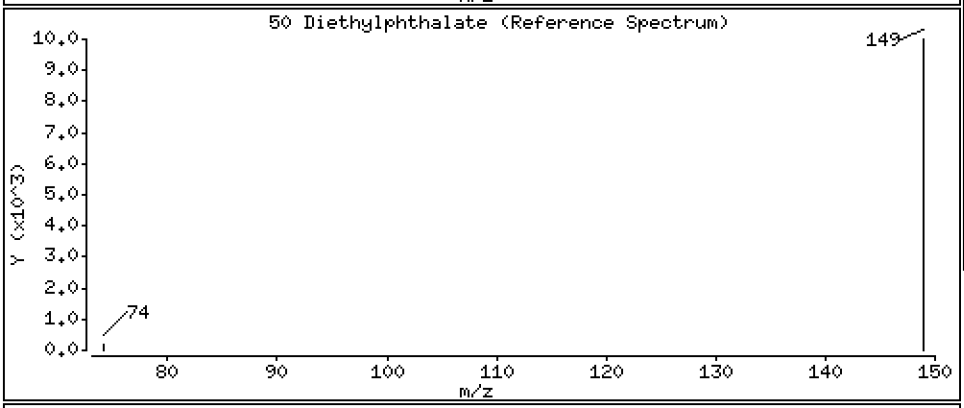
Concentration: 5.478 ug/mL

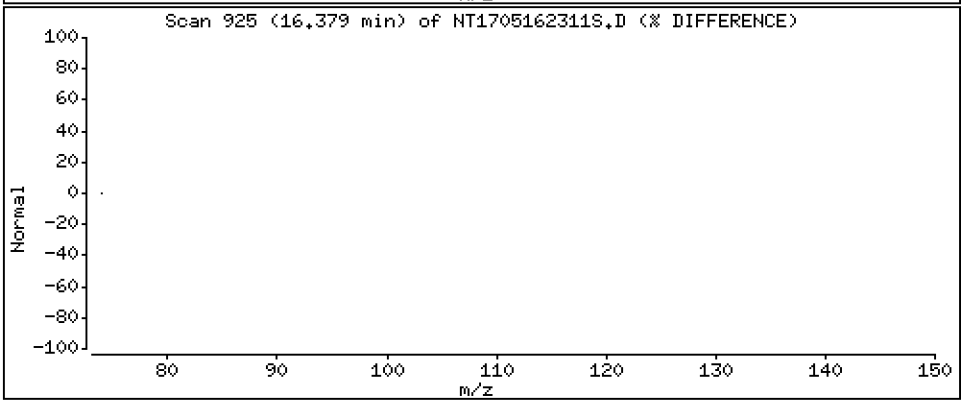












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

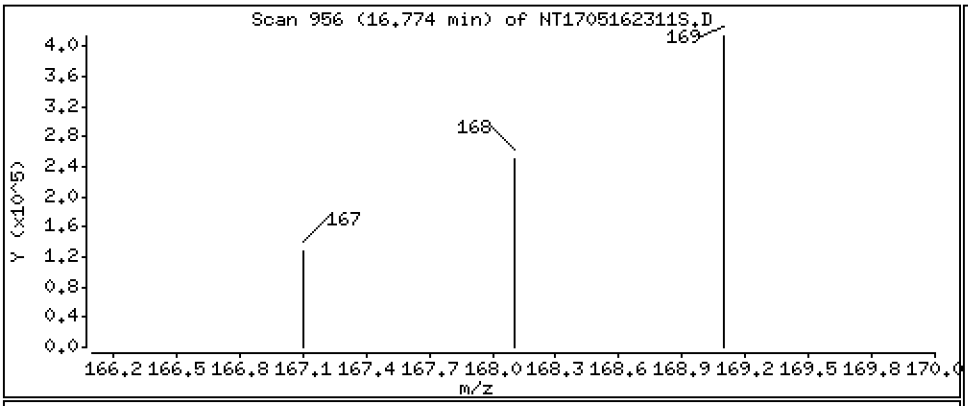
Operator: JGR

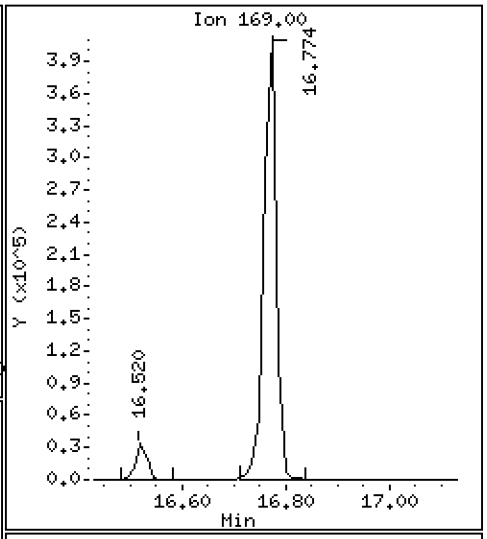
Column phase: ZB-5msi

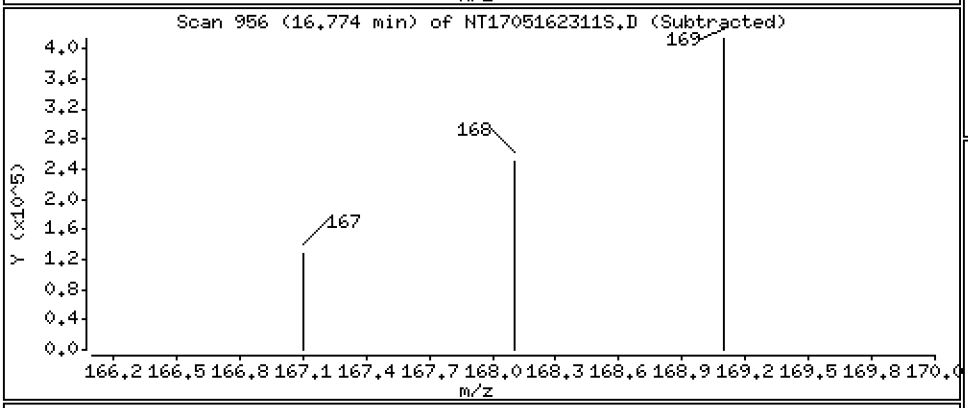
Column diameter: 0.25

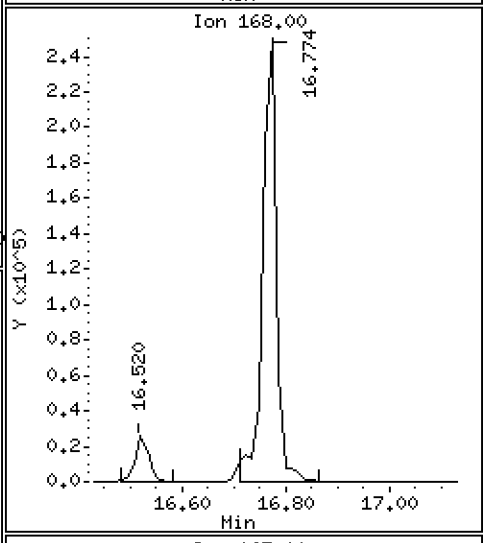
54 N-Nitrosodiphenylamine

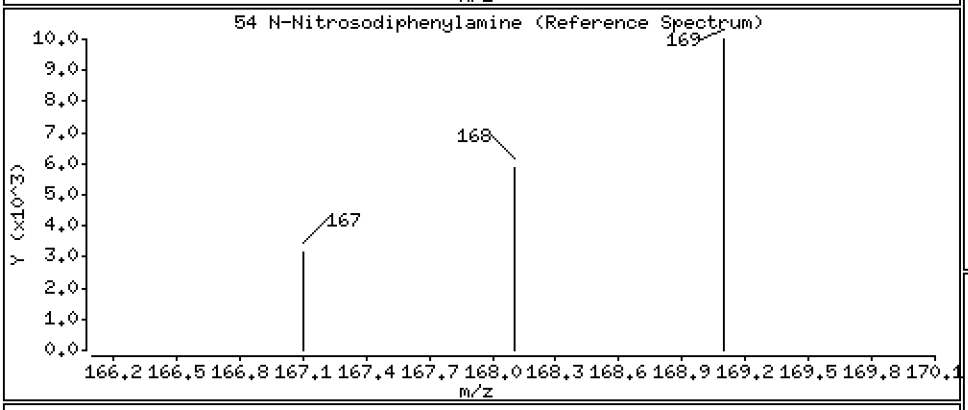
Concentration: 5.627 ug/mL

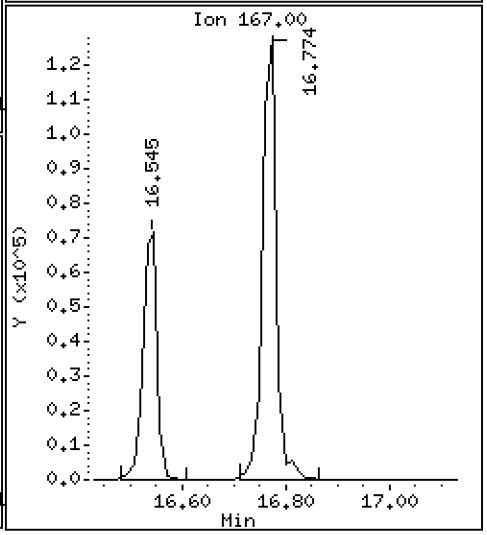


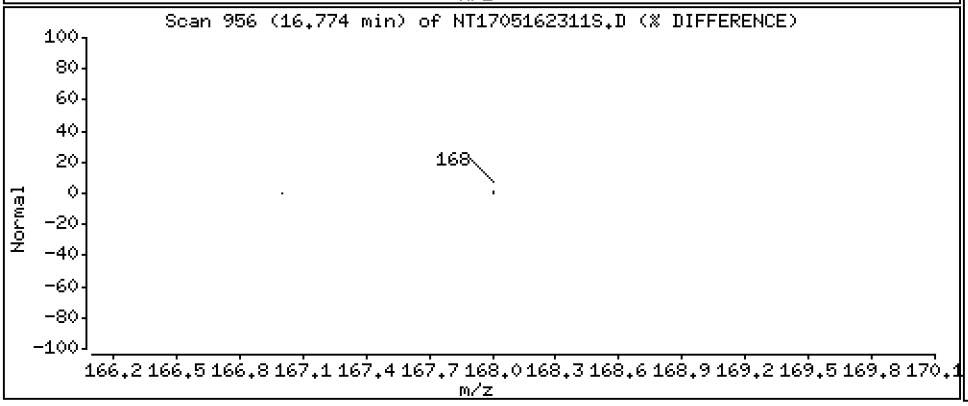












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

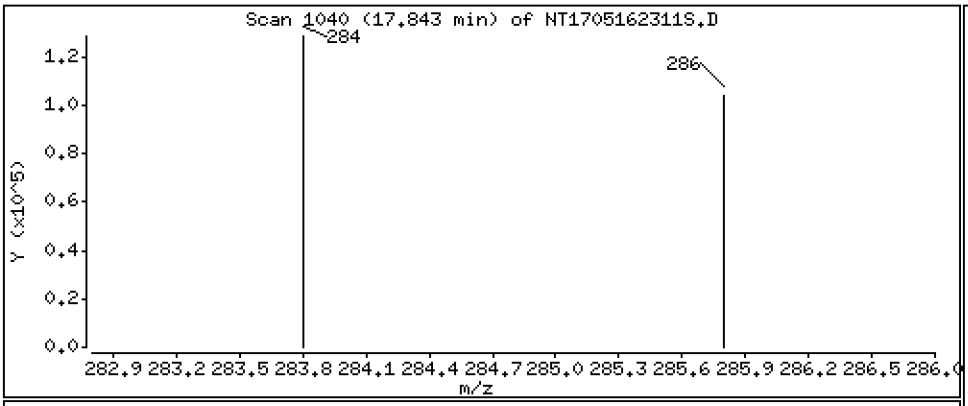
Operator: JGR

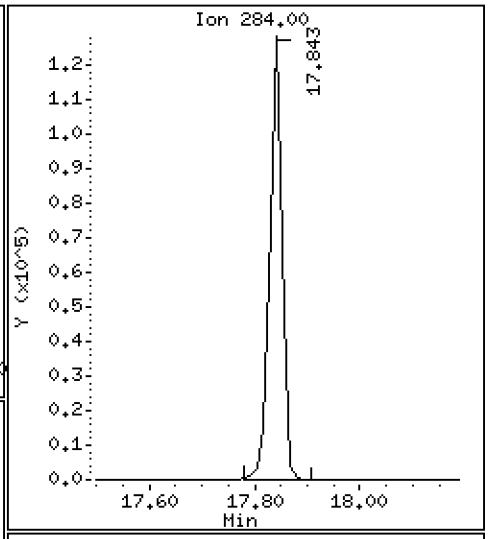
Column phase: ZB-5msi

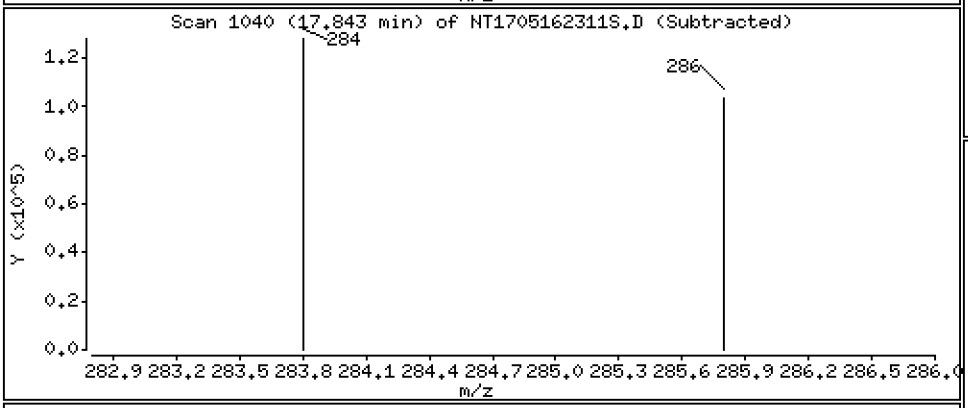
Column diameter: 0.25

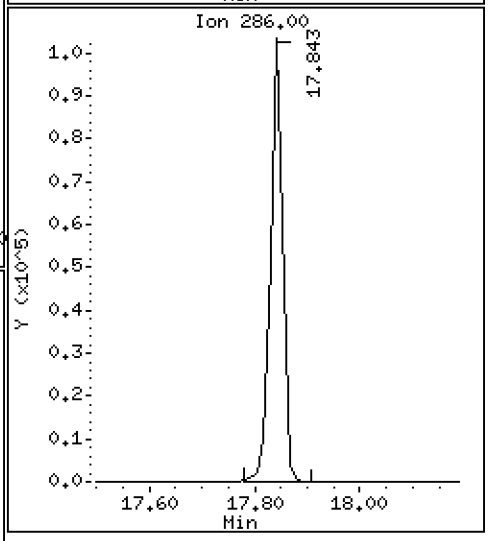
57 Hexachlorobenzene

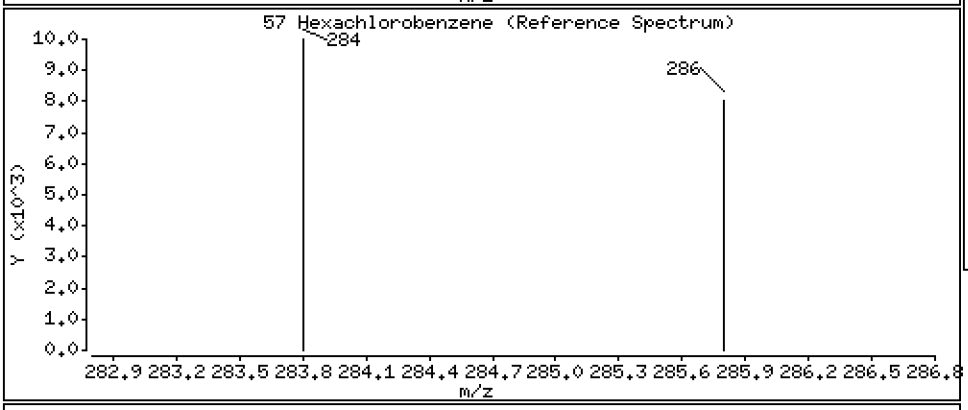
Concentration: 5.081 ug/mL

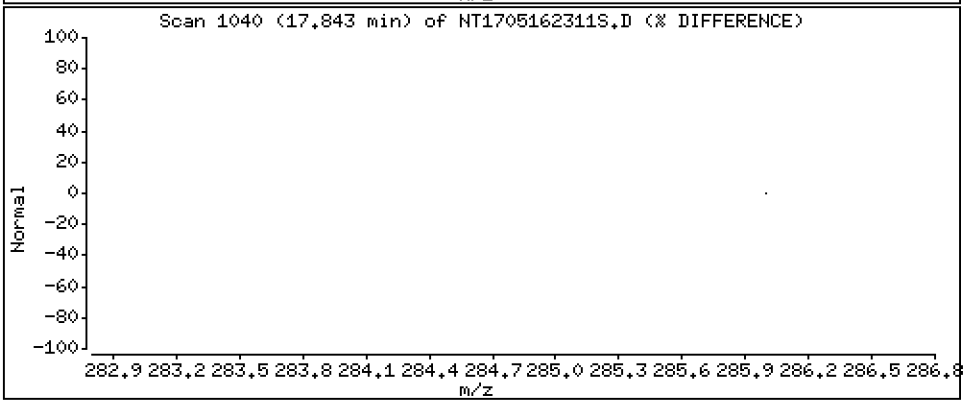












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

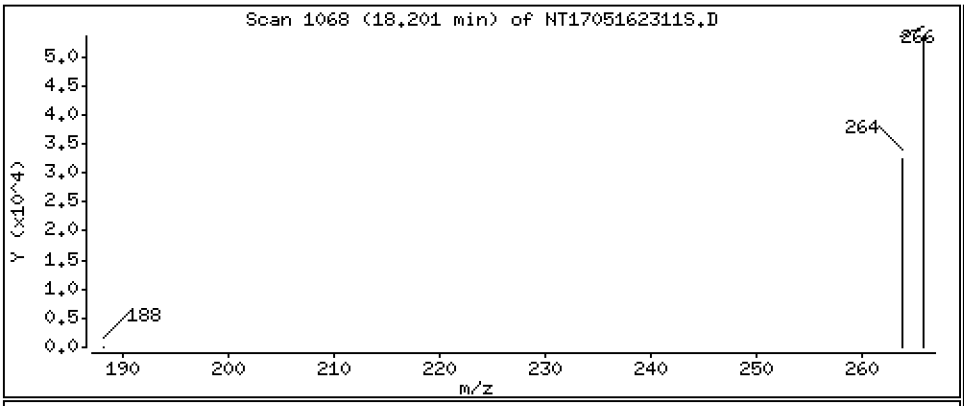
Operator: JGR

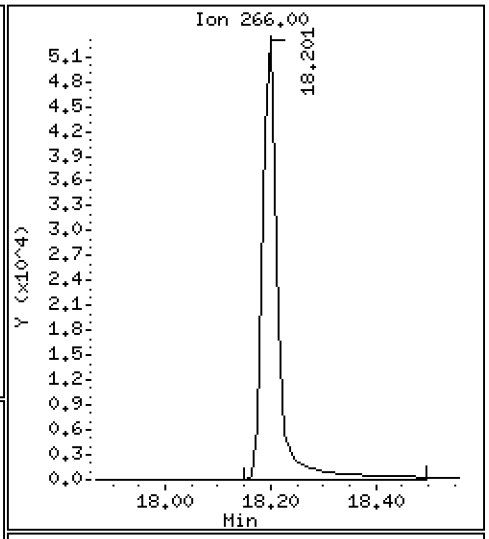
Column phase: ZB-5msi

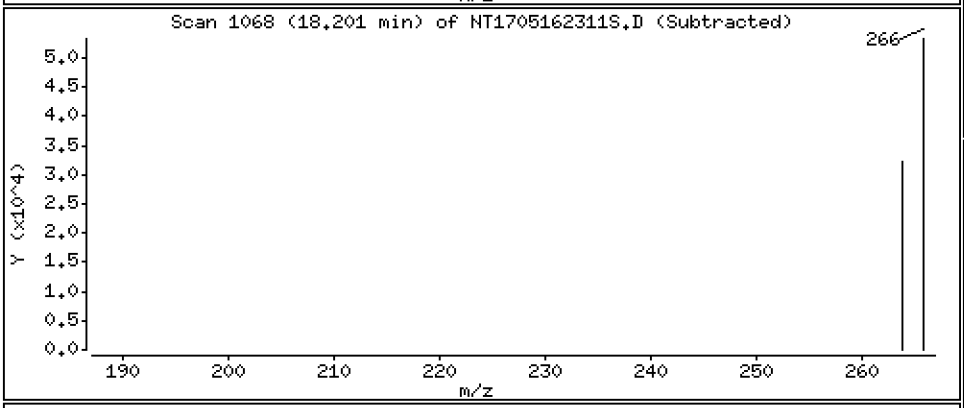
Column diameter: 0.25

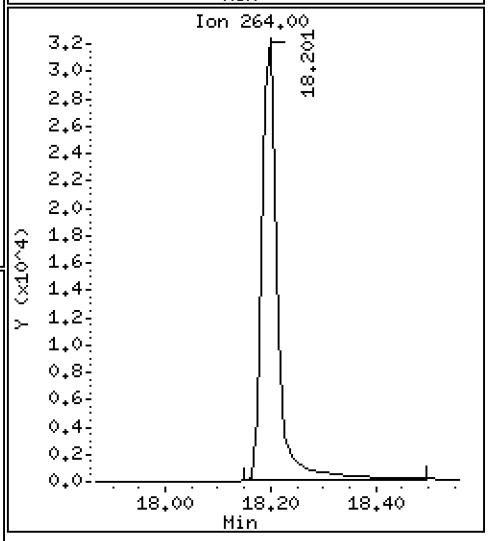
58 Pentachlorophenol

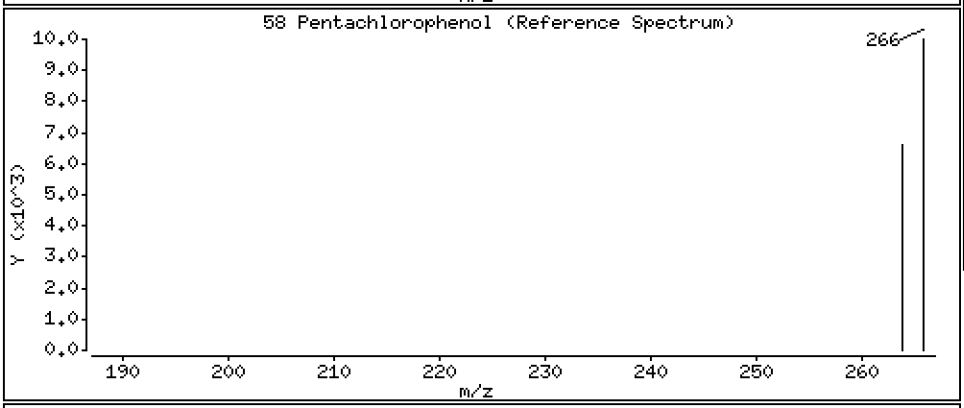
Concentration: 4.506 ug/mL

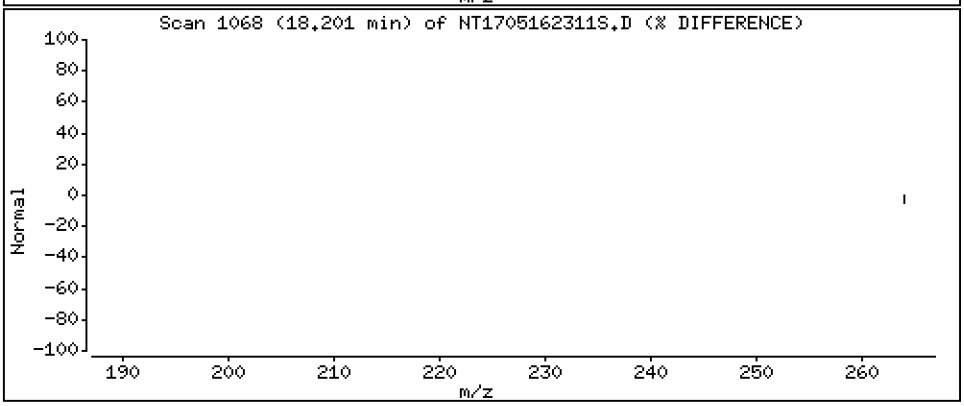












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

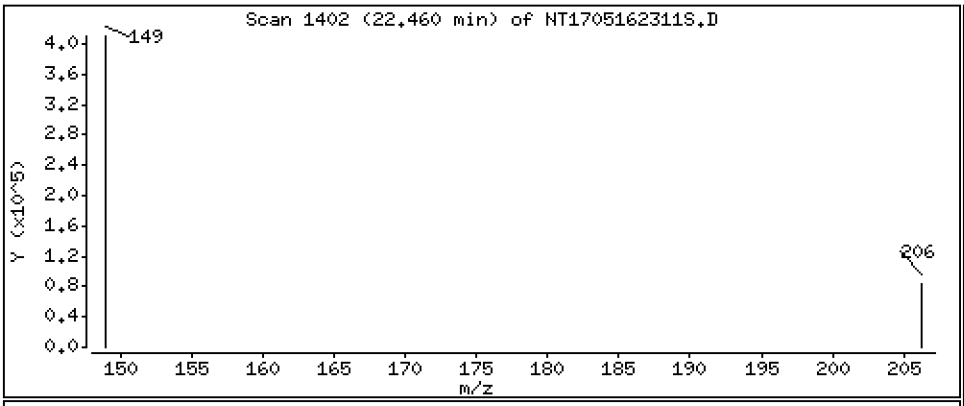
Operator: JGR

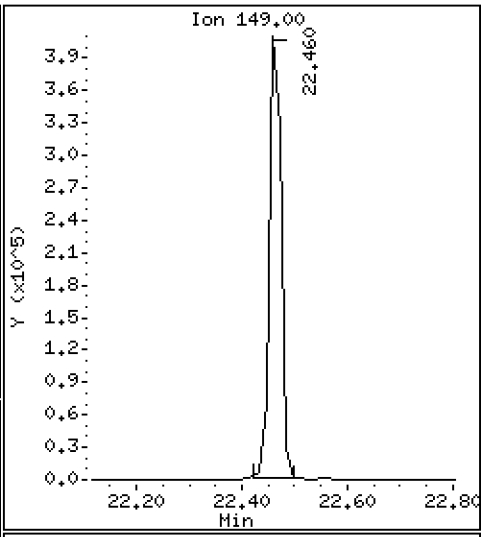
Column phase: ZB-5msi

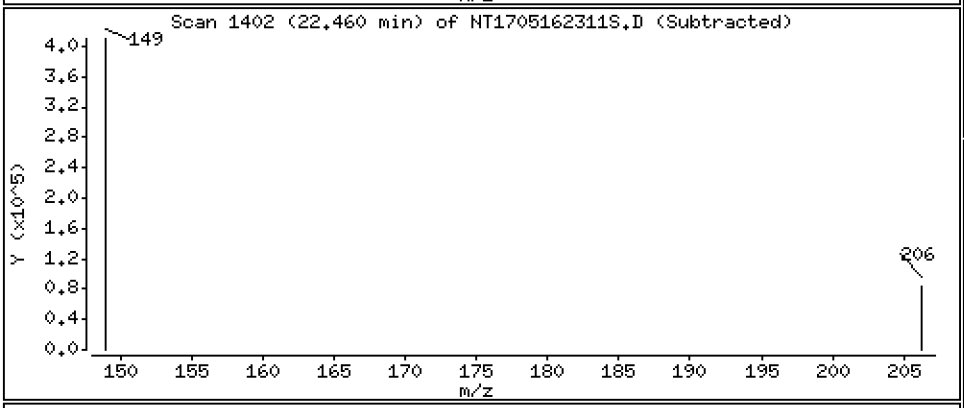
Column diameter: 0.25

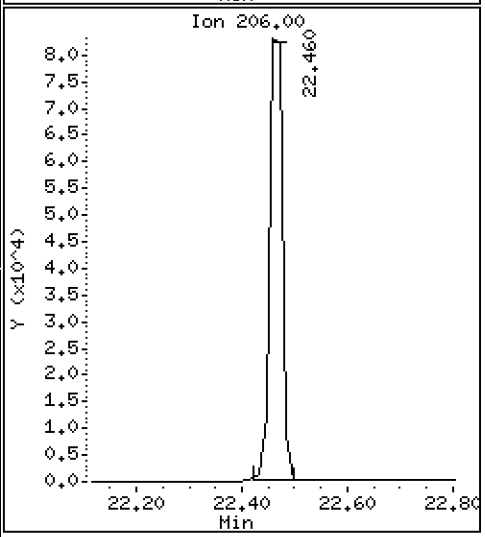
67 Butylbenzylphthalate

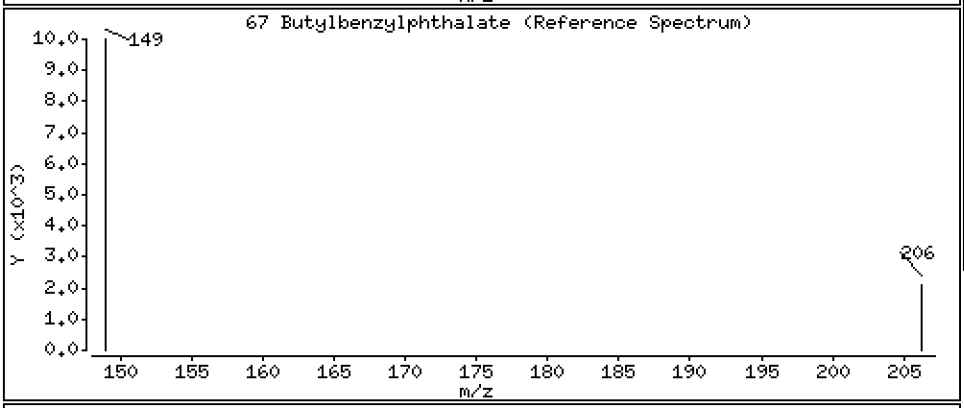
Concentration: 5.905 ug/mL

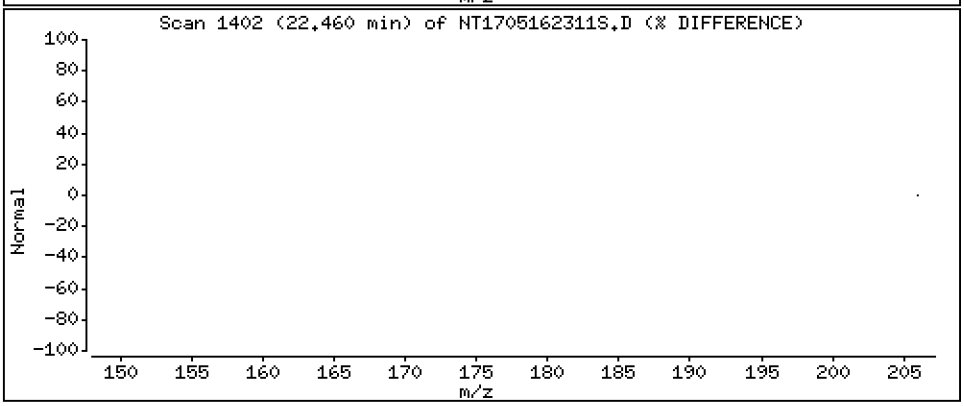












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

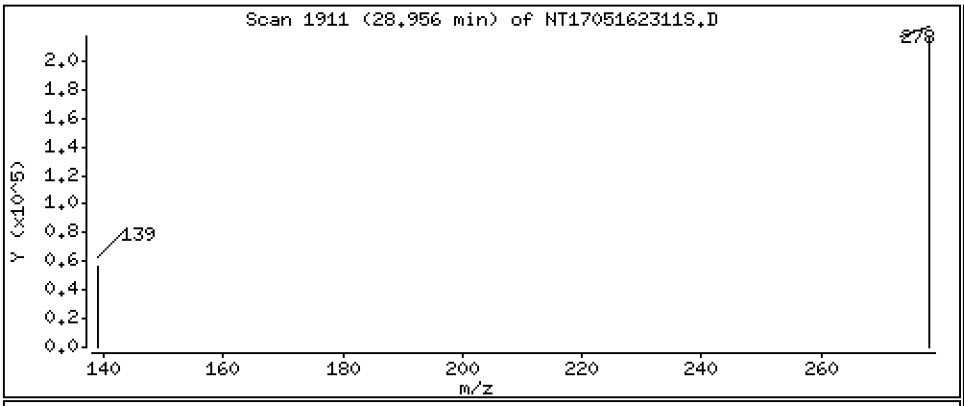
Operator: JGR

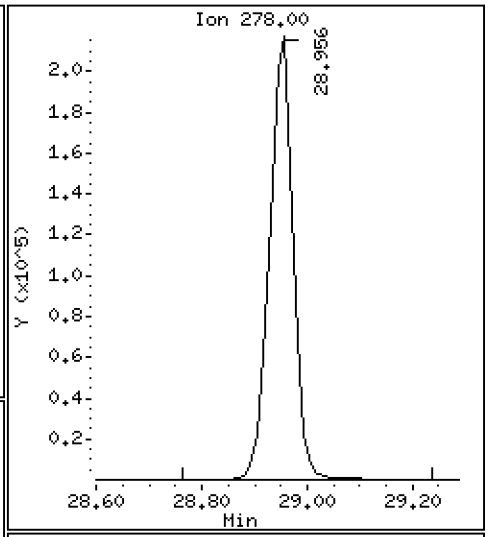
Column phase: ZB-5msi

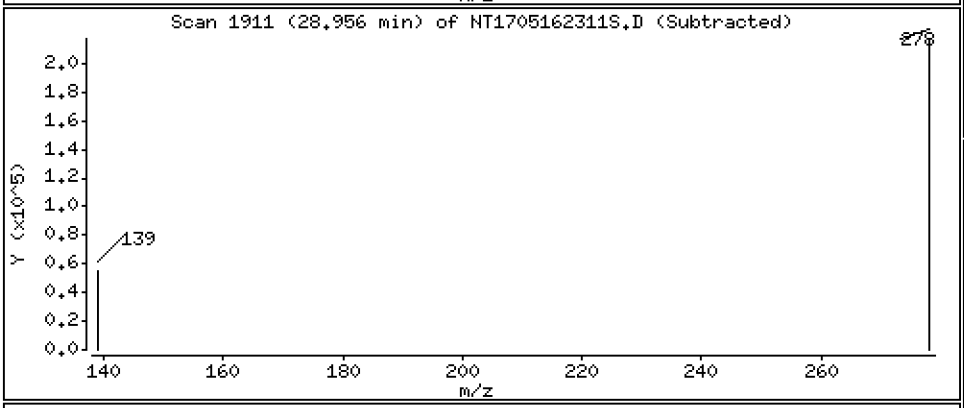
Column diameter: 0.25

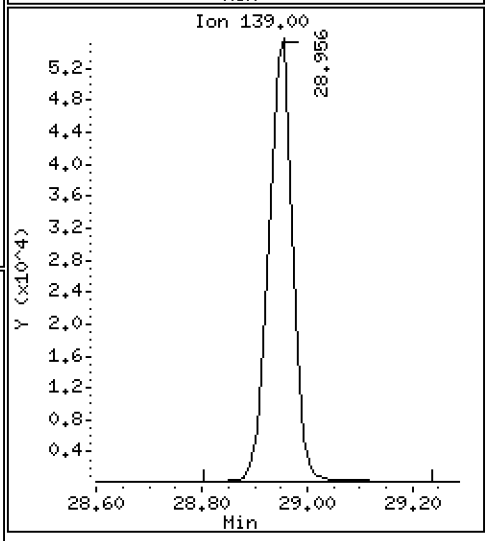
79 Dibenzo(a,h)anthracene

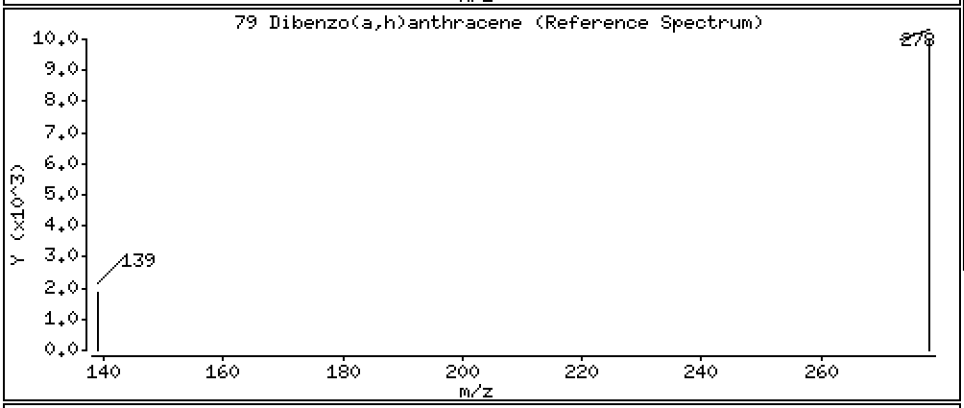
Concentration: 5.149 ug/mL

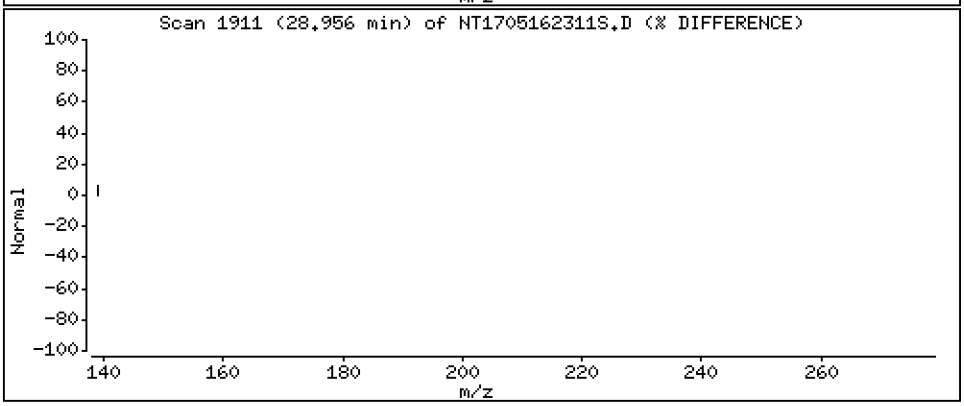












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

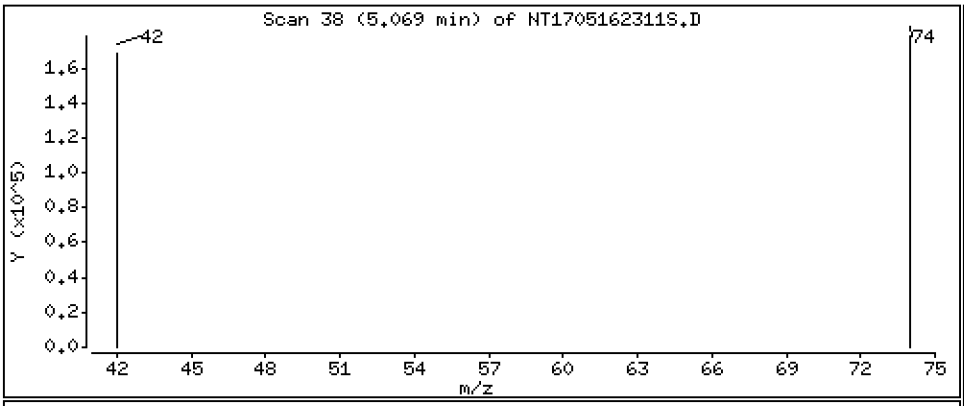
Operator: JGR

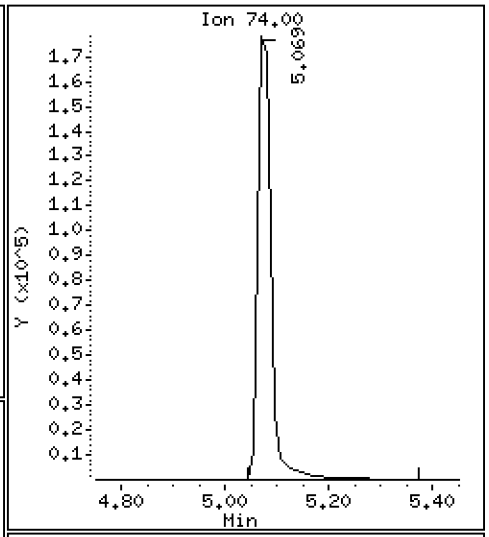
Column phase: ZB-5msi

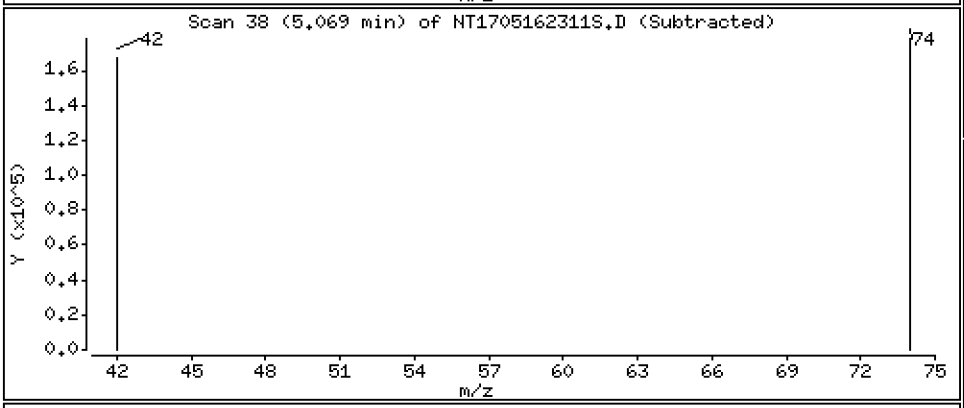
Column diameter: 0.25

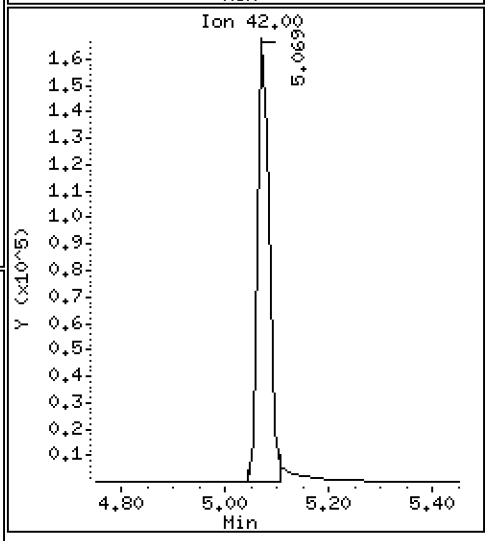
90 N-Nitrosodimethylamine

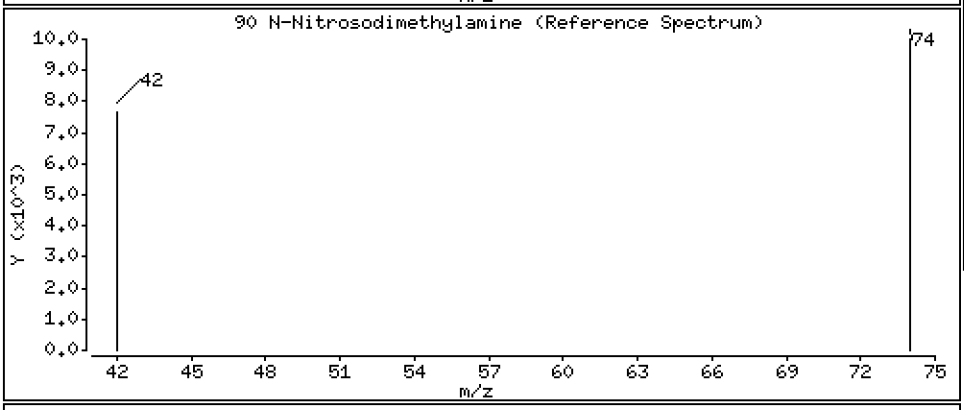
Concentration: 5.868 ug/mL

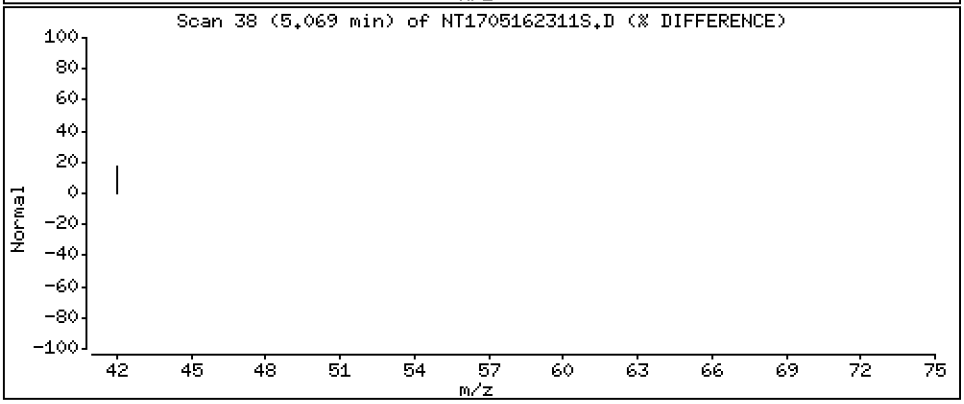












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D
Lab Smp Id: SLE0339-SCV1
Inj Date : 17-MAY-2023 00:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.					
	3	Phenol	94	8.750	8.751	(0.933)	616997	4.88420	4.884
	7	1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	575988	5.08691	5.087
*	8	1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	280298	4.00000	
	9	1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	566257	5.13211	5.132
	11	Benzyl alcohol	79	9.630	9.656	(1.027)	410745	5.70628	5.706
	12	1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	541461	5.00685	5.007
	13	2-Methylphenol	108	9.848	9.861	(1.050)	385832	4.40762	4.408
	15	4-Methylphenol	108	10.129	10.129	(1.080)	423610	4.78832	4.788
	16	N-Nitroso-di-n-propylamine	70	10.193	10.180	(1.087)	349317	5.47874	5.479
	22	2,4-Dimethylphenol	107	11.151	11.164	(0.942)	366886	3.81638	3.816
	24	Benzoic acid	105	11.329	11.356	(0.957)	465783	7.77732	7.777
	26	1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	427934	4.90638	4.906
*	27	Naphthalene-d8	136	11.840	11.840	(1.000)	999390	4.00000	
	30	Hexachlorobutadiene	225	12.235	12.235	(1.033)	238867	5.20120	5.201
	39	Dimethylphthalate	163	14.938	14.926	(0.968)	1015804	5.23967	5.240
*	42	Acenaphthene-d10	162	15.436	15.436	(1.000)	527927	4.00000	
	50	Diethylphthalate	149	16.379	16.379	(1.061)	964439	5.47782	5.478
	54	N-Nitrosodiphenylamine	169	16.774	16.774	(0.908)	681829	5.62729	5.627
	57	Hexachlorobenzene	284	17.843	17.843	(0.966)	208857	5.08140	5.081
	58	Pentachlorophenol	266	18.200	18.214	(0.986)	108866	4.50590	4.506
*	59	Phenanthrene-d10	188	18.468	18.455	(1.000)	860054	4.00000	
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.460	22.460	(0.958)	642329	5.90509	5.905
*	69	Chrysene-d12	240	23.455	23.455	(1.000)	527529	4.00000	
*	77	Perylene-d12	264	26.159	26.147	(1.000)	475440	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.956	28.943	(1.107)	690513	5.14916	5.149
	90	N-Nitrosodimethylamine	74	5.068	5.094	(0.541)	321072	5.86783	5.868

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162311S.D
Lab Smp Id: SLE0339-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	280298	-11.32
27 Naphthalene-d8	1102073	551037	2204146	999390	-9.32
42 Acenaphthene-d10	583826	291913	1167652	527927	-9.57
59 Phenanthrene-d10	970917	485459	1941834	860054	-11.42
69 Chrysene-d12	590568	295284	1181136	527529	-10.67
77 Perylene-d12	537938	268969	1075876	475440	-11.62

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.47	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162311S.D

Lab ID: SLE0339-SCV1
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   17-MAY-2023 00:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.000	0.9569	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00070
Lab File ID:	NT1705262303S.D	Calibration Date:	05/16/2023
Sequence:	SLE0442	Injection Date:	05/26/23
Lab Sample ID:	SLE0442-ICV1	Injection Time:	13:53
Sequence Name:	ABN 1.0		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Phenol	A	1.0000	1.12	1.8027250	2.0155690		11.8	+/-20
1,3-Dichlorobenzene	A	1.0000	1.01	1.6158430	1.6234880		0.5	+/-20
1,4-Dichlorobenzene	A	1.0000	1.01	1.5745540	1.5832220		0.6	+/-20
1,2-Dichlorobenzene	A	1.0000	0.996	1.5432720	1.5370500		-0.4	+/-20
Benzyl Alcohol	A	1.0000	1.13	1.0272110	1.1554050		12.5	+/-20
Benzoic acid	A	4.0000	3.42	0.1537024	0.2046749		-14.6	+/-20
2-Methylphenol	A	1.0000	0.976	1.2492070	1.2188080		-2.4	+/-20
N-Nitroso-di-n-Propylamine	A	1.0000	1.02	0.9098695	0.9272519		1.9	+/-20
4-Methylphenol	A	1.0000	1.01	1.2624750	1.2738370		0.9	+/-20
2,4-Dimethylphenol	A	2.0000	2.03	0.3847731	0.3910398		1.7	+/-20
1,2,4-Trichlorobenzene	A	1.0000	0.939	0.3490929	0.3277528		-6.1	+/-20
Hexachlorobutadiene	A	1.0000	1.04	0.1838137	0.1904389		3.6	+/-20
N-Nitrosodimethylamine	A	2.0000	2.10	0.7808454	0.8179931		4.8	+/-20
Dimethylphthalate	A	1.0000	0.918	1.4689	1.3481990		-8.2	+/-20
Diethyl phthalate	A	1.0000	0.910	1.3339910	1.2135780		-9.0	+/-20
N-Nitrosodiphenylamine	A	1.0000	1.03	0.5635219	0.5811221		3.1	+/-20
Hexachlorobenzene	A	1.0000	1.08	0.1911612	0.2064729		8.0	+/-20
Pentachlorophenol	A	2.0000	1.72	0.0772800	0.0937814		-14.2	+/-20
Butylbenzylphthalate	A	1.0000	1.02	0.8247925	0.8421953		2.1	+/-20
Dibenzo(a,h)anthracene	A	1.0000	1.04	1.1282360	1.1733200		4.0	+/-20
2-Fluorophenol	A	1.5000	1.62	1.2098450	1.3087770		8.2	+/-20
p-Terphenyl-d14	A	1.0000	1.15	0.7589992	0.8700541		14.6	+/-20
1,4-Dichlorobenzene-d4	A	4.0000	4.00	79150.5600	1.0000		0.0	
Naphthalene-d8	A	4.0000	4.00	278594.8000	1.0000		0.0	
Acenaphthene-d10	A	4.0000	4.00	147343.3000	1.0000		0.0	
Phenanthrene-d10	A	4.0000	4.00	243223.3000	1.0000		0.0	
Chrysene-d12	A	4.0000	4.00	150416.5000	1.0000		0.0	
Perylene-d12	A	4.0000	4.00	135257.9000	1.0000		0.0	

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623035.D

Page 1

Date : 26-MAY-2023 13:53

Client ID:

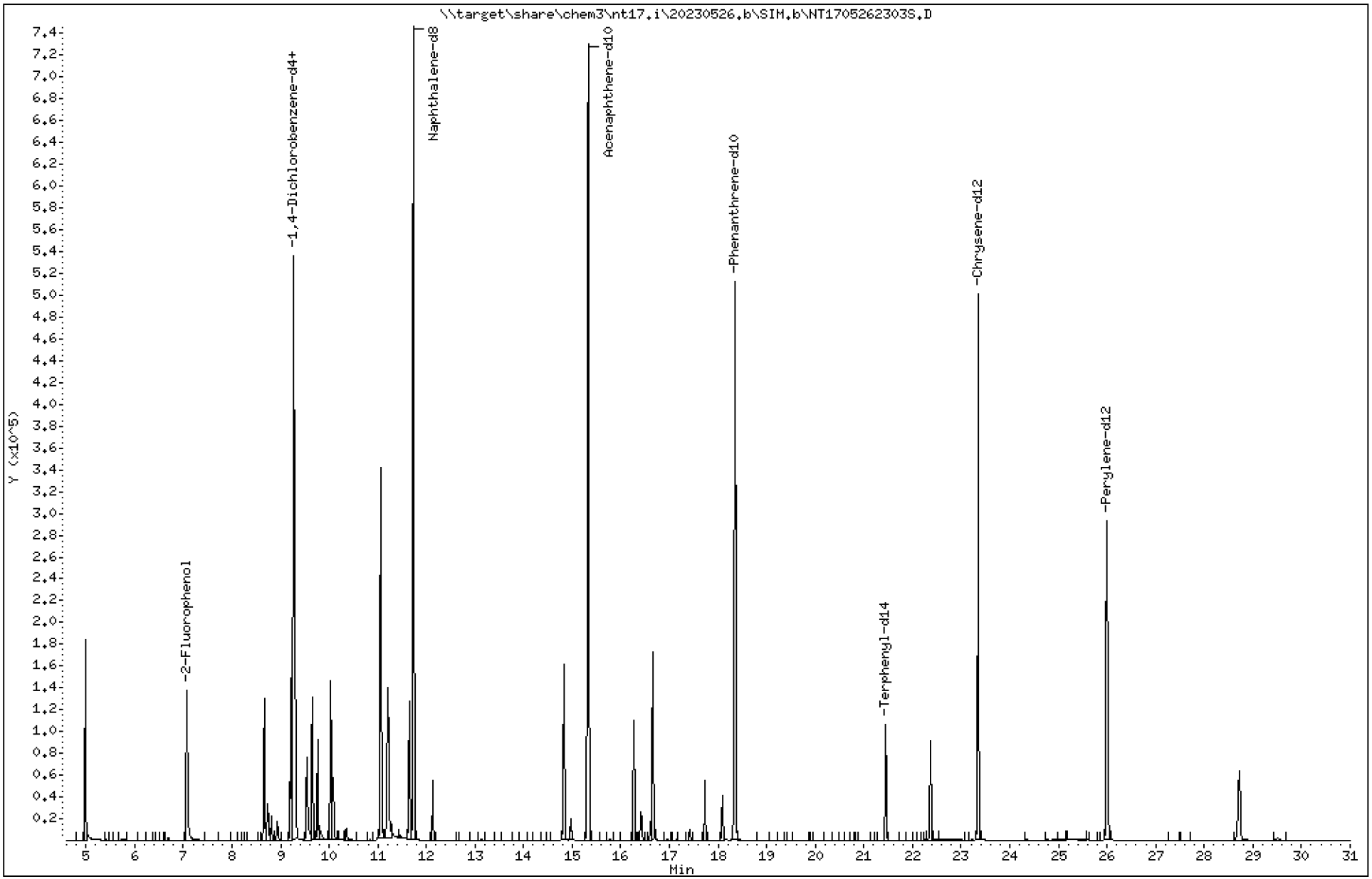
Instrument: nt17.i

Sample Info: SLE0442-ICV1

Operator: JGR

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262303S.D
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Inj Date : 26-MAY-2023 13:53
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0442-ICV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 06-Jun-2023 14:52 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.069	7.069	(0.762)	174200	1.50000	1.623
	3	Phenol	94	8.661	8.661	(0.934)	178850	1.00000	1.118
	7	1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	144059	1.00000	1.005
*	8	1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	354937	4.00000	
	9	1,4-Dichlorobenzene	146	9.299	9.299	(1.003)	140486	1.00000	1.006
	11	Benzyl alcohol	79	9.541	9.541	(1.029)	102524	1.00000	1.125
	12	1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	136389	1.00000	0.9960
	13	2-Methylphenol	108	9.759	9.759	(1.052)	108150	1.00000	0.9757
	15	4-Methylphenol	108	10.027	10.027	(1.081)	113033	1.00000	1.009
	16	N-Nitroso-di-n-propylamine	70	10.091	10.091	(1.088)	82279	1.00000	1.019
	22	2,4-Dimethylphenol	107	11.062	11.062	(0.942)	235500	2.00000	2.033
	24	Benzoic acid	105	11.215	11.215	(0.955)	246527	4.00000	3.415
	26	1,2,4-Trichlorobenzene	180	11.649	11.649	(0.992)	98693	1.00000	0.9389
*	27	Naphthalene-d8	136	11.738	11.738	(1.000)	1204481	4.00000	
	30	Hexachlorobutadiene	225	12.133	12.133	(1.034)	57345	1.00000	1.036
	39	Dimethylphthalate	163	14.824	14.824	(0.967)	222007	1.00000	0.9178
*	42	Acenaphthene-d10	162	15.334	15.334	(1.000)	658677	4.00000	
	50	Diethylphthalate	149	16.277	16.277	(1.062)	199839	1.00000	0.9097
	54	N-Nitrosodiphenylamine	169	16.659	16.659	(0.908)	140256	1.00000	1.031
	57	Hexachlorobenzene	284	17.728	17.728	(0.966)	49833	1.00000	1.080
	58	Pentachlorophenol	266	18.086	18.086	(0.985)	45269	2.00000	1.716
*	59	Phenanthrene-d10	188	18.353	18.353	(1.000)	965415	4.00000	
$	66	Terphenyl-d14	244	21.452	21.452	(0.919)	133793	1.00000	1.146
	67	Butylbenzylphthalate	149	22.371	22.371	(0.958)	129509	1.00000	1.021
*	69	Chrysene-d12	240	23.353	23.353	(1.000)	615102	4.00000	
*	77	Perylene-d12	264	25.994	25.994	(1.000)	580660	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.713	28.713	(1.105)	170325	1.00000	1.040
	90	N-Nitrosodimethylamine	74	4.979	4.979	(0.537)	145168	2.00000	2.095

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262303S.D
Lab Smp Id: SLE0442-ICV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:53
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	354937	177469	709874	354937	0.00
27 Naphthalene-d8	1204481	602241	2408962	1204481	0.00
42 Acenaphthene-d10	658677	329339	1317354	658677	0.00
59 Phenanthrene-d10	965415	482708	1930830	965415	0.00
69 Chrysene-d12	615102	307551	1230204	615102	0.00
77 Perylene-d12	580660	290330	1161320	580660	0.00

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	0.00
69 Chrysene-d12	23.35	22.85	23.85	23.35	0.00
77 Perylene-d12	25.99	25.49	26.49	25.99	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262303S.D

Lab ID: SLE0442-ICV1
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   26-MAY-2023 13:53

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b\SIM.b

Instrument: nt17.i Date: 26-MAY-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 16-MAY-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1705262303S.D 26-MAY-2023 13:53

Compound	%D
NO Q-FLAGS	

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00070
Lab File ID:	NT1705262320S.D	Calibration Date:	05/16/2023
Sequence:	SLE0442	Injection Date:	05/27/23
Lab Sample ID:	SLE0442-ICV2	Injection Time:	00:33
Sequence Name:	ABN 1		

		CONC. (ug/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Phenol	A	1.0000	1.01	1.8027250	1.8228930		1.1	+/-20	
1,3-Dichlorobenzene	A	1.0000	1.01	1.6158430	1.6358610		1.2	+/-20	
1,4-Dichlorobenzene	A	1.0000	1.01	1.5745540	1.5932110		1.2	+/-20	
1,2-Dichlorobenzene	A	1.0000	0.987	1.5432720	1.5227840		-1.3	+/-20	
Benzyl Alcohol	A	1.0000	0.978	1.0272110	1.0041690		-2.2	+/-20	
Benzoic acid	A	4.0000	3.40	0.1537024	0.2037455		-15.0	+/-20	
2-Methylphenol	A	1.0000	0.869	1.2492070	1.0850800		-13.1	+/-20	
N-Nitroso-di-n-Propylamine	A	1.0000	0.913	0.9098695	0.8308175		-8.7	+/-20	
4-Methylphenol	A	1.0000	0.858	1.2624750	1.0829490		-14.2	+/-20	
2,4-Dimethylphenol	A	2.0000	1.98	0.3847731	0.3799198		-1.3	+/-20	
1,2,4-Trichlorobenzene	A	1.0000	0.956	0.3490929	0.3336024		-4.4	+/-20	
Hexachlorobutadiene	A	1.0000	1.06	0.1838137	0.1938933		5.5	+/-20	
N-Nitrosodimethylamine	A	2.0000	2.12	0.7808454	0.8278129		6.0	+/-20	
Dimethylphthalate	A	1.0000	0.936	1.4689	1.3744640		-6.4	+/-20	
Diethyl phthalate	A	1.0000	0.898	1.3339910	1.1977960		-10.2	+/-20	
N-Nitrosodiphenylamine	A	1.0000	1.10	0.5635219	0.6216095		10.3	+/-20	
Hexachlorobenzene	A	1.0000	1.11	0.1911612	0.2127773		11.3	+/-20	
Pentachlorophenol	A	2.0000	1.78	0.0772800	0.0973089		-11.1	+/-20	
Butylbenzylphthalate	A	1.0000	0.900	0.8247925	0.7424600		-10.0	+/-20	
Dibenzo(a,h)anthracene	A	1.0000	0.627	1.1282360	0.7074059		-37.3	+/-20	*
2-Fluorophenol	A	1.5000	1.66	1.2098450	1.3375990		10.5	+/-20	
p-Terphenyl-d14	A	1.0000	0.917	0.7589992	0.6961558		-8.3	+/-20	
1,4-Dichlorobenzene-d4	A	4.0000	4.00	79150.5600	1.0000		0.0		
Naphthalene-d8	A	4.0000	4.00	278594.8000	1.0000		0.0		
Acenaphthene-d10	A	4.0000	4.00	147343.3000	1.0000		0.0		
Phenanthrene-d10	A	4.0000	4.00	243223.3000	1.0000		0.0		
Chrysene-d12	A	4.0000	4.00	150416.5000	1.0000		0.0		
Perylene-d12	A	4.0000	4.00	135257.9000	1.0000		0.0		

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623205.D

Page 1

Date : 27-MAY-2023 00:33

Client ID:

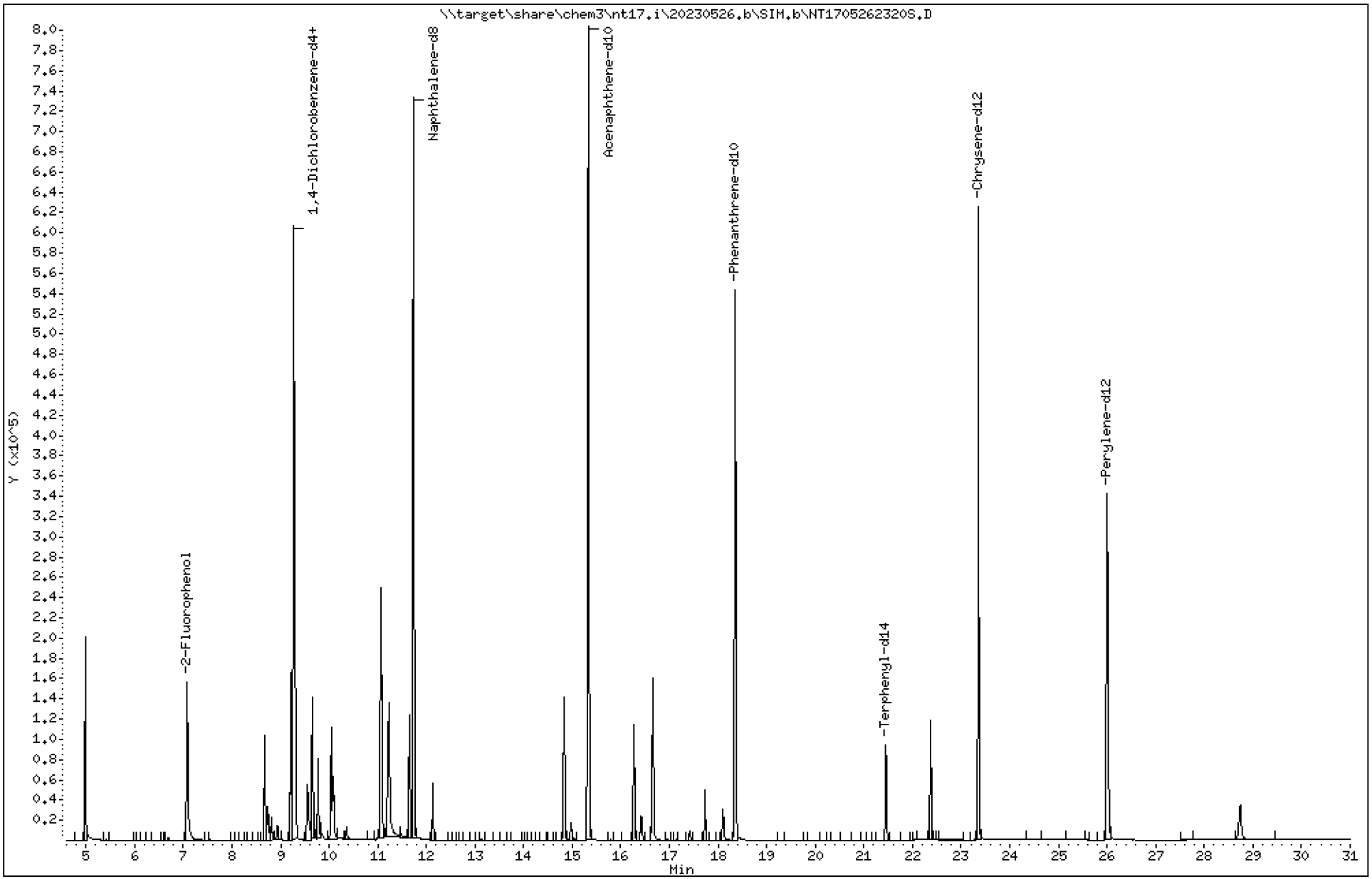
Instrument: nt17.i

Sample Info: SLE0442-ICV2

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262320S.D
Lab Smp Id: SLE0442-ICV2
Inj Date : 27-MAY-2023 00:33
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0442-ICV2
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 07-Jun-2023 07:26 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 3 Continuing Calibration Sample
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

			QUANT SIG					AMOUNTS	
		Compounds	MASS	RT	EXP RT	REL RT	RESPONSE	CAL-AMT (ug/mL)	ON-COL (ug/mL)
$	1	2-Fluorophenol	112	7.081	7.081	(0.764)	188312	1.50000	1.658
	3	Phenol	94	8.674	8.674	(0.935)	171089	1.00000	1.011
	7	1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	153535	1.00000	1.012
*	8	1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	375423	4.00000	
	9	1,4-Dichlorobenzene	146	9.299	9.299	(1.003)	149532	1.00000	1.012
	11	Benzyl alcohol	79	9.554	9.554	(1.030)	94247	1.00000	0.9776
	12	1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	142922	1.00000	0.9867
	13	2-Methylphenol	108	9.771	9.771	(1.054)	101841	1.00000	0.8686
	15	4-Methylphenol	108	10.040	10.040	(1.083)	101641	1.00000	0.8578
	16	N-Nitroso-di-n-propylamine	70	10.091	10.091	(1.088)	77977	1.00000	0.9131
	22	2,4-Dimethylphenol	107	11.062	11.062	(0.942)	222830	2.00000	1.975
	24	Benzoic acid	105	11.228	11.228	(0.957)	239001	4.00000	3.400
	26	1,2,4-Trichlorobenzene	180	11.649	11.649	(0.992)	97832	1.00000	0.9556
*	27	Naphthalene-d8	136	11.738	11.738	(1.000)	1173037	4.00000	
	30	Hexachlorobutadiene	225	12.133	12.133	(1.034)	56861	1.00000	1.055
	39	Dimethylphthalate	163	14.837	14.837	(0.968)	219550	1.00000	0.9357
*	42	Acenaphthene-d10	162	15.334	15.334	(1.000)	638940	4.00000	
	50	Diethylphthalate	149	16.277	16.277	(1.062)	191330	1.00000	0.8979
	54	N-Nitrosodiphenylamine	169	16.659	16.659	(0.908)	140140	1.00000	1.103
	57	Hexachlorobenzene	284	17.728	17.728	(0.966)	47970	1.00000	1.113
	58	Pentachlorophenol	266	18.098	18.098	(0.986)	43876	2.00000	1.779
*	59	Phenanthrene-d10	188	18.353	18.353	(1.000)	901788	4.00000	
$	66	Terphenyl-d14	244	21.452	21.452	(0.919)	133656	1.00000	0.9172
	67	Butylbenzylphthalate	149	22.370	22.370	(0.958)	142546	1.00000	0.9002
*	69	Chrysene-d12	240	23.353	23.353	(1.000)	767966	4.00000	
*	77	Perylene-d12	264	26.006	26.006	(1.000)	642149	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.739	28.739	(1.105)	113565	1.00000	0.6270
	90	N-Nitrosodimethylamine	74	4.979	4.979	(0.537)	155390	2.00000	2.120

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262320S.D
Lab Smp Id: SLE0442-ICV2
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 26-MAY-2023
Calibration Time: 13:53
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	354937	177469	709874	375423	5.77
27 Naphthalene-d8	1204481	602241	2408962	1173037	-2.61
42 Acenaphthene-d10	658677	329339	1317354	638940	-3.00
59 Phenanthrene-d10	965415	482708	1930830	901788	-6.59
69 Chrysene-d12	615102	307551	1230204	767966	24.85
77 Perylene-d12	580660	290330	1161320	642149	10.59

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	-0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	-0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	-0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	-0.00
69 Chrysene-d12	23.35	22.85	23.85	23.35	-0.00
77 Perylene-d12	25.99	25.49	26.49	26.01	0.05

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

REVIEW SUMMARY FOR FILE - NT1705262320S.D

Lab ID: SLE0442-ICV2
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   27-MAY-2023 00:33

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

No RRT check. Ccal file.

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Q-FLAG SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b\SIM.b

Instrument: nt17.i Date: 27-MAY-2023 Method: SIM.b\SIMABN2.m

INITIAL CAL: 16-MAY-2023

Compound	%RSD or R^2
NO Q-FLAGS	

ICV CAL: NT1705262320S.D 27-MAY-2023 00:33

Compound	%D
Dibenzo(a,h)anthracene	-37.3

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00070
Lab File ID:	NT1705162311S.D	Calibration Date:	05/16/2023
Sequence:	SLE0339	Injection Date:	05/17/23
Lab Sample ID:	SLE0339-SCV1	Injection Time:	00:29
Sequence Name:	SCV 5.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
1,4-Dichlorobenzene	A	5.0000	5.1	1.5745540	1.6161570		2.6	+/-20	
1,2-Dichlorobenzene	A	5.0000	5.0	1.5432720	1.5453870		0.1	+/-20	
Benzyl Alcohol	A	5.0000	5.7	1.0272110	1.1723090		14.1	+/-20	
Benzoic acid	A	10.000	7.8	0.1537024	0.1864269		-22.2	+/-20	*
2,4-Dimethylphenol	A	5.0000	3.8	0.3847731	0.2936879		-23.7	+/-20	*
1,2,4-Trichlorobenzene	A	5.0000	4.9	0.3490929	0.3425562		-1.9	+/-20	
N-Nitrosodiphenylamine	A	5.0000	5.6	0.5635219	0.6342197		12.5	+/-20	
Pentachlorophenol	A	5.0000	4.5	0.0772800	0.1012643		-9.9	+/-20	
2-Fluorophenol	A	7.5000	0.00	1.2098450					
p-Terphenyl-d14	A	5.0000	0.00	0.7589992					

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

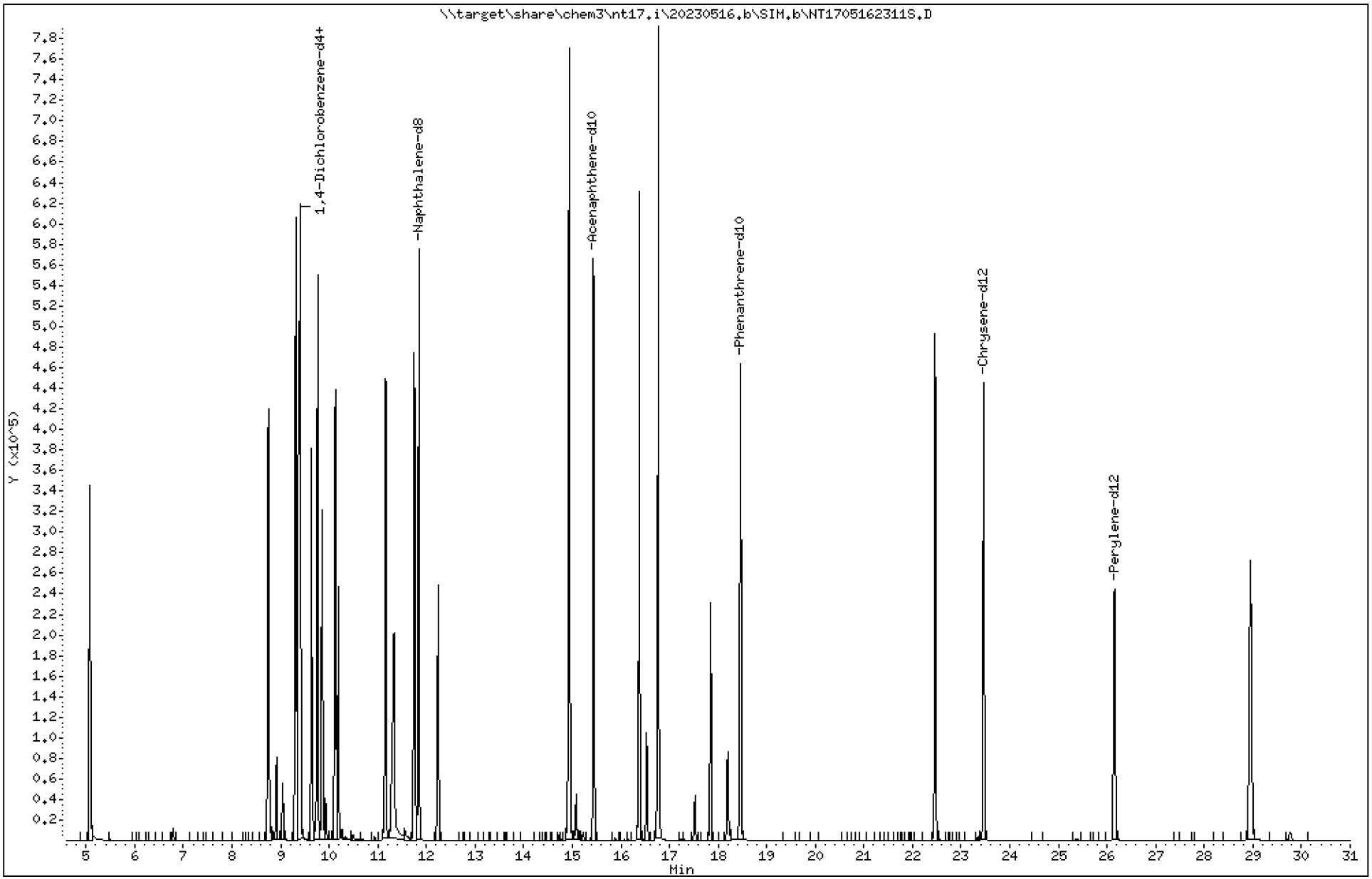
Sample Info: SLE0339-SCV1

Column phase: ZB-5msi

Instrument: nt17.i

Operator: JGR

Column diameter: 0.25



Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

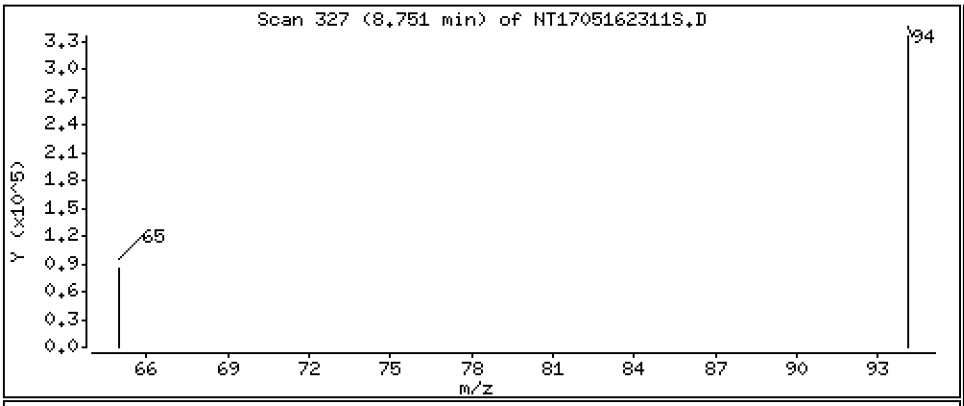
Operator: JGR

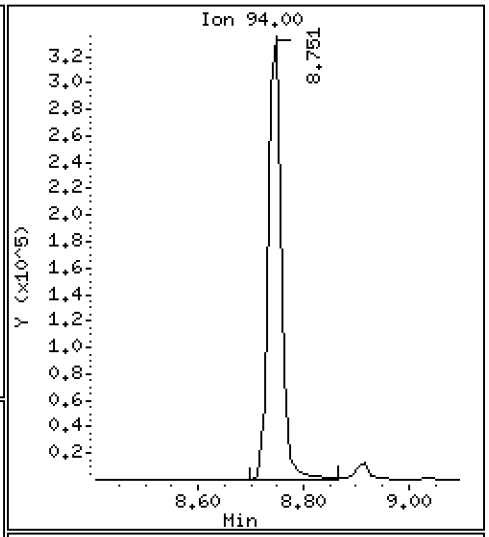
Column phase: ZB-5msi

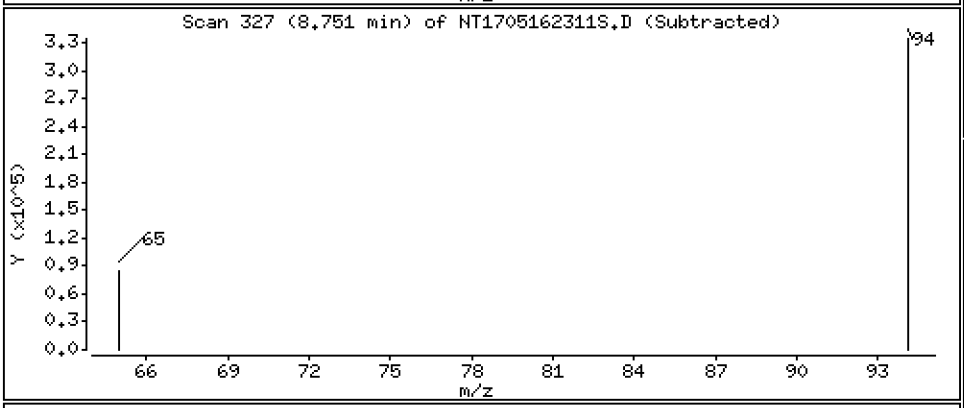
Column diameter: 0.25

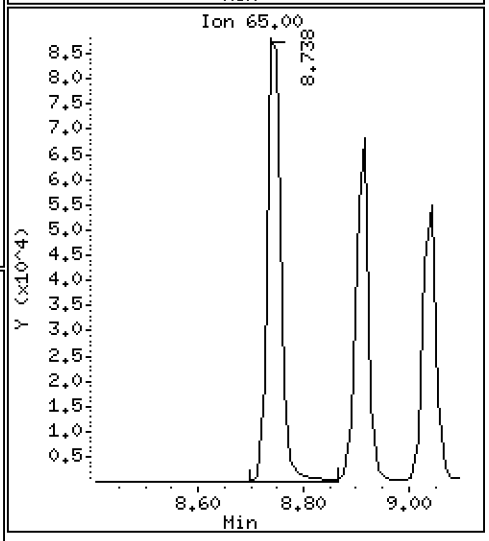
3 Phenol

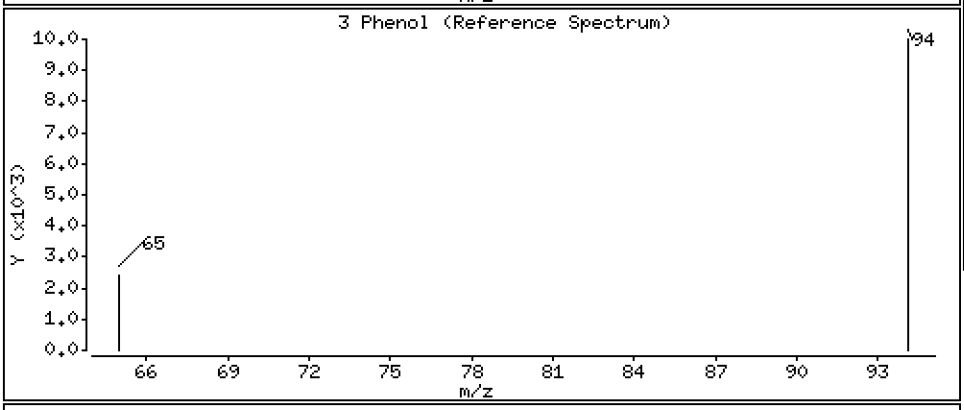
Concentration: 4.884 ug/mL

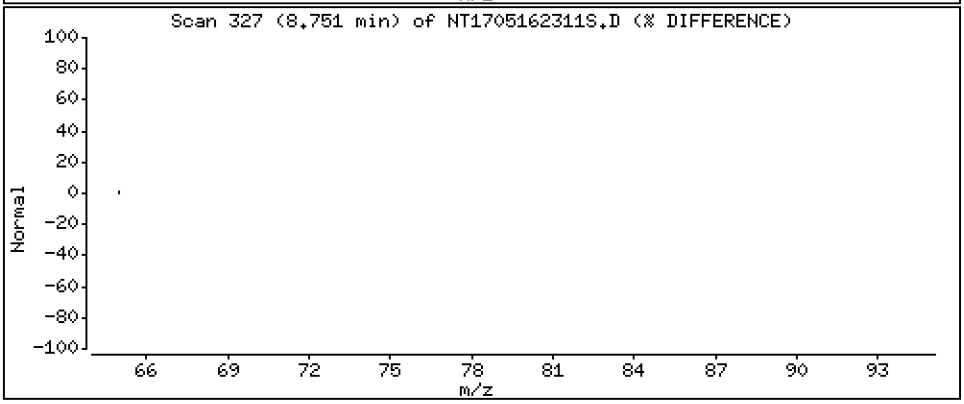












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

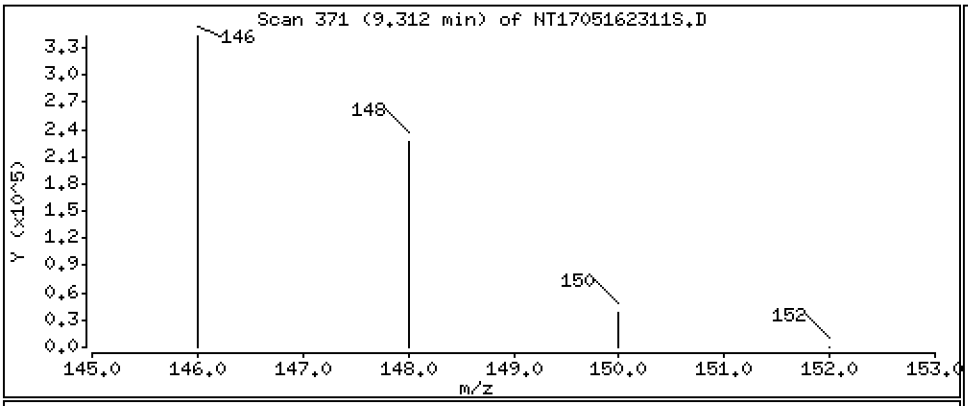
Operator: JGR

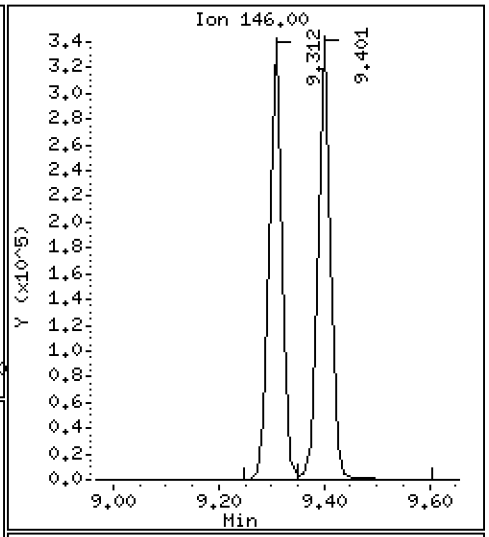
Column phase: ZB-5msi

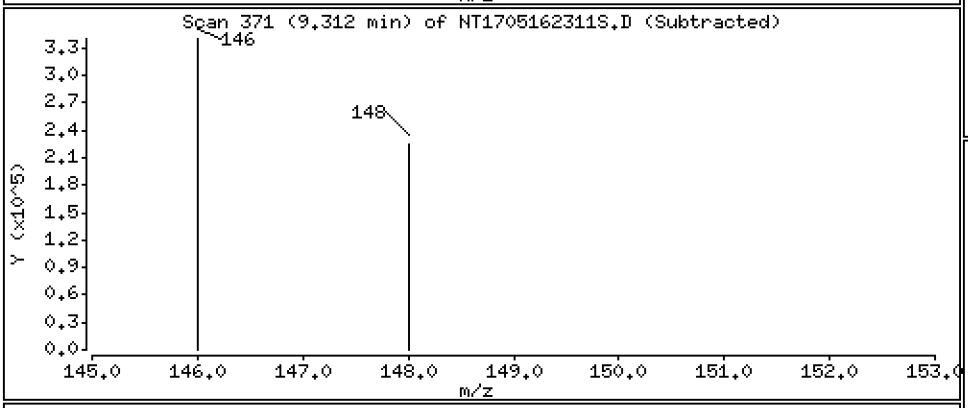
Column diameter: 0.25

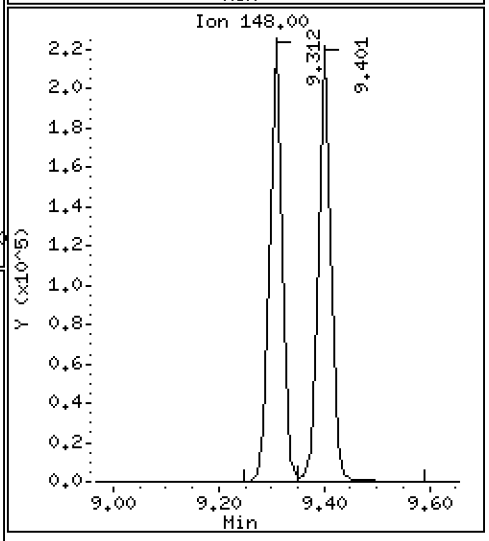
7 1,3-Dichlorobenzene

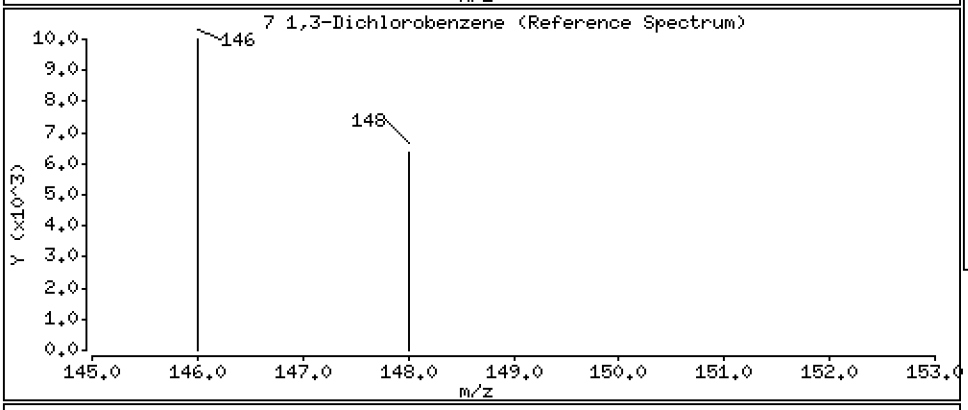
Concentration: 5.087 ug/mL

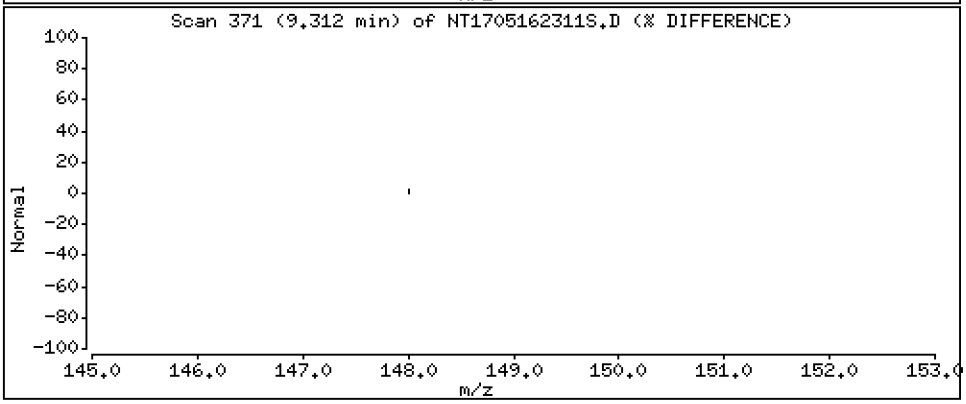












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

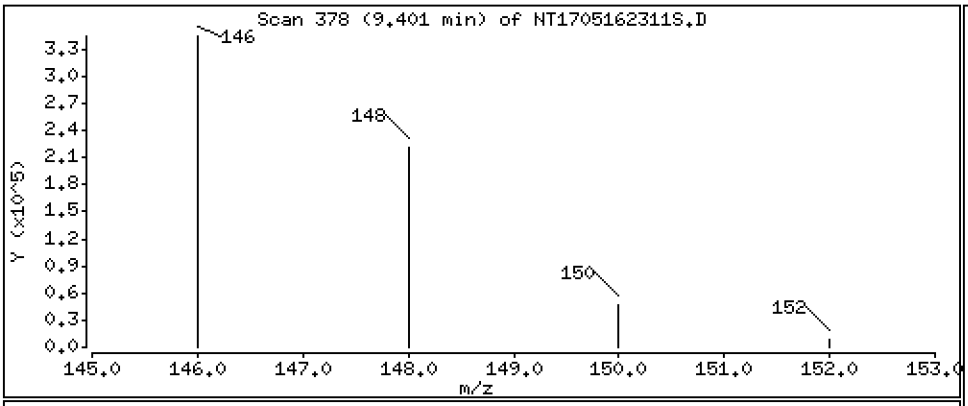
Operator: JGR

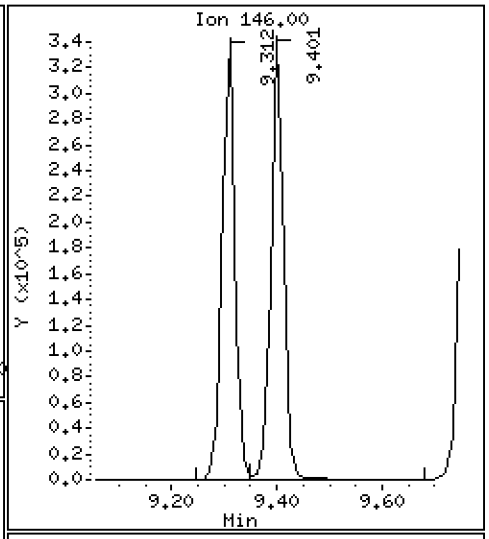
Column phase: ZB-5msi

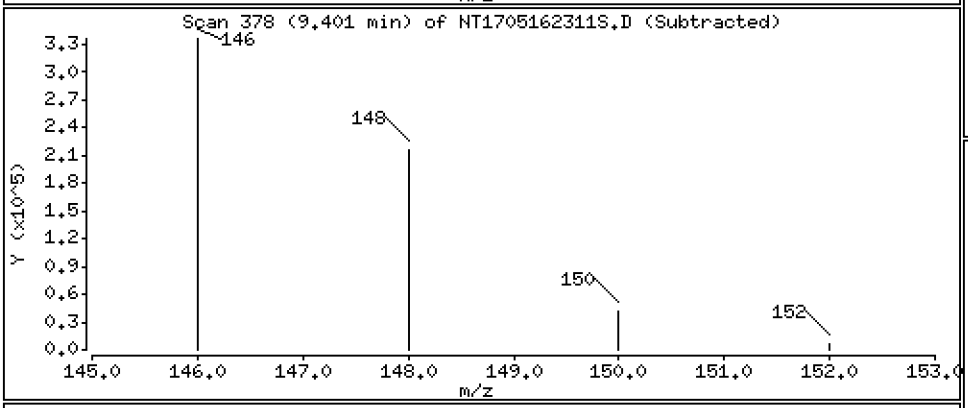
Column diameter: 0.25

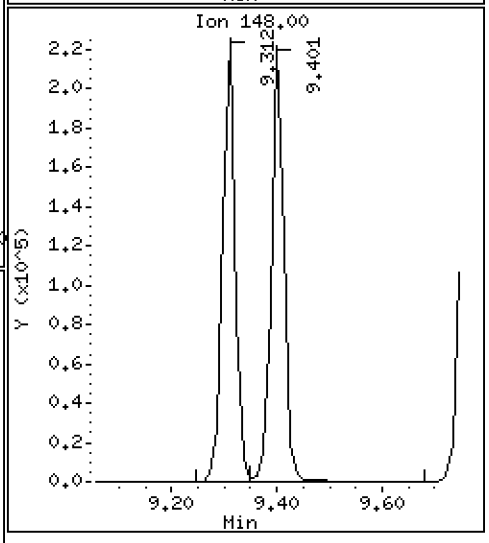
9 1,4-Dichlorobenzene

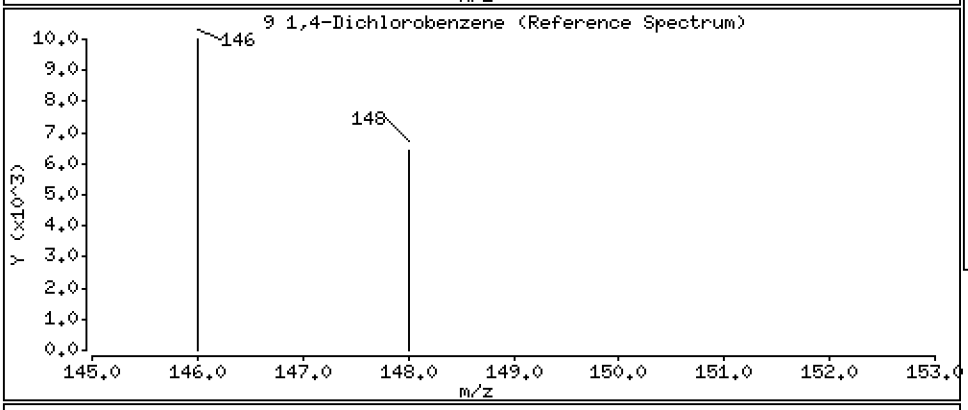
Concentration: 5.132 ug/mL

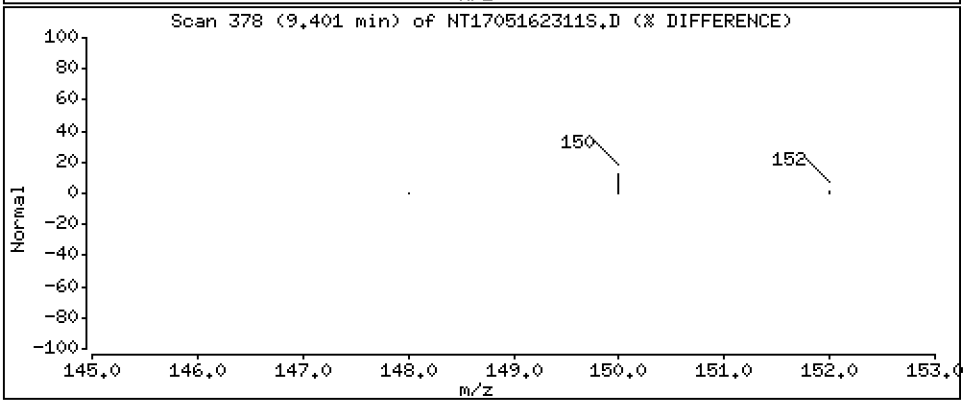












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

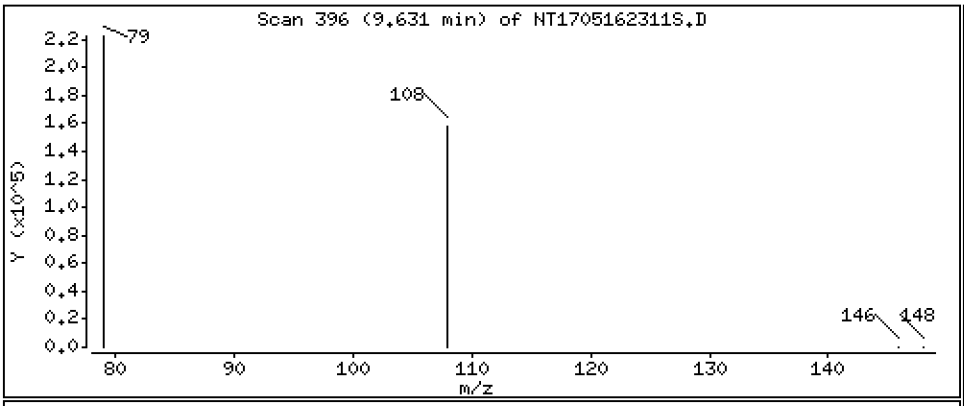
Operator: JGR

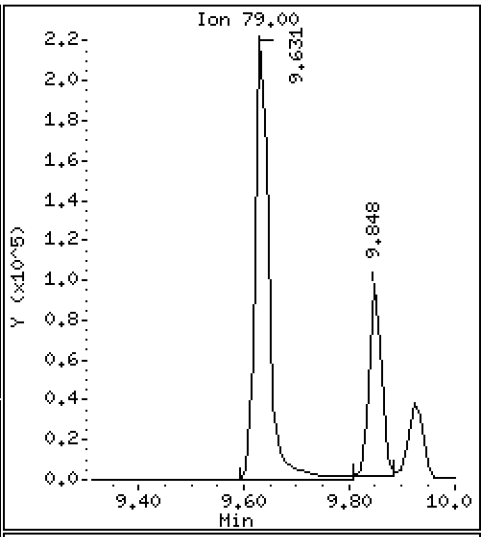
Column phase: ZB-5msi

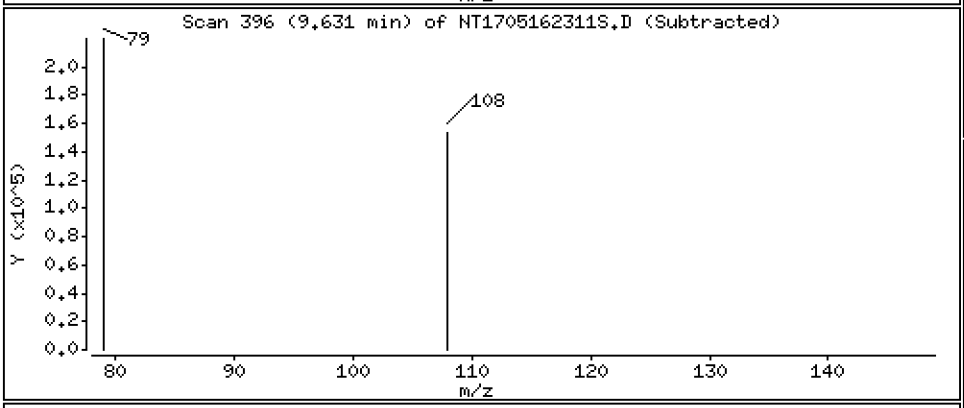
Column diameter: 0.25

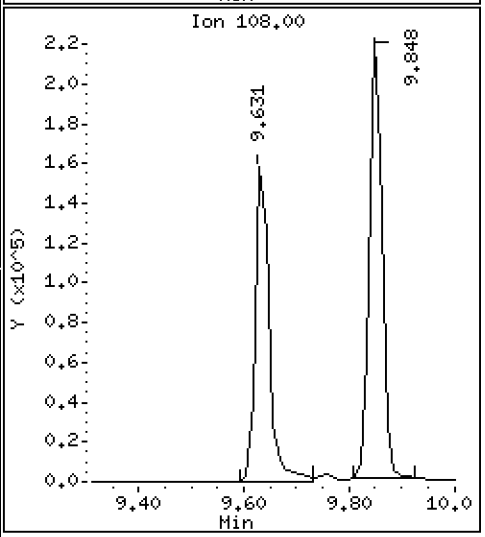
11 Benzyl alcohol

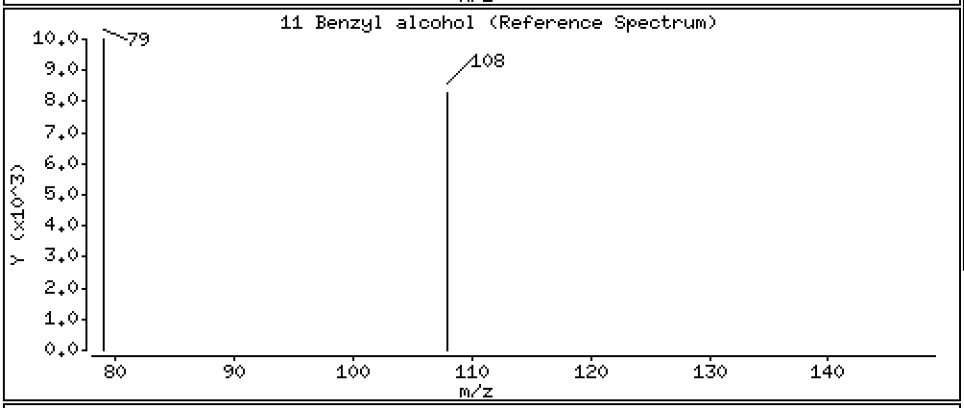
Concentration: 5.706 ug/mL

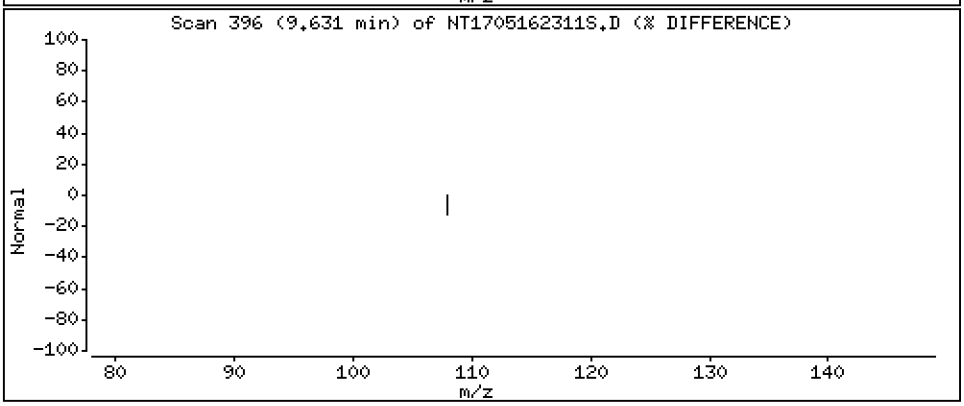












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

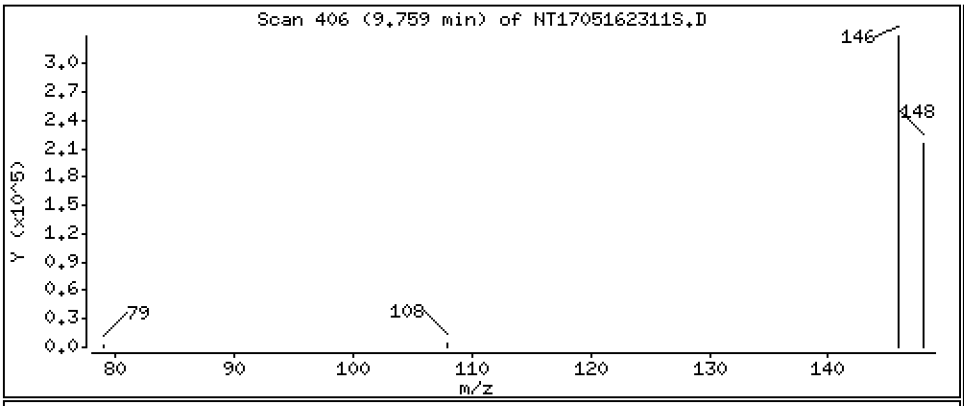
Operator: JGR

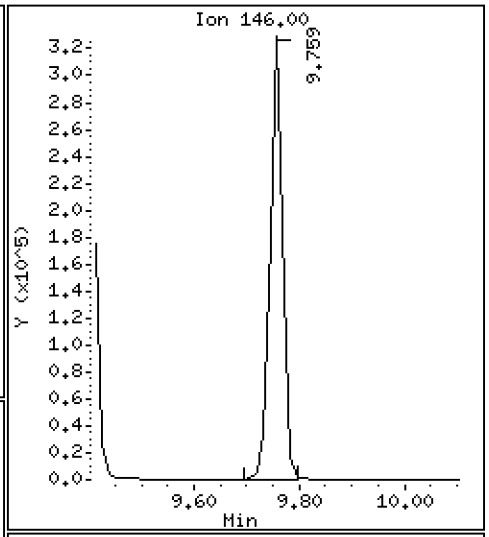
Column phase: ZB-5msi

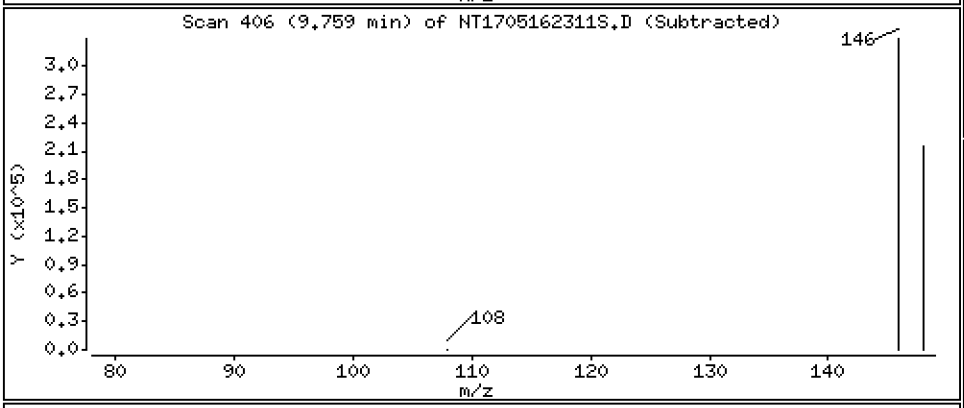
Column diameter: 0.25

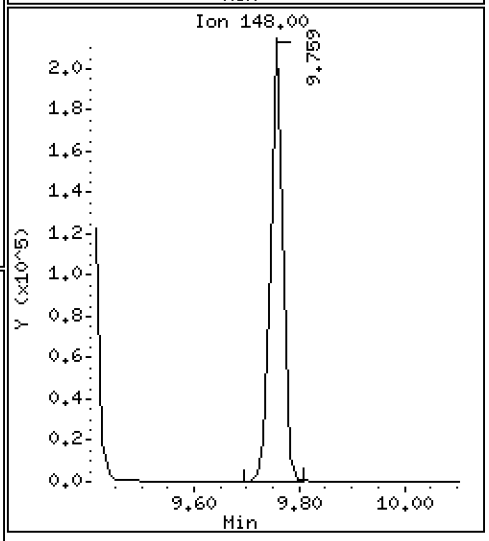
12 1,2-Dichlorobenzene

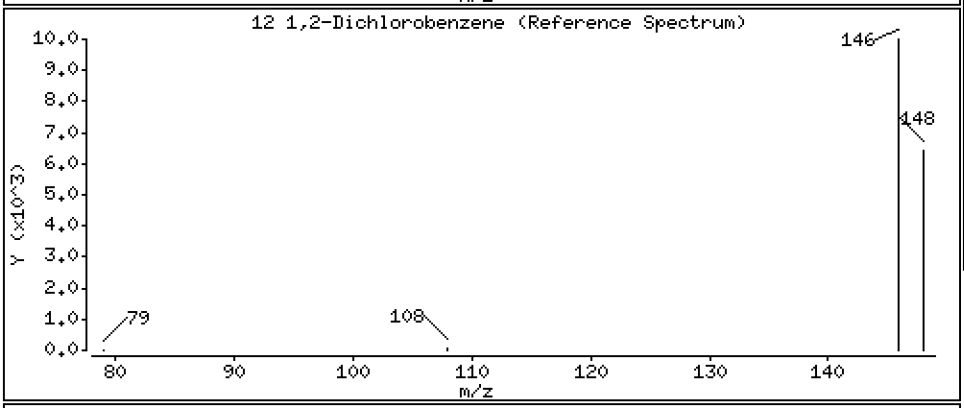
Concentration: 5.007 ug/mL

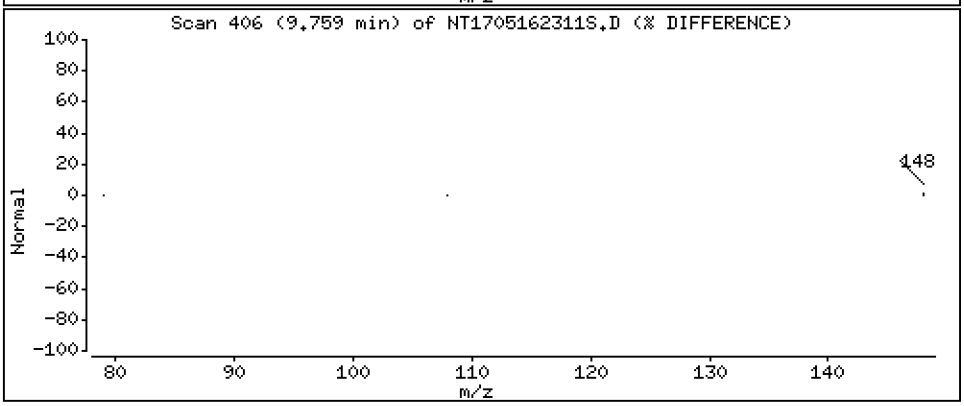












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

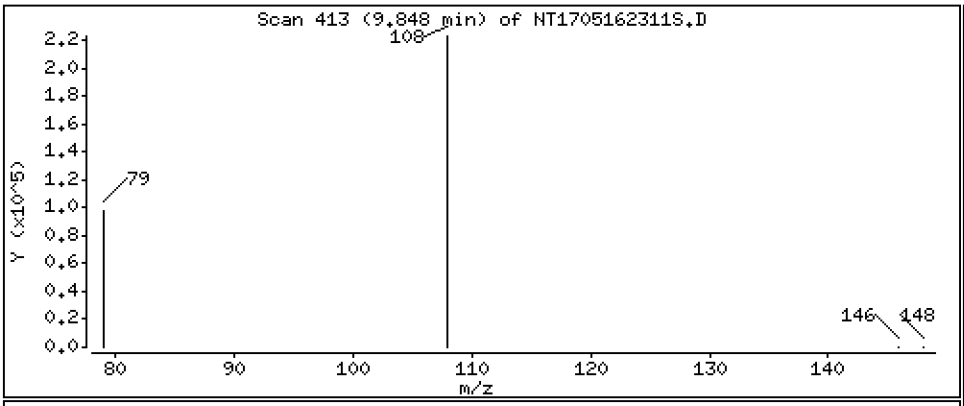
Operator: JGR

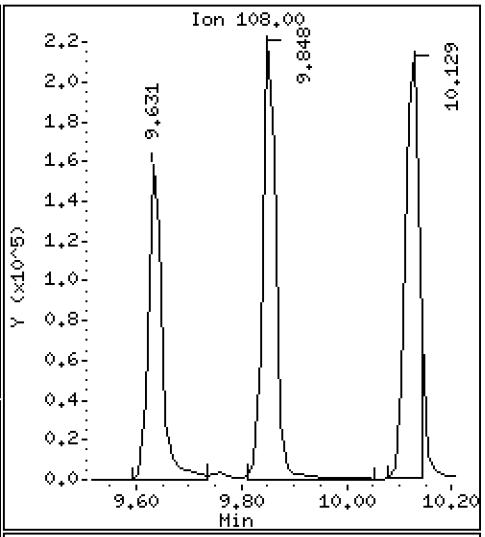
Column phase: ZB-5msi

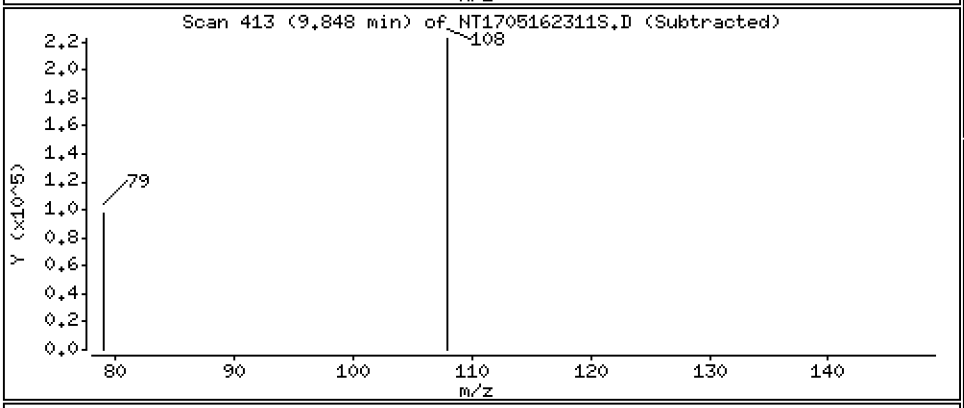
Column diameter: 0.25

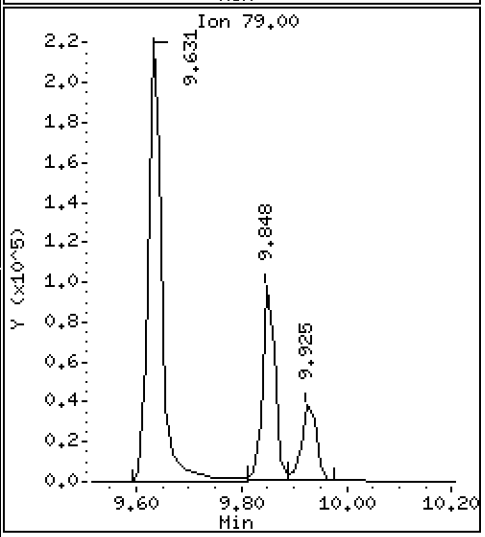
13 2-Methylphenol

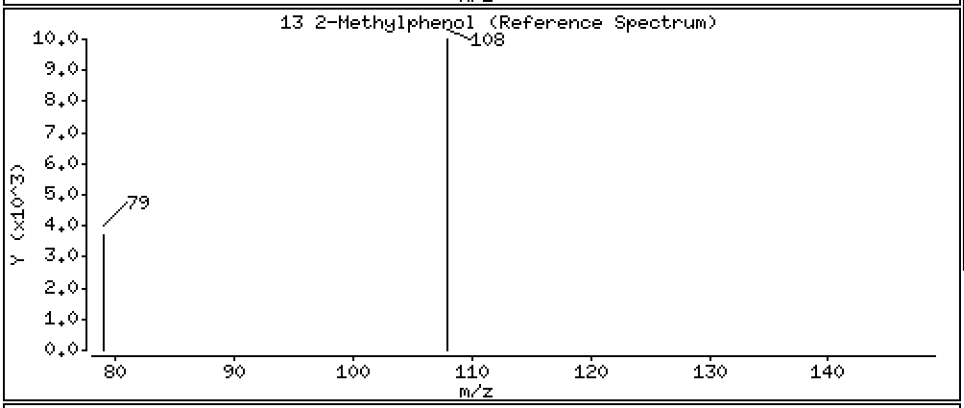
Concentration: 4.408 ug/mL

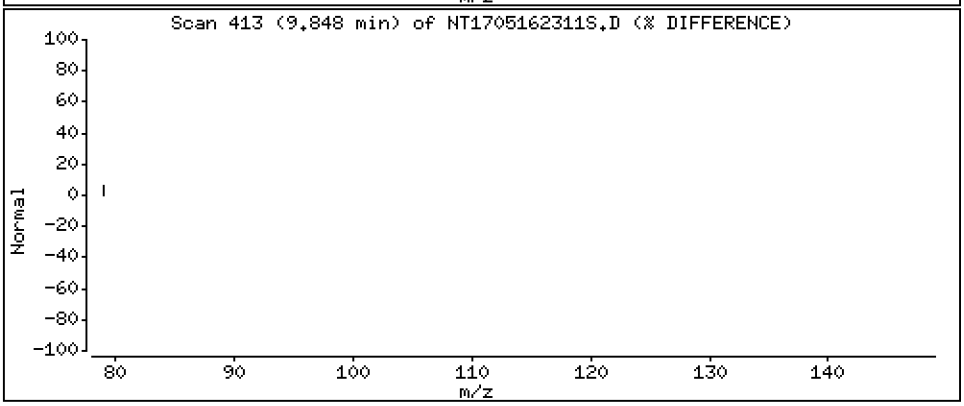












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

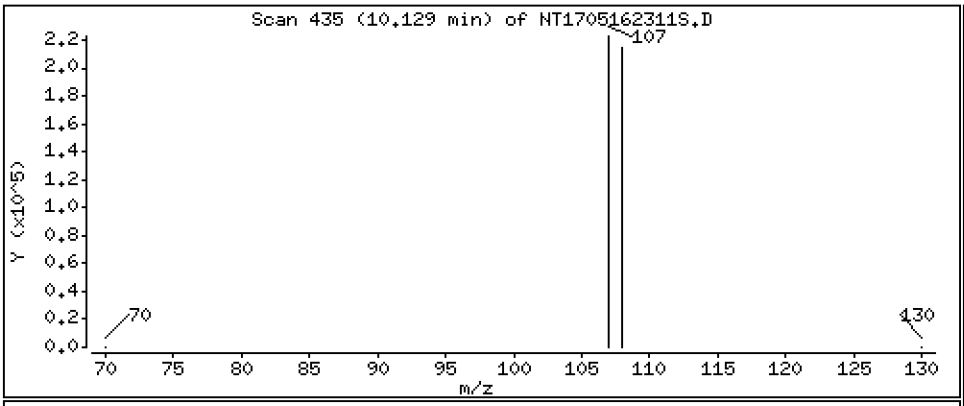
Operator: JGR

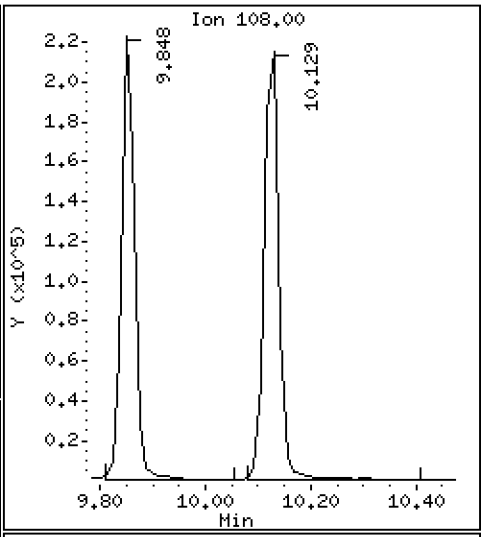
Column phase: ZB-5msi

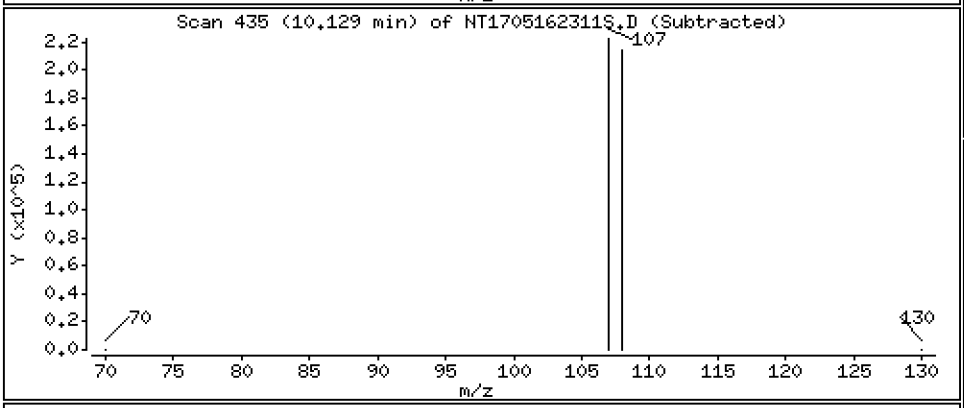
Column diameter: 0.25

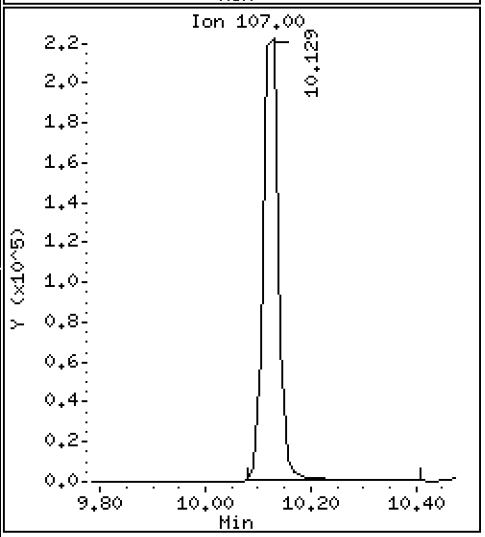
15 4-Methylphenol

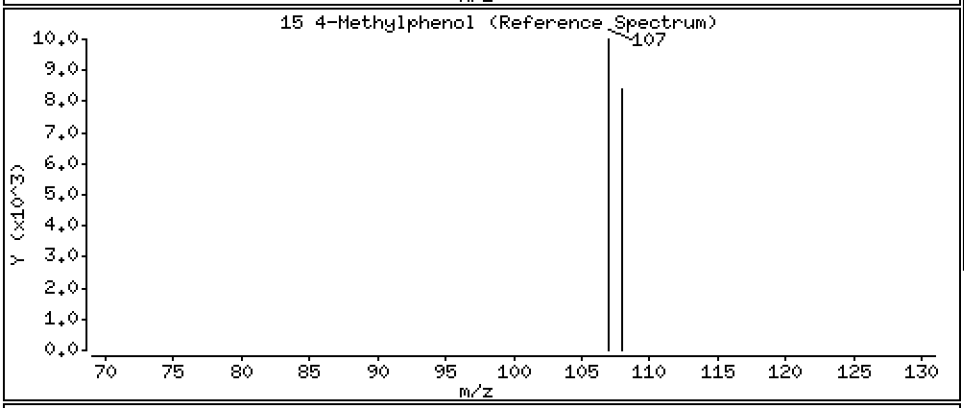
Concentration: 4.788 ug/mL

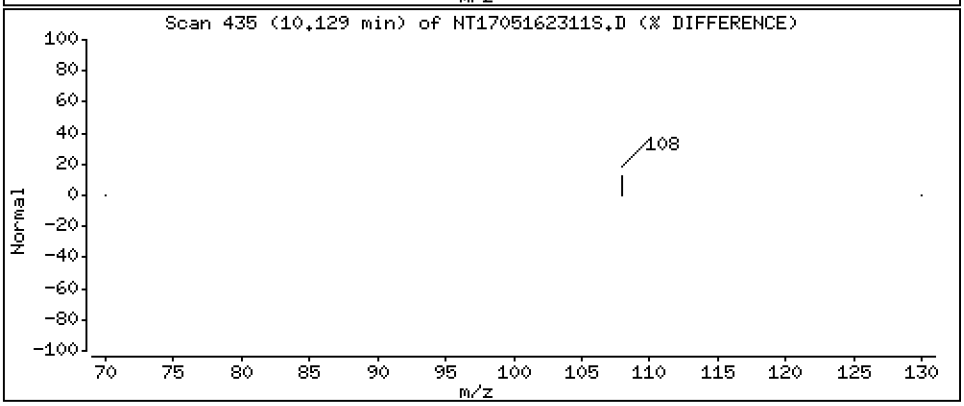












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

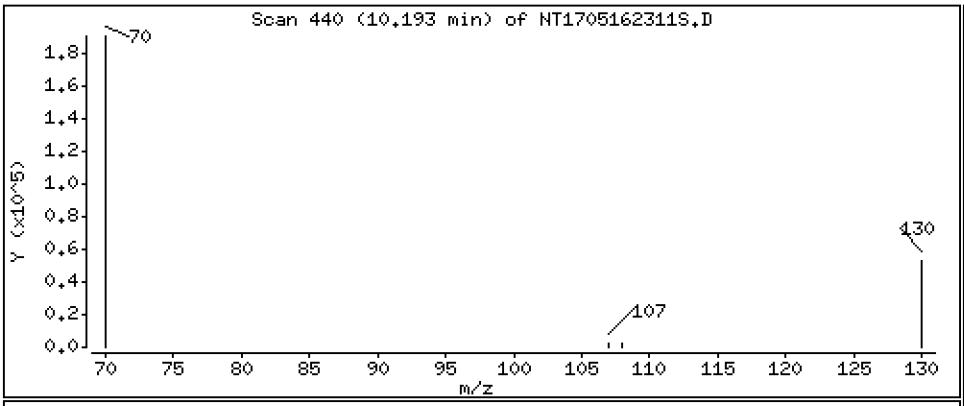
Operator: JGR

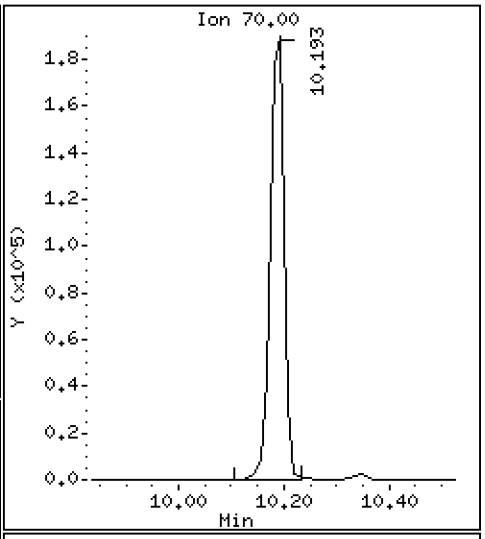
Column phase: ZB-5msi

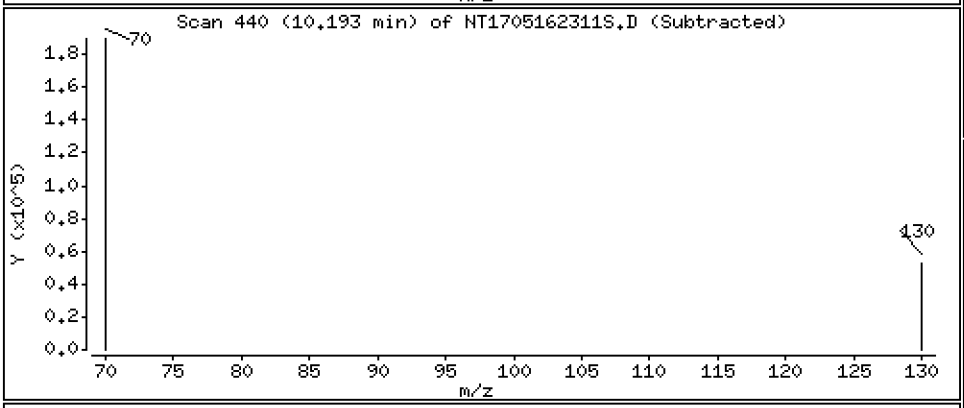
Column diameter: 0.25

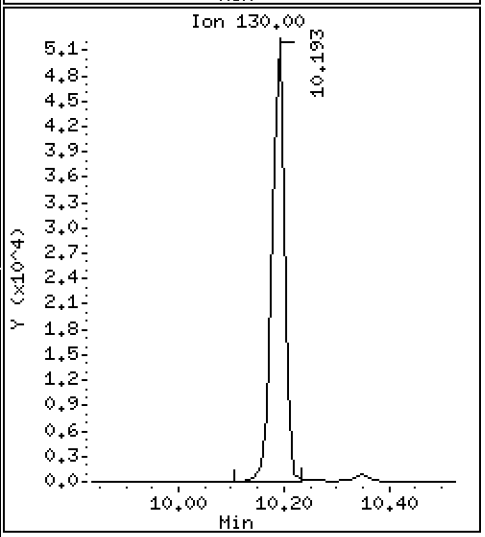
16 N-Nitroso-di-n-propylamine

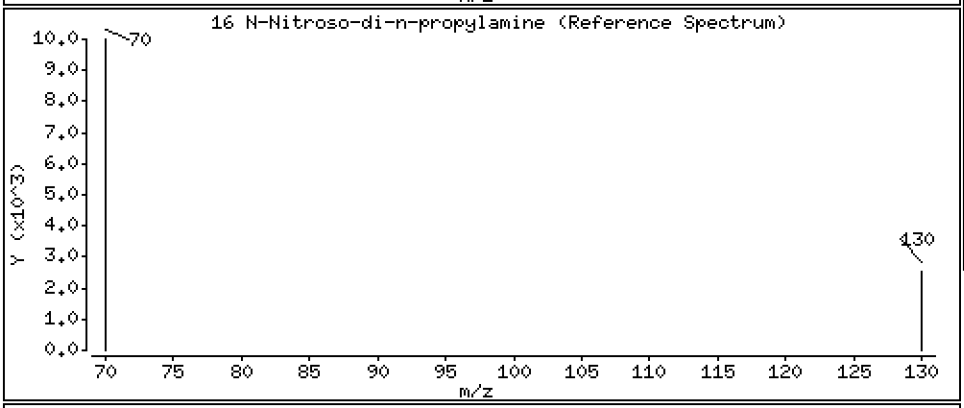
Concentration: 5.479 ug/mL

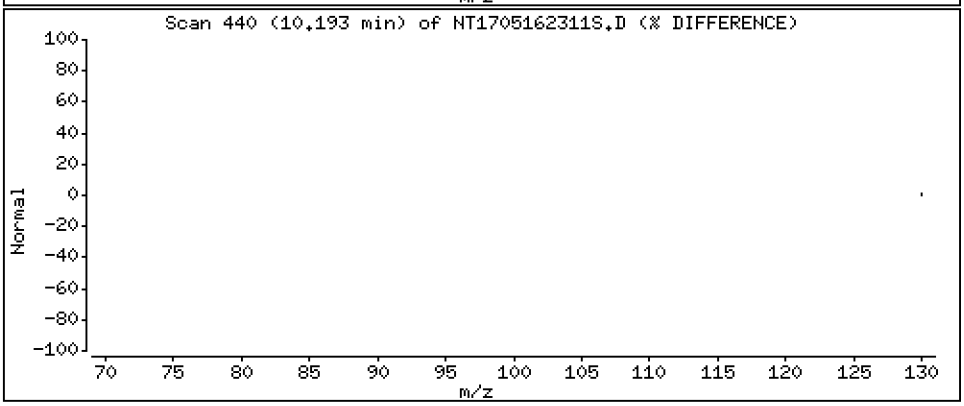












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

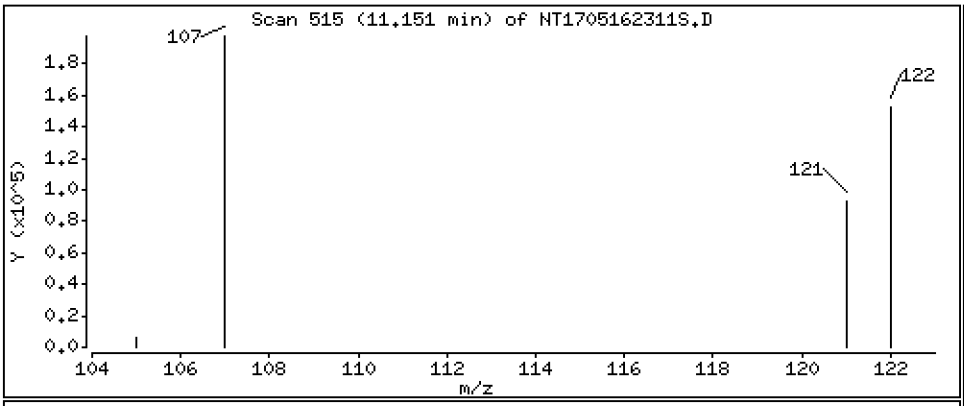
Operator: JGR

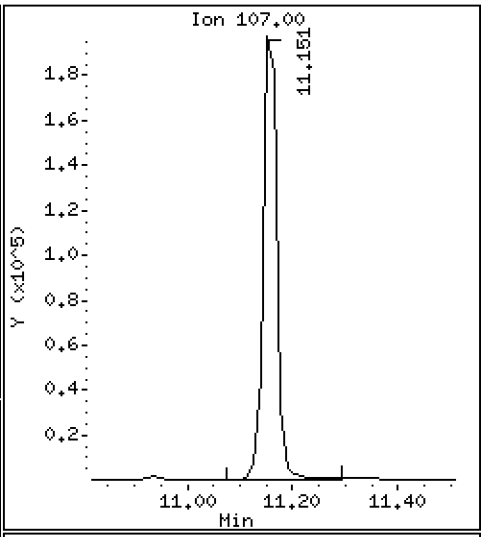
Column phase: ZB-5msi

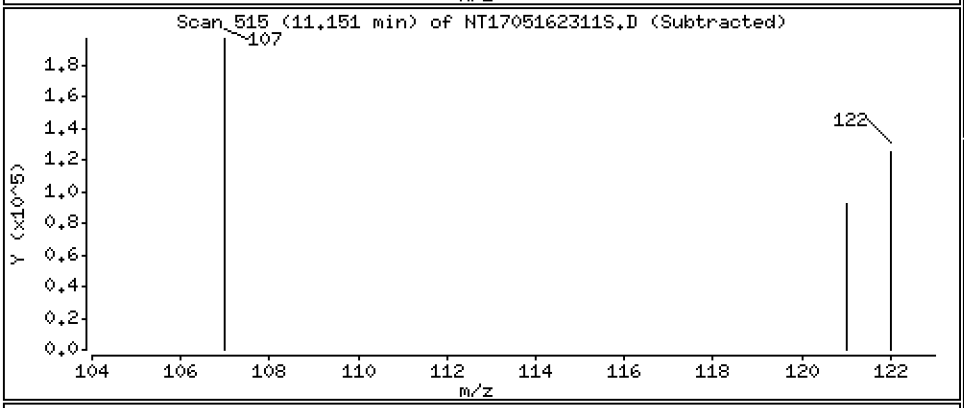
Column diameter: 0.25

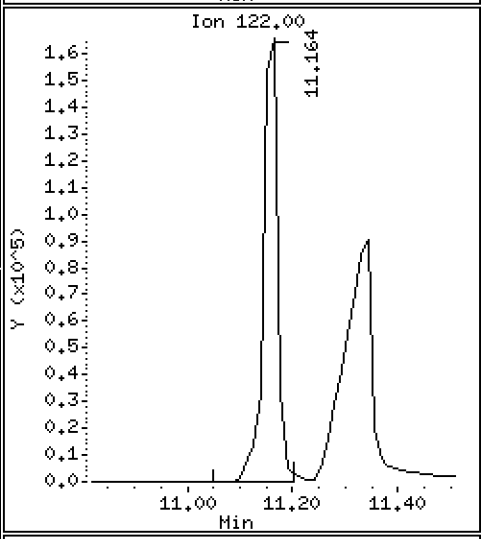
22 2,4-Dimethylphenol

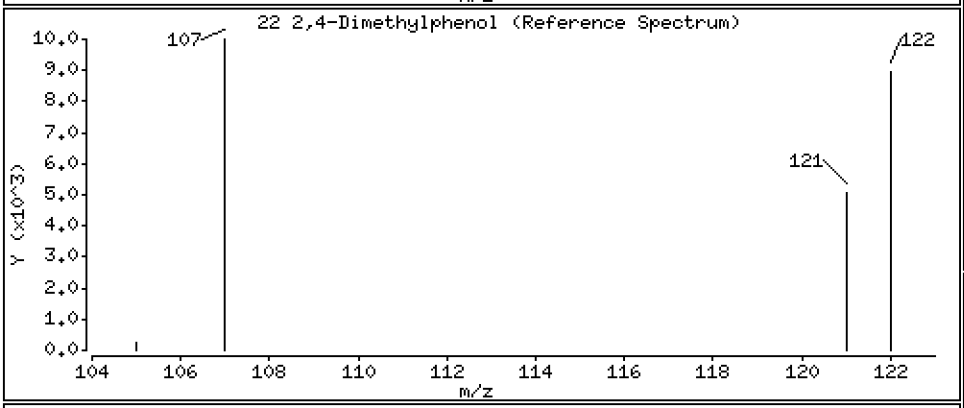
Concentration: 3.816 ug/mL

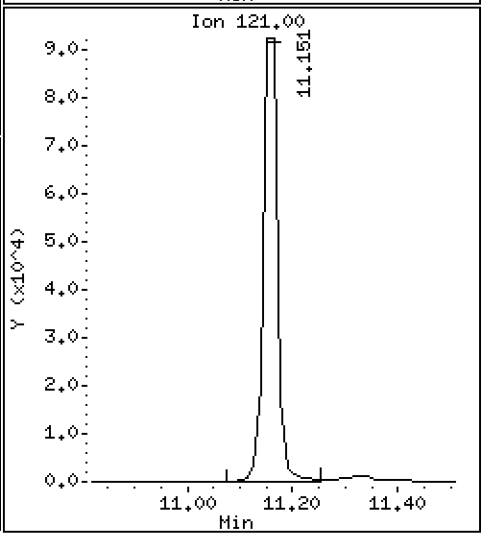


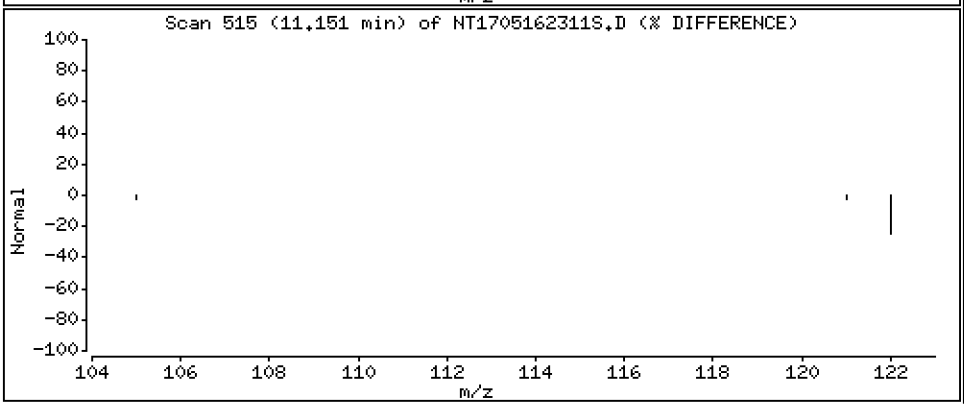












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT17051623115.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

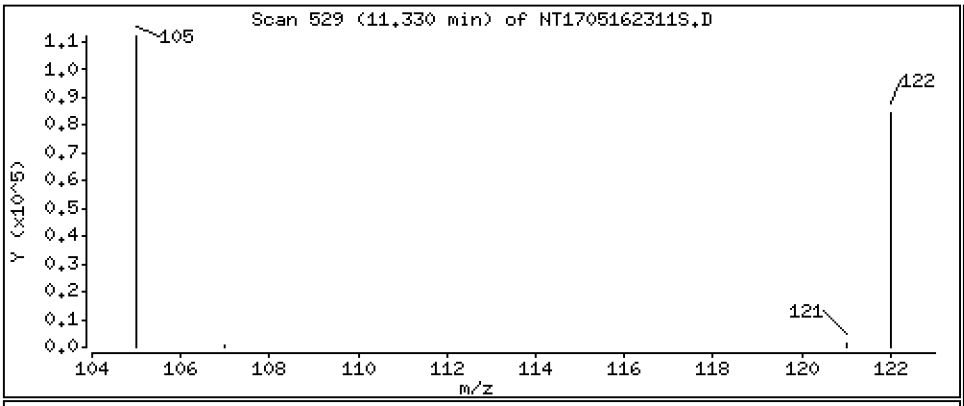
Operator: JGR

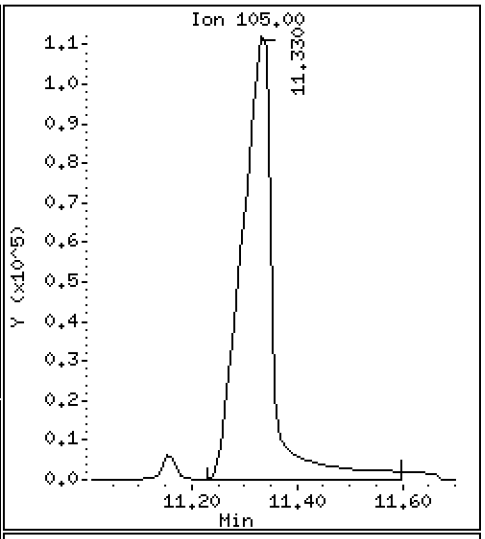
Column phase: ZB-5msi

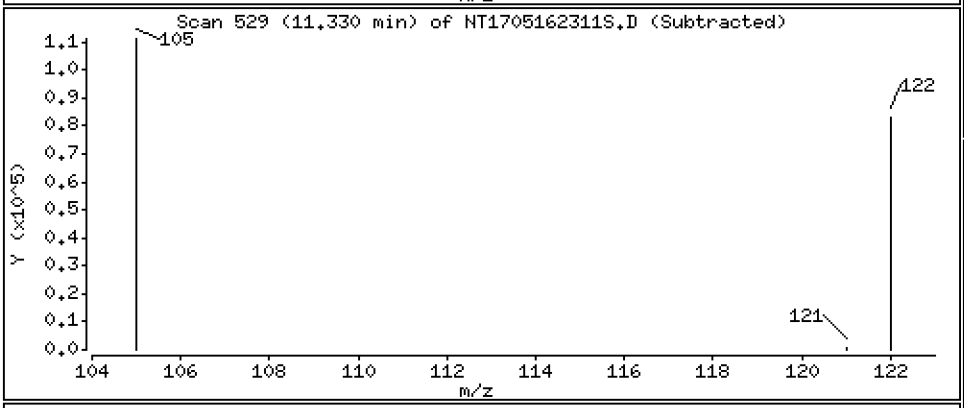
Column diameter: 0.25

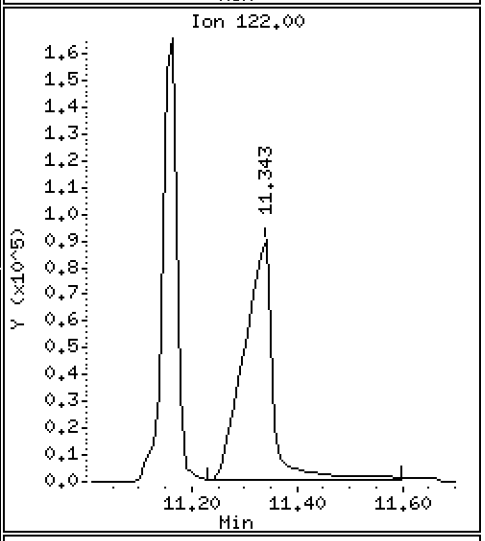
24 Benzoic acid

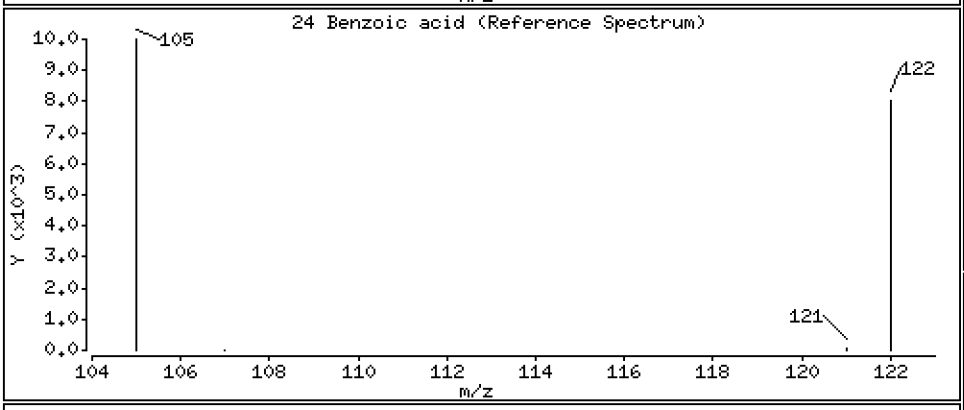
Concentration: 7.777 ug/mL

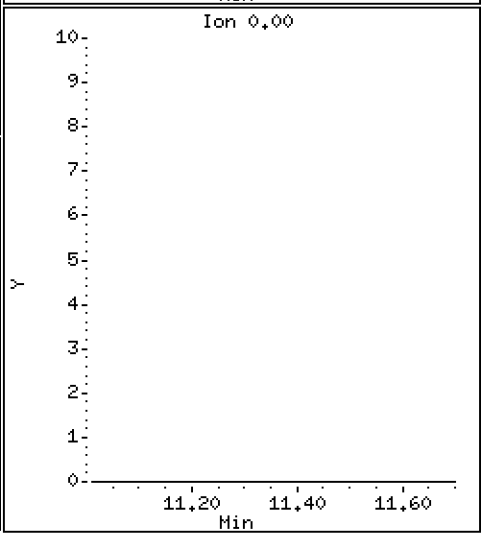


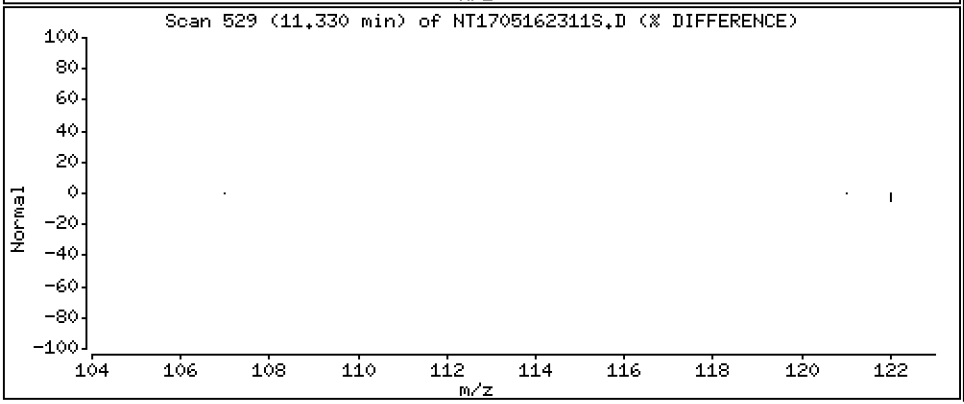












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

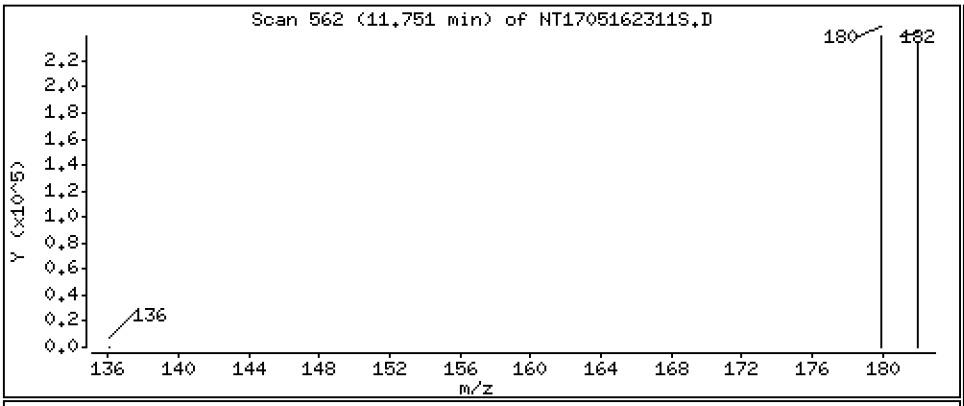
Operator: JGR

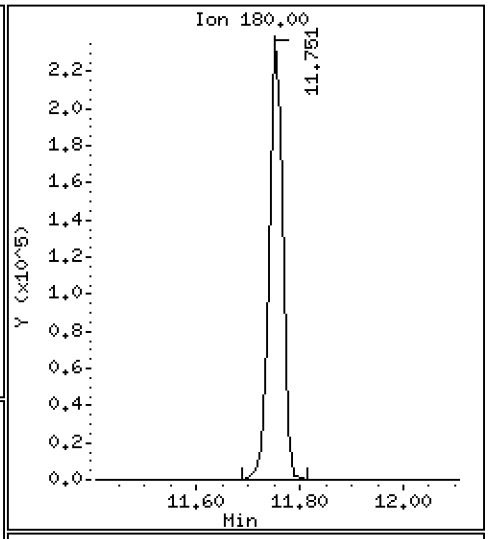
Column phase: ZB-5msi

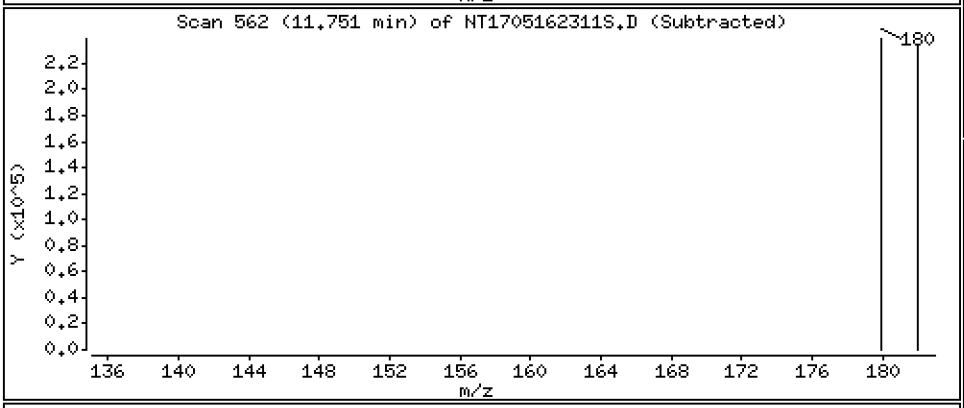
Column diameter: 0.25

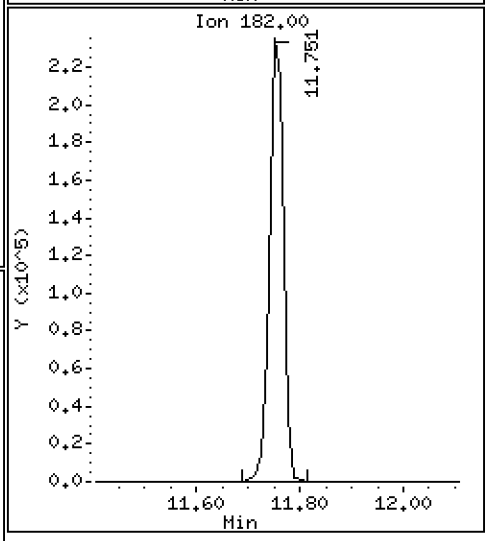
26 1,2,4-Trichlorobenzene

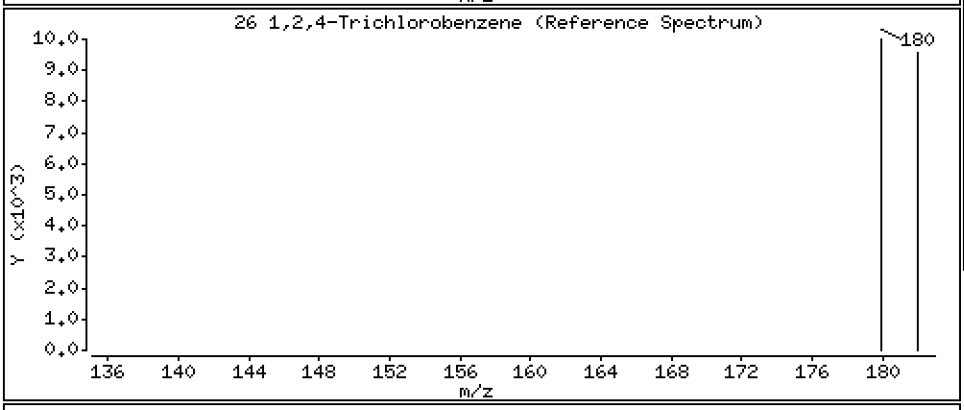
Concentration: 4.906 ug/mL

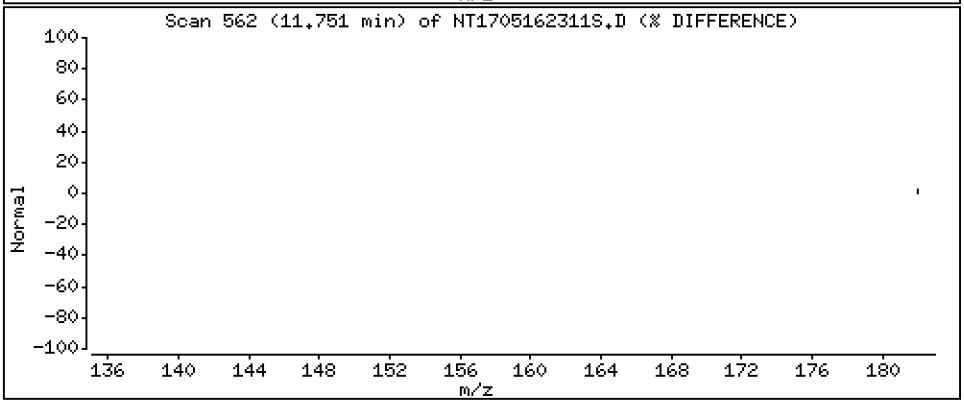












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

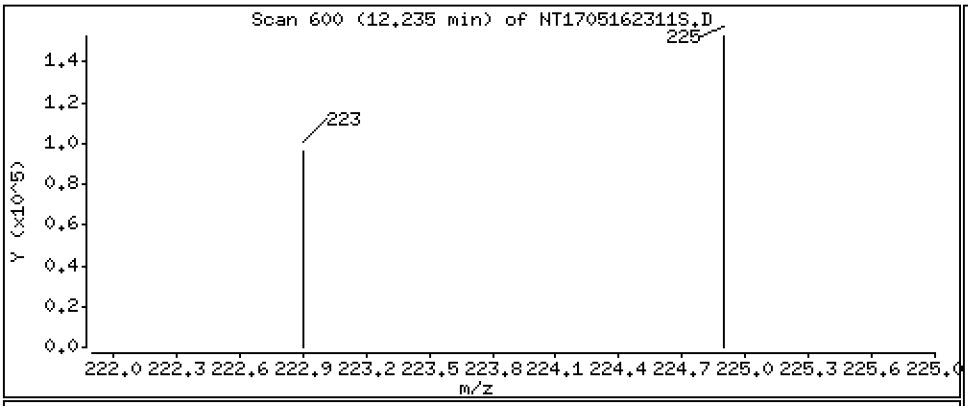
Operator: JGR

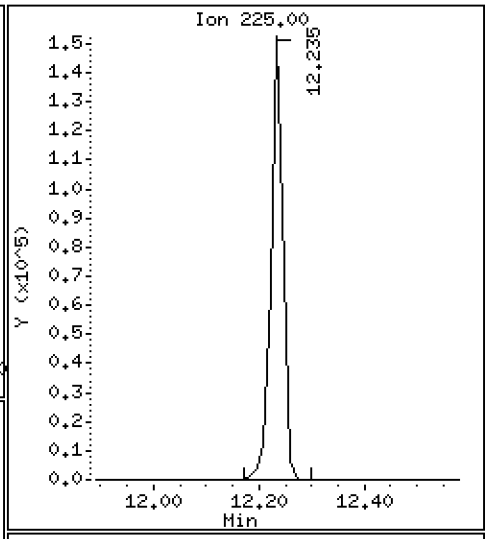
Column phase: ZB-5msi

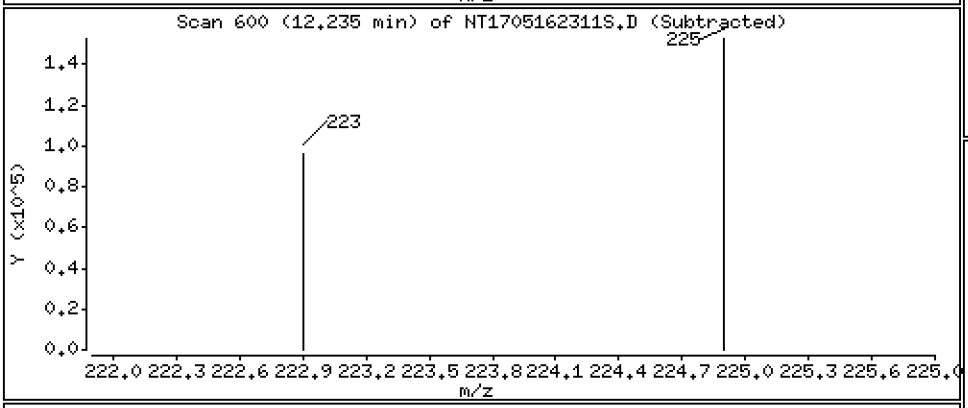
Column diameter: 0.25

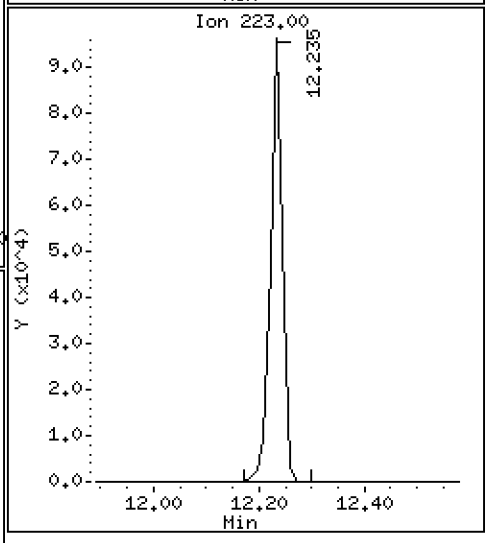
30 Hexachlorobutadiene

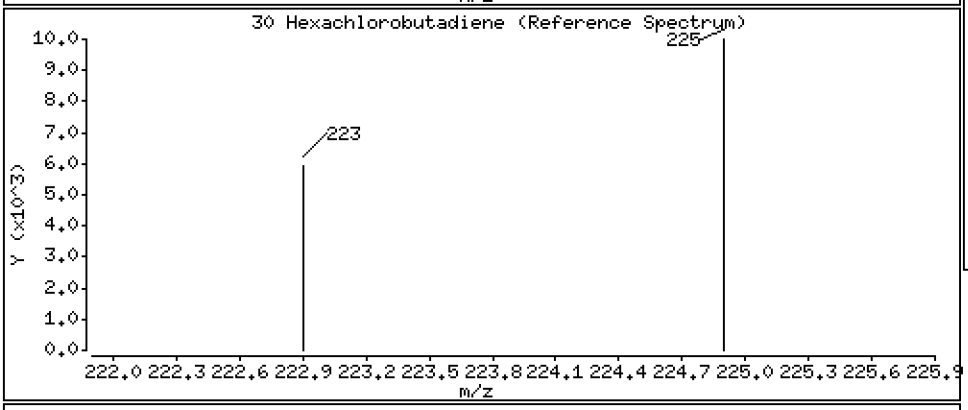
Concentration: 5.201 ug/mL

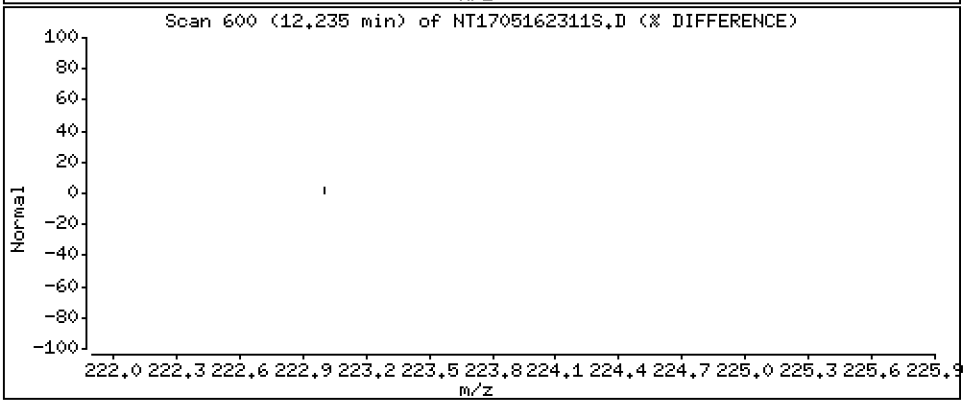












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

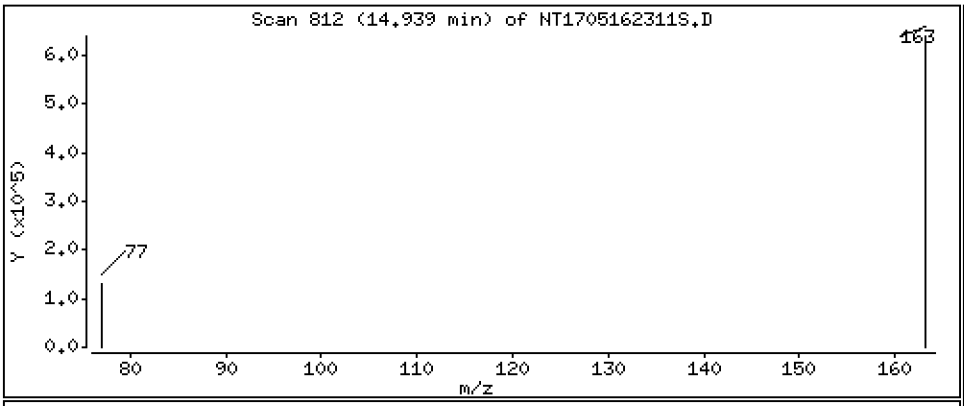
Operator: JGR

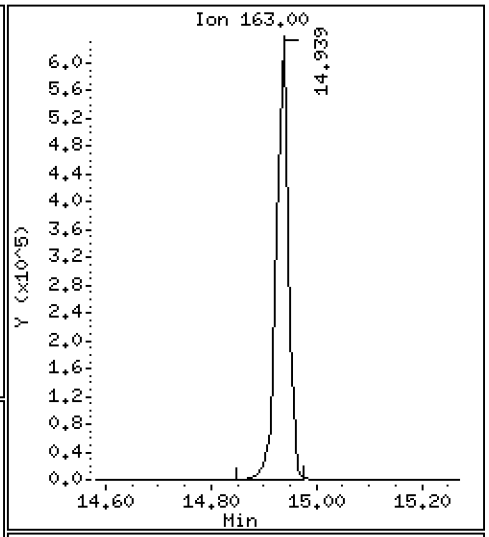
Column phase: ZB-5msi

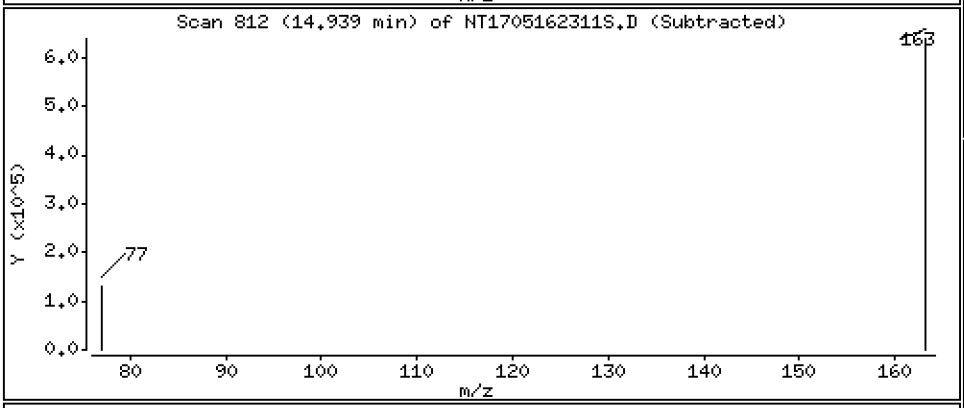
Column diameter: 0.25

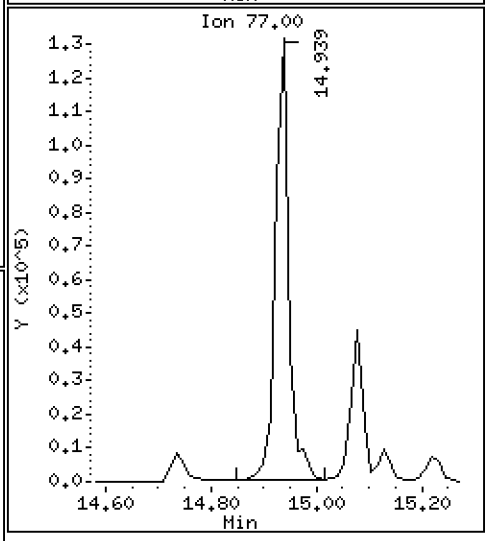
39 Dimethylphthalate

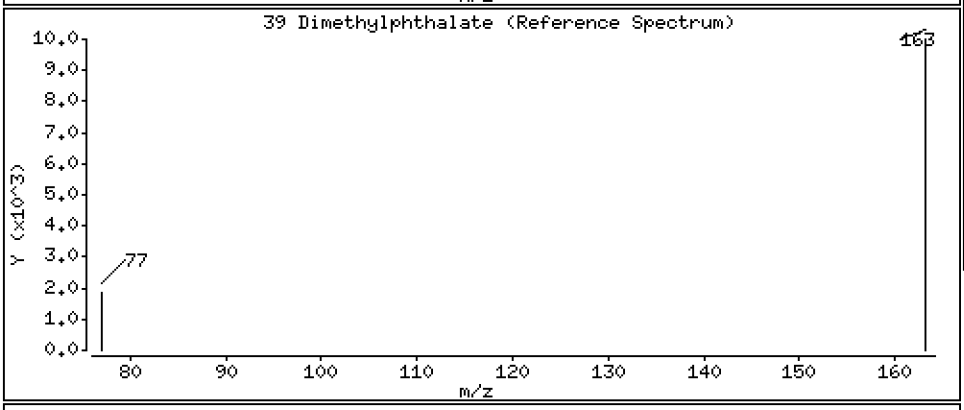
Concentration: 5.240 ug/mL

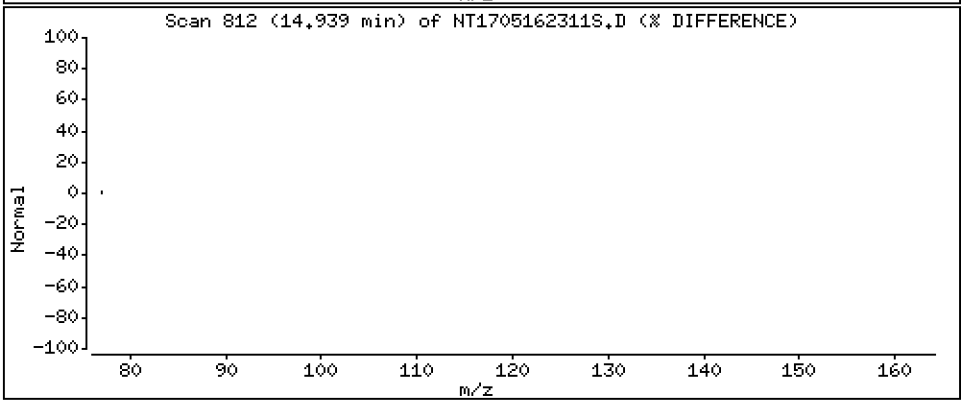












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

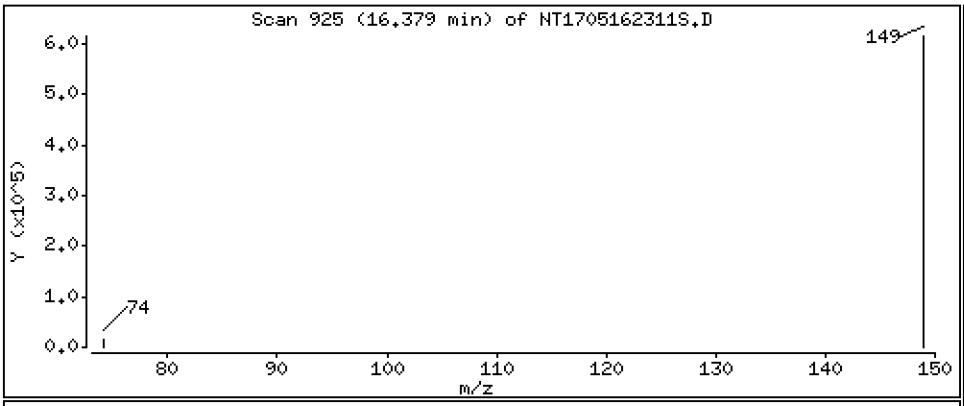
Operator: JGR

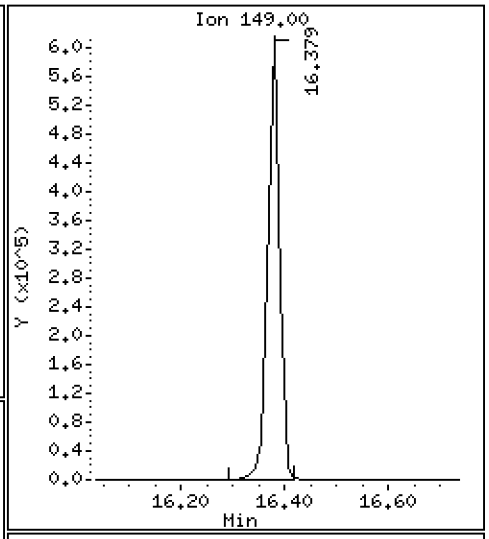
Column phase: ZB-5msi

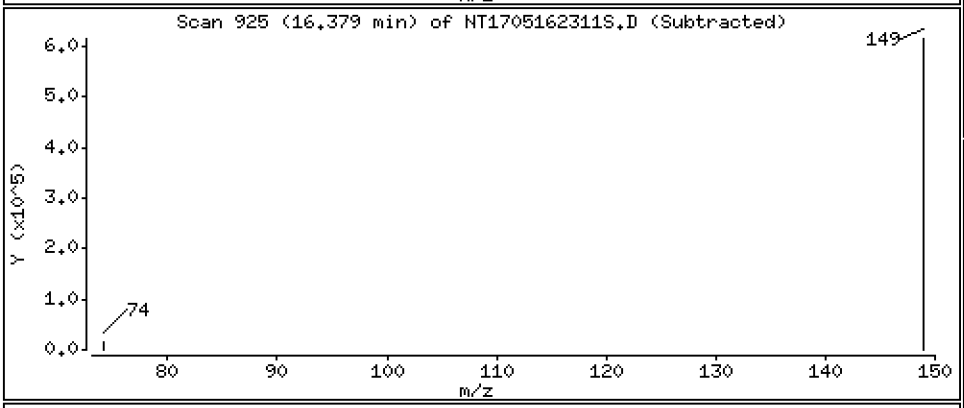
Column diameter: 0.25

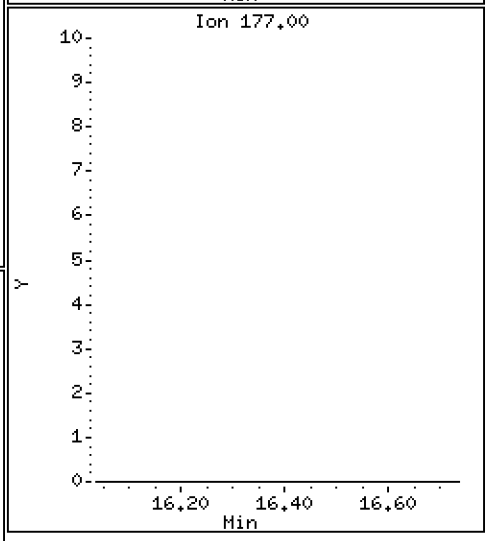
50 Diethylphthalate

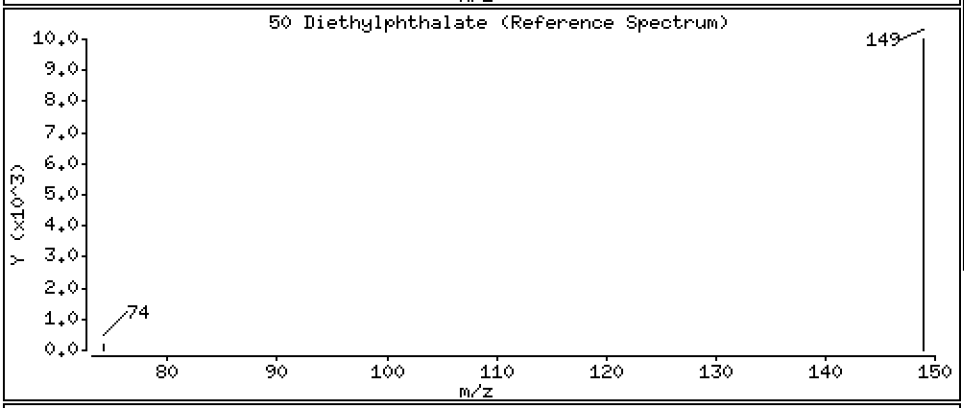
Concentration: 5.478 ug/mL

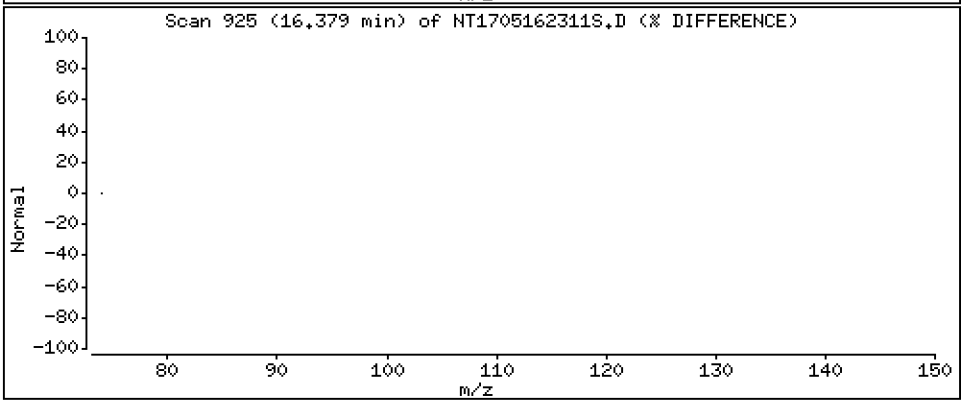












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

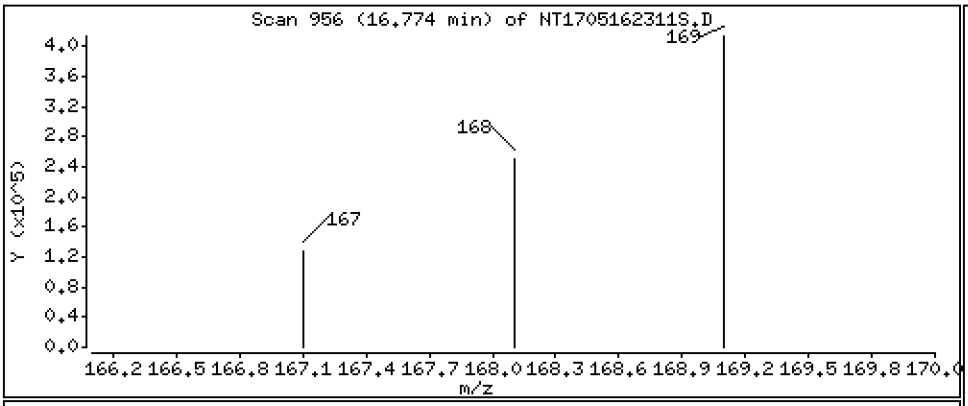
Operator: JGR

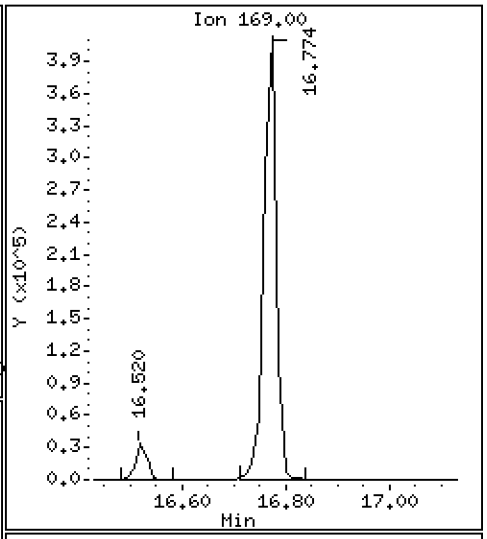
Column phase: ZB-5msi

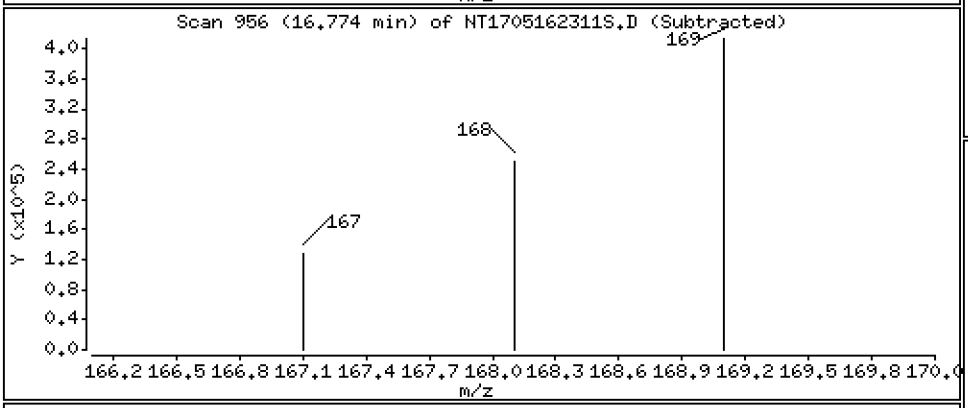
Column diameter: 0.25

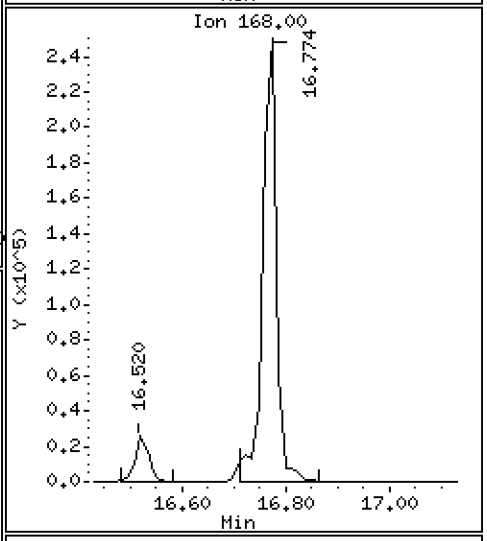
54 N-Nitrosodiphenylamine

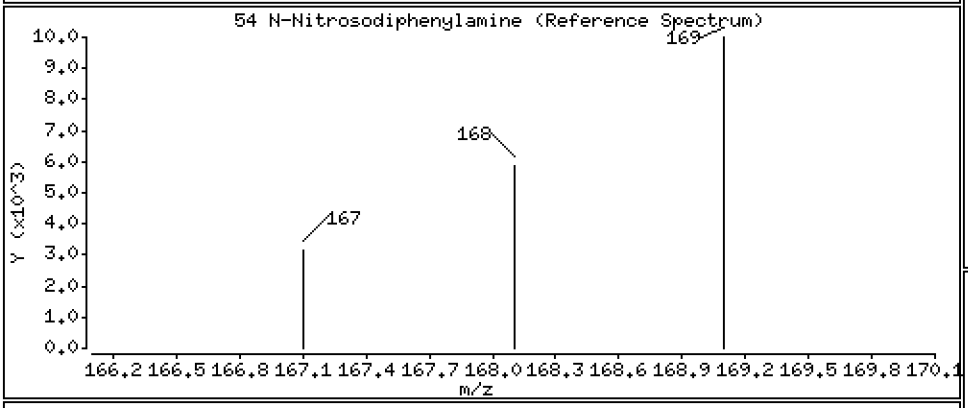
Concentration: 5.627 ug/mL

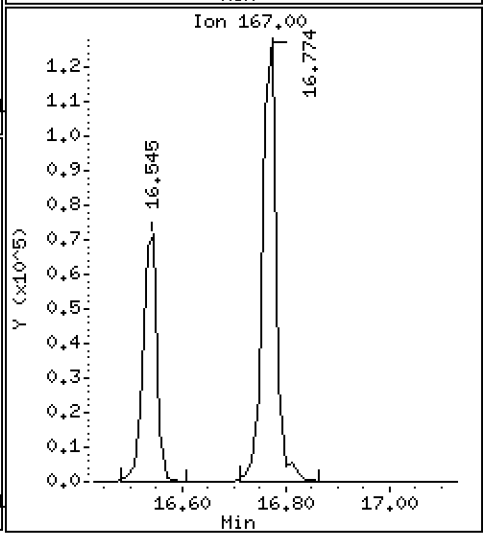


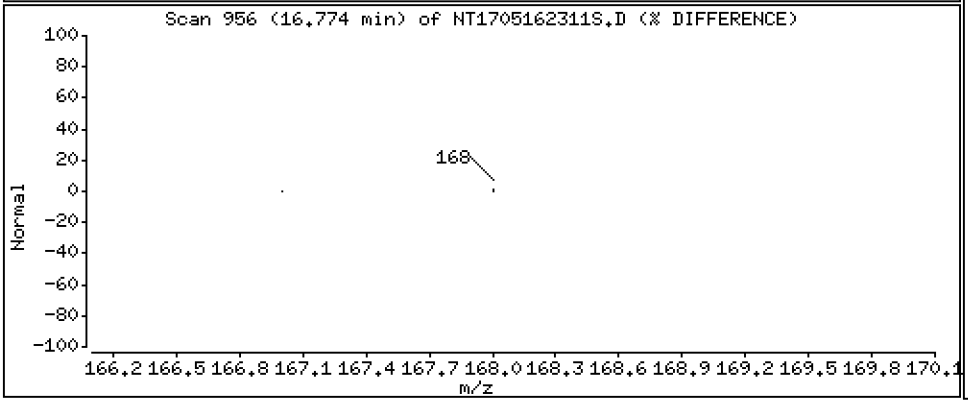












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

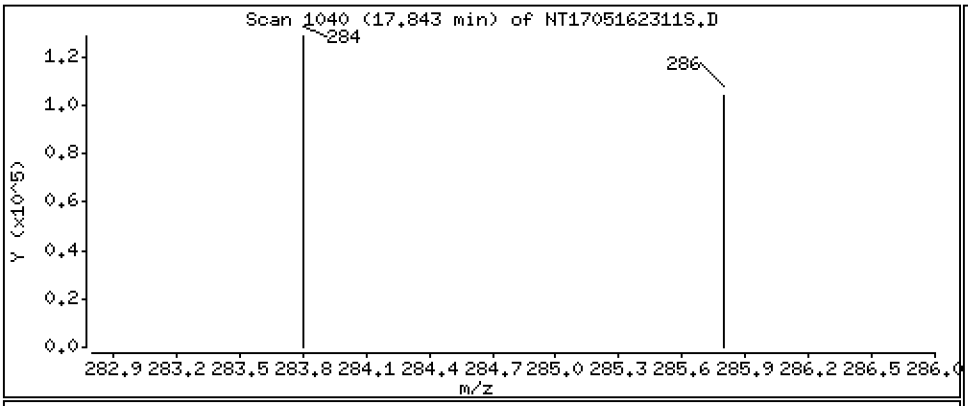
Operator: JGR

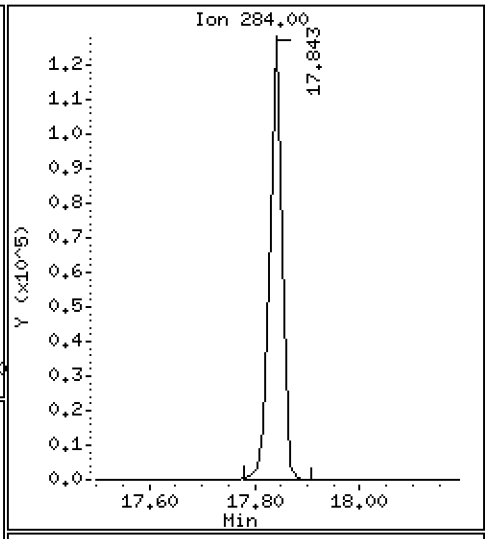
Column phase: ZB-5msi

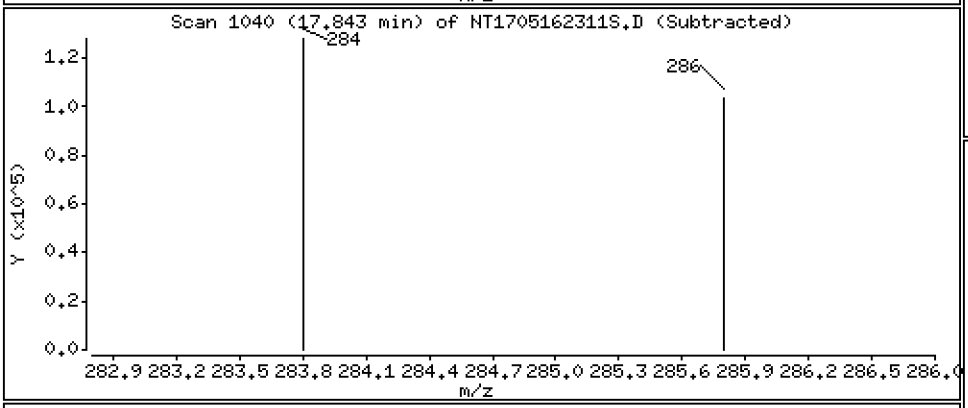
Column diameter: 0.25

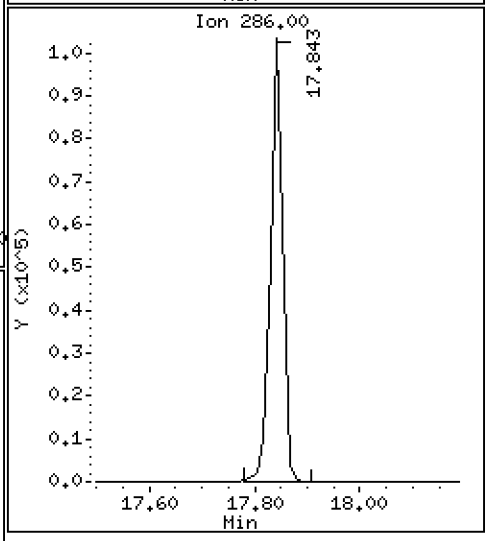
57 Hexachlorobenzene

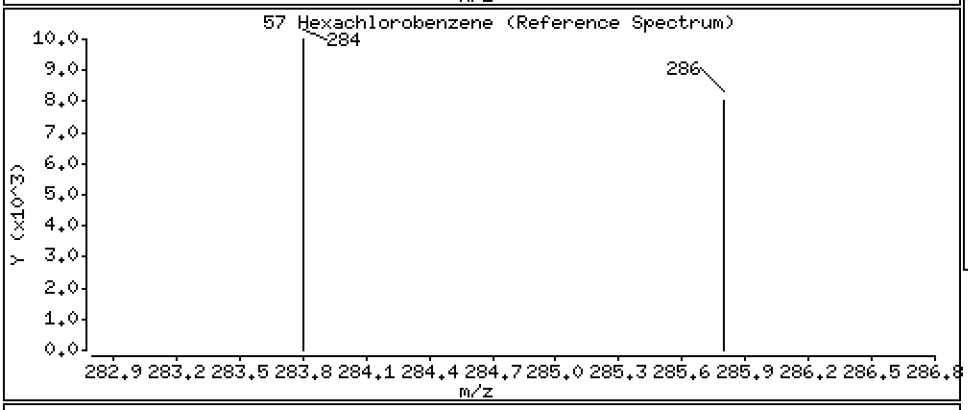
Concentration: 5.081 ug/mL

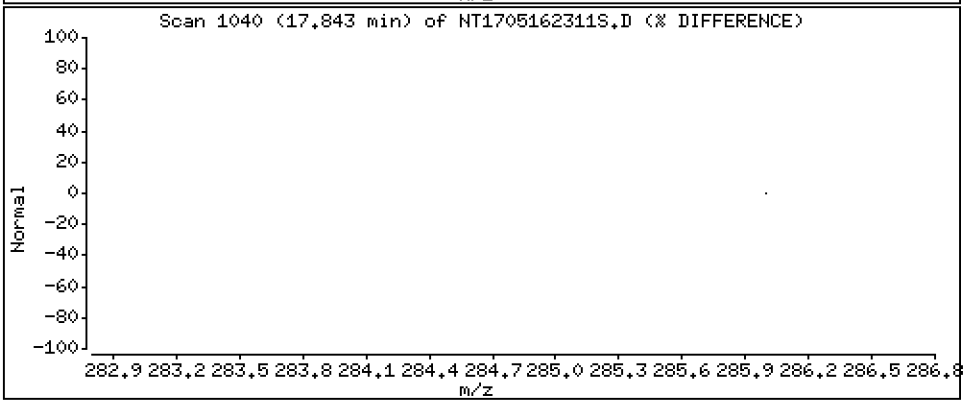












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

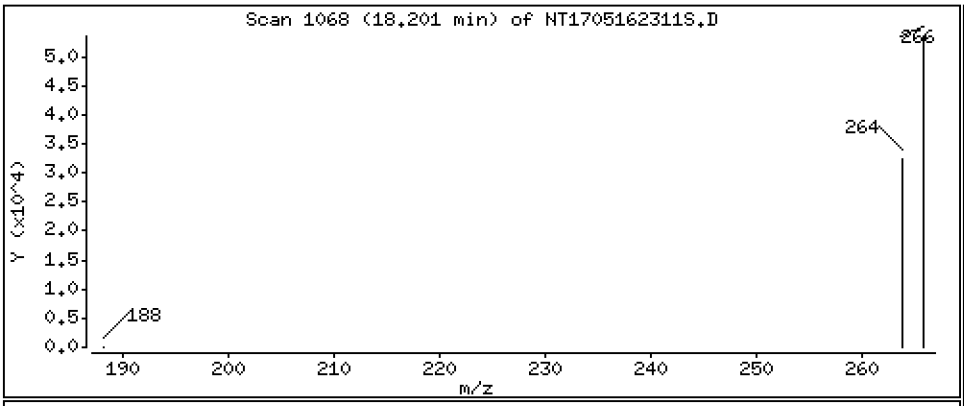
Operator: JGR

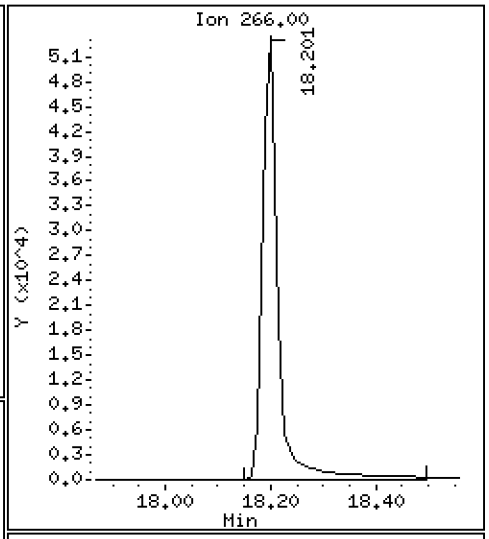
Column phase: ZB-5msi

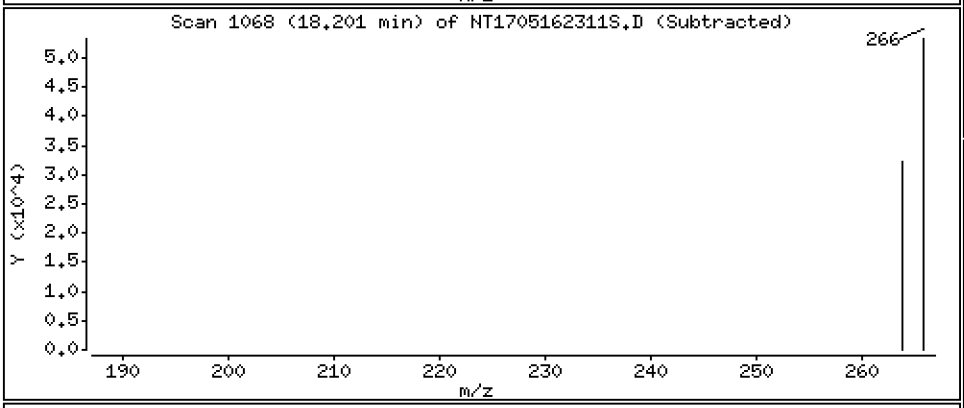
Column diameter: 0.25

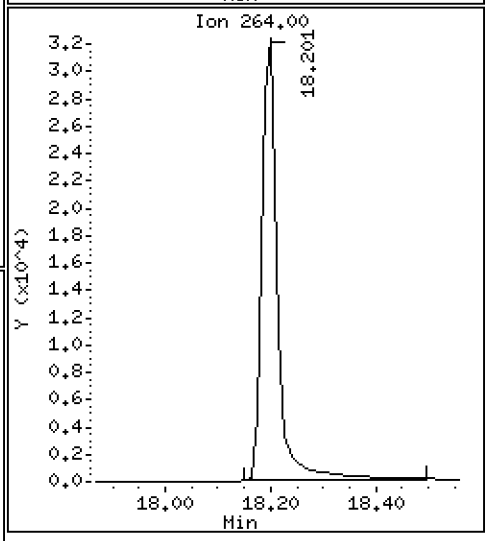
58 Pentachlorophenol

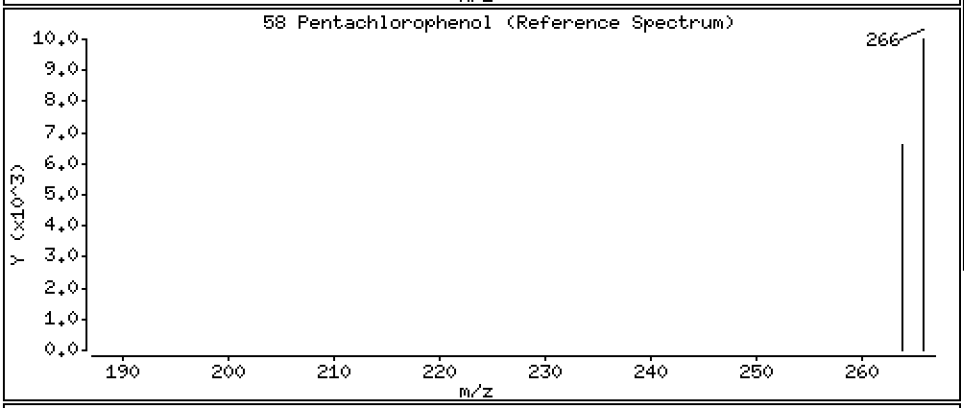
Concentration: 4.506 ug/mL

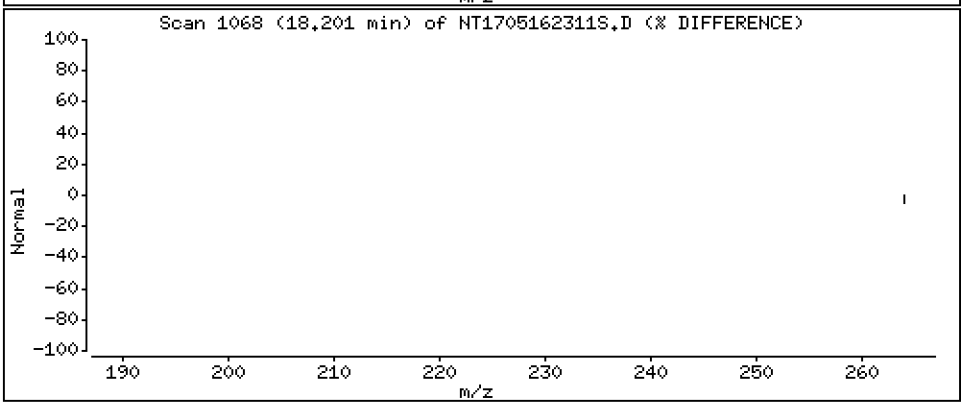












Data File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D

Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

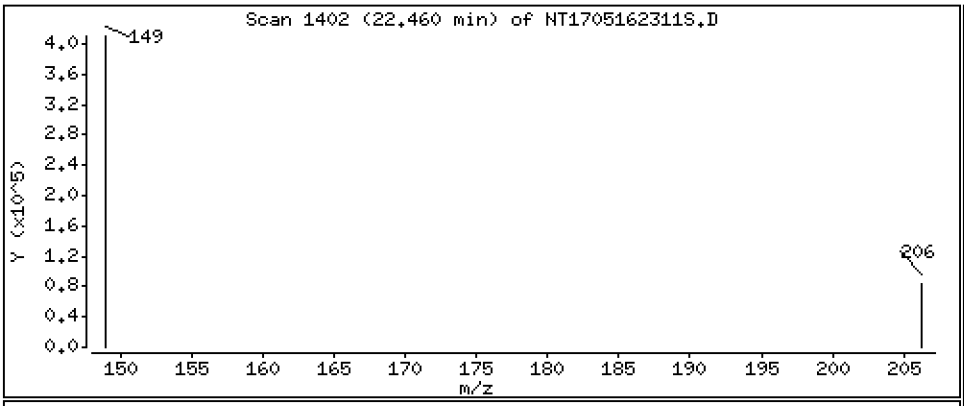
Operator: JGR

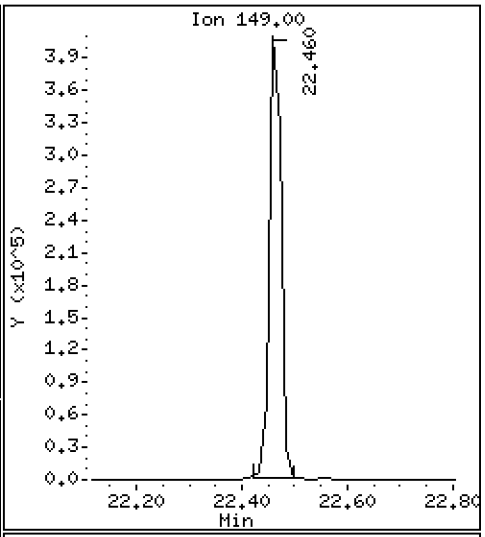
Column phase: ZB-5msi

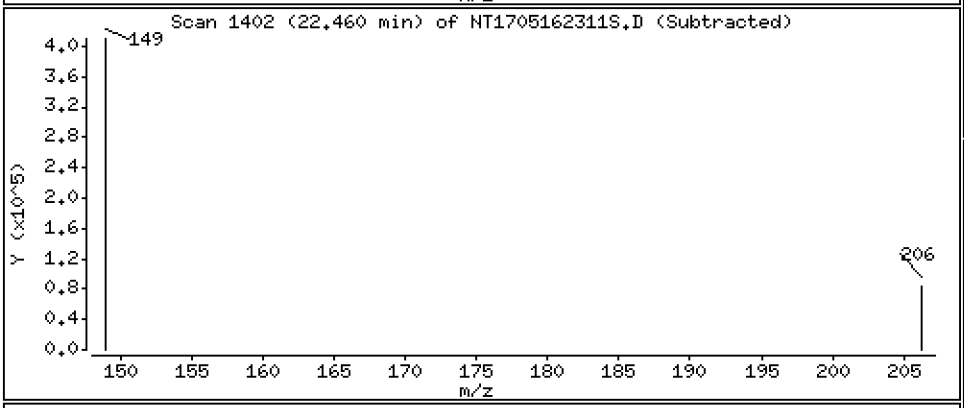
Column diameter: 0.25

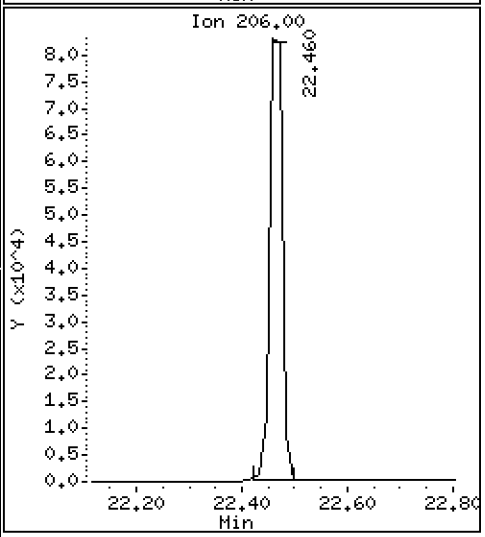
67 Butylbenzylphthalate

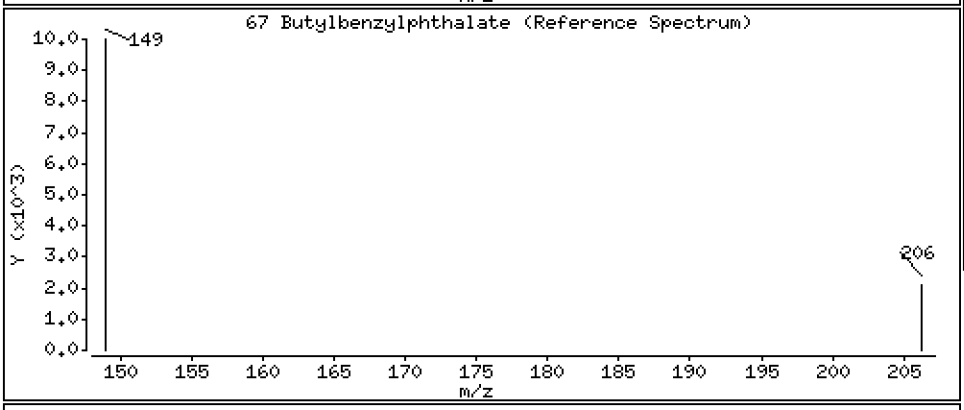
Concentration: 5.905 ug/mL

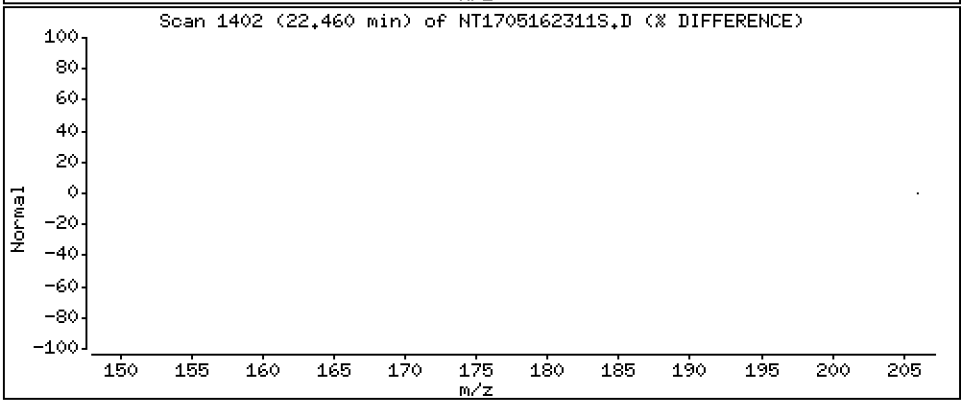












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

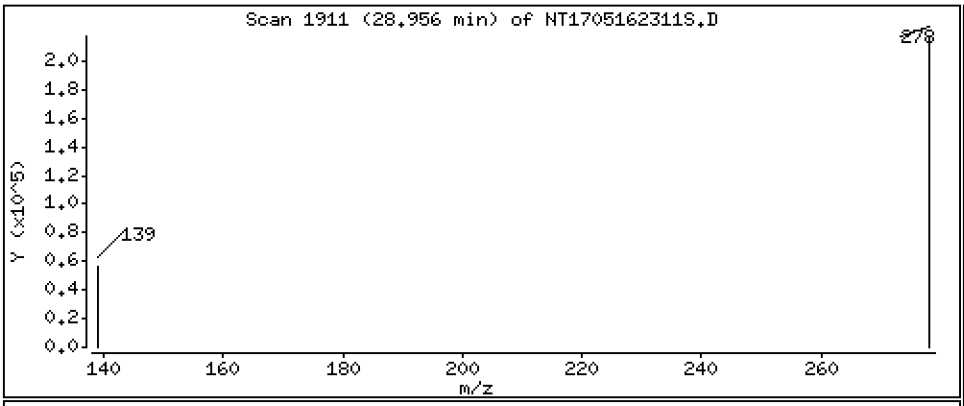
Operator: JGR

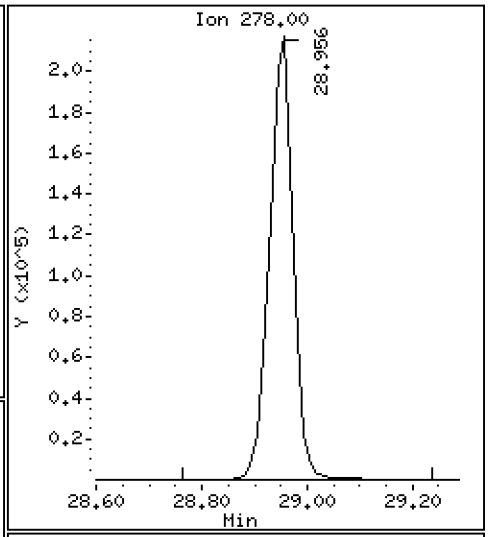
Column phase: ZB-5msi

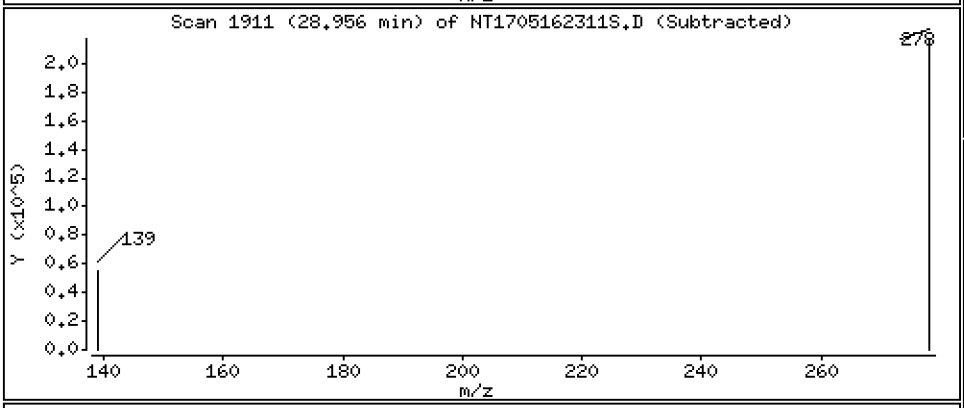
Column diameter: 0.25

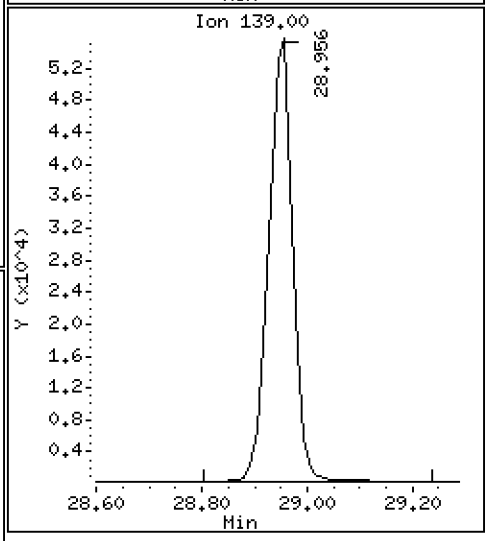
79 Dibenzo(a,h)anthracene

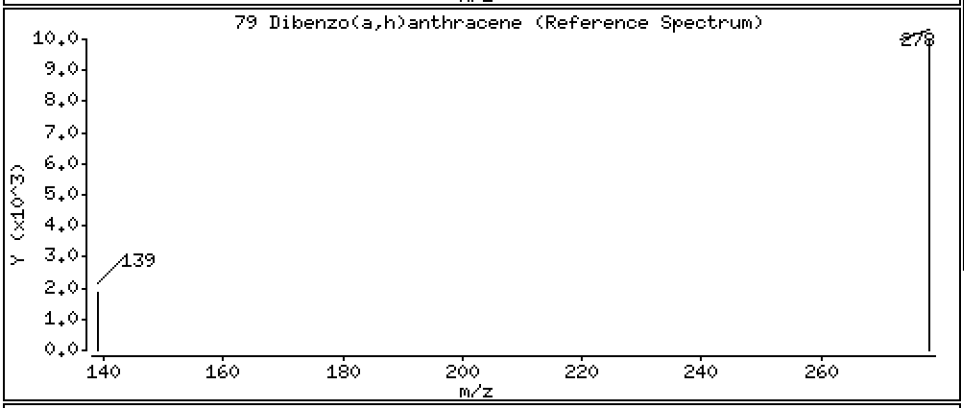
Concentration: 5.149 ug/mL

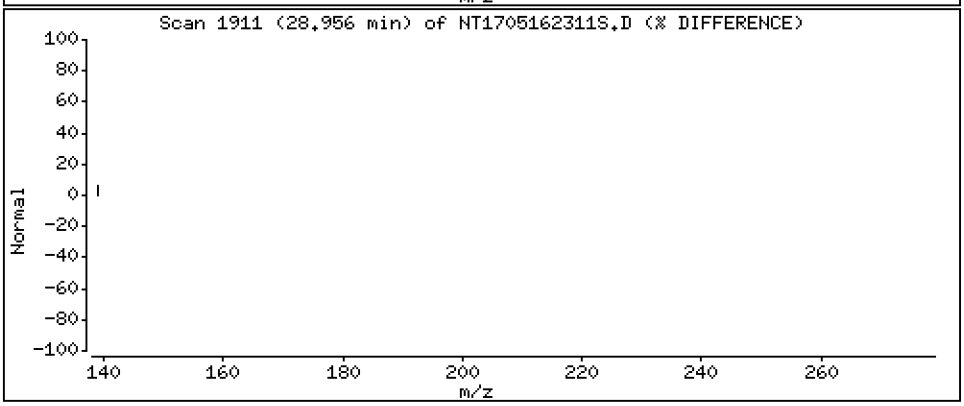












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Date : 17-MAY-2023 00:29

Client ID:

Instrument: nt17.i

Sample Info: SLE0339-SCV1

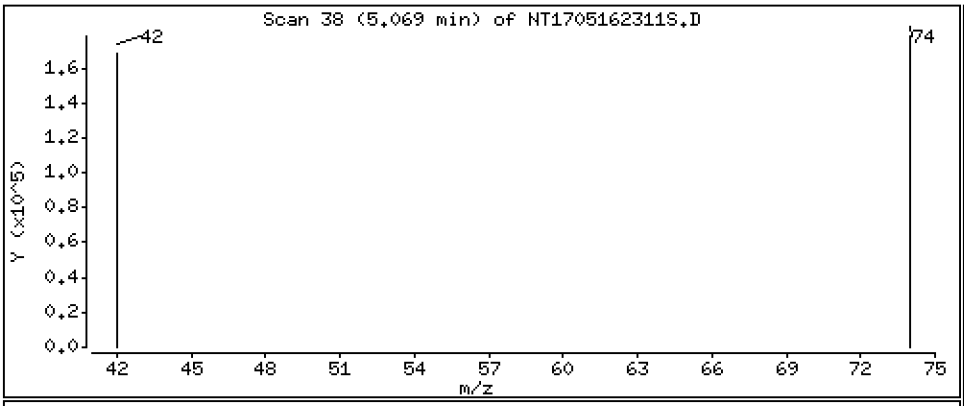
Operator: JGR

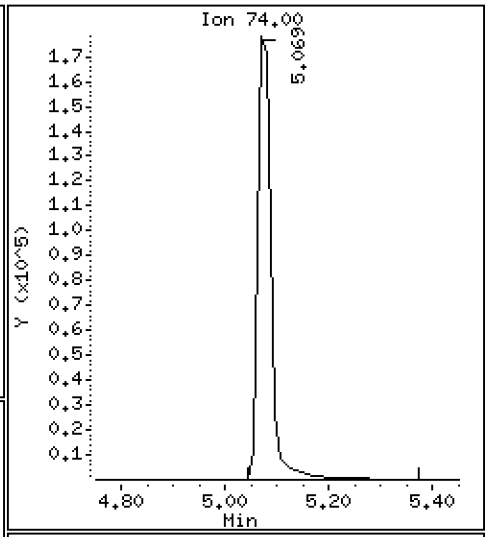
Column phase: ZB-5msi

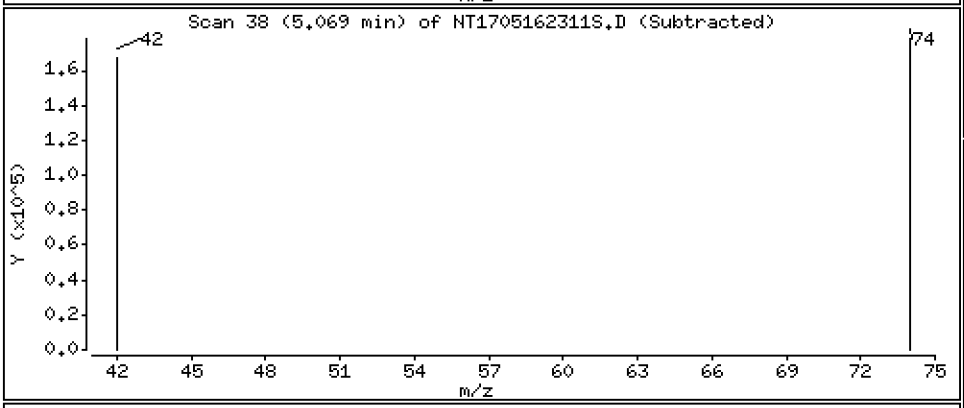
Column diameter: 0.25

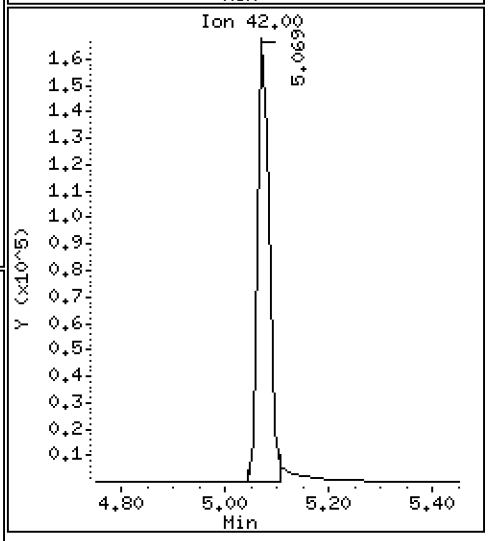
90 N-Nitrosodimethylamine

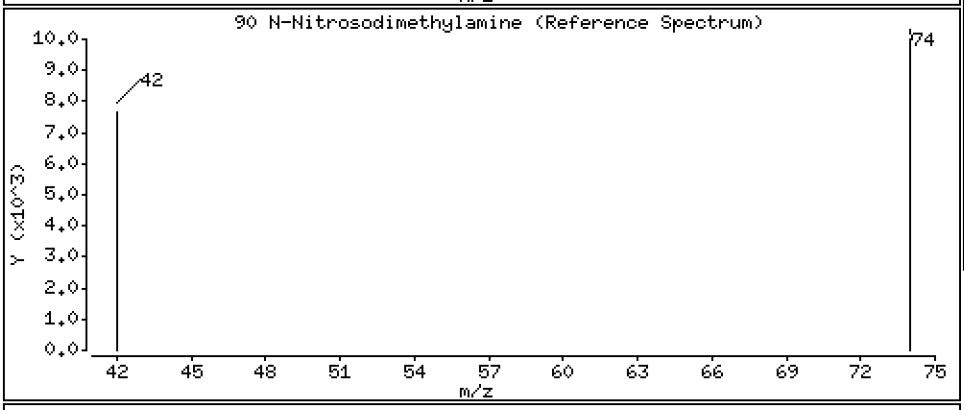
Concentration: 5.868 ug/mL

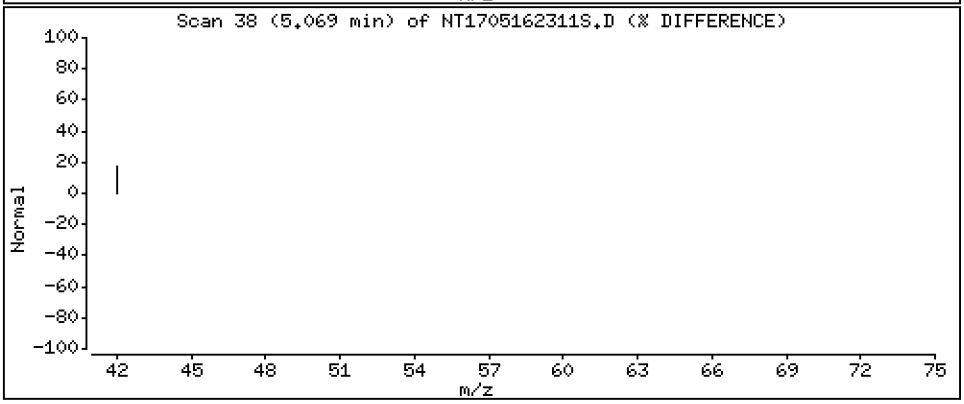












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230516.b\SIM.b\NT1705162311S.D
Lab Smp Id: SLE0339-SCV1
Inj Date : 17-MAY-2023 00:29
Operator : JGR Inst ID: nt17.i
Smp Info : SLE0339-SCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Meth Date : 23-May-2023 13:02 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 11
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

		Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	CONCENTRATIONS FINAL (ug/mL)
$	1	2-Fluorophenol	112	Compound Not Detected.					
	3	Phenol	94	8.750	8.751	(0.933)	616997	4.88420	4.884
	7	1,3-Dichlorobenzene	146	9.311	9.311	(0.993)	575988	5.08691	5.087
*	8	1,4-Dichlorobenzene-d4	152	9.375	9.375	(1.000)	280298	4.00000	
	9	1,4-Dichlorobenzene	146	9.401	9.401	(1.003)	566257	5.13211	5.132
	11	Benzyl alcohol	79	9.630	9.656	(1.027)	410745	5.70628	5.706
	12	1,2-Dichlorobenzene	146	9.758	9.759	(1.041)	541461	5.00685	5.007
	13	2-Methylphenol	108	9.848	9.861	(1.050)	385832	4.40762	4.408
	15	4-Methylphenol	108	10.129	10.129	(1.080)	423610	4.78832	4.788
	16	N-Nitroso-di-n-propylamine	70	10.193	10.180	(1.087)	349317	5.47874	5.479
	22	2,4-Dimethylphenol	107	11.151	11.164	(0.942)	366886	3.81638	3.816
	24	Benzoic acid	105	11.329	11.356	(0.957)	465783	7.77732	7.777
	26	1,2,4-Trichlorobenzene	180	11.751	11.751	(0.992)	427934	4.90638	4.906
*	27	Naphthalene-d8	136	11.840	11.840	(1.000)	999390	4.00000	
	30	Hexachlorobutadiene	225	12.235	12.235	(1.033)	238867	5.20120	5.201
	39	Dimethylphthalate	163	14.938	14.926	(0.968)	1015804	5.23967	5.240
*	42	Acenaphthene-d10	162	15.436	15.436	(1.000)	527927	4.00000	
	50	Diethylphthalate	149	16.379	16.379	(1.061)	964439	5.47782	5.478
	54	N-Nitrosodiphenylamine	169	16.774	16.774	(0.908)	681829	5.62729	5.627
	57	Hexachlorobenzene	284	17.843	17.843	(0.966)	208857	5.08140	5.081
	58	Pentachlorophenol	266	18.200	18.214	(0.986)	108866	4.50590	4.506
*	59	Phenanthrene-d10	188	18.468	18.455	(1.000)	860054	4.00000	
$	66	Terphenyl-d14	244	Compound Not Detected.					
	67	Butylbenzylphthalate	149	22.460	22.460	(0.958)	642329	5.90509	5.905
*	69	Chrysene-d12	240	23.455	23.455	(1.000)	527529	4.00000	
*	77	Perylene-d12	264	26.159	26.147	(1.000)	475440	4.00000	
	79	Dibenzo(a,h)anthracene	278	28.956	28.943	(1.107)	690513	5.14916	5.149
	90	N-Nitrosodimethylamine	74	5.068	5.094	(0.541)	321072	5.86783	5.868

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705162311S.D
Lab Smp Id: SLE0339-SCV1
Analysis Type: SV
Quant Type: ISTD
Operator: JGR
Method File: \\target\share\chem3\nt17.i\20230516.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 16-MAY-2023
Calibration Time: 21:22
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	316066	158033	632132	280298	-11.32
27 Naphthalene-d8	1102073	551037	2204146	999390	-9.32
42 Acenaphthene-d10	583826	291913	1167652	527927	-9.57
59 Phenanthrene-d10	970917	485459	1941834	860054	-11.42
69 Chrysene-d12	590568	295284	1181136	527529	-10.67
77 Perylene-d12	537938	268969	1075876	475440	-11.62

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.38	8.88	9.88	9.38	-0.00
27 Naphthalene-d8	11.84	11.34	12.34	11.84	-0.00
42 Acenaphthene-d10	15.44	14.94	15.94	15.44	-0.00
59 Phenanthrene-d10	18.47	17.97	18.97	18.47	-0.00
69 Chrysene-d12	23.46	22.96	23.96	23.46	-0.00
77 Perylene-d12	26.16	25.66	26.66	26.16	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705162311S.D

Lab ID: SLE0339-SCV1
nt17.i, 20230516.b\SIM.b\SIMABN2.m,   17-MAY-2023 00:29

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

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

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
0.957	0.000	0.9569	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705162310S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00070
Lab File ID:	NT1705262329S.D	Calibration Date:	05/16/2023
Sequence:	SLE0442	Injection Date:	05/27/23
Lab Sample ID:	SLE0442-CCV1	Injection Time:	06:08
Sequence Name:	ABN 1.0		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	1.0000	1.06	1.8027250	1.9093980		5.9	+/-50
1,3-Dichlorobenzene	A	1.0000	1.03	1.6158430	1.6575650		2.6	+/-50
1,4-Dichlorobenzene	A	1.0000	1.02	1.5745540	1.5991290		1.6	+/-50
1,2-Dichlorobenzene	A	1.0000	0.995	1.5432720	1.5354100		-0.5	+/-50
Benzyl Alcohol	A	1.0000	0.984	1.0272110	1.0109760		-1.6	+/-50
Benzoic acid	A	4.0000	3.81	0.1537024	0.2286168		-4.6	+/-50
2-Methylphenol	A	1.0000	0.891	1.2492070	1.1125280		-10.9	+/-50
N-Nitroso-di-n-Propylamine	A	1.0000	0.944	0.9098695	0.8589215		-5.6	+/-50
4-Methylphenol	A	1.0000	0.886	1.2624750	1.1179370		-11.4	+/-50
2,4-Dimethylphenol	A	2.0000	1.98	0.3847731	0.3813988		-0.9	+/-50
1,2,4-Trichlorobenzene	A	1.0000	0.957	0.3490929	0.3342303		-4.3	+/-50
Hexachlorobutadiene	A	1.0000	1.07	0.1838137	0.1969810		7.2	+/-50
N-Nitrosodimethylamine	A	2.0000	2.15	0.7808454	0.8404921		7.6	+/-50
Dimethylphthalate	A	1.0000	0.927	1.4689000	1.3610490		-7.3	+/-50
Diethyl phthalate	A	1.0000	0.913	1.3339910	1.2174310		-8.7	+/-50
N-Nitrosodiphenylamine	A	1.0000	1.16	0.5635219	0.6510684		15.5	+/-50
Hexachlorobenzene	A	1.0000	1.14	0.1911612	0.2177478		13.9	+/-50
Pentachlorophenol	A	2.0000	1.78	0.0772800	0.0973106		-11.0	+/-50
Butylbenzylphthalate	A	1.0000	0.900	0.8247925	0.7419624		-10.0	+/-50
Dibenzo(a,h)anthracene	A	1.0000	0.617	1.1282360	0.6957749		-38.3	+/-50
2-Fluorophenol	A	1.5000	1.63	1.2098450	1.3159630		8.8	+/-50
p-Terphenyl-d14	A	1.0000	0.972	0.7589992	0.7380468		-2.8	+/-50

* Values outside of QC limits

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623295.D

Page 1

Date : 27-MAY-2023 06:08

Client ID:

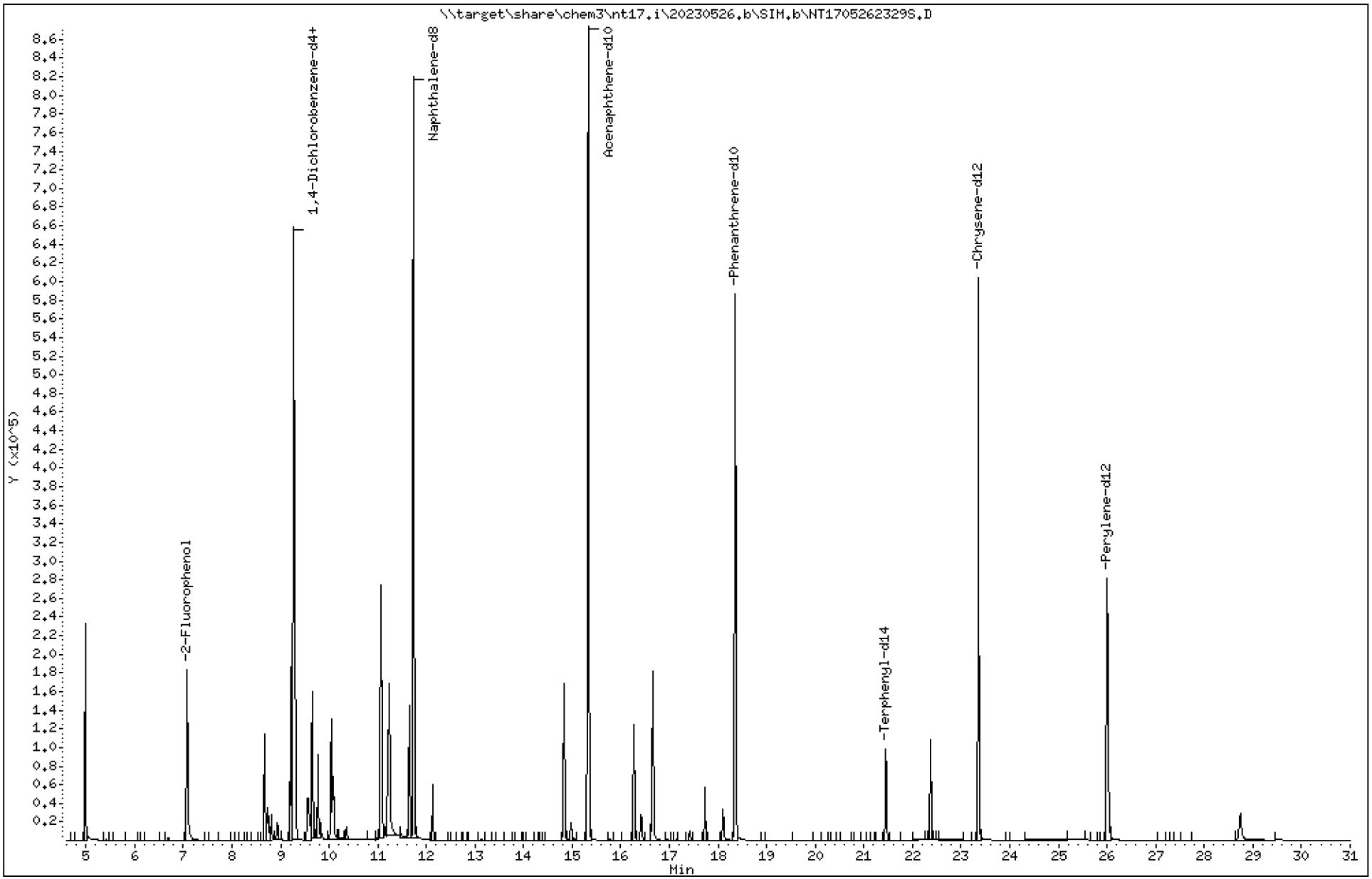
Instrument: nt17.i

Sample Info: SLE0442-CCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

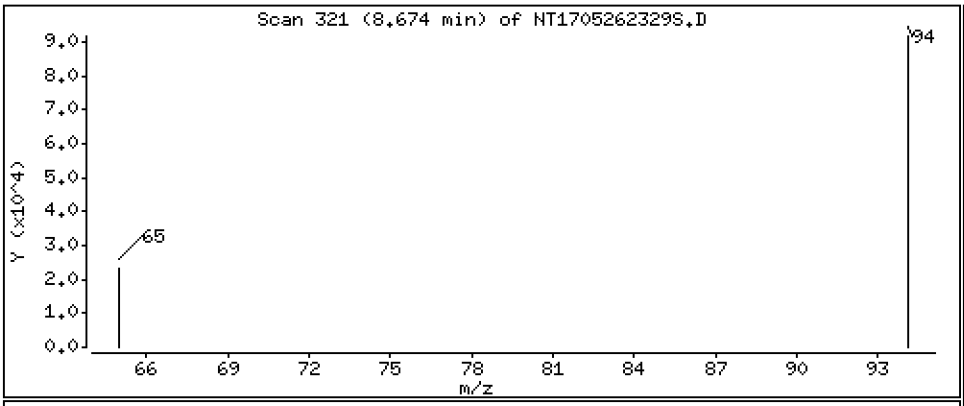
Operator: VTS

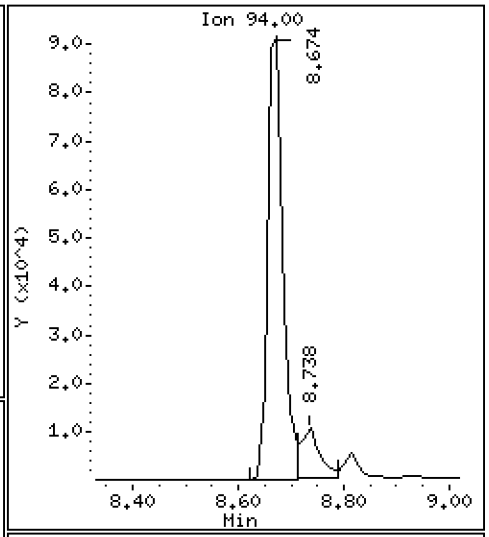
Column phase: ZB-5msi

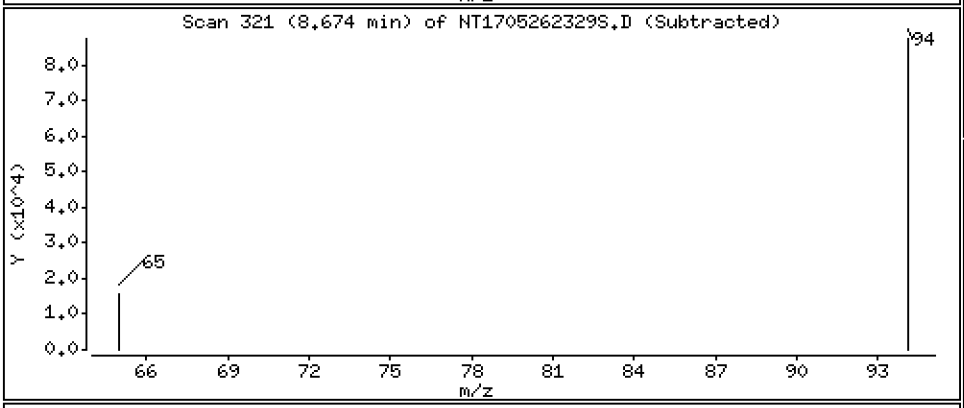
Column diameter: 0.25

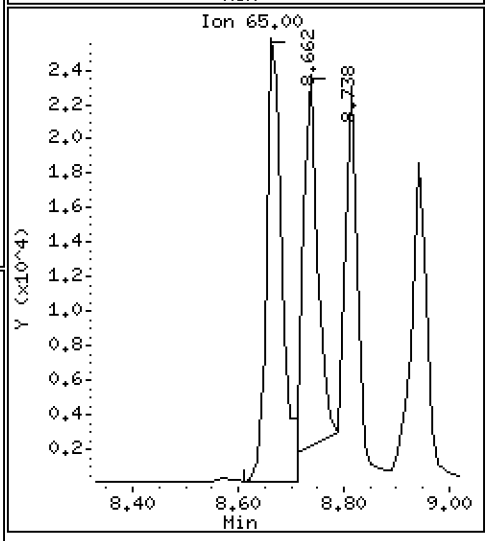
3 Phenol

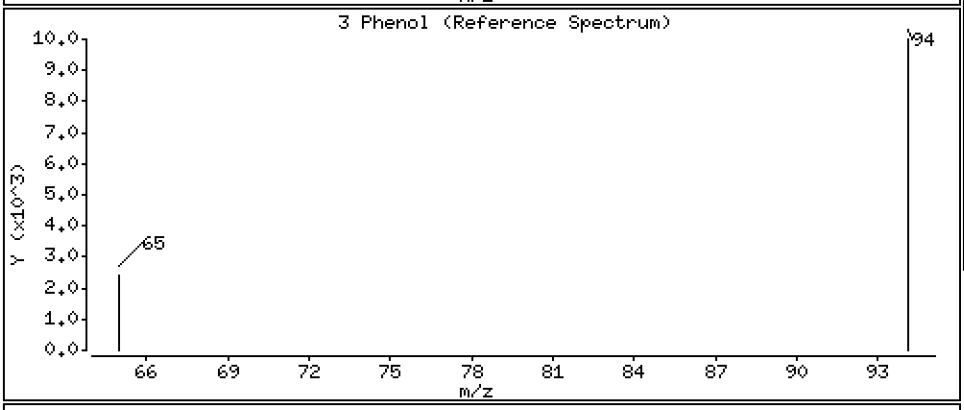
Concentration: 1.059 ug/mL

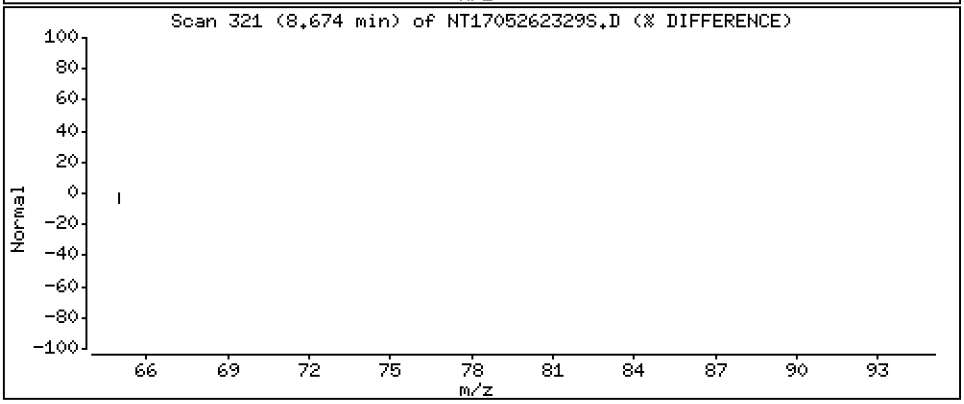












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

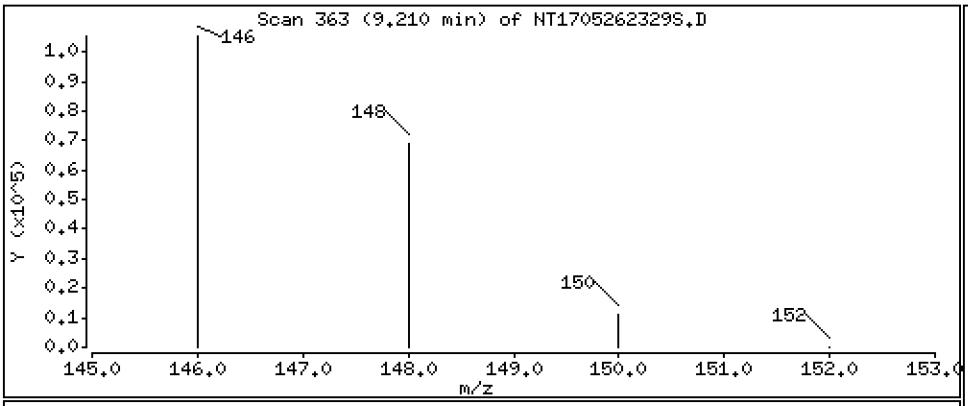
Operator: VTS

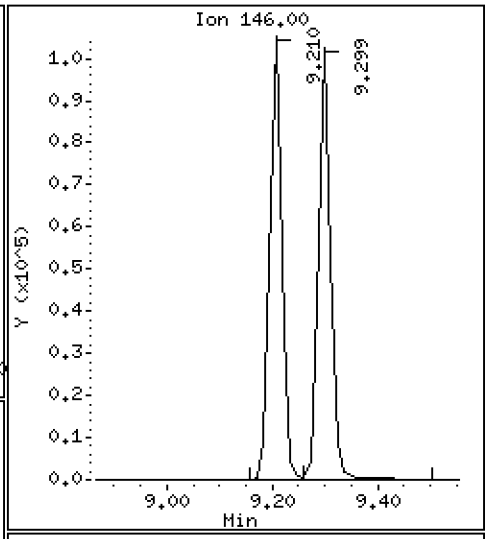
Column phase: ZB-5msi

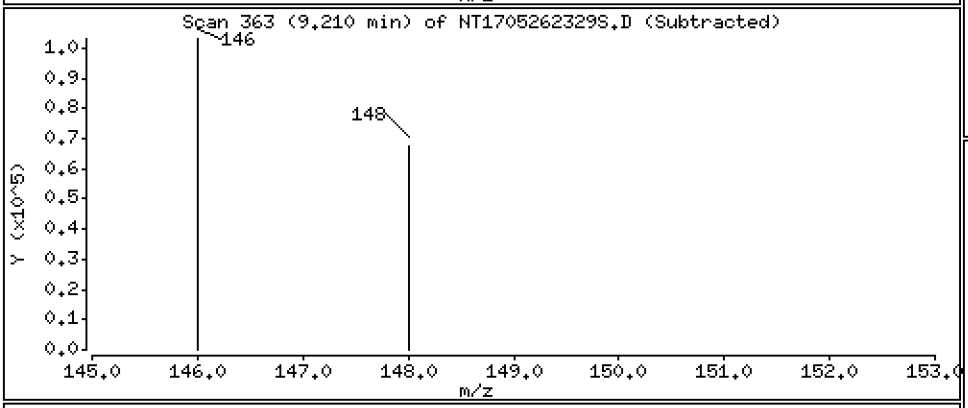
Column diameter: 0.25

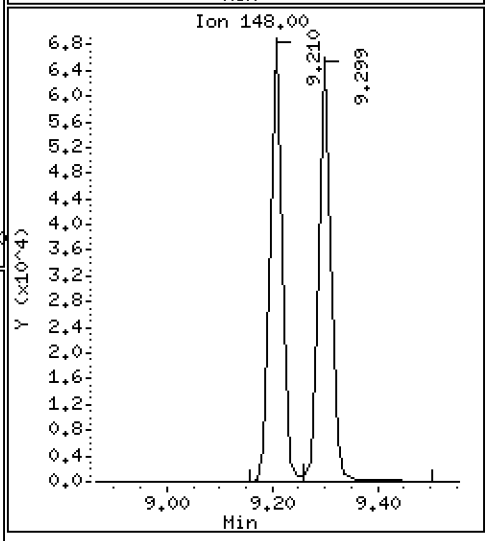
7 1,3-Dichlorobenzene

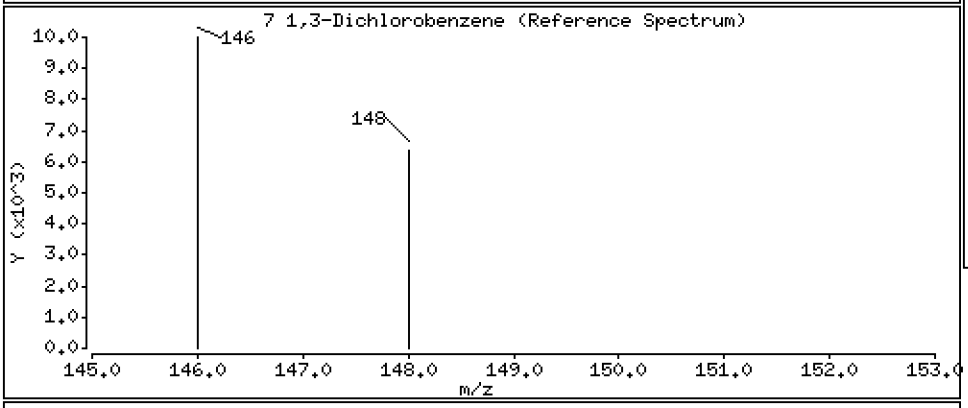
Concentration: 1.026 ug/mL

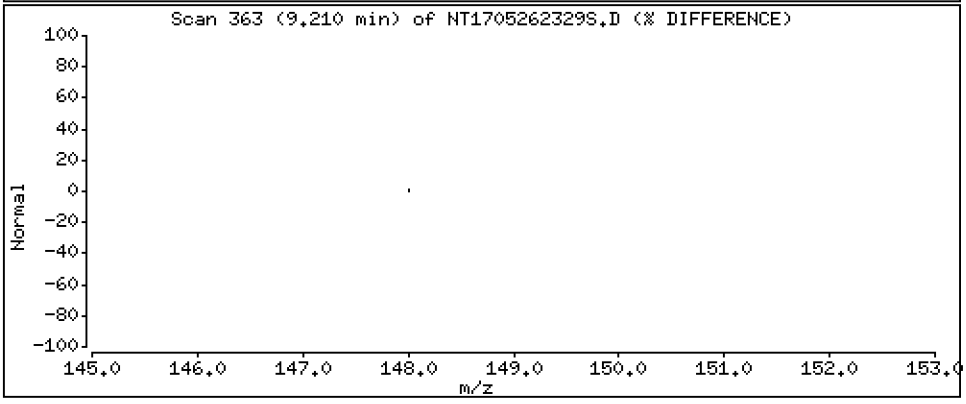












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

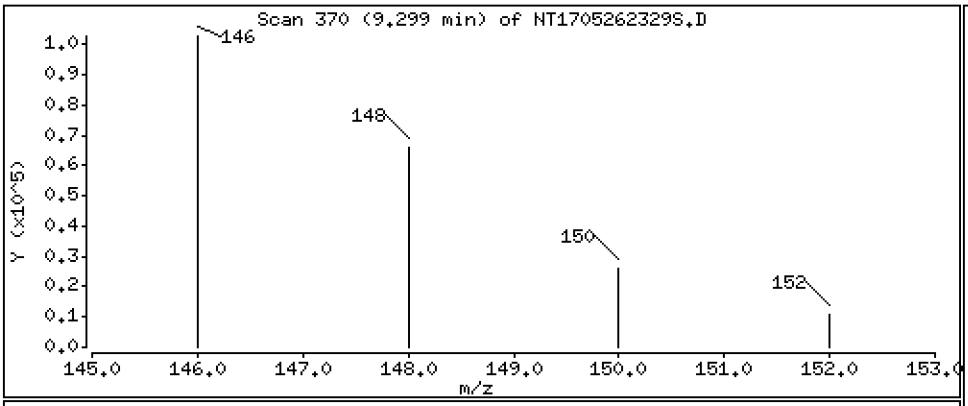
Operator: VTS

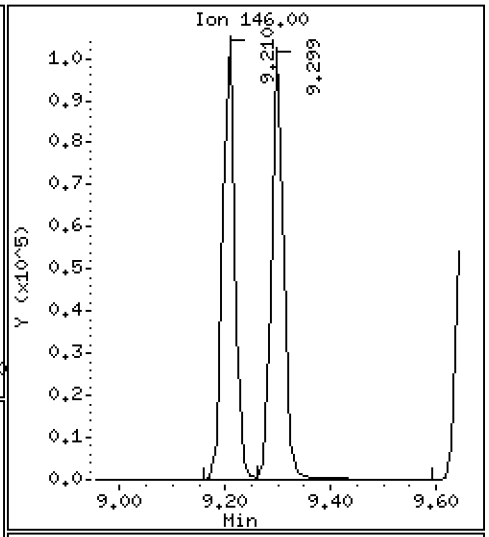
Column phase: ZB-5msi

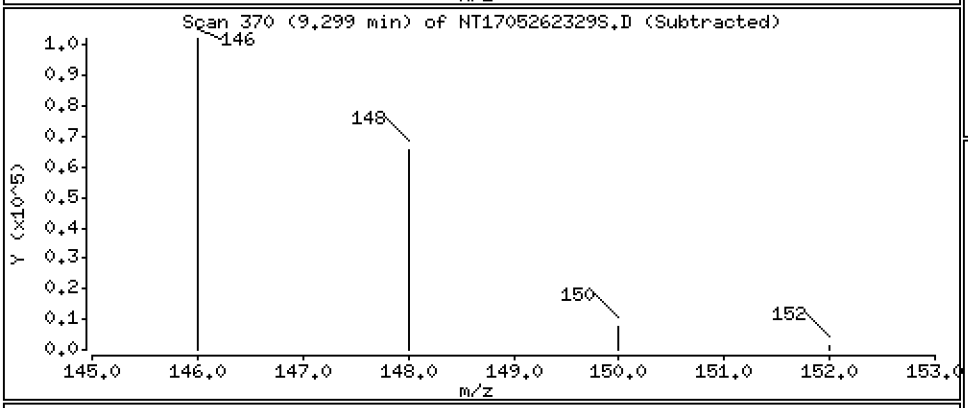
Column diameter: 0.25

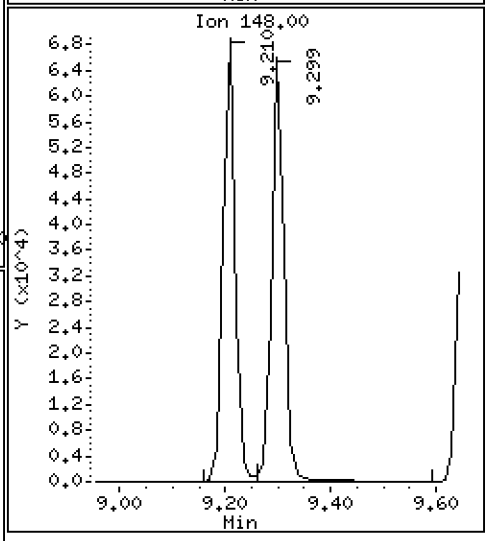
9 1,4-Dichlorobenzene

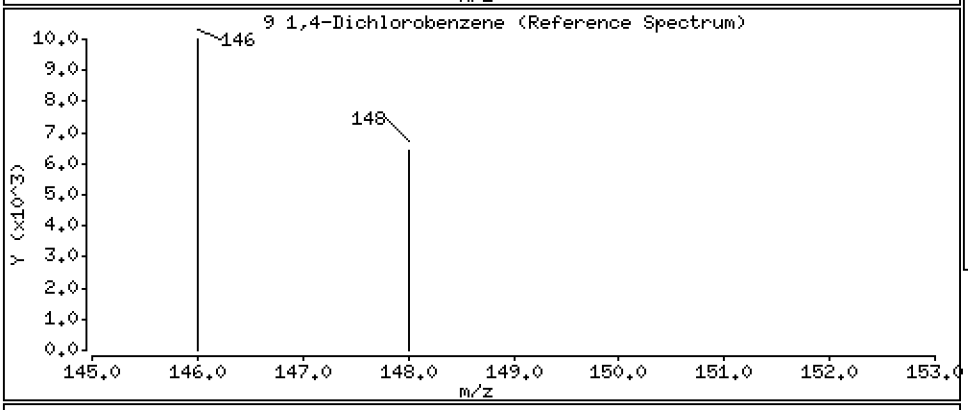
Concentration: 1.016 ug/mL

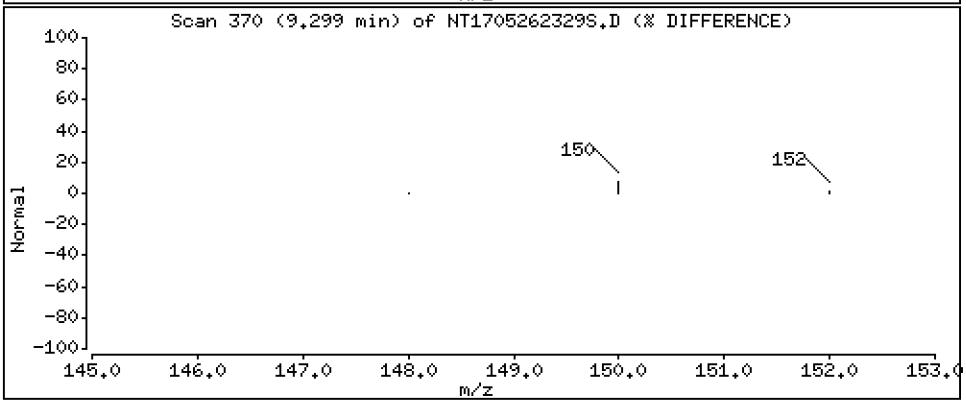












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

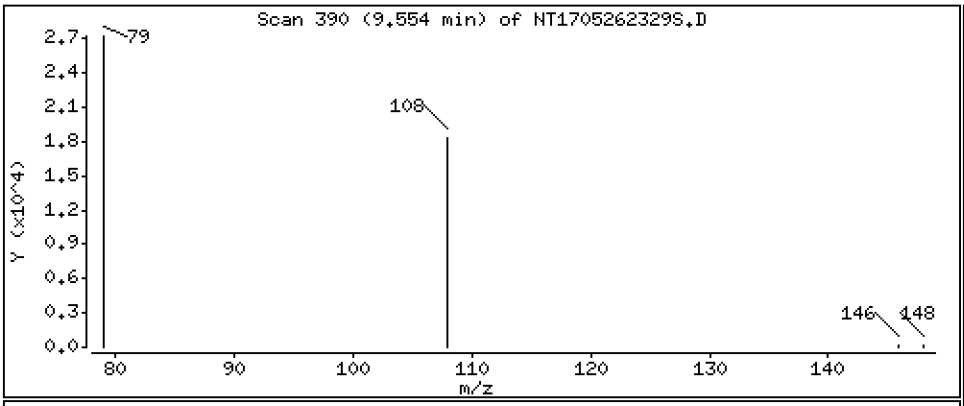
Operator: VTS

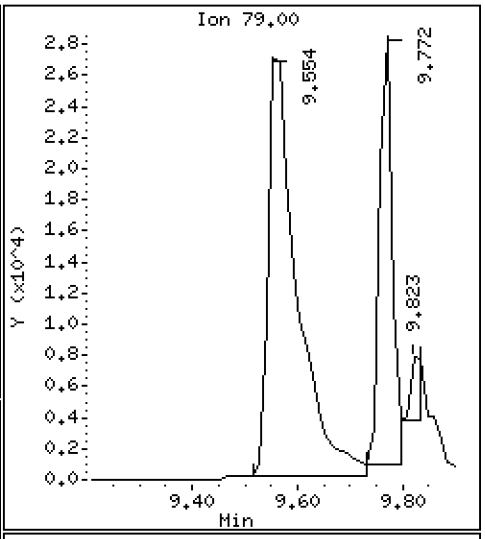
Column phase: ZB-5msi

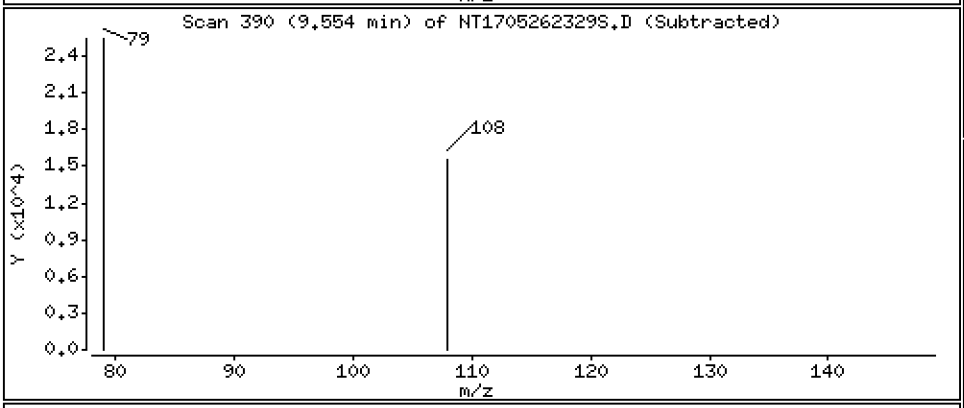
Column diameter: 0.25

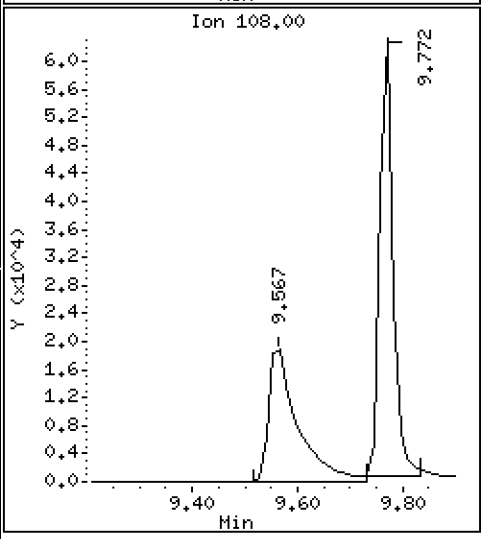
11 Benzyl alcohol

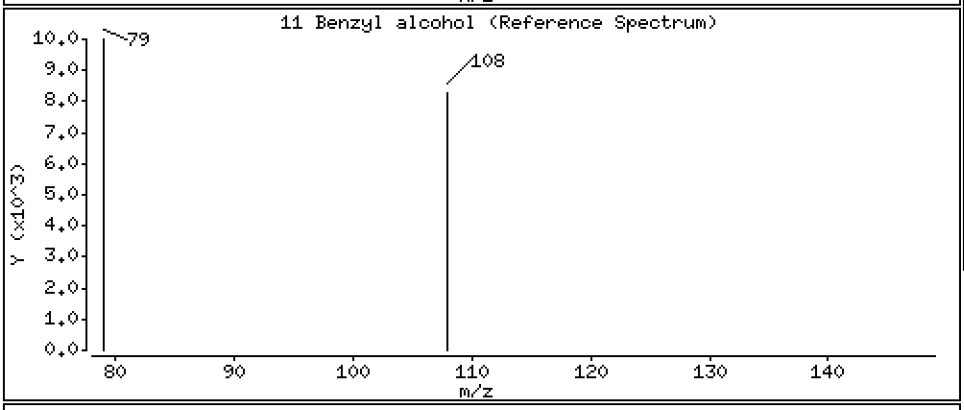
Concentration: 0.9842 ug/mL

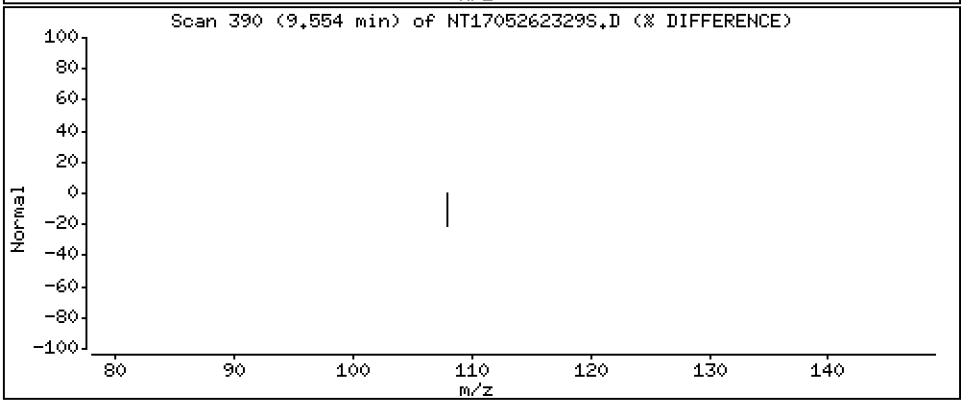












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

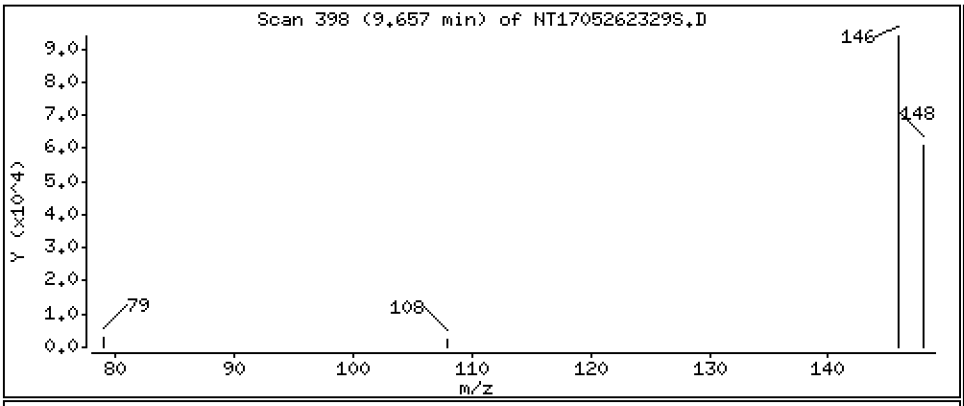
Operator: VTS

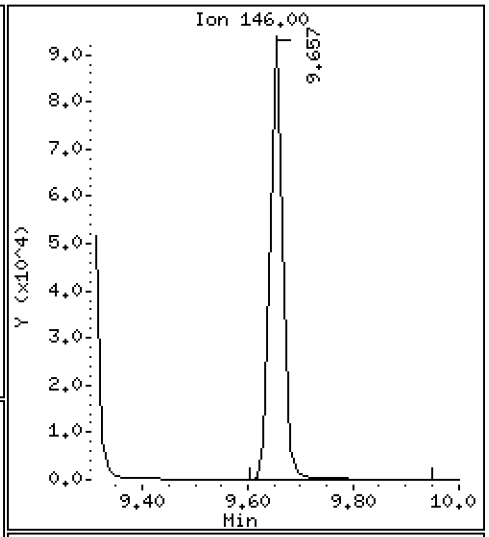
Column phase: ZB-5msi

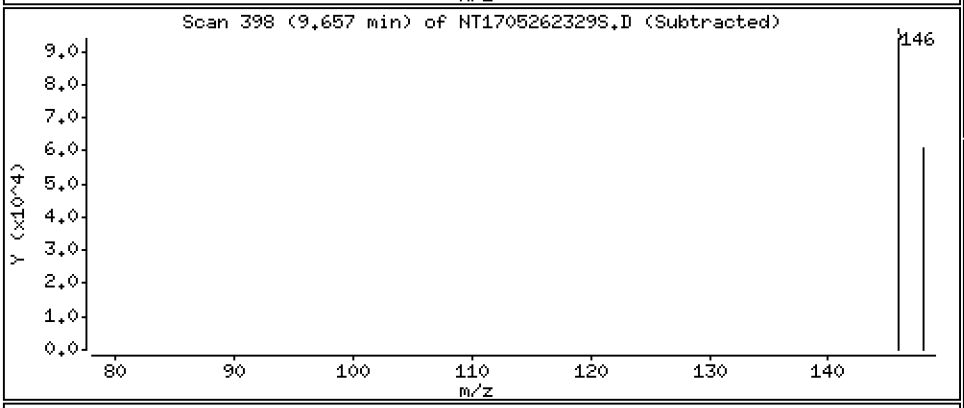
Column diameter: 0.25

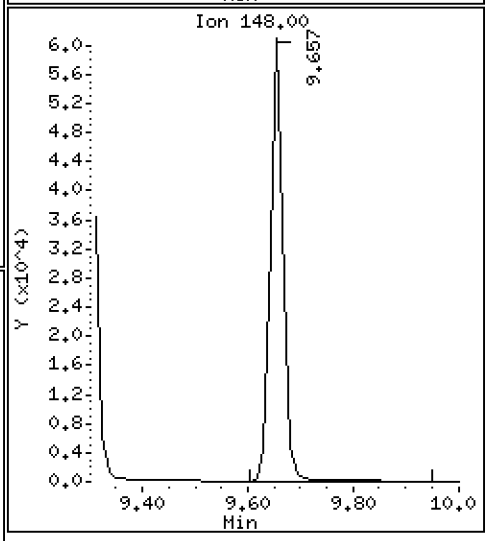
12 1,2-Dichlorobenzene

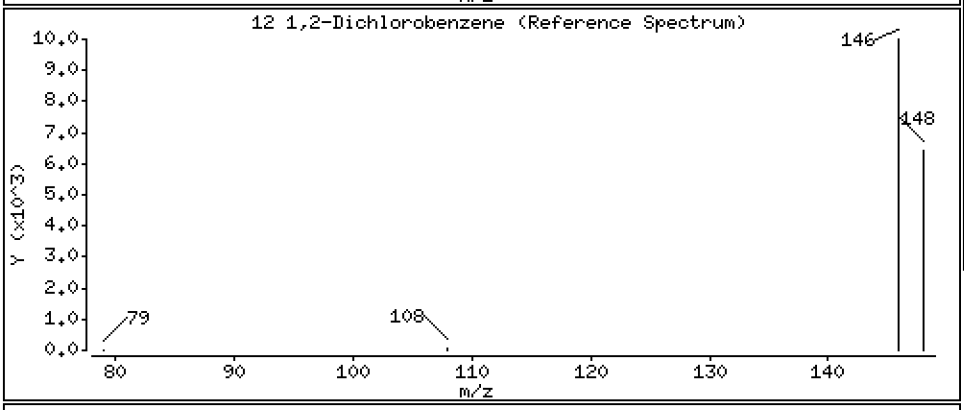
Concentration: 0.9949 ug/mL

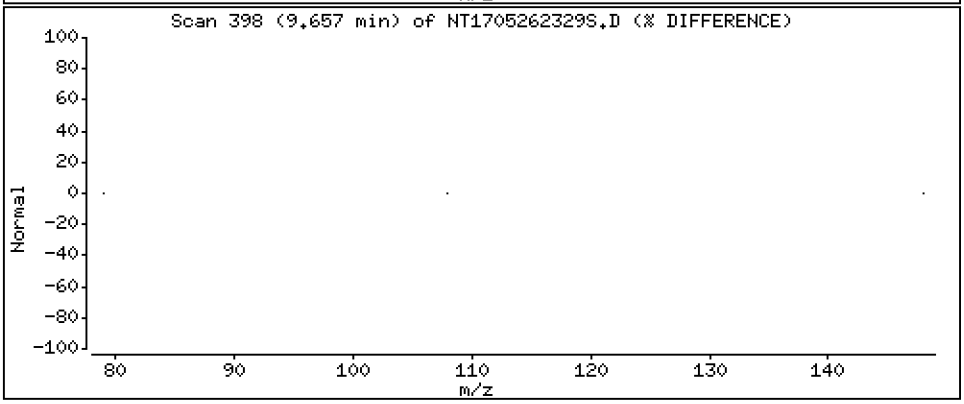












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

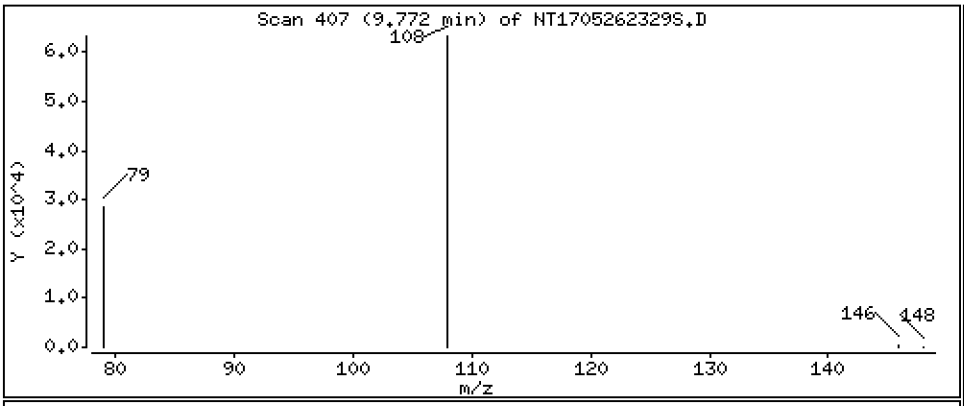
Operator: VTS

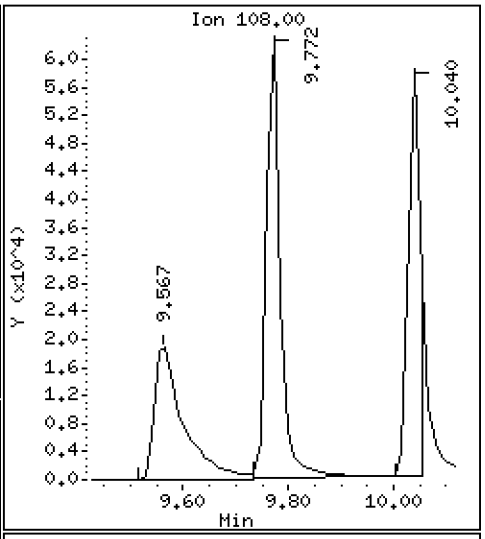
Column phase: ZB-5msi

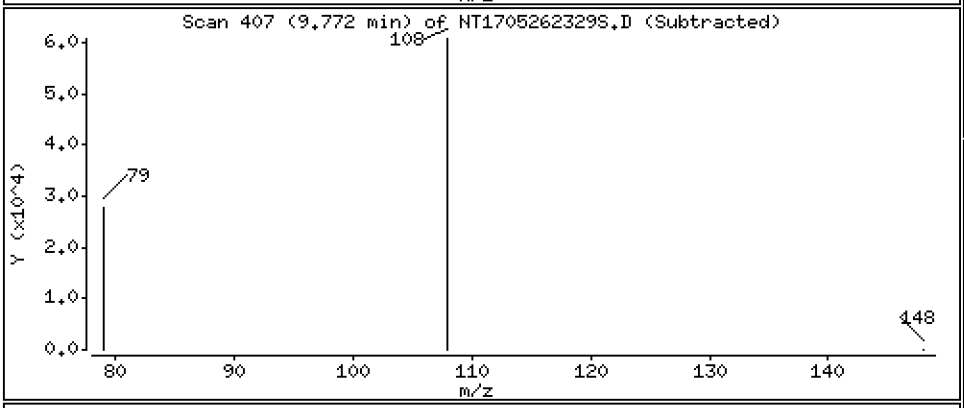
Column diameter: 0.25

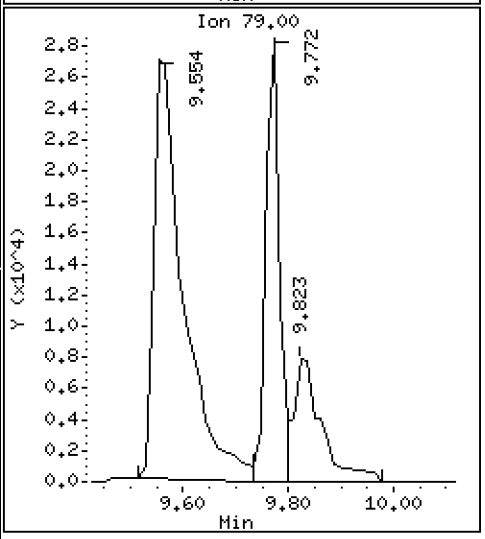
13 2-Methylphenol

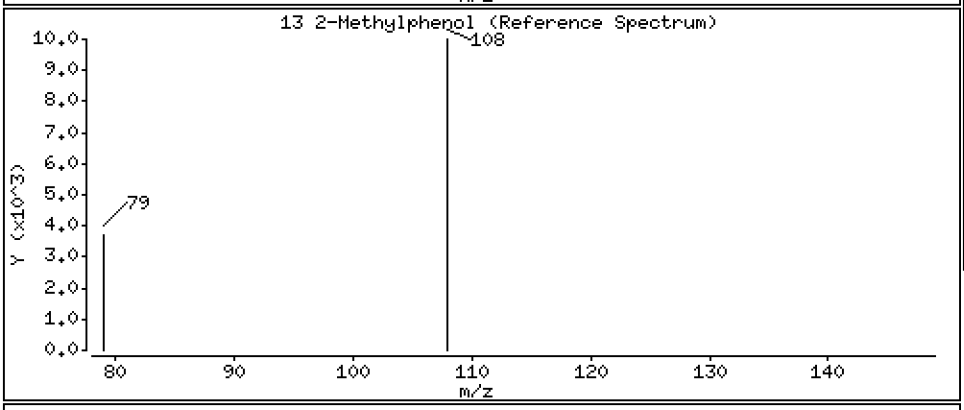
Concentration: 0.8906 ug/mL

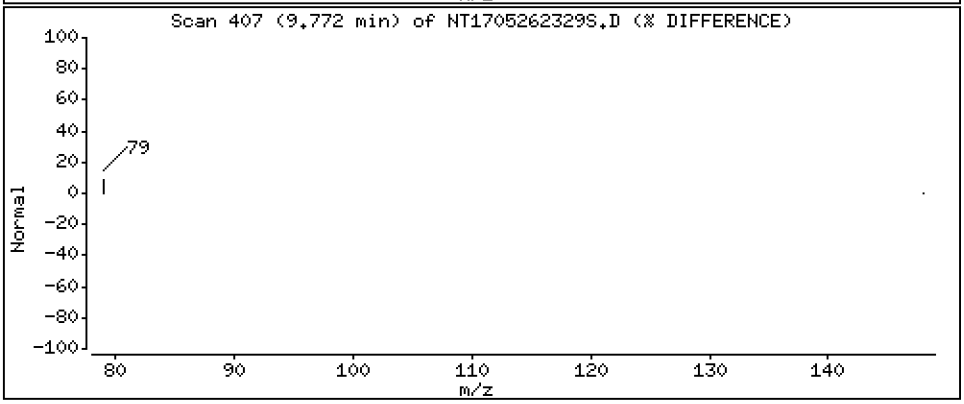












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

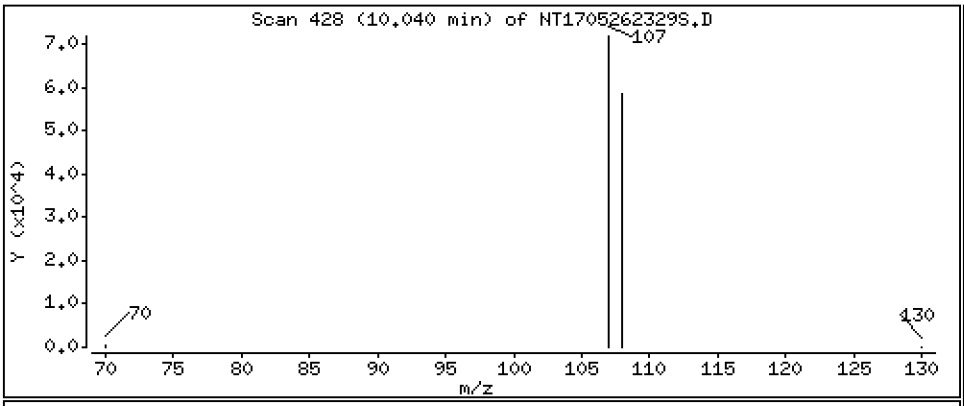
Operator: VTS

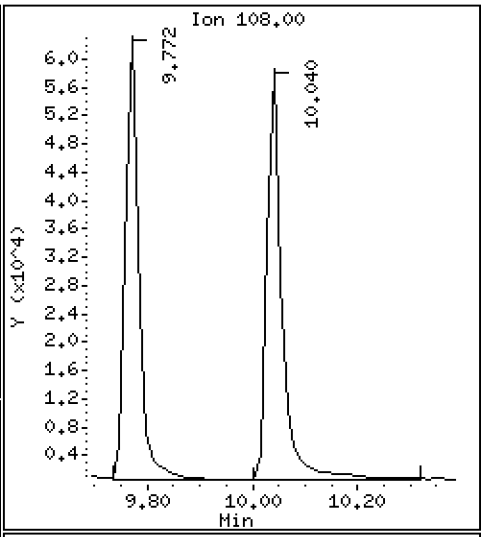
Column phase: ZB-5msi

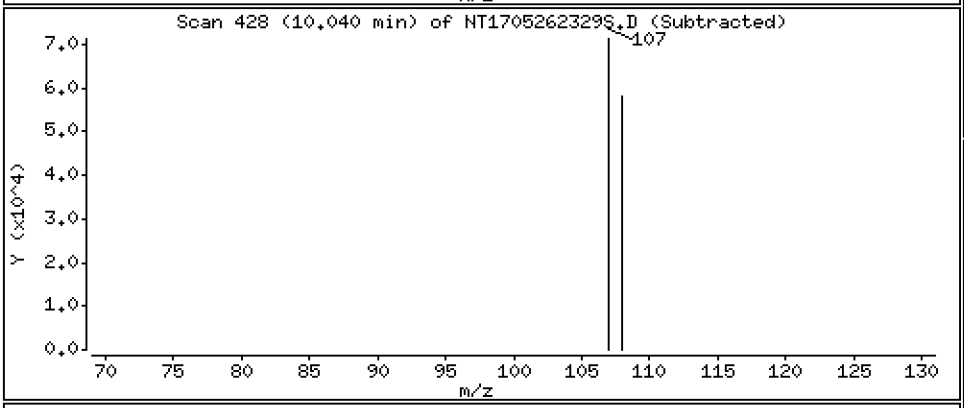
Column diameter: 0.25

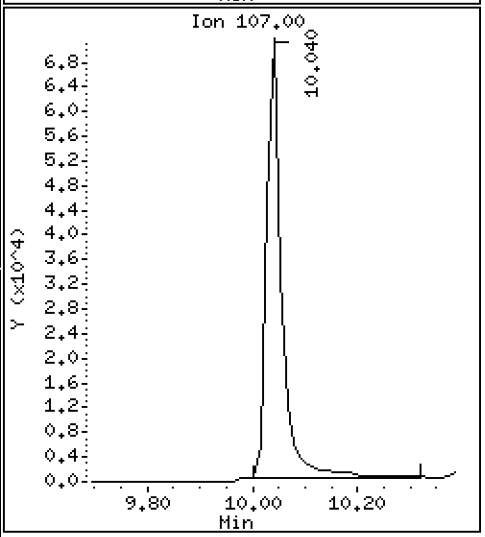
15 4-Methylphenol

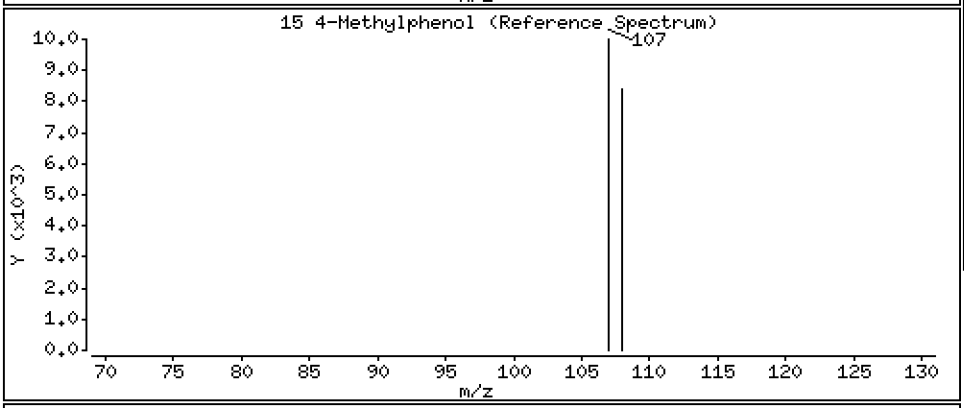
Concentration: 0.8855 ug/mL

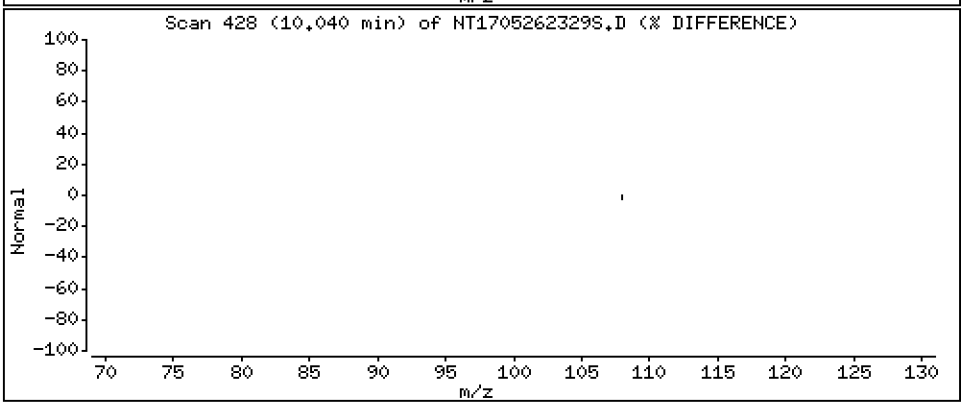












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

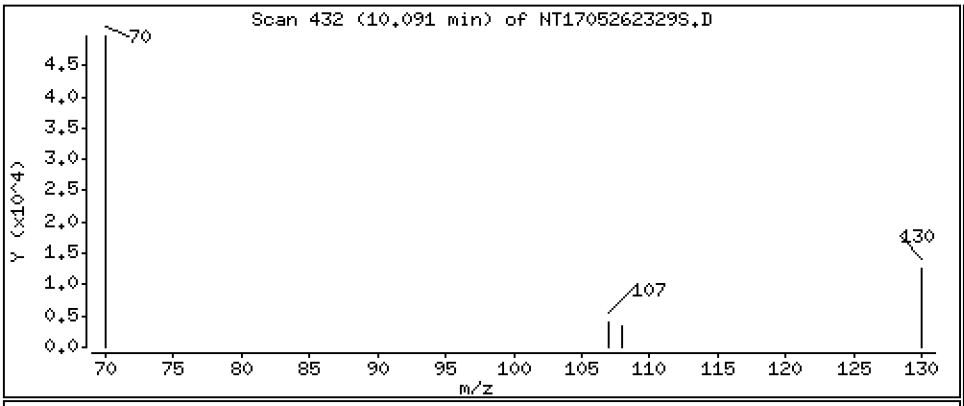
Operator: VTS

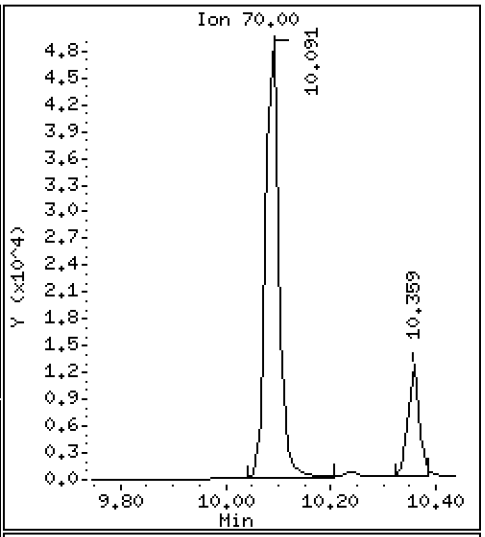
Column phase: ZB-5msi

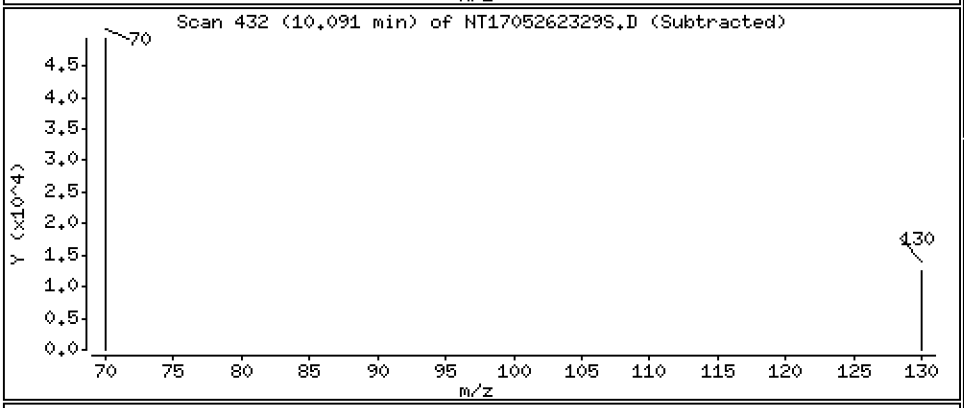
Column diameter: 0.25

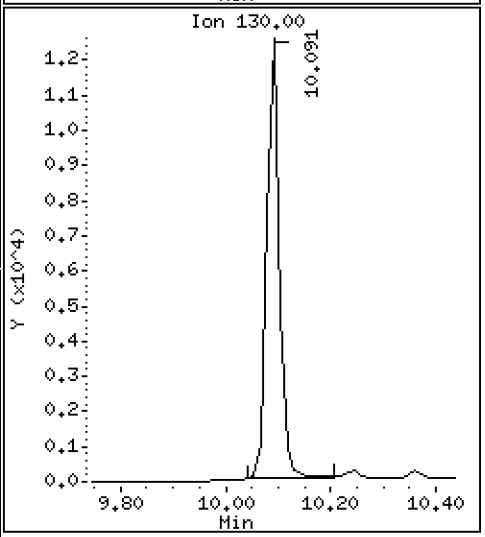
16 N-Nitroso-di-n-propylamine

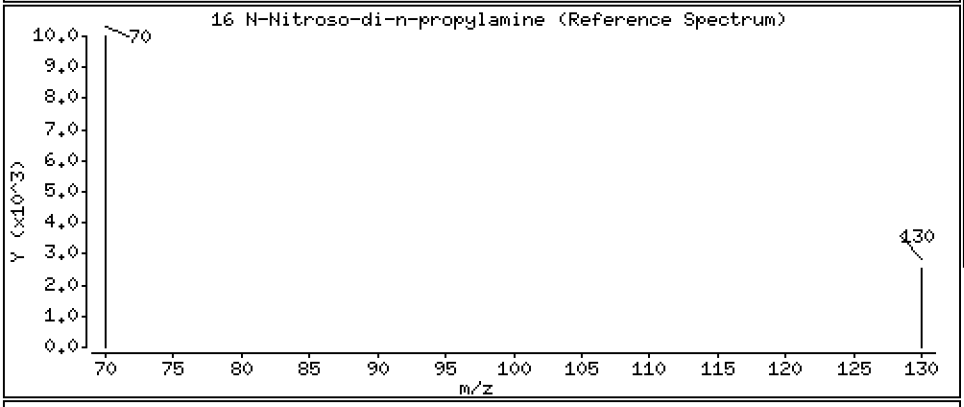
Concentration: 0.9440 ug/mL

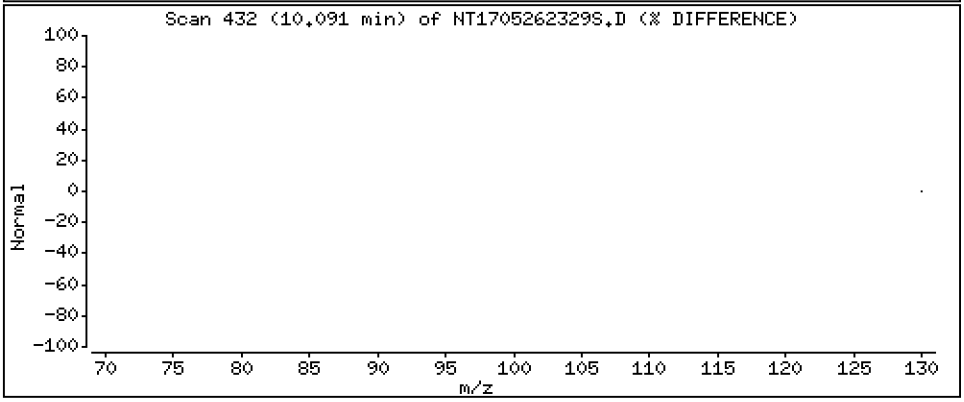












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

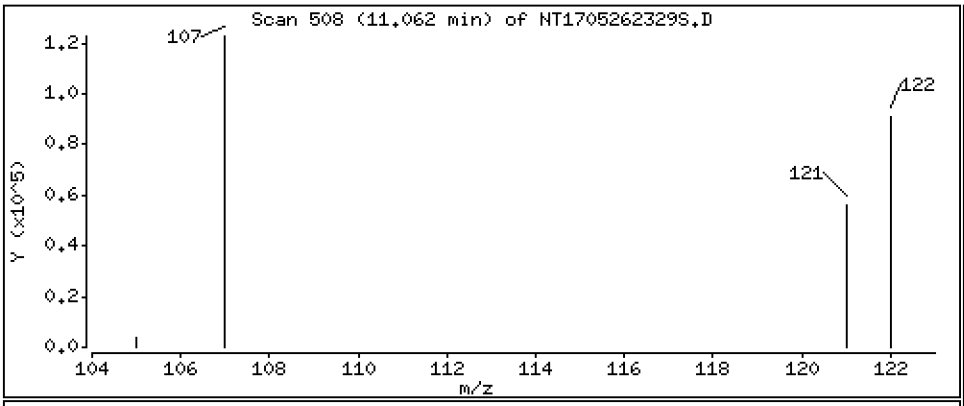
Operator: VTS

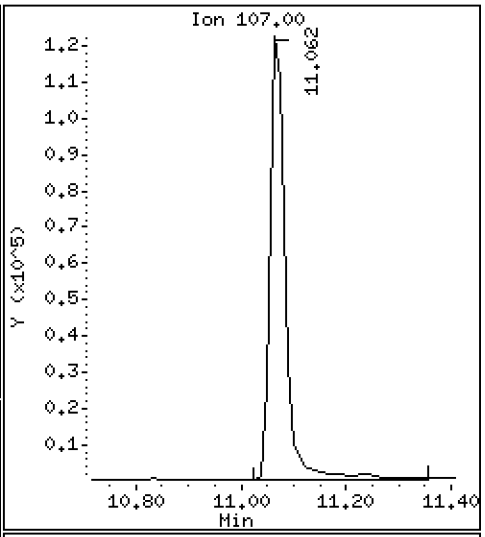
Column phase: ZB-5msi

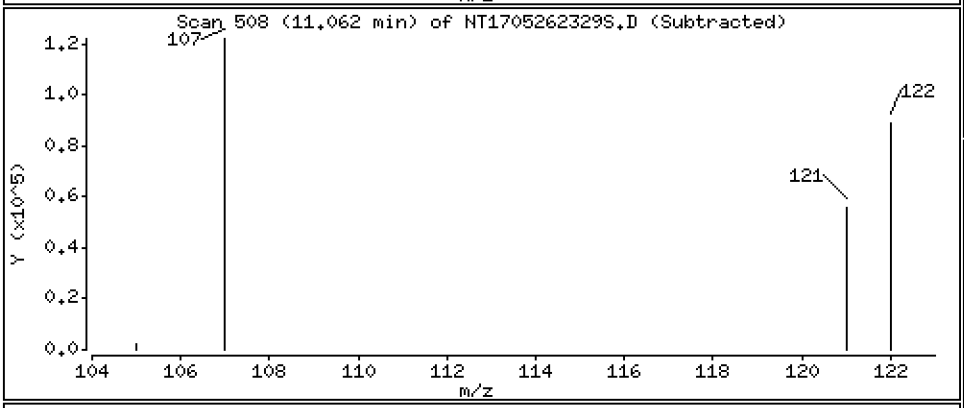
Column diameter: 0.25

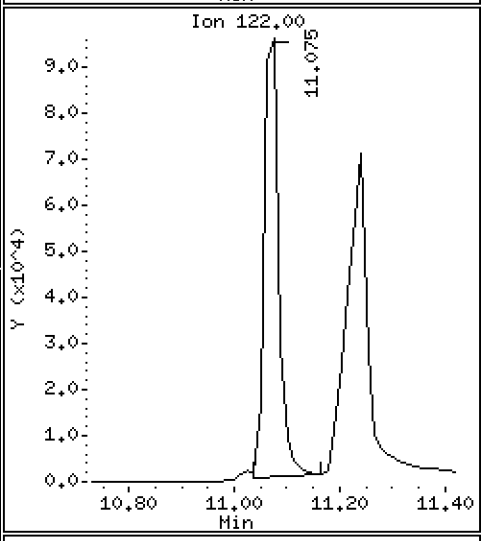
22 2,4-Dimethylphenol

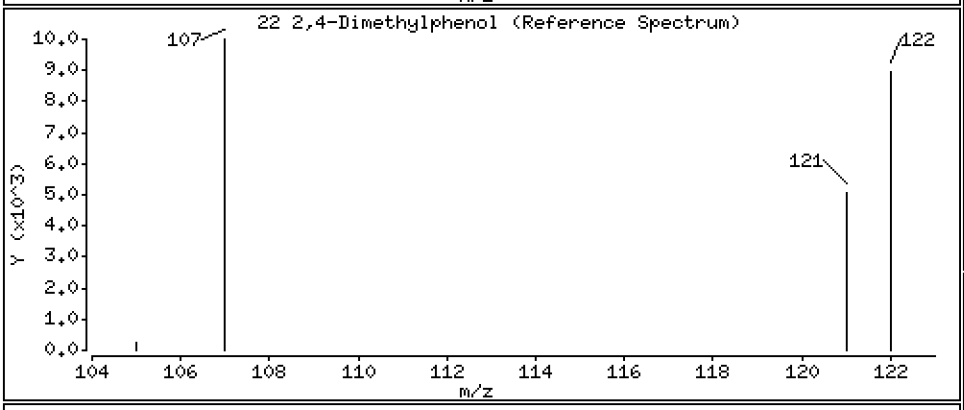
Concentration: 1.982 ug/mL

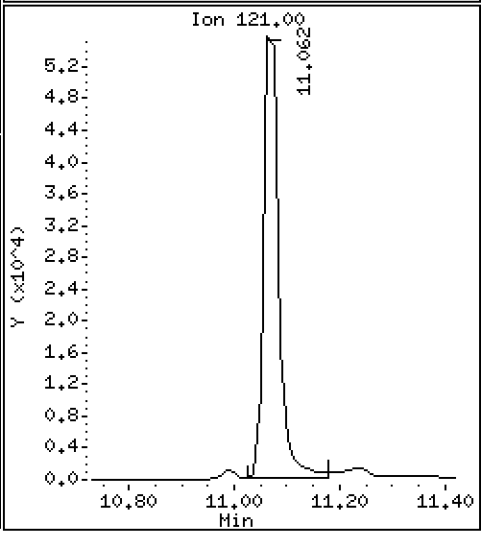


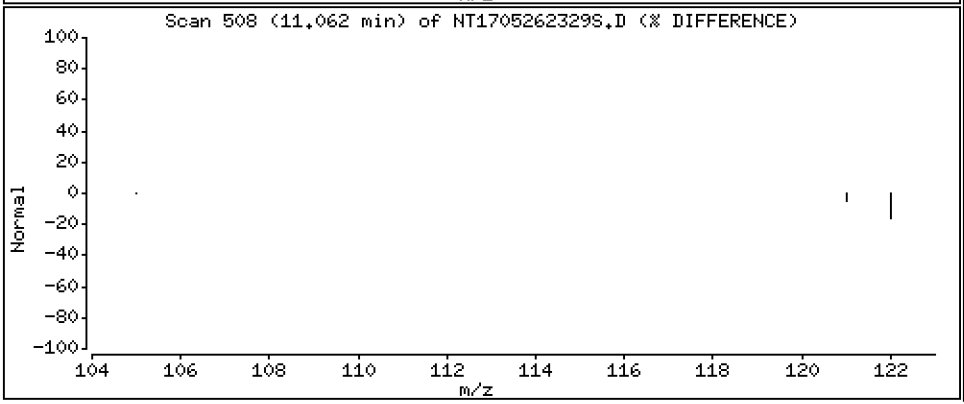












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

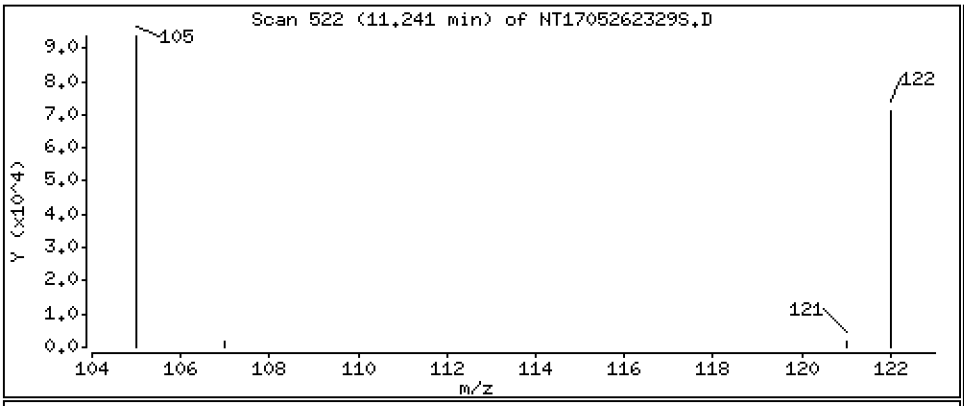
Operator: VTS

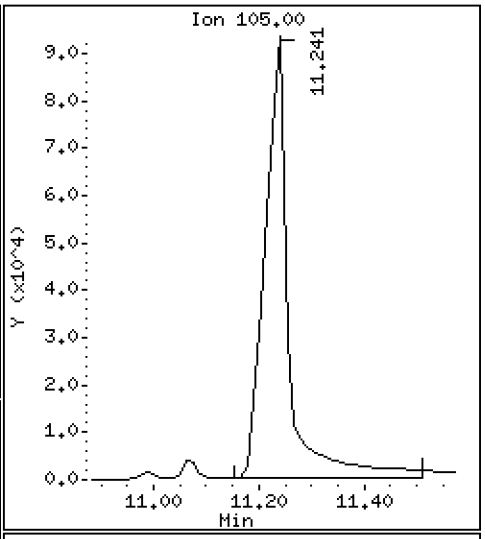
Column phase: ZB-5msi

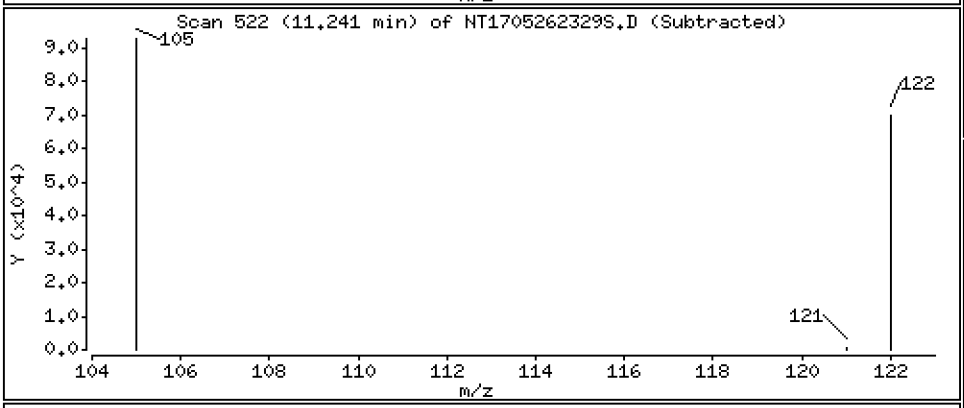
Column diameter: 0.25

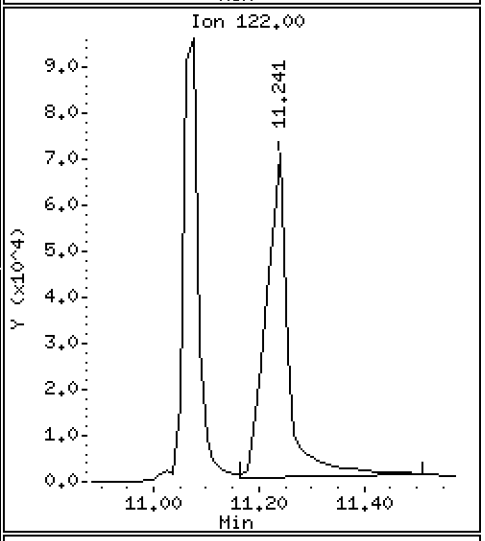
24 Benzoic acid

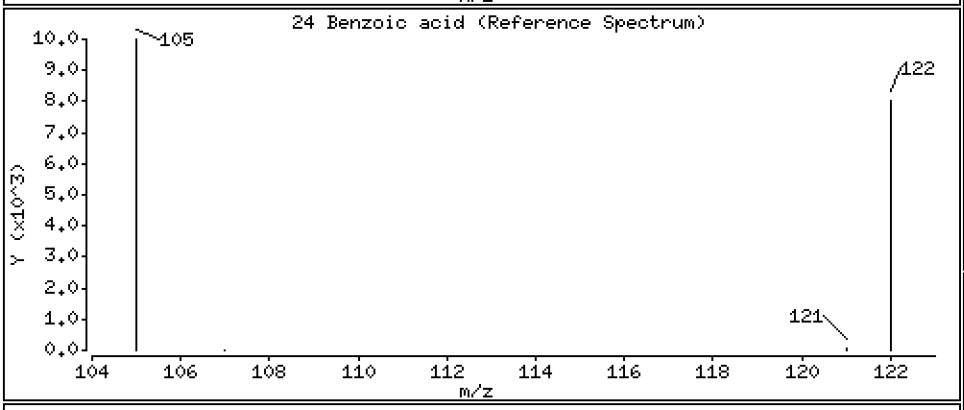
Concentration: 3.815 ug/mL

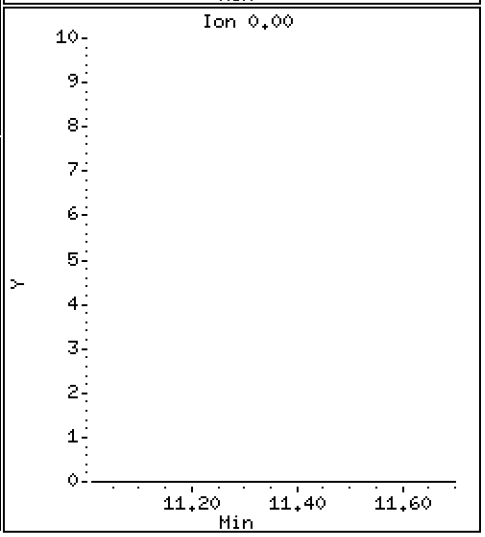


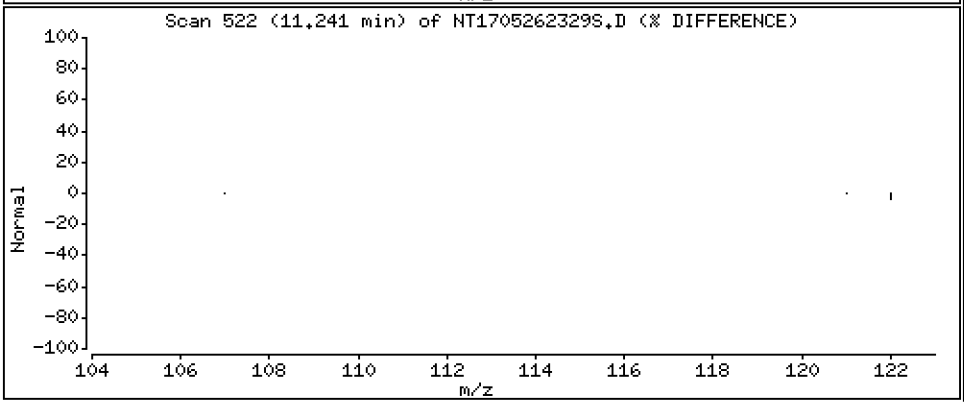












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

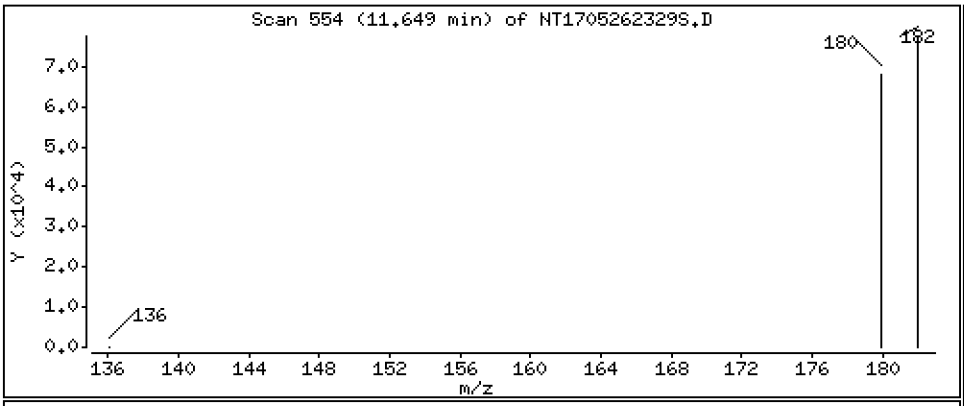
Operator: VTS

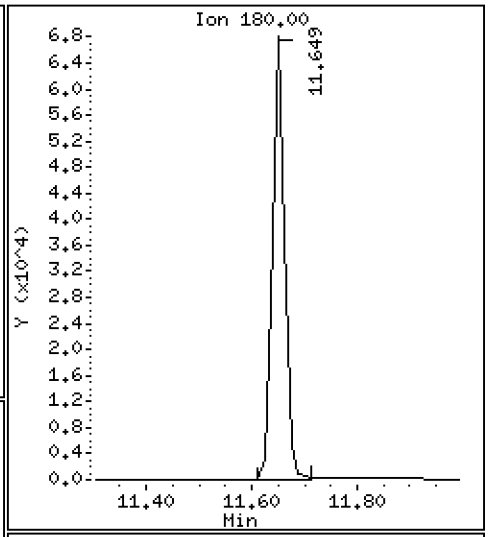
Column phase: ZB-5msi

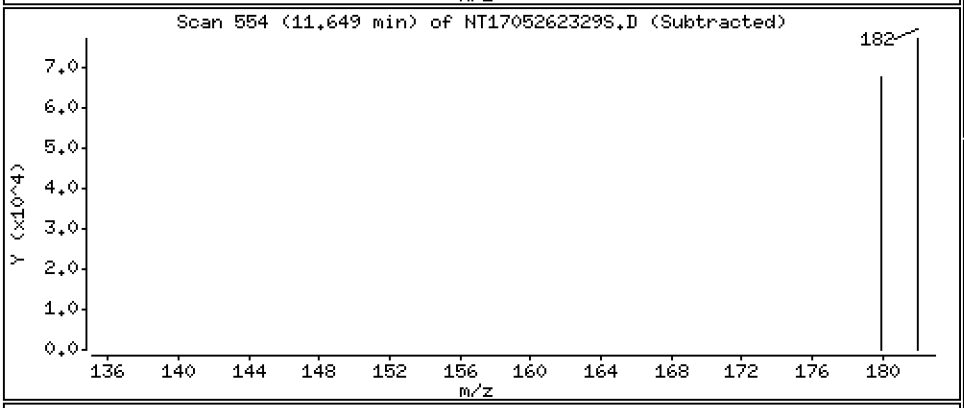
Column diameter: 0.25

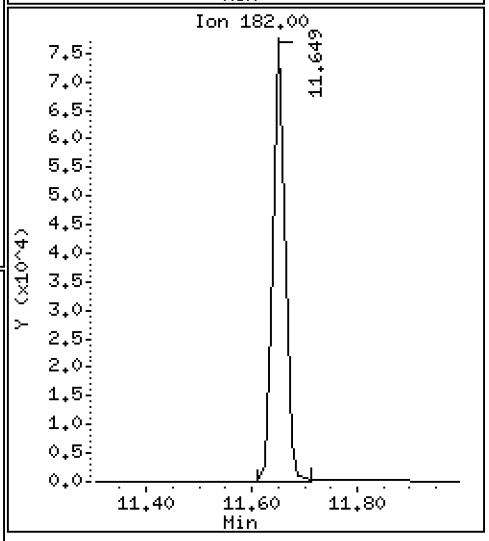
26 1,2,4-Trichlorobenzene

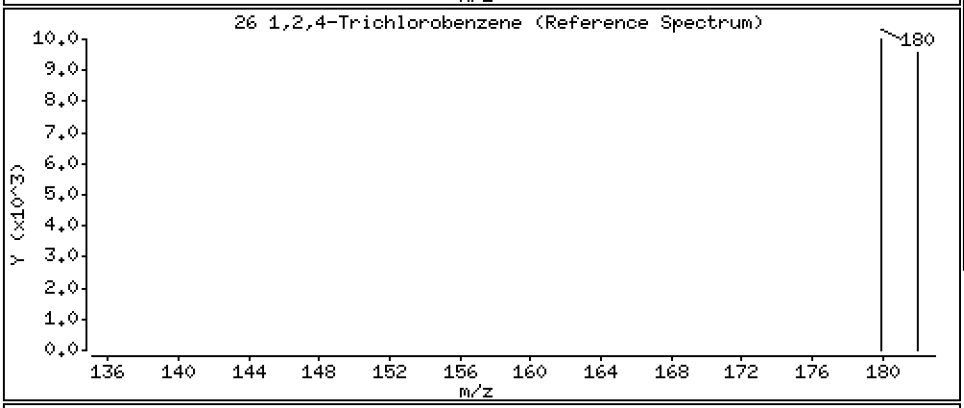
Concentration: 0.9574 ug/mL

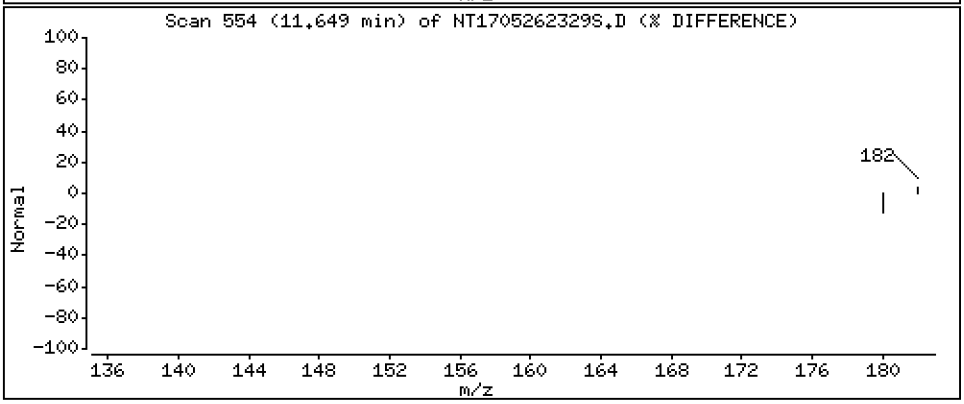












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

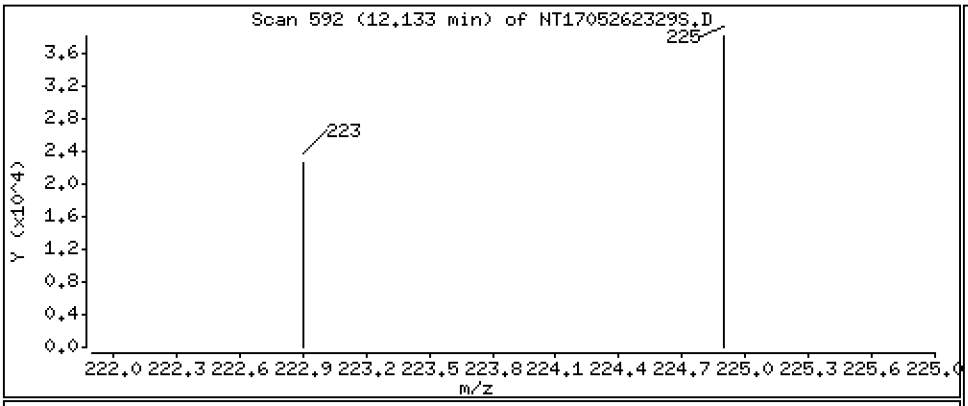
Operator: VTS

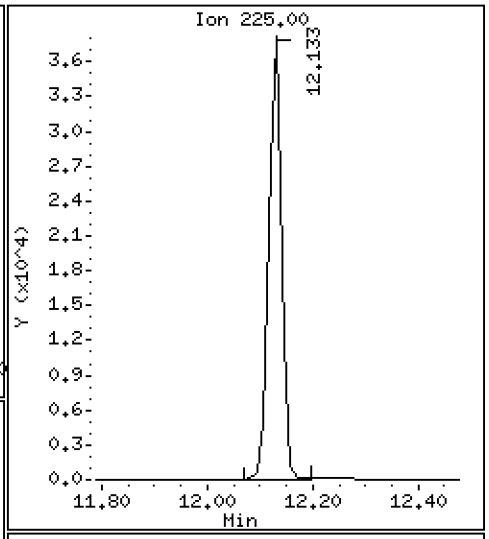
Column phase: ZB-5msi

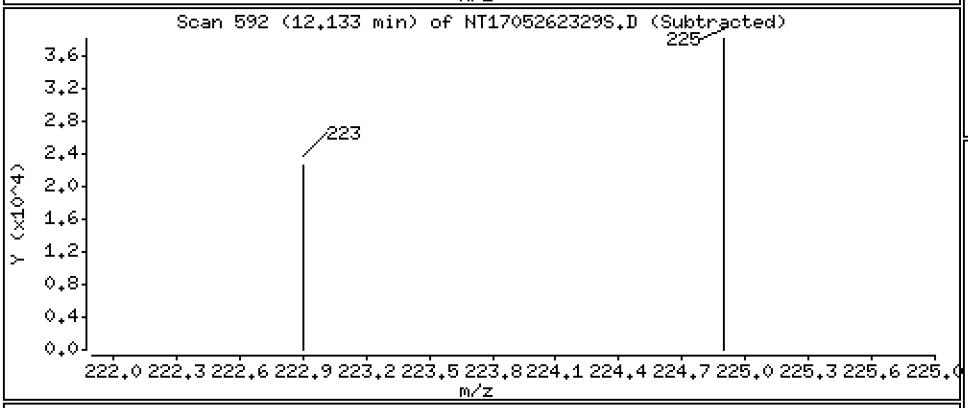
Column diameter: 0.25

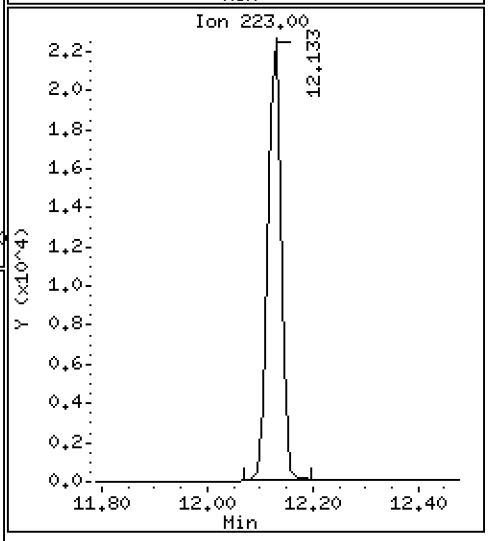
30 Hexachlorobutadiene

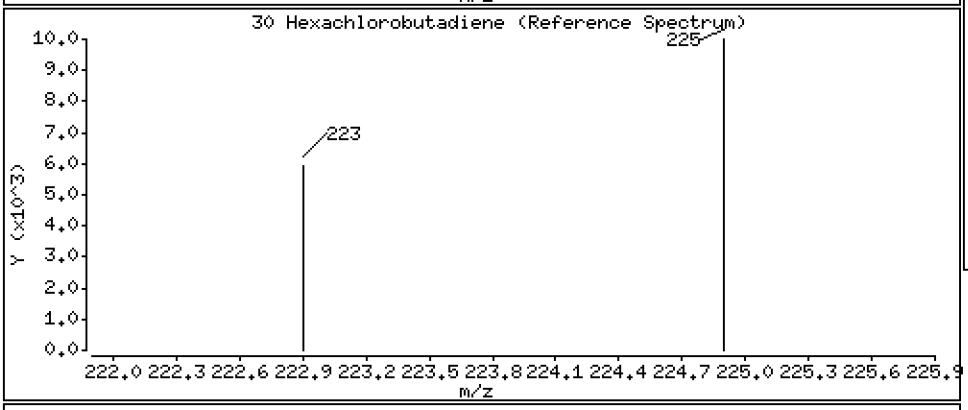
Concentration: 1.072 ug/mL

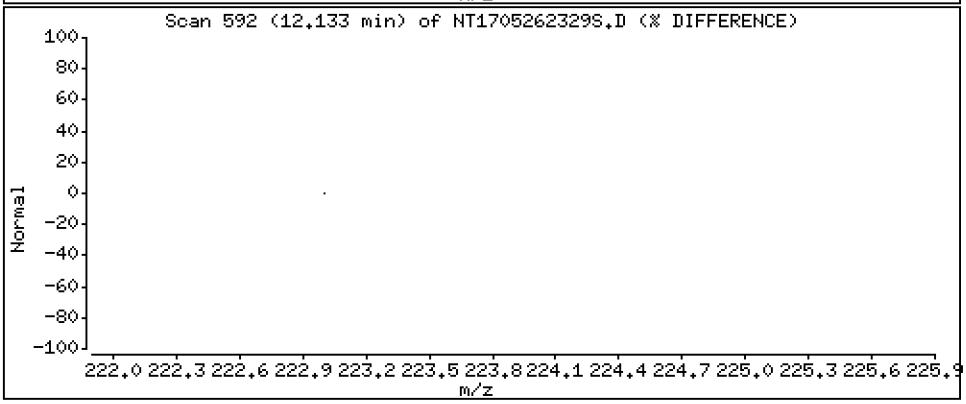












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

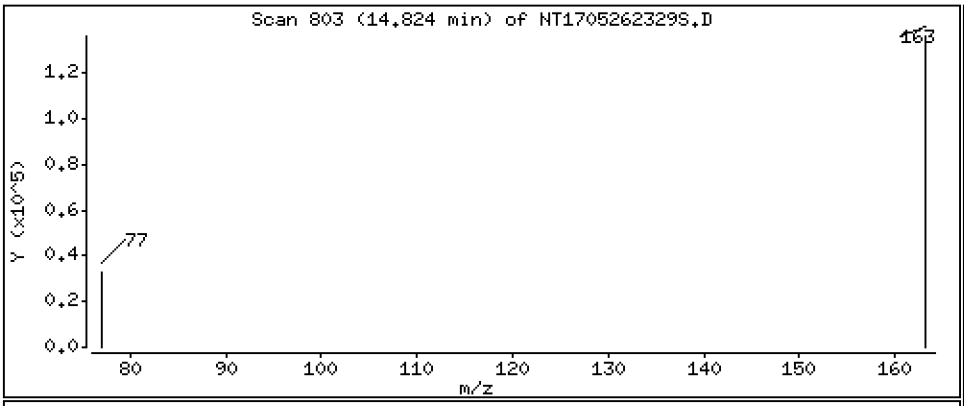
Operator: VTS

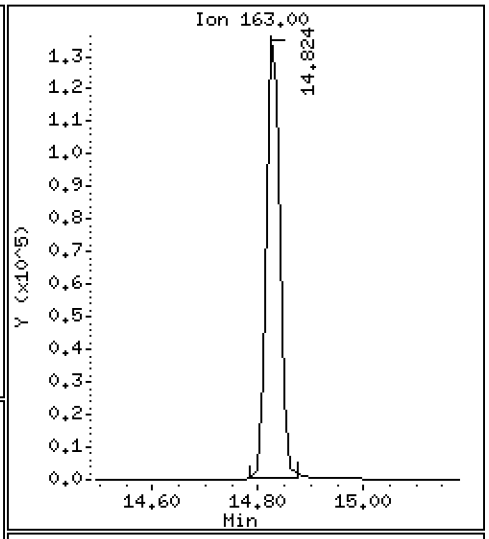
Column phase: ZB-5msi

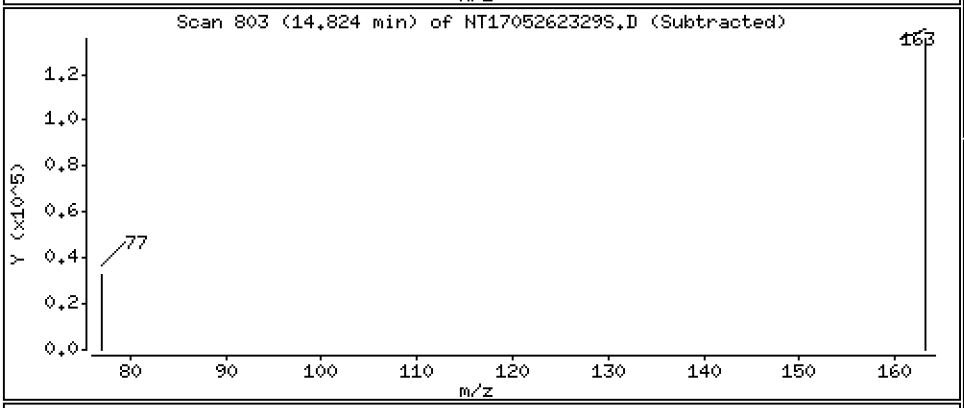
Column diameter: 0.25

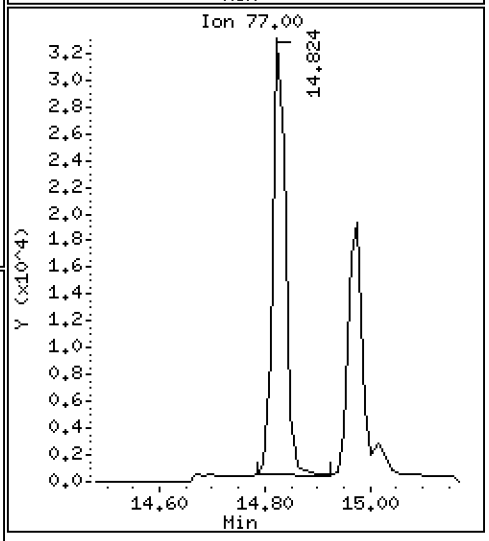
39 Dimethylphthalate

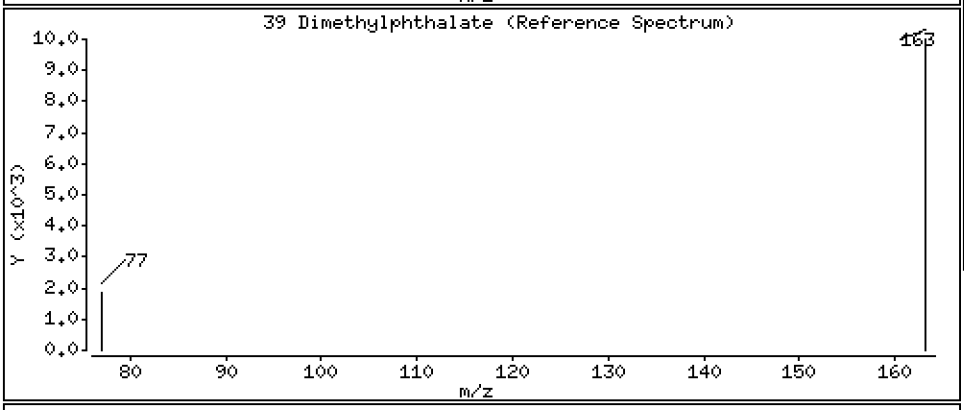
Concentration: 0.9266 ug/mL

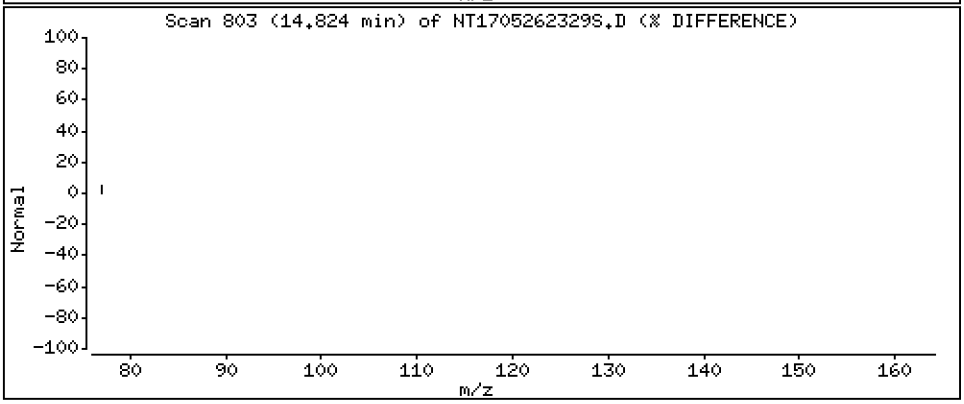












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

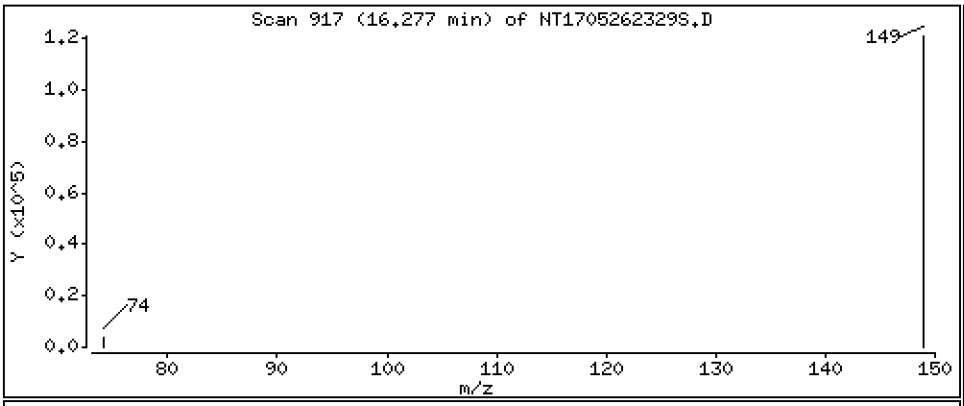
Operator: VTS

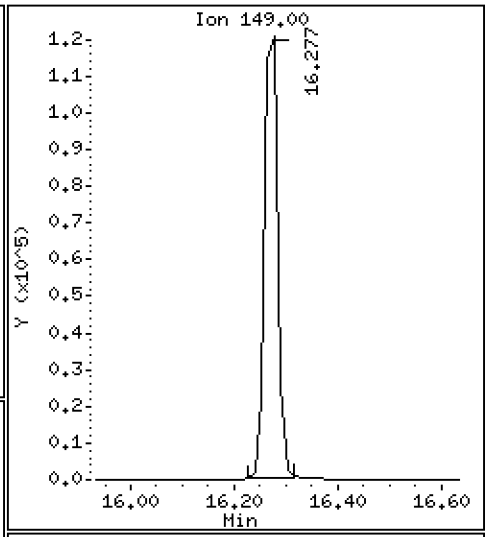
Column phase: ZB-5msi

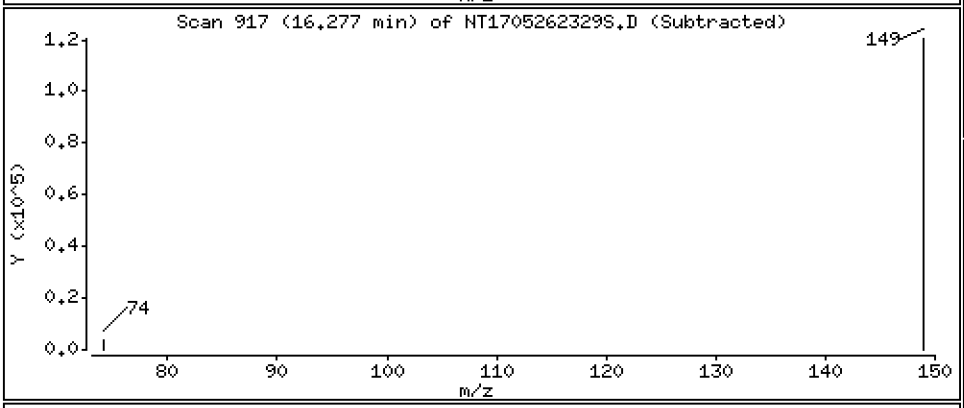
Column diameter: 0.25

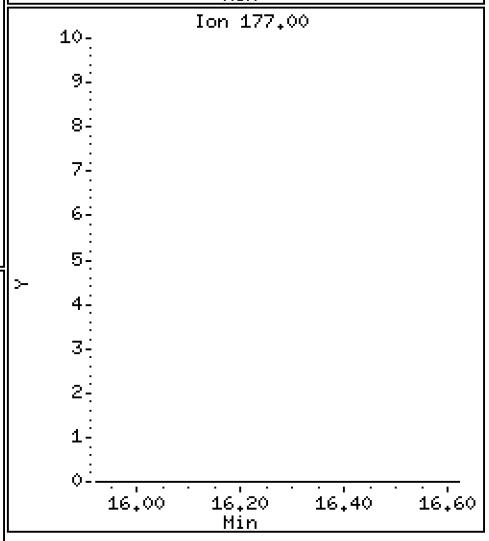
50 Diethylphthalate

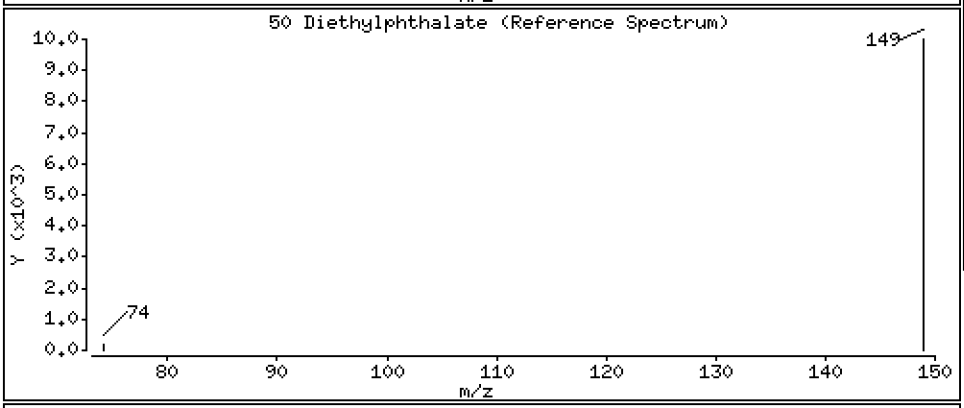
Concentration: 0.9126 ug/mL

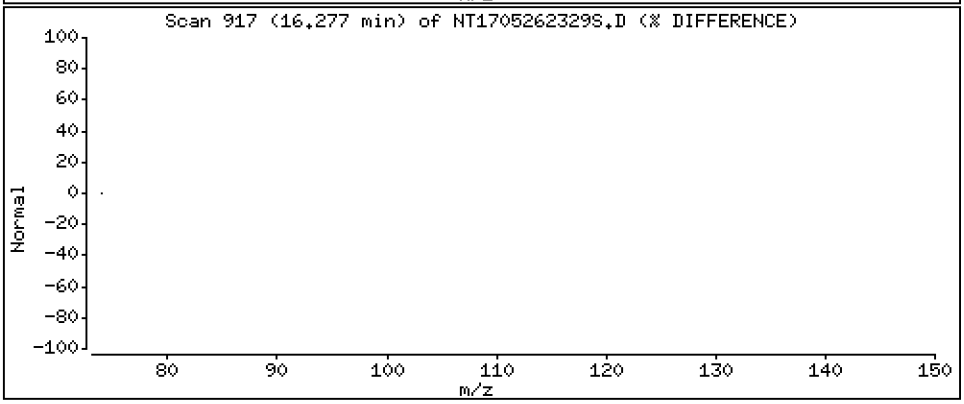












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

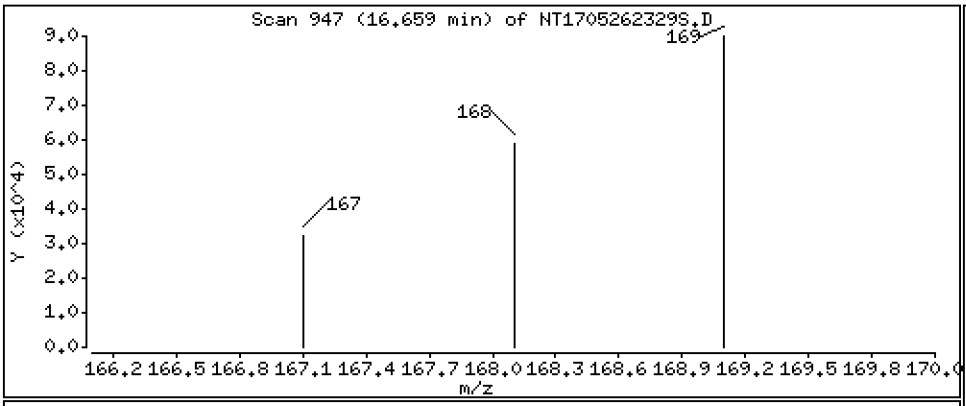
Operator: VTS

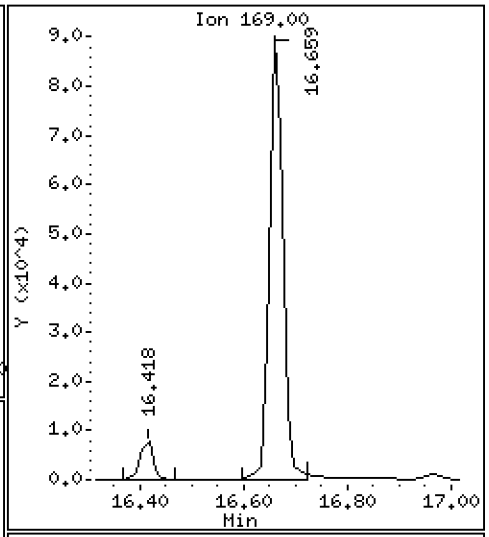
Column phase: ZB-5msi

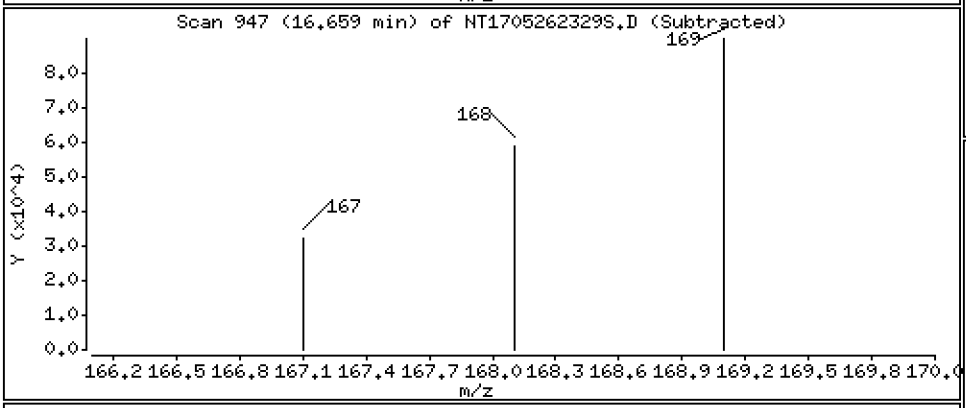
Column diameter: 0.25

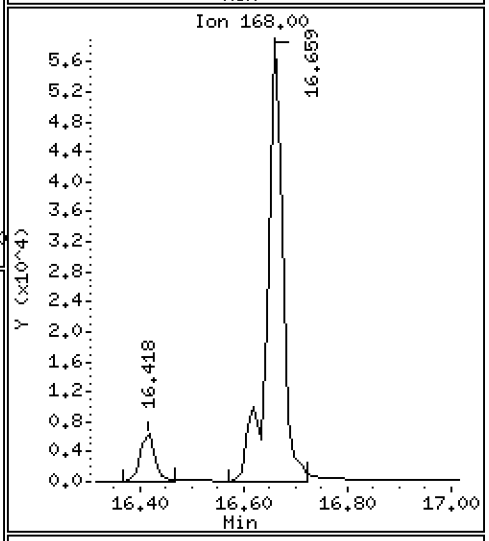
54 N-Nitrosodiphenylamine

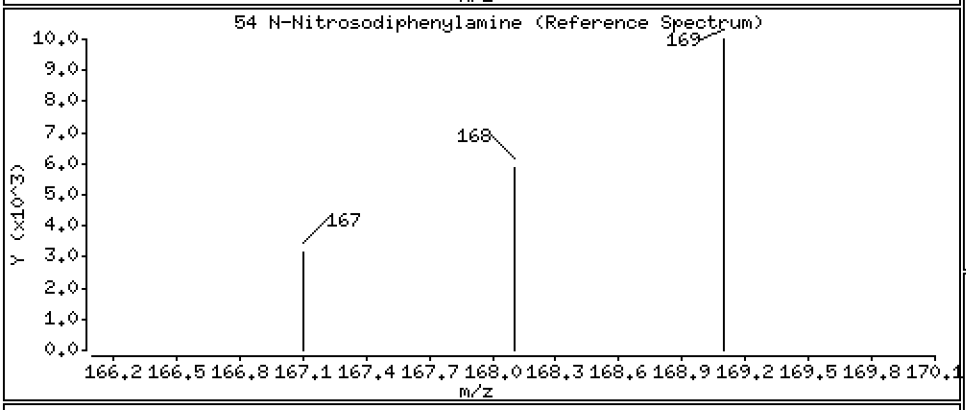
Concentration: 1.155 ug/mL

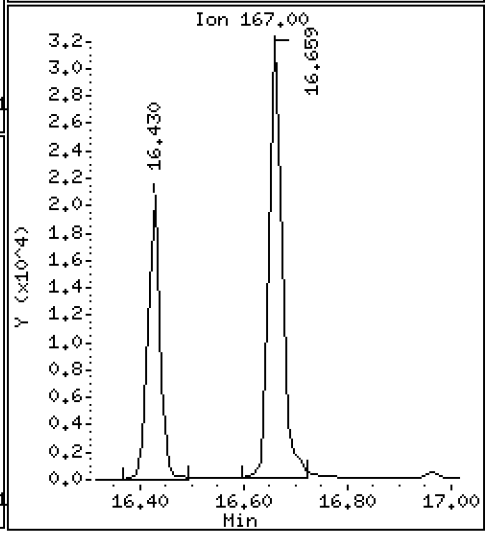


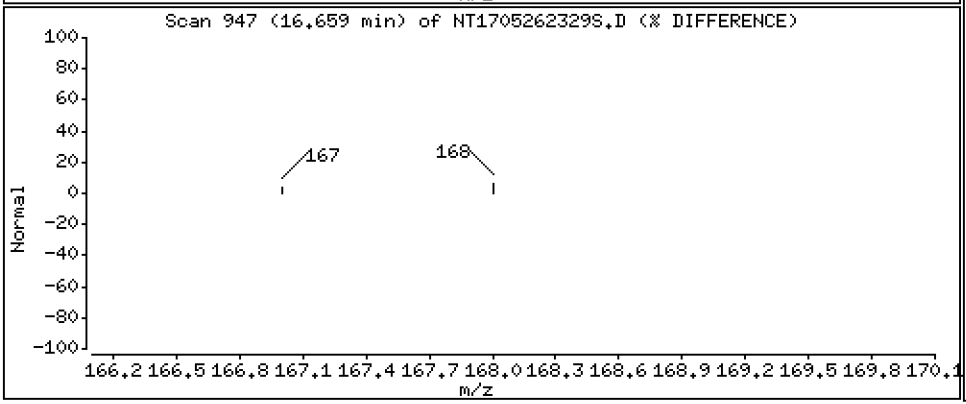












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Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

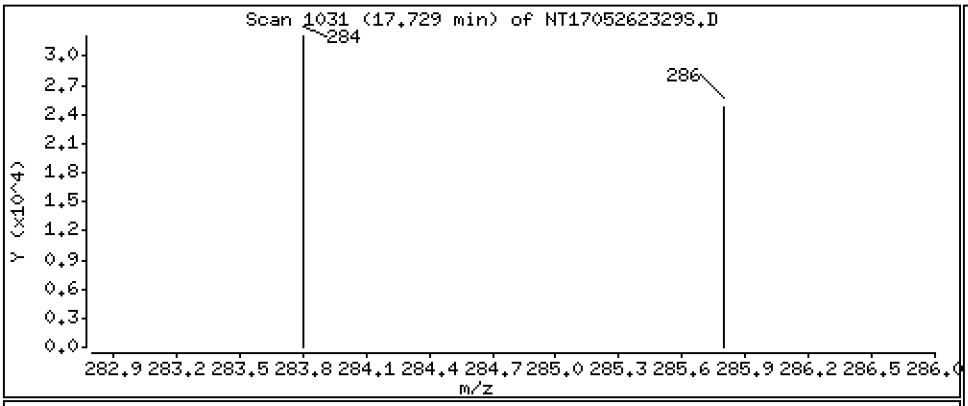
Operator: VTS

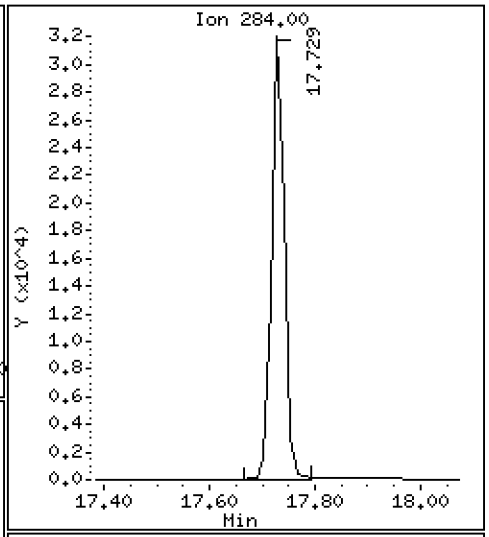
Column phase: ZB-5msi

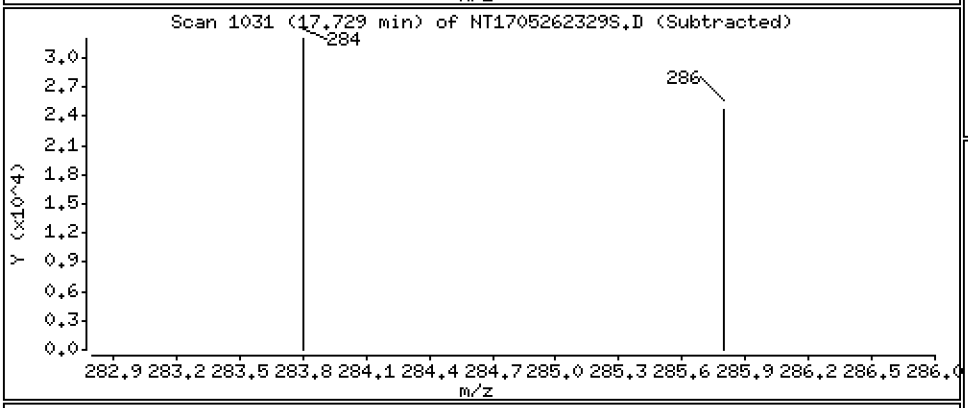
Column diameter: 0.25

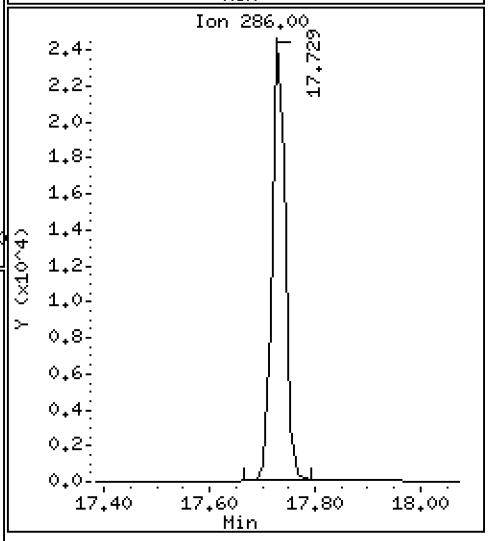
57 Hexachlorobenzene

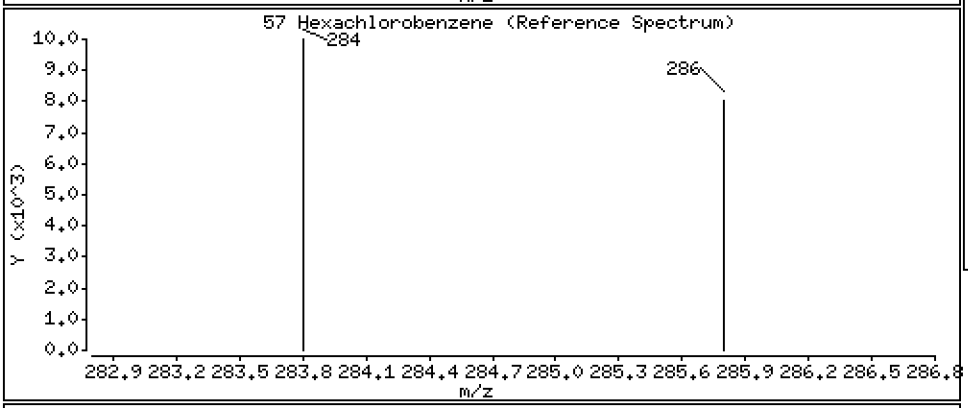
Concentration: 1.139 ug/mL

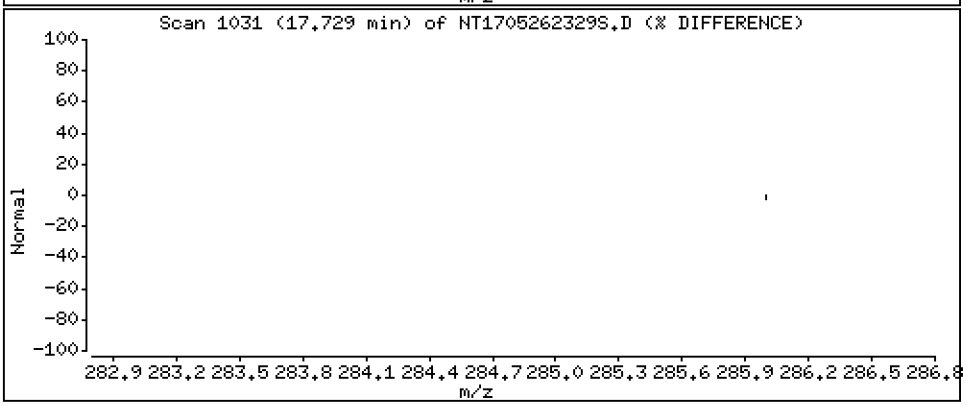












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

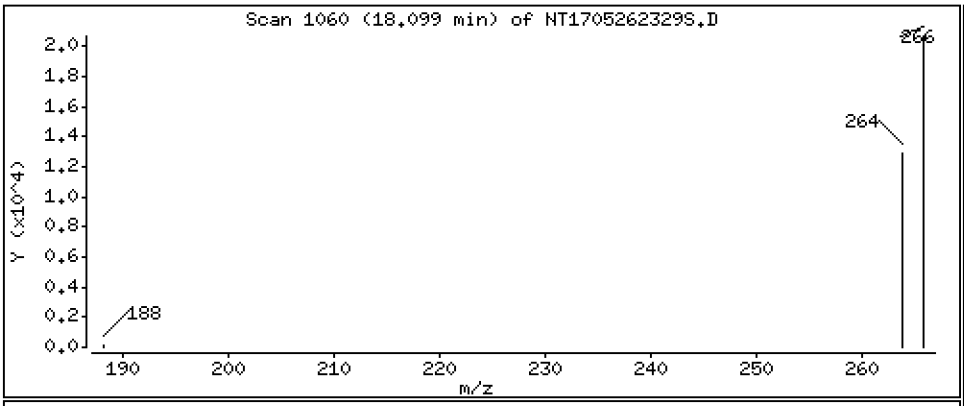
Operator: VTS

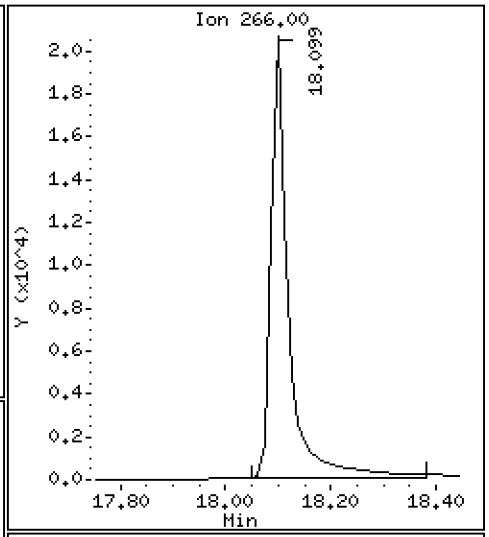
Column phase: ZB-5msi

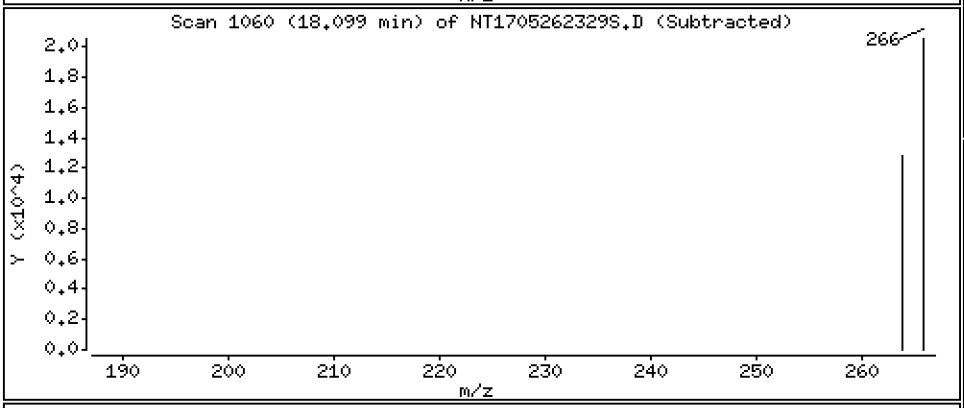
Column diameter: 0.25

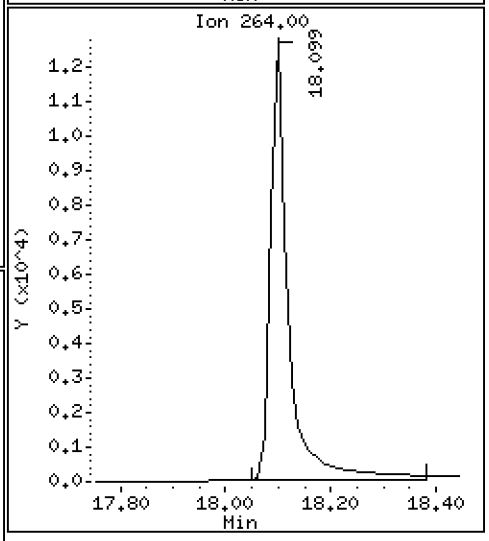
58 Pentachlorophenol

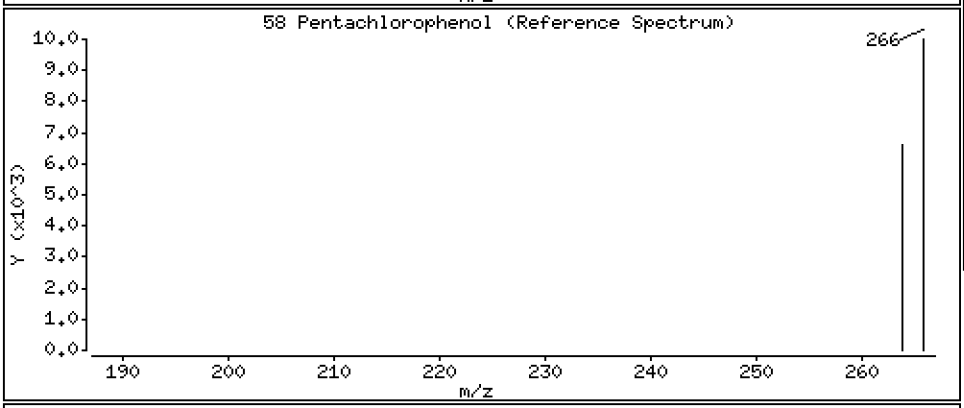
Concentration: 1.779 ug/mL

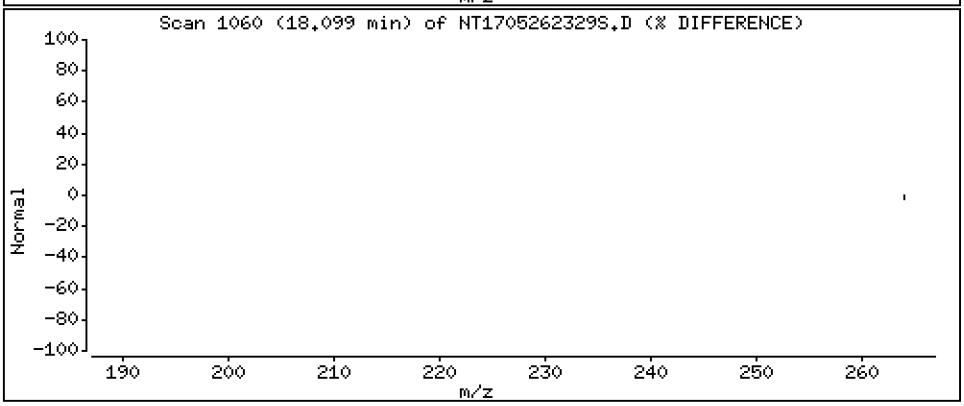












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

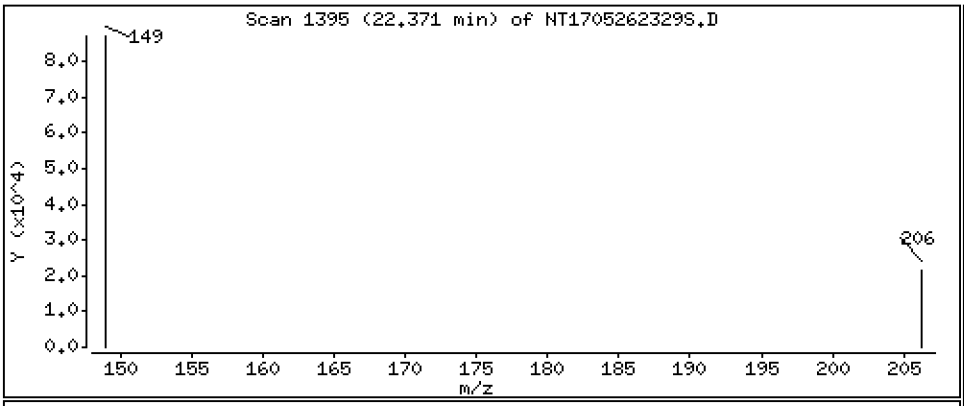
Operator: VTS

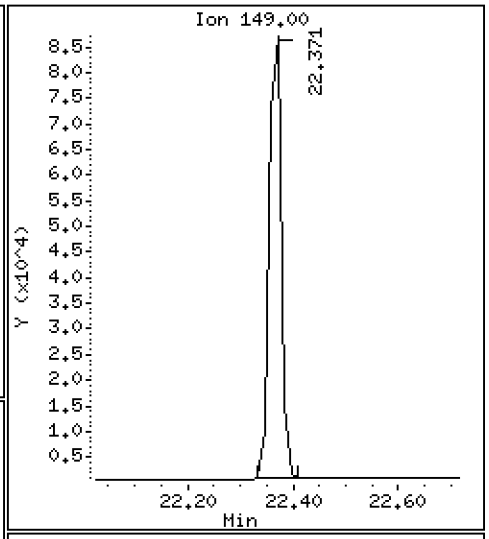
Column phase: ZB-5msi

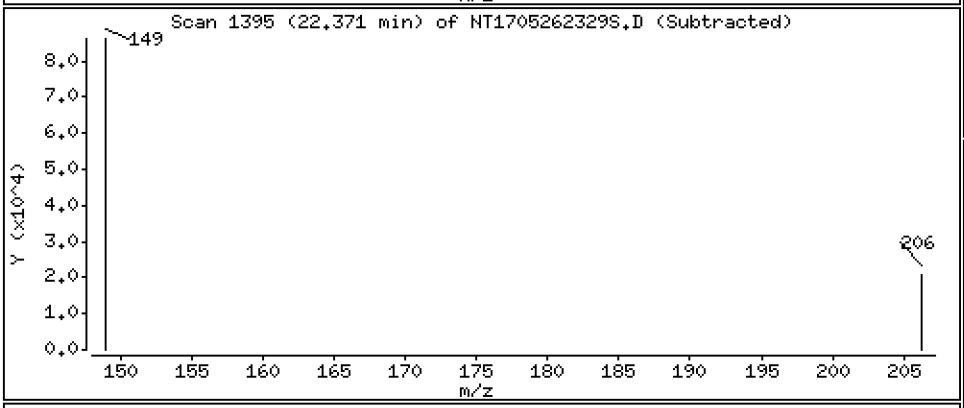
Column diameter: 0.25

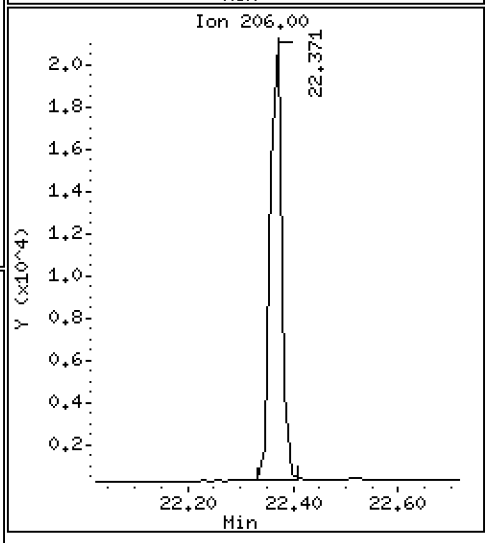
67 Butylbenzylphthalate

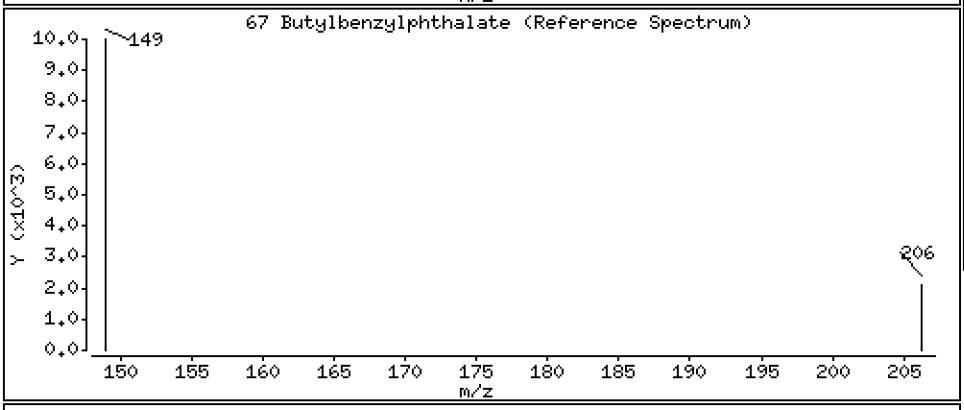
Concentration: 0.8996 ug/mL

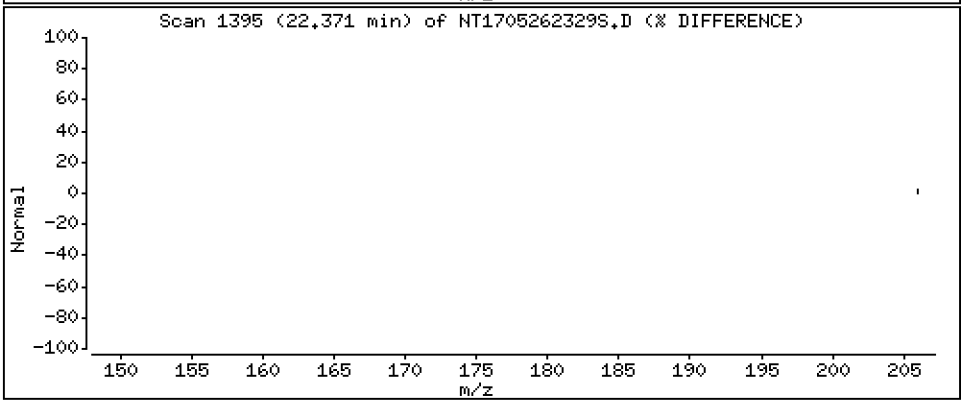












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

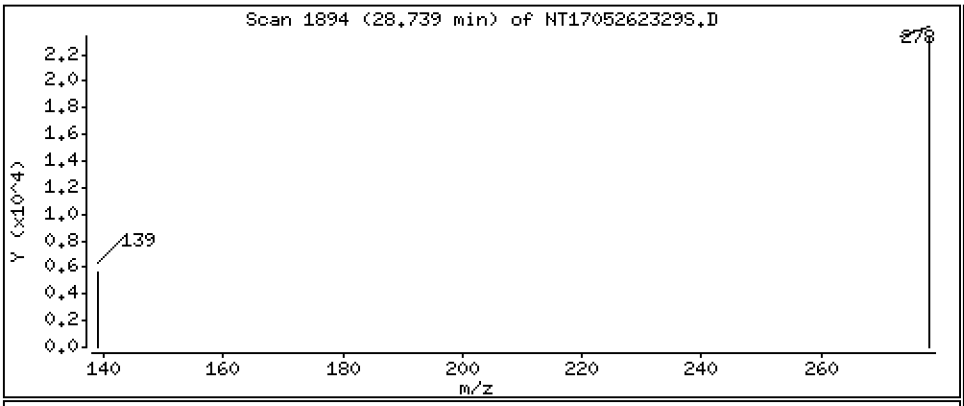
Operator: VTS

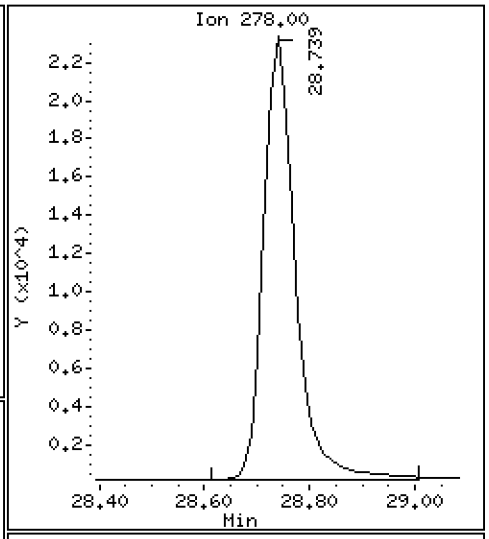
Column phase: ZB-5msi

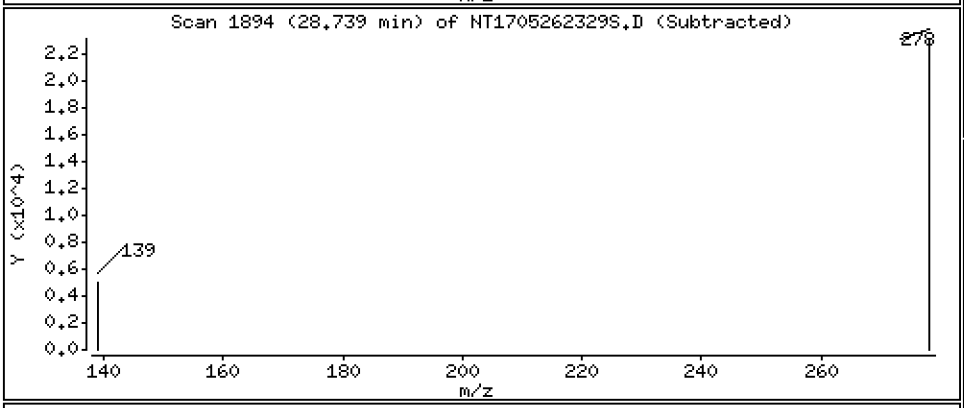
Column diameter: 0.25

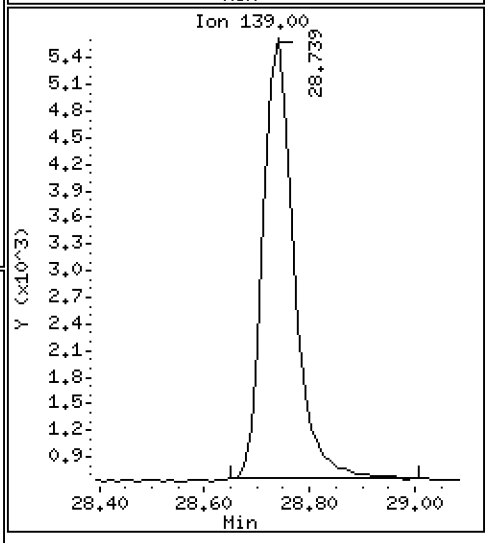
79 Dibenzo(a,h)anthracene

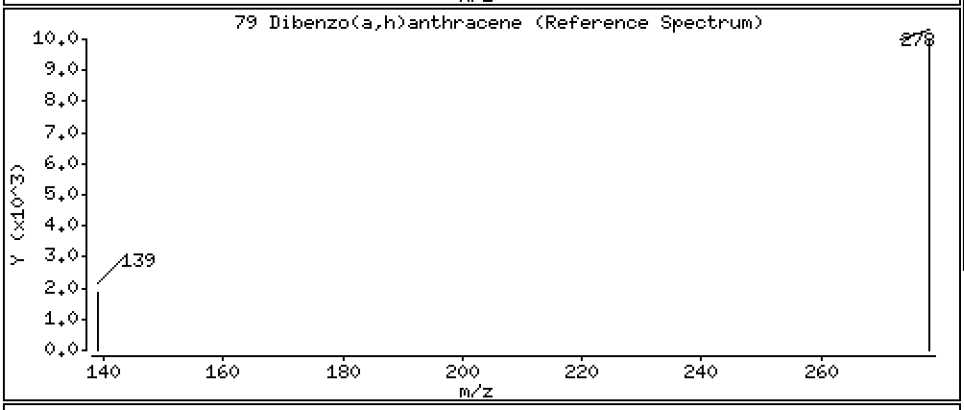
Concentration: 0.6167 ug/mL

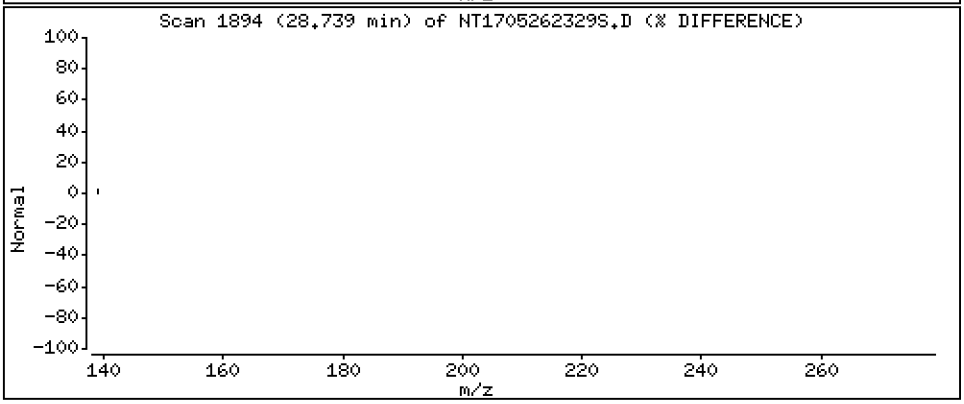












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D

Date : 27-MAY-2023 06:08

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-CCV1

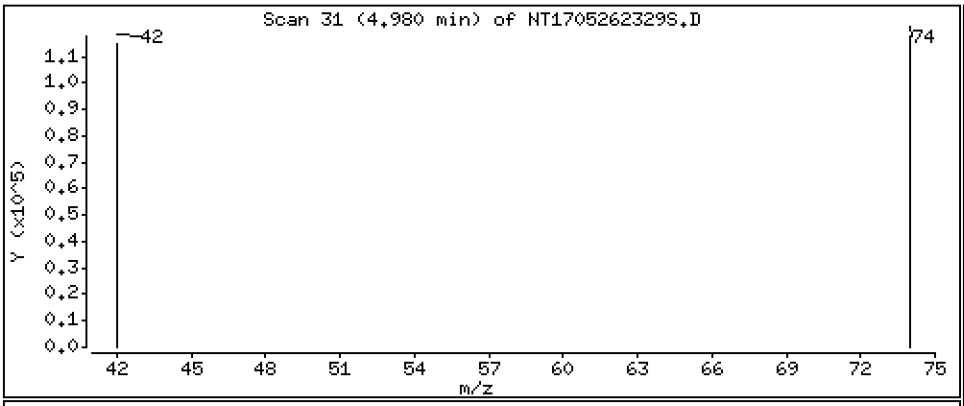
Operator: VTS

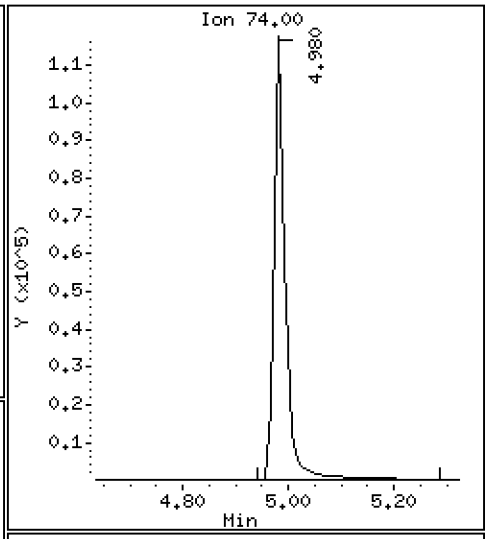
Column phase: ZB-5msi

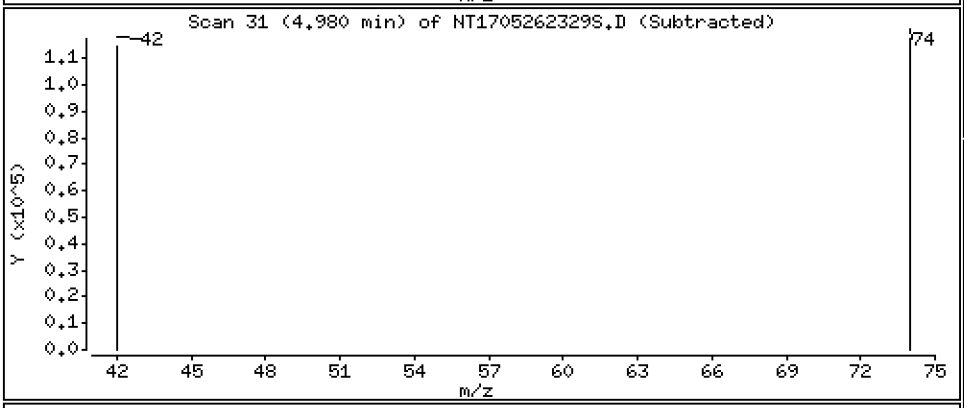
Column diameter: 0.25

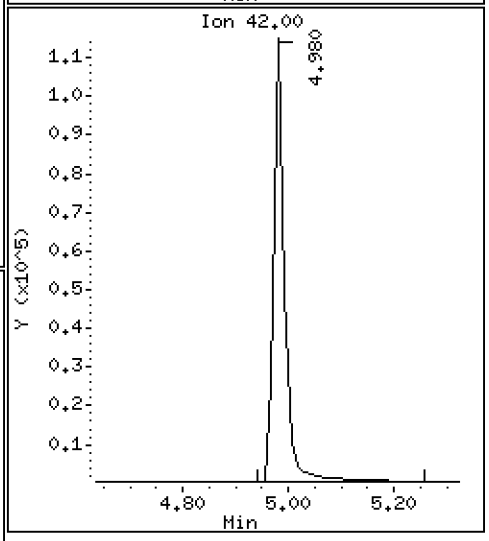
90 N-Nitrosodimethylamine

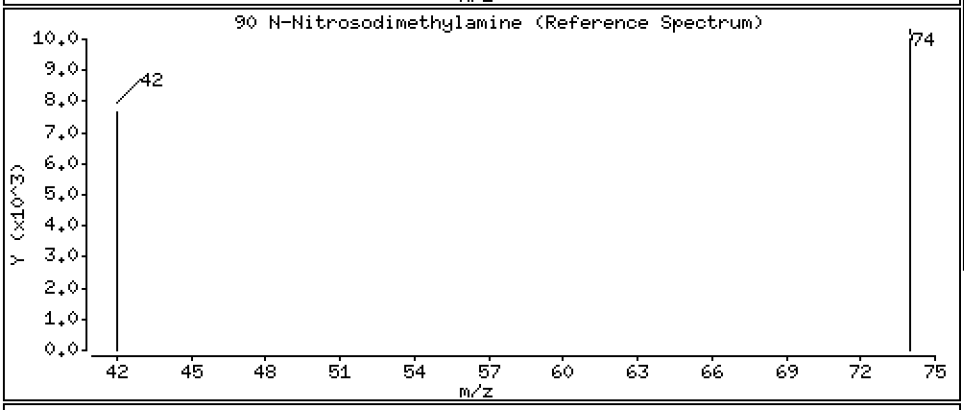
Concentration: 2.153 ug/mL

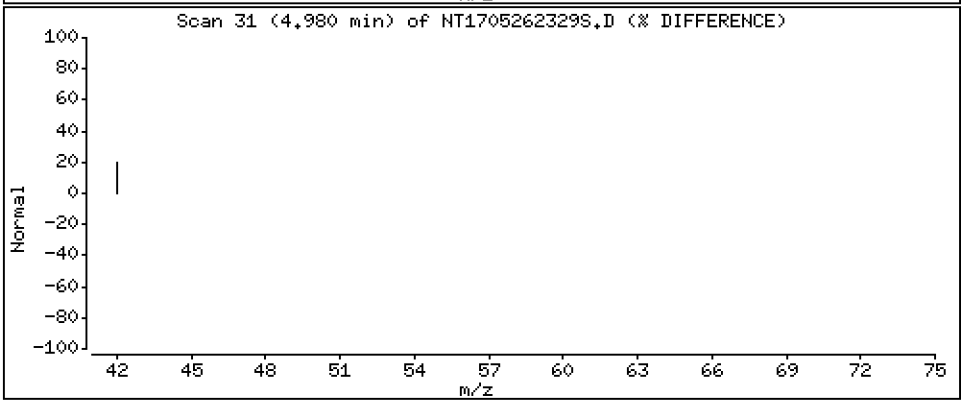












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262329S.D
Lab Smp Id: SLE0442-CCV1
Inj Date : 27-MAY-2023 06:08
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0442-CCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 07-Jun-2023 07:26 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 3
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.081	7.081	(0.764)	202542	1.63157	1.632(R)
	3 Phenol	94	8.674	8.674	(0.935)	195919	1.05917	1.059
	7 1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	170079	1.02582	1.026
*	8 1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	410431	4.00000	
	9 1,4-Dichlorobenzene	146	9.298	9.299	(1.003)	164083	1.01561	1.016
	11 Benzyl alcohol	79	9.554	9.554	(1.030)	103734	0.98420	0.9842
	12 1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	157545	0.99491	0.9949
	13 2-Methylphenol	108	9.771	9.771	(1.054)	114154	0.89059	0.8906
	15 4-Methylphenol	108	10.040	10.040	(1.083)	114709	0.88551	0.8855
	16 N-Nitroso-di-n-propylamine	70	10.091	10.091	(1.088)	88132	0.94401	0.9440
	22 2,4-Dimethylphenol	107	11.061	11.062	(0.942)	249304	1.98246	1.982
	24 Benzoic acid	105	11.240	11.228	(0.958)	298874	3.81496	3.815
	26 1,2,4-Trichlorobenzene	180	11.649	11.649	(0.992)	109236	0.95743	0.9574
*	27 Naphthalene-d8	136	11.738	11.738	(1.000)	1307314	4.00000	
	30 Hexachlorobutadiene	225	12.133	12.133	(1.034)	64379	1.07163	1.072
	39 Dimethylphthalate	163	14.824	14.837	(0.967)	244409	0.92658	0.9266
*	42 Acenaphthene-d10	162	15.334	15.334	(1.000)	718296	4.00000	
	50 Diethylphthalate	149	16.277	16.277	(1.062)	218619	0.91262	0.9126
	54 N-Nitrosodiphenylamine	169	16.659	16.659	(0.908)	159849	1.15536	1.155
	57 Hexachlorobenzene	284	17.728	17.728	(0.966)	53461	1.13908	1.139
	58 Pentachlorophenol	266	18.098	18.098	(0.986)	47783	1.77950	1.779
*	59 Phenanthrene-d10	188	18.353	18.353	(1.000)	982072	4.00000	
$	66 Terphenyl-d14	244	21.452	21.452	(0.919)	138350	0.97239	0.9724(R)
	67 Butylbenzylphthalate	149	22.370	22.370	(0.958)	139084	0.89957	0.8996
*	69 Chrysene-d12	240	23.353	23.353	(1.000)	749817	4.00000	
*	77 Perylene-d12	264	26.006	26.006	(1.000)	554047	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.739	28.739	(1.105)	96373	0.61669	0.6167
	90 N-Nitrosodimethylamine	74	4.979	4.979	(0.537)	172482	2.15277	2.153

QC Flag Legend

R - Spike/Surrogate failed recovery limits.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i Calibration Date: 27-MAY-2023
Lab File ID: NT1705262329S.D Calibration Time: 00:33
Lab Smp Id: SLE0442-CCV1
Analysis Type: SV Level:
Quant Type: ISTD Sample Type:
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Test Mode:
Use Last Continuing Calibrator.

		AREA LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375423	187712	750846	410431	9.32
27 Naphthalene-d8	1173037	586519	2346074	1307314	11.45
42 Acenaphthene-d10	638940	319470	1277880	718296	12.42
59 Phenanthrene-d10	901788	450894	1803576	982072	8.90
69 Chrysene-d12	767966	383983	1535932	749817	-2.36
77 Perylene-d12	642149	321075	1284298	554047	-13.72

		RT LIMIT			
COMPOUND	STANDARD	LOWER	UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	-0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	-0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	-0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	-0.00
69 Chrysene-d12	23.35	22.85	23.85	23.35	-0.00
77 Perylene-d12	26.01	25.51	26.51	26.01	-0.00

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

REVIEW SUMMARY FOR FILE - NT1705262329S.D

Lab ID: SLE0442-CCV1
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   27-MAY-2023 06:08

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND

NONE

RRT check based on Ccal File: SIM.b/NT1705262320S.D

On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

Exception: 1,2,4-Trichlorobenzene 0.0010

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

Analytical Resources, LLC
Analytical Chemists and Consultants

LOW-CONCENTRATION
CONTINUING CALIBRATION CHECK
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	NT17	Calibration:	GE00070
Lab File ID:	NT1705262322S.D	Calibration Date:	05/16/2023
Sequence:	SLE0442	Injection Date:	05/27/23
Lab Sample ID:	SLE0442-LCV1	Injection Time:	01:48
Sequence Name:	ABN 0.1		

		CONC. (ug/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Phenol	A	0.10000	0.092	1.8027250	1.6592240		-8.0	
1,3-Dichlorobenzene	A	0.10000	0.105	1.6158430	1.6935120		4.8	
1,4-Dichlorobenzene	A	0.10000	0.108	1.5745540	1.7054340		8.3	
1,2-Dichlorobenzene	A	0.10000	0.103	1.5432720	1.5876940		2.9	
Benzyl Alcohol	A	0.10000	0.077	1.0272110	0.7869368		-23.4	
Benzoic acid	A	0.40000	0.063	0.1537024	0.0379620		-84.2	
2-Methylphenol	A	0.10000	0.077	1.2492070	0.9562669		-23.5	
N-Nitroso-di-n-Propylamine	A	0.10000	0.085	0.9098695	0.7762811		-14.7	
4-Methylphenol	A	0.10000	0.062	1.2624750	0.7781801		-38.4	
2,4-Dimethylphenol	A	0.20000	0.167	0.3847731	0.3221424		-16.3	
1,2,4-Trichlorobenzene	A	0.10000	0.104	0.3490929	0.3619561		3.7	
Hexachlorobutadiene	A	0.10000	0.112	0.1838137	0.2057637		11.9	
N-Nitrosodimethylamine	A	0.20000	0.189	0.7808454	0.7368235		-5.6	
Dimethylphthalate	A	0.10000	0.096	1.4689000	1.4041270		-4.4	
Diethyl phthalate	A	0.10000	0.095	1.3339910	1.2686600		-4.9	
N-Nitrosodiphenylamine	A	0.10000	0.108	0.5635219	0.6101975		8.3	
Hexachlorobenzene	A	0.10000	0.115	0.1911612	0.2205311		15.4	
Pentachlorophenol	A	0.20000	0.096	0.0772800	0.0516264		-52.1	
Butylbenzylphthalate	A	0.10000	0.090	0.8247925	0.7458223		-9.6	
Dibenzo(a,h)anthracene	A	0.10000	0.060	1.1282360	0.6787192		-39.8	
2-Fluorophenol	A	0.15000	0.132	1.2098450	1.0622610		-12.2	
p-Terphenyl-d14	A	0.10000	0.0963	0.7589992	0.7308134		-3.7	

* Values outside of QC limits

Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Page 1

Date : 27-MAY-2023 01:48

Client ID:

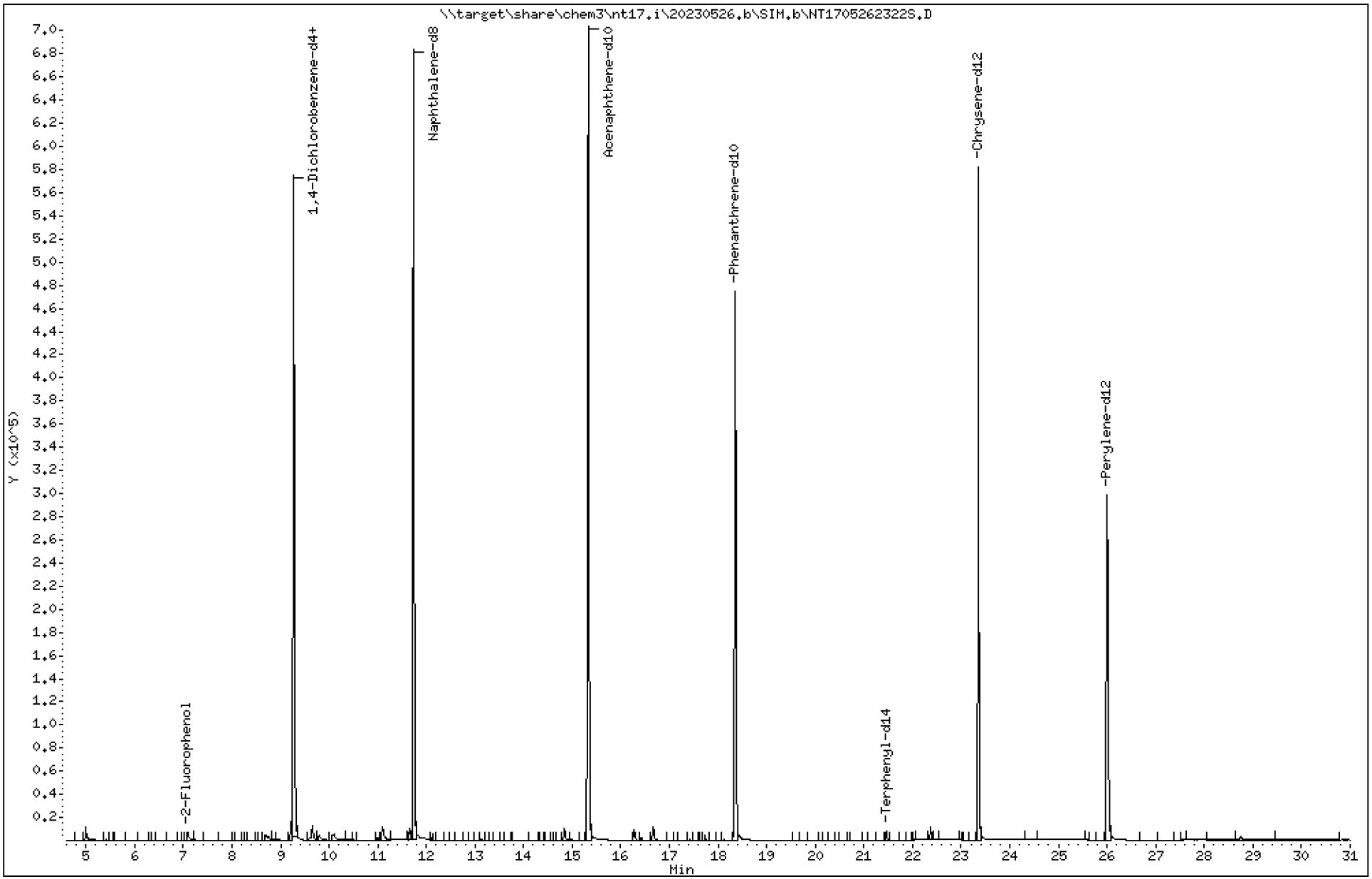
Instrument: nt17.i

Sample Info: SLE0442-LCV1

Operator: VTS

Column phase: ZB-5msi

Column diameter: 0.25



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Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

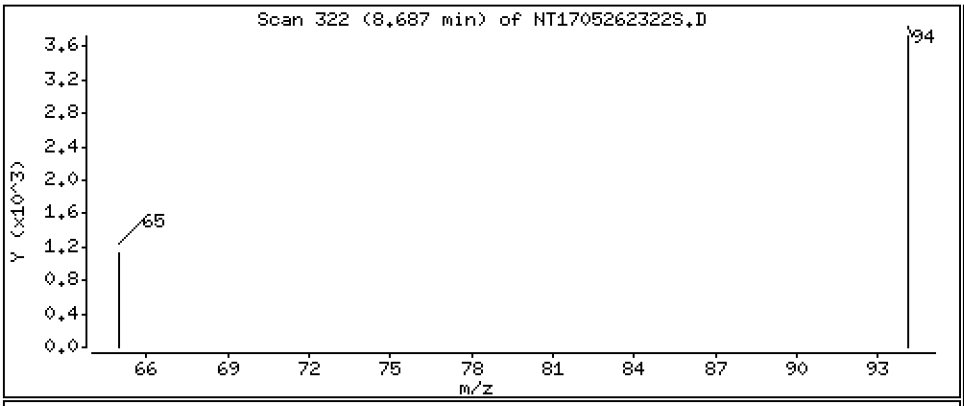
Operator: VTS

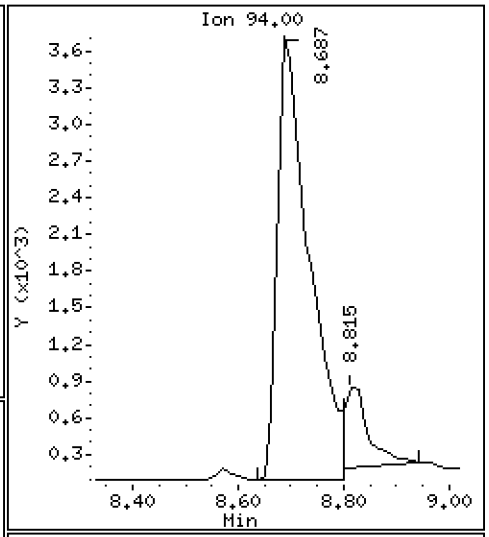
Column phase: ZB-5msi

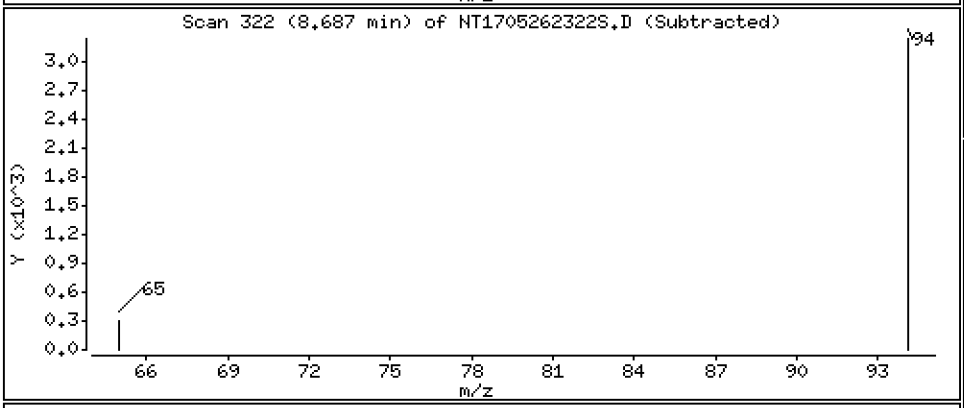
Column diameter: 0.25

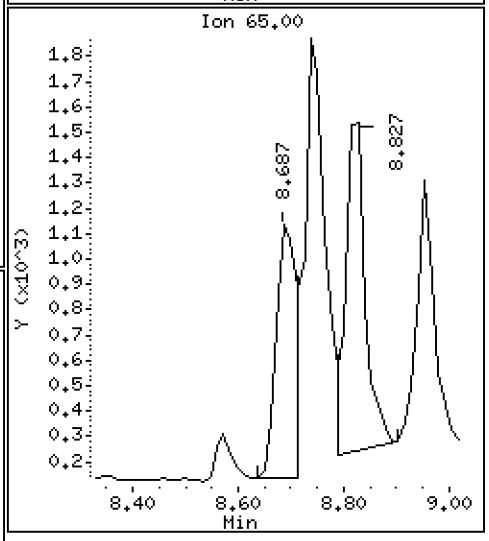
3 Phenol

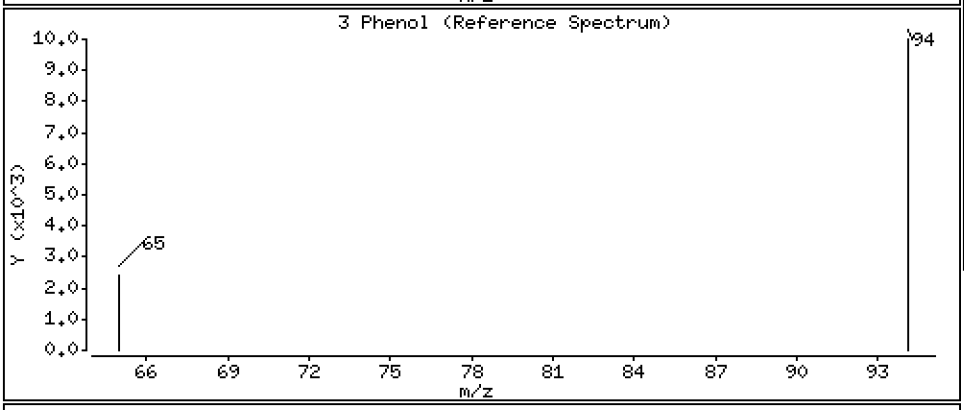
Concentration: 0.09204 ug/mL

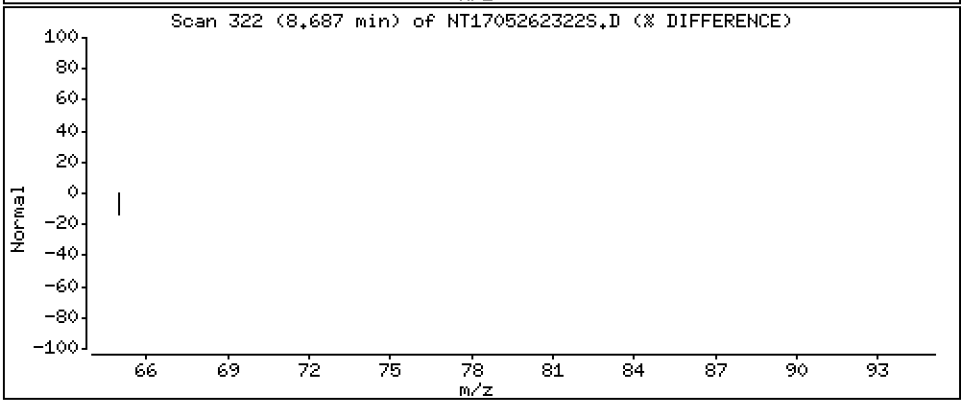












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

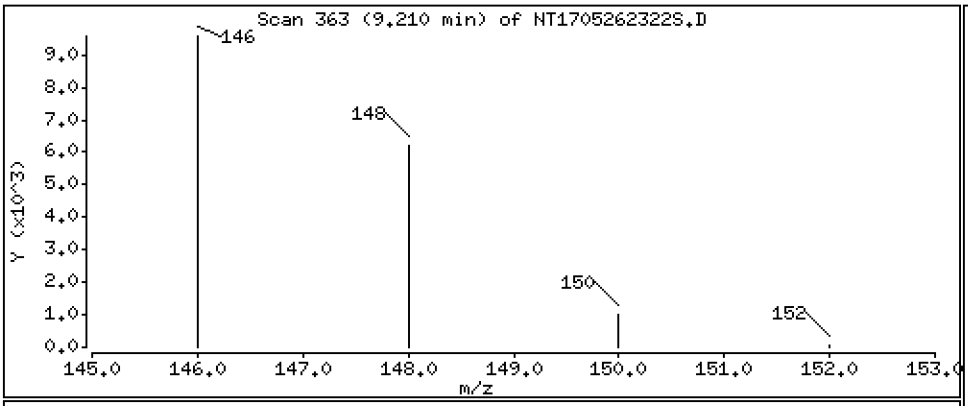
Operator: VTS

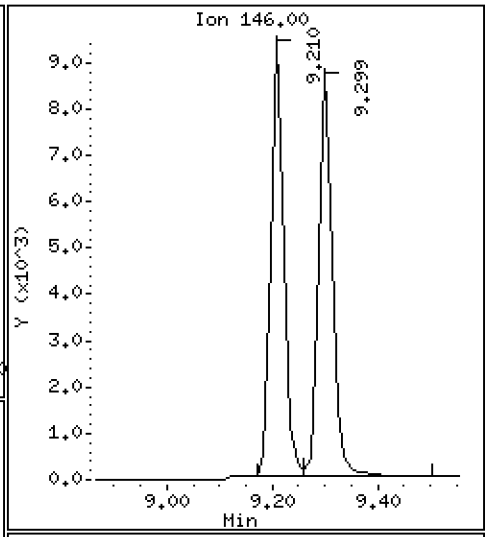
Column phase: ZB-5msi

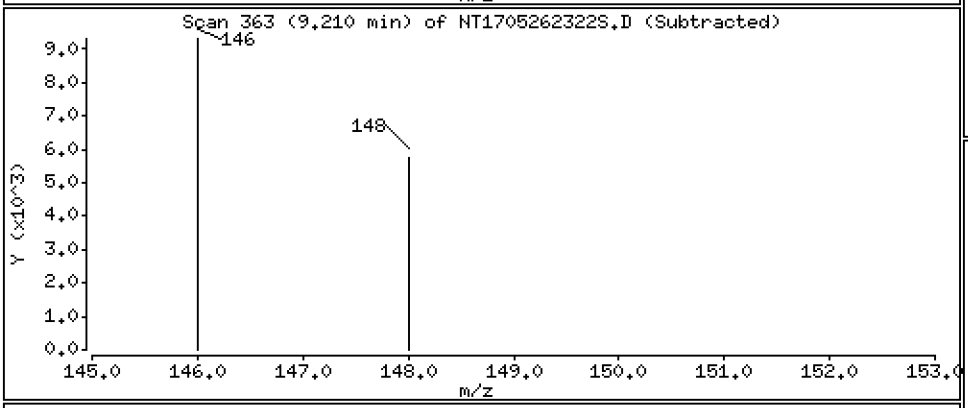
Column diameter: 0.25

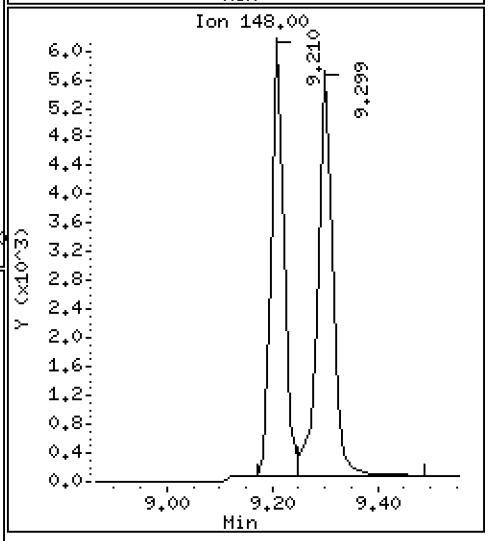
7 1,3-Dichlorobenzene

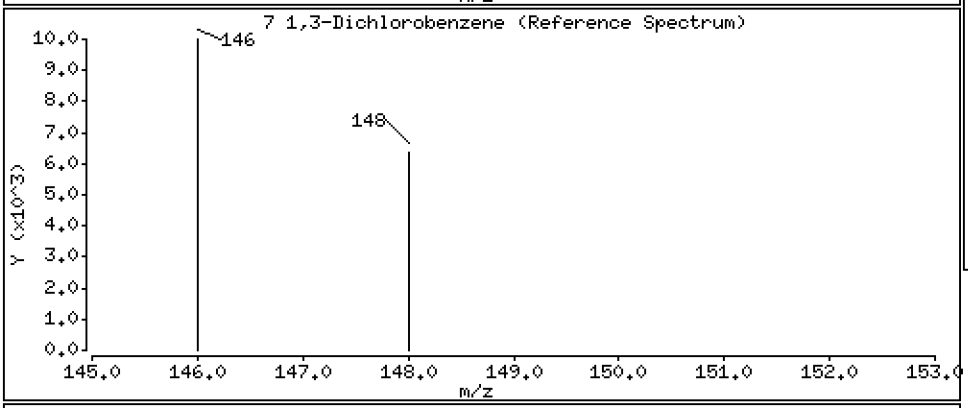
Concentration: 0.1048 ug/mL

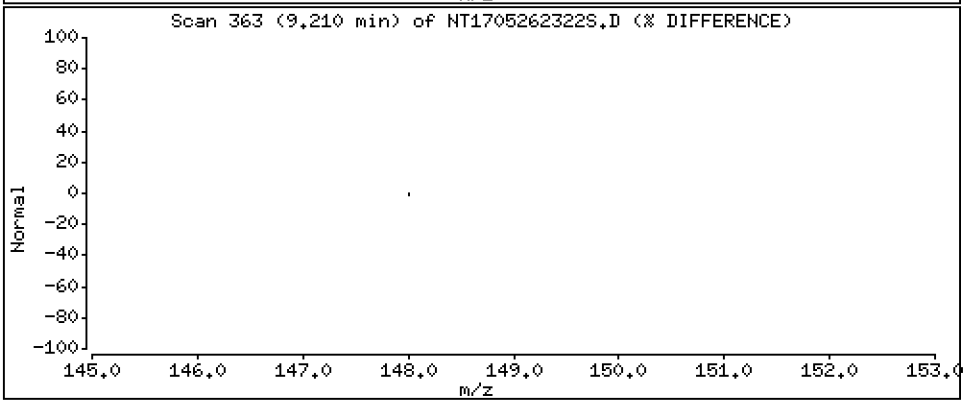












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262322S.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

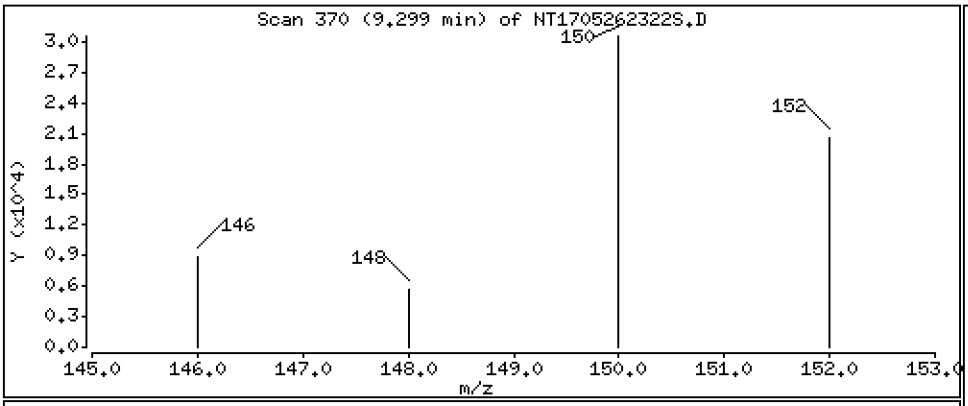
Operator: VTS

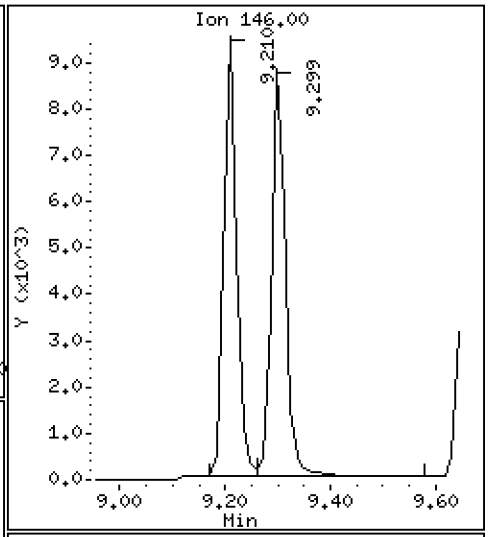
Column phase: ZB-5msi

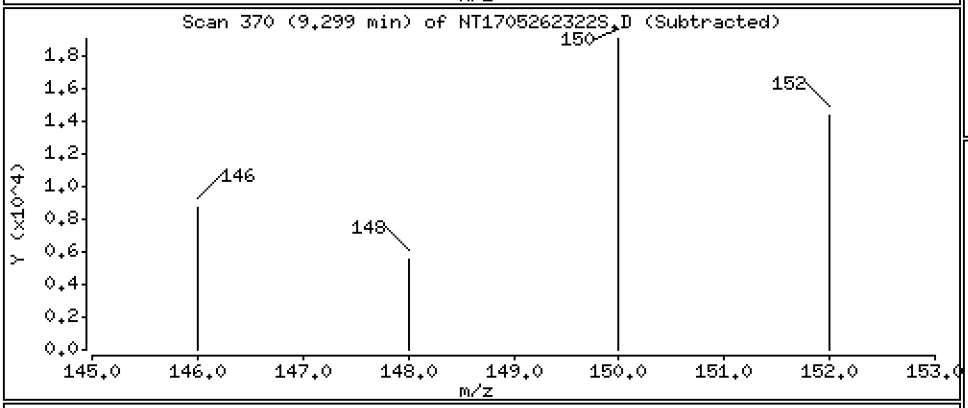
Column diameter: 0.25

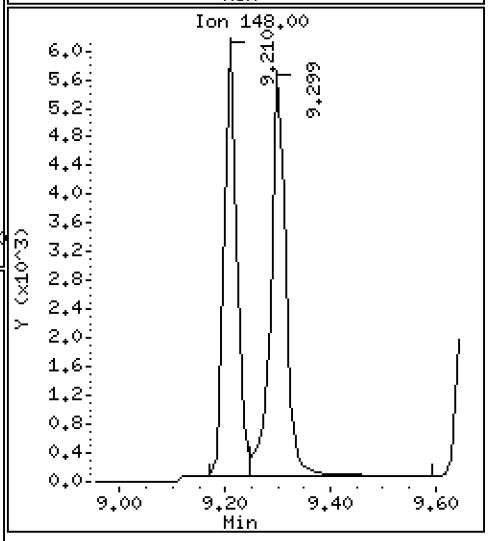
9 1,4-Dichlorobenzene

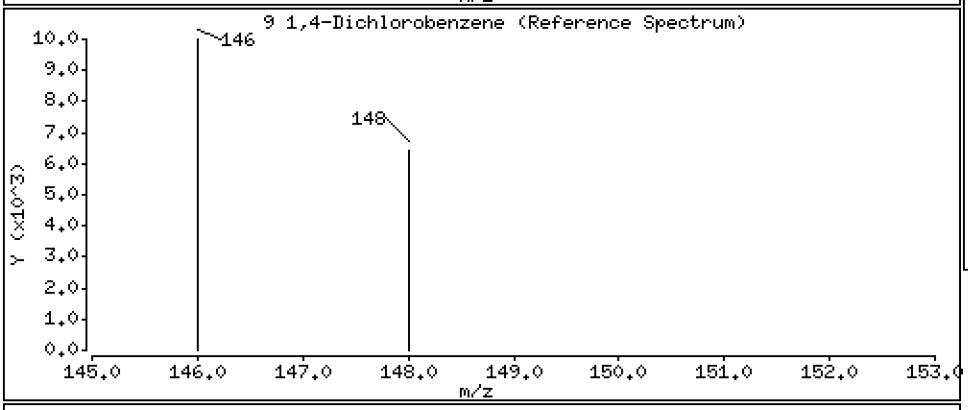
Concentration: 0.1083 ug/mL

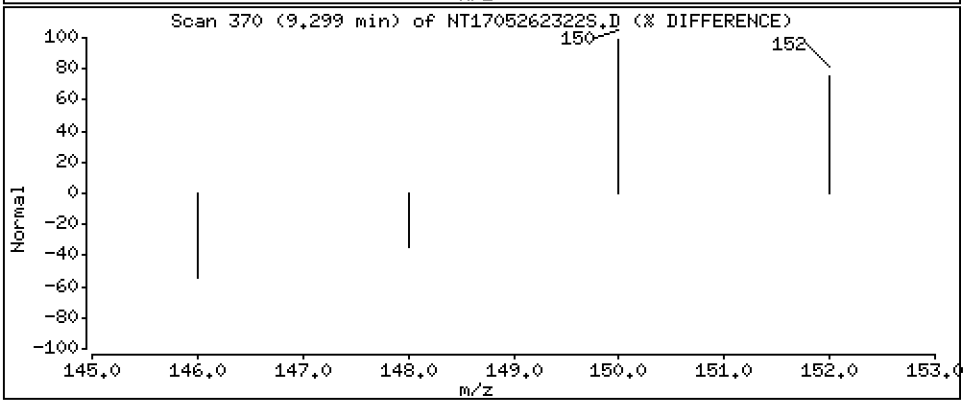












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

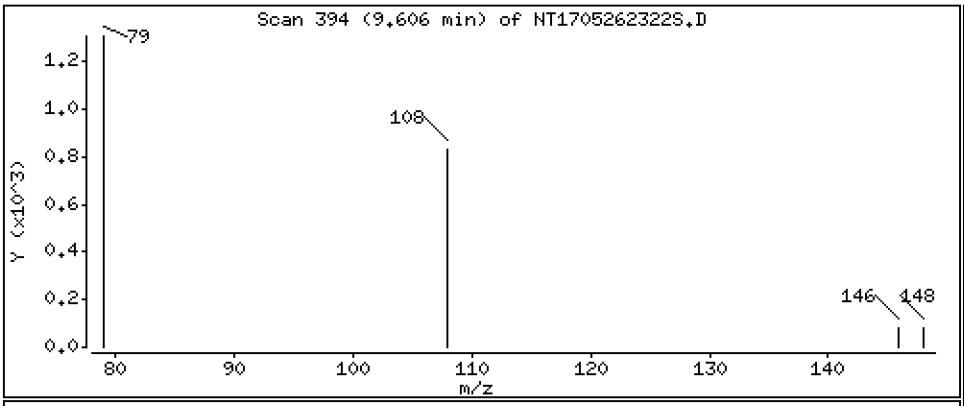
Operator: VTS

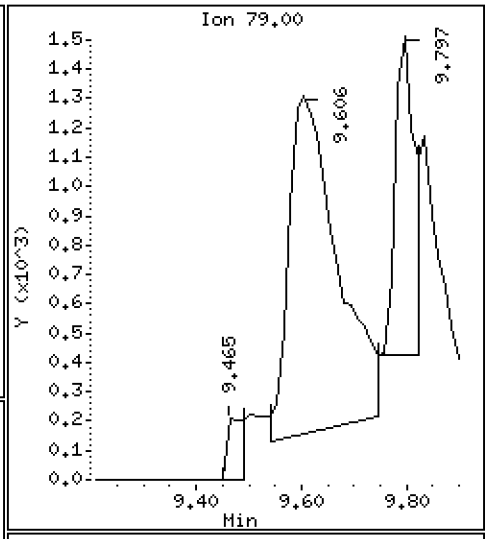
Column phase: ZB-5msi

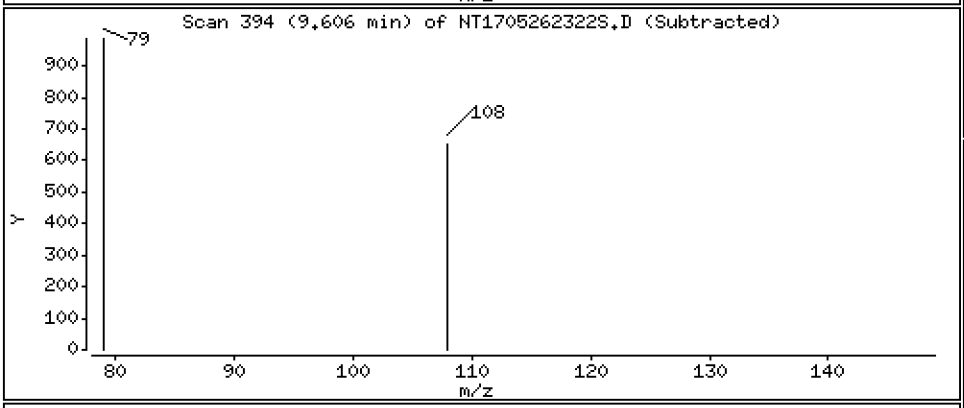
Column diameter: 0.25

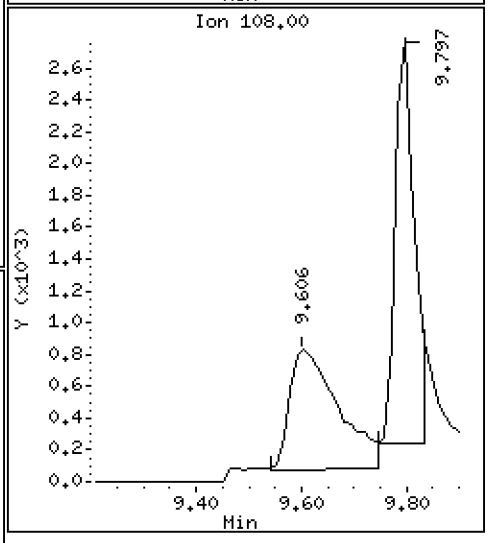
11 Benzyl alcohol

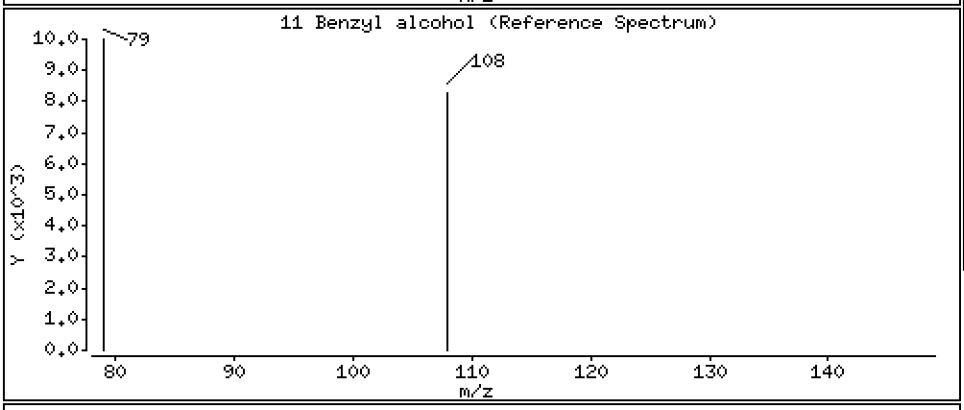
Concentration: 0.07661 ug/mL

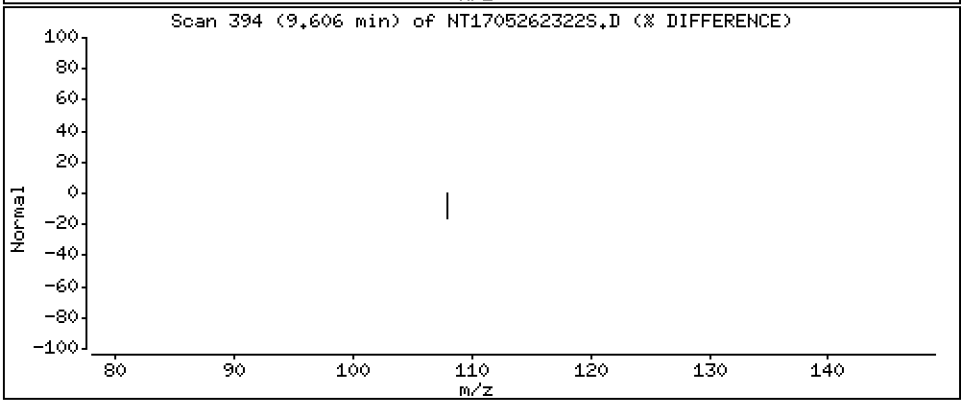












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

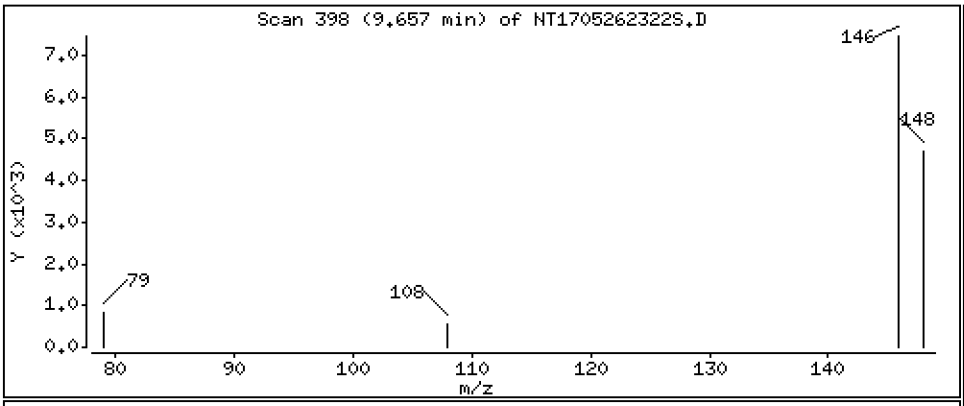
Operator: VTS

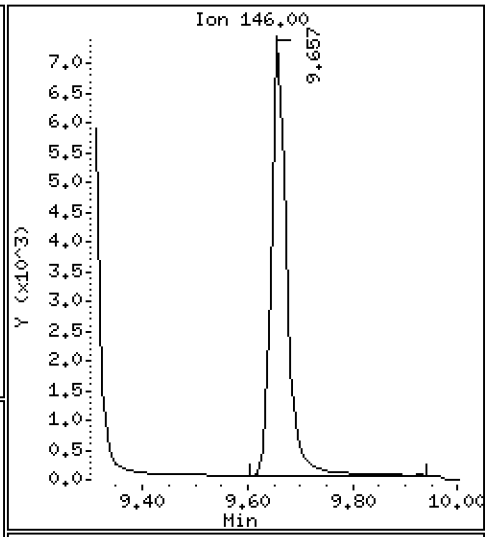
Column phase: ZB-5msi

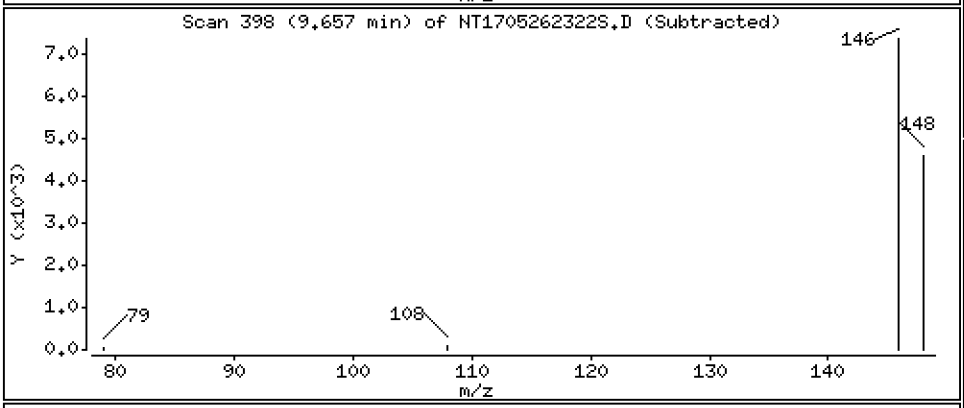
Column diameter: 0.25

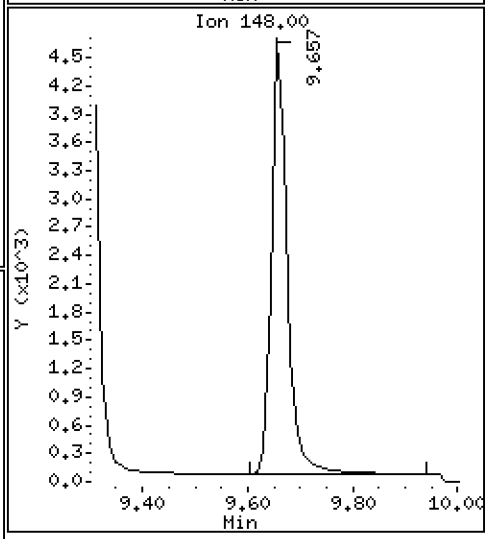
12 1,2-Dichlorobenzene

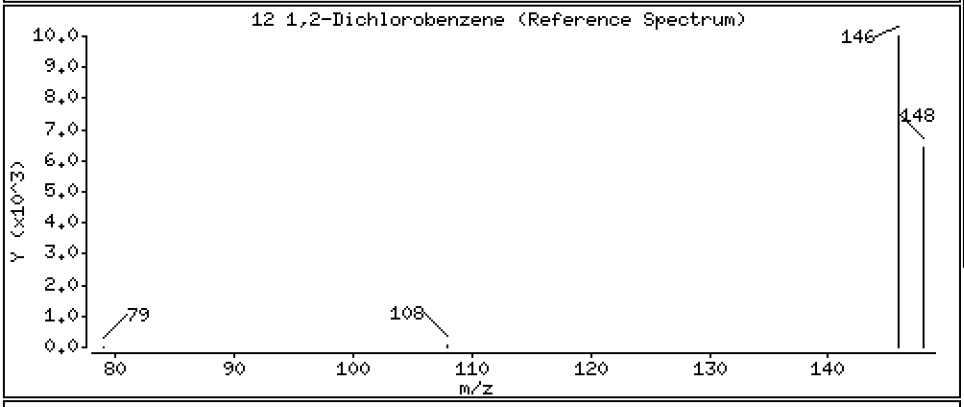
Concentration: 0.1029 ug/mL

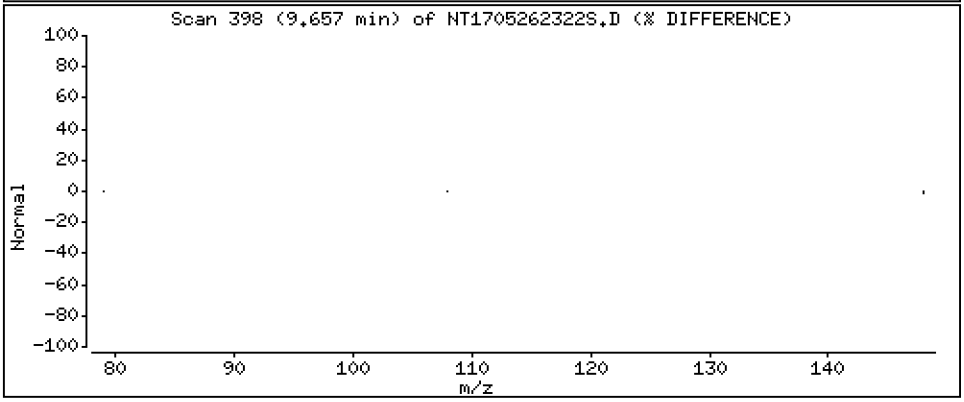












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

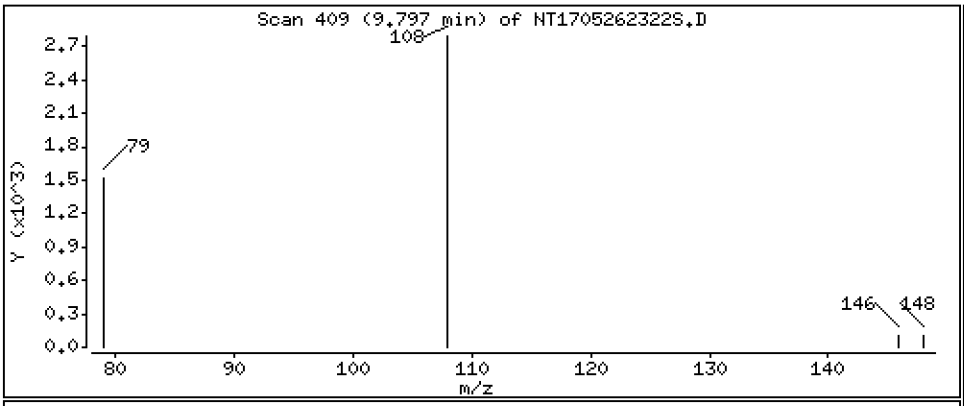
Operator: VTS

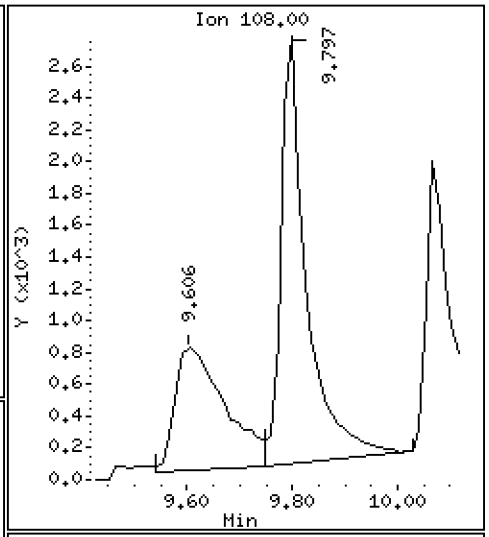
Column phase: ZB-5msi

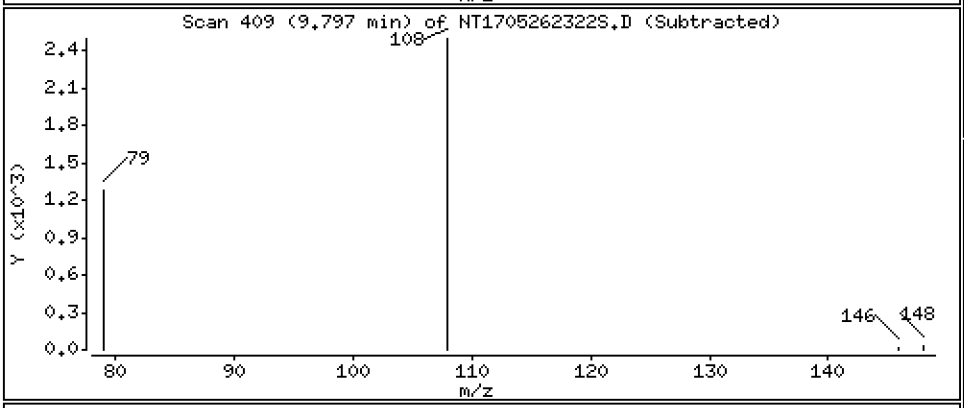
Column diameter: 0.25

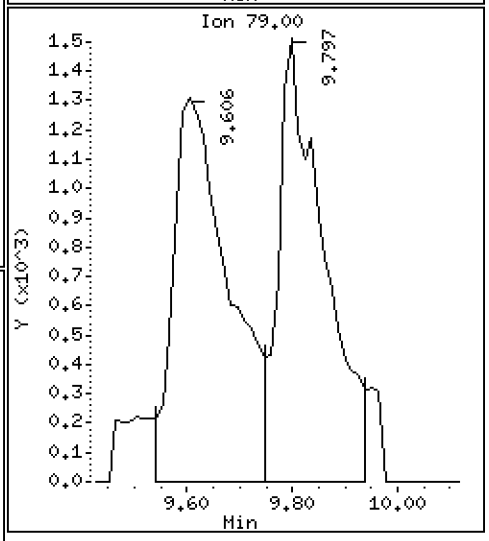
13 2-Methylphenol

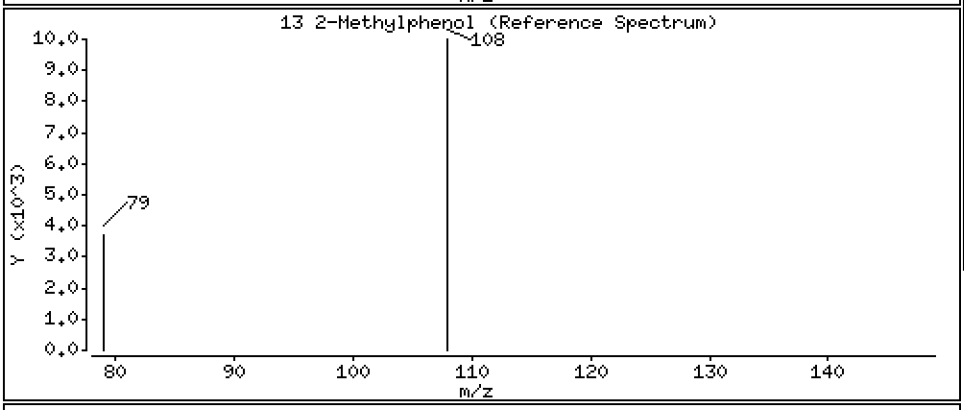
Concentration: 0.07655 ug/mL

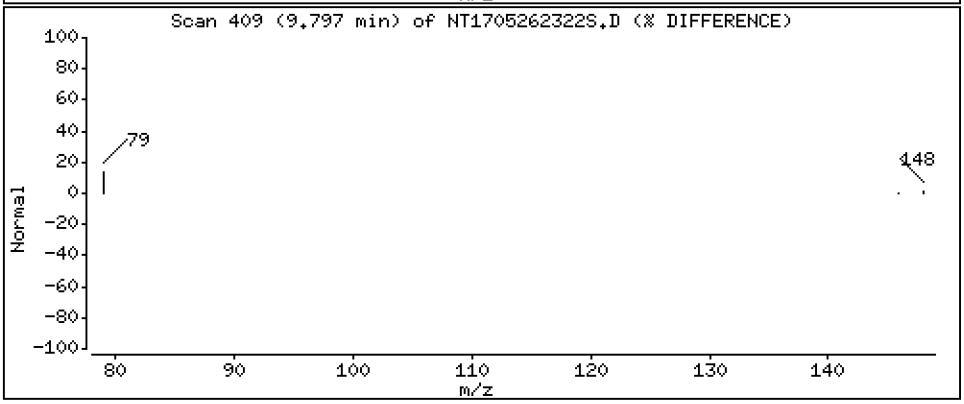












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

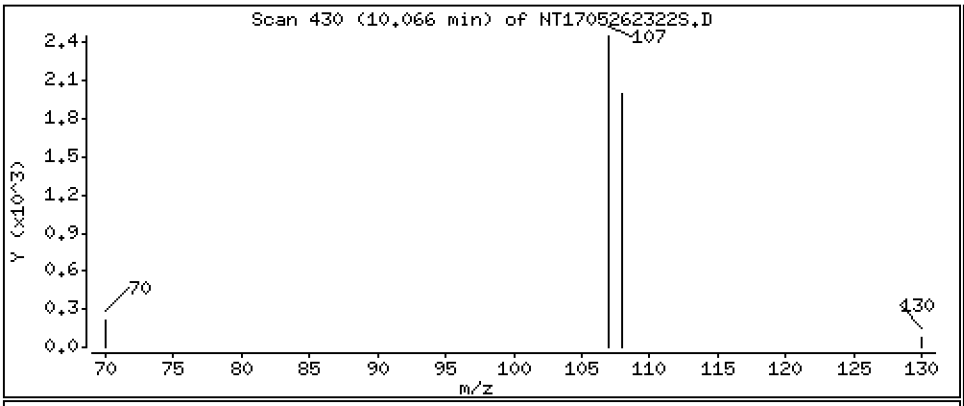
Operator: VTS

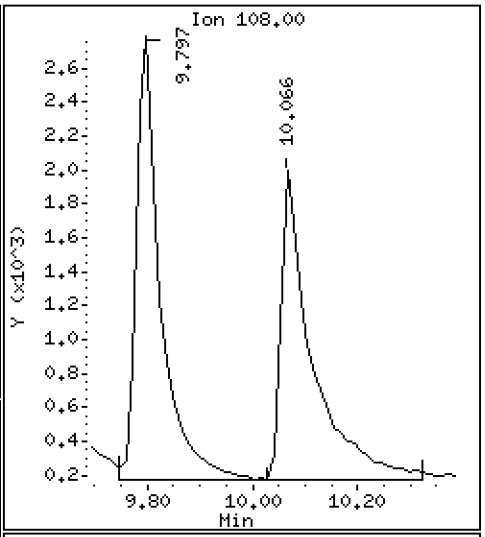
Column phase: ZB-5msi

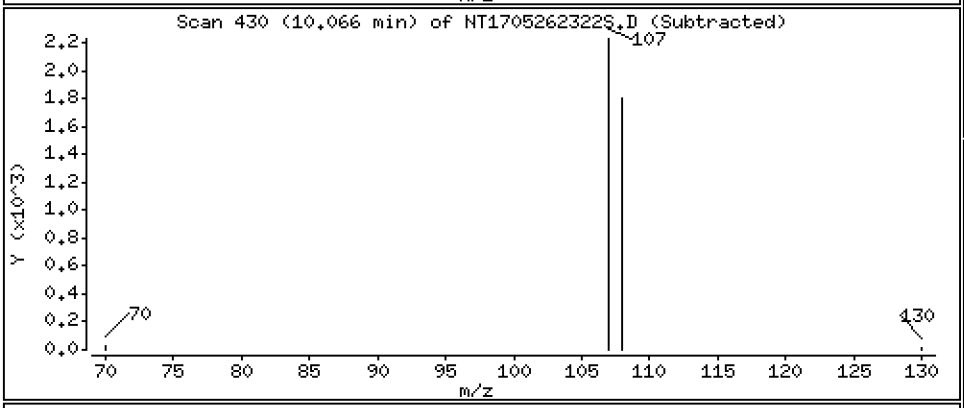
Column diameter: 0.25

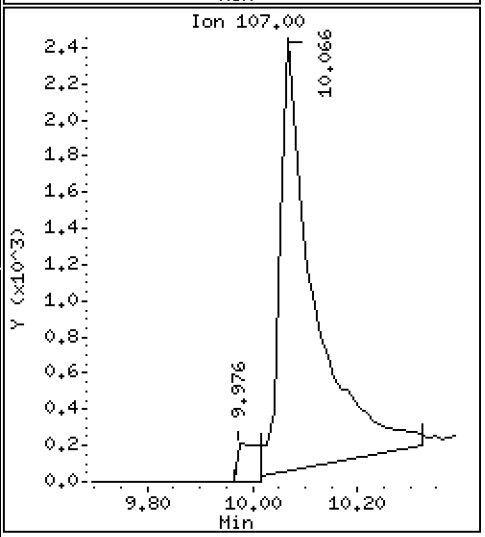
15 4-Methylphenol

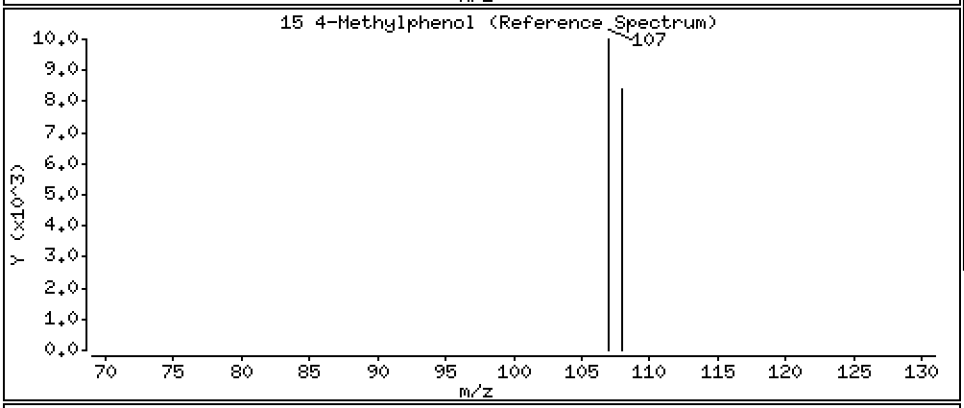
Concentration: 0.06164 ug/mL

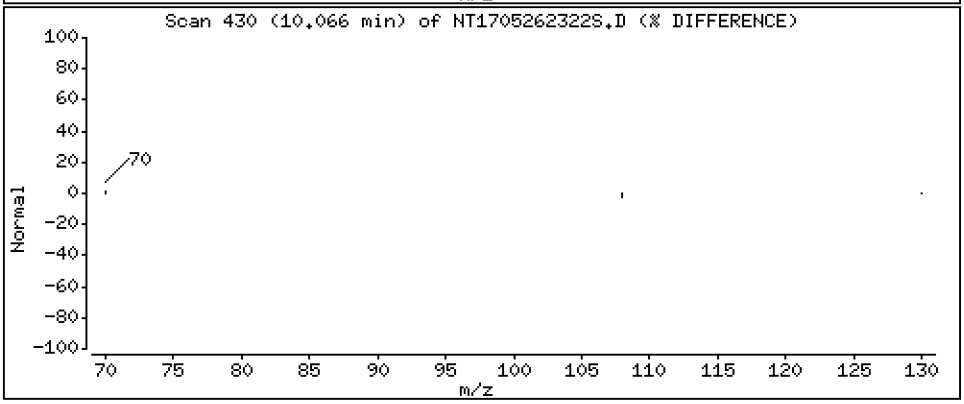












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

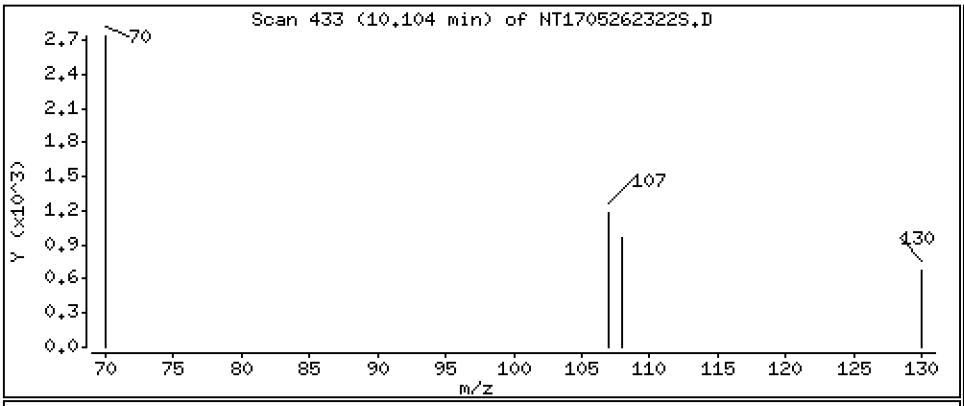
Operator: VTS

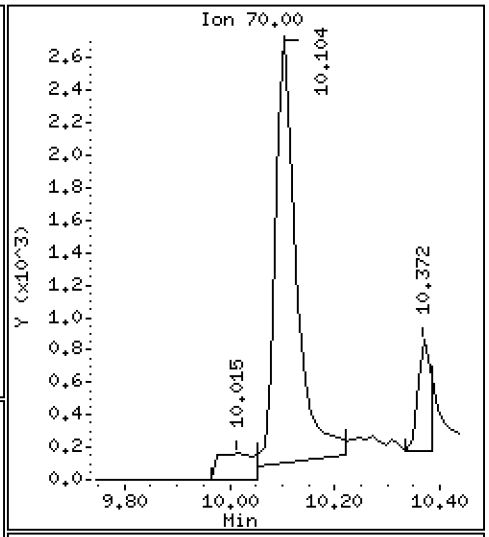
Column phase: ZB-5msi

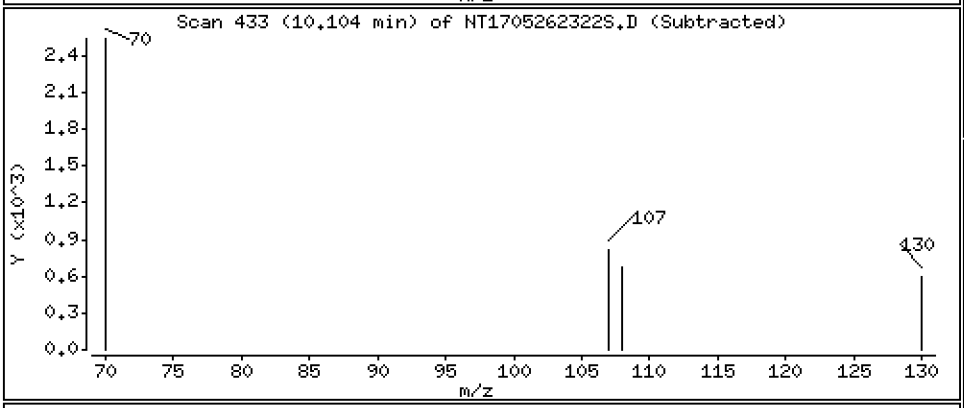
Column diameter: 0.25

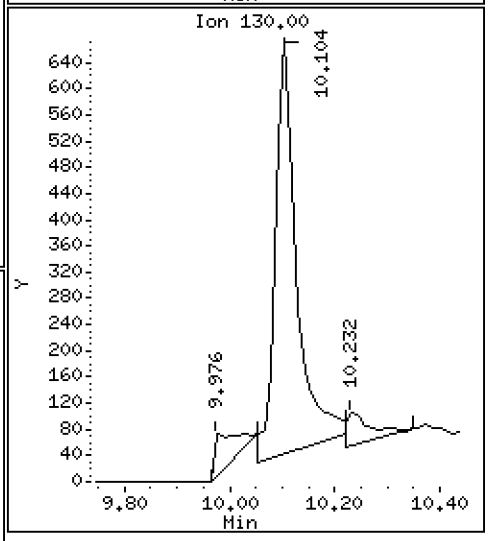
16 N-Nitroso-di-n-propylamine

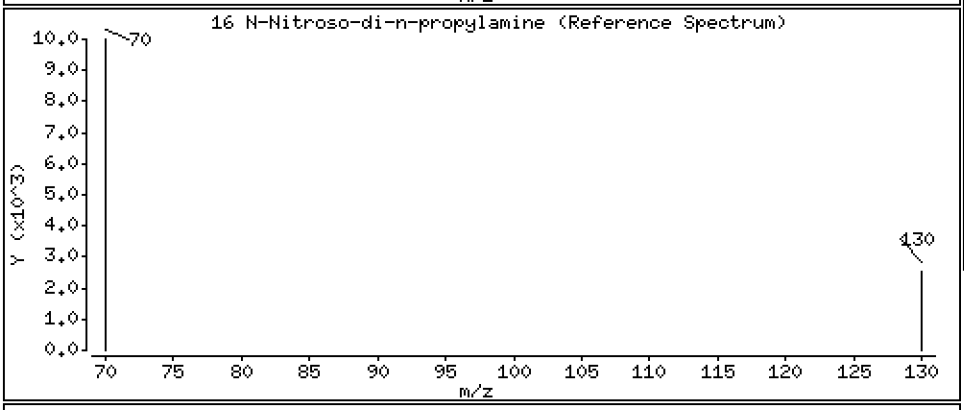
Concentration: 0.08532 ug/mL

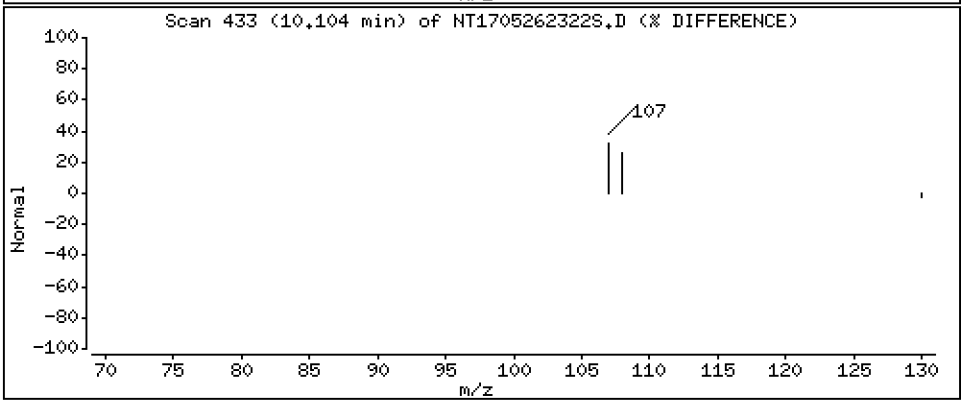












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

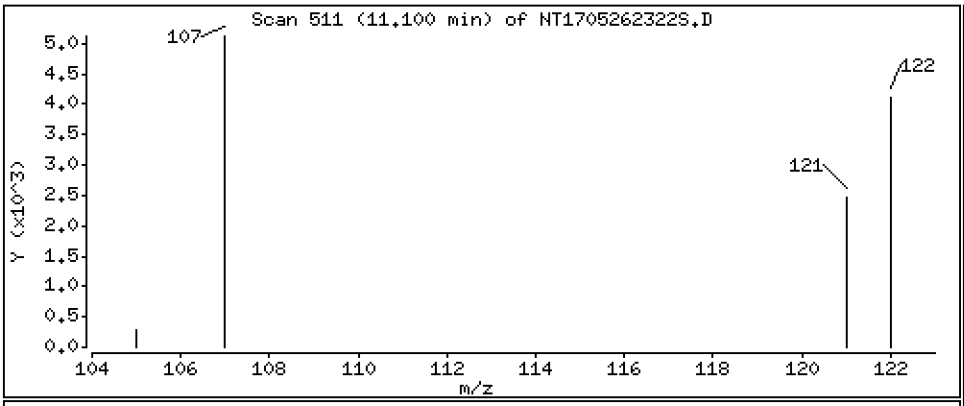
Operator: VTS

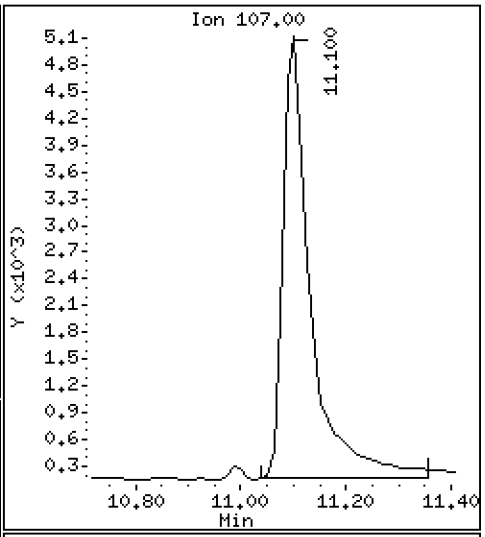
Column phase: ZB-5msi

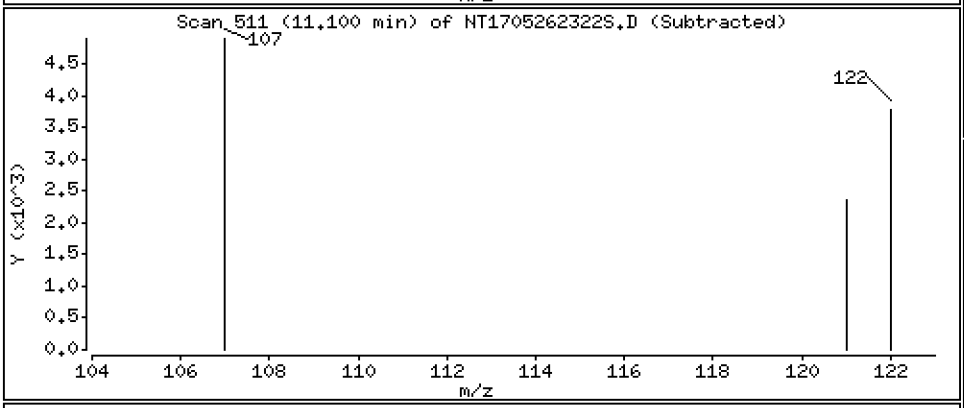
Column diameter: 0.25

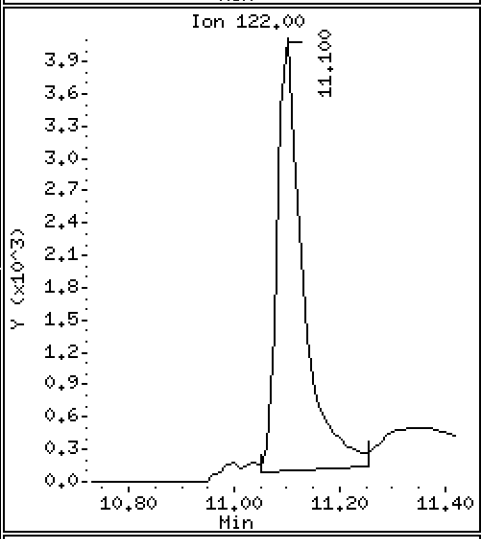
22 2,4-Dimethylphenol

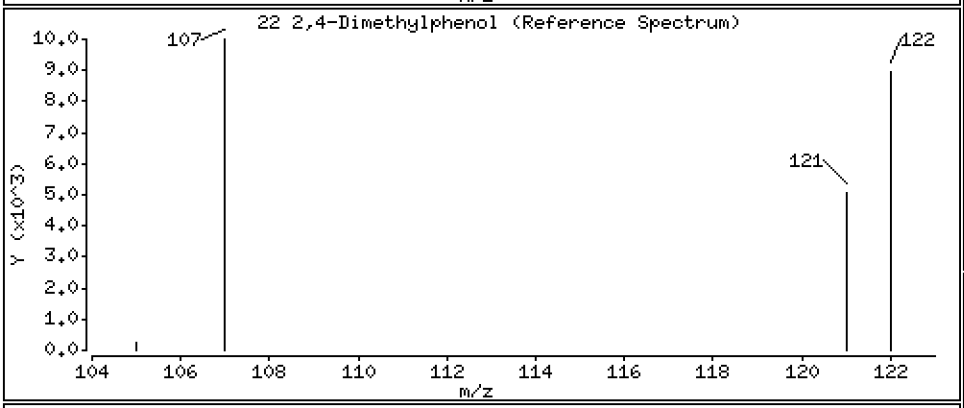
Concentration: 0.1674 ug/mL

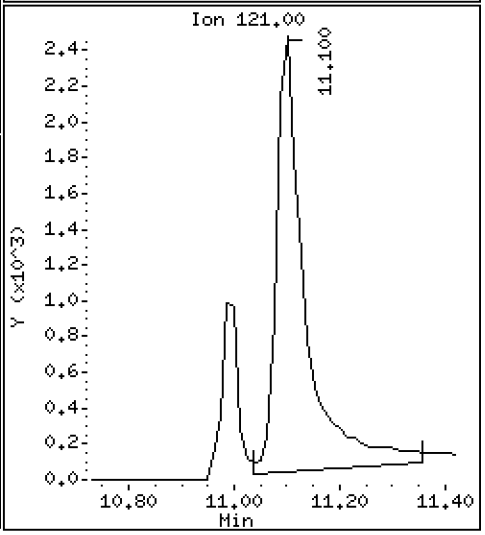


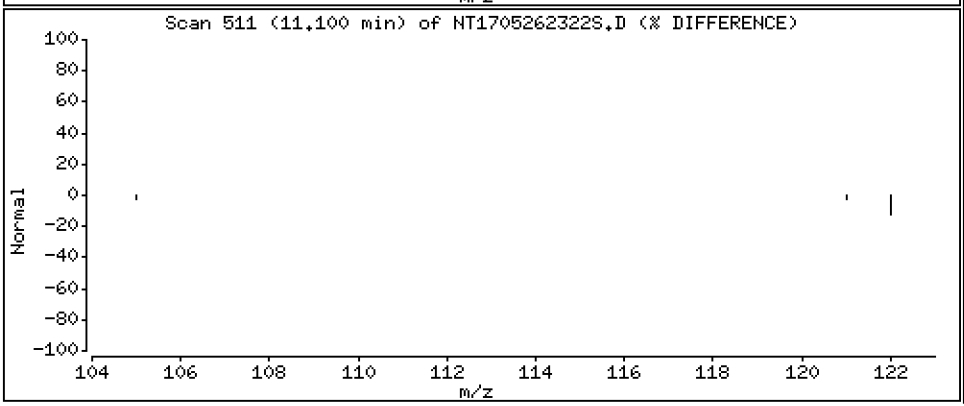












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

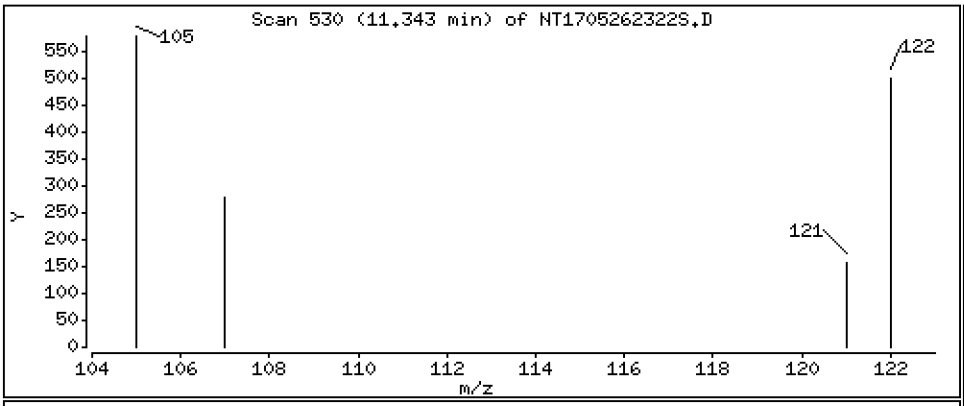
Operator: VTS

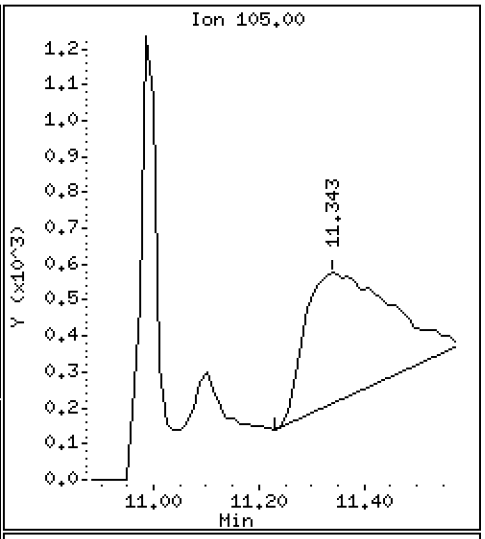
Column phase: ZB-5msi

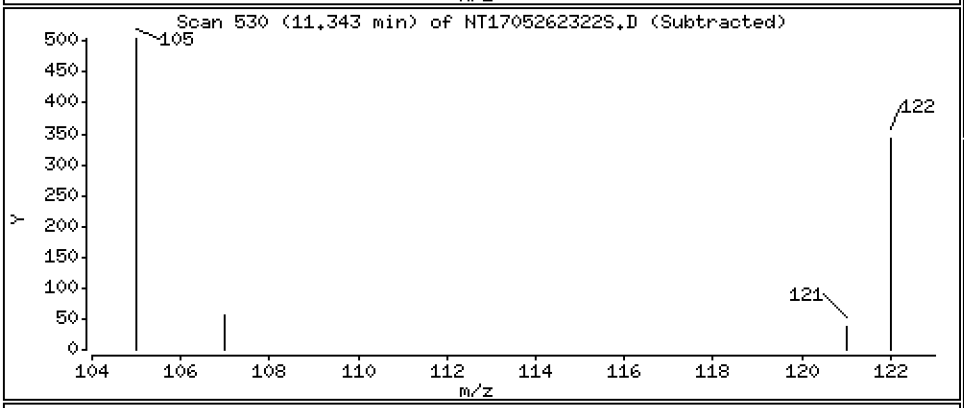
Column diameter: 0.25

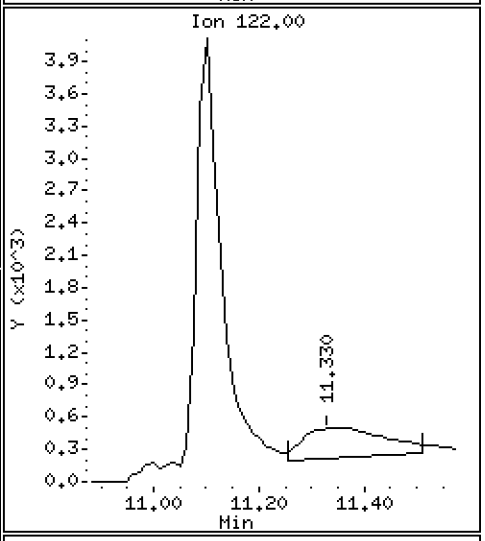
24 Benzoic acid

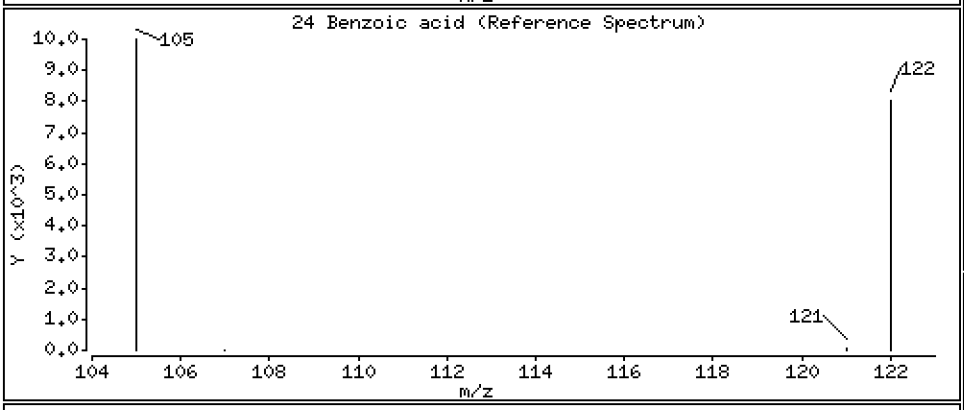
Concentration: 0.06335 ug/mL

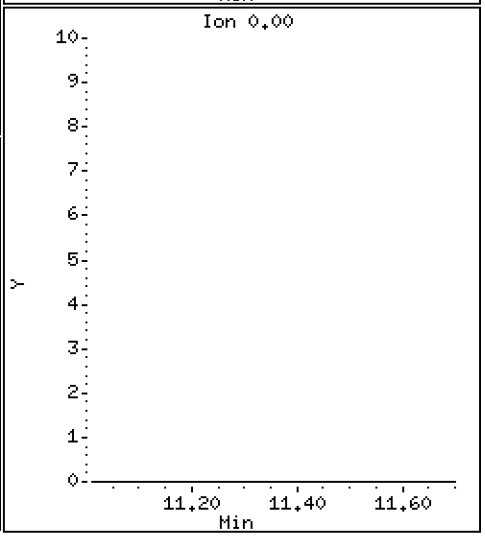


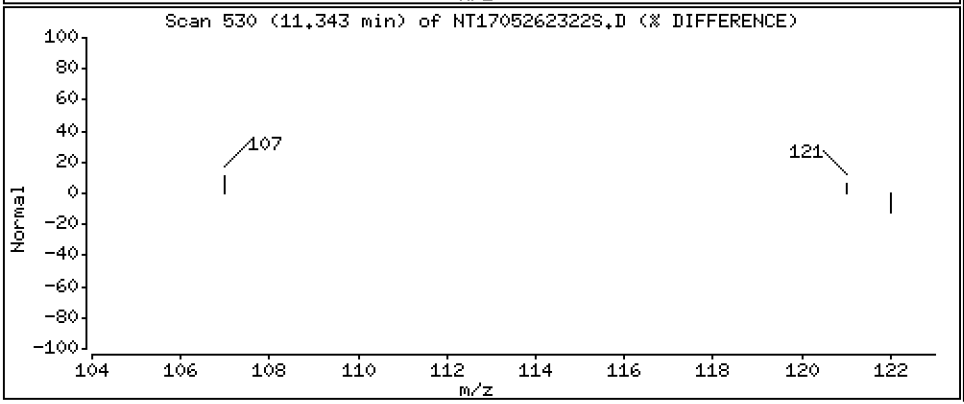












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

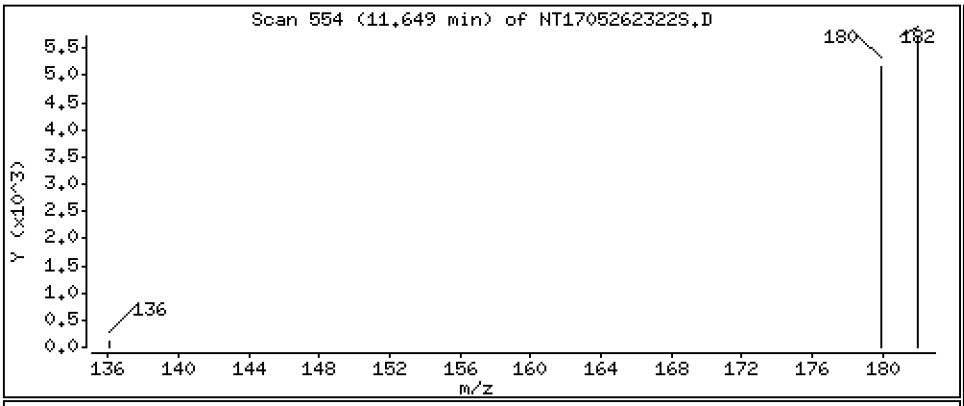
Operator: VTS

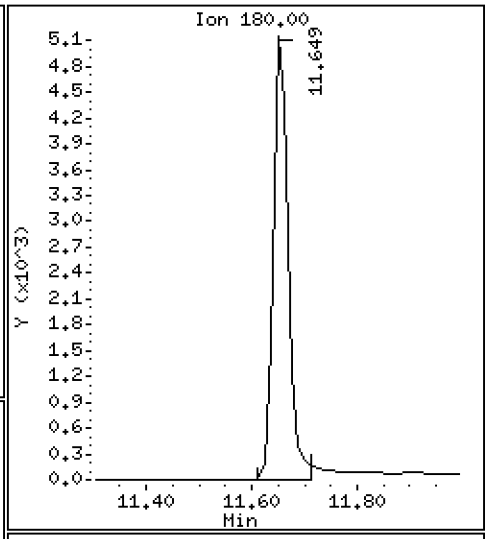
Column phase: ZB-5msi

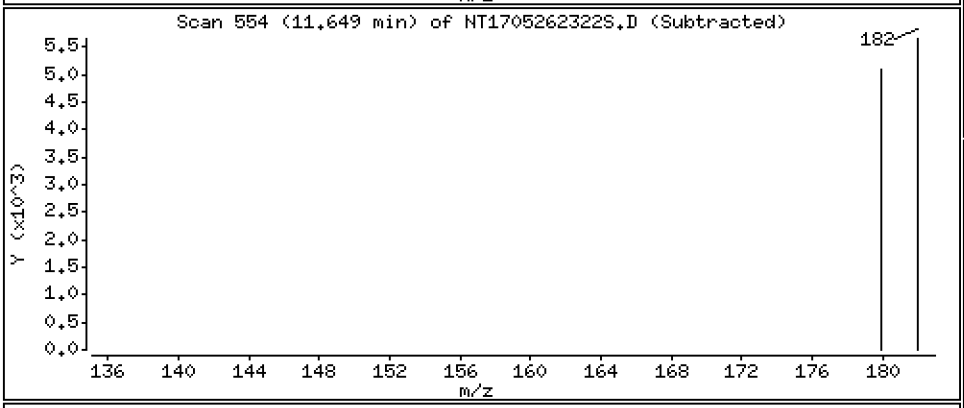
Column diameter: 0.25

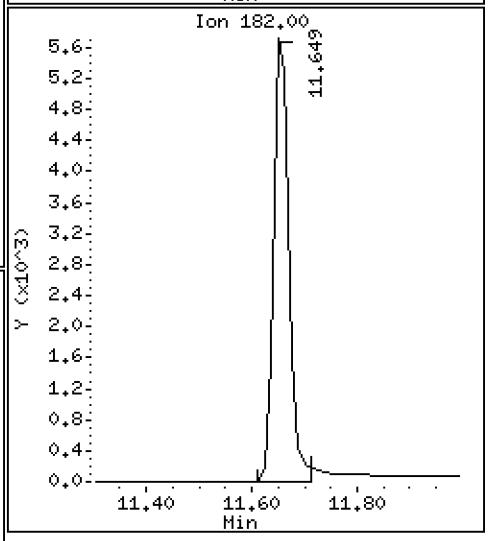
26 1,2,4-Trichlorobenzene

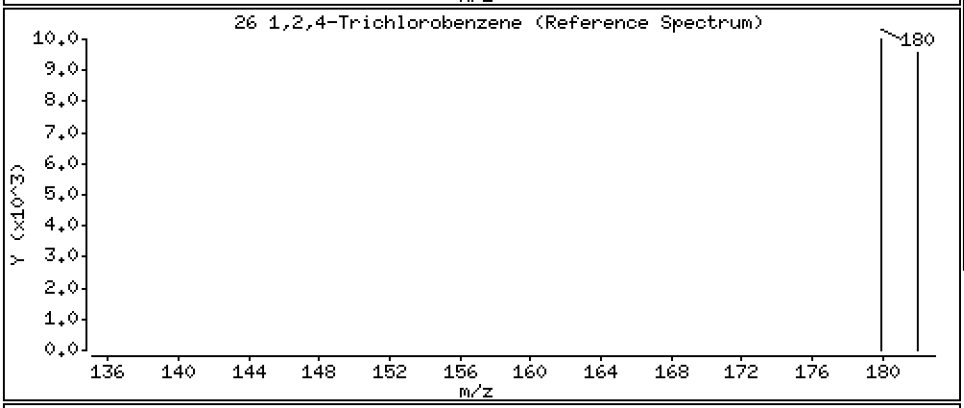
Concentration: 0.1037 ug/mL

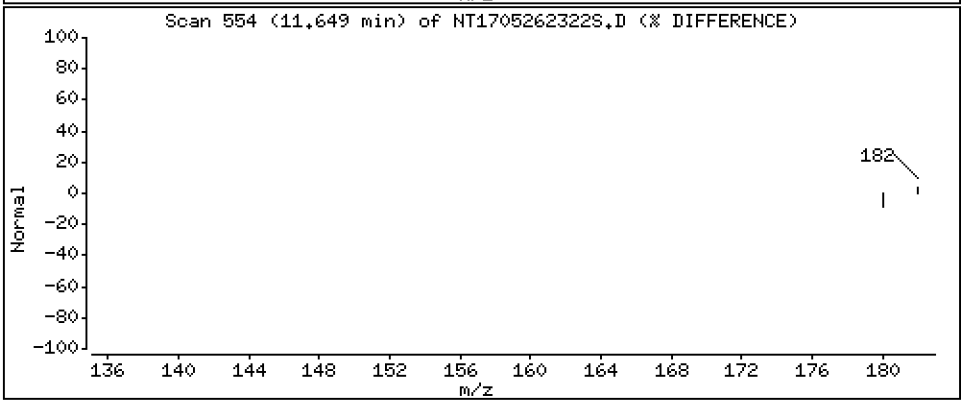












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262322S.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

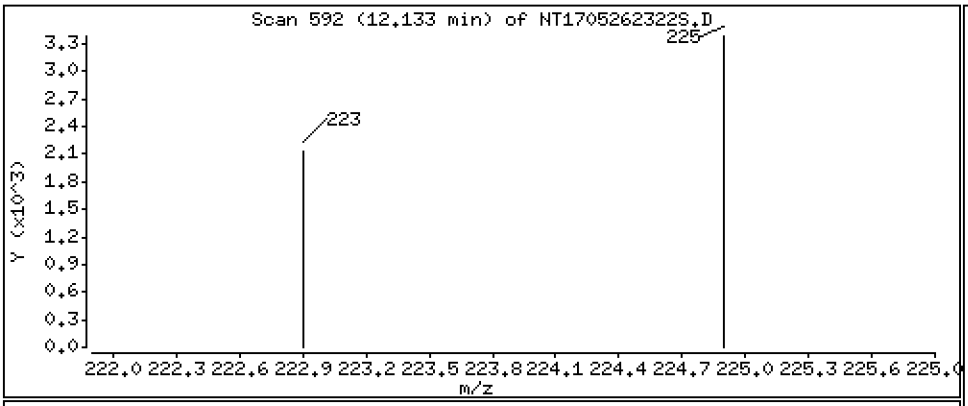
Operator: VTS

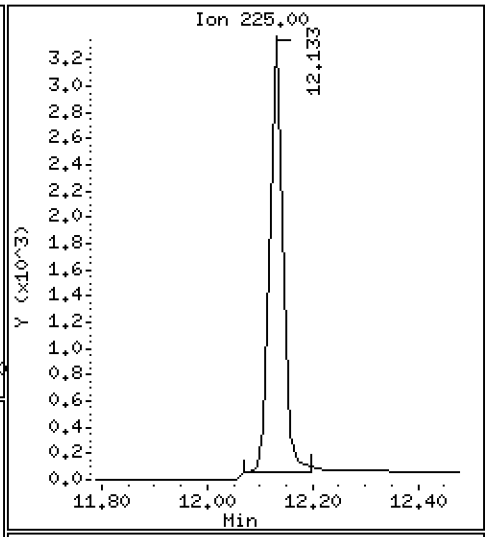
Column phase: ZB-5msi

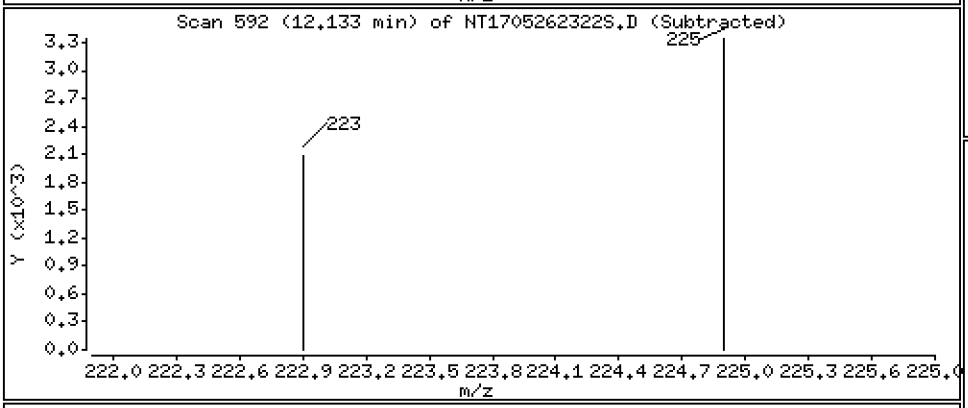
Column diameter: 0.25

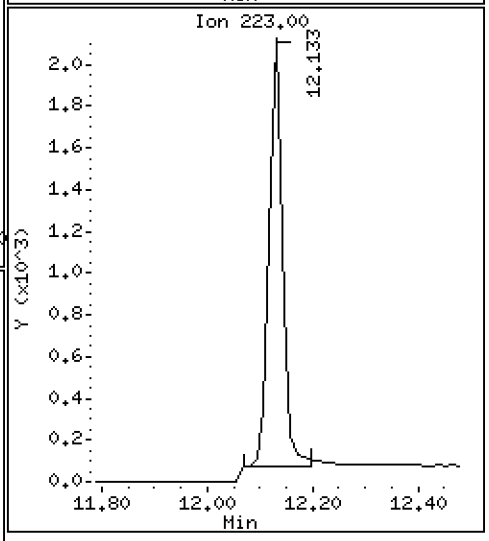
30 Hexachlorobutadiene

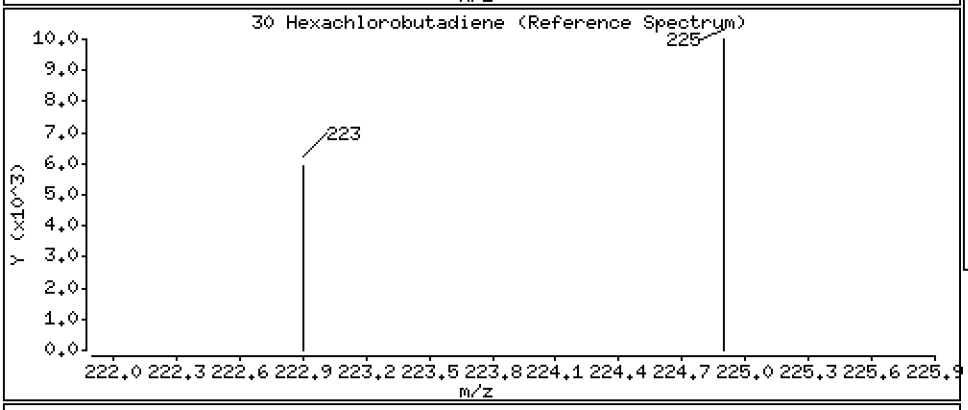
Concentration: 0.1119 ug/mL

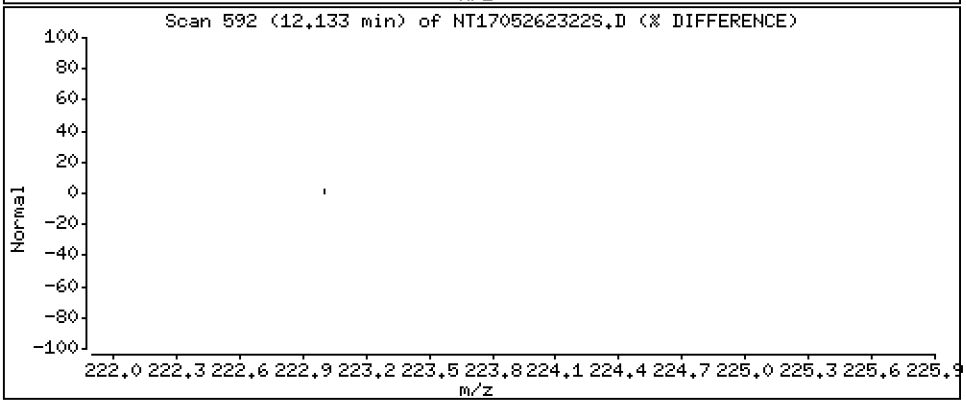












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

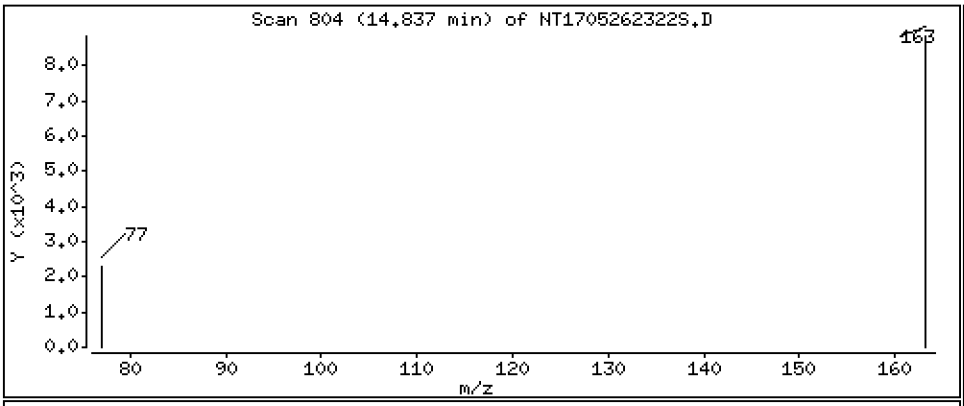
Operator: VTS

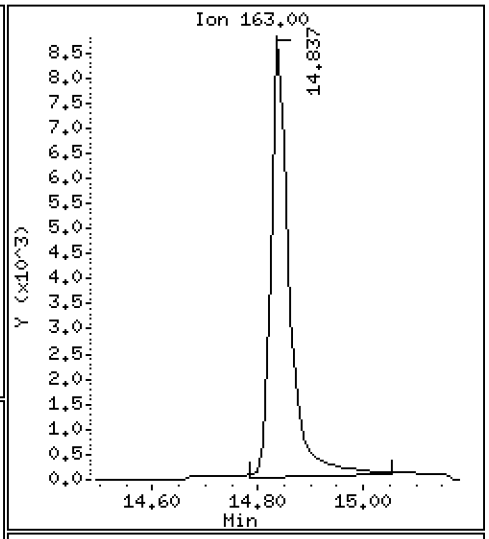
Column phase: ZB-5msi

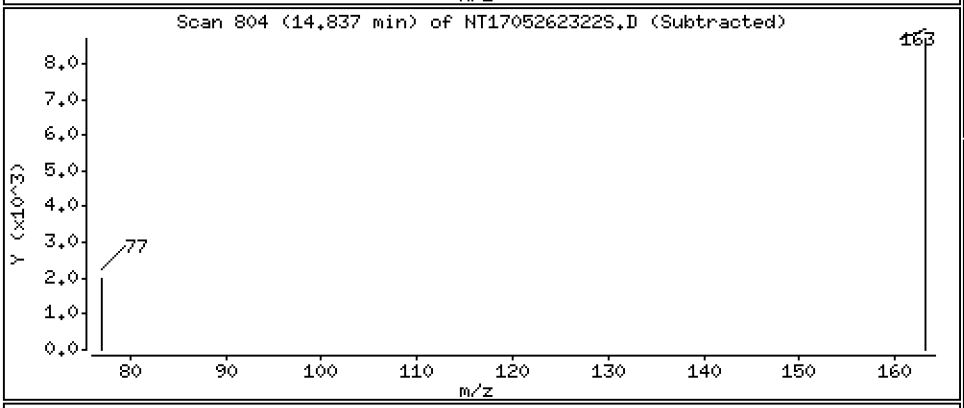
Column diameter: 0.25

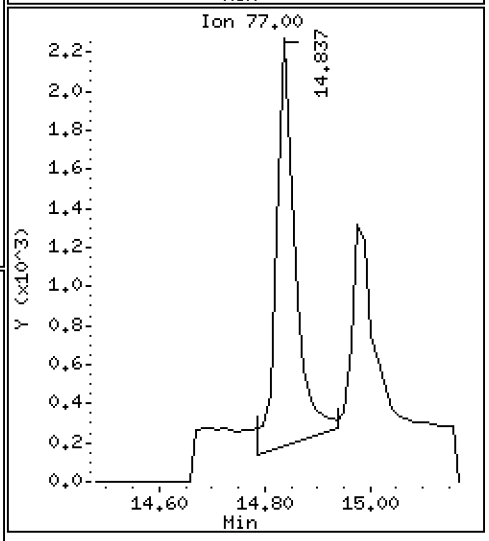
39 Dimethylphthalate

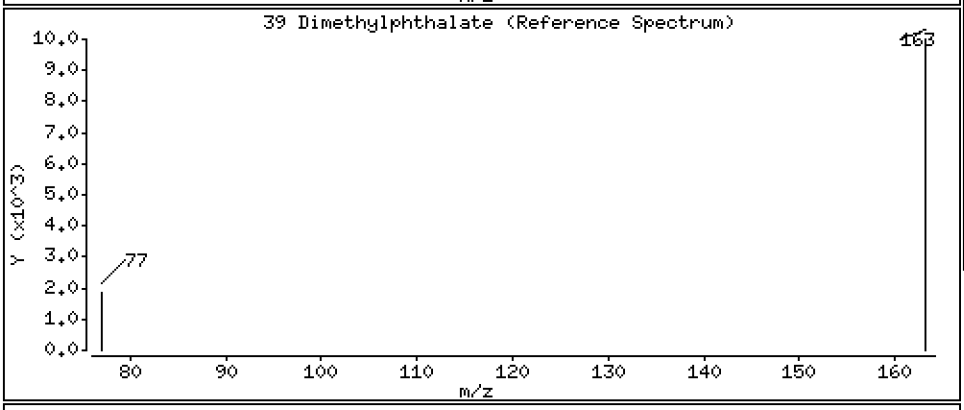
Concentration: 0.09559 ug/mL

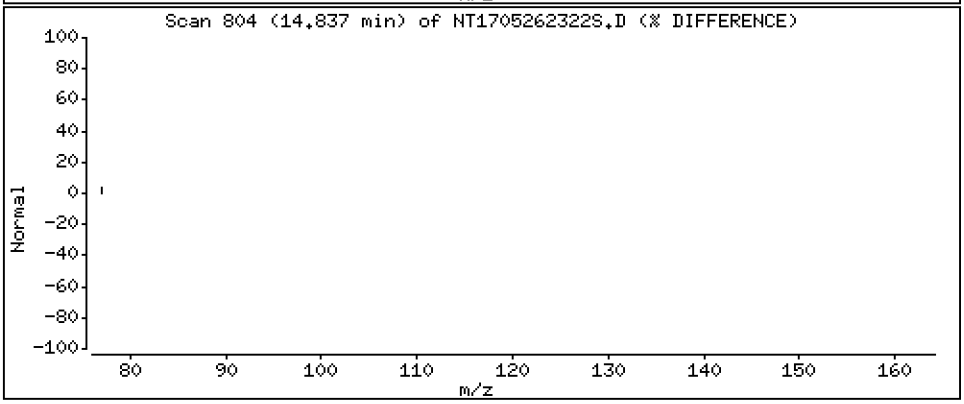












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

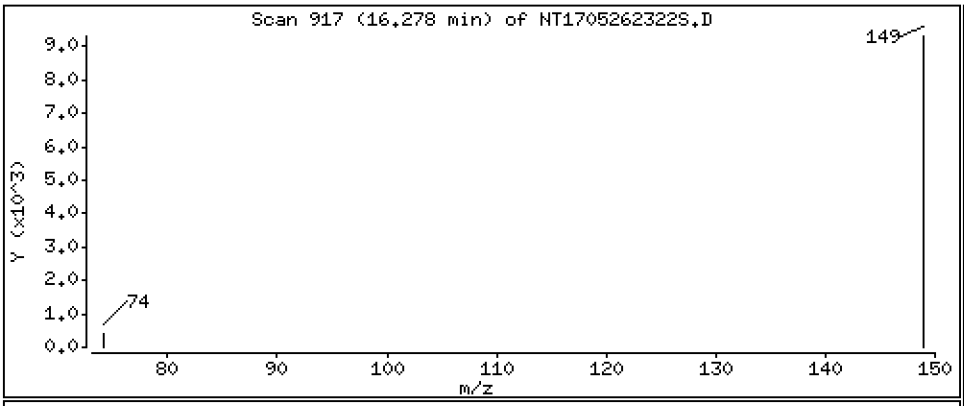
Operator: VTS

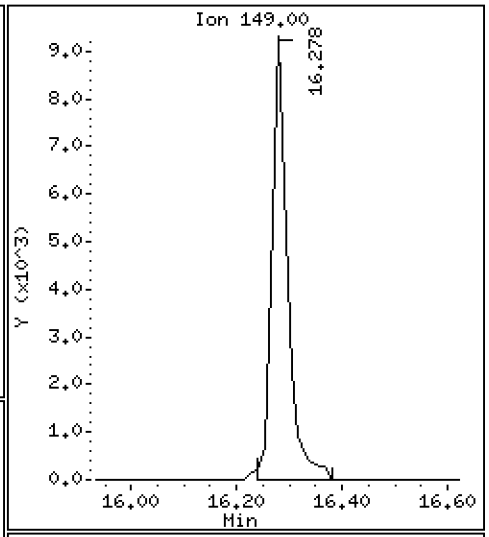
Column phase: ZB-5msi

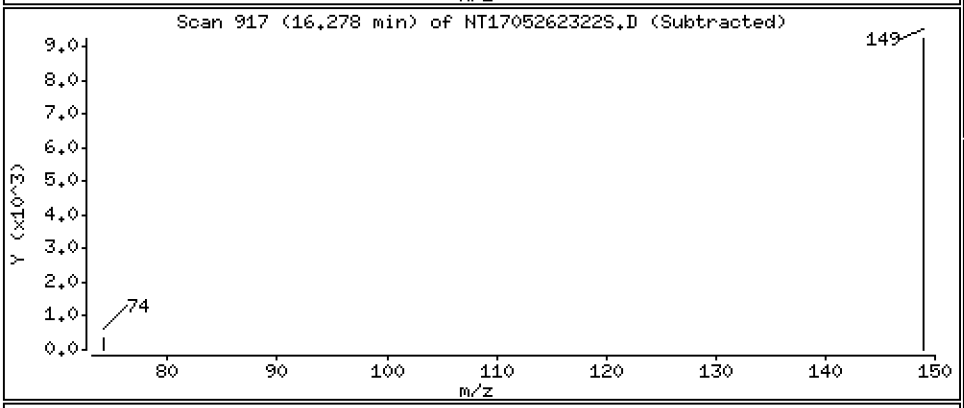
Column diameter: 0.25

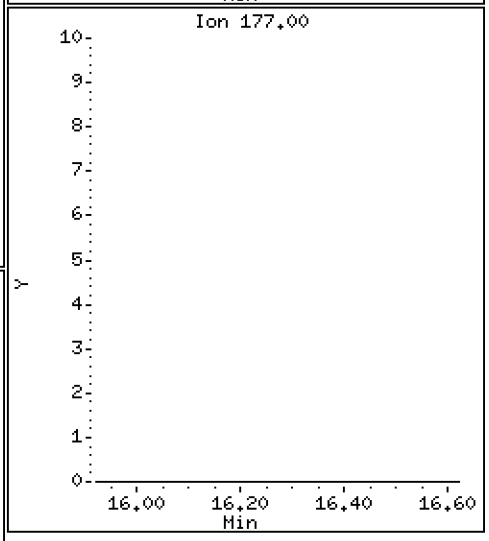
50 Diethylphthalate

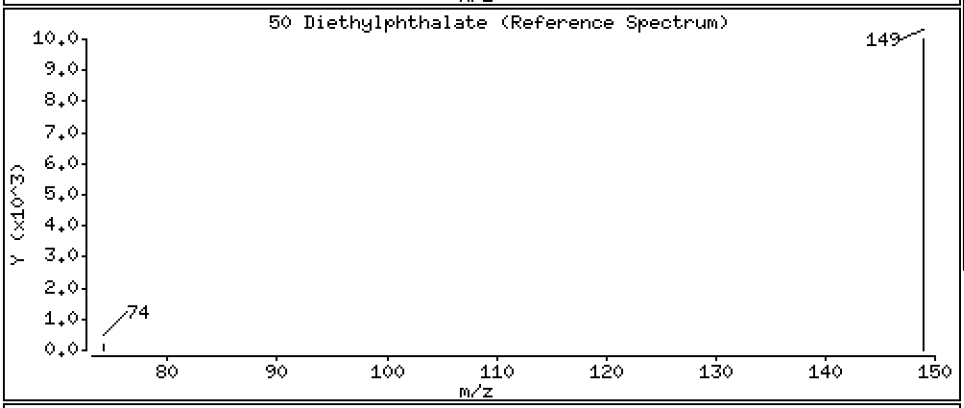
Concentration: 0.09510 ug/mL

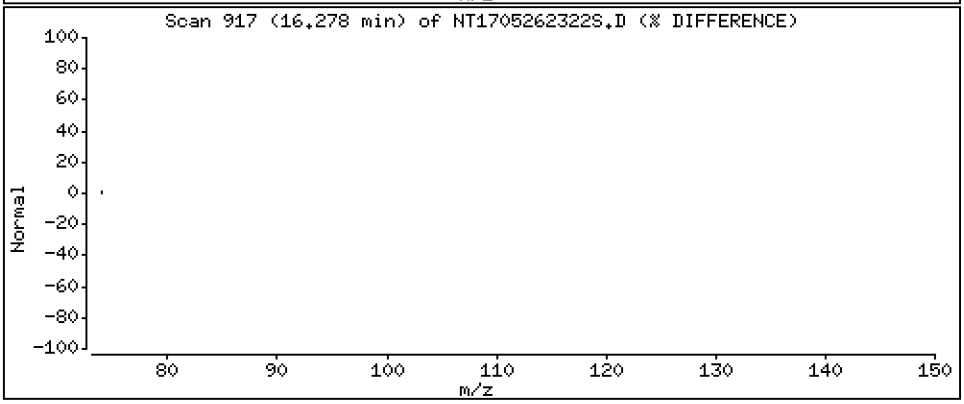












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Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

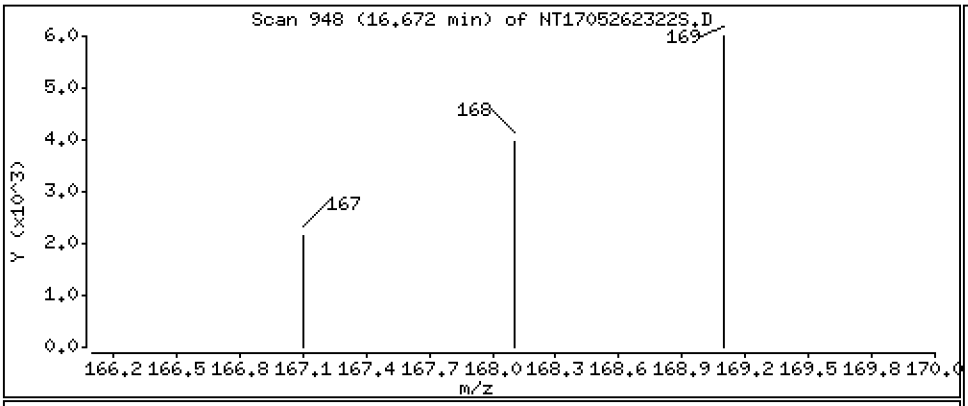
Operator: VTS

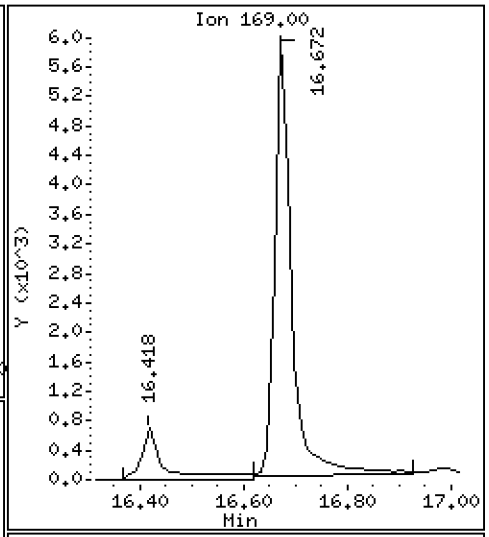
Column phase: ZB-5msi

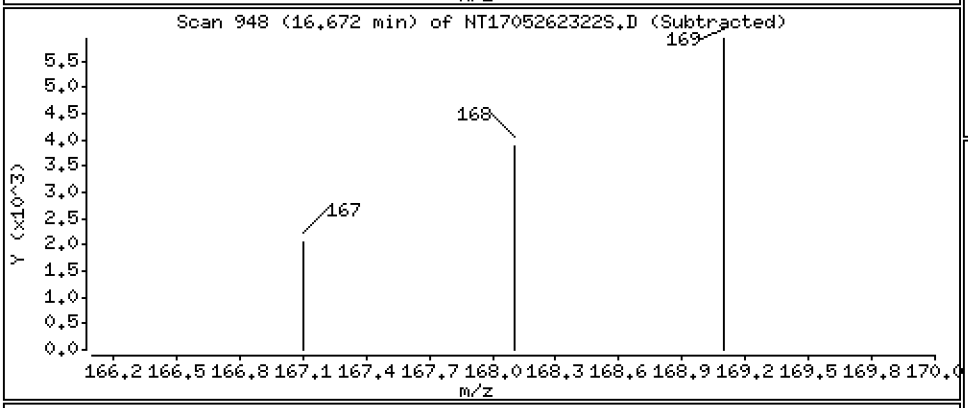
Column diameter: 0.25

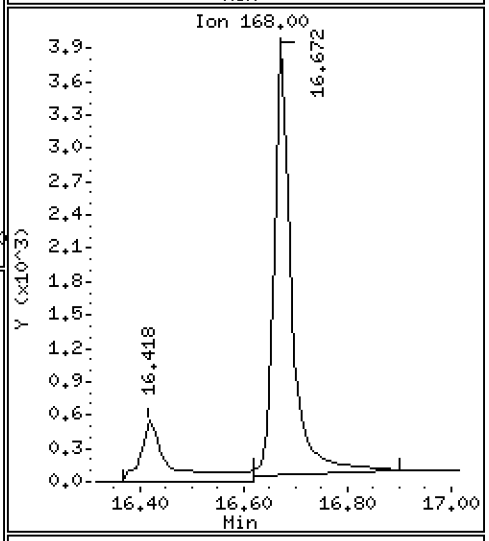
54 N-Nitrosodiphenylamine

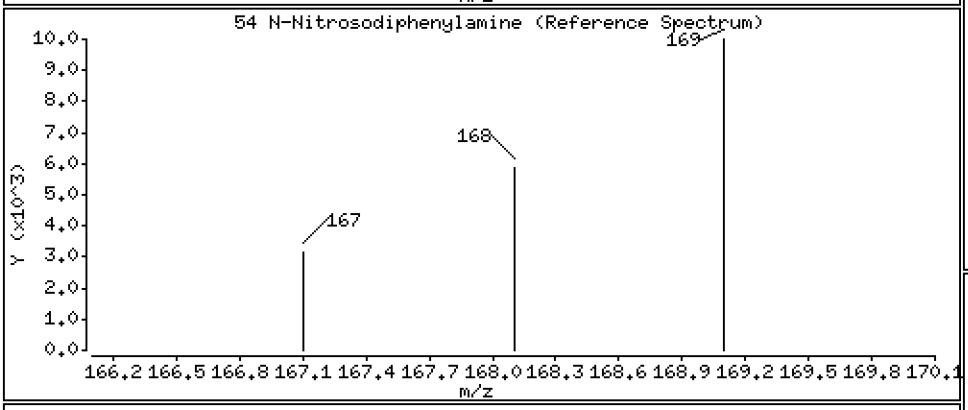
Concentration: 0.1083 ug/mL

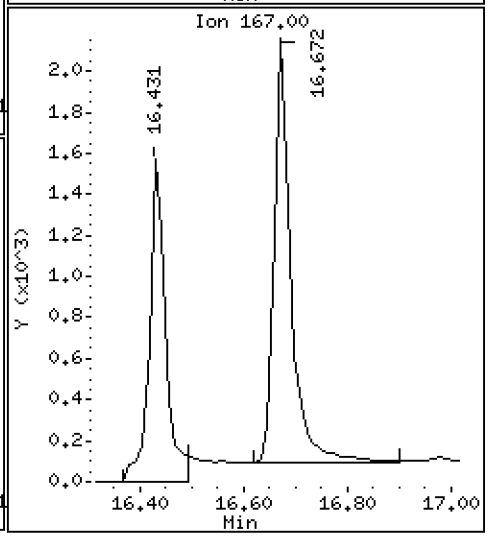


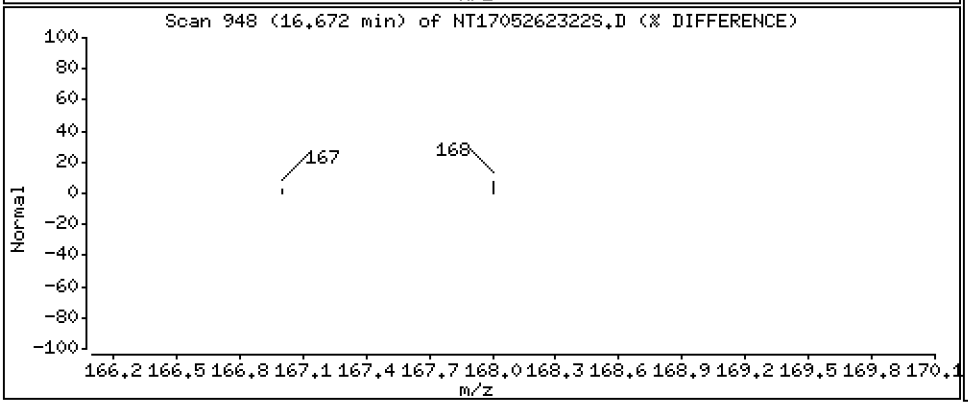












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262322S.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

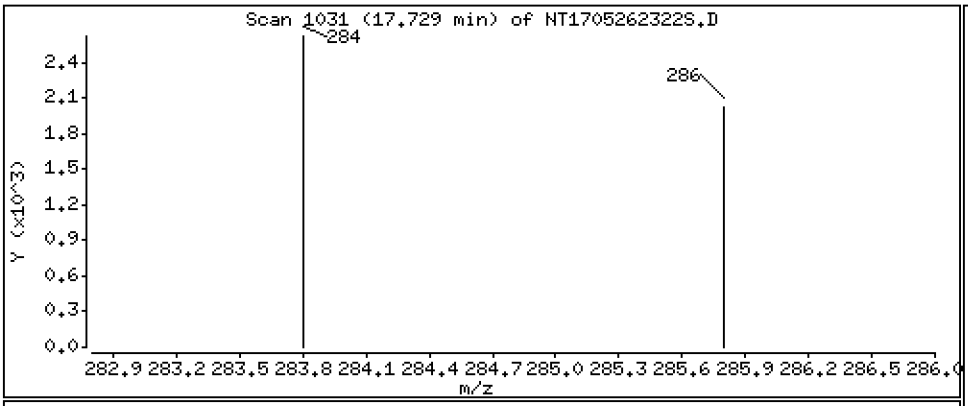
Operator: VTS

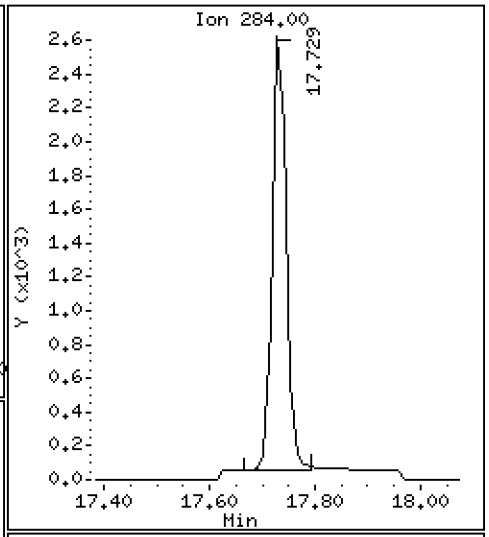
Column phase: ZB-5msi

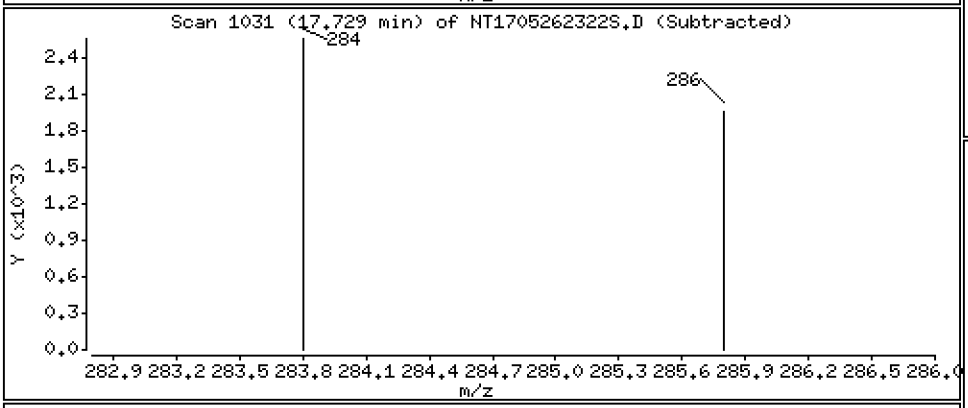
Column diameter: 0.25

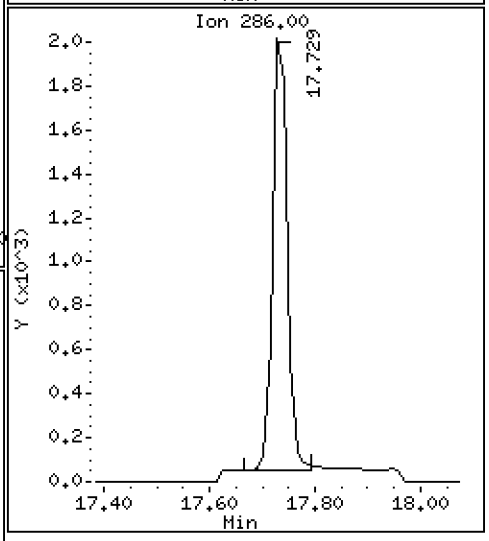
57 Hexachlorobenzene

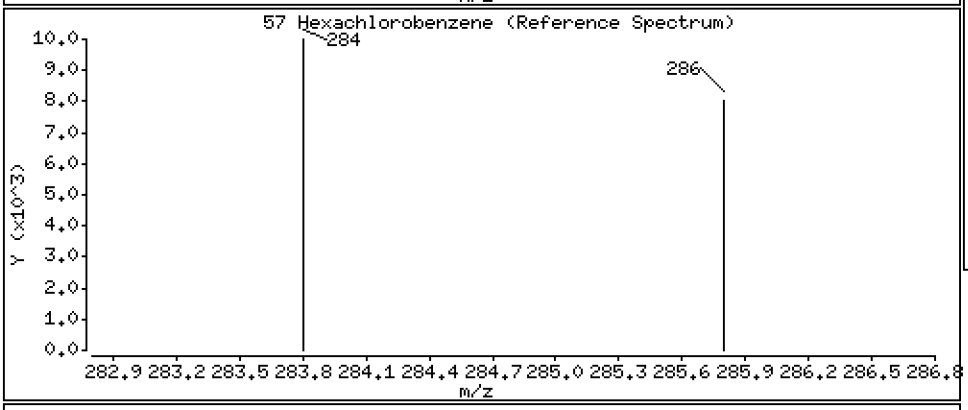
Concentration: 0.1154 ug/mL

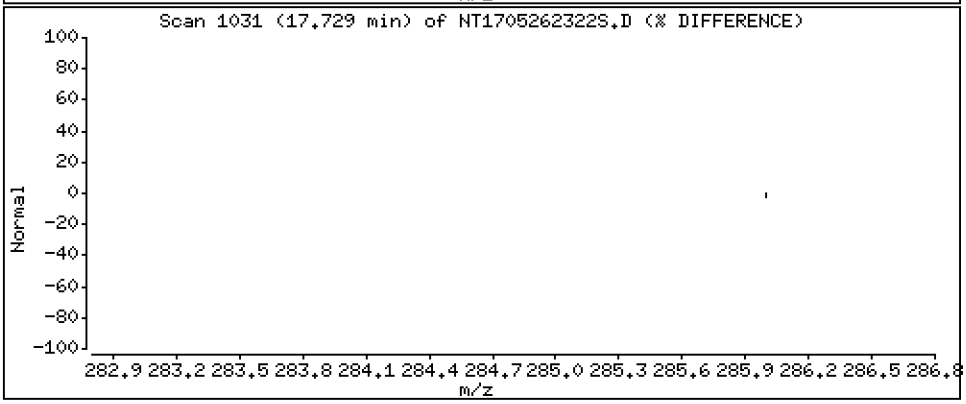












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262322S.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

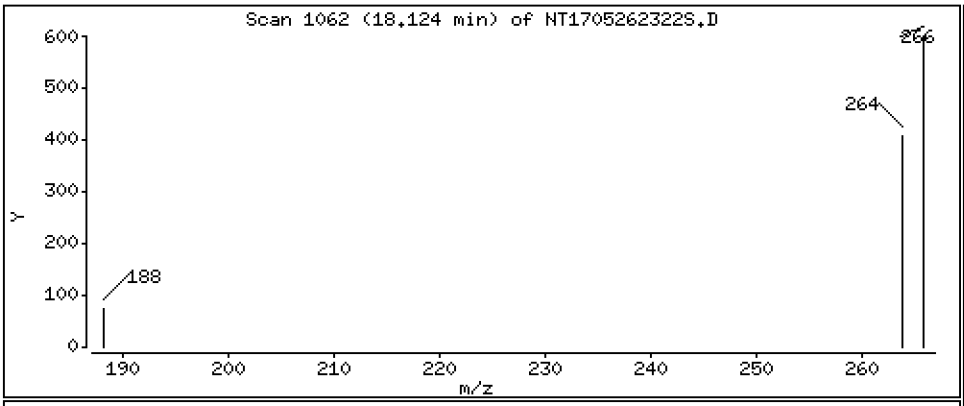
Operator: VTS

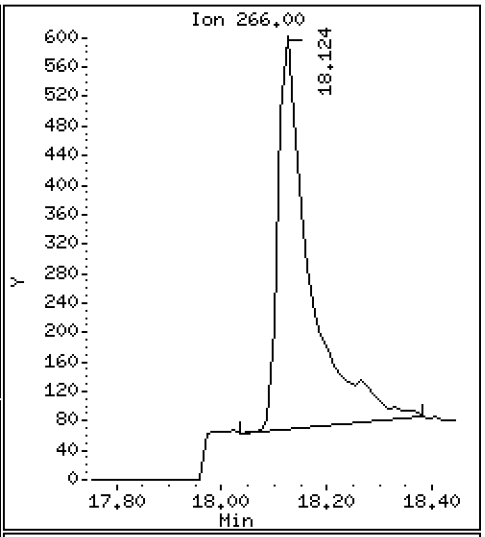
Column phase: ZB-5msi

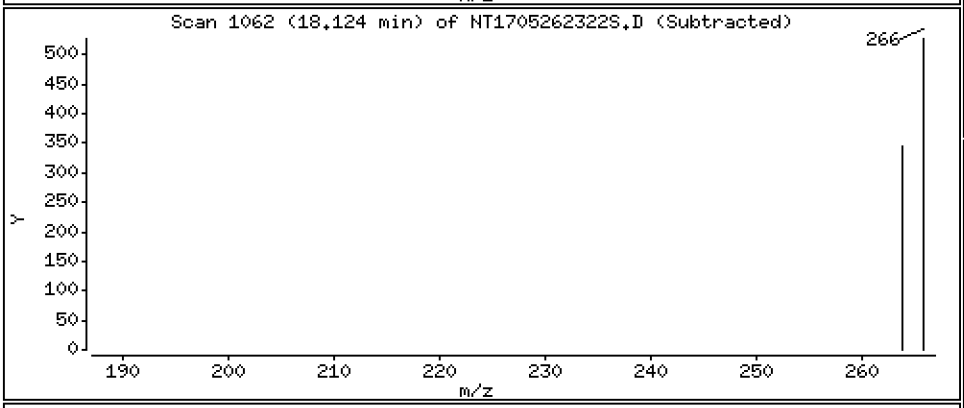
Column diameter: 0.25

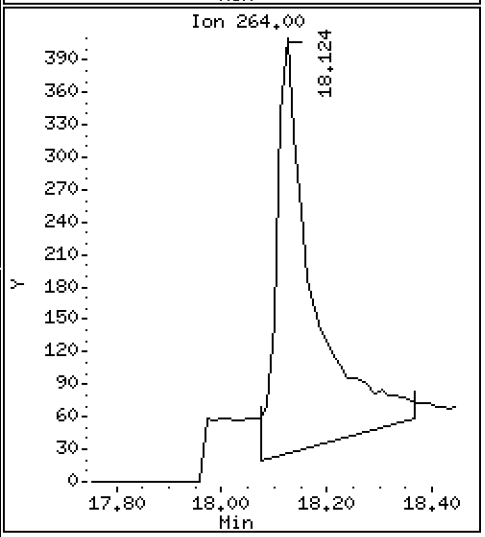
58 Pentachlorophenol

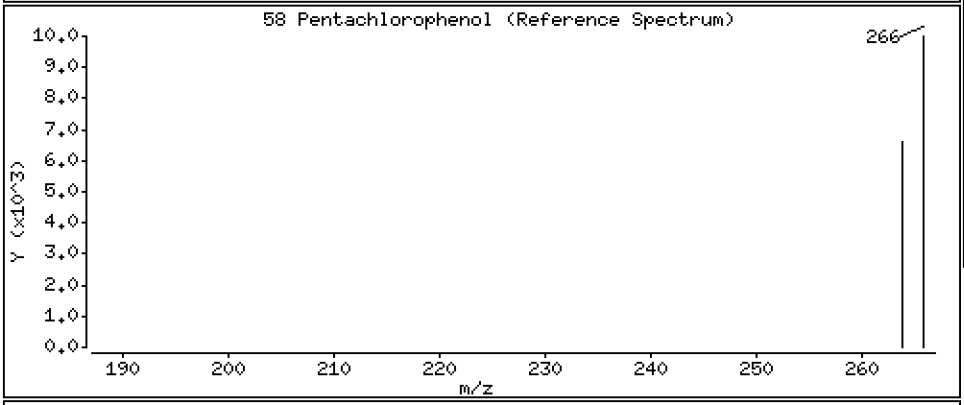
Concentration: 0.09590 ug/mL

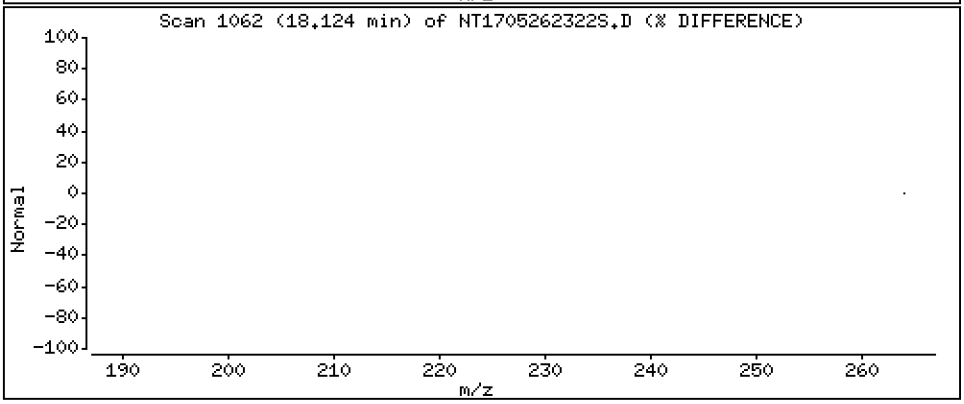












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262322S.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

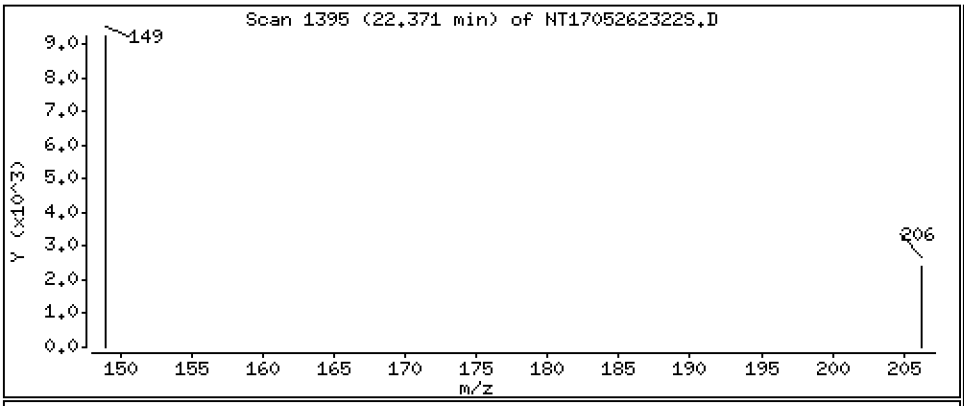
Operator: VTS

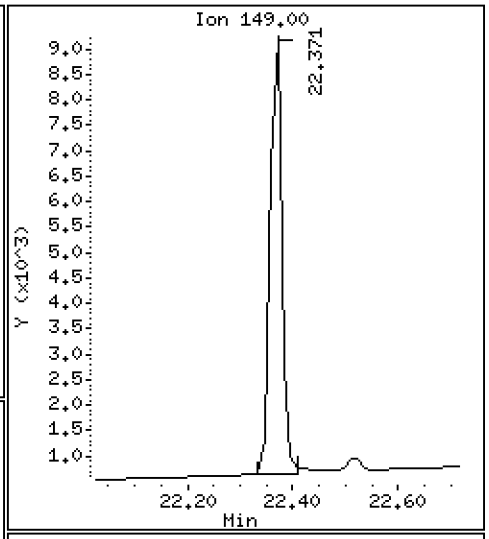
Column phase: ZB-5msi

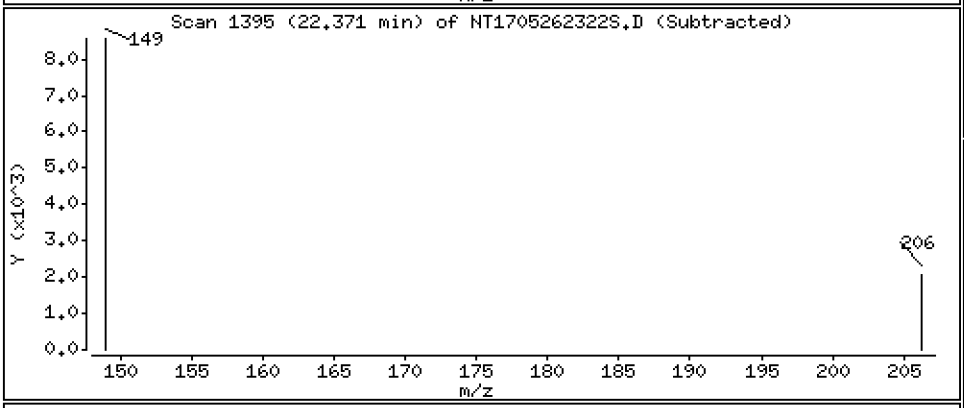
Column diameter: 0.25

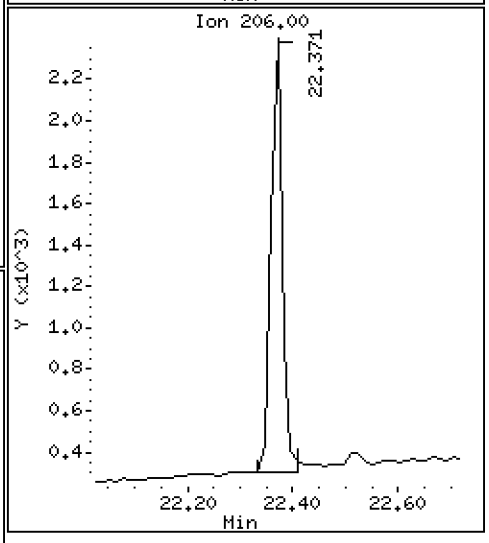
67 Butylbenzylphthalate

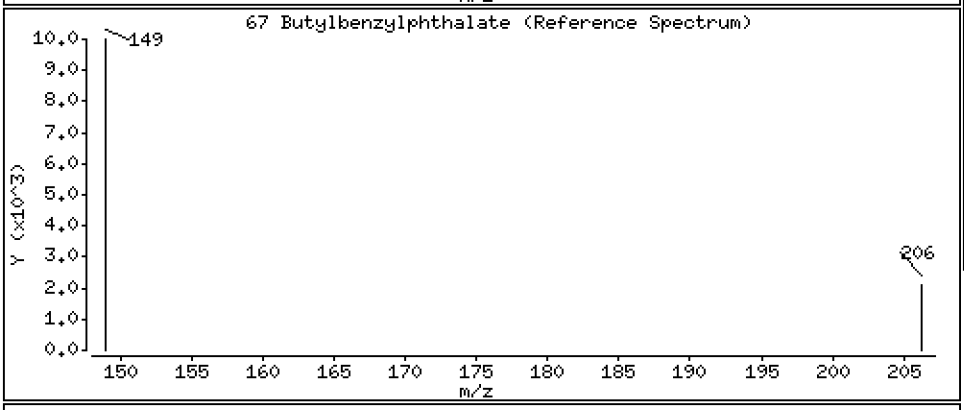
Concentration: 0.09043 ug/mL

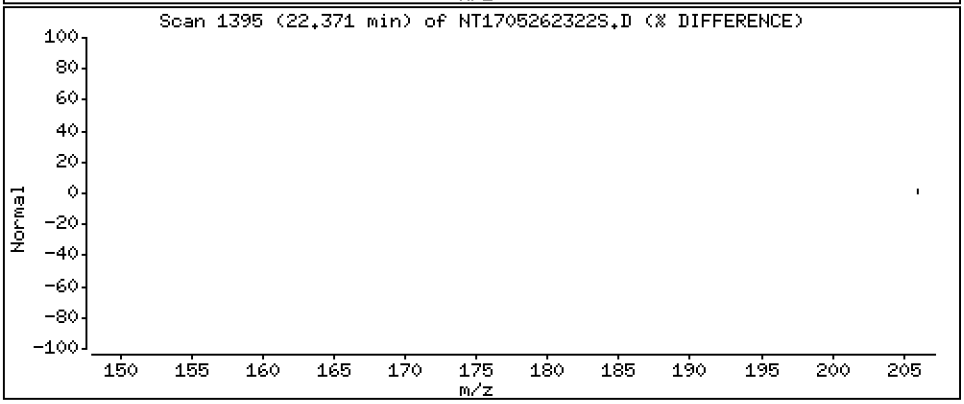












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262322S.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

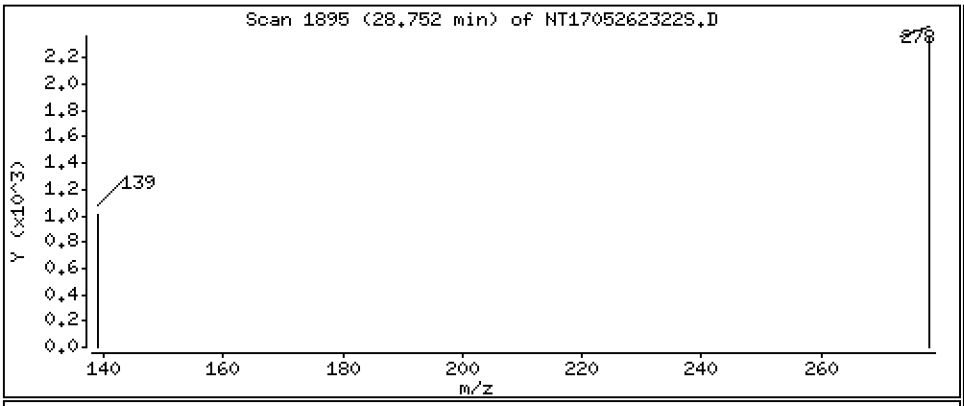
Operator: VTS

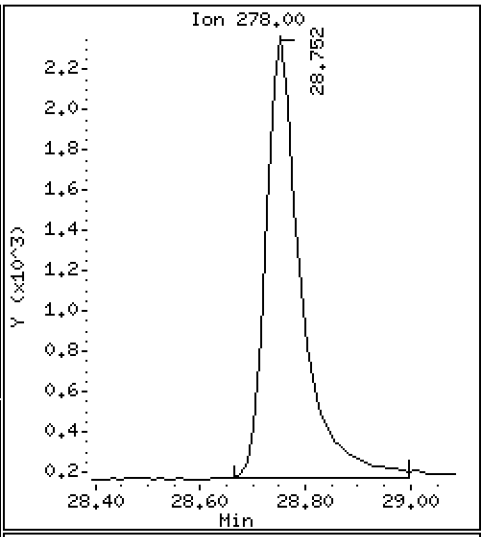
Column phase: ZB-5msi

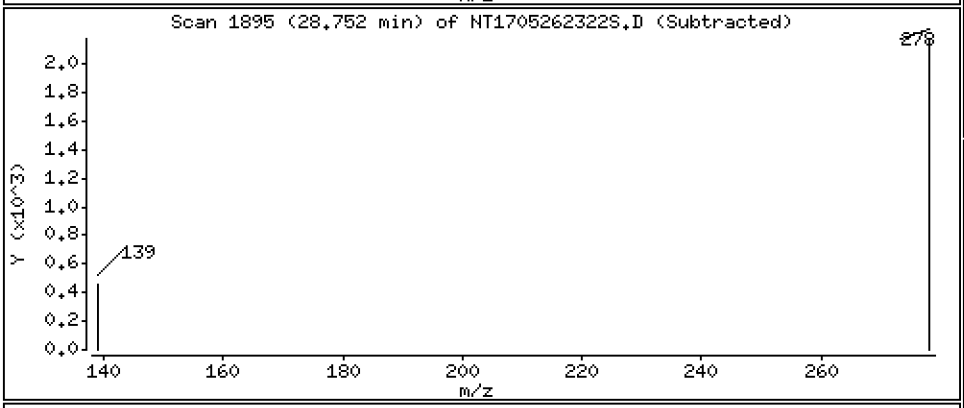
Column diameter: 0.25

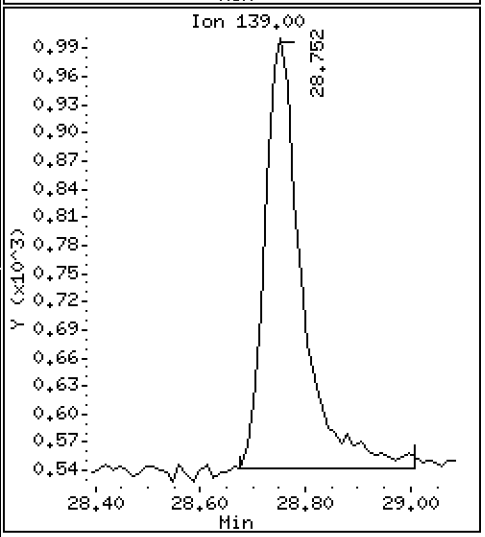
79 Dibenzo(a,h)anthracene

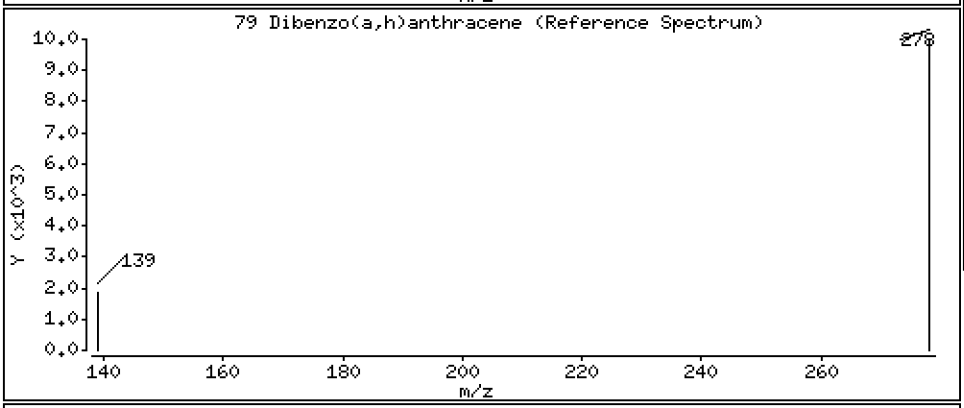
Concentration: 0.06016 ug/mL

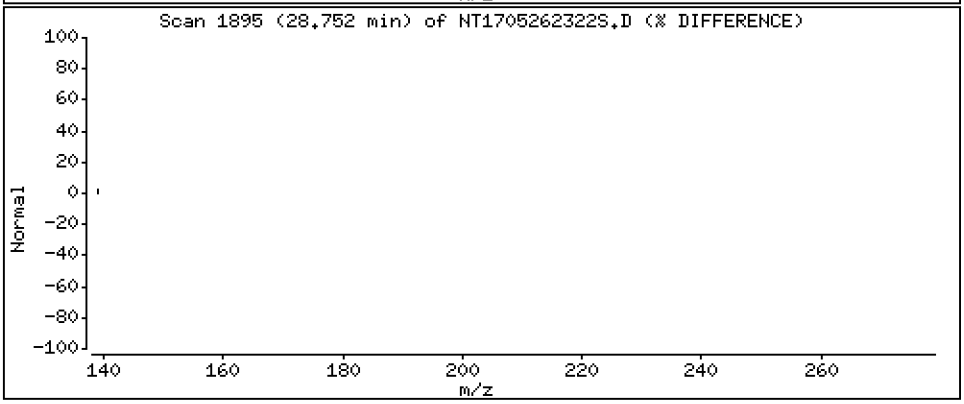












Data File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT17052623225.D

Date : 27-MAY-2023 01:48

Client ID:

Instrument: nt17.i

Sample Info: SLE0442-LCV1

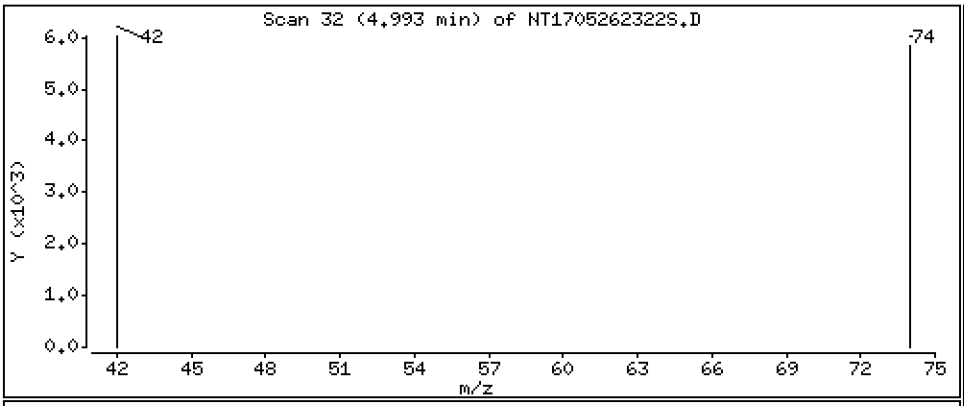
Operator: VTS

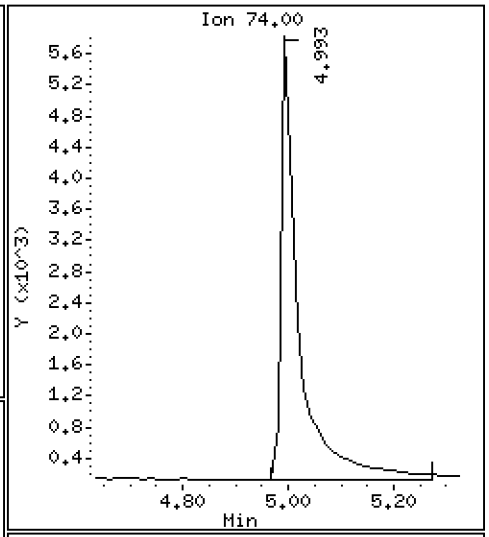
Column phase: ZB-5msi

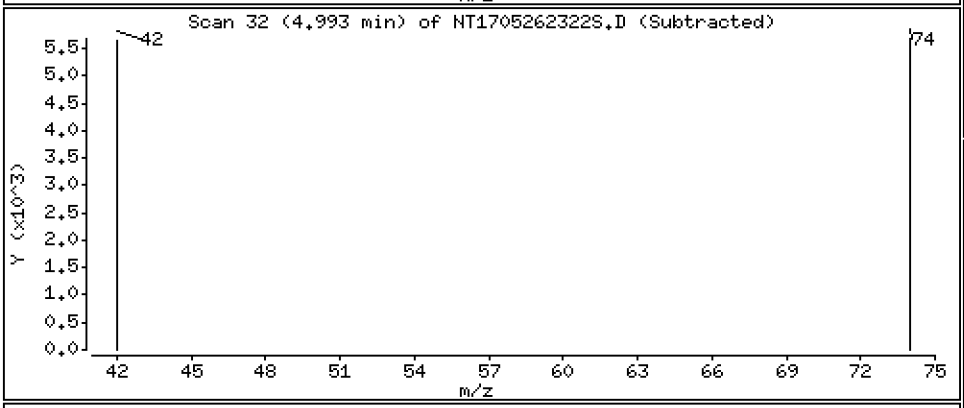
Column diameter: 0.25

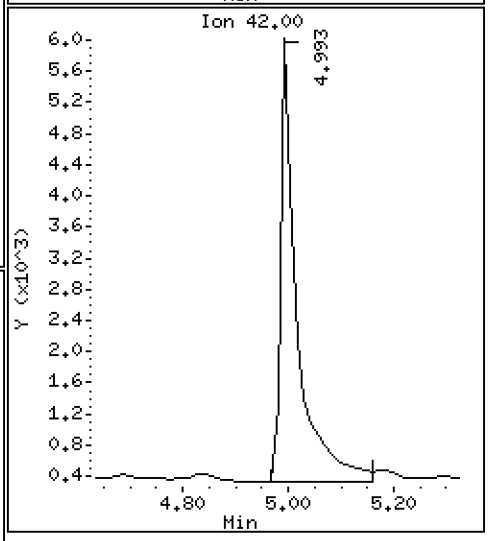
90 N-Nitrosodimethylamine

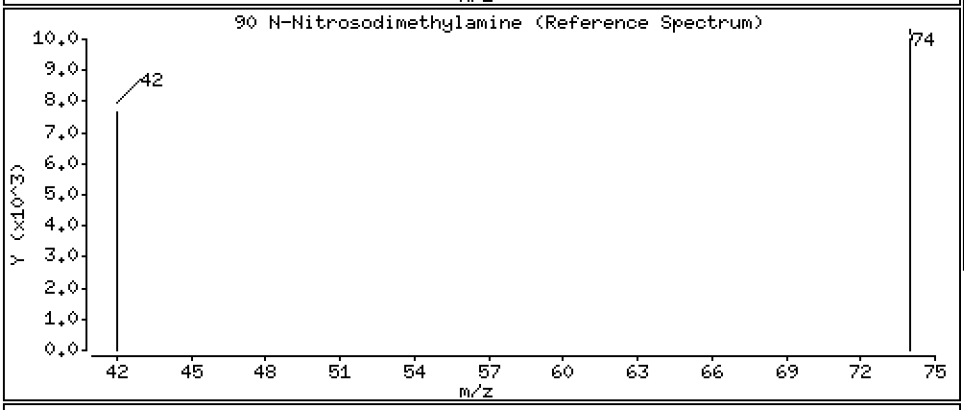
Concentration: 0.1887 ug/mL

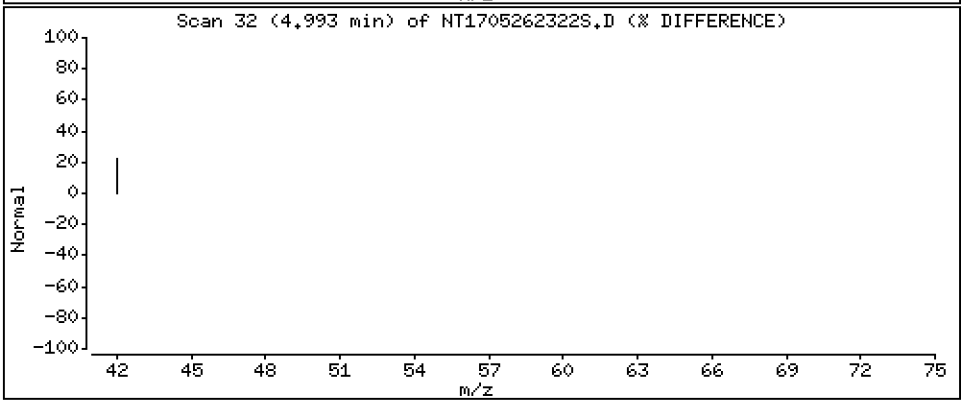












ARI Labs, Inc.

METHOD 8270D-SIM

Data file : \\target\share\chem3\nt17.i\20230526.b\SIM.b\NT1705262322S.D
Lab Smp Id: SLE0442-LCV1
Inj Date : 27-MAY-2023 01:48
Operator : VTS Inst ID: nt17.i
Smp Info : SLE0442-LCV1
Misc Info :
Comment :
Method : \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Meth Date : 07-Jun-2023 07:26 van Quant Type: ISTD
Cal Date : 16-MAY-2023 23:51 Cal File: NT1705162310S.D
Als bottle: 6
Dil Factor: 1.00000
Integrator: HP RTE Compound Sublist: PSDDA.sub
Target Version: 4.14
Processing Host: VANS-201906

	Compounds	QUANT SIG MASS	RT	EXP RT	REL RT	RESPONSE	CONCENTRATIONS ON-COLUMN (ug/mL)	FINAL (ug/mL)
$	1 2-Fluorophenol	112	7.094	7.081	(0.765)	15103	0.13170	0.1317(R)
	3 Phenol	94	8.687	8.674	(0.937)	15727	0.09204	0.09204
	7 1,3-Dichlorobenzene	146	9.209	9.209	(0.993)	16052	0.10481	0.1048
*	8 1,4-Dichlorobenzene-d4	152	9.273	9.273	(1.000)	379141	4.00000	
	9 1,4-Dichlorobenzene	146	9.299	9.299	(1.003)	16165	0.10831	0.1083
	11 Benzyl alcohol	79	9.605	9.554	(1.036)	7459	0.07661	0.07661
	12 1,2-Dichlorobenzene	146	9.656	9.656	(1.041)	15049	0.10288	0.1029
	13 2-Methylphenol	108	9.797	9.771	(1.056)	9064	0.07655	0.07655
	15 4-Methylphenol	108	10.065	10.040	(1.085)	7376	0.06164	0.06164
	16 N-Nitroso-di-n-propylamine	70	10.104	10.091	(1.090)	7358	0.08532	0.08532
	22 2,4-Dimethylphenol	107	11.100	11.062	(0.946)	18092	0.16745	0.1674
	24 Benzoic acid	105	11.342	11.228	(0.966)	4264	0.06335	0.06335(MH)
	26 1,2,4-Trichlorobenzene	180	11.649	11.649	(0.992)	10164	0.10368	0.1037
*	27 Naphthalene-d8	136	11.738	11.738	(1.000)	1123230	4.00000	
	30 Hexachlorobutadiene	225	12.133	12.133	(1.034)	5778	0.11194	0.1119
	39 Dimethylphthalate	163	14.837	14.837	(0.968)	21352	0.09559	0.09559
*	42 Acenaphthene-d10	162	15.334	15.334	(1.000)	608264	4.00000	
	50 Diethylphthalate	149	16.277	16.277	(1.062)	19292	0.09510	0.09510
	54 N-Nitrosodiphenylamine	169	16.672	16.659	(0.908)	13226	0.10828	0.1083
	57 Hexachlorobenzene	284	17.728	17.728	(0.966)	4780	0.11536	0.1154
	58 Pentachlorophenol	266	18.124	18.098	(0.987)	2238	0.09590	0.09590(M)
*	59 Phenanthrene-d10	188	18.353	18.353	(1.000)	866998	4.00000	
$	66 Terphenyl-d14	244	21.465	21.452	(0.919)	13439	0.09629	0.09629(R)
	67 Butylbenzylphthalate	149	22.370	22.370	(0.958)	13715	0.09043	0.09043
*	69 Chrysene-d12	240	23.353	23.353	(1.000)	735564	4.00000	
*	77 Perylene-d12	264	26.006	26.006	(1.000)	596830	4.00000	
	79 Dibenzo(a,h)anthracene	278	28.752	28.739	(1.106)	10127	0.06016	0.06016
	90 N-Nitrosodimethylamine	74	4.992	4.979	(0.538)	13968	0.18872	0.1887

QC Flag Legend

R - Spike/Surrogate failed recovery limits.
M - Compound response manually integrated.

QC Flag Legend

H - Operator selected an alternate compound hit.

ARI Labs, Inc.

INTERNAL STANDARD COMPOUNDS
AREA AND RT SUMMARY

Instrument ID: nt17.i
Lab File ID: NT1705262322S.D
Lab Smp Id: SLE0442-LCV1
Analysis Type: SV
Quant Type: ISTD
Operator: VTS
Method File: \\target\share\chem3\nt17.i\20230526.b\SIM.b\SIMABN2.m
Misc Info:

Calibration Date: 27-MAY-2023
Calibration Time: 00:33
Level:
Sample Type:

Test Mode:
Use Last Continuing Calibrator.

COMPOUND	STANDARD	AREA LIMIT LOWER	AREA LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	375423	187712	750846	379141	0.99
27 Naphthalene-d8	1173037	586519	2346074	1123230	-4.25
42 Acenaphthene-d10	638940	319470	1277880	608264	-4.80
59 Phenanthrene-d10	901788	450894	1803576	866998	-3.86
69 Chrysene-d12	767966	383983	1535932	735564	-4.22
77 Perylene-d12	642149	321075	1284298	596830	-7.06

COMPOUND	STANDARD	RT LIMIT LOWER	RT LIMIT UPPER	SAMPLE	%DIFF
8 1,4-Dichlorobenze	9.27	8.77	9.77	9.27	0.00
27 Naphthalene-d8	11.74	11.24	12.24	11.74	0.00
42 Acenaphthene-d10	15.33	14.83	15.83	15.33	0.00
59 Phenanthrene-d10	18.35	17.85	18.85	18.35	0.00
69 Chrysene-d12	23.35	22.85	23.85	23.35	0.00
77 Perylene-d12	26.01	25.51	26.51	26.01	0.00

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

REVIEW SUMMARY FOR FILE - NT1705262322S.D

Lab ID: SLE0442-LCV1
nt17.i, 20230526.b\SIM.b\SIMABN2.m,   27-MAY-2023 01:48

RT	CO-ELUTION COMPOUNDS

NO CO-ELUTIONS

Quant Method: ICAL

RRT CHECK

RRT	CCV RRT	DELTA	COMPOUND
1.036	1.030	0.0055	Benzyl alcohol
0.966	0.957	0.0098	Benzoic acid

RRT check based on Ccal File: SIM.b/NT1705262320S.D

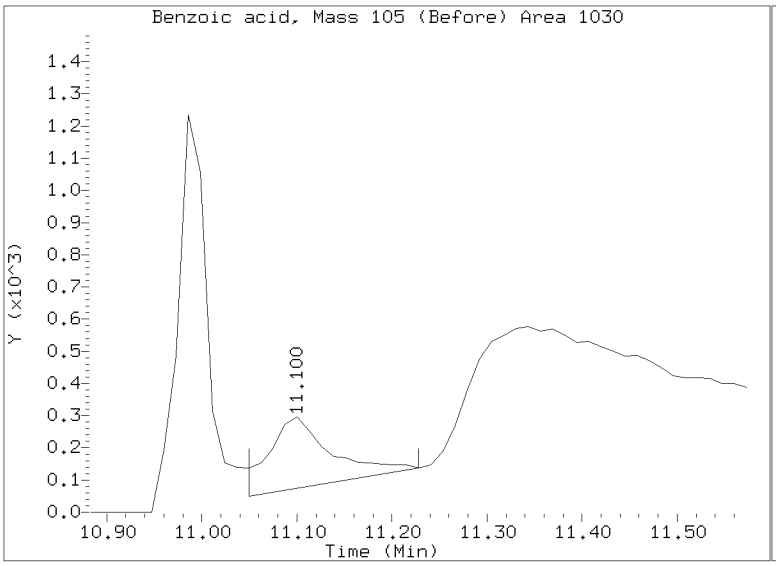
On Column LOD for nt17.i, SIM.b\SIMABN2.m, PSDDA.sub = 0.0000

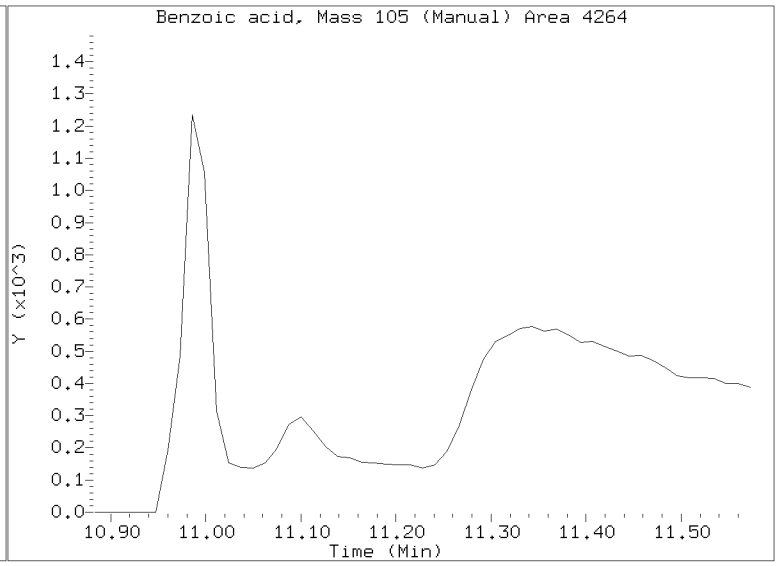
Exception: 1,2,4-Trichlorobenzene 0.0010

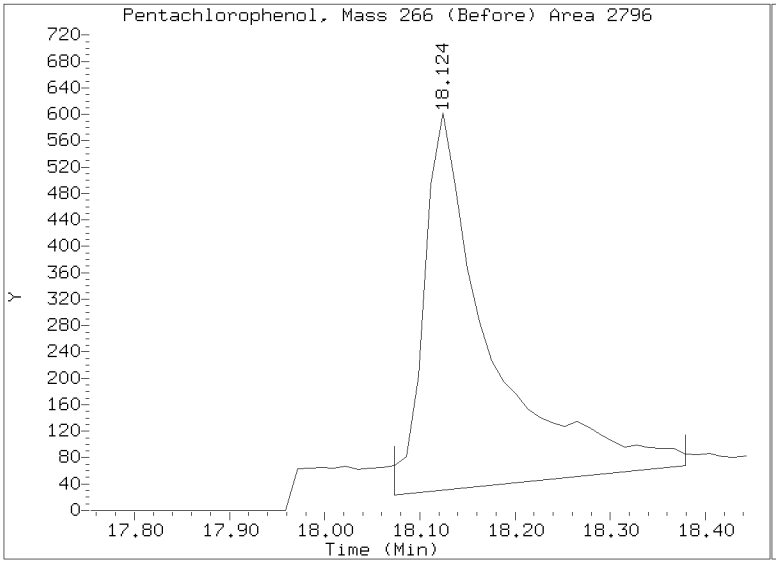
* Only compounds listed in the work order have been verified by the analyst *

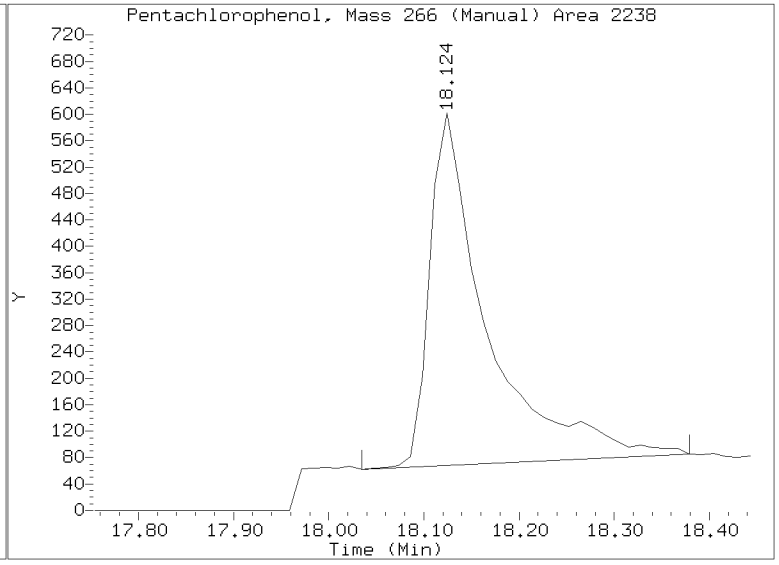
Quant Ion Manual Peak Adjustment Report

Datafile: //target/share/chem3/nt17.i/20230526.b/SIM.b/NT1705262322S.D
Injection Date: 27-MAY-2023 01:48
Lab ID:SLE0442-LCV1 Client ID:
Report Date: 06/07/2023 07:57









Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0339	Instrument:	NT17
		Calibration:	GE00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLE0339-TUN1	NT1705162301S.D	NA	05/16/23 18:14
CAL 10.0	SLE0339-CAL8	NT1705162303S.D	NA	05/16/23 19:29
CAL 5.0	SLE0339-CAL7	NT1705162304S.D	NA	05/16/23 20:07
CAL 2.5	SLE0339-CAL6	NT1705162305S.D	NA	05/16/23 20:44
CAL 1.0	SLE0339-CAL5	NT1705162306S.D	NA	05/16/23 21:22
CAL 0.50	SLE0339-CAL4	NT1705162307S.D	NA	05/16/23 21:59
CAL 0.20	SLE0339-CAL3	NT1705162308S.D	NA	05/16/23 22:37
CAL 0.10	SLE0339-CAL2	NT1705162309S.D	NA	05/16/23 23:14
CAL 0.05	SLE0339-CAL1	NT1705162310S.D	NA	05/16/23 23:51
SCV 5.0	SLE0339-SCV1	NT1705162311S.D	NA	05/17/23 00:29
Initial Cal Blank	SLE0339-ICB1	NT1705162312S.D	NA	05/17/23 01:07

Printed: 5/24/2023 7:09:37AM

ANALYSIS SEQUENCE

SLE0339

Instrument ID: NT17
Calibration ID: GE00070
MS EM Level: 1450 EV

GCMS Description: Agilent 7890B/5977B
GCMS Column ID: L004289

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLE0339-TUN1	MS Tune	QC		1	L005516		05/16/2023 18:14	NT1705162301S.D	VTS	
SLE0339-CAL8	CAL 10.0	QC		2	K011110	K010831	05/16/2023 19:29	NT1705162303S.D	JGR	
SLE0339-CAL7	CAL 5.0	QC		3	K011109	K010831	05/16/2023 20:07	NT1705162304S.D	JGR	
SLE0339-CAL6	CAL 2.5	QC		4	K011108	K010831	05/16/2023 20:44	NT1705162305S.D	JGR	
SLE0339-CAL5	CAL 1.0	QC		5	K011107	K010831	05/16/2023 21:22	NT1705162306S.D	JGR	
SLE0339-CAL4	CAL 0.50	QC		6	K011106	K010831	05/16/2023 21:59	NT1705162307S.D	JGR	
SLE0339-CAL3	CAL 0.20	QC		7	K011105	K010831	05/16/2023 22:37	NT1705162308S.D	JGR	
SLE0339-CAL2	CAL 0.10	QC		8	L002877	K010831	05/16/2023 23:14	NT1705162309S.D	JGR	
SLE0339-CAL1	CAL 0.05	QC		9	L002878	K010831	05/16/2023 23:51	NT1705162310S.D	JGR	
SLE0339-SCV1	SCV 5.0	QC		10	K010066	K010831	05/17/2023 00:29	NT1705162311S.D	JGR	
SLE0339-ICB1	Initial Cal Blank	QC		11	K005156	K010831	05/17/2023 01:07	NT1705162312S.D	JGR	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230516.b\SIM.b

	Time	Filename	LabID	ClientId	DF											
1	1814	NT1705162301S.D	SLE0339-TUN1		1	|NO ISTDS FOUND||										
2	1929	NT1705162303S.D	SLE0339-CAL8		1	| 9.38	304989||11.85	1098933||15.45	590948||18.47	969131||23.47	604233||26.16	501580|				
3	2007	NT1705162304S.D	SLE0339-CAL7		1	| 9.38	303993||11.84	1096471||15.44	588455||18.47	962811||23.46	594121||26.16	517800|				
4	2044	NT1705162305S.D	SLE0339-CAL6		1	| 9.38	312779||11.84	1112850||15.44	600559||18.47	997102||23.46	638760||26.16	569257|				
5	2122	NT1705162306S.D	SLE0339-CAL5		1	| 9.38	316066||11.84	1102073||15.44	583826||18.47	970917||23.46	590568||26.16	537938|				
6	2159	NT1705162307S.D	SLE0339-CAL4		1	| 9.38	310689||11.84	1075836||15.44	560079||18.46	909163||23.46	547811||26.16	508065|				
7	2237	NT1705162308S.D	SLE0339-CAL3		1	| 9.38	324202||11.84	1123074||15.44	587914||18.46	972346||23.46	582965||26.15	529057|				
8	2314	NT1705162309S.D	SLE0339-CAL2		1	| 9.38	342586||11.84	1209699||15.44	635389||18.46	1076905||23.46	694468||26.16	649331|				
9	2351	NT1705162310S.D	SLE0339-CAL1		1	| 9.38	317514||11.84	1096096||15.44	567814||18.46	924770||23.46	560403||26.15	515224|				
10	0029	NT1705162311S.D	SLE0339-SCV1		1	| 9.38	280298||11.84	999390||15.44	527927||18.47	860054||23.46	527529||26.16	475440|				
11	0107	NT1705162312S.D	SLE0339-ICB1		1	| 9.38	302680||11.84	1065796||15.44	551880||18.46	903730||23.46	538208||26.15	508161|				

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230516.b\SIM.b

Instrument: nt17.i Date: 16-MAY-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1814	NT1705162301S.D	SLE0339-TUN1	1	NO MANUAL INTEGRATION
1929	NT1705162303S.D	SLE0339-CAL8	1	Benzoic acid,
2007	NT1705162304S.D	SLE0339-CAL7	1	Benzoic acid,
2044	NT1705162305S.D	SLE0339-CAL6	1	Benzoic acid,
2122	NT1705162306S.D	SLE0339-CAL5	1	Benzoic acid,
2159	NT1705162307S.D	SLE0339-CAL4	1	Benzoic acid,
2237	NT1705162308S.D	SLE0339-CAL3	1	Benzoic acid,
2314	NT1705162309S.D	SLE0339-CAL2	1	NO MANUAL INTEGRATION
2351	NT1705162310S.D	SLE0339-CAL1	1	Benzyl alcohol, Pentachlorophenol,
0029	NT1705162311S.D	SLE0339-SCV1	1	NO MANUAL INTEGRATION
0107	NT1705162312S.D	SLE0339-ICB1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 24-May-2023 07:10

NT1705162301S.D	Data Locked	van, 24-May-2023 07:10
NT1705162303S.D	Data Locked	van, 24-May-2023 07:10
NT1705162304S.D	Data Locked	van, 24-May-2023 07:10
NT1705162305S.D	Data Locked	van, 24-May-2023 07:10
NT1705162306S.D	Data Locked	van, 24-May-2023 07:10
NT1705162307S.D	Data Locked	van, 24-May-2023 07:10
NT1705162308S.D	Data Locked	van, 24-May-2023 07:10
NT1705162309S.D	Data Locked	van, 24-May-2023 07:10
NT1705162310S.D	Data Locked	van, 24-May-2023 07:10
NT1705162311S.D	Data Locked	van, 24-May-2023 07:10
NT1705162312S.D	Data Locked	van, 24-May-2023 07:10

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0442	Instrument:	NT17
		Calibration:	GE00070

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
MS Tune	SLE0442-TUN1	NT1705262301S.D	NA	05/26/23 12:58
ABN 1.0	SLE0442-ICV1	NT1705262303S.D	NA	05/26/23 13:53
Blank	BLD0607-BLK2	NT1705262306S.D	Solid	05/26/23 15:47
LCS	BLD0607-BS2	NT1705262307S.D	Solid	05/26/23 16:25
LCS Dup	BLD0607-BSD2	NT1705262308S.D	Solid	05/26/23 17:02
Reference	BLD0607-SRM2	NT1705262311S.D	Solid	05/26/23 18:56
ZZZZZ	23D0394-01	NT1705262312S.D	Solid	05/26/23 19:33
ZZZZZ	23D0394-02	NT1705262313S.D	Solid	05/26/23 20:11
ZZZZZ	23D0394-04	NT1705262314S.D	Solid	05/26/23 20:48
ZZZZZ	23D0394-06	NT1705262315S.D	Solid	05/26/23 21:26
ZZZZZ	23D0394-08	NT1705262316S.D	Solid	05/26/23 22:03
ZZZZZ	23D0394-11	NT1705262317S.D	Solid	05/26/23 22:40
ZZZZZ	23D0394-12	NT1705262318S.D	Solid	05/26/23 23:18
ABN 1	SLE0442-ICV2	NT1705262320S.D	NA	05/27/23 00:33
ABN 0.1	SLE0442-LCV1	NT1705262322S.D	NA	05/27/23 01:48
LDW23-SS1801	23D0396-01	NT1705262323S.D	Solid	05/27/23 02:25
LDW23-SS1802	23D0396-03	NT1705262324S.D	Solid	05/27/23 03:02
Blank	BLD0607-BLK4	NT1705262327S.D	Solid	05/27/23 04:54
ABN 1.0	SLE0442-CCV1	NT1705262329S.D	NA	05/27/23 06:08

ANALYSIS SEQUENCE

SLE0442

Instrument ID: NT17
Calibration ID: GE00070
MS EM Level: 1500 EV

GCMS Description: Agilent 7890B/5977B
GCMS Column ID: L004289

Lab Number	Sample Name	Analysis	Container	Order	STD ID	ISTD ID	Analyzed	File ID	Analyst	Comments
SLE0442-TUN1	MS Tune	QC		1	L005516		05/26/2023 12:58	NT1705262301S.D	JGR	
SLE0442-ICV1	ABN 1.0	QC		2	L005948	L001570	05/26/2023 13:53	NT1705262303S.D	JGR	
BLD0607-BLK2	Blank	QC		3		L001570	05/26/2023 15:47	NT1705262306S.D	VTS	
BLD0607-BS2	LCS	QC		4		L001570	05/26/2023 16:25	NT1705262307S.D	VTS	
BLD0607-BSD2	LCS Dup	QC		5		L001570	05/26/2023 17:02	NT1705262308S.D	VTS	
BLD0607-SRM2	Reference	QC		6		L001570	05/26/2023 18:56	NT1705262311S.D	VTS	
BLD0607-MS2	Matrix Spike	QC		7		L001570	05/26/2023 17:40	NT1705262309S.D	VTS	
BLD0607-MSD2	Matrix Spike Dup	QC		8		L001570	05/26/2023 18:18	NT1705262310S.D	VTS	
23D0394-01	LDW23-SS1098	270E-SIM Dual Scan SVO	A 02	9		L001570	05/26/2023 19:33	NT1705262312S.D	VTS	
23D0394-02	LDW23-SS1071	270E-SIM Dual Scan SVO	A 02	10		L001570	05/26/2023 20:11	NT1705262313S.D	VTS	
23D0394-04	LDW23-SS1078	270E-SIM Dual Scan SVO	A 02	11		L001570	05/26/2023 20:48	NT1705262314S.D	VTS	
23D0394-06	LDW23-SS1807	270E-SIM Dual Scan SVO	A 02	12		L001570	05/26/2023 21:26	NT1705262315S.D	VTS	
23D0394-08	LDW23-SS1055	270E-SIM Dual Scan SVO	A 02	13		L001570	05/26/2023 22:03	NT1705262316S.D	VTS	
23D0394-11	LDW23-SS1034	270E-SIM Dual Scan SVO	A 02	14		L001570	05/26/2023 22:40	NT1705262317S.D	VTS	
23D0394-12	LDW23-SS1806	270E-SIM Dual Scan SVO	A 02	15		L001570	05/26/2023 23:18	NT1705262318S.D	VTS	
SLE0442-ICV2	ABN 1	QC		16	L005948	L001570	05/27/2023 00:33	NT1705262320S.D	VTS	
SLE0442-LCV1	ABN 0.1	QC		17	L005953	L001570	05/27/2023 01:48	NT1705262322S.D	VTS	
23D0396-01	LDW23-SS1801	270E-SIM Dual Scan SVO	A 02	18		L001570	05/27/2023 02:25	NT1705262323S.D	VTS	
23D0396-03	LDW23-SS1802	270E-SIM Dual Scan SVO	A 02	19		L001570	05/27/2023 03:02	NT1705262324S.D	VTS	
BLD0607-BLK4	Blank	QC		20		L001570	05/27/2023 04:54	NT1705262327S.D	VTS	
SLE0442-CCV1	ABN 1.0	QC		21	L005948	L001570	05/27/2023 06:08	NT1705262329S.D	VTS	

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b\SIM.b

	Time	Filename	LabID	ClientId	DF												
1	1258	NT1705262301S.D	SLE0442-TUN1		1	NO ISTDS FOUND											
2	1353	NT1705262303S.D	SLE0442-ICV1		1	9.27	354937	11.74	1204481	15.33	658677	18.35	965415	23.35	615102	25.99	580660
3	1431	NT1705262304S.D	SLE0434-LCV200		1	9.27	328321	11.74	1118326	15.32	617650	18.35	922083	23.35	615598	25.99	628559
4	1509	NT1705262305S.D	SLE0442-LCV1		1	9.27	367704	11.74	1242714	15.32	677616	18.35	988775	23.35	644760	25.99	640968
5	1547	NT1705262306S.D	BLD0607-BLK2		1	9.27	279952	11.74	1014860	15.32	570372	18.34	845585	23.35	569193	25.99	513712
6	1625	NT1705262307S.D	BLD0607-BS2		1	9.27	277093	11.74	977960	15.33	540748	18.35	777447	23.35	508163	25.99	427670
7	1702	NT1705262308S.D	BLD0607-BSD2		1	9.27	285381	11.74	1016889	15.33	563559	18.35	808753	23.35	517231	25.99	436120
8	1740	NT1705262309S.D	BLD0607-MS2		1	9.27	271585	11.74	937566	15.33	470023	18.35	681691	23.37	683924	26.03	539789
9	1818	NT1705262310S.D	BLD0607-MSD2		1	9.27	293739	11.74	1002142	15.33	518067	18.35	761797	23.37	765009	26.03	584836
10	1856	NT1705262311S.D	BLD0607-SRM2		1	9.27	309013	11.74	1037311	15.33	530135	18.35	737581	23.35	635091	26.01	660695
11	1933	NT1705262312S.D	23D0394-01		1	9.27	312770	11.74	1074928	15.33	564327	18.35	792090	23.37	668369	26.02	667499
12	2011	NT1705262313S.D	23D0394-02		1	9.27	309584	11.74	1054248	15.33	531367	18.35	738395	23.37	793180	26.07	617037
13	2048	NT1705262314S.D	23D0394-04		1	9.27	313946	11.74	1060478	15.33	529982	18.35	767549	23.37	753824	26.03	513695
14	2126	NT1705262315S.D	23D0394-06		1	9.27	304242	11.74	1027590	15.33	535671	18.35	768426	23.35	685494	26.01	539741
15	2203	NT1705262316S.D	23D0394-08		1	9.27	310702	11.74	1061743	15.33	541770	18.35	758934	23.35	675822	26.02	522322
16	2240	NT1705262317S.D	23D0394-11		1	9.27	318678	11.74	1094853	15.33	556026	18.35	771451	23.37	731665	26.03	530600
17	2318	NT1705262318S.D	23D0394-12		1	9.27	318831	11.74	1089402	15.33	569217	18.35	809483	23.35	688089	26.02	516716
18	2355	NT1705262319S.D	full-ICV2		1	9.27	336397	11.74	1129240	15.33	626421	18.35	889876	23.35	712210	26.01	582406
19	0033	NT1705262320S.D	SLE0442-ICV2		1	9.27	375423	11.74	1173037	15.33	638940	18.35	901788	23.35	767966	26.01	642149
20	0110	NT1705262321S.D	SLE0434-LCV2		1	9.27	336735	11.74	1050991	15.33	586965	18.35	844050	23.35	664774	26.01	566734

INTERNAL STANDARD SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b\SIM.b

	Time	Filename	LabID	ClientId	DF												
21	0148	NT1705262322S.D	SLE0442-LCV1		1	9.27	379141	11.74	1123230	15.33	608264	18.35	866998	23.35	735564	26.01	596830
22	0225	NT1705262323S.D	23D0396-01		1	9.27	303678	11.74	1033510	15.33	542573	18.35	773140	23.37	676021	26.03	507114
23	0302	NT1705262324S.D	23D0396-03		1	9.27	312420	11.74	1075428	15.33	559877	18.35	796135	23.37	700013	26.03	516440
24	0340	NT1705262325S.D	23C0109-03RE1		1	9.27	319229	11.74	1125873	15.33	604433	18.35	864416	23.37	705007	26.02	559974
25	0417	NT1705262326S.D	23C0108-09RE1		1	9.27	310438	11.74	1091661	15.33	585442	18.35	852083	23.37	679554	26.02	512691
26	0454	NT1705262327S.D	BLD0607-BLK4		1	9.27	319011	11.74	1068298	15.33	560262	18.35	759069	23.35	613725	26.01	449111
27	0531	NT1705262328S.D	SLE0434-CCV1		1	9.27	322824	11.74	1098244	15.33	611480	18.35	891263	23.35	684792	26.01	513007
28	0608	NT1705262329S.D	SLE0442-CCV1		1	9.27	410431	11.74	1307314	15.33	718296	18.35	982072	23.35	749817	26.01	554047

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem3\nt17.i\20230526.b\SIM.b

Instrument: nt17.i Date: 26-MAY-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
1258	NT1705262301S.D	SLE0442-TUN1	1	NO MANUAL INTEGRATION
1353	NT1705262303S.D	SLE0442-ICV1	1	NO MANUAL INTEGRATION
1431	NT1705262304S.D	SLE0434-LCV200	1	NO MANUAL INTEGRATION
1509	NT1705262305S.D	SLE0442-LCV1	1	NO MANUAL INTEGRATION
1547	NT1705262306S.D	BLD0607-BLK2	1	NO MANUAL INTEGRATION
1625	NT1705262307S.D	BLD0607-BS2	1	NO MANUAL INTEGRATION
1702	NT1705262308S.D	BLD0607-BSD2	1	NO MANUAL INTEGRATION
1740	NT1705262309S.D	BLD0607-MS2	1	NO MANUAL INTEGRATION
1818	NT1705262310S.D	BLD0607-MSD2	1	NO MANUAL INTEGRATION
1856	NT1705262311S.D	BLD0607-SRM2	1	NO MANUAL INTEGRATION
1933	NT1705262312S.D	23D0394-01	1	Pentachlorophenol,
2011	NT1705262313S.D	23D0394-02	1	1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dimethylphthalate, Diethylphthalate, Dibenzo(a,h)anthracene,
2048	NT1705262314S.D	23D0394-04	1	1,2-Dichlorobenzene, Benzoic acid, Diethylphthalate,
2126	NT1705262315S.D	23D0394-06	1	1,2-Dichlorobenzene, Dibenzo(a,h)anthracene,
2203	NT1705262316S.D	23D0394-08	1	Dimethylphthalate, Diethylphthalate,
2240	NT1705262317S.D	23D0394-11	1	Dimethylphthalate, Diethylphthalate, Pentachlorophenol,
2318	NT1705262318S.D	23D0394-12	1	1,2-Dichlorobenzene, Benzoic acid, Dimethylphthalate,

Instrument: nt17.i Date: 26-MAY-2023

Time	Filename	LabID	DF	Manually Integrated Compounds
2355	NT1705262319S.D	full-ICV2	1	NO MANUAL INTEGRATION
0033	NT1705262320S.D	SLE0442-ICV2	1	NO MANUAL INTEGRATION
0110	NT1705262321S.D	SLE0434-LCV2	1	NO MANUAL INTEGRATION
0148	NT1705262322S.D	SLE0442-LCV1	1	Benzoic acid, Pentachlorophenol,
0225	NT1705262323S.D	23D0396-01	1	Diethylphthalate, Pentachlorophenol,
0302	NT1705262324S.D	23D0396-03	1	Dimethylphthalate, Diethylphthalate, Pentachlorophenol,
0340	NT1705262325S.D	23C0109-03RE1	1	2-Methylphenol,
0417	NT1705262326S.D	23C0108-09RE1	1	NO MANUAL INTEGRATION
0454	NT1705262327S.D	BLD0607-BLK4	1	1,3-Dichlorobenzene, 1,4-Dichlorobenzene, Dimethylphthalate,
0531	NT1705262328S.D	SLE0434-CCV1	1	NO MANUAL INTEGRATION
0608	NT1705262329S.D	SLE0442-CCV1	1	NO MANUAL INTEGRATION

Security Status Report

Date: 24-May-2023 10:46

NT1705182301S.D	Data Locked	van, 24-May-2023 10:46
NT1705182303S.D	Data Locked	van, 24-May-2023 10:46
NT1705182304S.D	Data Locked	van, 24-May-2023 10:46
NT1705182305S.D	Data Locked	van, 24-May-2023 10:46
NT1705182313S.D	Data Locked	van, 24-May-2023 10:46
NT1705182314S.D	Data Locked	van, 24-May-2023 10:46
NT1705182315S.D	Data Locked	van, 24-May-2023 10:46
NT1705182316S.D	Data Locked	van, 24-May-2023 10:46
NT1705182317S.D	Data Locked	van, 24-May-2023 10:46
NT1705182318S.D	Data Locked	van, 24-May-2023 10:46
NT1705182319S.D	Data Locked	van, 24-May-2023 10:46
NT1705182320S.D	Data Locked	van, 24-May-2023 10:46
NT1705182322S.D	Data Locked	van, 24-May-2023 10:46
NT1705182324S.D	Data Locked	van, 24-May-2023 10:46

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0339	Instrument:	NT17
Calibration:	GE00070	Calibration Date:	05/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0339-SCV1 (Solid)			Lab File ID: NT1705162311S.D				Analyzed: 05/17/23 00:29	
2-Fluorophenol	7.5000		0 - 200		7.166125	-7.1661	N/A	
p-Terphenyl-d14	5.0000		0 - 200		21.55563	-21.5556	N/A	
SLE0339-ICB1 (Solid)			Lab File ID: NT1705162312S.D				Analyzed: 05/17/23 01:07	
2-Fluorophenol	7.5000	108	27 - 120	7.158	7.166125	-0.0081	N/A	
p-Terphenyl-d14	5.0000	105	37 - 120	21.554	21.55563	-0.0016	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0442
Instrument: NT17
Calibration: GE00070
Calibration Date: 05/16/2023

Surrogate Compound	Spike Level ug/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0442-ICV1 (Water)			Lab File ID: NT1705262303S.D			Analyzed: 05/26/23 13:53		
2-Fluorophenol	1.5000	108	80 - 120	7.069	7.166125	-0.0971	N/A	
p-Terphenyl-d14	1.0000	115	80 - 120	21.452	21.55563	-0.1036	N/A	
BLD0607-BLK2 (Solid)			Lab File ID: NT1705262306S.D			Analyzed: 05/26/23 15:47		
2-Fluorophenol	750.00	67.6	27 - 120	7.094	7.166125	-0.0721	N/A	
p-Terphenyl-d14	500.00	102	37 - 120	21.452	21.55563	-0.1036	N/A	
BLD0607-BS2 (Solid)			Lab File ID: NT1705262307S.D			Analyzed: 05/26/23 16:25		
2-Fluorophenol	750.00	83.5	27 - 120	7.094	7.166125	-0.0721	N/A	
p-Terphenyl-d14	500.00	103	37 - 120	21.452	21.55563	-0.1036	N/A	
BLD0607-BSD2 (Solid)			Lab File ID: NT1705262308S.D			Analyzed: 05/26/23 17:02		
2-Fluorophenol	750.00	82.4	27 - 120	7.094	7.166125	-0.0721	N/A	
p-Terphenyl-d14	500.00	103	37 - 120	21.452	21.55563	-0.1036	N/A	
BLD0607-SRM2 (Solid)			Lab File ID: NT1705262311S.D			Analyzed: 05/26/23 18:56		
2-Fluorophenol	7500.0	86.0	27 - 120	7.107	7.166125	-0.0591	N/A	
p-Terphenyl-d14	5000.0	81.8	37 - 120	21.452	21.55563	-0.1036	N/A	
SLE0442-ICV2 (Water)			Lab File ID: NT1705262320S.D			Analyzed: 05/27/23 00:33		
2-Fluorophenol	1.5000	111	80 - 120	7.081	7.166125	-0.0851	N/A	
p-Terphenyl-d14	1.0000	91.7	80 - 120	21.452	21.55563	-0.1036	N/A	
SLE0442-LCV1 (Water)			Lab File ID: NT1705262322S.D			Analyzed: 05/27/23 01:48		
2-Fluorophenol	0.15000	87.8	0 - 200	7.094	7.166125	-0.0721	N/A	
p-Terphenyl-d14	0.10000	96.3	0 - 200	21.465	21.55563	-0.0906	N/A	
23D0396-01 (Solid)			Lab File ID: NT1705262323S.D			Analyzed: 05/27/23 02:25		
2-Fluorophenol	750.01	74.1	27 - 120	7.132	7.166125	-0.0341	N/A	
p-Terphenyl-d14	500.01	74.6	37 - 120	21.465	21.55563	-0.0906	N/A	
23D0396-03 (Solid)			Lab File ID: NT1705262324S.D			Analyzed: 05/27/23 03:02		
2-Fluorophenol	749.98	72.0	27 - 120	7.132	7.166125	-0.0341	N/A	
p-Terphenyl-d14	499.99	71.2	37 - 120	21.465	21.55563	-0.0906	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG/WO:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0442	Instrument:	NT17
Calibration:	GE00070	Calibration Date:	05/16/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLD0607-BLK4 (Solid)			Lab File ID: NT1705262327S.D				Analyzed: 05/27/23 04:54	
2-Fluorophenol	750.00	67.1	27 - 120	7.094	7.166125	-0.0721	N/A	
p-Terphenyl-d14	500.00	85.7	37 - 120	21.452	21.55563	-0.1036	N/A	
SLE0442-CCV1 (Water)			Lab File ID: NT1705262329S.D				Analyzed: 05/27/23 06:08	
2-Fluorophenol	1.5000	109	50 - 150	7.081	7.166125	-0.0851	N/A	
p-Terphenyl-d14	1.0000	97.2	50 - 150	21.452	21.55563	-0.1036	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0339	Instrument:	NT17
		Calibration:	GE00070

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLE0339-SCV1)		(Solid)		Lab File ID: NT1705162311S.D				Analyzed: 05/17/23 00:29	
1,4-Dichlorobenzene-d4	280298	9.375	316066	9.375	89	50 - 200	0.000	+/-0.50	
Naphthalene-d8	999390	11.84	1102073	11.84	91	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	527927	15.436	583826	15.436	90	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	860054	18.468	970917	18.468	89	50 - 200	0.000	+/-0.50	
Chrysene-d12	527529	23.455	590568	23.455	89	50 - 200	0.000	+/-0.50	
Perylene-d12	475440	26.159	537938	26.159	88	50 - 200	0.000	+/-0.50	
Initial Cal Blank (SLE0339-ICB1)		(Solid)		Lab File ID: NT1705162312S.D				Analyzed: 05/17/23 01:07	
1,4-Dichlorobenzene-d4	302680	9.375	316066	9.375	96	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1065796	11.84	1102073	11.84	97	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	551880	15.436	583826	15.436	95	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	903730	18.455	970917	18.468	93	50 - 200	-0.013	+/-0.50	
Chrysene-d12	538208	23.455	590568	23.455	91	50 - 200	0.000	+/-0.50	
Perylene-d12	508161	26.146	537938	26.159	94	50 - 200	-0.013	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0442
Instrument: NT17
Calibration: GE00070

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLE0442-ICV1)		(Water)	Lab File ID: NT1705262303S.D				Analyzed: 05/26/23 13:53		
1,4-Dichlorobenzene-d4	354937	9.273	354937	9.273	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1204481	11.738	1204481	11.738	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	658677	15.334	658677	15.334	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	965415	18.353	965415	18.353	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	615102	23.353	615102	23.353	100	50 - 200	0.000	+/-0.50	
Perylene-d12	580660	25.994	580660	25.994	100	50 - 200	0.000	+/-0.50	
Blank (BLD0607-BLK2)		(Solid)	Lab File ID: NT1705262306S.D				Analyzed: 05/26/23 15:47		
1,4-Dichlorobenzene-d4	279952	9.273	375423	9.273	75	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1014860	11.738	1173037	11.738	87	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	570372	15.321	638940	15.334	89	50 - 200	-0.013	+/-0.50	
Phenanthrene-d10	845585	18.341	901788	18.353	94	50 - 200	-0.012	+/-0.50	
Chrysene-d12	569193	23.353	767966	23.353	74	50 - 200	0.000	+/-0.50	
Perylene-d12	513712	25.993	642149	26.006	80	50 - 200	-0.013	+/-0.50	
LCS (BLD0607-BS2)		(Solid)	Lab File ID: NT1705262307S.D				Analyzed: 05/26/23 16:25		
1,4-Dichlorobenzene-d4	277093	9.273	375423	9.273	74	50 - 200	0.000	+/-0.50	
Naphthalene-d8	977960	11.738	1173037	11.738	83	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	540748	15.334	638940	15.334	85	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	777447	18.353	901788	18.353	86	50 - 200	0.000	+/-0.50	
Chrysene-d12	508163	23.353	767966	23.353	66	50 - 200	0.000	+/-0.50	
Perylene-d12	427670	25.993	642149	26.006	67	50 - 200	-0.013	+/-0.50	
LCS Dup (BLD0607-BSD2)		(Solid)	Lab File ID: NT1705262308S.D				Analyzed: 05/26/23 17:02		
1,4-Dichlorobenzene-d4	285381	9.273	375423	9.273	76	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1016889	11.738	1173037	11.738	87	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	563559	15.334	638940	15.334	88	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	808753	18.353	901788	18.353	90	50 - 200	0.000	+/-0.50	
Chrysene-d12	517231	23.353	767966	23.353	67	50 - 200	0.000	+/-0.50	
Perylene-d12	436120	25.994	642149	26.006	68	50 - 200	-0.012	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0442	Instrument:	NT17
		Calibration:	GE00070

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Reference (BLD0607-SRM2)		(Solid)	Lab File ID: NT1705262311S.D				Analyzed: 05/26/23 18:56		
1,4-Dichlorobenzene-d4	309013	9.273	375423	9.273	82	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1037311	11.738	1173037	11.738	88	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	530135	15.334	638940	15.334	83	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	737581	18.353	901788	18.353	82	50 - 200	0.000	+/-0.50	
Chrysene-d12	635091	23.353	767966	23.353	83	50 - 200	0.000	+/-0.50	
Perylene-d12	660695	26.006	642149	26.006	103	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLE0442-ICV2)		(Water)	Lab File ID: NT1705262320S.D				Analyzed: 05/27/23 00:33		
1,4-Dichlorobenzene-d4	375423	9.273	375423	9.273	100	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1173037	11.738	1173037	11.738	100	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	638940	15.334	638940	15.334	100	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	901788	18.353	901788	18.353	100	50 - 200	0.000	+/-0.50	
Chrysene-d12	767966	23.353	767966	23.353	100	50 - 200	0.000	+/-0.50	
Perylene-d12	642149	26.006	642149	26.006	100	50 - 200	0.000	+/-0.50	
Low Cal Check (SLE0442-LCV1)		(Water)	Lab File ID: NT1705262322S.D				Analyzed: 05/27/23 01:48		
1,4-Dichlorobenzene-d4	379141	9.273	375423	9.273	101	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1123230	11.738	1173037	11.738	96	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	608264	15.334	638940	15.334	95	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	866998	18.353	901788	18.353	96	50 - 200	0.000	+/-0.50	
Chrysene-d12	735564	23.353	767966	23.353	96	50 - 200	0.000	+/-0.50	
Perylene-d12	596830	26.006	642149	26.006	93	50 - 200	0.000	+/-0.50	
LDW23-SS1801 (23D0396-01)		(Solid)	Lab File ID: NT1705262323S.D				Analyzed: 05/27/23 02:25		
1,4-Dichlorobenzene-d4	303678	9.273	375423	9.273	81	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1033510	11.738	1173037	11.738	88	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	542573	15.334	638940	15.334	85	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	773140	18.353	901788	18.353	86	50 - 200	0.000	+/-0.50	
Chrysene-d12	676021	23.366	767966	23.353	88	50 - 200	0.013	+/-0.50	
Perylene-d12	507114	26.032	642149	26.006	79	50 - 200	0.026	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8270E-SIM

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0442	Instrument:	NT17
		Calibration:	GE00070

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1802 (23D0396-03)		(Solid)	Lab File ID: NT1705262324S.D				Analyzed: 05/27/23 03:02		
1,4-Dichlorobenzene-d4	312420	9.273	375423	9.273	83	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1075428	11.738	1173037	11.738	92	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	559877	15.334	638940	15.334	88	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	796135	18.353	901788	18.353	88	50 - 200	0.000	+/-0.50	
Chrysene-d12	700013	23.365	767966	23.353	91	50 - 200	0.012	+/-0.50	
Perylene-d12	516440	26.032	642149	26.006	80	50 - 200	0.026	+/-0.50	
Blank (BLD0607-BLK4)		(Solid)	Lab File ID: NT1705262327S.D				Analyzed: 05/27/23 04:54		
1,4-Dichlorobenzene-d4	319011	9.273	375423	9.273	85	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1068298	11.738	1173037	11.738	91	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	560262	15.334	638940	15.334	88	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	759069	18.353	901788	18.353	84	50 - 200	0.000	+/-0.50	
Chrysene-d12	613725	23.353	767966	23.353	80	50 - 200	0.000	+/-0.50	
Perylene-d12	449111	26.006	642149	26.006	70	50 - 200	0.000	+/-0.50	
Calibration Check (SLE0442-CCV1)		(Solid)	Lab File ID: NT1705262329S.D				Analyzed: 05/27/23 06:08		
1,4-Dichlorobenzene-d4	410431	9.273	375423	9.273	109	50 - 200	0.000	+/-0.50	
Naphthalene-d8	1307314	11.738	1173037	11.738	111	50 - 200	0.000	+/-0.50	
Acenaphthene-d10	718296	15.334	638940	15.334	112	50 - 200	0.000	+/-0.50	
Phenanthrene-d10	982072	18.353	901788	18.353	109	50 - 200	0.000	+/-0.50	
Chrysene-d12	749817	23.353	767966	23.353	98	50 - 200	0.000	+/-0.50	
Perylene-d12	554047	26.006	642149	26.006	86	50 - 200	0.000	+/-0.50	

HOLDING TIME SUMMARY

Analysis: EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	04/24/23 16:38	12	14	05/27/23 02:25	32	40	
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	04/24/23 16:38	12	14	05/27/23 03:02	32	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8270E-SIM

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: NT17

Analyte	MDL	RL	Units
1,4-Dichlorobenzene	0.6	5.0	ug/kg
1,2-Dichlorobenzene	0.7	5.0	ug/kg
Benzyl Alcohol	2.5	20.0	ug/kg
Benzoic acid	13.4	100	ug/kg
2,4-Dimethylphenol	2.2	20.0	ug/kg
1,2,4-Trichlorobenzene	2.7	5.0	ug/kg
N-Nitrosodiphenylamine	1.3	5.0	ug/kg
Pentachlorophenol	2.1	20.0	ug/kg

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: NA

Chemical: Tributyl Phosphate

Manufacturer: Chemservice

Product #: O-916

Lot #: 59-57A

Purity: 99%

Analyst: VB

Element: B000954

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001873

Printed: 9/23/2013 11:47:03AM

Description:	SVOC 4,4 DDT	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	23-Sep-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 11:46 by JZ
Vendor:	Chem Service	Lot #:	198-128A
Vendor Catalog #:			

Comments

Neat, Purity @ 99.2%. (ARI#: 790A)

Analyte	CAS Number	Concentration	Units
4,4'-DDT	50-29-3	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,4' DDT

Manufacturer: Chem Service

Product #: _____

Lot #: 198-128A

Purity: 99.2%

Analyst: AB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001875

Printed: 9/23/2013 12:13:55PM

Description:	SVOC alpha-Terpineol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 12:13 by JZ
Vendor:	ACROS Organics	Lot #:	AD16481201
Vendor Catalog #:			

Comments

Neat, Purity @ 98%. (ARI#: I1582A)

Analyte	CAS Number	Concentration	Units
alpha-Terpineol	98-55-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: alpha-Terpineol

Manufacturer: Acros Organics

Product #: _____

Lot #: A0648170 1

Purity: 98%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001885

Printed: 9/23/2013 3:45:57PM

Description:	SVOA Dibutyl Phenyl phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:45 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98.9%.

Analyte	CAS Number	Concentration	Units
Dibutyl Phenyl Phosphate	2528-36-1	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Dibutyl Phenyl Phosphate

Manufacturer: Monsanto

Product #: N/A

Lot #: N/A

Purity: 98.9%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001886

Printed: 9/23/2013 3:59:35PM

Description:	SVOC Triphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 15:59 by JZ
Vendor:	Aldrich	Lot #:	04902CM
Vendor Catalog #:			

Comments

Neat, Purity @ 99%.

Analyte	CAS Number	Concentration	Units
Triphenyl Phosphate	115-86-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Triphenyl phosphate

Manufacturer: Aldrich

Product #: _____

Lot #: 04907CM

Purity: 99%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001887

Printed: 9/23/2013 4:18:55PM

Description:	SVOC Butylated Hydroxytoluene	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 16:18 by JZ
Vendor:	SIGMA	Lot #:	39F-0197
Vendor Catalog #:			

Comments

neat,Purity @ 99.9%.

Analyte	CAS Number	Concentration	Units
Butylated Hydroxytoluene	128-37-0	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butylated Hydroxytoluene

Manufacturer: Sigma

Product #: _____

Lot #: 39F-0197

Purity: 99.8%

Analyst: AR

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001890

Printed: 9/23/2013 5:02:53PM

Description:	SVOC Butyl Diphenyl Phosphate	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	23-Sep-13 17:02 by JZ
Vendor:	Monsanto	Lot #:	N/A
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Butyl Diphenyl Phosphate	2752-95-6	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: Butyl Diphenyl Phosphate

Manufacturer: Monsanto

Product #: NA

Lot #: NA

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001941

Printed: 9/25/2013 1:45:31PM

Description:	SVOC 2,4-Dinitrophenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 13:45 by JZ
Vendor:	SIGMA	Lot #:	65H5021
Vendor Catalog #:			

Comments

Neat, Purity @ 90-95%. (ARI#: 0466)

Analyte	CAS Number	Concentration	Units
2,4-Dinitrophenol	51-28-5	1000000	ug/mL

B001941
SVOA 2,4-Dinitrophenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 2,4-Dinitrophenol

Manufacturer: Sigma

Product #: _____

Lot #: bEH 502 I

Purity: 90 ~ 94%

Analyst: _____

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001945

Printed: 9/25/2013 3:23:22PM

Description:	SVOC Benzoic Acid	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	31-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:23 by JZ
Vendor:	ACROS Organics	Lot #:	A0224339
Vendor Catalog #:			

Comments

Neat, Purity @ 98%.

Analyte	CAS Number	Concentration	Units
Benzoic acid	65-85-0	1000000	ug/mL

B001945
SVOC Benzoic Acid
Expires 12/31/2029
Prepared By Jianqing Zhou 12/31/2012

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzoic Acid

Manufacturer: Acros Organics

Product #: _____

Lot #: A0214339

Purity: 98%

Analyst: [signature]

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B001948

Printed: 9/25/2013 3:37:51PM

Description:	SVOC 4,6-Dinitro-2-Methylphenol	Expires:	31-Dec-29
Standard Type:	Calibration Stan	Prepared:	25-Sep-13
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	25-Sep-13 15:37 by JZ
Vendor:	Chem Service	Lot #:	179-31A
Vendor Catalog #:			

Comments

Neat, Purity @ 99%. (ARI#: 009A)

Analyte	CAS Number	Concentration	Units
4,6-Dinitro-2-methylphenol	534-52-1	1000000	ug/mL

B001948
SVOA 4,6-Dinitro-2-Methylphenol
Expires 12/31/2029
Prepared By Jianqing Zhou 9/25/2013

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer: _____

Chemical: 4,6-Dinitro-2-Methylphenol

Manufacturer: Chem Service

Product #: _____

Lot #: 179-31A

Purity: 99%

Analyst: KB

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002054

Printed: 10/4/2013 6:32:21PM

Description:	SVOA 1-Methylnaphthalene	Expires:	02-Apr-14
Standard Type:	Analyte Spike	Prepared:	13-Dec-12
Solvent:	NA	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	04-Oct-13 18:32 by JZ
Vendor:	Chem Service	Lot #:	62-5B
Vendor Catalog #:			

Comments

Neat, Purity @ 99%

Analyte	CAS Number	Concentration	Units
1-Methylnaphthalene	90-12-0	1000000	ug/mL

B002054
SVOA 1-Methylnaphthalene
Solvent / Lot: NA
Prep: 12/13/2012 by JZ
Exp: 12/31/2029
Location:

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: 1-Methyl naphthalene

Manufacturer: Chem Service

Product #: 0787

Lot #: 67-53

Purity: 99%

Analyst: AZ

Analytical Resources, Incorporated

Analytical Standard Record
Analytical Resources, Inc.
Standard ID: B002135

Printed: 10/15/2013 12:07:39PM

Description:	SVOA Benzidine	Expires:	31-Dec-29
Standard Type:	Analyte Spike	Prepared:	15-Oct-13
Solvent:	N/A	Prepared By:	Jianqing Zhou
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	15-Oct-13 12:07 by JZ
Vendor:	SIGMA	Lot #:	18C0024
Vendor Catalog #:			

Comments

Purity @ 95%. ARI#: 0467.

Analyte	CAS Number	Concentration	Units
Benzidine	92-87-5	1000000	ug/mL

Reviewed By Date

Appendix 20.1

ALTERNATE CERTIFICATE OF ANALYSIS

The manufacturer of the below chemical was unable to provide a Certificate of Analysis at the time of request by ARI.

Date Requested from Manufacturer:_____

Chemical: Benzidine

Manufacturer: Sigma

Product #: B-3503

Lot #: 18C0024

Purity: 98%

Analyst: [signature]

H000691

Data File: \\target\share\chem2\fid4a.i\20230317.b\423C1703.D

Page 1

Date : 17-MAR-2023 10:46

Client ID:

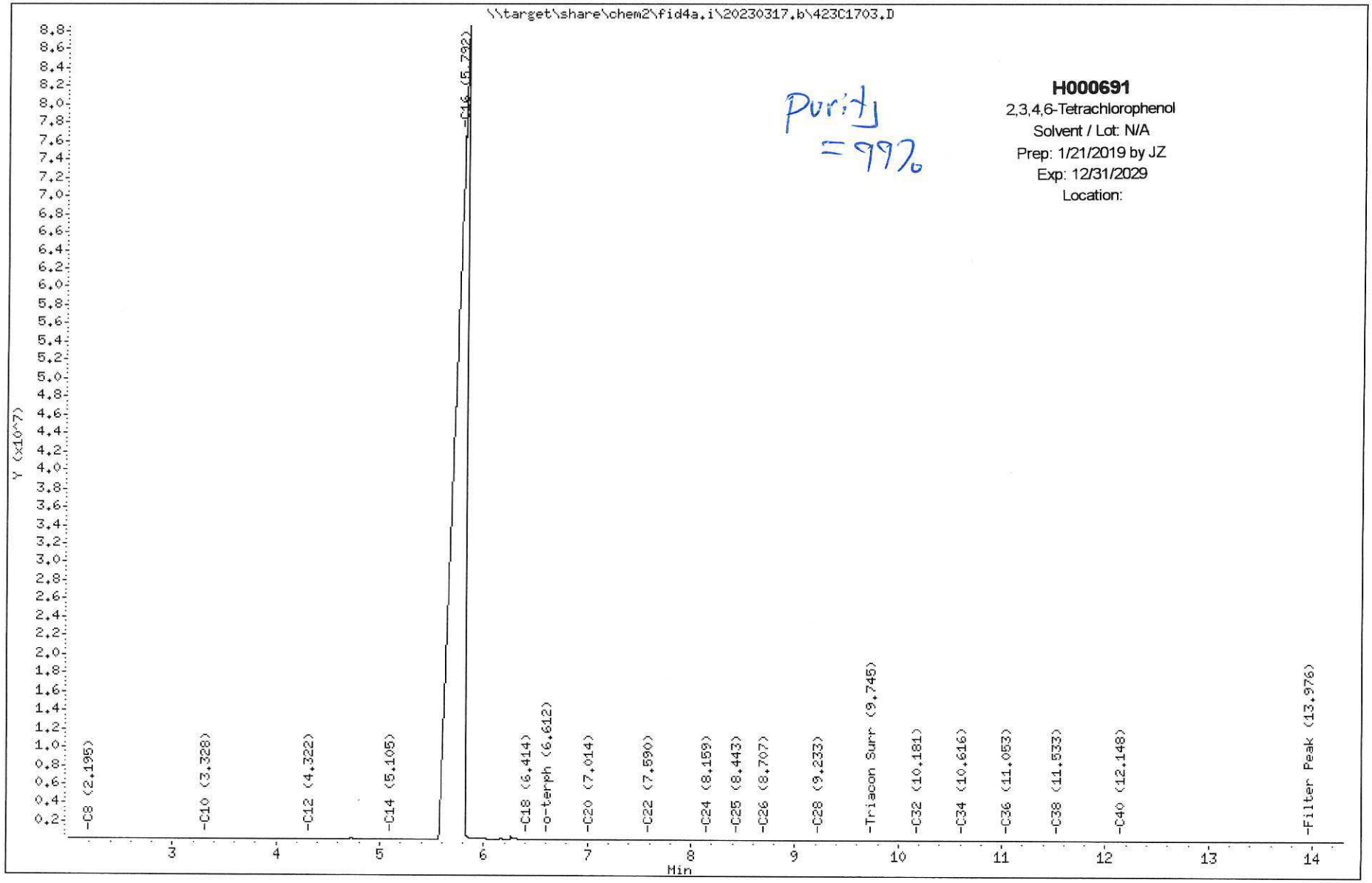
Instrument: fid4a.i

Sample Info: K007226

Operator: AA

Column phase: RTX-1

Column diameter: 0.25



Purity = 99%

H000691
2,3,4,6-Tetrachlorophenol
Solvent / Lot: N/A
Prep: 1/21/2019 by JZ
Exp: 12/31/2029
Location:

ARI Labs, Inc.

Data file : \\target\share\chem2\fid4a.i\20230317.b\423C1703.D
Lab Smp Id: K007226
Inj Date : 17-MAR-2023 10:46
Operator : AA Inst ID: fid4a.i
Smp Info : K007226
Misc Info :
Comment   :
Method   : \\target\share\chem2\fid4a.i\20230317.b\FID4TPH.m
Meth Date : 17-Mar-2023 16:58 alfonso Quant Type: AREA%
Cal Date : 18-AUG-2022 11:51 Cal File: 422H1803.D
Als bottle: 10
Dil Factor: 1.00000
Integrator: Falcon+ Compound Sublist: tph.sub
Target Version: 4.14
Processing Host: ALFONSO-201901

Concentration Formula: Amt * DF * CpndVariable
Cpnd Variable Local Compound Variable

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.043	81395	55677	0.684	0.012	1 Toluene
2.074	68503	39991	0.584	0.010	
2.104	85451	37158	0.435	0.012	
2.146	59381	25207	0.424	0.008	
2.181	11414	22862	2.003	0.001	
2.195	34939	23199	0.664	0.005	2 C8
2.218	8679	21808	2.513	0.001	
2.224	21070	21832	1.036	0.003	
2.243	45086	20191	0.448	0.006	
2.286	3130	15677	5.009	0.000	
2.291	12615	15880	1.259	0.001	
2.313	20979	15888	0.757	0.003	
2.333	7621	15373	2.017	0.001	
2.348	31874	17112	0.537	0.004	
2.373	4619	13267	2.872	0.000	
2.380	12003	13446	1.120	0.001	
2.393	10327	13347	1.292	0.001	
2.408	9963	12697	1.274	0.001	
2.446	24366	11882	0.488	0.003	
2.498	24898	10214	0.410	0.003	
2.557	1592	6395	4.017	0.000	
2.570	4427	6384	1.442	0.000	
2.583	4275	6215	1.454	0.000	
2.595	1208	6068	5.024	0.000	
2.602	3076	6230	2.025	0.000	
2.607	1560	6270	4.019	0.000	
2.631	17195	8933	0.520	0.002	
2.654	17386	7637	0.439	0.002	
2.703	4531	5468	1.207	0.000	
2.717	9156	5741	0.627	0.001	
2.740	3955	5045	1.275	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
2.768	1029	4134	4.017	0.000	
2.771	830	4189	5.050	0.000	
2.778	1924	4438	2.307	0.000	
2.784	5498	4564	0.830	0.000	
2.846	25970	8400	0.323	0.003	
2.880	939	3165	3.370	0.000	
2.884	1885	3183	1.688	0.000	
2.901	4805	3504	0.729	0.000	
2.938	581	1990	3.423	0.000	
2.944	1450	2016	1.390	0.000	
2.955	449	1816	4.043	0.000	
2.967	1234	2009	1.629	0.000	
2.982	712	2087	2.931	0.000	
2.988	1000	2338	2.337	0.000	
3.001	3475	3541	1.019	0.000	
3.018	3528	3705	1.050	0.000	
3.033	983	2521	2.564	0.000	
3.038	1297	2686	2.070	0.000	
3.044	2547	2541	0.997	0.000	
3.069	389	1330	3.418	0.000	
3.078	728	1545	2.123	0.000	
3.085	1244	1637	1.316	0.000	
3.098	1115	1624	1.457	0.000	
3.108	926	1475	1.593	0.000	
3.119	239	1202	5.036	0.000	
3.125	540	1251	2.315	0.000	
3.133	409	1219	2.978	0.000	
3.144	2600	1886	0.725	0.000	
3.165	620	1604	2.588	0.000	
3.173	554	1647	2.972	0.000	
3.192	2423	2273	0.938	0.000	
3.197	582	2418	4.158	0.000	
3.204	1161	2723	2.346	0.000	
3.208	825	2777	3.364	0.000	
3.228	4472	3391	0.758	0.000	
3.246	1586	2676	1.688	0.000	
3.279	1194	2070	1.734	0.000	
3.293	854	1951	2.285	0.000	
3.298	595	2029	3.408	0.000	
3.315	2640	2597	0.984	0.000	
3.320	1015	2542	2.504	0.000	
3.328	1549	2593	1.674	0.000	3 C10
3.338	1314	2533	1.928	0.000	
3.350	523	2159	4.130	0.000	
3.358	1776	2105	1.185	0.000	
3.371	356	1797	5.043	0.000	
3.378	914	1880	2.057	0.000	
3.383	380	1927	5.068	0.000	
3.387	595	2023	3.399	0.000	
3.395	1390	2270	1.633	0.000	
3.405	1490	1994	1.338	0.000	
3.423	690	1601	2.321	0.000	
3.435	821	1554	1.894	0.000	
3.441	387	1583	4.087	0.000	
3.444	401	1625	4.051	0.000	
3.448	403	1636	4.060	0.000	
3.455	1216	1700	1.398	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
3.478	235	1185	5.047	0.000	
3.482	412	1229	2.986	0.000	
3.488	695	1177	1.694	0.000	
3.501	239	969	4.063	0.000	
3.509	914	1149	1.258	0.000	
3.520	1078	1069	0.992	0.000	
3.540	301	927	3.079	0.000	
3.556	406	849	2.089	0.000	
3.567	370	873	2.359	0.000	
3.572	178	939	5.270	0.000	
3.578	591	1171	1.981	0.000	
3.591	869	1353	1.556	0.000	
3.596	741	1352	1.826	0.000	
3.606	471	1401	2.976	0.000	
3.613	548	1411	2.577	0.000	
3.618	433	1521	3.511	0.000	
3.625	710	1635	2.303	0.000	
3.630	910	1667	1.832	0.000	
3.652	661	1562	2.362	0.000	
3.670	462	1214	2.627	0.000	
3.686	1036	1453	1.403	0.000	
3.690	829	1374	1.658	0.000	
3.702	531	1191	2.241	0.000	
3.712	452	1355	3.001	0.000	
3.716	820	1423	1.736	0.000	
3.736	2685	2093	0.780	0.000	
3.752	689	2030	2.946	0.000	
3.760	4109	2349	0.572	0.000	
3.805	3183	2036	0.640	0.000	
3.823	496	1686	3.401	0.000	
3.835	1641	2314	1.410	0.000	
3.859	9243	4616	0.499	0.001	
3.897	851	1745	2.051	0.000	
3.904	503	1721	3.419	0.000	
3.927	3866	3293	0.852	0.000	
3.941	5520	3558	0.645	0.000	
3.980	573	1715	2.991	0.000	
3.992	1027	1794	1.748	0.000	
3.995	1494	1860	1.245	0.000	
4.010	887	1639	1.847	0.000	
4.021	663	1724	2.602	0.000	
4.026	1380	1776	1.287	0.000	
4.045	306	1546	5.059	0.000	
4.053	1001	1758	1.757	0.000	
4.061	1137	1804	1.586	0.000	
4.072	779	1773	2.275	0.000	
4.080	989	1896	1.917	0.000	
4.087	561	1905	3.396	0.000	
4.098	1956	2156	1.103	0.000	
4.106	1168	2044	1.750	0.000	
4.127	1049	1627	1.551	0.000	
4.142	587	1545	2.633	0.000	
4.148	1155	1572	1.361	0.000	
4.173	3682	2398	0.651	0.000	
4.189	1023	1738	1.700	0.000	
4.204	549	1627	2.961	0.000	
4.213	628	1658	2.641	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
4.221	1039	1830	1.761	0.000	
4.227	447	1814	4.058	0.000	
4.248	2703	2638	0.976	0.000	
4.256	1387	2945	2.123	0.000	
4.260	743	2988	4.022	0.000	
4.265	912	3081	3.378	0.000	
4.268	779	3140	4.031	0.000	
4.275	1736	3217	1.853	0.000	
4.289	2688	3495	1.300	0.000	
4.295	3466	3448	0.995	0.000	
4.322	1054	2680	2.543	0.000	4 C12
4.330	1686	2627	1.558	0.000	
4.358	1066	1974	1.852	0.000	
4.378	434	1758	4.054	0.000	
4.384	1324	1879	1.419	0.000	
4.403	860	1608	1.869	0.000	
4.414	457	1567	3.431	0.000	
4.421	1117	1675	1.499	0.000	
4.433	910	1538	1.690	0.000	
4.439	865	1534	1.774	0.000	
4.449	764	1302	1.705	0.000	
4.471	433	1123	2.593	0.000	
4.476	734	1135	1.546	0.000	
4.490	385	1005	2.610	0.000	
4.498	555	1186	2.137	0.000	
4.502	695	1166	1.677	0.000	
4.518	587	949	1.618	0.000	
4.526	316	925	2.924	0.000	
4.533	560	989	1.765	0.000	
4.543	469	1001	2.135	0.000	
4.548	222	916	4.130	0.000	
4.553	188	980	5.207	0.000	
4.558	255	1038	4.076	0.000	
4.568	652	1157	1.775	0.000	
4.573	338	1151	3.409	0.000	
4.580	487	1283	2.636	0.000	
4.596	3801	1950	0.513	0.000	
4.631	531	1429	2.692	0.000	
4.663	4548	3737	0.822	0.000	
4.667	2815	3822	1.358	0.000	
4.679	2199	3760	1.710	0.000	
4.688	1068	3585	3.356	0.000	
4.694	2166	3742	1.727	0.000	
4.723	372603	172476	0.463	0.055	
4.894	47034	21828	0.464	0.006	
4.956	80510	28154	0.350	0.011	
4.999	54273	16950	0.312	0.008	
5.068	1137	5713	5.027	0.000	
5.072	8415	5792	0.688	0.001	
5.105	4203	4316	1.027	0.000	5 C14
5.146	660	2685	4.070	0.000	
5.153	2524	2649	1.050	0.000	
5.170	1076	2437	2.265	0.000	
5.174	2371	2438	1.028	0.000	
5.201	1013	2011	1.986	0.000	
5.210	2064	2332	1.130	0.000	
5.224	1083	2304	2.127	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
5.228	2027	2354	1.162	0.000	
5.276	4673	2682	0.574	0.000	
5.322	195	844	4.328	0.000	
5.331	977	1203	1.231	0.000	
5.356	490	993	2.027	0.000	
5.361	814	1044	1.283	0.000	
5.382	115	387	3.351	0.000	
5.399	619	960	1.551	0.000	
5.406	402	1035	2.576	0.000	
5.410	378	1122	2.968	0.000	
5.423	1663	1555	0.935	0.000	
5.452	5951	5020	0.844	0.000	
5.501	290	797	2.753	0.000	
5.523	2317	2472	1.067	0.000	
5.538	5946	6823	1.147	0.000	
5.792	501855376	76456669	0.152	74.449	6 C16
5.807	79757019	82319946	1.032	11.775	
5.823	77929961	88539160	1.136	11.505	
5.962	75333	84828	1.126	0.011	
5.986	474748	124326	0.262	0.070	
6.070	17103	57180	3.343	0.002	
6.074	120761	57565	0.477	0.017	
6.113	90233	47140	0.522	0.013	
6.165	407438	218439	0.536	0.060	
6.263	944101	374166	0.396	0.139	
6.414	114839	39498	0.344	0.016	7 C18
6.464	53190	31177	0.586	0.007	
6.523	31509	25870	0.821	0.004	
6.551	4785	23963	5.008	0.000	
6.559	51194	25409	0.496	0.007	
6.590	21354	21666	1.015	0.003	
6.612	35061	21127	0.603	0.005	$ 8 o-terph
6.638	17712	19934	1.125	0.002	
6.672	22159	19651	0.887	0.003	
6.683	26846	19268	0.718	0.003	
6.708	5413	18142	3.351	0.000	
6.713	24941	18247	0.732	0.003	
6.747	50657	18478	0.365	0.007	
6.795	23973	17444	0.728	0.003	
6.814	28457	17895	0.629	0.004	
6.837	10746	15445	1.437	0.001	
6.871	29974	21406	0.714	0.004	
6.874	4287	21471	5.009	0.000	
6.882	20520	21675	1.056	0.003	
6.944	32864	17445	0.531	0.004	
6.978	9138	15347	1.679	0.001	
7.014	4130	13830	3.348	0.000	9 C20
7.025	12567	14083	1.121	0.001	
7.038	4952	14274	2.882	0.000	
7.044	6508	14578	2.240	0.000	
7.050	25344	14736	0.581	0.003	
7.099	5531	12365	2.236	0.000	
7.108	16440	12371	0.752	0.002	
7.129	9415	11275	1.198	0.001	
7.175	3589	10327	2.878	0.000	
7.182	7285	10474	1.438	0.001	
7.212	11252	10002	0.889	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.227	5193	9506	1.830	0.000	
7.237	5172	9476	1.832	0.000	
7.247	4652	9357	2.011	0.000	
7.254	3258	9369	2.875	0.000	
7.259	7003	9455	1.350	0.001	
7.272	5540	9252	1.670	0.000	
7.283	4511	9087	2.014	0.000	
7.296	5828	9031	1.550	0.000	
7.308	4850	8866	1.828	0.000	
7.318	3111	9014	2.897	0.000	
7.324	3191	9168	2.873	0.000	
7.328	2775	9325	3.360	0.000	
7.339	6190	9713	1.569	0.000	
7.344	2920	9761	3.343	0.000	
7.350	17091	9874	0.578	0.002	
7.379	7217	8616	1.194	0.001	
7.395	5430	8408	1.548	0.000	
7.404	2492	8342	3.348	0.000	
7.409	1666	8354	5.014	0.000	
7.415	2955	8500	2.877	0.000	
7.423	3887	8782	2.259	0.000	
7.465	28160	14253	0.506	0.004	
7.471	6466	14499	2.242	0.000	
7.480	6649	15111	2.273	0.000	
7.484	26595	15197	0.571	0.003	
7.514	13964	13621	0.975	0.002	
7.539	8118	12614	1.554	0.001	
7.553	10540	12495	1.185	0.001	
7.584	2820	11307	4.010	0.000	
7.590	4522	11429	2.527	0.000	10 C22
7.620	16634	10435	0.627	0.002	
7.653	6793	9783	1.440	0.001	
7.663	8606	9666	1.123	0.001	
7.675	2827	9464	3.347	0.000	
7.683	9373	9620	1.026	0.001	
7.699	3657	9205	2.517	0.000	
7.708	5071	9290	1.832	0.000	
7.713	10483	9274	0.885	0.001	
7.735	10686	9257	0.866	0.001	
7.752	4732	8664	1.831	0.000	
7.765	5624	8765	1.558	0.000	
7.773	5614	8686	1.547	0.000	
7.784	3375	8506	2.520	0.000	
7.793	2118	8517	4.021	0.000	
7.799	10086	8544	0.847	0.001	
7.817	7761	8325	1.073	0.001	
7.833	2415	8088	3.350	0.000	
7.838	2838	8160	2.875	0.000	
7.844	3649	8173	2.240	0.000	
7.858	2009	8069	4.017	0.000	
7.864	4482	8197	1.829	0.000	
7.871	3688	8223	2.230	0.000	
7.879	4875	8269	1.696	0.000	
7.889	2009	8061	4.013	0.000	
7.897	4080	8308	2.036	0.000	
7.916	17828	10103	0.567	0.002	
7.935	4052	9086	2.242	0.000	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
7.940	2229	8948	4.015	0.000	
7.945	5765	8973	1.556	0.000	
7.954	6458	8765	1.357	0.000	
7.976	2099	8428	4.016	0.000	
7.984	10213	8807	0.862	0.001	
7.999	4897	8282	1.691	0.000	
8.013	8782	8112	0.924	0.001	
8.028	5860	7858	1.341	0.000	
8.040	3929	7871	2.003	0.000	
8.054	9161	8146	0.889	0.001	
8.067	2701	7766	2.876	0.000	
8.074	3069	7702	2.510	0.000	
8.081	2694	7742	2.874	0.000	
8.088	2705	7793	2.881	0.000	
8.095	5842	7832	1.341	0.000	
8.104	5419	7841	1.447	0.000	
8.119	5740	7735	1.348	0.000	
8.134	4986	7768	1.558	0.000	
8.141	5893	8009	1.359	0.000	
8.159	9098	8027	0.882	0.001	11 C24
8.174	3156	7971	2.526	0.000	
8.185	2376	7967	3.353	0.000	
8.190	4739	7937	1.675	0.000	
8.202	5181	8028	1.549	0.000	
8.212	1994	8027	4.025	0.000	
8.223	6137	8270	1.348	0.000	
8.236	6864	8171	1.190	0.001	
8.248	2383	7986	3.351	0.000	
8.253	2405	8059	3.351	0.000	
8.259	5294	8207	1.550	0.000	
8.268	2866	8235	2.874	0.000	
8.280	6583	8312	1.263	0.000	
8.289	4538	8296	1.828	0.000	
8.295	2060	8300	4.029	0.000	
8.300	2063	8291	4.020	0.000	
8.313	7062	8400	1.189	0.001	
8.318	1667	8375	5.023	0.000	
8.332	11362	9100	0.801	0.001	
8.343	4357	8741	2.006	0.000	
8.358	1267	8458	6.676	0.000	
8.363	2991	8621	2.882	0.000	
8.371	3980	8983	2.257	0.000	
8.379	6330	9083	1.435	0.000	
8.385	3111	8963	2.881	0.000	
8.393	6706	9050	1.349	0.000	
8.404	4903	8943	1.824	0.000	
8.417	8437	8972	1.063	0.001	
8.438	7166	9103	1.270	0.001	
8.443	3211	9227	2.873	0.000	12 C25
8.450	3688	9295	2.521	0.000	
8.455	2313	9276	4.010	0.000	
8.475	30054	13714	0.456	0.004	
8.504	5760	9733	1.690	0.000	
8.519	2799	9376	3.350	0.000	
8.529	4766	9710	2.037	0.000	
8.537	4875	9815	2.013	0.000	
8.543	8411	9973	1.186	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
8.555	2969	9916	3.340	0.000	
8.560	3974	9987	2.513	0.000	
8.568	2483	9997	4.026	0.000	
8.572	5007	10043	2.006	0.000	
8.591	14074	10725	0.762	0.002	
8.602	2648	10665	4.028	0.000	
8.606	2159	10862	5.032	0.000	
8.609	2183	10952	5.017	0.000	
8.633	7361	10561	1.435	0.001	
8.647	6774	10495	1.549	0.001	
8.658	2596	10420	4.014	0.000	
8.663	4723	10573	2.239	0.000	
8.669	3156	10589	3.355	0.000	
8.687	15405	11334	0.736	0.002	
8.699	6103	11158	1.828	0.000	
8.707	2223	11136	5.009	0.000	13 C26
8.730	28697	12536	0.437	0.004	
8.754	8658	11553	1.334	0.001	
8.763	2896	11612	4.010	0.000	
8.780	15029	12352	0.822	0.002	
8.788	1833	12243	6.680	0.000	
8.798	11854	12679	1.070	0.001	
8.806	1873	12509	6.677	0.000	
8.809	3133	12565	4.011	0.000	
8.813	2506	12550	5.008	0.000	
8.819	7588	12757	1.681	0.001	
8.829	4418	12679	2.870	0.000	
8.835	6988	12762	1.826	0.001	
8.848	13711	13258	0.967	0.002	
8.872	26625	13656	0.513	0.003	
8.894	4575	13127	2.869	0.000	
8.898	2631	13188	5.013	0.000	
8.902	5918	13262	2.241	0.000	
8.914	8577	13313	1.552	0.001	
8.922	4011	13433	3.349	0.000	
8.926	4724	13546	2.867	0.000	
8.933	6787	13651	2.011	0.001	
8.946	9614	13923	1.448	0.001	
8.951	6274	14004	2.232	0.000	
8.960	5592	14036	2.510	0.000	
8.966	3513	14090	4.011	0.000	
8.969	2829	14171	5.009	0.000	
8.973	4976	14233	2.860	0.000	
8.980	4289	14365	3.350	0.000	
8.996	27708	16441	0.593	0.004	
9.013	8129	14847	1.827	0.001	
9.025	8129	14840	1.826	0.001	
9.036	7503	15229	2.030	0.001	
9.040	4559	15225	3.340	0.000	
9.057	14920	16251	1.089	0.002	
9.067	9915	16831	1.698	0.001	
9.076	8535	17331	2.031	0.001	
9.081	5250	17596	3.352	0.000	
9.084	10558	17675	1.674	0.001	
9.095	4386	17601	4.013	0.000	
9.111	30564	19262	0.630	0.004	
9.128	8346	18722	2.243	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.139	15095	18986	1.258	0.002	
9.149	6655	19050	2.862	0.000	
9.158	23240	19719	0.848	0.003	
9.171	1903	19042	10.005	0.000	
9.175	4773	19156	4.013	0.000	
9.187	23630	19927	0.843	0.003	
9.199	4925	19763	4.013	0.000	
9.208	14115	20394	1.445	0.002	
9.219	12303	20691	1.682	0.001	
9.226	7266	20831	2.867	0.001	
9.233	15622	21000	1.344	0.002	14 C28
9.247	9280	20714	2.232	0.001	
9.262	45057	27849	0.618	0.006	
9.281	22651	23200	1.024	0.003	
9.304	13489	22820	1.692	0.001	
9.307	18038	22862	1.267	0.002	
9.328	8656	21778	2.516	0.001	
9.334	8635	21650	2.507	0.001	
9.343	16240	21738	1.339	0.002	
9.354	5409	21709	4.013	0.000	
9.367	16481	22234	1.349	0.002	
9.370	6683	22346	3.344	0.000	
9.382	14775	23166	1.568	0.002	
9.390	11679	23531	2.015	0.001	
9.394	12888	23584	1.830	0.001	
9.408	18752	23645	1.261	0.002	
9.416	4675	23396	5.004	0.000	
9.428	25138	24392	0.970	0.003	
9.438	20233	24095	1.191	0.002	
9.468	67429	26696	0.396	0.009	
9.496	8413	24122	2.867	0.001	
9.507	12049	24259	2.013	0.001	
9.527	36362	25771	0.709	0.005	
9.538	12891	25911	2.010	0.001	
9.543	6452	25853	4.007	0.000	
9.551	10420	26202	2.515	0.001	
9.557	29750	26593	0.894	0.004	
9.574	6252	25071	4.010	0.000	
9.593	29143	27655	0.949	0.004	
9.599	40783	27905	0.684	0.006	
9.620	13159	26364	2.004	0.001	
9.632	17259	26799	1.553	0.002	
9.640	13210	26592	2.013	0.001	
9.664	35362	28170	0.797	0.005	
9.672	27890	28134	1.009	0.004	
9.696	26737	28634	1.071	0.003	
9.711	53475	30848	0.577	0.007	
9.745	33266	29504	0.887	0.004	$ 15 Triacon Surr
9.752	7348	29501	4.015	0.001	
9.756	20542	29565	1.439	0.003	
9.768	7255	29059	4.005	0.001	
9.773	7275	29173	4.010	0.001	
9.785	31543	30611	0.970	0.004	
9.803	46804	32832	0.701	0.006	
9.821	10456	30060	2.875	0.001	
9.833	30772	31156	1.012	0.004	
9.860	77784	33514	0.431	0.011	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
9.881	12779	32069	2.510	0.001	
9.892	14531	32668	2.248	0.002	
9.896	8201	32902	4.012	0.001	
9.908	23357	33882	1.451	0.003	
9.912	27050	34095	1.260	0.003	
9.939	14585	32570	2.233	0.002	
9.951	23032	33095	1.437	0.003	
9.956	11596	33292	2.871	0.001	
9.966	16544	33271	2.011	0.002	
9.971	11660	33391	2.864	0.001	
9.975	10051	33617	3.345	0.001	
9.983	15209	33983	2.234	0.002	
9.988	15177	33830	2.229	0.002	
9.996	10128	33907	3.348	0.001	
10.018	43348	35629	0.822	0.006	
10.021	7133	35693	5.004	0.001	
10.025	8960	35988	4.016	0.001	
10.034	42064	36944	0.878	0.006	
10.063	65447	38699	0.591	0.009	
10.077	7375	36906	5.004	0.001	
10.083	16743	37428	2.235	0.002	
10.095	34467	38665	1.122	0.005	
10.118	90921	40621	0.447	0.013	
10.151	37738	38047	1.008	0.005	
10.158	11383	38037	3.342	0.001	
10.168	36074	38274	1.061	0.005	
10.181	15072	37809	2.509	0.002	16 C32
10.185	5655	37746	6.675	0.000	
10.198	43905	38471	0.876	0.006	
10.208	24771	38177	1.541	0.003	
10.218	19031	38113	2.003	0.002	
10.228	13353	38279	2.867	0.001	
10.237	21225	38826	1.829	0.003	
10.243	30946	38929	1.258	0.004	
10.266	43064	39733	0.923	0.006	
10.275	11912	39784	3.340	0.001	
10.278	19932	39886	2.001	0.002	
10.293	46366	40725	0.878	0.006	
10.318	46465	41024	0.883	0.006	
10.328	24720	41353	1.673	0.003	
10.334	10308	41278	4.005	0.001	
10.343	29100	41866	1.439	0.004	
10.354	22822	41695	1.827	0.003	
10.360	16568	41490	2.504	0.002	
10.376	31388	42321	1.348	0.004	
10.384	36478	43119	1.182	0.005	
10.393	21427	43144	2.014	0.003	
10.416	82339	44731	0.543	0.012	
10.434	23173	42257	1.824	0.003	
10.455	42801	43684	1.021	0.006	
10.459	19648	44004	2.240	0.002	
10.469	19632	43883	2.235	0.002	
10.492	56113	45807	0.816	0.008	
10.497	20626	45915	2.226	0.003	
10.503	27439	45837	1.671	0.004	
10.513	31833	45842	1.440	0.004	
10.523	6773	45190	6.672	0.001	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
10.529	22697	45513	2.005	0.003	
10.543	39087	46432	1.188	0.005	
10.552	16284	46719	2.869	0.002	
10.558	18796	47158	2.509	0.002	
10.576	69878	48769	0.698	0.010	
10.586	12085	48384	4.004	0.001	
10.592	21757	48469	2.228	0.003	
10.609	46960	50482	1.075	0.006	
10.616	40486	50812	1.255	0.005	17 C34
10.628	52392	50284	0.960	0.007	
10.665	99744	52644	0.528	0.014	
10.680	20832	52264	2.509	0.003	
10.699	126137	55939	0.443	0.018	
10.723	18258	52316	2.865	0.002	
10.733	65550	52928	0.807	0.009	
10.751	49102	51903	1.057	0.007	
10.765	10288	51490	5.005	0.001	
10.777	73220	52877	0.722	0.010	
10.791	15621	52150	3.338	0.002	
10.799	46819	52190	1.115	0.006	
10.817	52000	52328	1.006	0.007	
10.828	13014	52167	4.008	0.001	
10.833	18275	52280	2.861	0.002	
10.838	67284	52271	0.777	0.009	
10.860	15395	51401	3.339	0.002	
10.867	15366	51252	3.335	0.002	
10.874	25712	51608	2.007	0.003	
10.885	59363	52064	0.877	0.008	
10.901	33199	51247	1.544	0.004	
10.911	35859	51446	1.435	0.005	
10.925	15150	50526	3.335	0.002	
10.936	27761	50508	1.819	0.004	
10.954	40634	51235	1.261	0.005	
10.958	17973	51428	2.861	0.002	
10.982	101216	54997	0.543	0.014	
10.999	80380	54264	0.675	0.011	
11.022	15822	52869	3.342	0.002	
11.029	23878	53171	2.227	0.003	
11.032	23908	53219	2.226	0.003	
11.044	39793	53228	1.338	0.005	
11.053	13218	52959	4.007	0.001	19 C36
11.057	26491	53088	2.004	0.003	
11.069	47933	53454	1.115	0.007	
11.079	78088	52997	0.679	0.011	
11.132	4853	48537	10.002	0.000	
11.138	21933	48845	2.227	0.003	
11.148	46678	49317	1.057	0.006	
11.158	12248	49060	4.006	0.001	
11.164	14711	49102	3.338	0.002	
11.179	64473	49939	0.775	0.009	
11.192	19751	49439	2.503	0.002	
11.197	14848	49541	3.337	0.002	
11.202	17336	49566	2.859	0.002	
11.206	12400	49639	4.003	0.001	
11.212	56808	49881	0.878	0.008	
11.230	26830	48794	1.819	0.003	
11.263	19014	47590	2.503	0.002	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
11.267	11927	47790	4.007	0.001	
11.285	66432	50042	0.753	0.009	
11.308	17214	49235	2.860	0.002	
11.312	19684	49285	2.504	0.002	
11.322	19740	49570	2.511	0.002	
11.331	27467	50208	1.828	0.004	
11.334	12565	50301	4.003	0.001	
11.338	17617	50367	2.859	0.002	
11.356	50450	50688	1.005	0.007	
11.383	31641	48774	1.541	0.004	
11.392	14562	48589	3.337	0.002	
11.398	14566	48593	3.336	0.002	
11.405	21947	48858	2.226	0.003	
11.418	36961	49602	1.342	0.005	
11.428	52174	49838	0.955	0.007	
11.438	46900	49605	1.058	0.006	
11.456	66003	49218	0.746	0.009	
11.481	84312	48818	0.579	0.012	
11.518	39837	46996	1.180	0.005	
11.533	55836	46822	0.839	0.008	20 C38
11.560	30101	46465	1.544	0.004	
11.568	20916	46512	2.224	0.003	
11.573	11637	46596	4.004	0.001	
11.579	23274	46598	2.002	0.003	
11.586	13953	46531	3.335	0.002	
11.591	9318	46631	5.004	0.001	
11.623	97892	48831	0.499	0.014	
11.631	17107	48984	2.863	0.002	
11.638	22090	49260	2.230	0.003	
11.642	32050	49351	1.540	0.004	
11.669	95446	50981	0.534	0.014	
11.685	95822	49865	0.520	0.014	
11.788	8918	44609	5.002	0.001	
11.791	35704	44768	1.254	0.005	
11.804	11082	44350	4.002	0.001	
11.813	22172	44403	2.003	0.003	
11.823	19993	44543	2.228	0.002	
11.829	13395	44754	3.341	0.001	
11.837	20184	44981	2.228	0.002	
11.852	26933	44942	1.669	0.003	
11.866	36041	45224	1.255	0.005	
11.877	15835	45355	2.864	0.002	
11.883	18222	45726	2.509	0.002	
11.889	15985	45741	2.861	0.002	
11.896	20679	46117	2.230	0.003	
11.905	23259	46896	2.016	0.003	
11.929	70146	49826	0.710	0.010	
11.936	52288	50085	0.958	0.007	
11.951	14787	49369	3.339	0.002	
11.957	17313	49595	2.865	0.002	
11.961	32199	49647	1.542	0.004	
11.971	19578	49063	2.506	0.002	
11.980	34244	49065	1.433	0.005	
12.019	96987	51133	0.527	0.014	
12.025	48685	51499	1.058	0.007	
12.053	38386	51386	1.339	0.005	
12.062	38575	51549	1.336	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
12.070	17923	51300	2.862	0.002	
12.078	45780	51141	1.117	0.006	
12.105	31495	48817	1.550	0.004	
12.118	85510	48295	0.565	0.012	
12.148	55474	46657	0.841	0.008	21 C40
12.172	34299	45899	1.338	0.005	
12.181	18286	45754	2.502	0.002	
12.188	20565	45727	2.223	0.003	
12.198	29701	45787	1.542	0.004	
12.212	11377	45530	4.002	0.001	
12.218	29576	45566	1.541	0.004	
12.237	41054	45750	1.114	0.006	
12.243	13695	45701	3.337	0.002	
12.253	27528	46122	1.675	0.004	
12.260	16149	46201	2.861	0.002	
12.272	32473	46571	1.434	0.004	
12.347	231342	54259	0.235	0.034	
12.355	96470	54322	0.563	0.014	
12.383	13155	52687	4.005	0.001	
12.389	52817	52930	1.002	0.007	
12.434	117936	55204	0.468	0.017	
12.440	19323	55283	2.861	0.002	
12.448	22049	55156	2.502	0.003	
12.460	127044	56114	0.442	0.018	
12.500	63536	55700	0.877	0.009	
12.519	44746	56237	1.257	0.006	
12.523	16928	56556	3.341	0.002	
12.528	14154	56666	4.003	0.002	
12.532	14154	56644	4.002	0.002	
12.538	25607	57089	2.229	0.003	
12.543	31284	57010	1.822	0.004	
12.560	76588	57084	0.745	0.011	
12.574	22463	56167	2.500	0.003	
12.583	192414	56305	0.293	0.028	
12.668	201456	54098	0.269	0.029	
12.722	63529	49368	0.777	0.009	
12.744	14574	48683	3.340	0.002	
12.757	68233	49046	0.719	0.010	
12.777	29106	48653	1.672	0.004	
12.802	69072	49884	0.722	0.010	
12.805	19947	49915	2.502	0.002	
12.813	12457	49907	4.006	0.001	
12.826	42860	50672	1.182	0.006	
12.830	15192	50711	3.338	0.002	
12.835	63121	50727	0.804	0.009	
12.856	30109	50299	1.671	0.004	
12.871	12459	49875	4.003	0.001	
12.876	24950	49913	2.001	0.003	
12.883	12458	49860	4.002	0.001	
12.892	24999	50091	2.004	0.003	
12.904	37682	50442	1.339	0.005	
12.918	60965	51059	0.838	0.009	
12.929	15268	50972	3.338	0.002	
12.950	101236	52476	0.518	0.014	
12.991	32619	50285	1.542	0.004	
13.030	23826	47690	2.002	0.003	
13.047	49429	47410	0.959	0.007	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.072	11668	46709	4.003	0.001	
13.077	14056	46964	3.341	0.002	
13.083	21201	47214	2.227	0.003	
13.092	45034	47490	1.055	0.006	
13.103	33139	47401	1.430	0.004	
13.119	58622	47300	0.807	0.008	
13.136	61979	46406	0.749	0.009	
13.163	36232	45399	1.253	0.005	
13.172	13552	45219	3.337	0.002	
13.178	13550	45211	3.337	0.002	
13.183	13581	45318	3.337	0.002	
13.188	15867	45365	2.859	0.002	
13.193	11350	45433	4.003	0.001	
13.206	54879	45909	0.837	0.008	
13.233	74220	46899	0.632	0.010	
13.246	18724	46923	2.506	0.002	
13.250	14089	47028	3.338	0.002	
13.254	9392	46999	5.004	0.001	
13.261	35241	47103	1.337	0.005	
13.270	21093	46884	2.223	0.003	
13.278	16404	46889	2.858	0.002	
13.284	28108	46937	1.670	0.004	
13.309	27777	46575	1.677	0.004	
13.313	11643	46617	4.004	0.001	
13.323	30391	46938	1.544	0.004	
13.337	49696	47554	0.957	0.007	
13.345	11906	47686	4.005	0.001	
13.352	21499	47921	2.229	0.003	
13.358	14416	48133	3.339	0.002	
13.366	24163	48487	2.007	0.003	
13.391	108474	49842	0.459	0.016	
13.411	39818	49922	1.254	0.005	
13.421	140245	49882	0.356	0.020	
13.468	75433	46221	0.613	0.011	
13.519	59701	44435	0.744	0.008	
13.538	26345	44021	1.671	0.003	
13.553	17475	43727	2.502	0.002	
13.559	19699	43828	2.225	0.002	
13.566	15324	43832	2.860	0.002	
13.574	28519	43956	1.541	0.004	
13.585	21950	43943	2.002	0.003	
13.595	26497	44341	1.673	0.003	
13.603	22230	44574	2.005	0.003	
13.608	11135	44585	4.004	0.001	
13.633	100703	46371	0.460	0.014	
13.650	25255	45974	1.820	0.003	
13.663	20511	45675	2.227	0.003	
13.670	15945	45584	2.859	0.002	
13.677	40973	45642	1.114	0.006	
13.688	4544	45448	10.002	0.000	
13.693	29520	45508	1.542	0.004	
13.718	24720	44995	1.820	0.003	
13.727	11216	44890	4.002	0.001	
13.735	29185	45025	1.543	0.004	
13.752	17874	44782	2.505	0.002	
13.767	35874	45020	1.255	0.005	
13.775	36036	45104	1.252	0.005	

RT	AREA	HEIGHT	HT/AREA	% AREA	COMPOUNDS
13.785	11226	44939	4.003	0.001	
13.790	47016	44953	0.956	0.006	
13.813	11118	44516	4.004	0.001	
13.818	37641	44507	1.182	0.005	
13.832	15424	44192	2.865	0.002	
13.838	17564	43967	2.503	0.002	
13.844	26339	43892	1.666	0.003	
13.855	30567	43821	1.434	0.004	
13.865	23854	43526	1.825	0.003	
13.882	28266	43639	1.544	0.004	
13.886	30418	43629	1.434	0.004	
13.901	34702	43472	1.253	0.005	
13.920	48162	44005	0.914	0.007	
13.928	17577	43956	2.501	0.002	
13.941	15410	44084	2.861	0.002	
13.946	11045	44251	4.006	0.001	
13.949	24369	44341	1.820	0.003	
13.959	22103	44264	2.003	0.003	
13.967	22088	44195	2.001	0.003	
13.976	33207	44336	1.335	0.004	18 Filter Peak
13.998	24195	44018	1.819	0.003	
14.007	15335	43888	2.862	0.002	
14.014	17519	43863	2.504	0.002	
14.019	54335	43870	0.807	0.008	
14.046	10722	42915	4.003	0.001	
14.052	19305	42955	2.225	0.002	
14.058	8568	42864	5.003	0.001	
14.067	38739	43159	1.114	0.005	
14.077	15012	42931	2.860	0.002	
14.083	25753	42977	1.669	0.003	
14.102	25682	42913	1.671	0.003	
14.108	19267	42865	2.225	0.002	
14.116	12834	42815	3.336	0.001	
14.126	25874	43369	1.676	0.003	
14.133	56339	43595	0.774	0.008	
14.161	32503	43582	1.341	0.004	
14.165	10909	43696	4.006	0.001	
14.170	15313	43822	2.862	0.002	
14.175	10960	43911	4.007	0.001	
14.178	13176	43945	3.335	0.001	
14.183	19785	43976	2.223	0.002	
14.191	8796	44018	5.005	0.001	
14.197	17636	44177	2.505	0.002	
14.208	28815	44459	1.543	0.004	
14.219	8873	44379	5.002	0.001	
14.223	13318	44445	3.337	0.001	
14.229	28860	44456	1.540	0.004	
14.247	15436	44194	2.863	0.002	
14.260	37147	43758	1.178	0.005	
14.274	45685	43705	0.957	0.006	
	677340272	268782821		100.000	

Total unknown % area = 25.478

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

ACID STOC"

Product no.: 22523046
Lot no.: LRAC9812
Expiry Date: May 2023
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: Dichloromethane
Certificate version: LRAC9812.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

J005200
SVOA-ABN ACID STOCK-200-800ug/ml
Solvent / Lot: DCM
Prep: 5/18/2021 by JZ
Exp: 5/31/2023
Location:

JZ 5/18/21

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	802	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	802	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	802	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1806	µg/mL	75.9	MKBP5833V
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	803	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	801	µg/mL	99.9	JS00013
4-NITROPHENOL CAS# 100-02-7	801	µg/mL	99.9	LC10889
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1804	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	803	µg/mL	98.7	MKCK8156
BENZOIC ACID CAS# 65-85-0	1805	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Agilent

Certificate of Analysis

J008074

SVOA PAH STD 2000ug/ml
Expires 6/30/2023
Prepared By Joshua Rains 8/5/2021

Product Name: PAH Standard

Product Number: US-106N-1

Lot Number: 0006540449

Lot Issue Date: 11-Jun-2020

Expiration Date: 30-Jun-2023

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
acenaphthene	000083-32-9	RM10879	2008 ± 10 µg/mL
acenaphthylene	000208-96-8	RM10891	2003 ± 10 µg/mL
anthracene	000120-12-7	RM14212	2006 ± 10 µg/mL
benz[a]anthracene	000056-55-3	RM16072	2006 ± 10 µg/mL
benzo[b]fluoranthene	000205-99-2	RM14571	2005 ± 10 µg/mL
benzo[k]fluoranthene	000207-08-9	RM14321	2009 ± 10 µg/mL
benzo[ghi]perylene	000191-24-2	RM15761	2008 ± 10 µg/mL
benzo[a]pyrene	000050-32-8	RM12669	2009 ± 10 µg/mL
chrysene	000218-01-9	RM12260	2009 ± 10 µg/mL
dibenz[a,h]anthracene	000053-70-3	RM06786	2009 ± 10 µg/mL
fluoranthene	000206-44-0	RM12277	2004 ± 10 µg/mL
fluorene	000086-73-7	RM09441	2009 ± 10 µg/mL
indeno[1,2,3-cd]pyrene	000193-39-5	RM14192	2009 ± 10 µg/mL
naphthalene	000091-20-3	NT00970	2008 ± 10 µg/mL
phenanthrene	000085-01-8	RM10495	2009 ± 10 µg/mL
pyrene	000129-00-0	RM03479	2008 ± 10 µg/mL

Matrix: methylene chloride/benzene (1:1)

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

Certificate of Analysis

Product Number: US-106N-1 **Lot Number:** 0006540449

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ISO 17034 Cert No.
AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 2 of 2

www.agilent.com/quality/

ISO 17025 Cert
No. AT-1937

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL16062
Certification Date: November 19, 2020
Expiration Date: November 30, 2030

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 2.740%
3,3'-Dichlorobenzidine	91-94-1	2000	± 3.229%

J008310
Benzidines std @2000ug/ml
Expires 11/30/2030
Prepared By Van Spohn 8/12/2021

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018_us

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

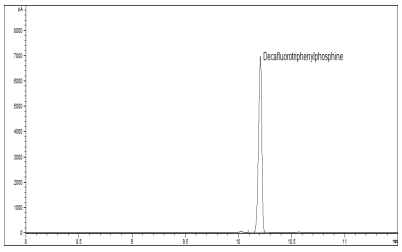
References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis - Certified Reference Material

Decafluorotriphenylphosphine solution

Product no.: 48724-U
Lot no.: LRAD0628
Expiry Date: October 2024
Manufacturing Date: September 2021
Storage: ROOM TEMPERATURE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0628.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

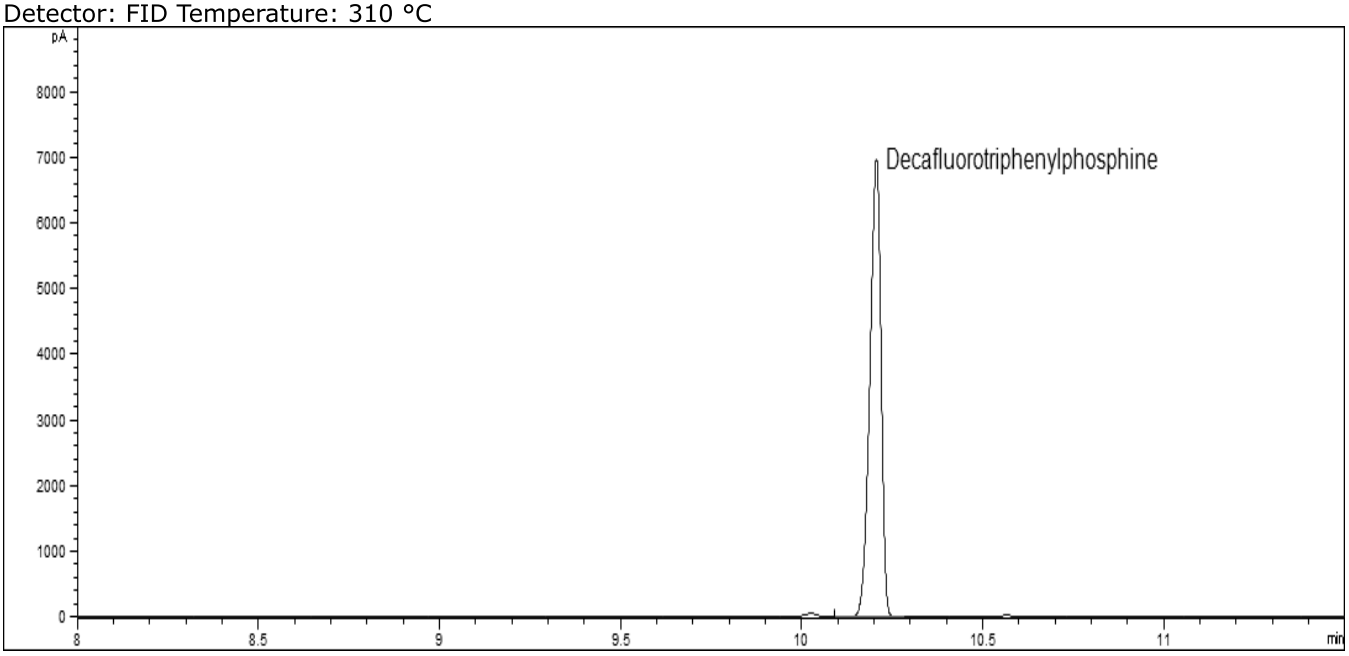


Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
DFTPP CAS# 5074-71-5	25.2 ± 2.6	mg/mL	97.0	10220909

ASSAY Method

METHOD: GC (BELLEFONTE)
Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.3 mL/min
Inlet Temperature: 250 °C Injection Volume: 1 µL
Injection Mode: 25:1
Temperature Program: 120 °C (Hold 0 min) @ 12 °C/min to 260 °C (Hold 0 min)
Detector: FID Temperature: 310 °C



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Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Elution details:

EO	RT(MIN)	ANALYTE
1	10.206	Decafluorotriphenylphosphine

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Minimum sample size: 1 µL

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 30-Sep-2021

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0628.01	30-Sep-2021	Original Release Date

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Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Certified Values

Analyte	*Units*	*Certified Value* [1,4]
1,2,4-Trichlorobenzene	µg/Kg	1477 ± 181
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	1625 ± 292
1-Chloronaphthalene	µg/Kg	2809 ± 84
2,3-Dimethylphenol	µg/Kg	4552 ± 137
2,4,5-Trichlorophenol	µg/Kg	3438 ± 245
2,4,6-Trichlorophenol	µg/Kg	2194 ± 251
2,4-Dichlorophenol	µg/Kg	6991 ± 394
2,4-Dimethylphenol	µg/Kg	6357 ± 879
2,4-Dinitrophenol	µg/Kg	2922 ± 523
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	3318 ± 442
2,6-Dichlorophenol	µg/Kg	4578 ± 874
2,6-Dimethylphenol	µg/Kg	7582 ± 228
2-Chloronaphthalene	µg/Kg	2223 ± 168
2-Chlorophenol	µg/Kg	1678 ± 202
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	5148 ± 685
2-Methylphenol (o-Cresol)	µg/Kg	6004 ± 573
2-Nitrophenol	µg/Kg	6456 ± 383
3,4-Dimethylphenol	µg/Kg	7185 ± 216
3+4-Methylphenol (m+p-Cresol)	µg/Kg	8033 ± 1613
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	7169 ± 310
4-Chloro-3-methylphenol	µg/Kg	2071 ± 110
4-Chlorophenyl phenylether	µg/Kg	2052 ± 113
4-Methylphenol (p-Cresol)	µg/Kg	6617 ± 1371
4-Nitrophenol	µg/Kg	6812 ± 595
Acenaphthene	µg/Kg	5489 ± 380

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Acenaphthylene	µg/Kg	1948 ± 240
Anthracene	µg/Kg	2866 ± 237
Benzo(a)anthracene	µg/Kg	5751 ± 552
Benzo(a)pyrene	µg/Kg	5902 ± 612
Benzo(b)fluoranthene	µg/Kg	3010 ± 409
Benzo(b+k)fluoranthene	µg/Kg	6534 ± 196
Benzo(g,h,i)perylene	µg/Kg	1380 ± 136
Benzo(k)fluoranthene	µg/Kg	2215 ± 237
Butyl benzyl phthalate	µg/Kg	3511 ± 384
Carbazole	µg/Kg	5412 ± 407
Chrysene	µg/Kg	1477 ± 72
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	2905 ± 321
Dibenzo(a,h)anthracene	µg/Kg	3420 ± 302
Dibenzofuran	µg/Kg	6130 ± 253
Dimethyl phthalate	µg/Kg	4537 ± 250
Di-n-butyl phthalate	µg/Kg	1721 ± 154
Di-n-octyl phthalate	µg/Kg	2744 ± 288
Fluoranthene	µg/Kg	2497 ± 222
Fluorene	µg/Kg	3724 ± 222
Hexachlorobutadiene	µg/Kg	1877 ± 245
Indeno(1,2,3-cd) pyrene	µg/Kg	3914 ± 409
Isophorone	µg/Kg	1615 ± 170
Naphthalene	µg/Kg	4458 ± 480
Nitrobenzene	µg/Kg	3539 ± 266
n-Nitrosodimethylamine	µg/Kg	1580 ± 402
n-Nitrosodiphenylamine	µg/Kg	2854 ± 379
Pentachlorophenol	µg/Kg	3411 ± 358
Phenanthrene	µg/Kg	5052 ± 385
Phenol	µg/Kg	2660 ± 184
Pyrene	µg/Kg	2964 ± 256
Pyridine	µg/Kg	1008 ± 30

Informational Values

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID CRM143-50G
Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Analyte	*Units*	*Suggested Acceptance Windows*	*Standard Deviation*
1,2,4-Trichlorobenzene	µg/Kg	148 to 2853	459
1,3-Dichlorobenzene (m-Dichlorobenzene)	µg/Kg	163 to 3440	605
1-Chloronaphthalene	µg/Kg	1123 to 4494	562
2,3-Dimethylphenol	µg/Kg	1821 to 7284	910
2,4,5-Trichlorophenol	µg/Kg	1003 to 5872	811
2,4,6-Trichlorophenol	µg/Kg	640 to 3748	518
2,4-Dichlorophenol	µg/Kg	2391 to 11591	1533
2,4-Dimethylphenol	µg/Kg	0.00 to 13959	2534
2,4-Dinitrophenol	µg/Kg	1169 to 4675	584
2,4-Dinitrotoluene (2,4-DNT)	µg/Kg	1248 to 5388	690
2,6-Dichlorophenol	µg/Kg	1831 to 7324	916
2,6-Dimethylphenol	µg/Kg	3033 to 12132	1516
2-Chloronaphthalene	µg/Kg	748 to 3699	492
2-Chlorophenol	µg/Kg	415 to 2942	421
2-Methyl-4,6-dinitrophenol (4,6-Dinitro-2-methylphenol)	µg/Kg	0.00 to 10347	1733
2-Methylphenol (o-Cresol)	µg/Kg	1306 to 10702	1566
2-Nitrophenol	µg/Kg	1534 to 11379	1641
3,4-Dimethylphenol	µg/Kg	2874 to 11495	1437
3+4-Methylphenol (m+p-Cresol)	µg/Kg	4054 to 16218	2027
4-Bromophenyl phenyl ether (BDE-3)	µg/Kg	2901 to 11437	1423
4-Chloro-3-methylphenol	µg/Kg	677 to 3464	464
4-Chlorophenyl phenylether	µg/Kg	756 to 3348	432
4-Methylphenol (p-Cresol)	µg/Kg	2647 to 10587	1323
4-Nitrophenol	µg/Kg	681 to 14762	2650
Acenaphthene	µg/Kg	2243 to 8736	1082
Acenaphthylene	µg/Kg	712 to 3183	412
Anthracene	µg/Kg	1218 to 4515	550
Benzo(a)anthracene	µg/Kg	2806 to 8696	982
Benzo(a)pyrene	µg/Kg	2512 to 9292	1130
Benzo(b)fluoranthene	µg/Kg	1197 to 4822	604
Benzo(b+k)fluoranthene	µg/Kg	2614 to 10454	1307

Description

Lot **LRAC8918**
Expiration Date January 2024
Manufacturing Date January 2021
Storage Conditions Refrigerate
Solvent/Matrix SOIL

Benzo(g,h,i)perylene	µg/Kg	489 to 2271	297
Benzo(k)fluoranthene	µg/Kg	892 to 3537	441
Butyl benzyl phthalate	µg/Kg	1255 to 5766	752
Carbazole	µg/Kg	2032 to 8792	1127
Chrysene	µg/Kg	669 to 2284	269
Di(2-ethylhexyl) phthalate (bis(2-Ethylhexyl)phthalate, DEHP)	µg/Kg	765 to 5045	713
Dibenzo(a,h)anthracene	µg/Kg	1257 to 5583	721
Dibenzofuran	µg/Kg	2766 to 9493	1121
Dimethyl phthalate	µg/Kg	1842 to 7231	898
Di-n-butyl phthalate	µg/Kg	495 to 2947	409
Di-n-octyl phthalate	µg/Kg	690 to 4798	685
Fluoranthene	µg/Kg	984 to 4009	504
Fluorene	µg/Kg	1638 to 5810	695
Hexachlorobutadiene	µg/Kg	425 to 3329	484
Indeno(1,2,3-cd) pyrene	µg/Kg	870 to 6957	1015
Isophorone	µg/Kg	437 to 2792	392
Naphthalene	µg/Kg	1131 to 7784	1109
Nitrobenzene	µg/Kg	1024 to 6054	838
n-Nitrosodimethylamine	µg/Kg	632 to 2528	316
n-Nitrosodiphenylamine	µg/Kg	1142 to 4567	571
Pentachlorophenol	µg/Kg	341 to 7037	1209
Phenanthrene	µg/Kg	2307 to 7798	915
Phenol	µg/Kg	681 to 4639	660
Pyrene	µg/Kg	1118 to 4810	615
Pyridine	µg/Kg	403 to 1613	202

Additional Information:

DESCRIPTION

The organic sample is a soil containing extractable BNAs for analysis by 8100, 8270, 8310 or equivalent methods.

This product consist of a 5 vials each containing 10g of soil for analysis of PAHs. Each vial is identical and has been tested how homogeneity. Only one vial is need for test the remaining vials are to be used for multiple methods or routine testing.

The soil has been sterilized to minimize degradation of the sample.

The sample has been sized to 100 mesh.

Required storage condition is 4ºC.

The sample has been intentionally prepared with an apparent headspace.

STORAGE

The sample should be stored at 4ºC. It has been determined to be stable for the duration of the expiration date.

After sub-sampling replace cap securely and store remaining sample at 4ºC.

The shelf life of the product was determined by historic stability of similar CRM's. The expiration date may be extended based on stock and popularity upon successful stability testing by a 17025 accredited laboratory.

Certificate of Analysis

BNAs - Sandy Loam 1

Certified Reference Material

Description

Product ID	CRM143-50G
Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

Stability and shelf life after opening must be determined by the user, taking into account sampling frequency/volume and all local conditions.

SAMPLE PREPARATION

Extract the complete contents of a single vial. Transfer entire contents of one vial to extraction vessel. Rinse vial and cap with extraction solvent.

Assume a 10g sample size for all calculations.

Note: Sample extracts and calibration solutions should be in the same solvent.

Report all results on a wet weight basis, do not correct for moisture.

NOTE: For method 8100 and using a packed column gas chromatographic method or cannot adequately resolve the following may coelute in four pairs of compounds: anthracene and phenanthrene; chrysene and benzo(a)anthracene; benzo(b)fluoranthene and benzo(k)fluoranthene; and dibenzo(a,h)anthracene and indeno(1,2,3-cd)pyrene.

SCOPE AND APPLICATION

The BNAs in Soil Certified Reference Material (CRM) consists of 5 10mL VOA vials, with a Teflon lined closures containing approximately 10 grams of soil, fortified with BNAs. Being a natural matrix waste sample the analyst is challenged by the same preparation problems, analytical interferences, etc. as is typical for similar matrices received by the laboratory for analysis.

Description

Lot	**LRAC8918**
Expiration Date	January 2024
Manufacturing Date	January 2021
Storage Conditions	Refrigerate
Solvent/Matrix	SOIL

1 **Metrological traceability:** Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.
4 Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. K=2 unless specified. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom } ogeneity}^2 + u_{stability}^2}$$

***k*:** Coverage factor derived from a t-distribution table, based on the degrees of freedom of the data set. Assume 2.0 for a **Confidence interval = 95%**

6 Analytical Value- For QC verification of the certified value only- not to be used in calculations. Represents the analytical data obtained by comparison to a standard as analyzed by the method described in the CoA or another acceptable method. The result may differ from the certified value and UCRM based on method uncertainty as well as the uncertainty associated with the standard used for comparison.

Traceability: The standard was manufactured under an ISO/IEC 17025:2017 certified quality system. The balance used to weigh raw materials is accurate to +/- 0.0001g and calibrated regularly using mass standards traceable to NIST. All dilutions were preformed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Homogeneity: Homogeneity was assessed in accordance with ISO 17034:2016. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared using a one-way analysis of variance approach as described by TNI EL-V3-2009 Appendix A.2. See Instructions for minimum sub-sample size.

Expiration is at end of month given on certificate and label.

MSDS reports for components comprising greater than 1.0% of the solution or 0.1% for components known to be carcinogens are available upon request.

THIS PRODUCT WAS DESIGNED, PRODUCED AND VERIFIED FOR ACCURACY AND STABILITY IN ACCORDANCE WITH **ISO/IEC 17025:2017 (ANAB Cert AT-1467)** and **ISO 17034:2016 (ANAB Cert AR-1470).**

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Certification Date	January 05, 2021
Version	0-152021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-103N-1 **Lot Issue Date:** 25-May-2021

Lot Number: 0006609664 **Expiration Date:** 30-Jun-2024

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
benzoic acid	000065-85-0	RM01884	2005 ± 10 µg/mL
o-cresol	000095-48-7	RM12877	2005 ± 10 µg/mL
p-cresol	000106-44-5	RM01988	2005 ± 10 µg/mL
2,4,5-trichlorophenol	000095-95-4	NT00344	2004 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

5/11/22

K004539
toxic sub mix#1
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 6/30/2024
Location:

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: Phenols Standard
Product Number: US-107N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006648297
Lot Issue Date: 17-Nov-2021
Expiration Date: 31-Dec-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
4-chloro-3-methylphenol	2006 ±	10 µg/mL	000059-50-7	RM01885
2-chlorophenol	2007 ±	10 µg/mL	000095-57-8	RM01871
2,4-dichlorophenol	2005 ±	10 µg/mL	000120-83-2	RM13878
2,4-dimethylphenol	2006 ±	10 µg/mL	000105-67-9	RM13009
2,4-dinitrophenol	2006 ±	10 µg/mL	000051-28-5	RM02112
2-methyl-4,6-dinitrophenol	2005 ±	10 µg/mL	000534-52-1	RM02292
2-nitrophenol	2007 ±	10 µg/mL	000088-75-5	RM13445
4-nitrophenol	2006 ±	10 µg/mL	000100-02-7	RM03752
pentachlorophenol	2006 ±	10 µg/mL	000087-86-5	RM02474
phenol	2006 ±	10 µg/mL	000108-95-2	RM11471
2,4,6-trichlorophenol	2006 ±	10 µg/mL	000088-06-2	RM18096

Matrix: methylene chloride (dichloromethane)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

5/11/22

CSD-QA-015.1

K004540
phenols mix
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 12/31/2024
Location:

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name: PAH Standard
Product Number: US-106N-1
Storage Conditions: Store at Room Temperature (15° to 30°C).

Lot Number: 0006627349
Lot Issue Date: 17-Sep-2021
Expiration Date: 31-Oct-2024

Component Name	CERTIFIED VALUES Concentration	Expanded Uncertainty	CAS#	Analyte Lot
acenaphthene	2007 ±	10 µg/mL	000083-32-9	RM10879
acenaphthylene	2004 ±	10 µg/mL	000208-96-8	RM10891
anthracene	2006 ±	10 µg/mL	000120-12-7	RM14212
benz[a]anthracene	2006 ±	10 µg/mL	000056-55-3	RM16072
benzo[b]fluoranthene	2006 ±	10 µg/mL	000205-99-2	RM14571
benzo[k]fluoranthene	2006 ±	10 µg/mL	000207-08-9	RM18376
benzo[ghi]perylene	2006 ±	10 µg/mL	000191-24-2	RM15761
benzo[a]pyrene	2006 ±	10 µg/mL	000050-32-8	RM17573
chrysene	2007 ±	10 µg/mL	000218-01-9	RM13771
dibenz[a,h]anthracene	2006 ±	10 µg/mL	000053-70-3	RM06786
fluoranthene	2006 ±	10 µg/mL	000206-44-0	RM12277
fluorene	2006 ±	10 µg/mL	000086-73-7	RM09441
indeno[1,2,3-cd]pyrene	2006 ±	10 µg/mL	000193-39-5	RM14192
naphthalene	2007 ±	10 µg/mL	000091-20-3	RM10445
phenanthrene	2005 ±	10 µg/mL	000085-01-8	RM10495
pyrene	2005 ±	10 µg/mL	000129-00-0	RM16126

Matrix: methylene chloride/benzene (1:1)

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

K004541
SVOA PAH STD 2000ug/ml
Solvent / Lot: DCM/BENZENE
Prep: 5/11/2022 by JZ
Exp: 10/31/2024
Location: Fridge 19

CSD-QA-015.1

11/22

Reference Materials Producer
Cert #2495.01

Certificate of Analysis

Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics**® Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Mora

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory , please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5 µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i, where $u_c = \sqrt{\sum u_i^2}$

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Phone: 1-732-549-7144 • Fax 1-732-603-9647

Accredited to 17025 & Guide 34 ISO Certified to 9001

ACCREDITED
Reference Materials Producer
Cert #2495.01

ECS

Certificate of Analysis

ilac-MRA ACCREDITED
Chemical Testing
Cert #2495.02

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This **SPEXOrganics®** Certified Reference Material, CRM, is intended primarily for use as a calibration standard or quality control standard for organic chromatography instrumentation such as GC, GC-MS, LC, and LC-MS. It can be employed in USEPA, ASTM and other methods relevant to the certified properties listed below.

Certified Compounds:

Compound	CAS #	Labeled	Purity	Certified†	Uncertainty
1,2,4-Trichlorobenzene	120-82-1	2000 µg/mL	99%	2010 µg/mL	± 50 µg/mL
1,2-Dichlorobenzene	95-50-1	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
1,3-Dichlorobenzene	541-73-1	2000 µg/mL	98%	2021 µg/mL	± 51 µg/mL
1,4-Dichlorobenzene	106-46-7	2000 µg/mL	99%	2012 µg/mL	± 50 µg/mL
2,4-Dinitrotoluene	121-14-2	2000 µg/mL	97%	2006 µg/mL	± 50 µg/mL
2,6-Dinitrotoluene	606-20-2	2000 µg/mL	99.6%	2012 µg/mL	± 50 µg/mL
2-Chloronaphthalene	91-58-7	2000 µg/mL	98%	2004 µg/mL	± 50 µg/mL
4-Bromodiphenyl ether	101-55-3	2000 µg/mL	99%	2022 µg/mL	± 51 µg/mL
4-Chlorophenyl-phenyl ether	7005-72-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Azobenzene	103-33-3	2000 µg/mL	98%	2001 µg/mL	± 50 µg/mL
Bis(2-chloro-1-methylethyl) ether	108-60-1	2000 µg/mL	98.9%	2010 µg/mL	± 50 µg/mL
bis(2-Chloroethoxy)methane	111-91-1	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
bis(2-Chloroethyl)ether	111-44-4	2000 µg/mL	99%	2002 µg/mL	± 50 µg/mL
Bis(2-Ethylhexyl)phthalate	117-81-7	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Butylbenzyl phthalate	85-68-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Carbazole	86-74-8	2000 µg/mL	95%	2009 µg/mL	± 50 µg/mL
Di-n-butyl phthalate	84-74-2	2000 µg/mL	99%	2020 µg/mL	± 50 µg/mL
Di-n-octyl phthalate	117-84-0	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
Diethyl phthalate	84-66-2	2000 µg/mL	99.5%	2002 µg/mL	± 50 µg/mL
Dimethyl phthalate	131-11-3	2000 µg/mL	99%	2006 µg/mL	± 50 µg/mL
Hexachlorobenzene	118-74-1	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachlorobutadiene	87-68-3	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
Hexachlorocyclopentadiene	77-47-4	2000 µg/mL	99%	2003 µg/mL	± 50 µg/mL
Hexachloroethane	67-72-1	2000 µg/mL	98%	2003 µg/mL	± 50 µg/mL
Isophorone	78-59-1	2000 µg/mL	97%	2003 µg/mL	± 50 µg/mL
N-Nitrosodi-n-propylamine	621-64-7	2000 µg/mL	98%	2000 µg/mL	± 50 µg/mL
N-Nitrosodiphenylamine	86-30-6	2000 µg/mL	97%	2001 µg/mL	± 50 µg/mL
Nitrobenzene	98-95-3	2000 µg/mL	99%	2001 µg/mL	± 50 µg/mL
Pyridine	110-86-1	2000 µg/mL	99%	2004 µg/mL	± 50 µg/mL
N-Nitrosodimethylamine	62-75-9	2000 µg/mL	97%	2000 µg/mL	± 50 µg/mL

K004542

Certificate of Reference Material

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

Final Solution Verification:

Final solution integrity verified by Gas Chromatography/Mass Spectrometry. The mass spectrum of each compound was confirmed against the NIST mass spectral database.

† Certified concentration based on gravimetric weights and corrected for the purity of the compound(s) used to prepare the standard. Analytical balance calibration is verified daily with C1 weight set #23-190006 which is registered with Atlantic Scale, and traceable to NIST and NJ Division of Weights and Measures.

This CRM is guaranteed stable and accurate to within the uncertainty listed for the certified value. This includes uncertainty components due to preparation, homogeneity, short term and long term stability. During the stated period of validity, the purchaser will be notified if this product is recalled due to any significant changes in the stability of the solution. For further information, contact the Sales Support Department at crmsales@spexcsp.com.

Date of Certification: 1-26-2021 Certifying Officer: Shannon Nave

Report of Certification

Catalog Number: ECS-A-030 **Lot No.** AA210126005

Description: Base/Neutrals Mix 1

Matrix: Methylene Chloride

Manufactured Date: 1-26-2021

Expiration Date: 1-26-2024

This Certified Reference Material (CRM) has been prepared and certified under an ISO 9001:2008, ISO 17025:2005, and ISO Guide 34:2009 Quality System consistent with the following standards:

- ISO 9001:2008: Quality management systems - Requirements - Certified by UL-DQS
- ISO 17025:2005: General Requirements for the Competence of Testing and Calibration Laboratories - Accredited by A2LA
- ISO Guide 34:2009: General Requirements for the Competence of Reference Material Producers - Accredited by A2LA
- ISO Guide 31:2000: Reference Materials - Contents of Certificates and Labels
- ISO Guide 35:2006: Reference Materials - General and statistical principals for certification
- Guide to the Expression of Uncertainty in Measurement 1997
- EURACHEM/CITAC Guide: Qualifying Uncertainty in Analytical Measurements - Second Edition
- ASTM Guide D6362-98
- NIST Technical Note 1297
- ILAC-G12-2000: Guidelines for the requirements for the competence of reference material producers
- ISO/REMCO N280

Storage Requirements:

To ensure the stability of the product once it arrives in your laboratory, please store this product in a refrigerator (2°C to 8°C). Note: Shipping conditions may differ from storage conditions. The EXPIRATION DATE is calculated from the MANUFACTURED DATE using our stability data and is applicable only if the product is unopened and stored under the prescribed conditions.

Instructions for Use:

Let material come to room temperature before use. Check for precipitate and if necessary sonicate for one minute. If compounds do not dissolve after one minute then sonicate further until the product is dissolved. A clear appearance is acceptable. The minimum recommended amount that should be removed from this vial is 5µL with a 25µL gas tight syringe. All solutions should be thoroughly mixed, by shaking, prior to use. All surfaces that come in contact with the solution must be thoroughly cleaned prior to use. Dilutions should be performed only with Class A volumetric glassware.

Material Source:

All analytes and matrix materials are obtained and verified by SPEX CertiPrep from pre-qualified vendors as per ISO guidelines. Vendor identifications are proprietary, however sources of all materials used in the preparation and testing of SPEX CertiPrep CRMs are tracked and documented. For assistance, please contact sales support at crmsales@spexcsp.com.

Method of Preparation:

Clean laboratory procedures and techniques have been used throughout the preparation. All materials, equipment, and analytical instrumentation have been qualified prior to use. The highest purity solvents and Class A / calibrated volumetrics have been been used in all preparations.

Homogeneity:

The homogeneity of this CRM has been confirmed by procedures consistent with ISO 17025:2005, ISO Guide 34:2009, and ASTM D6362-98 Appendix X2. Random, replicate samples of the final, packaged material have been analyzed to prove homogeneity in accordance with our internal procedure 4300-HOMOGEN-1A. This is consistent with the intended use of this CRM. The Degree of Homogeneity, as expressed as maximum between-bottle variation, is 1.2%

Statistical Estimator and Confidence Limits:

The Certified value 'X' as listed on the reverse of this document is at the 95% level of confidence and can be expressed as:

- $X = x \pm U$ where X=certified value, U=expanded uncertainty, x=property value
- $U = ku_c$ where k=2 is the coverage factor at the 95% confidence level
- u_c = combined standard uncertainty obtained by combining the individual compound standard uncertainty components u_i where $u_c = \sqrt{\sum u_i^2}$

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Agilent

Certificate of Analysis

Product Name: 1-Methylnaphthalene Standard

Product Number: EPA-1225-1 **Lot Issue Date:** 19-Jul-2021

Lot Number: 0006624769 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
1-methylnaphthalene	000090-12-0	RM07712	999.3 ± 5.0 µg/mL

Matrix: methanol (methyl alcohol)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

K004543
1-Methylnaphthalene
Solvent / Lot: MEOH
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

5/11/22

Sample lot approver:
Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert
No. AT-1937

Agilent

Certificate of Analysis

Product Name: Toxic Substances Standard

Product Number: US-104N-1 **Lot Issue Date:** 02-Jul-2021

Lot Number: 0006620643 **Expiration Date:** 31-Jul-2023

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
aniline	000062-53-3	RM12853	2005 ± 10 µg/mL
benzyl alcohol	000100-51-6	RM10547	2004 ± 10 µg/mL
4-chloroaniline	000106-47-8	RM01886	2002 ± 10 µg/mL
dibenzofuran	000132-64-9	RM02077	2002 ± 10 µg/mL
2-methylnaphthalene	000091-57-6	RM01258	2006 ± 10 µg/mL
2-nitroaniline	000088-74-4	RM02402	2003 ± 10 µg/mL
3-nitroaniline	000099-09-2	RM02424	2003 ± 10 µg/mL
4-nitroaniline	000100-01-6	RM02425	2003 ± 10 µg/mL

Matrix: methylene chloride (dichloromethane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

K004544
toxic sub mix#2
Solvent / Lot: methylene chloride
Prep: 5/11/2022 by JZ
Exp: 7/31/2023
Location:

05/11/22

ANAB ACCREDITED ISO17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

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CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0181243

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : October 31, 2025 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

05/11/22

K004545
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO175316
Prep: 5/11/2022 by JZ
Exp: 10/20/2025
Location:

Elution Order	Compound	Gr (weig					
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ2508) **Purity** 99%	1,50					
				+/-	53.3632	µg/mL	Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot PR-31262) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,510.0	µg/mL	+/-	8.9689	µg/mL	Gravimetric
				+/-	44.1050	µg/mL	Unstressed
				+/-	53.5049	µg/mL	Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32542/022621DB1 **Purity** 99%	1,004.0	µg/mL	+/-	5.9635	µg/mL	Gravimetric
				+/-	29.3255	µg/mL	Unstressed
				+/-	35.5754	µg/mL	Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,008.0	µg/mL	+/-	5.9872	µg/mL	Gravimetric
				+/-	29.4423	µg/mL	Unstressed
				+/-	35.7172	µg/mL	Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 19169) **Purity** 99%	1,006.0	µg/mL	+/-	5.9753	µg/mL	Gravimetric
				+/-	29.3839	µg/mL	Unstressed
				+/-	35.6463	µg/mL	Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,506.0	µg/mL	+/-	8.9452	µg/mL	Gravimetric
				+/-	43.9882	µg/mL	Unstressed
				+/-	53.3632	µg/mL	Stressed

Certificate of Analysis

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Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101246	**Lot Number:**	CL17953
Description:	Benzoic Acid	**Certification Date:**	January 31, 2022
Storage:	4 °C	**Expiration Date:**	January 31, 2032
Provided As:	1 mL in 2 mL Ampoule in Methylene Chloride		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzoic acid	65-85-0	2000	± 2.714%

K004603
Benzoic Acid @2000ug/ml
Solvent / Lot: N/A
Prep: 5/13/2022 by JZ
Exp: 1/31/2032
Location: GC

5/13/22

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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Certificate of Analysis

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL17662
Certification Date: December 2, 2021
Expiration Date: November 30, 2031

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 0.211%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.305%

K004604
Benzidines std @2000ug/ml
Solvent / Lot: MeCl2
Prep: 5/13/2022 by JZ
Exp: 11/30/2031
Location: GC

5/13/22

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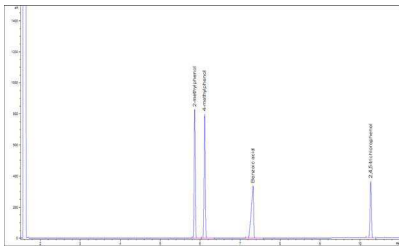
Certificate of Analysis - Certified Reference Material

EPA TCL Hazardous Substances Mix 1

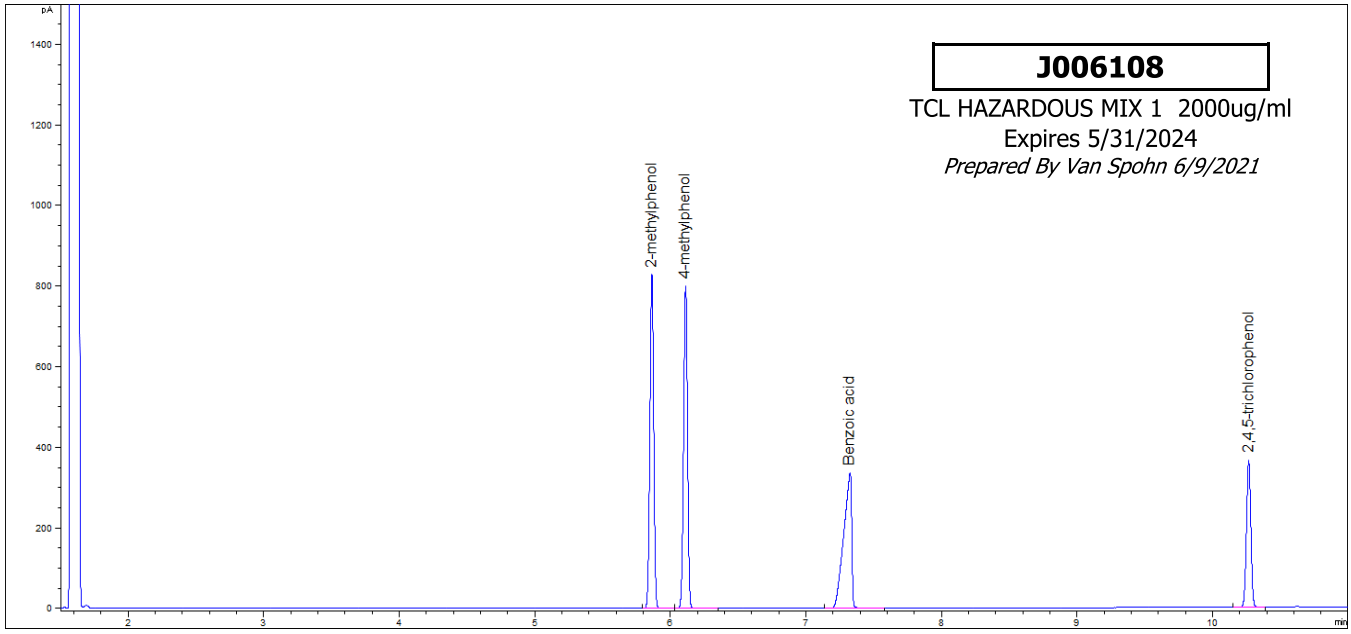
Product no.: 48907
Lot no.: LRAC9610
Expiry Date: May 2024
Manufacturing Date: May 2021
Storage: Refrigerate
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAC9610.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Elution order*	*Raw Material Lot*
2-METHYLPHENOL CAS# 95-48-7	2004 ± 9	µg/mL	99.0	1	G1735A
4-METHYLPHENOL CAS# 106-44-5	2004 ± 13	µg/mL	98.9	2	06921MG
BENZOIC ACID CAS# 65-85-0	2012 ± 6	µg/mL	99.9	3	LC16514
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	2003 ± 6	µg/mL	99.9	4	JS00008

Informational Values:



Additional Information:
Analytical Method Parameters:
Column: Equity-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness (Column #98)
Carrier Gas: H2, Flow: 4.5 mL/min
Inlet Temperature: 170 °C, Injection Volume: 1 µL
Injection Mode: Split, Split Ratio: 20:1

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Temperature Program: 80 °C @ 10 °C/min to 190 °C (Hold 5 min)
Detector: FID
Detector Temperature: 310 °C

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 20-May-2021

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{\text{hom}\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAC9610.01	20-May-2021	Original Release Date

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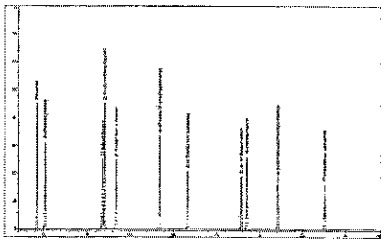
Certificate of Analysis - Certified Reference Material

EPA TCL Phenols Mix

Product no.: 48904
Lot no.: LRAD0139
Expiry Date: July 2024
Manufacturing Date: July 2021
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD0139.01 *(Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*



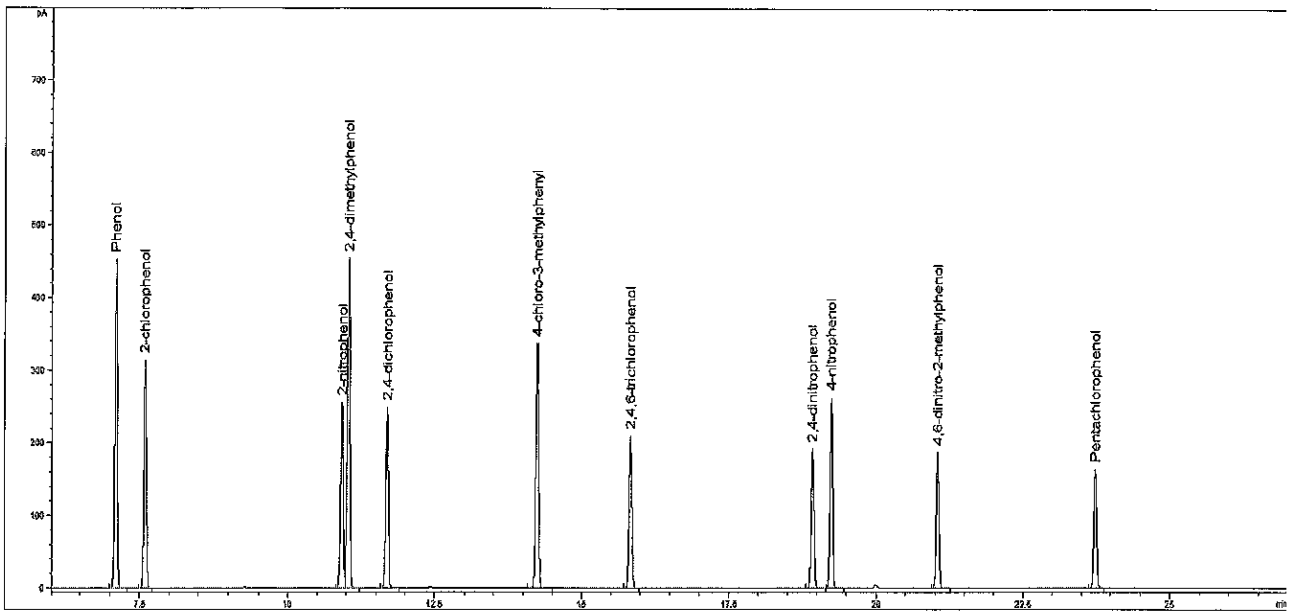
Certified Values:

Analyte	*Certified Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2-CHLOROPHENOL CAS# 95-57-8	2001 ± 25	µg/mL	99.9	STBG3033V
2-NITROPHENOL CAS# 88-75-5	1999 ± 18	µg/mL	99.3	15905BB
2,4-DIMETHYLPHENOL CAS# 105-67-9	2000 ± 14	µg/mL	99.2	05421CO
2,4-DICHLOROPHENOL CAS# 120-83-2	2000 ± 17	µg/mL	99.5	03221TN
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	2000 ± 5	µg/mL	99.9	JS00013
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	2002 ± 5	µg/mL	99.5	04212PS
2,4-DINITROPHENOL CAS# 51-28-5	2000 ± 28	µg/mL	66.9	STBJ5751
4-NITROPHENOL CAS# 100-02-7	2000 ± 33	µg/mL	99.0	04628LT
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	2000 ± 27	µg/mL	99.7	LC18338
PENTACHLOROPHENOL CAS# 87-86-5	1999 ± 25	µg/mL	97.9	MKCD2150

ASSAY Method

J013597
TCL Phenols Mix 2000ug/ml
Solvent / Lot: LRAD0139
Prep: 12/30/2021 by VS
Exp: 7/31/2024
Location:

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.



METHOD: GC (Bellefonte Method)

Column: SPB-5, 30 m × 0.53 mm I.D., 1.5 µm film thickness
Carrier Gas: H_2 Flow Rate: 4.5 mL/min
Inlet Temperature: 200 °C Injection Volume: 1.0 µL
Injection Mode: 25:1
Temperature Program: 80 °C (Hold 2 min) @ 6 °C/min to 260 °C (Hold 5 min)
Detector: FID Temperature: 310 °C

Elution details:

EO	RT(MIN)	ANALYTE
1	7.095	Phenol
2	7.585	2-chlorophenol
3	10.925	2-nitrophenol
4	11.037	2,4-dimethylphenol
5	11.696	2,4-dichlorphenol
6	14.242	4-chloro-3-m3thylphenol
7	15.842	2,4,6-trichlorophenol
8	18.93	2,4-dinitrophenol
9	19.25	4-nitrophenol
10	21.05	4,6-dinitro-2-methylphenol
11	23.752	Pentachlorophenol

Metrological traceability: Traceable to the SI and higher order standards from NIST through an unbroken chain of comparisons. The balance used to weigh raw materials is accurate to +/-0.0001 g and calibrated regularly using mass standards traceable to NIST. All dilutions were performed gravimetrically. Additionally, individual analytes are traceable to NIST SRMs where available and specified above.

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Accreditation: Sigma-Aldrich RTC is accredited by the US accreditation authority ANAB as a registered reference material producer AR-1470 in accordance with ISO 17034.

Certificate issue date: 12-Jul-2021

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

Andy Ommen - QC Manager

Mark Pooler - QA Supervisor

Details on metrological traceability: This standard has been gravimetrically prepared using balances that have been fully qualified and calibrated to ISO 17025 requirements. All calibrations utilize NIST traceable weights which are calibrated externally by a qualified ISO 17025 accredited calibration laboratory to NIST standards. Qualification of each balance includes the assignment of a minimum weighing by a qualified and ISO 17025 accredited calibration vendor taking into consideration the balance and installed environmental conditions to ensure compliance with USP tolerances of NMT 0.10% relative error. Fill volume to predetermined specifications is gravimetrically verified throughout the dispensing process using qualified and calibrated balances. Further traceability to a corresponding Primary Standard may be achieved through a direct comparison assay. Where a Primary Standard is available, the assay value will be included in the specified section of the COA.

Associated uncertainty: Ucrm - Uncertainty values in this document are expressed as Expanded Uncertainty (Ucrm) corresponding to the 95% confidence interval. Ucrm is derived from the combined standard uncertainty multiplied by the coverage factor k, which is obtained from a *t*-distribution and degrees of freedom. The components of combined standard uncertainty include the uncertainties due to characterization, homogeneity, long term stability, and short term stability (transport). The components due to stability are generally considered to be negligible unless otherwise indicated by stability studies. The mathematical representation of the Ucrm calculation is as follows:

$$u_{CRM} = \sqrt{u_{char}^2 + u_{hom\ ogeneity}^2 + u_{stability}^2}$$

Homogeneity assessment: Homogeneity was assessed in accordance with ISO Guide 35. Completed units were sampled using a random stratified sampling protocol. The results of chemical analysis were then compared by Single Factor Analysis of Variance (ANOVA). The uncertainty due to homogeneity was derived from the ANOVA. Heterogeneity was not detected under the conditions of the ANOVA.

Stability assessment: Significance of the stability assessment will be demonstrated if the analytical result of the study and the range of values represented by the Expanded Uncertainty do not overlap the result of the original assay and the range of its values represented by the Expanded Uncertainty. The method employed will usually be the same method used to characterize the assay value in the initial

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD0139.01	12-Jul-2021	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

The life science business of Merck KGaA, Darmstadt, Germany operates as MilliporeSigma in the US and Canada.

RESTEK® C

110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
Fax: (814)353-1309

www.restek.com

K007194
CLP 04.1 BNA SURR MIX
Solvent / Lot: AO187400
Prep: 8/5/2022 by VS
Exp: 4/30/2026
Location:

Certificate of Analysis

IAL

ACCREDITED
ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ACCREDITED
ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 31493 **Lot No.:** A0187400

Description : CLP 04.1 BNA Surrogate Mix

CLP 04.1 BNA Surrogate Mix 1000-1500 µg/mL, Methylene Chloride, 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : April 30, 2026 **Storage:** 10°C or colder

Handling: Sonicate prior to use. **Ship:** Ambient

CERTIFIED VALUES

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	2-Fluorophenol **CAS #** 367-12-4 (Lot STBJ3299) **Purity** 99%	1,508.0 µg/mL	+/- 8.9571 µg/mL +/- 44.0466 µg/mL +/- 53.4340 µg/mL	Gravimetric Unstressed Stressed
2	Phenol-d6 **CAS #** 13127-88-3 (Lot SL210831) **Purity** 99%	1,510.0 µg/mL	+/- 8.9689 µg/mL +/- 44.1050 µg/mL +/- 53.5049 µg/mL	Gravimetric Unstressed Stressed
3	2-Chlorophenol-d4 **CAS #** 93951-73-6 (Lot PR-30568) **Purity** 99%	1,512.0 µg/mL	+/- 8.9808 µg/mL +/- 44.1635 µg/mL +/- 53.5758 µg/mL	Gravimetric Unstressed Stressed
4	1,2-Dichlorobenzene-d4 **CAS #** 2199-69-1 (Lot PR-32597) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
5	Nitrobenzene-d5 **CAS #** 4165-60-0 (Lot PR-29940A) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
6	2-Fluorobiphenyl **CAS #** 321-60-8 (Lot 00021384) **Purity** 99%	1,004.0 µg/mL	+/- 5.9635 µg/mL +/- 29.3255 µg/mL +/- 35.5754 µg/mL	Gravimetric Unstressed Stressed
7	2,4,6-Tribromophenol **CAS #** 118-79-6 (Lot MKCJ7664) **Purity** 99%	1,502.0 µg/mL	+/- 8.9214 µg/mL +/- 43.8714 µg/mL +/- 53.2214 µg/mL	Gravimetric Unstressed Stressed

8	p-Terphenyl-d14		1,002.0	µg/mL	+/-	5.9516	µg/mL	Gravimetric
	CAS # 1718-51-0	(Lot PR-30504)			+/-	29.2671	µg/mL	Unstressed
	Purity 99%				+/-	35.5046	µg/mL	Stressed

Solvent: Methylene chloride
CAS # 75-09-2
Purity 99%

Tech Tips:
Due to the limited solubility of p-terphenyl-d14 in methanol, we do not recommend that this mixture be diluted in methanol.

Column:
30m x 0.25mm x 0.25µm
Rtx-5 (cat.#10223)

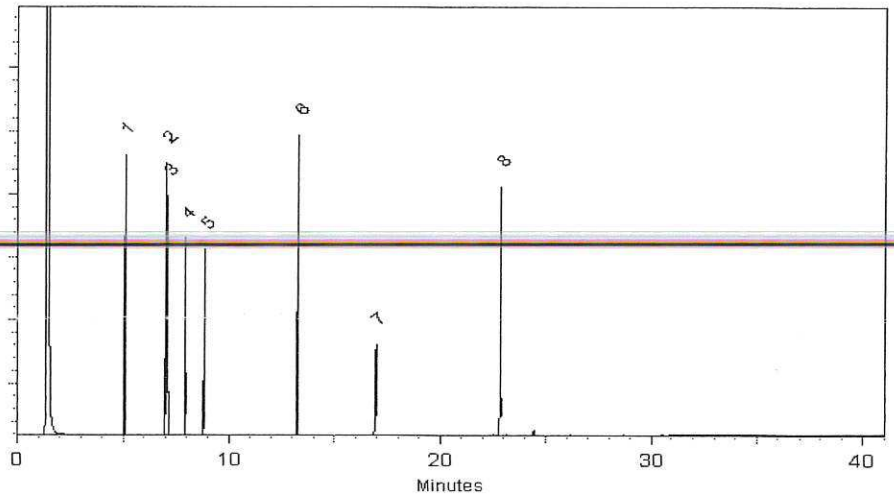
Carrier Gas:
hydrogen-constant pressure 10 psi.

Temp. Program:
40°C (hold 2 min.) to 330°C
@ 10°C/min. (hold 10 min.)

Inj. Temp:
250°C

Det. Temp:
330°C

Det. Type:
FID



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Bryan Snyder - Operations Tech I

Date Mixed: 17-Jul-2022 **Balance:** 1128353505

Christie Mills - Operations Tech II - ARM QC

Date Passed: 21-Jul-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ■ Tel: 303-940-0033 ■ Fax: 303-940-0043 ■ info@phenova.com
Access your Safety Data Sheets and digital Certificates at **www.phenova.com/documents.**

Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18355
Certification Date: July 25, 2022
Expiration Date: August 31, 2023

K007995
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: N/A
Prep: 8/29/2022 by JZ
Exp: 8/31/2023
Location: FREEZER 44

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 0.300%
Acenaphthylene	208-96-8	1000	± 0.225%
Anthracene	120-12-7	1000	± 6.858%
Azobenzene	103-33-3	1000	± 0.224%
Benzo(a)anthracene	56-55-3	1000	± 0.247%
Benzo(a)pyrene	50-32-8	1000	± 0.270%
Benzo(b)fluoranthene	205-99-2	1000	± 0.635%
Benzo(k)fluoranthene	207-08-9	1000	± 0.682%
Benzo(g,h,i)perylene	191-24-2	1000	± 0.272%
Benzyl alcohol	100-51-6	1000	± 0.231%
Benzyl butyl phthalate	85-68-7	1000	± 0.480%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 0.479%
bis(2-Chloroethyl) ether	111-44-4	1000	± 0.479%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 0.550%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 0.479%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 0.479%
4-Bromophenyl phenyl ether	101-55-3	1000	± 0.479%
Carbazole	86-74-8	1000	± 0.146%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 0.300%
4-Chloro-3-methylphenol	59-50-7	1000	± 0.545%
2-Chloronaphthalene	91-58-7	1000	± 0.224%
2-Chlorophenol	95-57-8	1000	± 0.507%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 0.479%
Chrysene	218-01-9	1000	± 0.145%
Dibenz(a,h)anthracene	53-70-3	1000	± 1.058%
Dibenzofuran	132-64-9	1000	± 0.302%
Di-n-butyl phthalate	84-74-2	1000	± 0.518%
1,2-Dichlorobenzene	95-50-1	1000	± 0.247%
1,3-Dichlorobenzene	541-73-1	1000	± 0.225%
1,4-Dichlorobenzene	106-46-7	1000	± 0.224%
2,4-Dichlorophenol	120-83-2	1000	± 0.545%
Diethyl phthalate	84-66-2	1000	± 0.518%
2,4-Dimethylphenol	105-67-9	1000	± 0.507%
Dimethyl phthalate	131-11-3	1000	± 0.518%
1,2-Dinitrobenzene	528-29-0	1000	± 0.361%
1,3-Dinitrobenzene	99-65-0	1000	± 0.300%
1,4-Dinitrobenzene	100-25-4	1000	± 0.242%
2,4-Dinitrophenol	51-28-5	1000	± 0.545%
2,4-Dinitrotoluene	121-14-2	1000	± 1.128%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 0.224%
Di-n-octyl phthalate	117-84-0	1000	± 0.486%
Fluoranthene	206-44-0	1000	± 0.224%
Fluorene	86-73-7	1000	± 0.224%
Hexachlorobenzene	118-74-1	1000	± 0.152%
Hexachlorobutadiene	87-68-3	1000	± 0.746%
Hexachlorocyclopentadiene	77-47-4	1000	± 0.153%
Hexachloroethane	67-72-1	1000	± 0.300%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 0.883%
Isophorone	78-59-1	1000	± 0.145%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 0.508%
1-Methylnaphthalene	90-12-0	1000	± 0.479%
2-Methylnaphthalene	91-57-6	1000	± 0.487%
2-Methylphenol	95-48-7	1000	± 0.545%
3-Methylphenol	108-39-4	500	± 0.279%
4-Methylphenol	106-44-5	500	± 0.399%
Naphthalene	91-20-3	1000	± 0.226%
2-Nitroaniline	88-74-4	1000	± 0.224%
3-Nitroaniline	99-09-2	1000	± 0.235%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 0.300%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18355
Description: 8270 Calibration Standard
Certification Date: July 25, 2022
Storage: -18 °C
Expiration Date: August 31, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 0.514%
4-Nitrophenol	100-02-7	1000	± 0.519%
N-Nitrosodimethylamine	62-75-9	1000	± 0.503%
N-Nitrosodiphenylamine	86-30-6	1000	± 0.476%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.461%
Pentachlorophenol	87-86-5	1000	± 0.202%
Phenanthrene	85-01-8	1000	± 0.145%
Phenol	108-95-2	1000	± 0.545%
Pyrene	129-00-0	1000	± 0.147%
Pyridine	110-86-1	1000	± 0.503%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 0.247%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 0.247%
1,2,4-Trichlorobenzene	120-82-1	1000	± 0.224%
2,4,5-Trichlorophenol	95-95-4	1000	± 0.507%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.509%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Composition - Analytical Standard

BASE STOCK

Product no.: 22523051
Lot no.: LRAD2751
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2751.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
3,3'-DICHLOROBENZIDINE, 100MG, NEAT CAS# 91-94-1	799	µg/mL	99.8	LRAD2376
2,4-DINITROTOLUENE CAS# 121-14-2	801	µg/mL	97.8	LB46632
2,6-DINITROTOLUENE CAS# 606-20-2	800	µg/mL	99.2	11231AN
HEXACHLOROCYCLOPENTADIENE CAS# 77-47-4	800	µg/mL	96.0	LB95525
N-NITROSODIMETHYLAMINE CAS# 62-75-9	800	µg/mL	95.0	2019-030598 5
PERYLENE CAS# 198-55-0	200	µg/mL	99.6	04101PG
ANILINE CAS# 62-53-3	800	µg/mL	99.9	LA41596
4-CHLOROANILINE CAS# 106-47-8	800	µg/mL	100.0	MKBZ6909V
2-NITROANILINE CAS# 88-74-4	799	µg/mL	99.9	07411KN
3-NITROANILINE CAS# 99-09-2	800	µg/mL	99.9	LC09264
4-NITROANILINE CAS# 100-01-6	800	µg/mL	99.9	15609AA
PYRIDINE (LOW WATER) CAS# 110-86-1	800	µg/mL	100.0	SHBJ9218

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Sigma-Aldrich RTC, 2931 Soldier Springs Rd. Laramie, WY 82070, USA;
Tel. 1 307-742-5452; Fax 1 855-831-9211; www.sigmaaldrich.com
Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2751.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Supelco®

www.sigmaaldrich.com

Certificate of Composition - Analytical Standard

ACID STOCK

Product no.: 22523046
Lot no.: LRAD2750
Expiry Date: June 2024
Manufacturing Date: June 2022
Storage: REFRIGERATE
Solvent/Matrix: DICHLOROMETHANE
Certificate version: LRAD2750.01 (*Note: Certificates may be updated due to the availability of new data. Check our website at: www.sigma-aldrich.com for the most current version.)*

Analyte	*Assigned Value*	*Units*	*Raw Material Purity,%*	*Raw Material Lot*
2,4-DIMETHYLPHENOL CAS# 105-67-9	800	µg/mL	99.9	LB88935
2,4-DICHLOROPHENOL CAS# 120-83-2	800	µg/mL	100.0	BCBZ6787
2,4,5-TRICHLOROPHENOL CAS# 95-95-4	801	µg/mL	99.9	JS00008
2,4-DINITROPHENOL CAS# 51-28-5	1799	µg/mL	66.9	STBJ5751
2,4,6-TRICHLOROPHENOL CAS# 88-06-2	800	µg/mL	98.7	LB82983
4-CHLORO-3-METHYLPHENOL CAS# 59-50-7	800	µg/mL	100.0	BCCD4461
4-NITROPHENOL CAS# 100-02-7	800	µg/mL	100.0	MKCN1089
2-METHYL-4,6-DINITROPHENOL CAS# 534-52-1	1800	µg/mL	100.0	BCBX5762
PENTACHLOROPHENOL CAS# 87-86-5	800	µg/mL	99.0	23614-01
BENZOIC ACID CAS# 65-85-0	1800	µg/mL	99.9	LC16514

Measurement method: Where applicable, the assigned value is based on a purity determination by mass balance and gravimetrically prepared value.

Intended use: Intended for R&D and Analytical Use only. Not for drug, household or other uses.

Packaging: 1 mL in amber ampule

Instructions for handling and correct use: Use on the as is basis. The internal pressure of the container may be slightly different from the atmospheric pressure at the user`s location. Open slowly and carefully to avoid dispersion of the material.

Health and safety information: All chemical reference materials should be considered potentially hazardous and should be used only by qualified laboratory personnel. Please refer to the Safety Data Sheet for detailed information about the nature of any hazard and appropriate precautions to be taken.

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Sigma-Aldrich RTC is a subsidiary of Merck KGaA, Darmstadt, Germany.

Certificate issue date: 03 JUN 2022

Andy Ommen - QC Manager

Scott Stetler - QA Manager

Certificate of analysis revision history:

Certificate version	Date	Reason for version
LRAD2750.01	03 JUN 2022	Original Release Date

Disclaimer: The purchaser is required to determine the suitability of this product for any particular application. Sigma-Aldrich RTC makes no warranty of any kind, express or implied, other than its products meet all quality control standards set by Sigma-Aldrich RTC. We do not guarantee that the product can be used for any particular application.

Certificate of Analysis

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Produced by Phenova
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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101244
Description: Benzidines Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Lot Number: CL18939
Certification Date: September 7, 2022
Expiration Date: August 31, 2032

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Benzidine	92-87-5	2000	± 3.812%
3,3'-Dichlorobenzidine	91-94-1	2000	± 1.419%

L001288
Benzidines std @2000ug/ml
Solvent / Lot: CL18939
Prep: 2/7/2023 by VS
Exp: 8/31/2032
Location: GC

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

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Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101443
Lot Number: CL18741
Description: Aniline
Certification Date: July 21, 2022
Storage: 4 °C
Expiration Date: July 31, 2030
Provided As: 1 mL in 2 mL Ampoule in Methylene Chloride

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aniline	62-53-3	1000	± 1.719%

L001290
Anline-1000ug/mL
Solvent / Lot: CL18741
Prep: 2/7/2023 by VS
Exp: 7/31/2030
Location: GC

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

Certificate of Analysis

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18811
Certification Date: August 9, 2022
Expiration Date: November 30, 2023

Aaron Dukes, Certified Reference Materials Manager

L001291
SVOA-8270 LCS MIX 1000ug/ml
Solvent / Lot: CL18811
Prep: 2/7/2023 by VS
Exp: 11/30/2023
Location: FREEZER 44

Component	CAS #	µg/mL	Expanded Uncertainty
Acenaphthene	83-32-9	1000	± 1.643%
Acenaphthylene	208-96-8	1000	± 1.317%
Anthracene	120-12-7	1000	± 2.136%
Azobenzene	103-33-3	1000	± 1.630%
Benzo(a)anthracene	56-55-3	1000	± 2.372%
Benzo(a)pyrene	50-32-8	1000	± 3.028%
Benzo(b)fluoranthene	205-99-2	1000	± 2.377%
Benzo(k)fluoranthene	207-08-9	1000	± 2.286%
Benzo(g,h,i)perylene	191-24-2	1000	± 2.561%
Benzyl alcohol	100-51-6	1000	± 1.803%
Benzyl butyl phthalate	85-68-7	1000	± 1.855%
bis(2-Chloroethoxy)methane	111-91-1	1000	± 1.626%
bis(2-Chloroethyl) ether	111-44-4	1000	± 1.776%
bis(2-Chloroisopropyl) ether	108-60-1	1000	± 2.406%
bis(2-Ethylhexyl) adipate	103-23-1	1000	± 2.415%
bis(2-Ethylhexyl) phthalate	117-81-7	1000	± 2.350%
4-Bromophenyl phenyl ether	101-55-3	1000	± 1.708%
Carbazole	86-74-8	1000	± 1.844%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18811
Certification Date: August 9, 2022
Expiration Date: November 30, 2023

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
4-Chloroaniline	106-47-8	1000	± 2.831%
4-Chloro-3-methylphenol	59-50-7	1000	± 1.571%
2-Chloronaphthalene	91-58-7	1000	± 2.022%
2-Chlorophenol	95-57-8	1000	± 2.001%
4-Chlorophenyl phenyl ether	7005-72-3	1000	± 1.634%
Chrysene	218-01-9	1000	± 2.358%
Dibenz(a,h)anthracene	53-70-3	1000	± 2.452%
Dibenzofuran	132-64-9	1000	± 0.310%
Di-n-butyl phthalate	84-74-2	1000	± 2.347%
1,2-Dichlorobenzene	95-50-1	1000	± 1.803%
1,3-Dichlorobenzene	541-73-1	1000	± 1.808%
1,4-Dichlorobenzene	106-46-7	1000	± 1.503%
2,4-Dichlorophenol	120-83-2	1000	± 1.393%
Diethyl phthalate	84-66-2	1000	± 1.870%
2,4-Dimethylphenol	105-67-9	1000	± 2.495%
Dimethyl phthalate	131-11-3	1000	± 2.113%
1,2-Dinitrobenzene	528-29-0	1000	± 0.240%
1,3-Dinitrobenzene	99-65-0	1000	± 1.221%
1,4-Dinitrobenzene	100-25-4	1000	± 0.246%
2,4-Dinitrophenol	51-28-5	1000	± 0.519%
2,4-Dinitrotoluene	121-14-2	1000	± 2.242%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Lot Number: CL18811
Description: 8270 Calibration Standard
Certification Date: August 9, 2022
Storage: -18 °C
Expiration Date: November 30, 2023
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2,6-Dinitrotoluene	606-20-2	1000	± 2.154%
Di-n-octyl phthalate	117-84-0	1000	± 2.670%
Fluoranthene	206-44-0	1000	± 2.103%
Fluorene	86-73-7	1000	± 0.890%
Hexachlorobenzene	118-74-1	1000	± 1.210%
Hexachlorobutadiene	87-68-3	1000	± 1.304%
Hexachlorocyclopentadiene	77-47-4	1000	± 1.510%
Hexachloroethane	67-72-1	1000	± 3.281%
Indeno(1,2,3-cd)pyrene	193-39-5	1000	± 1.921%
Isophorone	78-59-1	1000	± 2.022%
2-Methyl-4,6-dinitrophenol	534-52-1	1000	± 1.661%
1-Methylnaphthalene	90-12-0	1000	± 1.929%
2-Methylnaphthalene	91-57-6	1000	± 2.220%
2-Methylphenol	95-48-7	1000	± 2.168%
3-Methylphenol	108-39-4	500	± 1.025%
4-Methylphenol	106-44-5	500	± 1.064%
Naphthalene	91-20-3	1000	± 1.199%
2-Nitroaniline	88-74-4	1000	± 1.874%
3-Nitroaniline	99-09-2	1000	± 2.146%
4-Nitroaniline	100-01-6	1000	± 0.300%
Nitrobenzene	98-95-3	1000	± 1.704%

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101444
Description: 8270 Calibration Standard
Storage: -18 °C
Provided As: 1 mL in 2 mL Ampoule in MeCl2/Methanol (97:3)

Lot Number: CL18811
Certification Date: August 9, 2022
Expiration Date: November 30, 2023

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
2-Nitrophenol	88-75-5	1000	± 2.051%
4-Nitrophenol	100-02-7	1000	± 1.413%
N-Nitrosodimethylamine	62-75-9	1000	± 0.545%
N-Nitrosodiphenylamine	86-30-6	1000	± 1.669%
N-Nitrosodi-n-propylamine	621-64-7	1000	± 0.712%
Pentachlorophenol	87-86-5	1000	± 2.454%
Phenanthrene	85-01-8	1000	± 2.072%
Phenol	108-95-2	1000	± 2.140%
Pyrene	129-00-0	1000	± 1.869%
Pyridine	110-86-1	1000	± 0.545%
2,3,4,6-Tetrachlorophenol	58-90-2	1000	± 2.552%
2,3,5,6-Tetrachlorophenol	935-95-5	1000	± 2.220%
1,2,4-Trichlorobenzene	120-82-1	1000	± 1.632%
2,4,5-Trichlorophenol	95-95-4	1000	± 1.596%
2,4,6-Trichlorophenol	88-06-2	1000	± 0.481%

Notes: The proper chemical name for Bis(2-Chloroiospropyl) ether is 2,2'-oxybis(1-chloropropane). The analytical uncertainty contribution to the expanded uncertainty for 3 and 4-Methylphenol is measured as the total of the two analytes. N-Nitrosodiphenylamine presents as Diphenylamine at 854 µg/mL.

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1801

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23D0396-01 A	File ID:	23051316.D
Sampled:	04/12/23 09:56	Prepared:	04/25/23 11:56	Analyzed:	05/13/23 20:14
% Solids:	43.01	Preparation:	EPA 3546 (Microwave)	Initial/Final:	29.08 g Wet / 2.5 mL
Batch:	BLD0606	Sequence:	SLE0423	Calibration:	GD00035
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.50	0.14	0.50	U

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9953*	*4.86*	*60.8*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9953*	*5.04*	*63.0*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9953*	*4.18*	*52.3*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9953*	*4.26*	*53.3*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230513.b/23051316.D
Data file 2: /20230513.b/B20230513.b/23051316.D
Method: \20230513.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: 23D0396-01
Client ID:
Injection Date: 13-MAY-2023 20:14
Report Date: 05/25/2023 19:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.311	-0.000	20174	----			0.66	0.00	---	alpha-BHC
4.694	-0.001	8614	----			0.70	0.00	---	beta-BHC
4.891	0.013	154577	----			5.58	0.00	---	delta-BHC
4.618	0.004	23245	5.126	0.001	6909	0.86	0.28	101.6*	gamma-BHC (Lindane) M
5.087	-0.013	44252	----			1.78	0.00	---	Heptachlor
5.444	0.021	96167	6.047	0.008	25978	3.80	1.16	106.1*	Aldrin
----			----			0.00	0.00	---	Heptachlor epoxide b
----			7.135	-0.008	11515	0.00	0.69	---	Endosulfan I
6.789	-0.012	152803	----			7.09	0.00	---	Dieldrin
6.461	-0.004	183715	7.230	0.001	65989	9.04	3.78	82.0*	4,4'-DDE
7.082	0.030	256722	----			16.94	0.00	---	Endrin
7.268	-0.020	24446	----			1.72	0.00	---	Endosulfan II
7.109	-0.003	132342	7.836	0.001	88777	9.73	7.49	26.1	4,4'-DDD M
8.146	-0.006	10818	----			0.81	0.00	---	Endosulfan sulfate
7.423	0.017	16301	----			1.11	0.00	---	4,4'-DDT
----			----			0.00	0.00	---	Methoxychlor
8.404	-0.022	61180	----			4.01	0.00	---	Endrin ketone
----			8.303	-0.001	52882	0.00	5.97	---	Endrin aldehyde
6.240	0.001	24330	----			1.09	0.00	---	trans-Chlordane
6.410	0.023	108202	7.073	0.002	19136	4.82	1.03	129.4*	cis-Chlordane
2.293	-0.001	5139	----			0.16	0.00	---	Hexachlorobutadiene
----			----			0.00	0.00	---	Hexachlorobenzene
3.799	-0.000	409539	4.113	-0.000	385277	20.91	21.33	2.0	Tetrachloro-m-xylene
9.347	0.005	251616	10.279	0.005	196050	24.33	25.20	3.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

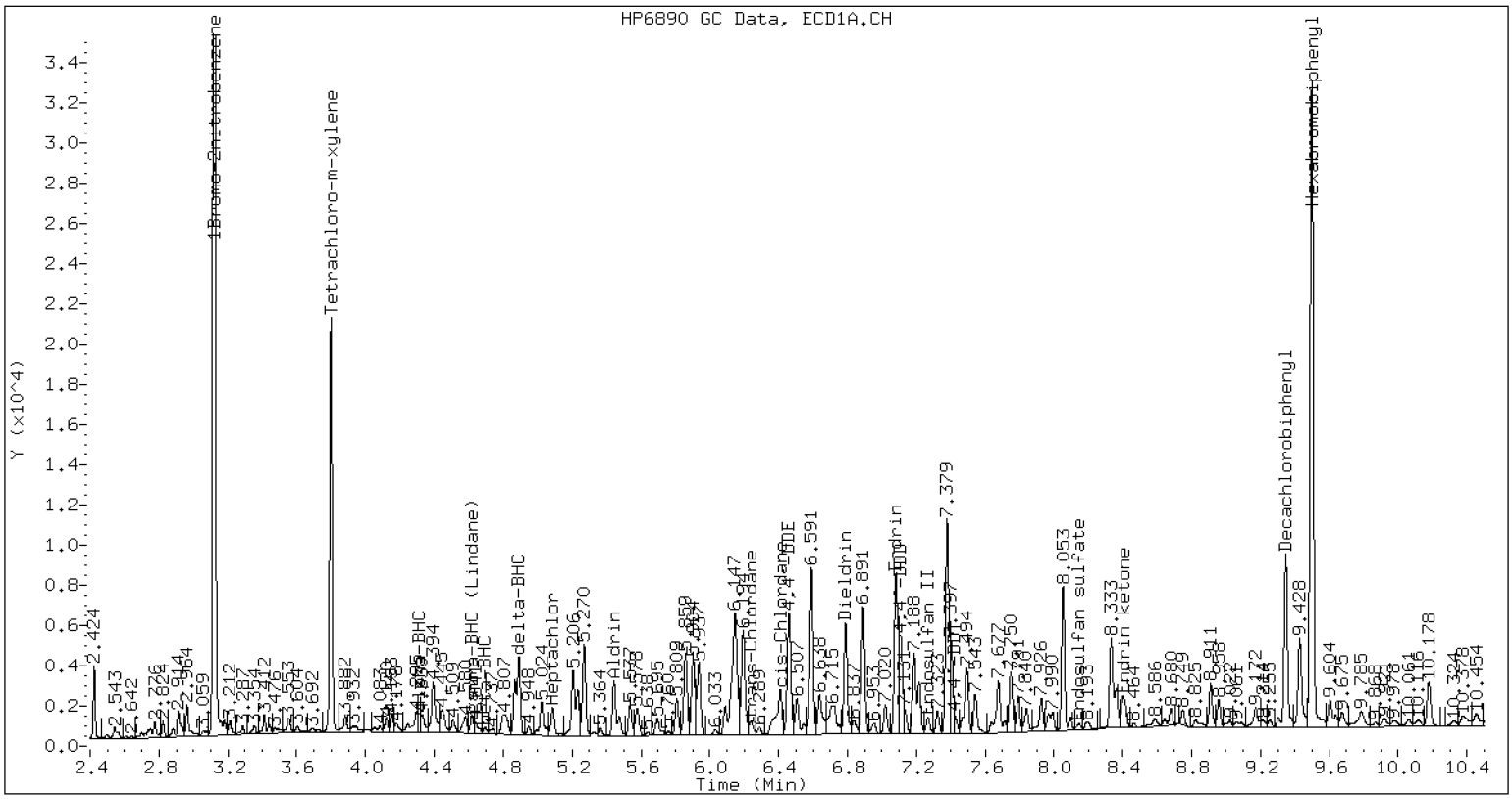
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	932757	1399601	50.0
Hexabromobiphenyl	745426	876824	17.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1248665	1313494	5.2
Hexabromobiphenyl	754634	644626	-14.6

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230513.b/23051316.D 23D0396-01 STX-CLP 13-MAY-2023 20:14 1ul



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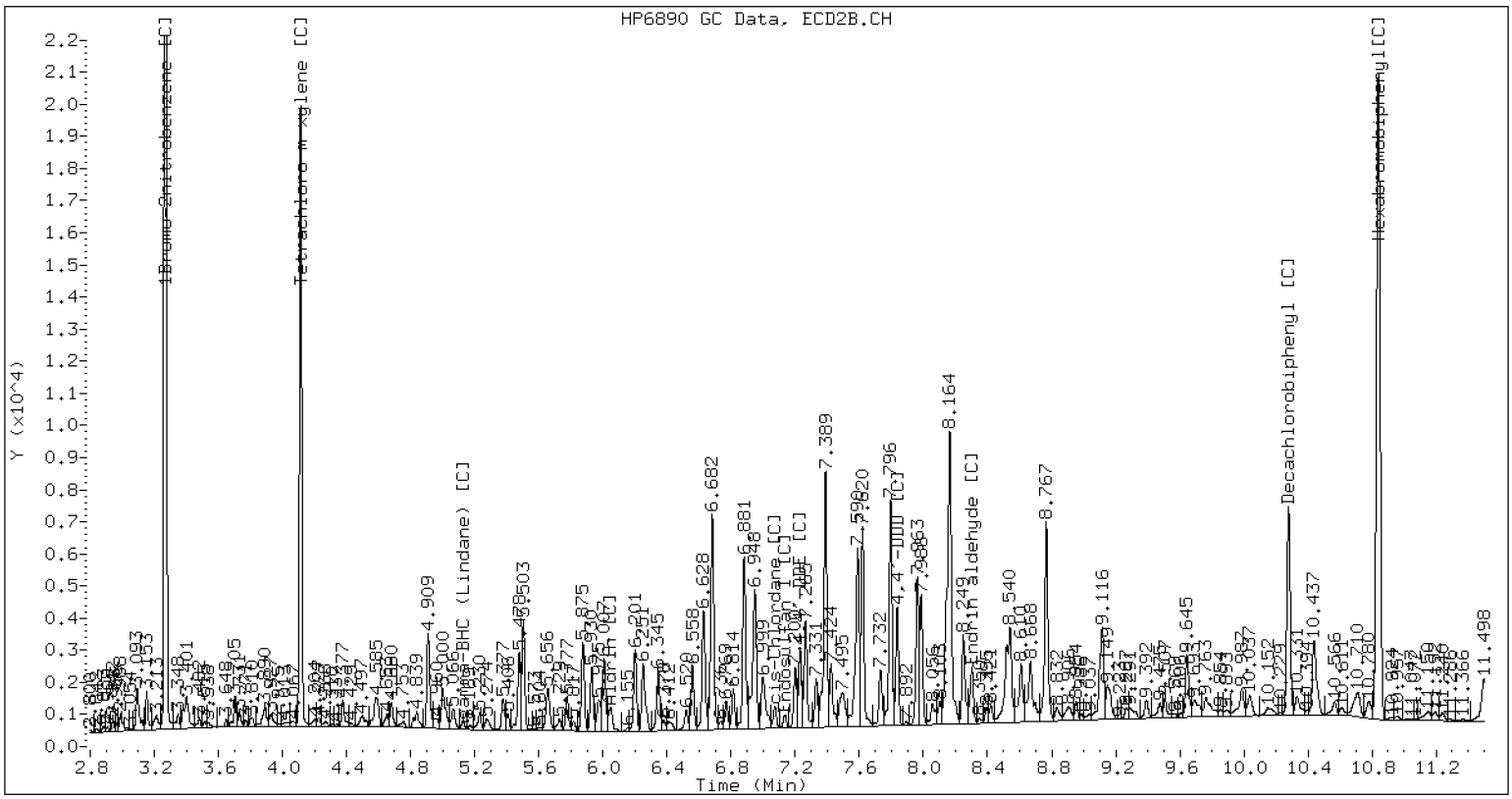
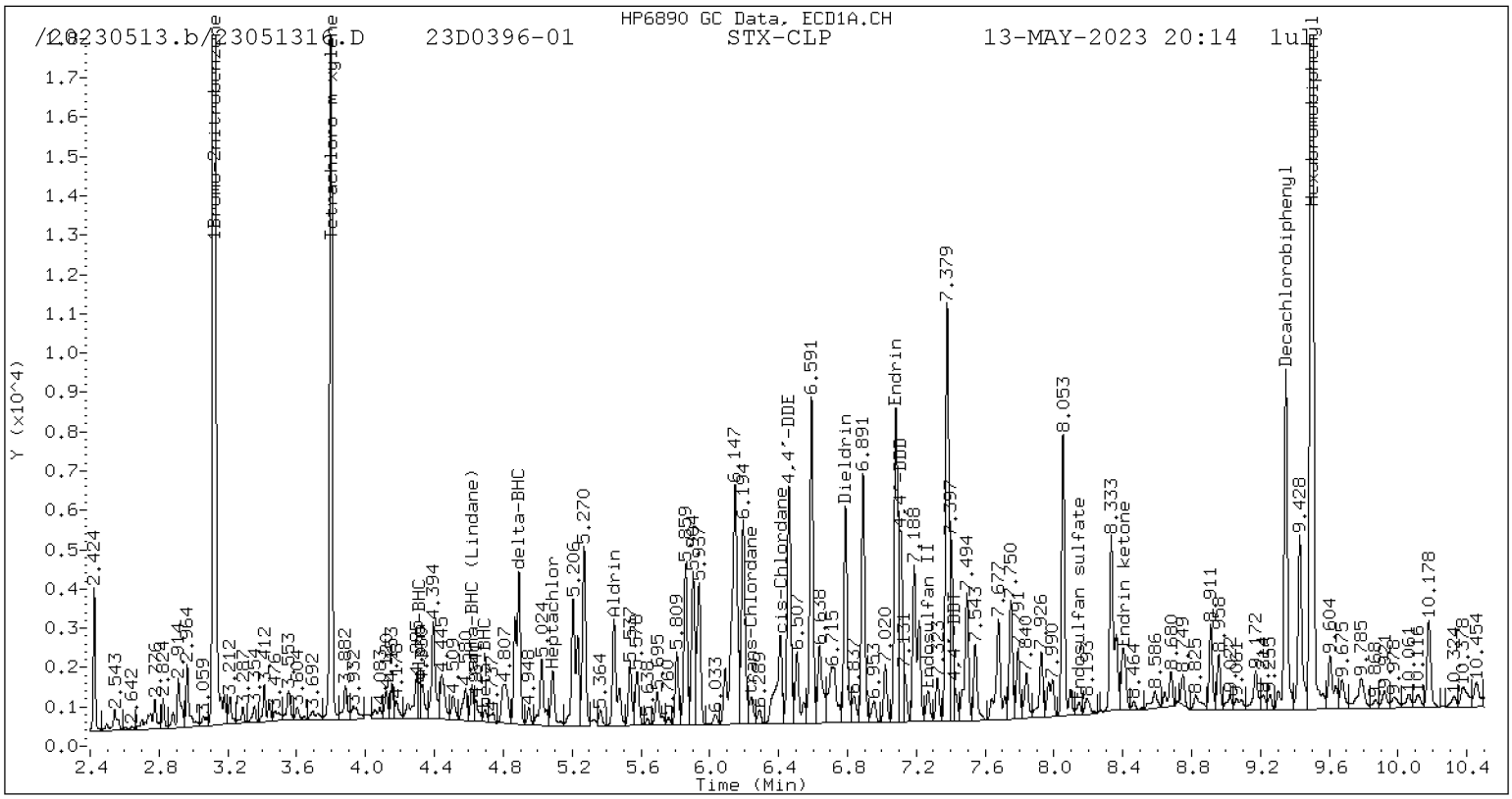
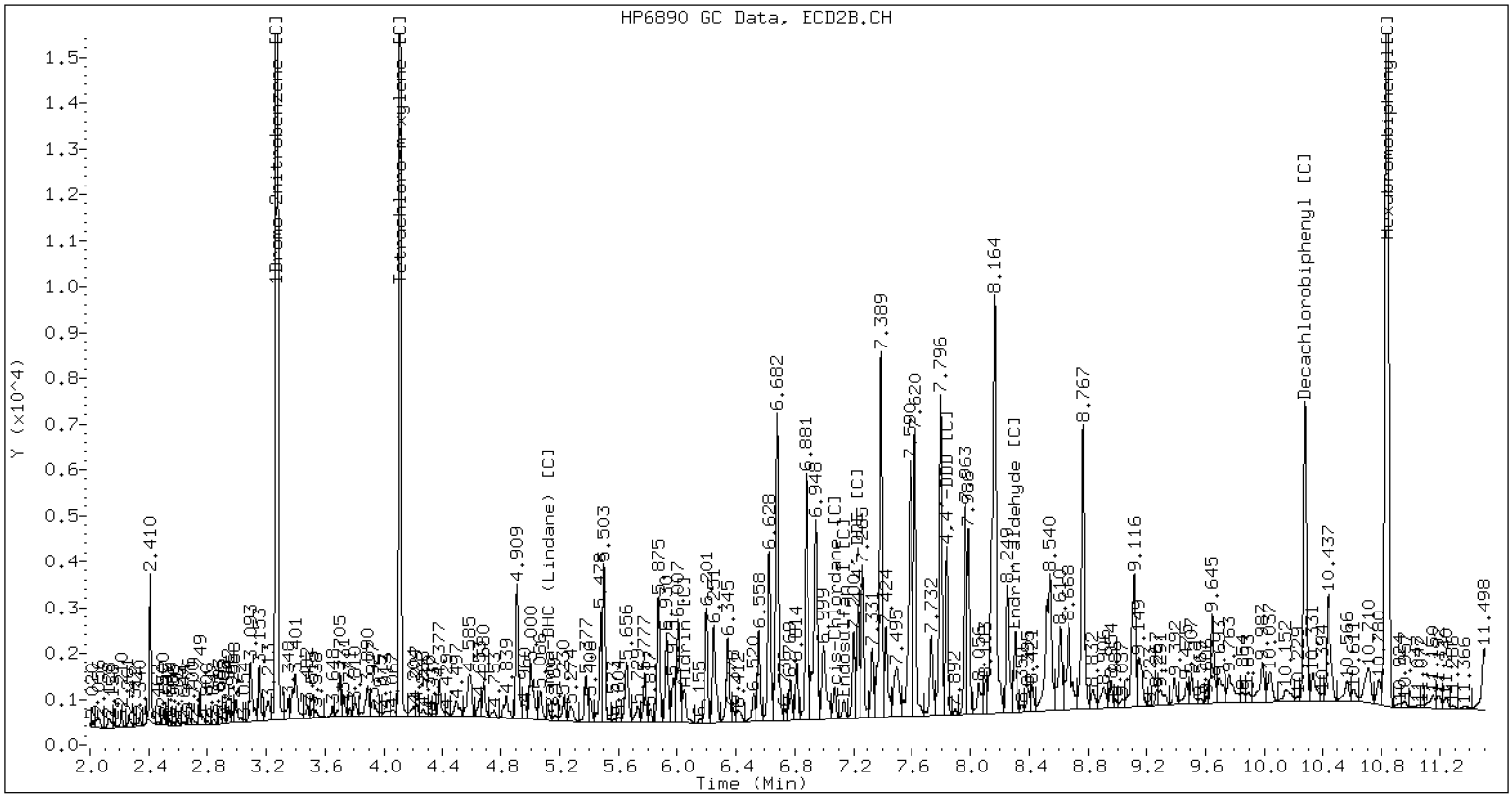


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

/20230513.b/B20230513.b/23051316.D 23D0396-01 CLP2



CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, STX-CLP

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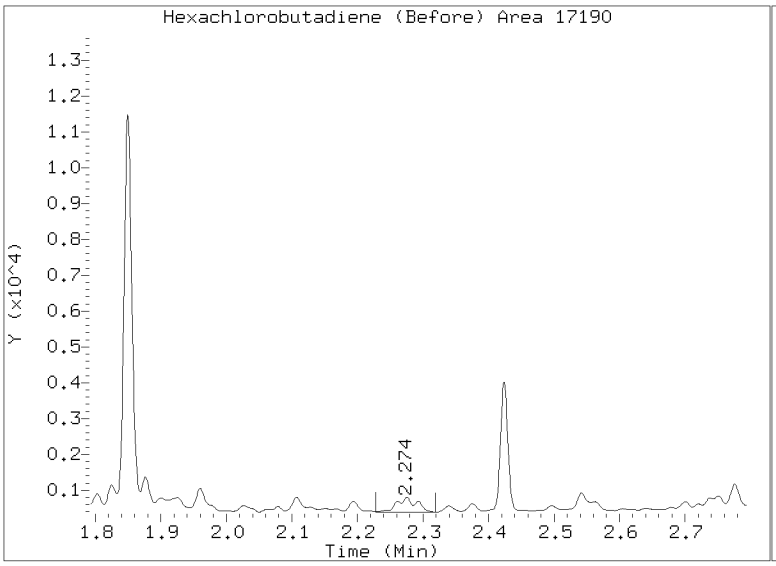
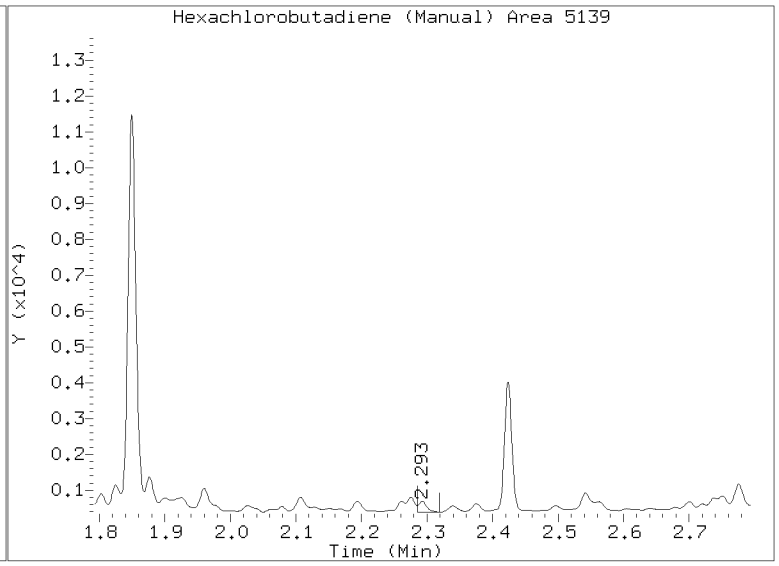
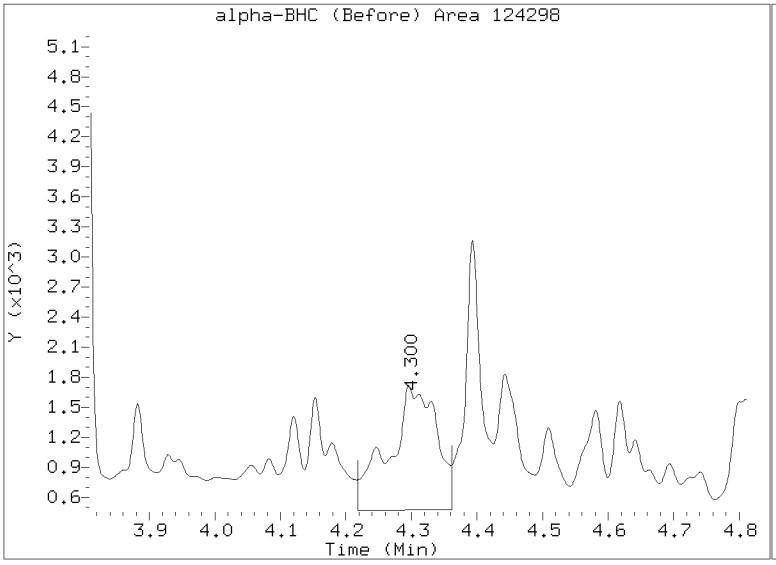
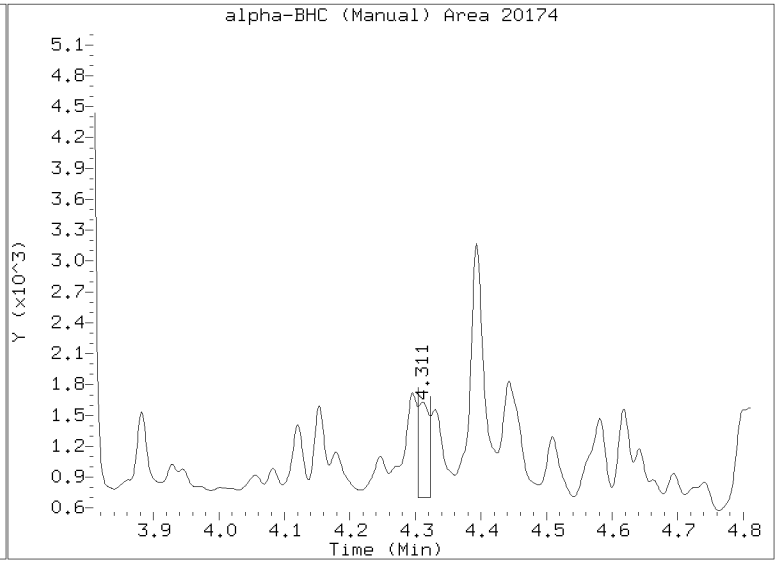
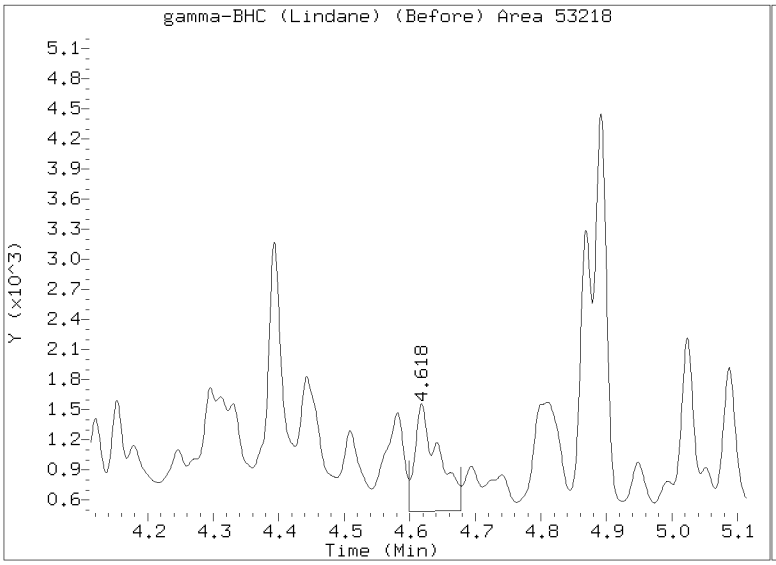
Lab ID:23D0396-01 Client ID:
Report Date: 05/25/2023 19:14

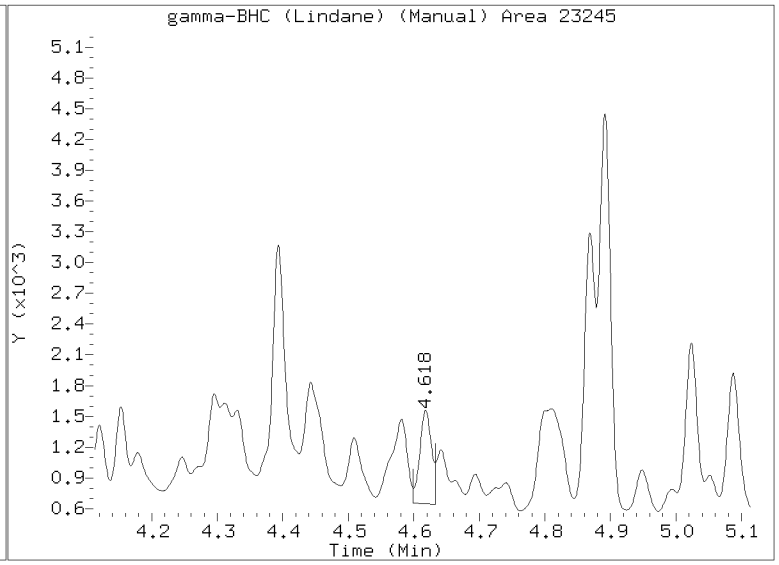












Manual Peak Adjustment Report, STX-CLP

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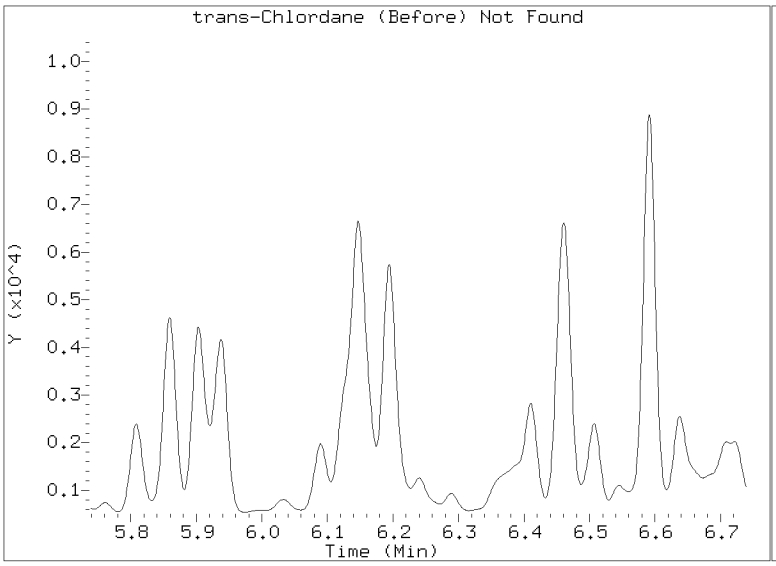
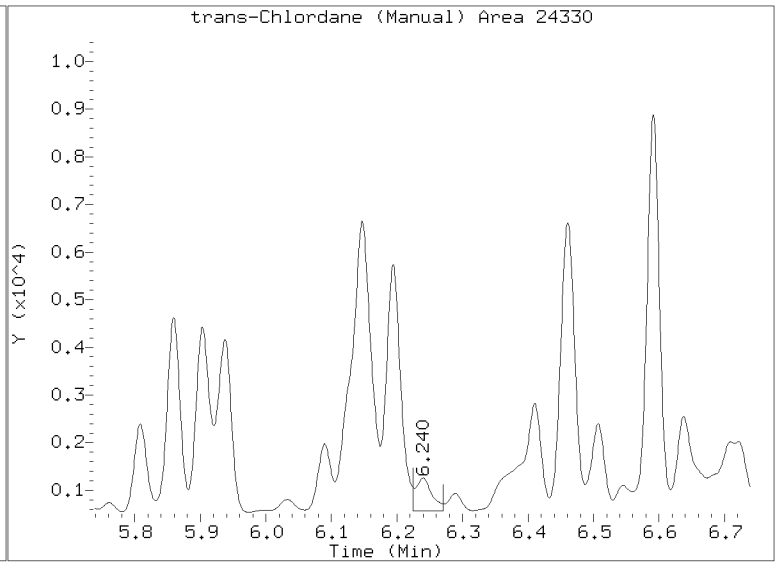
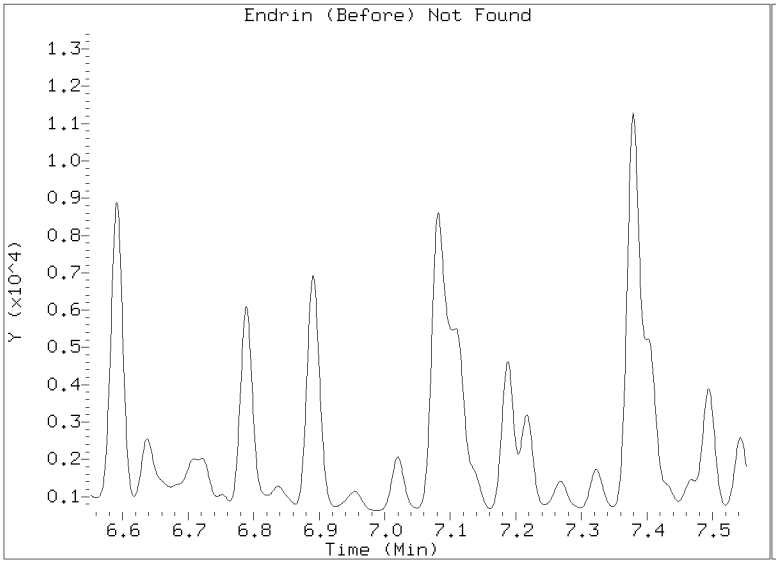
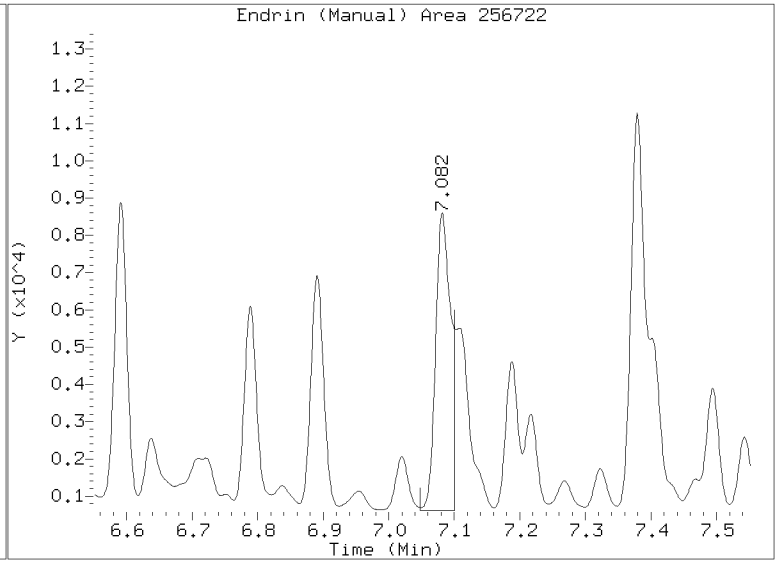
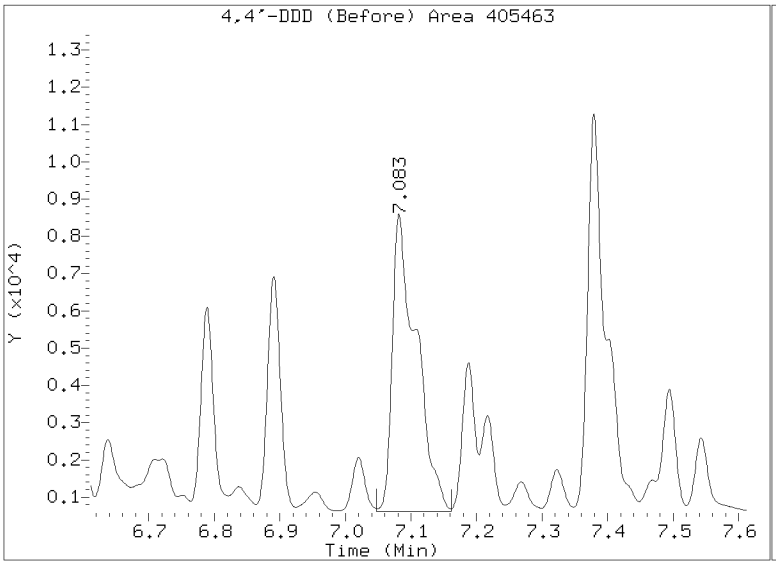
Report Date: 05/25/2023 19:14

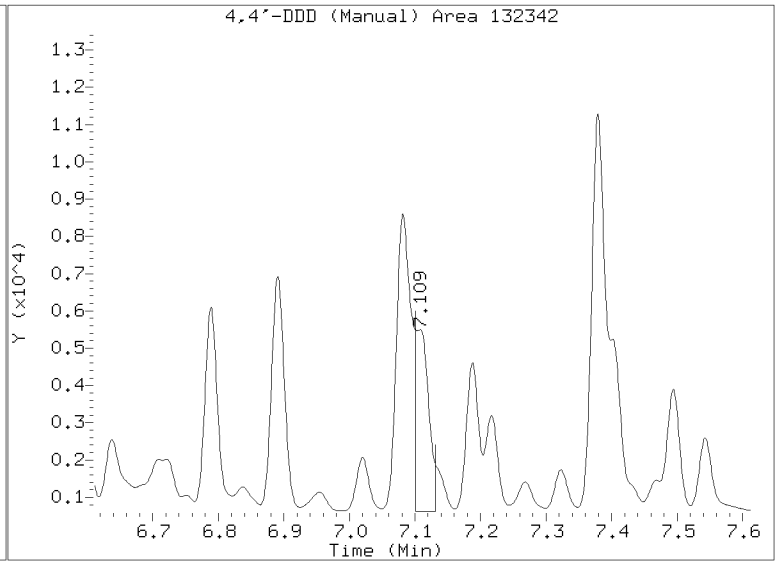












Manual Peak Adjustment Report, STX-CLP

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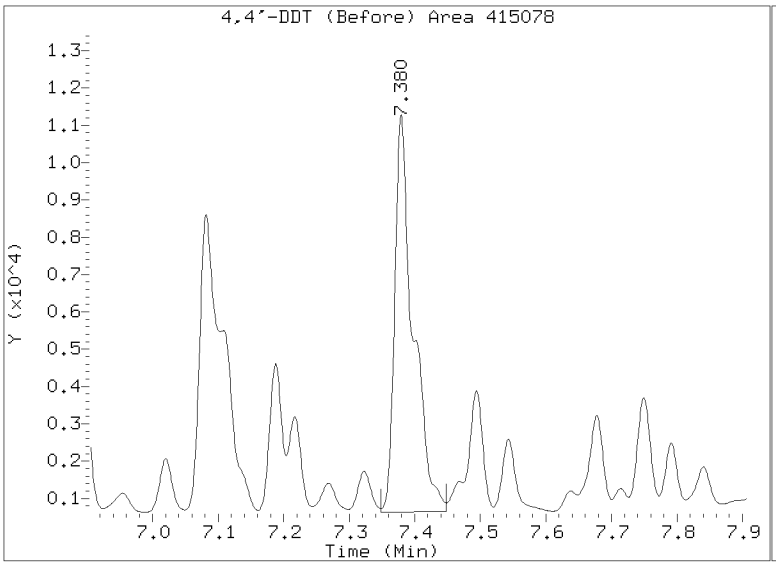
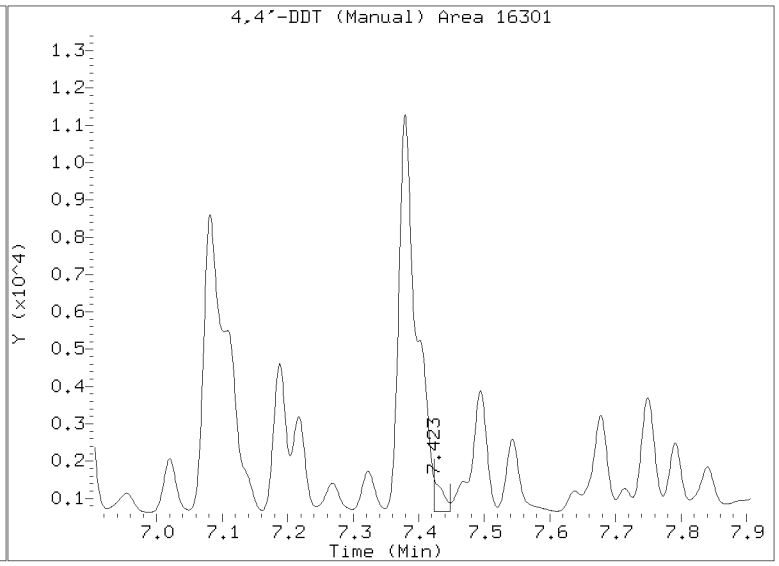
Report Date: 05/25/2023 19:14





Manual Peak Adjustment Report, CLP-2

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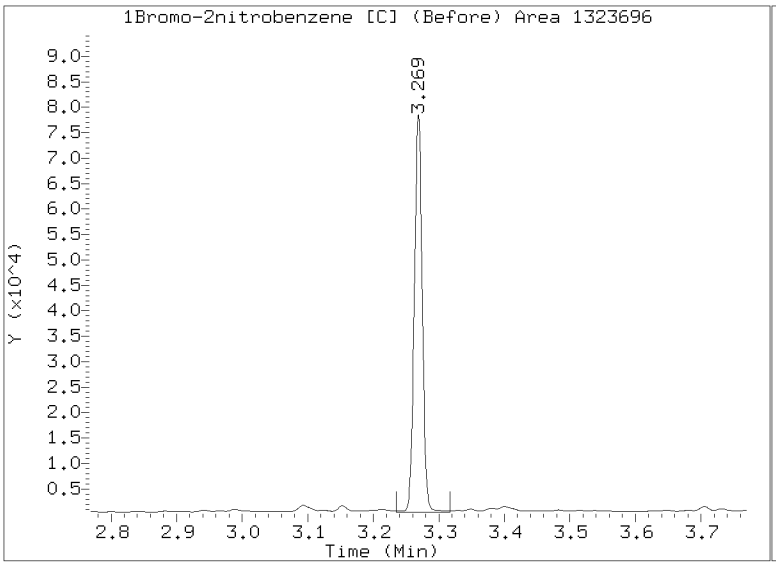

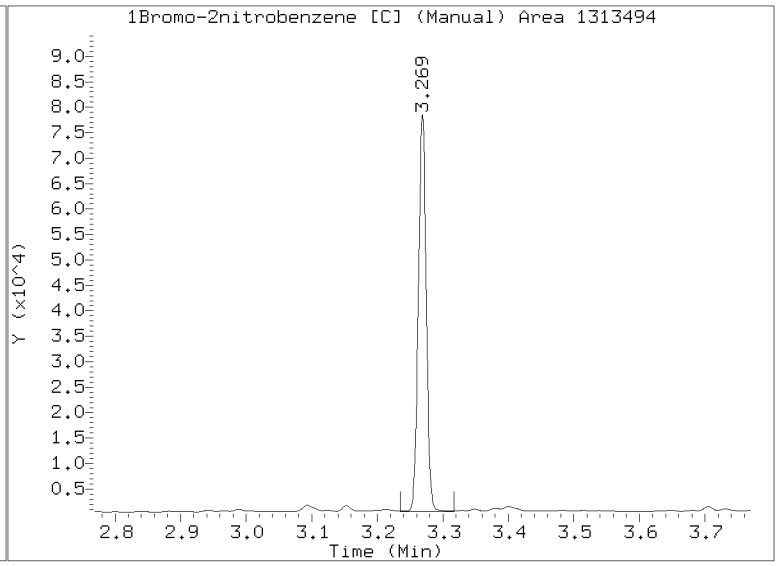

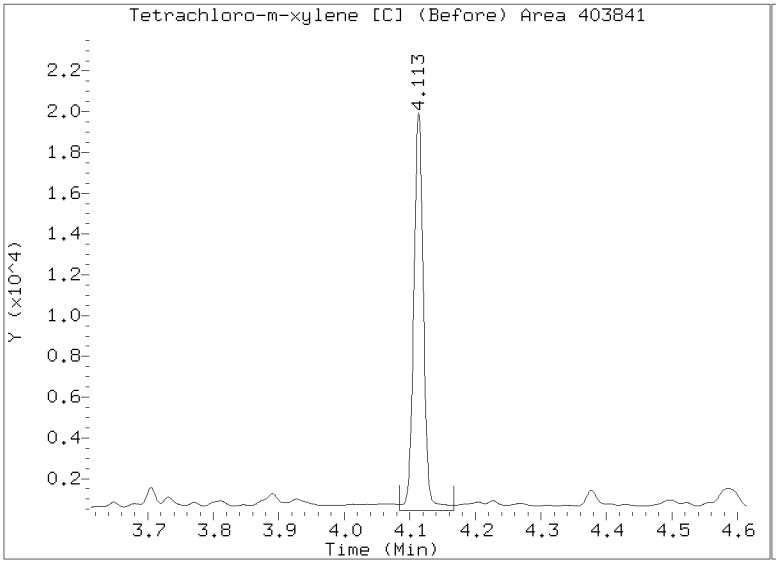

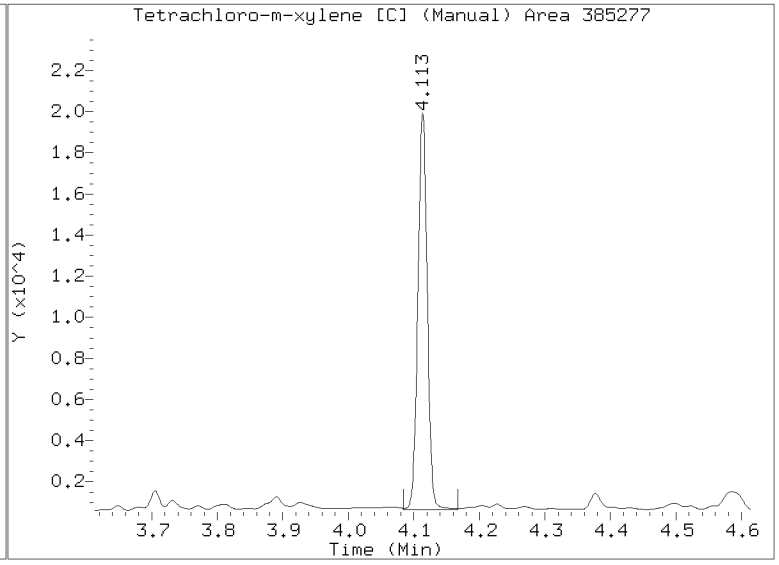

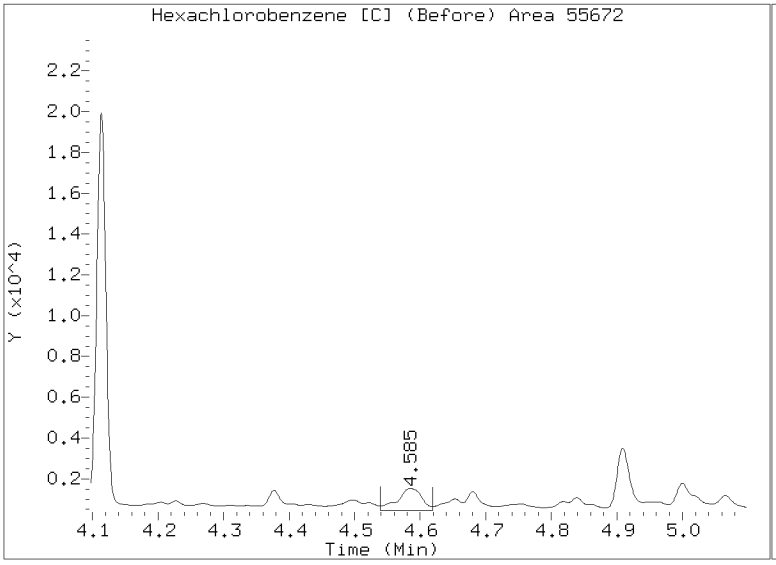

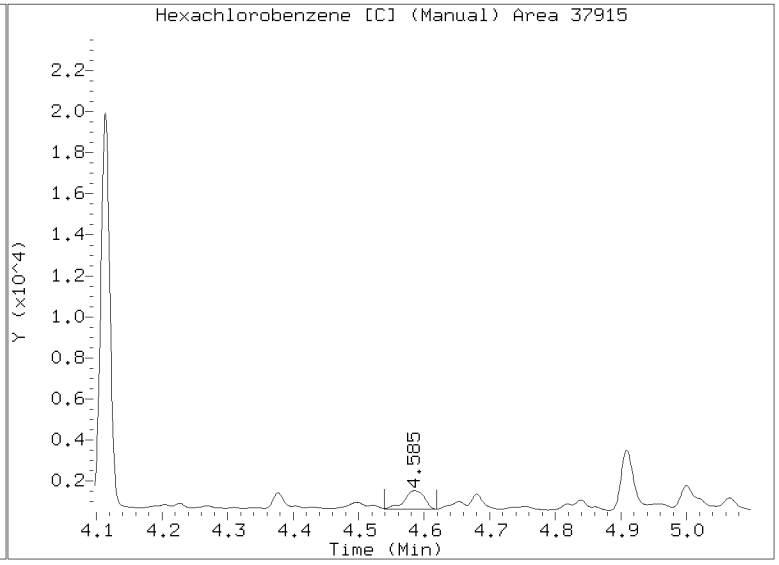

Manual Peak Adjustment Report, CLP-2

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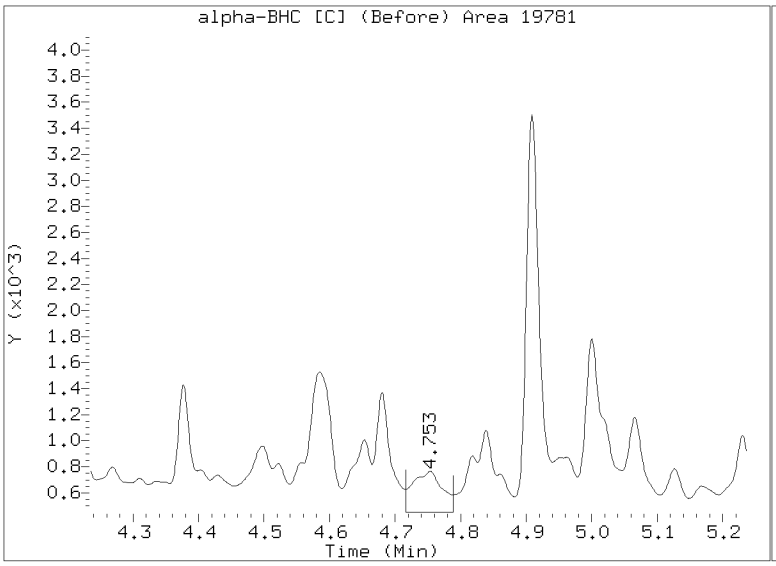

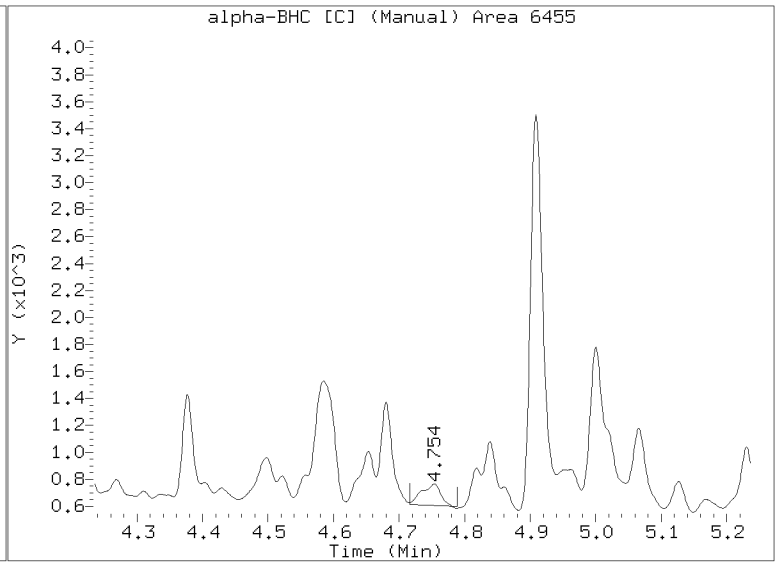

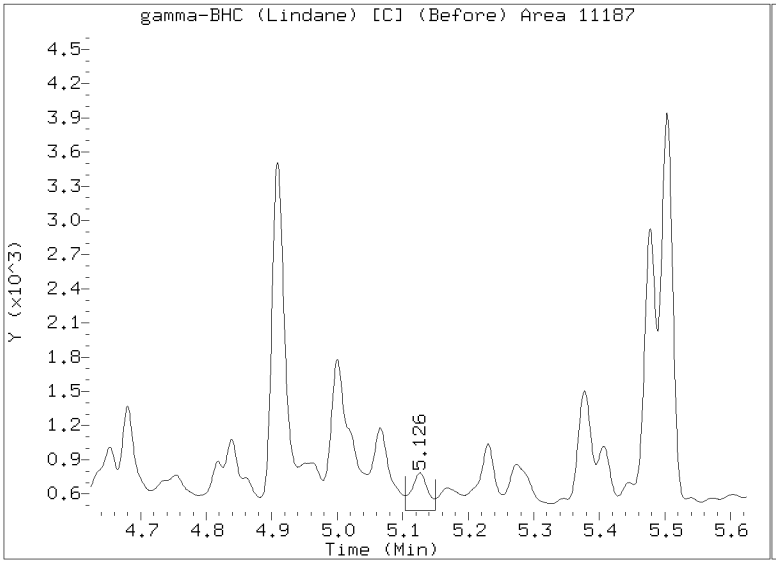

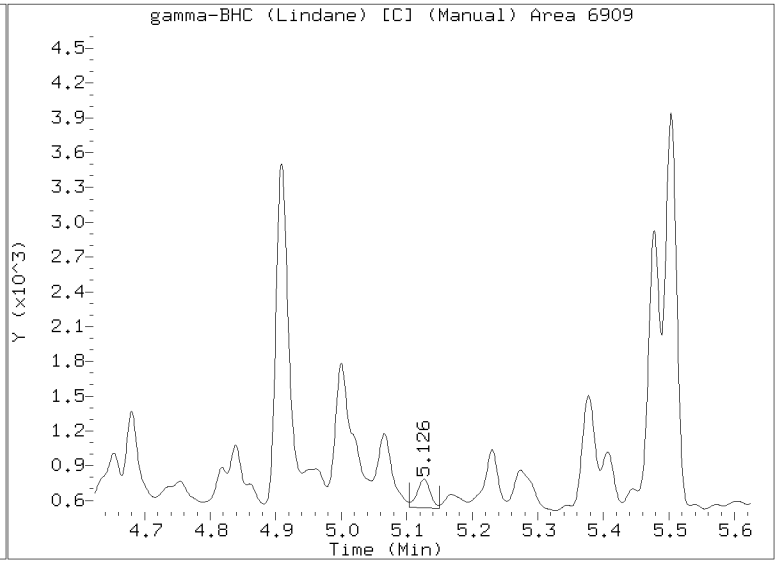

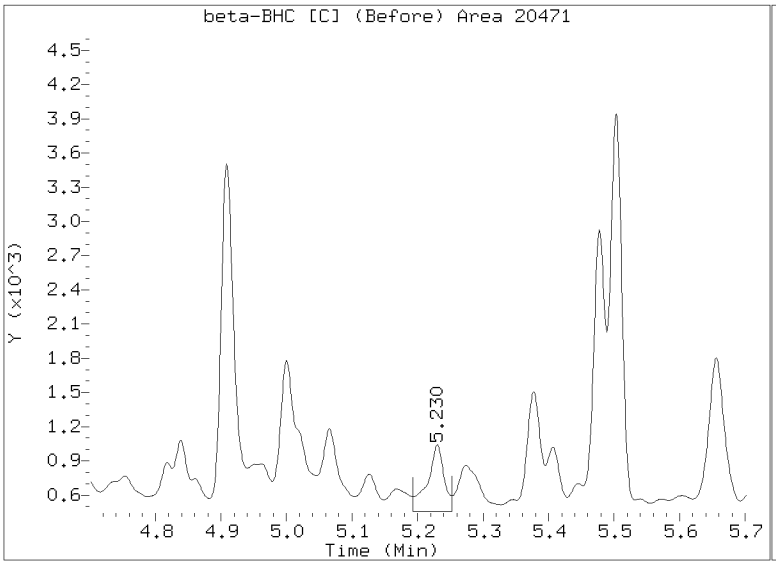

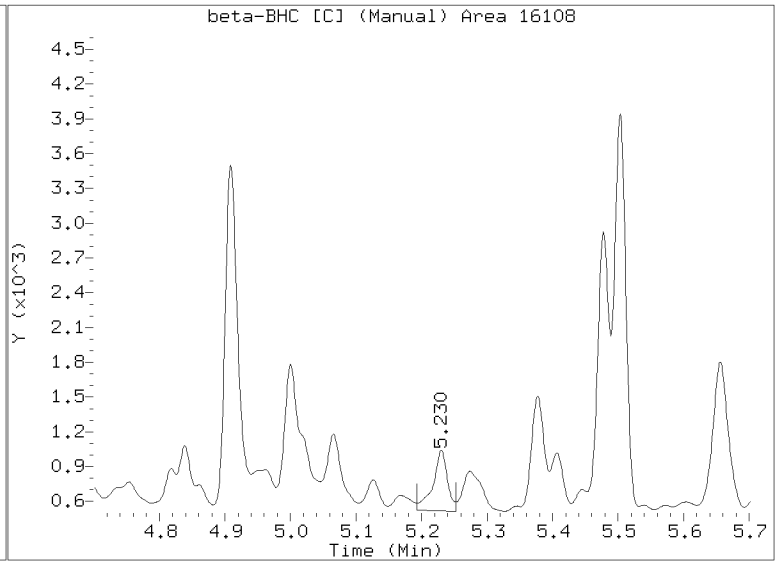

Manual Peak Adjustment Report, CLP-2

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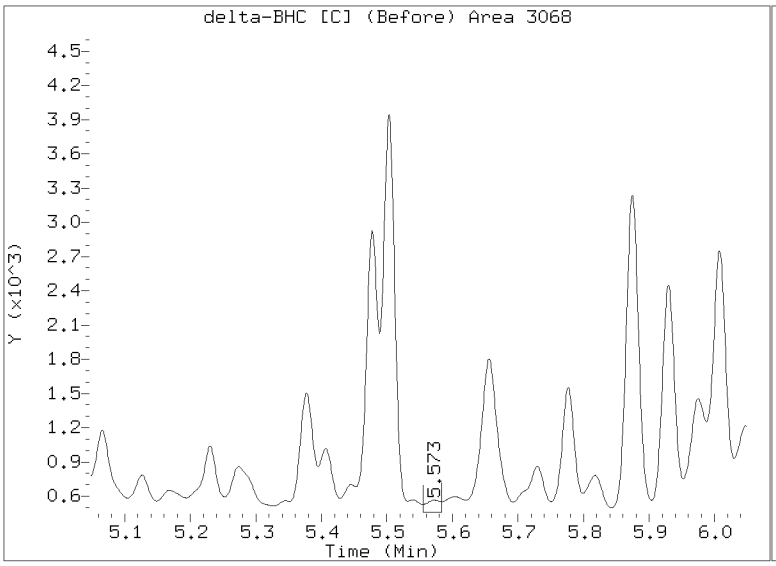

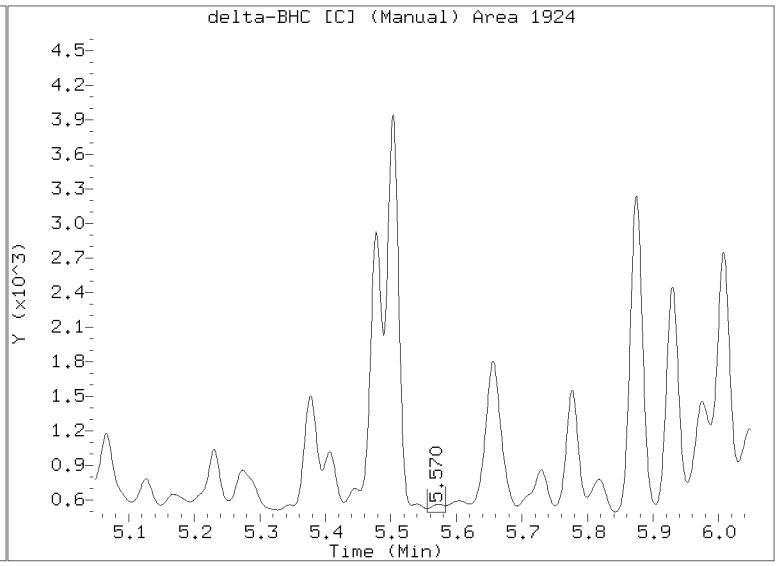

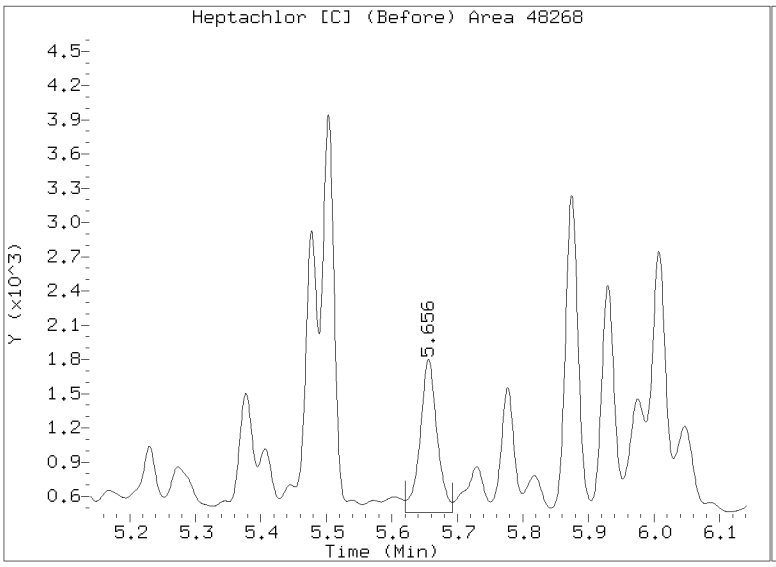

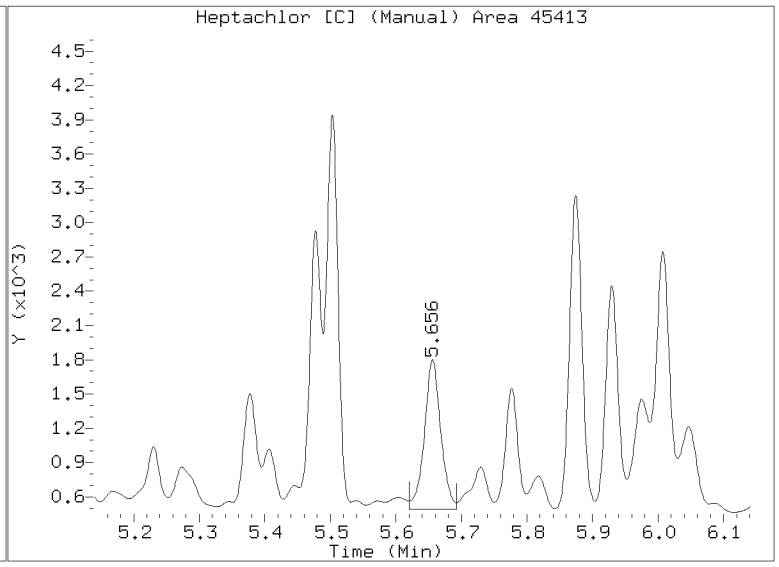

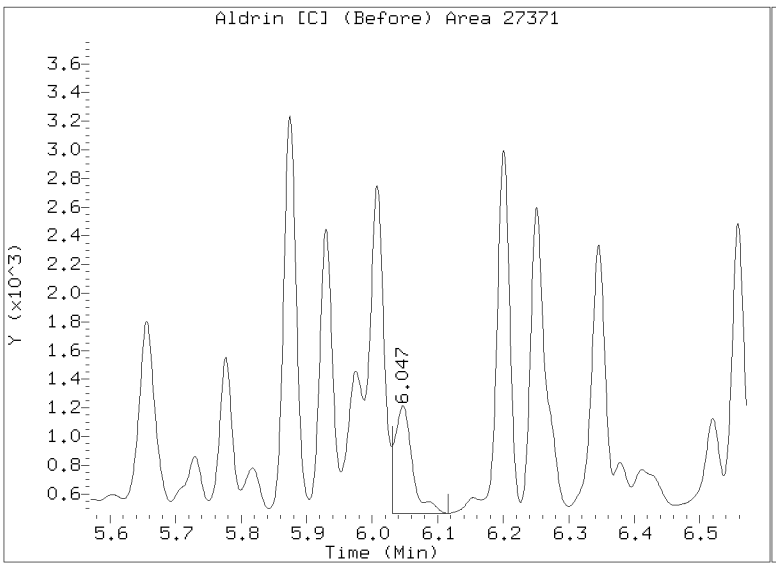

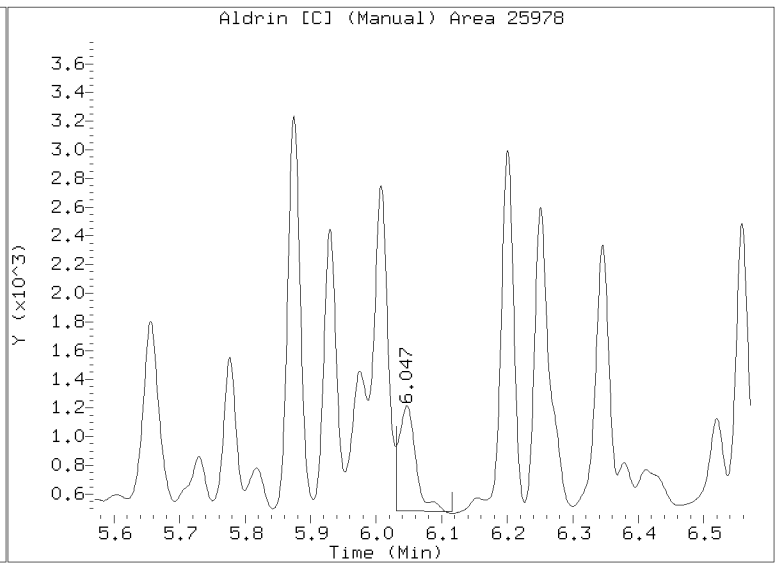

Manual Peak Adjustment Report, CLP-2

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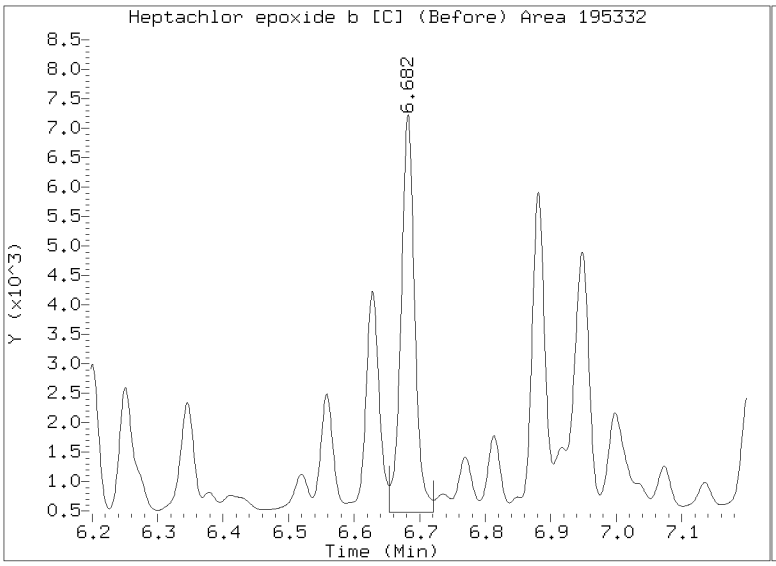

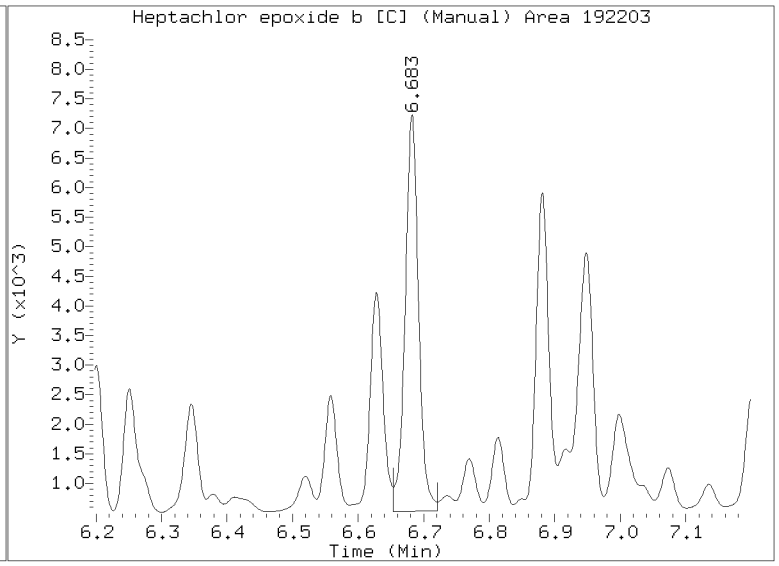

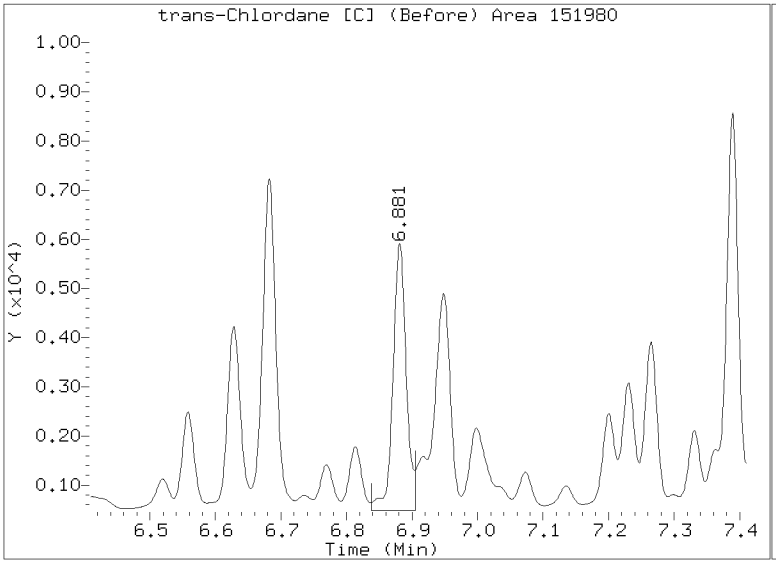

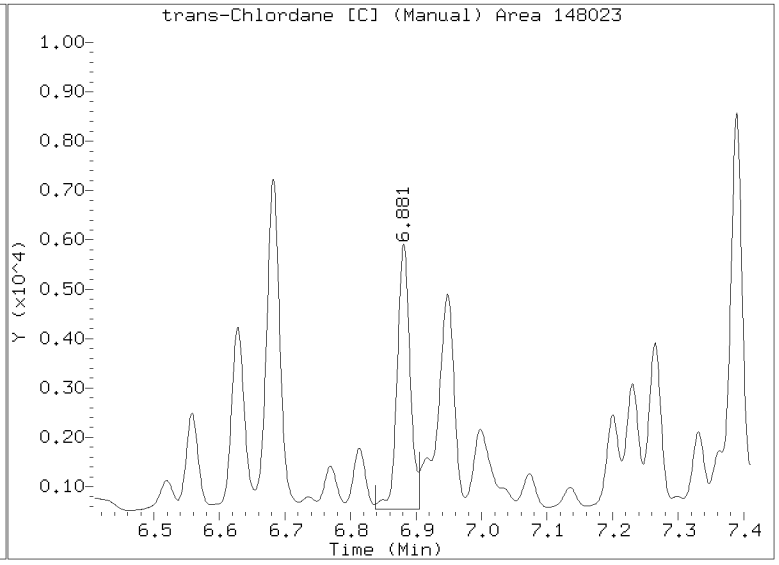

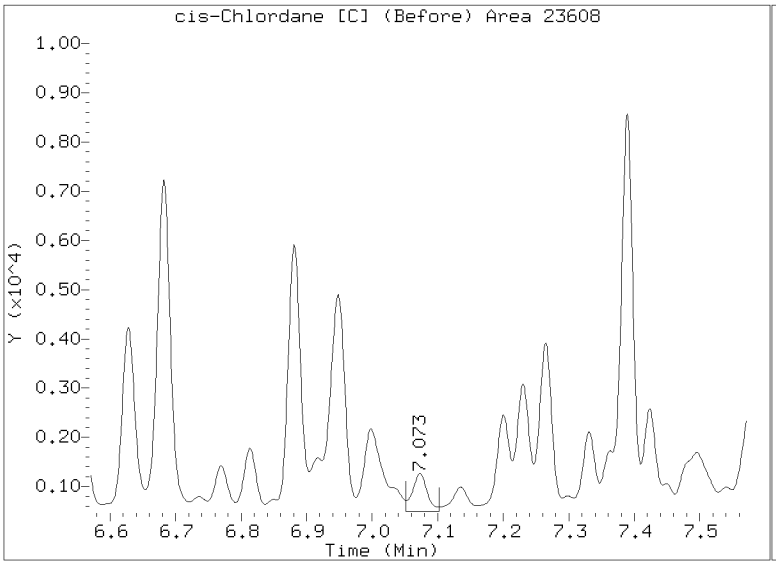

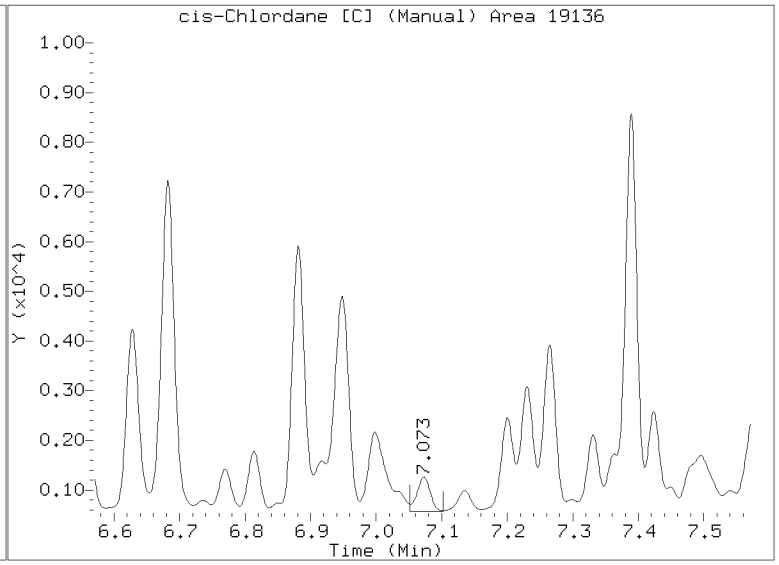

Manual Peak Adjustment Report, CLP-2

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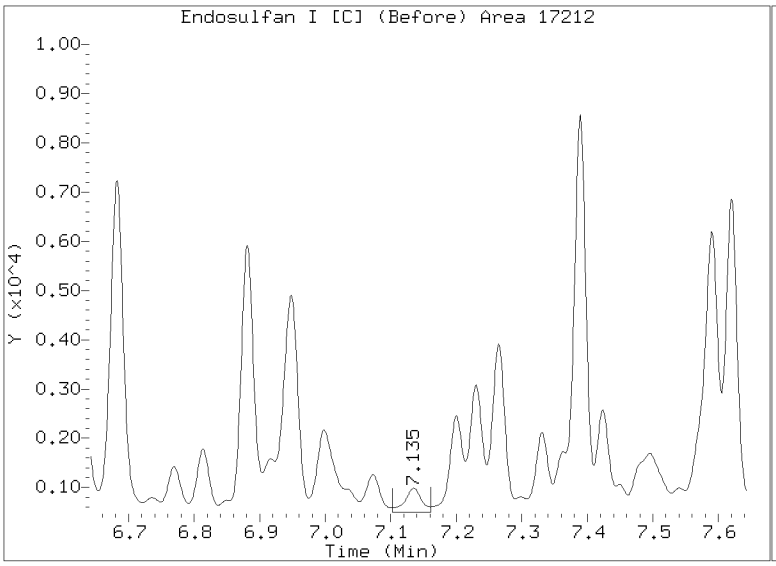

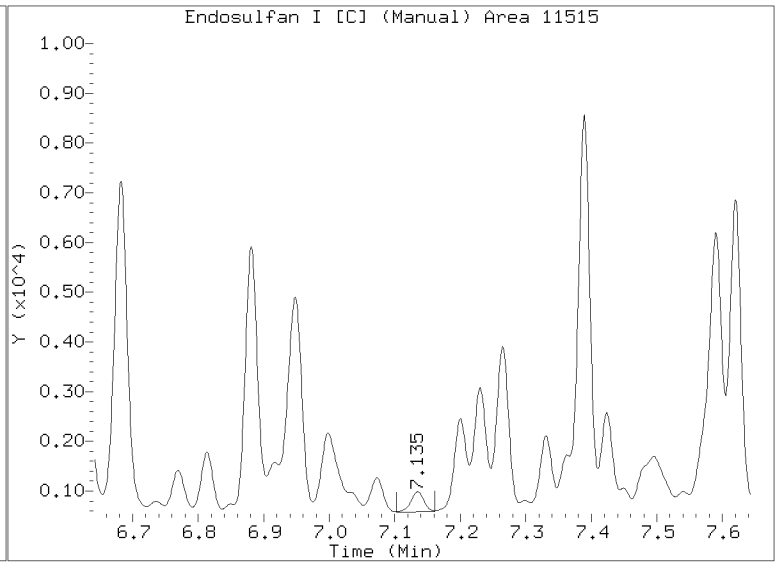

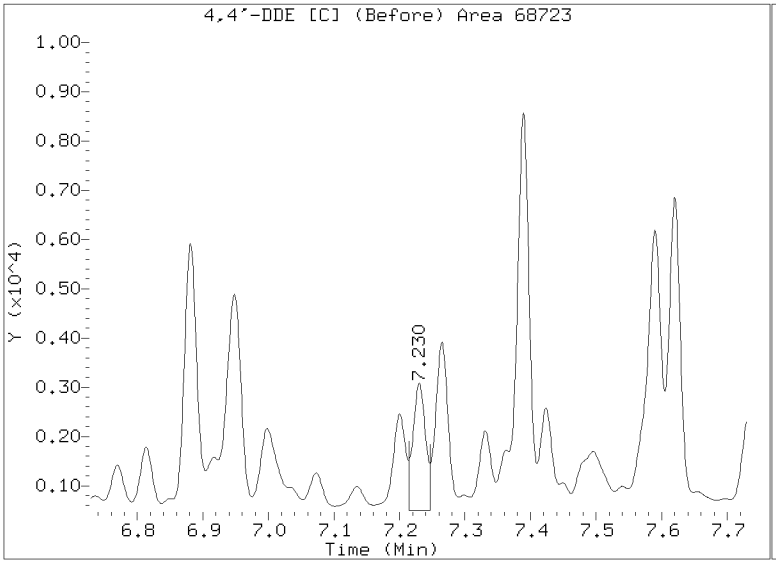

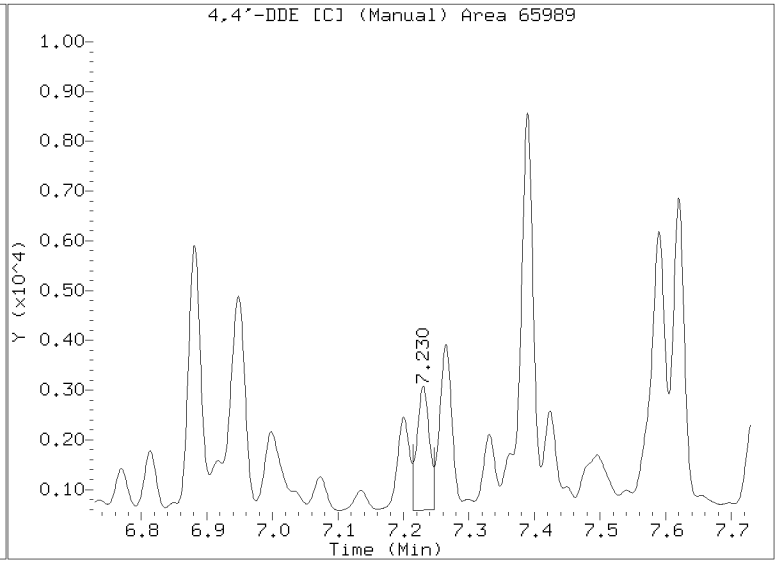

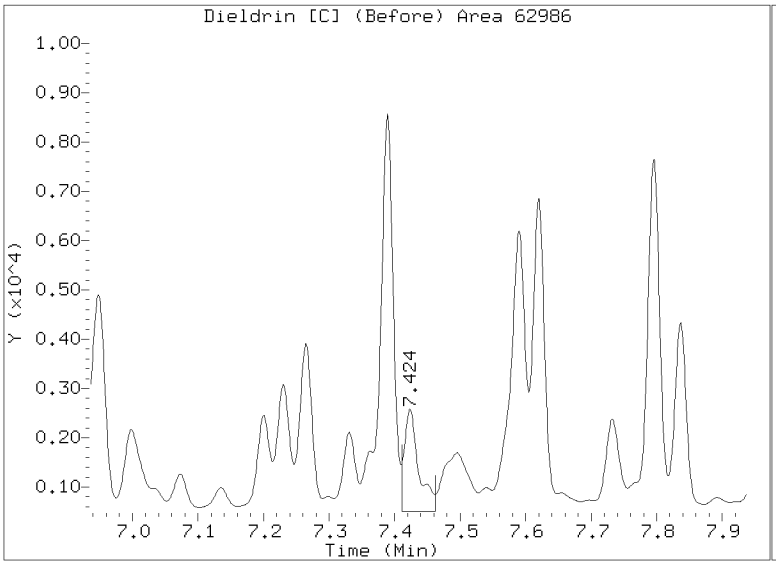

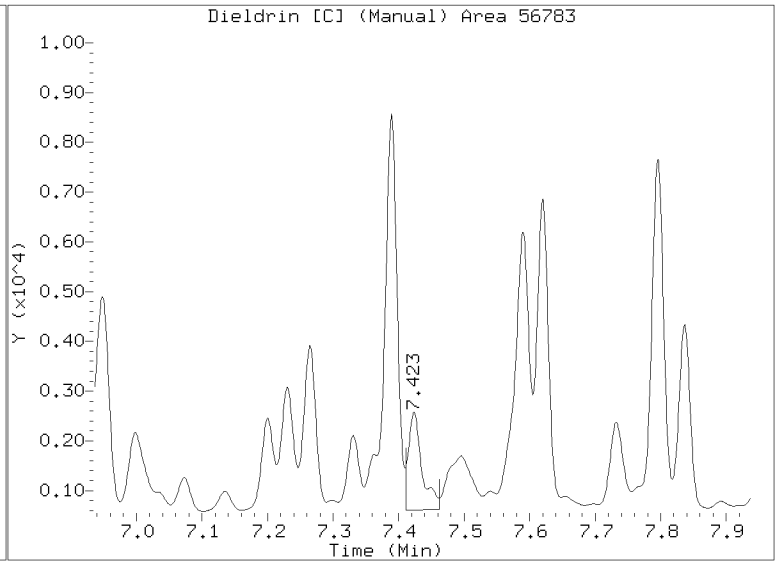

Manual Peak Adjustment Report, CLP-2

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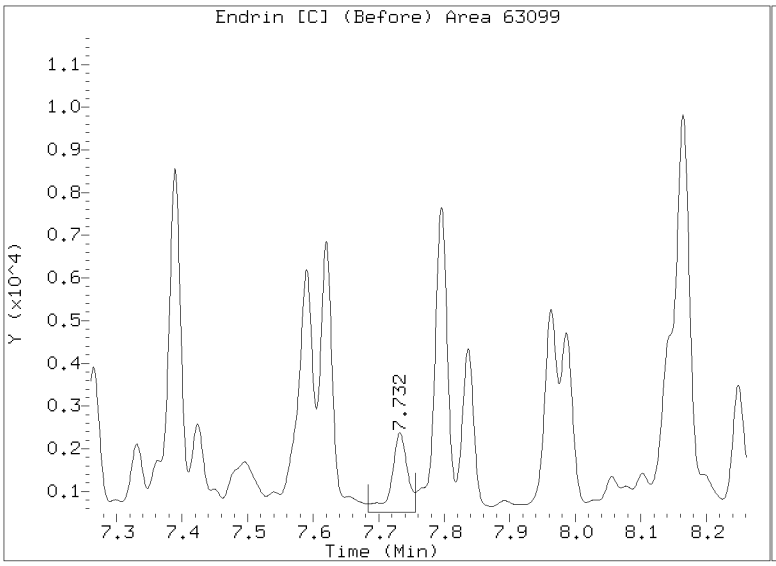

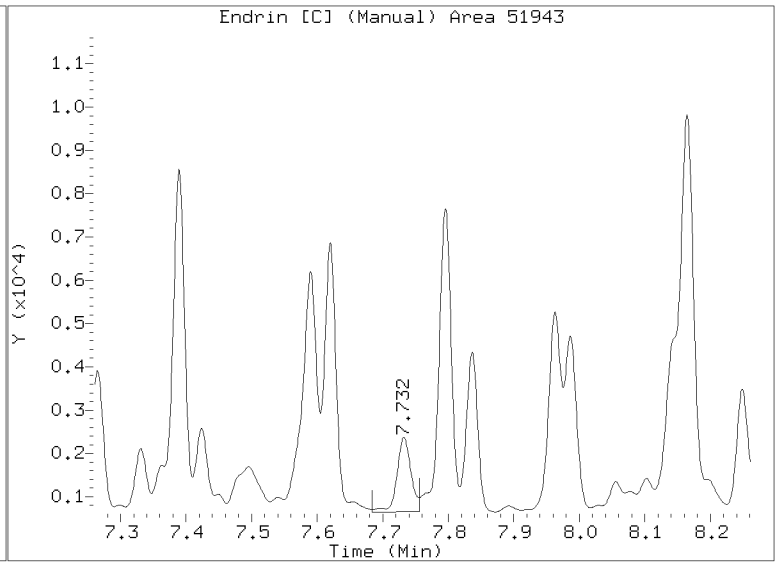

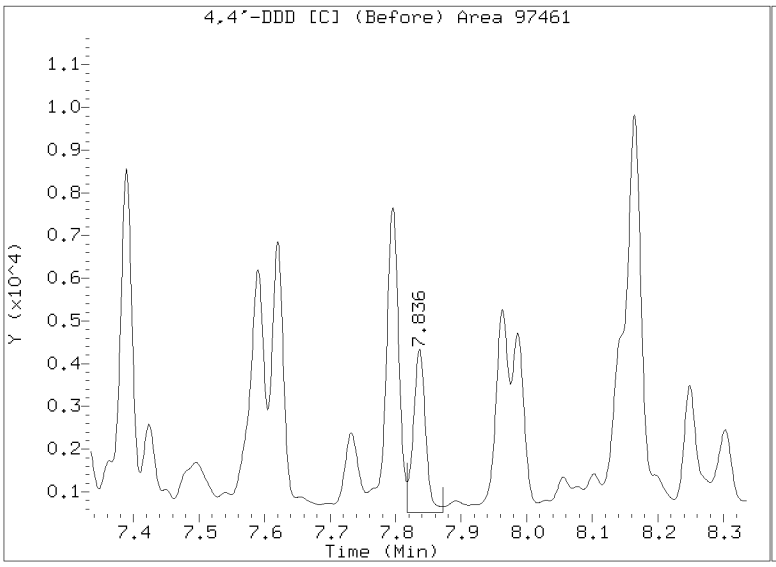

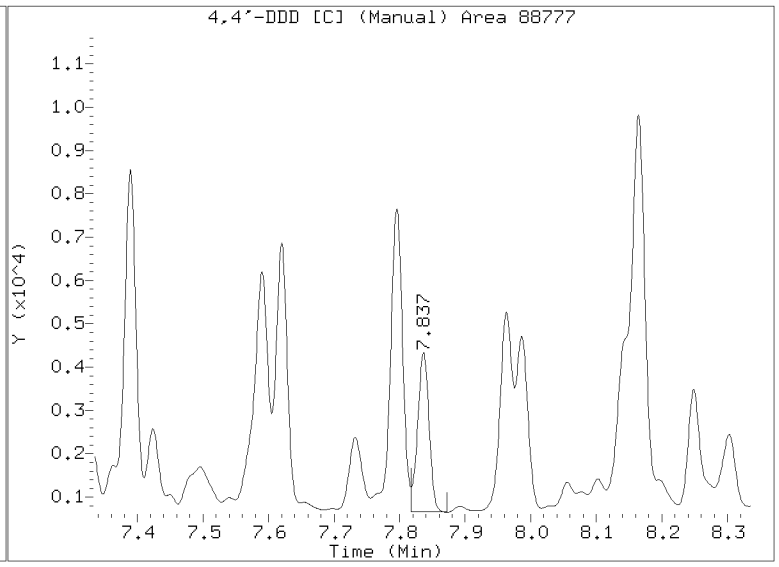

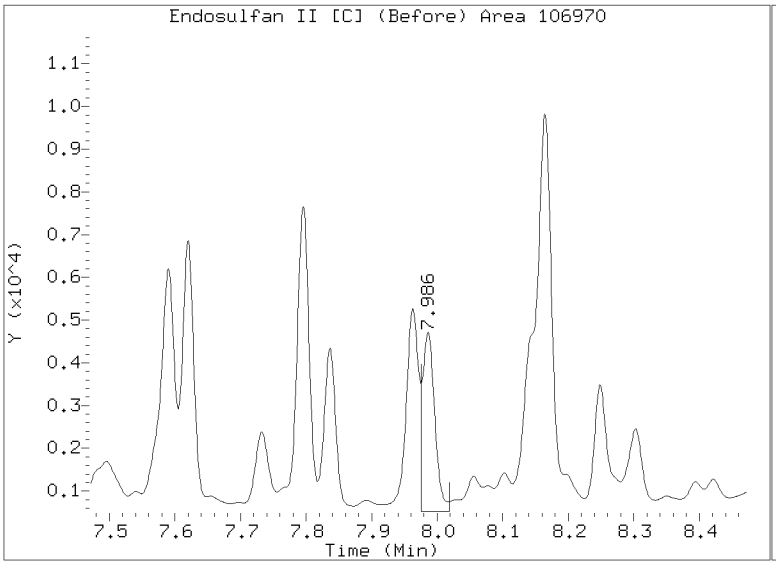

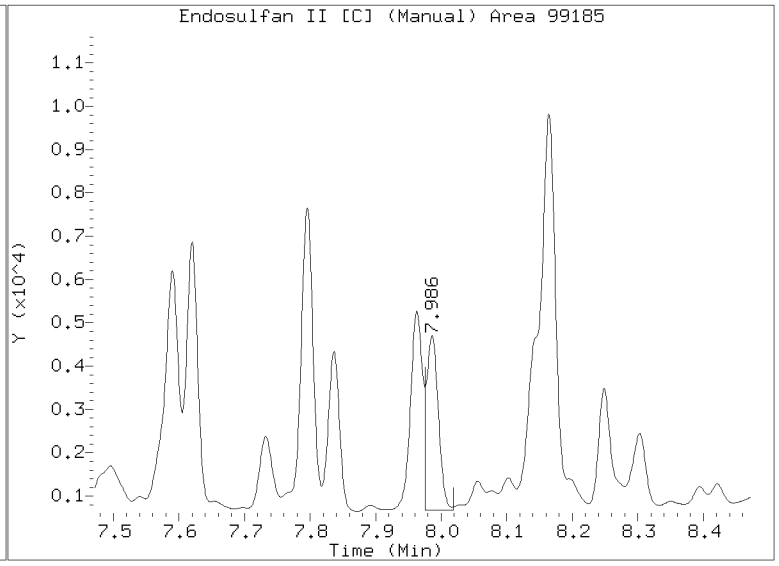

Manual Peak Adjustment Report, CLP-2

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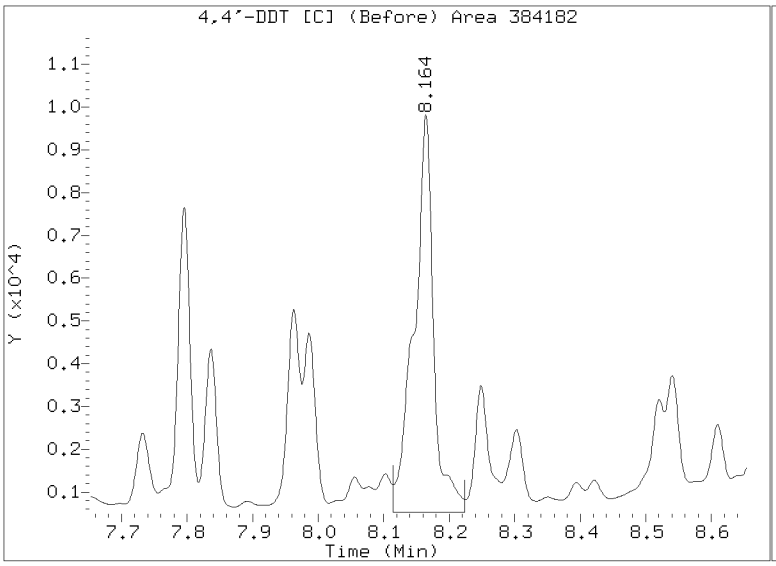
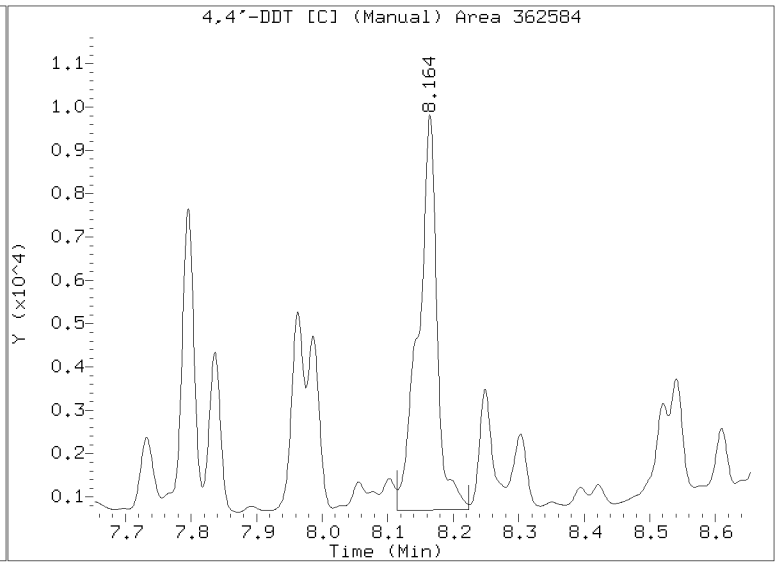
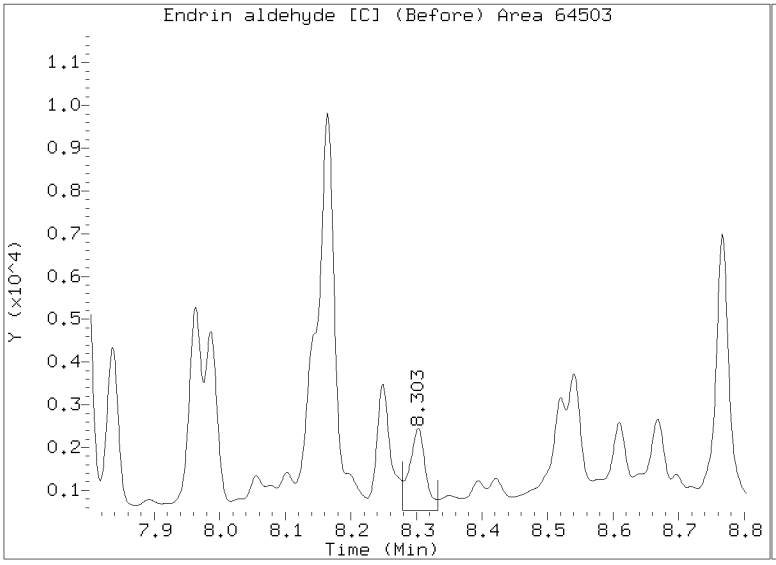
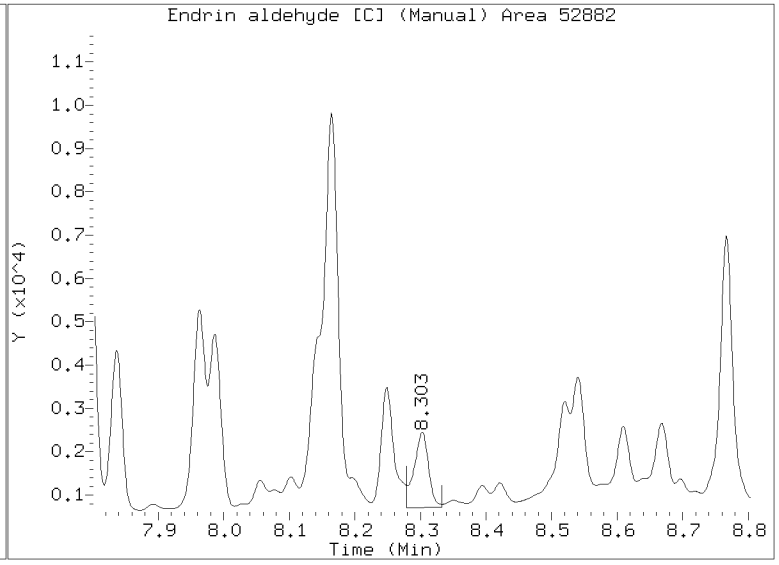
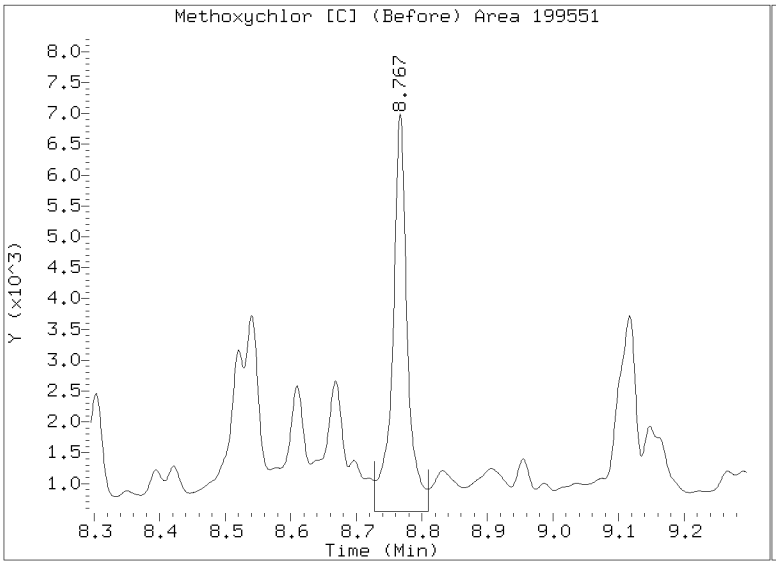
Lab ID:23D0396-01 Client ID:

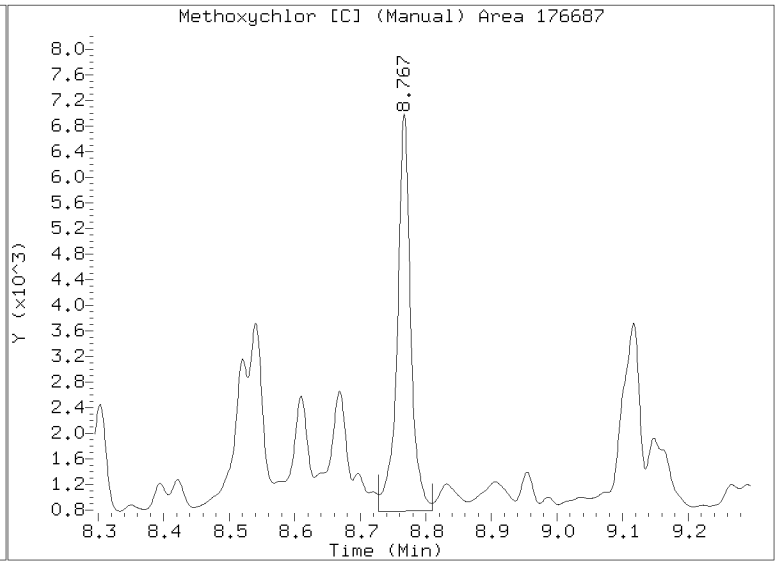












Manual Peak Adjustment Report, CLP-2

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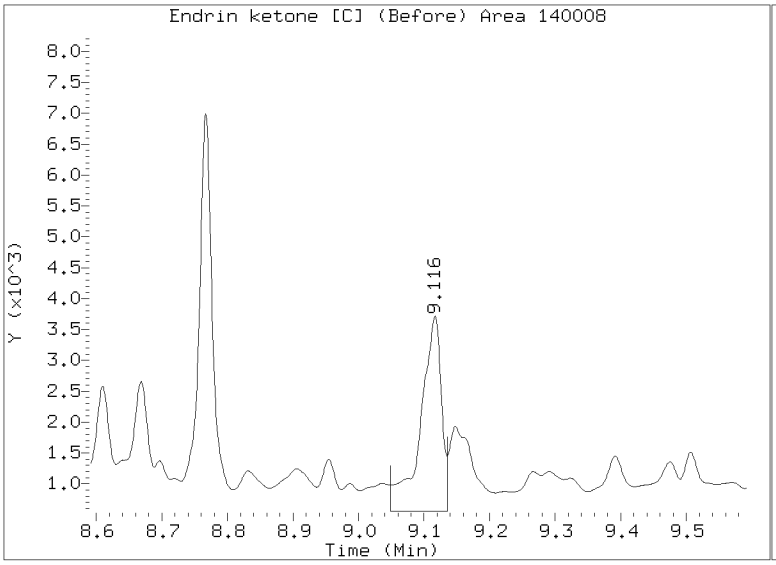
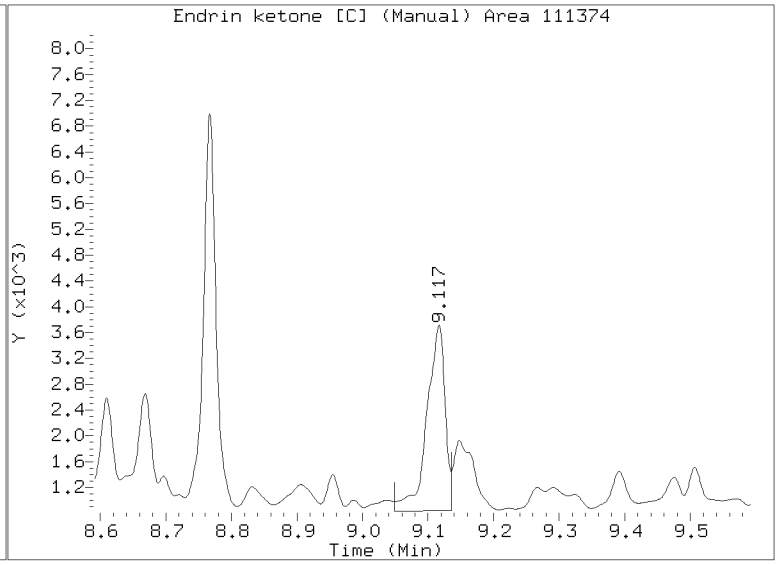
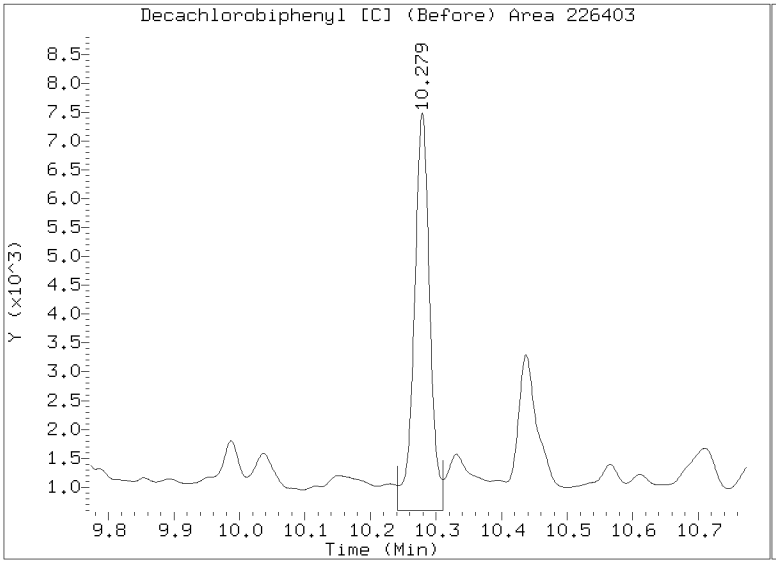
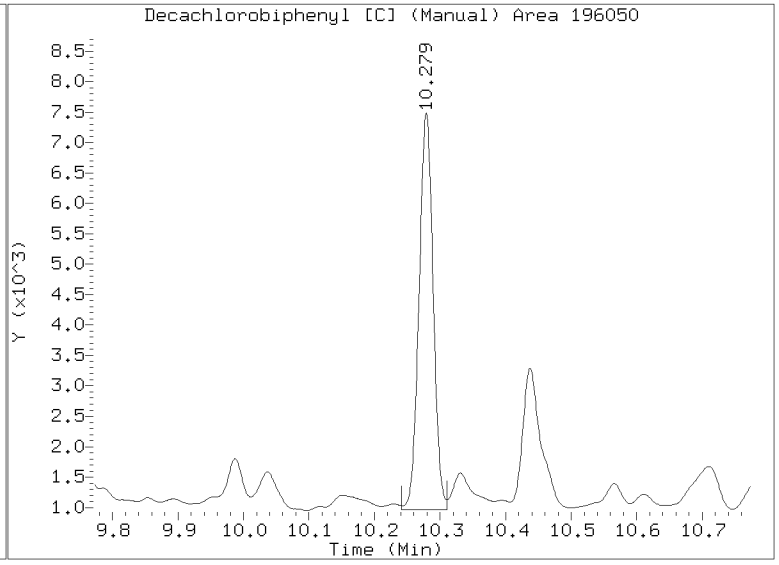
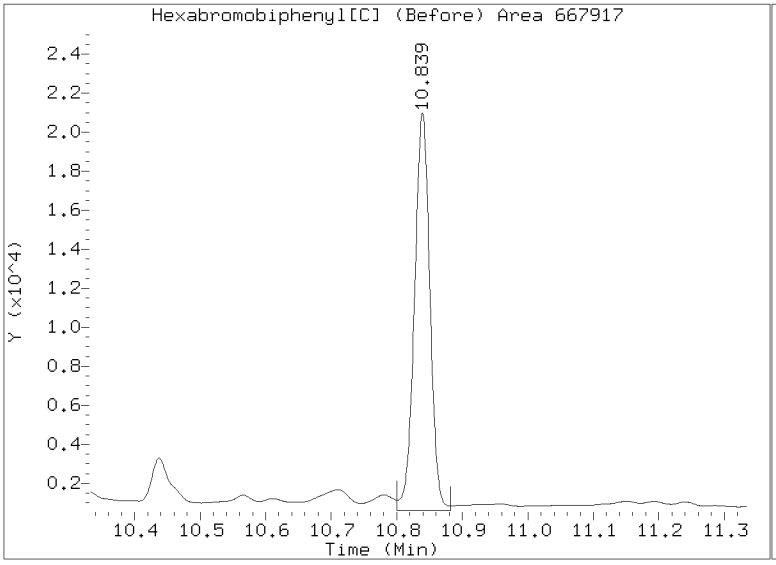
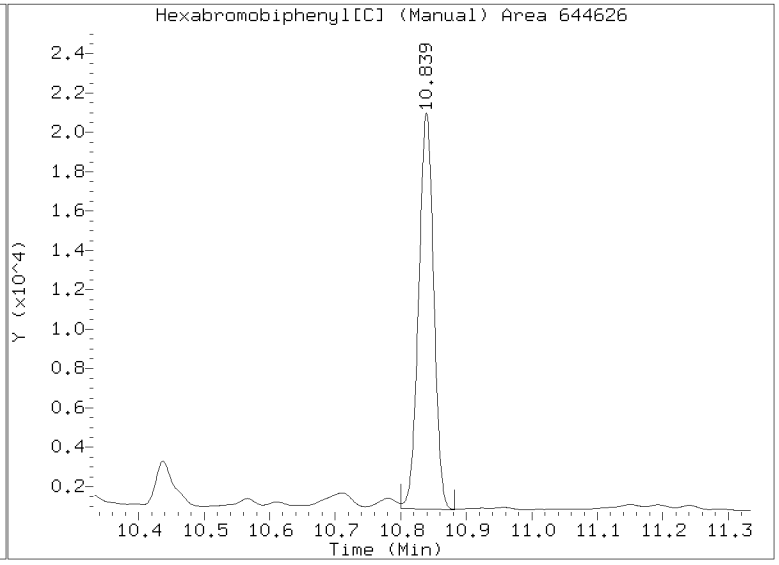












Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1802

ORGANIC ANALYSIS DATA SHEET
EPA 8081B

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23D0396-03 A	File ID:	23051317.D
Sampled:	04/12/23 15:03	Prepared:	04/25/23 11:56	Analyzed:	05/13/23 20:32
% Solids:	43.88	Preparation:	EPA 3546 (Microwave)	Initial/Final:	28.53 g Wet / 2.5 mL
Batch:	BLD0606	Sequence:	SLE0423	Calibration:	GD00035
Instrument:	ECD6	Column 1:	STX-CLP	Column 2:	STX-CLPII

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
118-74-1	Hexachlorobenzene	1	1	0.18	0.14	0.50	P1, J

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9879*	*4.71*	*59.0*	*30 - 160*	
Decachlorobiphenyl	*2*	*7.9879*	*4.91*	*61.5*	*30 - 160*	
Tetrachlorometaxylene	*1*	*7.9879*	*4.21*	*52.8*	*30 - 160*	
Tetrachlorometaxylene	*2*	*7.9879*	*4.44*	*55.6*	*30 - 160*	

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230513.b/23051317.D
Data file 2: /20230513.b/B20230513.b/23051317.D
Method: \20230513.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: 23D0396-03
Client ID:
Injection Date: 13-MAY-2023 20:32
Report Date: 05/25/2023 19:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.320	0.009	14704	----			0.48	0.00	---	alpha-BHC
4.694	-0.001	8391	----			0.68	0.00	---	beta-BHC
----			----			0.00	0.00	---	delta-BHC
4.618	0.004	25036	5.126	0.001	5743	0.92	0.24	117.5*	gamma-BHC (Lindane) M
----			----			0.00	0.00	---	Heptachlor
----			6.046	0.007	22979	0.00	1.05	---	Aldrin
----			----			0.00	0.00	---	Heptachlor epoxide b
6.544	0.004	15396	7.135	-0.008	10811	0.75	0.66	12.6	Endosulfan I M
----			----			0.00	0.00	---	Dieldrin
6.461	-0.004	183953	7.230	0.001	66150	8.98	3.88	79.4*	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			----			0.00	0.00	---	Endosulfan II
7.101	-0.011	119146	7.837	0.001	77622	8.68	6.36	30.9	4,4'-DDD M
8.146	-0.006	11720	----			0.87	0.00	---	Endosulfan sulfate
7.396	-0.010	87380	----			5.91	0.00	---	4,4'-DDT
----			----			0.00	0.00	---	Methoxychlor
----			----			0.00	0.00	---	Endrin ketone
7.714	-0.004	13825	8.303	-0.002	46938	1.27	5.14	121.0*	Endrin aldehyde M
6.239	-0.000	23205	----			1.03	0.00	---	trans-Chlordane
----			7.073	0.002	19591	0.00	1.08	---	cis-Chlordane
----			2.462	0.025	1464	0.00	0.06	---	Hexachlorobutadiene
4.153	-0.001	24914	4.592	-0.006	38041	0.91	1.60	54.7*	Hexachlorobenzene M
3.799	-0.000	416437	4.113	-0.000	392323	21.10	22.22	5.2	Tetrachloro-m-xylene M
9.347	0.005	246122	10.278	0.005	197135	23.59	24.61	4.2	Decachlorobiphenyl M

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

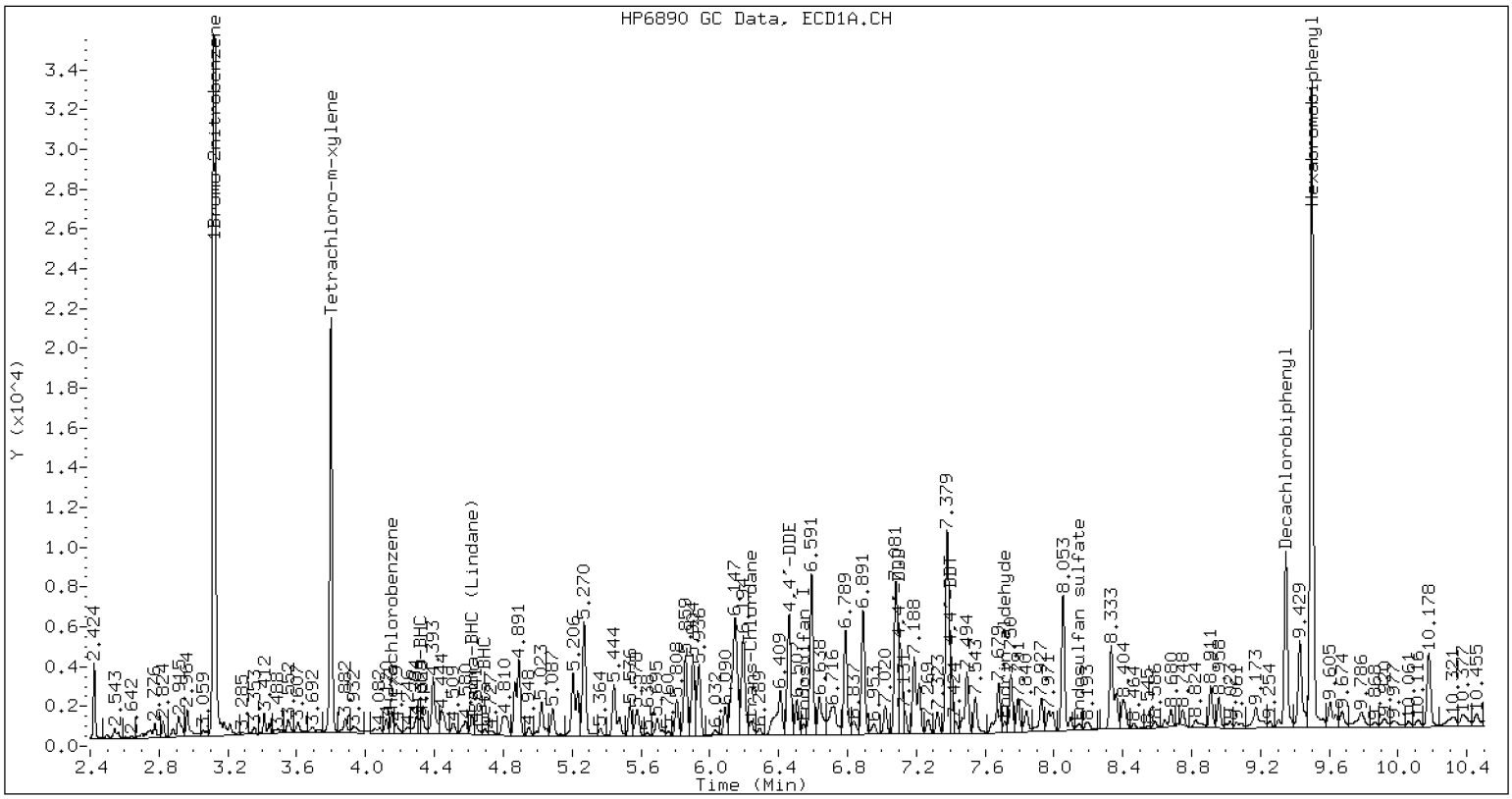
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	932757	1410491	51.2
Hexabromobiphenyl	745426	884703	18.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1248665	1283782	2.8
Hexabromobiphenyl	754634	663781	-12.0

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230513.b/23051317.D 23D0396-03 STX-CLP 13-MAY-2023 20:32 1ul



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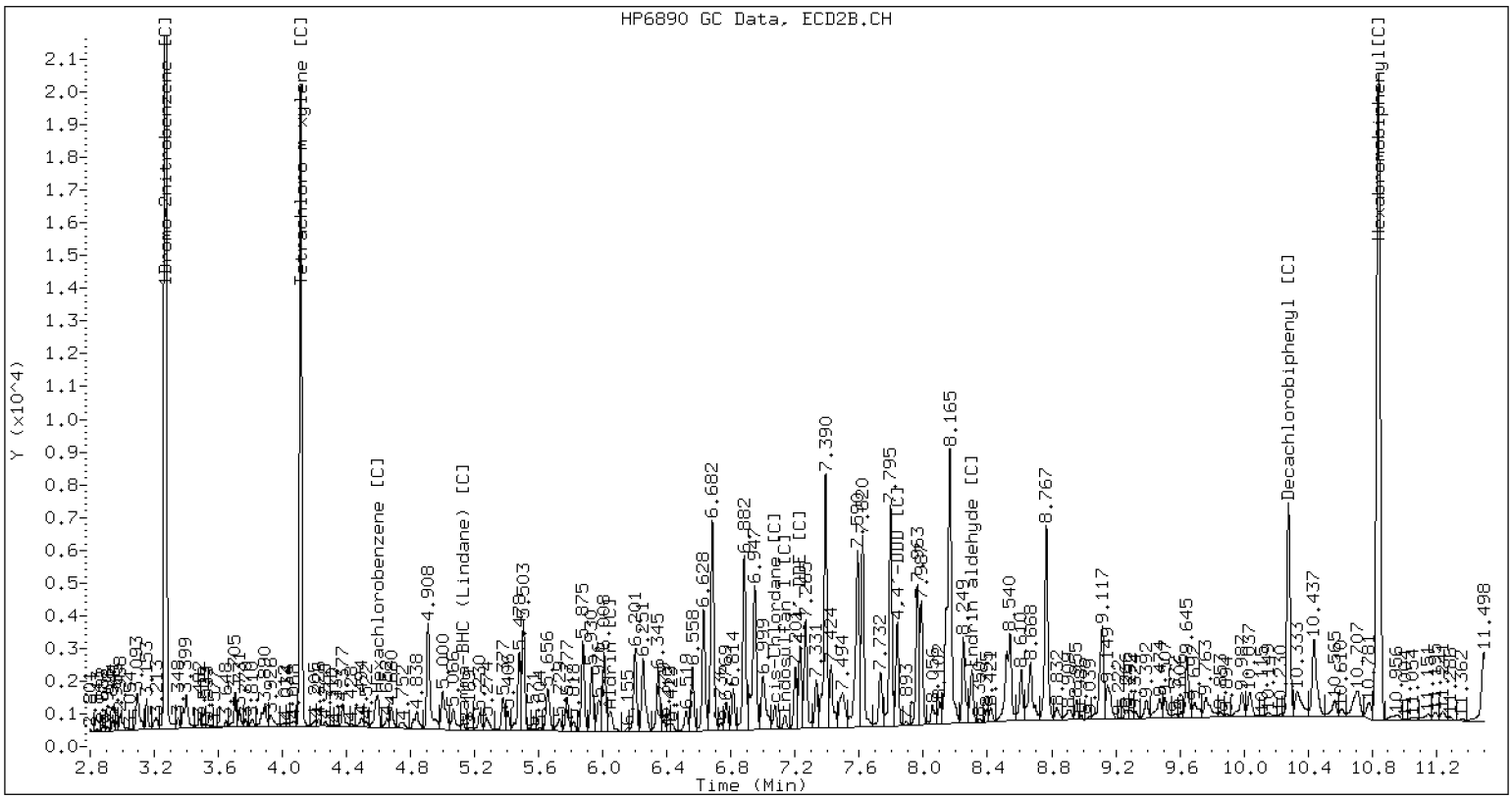
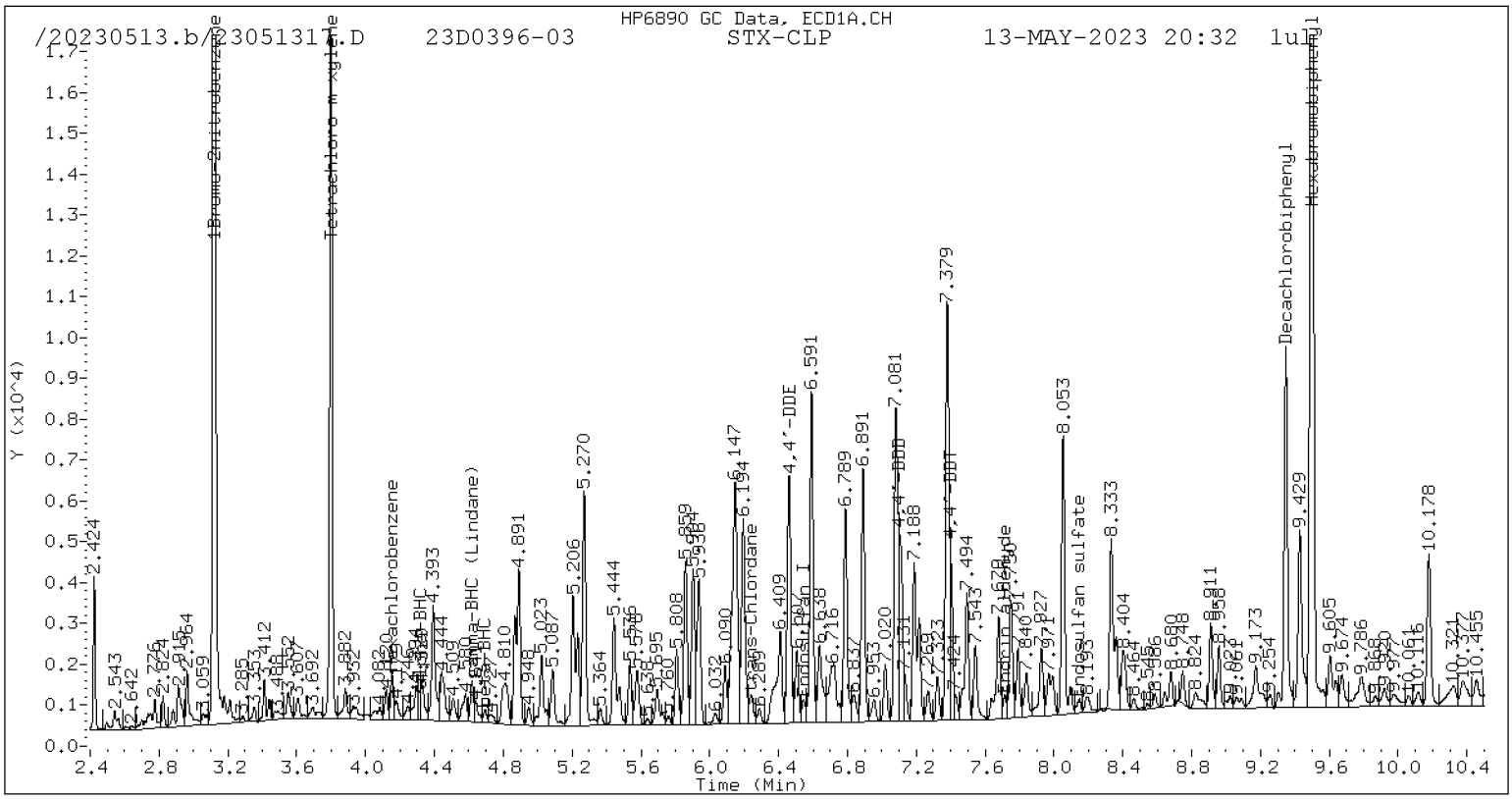
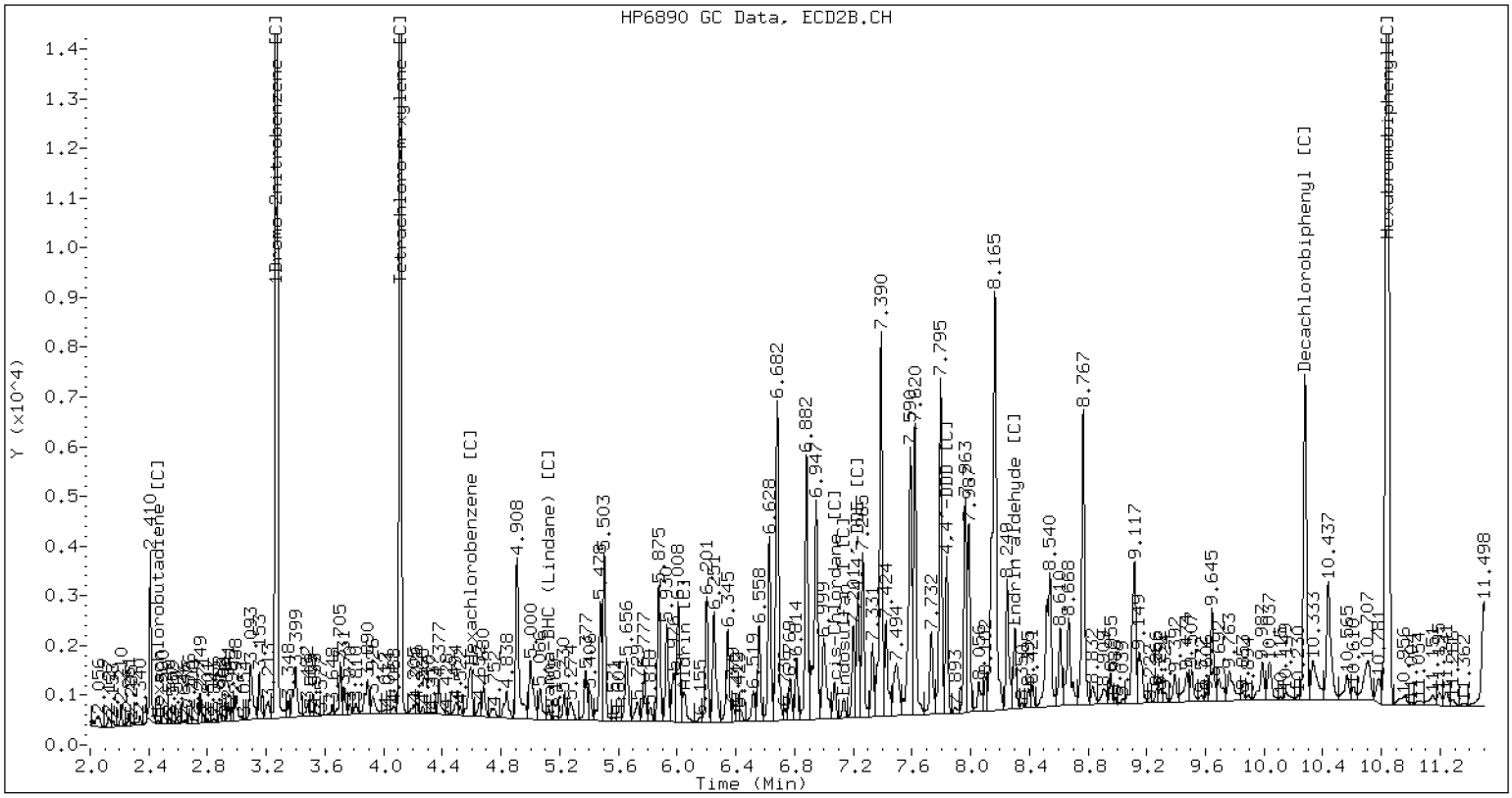


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

/20230513.b/B20230513.b/23051317.D 23D0396-03 CLP2



CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, STX-CLP

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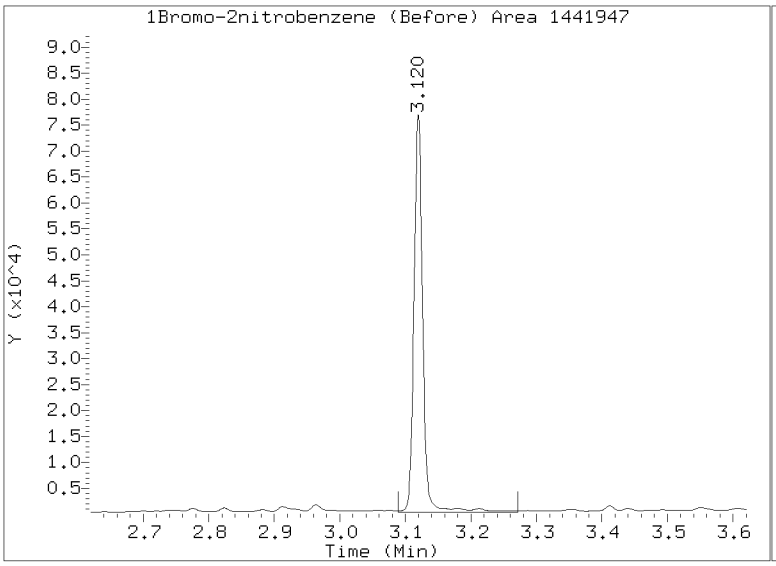
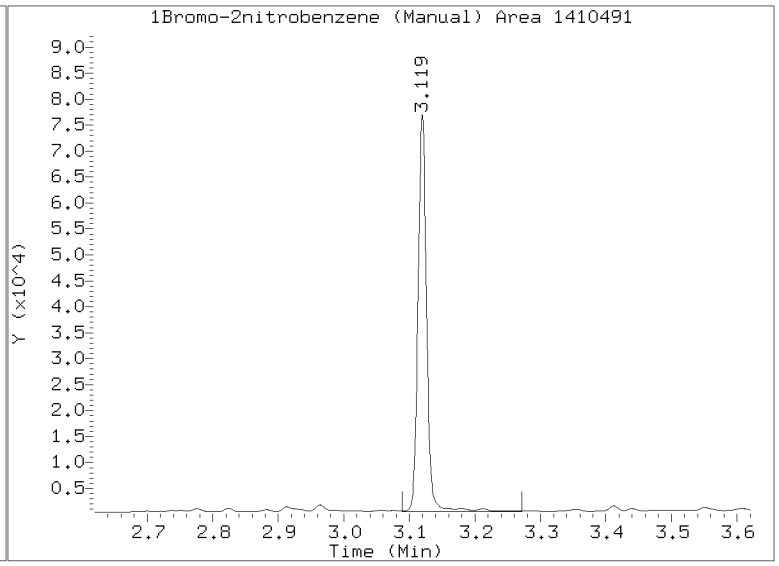
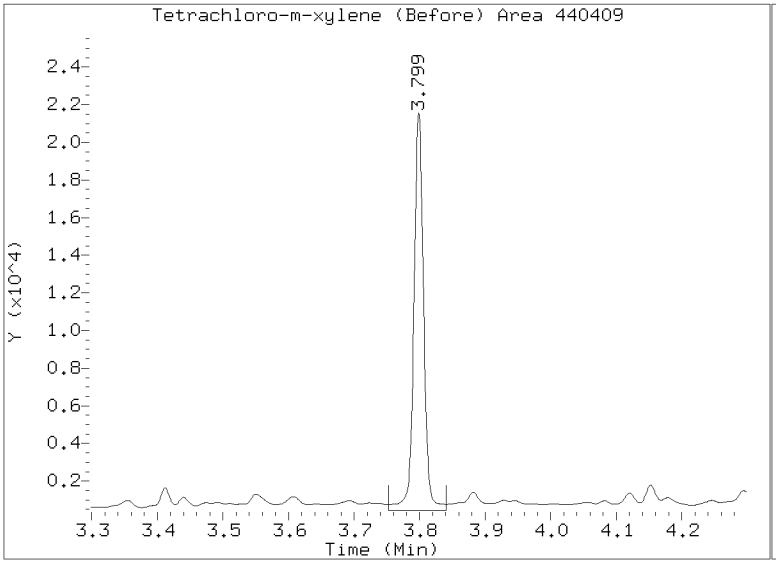
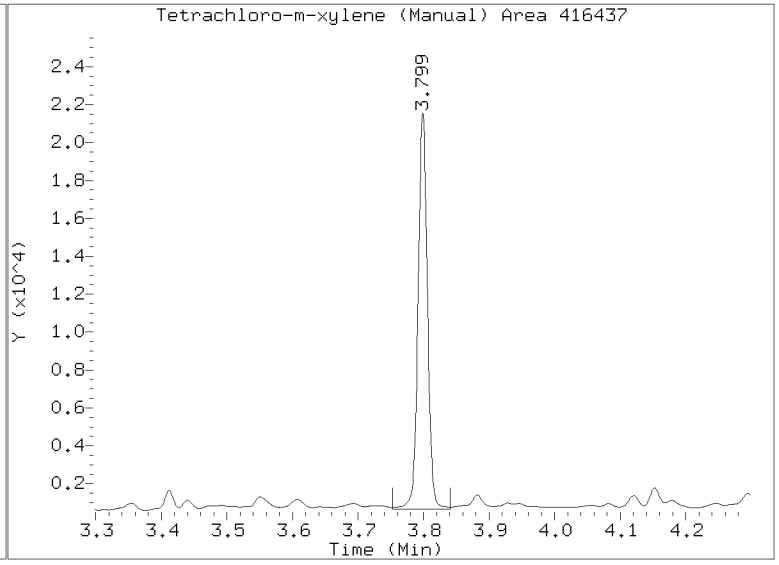
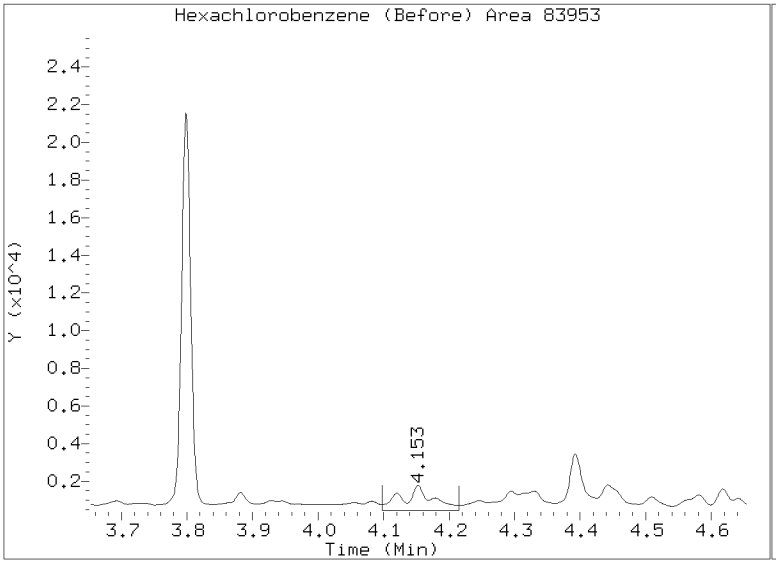
Injection Date: 13-MAY-2023 20:32
Lab ID:23D0396-03 Client ID:
Report Date: 05/25/2023 19:15

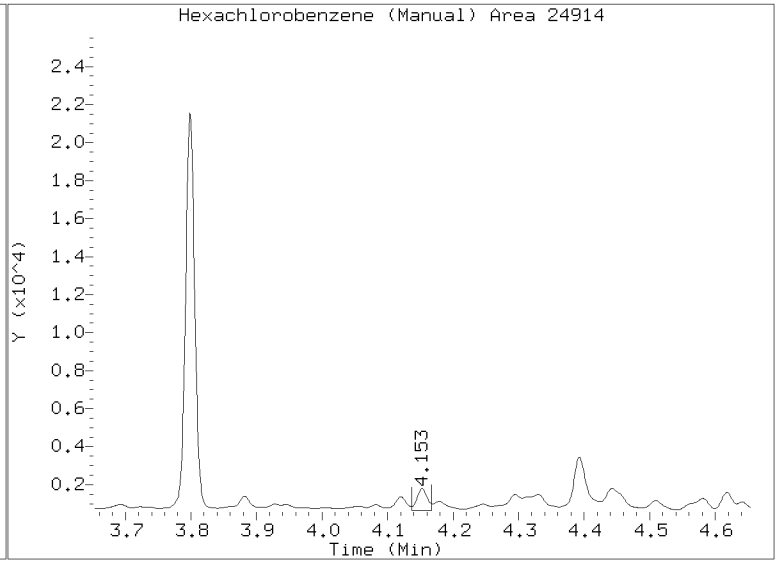












Manual Peak Adjustment Report, STX-CLP

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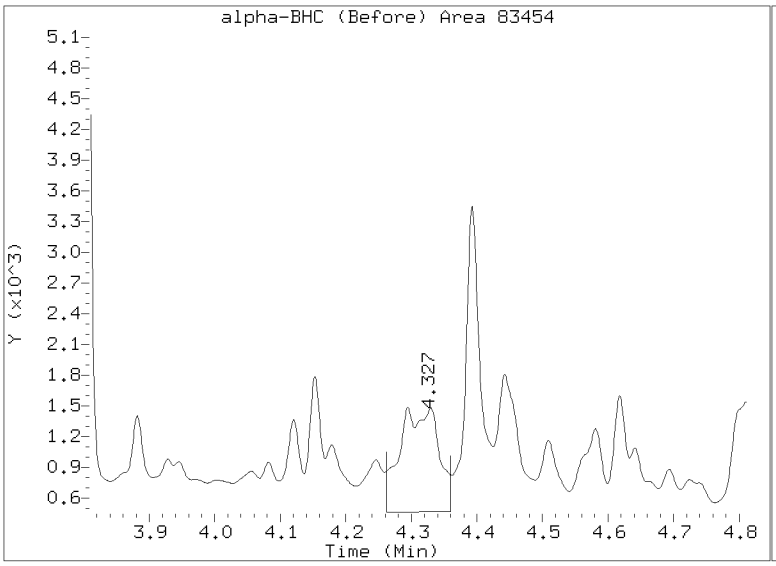

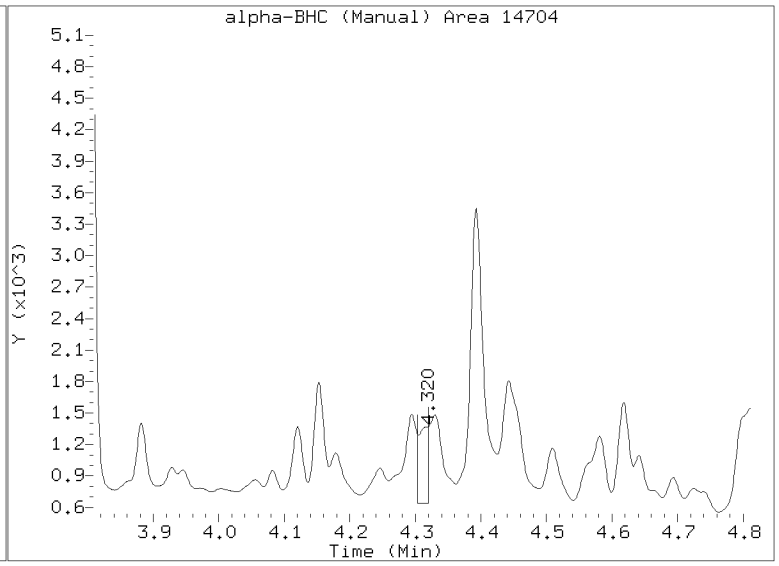

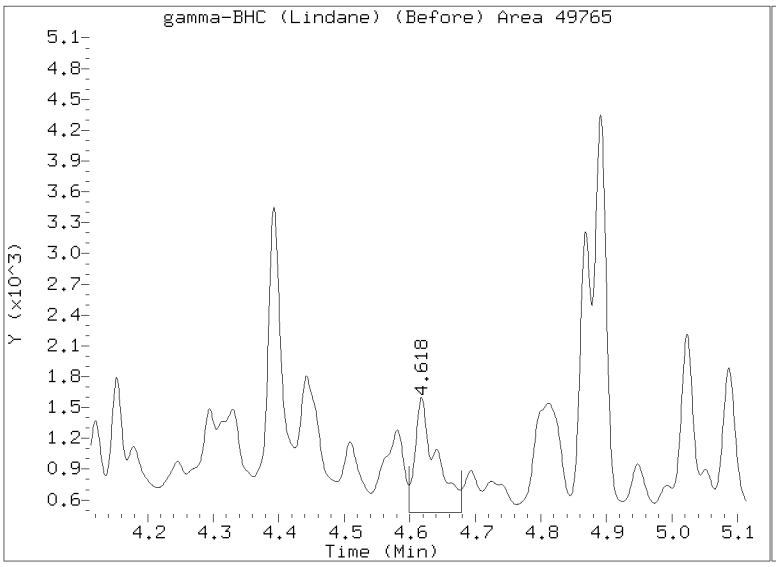

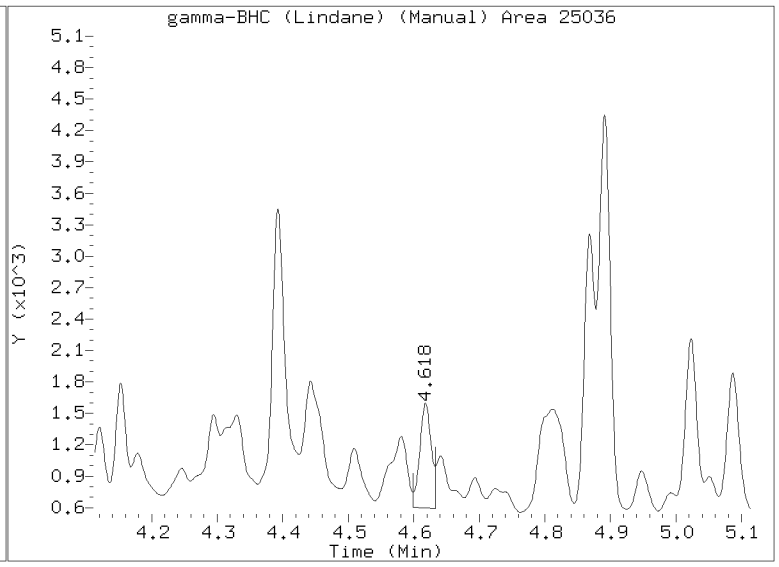

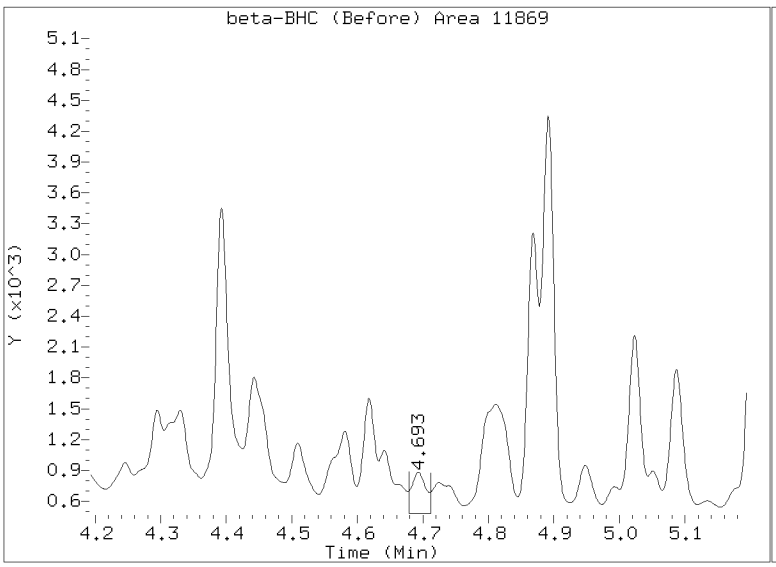

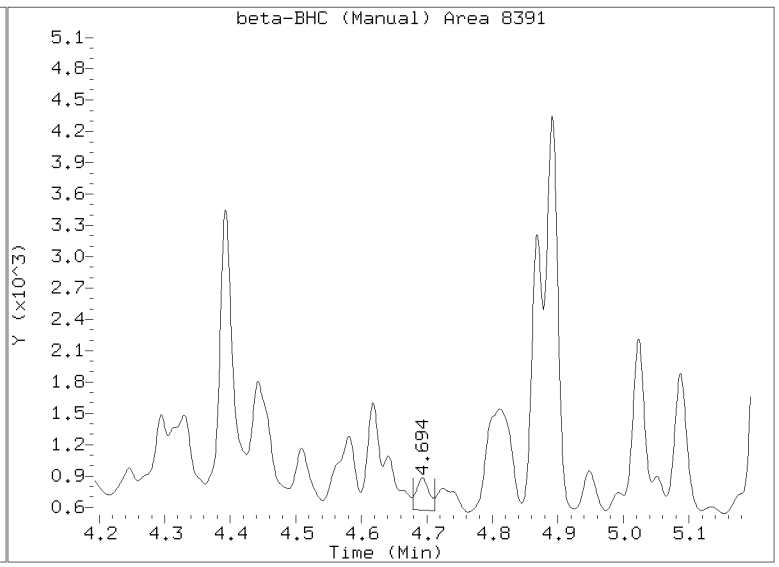

Manual Peak Adjustment Report, STX-CLP

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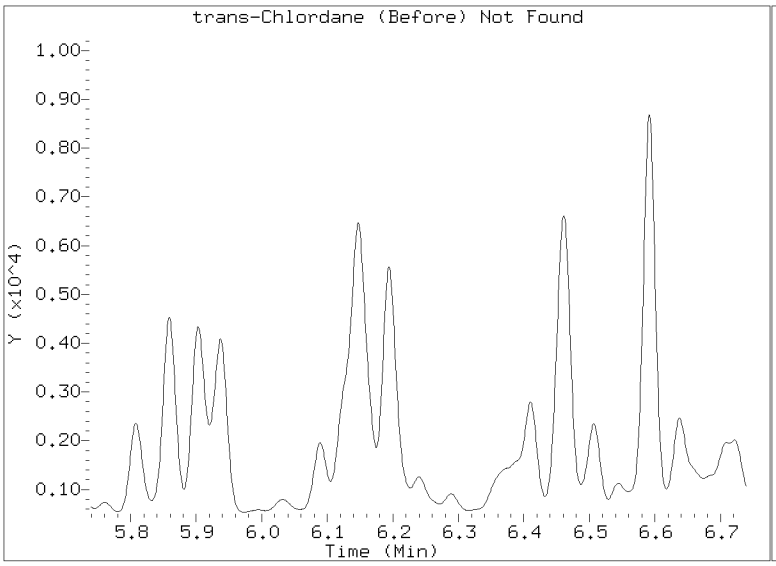
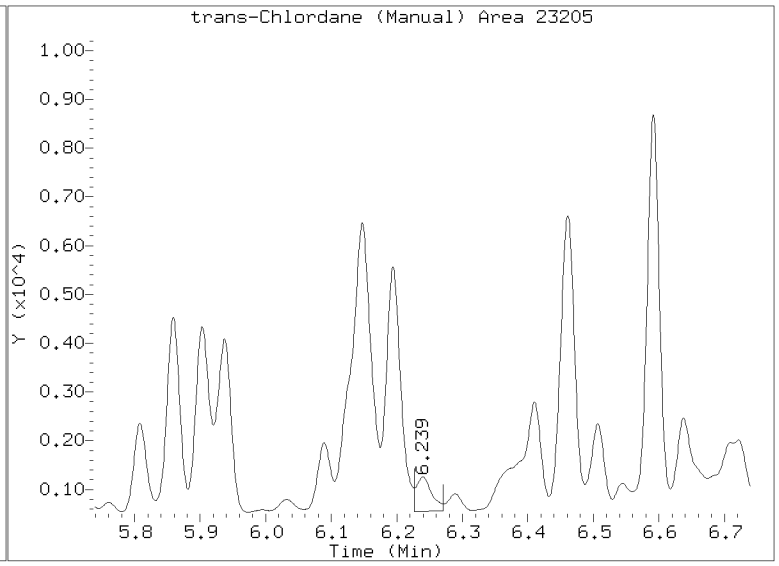
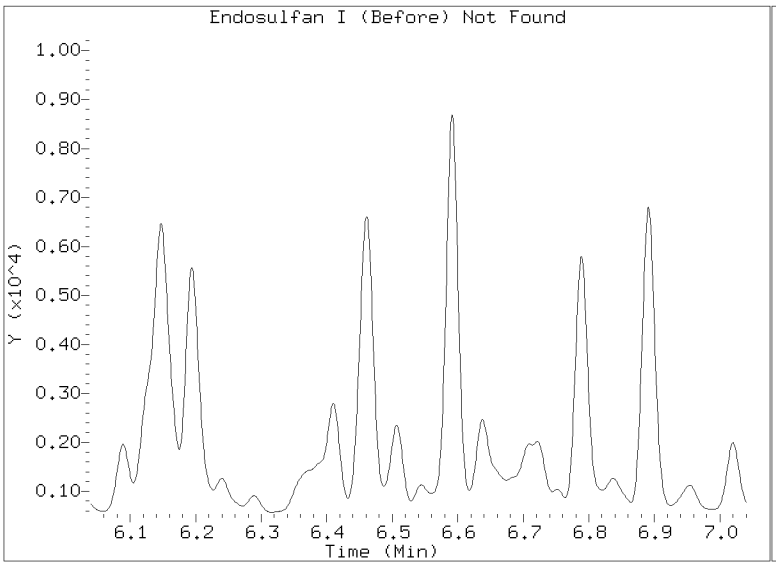
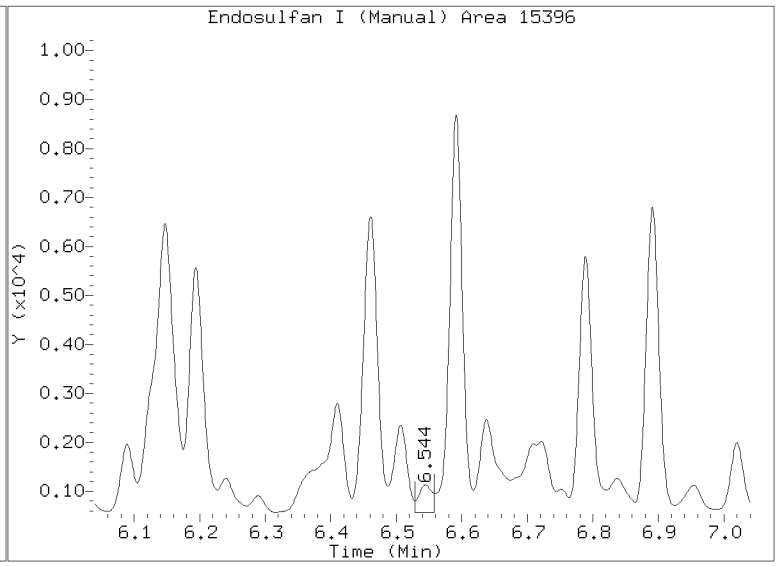
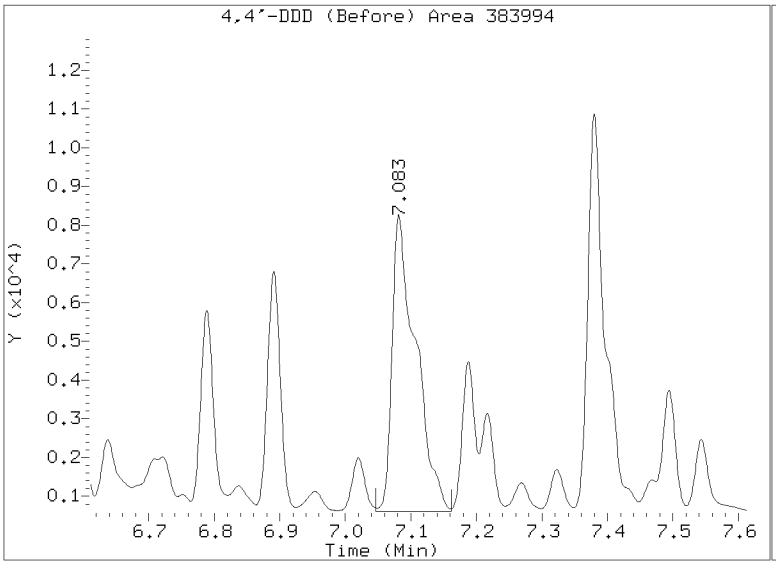
Lab ID:23D0396-03 Client ID:
Report Date: 05/25/2023 19:15

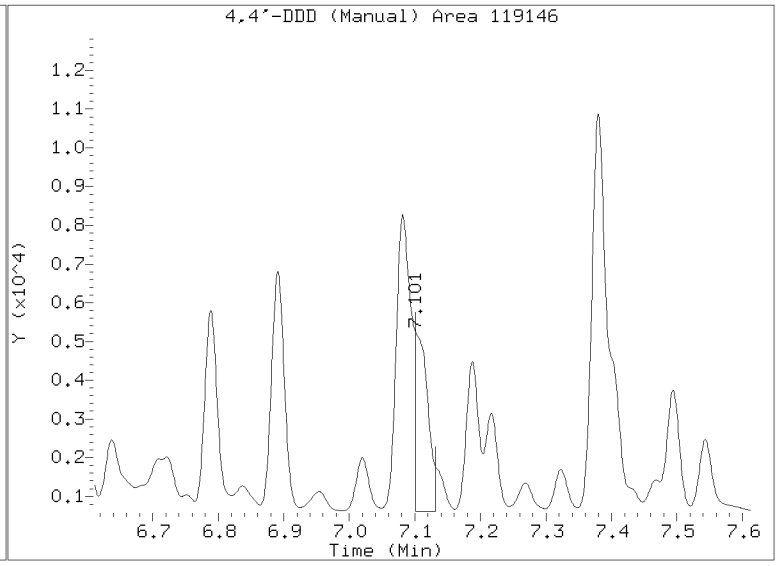












Manual Peak Adjustment Report, STX-CLP

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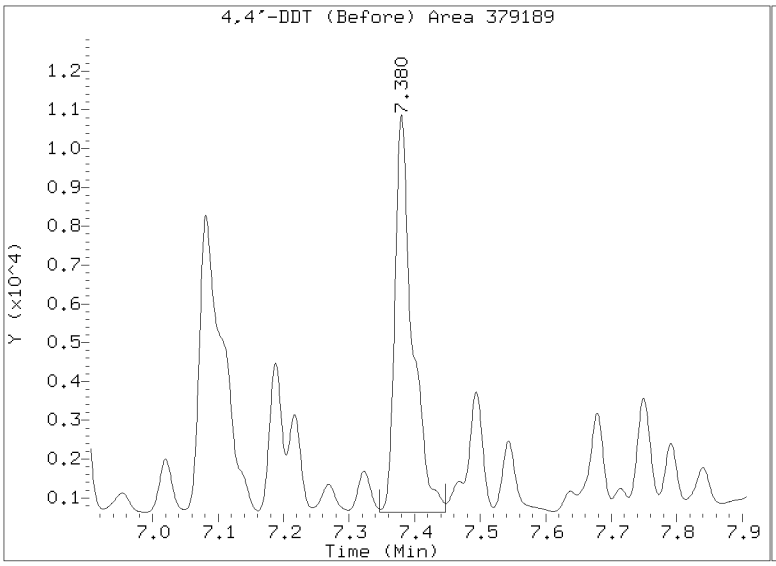
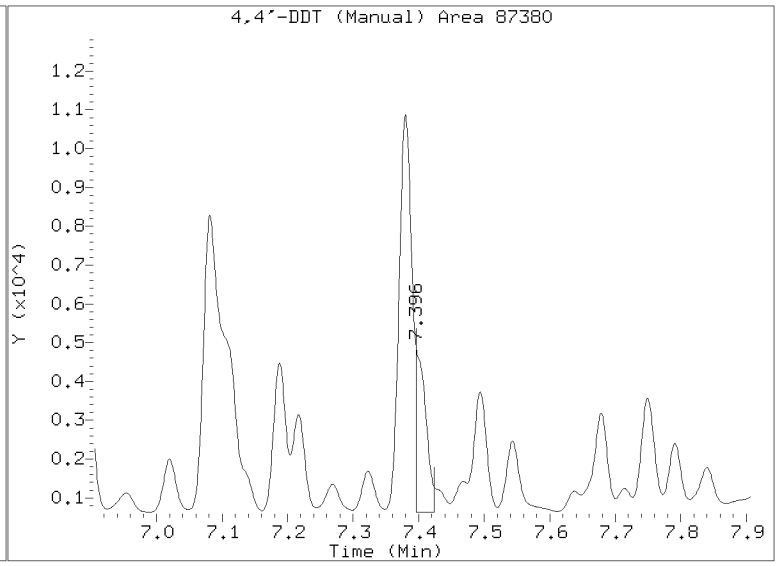
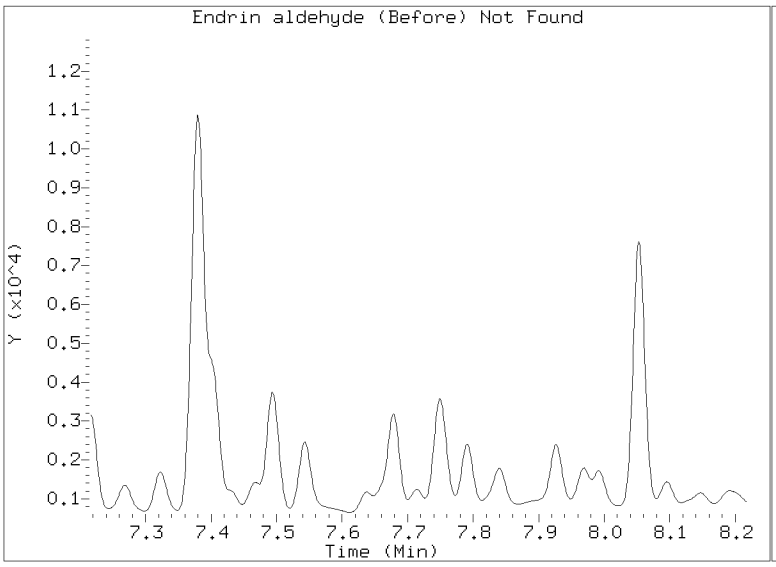
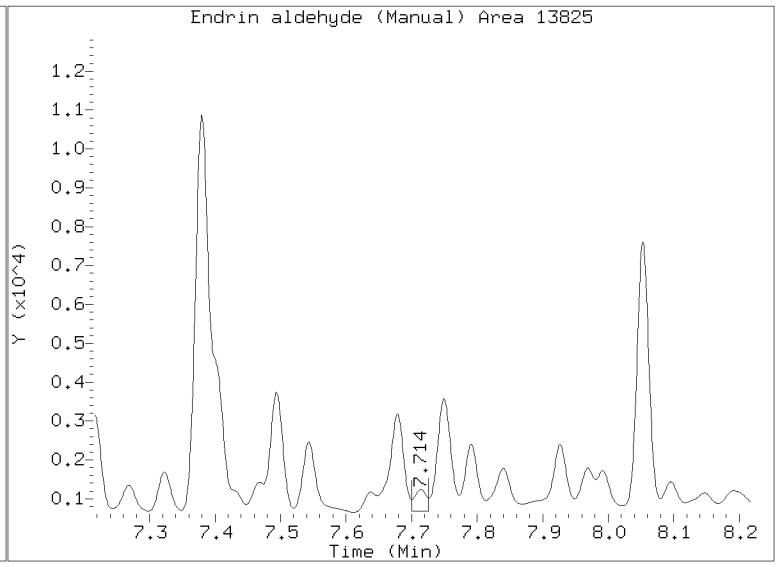
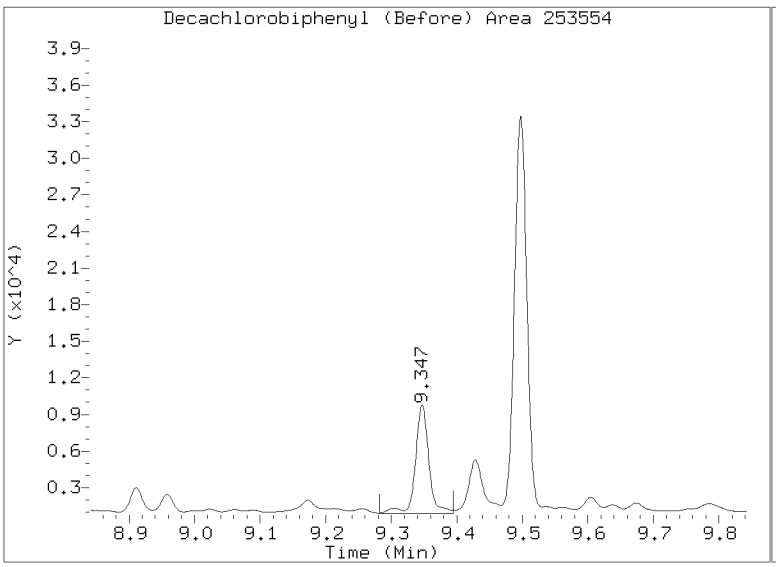
Injection Date: 13-MAY-2023 20:32
Lab ID:23D0396-03 Client ID:
Report Date: 05/25/2023 19:15

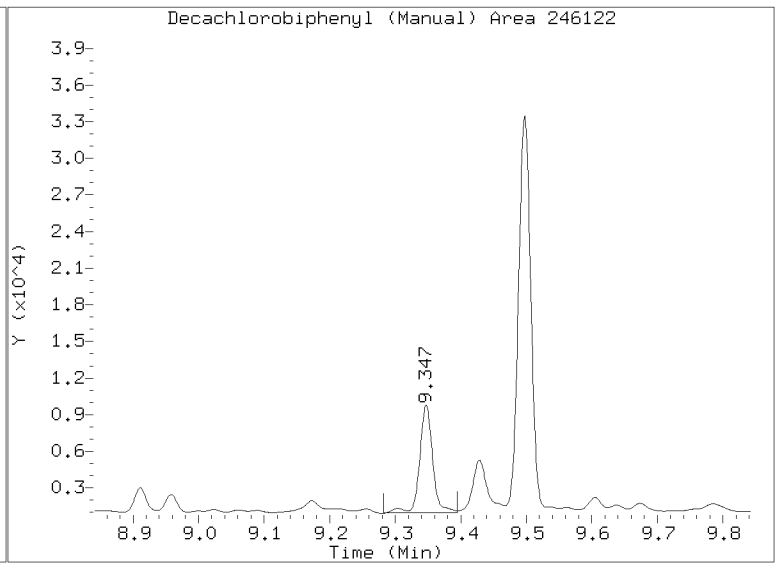












Manual Peak Adjustment Report, STX-CLP

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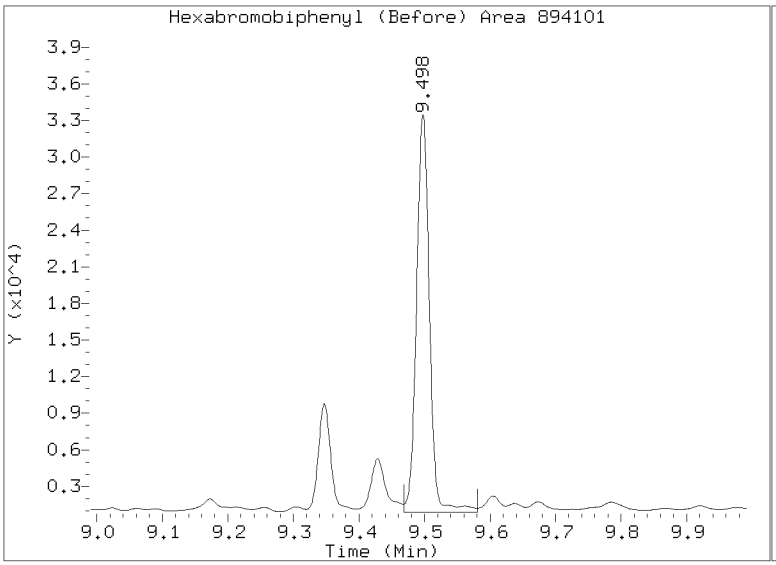
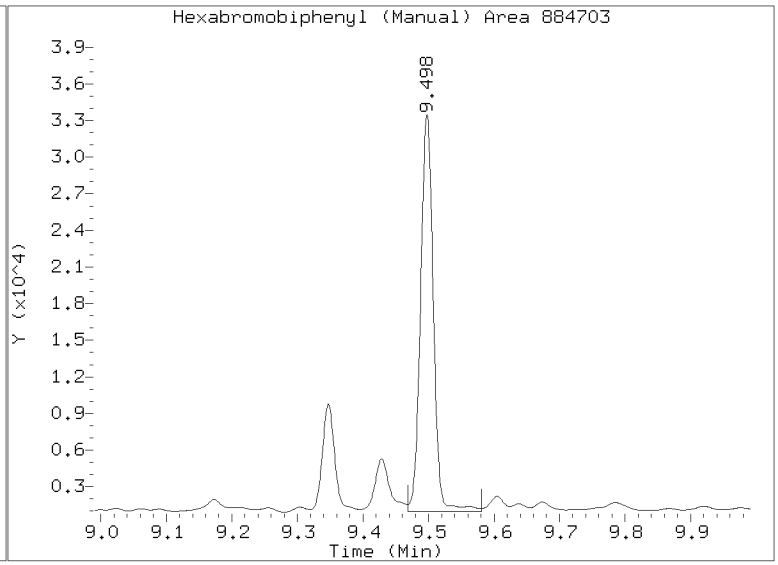
Report Date: 05/25/2023 19:15





Manual Peak Adjustment Report, CLP-2

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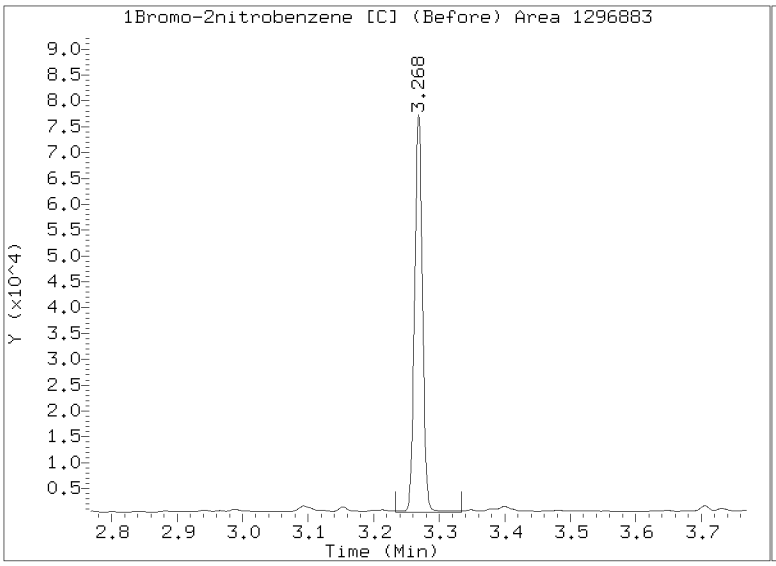

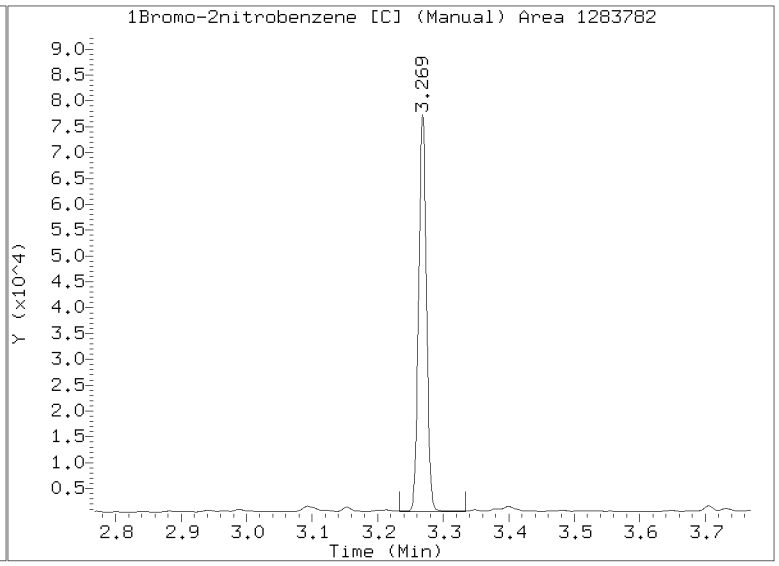

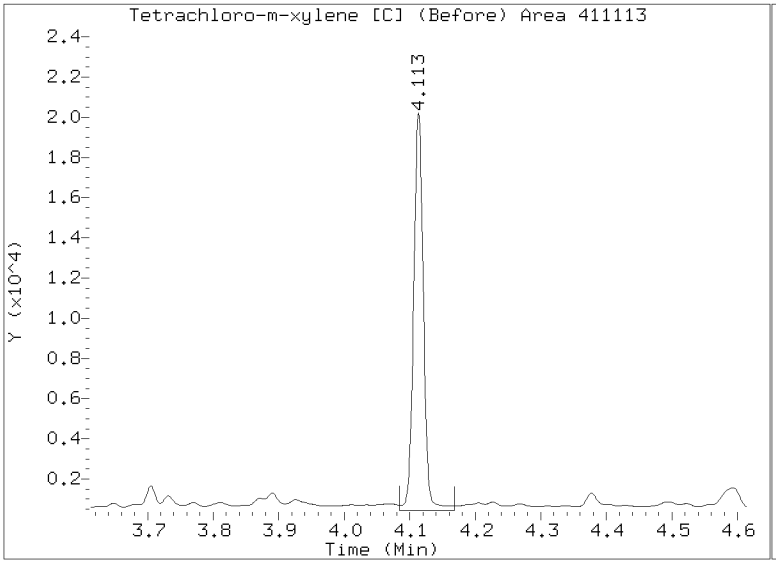

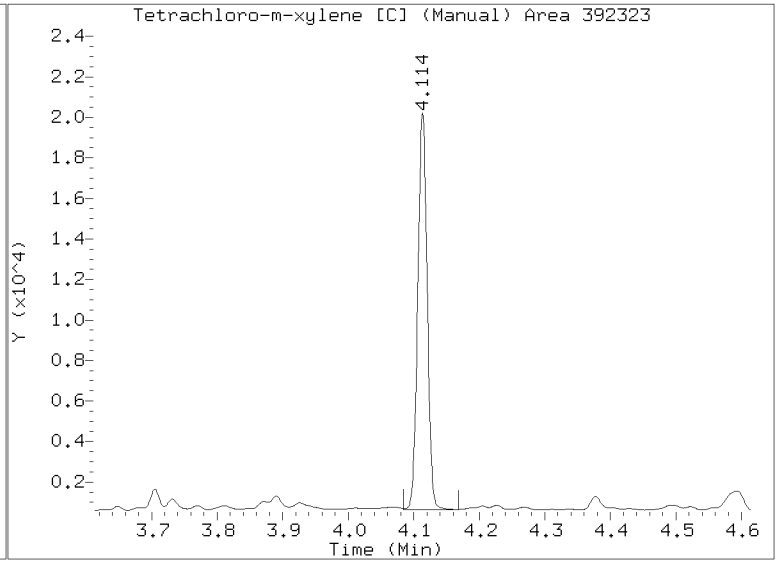

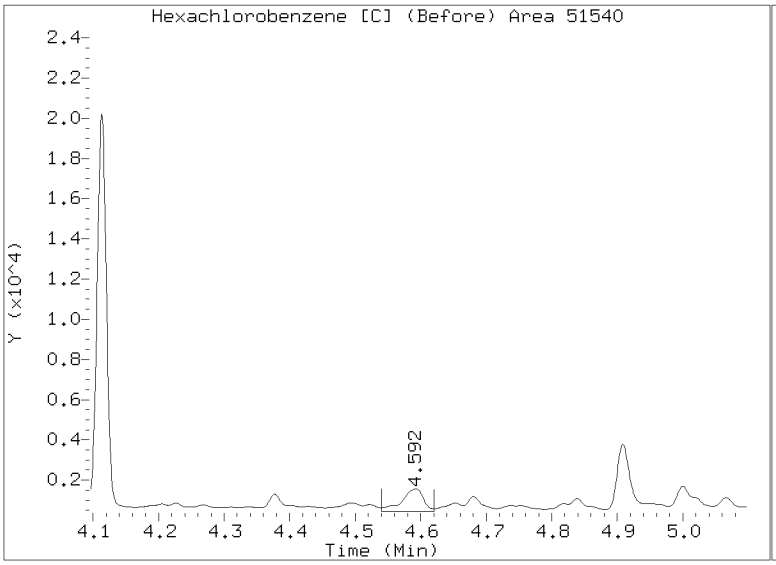

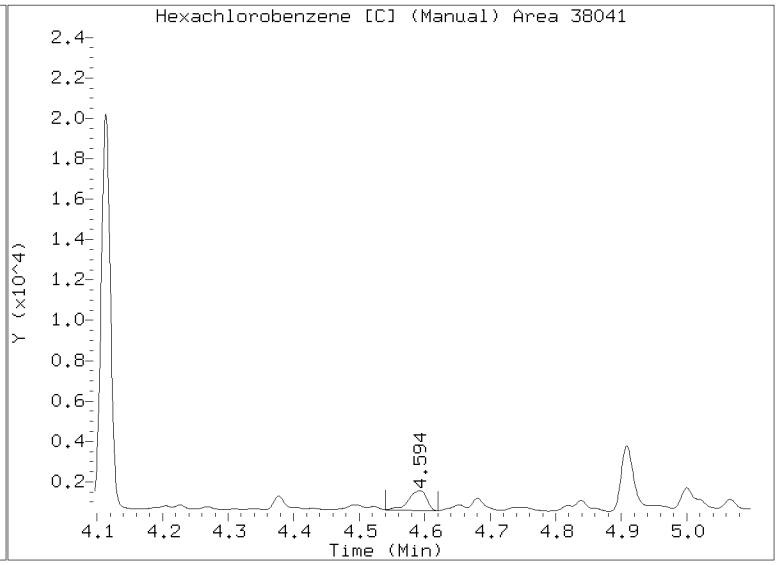

Manual Peak Adjustment Report, CLP-2

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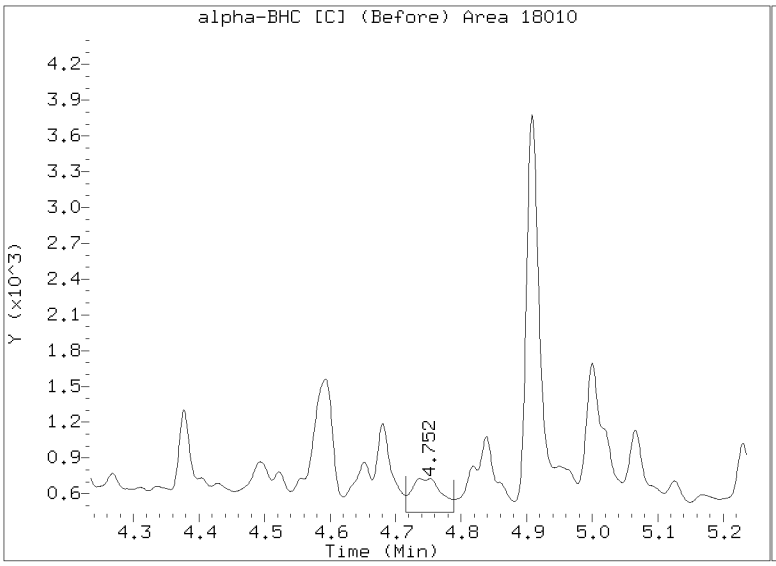

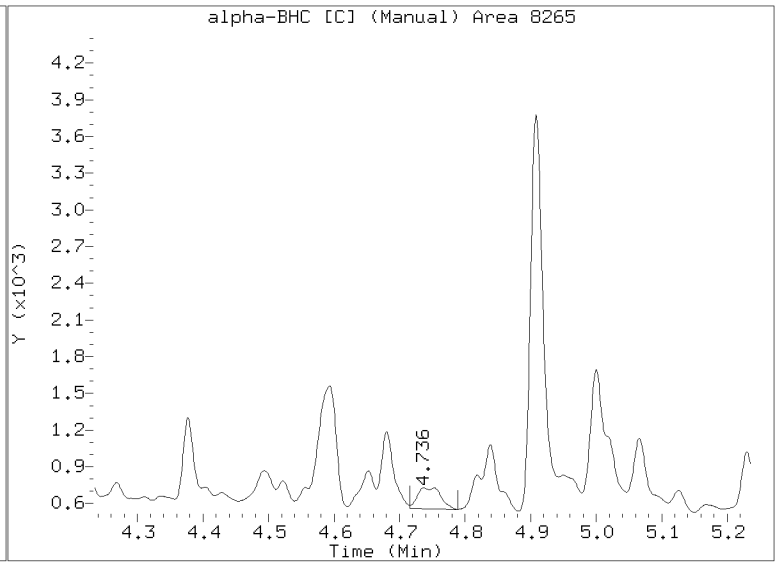

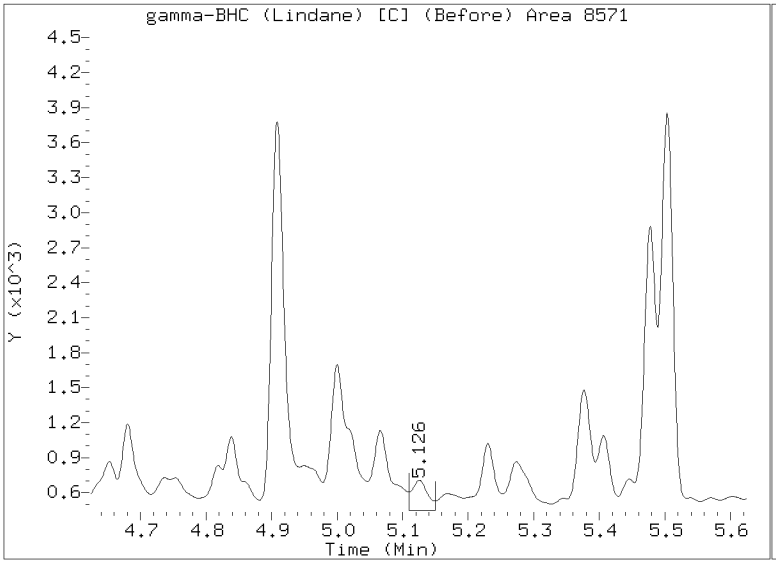

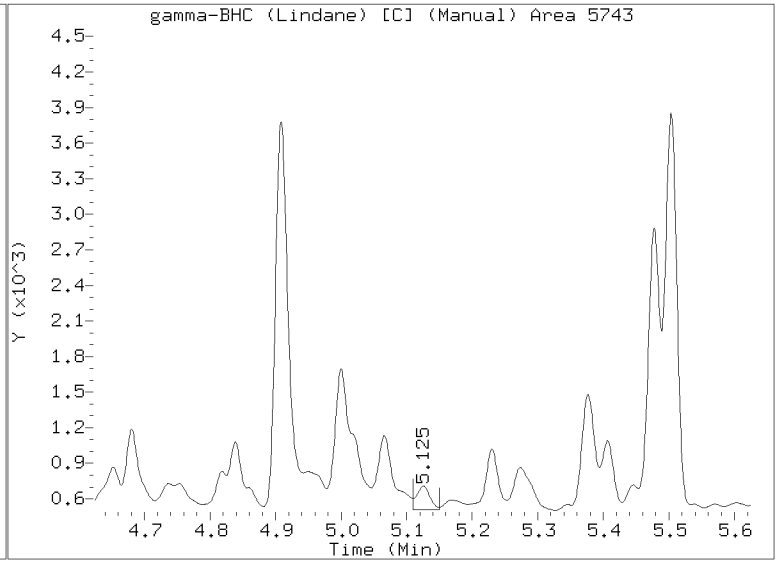

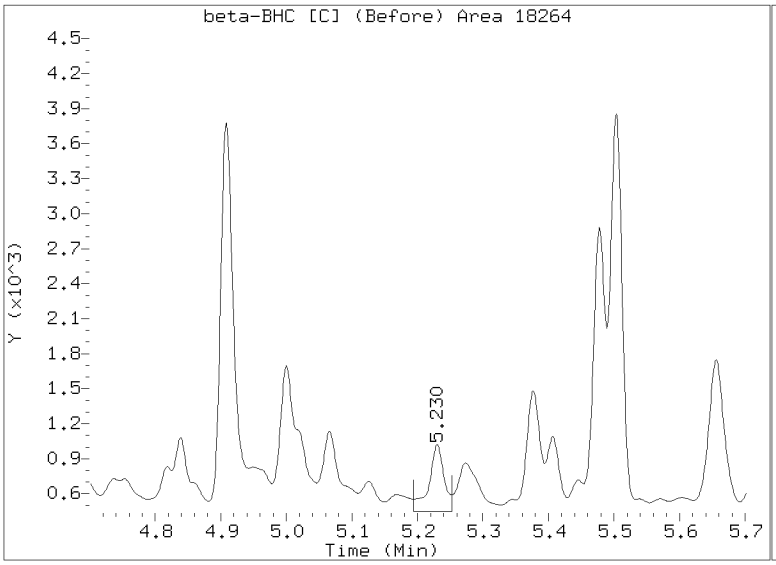

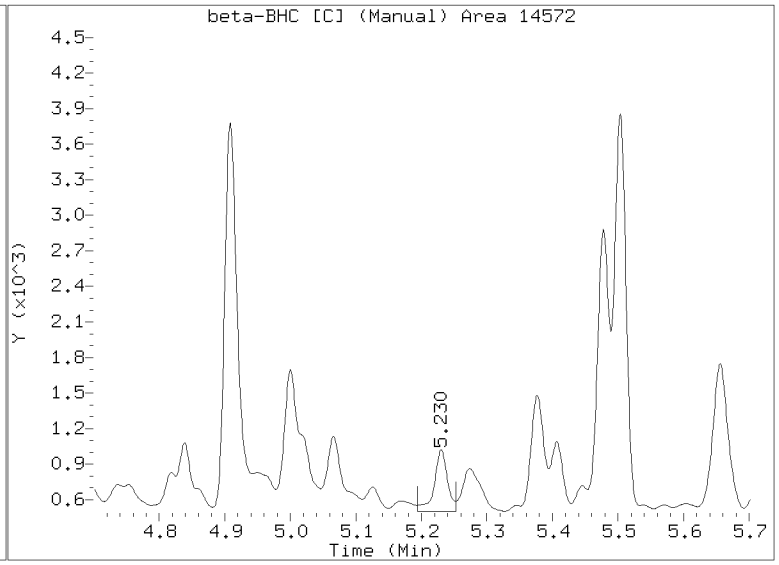

Manual Peak Adjustment Report, CLP-2

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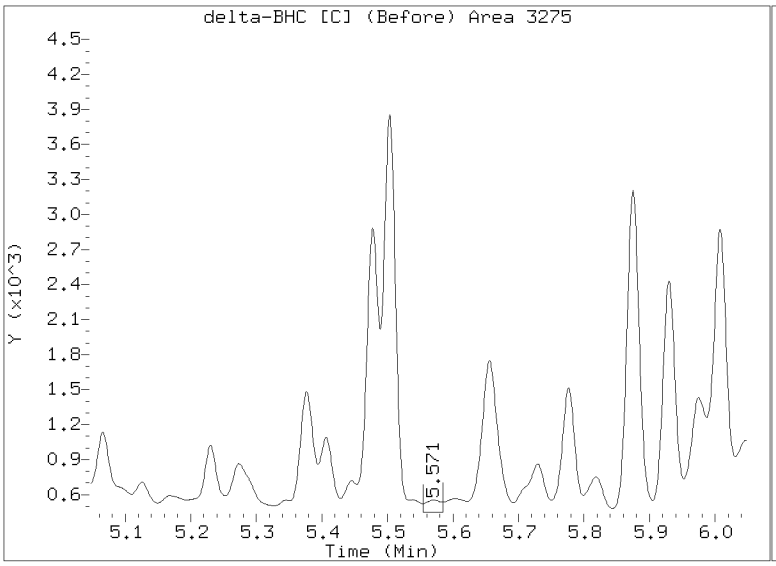

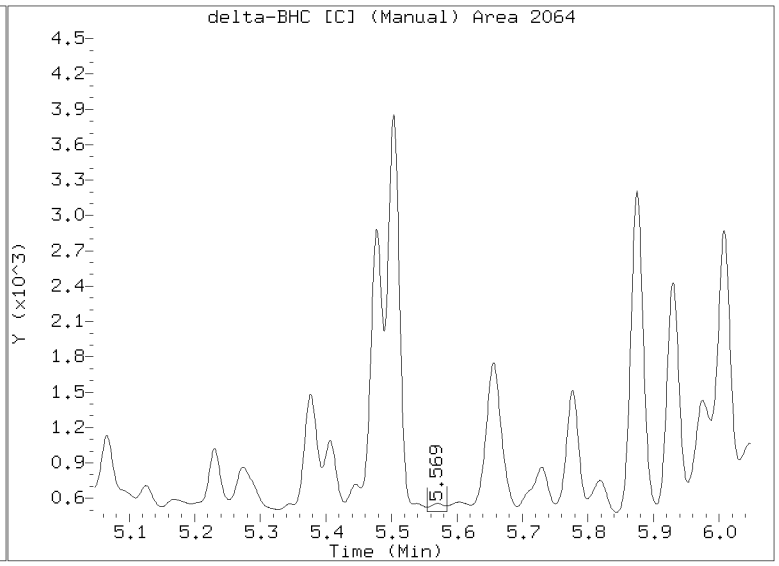

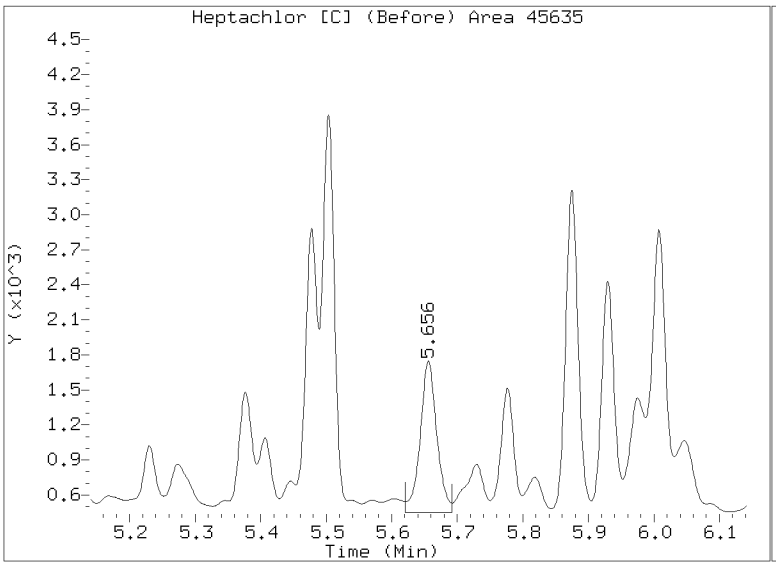

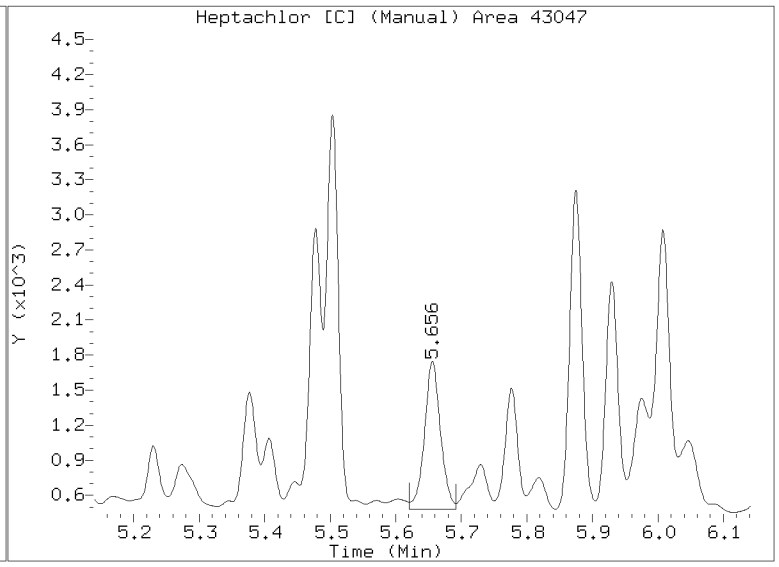

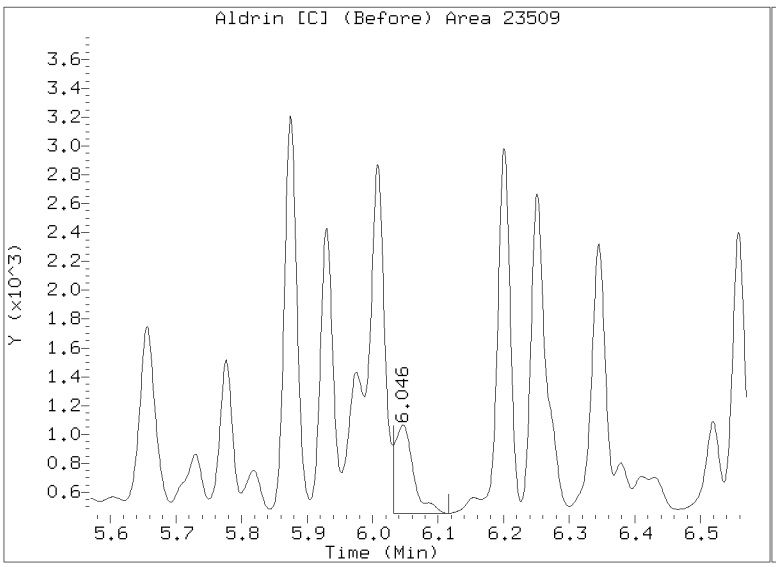

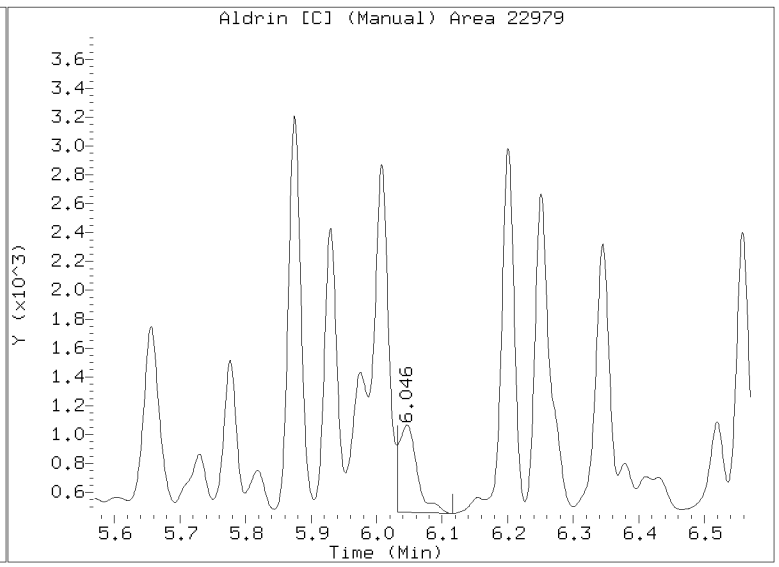

Manual Peak Adjustment Report, CLP-2

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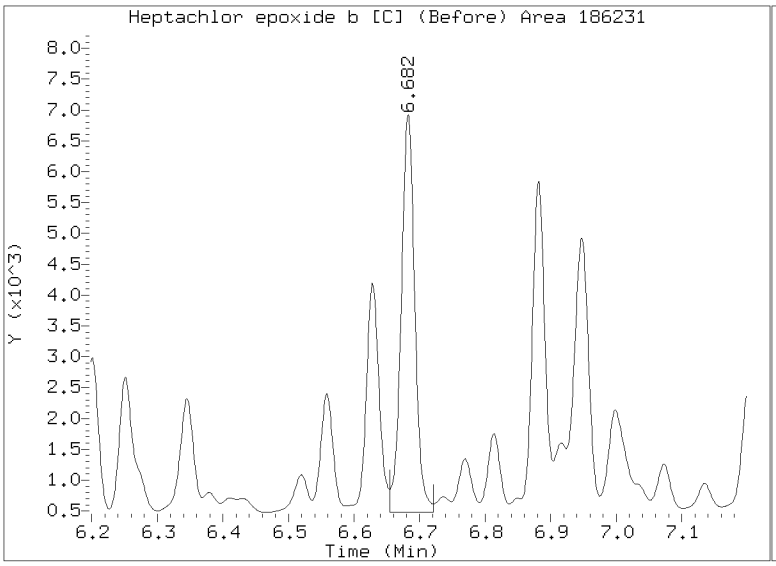

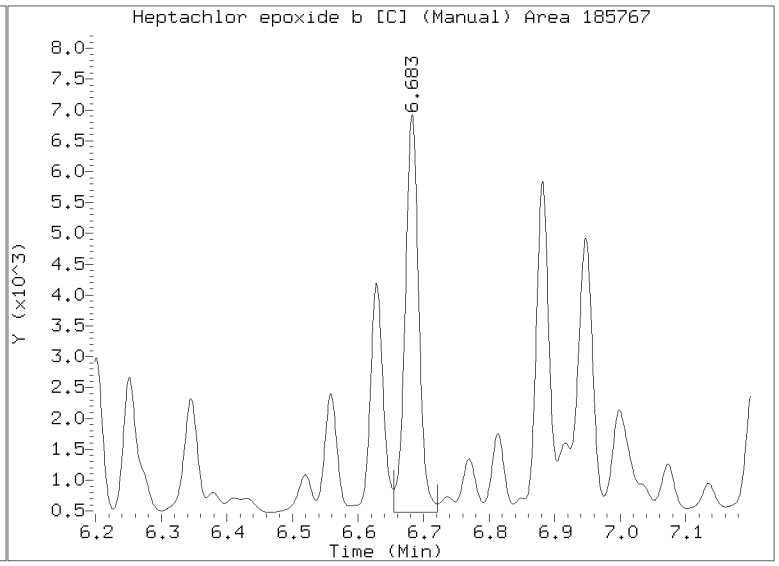

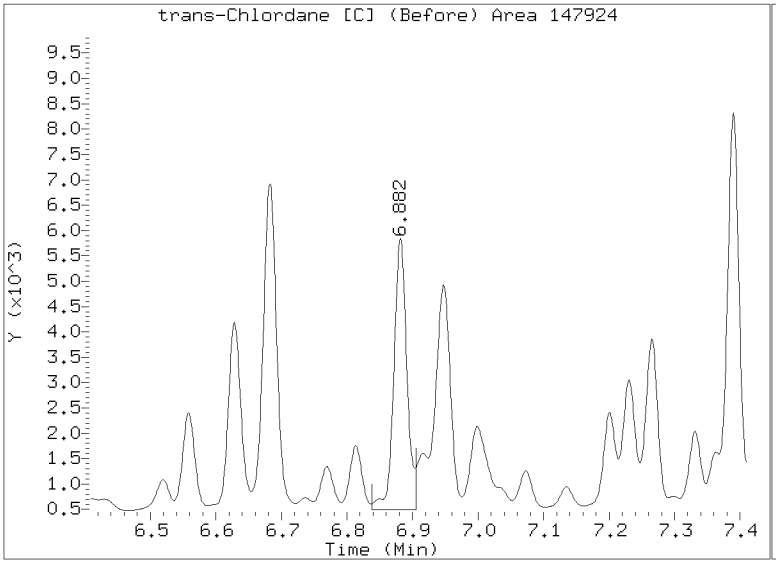

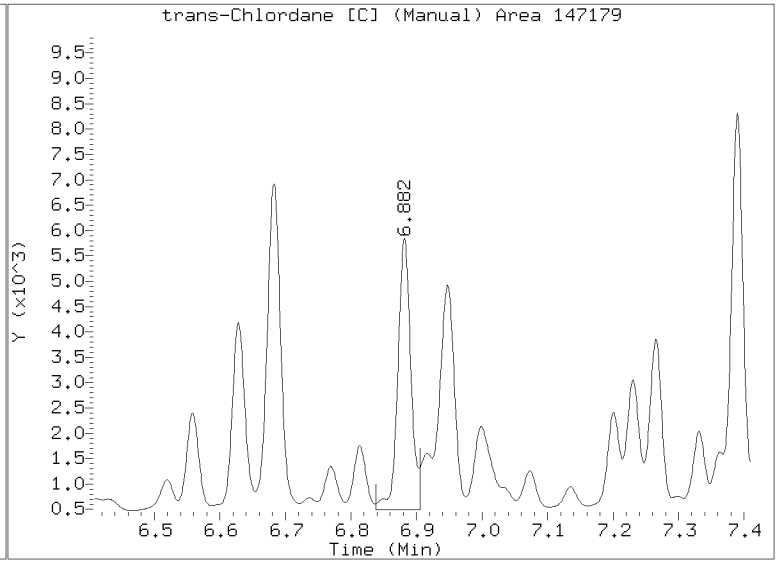

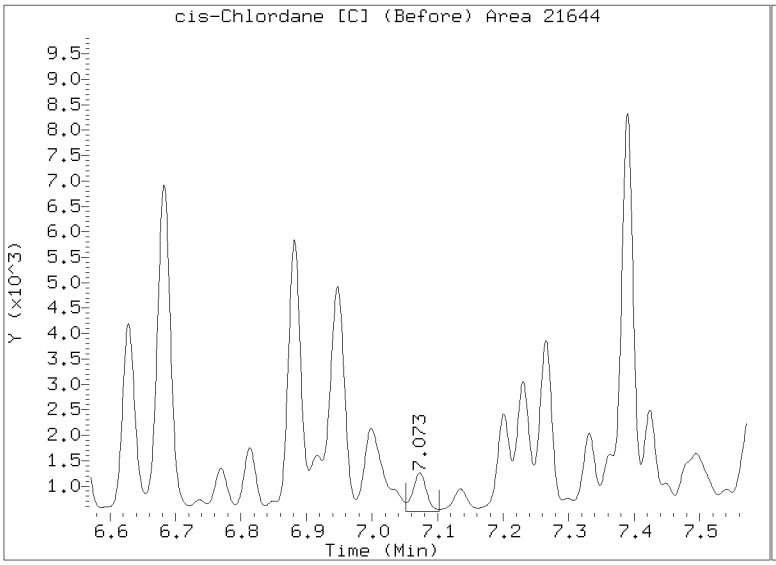

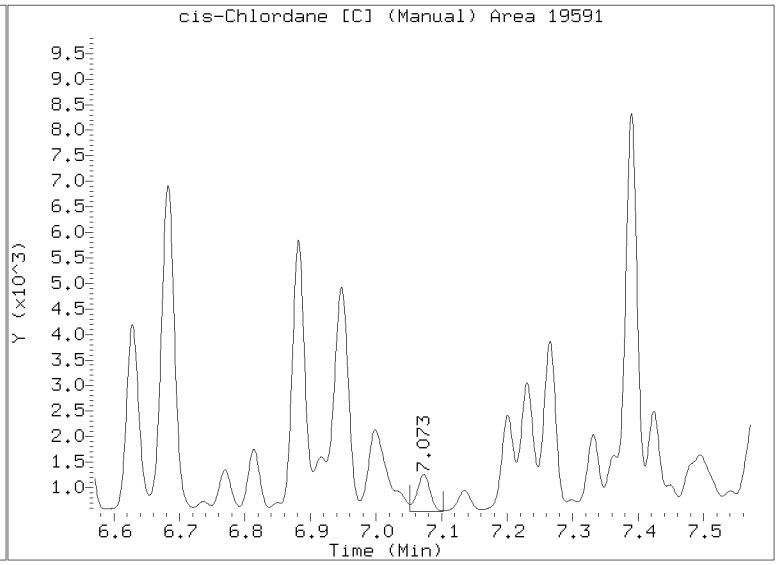

Manual Peak Adjustment Report, CLP-2

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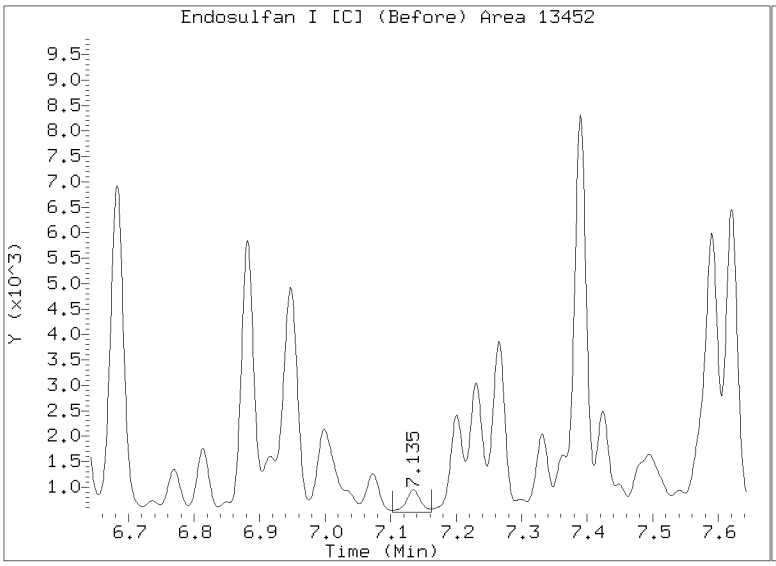

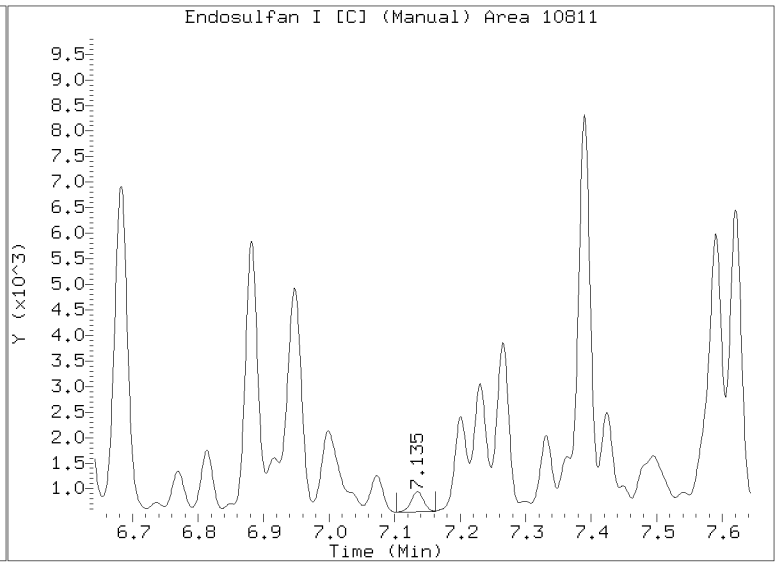

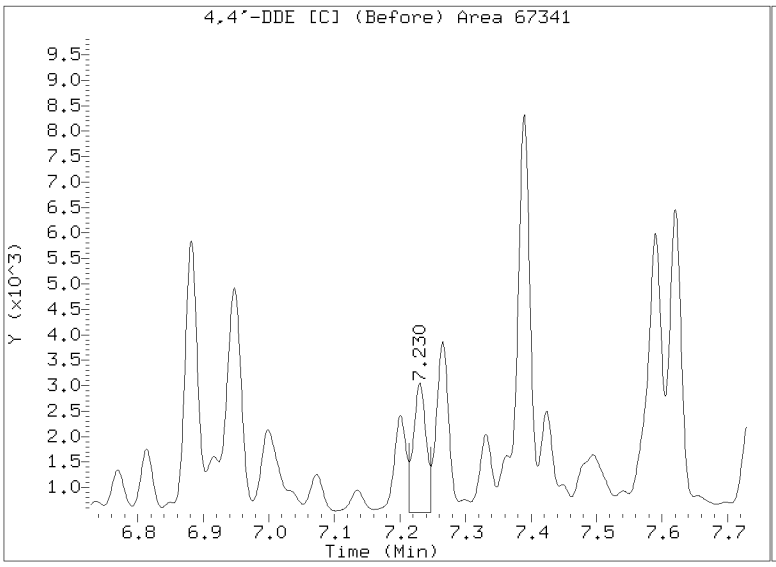

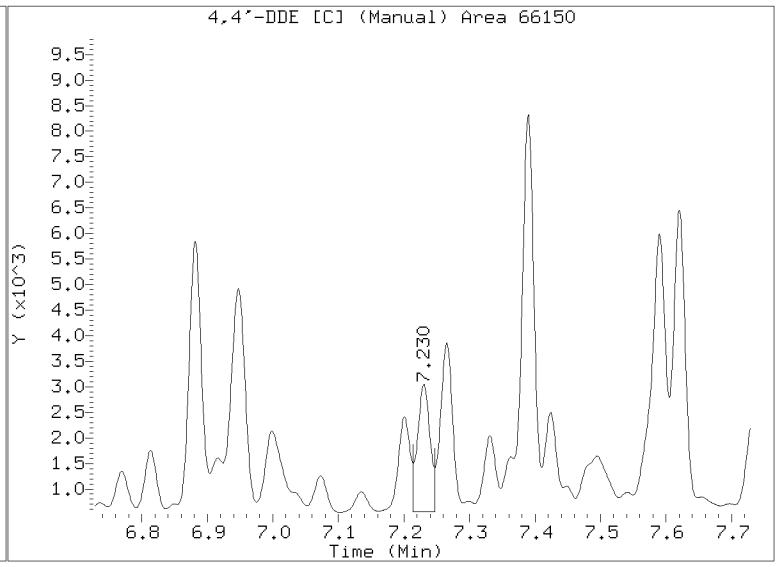

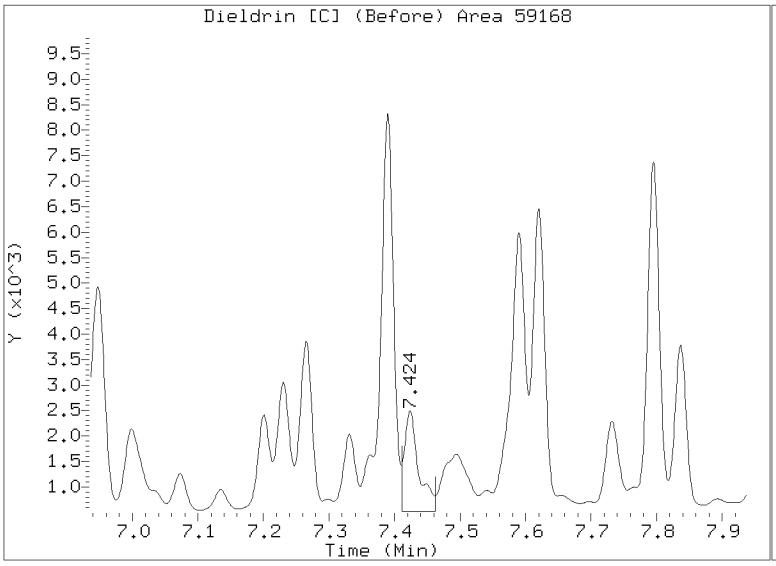

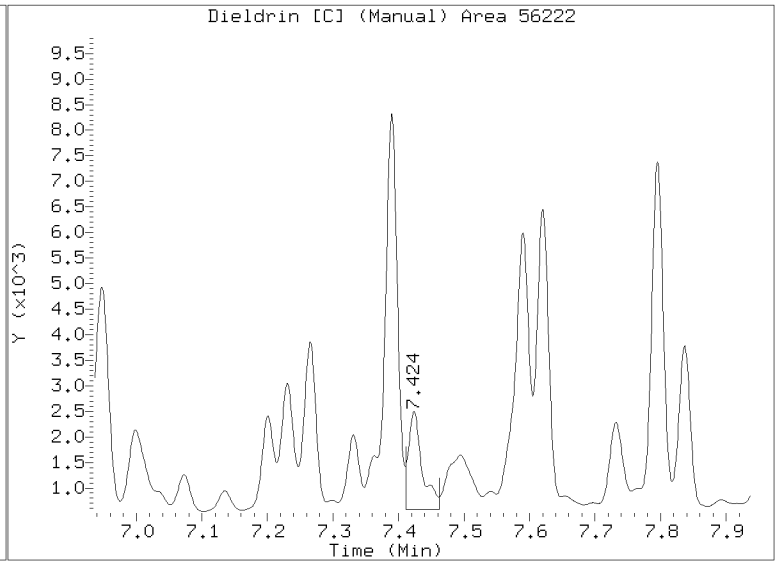

Manual Peak Adjustment Report, CLP-2

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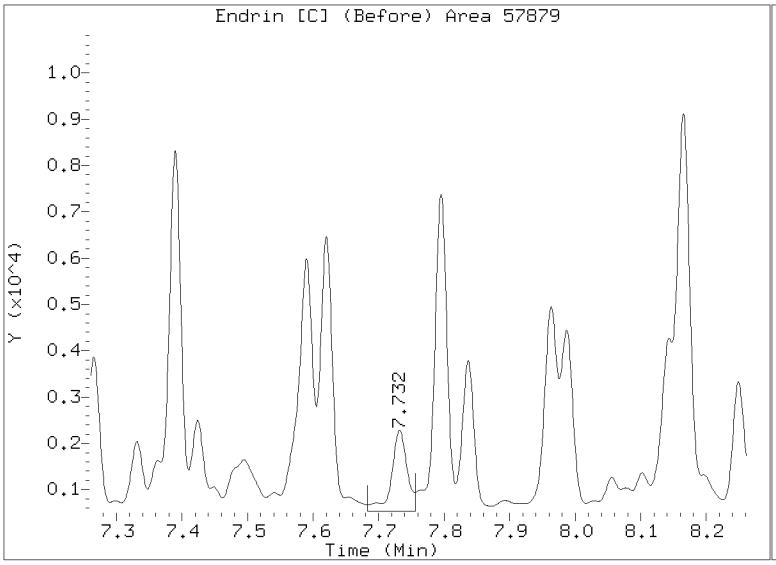

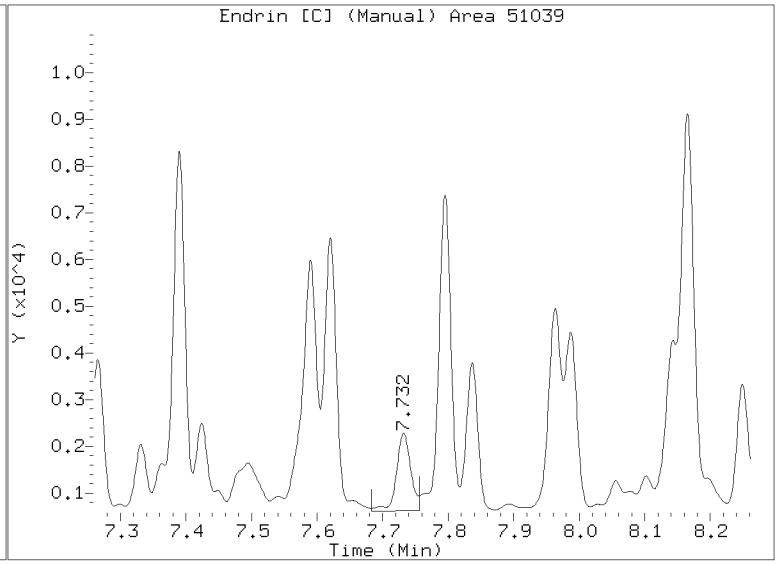

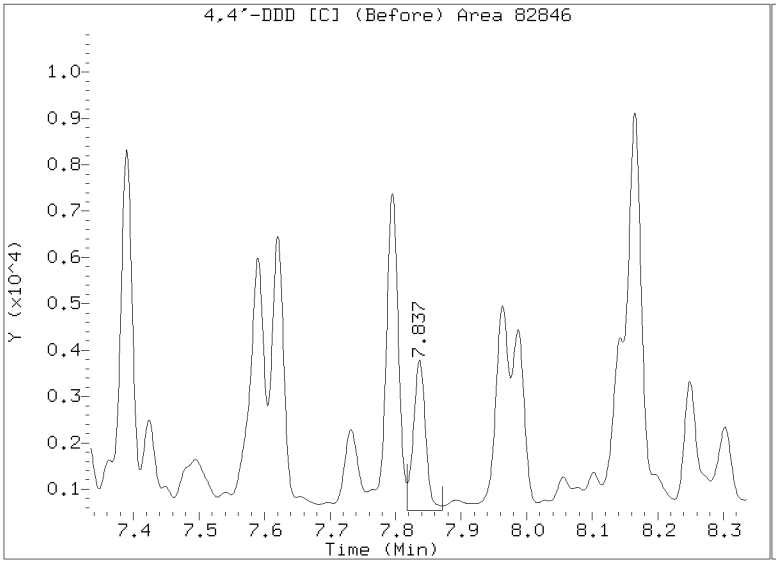

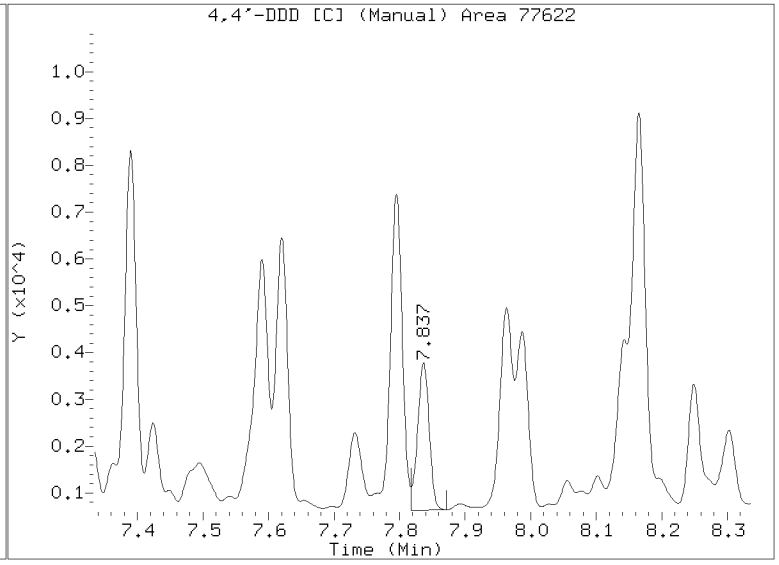

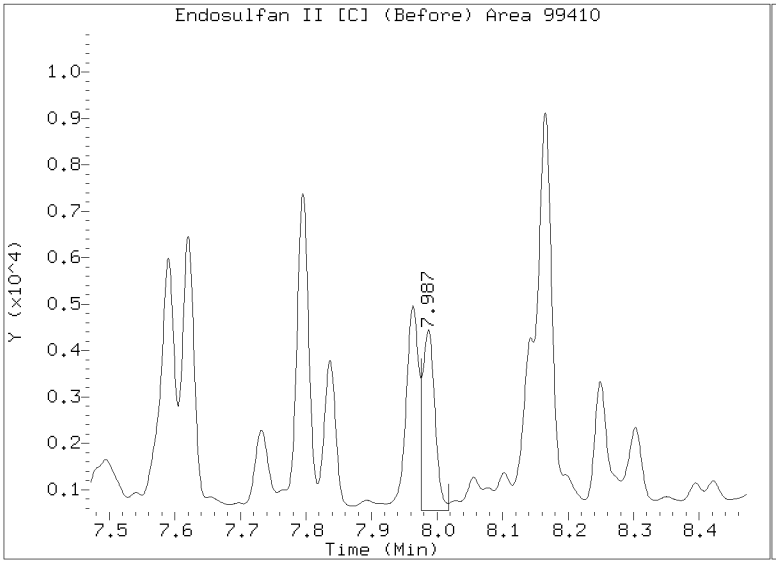

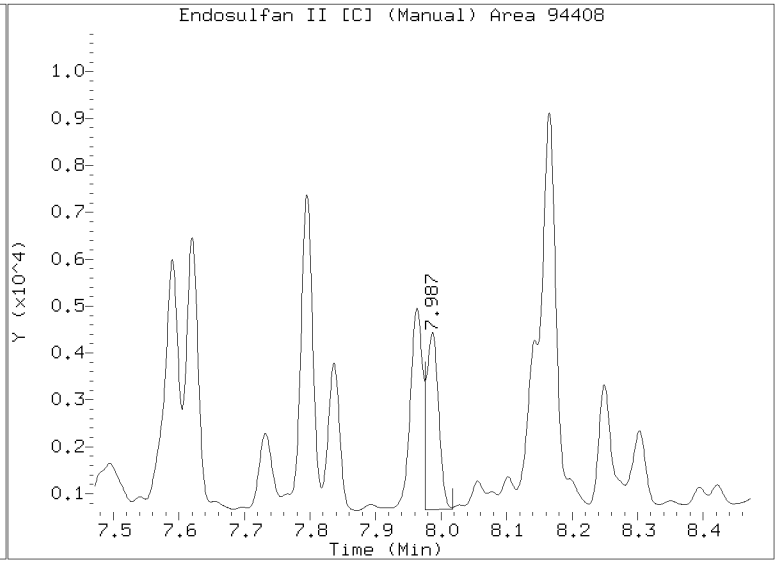

Manual Peak Adjustment Report, CLP-2

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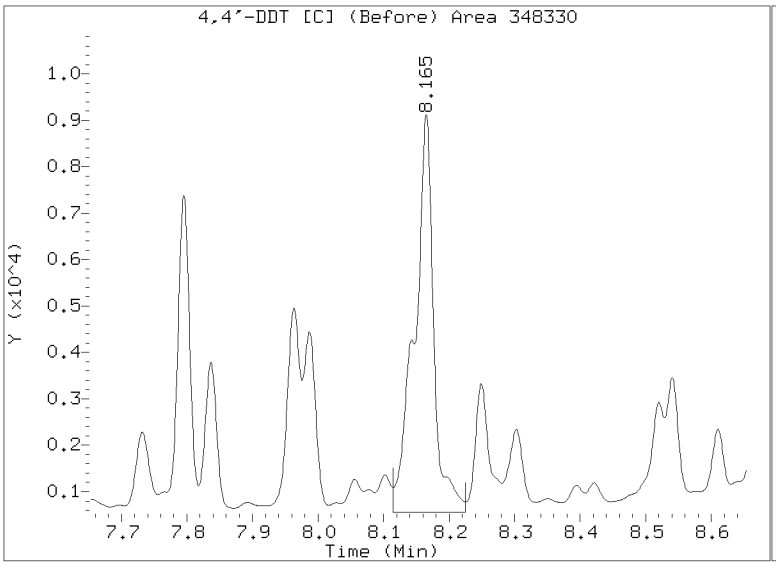

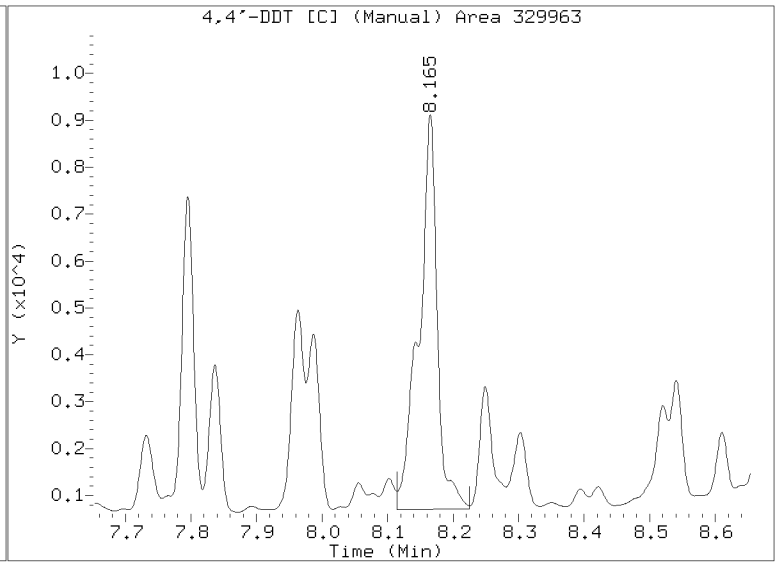

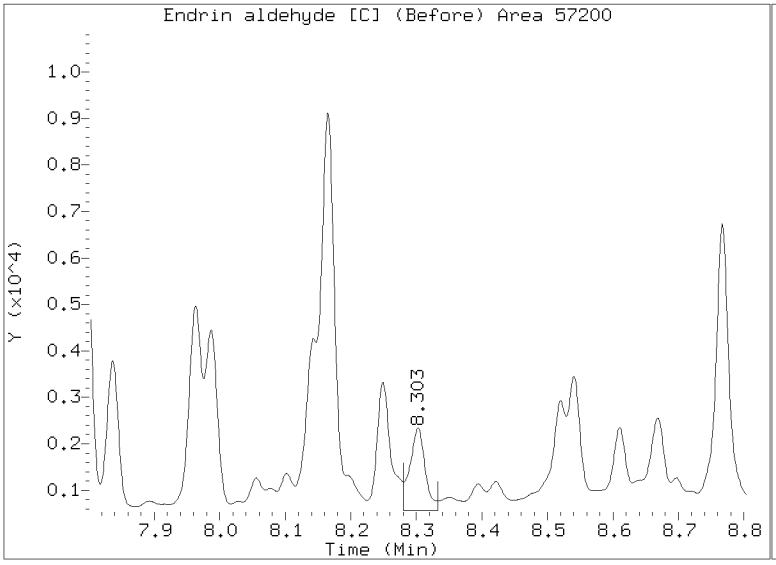

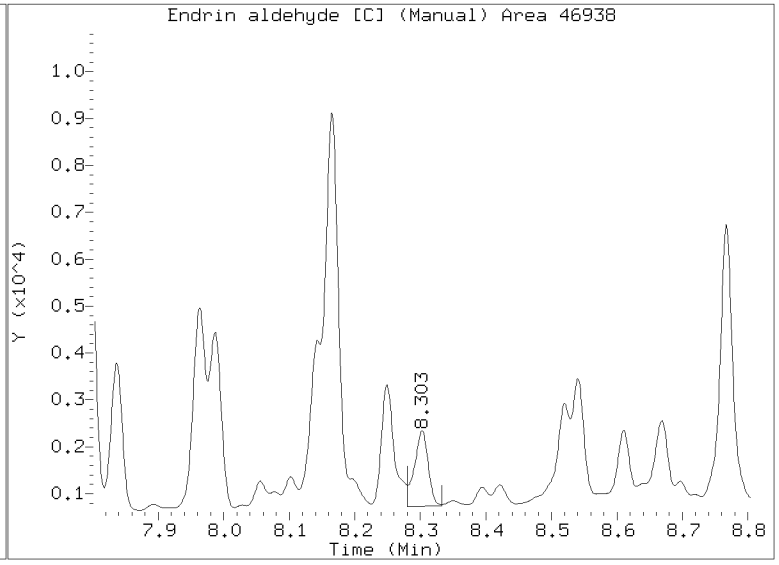

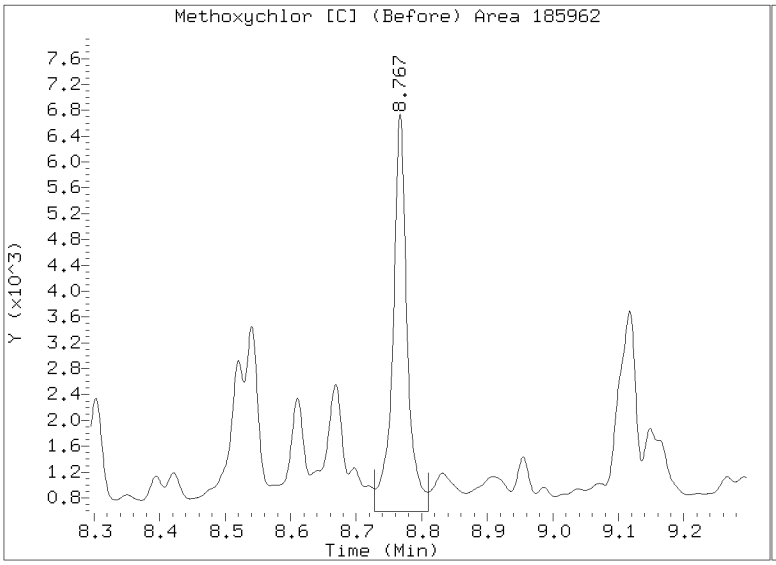

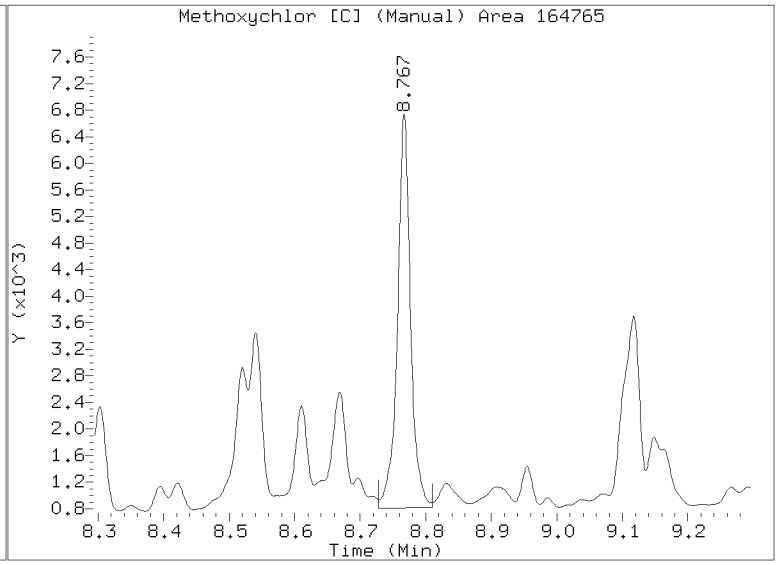

Manual Peak Adjustment Report, CLP-2

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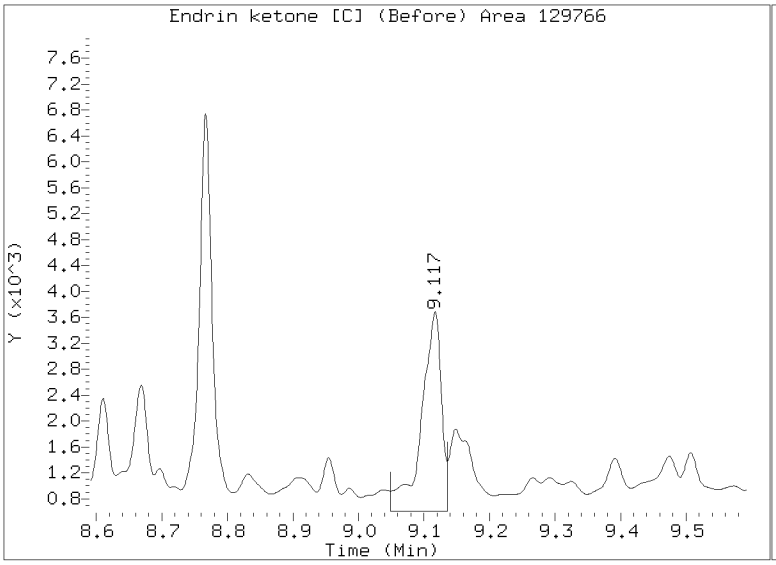

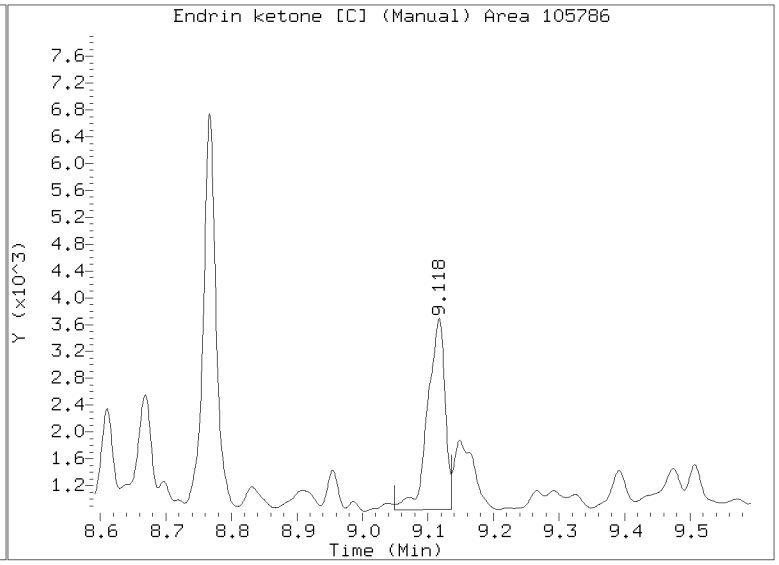

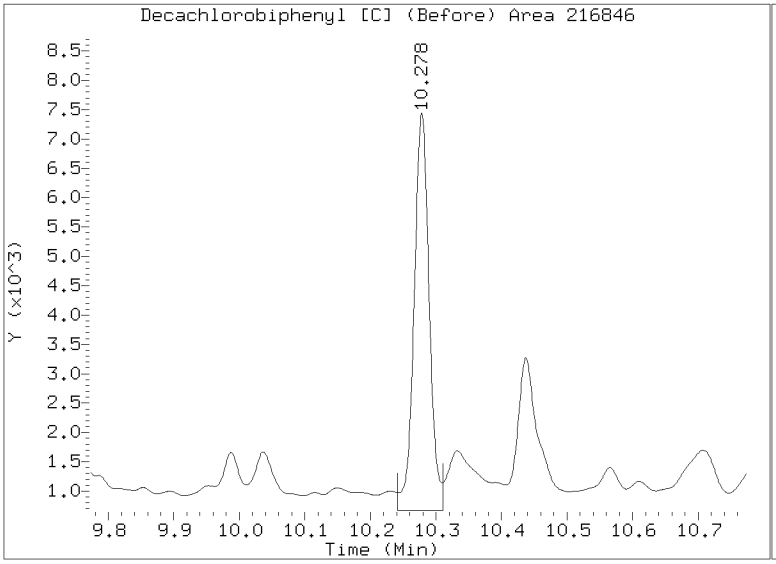

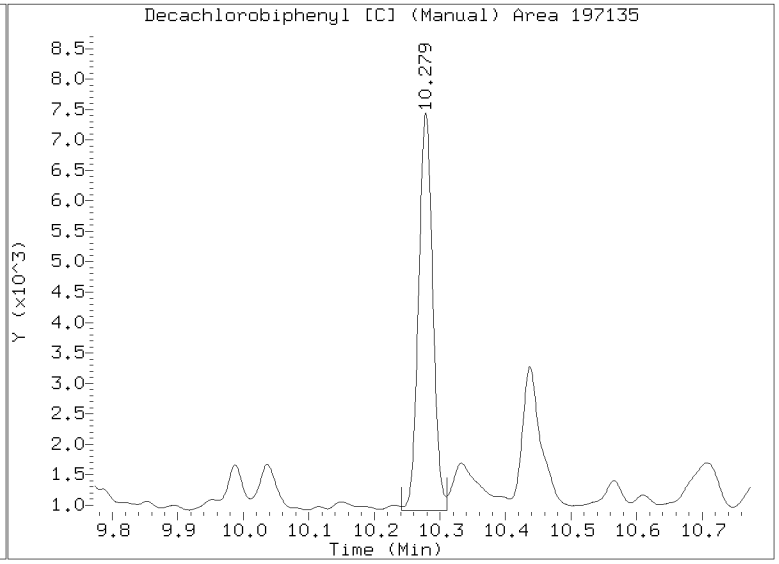

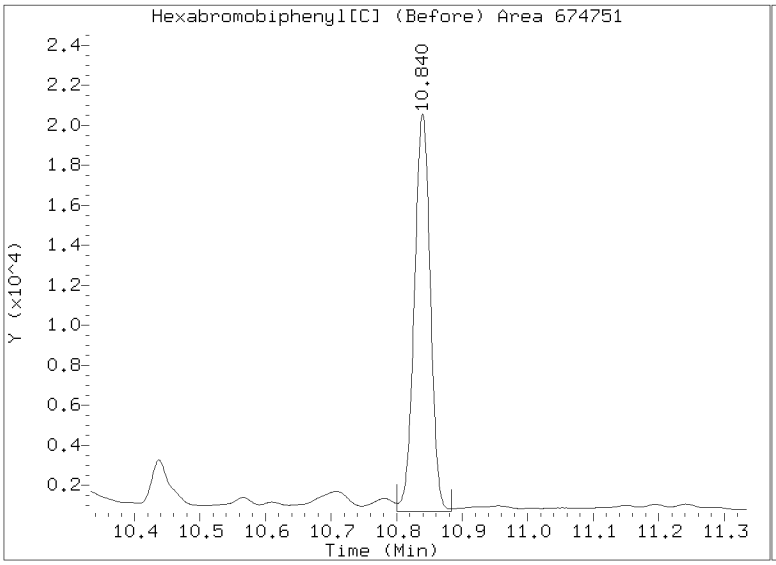

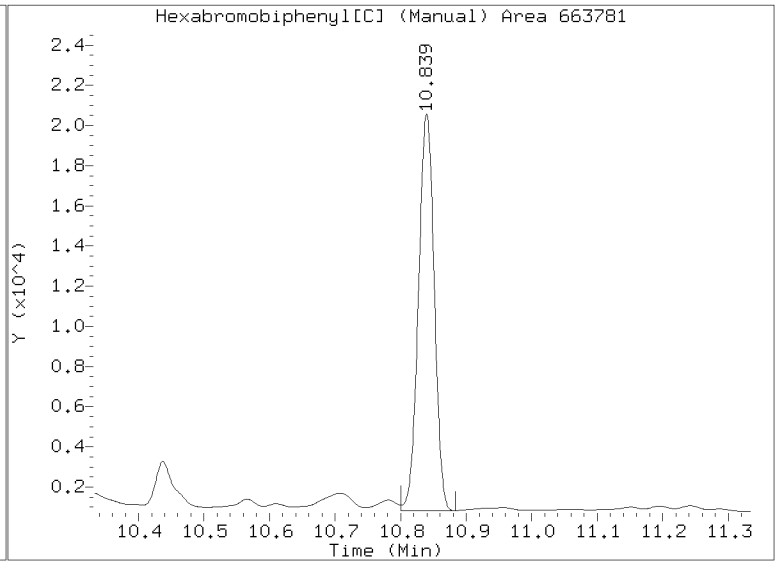

PREPARATION BATCH SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0606 Batch Matrix: Solid
Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	23051316.D	04/25/23 11:56	
LDW23-SS1802	23D0396-03	23051317.D	04/25/23 11:56	
Blank	BLD0606-BLK1	23051304.D	04/25/23 11:56	
LCS	BLD0606-BS1	23051305.D	04/25/23 11:56	
LCS Dup	BLD0606-BSD1	23051306.D	04/25/23 11:56	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0606

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

Matrix: Solid **Date Prepared:** 04/25/23 **Balance ID:** B146462614 **Set Up By:** CRD 4/21/23

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)
23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
62	Toxaphene
44	WND
QLS 10	QLS Spike

Analysis: 8081B Pest (PSDDA)

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) 1 (2) 3	(Yes / No) Acid Clean 5mL	(REQ) Sulfur C/U ~~4.5mL+0.5~~ 5 mL ~~Ethyl~~ Acetate	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23D0394-01 A	46.4	(26.96)	26.96	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23D0394-02 A	76.2	(16.41)	16.47	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23D0394-04 A	76.8	(16.28)	16.31	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23D0394-06 A	90.3	(13.84)	13.85	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23D0394-08 A	78.3	(15.96)	15.97	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23D0394-11 A	77.4	(16.15)	16.16	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23D0394-12 A	80.4	(15.55)	15.61	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23D0396-01 A	43.0	(29.06)	29.08	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
23D0396-03 A	43.9	(28.49)	28.53	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Actual	(REQ) GPC (1:1) 1 (2) 3	(Yes / No) Acid Clean 5mL	(REQ) Sulfur C/U ~~4.5mL+0.5~~ 5 mL ~~Ethyl~~ Acetate	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLD0606-BLK1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLD0606-BS1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLD0606-BSD1	100.0	(12.50)	12.50	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	
BLD0606-MS1	76.2	(16.41)	16.47	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23D0394-02
BLD0606-MSD1	76.2	(16.41)	16.47	(1:1)	5mL	5mL	(2:5) 2mL	2.5	1.0	Use 23D0394-02

04/25/23 — Client ID verified By — Date

05/12/23 — Preparation Reviewed By — Date

04/25/23 11:56 — Extraction Date and Time

Printed: 4/21/2023 11:59:15AM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0606

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 2 3
Analyst/Date: 04/25/23

Pre GPC KD
100°C
(No Exchange)
0 3 4 5 6
LJ 4/26/23
Analyst/Date

TurboVap
Pre GPC
1 2 3 4 5
CR 5/9/23
Analyst/Date

Post GPC KD
80 - 85°C
Hexane Exchange
(2 X 20 mL)
100°C
2 1 2 3 4 5 6
CR 5/11/23
Analyst/Date

TurboVap
Pre-Cleanups
1 2 3 4 5
TWC 5/12/23
Analyst/Date

TurboVap
Post-Cleanups
1 2 3 4 5
05/12/23
05/12/23
Analyst/Date

Vialing

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: V/CT Date: 04/25/23	
Hexane	L004957
80:20 Hexane/Acetone	L004246
1:1 Hexane/Acetone	L004177
Neutral Glass Wool	L002437
Anhydrous Sodium Sulfate	L003875
Pre GPC KD Analyst: LJ Date: 4/26/23	
Hexane	L003500
Anhydrous Sodium Sulfate	05/12/23 L3657
Neutral Glass Wool	~~L3336~~
GPC Filter Prep Analyst: AK Date: 5/8/23	
Methylene Chloride	L004175
GPC Filter	L001799
GPC Analyst: CR Date: 5/9/23	
Methylene Chloride	L004175
GPC Calibration File	CLB132
Post GPC KD Analyst: CR Date: 5/11/23	
Methylene Chloride	L004175
Hexane	L003500
Vialing Analyst: Date: 05/12/23	
Hexane	L3500
Sulfuric Acid	L1033
Ethyl Acetate	N/A
Tetrabutylammonium hydrogensulfate (TBAS)	~~3025~~ 3024 05/12/23
Sodium Sulfite	L2437

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID		Vol uL	Analyst	Witness
Surrogate 2µg/mL	N Exp Date: 7/21/2023	L003667	50µL	CT	V
Spike (Freezer) 0.5/1/5µg/mL	3 Exp Date: 10/5/2023	L003590	100µL	CT	V

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0606

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

Analyst/Date	Silica Gel (SPE) Darts	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0606

Prepared using: EPA 3546 (Microwave)

8081B Pest (PSDDA) in Solid (Version:HCB Only)

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <B>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

Prep Instructions	
SPECIAL INSTRUCTIONS: 1. Weigh into beakers-lightly dry with Sodium Sulfate. 2. Transfer to microwave vessels. 3. Add 1:1 Hex/ACE to the vessels (until solvent is 3" above soil layer after homogenization). 4. Add surr/spike. 5. Microwave on appropriate power setting determined by # of samples. 6. After microwave-re-homogenize while hot then let cool 15 min in cold water. Re-homogenize while cool. 7. Decant 1:1 Hex/ACE into Erlenmeyer flask using a funnel containing neutral glasswool. 8. Rinse with Hexane. 9. Microwave a 2nd time using 8:2 Hex/Ace (until solvent is 3" above soil layer after homogenization). 10. Let cool and decant the solvent then empty the soil into the funnel and rinse with Hexane. 11. KD to 5mL at 100°C. (NO HEXANE EXCHANGE). 12. TurboVap 13. GPC 14. After GPC: KD at 80 - 85°C 15. Exchange to Hexane at 100°C 2 x 20 mL). 16. TurboVap. 17. Cleanups, If Acid cleaning do not add Ethyl Acetate for Sulfur Clean. Do Not Acid Clean if Acid liable compounds are requested. 18. Vial in Hexane. A. Need Total Solids Y / (N) B. Archive/Freeze Y / N ☐	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PEST Extraction Batch: BLD0606

Total Solids Batch: BLD0431 Work Order(s): 23D0394

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
[X] No Anomalies (standard soil/wet sediment/sand/gravel)= 01-13	CR 4/18/23
[X] Standing Water Decanted (Not shared)= 01-05, 07-13	CR 4/18/23
[ ] Standing Water Homogenized (Shared samples)=	
[ ] Clay/Clumps (Difficult to homogenize)=	
[ ] Rocks (%+size)?	
[ ] Organics (Leaves/sticks/grass)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Received in 32oz jar(s)=Homogenized in Pyrex dish=	
[X] Previously Frozen = 01-13	CR 4/18/23
[ ] Other (Details)=	
Aqueous:	
[ ] No Anomalies	
[ ] Turbid/Color=	
[ ] Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
[ ] Emulsions (%)=	
[ ] Oily, obvious fuel/sulfur odors=	
[ ] Other (Details)=	
[ ] Received in 1.0L Bottle(s)=No Bottle Rinse=	
[ ] Other Notes/Comments= (Note problems, concerns, corrective actions).	
[X] Share Samples Y / (N)	CR 4/18/23
[X] Multiple Jars Y / (N)	CR 4/18/23
[ ] Sample Pre-Screens indicate analyte activity=	
[ ] Sample weights/volumes reduced based on Pre-Screen=	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Organic Extractions Laboratory Analyst Notes

Extraction Parameter: PEST Extraction Batch BLD060C

Total Solids Batch: BLD0432 Work Order(s): 23D0396

Screens: Soil/Sediment/Solid/Other:	Analyst/Date
☒ No Anomalies (standard soil/wet sediment/sand/gravel)= 01-04	CR 4/18/23
☐ Standing Water Decanted (Not shared)=	
☐ Standing Water Homogenized (Shared samples)=	
☐ Clay/Clumps (Difficult to homogenize)=	
☐ Rocks (%+size)?	
☐ Organics (Leaves/sticks/grass)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Received in 32oz jar(s)=Homogenized in Pyrex dish=	
☒ Previously Frozen = 01-04	CR 4/18/23
☐ Other (Details)=	
Aqueous:	
☐ No Anomalies	
☐ Turbid/Color=	
☐ Particulates(%)=(Note: >5%=Notify Supervisor/Lead)	
☐ Emulsions (%)=	
☐ Oily, obvious fuel/sulfur odors=	
☐ Other (Details)=	
☐ Received in 1.0L Bottle(s)=No Bottle Rinse=	
☐ Other Notes/Comments= (Note problems, concerns, corrective actions).	
☒ Share Samples Y / (N)	CR 4/18/23
☒ Multiple Jars Y / (N)	CR 4/18/23
☐ Sample Pre-Screens indicate analyte activity=	
☐ Sample weights/volumes reduced based on Pre-Screen=	

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

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Method File:E:\GPC2_InHouse.mtd

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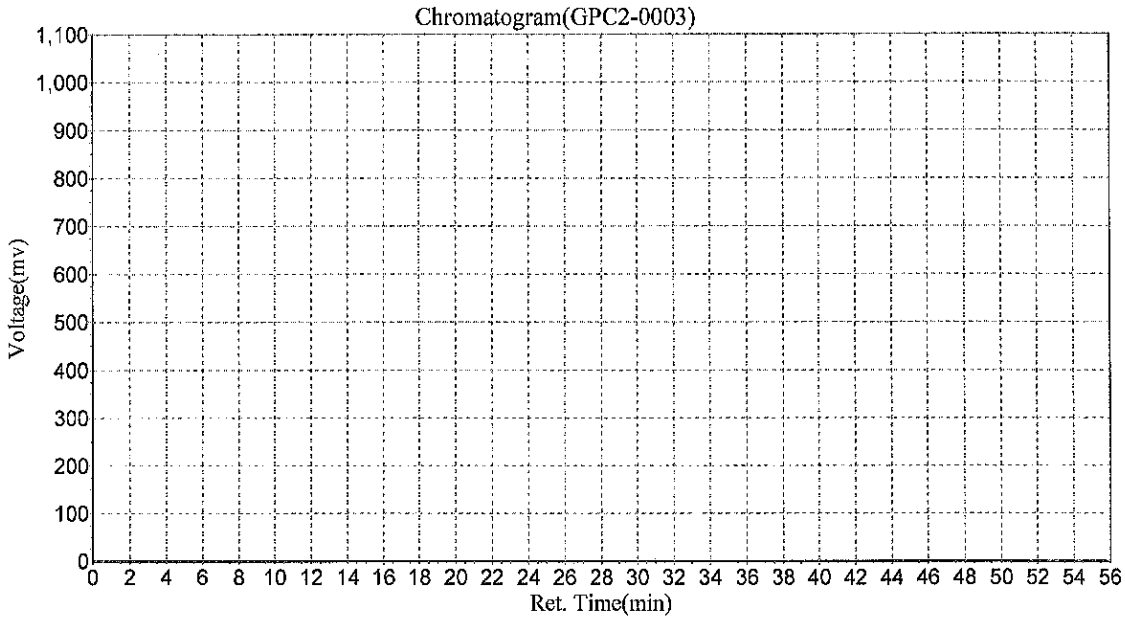
Date/Time2023-05-09,2:00:07 PM



Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-09,2:57:48 PM
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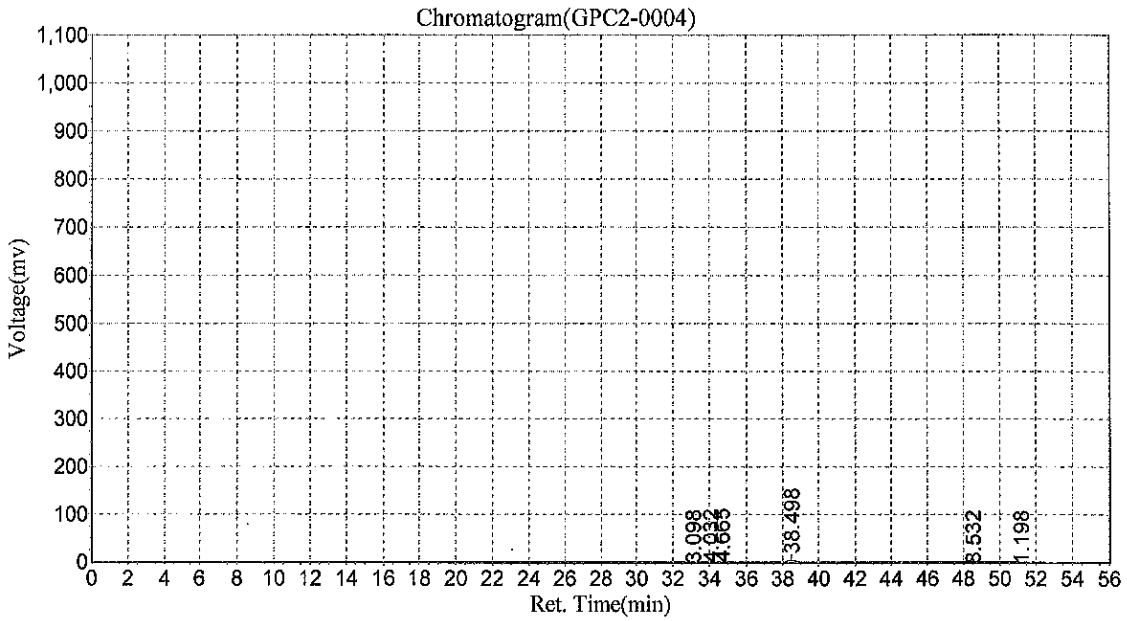

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		33.098	3646.571	185069.047	1.8852
2		34.032	4077.758	104444.461	1.0639
3		34.665	5667.100	204792.313	2.0861
4		38.498	46662.797	9083747.000	92.5318
5		48.532	1426.308	124259.641	1.2658
6		51.198	1533.103	114581.891	1.1672
Total			63013.636	9816894.352	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

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Method File:E:\GPC2_InHouse.mtd

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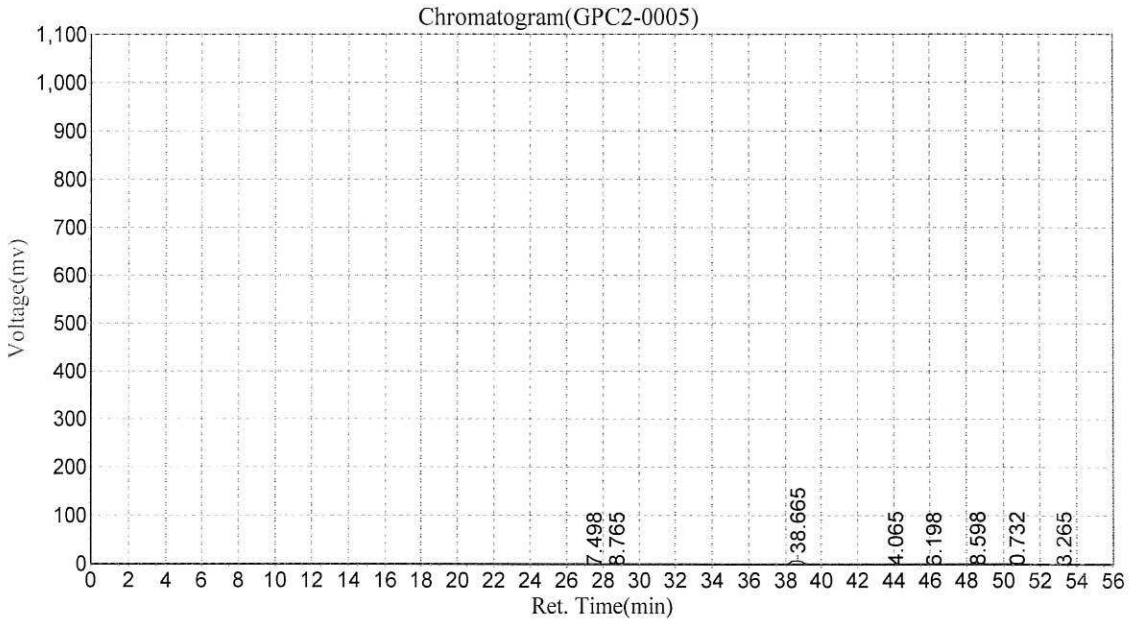
Date/Time2023-05-09,3:55:33 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		27.498	2423.213	118877.695	0.8775
2		28.765	2671.962	146220.359	1.0793
3		38.665	52837.691	12293811.000	90.7421
4		44.065	2352.436	235049.766	1.7349
5		46.198	1950.889	121026.570	0.8933
6		48.598	2254.775	292197.125	2.1567
7		50.732	2479.229	235767.875	1.7402
8		53.265	1823.330	105130.445	0.7760
Total			68793.525	13548080.836	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

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Analyst£°CTO
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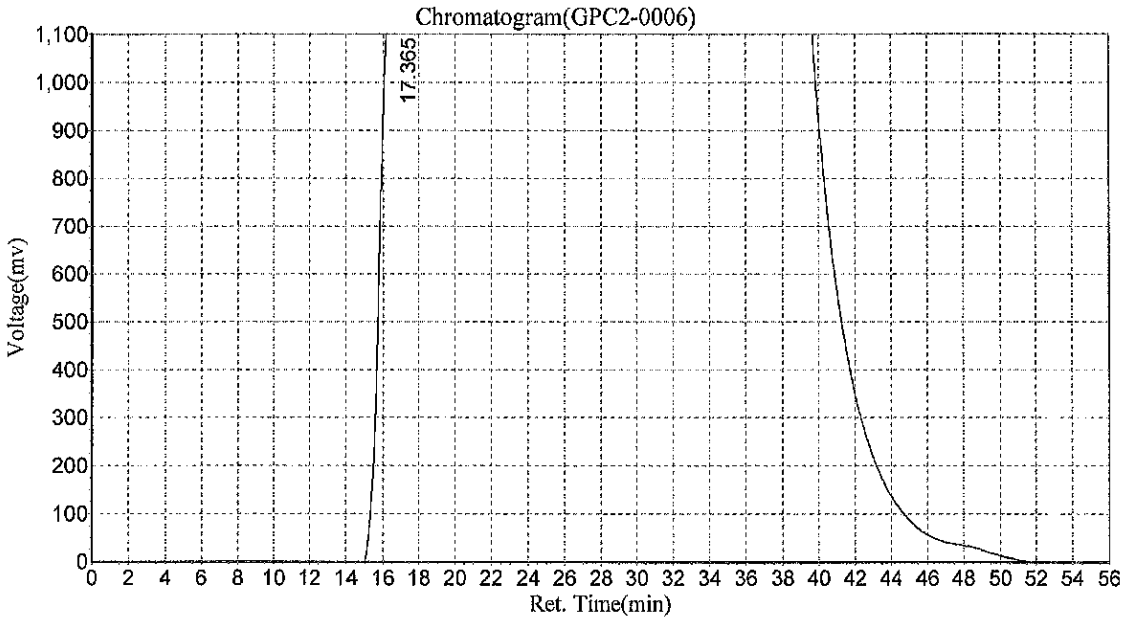

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	1292387.875	1956088960.000	100.0000
Total			1292387.875	1956088960.000	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

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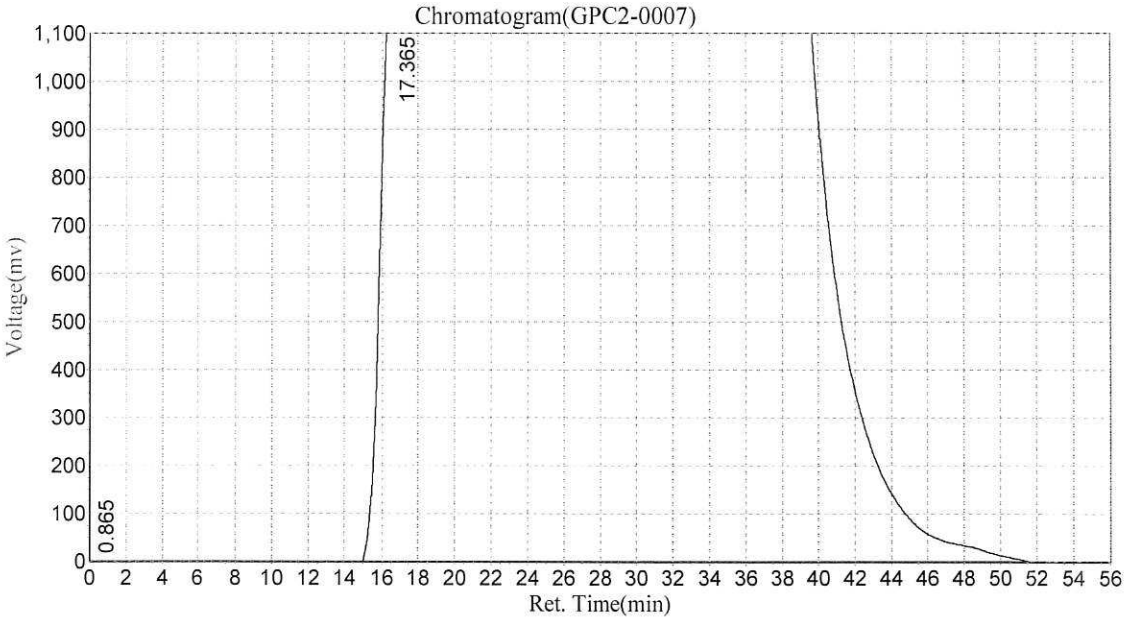
Analyst£°CTO
Date/Time2023-05-09,5:50:58 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.865	2240.688	127553.820	0.0065
2		17.365	1278426.625	1969615104.000	99.9935
Total			1280667.313	1969742657.820	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-09,6:48:38 PM
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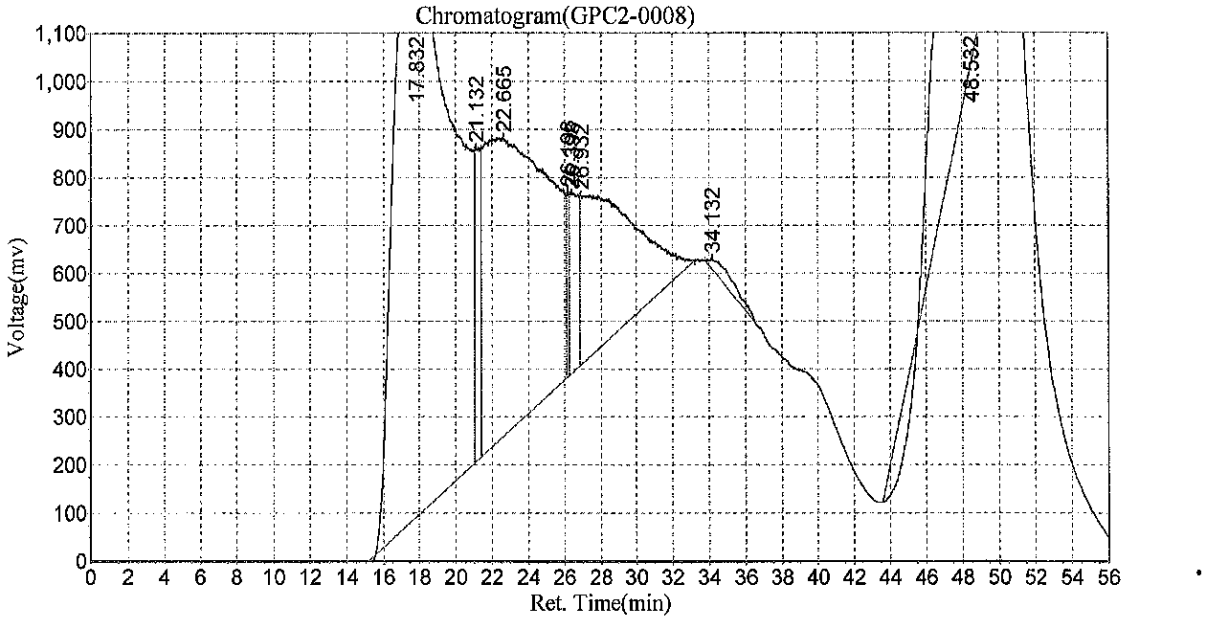
Analyst£ºCTO
Date/Time2023-05-09,6:48:38 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	1163062.125	270537408.000	46.2195
2		21.132	653181.063	12976774.000	2.2170
3		22.665	621836.500	153199776.000	26.1732
4		26.198	382309.469	3056564.250	0.5222
5		26.398	375332.844	13241696.000	2.2623
6		26.932	356126.438	68359024.000	11.6787
7		34.132	18021.533	3238852.500	0.5533
8		48.532	221694.500	60721120.000	10.3738
Total			3791564.471	585331214.750	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-09,7:46:22 PM
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Method File:E:\GPC2_InHouse.mtd

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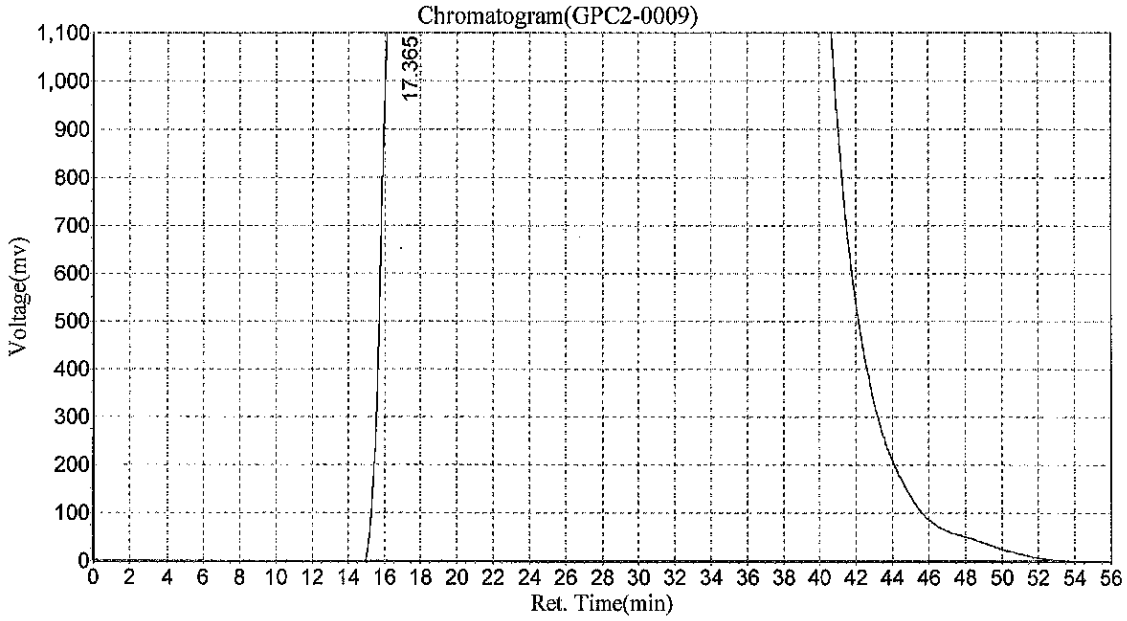
Date/Time2023-05-09,7:46:22 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	1282038.625	2036482688.000	100.0000
Total			1282038.625	2036482688.000	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-09,8:44:04 PM
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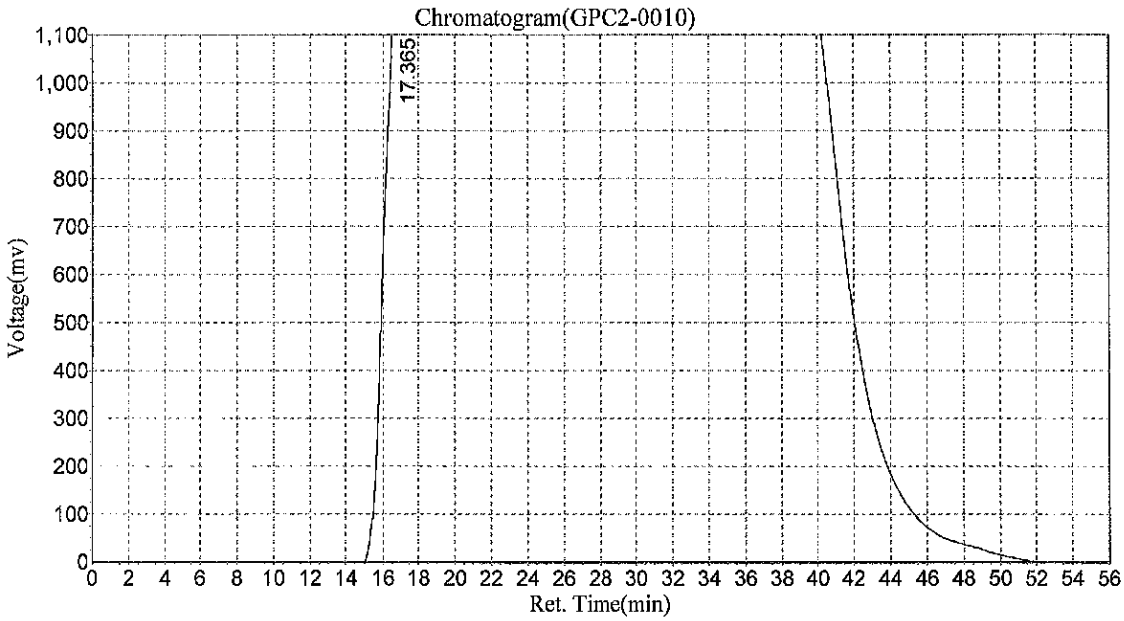
Date/Time2023-05-09,8:44:04 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.365	1272844.875	1998246400.000	100.0000
Total			1272844.875	1998246400.000	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-09,9:41:47 PM
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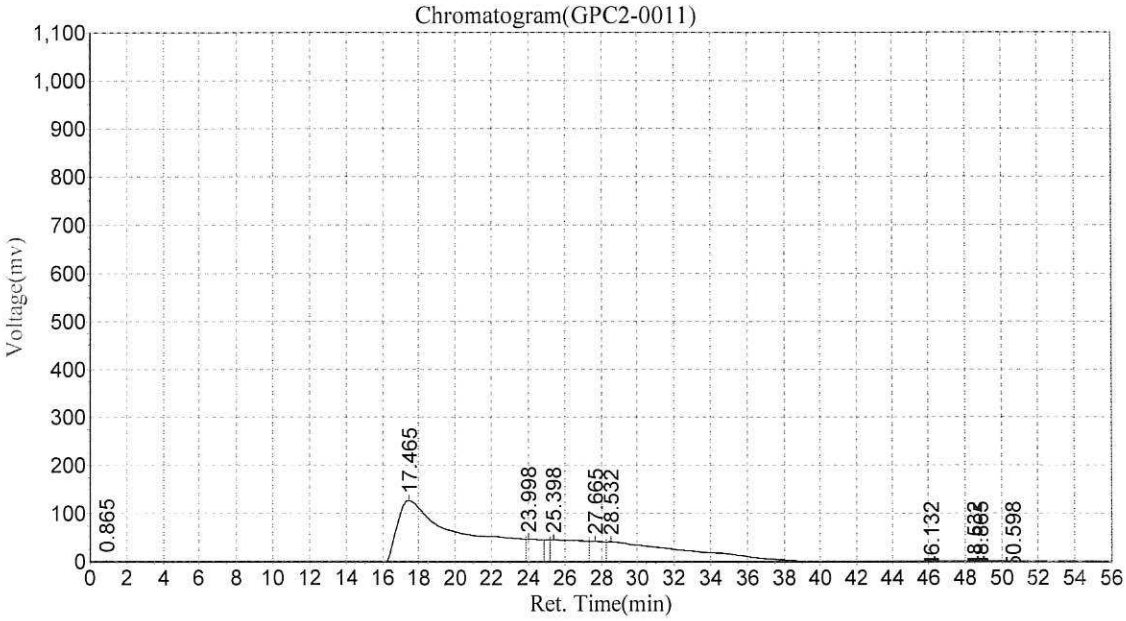
Method File:E:\GPC2_InHouse.mtd

Analyst£°CTO
Date/Time2023-05-09,9:41:48 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		0.865	2448.325	187757.031	0.1978
2		17.465	150049.125	42203876.000	44.4613
3	Collect BAN	23.998	70788.344	4214752.500	4.4402
4		25.398	69841.961	8773068.000	9.2423
5		27.665	67600.914	3749772.750	3.9503
6		28.532	66692.250	35172904.000	37.0542
7		46.132	2519.600	170954.484	0.1801
8		48.532	3209.375	102681.250	0.1082
9		48.865	2959.427	171383.984	0.1806
10		50.598	2352.098	175632.984	0.1850
Total			438461.419	94922782.984	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-09,10:39:29 PM
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Method File:E:\GPC2_InHouse.mtd

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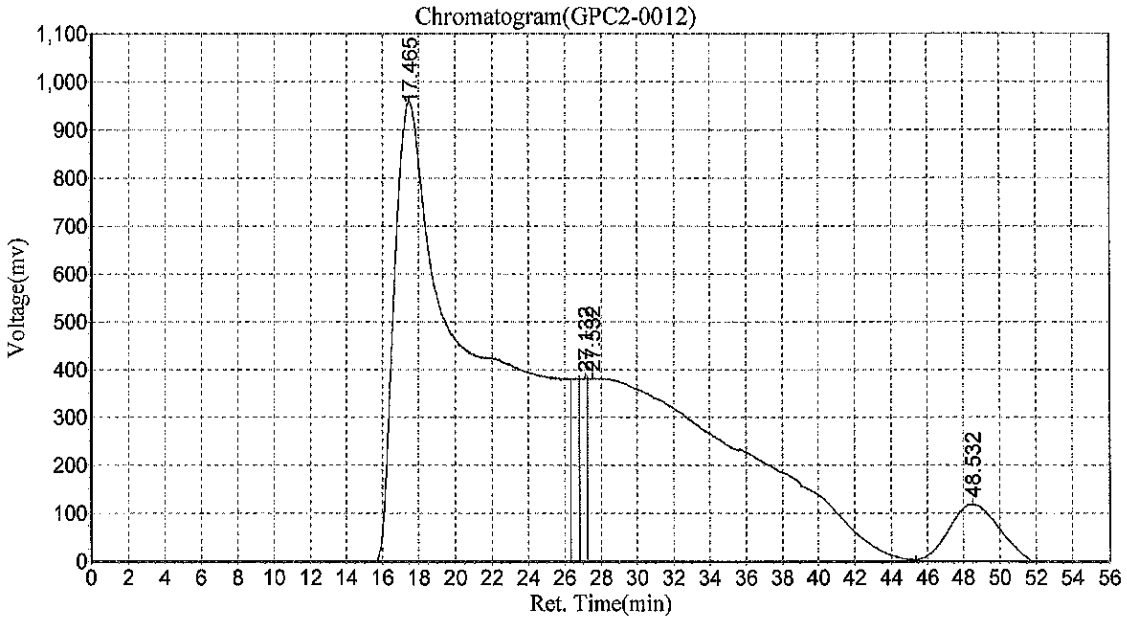

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.465	992388.438	325540416.000	51.6830
2		27.132	410535.000	11475483.000	1.8219
3		27.532	411267.750	258042448.000	40.9670
4		48.532	144131.719	34821008.000	5.5282
Total			1958322.906	629879355.000	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-10,1:47:45 PM
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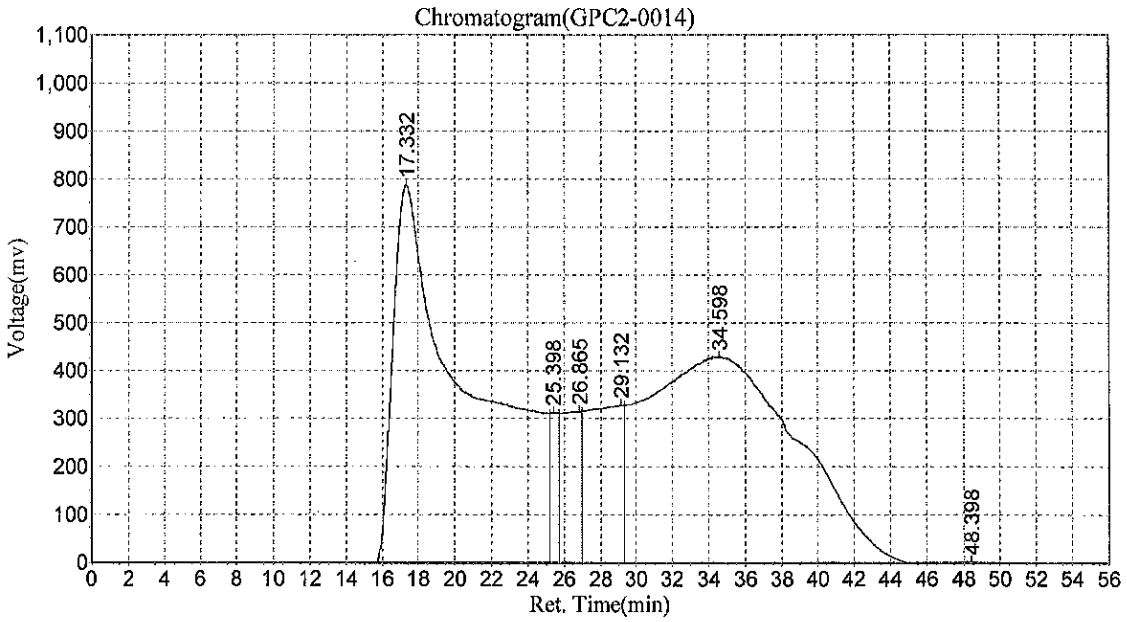
Date/Time2023-05-10,1:47:46 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.332	818565.625	246446240.000	39.6160
2		25.398	343675.438	10987068.000	1.7662
3		26.865	346251.688	26185908.000	4.2094
4		29.132	360511.531	49473236.000	7.9528
5		34.598	460220.719	280427680.000	45.0785
6		48.398	33572.633	8566798.000	1.3771
Total			2362797.633	622086930.000	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-10,2:45:29 PM
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Method File:E:\GPC2_InHouse.mtd

Analyst£ºCTO
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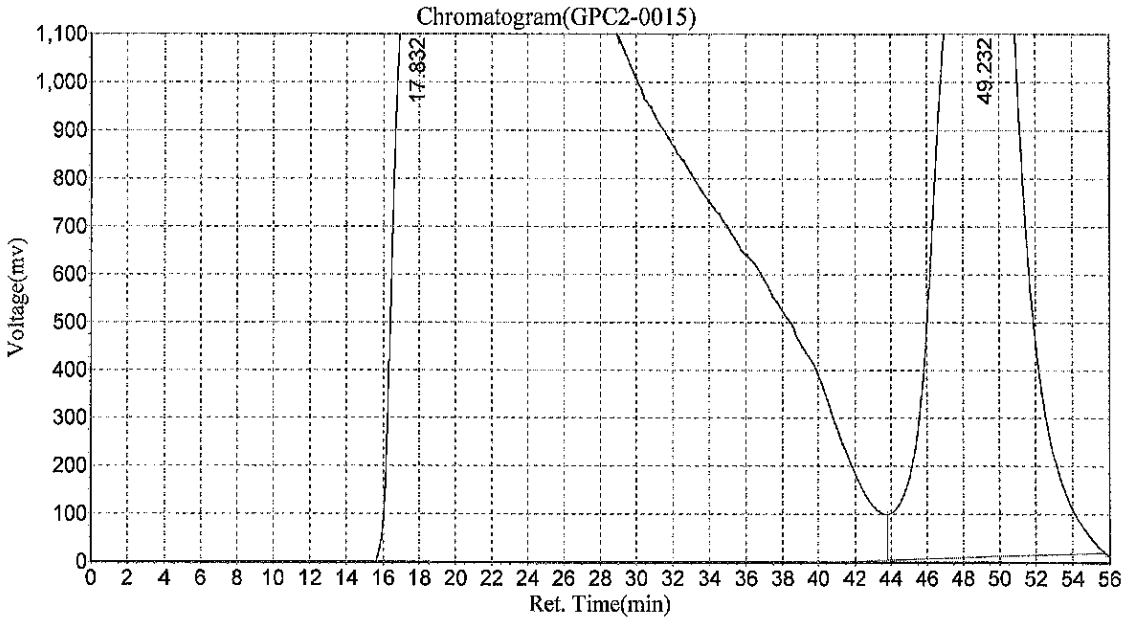

Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	1281607.875	1466659584.000	77.0817
2		49.232	1238442.375	436074592.000	22.9183
Total			2520050.250	1902734176.000	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-10,3:43:10 PM
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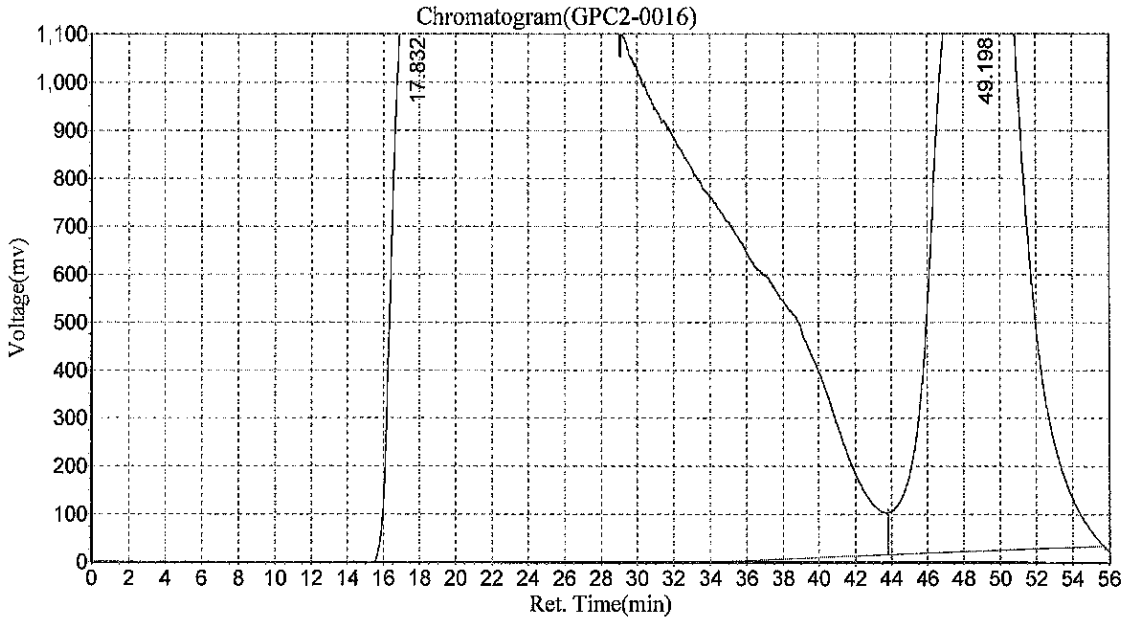
Method File:E:\GPC2_InHouse.mtd

Analyst£°CTO
Date/Time2023-05-10,3:43:11 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		17.832	1279264.500	1474341120.000	77.0639
2		49.198	1227167.875	438799584.000	22.9361
Total			2506432.375	1913140704.000	100.000

Ingredient Table

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

BLD0176/606/616 23E0100/D394/396/457 SVOA/PEST/SIM

Date:2023-05-10,4:40:53 PM
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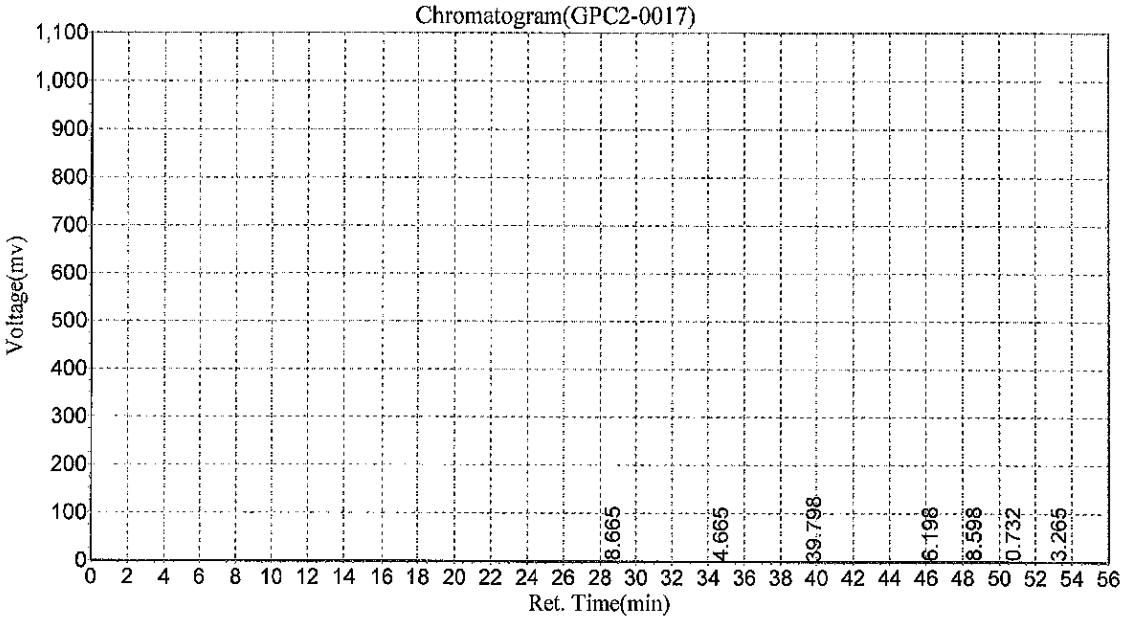
Method File:E:\GPC2_InHouse.mtd

Analyst£°CTO
Date/Time2023-05-10,4:40:54 PM



Results

Peak No.	Peak ID	Ret Time	Height	Area	Conc
1		28.665	1833.803	101611.023	1.3457
2		34.665	2610.052	163277.984	2.1625
3		39.798	25555.131	6421017.500	85.0403
4		46.198	2342.400	154326.078	2.0439
5		48.598	2520.126	315062.531	4.1727
6		50.732	2537.549	253040.234	3.3513
7		53.265	1857.926	142221.984	1.8836
Total			39256.985	7550557.336	100.000

Ingredient Table

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

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0141	Cleanup Type:	GPC
Cleanup Method:	EPA 3640A GPC Cleanup 1:1	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	23051316.D	05/12/2023	
Blank	BLD0606-BLK1	23051304.D	05/12/2023	
LCS	BLD0606-BS1	23051305.D	05/12/2023	
LCS Dup	BLD0606-BSD1	23051306.D	05/12/2023	
LDW23-SS1802	23D0396-03	23051317.D	05/12/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0142	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	23051316.D	05/12/2023	
Blank	BLD0606-BLK1	23051304.D	05/12/2023	
LCS Dup	BLD0606-BSD1	23051306.D	05/12/2023	
LCS	BLD0606-BS1	23051305.D	05/12/2023	
LDW23-SS1802	23D0396-03	23051317.D	05/12/2023	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0143	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLD0606-BSD1	23051306.D	05/12/2023	
Blank	BLD0606-BLK1	23051304.D	05/12/2023	
LCS	BLD0606-BS1	23051305.D	05/12/2023	
LDW23-SS1802	23D0396-03	23051317.D	05/12/2023	
LDW23-SS1801	23D0396-01	23051316.D	05/12/2023	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0144	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8081B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLD0606-BSD1	23051306.D	05/12/2023	
Blank	BLD0606-BLK1	23051304.D	05/12/2023	
LCS	BLD0606-BS1	23051305.D	05/12/2023	
LDW23-SS1801	23D0396-01	23051316.D	05/12/2023	
LDW23-SS1802	23D0396-03	23051317.D	05/12/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8081B

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLD0606-BLK1	File ID:	23051304.D
Sampled:	N/A	Prepared:	04/25/23 11:56	Analyzed:	05/13/23 16:30
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLD0606	Sequence:	SLE0423	Calibration:	GD00035
Instrument:	ECD6	Column:	STX-CLP	Cleanups:	GPC, Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
118-74-1	Hexachlorobenzene	1	0.20	J	0.15	0.50

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	4.91	61.4	30 - 160	
Decachlorobiphenyl [2C]	8.0000	5.23	65.4	30 - 160	
Tetrachlorometaxylene	8.0000	4.65	58.1	30 - 160	
Tetrachlorometaxylene [2C]	8.0000	4.61	57.6	30 - 160	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230513.b/23051304.D
Data file 2: /20230513.b/B20230513.b/23051304.D
Method: \20230513.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: BLD0606-BLK1
Client ID:
Injection Date: 13-MAY-2023 16:30
Report Date: 05/25/2023 19:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.309	-0.002	24364	----			1.30	0.00	---	alpha-BHC
----			----			0.00	0.00	---	beta-BHC
4.880	0.002	8026	----			0.47	0.00	---	delta-BHC
----			----			0.00	0.00	---	gamma-BHC (Lindane)
----			5.646	0.005	4733	0.00	0.37	---	Heptachlor
----			6.046	0.008	18740	0.00	1.42	---	Aldrin
----			----			0.00	0.00	---	Heptachlor epoxide b
----			----			0.00	0.00	---	Endosulfan I
----			----			0.00	0.00	---	Dieldrin
----			----			0.00	0.00	---	4,4'-DDE
----			----			0.00	0.00	---	Endrin
----			----			0.00	0.00	---	Endosulfan II
----			----			0.00	0.00	---	4,4'-DDD
----			----			0.00	0.00	---	Endosulfan sulfate
----			----			0.00	0.00	---	4,4'-DDT
----			----			0.00	0.00	---	Methoxychlor
8.426	0.000	2851	----			0.22	0.00	---	Endrin ketone
----			----			0.00	0.00	---	Endrin aldehyde
----			----			0.00	0.00	---	trans-Chlordane
----			----			0.00	0.00	---	cis-Chlordane
2.293	-0.001	17323	----			0.90	0.00	---	Hexachlorobutadiene
4.153	-0.000	16409	----			0.99	0.00	---	Hexachlorobenzene
3.799	0.000	278020	4.113	-0.000	245750	23.26	23.05	0.9	Tetrachloro-m-xylene M
9.342	-0.000	212021	10.274	0.000	157949	24.56	26.16	6.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

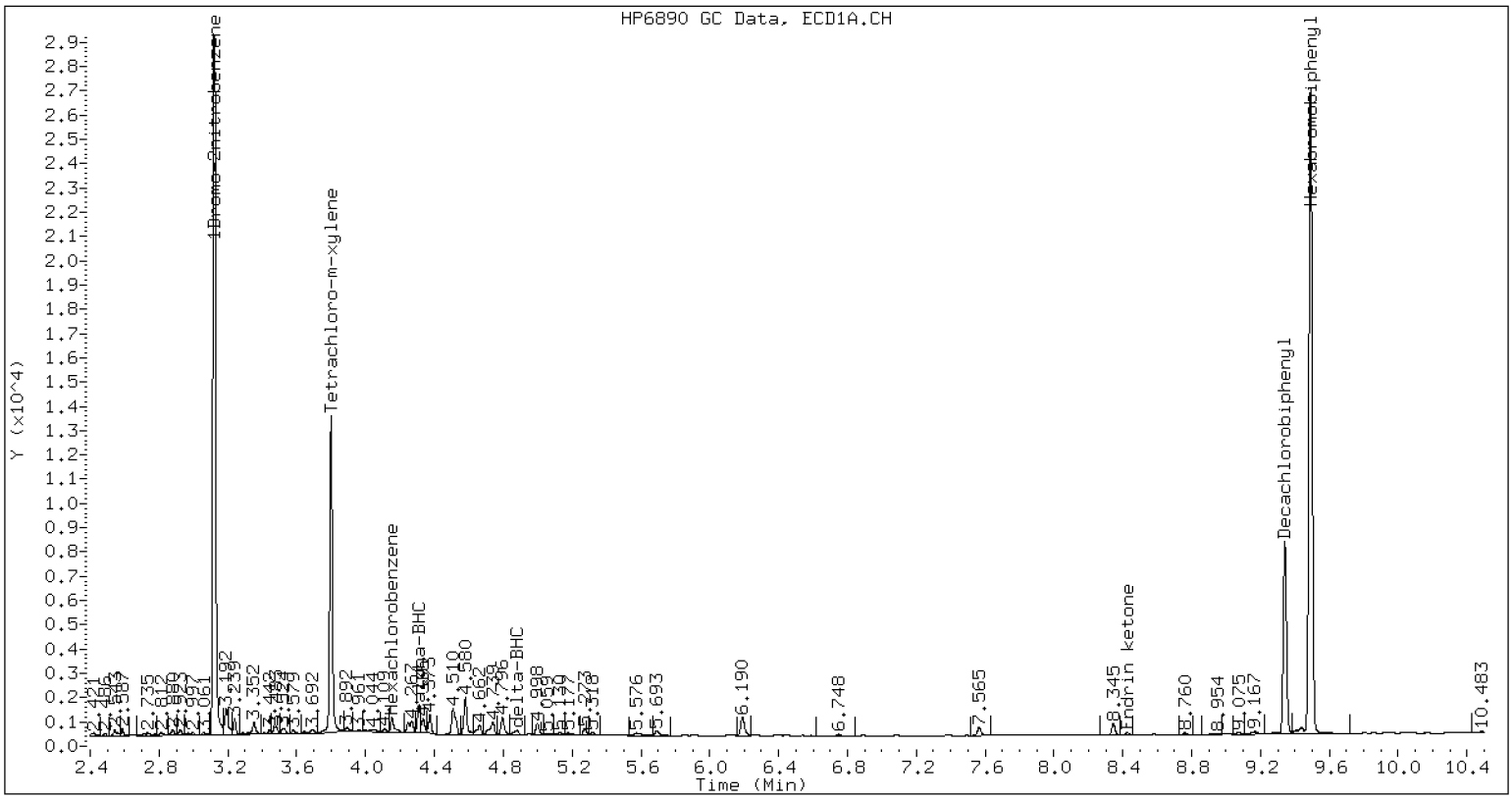
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	932757	854265	-8.4
Hexabromobiphenyl	745426	731936	-1.8

Column 2

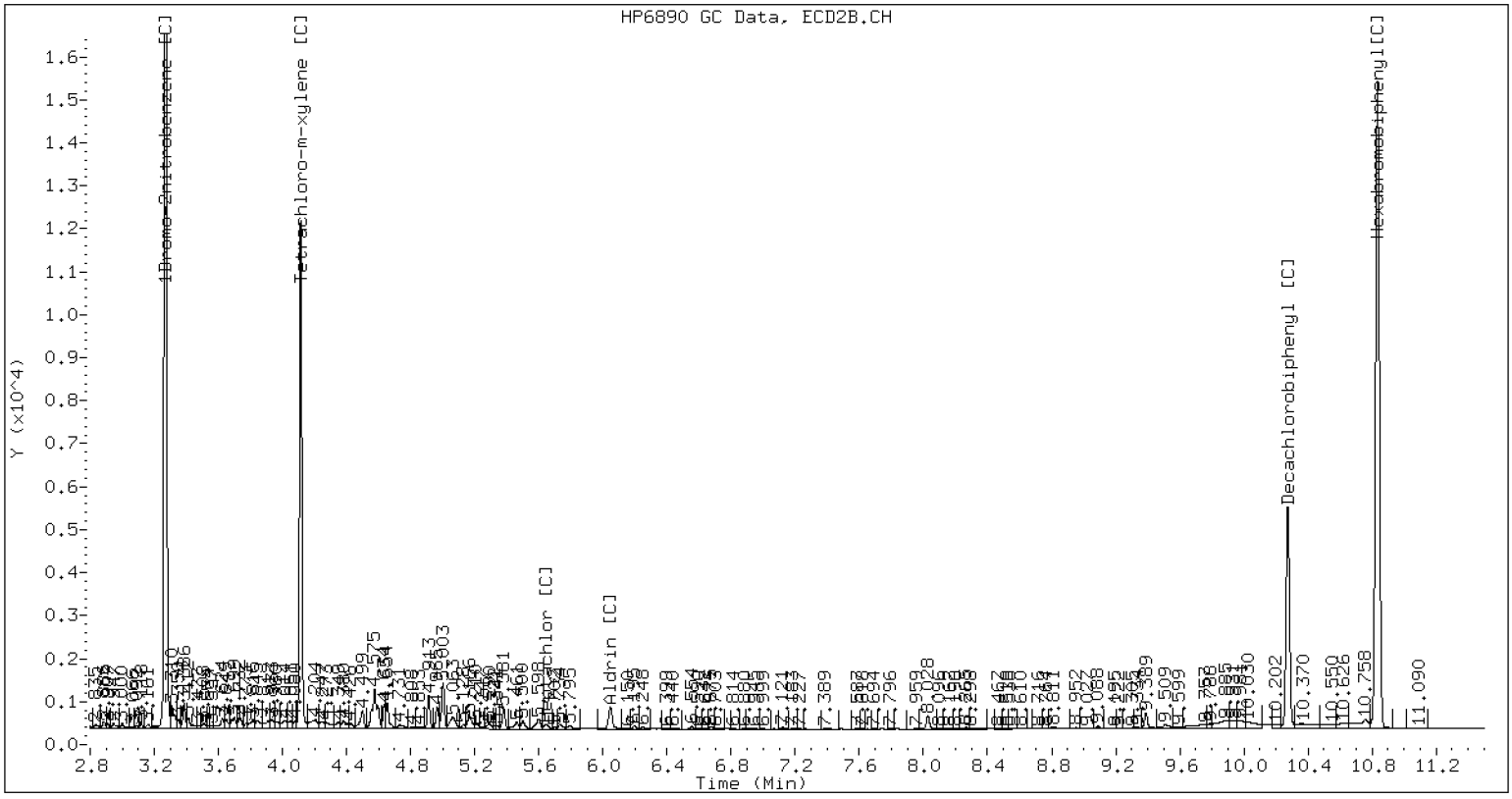
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1248665	775487	-37.9
Hexabromobiphenyl	754634	500266	-33.7

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

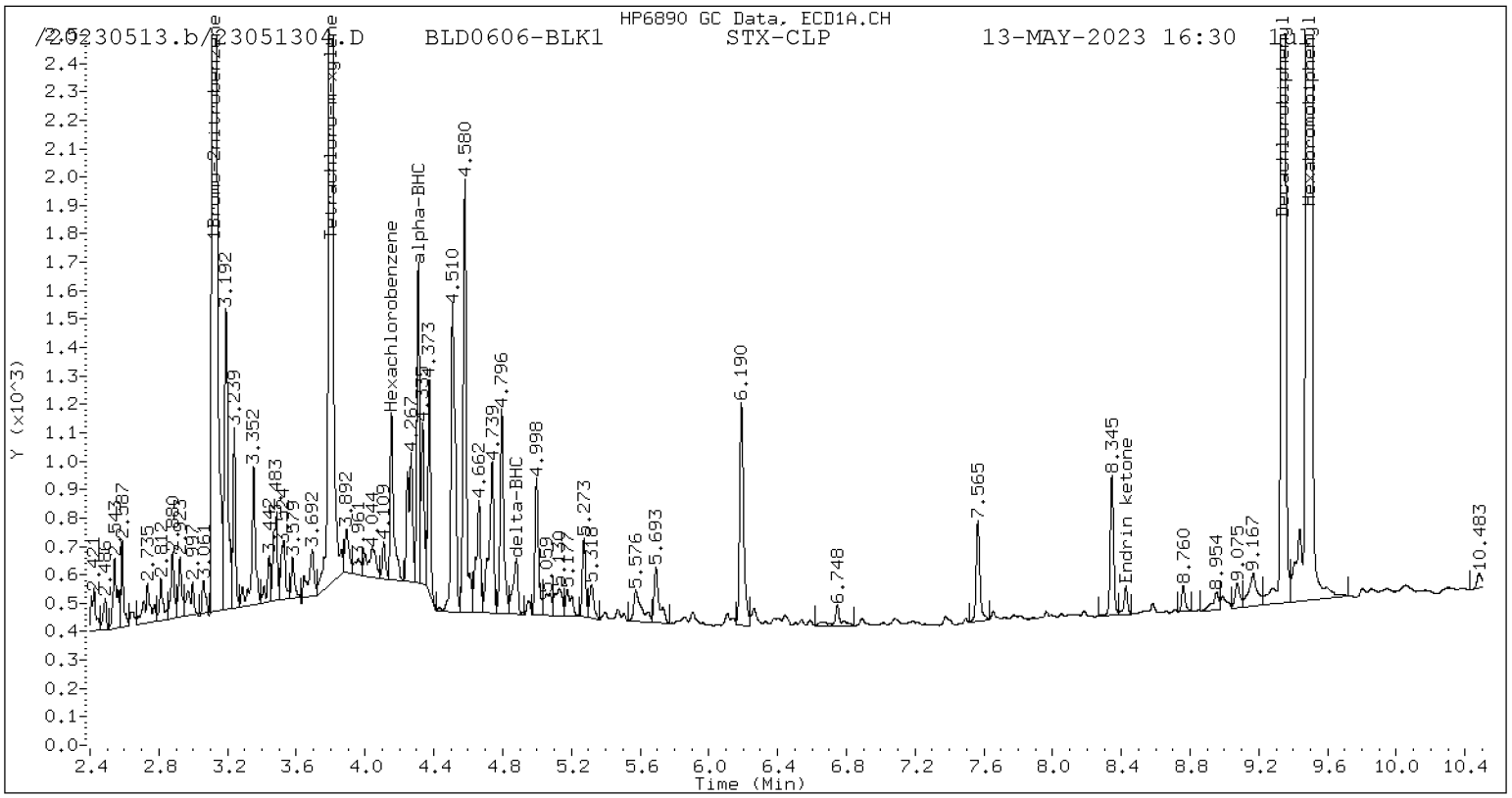
/20230513.b/23051304.D BLD0606-BLK1 STX-CLP 13-MAY-2023 16:30 1ul



/20230513.b/B20230513.b/23051304.D BLD0606-BLK1 CLP2 13-MAY-2023 16:30 1ul

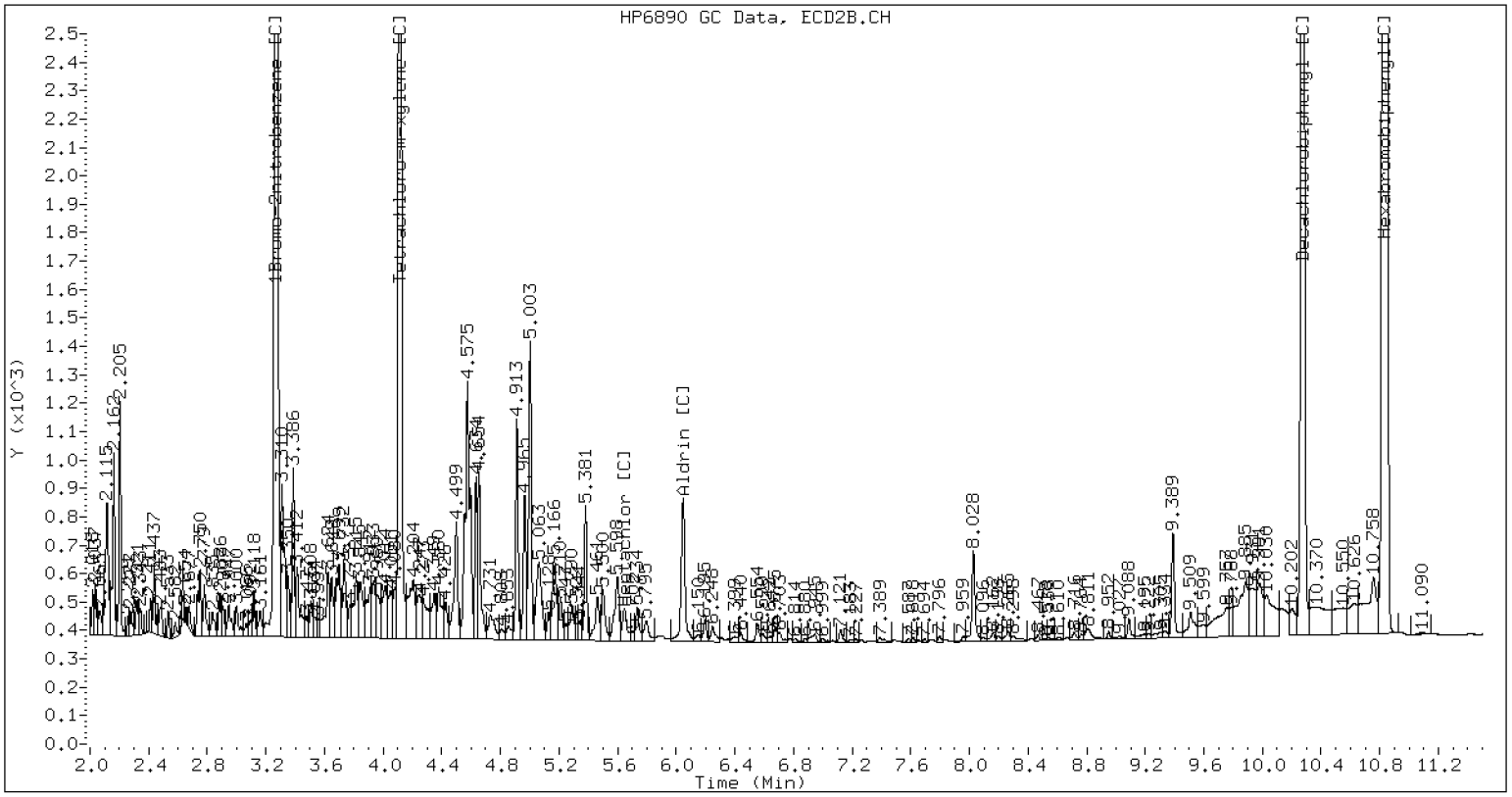


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

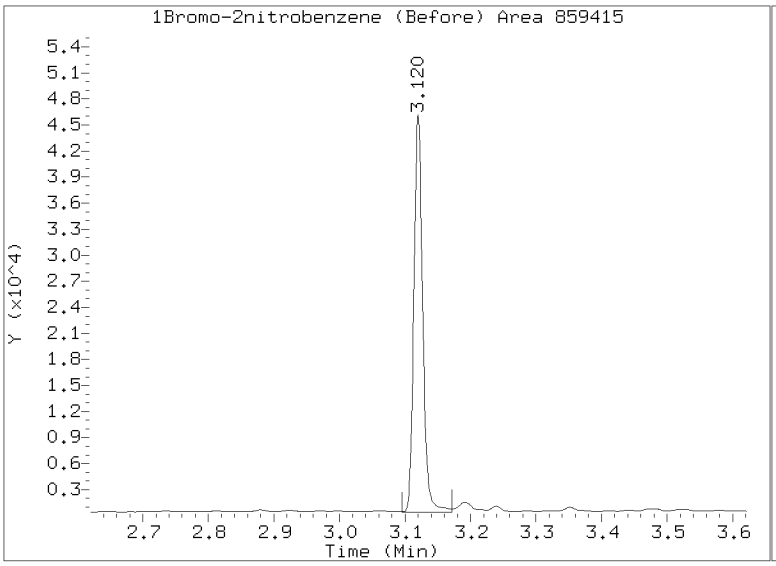
/20230513.b/B20230513.b/23051304.D BLD0606-BLK1 CLP2

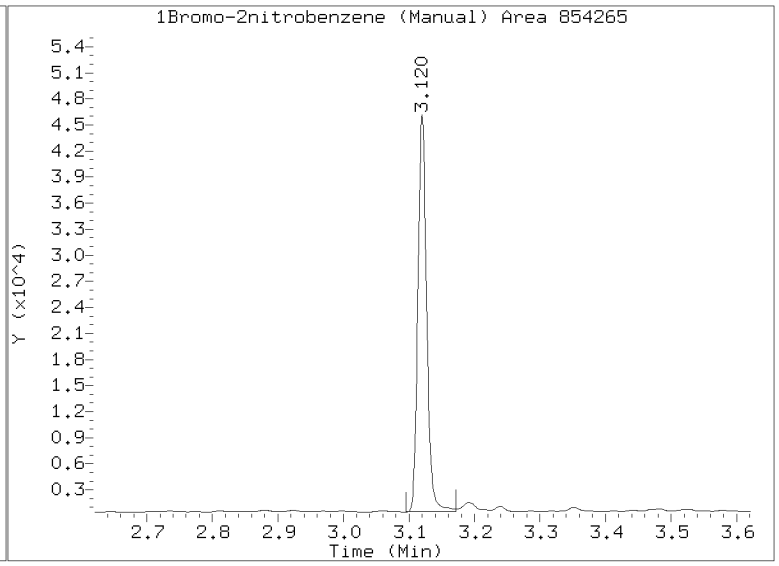


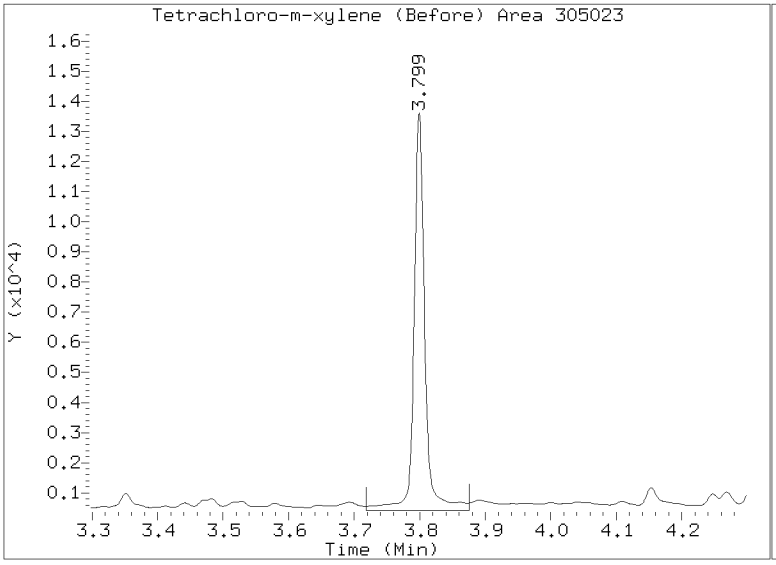
CLP-2 Manual Integration: NO

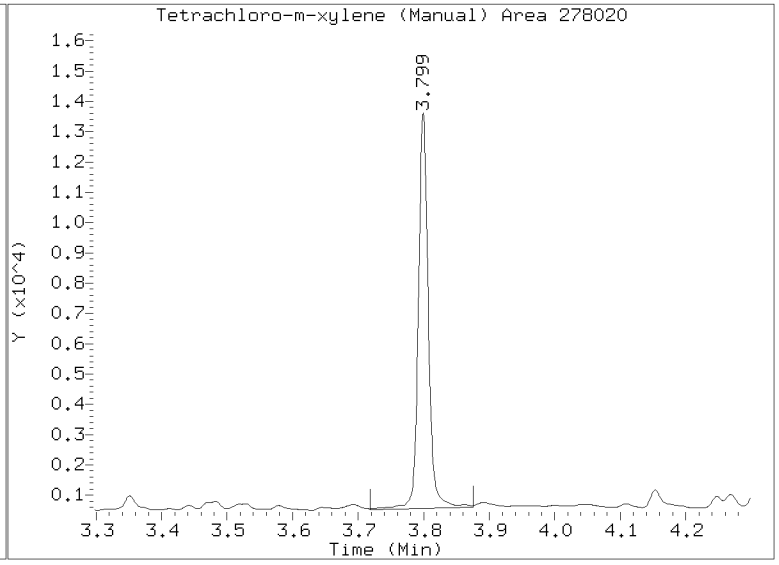
Manual Peak Adjustment Report, STX-CLP

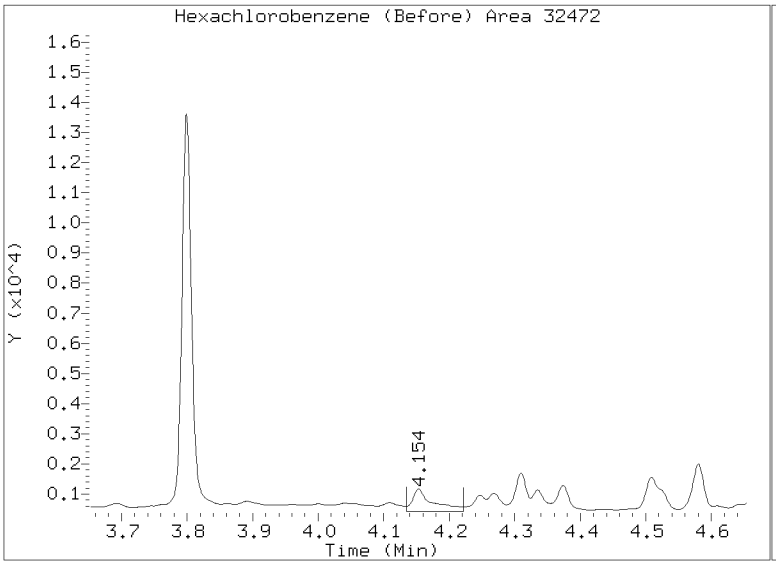
Datafile: /20230513.b/23051304.D
Injection Date: 13-MAY-2023 16:30
Lab ID:BLD0606-BLK1 Client ID:
Report Date: 05/25/2023 19:14

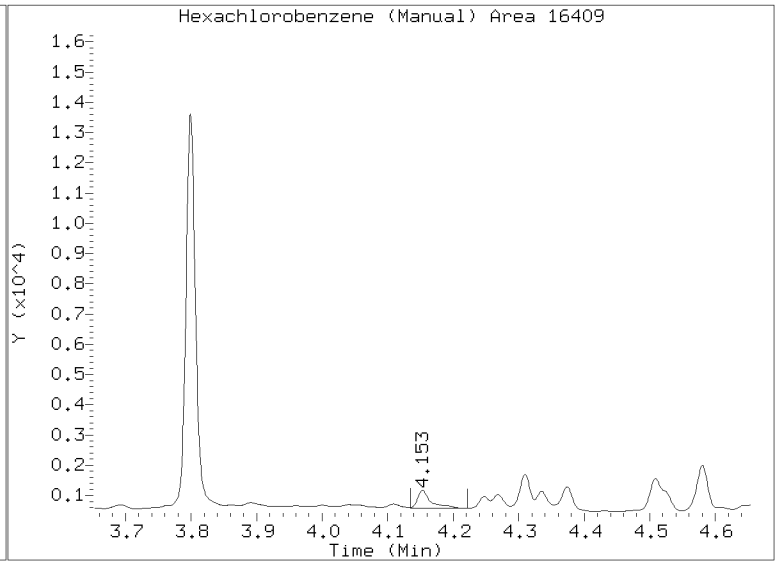






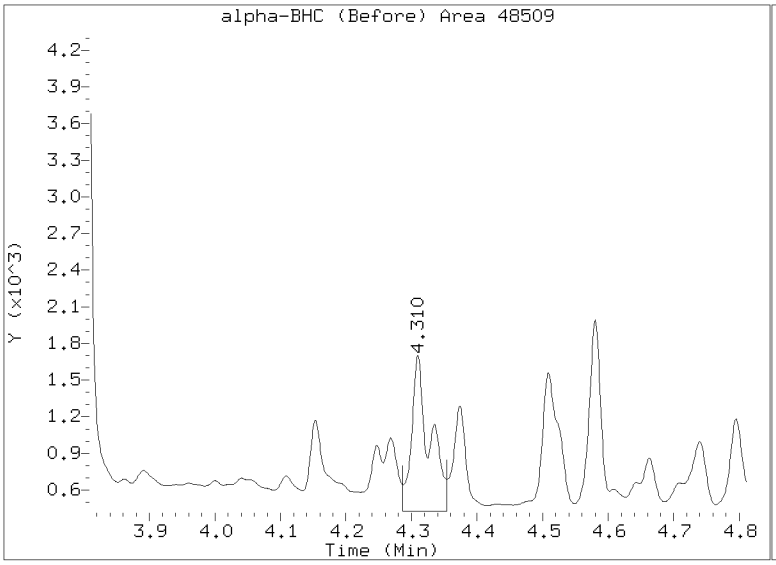


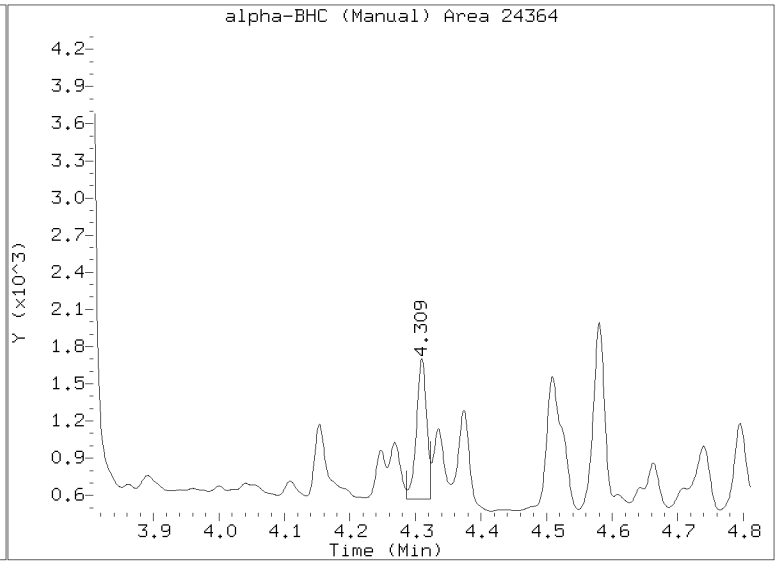


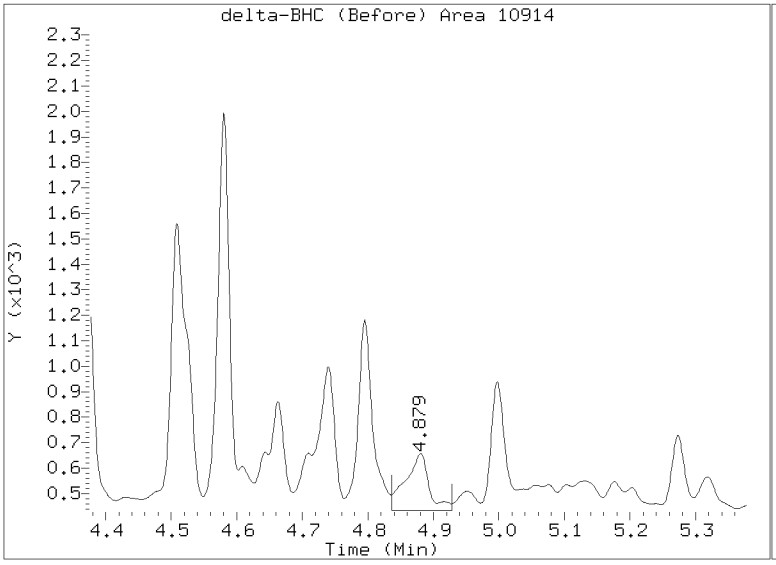


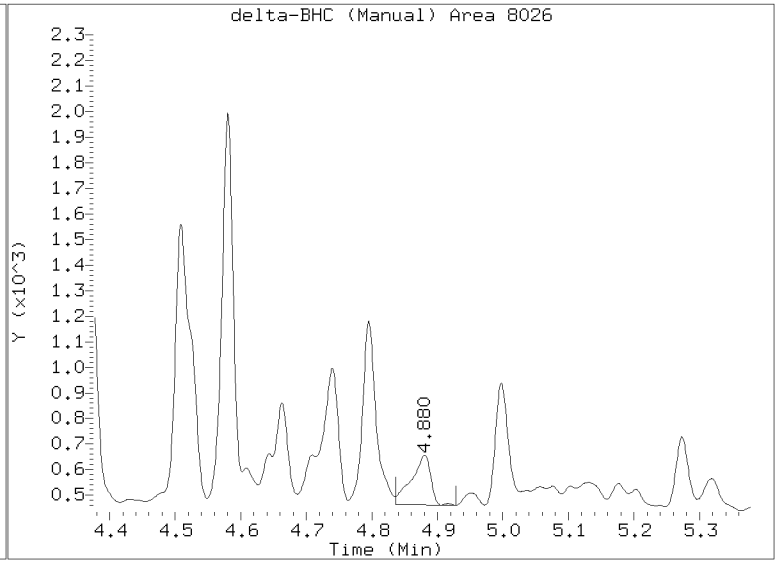
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230513.b/23051304.D
Injection Date: 13-MAY-2023 16:30
Lab ID:BLD0606-BLK1 Client ID:
Report Date: 05/25/2023 19:14



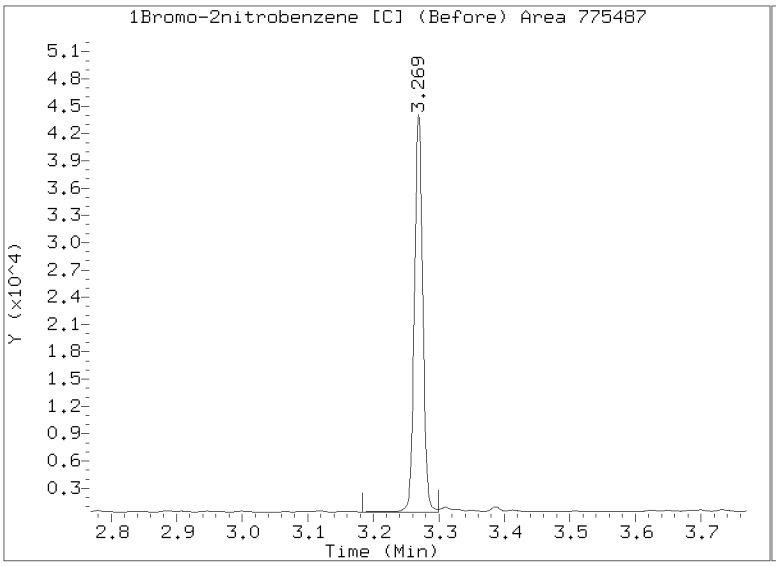


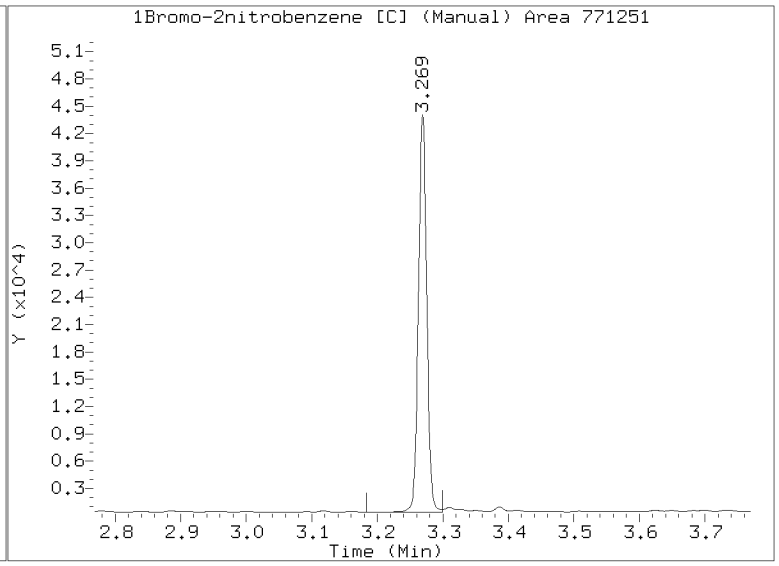


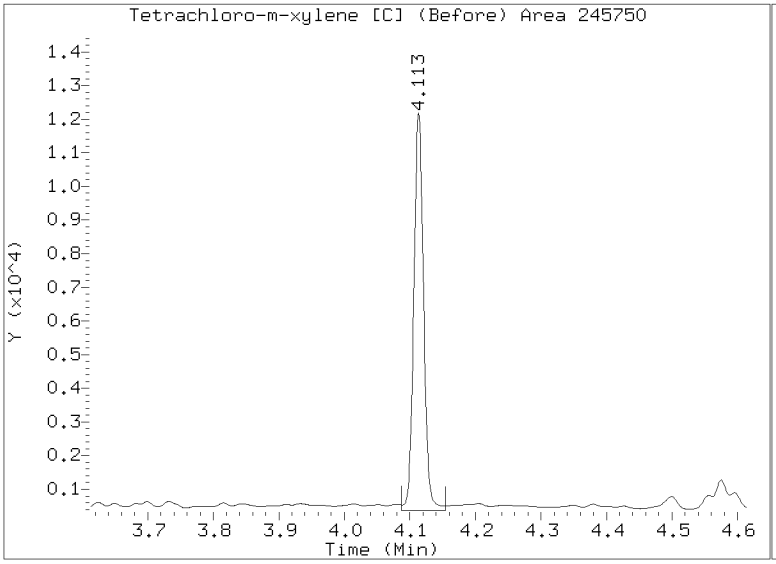


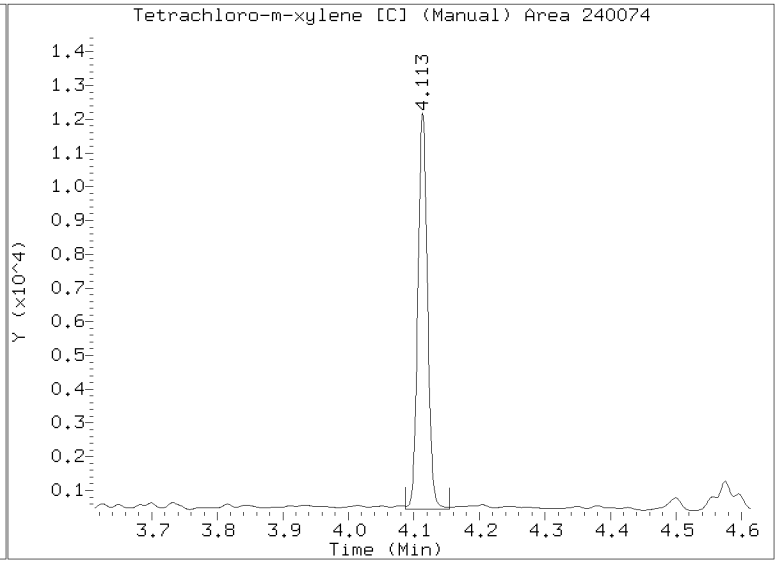
Manual Peak Adjustment Report, CLP-2

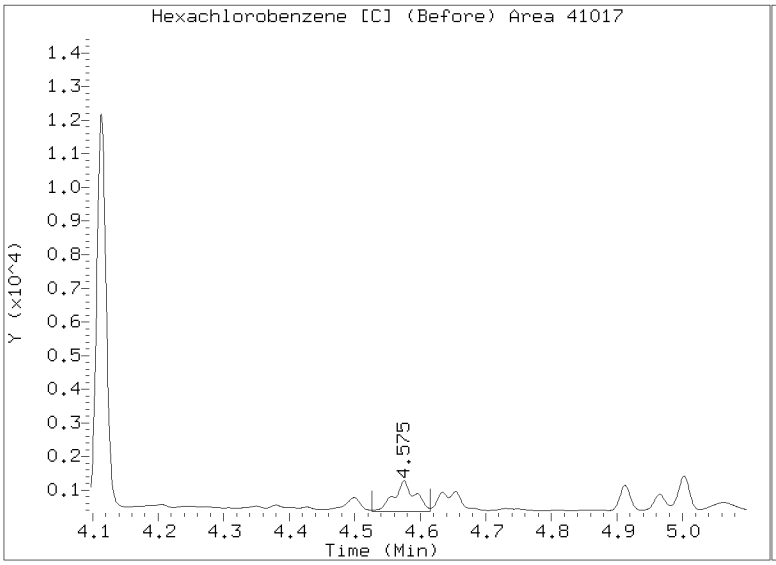
Datafile: /20230513.b/B20230513.b/23051304.D
Injection Date: 13-MAY-2023 16:30
Lab ID:BLD0606-BLK1 Client ID:

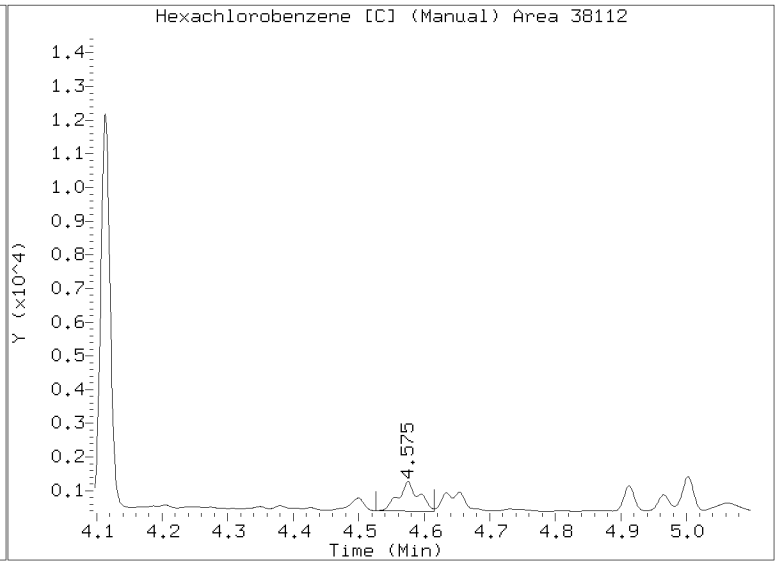






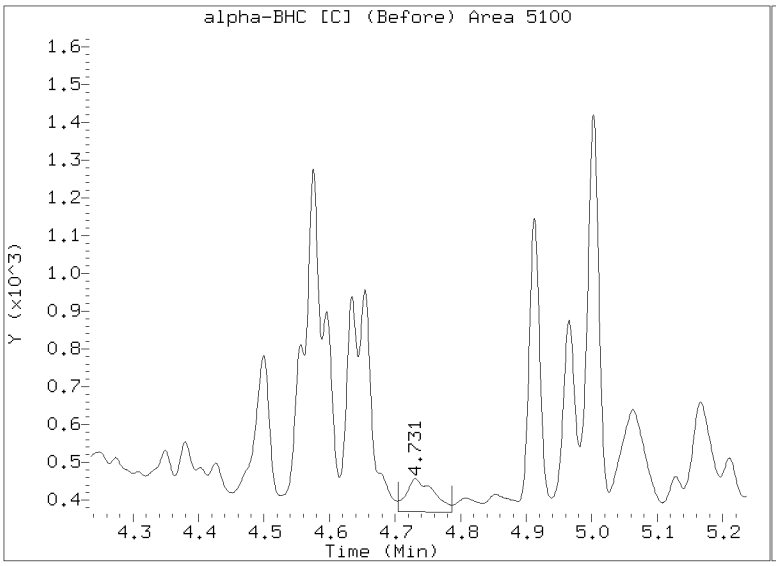


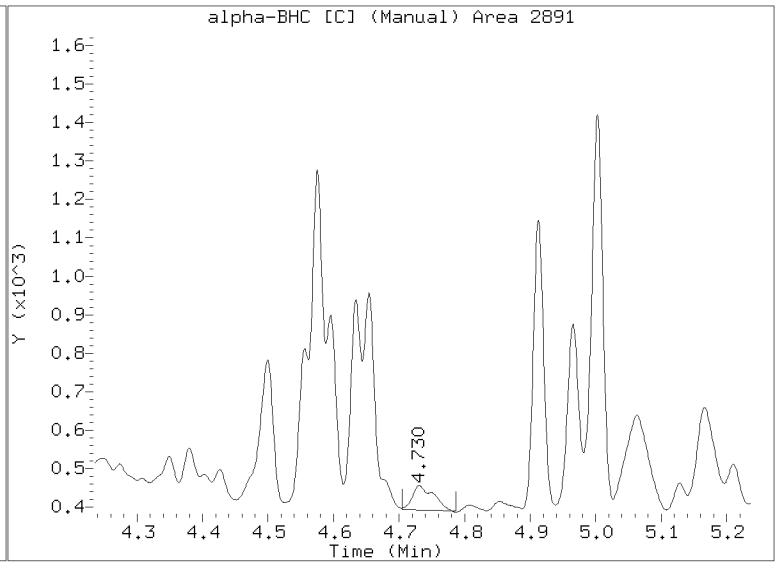


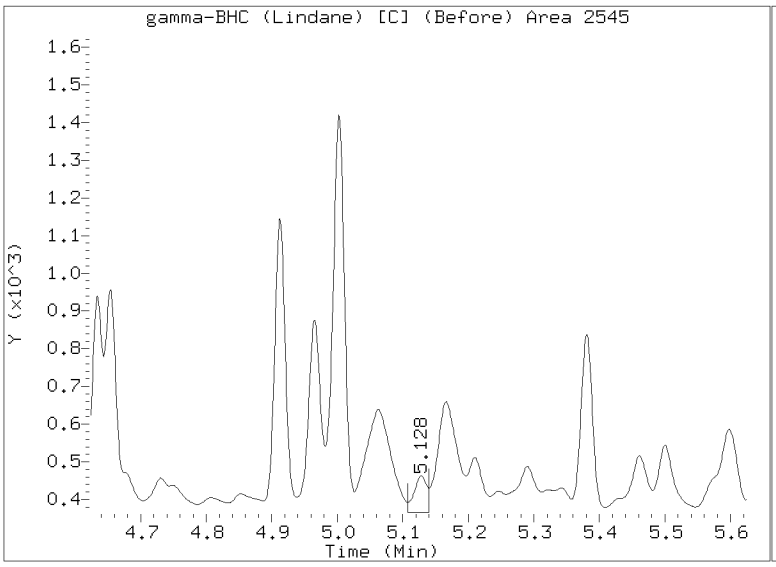


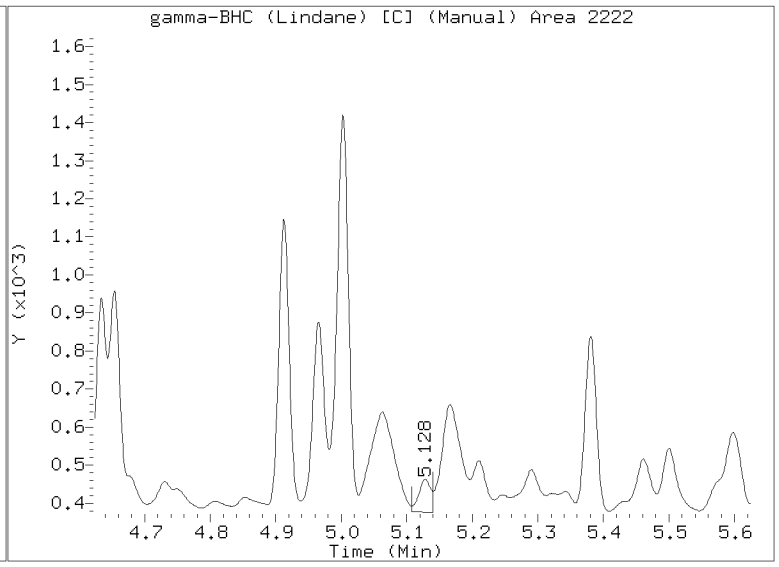
Manual Peak Adjustment Report, CLP-2

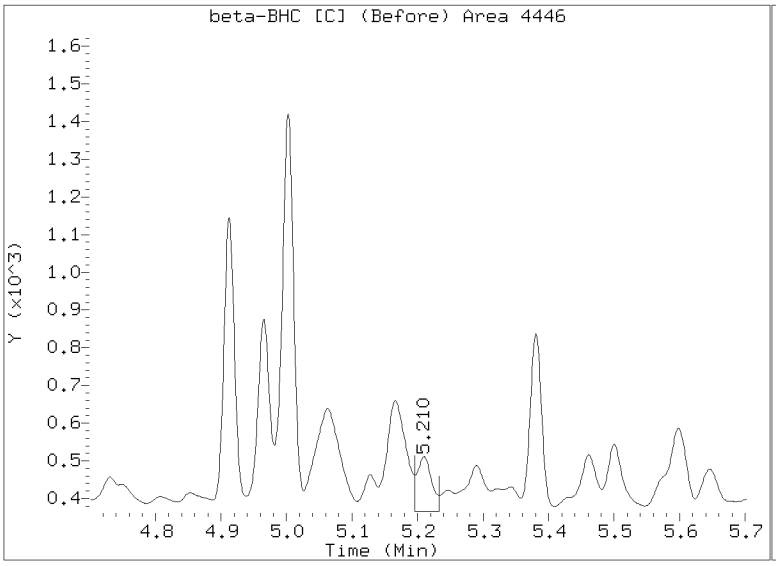
Datafile: /20230513.b/B20230513.b/23051304.D
Injection Date: 13-MAY-2023 16:30
Lab ID:BLD0606-BLK1 Client ID:

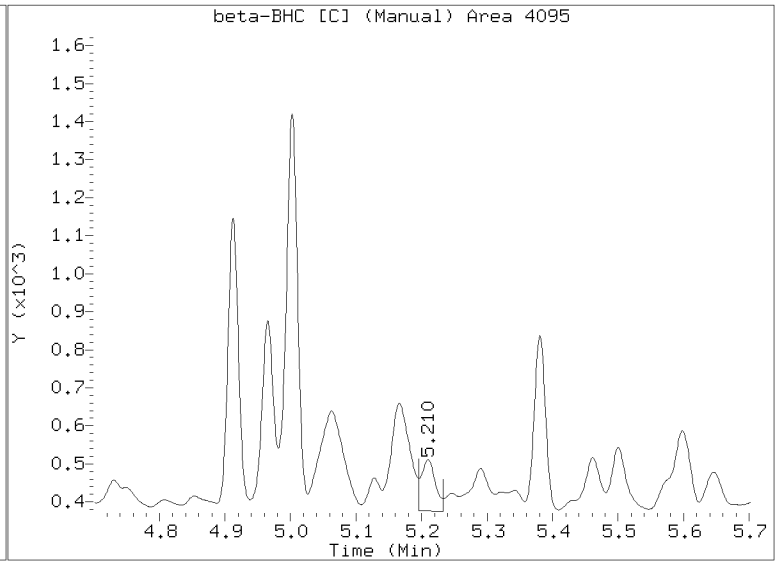












Manual Peak Adjustment Report, CLP-2

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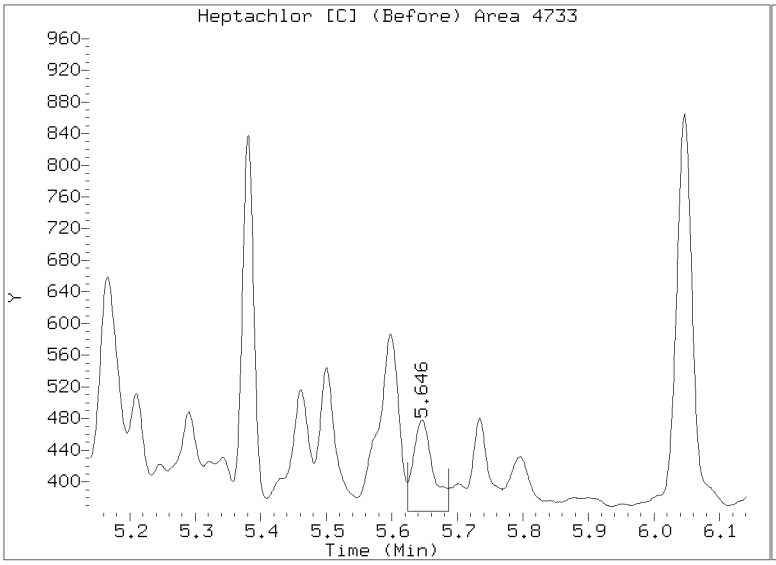
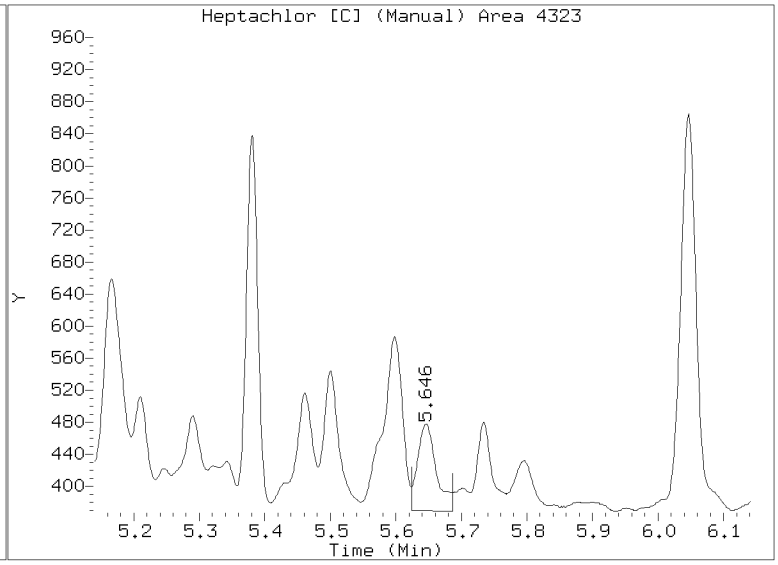
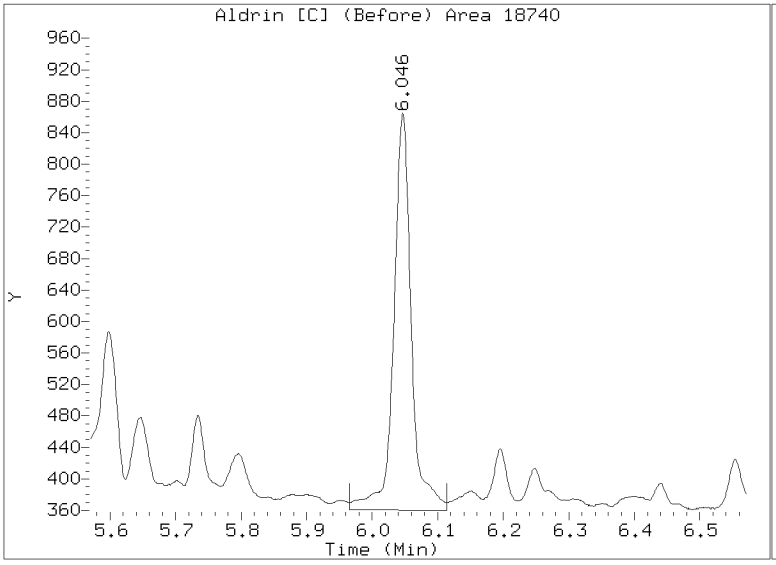
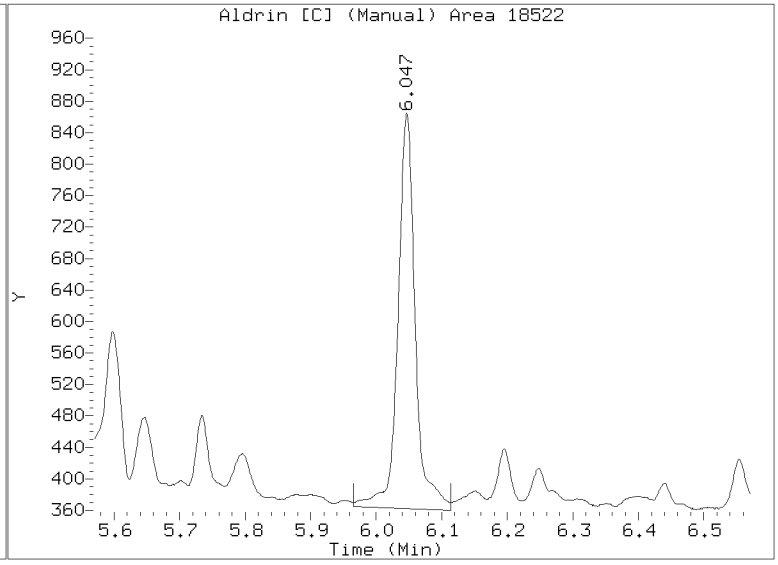
Injection Date: 13-MAY-2023 16:30
Lab ID:BLD0606-BLK1 Client ID:









LCS / LCS DUPLICATE RECOVERY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/13/23 16:48
Batch:	BLD0606	Laboratory ID:	BLD0606-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Hexachlorobenzene [2C]	4.00	2.58		64.5	26 - 128

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS RPD	QC LIMITS REC.
Hexachlorobenzene [2C]	4.00	2.51		62.7	2.80	30	26 - 128

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230513.b/23051305.D
Data file 2: /20230513.b/B20230513.b/23051305.D
Method: \20230513.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: BLD0606-BS1
Client ID:
Injection Date: 13-MAY-2023 16:48
Report Date: 05/25/2023 19:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.311	0.000	245725	4.736	0.000	192592	13.79	11.99	14.0	alpha-BHC
4.695	0.000	103707	5.203	0.000	80458	14.58	12.61	14.5	beta-BHC
4.878	-0.000	215214	5.549	0.000	184329	13.34	12.89	3.4	delta-BHC
4.614	0.000	220667	5.124	-0.001	174282	14.09	12.34	13.3	gamma-BHC (Lindane)
5.100	0.000	186994	5.642	0.001	155390	12.90	12.55	2.8	Heptachlor
5.423	0.000	186653	6.039	0.001	134816	12.66	10.49	18.8	Aldrin
6.098	0.001	188622	6.699	0.000	159558	14.18	14.10	0.6	Heptachlor epoxide b
6.541	0.000	254218	7.143	-0.000	208786	21.43	21.65	1.0	Endosulfan I
----			7.409	-0.028	2099	0.00	0.20	---	Dieldrin
6.464	-0.000	333343	7.229	-0.000	272943	28.16	27.13	3.8	4,4'-DDE
----			7.771	0.010	1308	0.00	0.13	---	Endrin
7.288	0.000	117162	7.973	0.000	90039	10.55	9.59	9.5	Endosulfan II
7.112	0.000	285500	7.835	-0.000	235696	26.81	25.94	3.3	4,4'-DDD
8.152	0.000	234685	8.571	0.000	186644	22.41	21.58	3.7	Endosulfan sulfate
7.407	0.000	302415	8.154	0.000	239371	26.37	26.11	1.0	4,4'-DDT
7.896	0.000	57839	8.796	0.000	47686	11.77	12.13	3.0	Methoxychlor
8.427	0.001	292963	9.093	0.001	161384	24.51	17.09	35.7	Endrin ketone
7.718	0.000	39427	8.304	0.000	32334	4.65	4.76	2.4	Endrin aldehyde
6.240	0.000	178185	6.911	0.001	144563	13.69	13.32	2.7	trans-Chlordane
6.387	0.000	176419	7.071	0.000	140744	13.50	13.17	2.5	cis-Chlordane
2.293	-0.001	198570	2.437	-0.001	152537	10.80	10.46	3.3	Hexachlorobutadiene
4.154	-0.000	190394	4.598	-0.000	180950	12.07	12.90	6.6	Hexachlorobenzene
3.800	0.001	304990	4.114	-0.000	264588	26.75	25.41	5.1	Tetrachloro-m-xylene
9.343	0.001	225736	10.275	0.001	173802	27.88	29.15	4.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

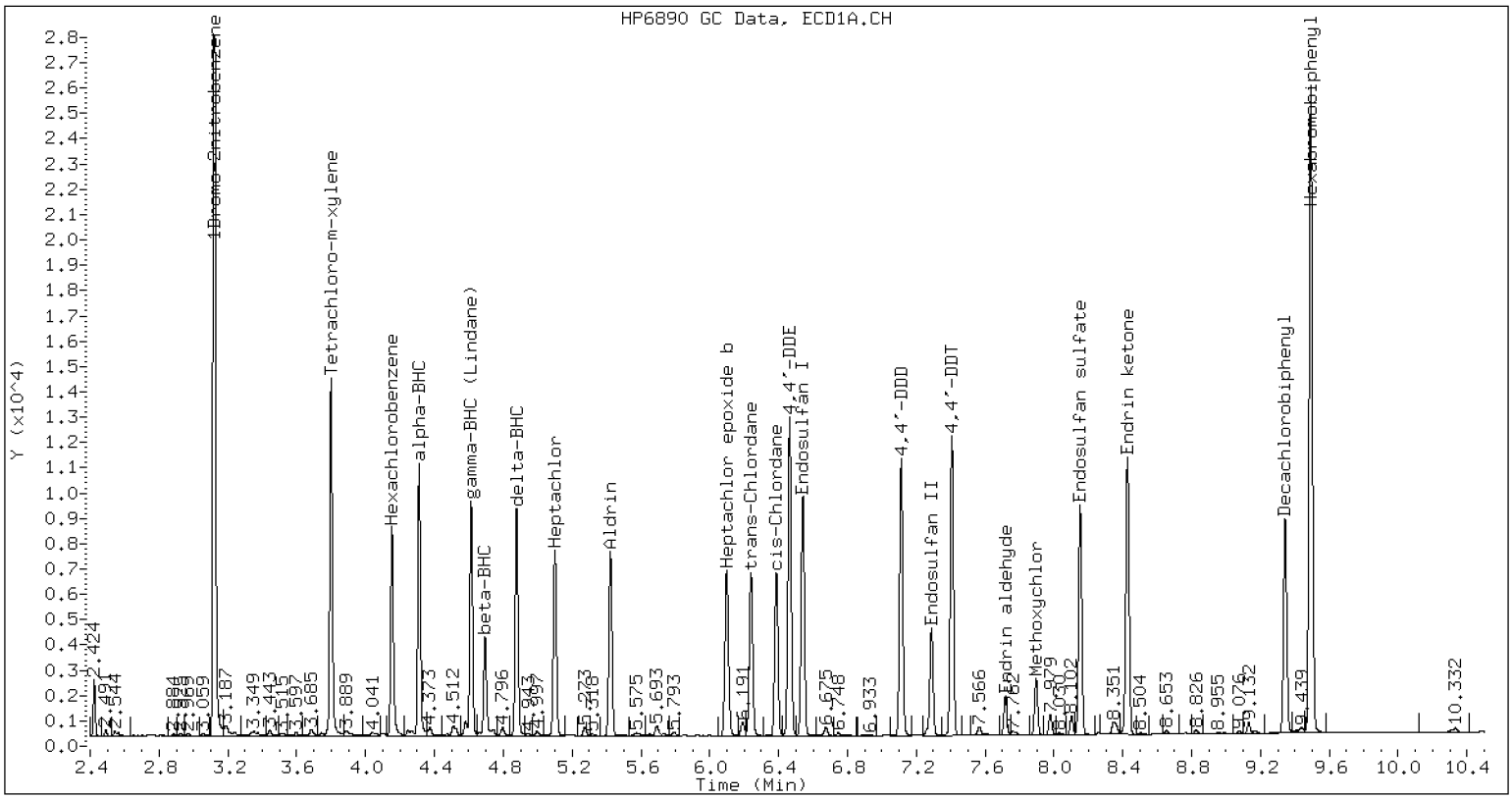
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	932757	814875	-12.6
Hexabromobiphenyl	745426	686460	-7.9

Column 2

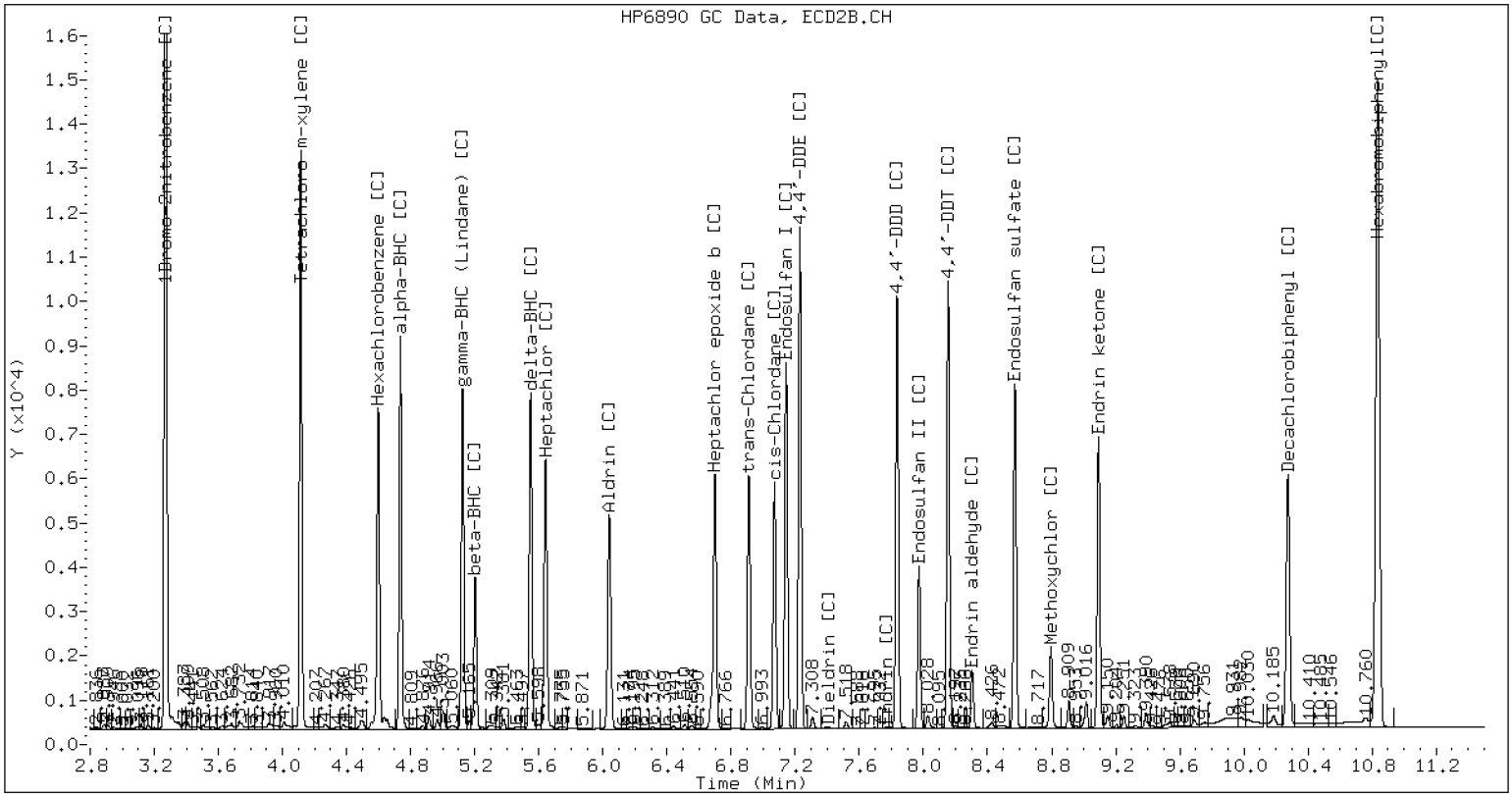
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1248665	757251	-39.4
Hexabromobiphenyl	754634	493938	-34.5

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

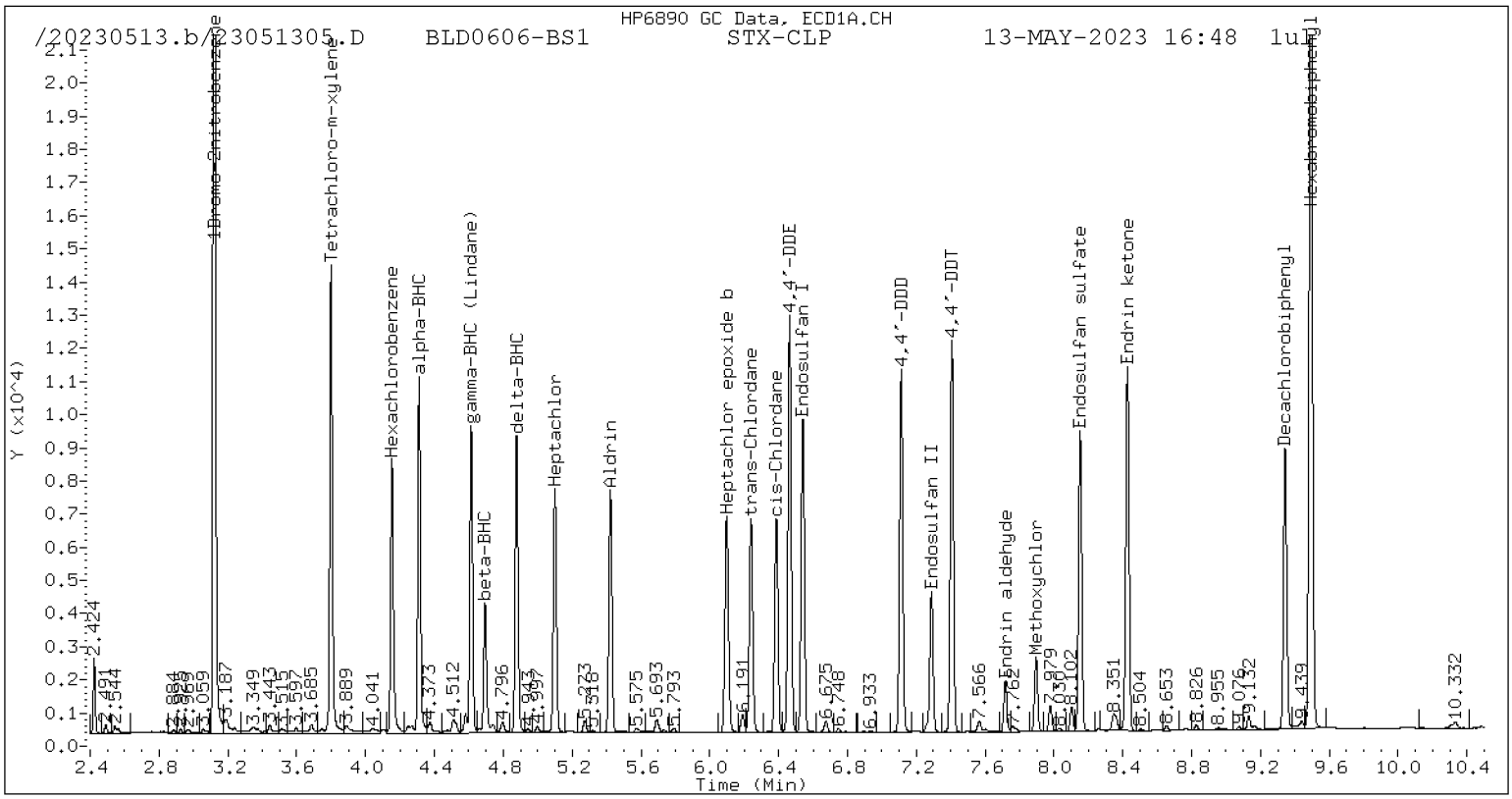
/20230513.b/23051305.D BLD0606-BS1 STX-CLP 13-MAY-2023 16:48 1ul



/20230513.b/B20230513.b/23051305.D BLD0606-BS1 CLP2 13-MAY-2023 16:48 1ul

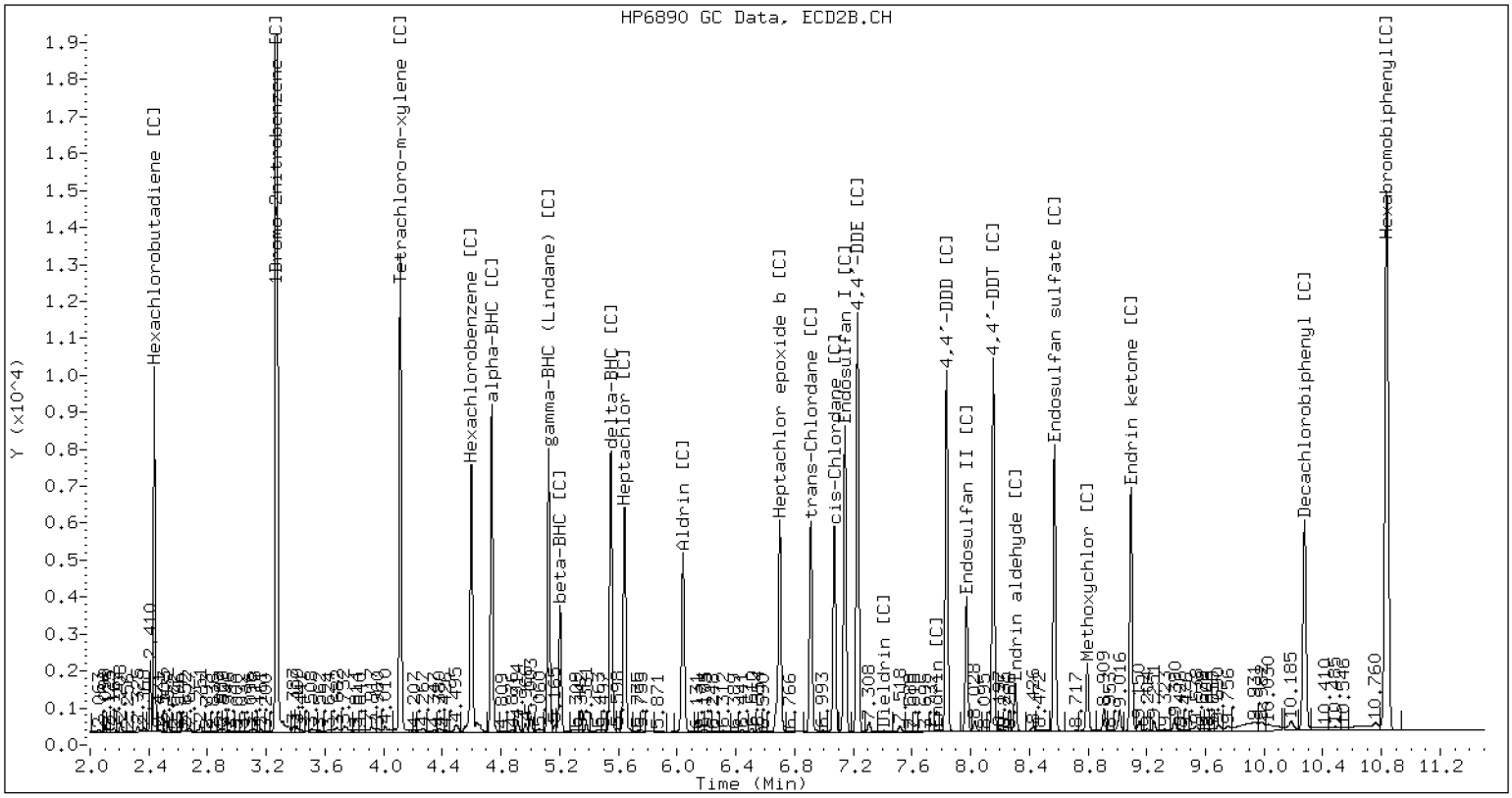


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230513.b/B20230513.b/23051305.D BLD0606-BS1 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230513.b/23051306.D
Data file 2: /20230513.b/B20230513.b/23051306.D
Method: \20230513.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: BLD0606-BSD1
Client ID:
Injection Date: 13-MAY-2023 17:07
Report Date: 05/25/2023 19:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.311	-0.000	251540	4.735	-0.001	208426	13.92	12.75	8.8	alpha-BHC
4.694	-0.000	106572	5.202	-0.000	86480	14.77	13.32	10.4	beta-BHC
4.877	-0.000	230710	5.548	-0.001	201235	14.11	13.83	2.0	delta-BHC
4.614	-0.000	227079	5.123	-0.002	188171	14.30	13.09	8.8	gamma-BHC (Lindane)
5.100	-0.000	200156	5.641	-0.000	168798	13.62	13.39	1.7	Heptachlor
5.423	0.000	200132	6.039	-0.000	146096	13.39	11.17	18.1	Aldrin
6.098	0.000	180700	6.699	-0.000	155748	13.40	13.52	0.9	Heptachlor epoxide b
6.540	-0.000	242702	7.143	-0.000	201020	20.18	20.49	1.5	Endosulfan I
6.802	0.001	3698	7.438	0.000	3337	0.29	0.31	6.5	Dieldrin
6.464	-0.001	353667	7.229	-0.000	293410	29.48	28.66	2.8	4,4'-DDE
----			7.768	0.007	2190	0.00	0.22	---	Endrin
7.288	0.000	181905	7.972	0.000	144670	16.53	15.14	8.8	Endosulfan II
7.112	-0.000	302547	7.835	-0.000	252571	28.69	27.31	4.9	4,4'-DDD
8.152	0.000	264955	8.571	0.000	214097	25.54	24.33	4.9	Endosulfan sulfate
7.406	0.000	318300	8.154	-0.000	254773	28.02	27.30	2.6	4,4'-DDT
7.896	0.001	132100	8.795	-0.000	106430	27.15	26.60	2.0	Methoxychlor
8.427	0.000	420563	9.093	0.000	228619	35.53	23.79	39.6	Endrin ketone
7.717	-0.000	61933	8.304	-0.000	51922	7.38	7.51	1.8	Endrin aldehyde
6.240	0.000	187280	6.910	0.000	153463	14.19	13.90	2.1	trans-Chlordane
6.387	-0.000	186953	7.071	-0.001	151494	14.11	13.93	1.3	cis-Chlordane
2.293	-0.001	208188	2.437	-0.001	161258	11.17	10.87	2.8	Hexachlorobutadiene
4.153	-0.000	199779	4.597	-0.001	179050	12.50	12.54	0.4	Hexachlorobenzene
3.799	0.000	299580	4.113	-0.000	266474	25.92	25.15	3.0	Tetrachloro-m-xylene
9.343	0.000	231908	10.275	0.001	173593	28.92	28.61	1.1	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

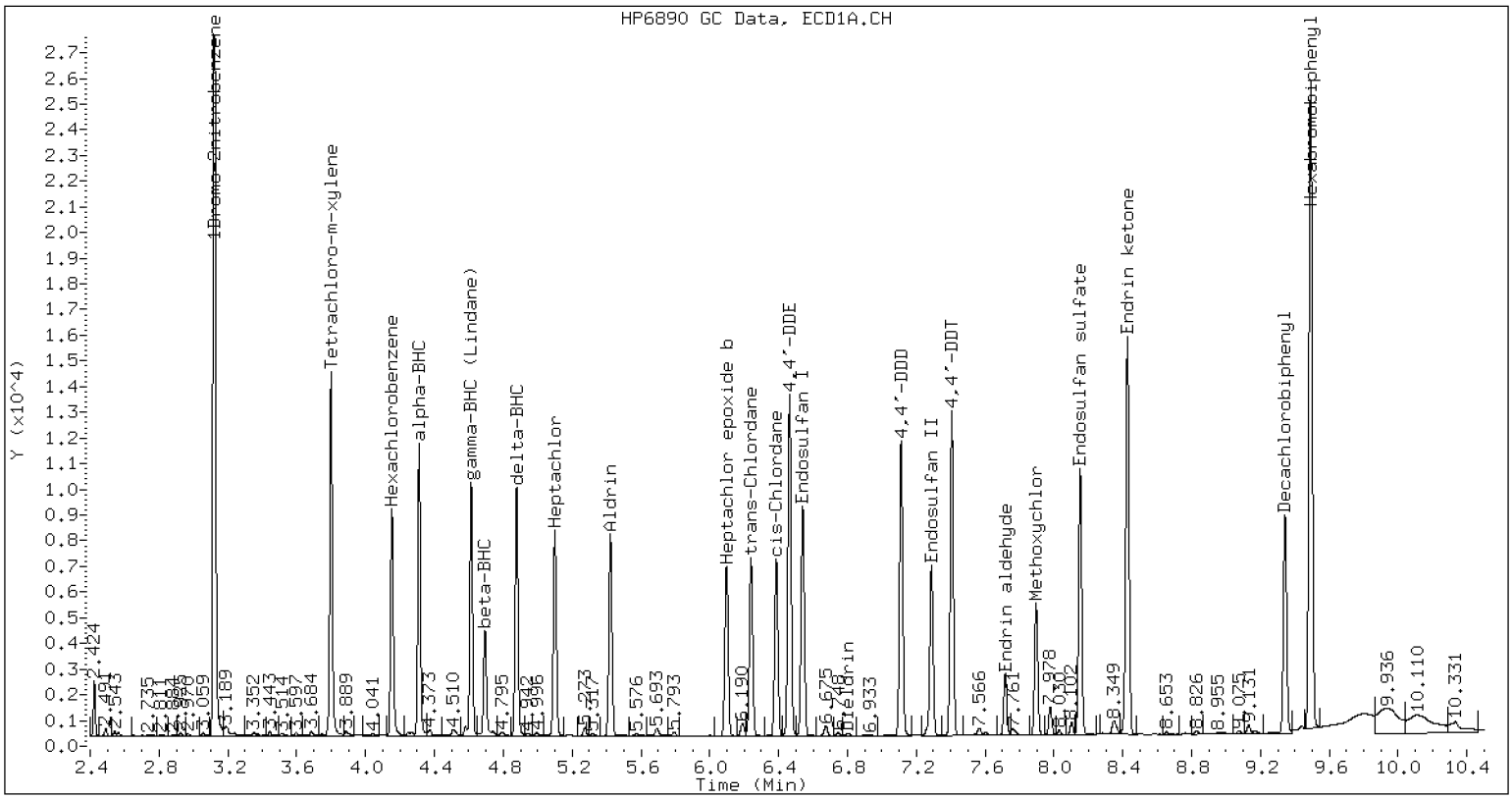
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	932757	826105	-11.4
Hexabromobiphenyl	745426	679915	-8.8

Column 2

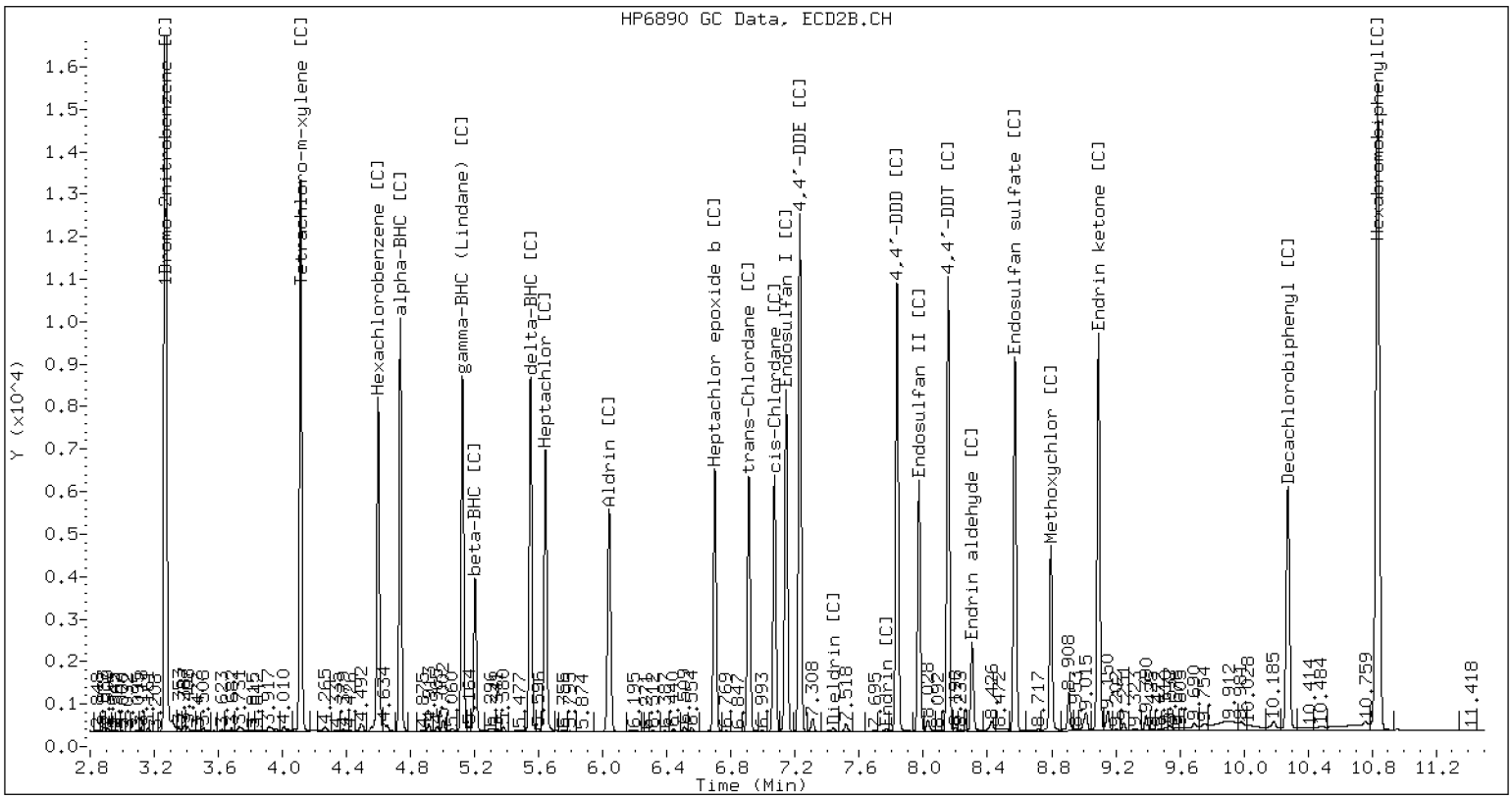
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1248665	770564	-38.3
Hexabromobiphenyl	754634	502713	-33.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

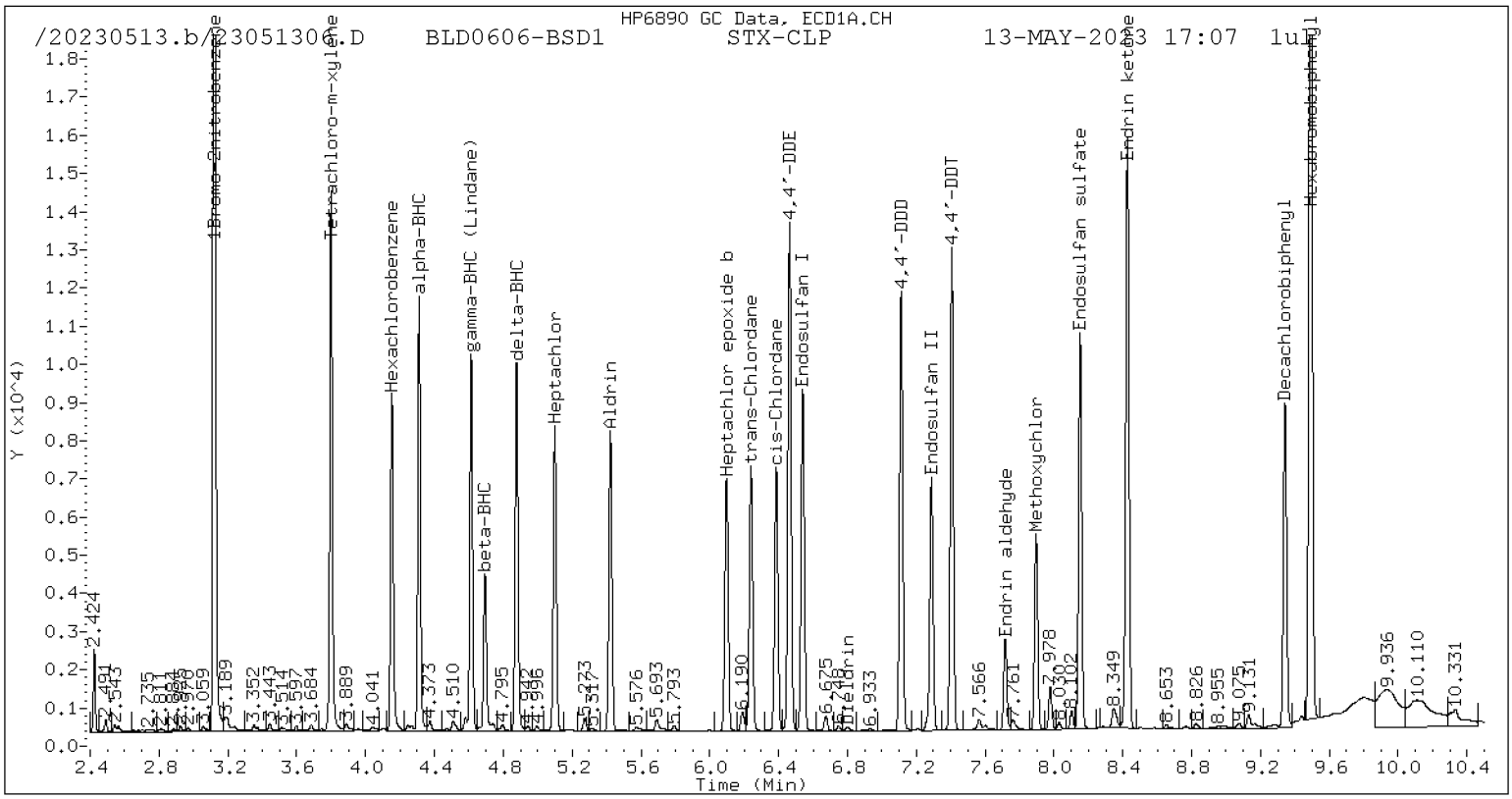
/20230513.b/23051306.D BLD0606-BSD1 STX-CLP 13-MAY-2023 17:07 1ul



/20230513.b/B20230513.b/23051306.D BLD0606-BSD1 CLP2 13-MAY-2023 17:07 1ul

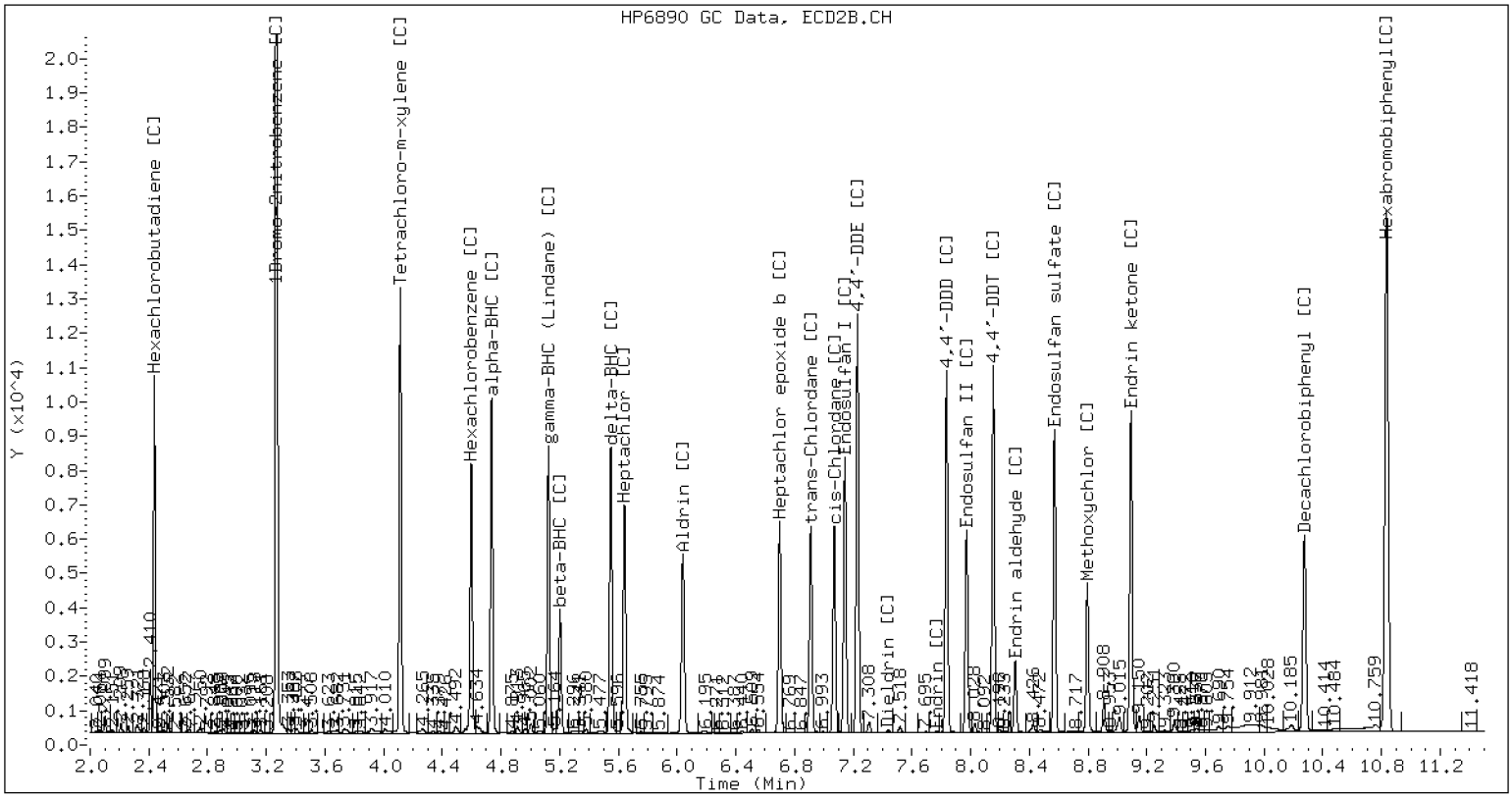


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

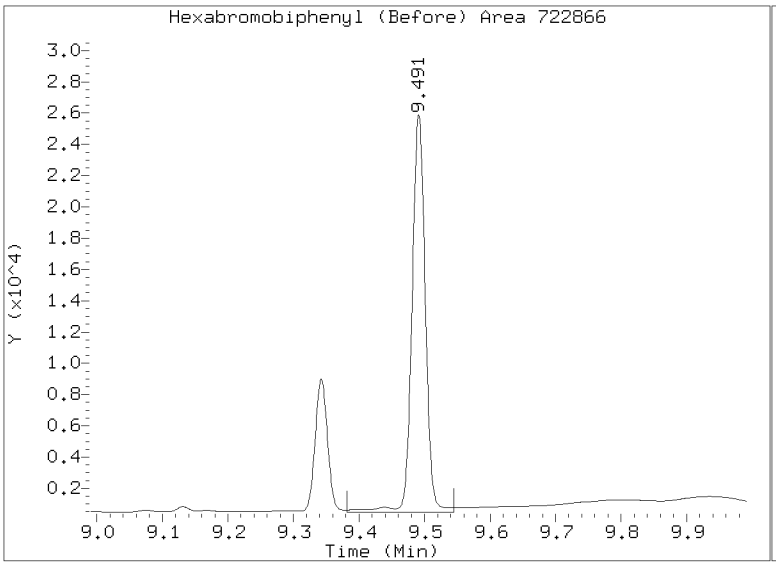
/20230513.b/B20230513.b/23051306.D BLD0606-BSD1 CLP2

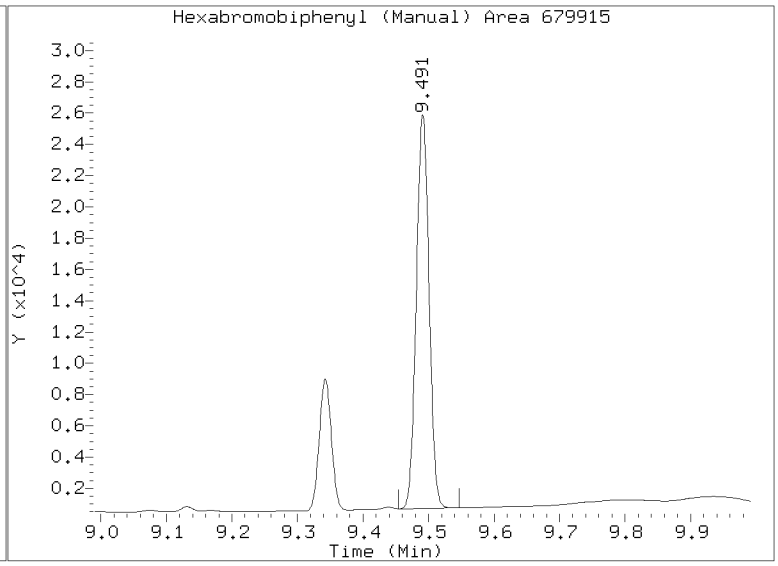


CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, STX-CLP

Datafile: /20230513.b/23051306.D
Injection Date: 13-MAY-2023 17:07
Lab ID:BLD0606-BSD1 Client ID:
Report Date: 05/25/2023 19:14





INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (1):	STX-CLP

Calibration Comments: PEST

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Hexachlorobenzene	1.25	1.762453	2.5	1.689934	5	1.607175	10	1.570994	20	1.468142	40	1.417979
Decachlorobiphenyl	2.5	1.222654	5	1.128374	10	0.9768294	20	0.9096561	40	0.8271431	80	0.8027704
Tetrachlorometaxylene	2.5	1.255658	5	1.227805	10	1.182654	20	1.158038	40	1.071055	80	1.01536

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (1):	STX-CLP

Calibration Comments: PEST

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Hexachlorobenzene	80	1.319539										
Decachlorobiphenyl	160	0.7377625										
Tetrachlorometaxylene	160	0.9251255										

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (1):	STX-CLP

Calibration Comments: PEST

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc		Conc		Conc		Conc		Conc		Conc	

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (1):	STX-CLP

Calibration Comments: PEST

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (1):	STX-CLP

Calibration Comments: PEST

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Hexachlorobenzene	1.548031	10.1			RSD ()	
Decachlorobiphenyl	0.9435985	18.9			RSD ()	
Tetrachlorometaxylene	1.119385	10.7			RSD ()	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (2):	STX-CLPII

Calibration Comments: PEST

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Hexachlorobenzene [2C]	1.25	1.637651	2.5	1.581918	5	1.532249	10	1.523234	20	1.427207	40	1.378405
Decachlorobiphenyl [2C]	2.5	1.110954	5	1.069191	10	1.031738	20	0.9714922	40	0.8913407	80	0.8617554
Tetrachlorometaxylene [2C]	2.5	1.21095	5	1.18796	10	1.162806	20	1.152165	40	1.062725	80	1.003709

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (2):	STX-CLPII

Calibration Comments: PEST

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Hexachlorobenzene [2C]	80	1.294186										
Decachlorobiphenyl [2C]	160	0.8227871										
Tetrachlorometaxylene [2C]	160	0.9200768										

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (2):	STX-CLPII

Calibration Comments: PEST

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc		Conc		Conc		Conc		Conc		Conc	

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (2):	STX-CLPII

Calibration Comments: PEST

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc		Conc		Conc		Conc		Conc		Conc	

INITIAL CALIBRATION DATA

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GD00035	Instrument:	ECD6
Calibration Date:	04/12/2023	Column (2):	STX-CLPII

Calibration Comments: PEST

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Hexachlorobenzene [2C]	1.482121	8.1			RSD ()	
Decachlorobiphenyl [2C]	0.9656083	11.4			RSD ()	
Tetrachlorometaxylene [2C]	1.100056	9.8			RSD ()	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLD0187

Instrument: ECD6
Calibration ID: UNASSIGNED

Printed: 4/14/2023 8:38:57AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLD0187-PEM1	QC		1		L002116	L000844		
SLD0187-CAL1	QC		2		L003348	L000844		
SLD0187-CAL2	QC		3		L003347	L000844		
SLD0187-CAL3	QC		4		L003346	L000844		
SLD0187-CAL4	QC		5		L003345	L000844		
SLD0187-CAL5	QC		6		L003344	L000844		
SLD0187-CAL6	QC		7		L003343	L000844		
SLD0187-CAL7	QC		8		L000560	L000844		
SLD0187-CAL8	QC		9		L003342	L000844		
SLD0187-CAL9	QC		10		L003341	L000844		
SLD0187-CALA	QC		11		L003340	L000844		
SLD0187-CALB	QC		12		L003339	L000844		
SLD0187-CALC	QC		13		L003338	L000844		
SLD0187-CALD	QC		14		L003337	L000844		
SLD0187-CALE	QC		15		L000377	L000844		
SLD0187-CALF	QC		16		L003398	L000844		
SLD0187-CALG	QC		17		L003397	L000844		
SLD0187-CALH	QC		18		L003396	L000844		
SLD0187-CALI	QC		19		L003395	L000844		
SLD0187-CALJ	QC		20		L003394	L000844		
SLD0187-CALK	QC		21		L003393	L000844		

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLD0187

Instrument: ECD6
Calibration ID: UNASSIGNED

Printed: 4/14/2023 8:38:57AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLD0187-CALL	QC		22		L000559	L000844		
SLD0187-SCV1	QC		23		L003155	L000844		
SLD0187-SCV2	QC		24		L003156	L000844		
SLD0187-PEM2	QC		25		L002116	L000844		
SLD0187-ICV1	QC		26		L003344	L000844		
SLD0187-ICV2	QC		27		L003338	L000844		
BLD0075-BLK1	QC		28			L000844		
BLD0075-BS1	QC		29			L000844		
BLD0075-MRL1	QC		30			L000844		
23D0028-01	8081B Pest	E 01	31			L000844	Associated Earth Sciences, Inc	
SLD0187-PEM3	QC		32		L002116	L000844		
SLD0187-CCV1	QC		33		L003344	L000844		
SLD0187-CCV2	QC		34		L003338	L000844		
BLD0009-BLK1	QC		35			L000844		
BLD0009-BS1	QC		36			L000844		
BLD0009-BSD1	QC		37			L000844		
BLD0009-MS1	QC		38			L000844		
BLD0009-MSD1	QC		39			L000844		
23C0752-01	8081B Pest (PSDDA)	A 03	40			L000844	Anchor QEA, LLC	
23C0752-02	8081B Pest (PSDDA)	A 03	41			L000844	Anchor QEA, LLC	
23C0752-03	8081B Pest (PSDDA)	A 03	42			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLD0187

Instrument: ECD6
Calibration ID: UNASSIGNED

Printed: 4/14/2023 8:38:57AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23C0752-04	8081B Pest (PSDDA)	A 03	43			L000844	Anchor QEA, LLC	
23C0752-06	8081B Pest (PSDDA)	A 03	44			L000844	Anchor QEA, LLC	
SLD0187-PEM4	QC		45		L002116	L000844		
SLD0187-CCV3	QC		46		L000845	L000844		
SLD0187-CCV4	QC		47		L003338	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230412.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	12-APR-2023 14:57	23041202.D	1	SEQ-IB	
2	12-APR-2023 15:16	23041203.D	1	SEQ-PEM1	
3	12-APR-2023 15:34	23041204.D	1	SEQ-CAL1	
4	12-APR-2023 15:53	23041205.D	1	SEQ-CAL2	
5	12-APR-2023 16:11	23041206.D	1	SEQ-CAL3	
6	12-APR-2023 16:30	23041207.D	1	SEQ-CAL5	
7	12-APR-2023 16:48	23041208.D	1	SEQ-CAL4	
8	12-APR-2023 17:06	23041209.D	1	SEQ-CAL6	
9	12-APR-2023 17:25	23041210.D	1	SEQ-CAL7	
10	12-APR-2023 17:43	23041211.D	1	SEQ-CAL8	
11	12-APR-2023 18:02	23041212.D	1	SEQ-CAL9	
12	12-APR-2023 18:20	23041213.D	1	SEQ-CALA	
13	12-APR-2023 18:38	23041214.D	1	SEQ-CALB	
14	12-APR-2023 18:57	23041215.D	1	SEQ-CALC	
15	12-APR-2023 19:15	23041216.D	1	SEQ-CALD	
16	12-APR-2023 19:34	23041217.D	1	SEQ-CALE	
17	12-APR-2023 19:52	23041218.D	1	SEQ-CALF	
18	12-APR-2023 20:10	23041219.D	1	SEQ-CALG	
19	12-APR-2023 20:29	23041220.D	1	SEQ-CALH	
20	12-APR-2023 20:47	23041221.D	1	SEQ-CALI	
21	12-APR-2023 21:05	23041222.D	1	SEQ-CALJ	
22	12-APR-2023 21:24	23041223.D	1	SEQ-CALK	
23	12-APR-2023 21:42	23041224.D	1	SEQ-CALL	
24	12-APR-2023 22:00	23041225.D	1	SEQ-SCV1	
25	12-APR-2023 22:19	23041226.D	1	SEQ-SCV2	
26	12-APR-2023 22:37	23041227.D	1	SEQ-PEM2	
27	12-APR-2023 22:55	23041228.D	1	SEQ-ICV1	
28	12-APR-2023 23:14	23041229.D	1	SEQ-ICV2	
29	12-APR-2023 23:32	23041230.D	1	BLD0075-BLK1	
30	12-APR-2023 23:50	23041231.D	1	BLD0075-BS1	
31	13-APR-2023 00:09	23041232.D	1	BLD0075-MRL1	
32	13-APR-2023 00:27	23041233.D	1	23D0028-01	
33	13-APR-2023 00:45	23041234.D	1	SEQ-PEM3	
34	13-APR-2023 01:04	23041235.D	1	SEQ-CCV1	
35	13-APR-2023 01:22	23041236.D	1	SEQ-CCV2	
36	13-APR-2023 01:40	23041237.D	1	BLD0009-BLK1	
37	13-APR-2023 01:59	23041238.D	1	BLD0009-BS1	
38	13-APR-2023 02:17	23041239.D	1	BLD0009-BSD1	
39	13-APR-2023 02:35	23041240.D	1	BLD0009-MS1	
40	13-APR-2023 02:53	23041241.D	1	BLD0009-MSD1	
41	13-APR-2023 03:12	23041242.D	1	23C0752-01	
42	13-APR-2023 03:30	23041243.D	1	23C0752-02	
43	13-APR-2023 03:48	23041244.D	1	23C0752-03	
44	13-APR-2023 04:07	23041245.D	1	23C0752-04	
45	13-APR-2023 04:25	23041246.D	1	23C0752-06	
46	13-APR-2023 04:43	23041247.D	1	SEQ-PEM4	
47	13-APR-2023 05:02	23041248.D	1	SEQ-CCV3	
48	13-APR-2023 05:20	23041249.D	1	SEQ-CCV4	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230412.b

ARI Job No.: SEQ- Method: PEST.m Instrument: ecd6.i Date: 12-APR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1457	23041202.D	SEQ-IB		1	NO MANUAL INTEGRATION
1516	23041203.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
1534	23041204.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
1553	23041205.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
1611	23041206.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
1630	23041207.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
1648	23041208.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
1706	23041209.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1725	23041210.D	SEQ-CAL7		1	alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Erdosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobe
1743	23041211.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
1802	23041212.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
1820	23041213.D	SEQ-CALA		1	NO MANUAL INTEGRATION
1838	23041214.D	SEQ-CALB		1	NO MANUAL INTEGRATION
1857	23041215.D	SEQ-CALC		1	NO MANUAL INTEGRATION
1915	23041216.D	SEQ-CALD		1	NO MANUAL INTEGRATION
1934	23041217.D	SEQ-CALE		1	Oxychlordane, 2,4-DDE, trans-Nonachlor, 2,4-DDD, 2,4-DDT, cis-Nonachlor, Mirex,
1952	23041218.D	SEQ-CALF		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230412.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2010	23041219.D	SEQ-CALG		1	NO MANUAL INTEGRATION
2029	23041220.D	SEQ-CALH		1	NO MANUAL INTEGRATION
2047	23041221.D	SEQ-CALI		1	NO MANUAL INTEGRATION
2105	23041222.D	SEQ-CALJ		1	NO MANUAL INTEGRATION
2124	23041223.D	SEQ-CALK		1	NO MANUAL INTEGRATION
2142	23041224.D	SEQ-CALL		1	NO MANUAL INTEGRATION
2200	23041225.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
2219	23041226.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
2237	23041227.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
2255	23041228.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
2314	23041229.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
2332	23041230.D	BLD0075-BLK1		1	NO MANUAL INTEGRATION
2350	23041231.D	BLD0075-BS1		1	NO MANUAL INTEGRATION
0009	23041232.D	BLD0075-MRL1		1	NO MANUAL INTEGRATION
0027	23041233.D	23D0028-01		1	NO MANUAL INTEGRATION
0045	23041234.D	SEQ-PEM3		1	Endrin, 4,4'-DDD,
0104	23041235.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
0122	23041236.D	SEQ-CCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230412.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0140	23041237.D	BLD0009-BLK1		1	NO MANUAL INTEGRATION
0159	23041238.D	BLD0009-BS1		1	NO MANUAL INTEGRATION
0217	23041239.D	BLD0009-BSD1		1	NO MANUAL INTEGRATION
0235	23041240.D	BLD0009-MS1		1	Endrin, 4,4'-DDD, 4,4'-DDT,
0253	23041241.D	BLD0009-MSD1		1	Aldrin,
0312	23041242.D	23C0752-01		1	delta-BHC, gamma-BHC (Lindane), Endrin, 4,4'-DDD, 4,4'-DDT, Endrin aldehyde, Toxaphene, cis-Nonachlor,
0330	23041243.D	23C0752-02		1	Endrin, 4,4'-DDD, 4,4'-DDT, trans-Chlordane, cis-Chlordane, Toxaphene, trans-Nonachlor, cis-Nonachlor, Chlordane (NOS),
0348	23041244.D	23C0752-03		1	Dieldrin, 4,4'-DDD, cis-Chlordane, Hexachlorobenzene, trans-Nonachlor, cis-Nonachlor, Chlordane (NOS),
0407	23041245.D	23C0752-04		1	delta-BHC, Endrin, 4,4'-DDD, 4,4'-DDT, trans-Chlordane, cis-Chlordane, Toxaphene, trans-Nonachlor, cis-Nonachlor, Chlordane (NOS),
0425	23041246.D	23C0752-06		1	Endrin, 4,4'-DDT, cis-Chlordane, Toxaphene, cis-Nonachlor, Mirex, Chlordane (NOS),
0443	23041247.D	SEQ-PEM4		1	Endrin, 4,4'-DDD,
0502	23041248.D	SEQ-CCV3		1	Hexabromobiphenyl,
0520	23041249.D	SEQ-CCV4		1	NO MANUAL INTEGRATION

Security Status Report

Date: 14-Apr-2023 08:24

23041202.D	Data Locked	yev, 14-
23041203.D	Data Locked	yev, 14-
23041204.D	Data Locked	yev, 14-
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23041212.D	Data Locked	yev, 14-
23041213.D	Data Locked	yev, 14-
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23041234.D	Data Locked	yev, 14-
23041235.D	Data Locked	yev, 14-
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23041237.D	Data Locked	yev, 14-
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23041247.D	Data Locked	yev, 14-
23041248.D	Data Locked	yev, 14-
23041249.D	Data Locked	yev, 14-

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	23041204	23041205	23041206	23041207	23041208	23041209	23041210
INJ.DATE:	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023
INJ.TIME:	15:34	15:53	16:11	16:30	16:48	17:06	17:25

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
1 Hexachlorobutadiene	2.308	2.308	2.308	2.309	2.308	2.309	2.309	2.308	2.278-2.338	2.308	0.000
* 2 1Bromo-2nitrobenzene	3.137	3.138	3.138	3.138	3.138	3.138	3.138	3.137	3.107-3.167	3.138	0.000
* 3 Hexabromobiphenyl	9.516	9.516	9.516	9.515	9.515	9.516	9.516	9.516	9.486-9.546	9.516	0.000
$ 4 Tetrachloro-m-xylene	3.819	3.820	3.819	3.819	3.819	3.819	3.819	3.819	3.789-3.849	3.819	0.000
5 Hexachlorobenzene	4.175	4.175	4.175	4.175	4.175	4.175	4.175	4.175	4.145-4.205	4.175	0.000
6 alpha-BHC	4.333	4.334	4.333	4.334	4.333	4.333	4.333	4.333	4.303-4.363	4.333	0.000
7 gamma-BHC (Lindane)	4.637	4.637	4.637	4.637	4.637	4.637	4.637	4.637	4.607-4.667	4.637	0.000
8 beta-BHC	4.718	4.718	4.717	4.717	4.717	4.717	4.717	4.718	4.688-4.748	4.717	0.001
9 delta-BHC	4.902	4.902	4.902	4.902	4.901	4.901	4.901	4.902	4.873-4.933	4.902	0.001
10 Heptachlor	5.125	5.125	5.125	5.125	5.125	5.125	5.124	5.125	5.095-5.155	5.125	0.000
11 Aldrin	5.449	5.449	5.449	5.449	5.449	5.448	5.448	5.449	5.419-5.479	5.449	0.000
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
14 Heptachlor epoxide b	6.127	6.125	6.125	6.125	6.125	6.125	6.125	6.127	6.097-6.157	6.125	0.001
15 cis-Chlordane	6.414	6.414	6.414	6.413	6.413	6.414	6.413	6.414	6.384-6.444	6.414	0.000
16 trans-Chlordane	6.267	6.267	6.267	6.267	6.267	6.266	6.266	6.267	6.237-6.297	6.267	0.000
17 Endosulfan I	6.568	6.567	6.567	6.568	6.567	6.567	6.567	6.568	6.538-6.598	6.567	0.000

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE	6.491	6.490	6.489	6.490	6.490	6.489	6.489	6.491	6.461-6.521	6.490	0.001
	19 Dieldrin	6.828	6.828	6.828	6.828	6.828	6.829	6.828	6.828	6.798-6.858	6.828	0.000
	20 Endrin	7.079	7.079	7.078	7.078	7.078	7.078	7.078	7.079	7.049-7.109	7.078	0.000
	21 4,4'-DDD	7.138	7.138	7.137	7.137	7.137	7.137	7.136	7.138	7.108-7.168	7.137	0.001
	22 Endosulfan II	7.315	7.315	7.315	7.315	7.314	7.314	7.314	7.315	7.285-7.345	7.315	0.000
	23 4,4'-DDT	7.431	7.431	7.431	7.431	7.431	7.431	7.431	7.431	7.401-7.461	7.431	0.000
	24 Endrin aldehyde	7.744	7.743	7.743	7.743	7.743	7.743	7.743	7.744	7.714-7.774	7.743	0.000
	25 Methoxychlor	7.920	7.920	7.919	7.920	7.920	7.920	7.920	7.920	7.890-7.950	7.920	0.000
	26 Endosulfan sulfate	8.178	8.178	8.177	8.177	8.178	8.178	8.177	8.178	8.148-8.208	8.178	0.000
	27 Endrin ketone	8.453	8.453	8.452	8.452	8.452	8.452	8.452	8.453	8.423-8.482	8.452	0.000
$	28 Decachlorobiphenyl	9.367	9.367	9.366	9.366	9.366	9.367	9.366	9.367	9.337-9.397	9.366	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
	38 Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.430	7.400-7.460	+++++	+++++
	39 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.106	6.076-6.136	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.682	6.652-6.712	+++++	+++++
41 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.959	6.929-6.989	+++++	+++++
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.010	5.980-6.040	+++++	+++++
44 trans-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.396	6.366-6.426	+++++	+++++
45 cis-Nonachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.112	7.082-7.142	+++++	+++++
46 Mirex	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.086	8.056-8.116	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	23041211	23041212	23041213	23041214	23041215	23041216	23041217
INJ.DATE:	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023
INJ.TIME:	17:43	18:02	18:20	18:38	18:57	19:15	19:34

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.309	2.279-2.339	+++++	+++++
*	2 1Bromo-2nitrobenzene	3.138	3.138	3.138	3.138	3.138	3.138	3.138	3.138	3.108-3.168	3.138	0.000
*	3 Hexabromobiphenyl	9.516	9.516	9.516	9.516	9.516	9.516	9.516	9.516	9.486-9.546	9.516	0.000
$	4 Tetrachloro-m-xylene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.819	3.789-3.849	+++++	+++++
	5 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.175	4.145-4.205	+++++	+++++
	6 alpha-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.333	4.303-4.363	+++++	+++++
	7 gamma-BHC (Lindane)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.637	4.607-4.667	+++++	+++++
	8 beta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.717	4.687-4.747	+++++	+++++
	9 delta-BHC	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.901	4.871-4.931	+++++	+++++
	10 Heptachlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.124	5.094-5.154	+++++	+++++
	11 Aldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.448	5.418-5.478	+++++	+++++
	12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	13.627	13.597-13.657	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.869	10.839-10.899	+++++	+++++
	14 Heptachlor epoxide b	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.125	6.095-6.155	+++++	+++++
	15 cis-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.413	6.383-6.443	+++++	+++++
	16 trans-Chlordane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.266	6.236-6.296	+++++	+++++
	17 Endosulfan I	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.567	6.537-6.597	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
18	4,4'-DDE	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.489	6.459-6.519	+++++	+++++
19	Dieldrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.828	6.798-6.858	+++++	+++++
20	Endrin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.078	7.048-7.108	+++++	+++++
21	4,4'-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.136	7.106-7.166	+++++	+++++
22	Endosulfan II	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.314	7.284-7.344	+++++	+++++
23	4,4'-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.431	7.401-7.461	+++++	+++++
24	Endrin aldehyde	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.743	7.713-7.773	+++++	+++++
25	Methoxychlor	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.920	7.890-7.950	+++++	+++++
26	Endosulfan sulfate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.177	8.147-8.207	+++++	+++++
27	Endrin ketone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.452	8.422-8.482	+++++	+++++
$ 28	Decachlorobiphenyl	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.366	9.336-9.396	+++++	+++++
29	Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
30	Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.881	4.851-4.911	+++++	+++++
31	Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.359	5.329-5.389	+++++	+++++
32	Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	3.765	3.735-3.795	+++++	+++++
33	Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.418	4.388-4.448	+++++	+++++
34	Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.257	5.227-5.287	+++++	+++++
35	Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.045	6.015-6.075	+++++	+++++
36	Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.301	8.271-8.331	+++++	+++++
37	Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.259	11.229-11.289	+++++	+++++
38	Toxaphene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.430	7.400-7.460	+++++	+++++
39	2,4-DDE	+++++	6.106	6.106	6.106	6.106	6.106	6.105	6.106	6.076-6.136	6.106	0.001

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD	+++++	6.682	6.682	6.682	6.681	6.681	6.681	6.682	6.652-6.712	6.681	0.000
41 2,4-DDT	+++++	6.959	6.959	6.960	6.959	6.958	6.959	6.959	6.929-6.989	6.959	0.000
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.774	1.744-1.804	+++++	+++++
43 Oxychlordane	+++++	6.010	6.009	6.010	6.010	6.010	6.009	6.010	5.980-6.040	6.010	0.000
44 trans-Nonachlor	+++++	6.396	6.396	6.396	6.396	6.395	6.395	6.396	6.366-6.426	6.395	0.000
45 cis-Nonachlor	+++++	7.112	7.112	7.112	7.112	7.112	7.112	7.112	7.082-7.142	7.112	0.000
46 Mirex	+++++	8.086	8.086	8.086	8.086	8.086	8.086	8.086	8.056-8.116	8.086	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	20.156	20.126-20.186	+++++	+++++
48 Chlordane (NOS)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.593	5.563-5.623	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.319	6.289-6.349	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.936	9.906-9.966	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.891	11.861-11.921	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.827	14.797-14.857	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.750	9.720-9.780	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.107	9.077-9.137	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.251	10.221-10.281	+++++	+++++
56 Kepone	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.588	6.558-6.618	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.953	6.923-6.983	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	23041204	23041205	23041206	23041207	23041208	23041209	23041210
INJ.DATE:	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023
INJ.TIME:	15:34	15:53	16:11	16:30	16:48	17:06	17:25

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	2.452	2.452	2.452	2.452	2.452	2.453	2.453	2.453	2.423-2.483	2.452	0.000
*	2 1Bromo-2nitrobenzene [	3.287	3.288	3.287	3.288	3.287	3.287	3.288	3.287	3.257-3.317	3.288	0.000
*	3 Hexabromobiphenyl[C]	10.870	10.870	10.869	10.869	10.870	10.870	10.870	10.869	10.839-10.899	10.870	0.000
$	4 Tetrachloro-m-xylene [	4.136	4.136	4.136	4.136	4.136	4.136	4.136	4.136	4.106-4.166	4.136	0.000
	5 Hexachlorobenzene [C]	4.622	4.622	4.622	4.623	4.622	4.623	4.622	4.622	4.592-4.652	4.622	0.000
	6 alpha-BHC [C]	4.761	4.762	4.761	4.762	4.762	4.762	4.762	4.762	4.732-4.792	4.762	0.000
	7 gamma-BHC (Lindane) [C	5.152	5.152	5.151	5.152	5.152	5.152	5.152	5.152	5.122-5.182	5.152	0.000
	8 beta-BHC [C]	5.230	5.230	5.229	5.230	5.230	5.230	5.230	5.230	5.200-5.260	5.230	0.000
	9 delta-BHC [C]	5.578	5.577	5.576	5.577	5.577	5.577	5.577	5.577	5.547-5.607	5.577	0.000
	10 Heptachlor [C]	5.671	5.671	5.670	5.671	5.672	5.671	5.671	5.671	5.641-5.701	5.671	0.000
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	6.070	6.070	6.070	6.070	6.070	6.071	6.071	6.071	6.041-6.101	6.070	0.000
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	6.728	6.728	6.728	6.728	6.728	6.729	6.729	6.729	6.699-6.759	6.728	0.000
	15 cis-Chlordane [C]	7.099	7.100	7.099	7.099	7.100	7.100	7.100	7.100	7.070-7.130	7.100	0.000
	16 trans-Chlordane [C]	6.939	6.940	6.939	6.939	6.939	6.940	6.939	6.939	6.909-6.969	6.939	0.000
	17 Endosulfan I [C]	7.172	7.172	7.171	7.172	7.172	7.173	7.172	7.172	7.142-7.202	7.172	0.000

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	7.257	7.257	7.257	7.257	7.257	7.257	7.257	7.257	7.227-7.287	7.257	0.000
	19 Dieldrin [C]	7.466	7.466	7.465	7.466	7.466	7.466	7.466	7.466	7.436-7.496	7.466	0.000
	20 Endrin [C]	7.789	7.790	7.789	7.790	7.789	7.790	7.790	7.790	7.760-7.820	7.790	0.000
	21 4,4'-DDD [C]	7.862	7.862	7.862	7.862	7.862	7.862	7.862	7.862	7.832-7.892	7.862	0.000
	22 Endosulfan II [C]	8.001	8.000	8.000	8.000	8.000	8.001	8.001	8.001	7.971-8.031	8.000	0.000
	23 4,4'-DDT [C]	8.180	8.180	8.180	8.180	8.181	8.181	8.181	8.181	8.151-8.211	8.180	0.000
	24 Endrin aldehyde [C]	8.331	8.331	8.330	8.331	8.331	8.332	8.331	8.331	8.301-8.361	8.331	0.000
	25 Endosulfan sulfate [C]	8.598	8.598	8.597	8.598	8.598	8.598	8.598	8.598	8.568-8.628	8.598	0.000
	26 Methoxychlor [C]	8.820	8.821	8.820	8.821	8.821	8.821	8.822	8.822	8.792-8.852	8.821	0.001
	27 Endrin ketone [C]	9.119	9.119	9.119	9.119	9.119	9.120	9.119	9.119	9.089-9.149	9.119	0.000
$	28 Decachlorobiphenyl [C]	10.306	10.306	10.305	10.305	10.306	10.306	10.306	10.306	10.276-10.336	10.306	0.000
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.440	7.410-7.470	+++++	+++++
	39 2,4-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.921	6.891-6.951	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.477	7.447-7.507	+++++	+++++
41 2,4-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.799	7.769-7.829	+++++	+++++
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.624	6.594-6.654	+++++	+++++
44 trans-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.039	7.009-7.069	+++++	+++++
45 cis-Nonachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.859	7.829-7.889	+++++	+++++
46 Mirex [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.101	9.071-9.131	+++++	+++++
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b
Inst ID: ecd6.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	23041211	23041212	23041213	23041214	23041215	23041216	23041217
INJ.DATE:	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023	12-APR-2023
INJ.TIME:	17:43	18:02	18:20	18:38	18:57	19:15	19:34

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	1 Hexachlorobutadiene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	2.453	2.423-2.483	+++++	+++++
*	2 1Bromo-2nitrobenzene [	3.287	3.287	3.287	3.288	3.288	3.287	3.287	3.287	3.257-3.317	3.287	0.000
*	3 Hexabromobiphenyl[C]	10.870	10.870	10.870	10.870	10.870	10.870	10.870	10.869	10.839-10.899	10.870	0.000
$	4 Tetrachloro-m-xylene [	+++++	+++++	+++++	+++++	+++++	4.135	4.136	4.136	4.106-4.166	4.136	0.000
	5 Hexachlorobenzene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.622	4.592-4.652	+++++	+++++
	6 alpha-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.762	4.732-4.792	+++++	+++++
	7 gamma-BHC (Lindane) [C	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.152	5.122-5.182	+++++	+++++
	8 beta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.230	5.200-5.260	+++++	+++++
	9 delta-BHC [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.577	5.547-5.607	+++++	+++++
	10 Heptachlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.671	5.641-5.701	+++++	+++++
	11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	14.588	14.558-14.618	+++++	+++++
	12 Aldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.071	6.041-6.101	+++++	+++++
	13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	12.680	12.650-12.710	+++++	+++++
	14 Heptachlor epoxide b [	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.729	6.699-6.759	+++++	+++++
	15 cis-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.100	7.070-7.130	+++++	+++++
	16 trans-Chlordane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.939	6.909-6.969	+++++	+++++
	17 Endosulfan I [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.172	7.142-7.202	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b
Inst ID: ecd6.i

	Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
	18 4,4'-DDE [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.257	7.227-7.287	+++++	+++++
	19 Dieldrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.466	7.436-7.496	+++++	+++++
	20 Endrin [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.790	7.760-7.820	+++++	+++++
	21 4,4'-DDD [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.862	7.832-7.892	+++++	+++++
	22 Endosulfan II [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.001	7.971-8.031	+++++	+++++
	23 4,4'-DDT [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.181	8.151-8.211	+++++	+++++
	24 Endrin aldehyde [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.331	8.301-8.361	+++++	+++++
	25 Endosulfan sulfate [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.598	8.568-8.628	+++++	+++++
	26 Methoxychlor [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.822	8.792-8.852	+++++	+++++
	27 Endrin ketone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.119	9.089-9.149	+++++	+++++
$	28 Decachlorobiphenyl [C]	+++++	+++++	+++++	10.309	10.309	10.309	10.308	10.306	10.276-10.336	10.309	0.001
	29 Aroclor-1016	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.180	4.150-4.210	+++++	+++++
	30 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.051	5.021-5.081	+++++	+++++
	31 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.171	5.141-5.201	+++++	+++++
	32 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.970	4.940-5.000	+++++	+++++
	33 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.285	5.255-5.315	+++++	+++++
	34 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.968	5.938-5.998	+++++	+++++
	35 Aroclor-1260	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.767	6.737-6.797	+++++	+++++
	36 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.714	9.684-9.744	+++++	+++++
	37 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.791	11.761-11.821	+++++	+++++
	38 Toxaphene [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.440	7.410-7.470	+++++	+++++
	39 2,4-DDE [C]	6.922	6.921	6.921	6.922	6.921	6.921	6.921	6.921	6.891-6.951	6.921	0.000

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Batch File: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b
Inst ID: ecd6.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
40 2,4-DDD [C]	7.477	7.477	7.477	7.476	7.476	7.476	7.477	7.477	7.447-7.507	7.476	0.000
41 2,4-DDT [C]	7.799	7.798	7.799	7.799	7.799	7.798	7.799	7.799	7.769-7.829	7.799	0.000
42 Hexachloroethane [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.676	1.646-1.706	+++++	+++++
43 Oxychlordane [C]	6.624	6.624	6.624	6.624	6.624	6.624	6.624	6.624	6.594-6.654	6.624	0.000
44 trans-Nonachlor [C]	7.039	7.038	7.039	7.039	7.039	7.039	7.039	7.039	7.009-7.069	7.039	0.000
45 cis-Nonachlor [C]	7.859	7.858	7.859	7.859	7.859	7.858	7.859	7.859	7.829-7.889	7.859	0.000
46 Mirex [C]	9.102	9.101	9.101	9.101	9.101	9.101	9.101	9.101	9.071-9.131	9.101	0.000
47 bis-(2-ethylhexyl) Pht	+++++	+++++	+++++	+++++	+++++	+++++	+++++	21.499	21.469-21.529	+++++	+++++
48 Chlordane (NOS) [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	5.612	5.582-5.642	+++++	+++++
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.871	4.841-4.901	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.640	6.610-6.670	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.115	8.085-8.145	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.286	11.256-11.316	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.527	6.497-6.557	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.342	6.312-6.372	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	6.841	6.811-6.871	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.336	7.306-7.366	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.745	7.715-7.775	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20230412.b\23041218.D
Level 2: \\target\share\chem4\ecd6.i\20230412.b\23041219.D
Level 3: \\target\share\chem4\ecd6.i\20230412.b\23041220.D
Level 4: \\target\share\chem4\ecd6.i\20230412.b\23041221.D
Level 5: \\target\share\chem4\ecd6.i\20230412.b\23041222.D
Level 6: \\target\share\chem4\ecd6.i\20230412.b\23041223.D
Level 7: \\target\share\chem4\ecd6.i\20230412.b\23041224.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
1 Hexachlorobutadiene	2.06676	1.98551	1.84558	1.81938	1.70622	1.65553	1.55088	1.80426	10.110
5 Hexachlorobenzene	1.76245	1.68993	1.60717	1.57099	1.46814	1.41798	1.31954	1.54803	10.064
6 alpha-BHC	1.75845	1.79303	1.78792	1.82015	1.74640	1.71680	1.62244	1.74931	3.739
7 gamma-BHC (Lindane)	1.55969	1.58392	1.58235	1.59868	1.52927	1.49902	1.40784	1.53725	4.344
8 beta-BHC	0.78879	0.75698	0.71551	0.70150	0.66783	0.65017	0.60902	0.69854	8.893
9 delta-BHC	1.59762	1.62693	1.62475	1.65308	1.58886	1.54105	1.45446	1.58382	4.244
10 Heptachlor	1.55444	1.53135	1.49709	1.48384	1.38462	1.31527	1.19276	1.42277	9.267
11 Aldrin	1.52950	1.52030	1.51102	1.51498	1.42775	1.37062	1.25612	1.44718	7.111

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b	1.77461	1.35433	1.32261	1.30465	1.21044	1.14473	1.03248	1.30626	18.012
15 cis-Chlordane	1.38132	1.35475	1.32741	1.32583	1.25243	1.21449	1.12534	1.28308	7.051
16 trans-Chlordane	1.35410	1.33073	1.31479	1.32467	1.25766	1.22594	1.13926	1.27816	5.931
17 Endosulfan I	1.28039	1.25168	1.22150	1.21676	1.13336	1.07368	0.97393	1.16447	9.443
18 4,4'-DDE	1.24170	1.24927	1.22317	1.21706	1.13776	1.08081	0.98378	1.16194	8.584
19 Dieldrin	1.34743	1.34643	1.30489	1.29164	1.19395	1.12151	1.02037	1.23232	10.143
20 Endrin	1.57568	1.51238	1.45431	1.42357	1.32589	1.25651	1.12944	1.38254	11.211
21 4,4'-DDD	1.35634	1.32763	1.29400	1.28872	1.20844	1.16122	1.04973	1.24087	8.699
22 Endosulfan II	1.47728	1.43199	1.36585	1.33268	1.23064	1.17531	1.04873	1.29464	11.695

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
23 4,4'-DDT	1.46240	1.43318	1.38952	1.37913	1.29284	1.25728	1.14081	1.33645	8.438
24 Endrin aldehyde	1.14396	1.08101	1.04038	1.00916	0.93237	0.89937	0.81008	0.98805	11.597
25 Methoxychlor	0.70887	0.65387	0.60096	0.56348	0.51256	0.49735	0.47085	0.57256	15.240
26 Endosulfan sulfate	1.38827	1.35363	1.28002	1.24749	1.15302	1.11454	1.00702	1.22057	11.169
27 Endrin ketone	1.70062	1.57515	1.43531	1.38817	1.27796	1.24181	1.13023	1.39275	14.203
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
31 Aroclor-1232(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
32 Aroclor-1242(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(6)	*****	*****	*****	*****	*****	*****	*****	*****	*****
33 Aroclor-1248(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
34 Aroclor-1254(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
35 Aroclor-1260(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
36 Aroclor-1262(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
37 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
38 Toxaphene(1)	0.02964	0.03226	0.03521	0.03252	0.03126	0.02556	0.02076	0.02960	16.566
(2)	0.04237	0.04244	0.04595	0.04487	0.04047	0.03477	0.02651	0.03962	17.214
(3)	0.05862	0.05791	0.06487	0.06029	0.05391	0.04678	0.03584	0.05403	18.141
(4)	0.04172	0.04045	0.05069	0.04873	0.04618	0.04013	0.03028	0.04260	16.014
(5)	0.02406	0.02417	0.03063	0.02984	0.02781	0.02427	0.01877	0.02565	15.995

ARI Labs, Inc.

INITIAL CALIBRATION DATA

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Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
39 2,4-DDE	+++++	0.96271	0.96579	0.91868	0.86843	0.79752	0.70837	0.87025	11.664
40 2,4-DDD	+++++	0.88281	0.89873	0.85426	0.81245	0.75323	0.67816	0.81327	10.387
41 2,4-DDT	+++++	1.07731	1.07494	1.02816	0.97817	0.90679	0.81933	0.98078	10.395
42 Hexachloroethane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
43 Oxychlordane	+++++	1.26894	1.32532	1.26543	1.20607	1.12176	1.02406	1.20193	9.252
44 trans-Nonachlor	+++++	1.54141	1.51800	1.46473	1.41186	1.32985	1.23122	1.41618	8.360
45 cis-Nonachlor	+++++	1.59233	1.57870	1.52677	1.47421	1.39620	1.29610	1.47739	7.740
46 Mirex	+++++	0.99781	0.99695	0.94201	0.89770	0.84639	0.78527	0.91102	9.320
47 bis-(2-ethylhexyl) Phthalate	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
48 Chlordane (NOS)(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
49 Trifluralin	#####	#####	#####	#####	#####	#####	#####	#####	#####
50 Dacthal	#####	#####	#####	#####	#####	#####	#####	#####	#####
51 Oxadiazon	#####	#####	#####	#####	#####	#####	#####	#####	#####
52 Kelthane	#####	#####	#####	#####	#####	#####	#####	#####	#####
53 Chlorpyrifos	#####	#####	#####	#####	#####	#####	#####	#####	#####
54 Methyl Parathion	#####	#####	#####	#####	#####	#####	#####	#####	#####
55 Ethyl Parathion	#####	#####	#####	#####	#####	#####	#####	#####	#####
56 Kepone	#####	#####	#####	#####	#####	#####	#####	#####	#####
57 1-Chloropyrene	#####	#####	#####	#####	#####	#####	#####	#####	#####
$ 4 Tetrachloro-m-xylene	1.25566	1.22780	1.18265	1.15804	1.07105	1.01536	0.92513	1.11939	10.740

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m
Last Edit : 13-Apr-2023 13:06 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
$ 28 Decachlorobiphenyl	1.22265	1.12837	0.97683	0.90966	0.82714	0.80277	0.73776	0.94360	18.860

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b\23041218.D
Level 2: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b\23041219.D
Level 3: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b\23041220.D
Level 4: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b\23041221.D
Level 5: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b\23041222.D
Level 6: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b\23041223.D
Level 7: \\target\share\chem4\ecd6.i\20230412.b\B20230412.b\23041224.D

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
1 Hexachlorobutadiene [C]	1.68175	1.59096	1.60748	1.61038	1.49696	1.45925	1.33902	1.54083	7.539
5 Hexachlorobenzene [C]	1.63765	1.58192	1.53225	1.52323	1.42721	1.37840	1.29419	1.48212	8.145
6 alpha-BHC [C]	1.63462	1.67867	1.71056	1.77219	1.71975	1.71612	1.64801	1.69713	2.779
7 gamma-BHC (Lindane) [C]	1.48009	1.48711	1.51015	1.55733	1.49836	1.49181	1.41985	1.49210	2.737
8 beta-BHC [C]	0.74714	0.70583	0.68405	0.68422	0.64813	0.64123	0.60839	0.67414	6.802
9 delta-BHC [C]	1.48755	1.49763	1.52471	1.57911	1.52554	1.52030	1.44063	1.51078	2.809
10 Heptachlor [C]	1.37389	1.35320	1.35361	1.37453	1.29676	1.25563	1.15202	1.30852	6.247
11 Chlorthalonil	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
12 Aldrin [C]	1.39523	1.38135	1.39556	1.42793	1.36125	1.32392	1.22309	1.35833	4.993
13 Heptachlor Epoxide a	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
14 Heptachlor epoxide b [C]	1.56323	1.20249	1.18929	1.19890	1.12726	1.08936	0.99933	1.19569	14.872
15 cis-Chlordane [C]	1.19498	1.16010	1.15172	1.16525	1.10932	1.09197	1.02977	1.12902	4.952
16 trans-Chlordane [C]	1.19368	1.16300	1.16384	1.18747	1.13804	1.12279	1.05677	1.14651	4.085
17 Endosulfan I [C]	1.08731	1.05822	1.05274	1.06193	1.00305	0.97183	0.89638	1.01878	6.548
18 4,4'-DDE [C]	1.12212	1.12143	1.12052	1.12760	1.04668	0.99351	0.90867	1.06293	7.992
19 Dieldrin [C]	1.19866	1.18503	1.16992	1.16774	1.08900	1.04163	0.96463	1.11666	7.871
20 Endrin [C]	1.78067	1.74471	1.68317	1.66518	1.56413	1.46925	1.36399	1.61016	9.423
21 4,4'-DDD [C]	1.57958	1.54965	1.50467	1.51523	1.44353	1.39149	1.31906	1.47189	6.277
22 Endosulfan II [C]	1.67704	1.62917	1.57040	1.56415	1.47191	1.40267	1.33218	1.52108	8.159

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	RRF	% RSD
23 4,4'-DDT [C]	1.60092	1.55757	1.51411	1.52351	1.44879	1.40898	1.34107	1.48499	6.076
24 Endrin aldehyde [C]	1.25337	1.18287	1.12863	1.11827	1.05217	1.01258	0.95076	1.09981	9.372
25 Endosulfan sulfate [C]	1.55683	1.49557	1.43410	1.42713	1.35325	1.30546	1.23196	1.40062	7.982
26 Methoxychlor [C]	0.75597	0.70472	0.65874	0.63180	0.58097	0.56318	0.56181	0.63674	11.732
27 Endrin ketone [C]	1.75477	1.67216	1.56779	1.54355	1.44756	1.39441	1.32623	1.52949	9.953
29 Aroclor-1016(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
30 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
31 Aroclor-1232(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(4)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(5)	*****	*****	*****	*****	*****	*****	*****	*****	*****
32 Aroclor-1242(1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
33 Aroclor-1248(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
34 Aroclor-1254(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
35 Aroclor-1260(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####
36 Aroclor-1262(1)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(2)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(3)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(4)	#####	#####	#####	#####	#####	#####	#####	#####	#####
(5)	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	RRF	% RSD
	80.000 Level 7							
37 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(2)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(3)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(4)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
(5)	+++++	+++++	+++++	+++++	+++++	+++++		
	+++++						+++++	+++++
38 Toxaphene [C](1)	0.02960	0.02897	0.02869	0.02664	0.02372	0.02271		
	0.01995						0.02576	14.316
(2)	0.08918	0.08648	0.08486	0.07864	0.06865	0.06553		
	0.05881						0.07602	15.453
(3)	0.06792	0.06646	0.06603	0.06172	0.05457	0.05229		
	0.04648						0.05935	13.972
(4)	0.07276	0.07135	0.06974	0.06542	0.05866	0.05671		
	0.05156						0.06374	12.837
(5)	0.03882	0.03832	0.03789	0.03573	0.03246	0.03203		
	0.02918						0.03492	10.684
39 2,4-DDE [C]	0.75845	0.72899	0.70778	0.69440	0.65651	0.59759		
	0.53401						0.66825	11.787

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
40 2,4-DDD [C]	1.12937	1.06142	1.05101	1.01695	0.98327	0.92485	0.84627	1.00188	9.375
41 2,4-DDT [C]	1.28576	1.20894	1.19812	1.16271	1.12721	1.06684	0.96934	1.14556	9.038
42 Hexachloroethane [C]	*****	*****	*****	*****	*****	*****	*****	*****	*****
43 Oxychlordane [C]	0.99553	0.97475	0.94837	0.94350	0.90717	0.84779	0.78529	0.91463	8.155
44 trans-Nonachlor [C]	1.85055	1.66441	1.77907	1.73821	1.69126	1.60386	1.46338	1.68439	7.480
45 cis-Nonachlor [C]	1.87416	1.79479	1.80526	1.78076	1.73947	1.66348	1.53301	1.74156	6.446
46 Mirex [C]	1.14525	1.09368	1.04777	0.99189	0.96224	0.92321	0.87240	1.00520	9.580
47 bis-(2-ethylhexyl) Phthalate	*****	*****	*****	*****	*****	*****	*****	*****	*****
48 Chlordane (NOS) [C](1)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(2)	*****	*****	*****	*****	*****	*****	*****	*****	*****
(3)	*****	*****	*****	*****	*****	*****	*****	*****	*****

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 12-APR-2023 15:34
End Cal Date : 12-APR-2023 21:42
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd6.i\20230412.b\PEST.m\PESTB.m
Last Edit : 13-Apr-2023 12:43 ecd6.i
Curve Type : Average

Compound	1.250 Level 1	2.500 Level 2	5.000 Level 3	10.000 Level 4	20.000 Level 5	40.000 Level 6	80.000 Level 7	___ RRF	% RSD
49 Trifluralin	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Dacthal	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
51 Oxadiazon	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
52 Kelthane	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
53 Chlorpyrifos	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
54 Methyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
55 Ethyl Parathion	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
56 Kepone [C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
57 1-Chloropyrene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 4 Tetrachloro-m-xylene [C]	1.21095	1.18796	1.16281	1.15216	1.06273	1.00371	0.92008	1.10006	9.801
$ 28 Decachlorobiphenyl [C]	1.11095	1.06919	1.03174	0.97149	0.89134	0.86176	0.82279	0.96561	11.420

7E

8081 DDT/ENDRIN BREAKDOWN VERIFICATION SUMMARY

Lab ID: SEQ-PEM1 InstID,Data File: ecd6.i, 23041203.D

Analysis Date: 12-APR-2023 15:16 Init. Calib. Date: 12-APR-2023

GC Column: STX-CLP1 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene	3.138	944928
4,4'-DDE	6.491	7178
Endrin	7.079	1094493
4,4'-DDD	7.138	----
4,4'-DDT	7.432	1044833
Endrin ketone	8.453	17361
Endrin aldehyde	7.745	11672
Hexabromobiphenyl	9.517	750693
Tetrachloro-m-xylene	3.820	499864
Decachlorobiphenyl	9.367	304586

DDT Percent Breakdown = 0.7 %
((7178+0) * 100)/(7178+0+1044833)

Endrin Percent Breakdown = 2.6 %
((11672+17361) * 100)/(11672+17361+1094493)

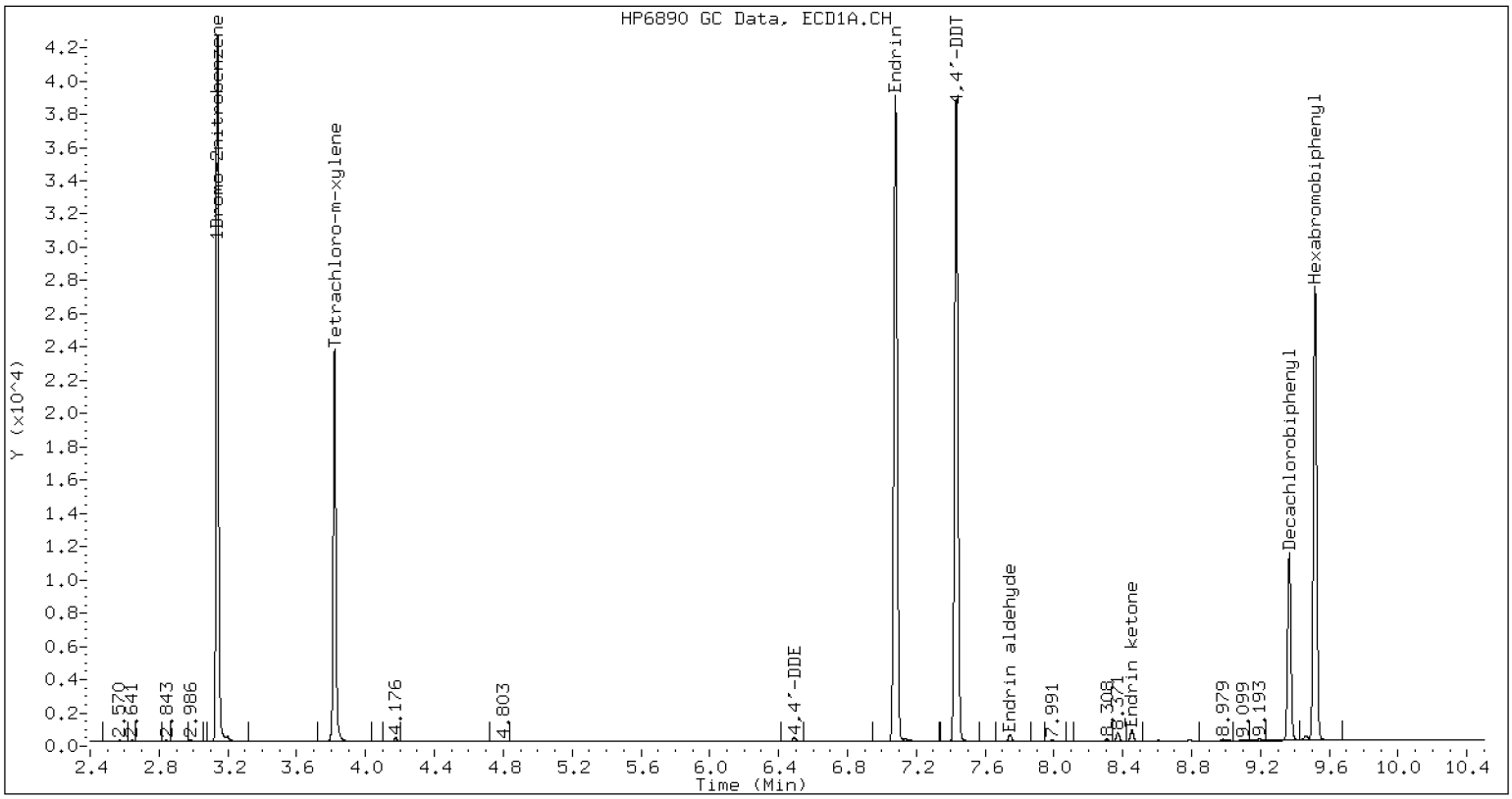
GC Column: STX-CLP2 ID: 0.53(mm)

COMPOUND	RT	AREA
1Bromo-2nitrobenzene [C]	3.288	1250764
4,4'-DDE [C]	7.257	9310
Endrin [C]	7.790	1308045
4,4'-DDD [C]	7.862	32953
4,4'-DDT [C]	8.181	1208253
Endrin ketone [C]	9.119	16410
Endrin aldehyde [C]	8.332	13846
Hexabromobiphenyl[C]	10.870	749199
Tetrachloro-m-xylene [C]	4.136	659084
Decachlorobiphenyl [C]	10.306	328819

DDT Percent Breakdown = 3.4 %
((9310+32953) * 100)/(9310+32953+1208253)

Endrin Percent Breakdown = 2.3 %
((13846+16410) * 100)/(13846+16410+1308045)

/20230412.b/23041203.D SEQ-PEM1 STX-CLP 12-APR-2023 15:16 1ul



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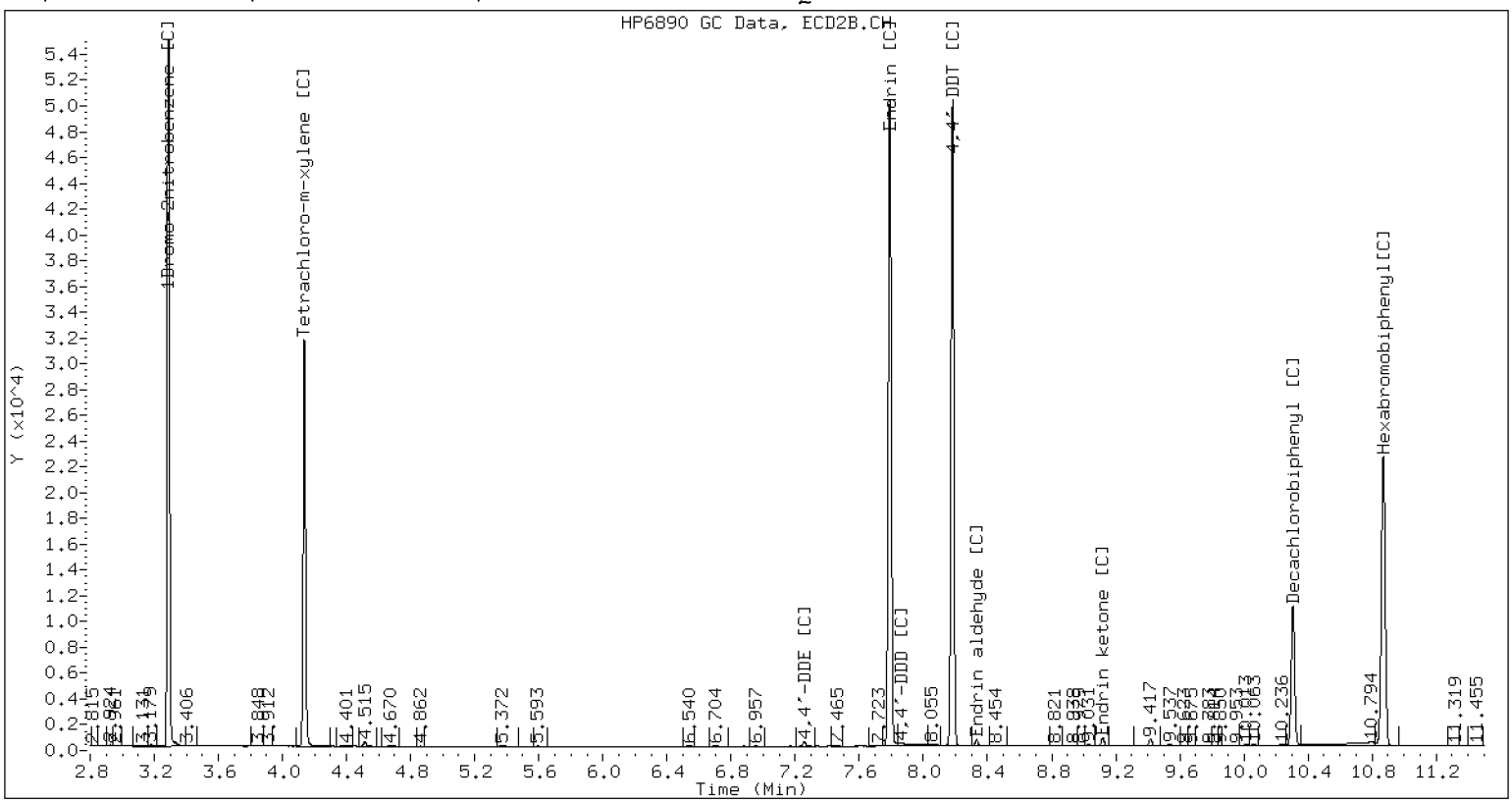

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041204.D
Data file 2: /20230412.b/B20230412.b/23041204.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL1
Client ID:
Injection Date: 12-APR-2023 15:34
Report Date: 04/13/2023 12:57
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.333	0.000	25454	4.761	-0.001	31321	1.26	1.20	4.3	alpha-BHC
4.718	0.000	11418	5.230	-0.000	14316	1.41	1.39	1.9	beta-BHC
4.902	0.000	23126	5.578	0.001	28503	1.26	1.23	2.4	delta-BHC
4.637	0.000	22577	5.152	-0.000	28360	1.27	1.24	2.3	gamma-BHC (Lindane)
5.125	0.000	22501	5.671	0.000	26325	1.37	1.31	4.0	Heptachlor
5.449	0.000	22140	6.070	-0.001	26734	1.32	1.28	2.9	Aldrin
6.127	0.000	25688	6.728	-0.001	29953	1.70	1.63	3.8	Heptachlor epoxide b
6.568	0.000	18534	7.172	0.000	20834	1.37	1.33	3.0	Endosulfan I
6.828	0.000	39009	7.466	0.000	45935	2.73	2.68	1.8	Dieldrin
6.491	0.000	35948	7.257	-0.000	43002	2.67	2.64	1.2	4,4'-DDE
7.079	0.000	36220	7.789	-0.001	40635	2.85	2.76	3.0	Endrin
7.315	0.000	33958	8.001	-0.000	38270	2.85	2.76	3.4	Endosulfan II
7.138	0.000	31178	7.862	0.000	36046	2.73	2.68	1.8	4,4'-DDD
8.178	0.000	31912	8.598	0.000	35527	2.84	2.78	2.3	Endosulfan sulfate
7.431	0.000	33616	8.180	-0.001	36533	2.74	2.70	1.5	4,4'-DDT
7.920	0.000	81474	8.820	-0.002	86256	15.48	14.84	4.2	Methoxychlor
8.453	0.000	39092	9.119	0.000	40044	3.05	2.87	6.2	Endrin ketone
7.744	0.000	26296	8.331	0.000	28602	2.89	2.85	1.6	Endrin aldehyde
6.267	0.000	19601	6.939	0.000	22872	1.32	1.30	1.7	trans-Chlordane
6.414	0.000	19995	7.099	-0.001	22897	1.35	1.32	1.7	cis-Chlordane
2.308	0.000	29917	2.452	-0.001	32224	1.43	1.36	4.8	Hexachlorobutadiene
4.175	0.000	25512	4.622	0.000	31379	1.42	1.38	3.0	Hexachlorobenzene
3.819	0.000	36352	4.136	-0.000	46406	2.80	2.75	1.9	Tetrachloro-m-xylene
9.367	0.000	28105	10.307	0.000	25352	3.24	2.88	11.9	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	926418	7.2
Hexabromobiphenyl	663237	735580	10.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1226303	-17.2
Hexabromobiphenyl	870561	730241	-16.1

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

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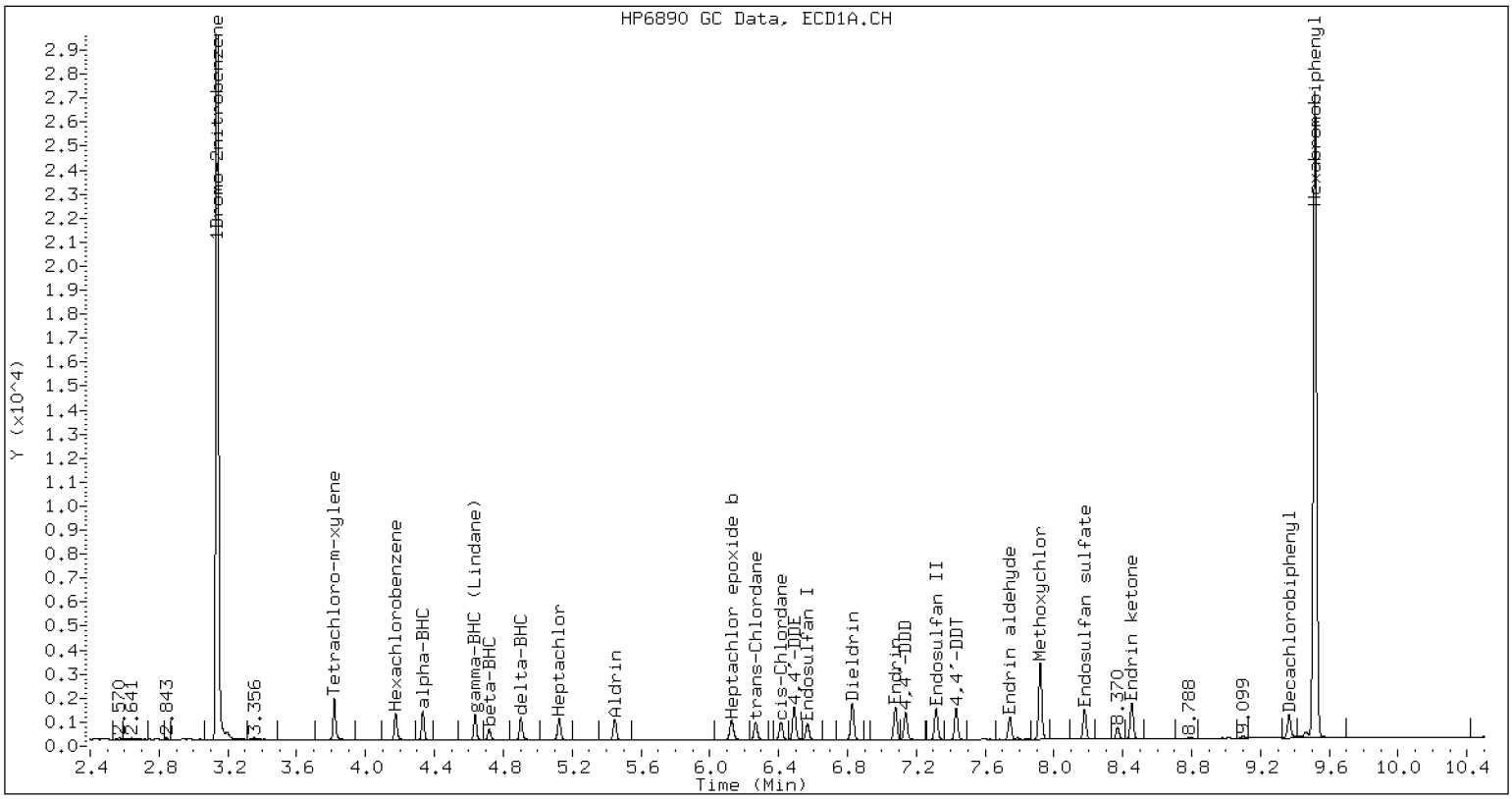

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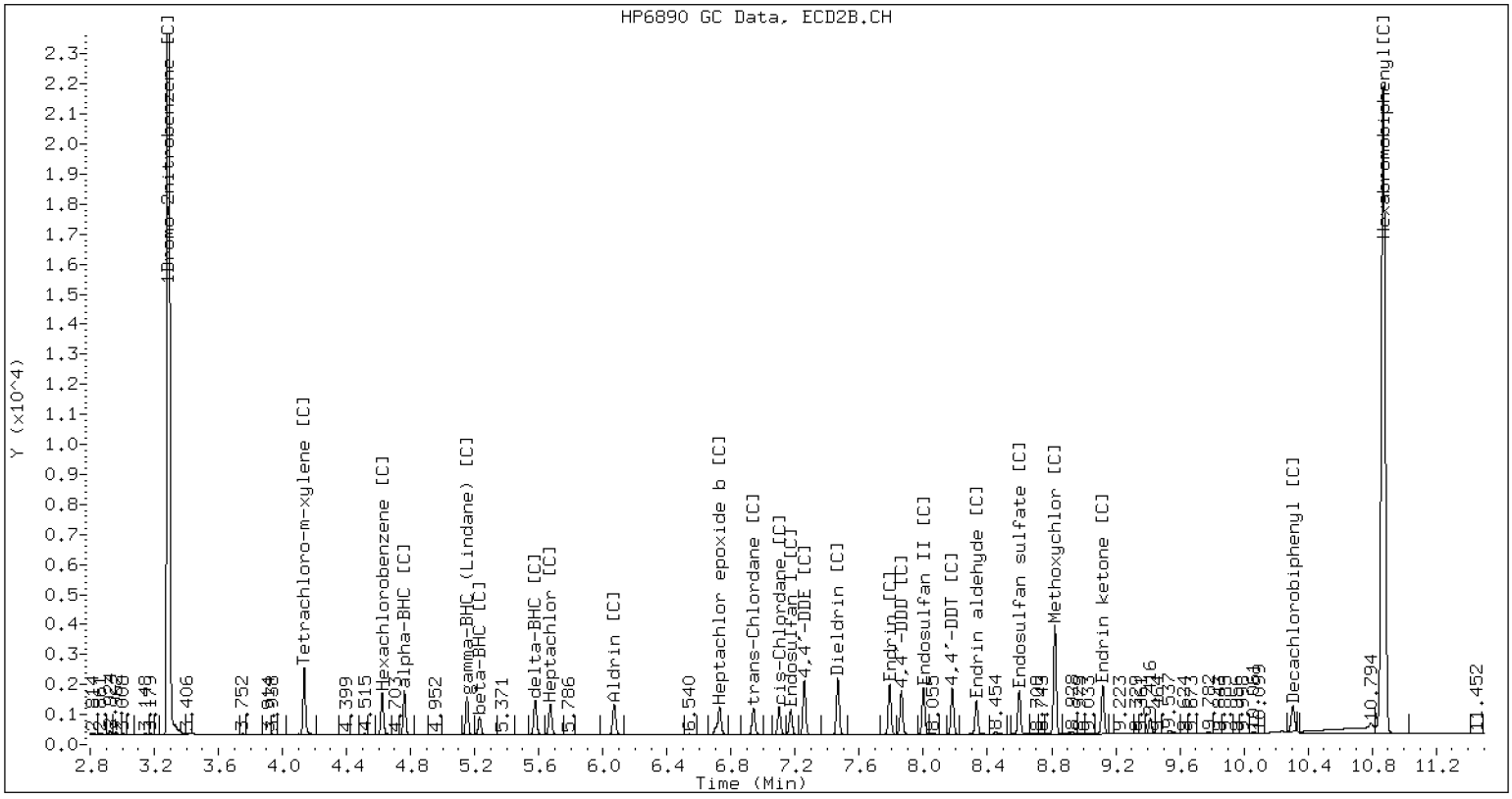
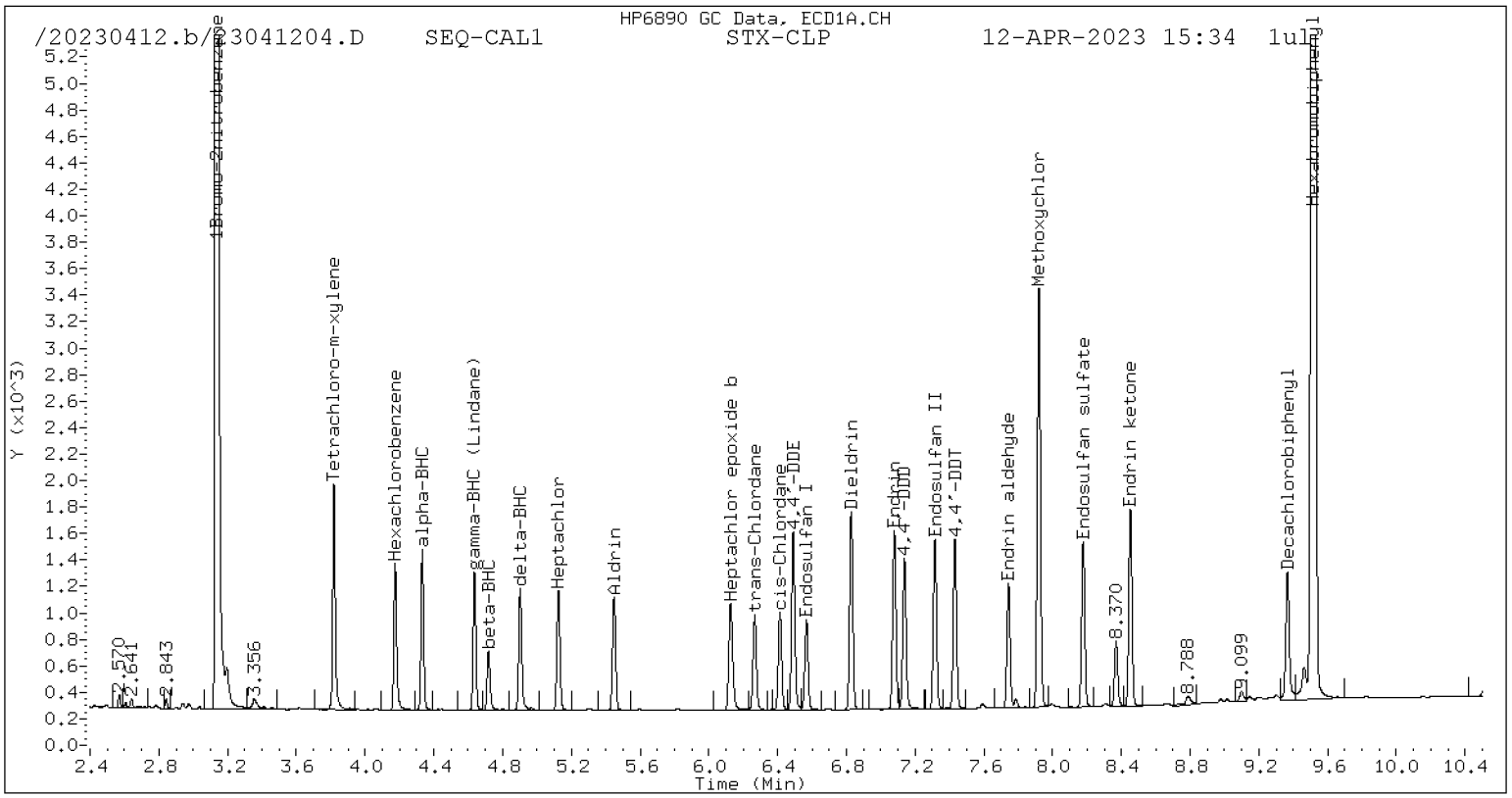
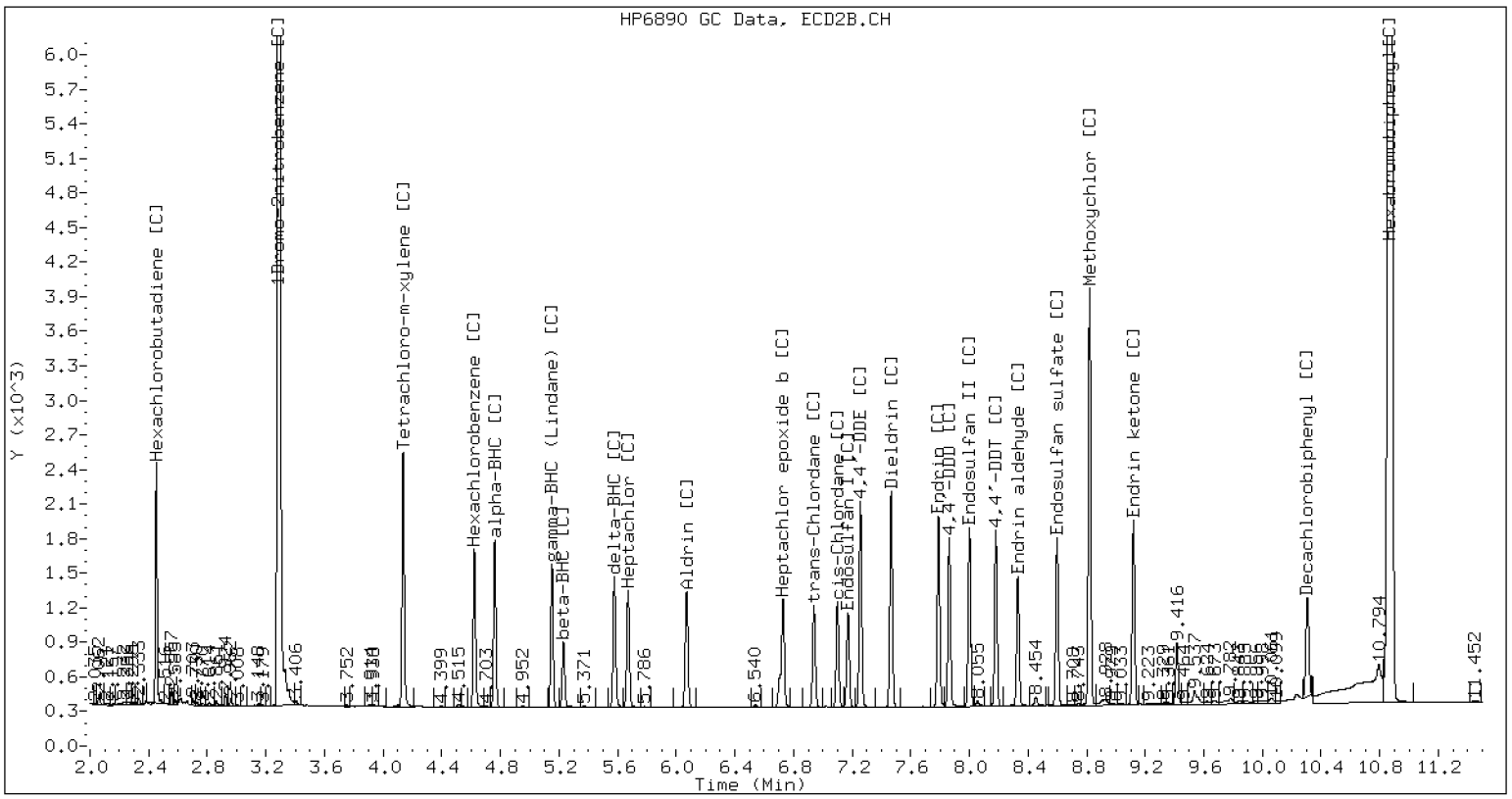


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

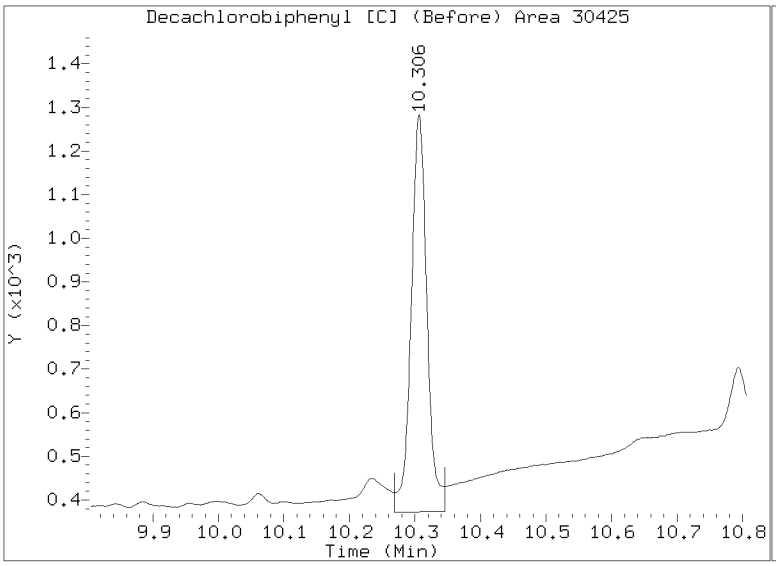
/20230412.b/B20230412.b/23041204.D SEQ-CAL1 CLP2

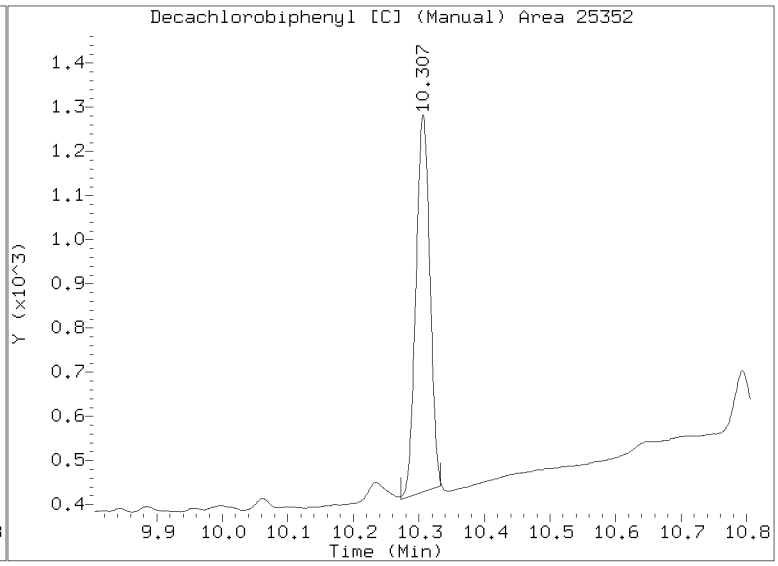


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

Datafile: /20230412.b/B20230412.b/23041204.D
Injection Date: 12-APR-2023 15:34
Lab ID:SEQ-CAL1 Client ID:





Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041205.D
Data file 2: /20230412.b/B20230412.b/23041205.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL2
Client ID:
Injection Date: 12-APR-2023 15:53
Report Date: 04/13/2023 12:57
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.334	0.000	51739	4.762	-0.000	64823	2.56	2.47	3.6	alpha-BHC
4.718	-0.000	21843	5.230	-0.000	27256	2.71	2.62	3.4	beta-BHC
4.902	-0.001	46946	5.577	0.000	57832	2.57	2.48	3.6	delta-BHC
4.637	0.000	45705	5.152	-0.000	57426	2.58	2.49	3.3	gamma-BHC (Lindane)
5.125	0.000	44188	5.671	0.000	52255	2.69	2.59	4.0	Heptachlor
5.449	-0.000	43869	6.070	-0.001	53342	2.63	2.54	3.2	Aldrin
6.125	-0.002	39080	6.728	-0.001	46435	2.59	2.51	3.0	Heptachlor epoxide b
6.567	-0.001	36118	7.172	0.000	40864	2.69	2.60	3.4	Endosulfan I
6.828	-0.000	77704	7.466	0.000	91522	5.46	5.31	2.9	Dieldrin
6.490	-0.001	72097	7.257	0.000	86610	5.38	5.28	1.9	4,4'-DDE
7.079	-0.000	69966	7.790	-0.000	80652	5.47	5.42	1.0	Endrin
7.315	-0.000	66247	8.000	-0.001	75311	5.53	5.36	3.2	Endosulfan II
7.138	-0.000	61419	7.862	-0.000	71635	5.35	5.26	1.6	4,4'-DDD
8.178	0.000	62622	8.598	0.000	69135	5.55	5.34	3.8	Endosulfan sulfate
7.431	-0.000	66302	8.180	-0.001	72001	5.36	5.24	2.2	4,4'-DDT
7.920	-0.000	151246	8.821	-0.001	162884	28.55	27.67	3.1	Methoxychlor
8.453	0.000	72870	9.119	0.000	77298	5.65	5.47	3.4	Endrin ketone
7.743	-0.000	50010	8.331	0.000	54680	5.47	5.38	1.7	Endrin aldehyde
6.267	-0.000	38399	6.940	0.001	44910	2.60	2.54	2.6	trans-Chlordane
6.414	0.000	39092	7.100	-0.000	44798	2.64	2.57	2.7	cis-Chlordane
2.308	0.000	57293	2.452	-0.001	61436	2.75	2.58	6.4	Hexachlorobutadiene
4.175	-0.000	48764	4.622	0.000	61087	2.73	2.67	2.3	Hexachlorobenzene
3.820	0.000	70858	4.136	0.000	91748	5.48	5.40	1.6	Tetrachloro-m-xylene
9.367	-0.000	52201	10.306	-0.000	49425	5.98	5.54	7.7	Decachlorobiphenyl N

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

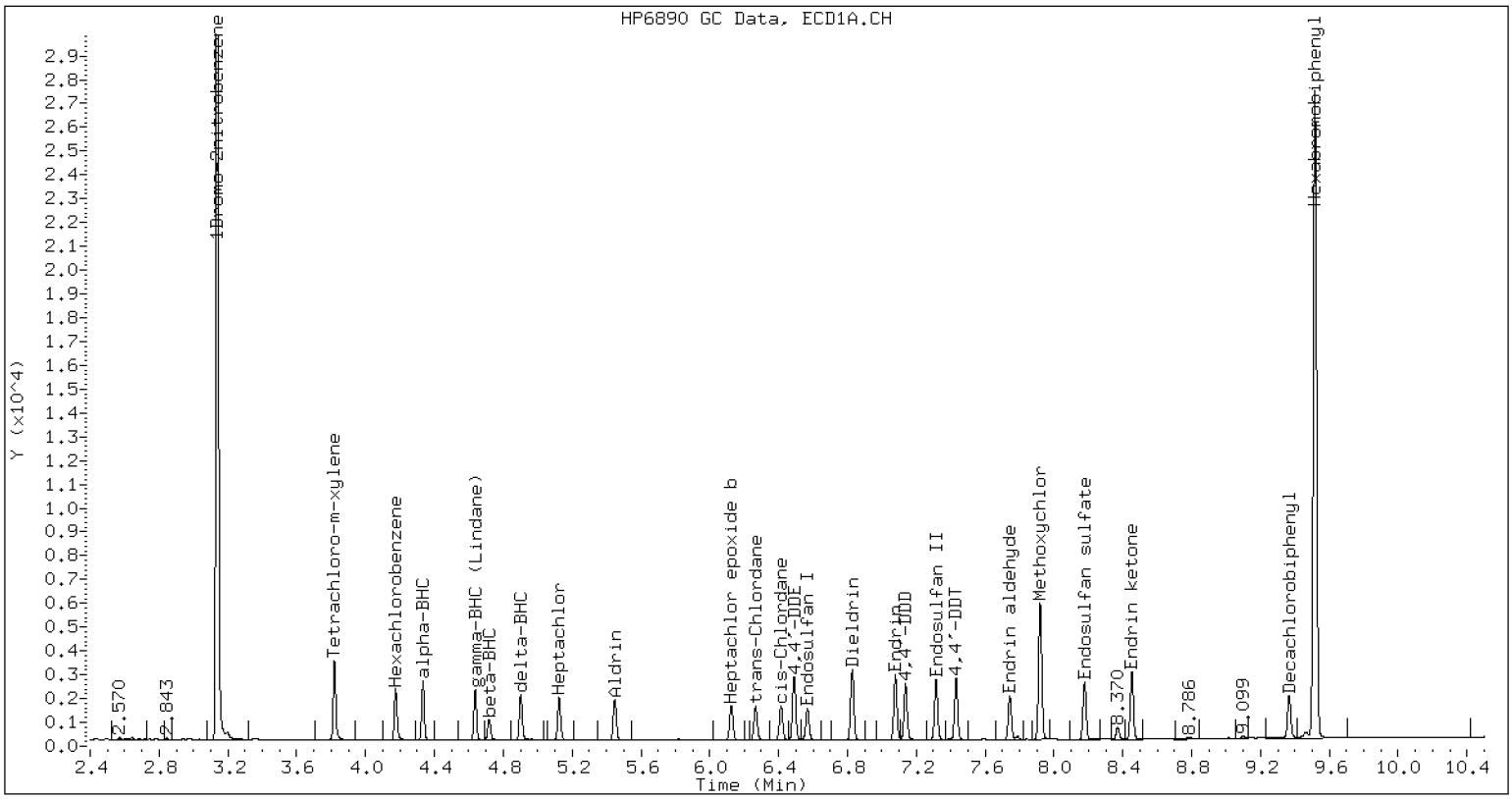
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	923378	6.8
Hexabromobiphenyl	663237	740194	11.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1235705	-16.6
Hexabromobiphenyl	870561	739625	-15.0

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230412.b/23041205.D SEQ-CAL2 STX-CLP 12-APR-2023 15:53 1ul



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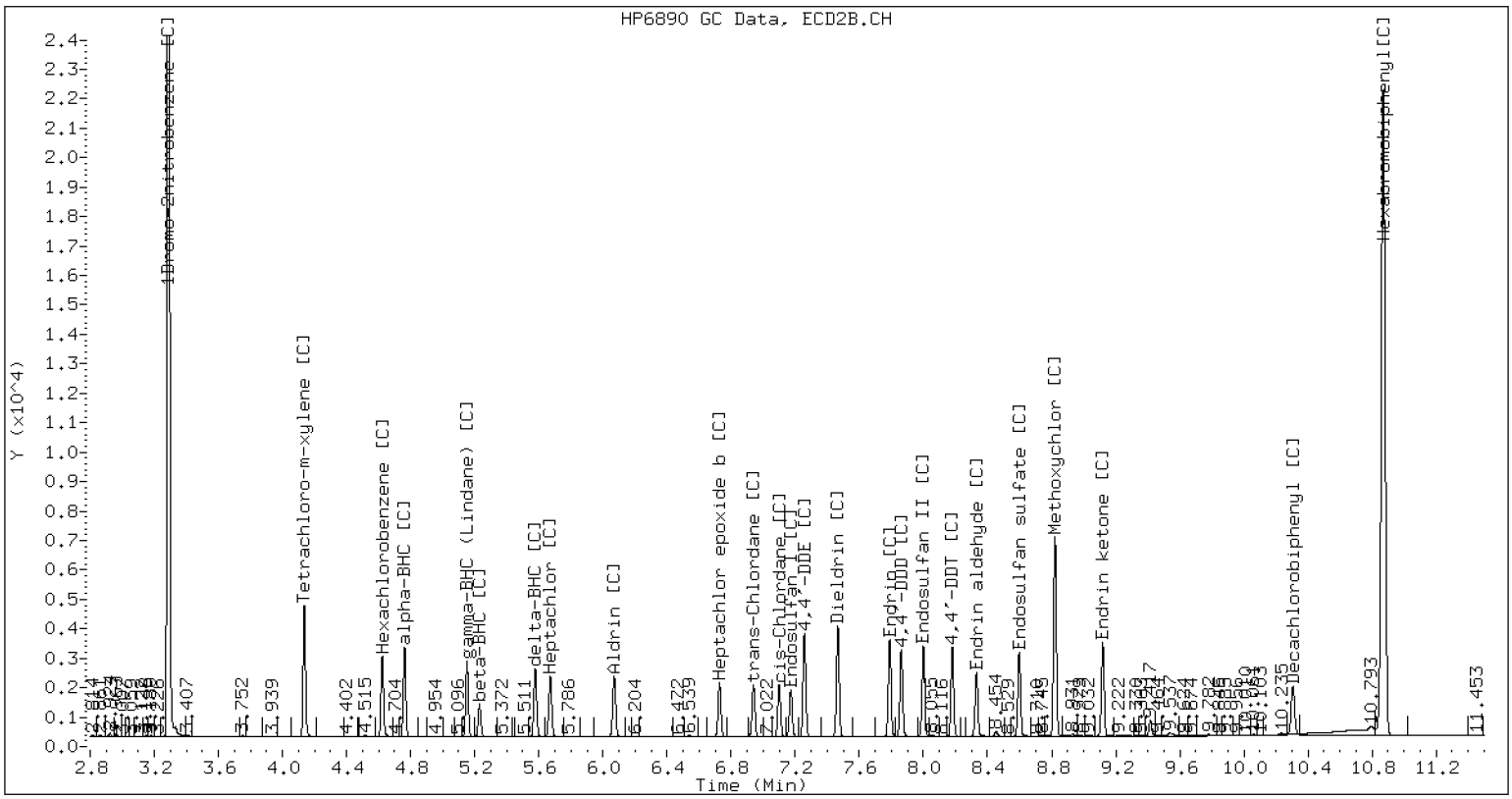
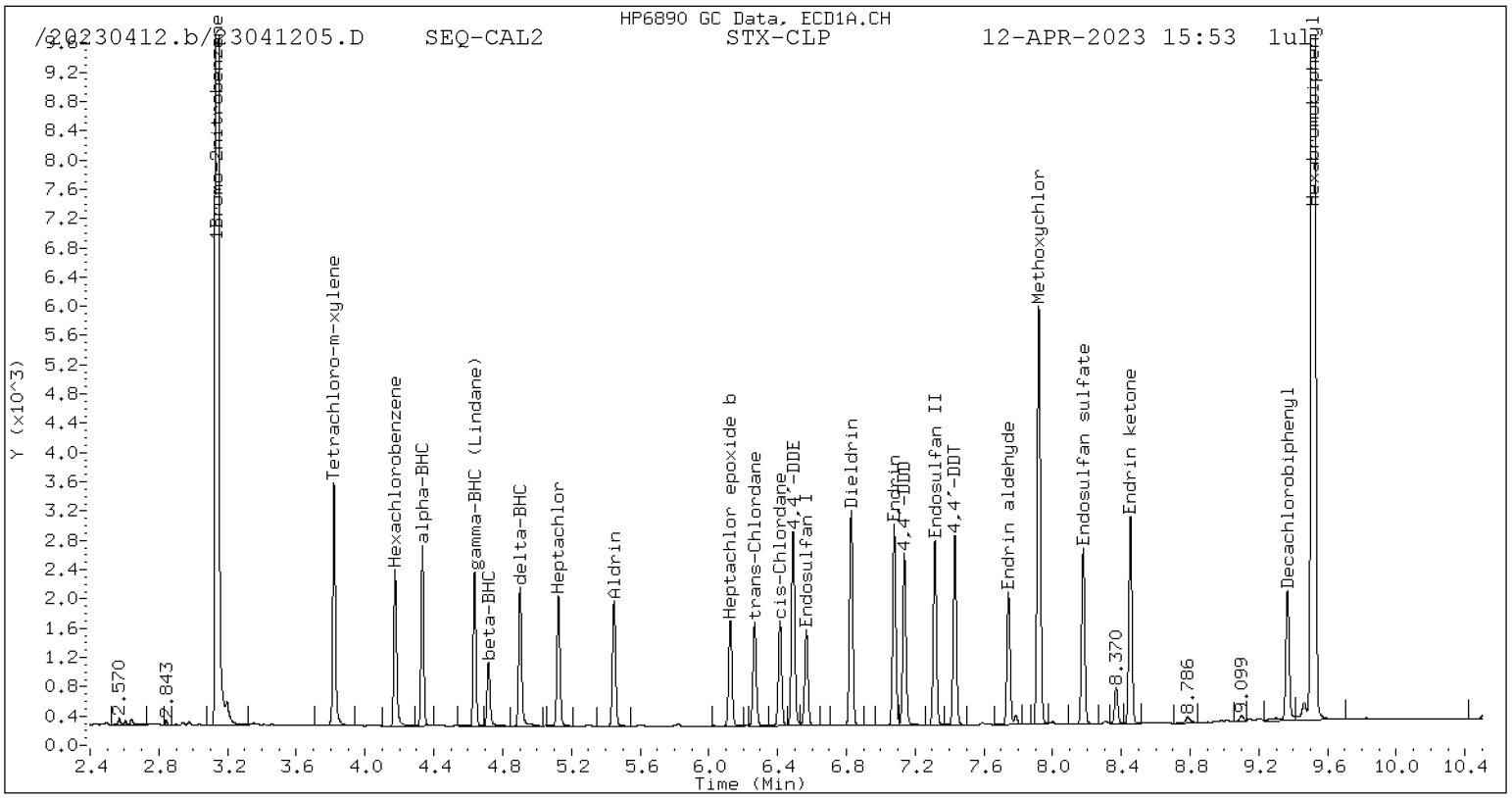
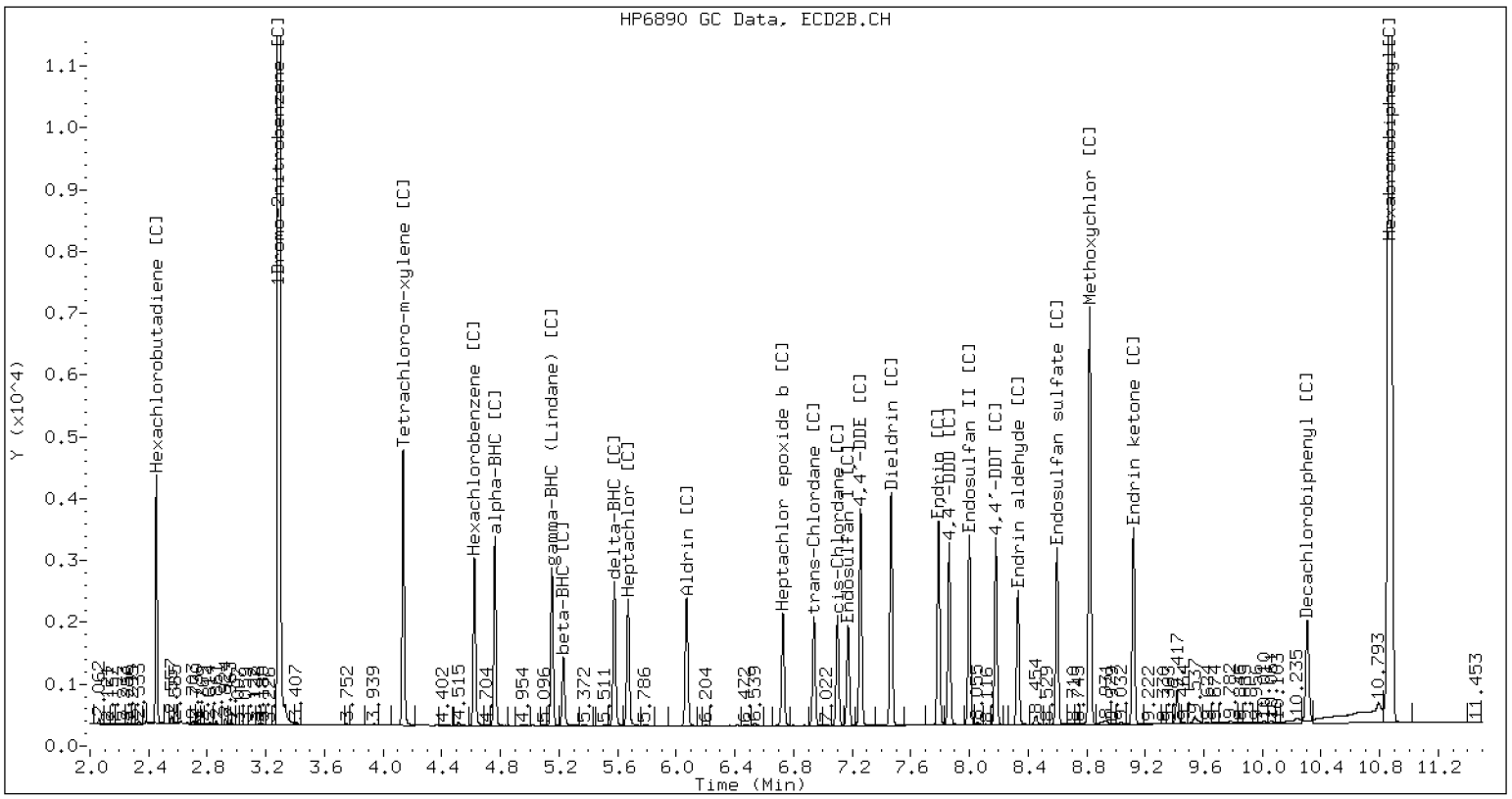


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

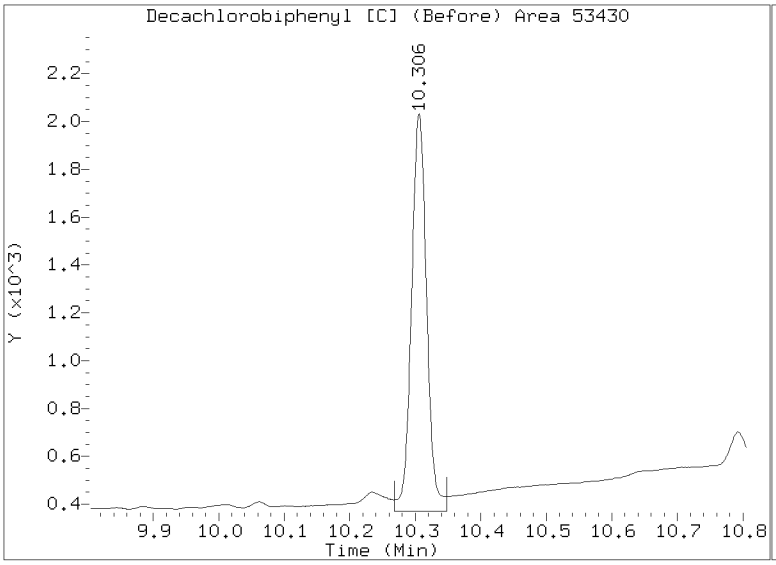
/20230412.b/B20230412.b/23041205.D SEQ-CAL2 CLP2

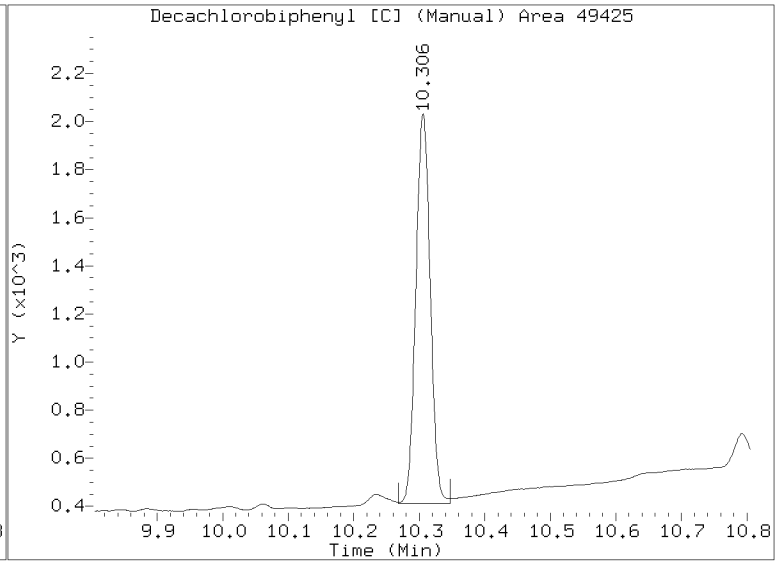


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

Datafile: /20230412.b/B20230412.b/23041205.D
Injection Date: 12-APR-2023 15:53
Lab ID:SEQ-CAL2 Client ID:





Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041206.D
Data file 2: /20230412.b/B20230412.b/23041206.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL3
Client ID:
Injection Date: 12-APR-2023 16:11
Report Date: 04/13/2023 12:57
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.333	0.000	103568	4.761	-0.001	131810	5.11	5.04	1.4	alpha-BHC
4.717	-0.001	41447	5.229	-0.001	52711	5.12	5.07	0.9	beta-BHC
4.902	-0.001	94116	5.576	-0.001	117489	5.13	5.05	1.6	delta-BHC
4.637	0.000	91660	5.151	-0.001	116367	5.15	5.06	1.7	gamma-BHC (Lindane)
5.125	-0.000	86721	5.670	-0.001	104305	5.26	5.17	1.7	Heptachlor
5.449	-0.000	87528	6.070	-0.001	107537	5.22	5.14	1.6	Aldrin
6.125	-0.002	76614	6.728	-0.001	91643	5.06	4.97	1.8	Heptachlor epoxide b
6.567	-0.001	70757	7.171	-0.001	81121	5.24	5.17	1.5	Endosulfan I
6.828	-0.000	151176	7.465	-0.001	180300	10.59	10.48	1.1	Dieldrin
6.489	-0.001	141708	7.257	-0.000	172687	10.53	10.54	0.1	4,4'-DDE
7.078	-0.001	135408	7.789	-0.001	157942	10.52	10.45	0.6	Endrin
7.315	-0.001	127172	8.000	-0.001	147360	10.55	10.32	2.2	Endosulfan II
7.137	-0.001	120482	7.862	-0.000	141192	10.43	10.22	2.0	4,4'-DDD
8.177	-0.001	119181	8.597	-0.001	134570	10.49	10.24	2.4	Endosulfan sulfate
7.431	-0.001	129376	8.180	-0.001	142078	10.40	10.20	2.0	4,4'-DDT
7.919	-0.001	279773	8.820	-0.002	309068	52.48	51.73	1.4	Methoxychlor
8.452	-0.000	133639	9.119	-0.000	147115	10.31	10.25	0.5	Endrin ketone
7.743	-0.001	96868	8.330	-0.001	105906	10.53	10.26	2.6	Endrin aldehyde
6.267	-0.000	76161	6.939	-0.000	89682	5.14	5.08	1.3	trans-Chlordane
6.414	-0.000	76892	7.099	-0.001	88748	5.17	5.10	1.4	cis-Chlordane
2.308	0.000	106908	2.452	-0.001	123867	5.11	5.22	2.0	Hexachlorobutadiene
4.175	-0.000	93098	4.622	-0.000	118070	5.19	5.17	0.4	Hexachlorobenzene
3.819	-0.000	137014	4.136	-0.000	179204	10.57	10.57	0.0	Tetrachloro-m-xylene
9.366	-0.001	90951	10.305	-0.001	96814	10.35	10.68	3.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

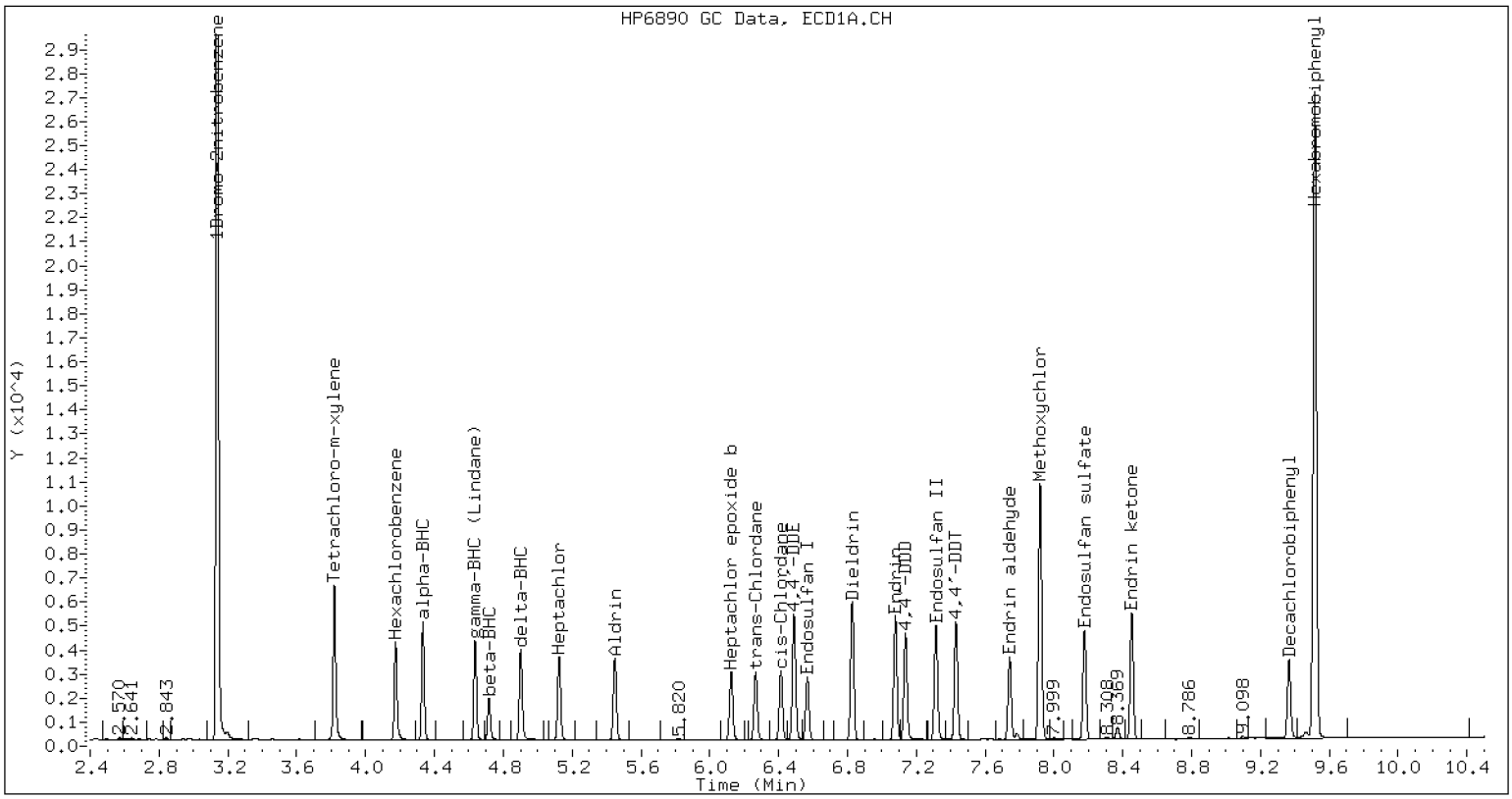
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	926824	7.2
Hexabromobiphenyl	663237	744867	12.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1232907	-16.7
Hexabromobiphenyl	870561	750687	-13.8

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230412.b/23041206.D SEQ-CAL3 STX-CLP 12-APR-2023 16:11 1ul



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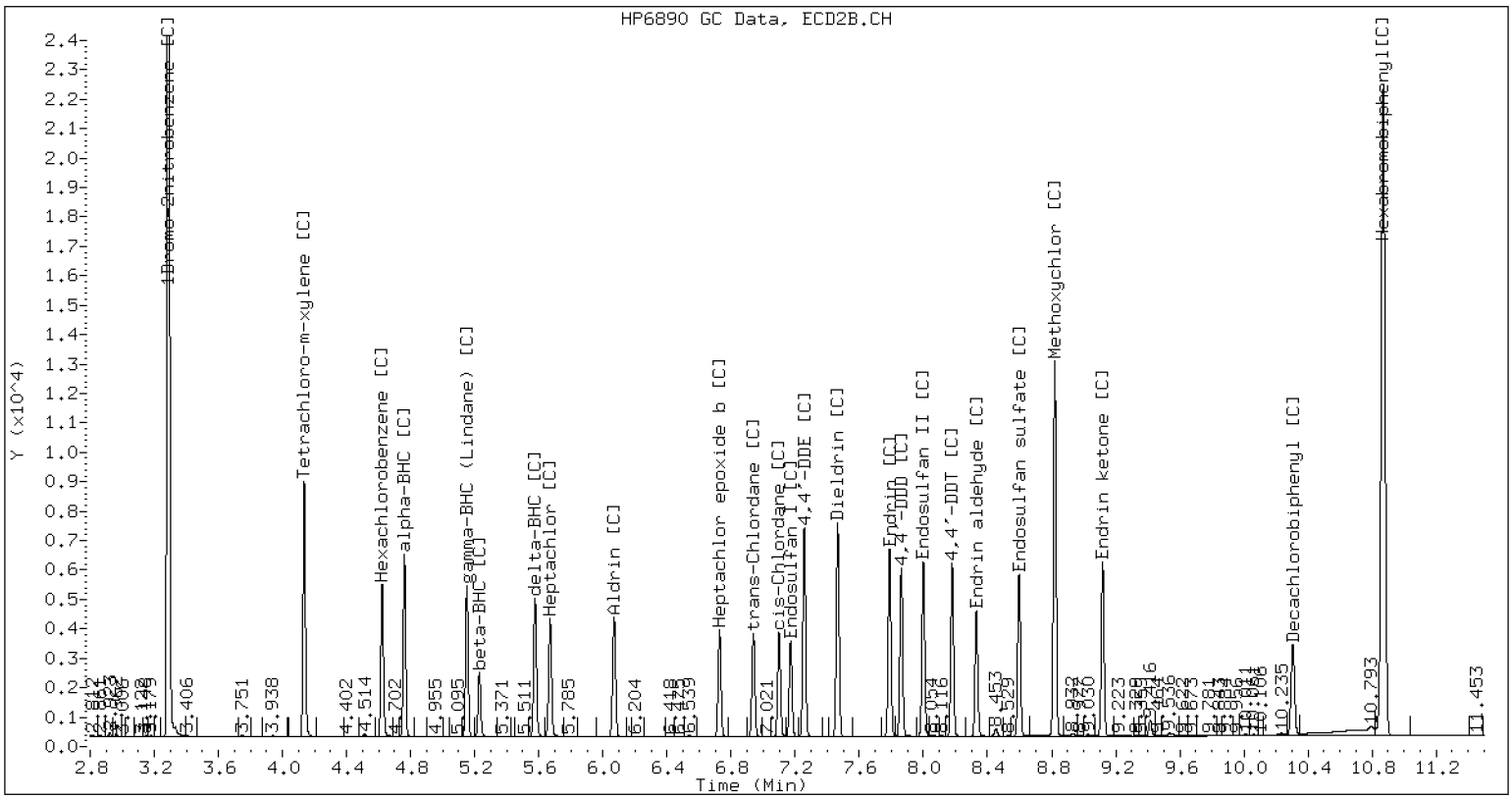
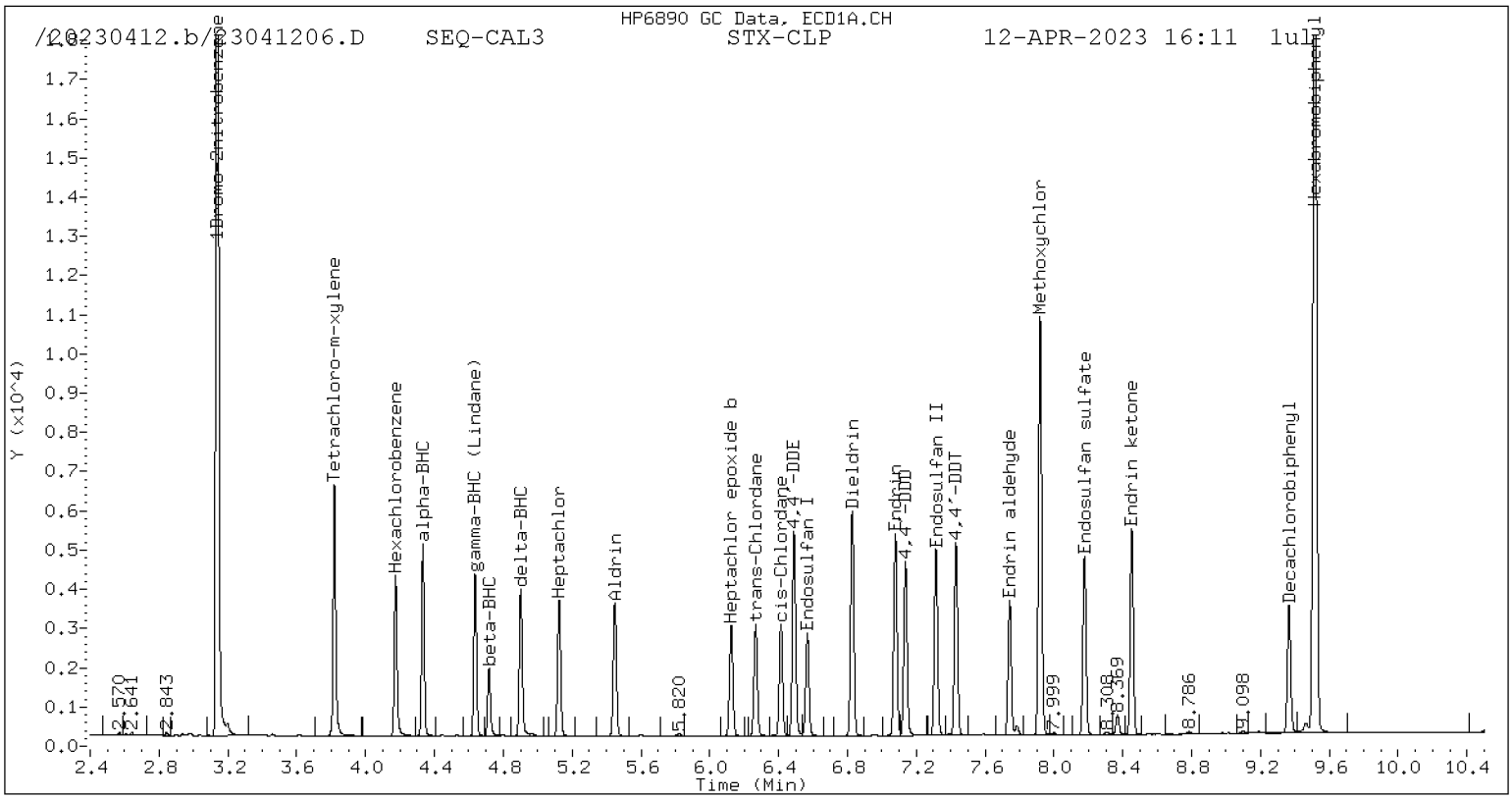
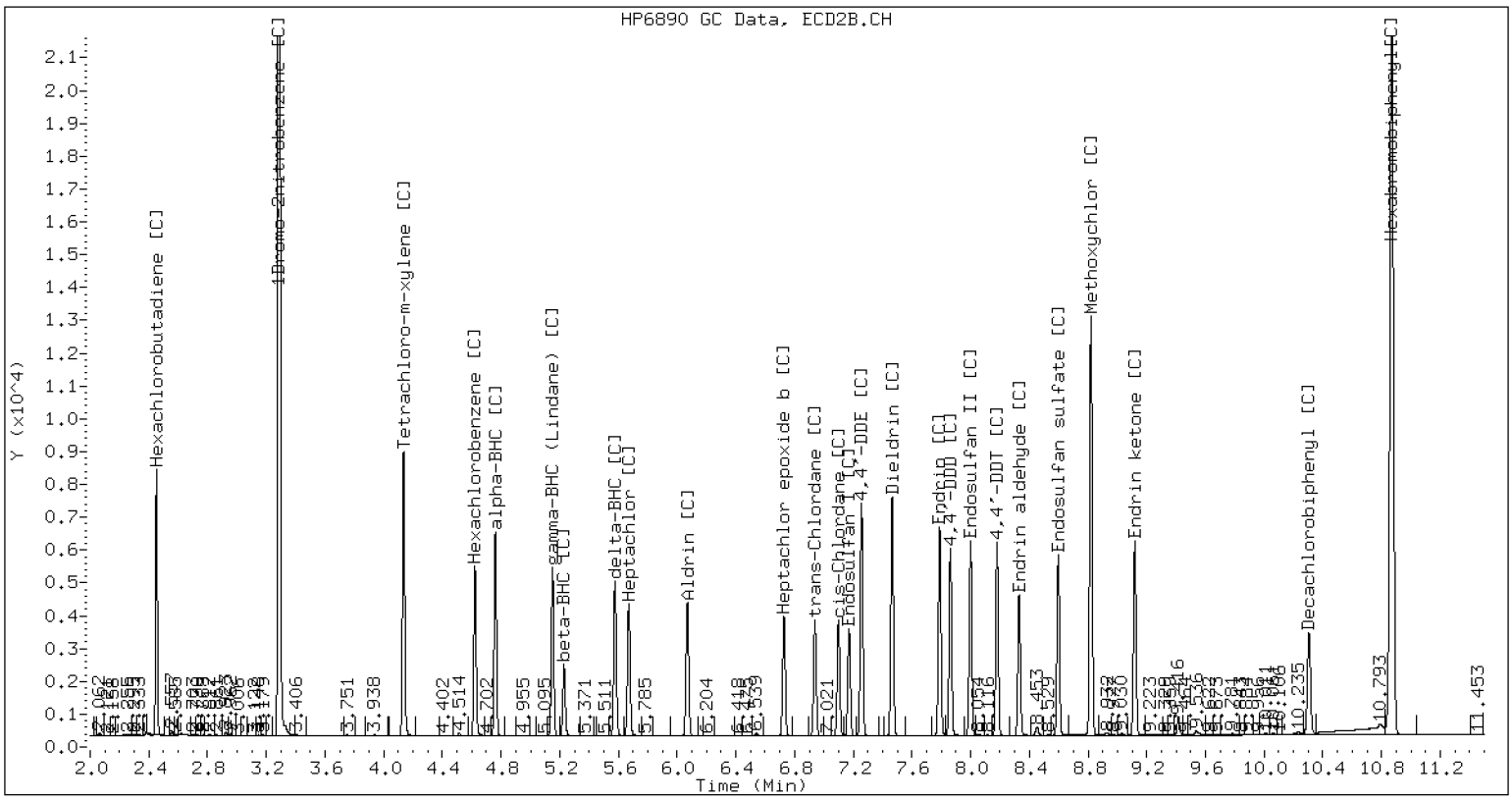


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041206.D SEQ-CAL3 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041207.D
Data file 2: /20230412.b/B20230412.b/23041207.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL5
Client ID:
Injection Date: 12-APR-2023 16:30
Report Date: 04/13/2023 12:57
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.334	0.001	407241	4.762	0.000	536848	19.97	20.27	1.5	alpha-BHC
4.717	-0.001	155730	5.230	-0.000	202325	19.12	19.23	0.6	beta-BHC
4.902	-0.001	370506	5.577	-0.000	476223	20.06	20.20	0.7	delta-BHC
4.637	0.000	356610	5.152	-0.000	467736	19.90	20.08	0.9	gamma-BHC (Lindane)
5.125	0.000	322878	5.671	-0.000	404806	19.46	19.82	1.8	Heptachlor
5.449	0.000	332937	6.070	-0.001	424935	19.73	20.04	1.6	Aldrin
6.125	-0.002	282261	6.728	-0.001	351893	18.53	18.86	1.7	Heptachlor epoxide b
6.568	-0.000	264288	7.172	-0.000	313117	19.47	19.69	1.2	Endosulfan I
6.828	0.000	556831	7.466	-0.000	679897	38.75	39.01	0.7	Dieldrin
6.490	-0.001	530626	7.257	-0.000	653476	39.17	39.39	0.6	4,4'-DDE
7.078	-0.000	494177	7.790	-0.000	590171	38.36	38.86	1.3	Endrin
7.315	-0.001	458674	8.000	-0.001	555378	38.02	38.71	1.8	Endosulfan II
7.137	-0.001	450400	7.862	0.000	544668	38.95	39.23	0.7	4,4'-DDD
8.177	-0.001	429746	8.598	-0.000	510603	37.79	38.65	2.3	Endosulfan sulfate
7.431	-0.000	481860	8.180	-0.001	546653	38.69	39.02	0.8	4,4'-DDT
7.920	-0.001	955187	8.821	-0.001	1096057	179.04	182.48	1.9	Methoxychlor
8.452	-0.000	476313	9.119	-0.000	546190	36.70	37.86	3.1	Endrin ketone
7.743	-0.000	347507	8.331	0.000	397001	37.75	38.27	1.4	Endrin aldehyde
6.267	-0.000	293273	6.939	0.000	355259	19.68	19.85	0.9	trans-Chlordane
6.413	-0.001	292054	7.099	-0.001	346293	19.52	19.65	0.7	cis-Chlordane
2.309	0.001	397872	2.452	-0.001	467299	18.91	19.43	2.7	Hexachlorobutadiene
4.175	0.000	342355	4.623	0.001	445526	18.97	19.26	1.5	Hexachlorobenzene
3.819	0.000	499517	4.136	0.000	663494	38.27	38.64	1.0	Tetrachloro-m-xylene
9.366	-0.001	308287	10.305	-0.001	336318	35.06	36.92	5.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

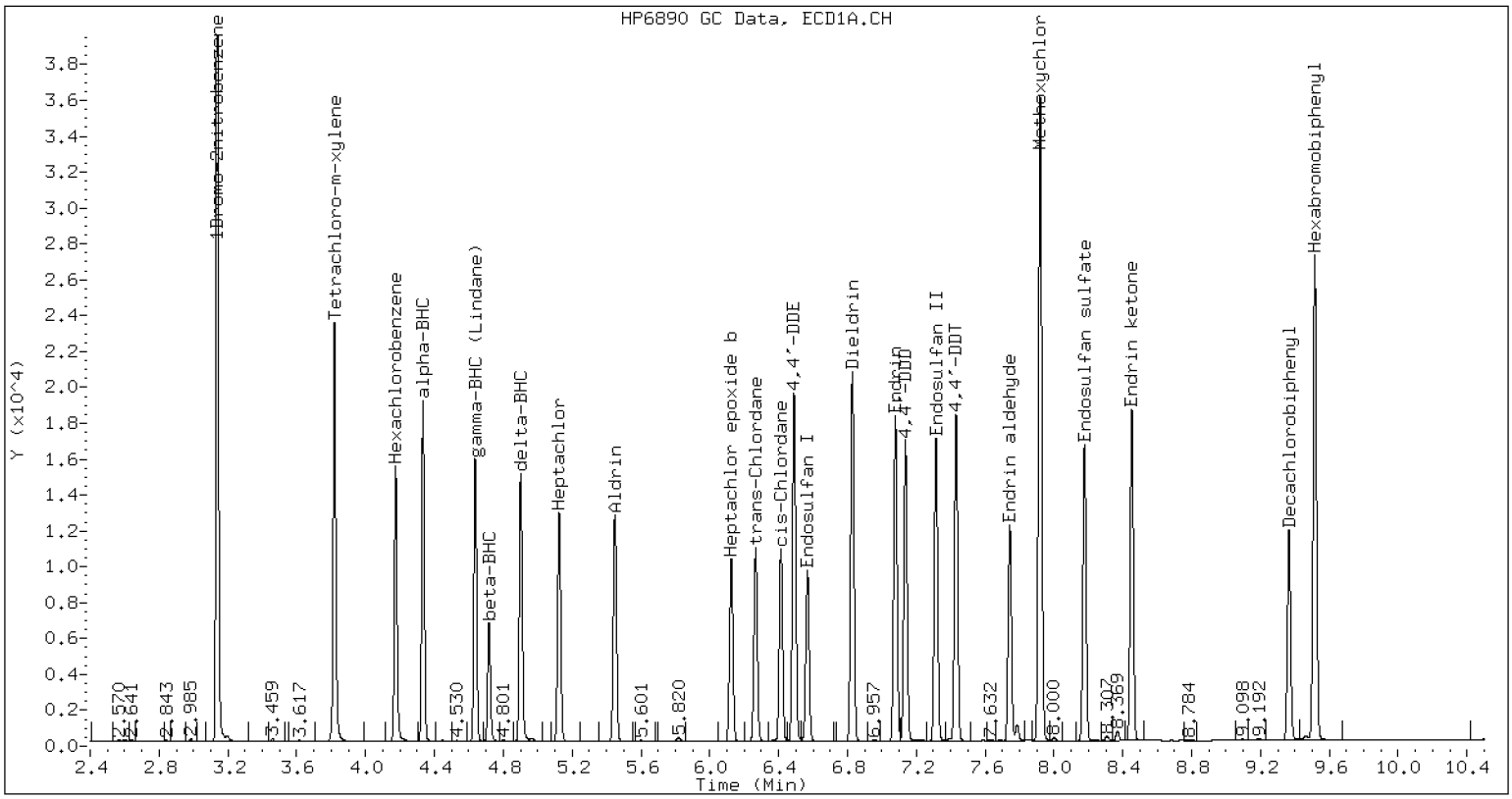
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	932757	7.9
Hexabromobiphenyl	663237	745426	12.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1248665	-15.7
Hexabromobiphenyl	870561	754634	-13.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230412.b/23041207.D SEQ-CAL5 STX-CLP 12-APR-2023 16:30 1ul



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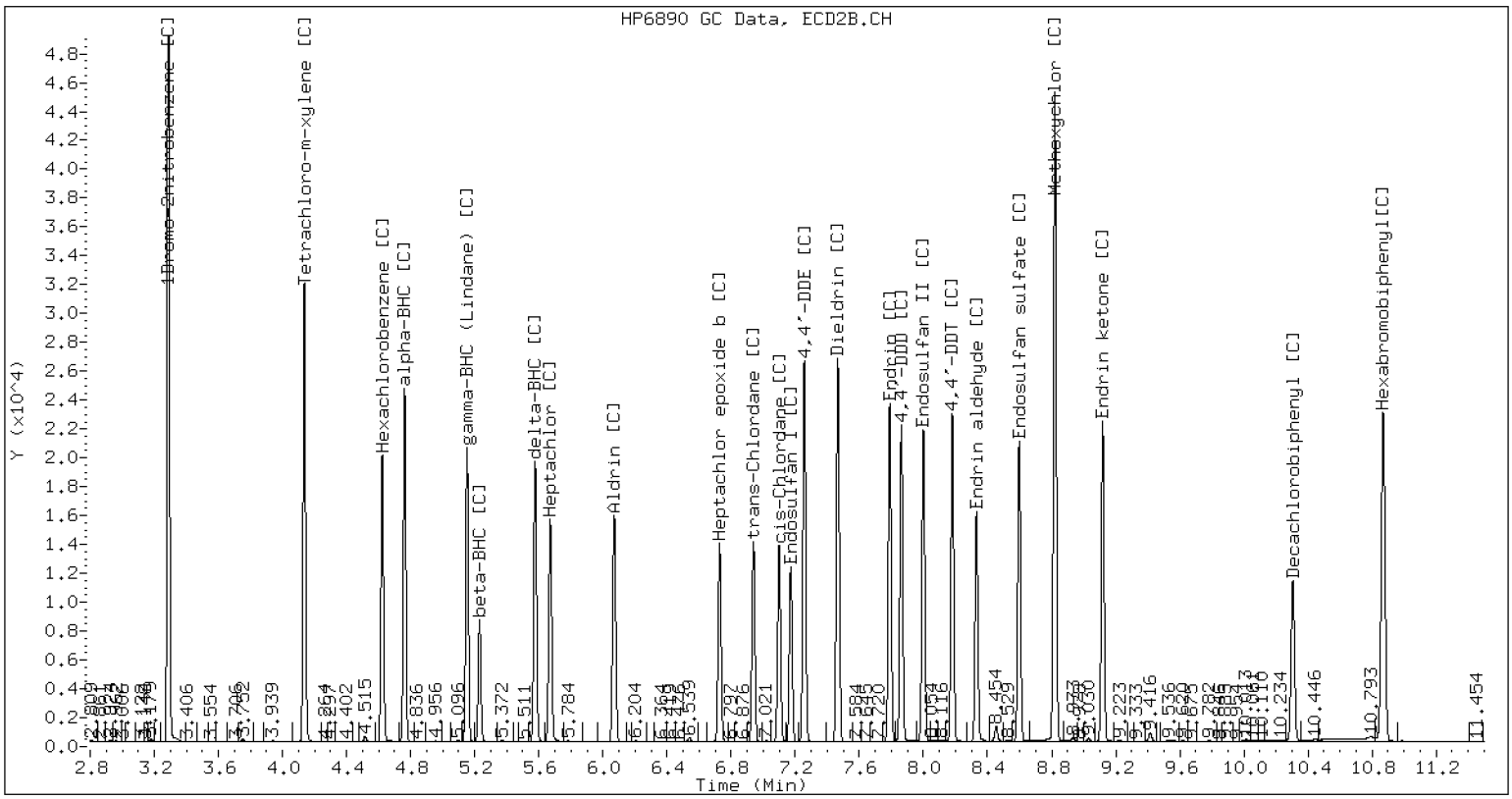
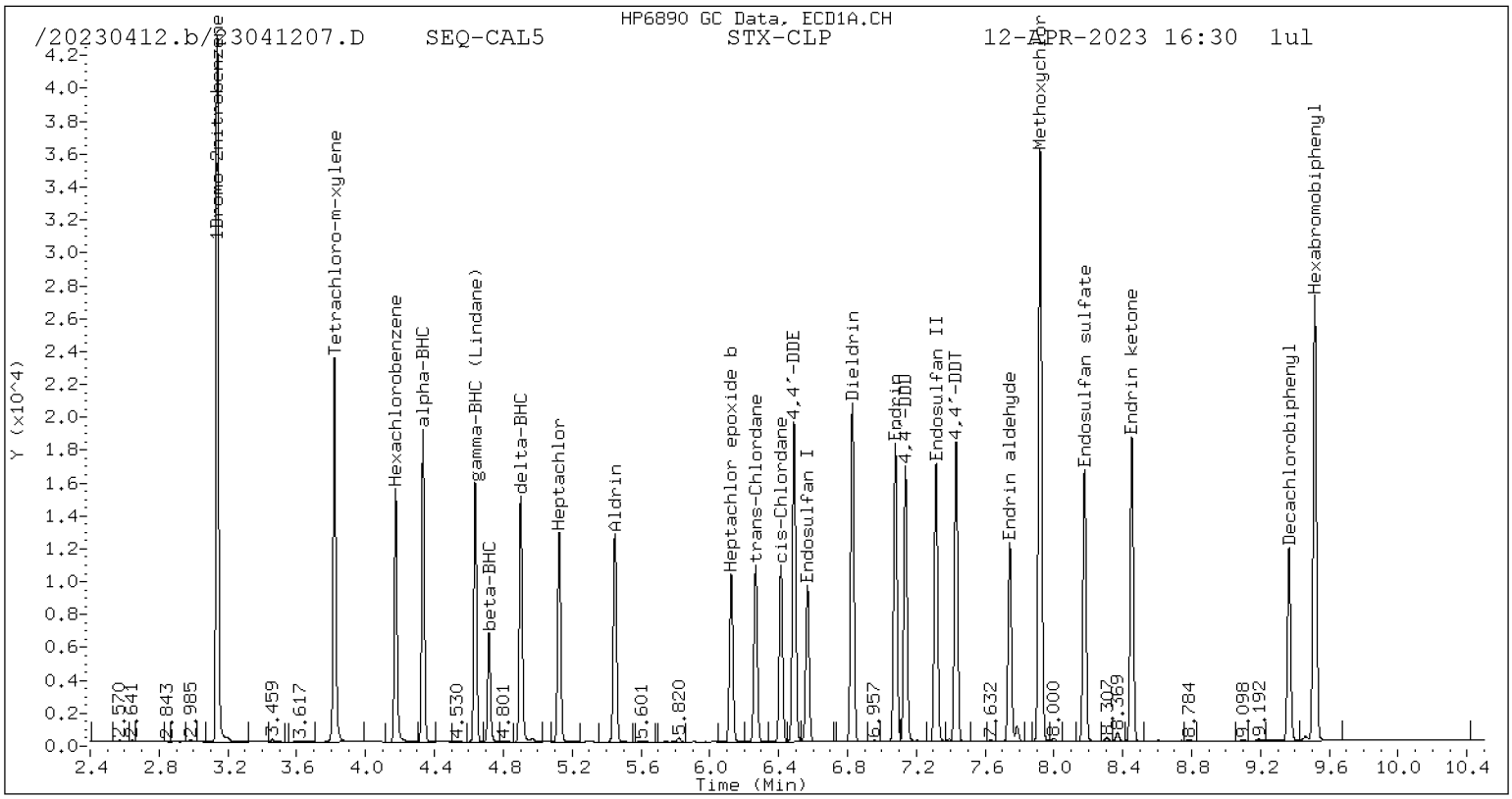
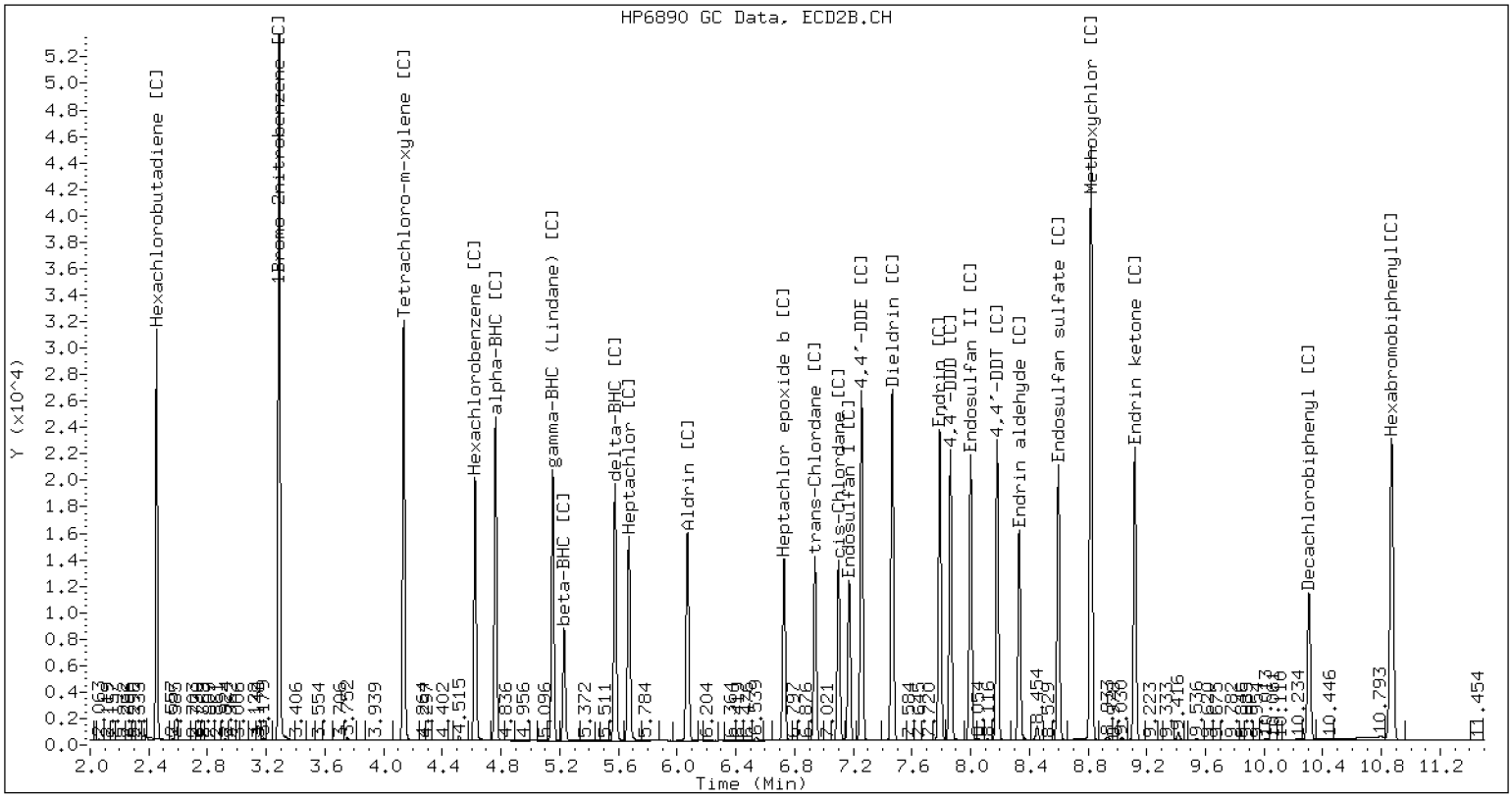


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041207.D SEQ-CAL5 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041208.D
Data file 2: /20230412.b/B20230412.b/23041208.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL4
Client ID:
Injection Date: 12-APR-2023 16:48
Report Date: 04/13/2023 12:57
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.333	0.000	207054	4.762	-0.000	269032	10.40	10.44	0.4	alpha-BHC
4.717	-0.001	79800	5.230	-0.000	103870	10.04	10.15	1.1	beta-BHC
4.901	-0.001	188049	5.577	0.000	239720	10.44	10.45	0.1	delta-BHC
4.637	0.000	181860	5.152	-0.000	236414	10.40	10.44	0.4	gamma-BHC (Lindane)
5.125	0.000	168797	5.672	0.001	208664	10.43	10.50	0.7	Heptachlor
5.449	0.000	172339	6.070	-0.001	216770	10.47	10.51	0.4	Aldrin
6.125	-0.002	148413	6.728	-0.001	182002	9.99	10.03	0.4	Heptachlor epoxide b
6.567	-0.001	138415	7.172	0.000	161209	10.45	10.42	0.2	Endosulfan I
6.828	-0.000	293866	7.466	0.000	354543	20.96	20.91	0.2	Dieldrin
6.490	-0.001	276898	7.257	0.000	342356	20.95	21.22	1.3	4,4'-DDE
7.078	-0.001	260570	7.789	-0.001	308995	20.59	20.68	0.4	Endrin
7.314	-0.001	243933	8.000	-0.001	290249	20.59	20.57	0.1	Endosulfan II
7.137	-0.001	235887	7.862	0.000	281171	20.77	20.59	0.9	4,4'-DDD
8.178	-0.000	228340	8.598	-0.000	264823	20.44	20.38	0.3	Endosulfan sulfate
7.431	-0.001	252435	8.181	-0.000	282707	20.64	20.52	0.6	4,4'-DDT
7.920	-0.000	515694	8.821	-0.001	586198	98.41	99.22	0.8	Methoxychlor
8.452	-0.000	254090	9.119	-0.000	286425	19.93	20.18	1.2	Endrin ketone
7.743	-0.001	184716	8.331	0.000	207509	20.43	20.34	0.4	Endrin aldehyde
6.267	-0.000	150690	6.939	0.000	180266	10.36	10.36	0.1	trans-Chlordane
6.413	-0.001	150822	7.100	-0.000	176894	10.33	10.32	0.1	cis-Chlordane
2.308	0.000	206966	2.452	-0.001	244467	10.08	10.45	3.6	Hexachlorobutadiene
4.175	-0.000	178711	4.622	-0.000	231238	10.15	10.28	1.3	Hexachlorobenzene
3.819	0.000	263469	4.136	-0.000	349814	20.69	20.95	1.2	Tetrachloro-m-xylene
9.366	-0.001	166503	10.306	-0.000	180273	19.28	20.12	4.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

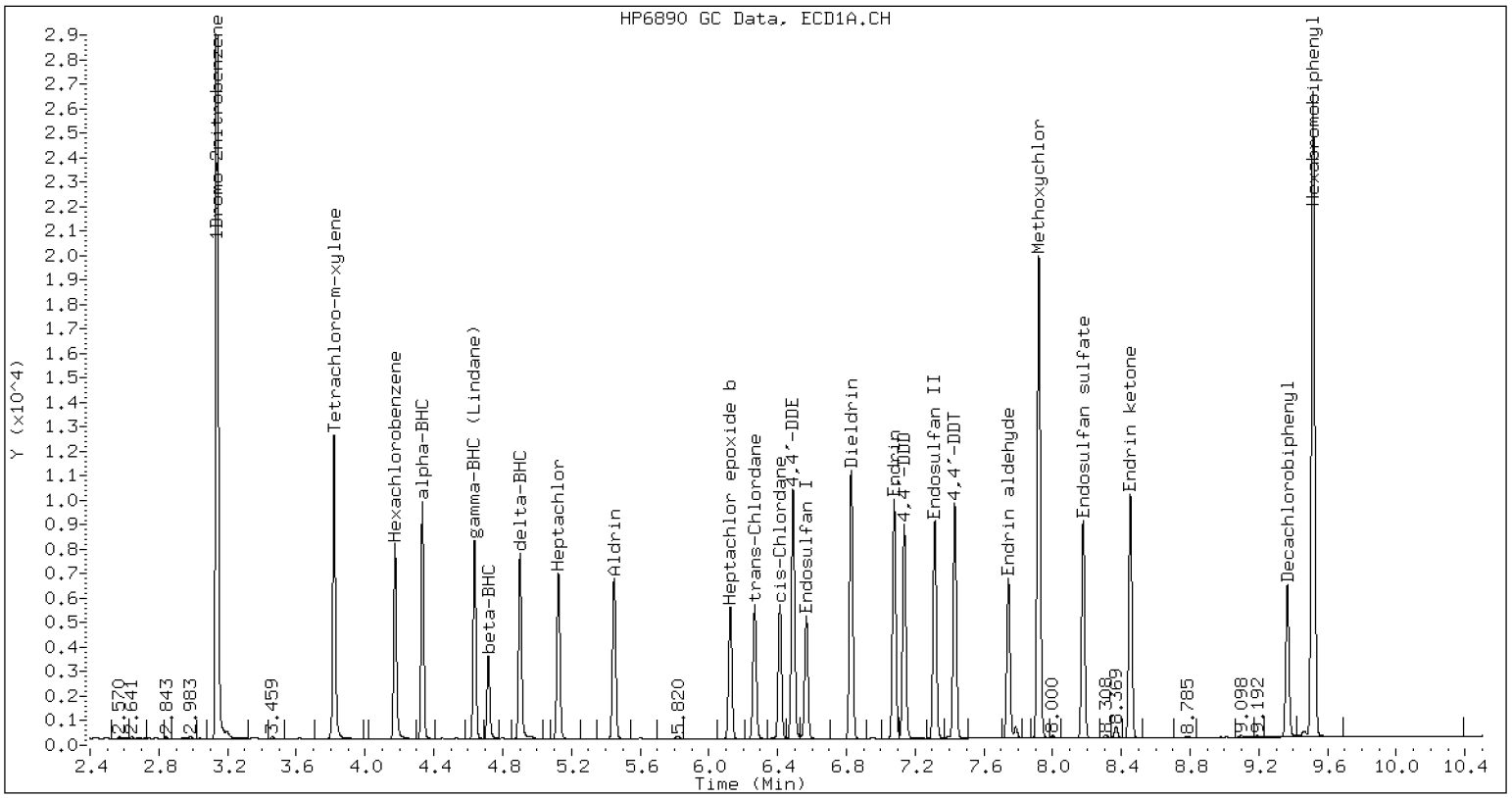
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	910053	5.3
Hexabromobiphenyl	663237	732158	10.4

Column 2

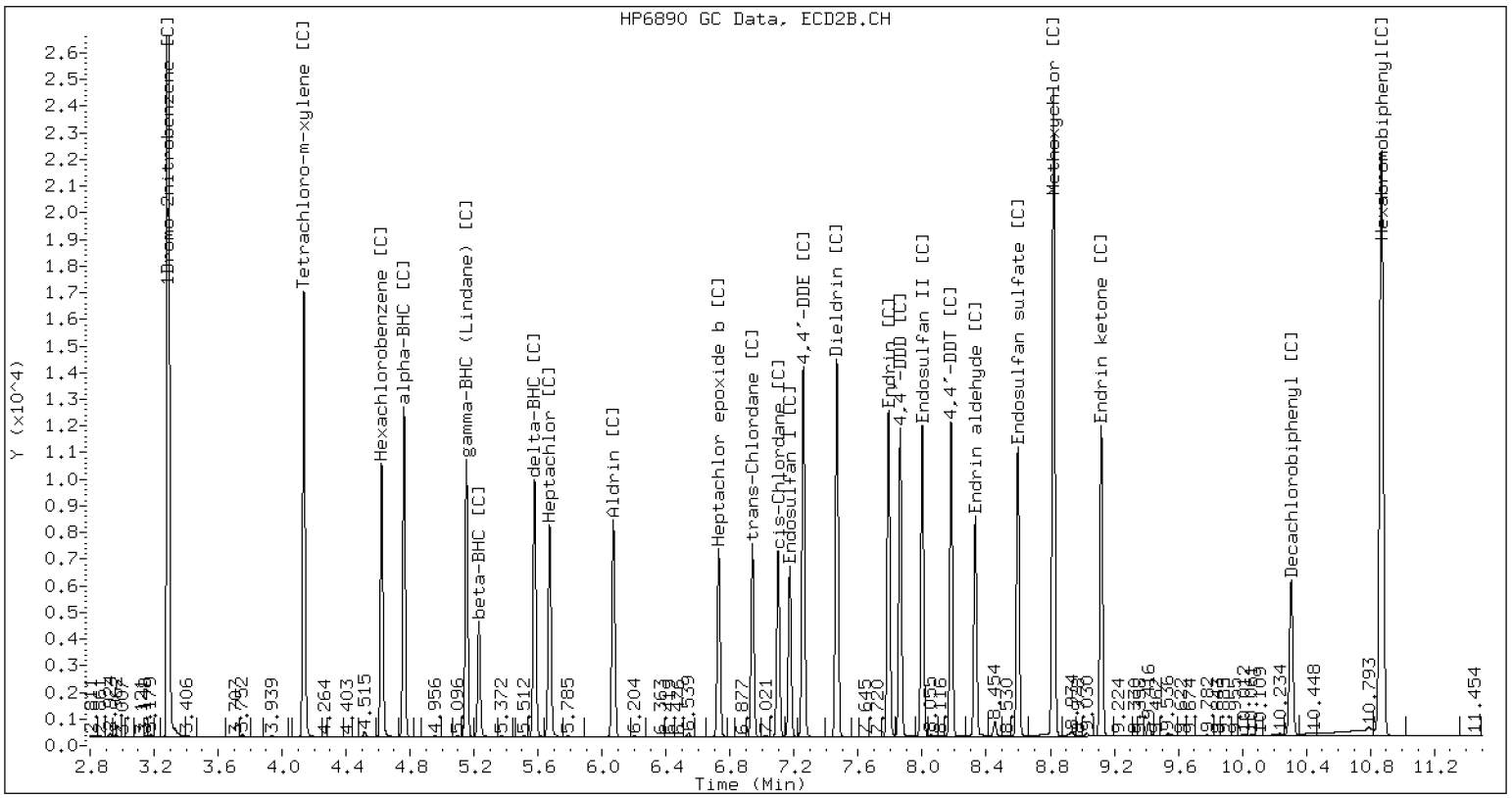
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1214458	-18.0
Hexabromobiphenyl	870561	742252	-14.7

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

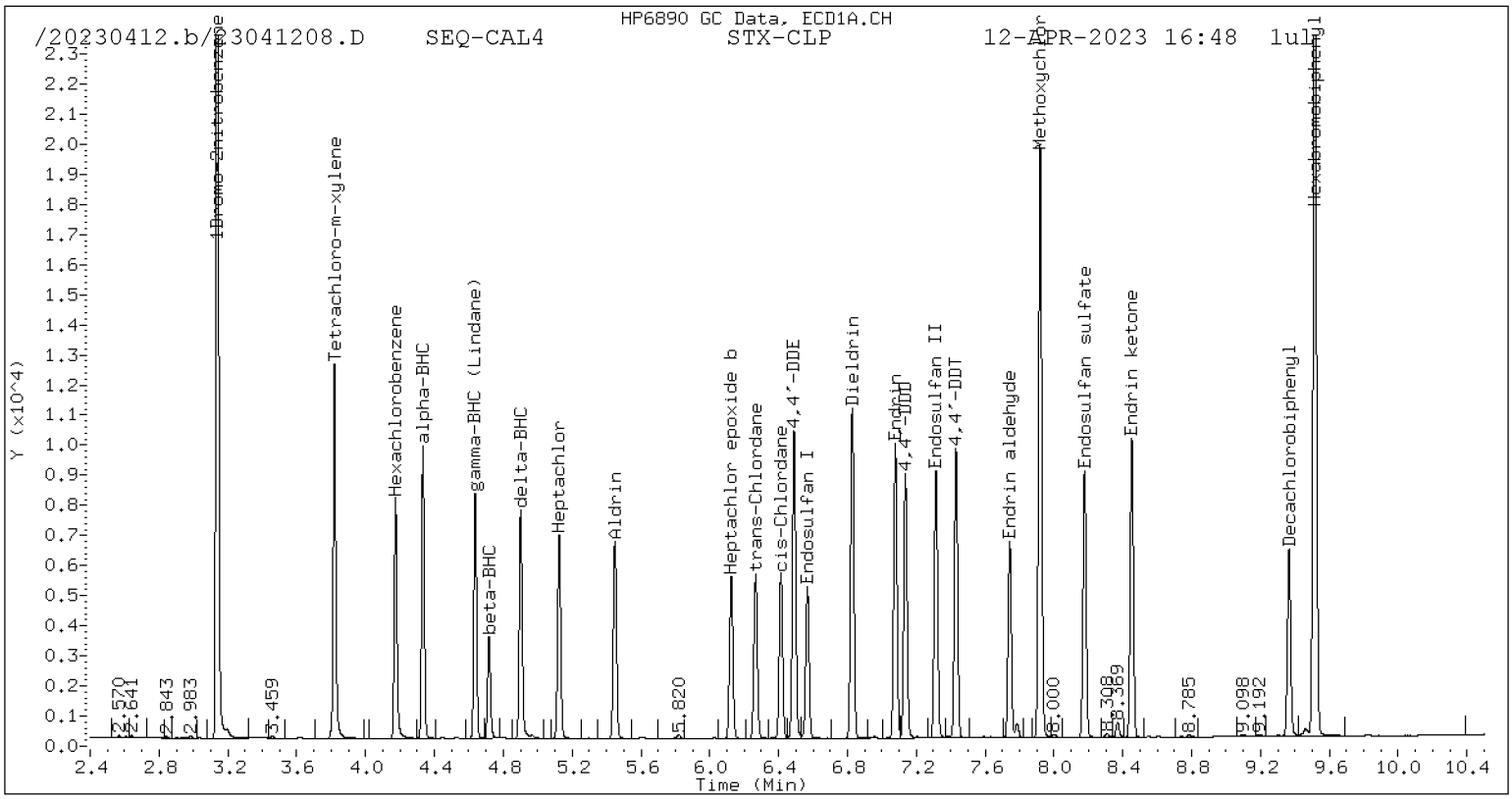
/20230412.b/23041208.D SEQ-CAL4 STX-CLP 12-APR-2023 16:48 1ul



/20230412.b/B20230412.b/23041208.D SEQ-CAL4 CLP2 12-APR-2023 16:48 1ul



Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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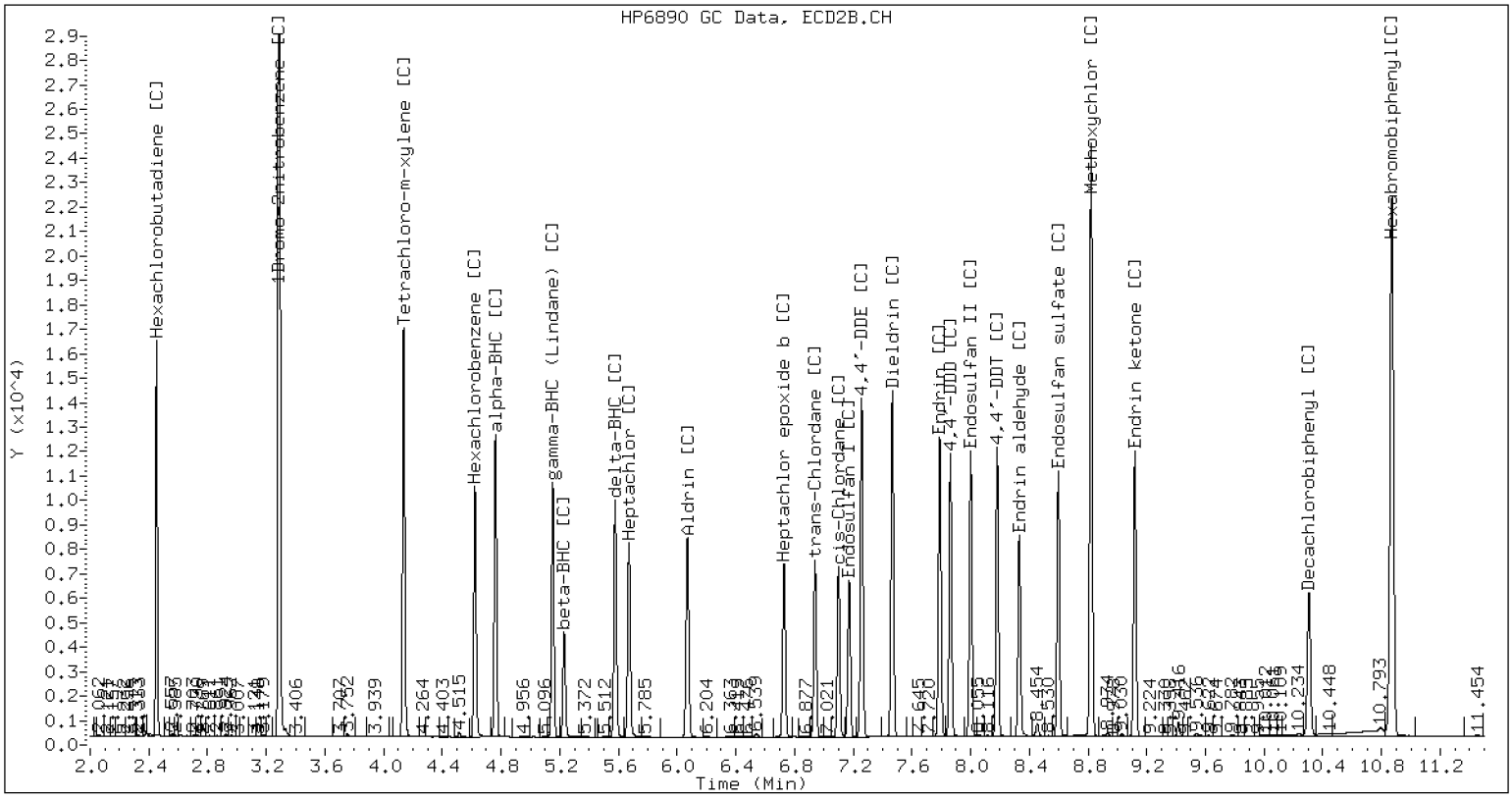


CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041209.D
Data file 2: /20230412.b/B20230412.b/23041209.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL6
Client ID:
Injection Date: 12-APR-2023 17:06
Report Date: 04/13/2023 12:57
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.333	0.000	789082	4.762	0.000	1053745	39.26	40.45	3.0	alpha-BHC
4.717	-0.001	298836	5.230	-0.000	393735	37.23	38.05	2.2	beta-BHC
4.901	-0.001	708304	5.577	0.000	933504	38.92	40.25	3.4	delta-BHC
4.637	0.000	688986	5.152	-0.000	916016	39.01	39.99	2.5	gamma-BHC (Lindane)
5.125	-0.000	604529	5.671	0.000	770994	36.98	38.38	3.7	Heptachlor
5.448	-0.000	629969	6.071	-0.000	812922	37.88	38.99	2.9	Aldrin
6.125	-0.002	526148	6.729	-0.000	668897	35.05	36.44	3.9	Heptachlor epoxide b
6.567	-0.001	493488	7.173	0.001	596729	36.88	38.16	3.4	Endosulfan I
6.829	0.000	1030944	7.466	0.000	1279184	72.81	74.62	2.5	Dieldrin
6.489	-0.001	993535	7.257	0.000	1220084	74.41	74.77	0.5	4,4'-DDE
7.078	-0.001	907557	7.790	-0.000	1098211	72.71	73.00	0.4	Endrin
7.314	-0.001	848911	8.001	-0.000	1048450	72.63	73.77	1.6	Endosulfan II
7.137	-0.001	838729	7.862	0.000	1040087	74.86	75.63	1.0	4,4'-DDD
8.178	-0.000	805013	8.598	0.000	975785	73.05	74.56	2.1	Endosulfan sulfate
7.431	-0.000	908115	8.181	0.000	1053162	75.26	75.90	0.9	4,4'-DDT
7.920	-0.001	1796134	8.821	-0.001	2104774	347.45	353.79	1.8	Methoxychlor
8.452	-0.000	896939	9.120	0.001	1042272	71.33	72.93	2.2	Endrin ketone
7.743	-0.001	649599	8.332	0.001	756869	72.82	73.66	1.1	Endrin aldehyde
6.266	-0.000	563470	6.940	0.001	689422	38.37	39.17	2.1	trans-Chlordane
6.414	-0.000	558211	7.100	-0.000	670499	37.86	38.69	2.2	cis-Chlordane
2.309	0.001	760920	2.453	-0.000	896023	36.70	37.88	3.2	Hexachlorobutadiene
4.175	-0.000	651738	4.623	0.001	846379	36.64	37.20	1.5	Hexachlorobenzene
3.819	-0.000	933369	4.136	0.000	1232611	72.57	72.99	0.6	Tetrachloro-m-xylene
9.367	0.000	579829	10.306	0.000	644132	68.06	71.40	4.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

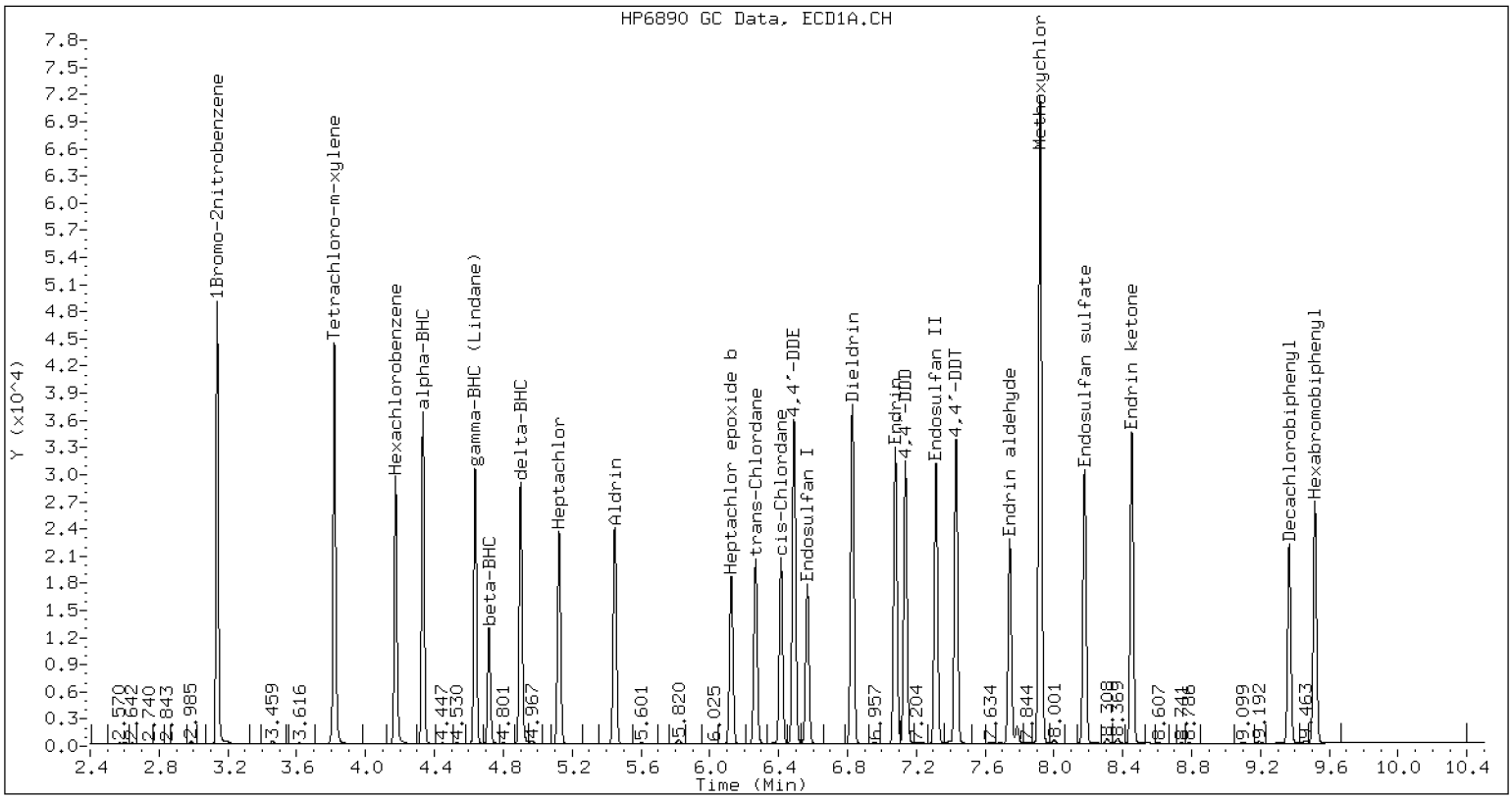
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	919249	6.4
Hexabromobiphenyl	663237	722285	8.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1228056	-17.1
Hexabromobiphenyl	870561	747465	-14.1

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230412.b/23041209.D SEQ-CAL6 STX-CLP 12-APR-2023 17:06 1ul



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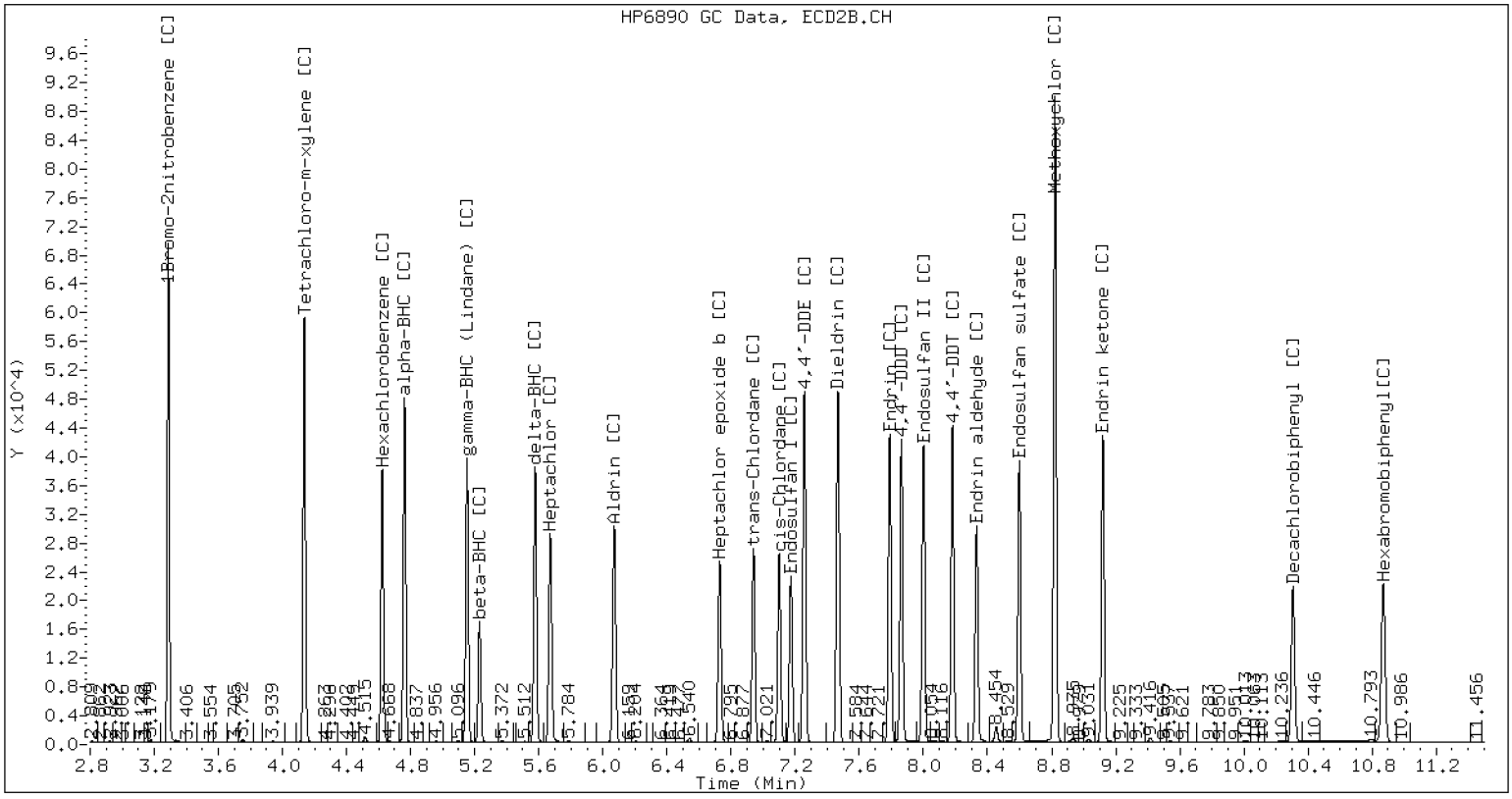
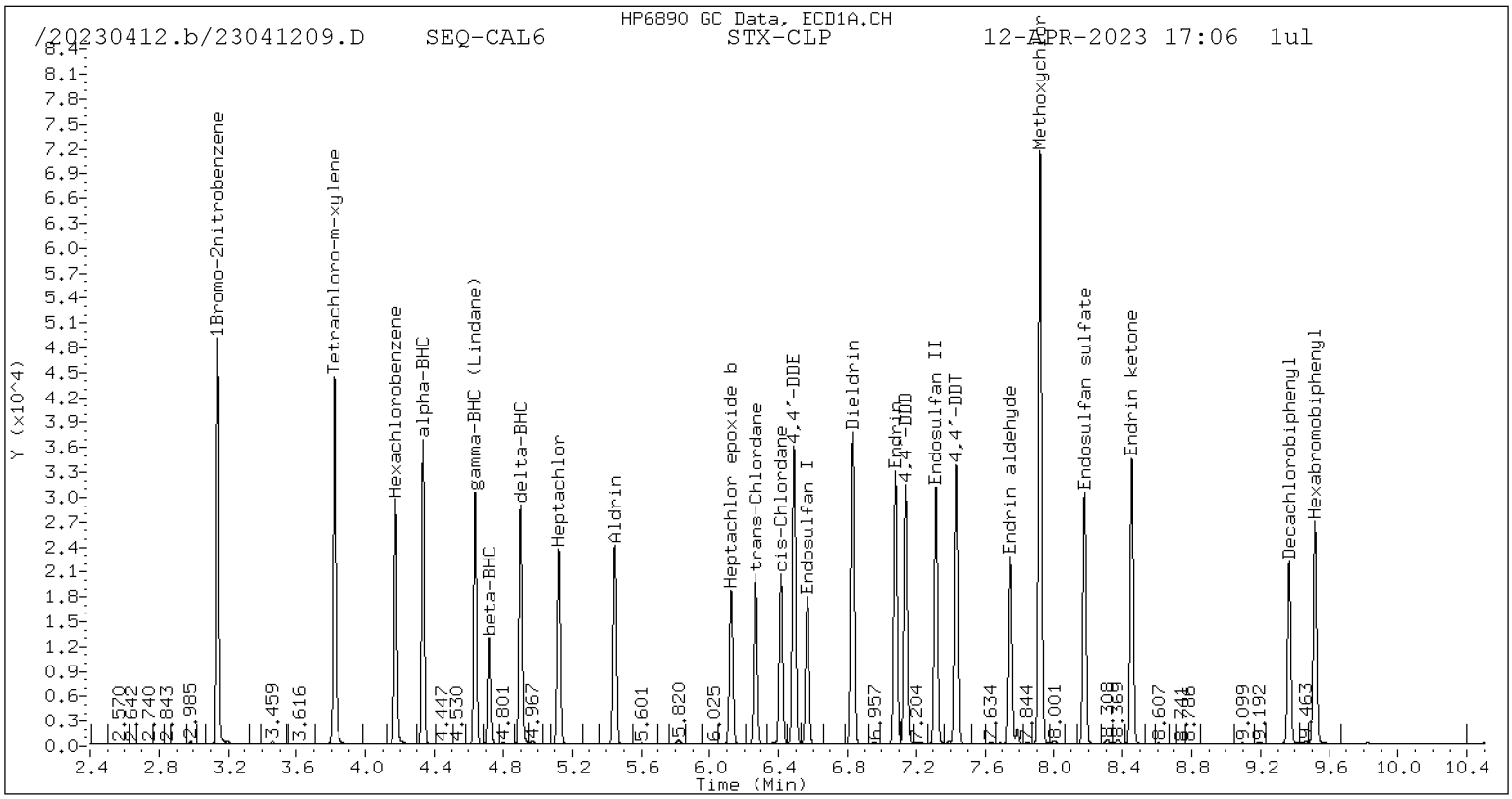
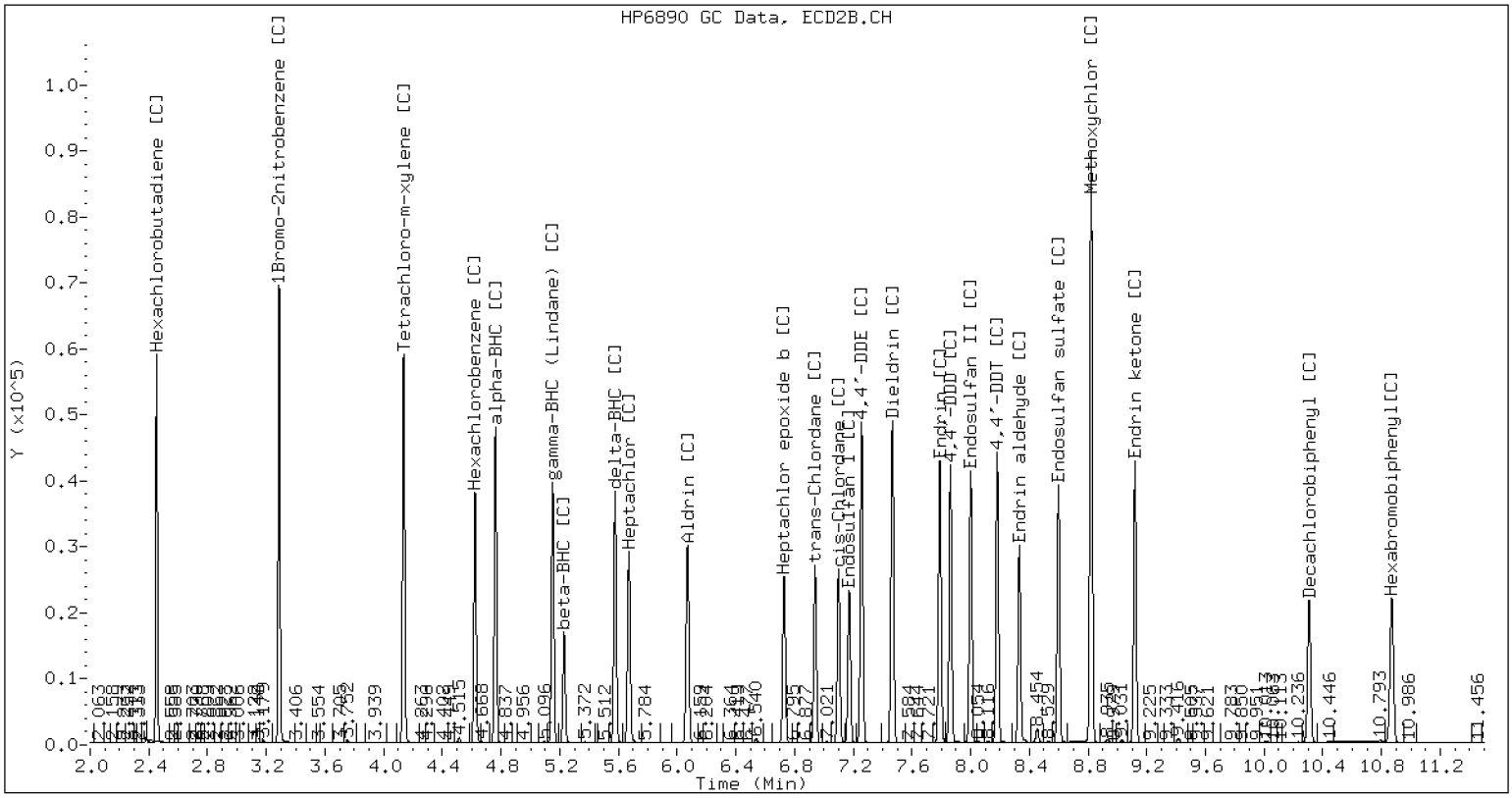


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041209.D SEQ-CAL6 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041210.D
Data file 2: /20230412.b/B20230412.b/23041210.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL7
Client ID:
Injection Date: 12-APR-2023 17:25
Report Date: 04/13/2023 12:57
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.333	0.000	1504143	4.762	0.000	2036495	74.20	77.68	4.6	alpha-BHC M
4.717	-0.001	564613	5.230	-0.000	751802	69.75	72.20	3.5	beta-BHC M
4.901	-0.002	1348410	5.577	-0.000	1780227	73.47	76.29	3.8	delta-BHC M
4.637	-0.000	1305188	5.152	-0.000	1754548	73.27	76.13	3.8	gamma-BHC (Lindane) M
5.124	-0.001	1105791	5.671	-0.000	1423580	67.07	70.43	4.9	Heptachlor M
5.448	-0.000	1164527	6.071	-0.000	1511414	69.44	72.04	3.7	Aldrin M
6.125	-0.002	957195	6.729	-0.000	1234899	63.23	66.86	5.6	Heptachlor epoxide b M
6.567	-0.001	902920	7.172	0.000	1107682	66.91	70.39	5.1	Endosulfan I M
6.828	-0.000	1891941	7.466	0.000	2384054	132.48	138.22	4.2	Dieldrin M
6.489	-0.001	1824093	7.257	0.000	2245750	135.47	136.78	1.0	4,4'-DDE M
7.078	-0.001	1667189	7.790	0.000	2038096	130.71	135.54	3.6	Endrin M
7.314	-0.001	1548044	8.001	-0.000	1990565	129.61	140.13	7.8	Endosulfan II M
7.136	-0.002	1549529	7.862	0.000	1970951	135.35	143.39	5.8	4,4'-DDD M
8.177	-0.001	1486482	8.598	-0.000	1840819	132.01	140.73	6.4	Endosulfan sulfate M
7.431	-0.001	1683975	8.181	-0.000	2003848	136.58	144.49	5.6	4,4'-DDT M
7.920	-0.000	3475120	8.822	-0.000	4197295	657.88	705.85	7.0	Methoxychlor M
8.452	-0.001	1668350	9.119	0.000	1981664	129.84	138.74	6.6	Endrin ketone M
7.743	-0.001	1195780	8.331	0.000	1420645	131.18	138.32	5.3	Endrin aldehyde M
6.266	-0.001	1056187	6.939	0.000	1305882	71.31	73.74	3.4	trans-Chlordane M
6.413	-0.001	1043284	7.100	-0.000	1272519	70.16	72.97	3.9	cis-Chlordane M
2.309	0.001	1437797	2.453	0.000	1654665	68.77	69.52	1.1	Hexachlorobutadiene
4.175	-0.001	1223325	4.622	0.000	1599265	68.19	69.86	2.4	Hexachlorobenzene M
3.819	0.000	1715340	4.136	0.000	2273933	132.23	133.82	1.2	Tetrachloro-m-xylene M
9.366	-0.000	1089026	10.306	-0.000	1229420	125.10	136.33	8.6	Decachlorobiphenyl M

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

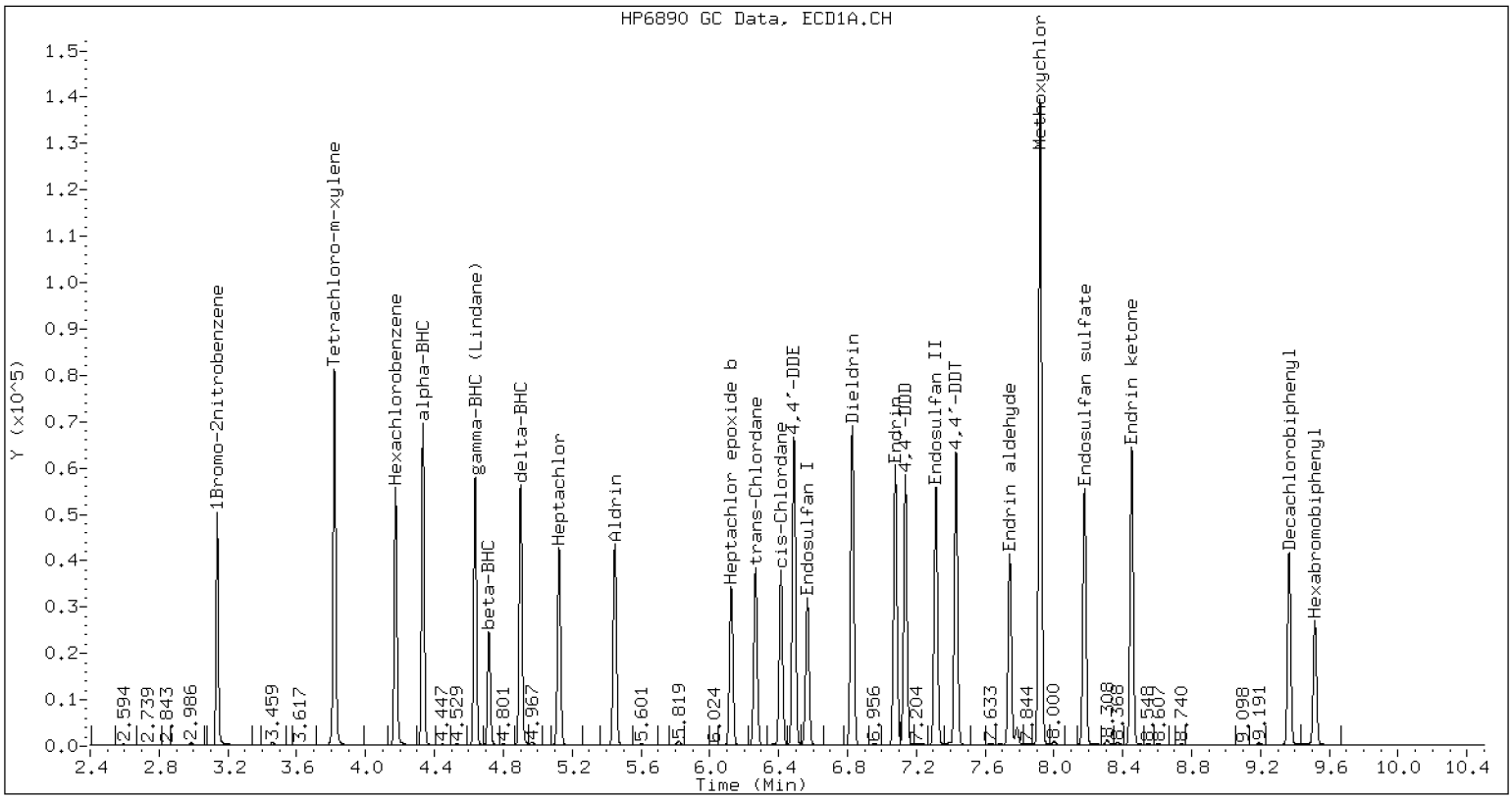
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	927085	7.3
Hexabromobiphenyl	663237	738060	11.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1235730	-16.6
Hexabromobiphenyl	870561	747107	-14.2

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230412.b/23041210.D SEQ-CAL7 STX-CLP 12-APR-2023 17:25 1ul



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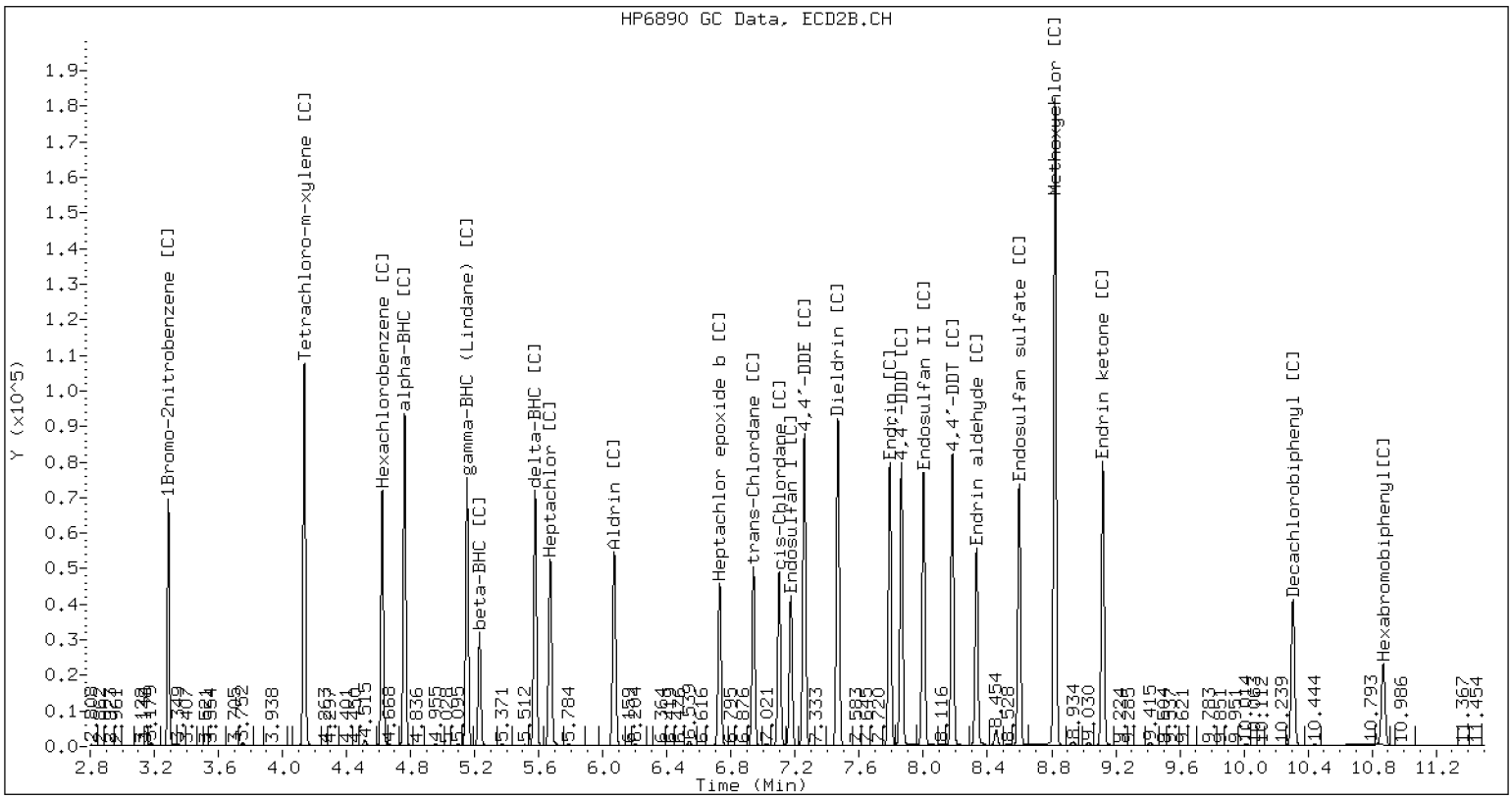
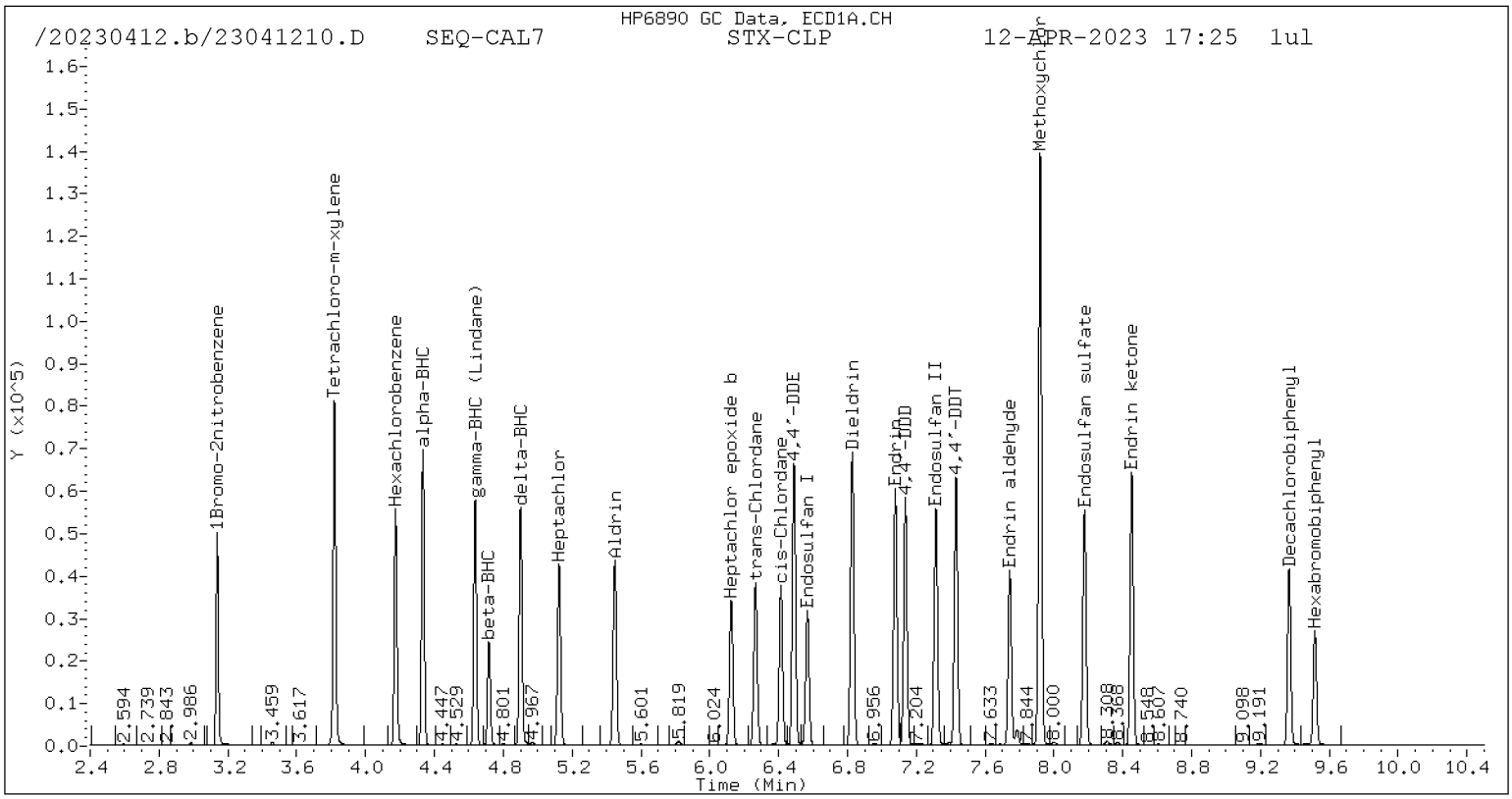
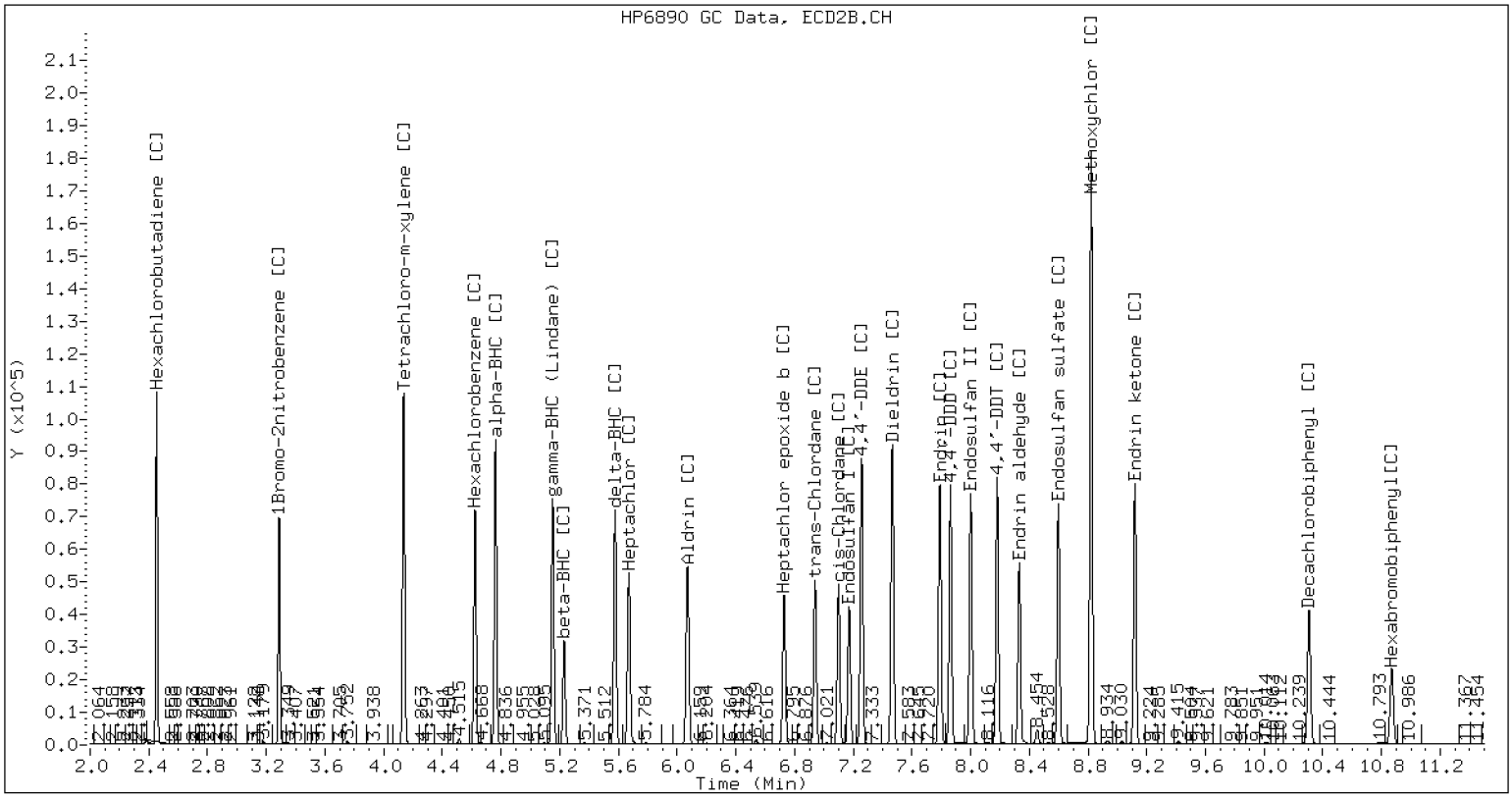


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

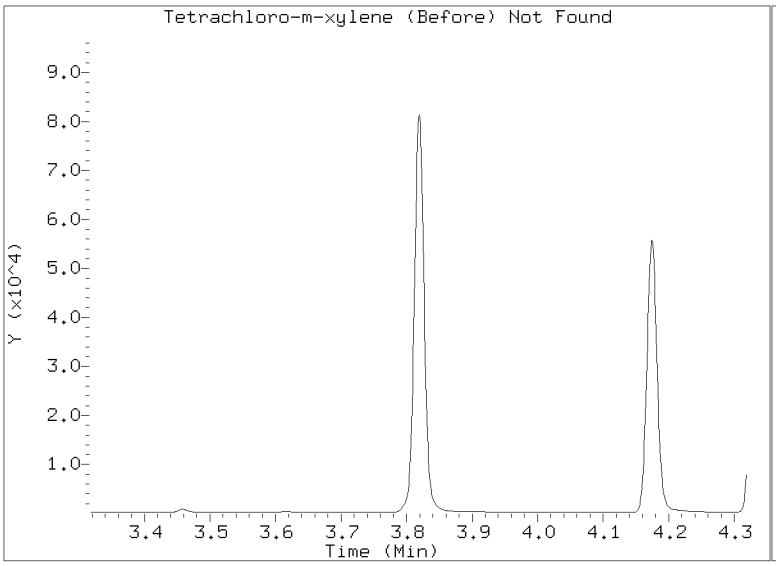
/20230412.b/B20230412.b/23041210.D SEQ-CAL7 CLP2

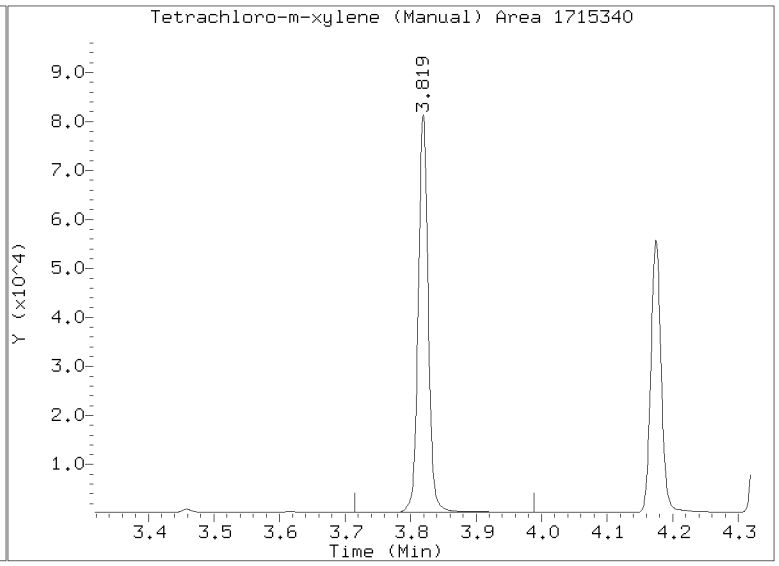


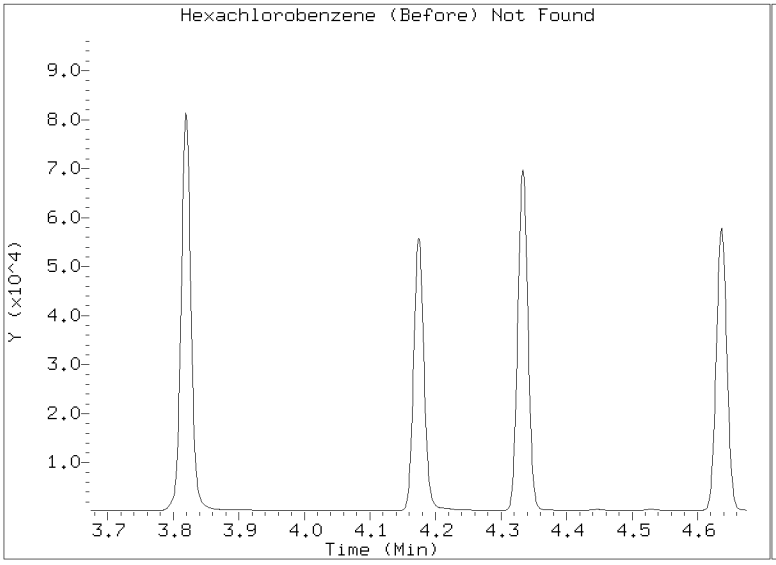
CLP-2 Manual Integration: YES

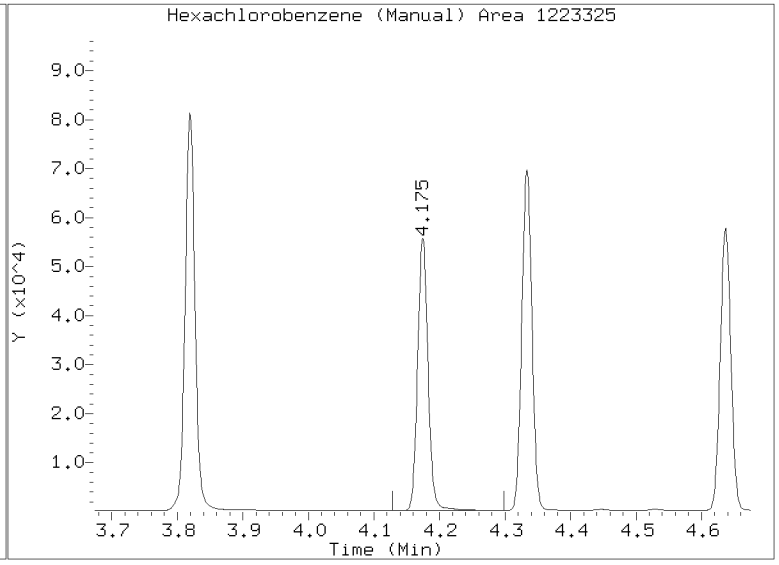
Manual Peak Adjustment Report, STX-CLP

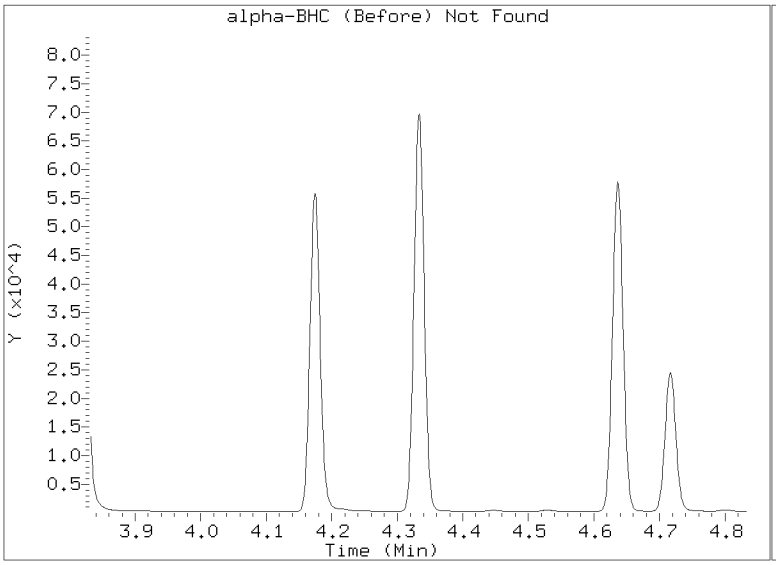
Datafile: /20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:
Report Date: 04/13/2023 12:57

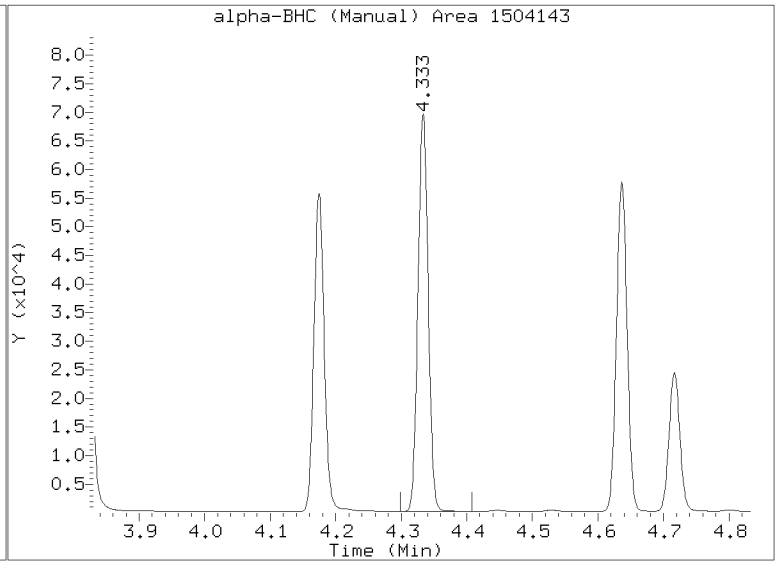






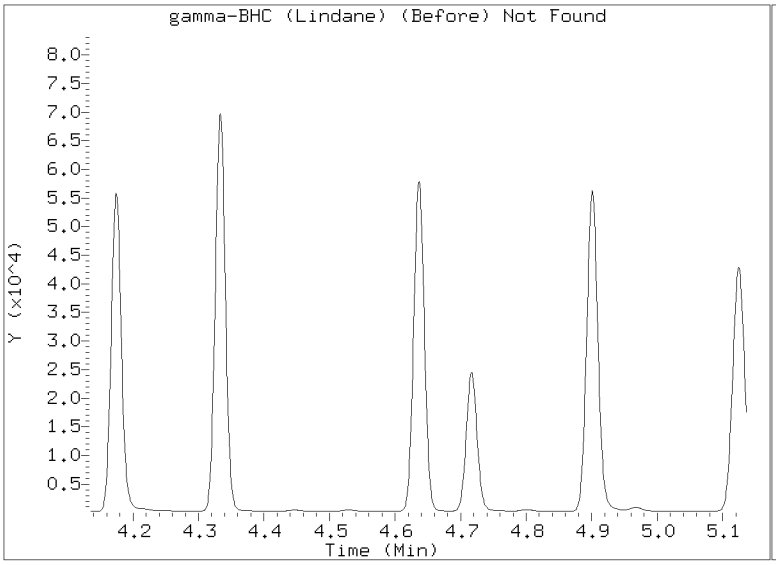


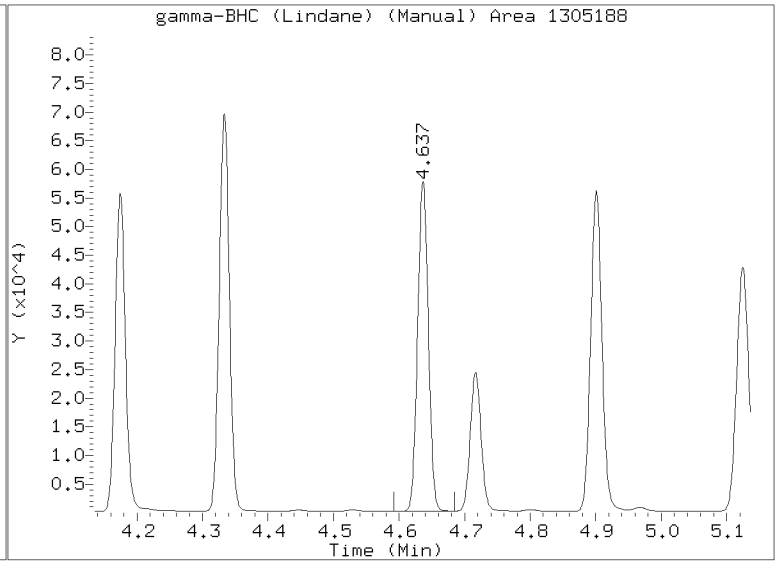


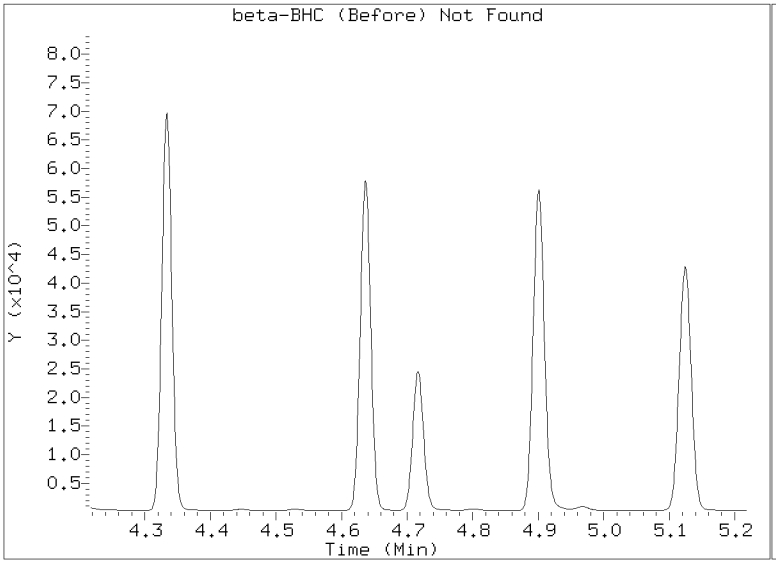


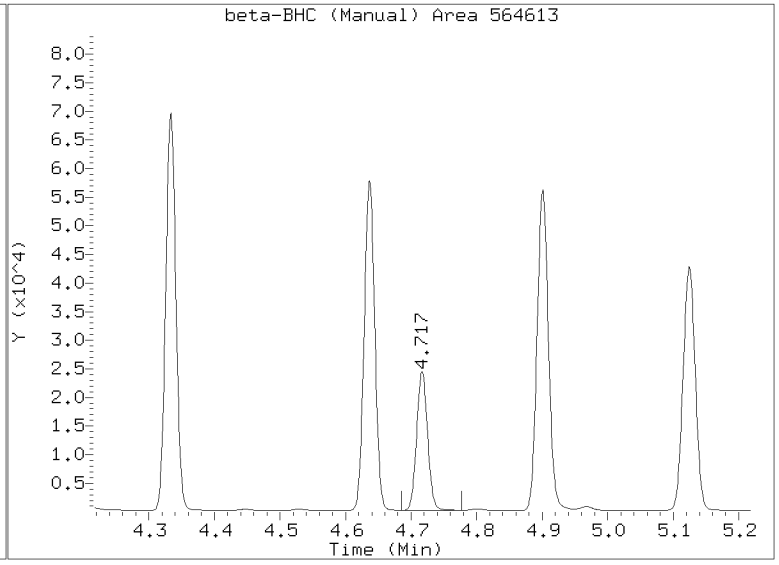
Manual Peak Adjustment Report, STX-CLP

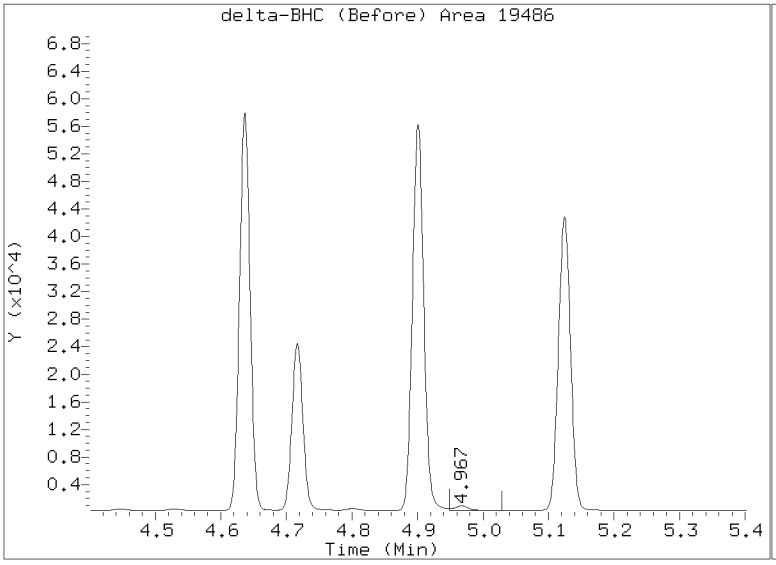
Datafile: /20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:
Report Date: 04/13/2023 12:57

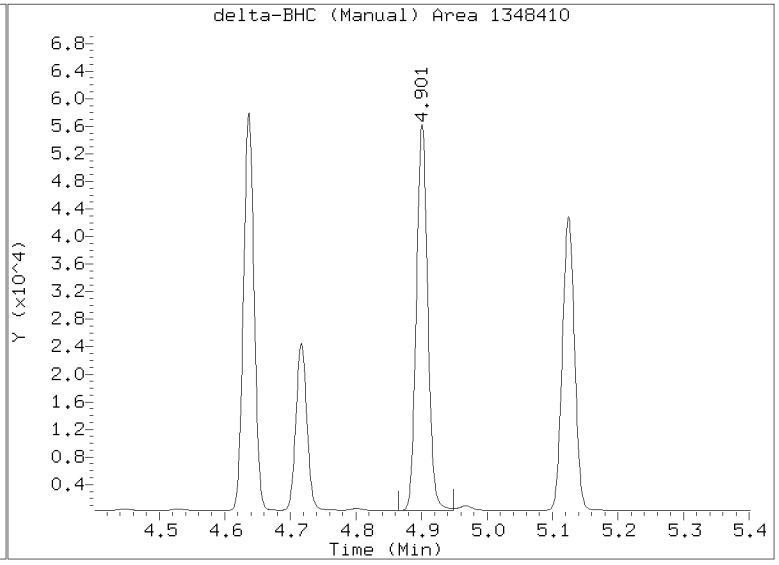






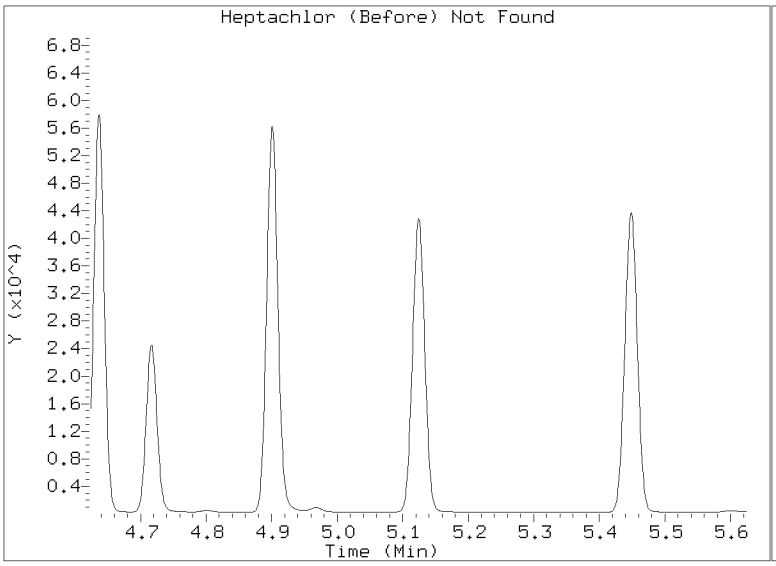


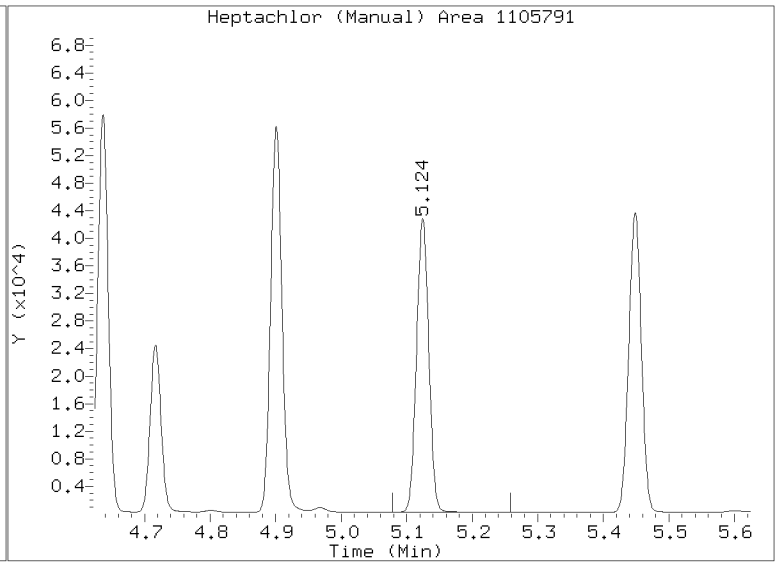


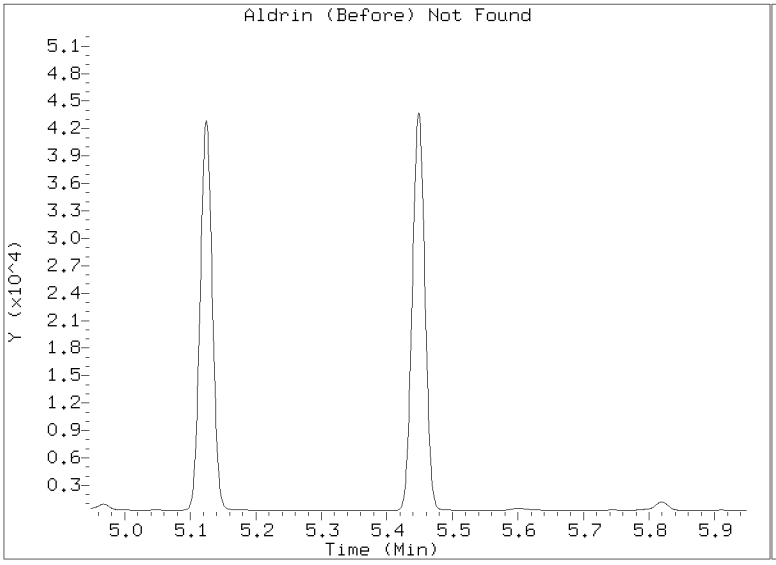


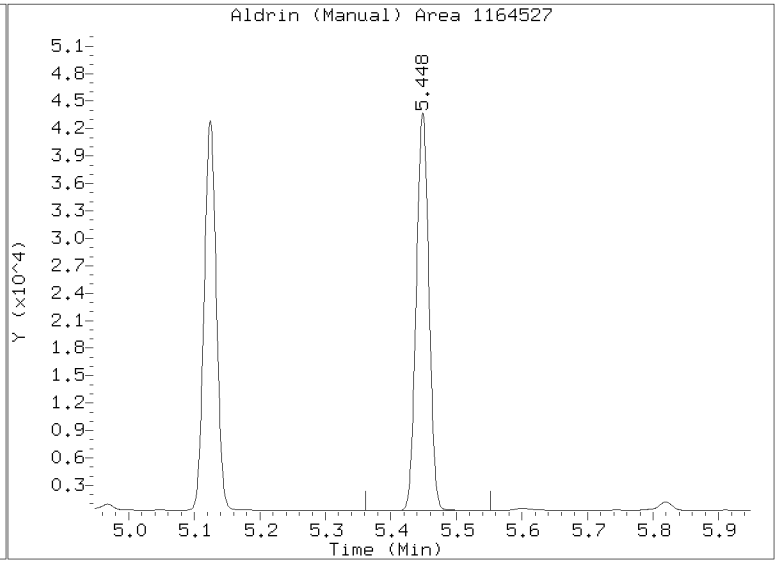
Manual Peak Adjustment Report, STX-CLP

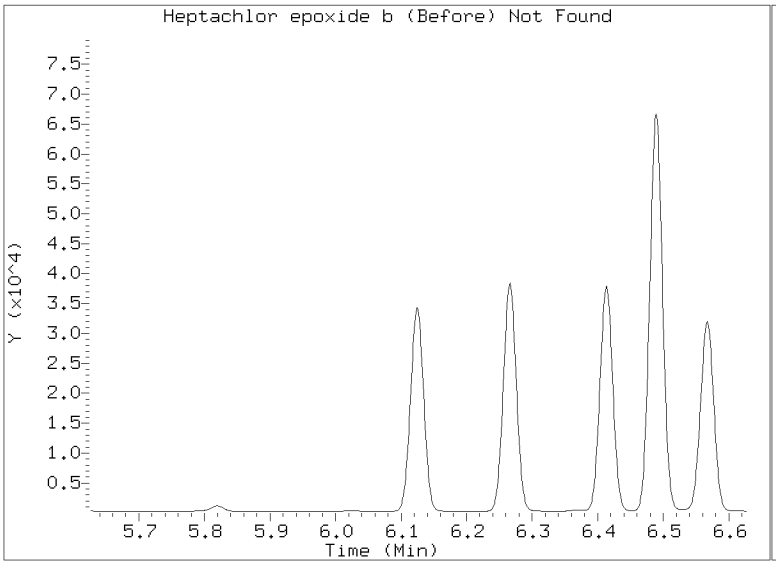
Datafile: /20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:
Report Date: 04/13/2023 12:57

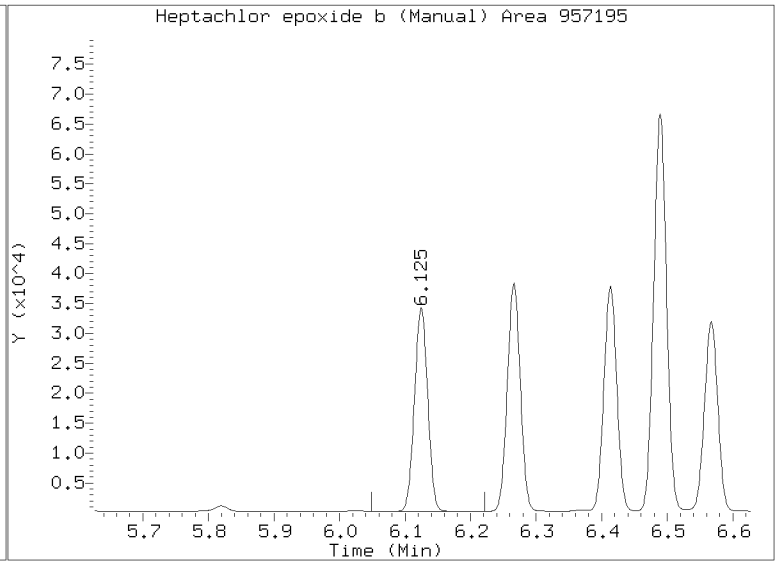






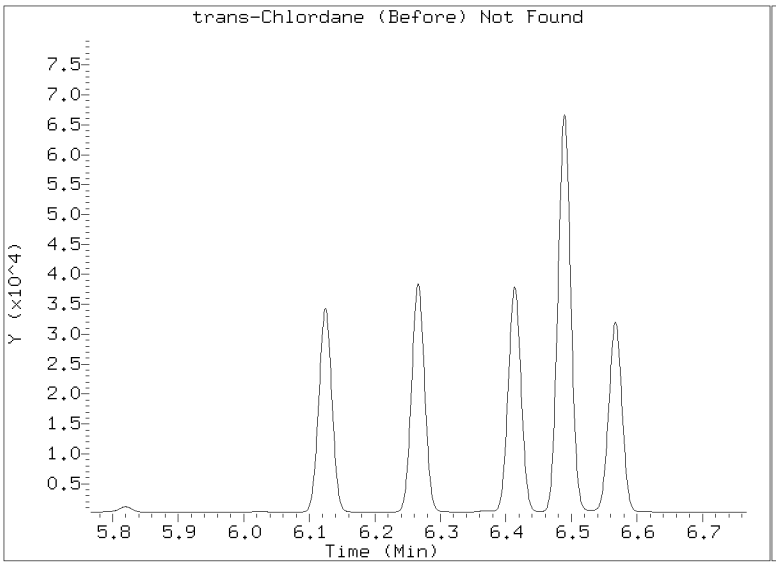


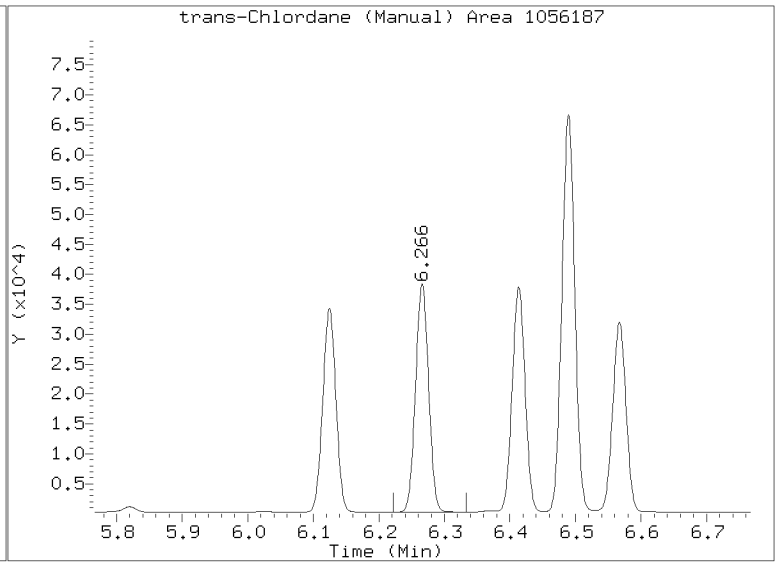


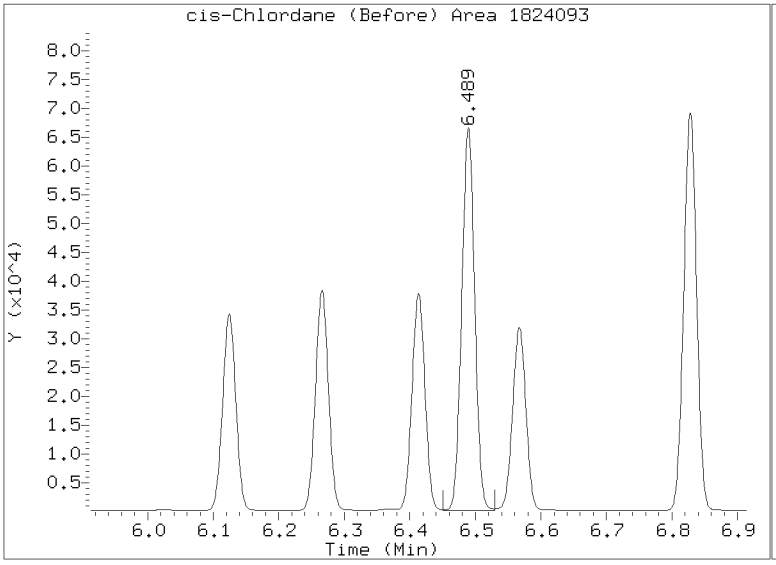


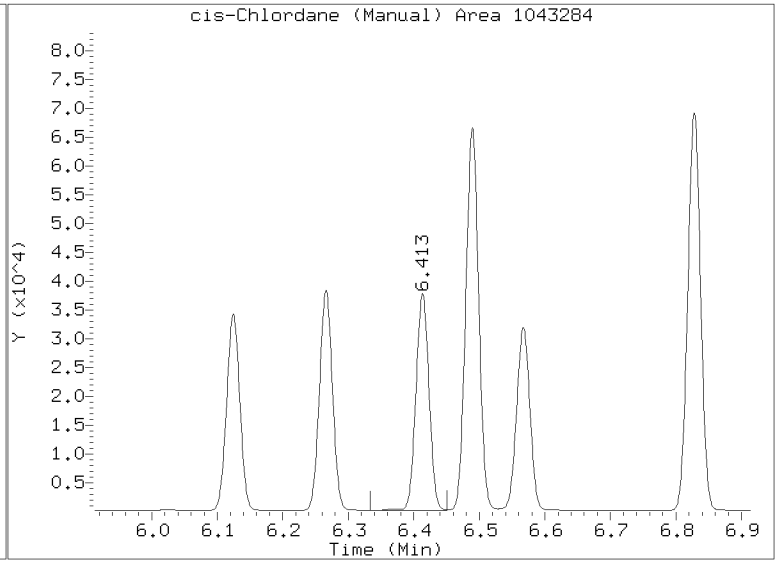
Manual Peak Adjustment Report, STX-CLP

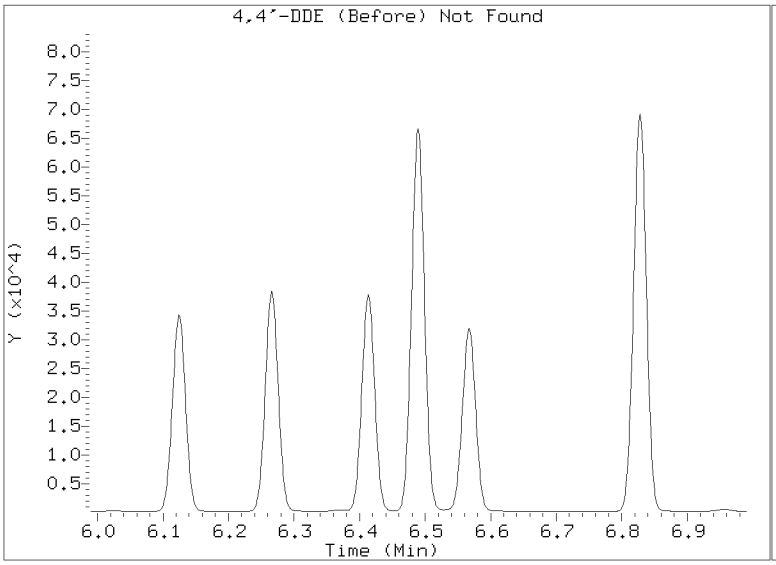
Datafile: /20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:
Report Date: 04/13/2023 12:57

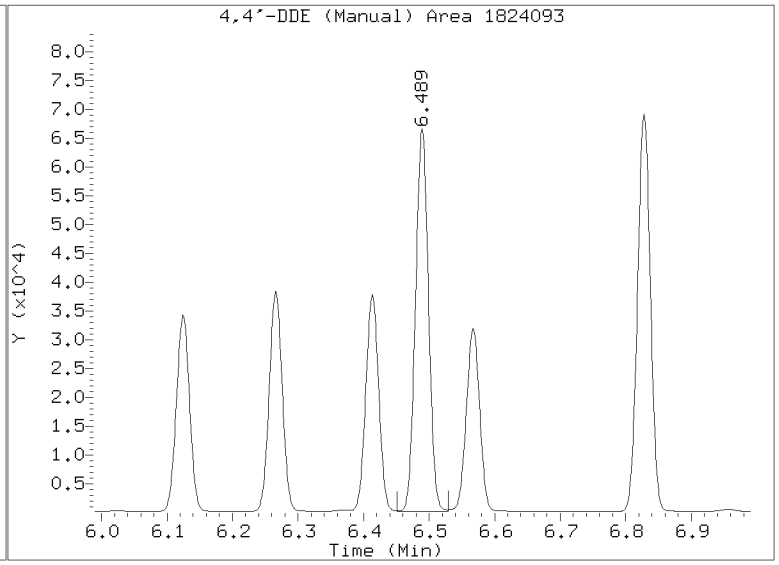






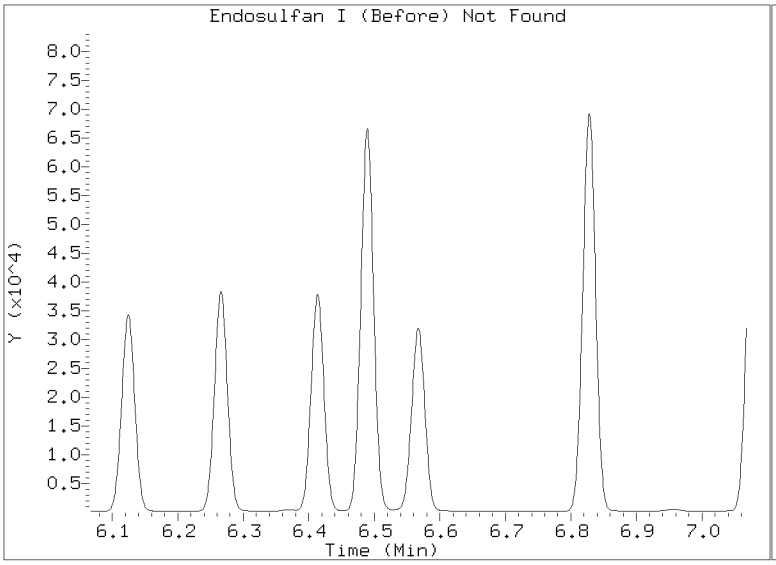


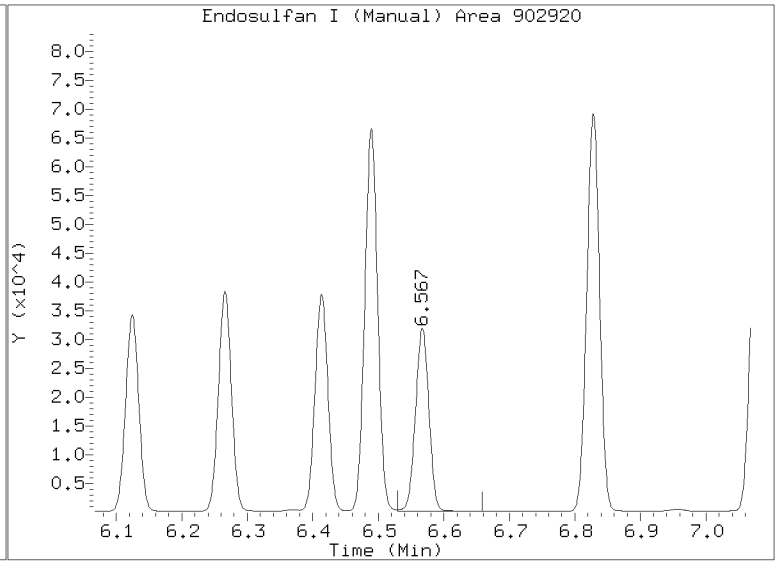


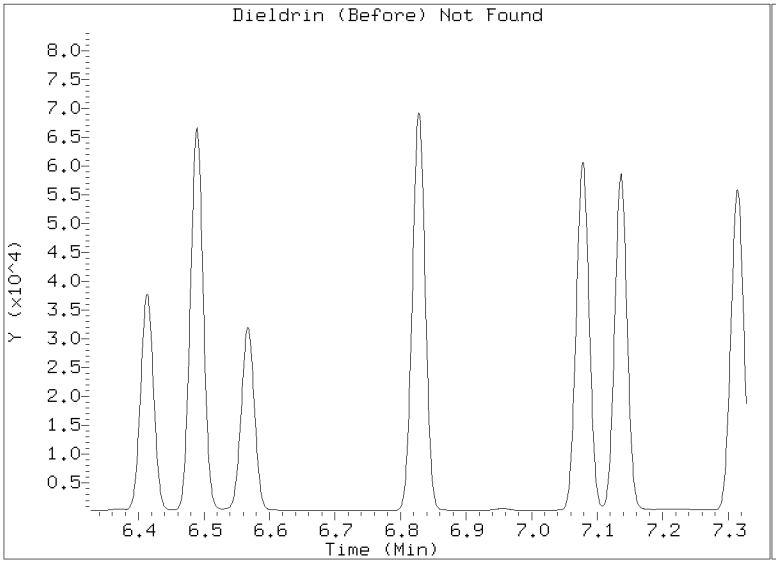


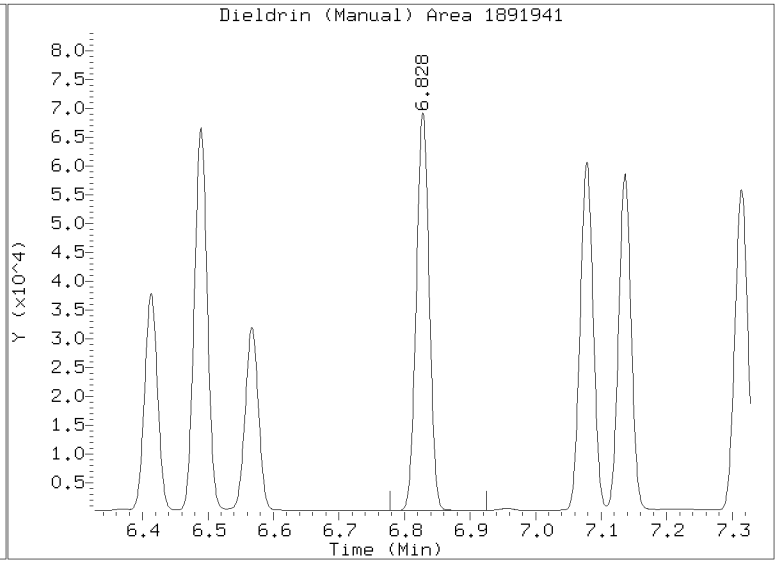
Manual Peak Adjustment Report, STX-CLP

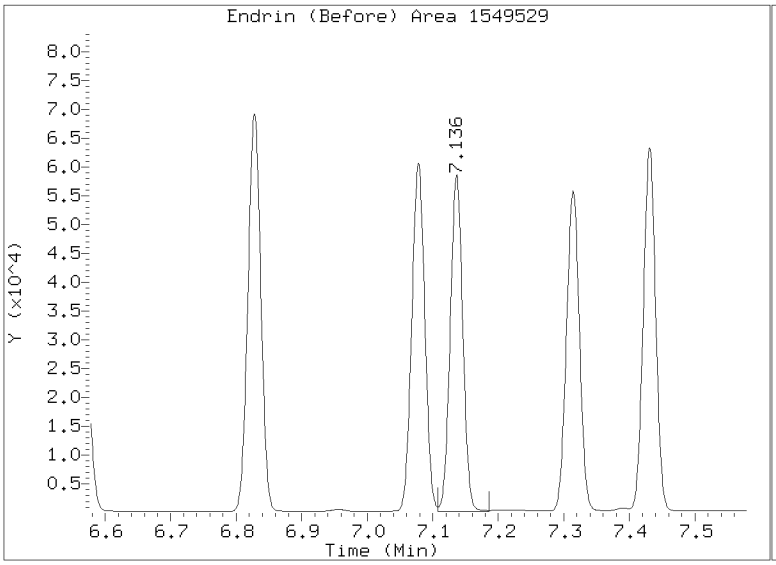
Datafile: /20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:
Report Date: 04/13/2023 12:57

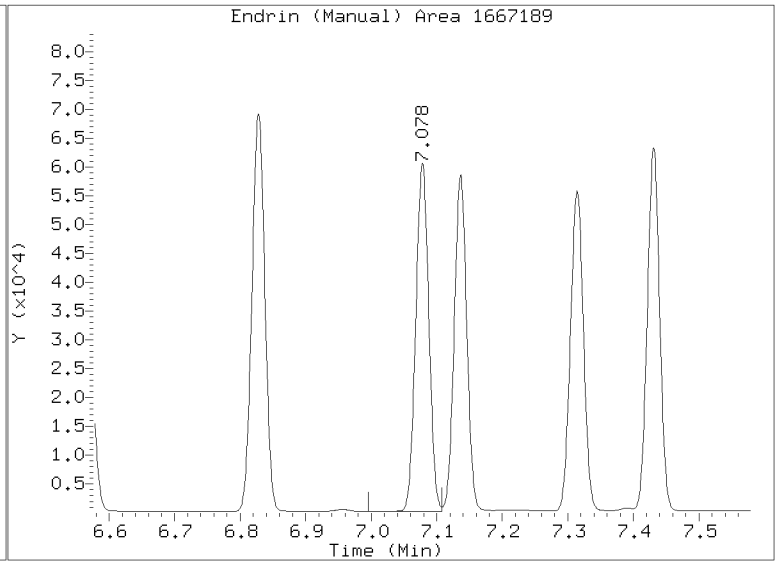






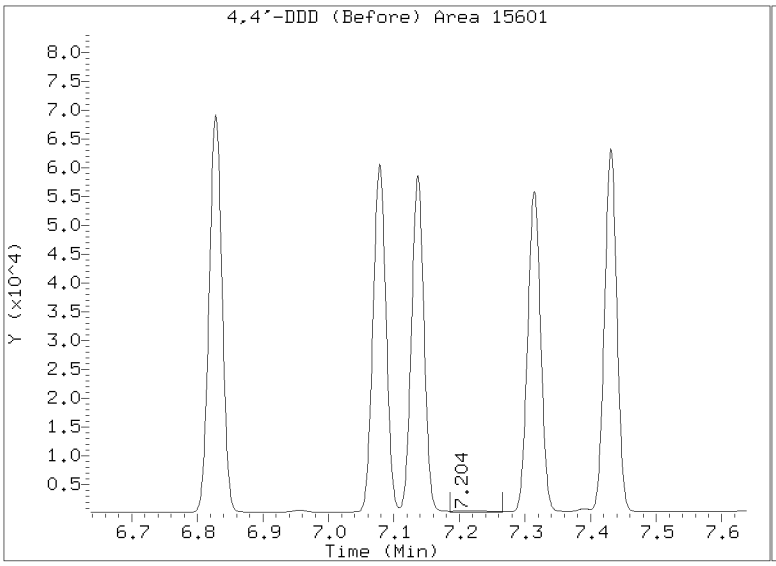


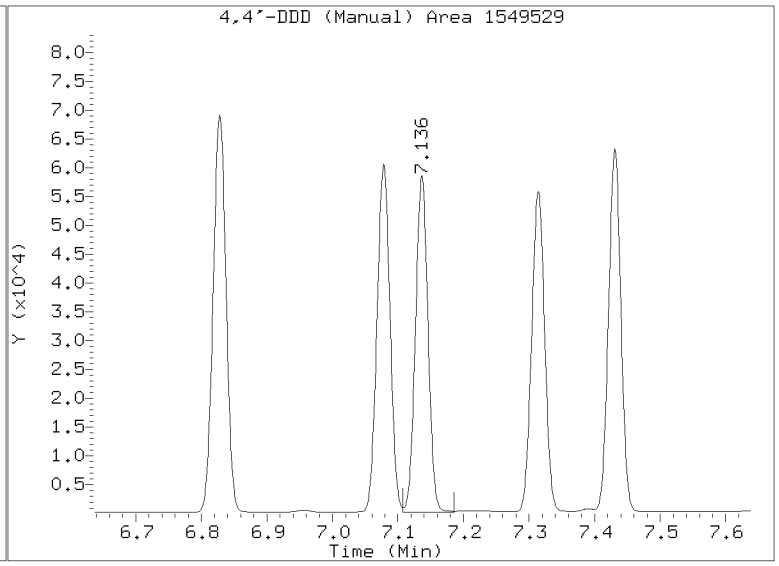


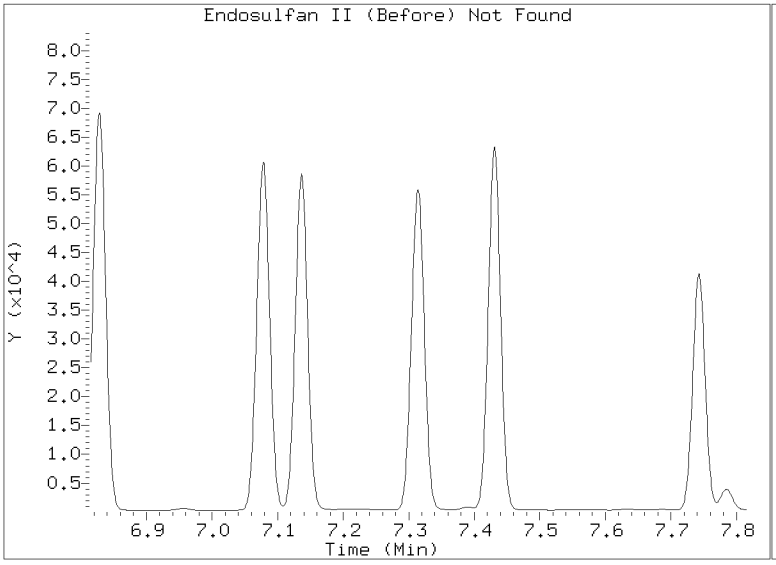


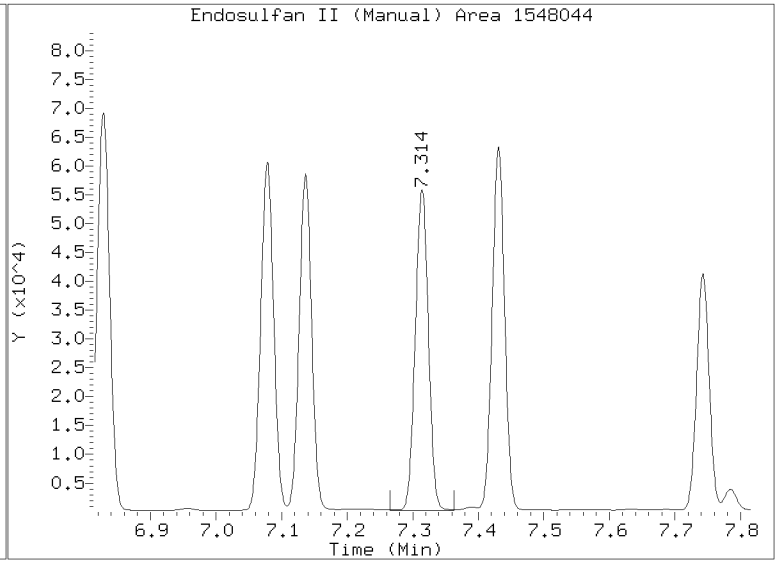
Manual Peak Adjustment Report, STX-CLP

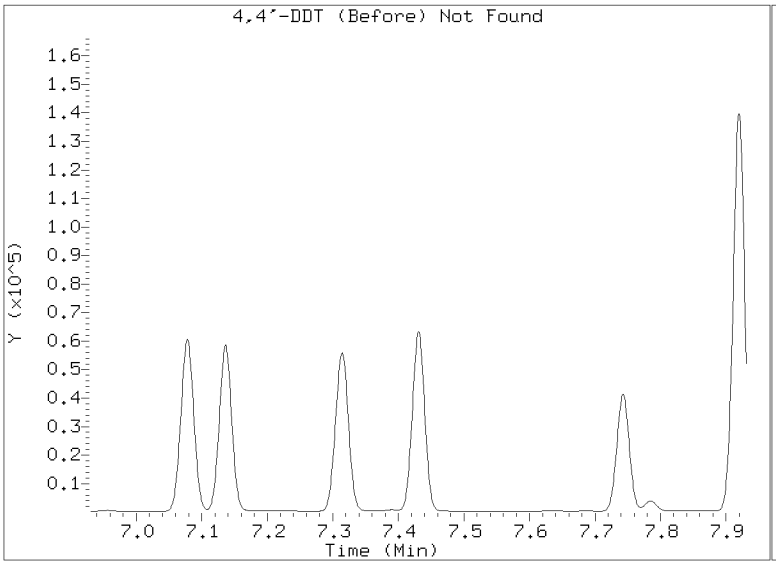
Datafile: /20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:
Report Date: 04/13/2023 12:57

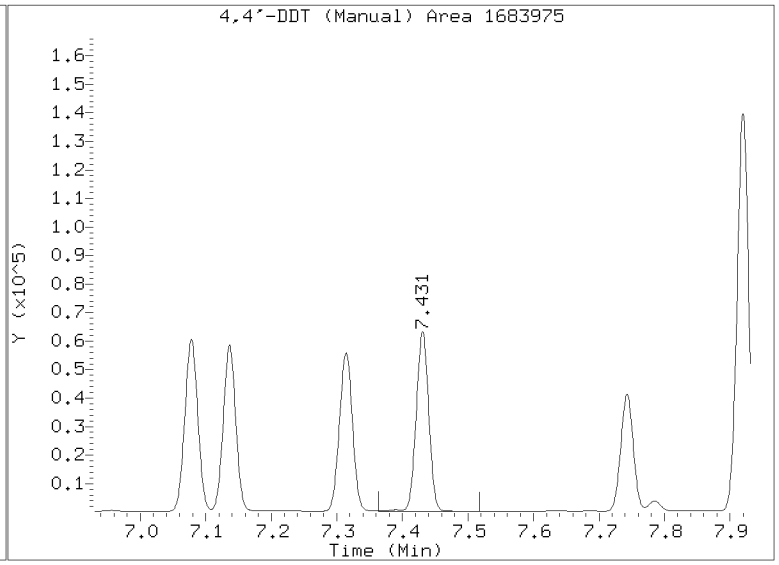






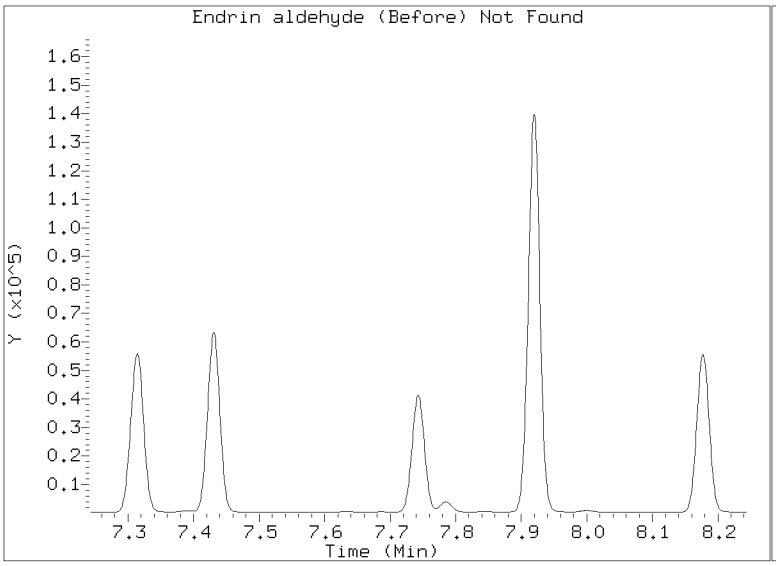


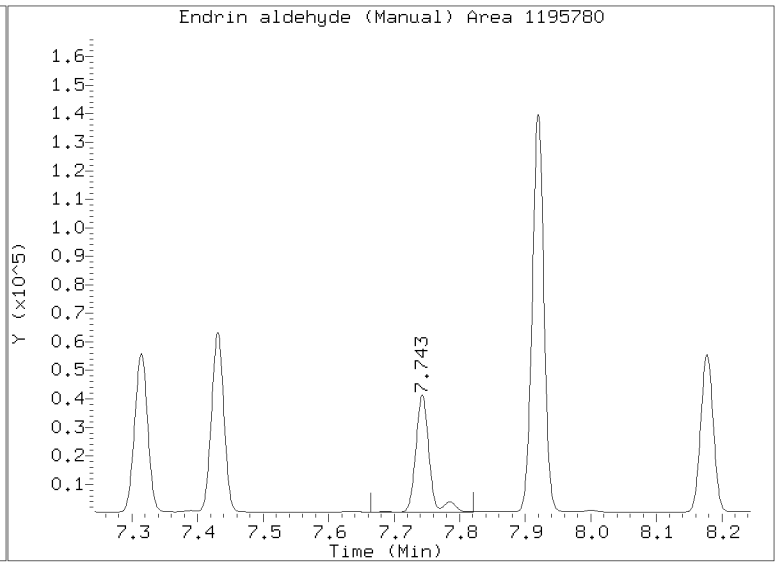


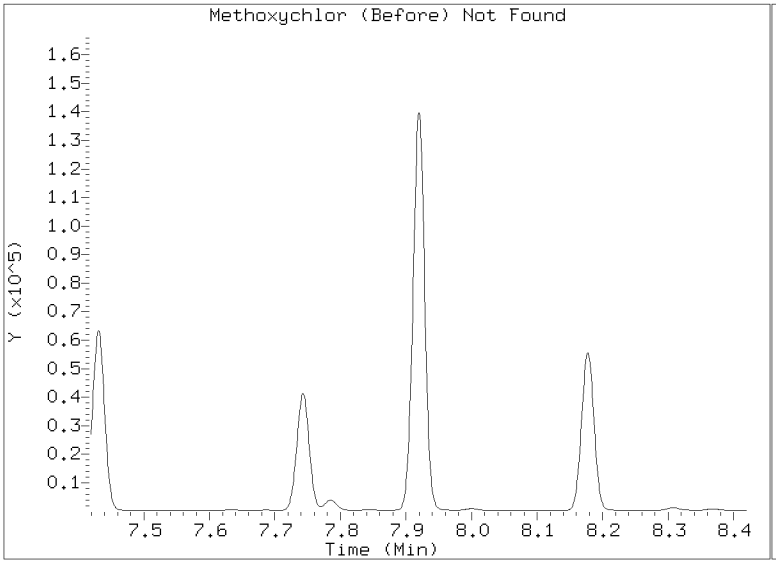


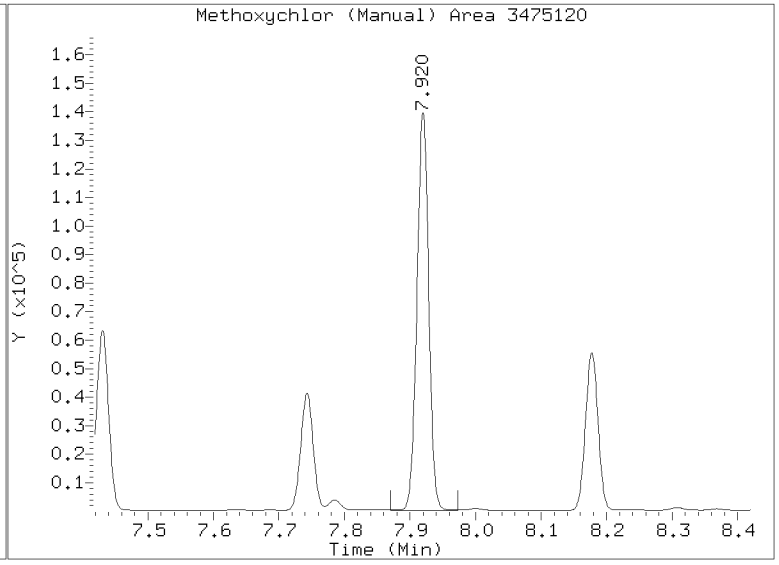
Manual Peak Adjustment Report, STX-CLP

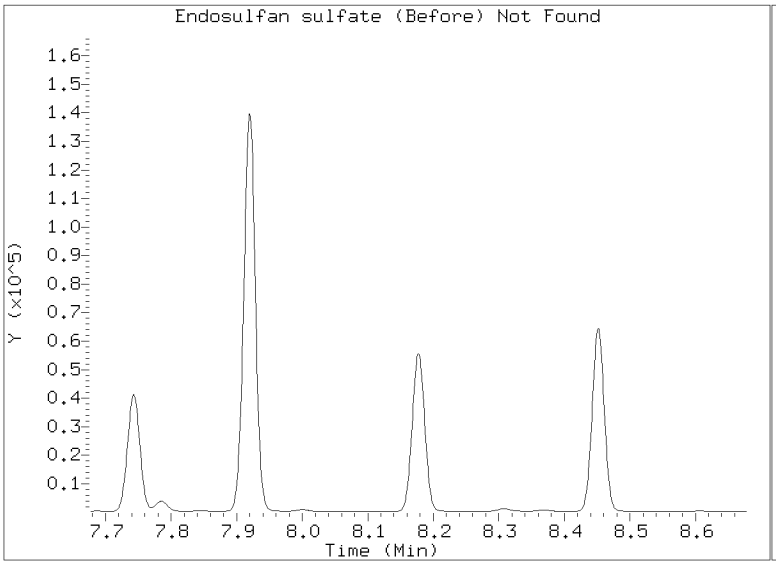
Datafile: /20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:
Report Date: 04/13/2023 12:57

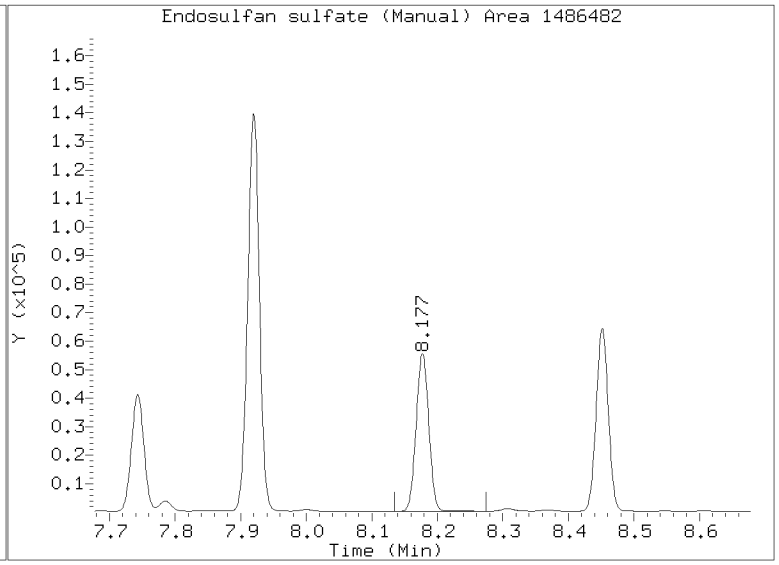






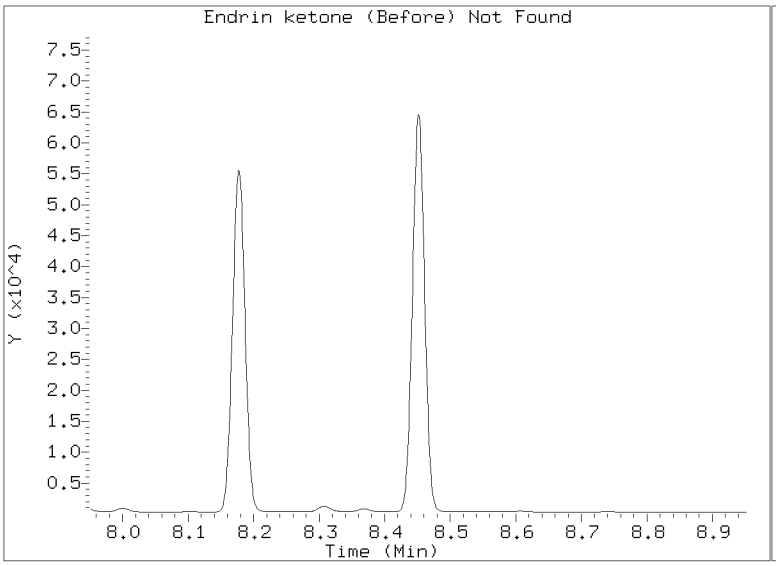


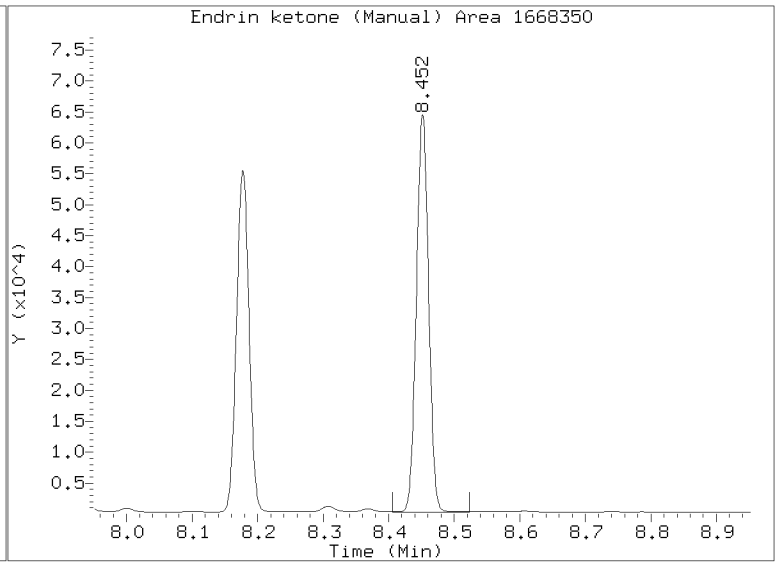


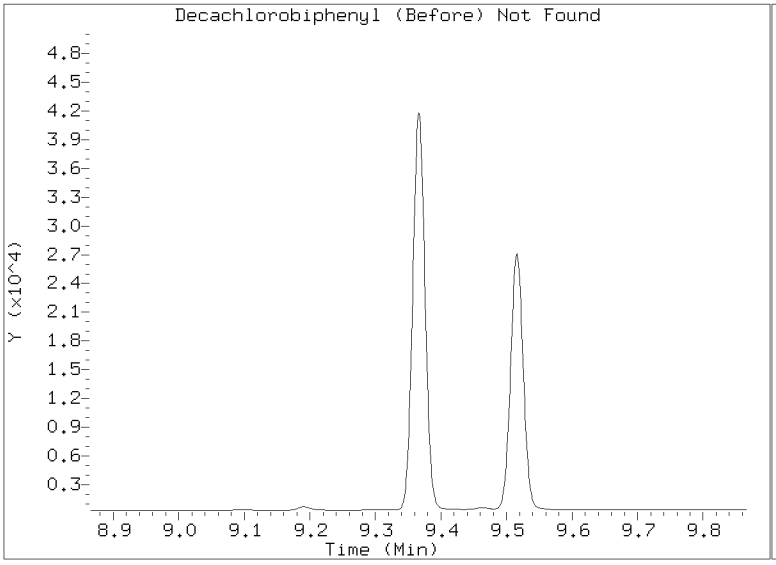


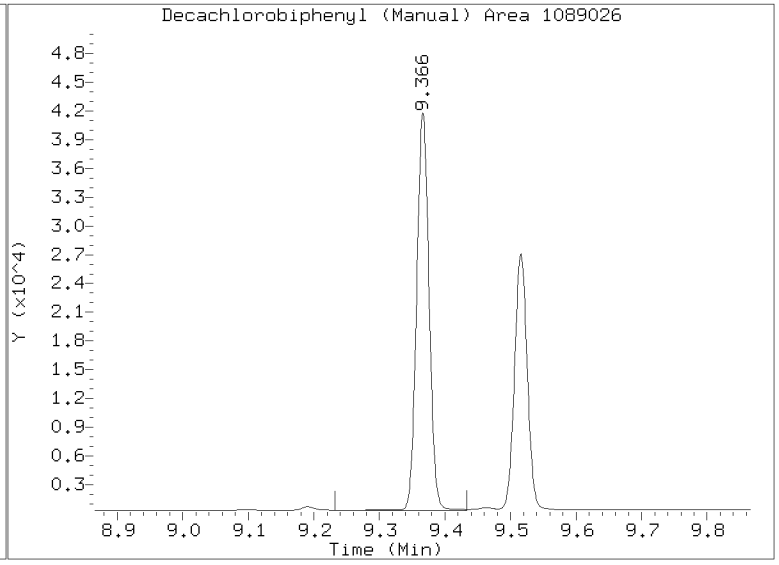
Manual Peak Adjustment Report, STX-CLP

Datafile: /20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:
Report Date: 04/13/2023 12:57



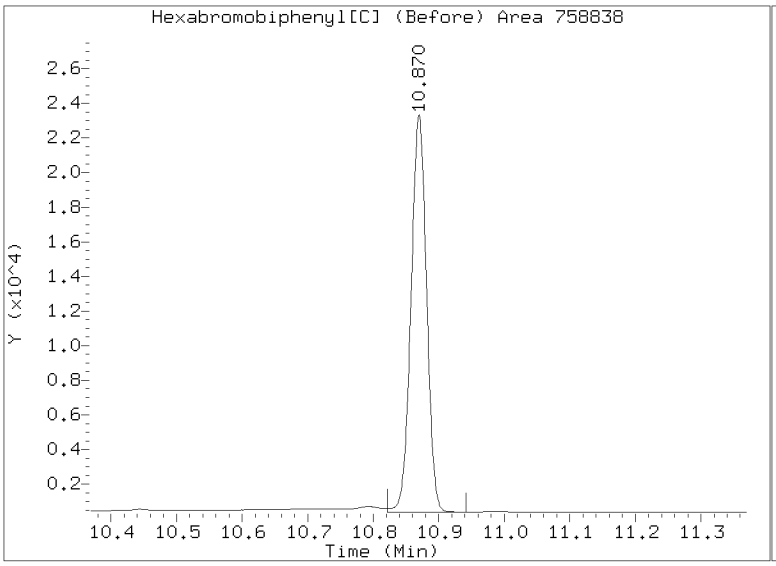


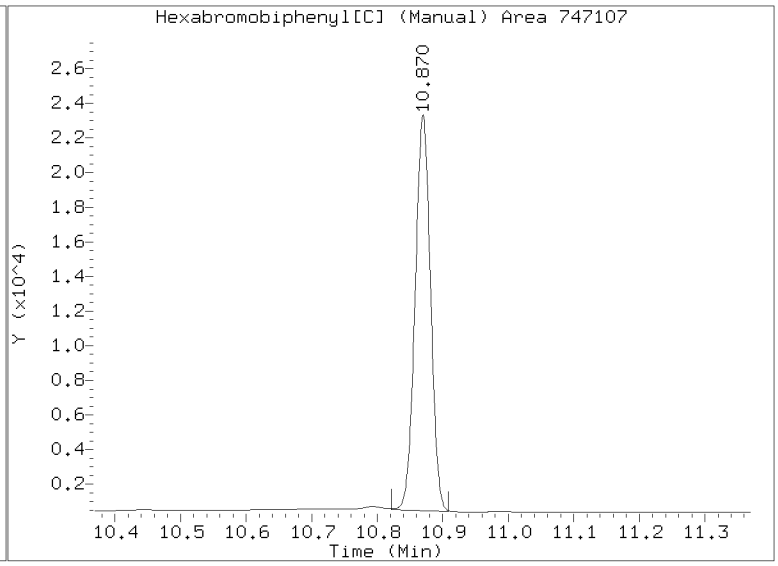




Manual Peak Adjustment Report, CLP-2

Datafile: /20230412.b/B20230412.b/23041210.D
Injection Date: 12-APR-2023 17:25
Lab ID:SEQ-CAL7 Client ID:





Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041211.D
Data file 2: /20230412.b/B20230412.b/23041211.D
Method: \20230412.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL8
Client ID:
Injection Date: 12-APR-2023 17:43
Report Date: 04/14/2023 09:40
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.010	0.001	32738	6.624	-0.000	38532	2.95	2.72	8.2	Oxychlordane
6.106	0.001	23612	6.922	0.001	29356	2.94	2.84	3.6	2,4-DDE
6.396	0.001	37432	7.039	-0.000	43568	2.87	2.75	4.3	trans-Nonachlor
6.682	0.001	21548	7.477	-0.000	26589	2.87	2.82	2.0	2,4-DDD
6.959	0.001	26208	7.799	-0.000	30271	2.90	2.81	3.2	2,4-DDT
7.112	0.001	38299	7.859	-0.000	44124	2.81	2.69	4.4	cis-Nonachlor
8.086	0.001	25731	9.101	0.000	26963	3.06	2.85	7.3	Mirex N
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

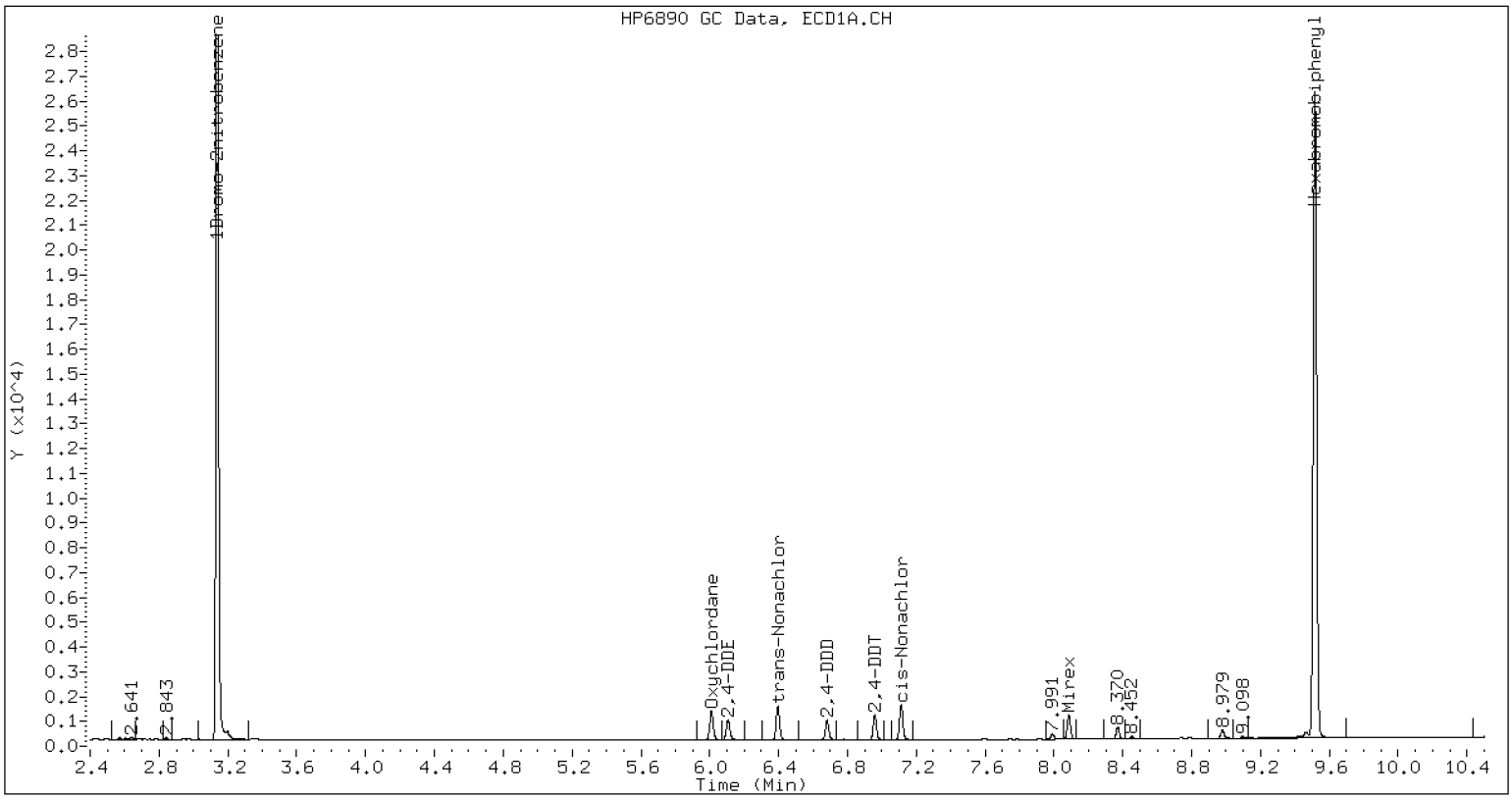
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	913523	5.7
Hexabromobiphenyl	663237	737594	11.2

Column 2

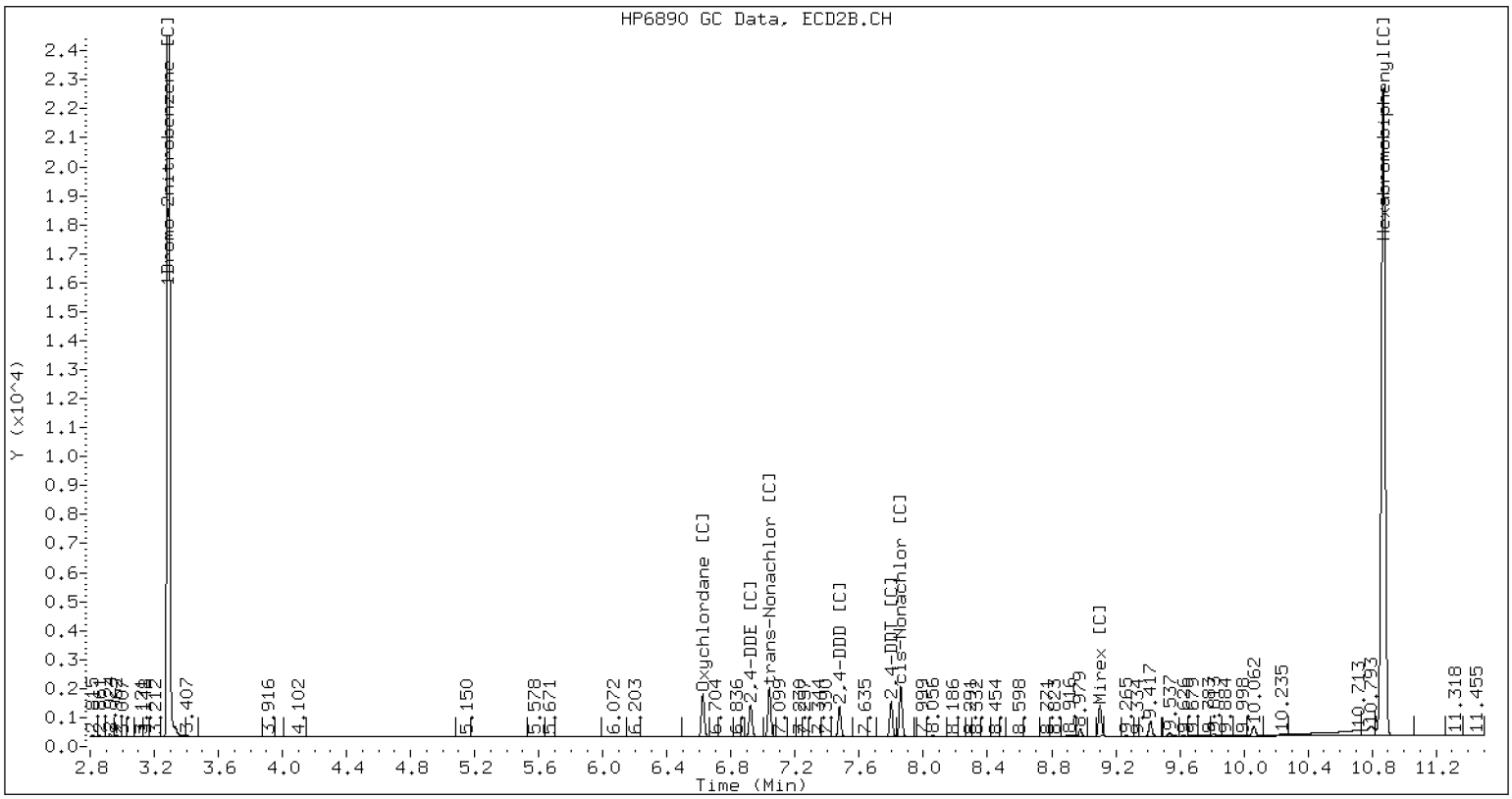
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1238562	-16.4
Hexabromobiphenyl	870561	753386	-13.5

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

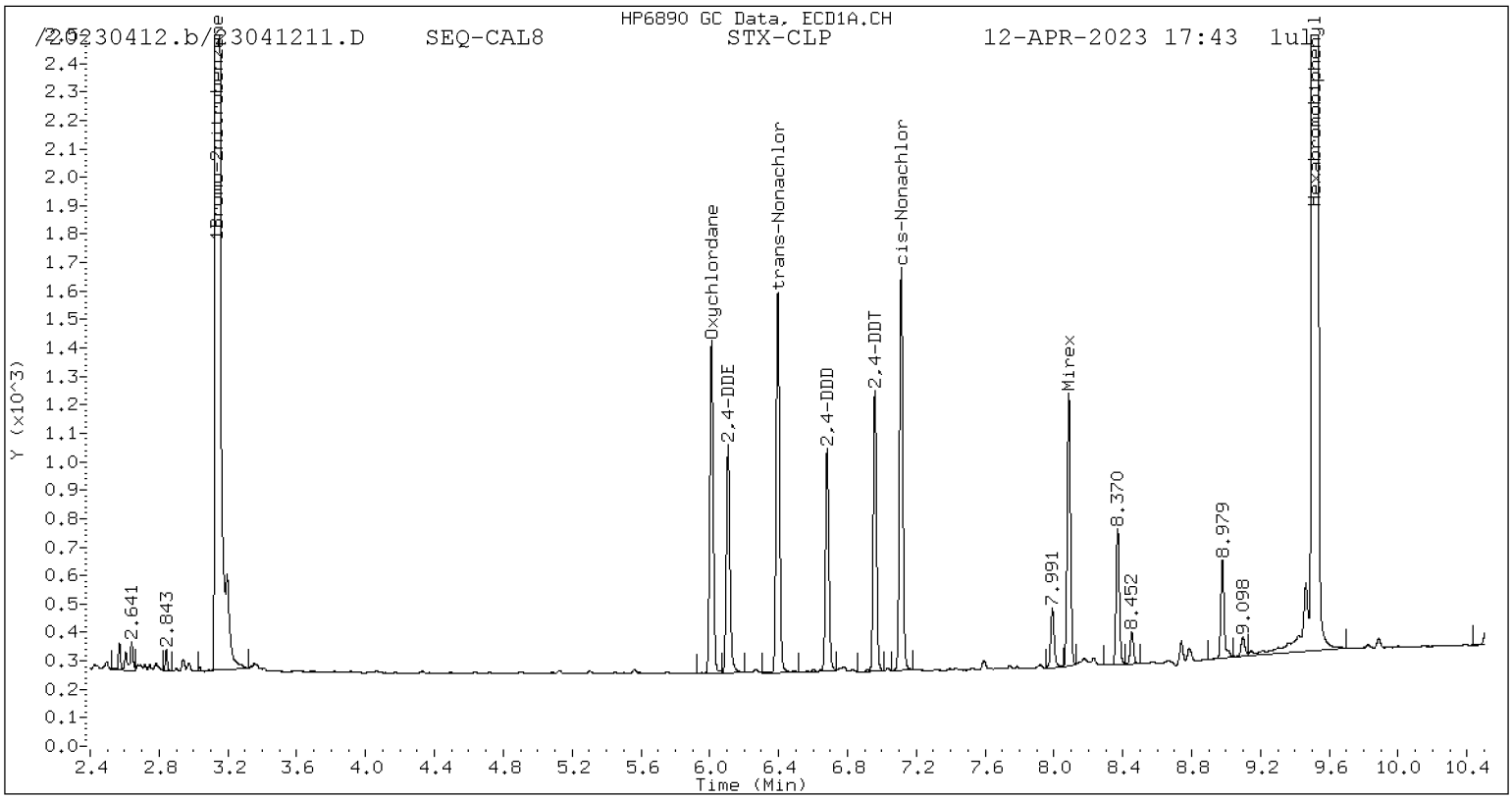
/20230412.b/23041211.D SEQ-CAL8 STX-CLP 12-APR-2023 17:43 1ul



/20230412.b/B20230412.b/23041211.D SEQ-CAL8 CLP2 12-APR-2023 17:43 1ul

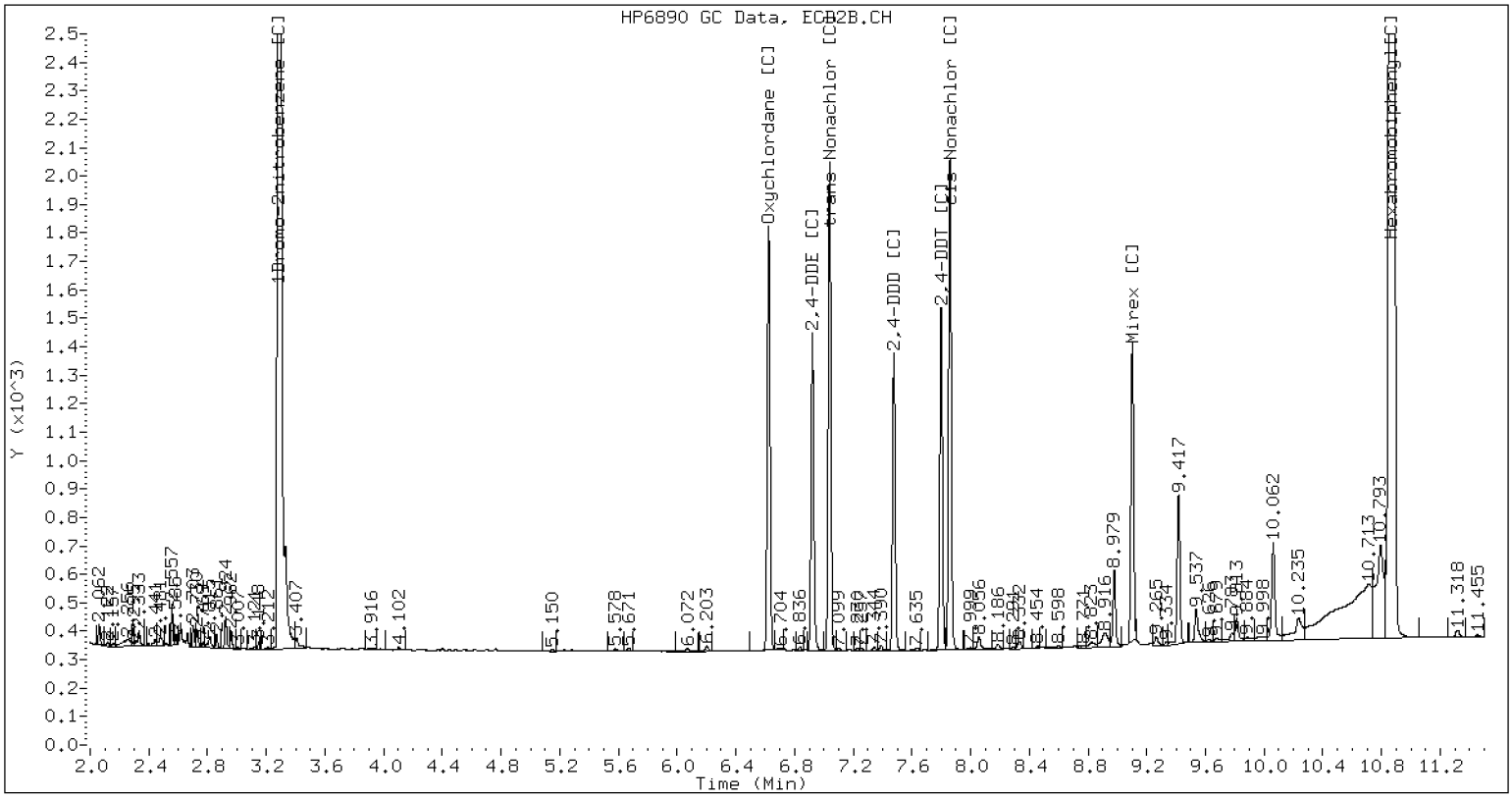


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

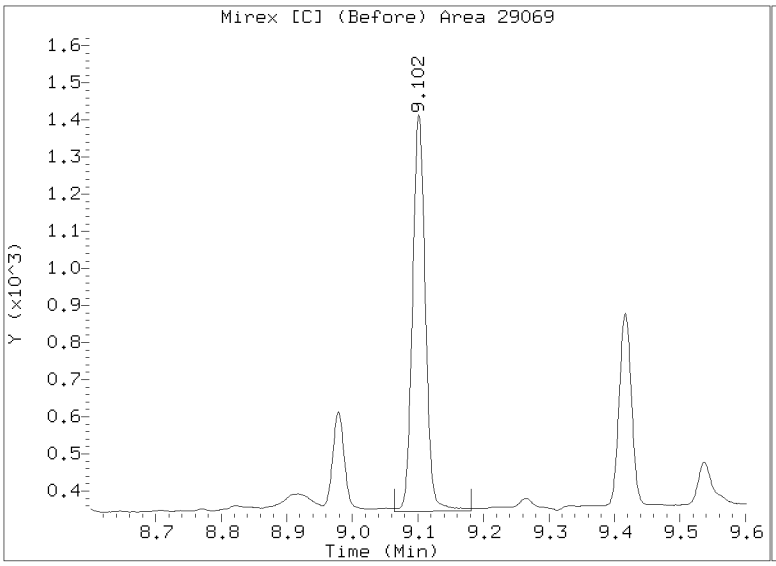
/20230412.b/B20230412.b/23041211.D SEQ-CAL8 CLP2

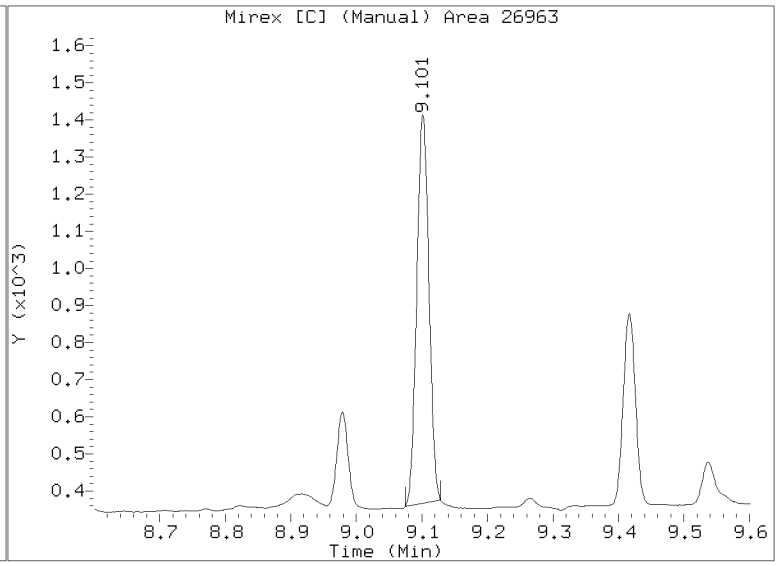


CLP-2 Manual Integration: YES

Manual Peak Adjustment Report, CLP-2

Datafile: /20230412.b/B20230412.b/23041211.D
Injection Date: 12-APR-2023 17:43
Lab ID:SEQ-CAL8 Client ID:





Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041212.D
Data file 2: /20230412.b/B20230412.b/23041212.D
Method: \20230412.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CAL9
Client ID:
Injection Date: 12-APR-2023 18:02
Report Date: 04/14/2023 09:40
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.010	0.001	60226	6.624	-0.000	77029	5.15	5.33	3.5	Oxychlordane
6.106	0.001	45692	6.921	0.000	57608	5.39	5.45	1.1	2,4-DDE
6.396	0.001	73158	7.038	-0.001	81213	5.33	4.94	7.6	trans-Nonachlor
6.682	0.001	41900	7.477	-0.000	51791	5.31	5.30	0.3	2,4-DDD
6.959	0.000	51131	7.798	-0.001	58989	5.37	5.28	1.8	2,4-DDT
7.112	0.000	75575	7.858	-0.001	87575	5.29	5.15	2.7	cis-Nonachlor
8.086	0.001	47358	9.101	0.000	53365	5.31	5.44	2.5	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

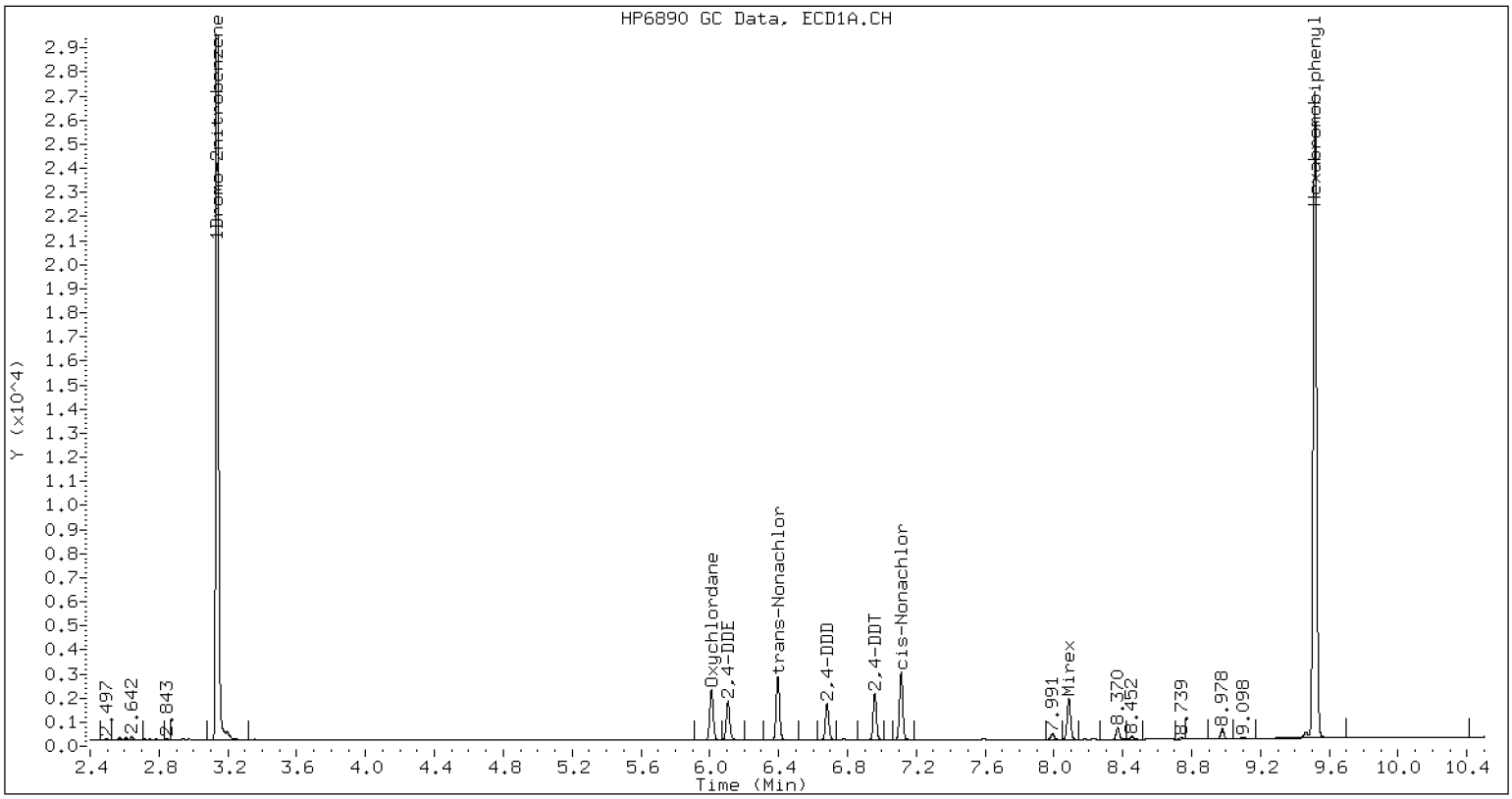
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	930904	7.7
Hexabromobiphenyl	663237	759389	14.5

Column 2

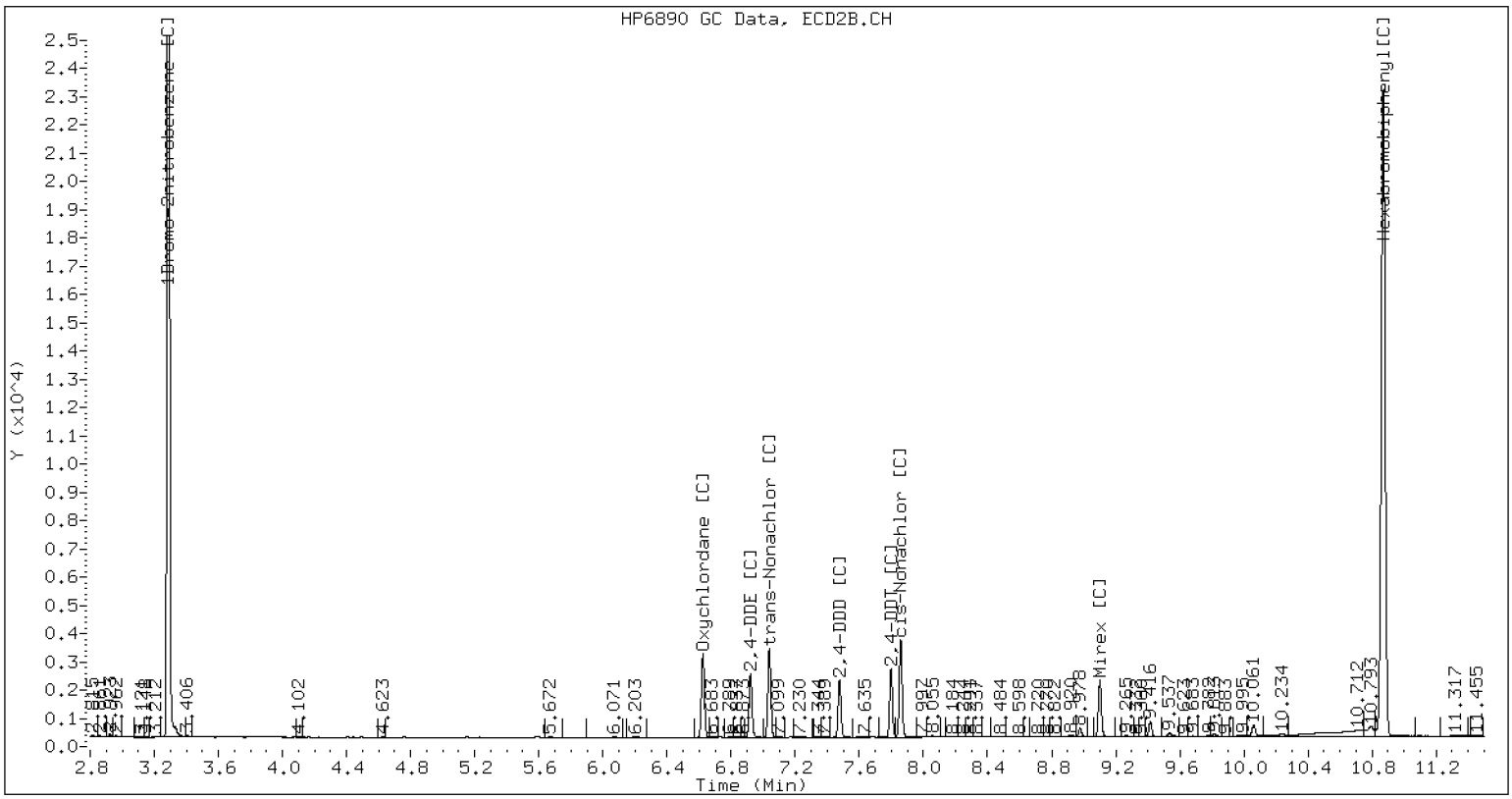
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1264392	-14.6
Hexabromobiphenyl	870561	780703	-10.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

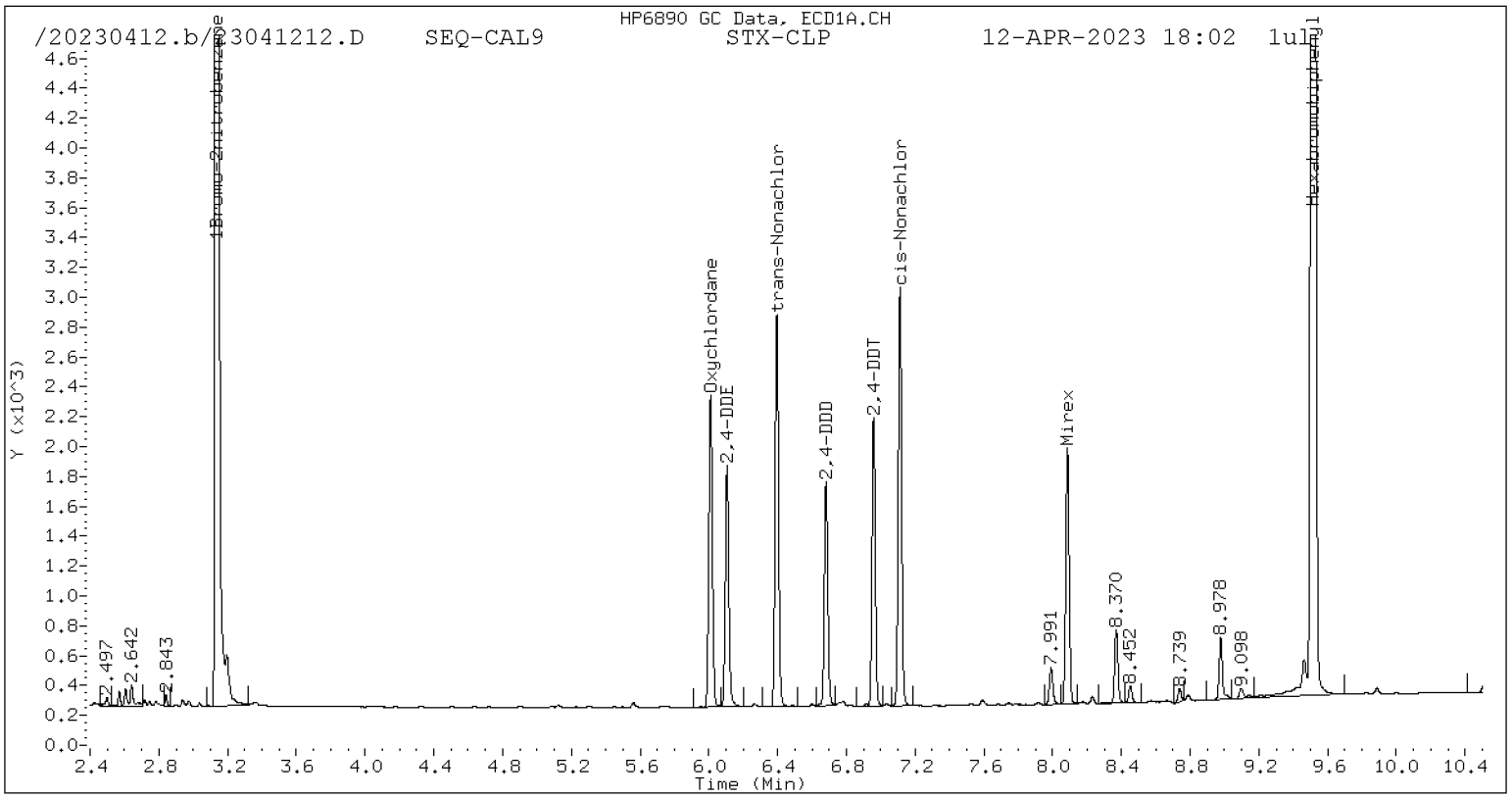
/20230412.b/23041212.D SEQ-CAL9 STX-CLP 12-APR-2023 18:02 1ul



/20230412.b/B20230412.b/23041212.D SEQ-CAL9 CLP2 12-APR-2023 18:02 1ul

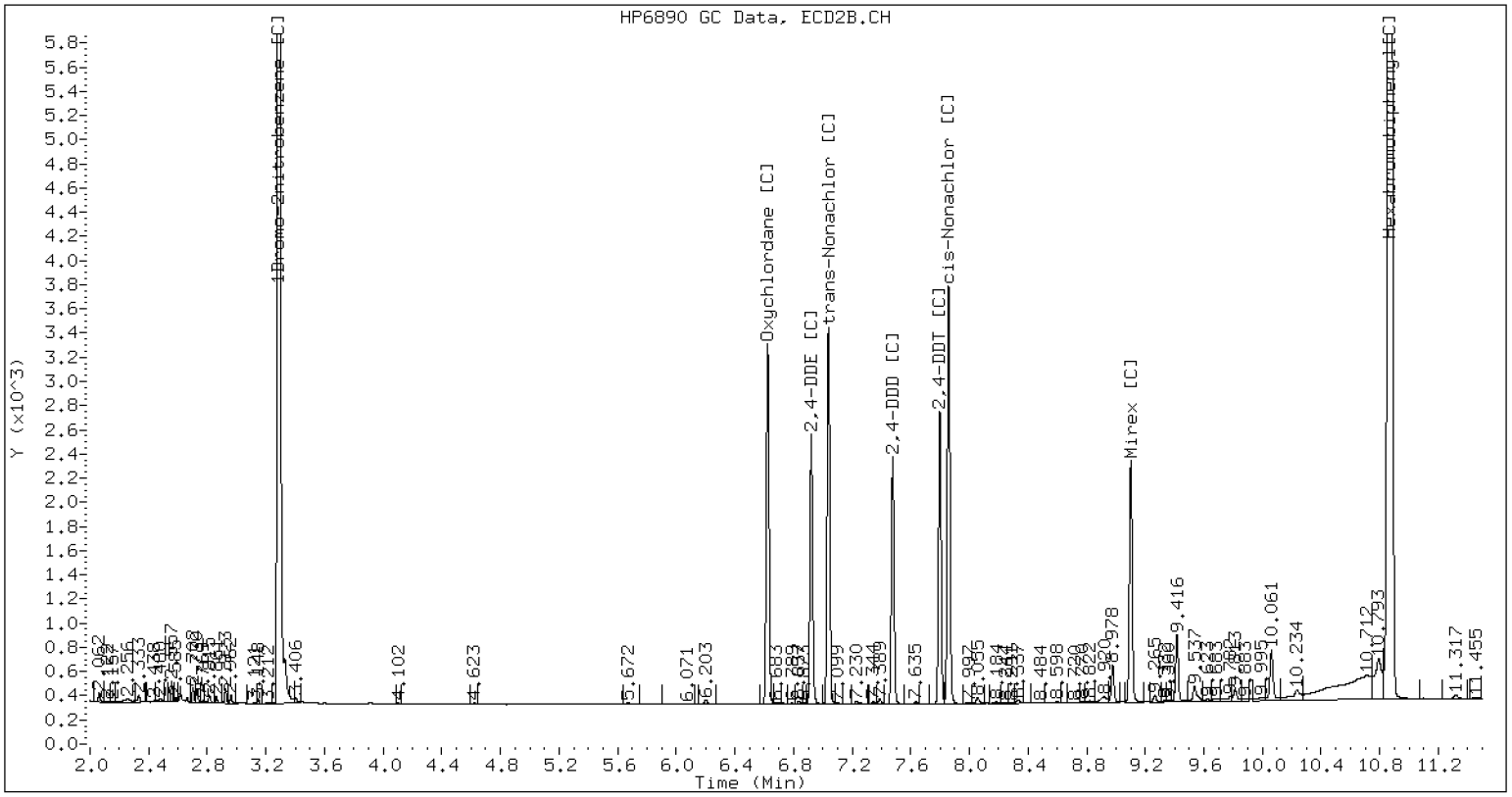


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041212.D SEQ-CAL9 CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041213.D
Data file 2: /20230412.b/B20230412.b/23041213.D
Method: \20230412.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALA
Client ID:
Injection Date: 12-APR-2023 18:20
Report Date: 04/14/2023 09:40
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.009	-0.000	123278	6.624	0.000	151270	10.75	10.37	3.6	Oxychlordane
6.106	0.001	89835	6.921	0.000	112895	10.82	10.59	2.2	2,4-DDE
6.396	0.001	141201	7.039	-0.000	170866	10.50	10.56	0.6	trans-Nonachlor
6.682	0.001	83598	7.477	-0.000	100942	10.82	10.49	3.1	2,4-DDD
6.959	0.000	99988	7.799	-0.000	115070	10.72	10.46	2.4	2,4-DDT
7.112	0.000	146847	7.859	0.000	173382	10.50	10.37	1.3	cis-Nonachlor
8.086	0.001	92734	9.101	0.000	100630	10.60	10.42	1.7	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			----			0.00	0.00	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

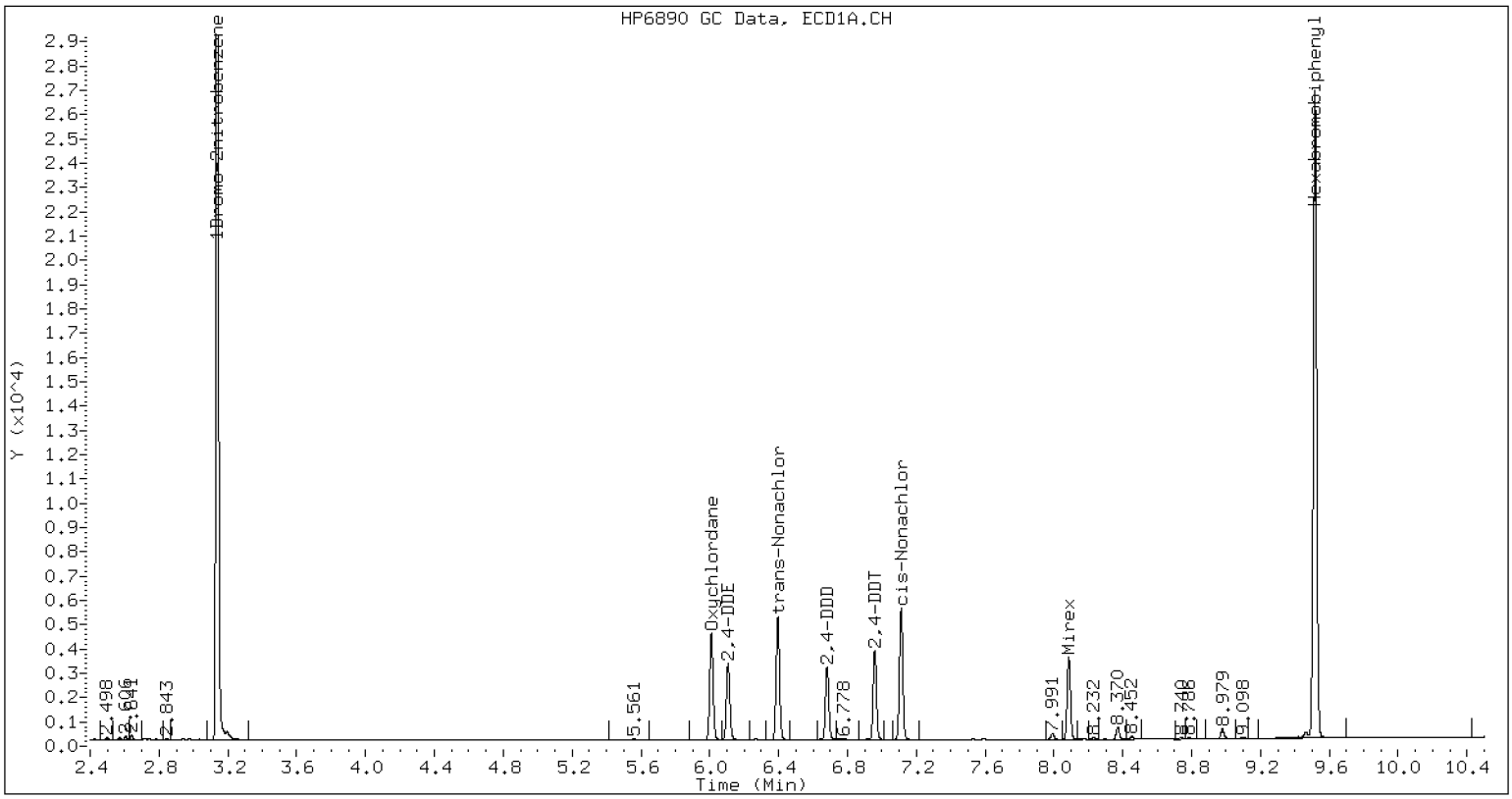
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	924798	7.0
Hexabromobiphenyl	663237	744140	12.2

Column 2

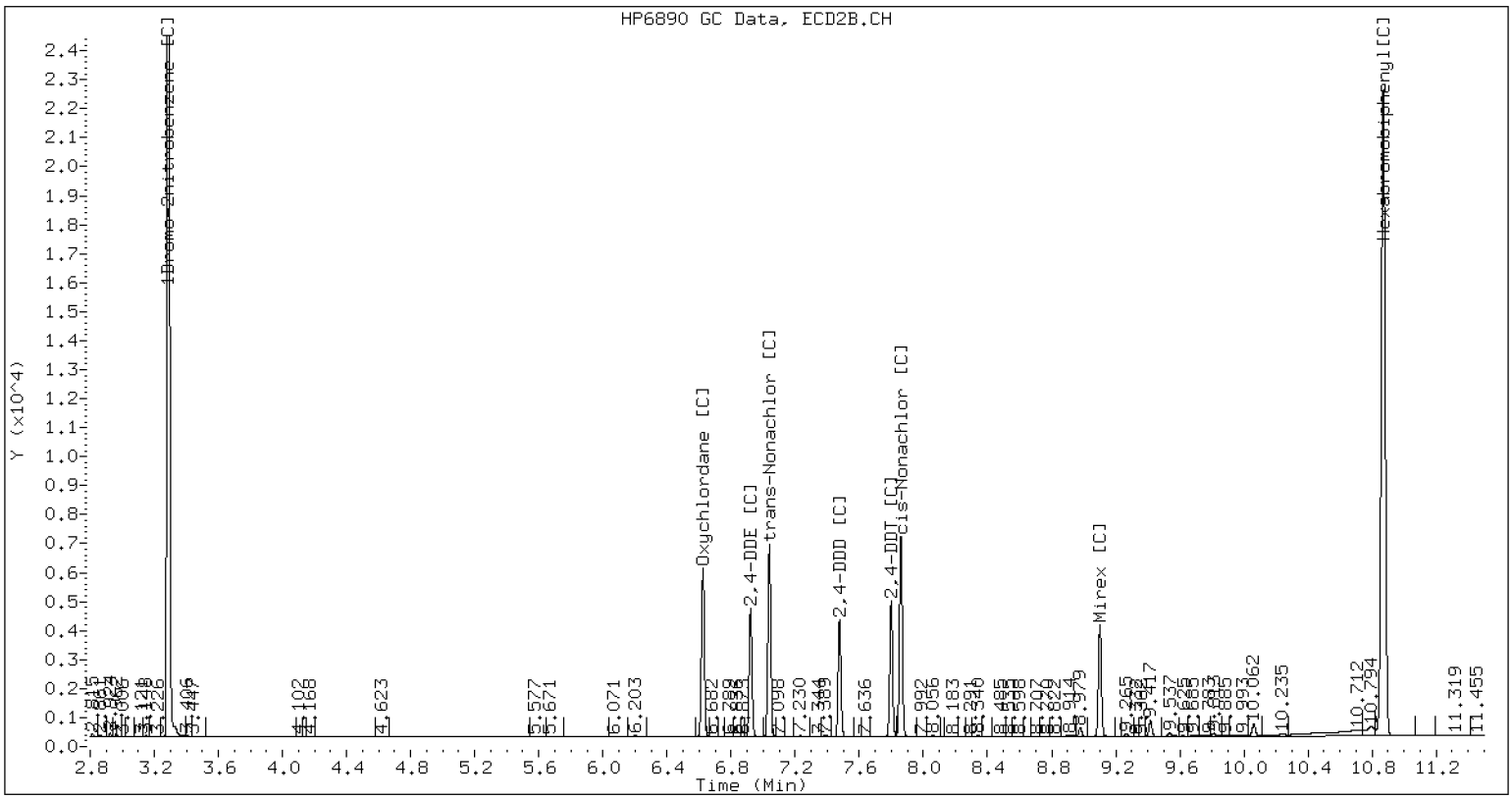
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1276044	-13.8
Hexabromobiphenyl	870561	768340	-11.7

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

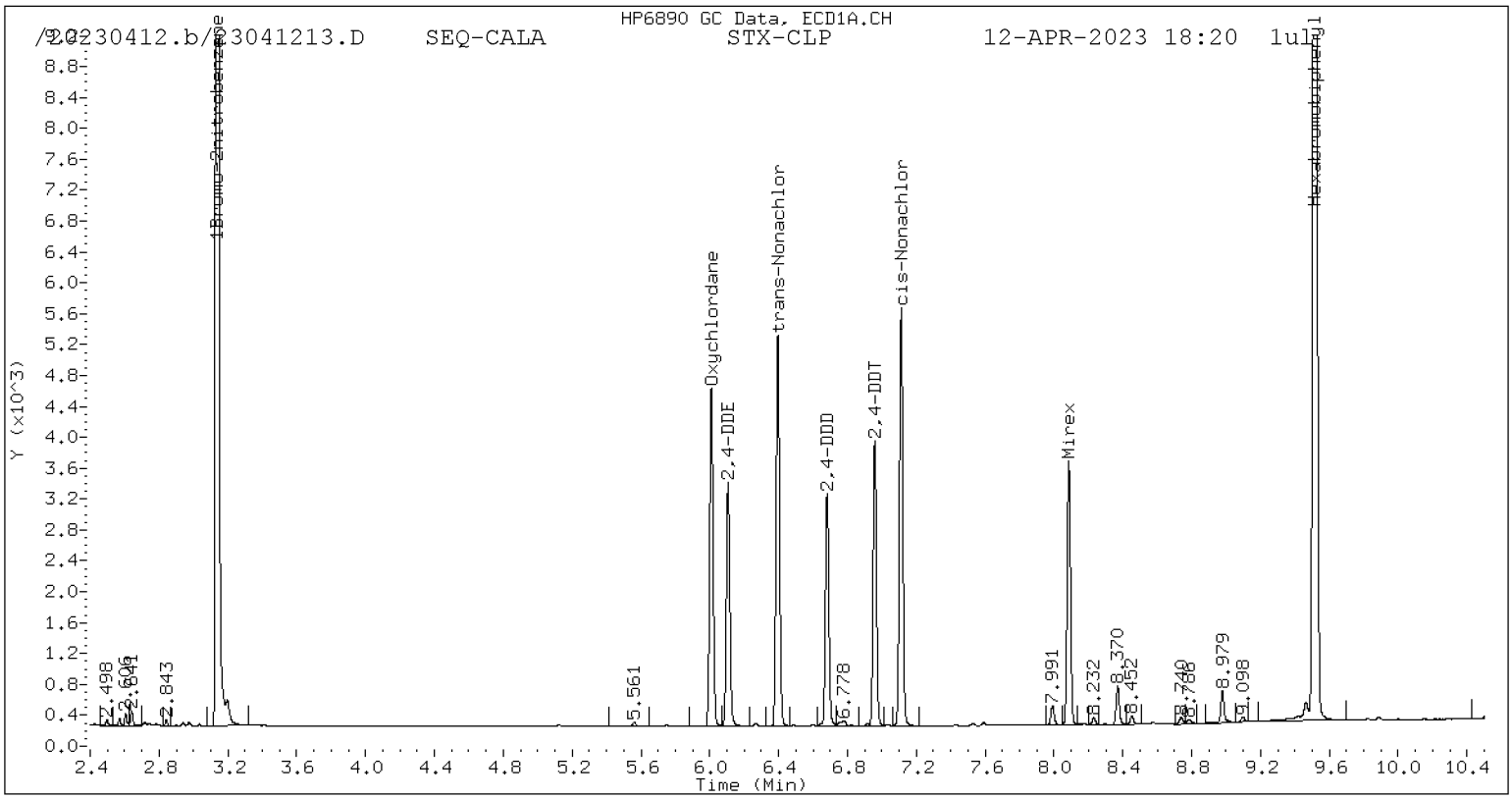
/20230412.b/23041213.D SEQ-CALA STX-CLP 12-APR-2023 18:20 1ul



/20230412.b/B20230412.b/23041213.D SEQ-CALA CLP2 12-APR-2023 18:20 1ul

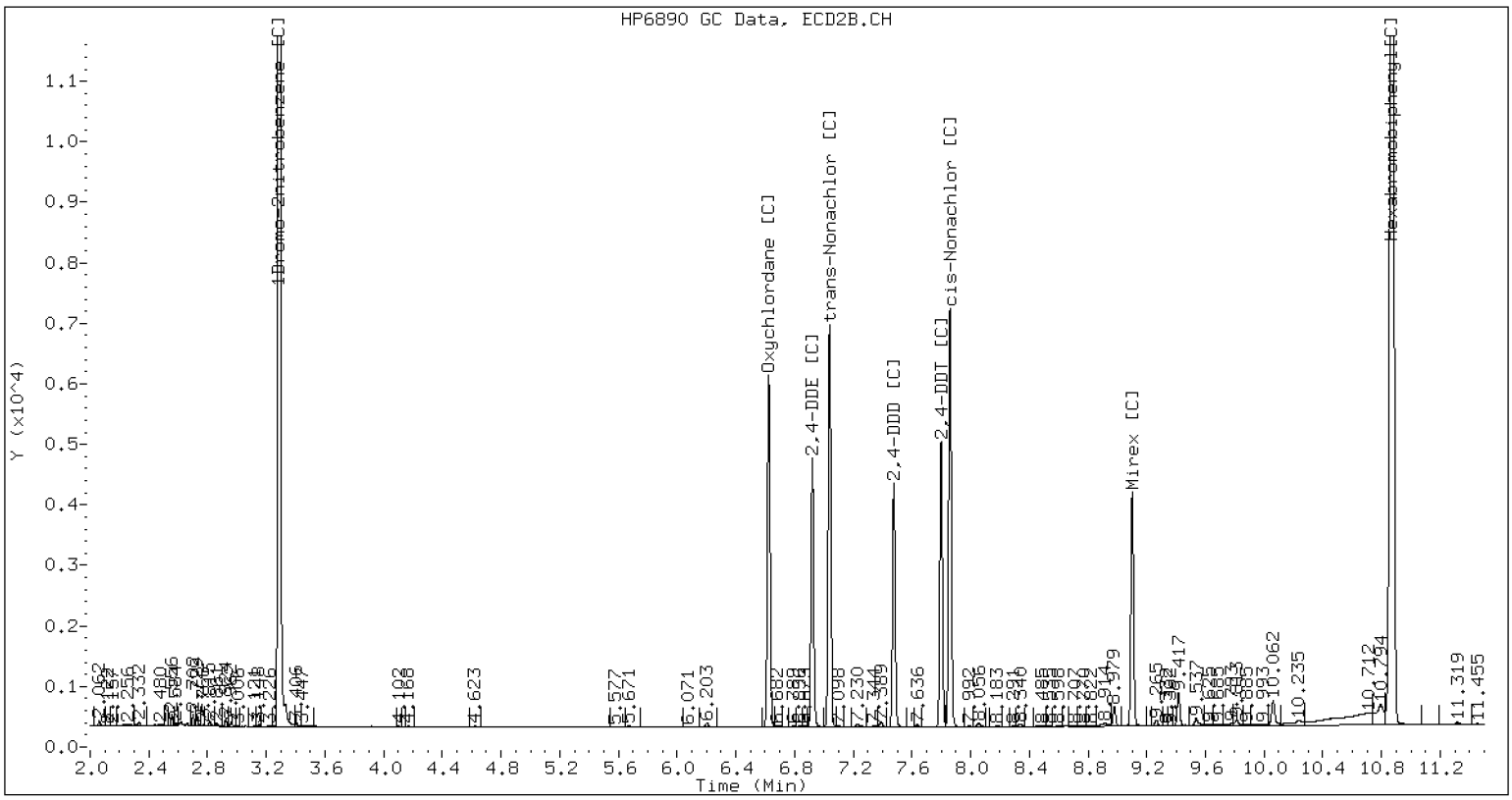


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041213.D SEQ-CALA CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041214.D
Data file 2: /20230412.b/B20230412.b/23041214.D
Method: \20230412.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALB
Client ID:
Injection Date: 12-APR-2023 18:38
Report Date: 04/14/2023 09:40
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.010	0.000	234579	6.624	0.000	293794	20.52	20.63	0.5	Oxychlordane
6.106	0.001	170299	6.922	0.001	216226	20.59	20.78	0.9	2,4-DDE
6.396	0.001	271524	7.039	0.000	333381	20.26	20.64	1.8	trans-Nonachlor
6.682	0.000	158357	7.476	-0.001	195047	20.57	20.30	1.3	2,4-DDD
6.960	0.001	190595	7.799	-0.000	223003	20.50	20.30	1.0	2,4-DDT
7.112	0.001	283023	7.859	0.000	341543	20.31	20.45	0.7	cis-Nonachlor
8.086	0.000	174624	9.101	0.000	190241	20.04	19.74	1.5	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			10.309	0.003	2954	0.00	0.32	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

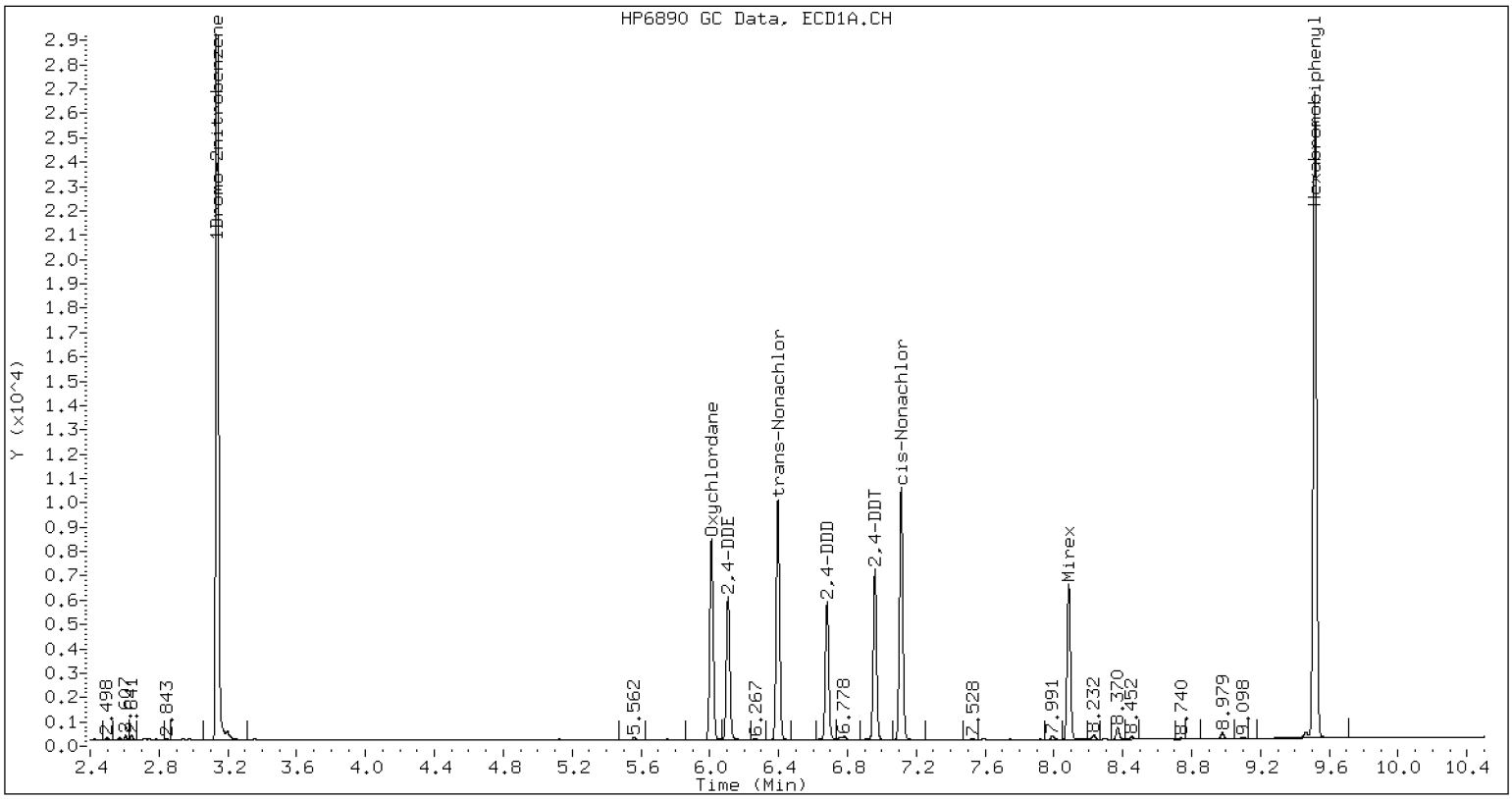
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	899601	4.1
Hexabromobiphenyl	663237	741497	11.8

Column 2

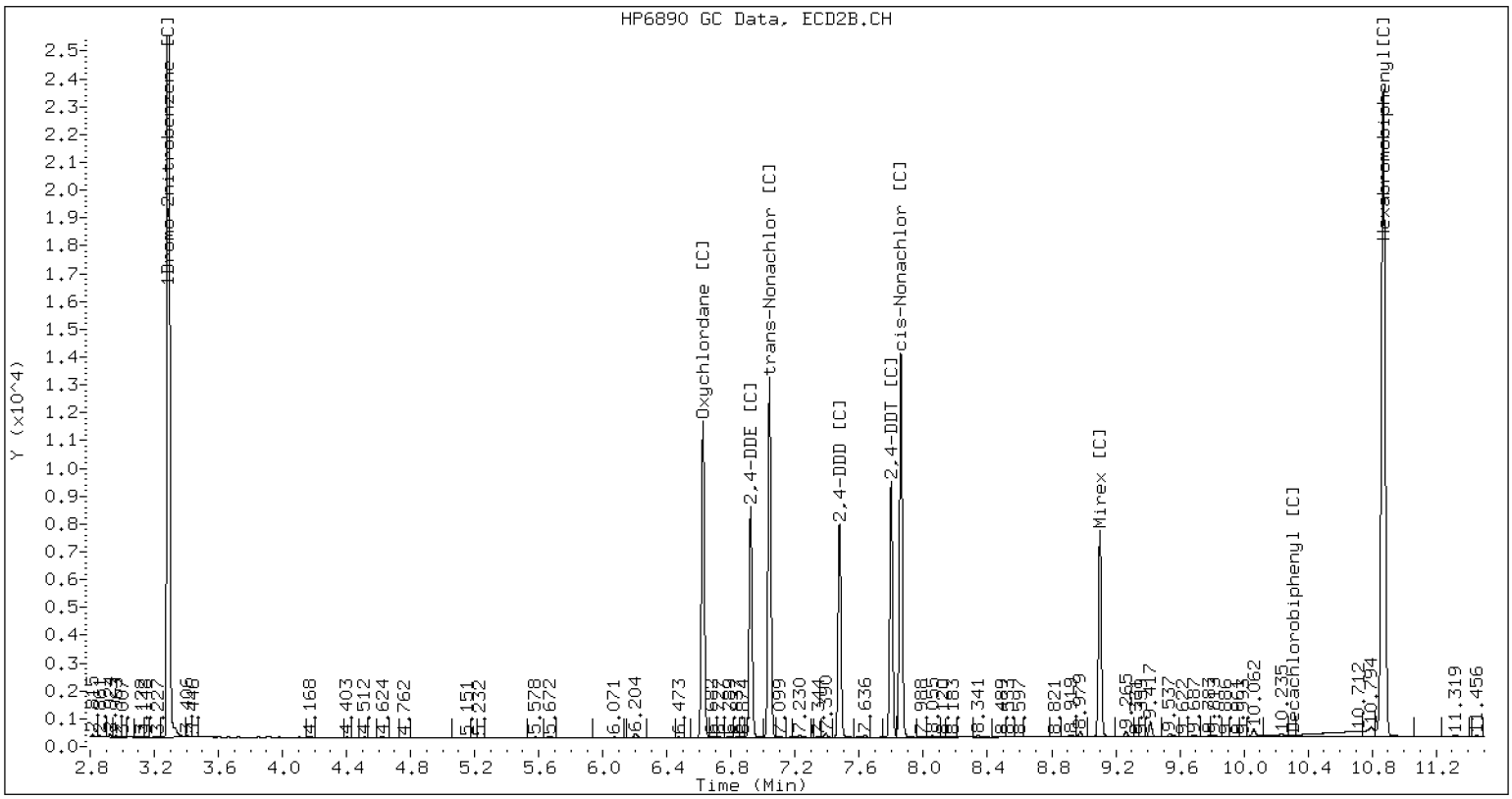
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1245547	-15.9
Hexabromobiphenyl	870561	767183	-11.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

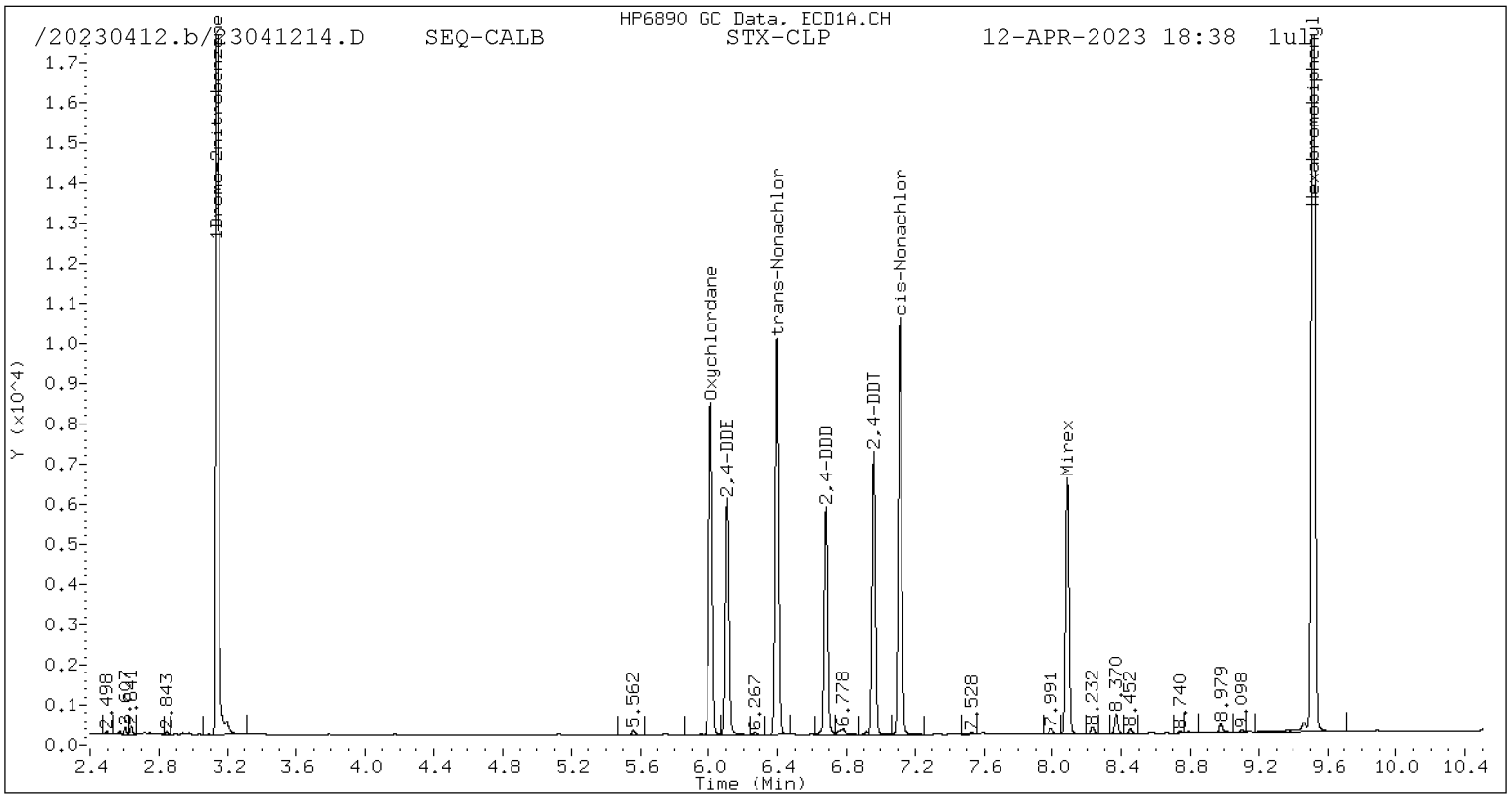
/20230412.b/23041214.D SEQ-CALB STX-CLP 12-APR-2023 18:38 1ul



/20230412.b/B20230412.b/23041214.D SEQ-CALB CLP2 12-APR-2023 18:38 1ul

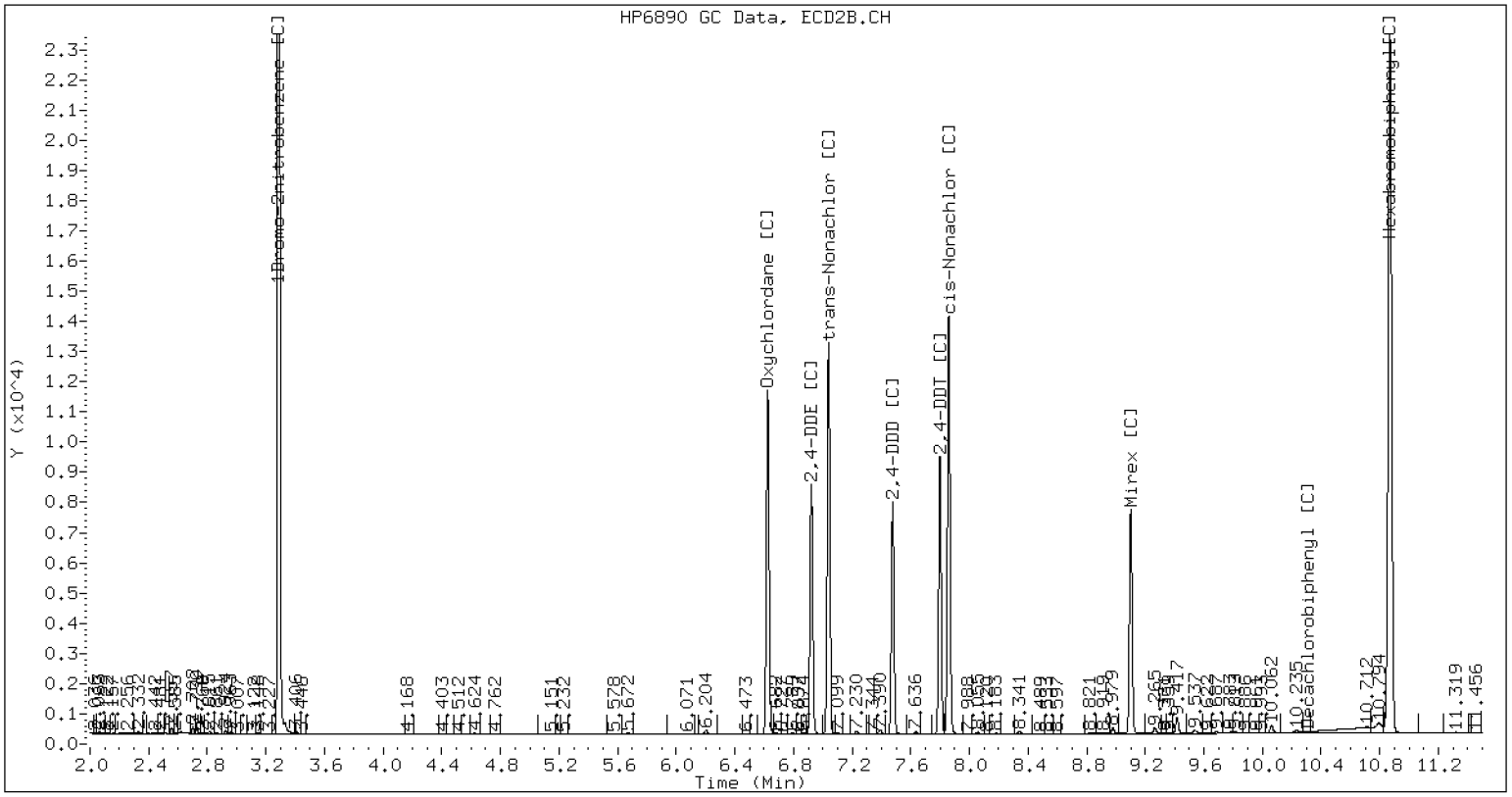


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041214.D SEQ-CALB CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041215.D
Data file 2: /20230412.b/B20230412.b/23041215.D
Method: \20230412.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALC
Client ID:
Injection Date: 12-APR-2023 18:57
Report Date: 04/14/2023 09:40
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.010	0.001	441791	6.624	0.000	561341	39.12	39.67	1.4	Oxychlordane
6.106	0.001	318110	6.921	0.000	406232	38.93	39.30	0.9	2,4-DDE
6.396	0.001	517172	7.039	-0.000	640936	39.06	40.16	2.8	trans-Nonachlor
6.681	-0.000	297604	7.476	-0.001	372629	39.12	39.26	0.3	2,4-DDD
6.959	0.001	358310	7.799	-0.000	427178	39.01	39.36	0.9	2,4-DDT
7.112	0.000	540011	7.859	-0.000	659204	39.22	39.95	1.9	cis-Nonachlor
8.086	0.000	328833	9.101	-0.000	364657	38.19	38.29	0.3	Mirex
----			----			0.00	0.00	---	Tetrachloro-m-xylene
----			10.309	0.003	2755	0.00	0.30	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

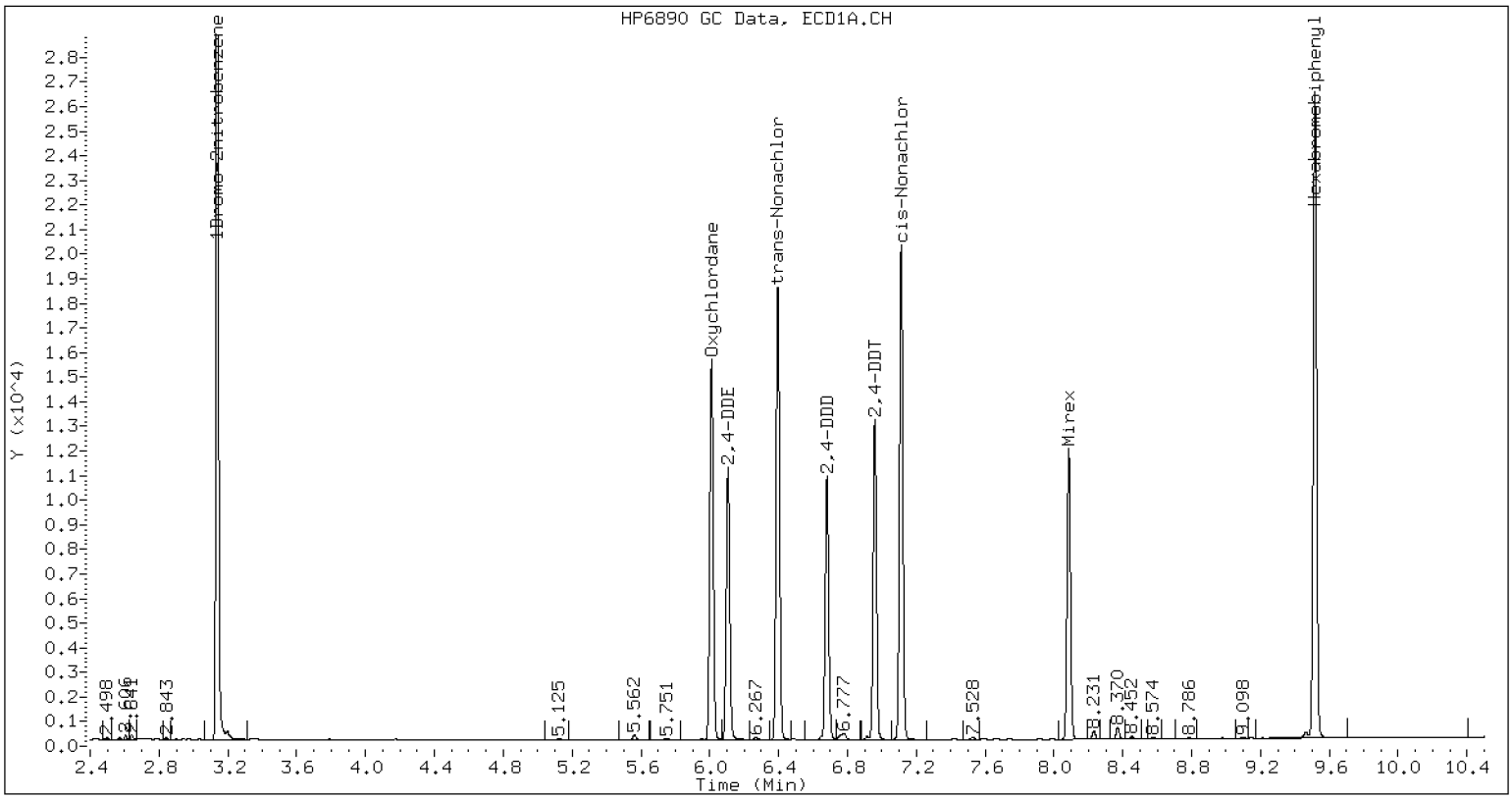
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	887506	2.7
Hexabromobiphenyl	663237	732612	10.5

Column 2

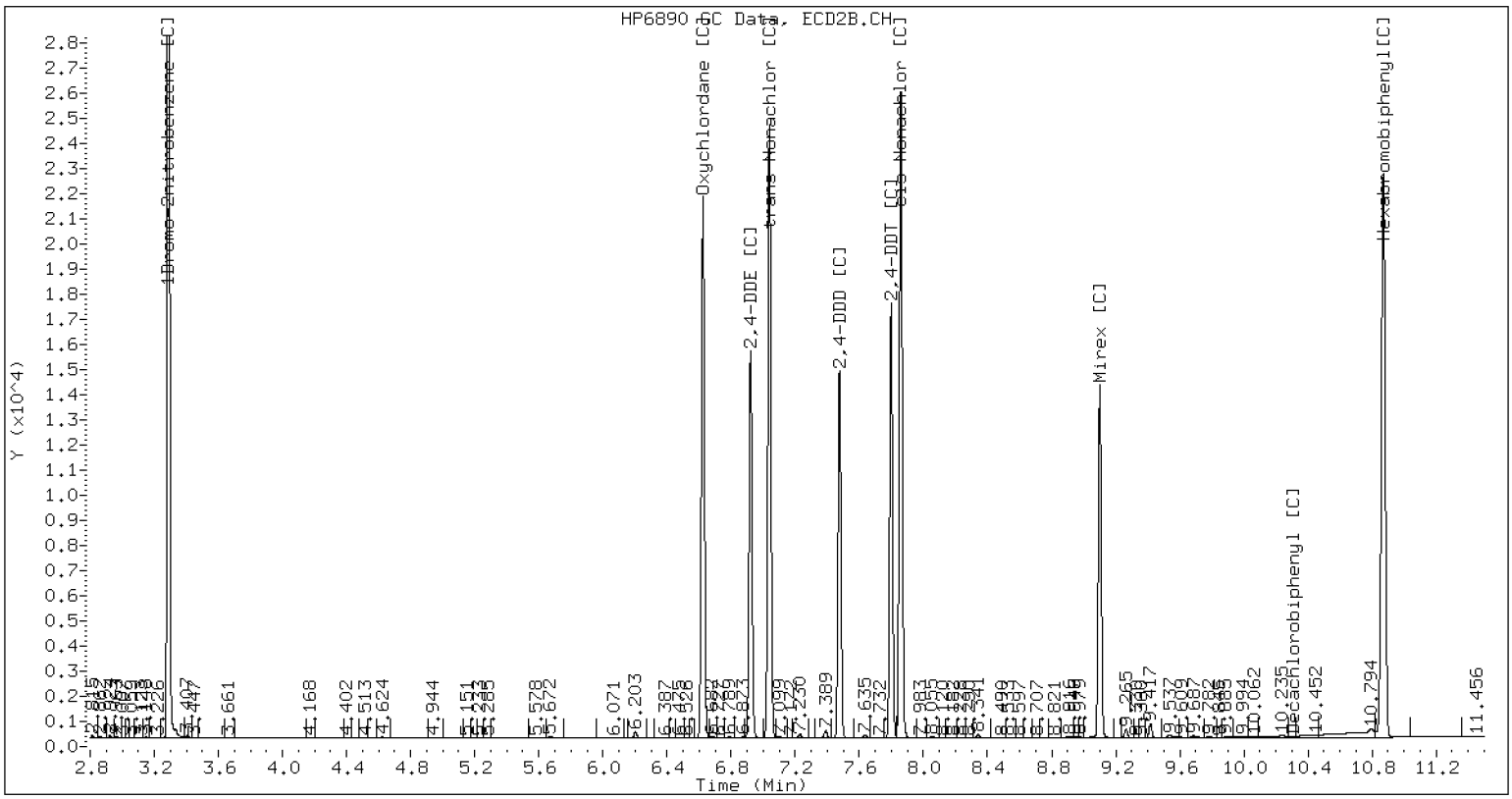
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1237559	-16.4
Hexabromobiphenyl	870561	757937	-12.9

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

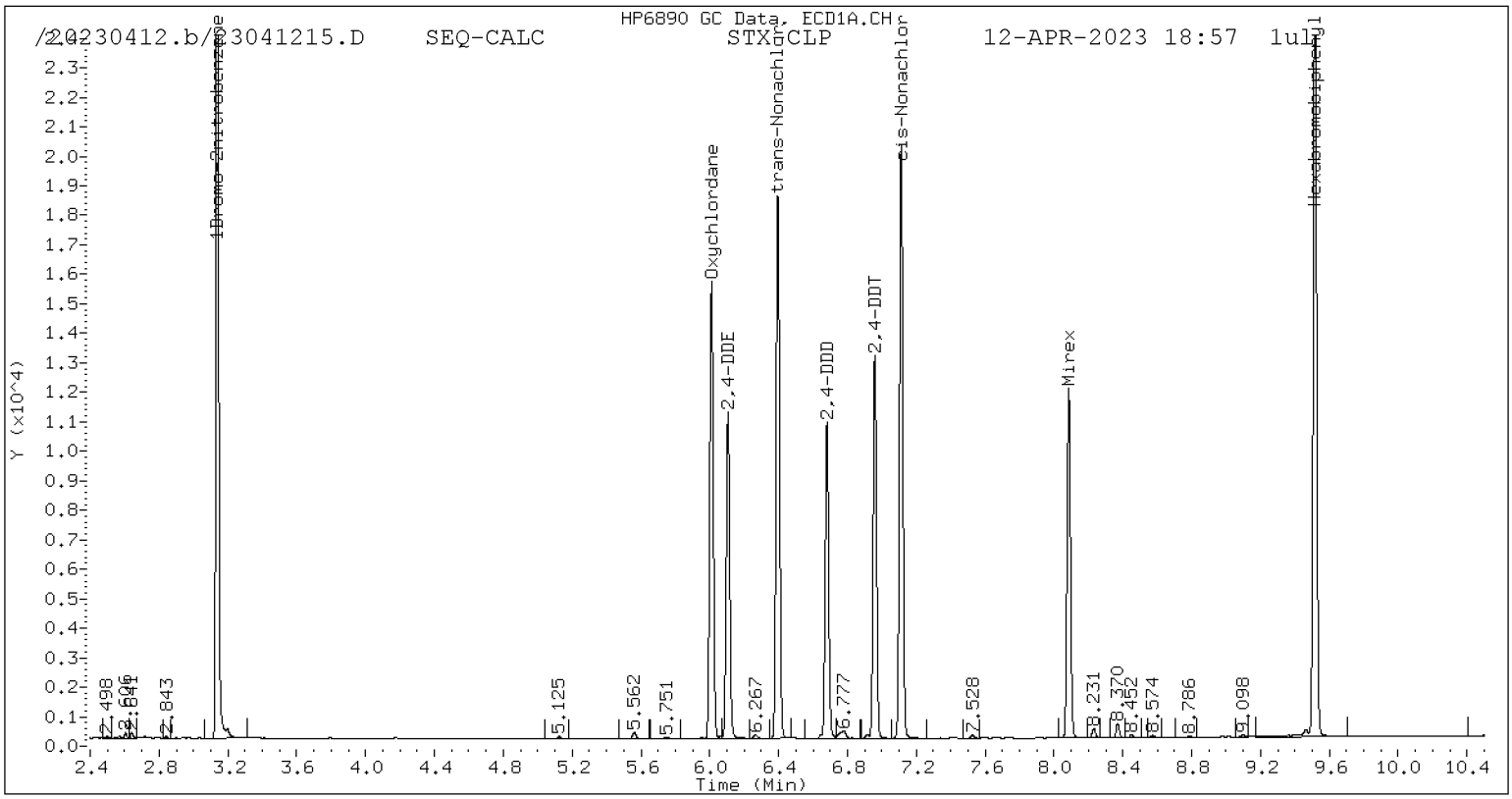
/20230412.b/23041215.D SEQ-CALC STX-CLP 12-APR-2023 18:57 1ul



/20230412.b/B20230412.b/23041215.D SEQ-CALC CLP2 12-APR-2023 18:57 1ul

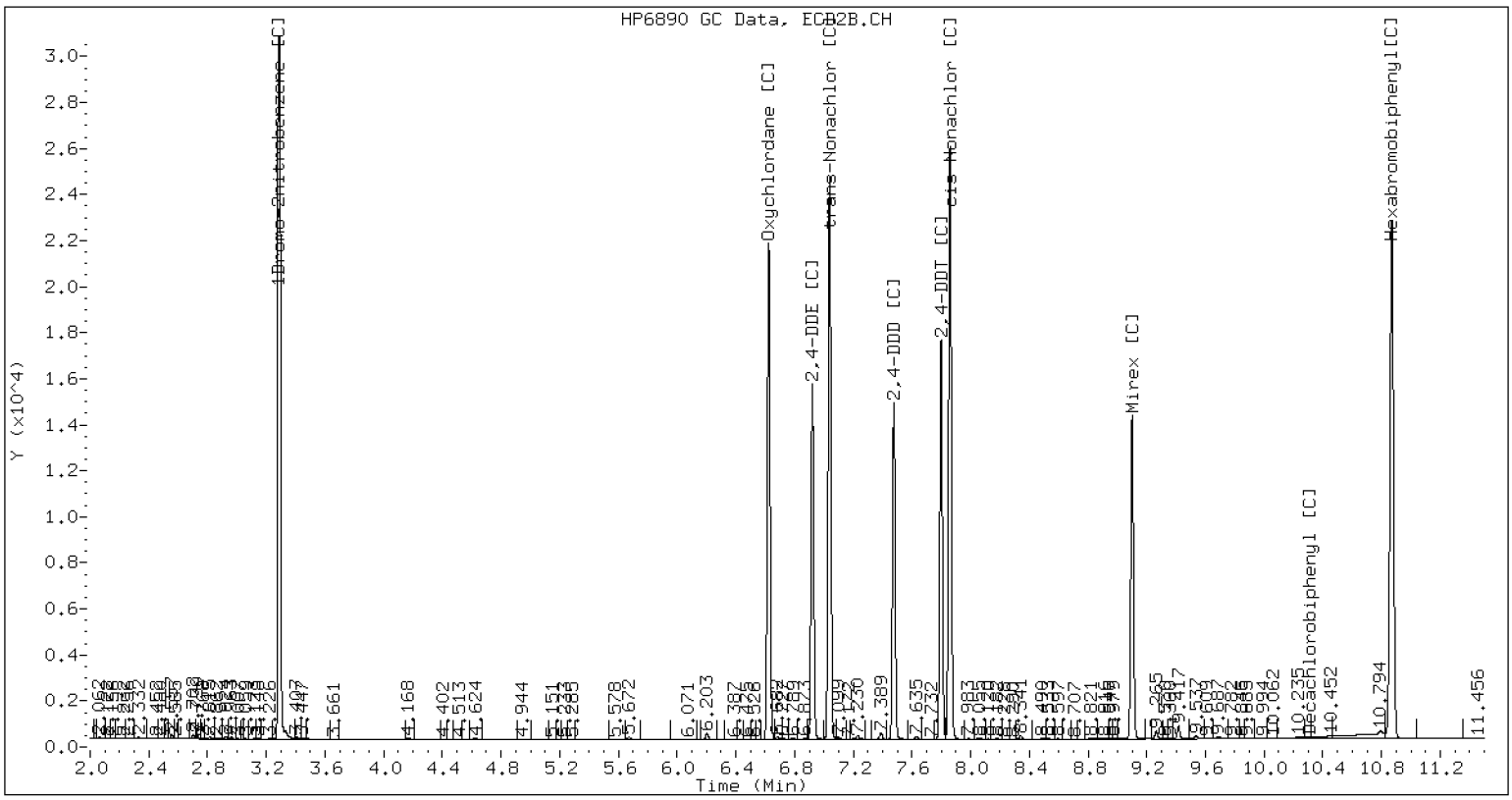


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041215.D SEQ-CALC CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041216.D
Data file 2: /20230412.b/B20230412.b/23041216.D
Method: \20230412.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALD
Client ID:
Injection Date: 12-APR-2023 19:15
Report Date: 04/14/2023 09:40
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.010	0.000	817171	6.624	-0.000	1054911	72.77	74.15	1.9	Oxychlordane
6.106	0.001	580973	6.921	-0.000	743589	71.50	71.54	0.1	2,4-DDE
6.395	0.001	968759	7.039	-0.001	1211298	73.58	76.18	3.5	trans-Nonachlor
6.681	-0.000	548708	7.476	-0.001	698482	72.54	73.85	1.8	2,4-DDD
6.958	-0.000	660572	7.798	-0.001	805720	72.32	74.50	3.0	2,4-DDT
7.112	-0.000	1017099	7.858	-0.001	1256322	74.28	76.41	2.8	cis-Nonachlor
8.086	0.000	616577	9.101	0.000	697240	72.01	73.47	2.0	Mirex
----			4.135	-0.001	186	0.00	0.01	---	Tetrachloro-m-xylene
----			10.309	0.003	3002	0.00	0.33	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

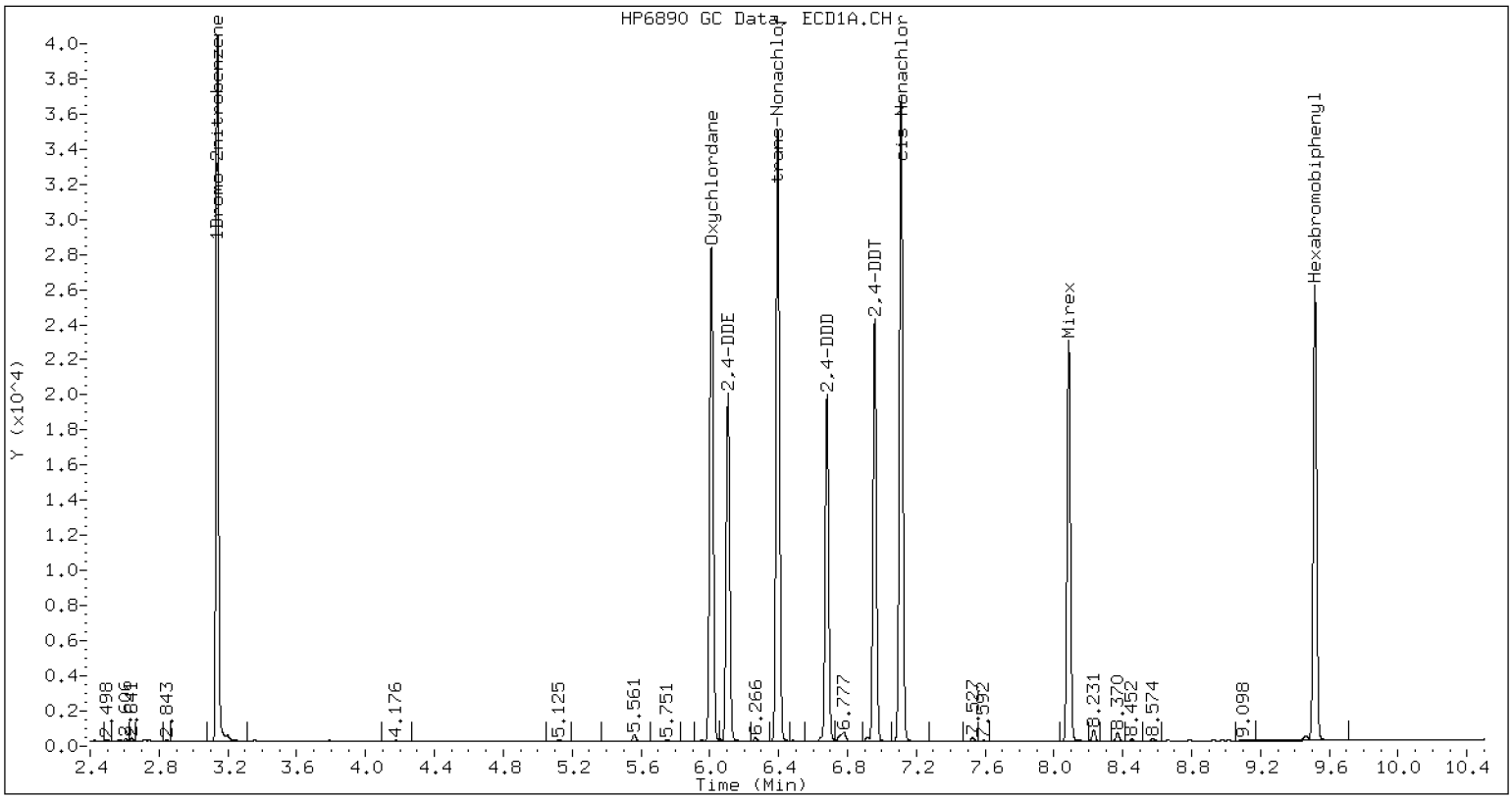
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	901377	4.3
Hexabromobiphenyl	663237	728475	9.8

Column 2

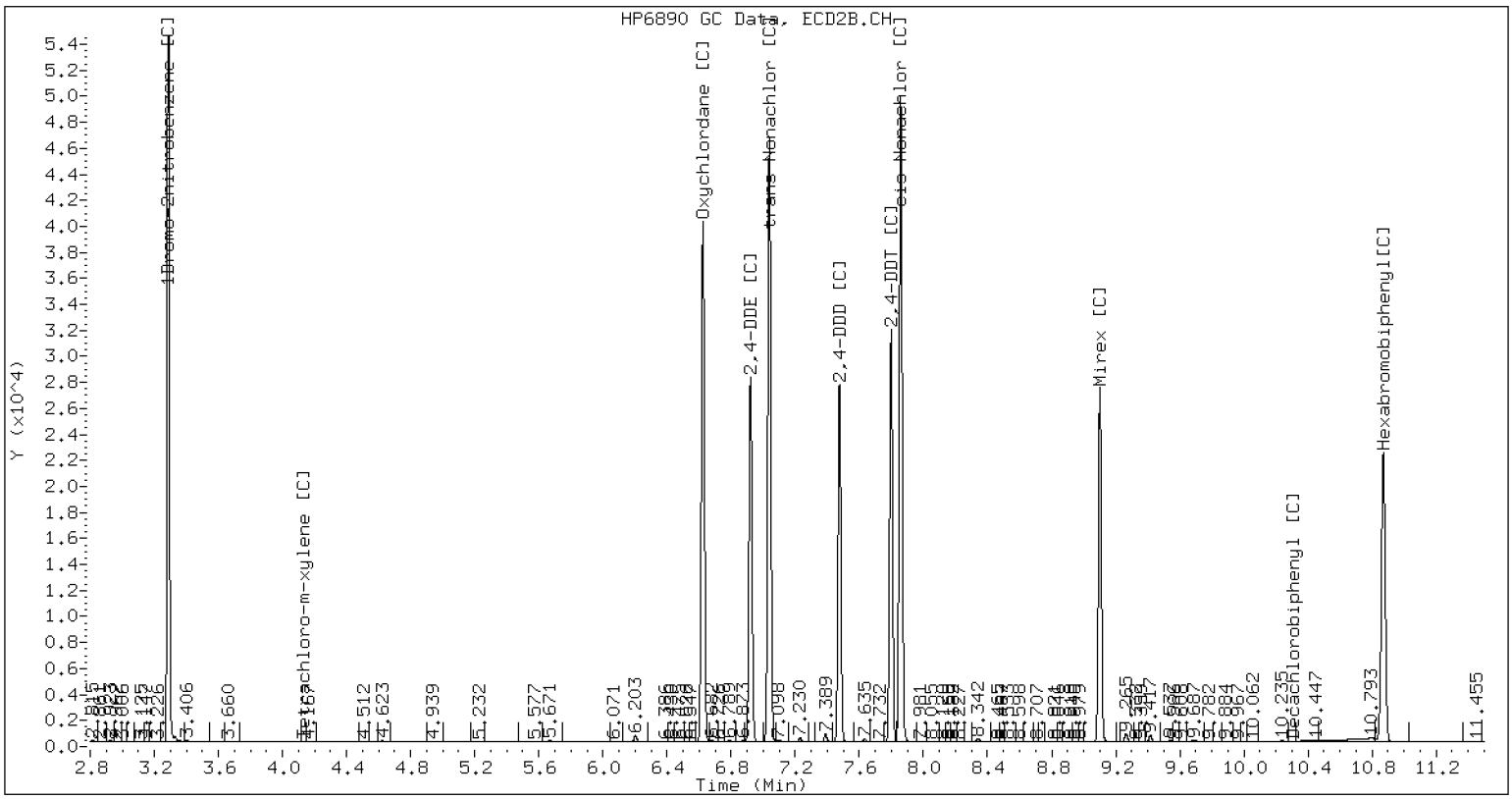
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1244306	-16.0
Hexabromobiphenyl	870561	755238	-13.2

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

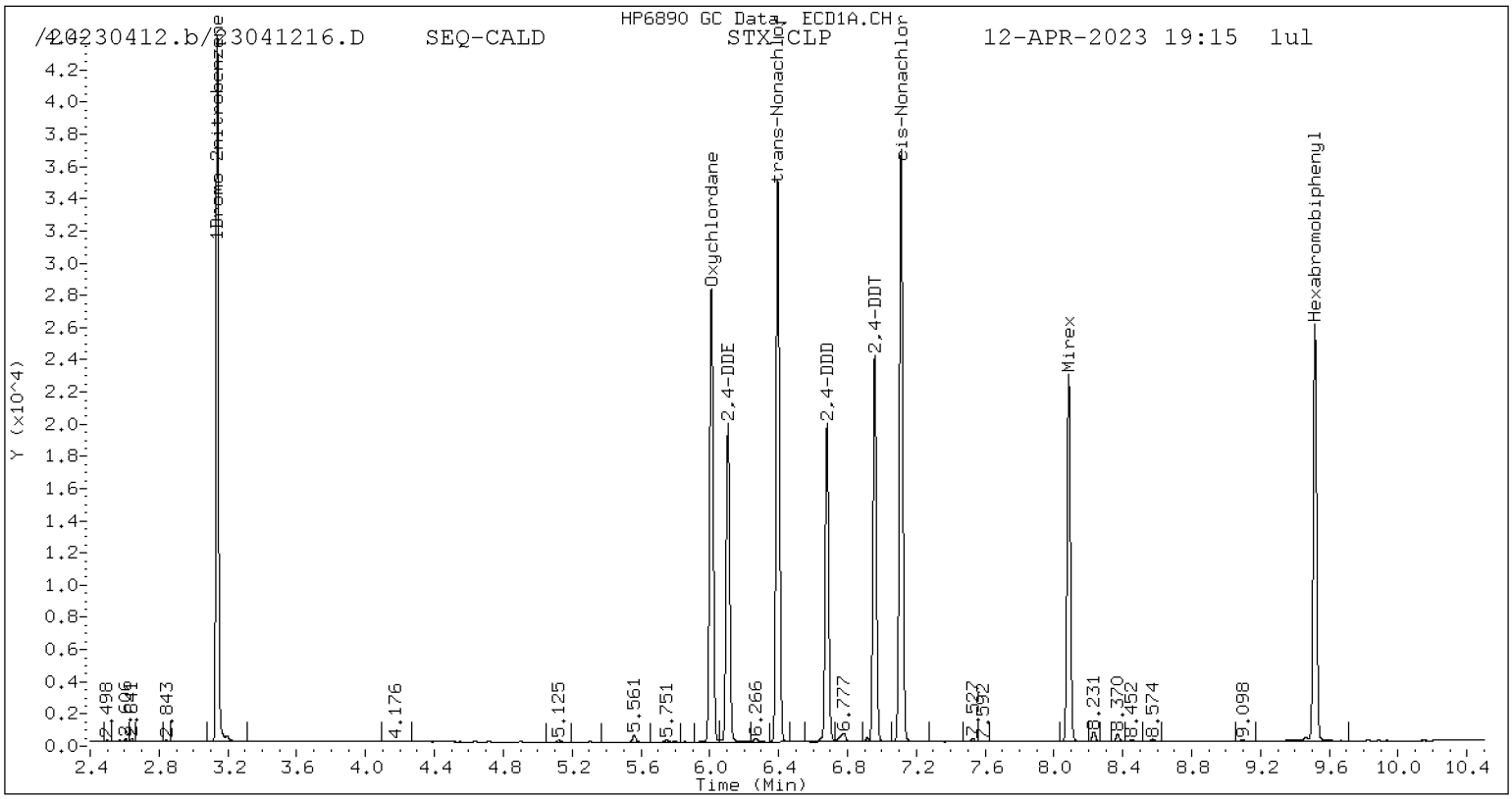
/20230412.b/23041216.D SEQ-CALD STX-CLP 12-APR-2023 19:15 1ul



/20230412.b/B20230412.b/23041216.D SEQ-CALD CLP2 12-APR-2023 19:15 1ul

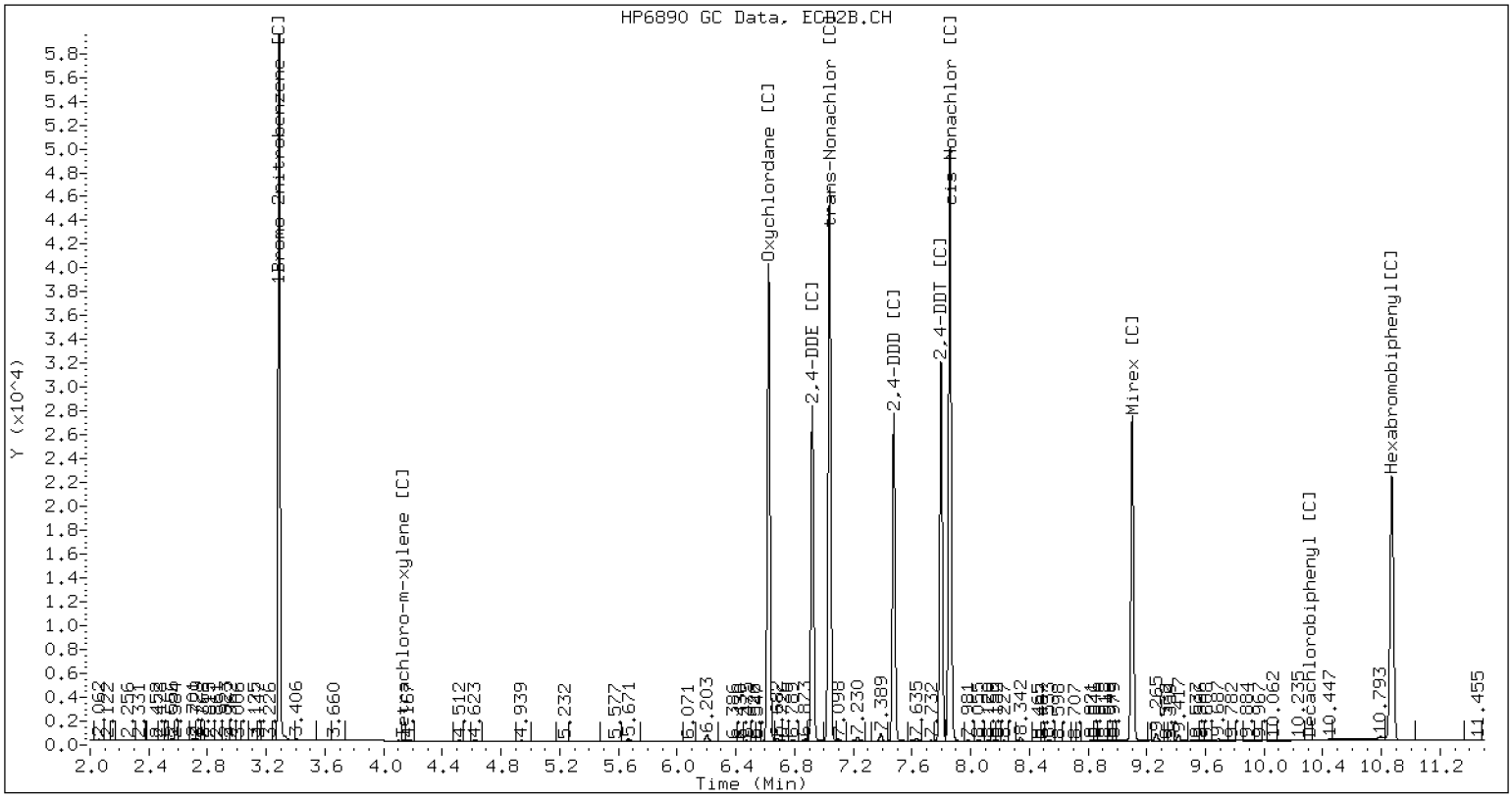


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041216.D SEQ-CALD CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041217.D
Data file 2: /20230412.b/B20230412.b/23041217.D
Method: \20230412.b\PEST.m
Compound Sublist: WND.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALE
Client ID:
Injection Date: 12-APR-2023 19:34
Report Date: 04/14/2023 09:40
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
6.009	0.000	1520737	6.624	-0.000	1976637	132.87	137.37	3.3	Oxychlordane M
6.105	-0.000	1051945	6.921	-0.000	1344143	127.02	127.86	0.7	2,4-DDE M
6.395	0.000	1828376	7.039	-0.000	2280597	136.25	139.01	2.0	trans-Nonachlor M
6.681	0.000	1007071	7.477	-0.000	1318871	130.63	135.15	3.4	2,4-DDD M
6.959	0.000	1216718	7.799	-0.000	1510661	130.69	135.39	3.5	2,4-DDT M
7.112	0.000	1924725	7.859	0.000	2389114	137.91	140.84	2.1	cis-Nonachlor M
8.086	0.000	1166143	9.101	0.000	1359594	133.61	138.86	3.9	Mirex M
----			4.136	0.000	307	0.00	0.02	---	Tetrachloro-m-xylene
----			10.308	0.002	3667	0.00	0.39	---	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

˜ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

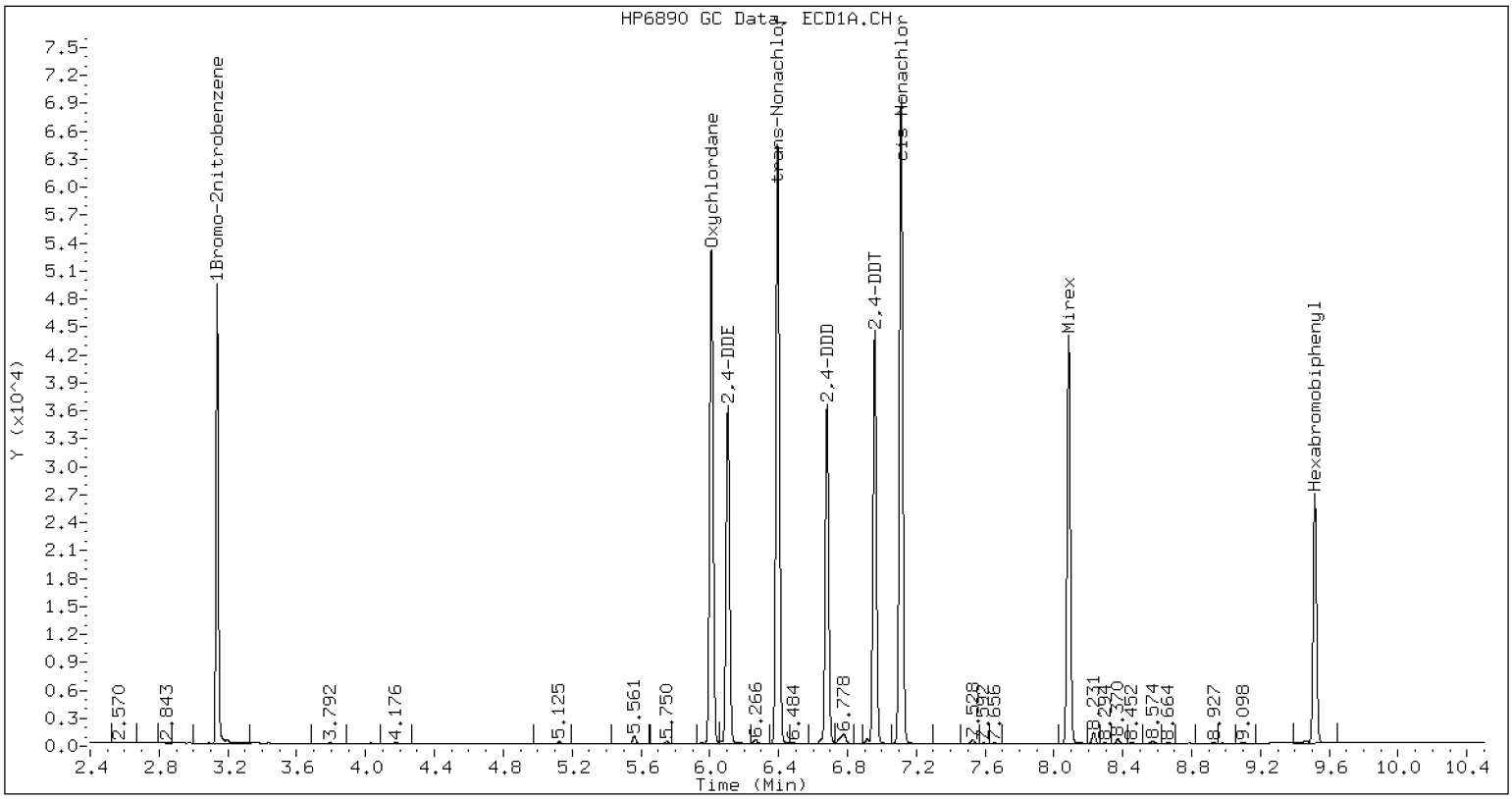
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	923493	6.8
Hexabromobiphenyl	663237	742507	12.0

Column 2

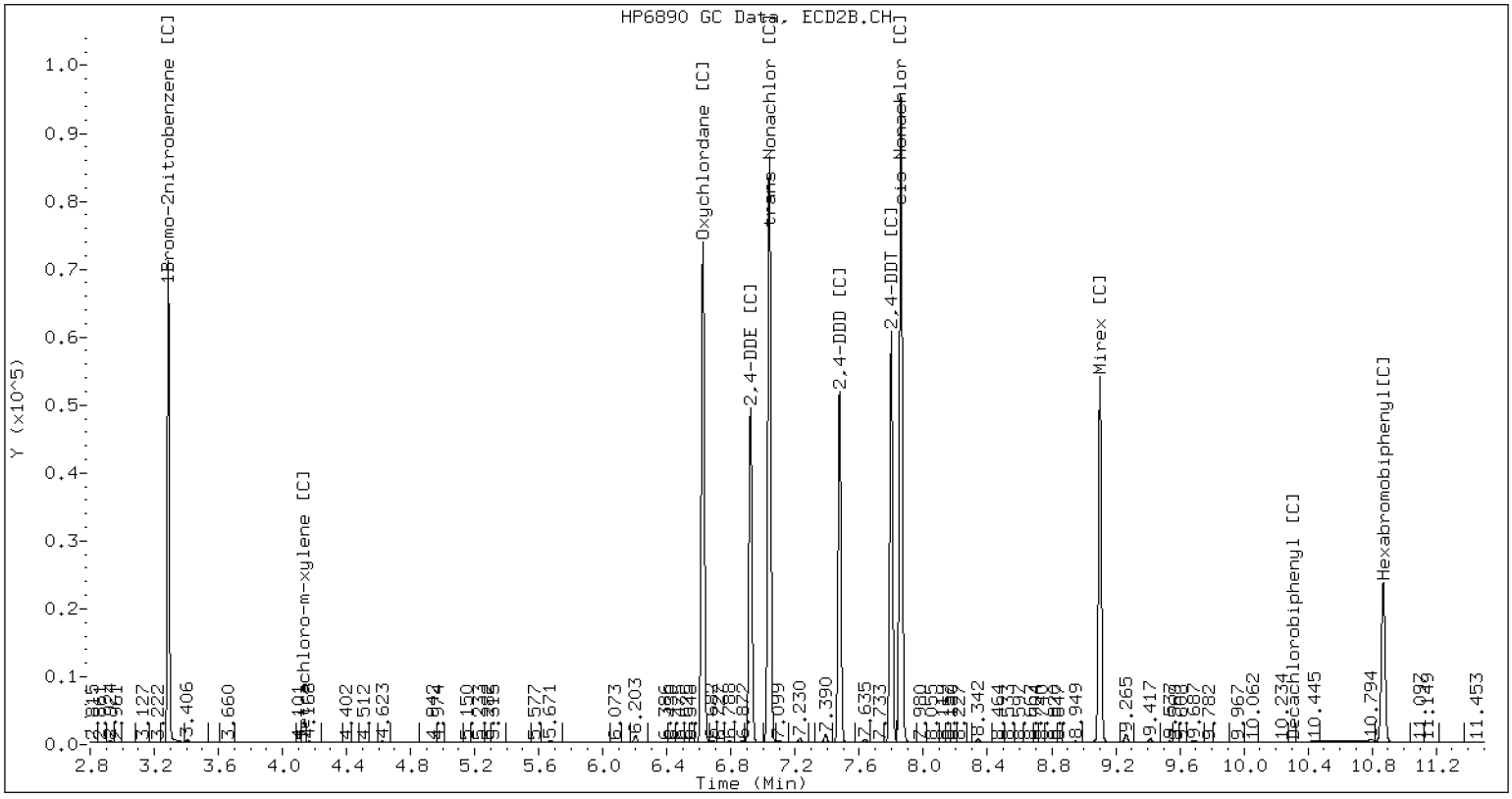
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1258546	-15.0
Hexabromobiphenyl	870561	779225	-10.5

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

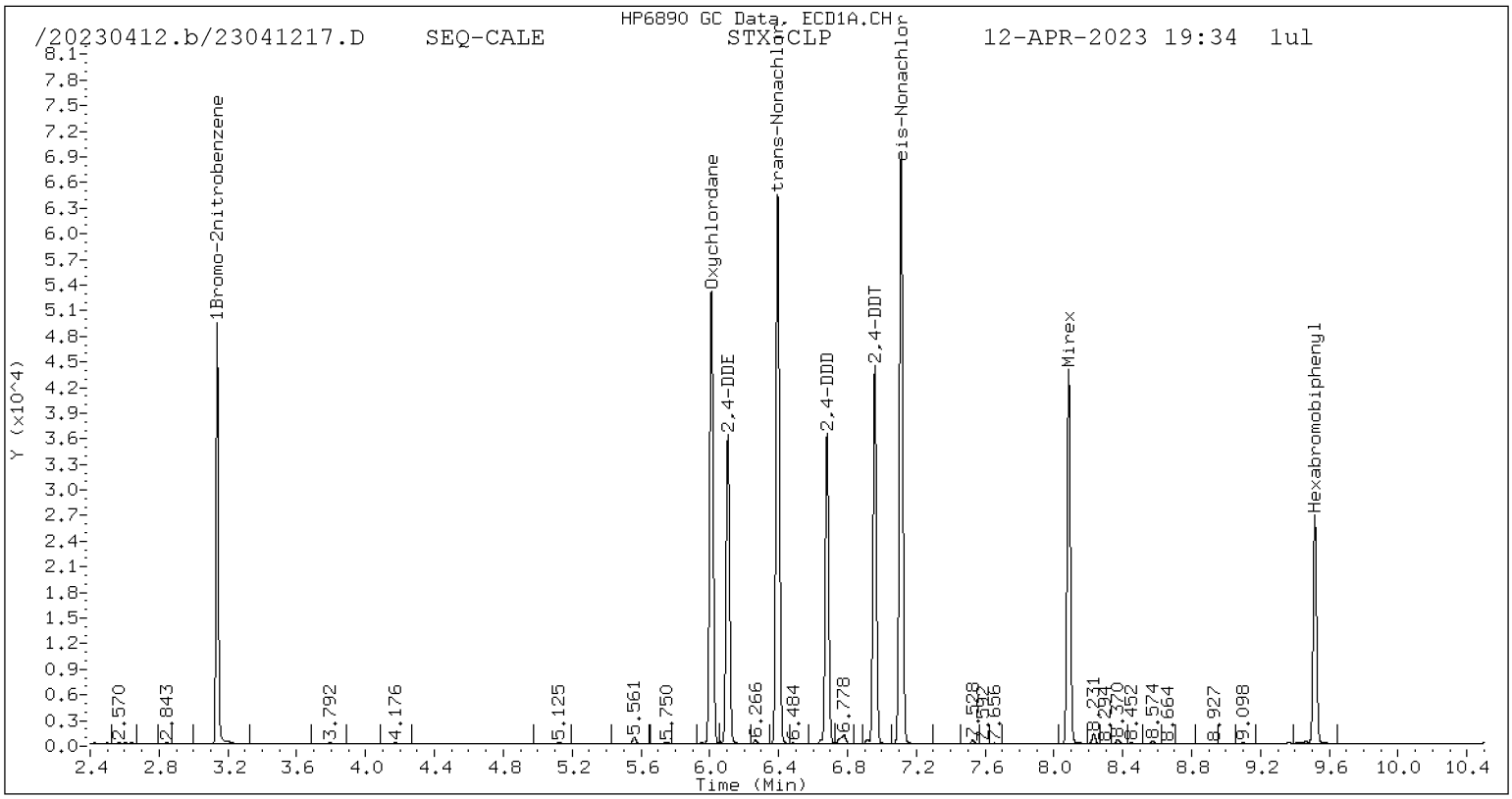
/20230412.b/23041217.D SEQ-CALE STX-CLP 12-APR-2023 19:34 1ul



/20230412.b/B20230412.b/23041217.D SEQ-CALE CLP2 12-APR-2023 19:34 1ul

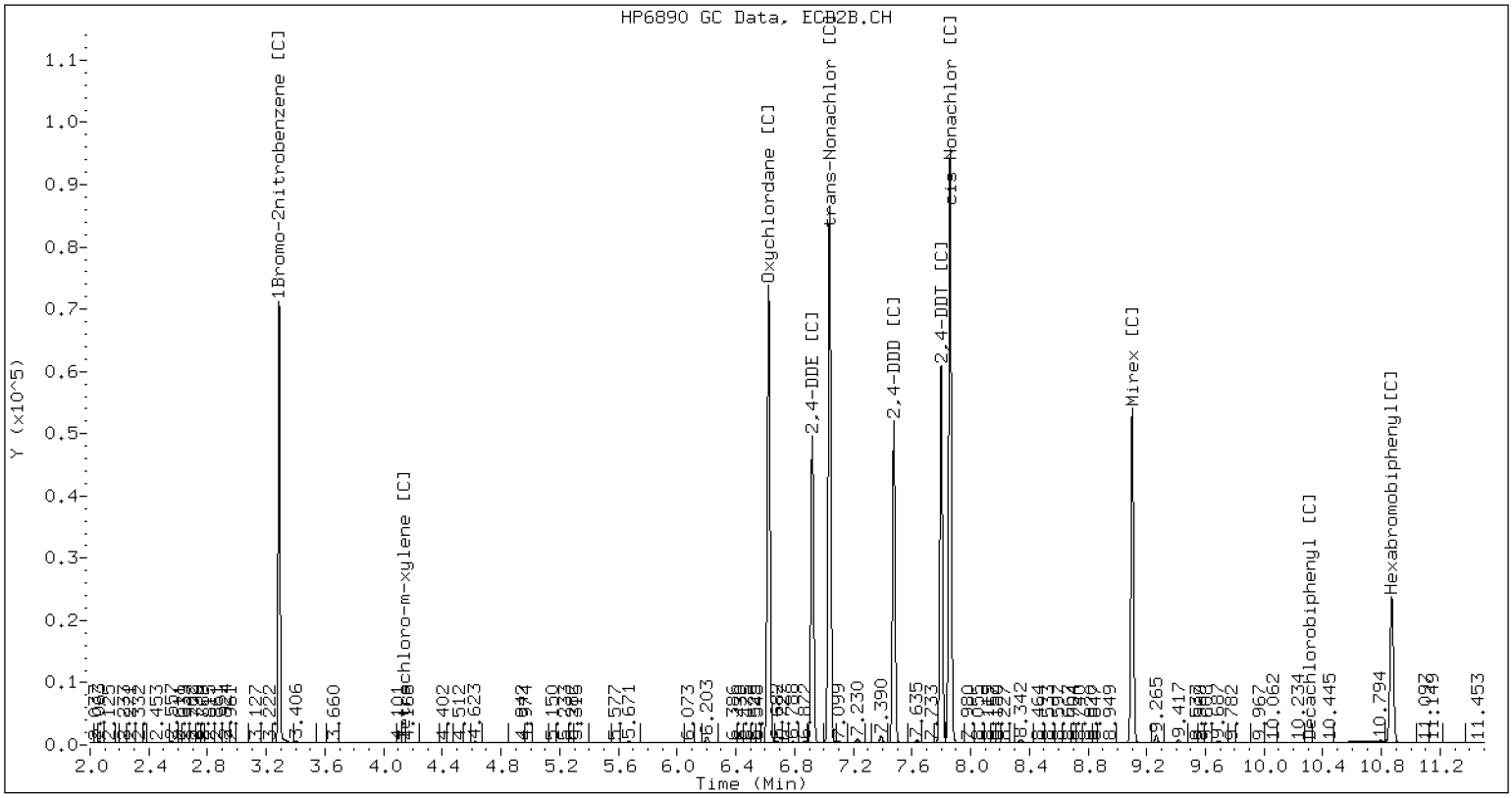


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: YES

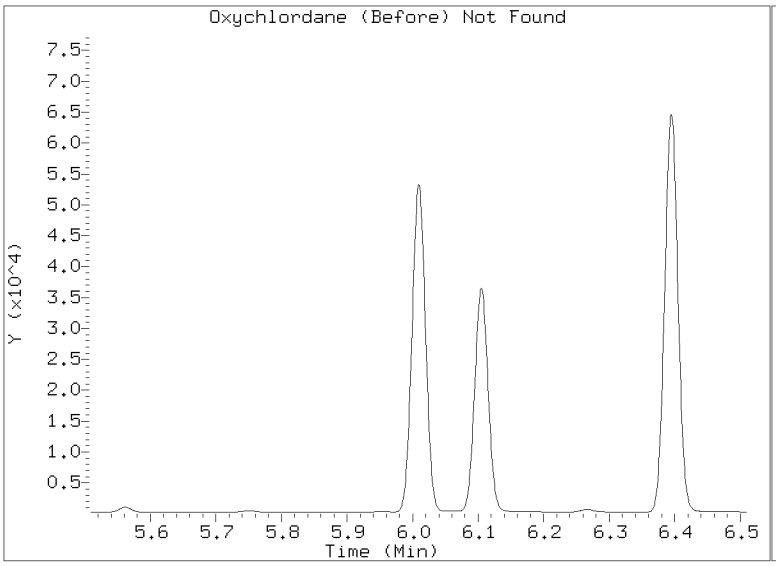
/20230412.b/B20230412.b/23041217.D SEQ-CALE CLP2

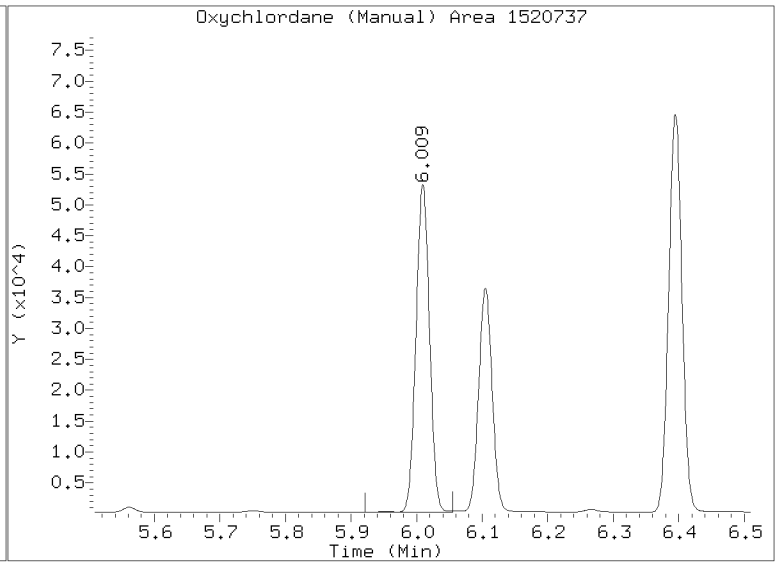


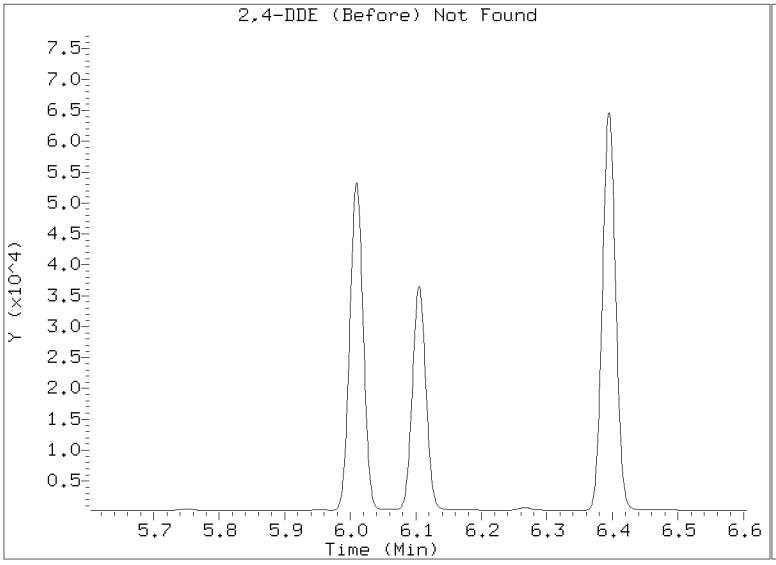
CLP-2 Manual Integration: NO

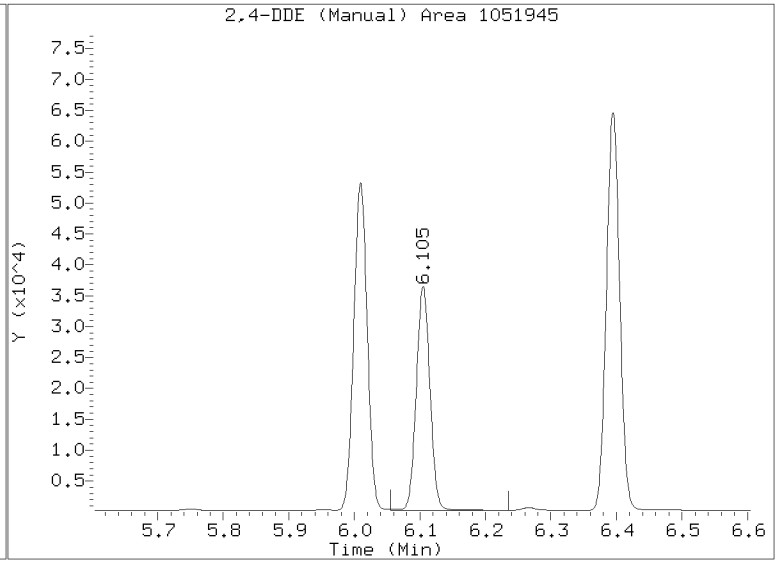
Manual Peak Adjustment Report, STX-CLP

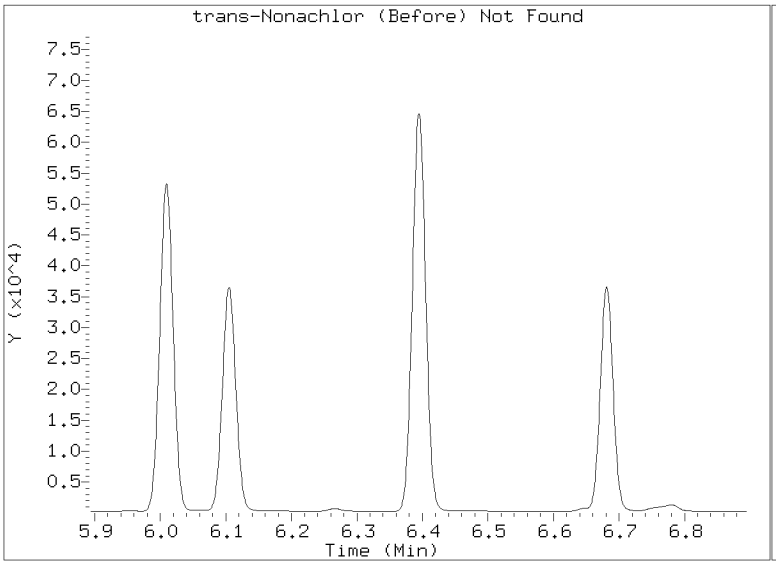
Datafile: /20230412.b/23041217.D
Injection Date: 12-APR-2023 19:34
Lab ID:SEQ-CALE Client ID:
Report Date: 04/14/2023 09:40

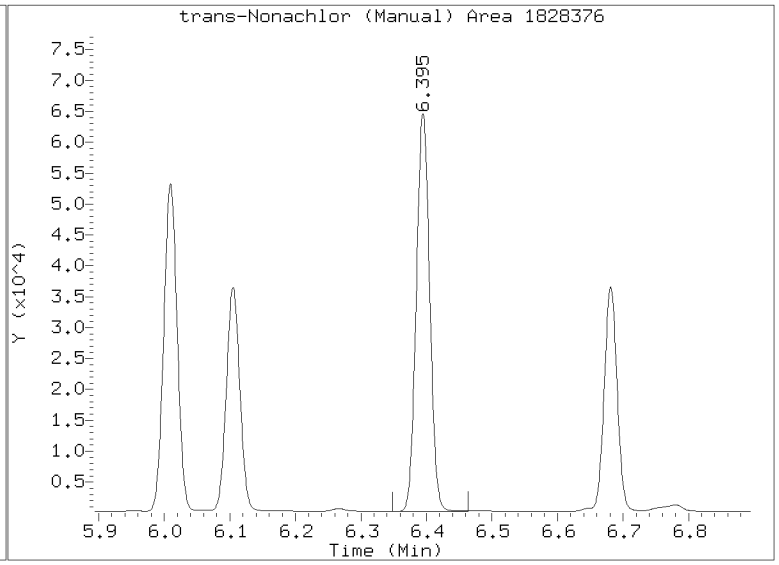






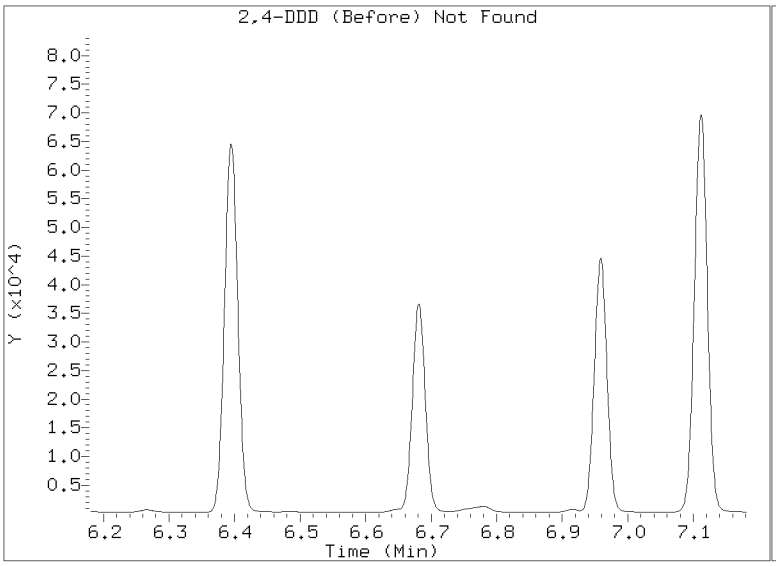


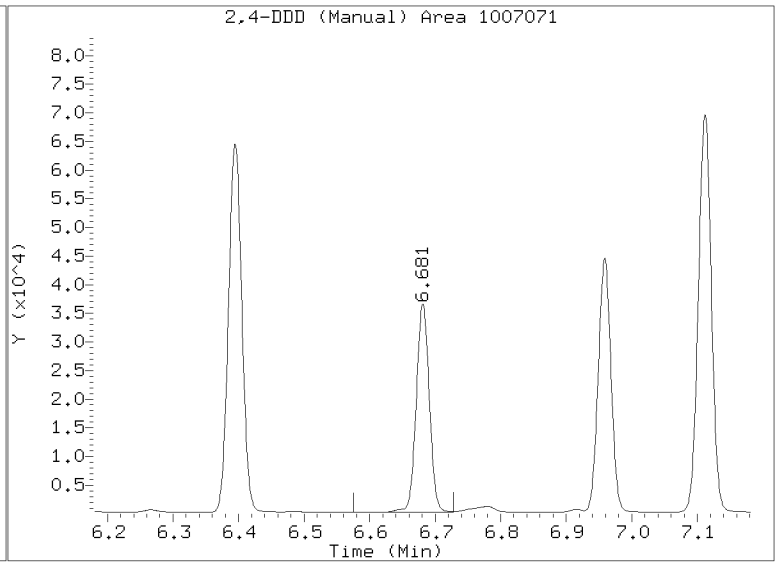


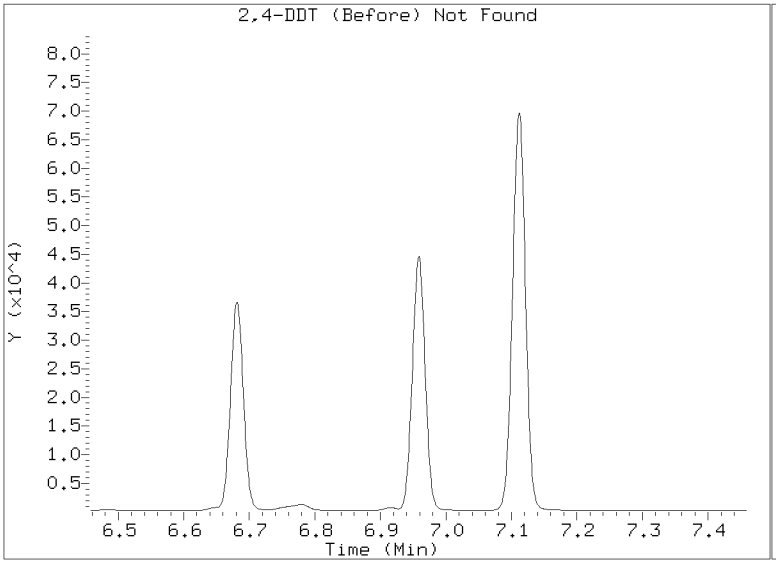


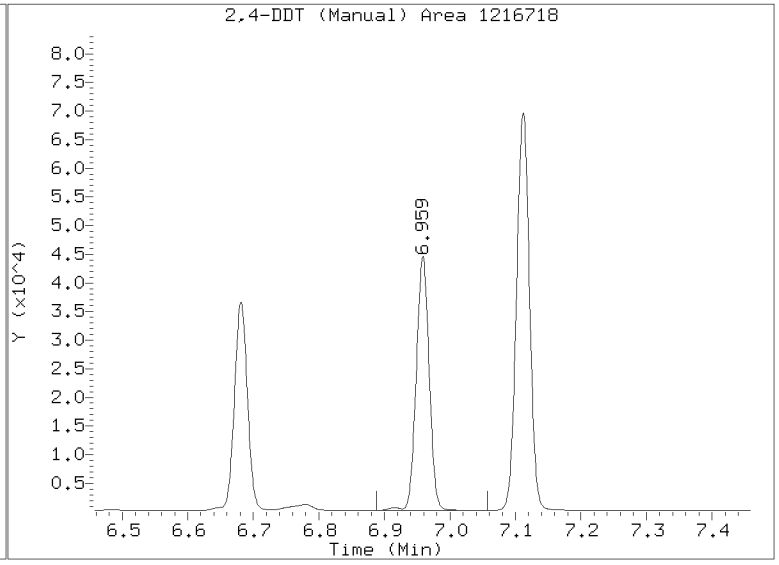
Manual Peak Adjustment Report, STX-CLP

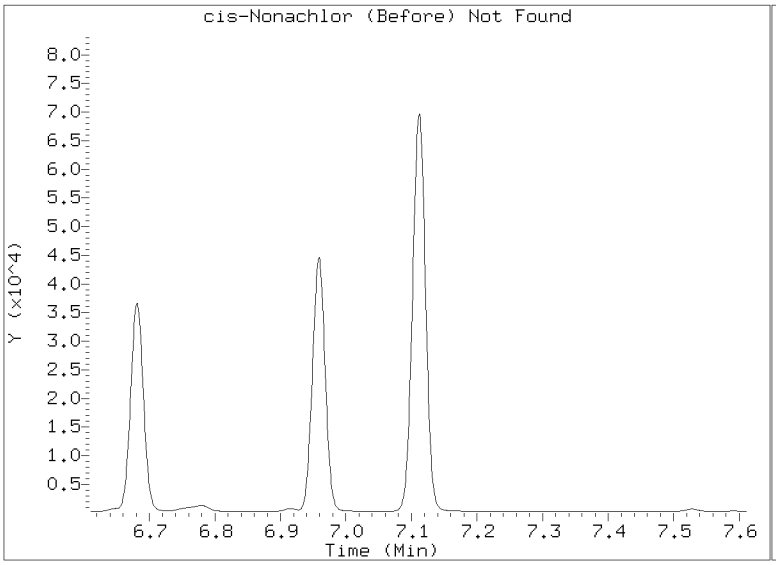
Datafile: /20230412.b/23041217.D
Injection Date: 12-APR-2023 19:34
Lab ID:SEQ-CALE Client ID:
Report Date: 04/14/2023 09:40

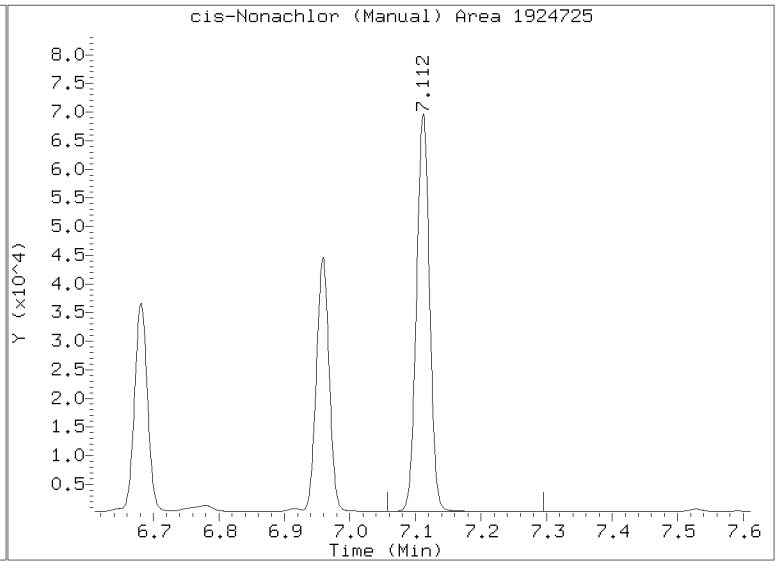






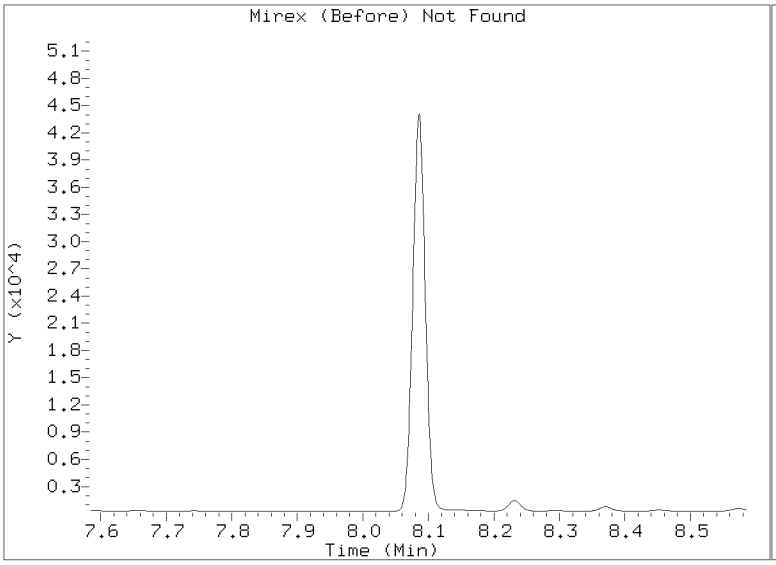


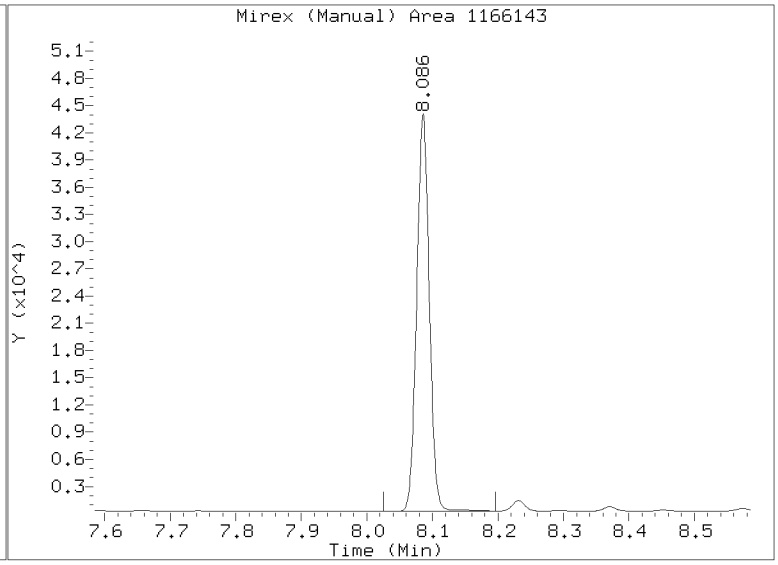




Manual Peak Adjustment Report, STX-CLP

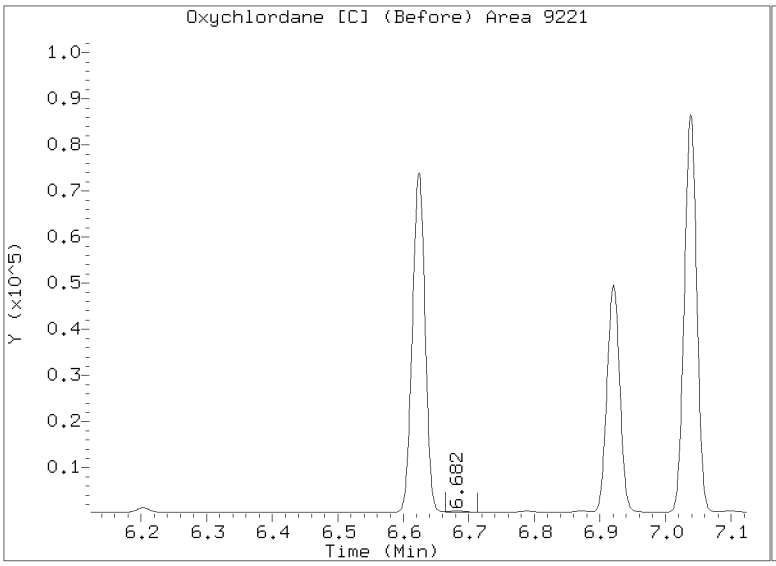
Datafile: /20230412.b/23041217.D
Injection Date: 12-APR-2023 19:34
Lab ID:SEQ-CALE Client ID:
Report Date: 04/14/2023 09:40

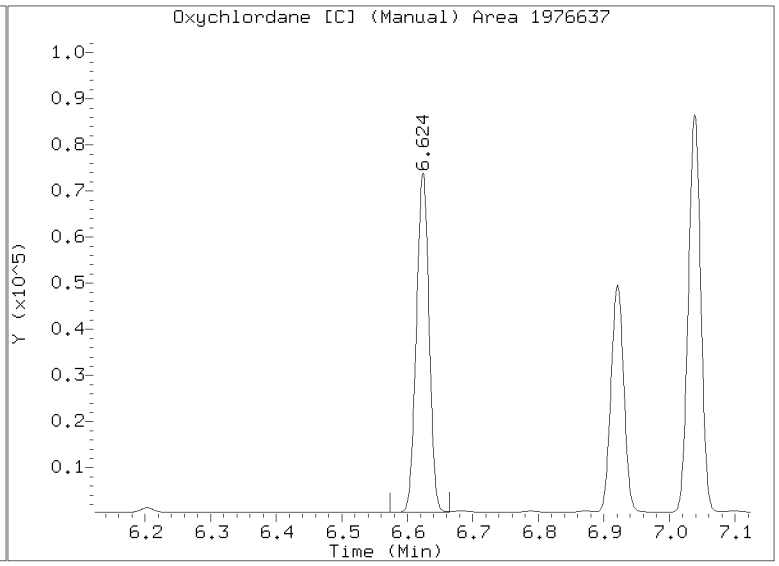


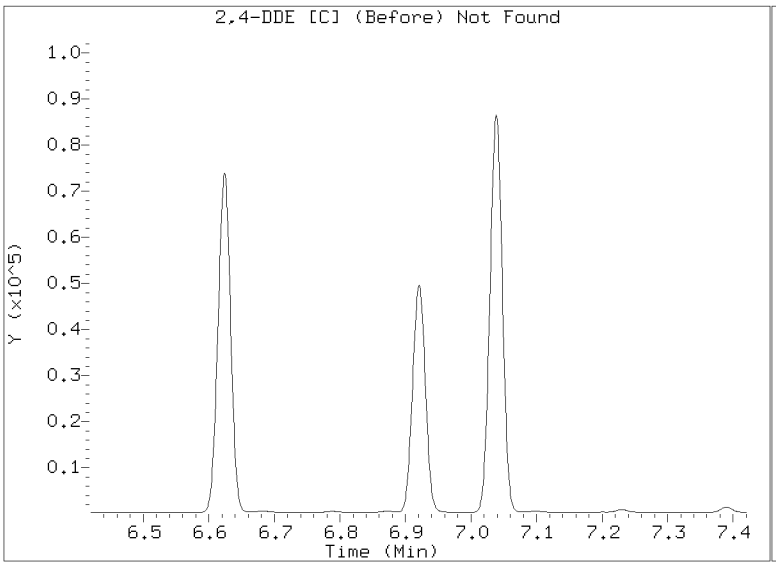


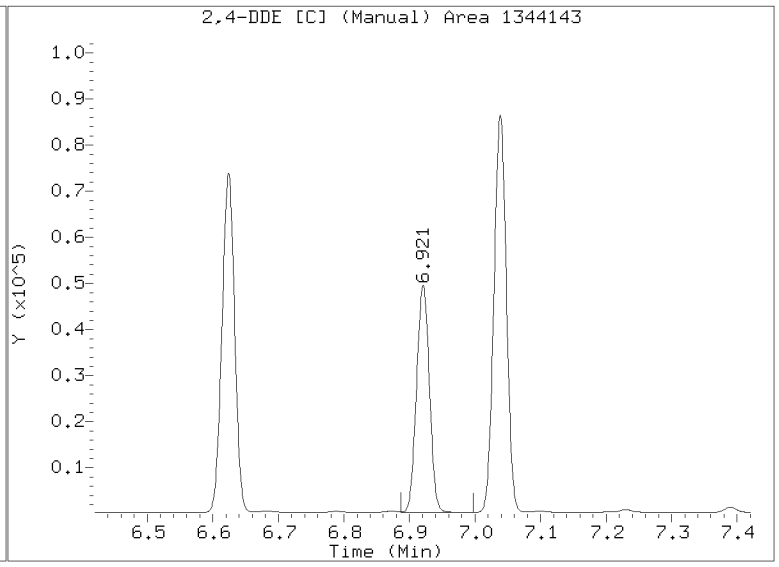
Manual Peak Adjustment Report, CLP-2

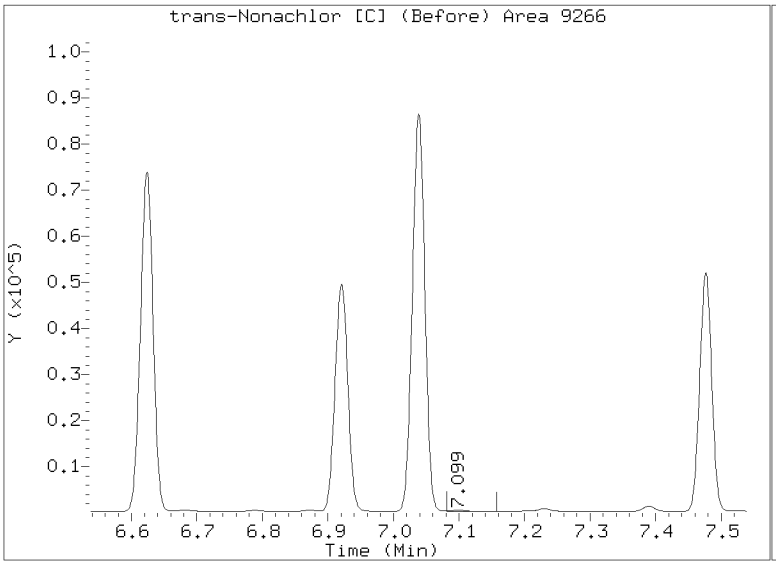
Datafile: /20230412.b/B20230412.b/23041217.D
Injection Date: 12-APR-2023 19:34
Lab ID:SEQ-CALE Client ID:

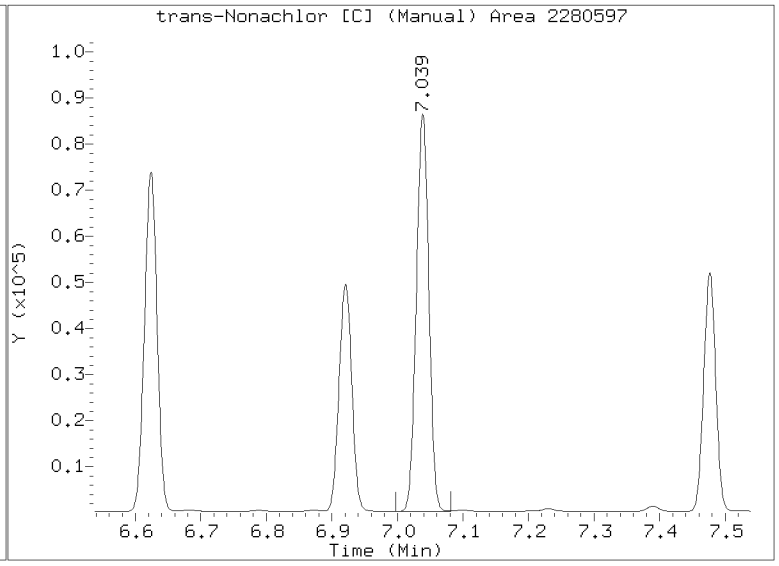






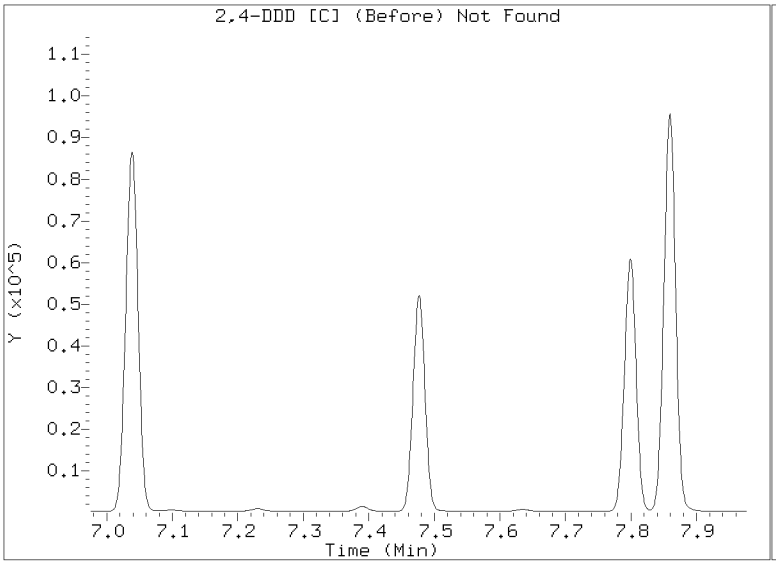


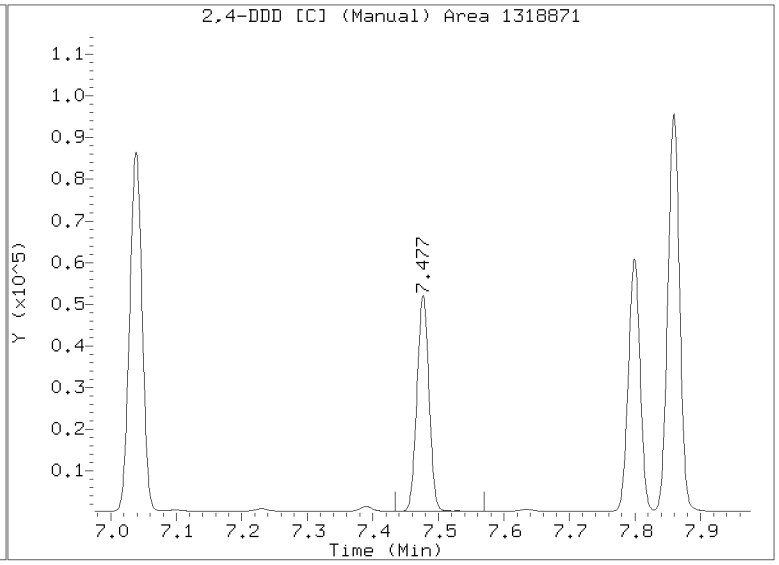


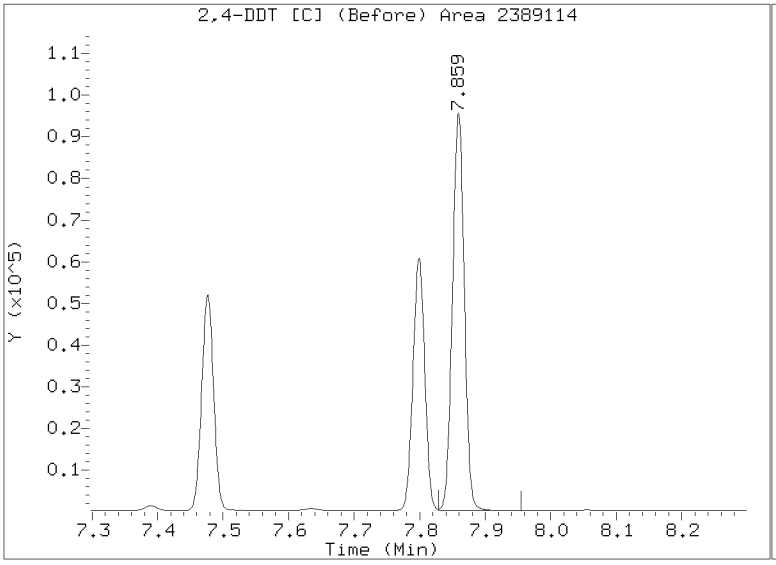


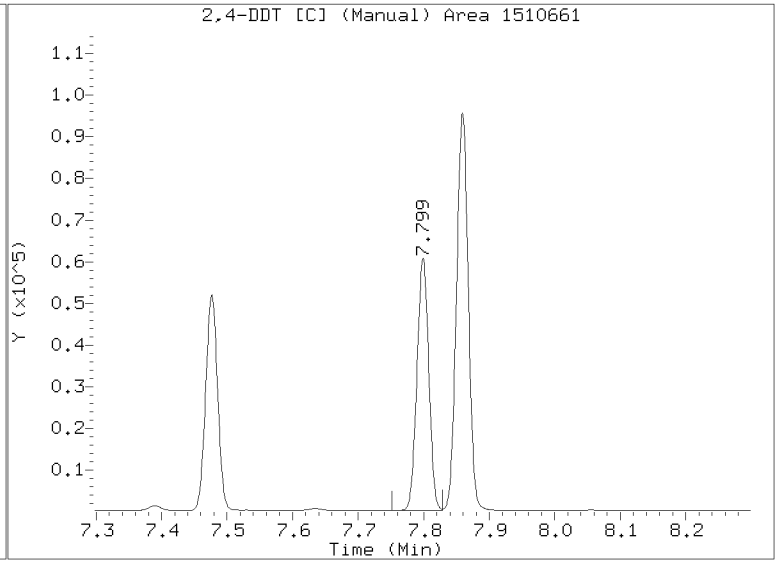
Manual Peak Adjustment Report, CLP-2

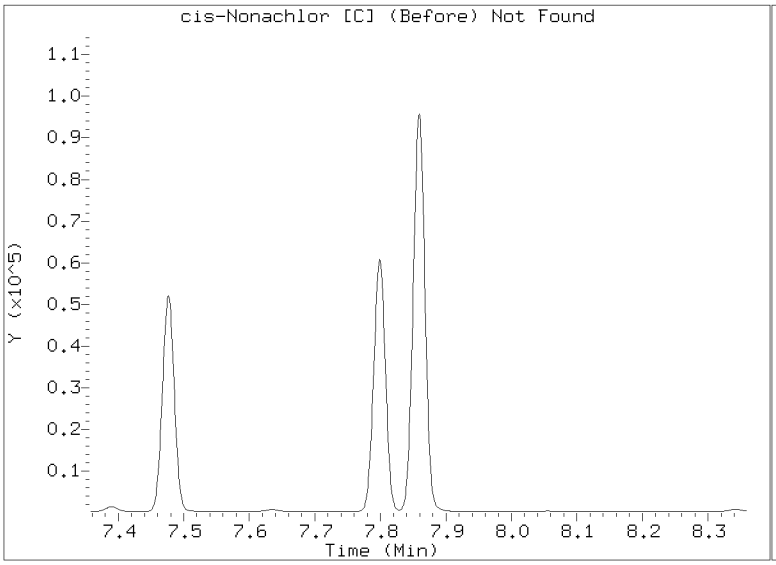
Datafile: /20230412.b/B20230412.b/23041217.D
Injection Date: 12-APR-2023 19:34
Lab ID:SEQ-CALE Client ID:

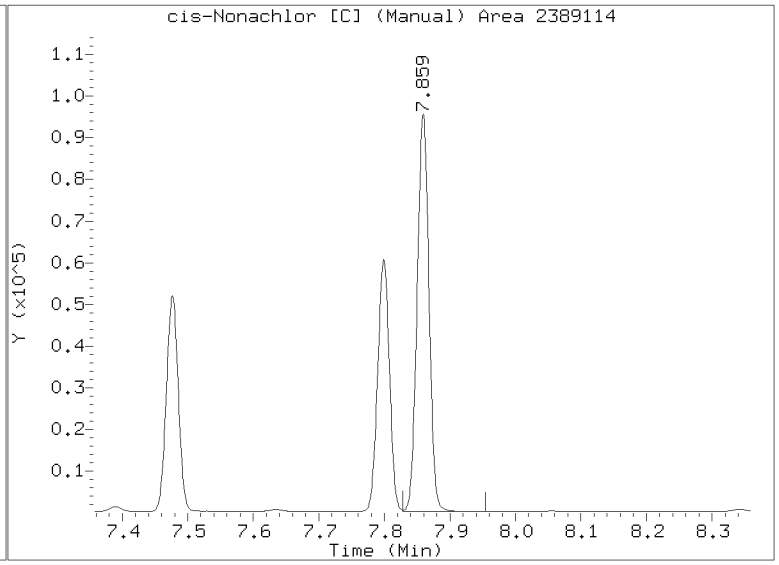






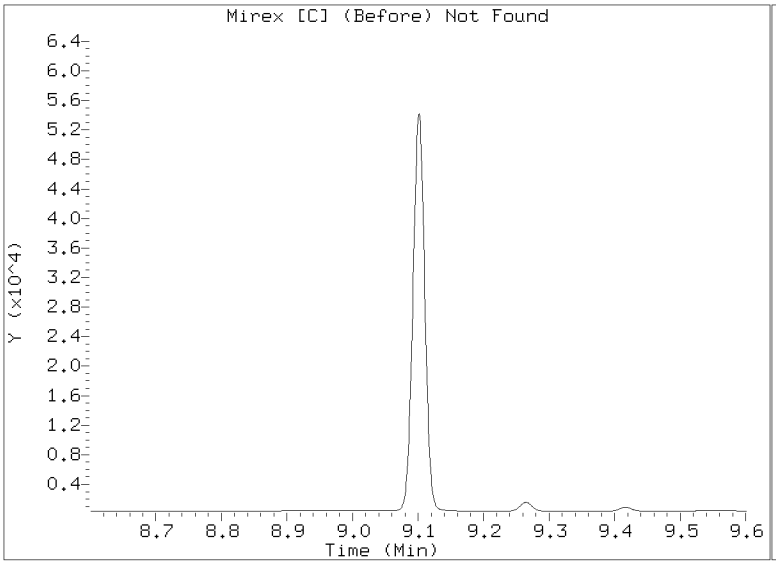


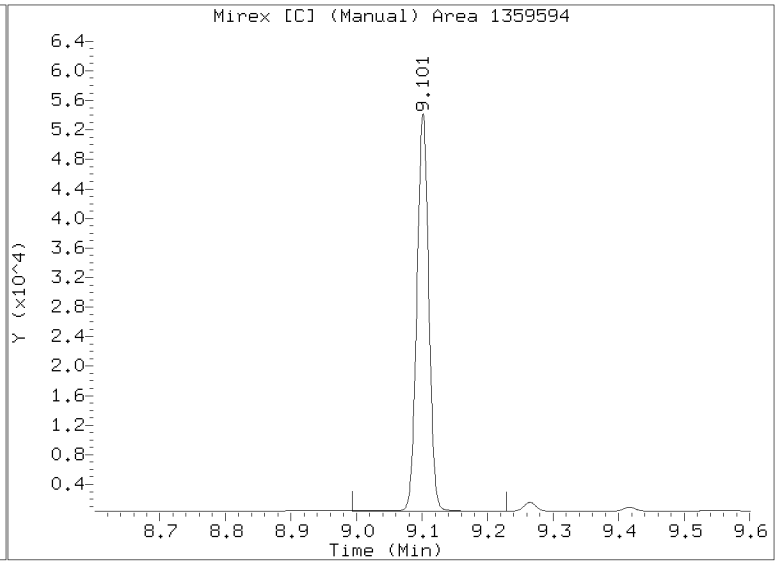




Manual Peak Adjustment Report, CLP-2

Datafile: /20230412.b/B20230412.b/23041217.D
Injection Date: 12-APR-2023 19:34
Lab ID:SEQ-CALE Client ID:





Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041218.D
Data file 2: /20230412.b/B20230412.b/23041218.D
Method: \20230412.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALF
Client ID:
Injection Date: 12-APR-2023 19:52
Report Date: 04/13/2023 13:06
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.820	0.001	13904	4.136	0.000	18748	1.09	1.07	1.1	Tetrachloro-m-xylene
9.367	0.001	24477	10.306	-0.000	31773	2.82	3.41	19.2	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	914711	5.8
Hexabromobiphenyl	663237	736746	11.1

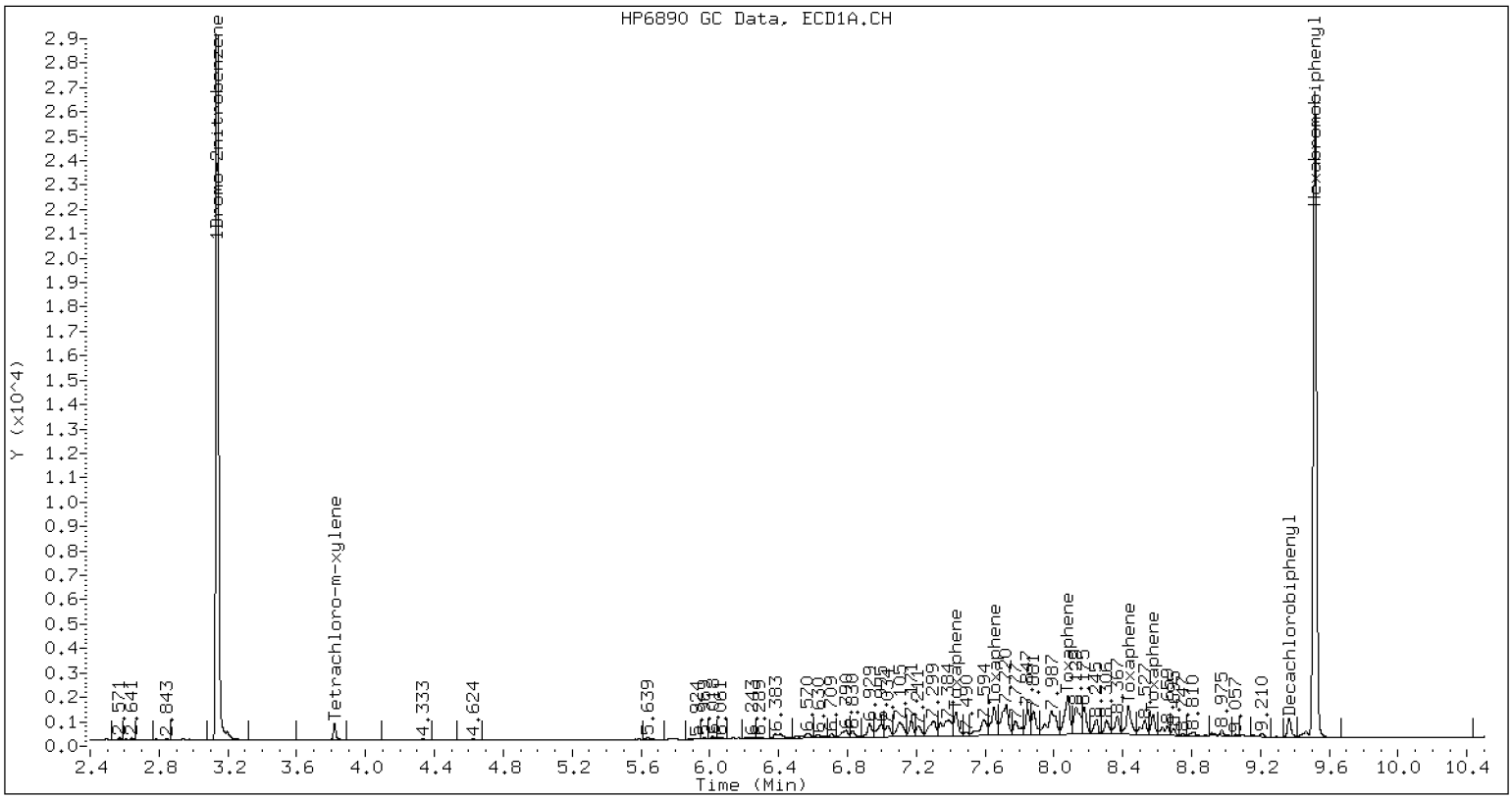
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1268733	-14.3
Hexabromobiphenyl	870561	770830	-11.5

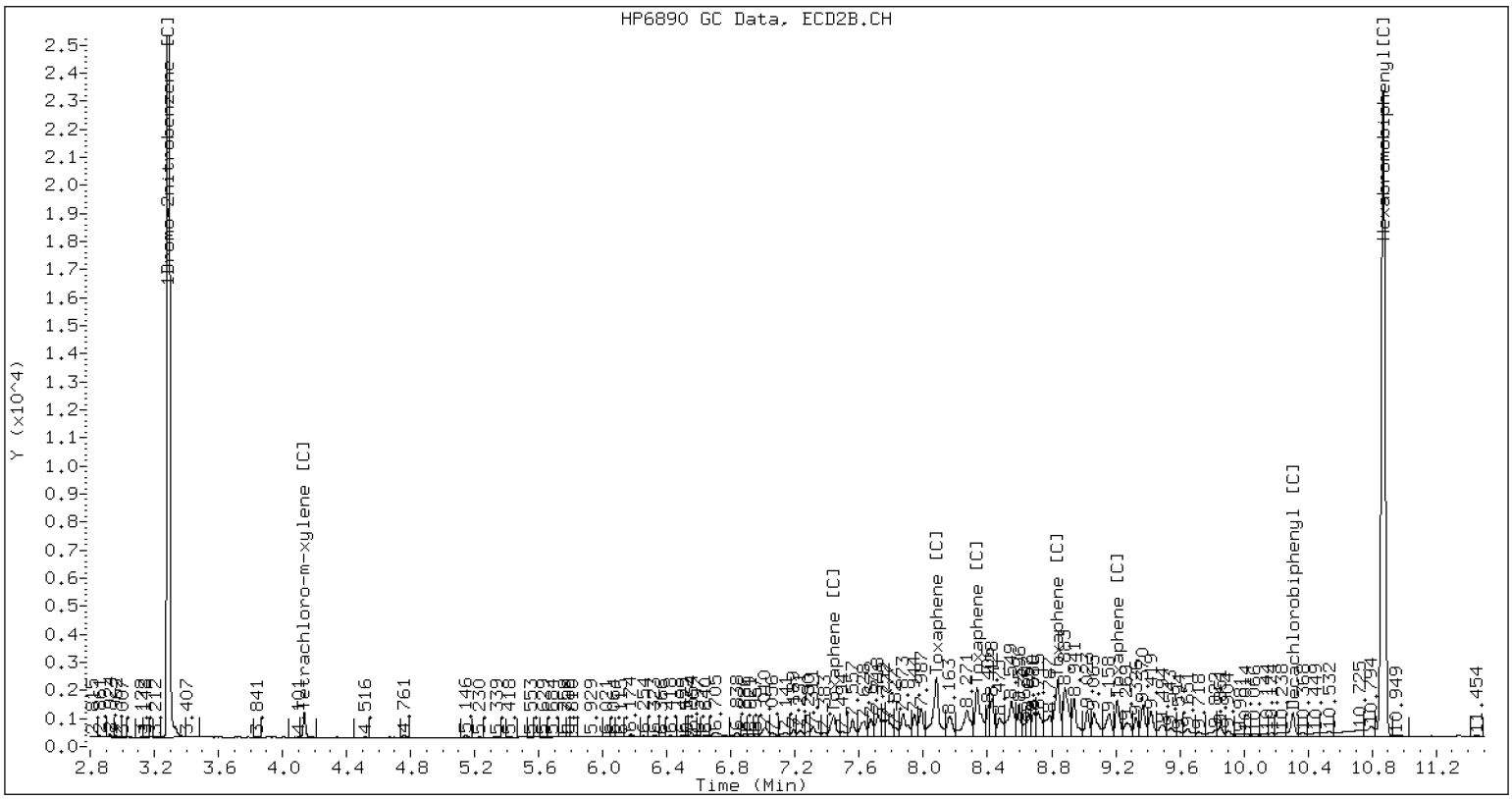
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	7.430	-0.000	34115	125.1	1	7.440	0.000	35652	143.7	
Toxaphene	2	7.652	-0.001	48770	133.6	2	8.082	-0.001	107411	146.6	
Toxaphene	3	8.080	0.000	67485	135.6	3	8.335	-0.001	81808	143.0	
Toxaphene	4	8.433	0.000	48028	122.4	4	8.838	-0.001	87639	142.7	
Toxaphene	5	8.575	-0.000	27697	117.3	5	9.209	-0.001	46750	139.0	
Total STX-CLPAve (5 peaks): 126.820						Total CLP2Ave (5 peaks): 142.998				RPD = 12	
Corrected Ave (5 peaks): 126.820						Corrected Ave (5 peaks): 142.998				RPD = 12	

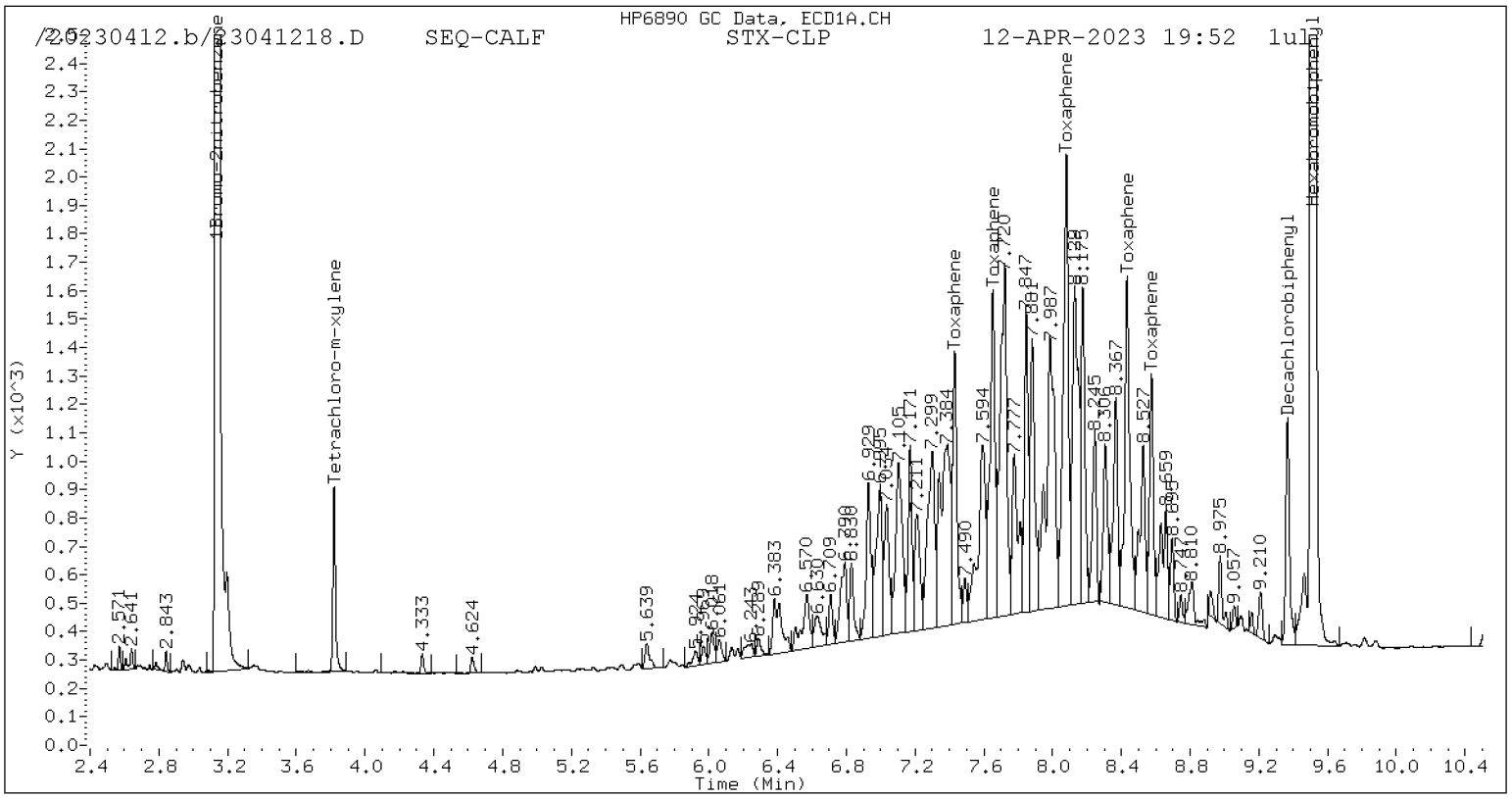
/20230412.b/23041218.D SEQ-CALF STX-CLP 12-APR-2023 19:52 1ul



/20230412.b/B20230412.b/23041218.D SEQ-CALF CLP2 12-APR-2023 19:52 1ul

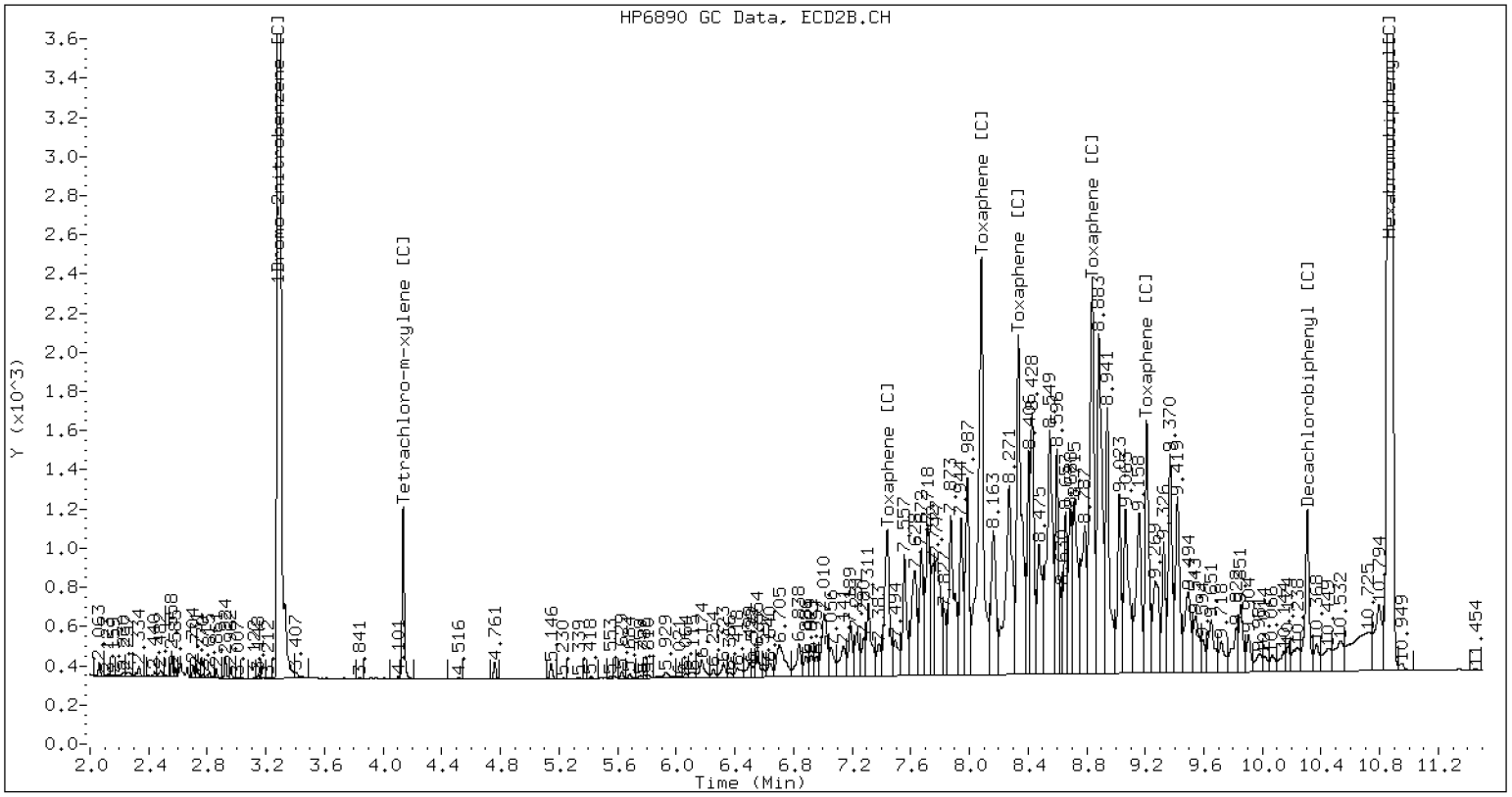


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041218.D SEQ-CALF CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041219.D
Data file 2: /20230412.b/B20230412.b/23041219.D
Method: \20230412.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALG
Client ID:
Injection Date: 12-APR-2023 20:10
Report Date: 04/13/2023 13:06
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.820	0.001	27648	4.136	0.000	36736	2.17	2.11	2.6	Tetrachloro-m-xylene
9.367	0.001	43538	10.306	-0.000	56135	5.17	6.10	16.5	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	911122	5.4
Hexabromobiphenyl	663237	714377	7.7

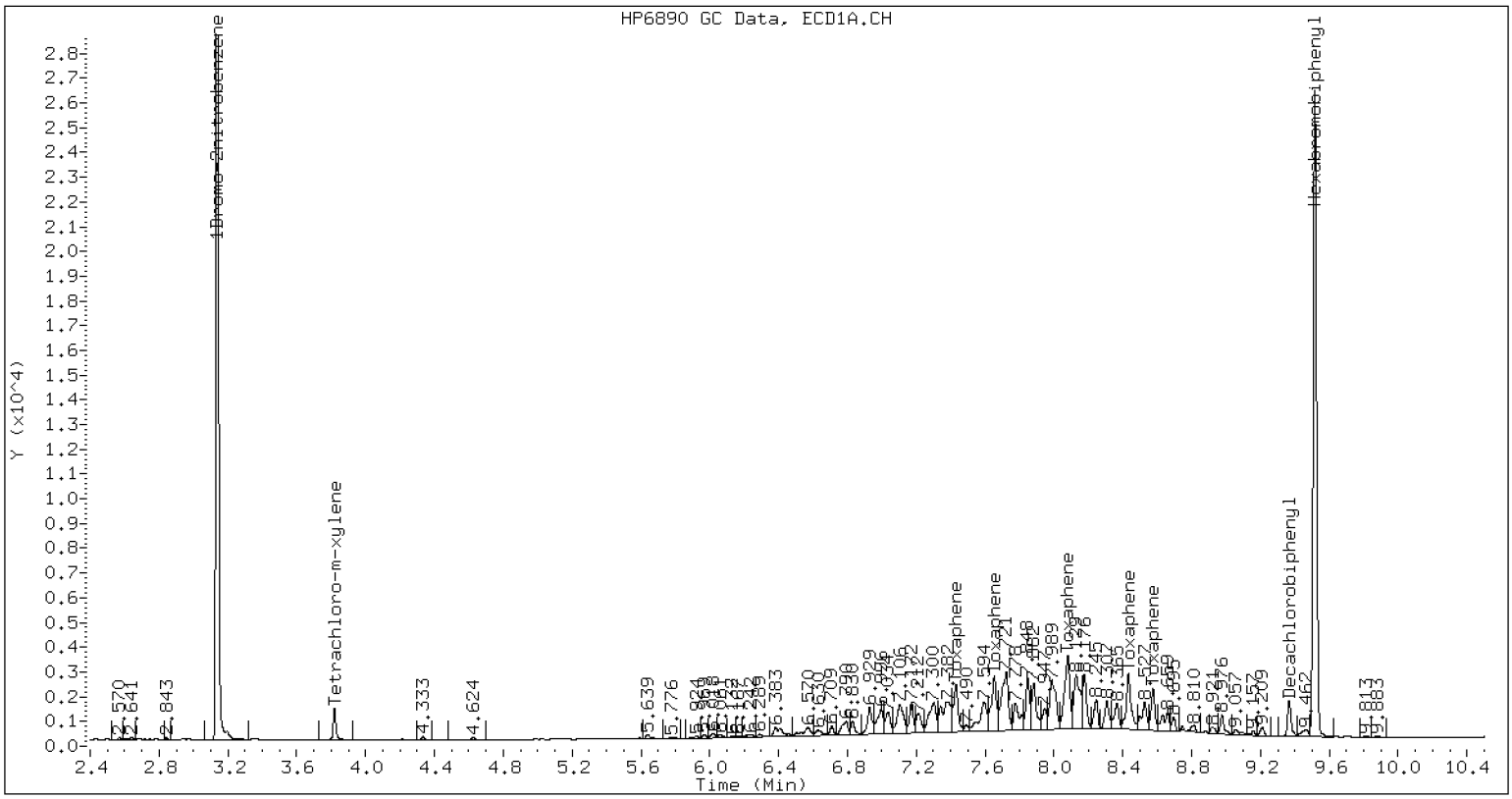
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1263997	-14.6
Hexabromobiphenyl	870561	762676	-12.4

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	7.430	0.000	72029	272.5	1	7.440	0.000	69042	281.2	
Toxaphene	2	7.653	0.000	94737	267.7	2	8.082	-0.001	206105	284.4	
Toxaphene	3	8.079	0.000	129282	268.0	3	8.335	-0.001	158407	279.9	
Toxaphene	4	8.433	0.000	90301	237.4	4	8.838	-0.001	170052	279.8	
Toxaphene	5	8.575	0.000	53948	235.5	5	9.209	-0.001	91320	274.3	
Total STX-CLPAve (5 peaks): 256.226						Total CLP2Ave (5 peaks): 279.934				RPD = 9	
Corrected Ave (5 peaks): 256.226						Corrected Ave (5 peaks): 279.934				RPD = 9	

/20230412.b/23041219.D SEQ-CALG STX-CLP 12-APR-2023 20:10 1ul



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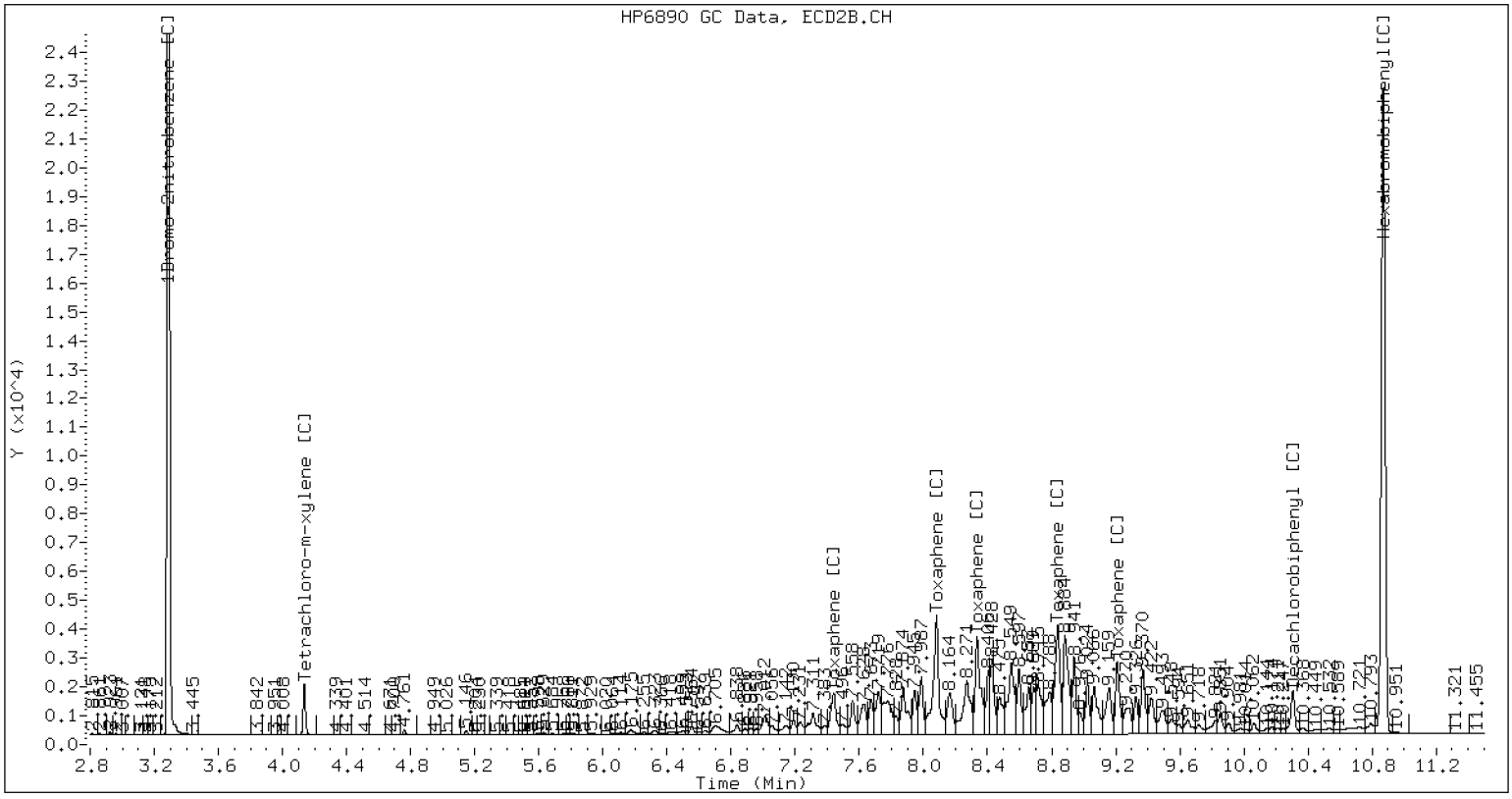
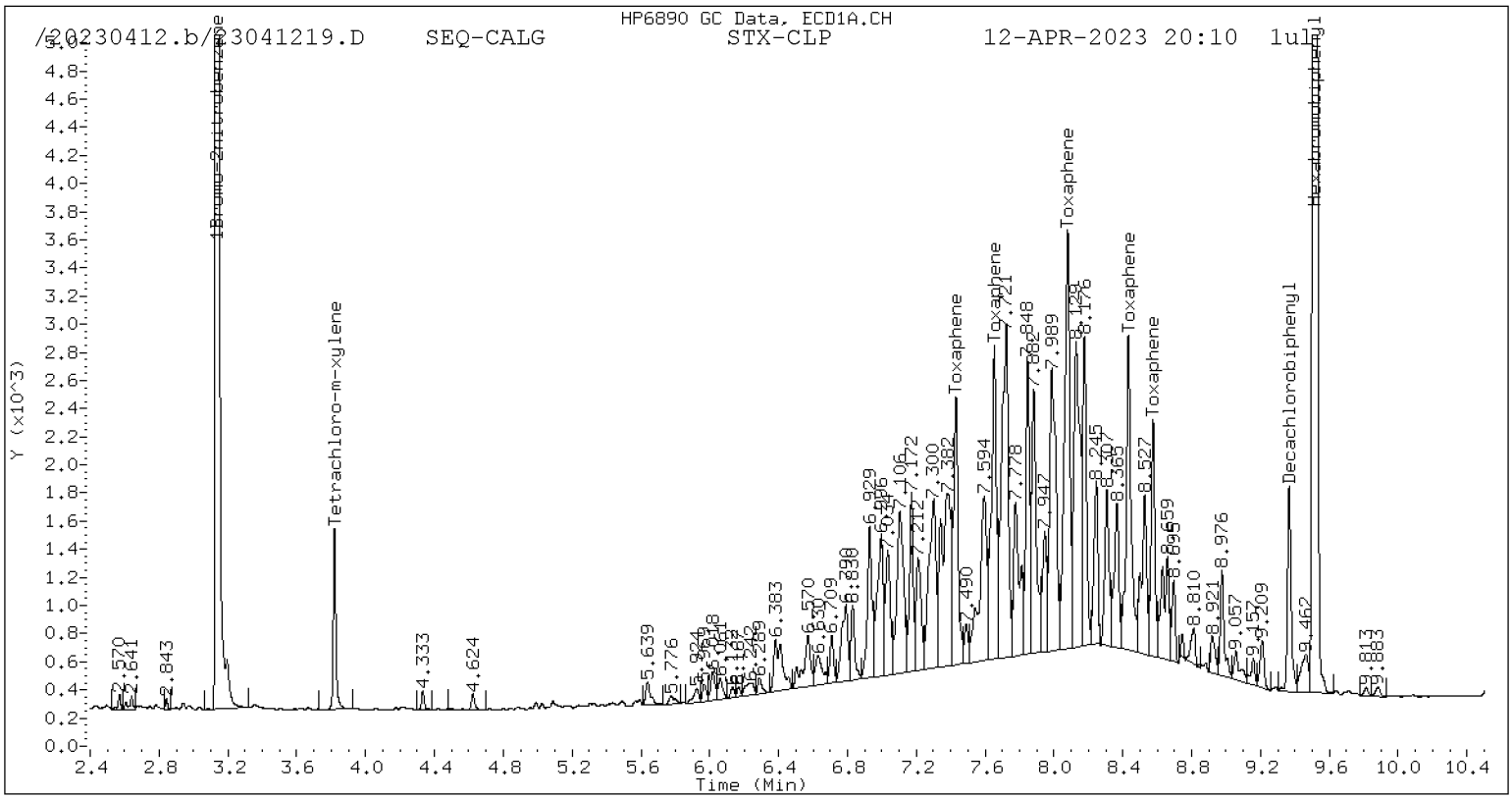
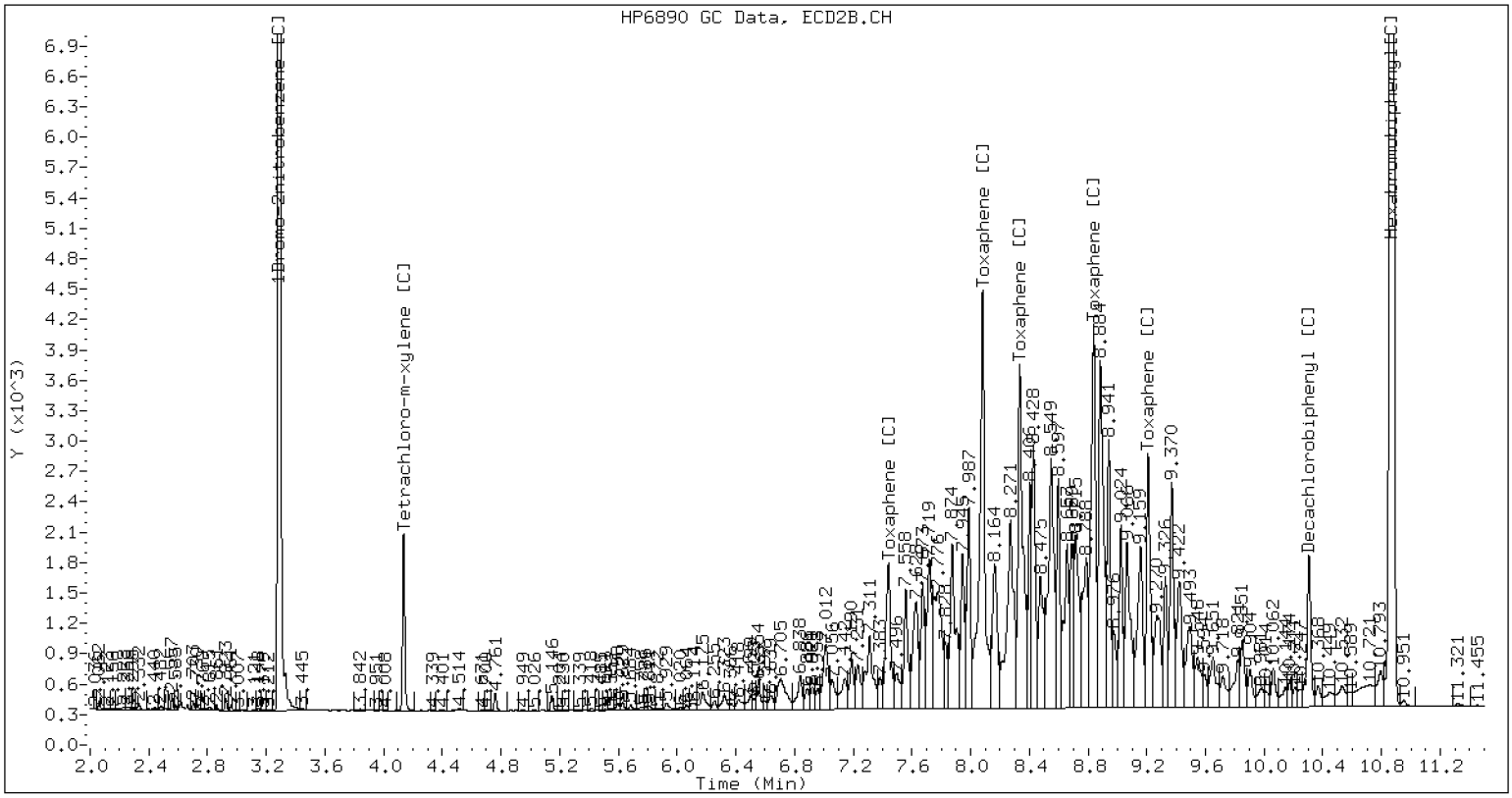


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041219.D SEQ-CALG CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041220.D
Data file 2: /20230412.b/B20230412.b/23041220.D
Method: \20230412.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALH
Client ID:
Injection Date: 12-APR-2023 20:29
Report Date: 04/13/2023 13:06
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.819	0.000	54190	4.136	-0.000	72947	4.30	4.19	2.4	Tetrachloro-m-xylene
9.367	0.001	84057	10.306	-0.000	112592	9.95	12.27	20.8	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	901082	4.3
Hexabromobiphenyl	663237	716024	8.0

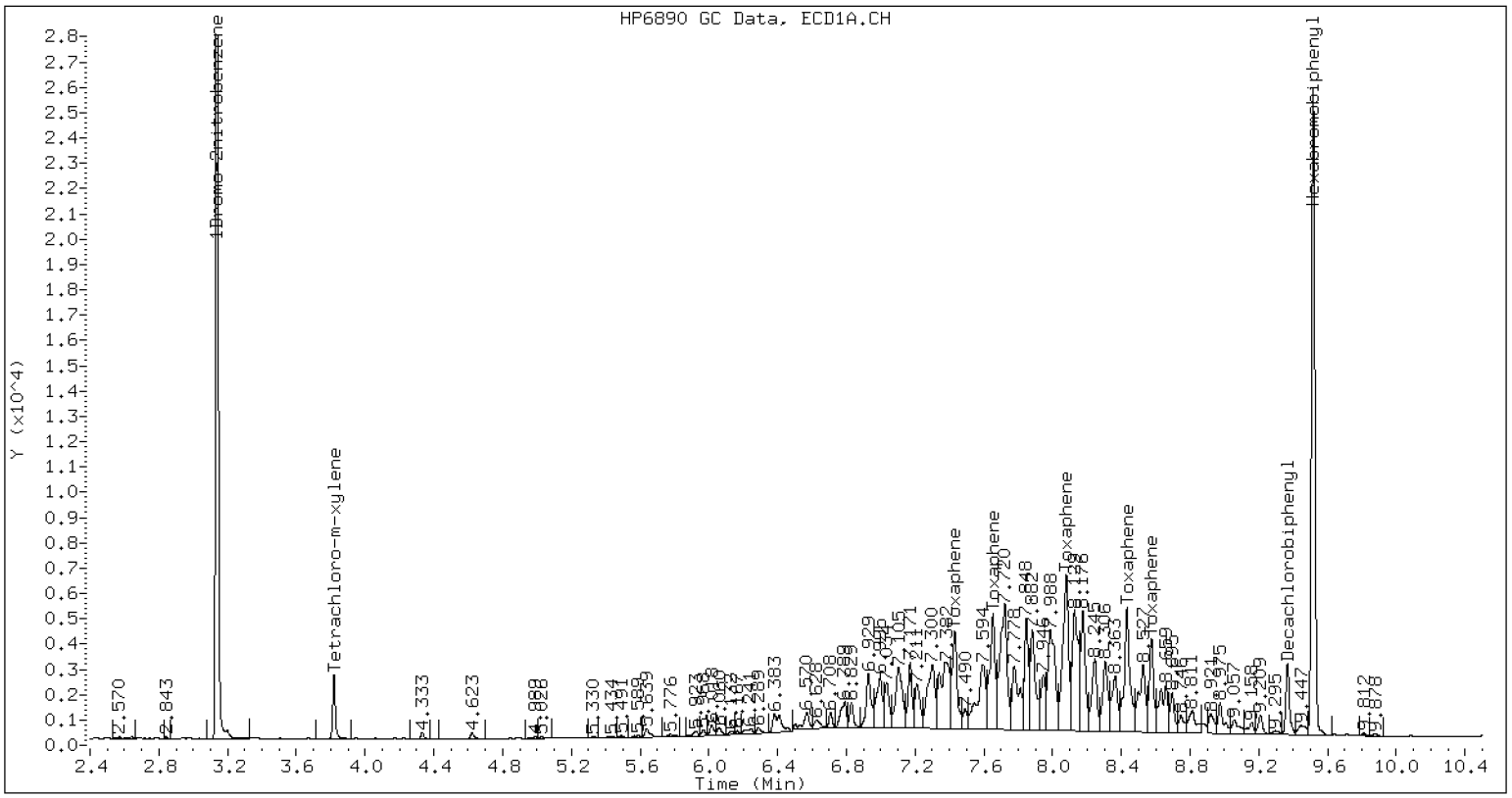
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1264745	-14.6
Hexabromobiphenyl	870561	760374	-12.7

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	7.430	0.000	157592	594.8	1	7.440	-0.000	136366	557.1	
Toxaphene	2	7.652	-0.001	205637	579.8	2	8.082	-0.001	403294	558.1	
Toxaphene	3	8.079	-0.000	290301	600.3	3	8.334	-0.002	313799	556.2	
Toxaphene	4	8.433	-0.000	226845	595.0	4	8.838	-0.001	331417	547.0	
Toxaphene	5	8.575	-0.000	137082	597.1	5	9.209	-0.001	180073	542.6	
Total STX-CLPAve (5 peaks): 593.415						Total CLP2Ave (5 peaks): 552.208				RPD = 7	
Corrected Ave (5 peaks): 593.415						Corrected Ave (5 peaks): 552.208				RPD = 7	

/20230412.b/23041220.D SEQ-CALH STX-CLP 12-APR-2023 20:29 1ul



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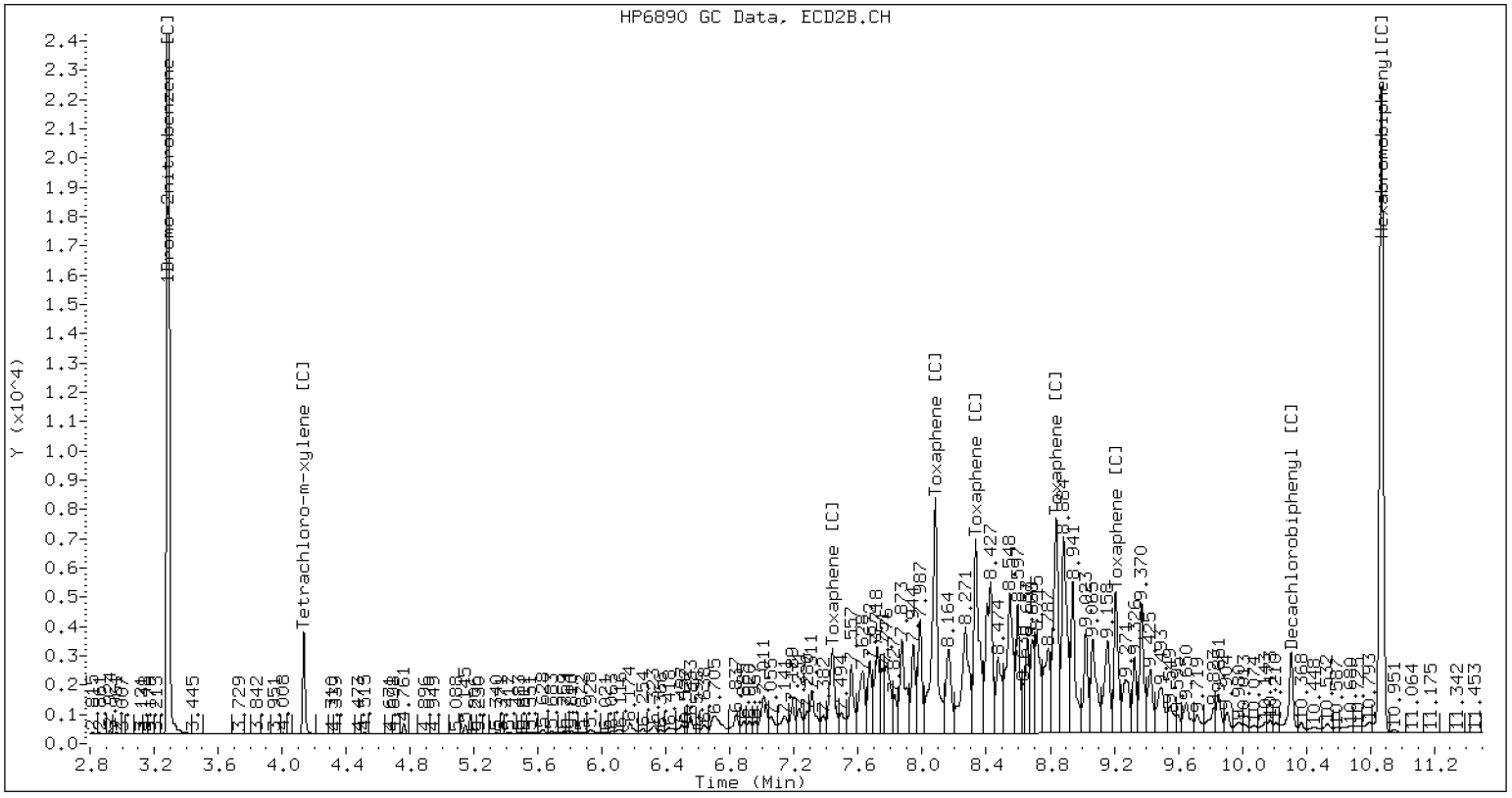
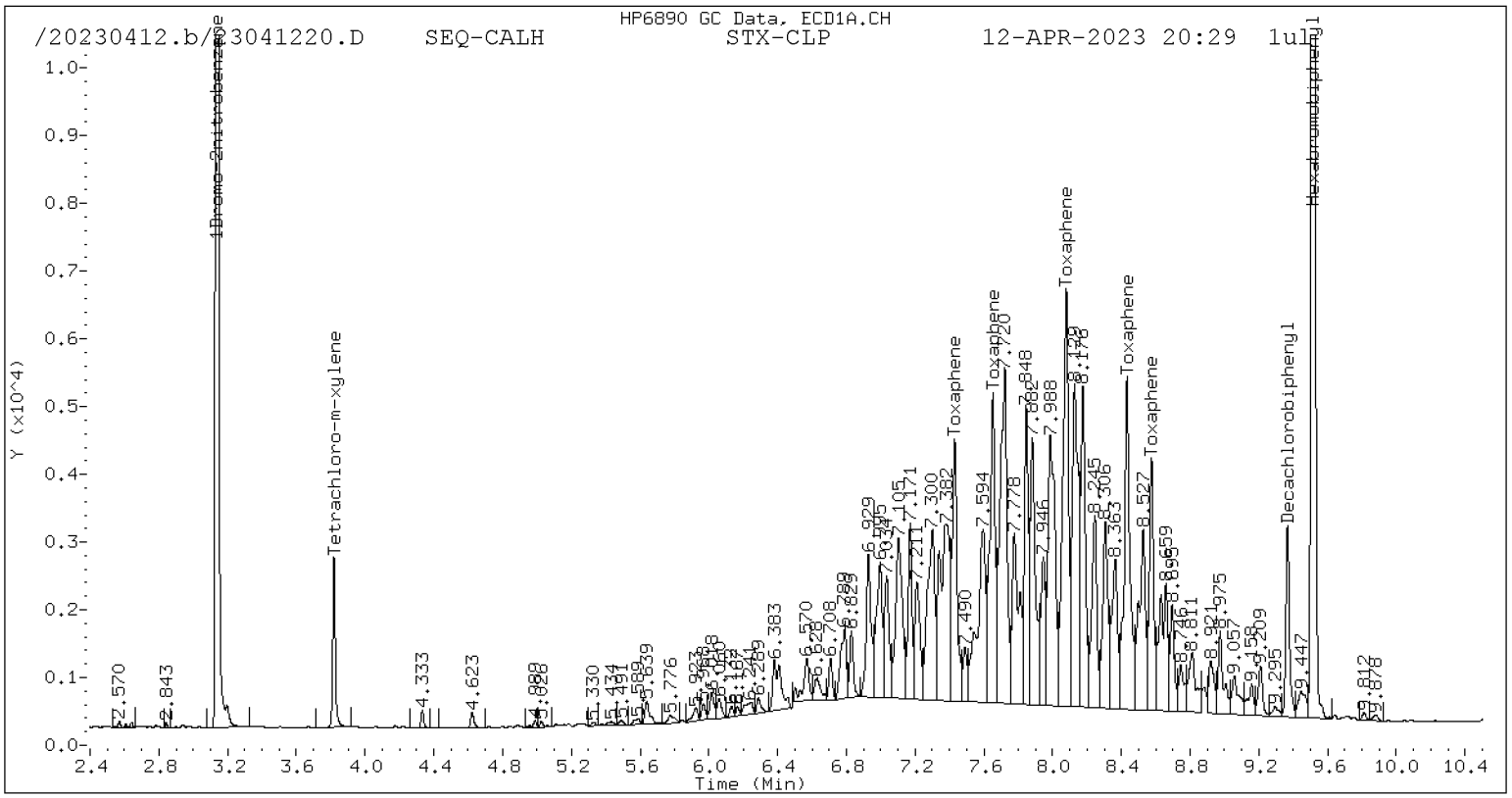
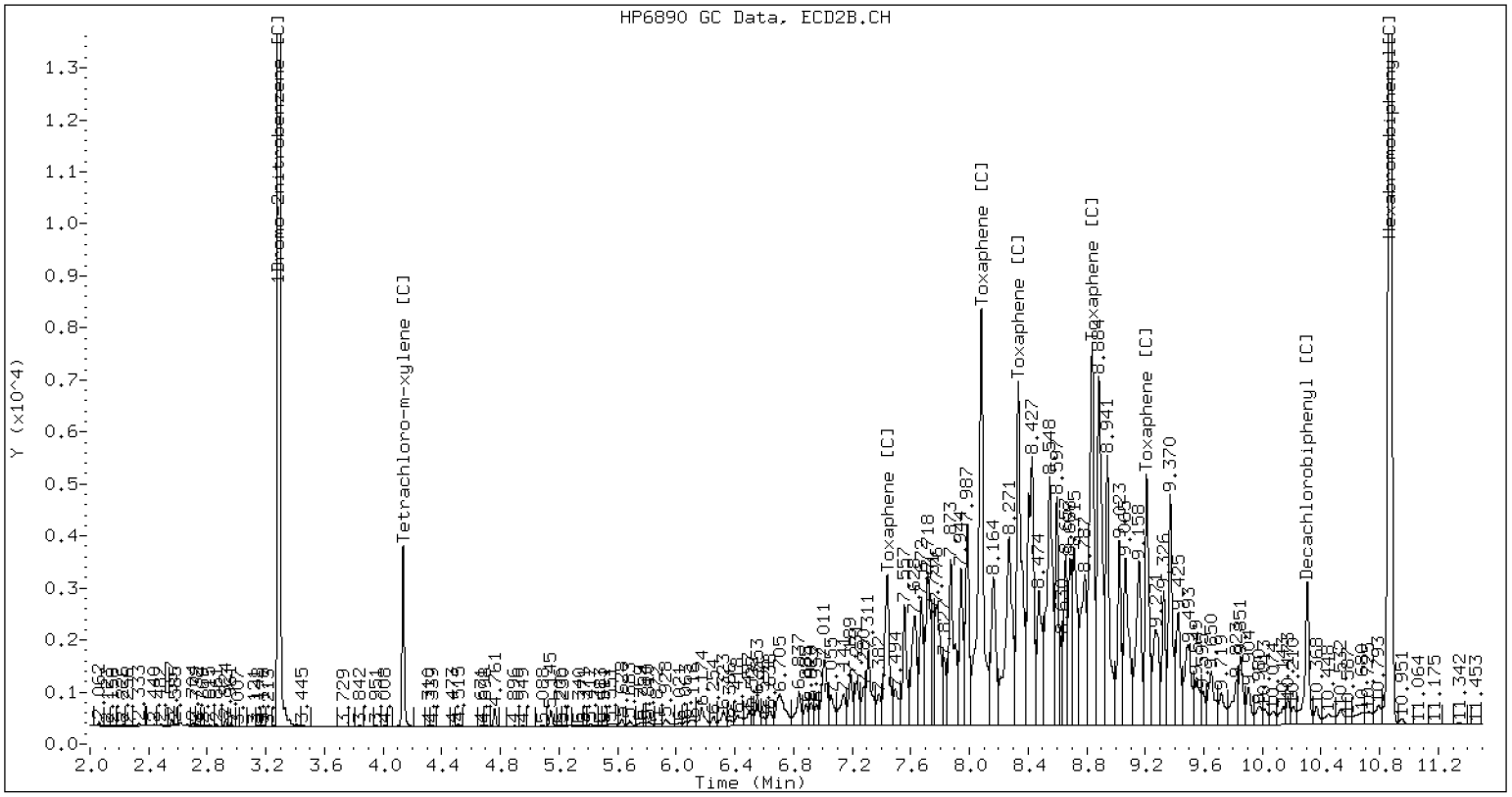


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041220.D SEQ-CALH CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041221.D
Data file 2: /20230412.b/B20230412.b/23041221.D
Method: \20230412.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALI
Client ID:
Injection Date: 12-APR-2023 20:47
Report Date: 04/13/2023 13:06
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.819	0.000	105882	4.136	-0.000	143630	8.24	8.18	0.8	Tetrachloro-m-xylene
9.367	0.001	153784	10.306	0.000	209053	17.55	21.94	22.3	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	918194	6.2
Hexabromobiphenyl	663237	742986	12.0

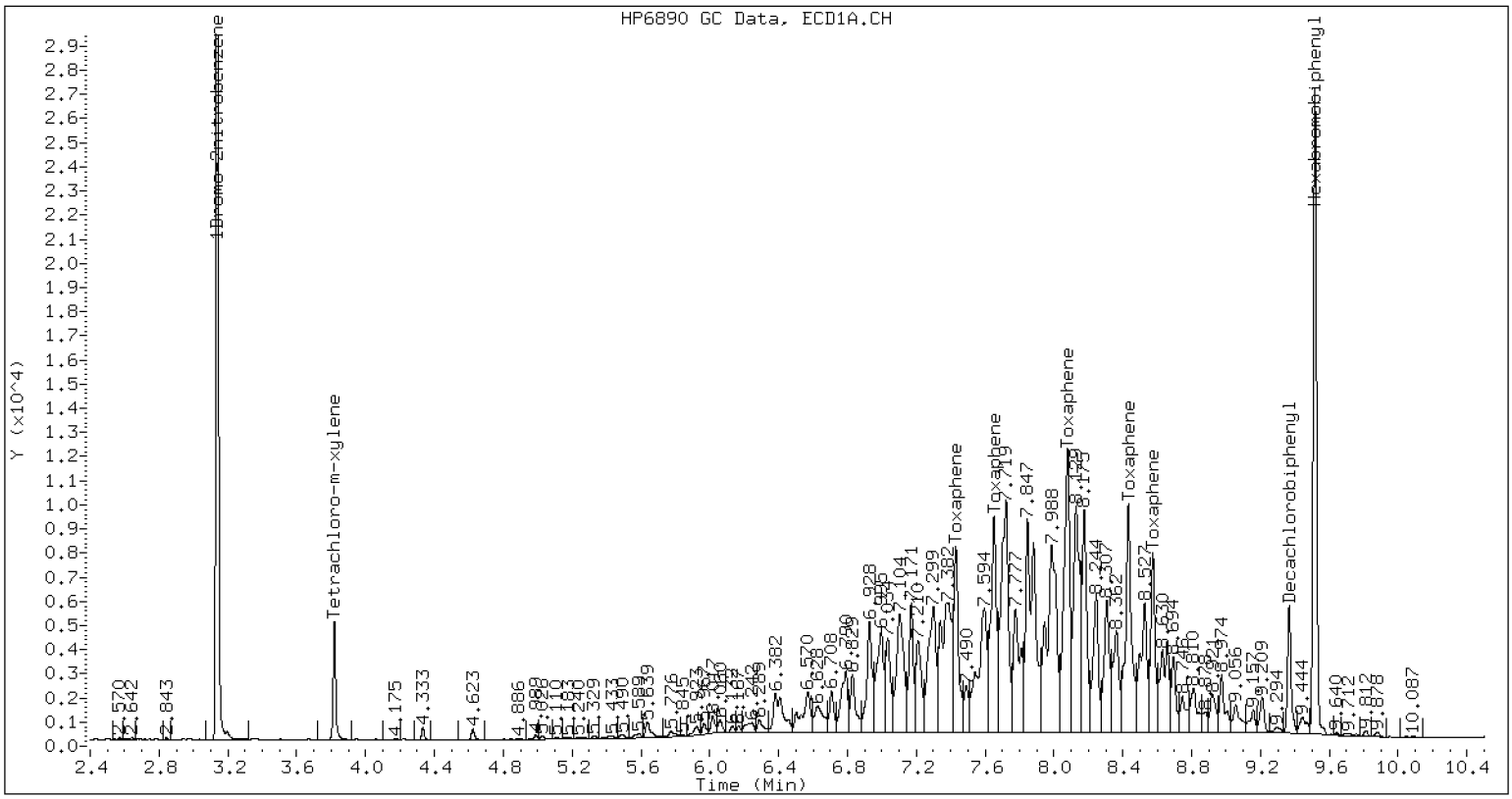
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1277652	-13.7
Hexabromobiphenyl	870561	789338	-9.3

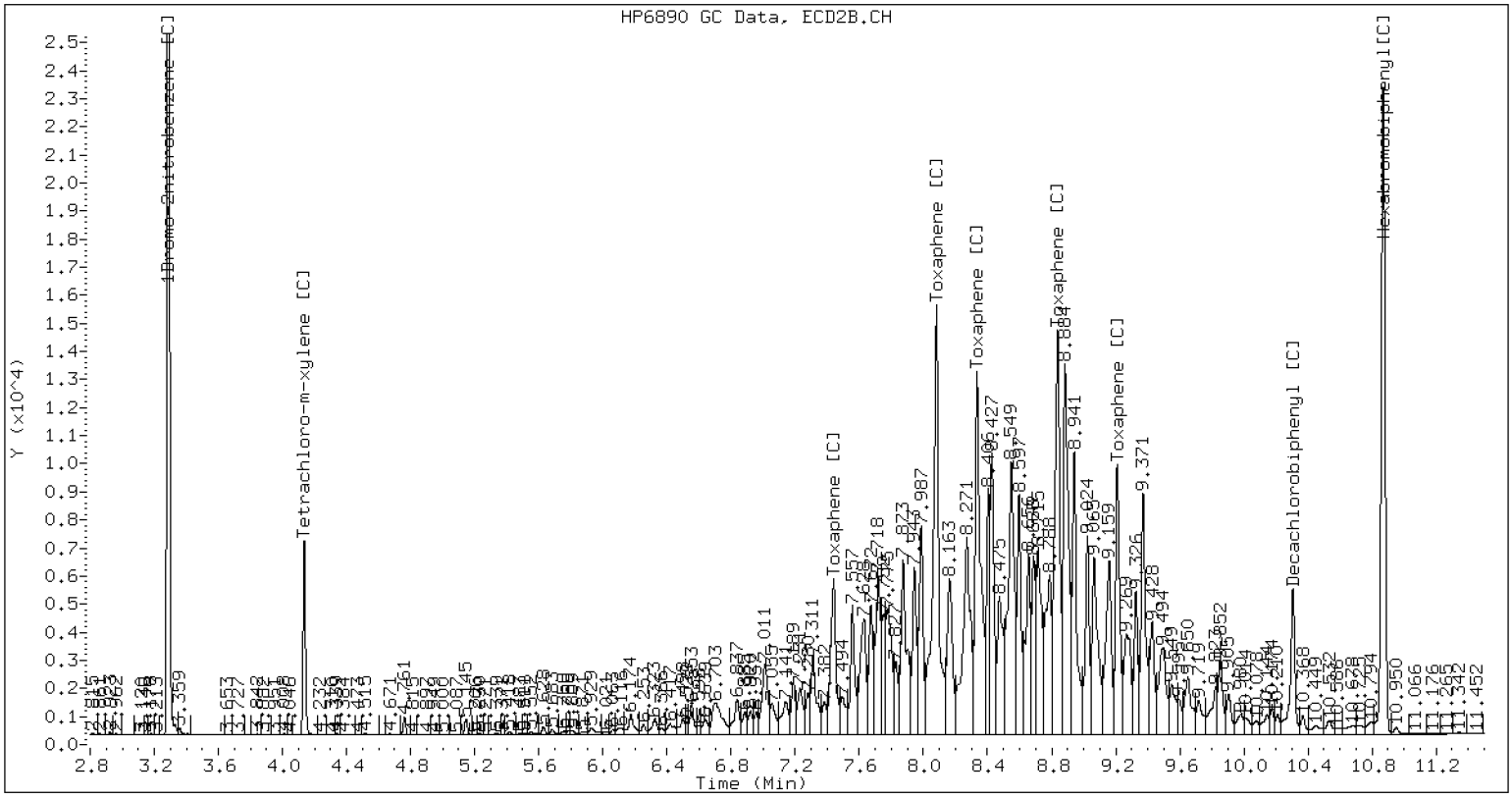
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	7.429	-0.001	301979	1098.4	1	7.440	-0.000	262813	1034.2	
Toxaphene	2	7.652	-0.001	416680	1132.3	2	8.081	-0.002	775904	1034.4	
Toxaphene	3	8.078	-0.001	559891	1115.8	3	8.335	-0.001	609018	1039.9	
Toxaphene	4	8.433	-0.000	452584	1144.0	4	8.838	-0.001	645519	1026.4	
Toxaphene	5	8.574	-0.001	277122	1163.4	5	9.210	-0.000	352517	1023.2	
Total STX-CLPAve (5 peaks): 1130.762						Total CLP2Ave (5 peaks): 1031.622					RPD = 9
Corrected Ave (5 peaks): 1130.762						Corrected Ave (5 peaks): 1031.622					RPD = 9

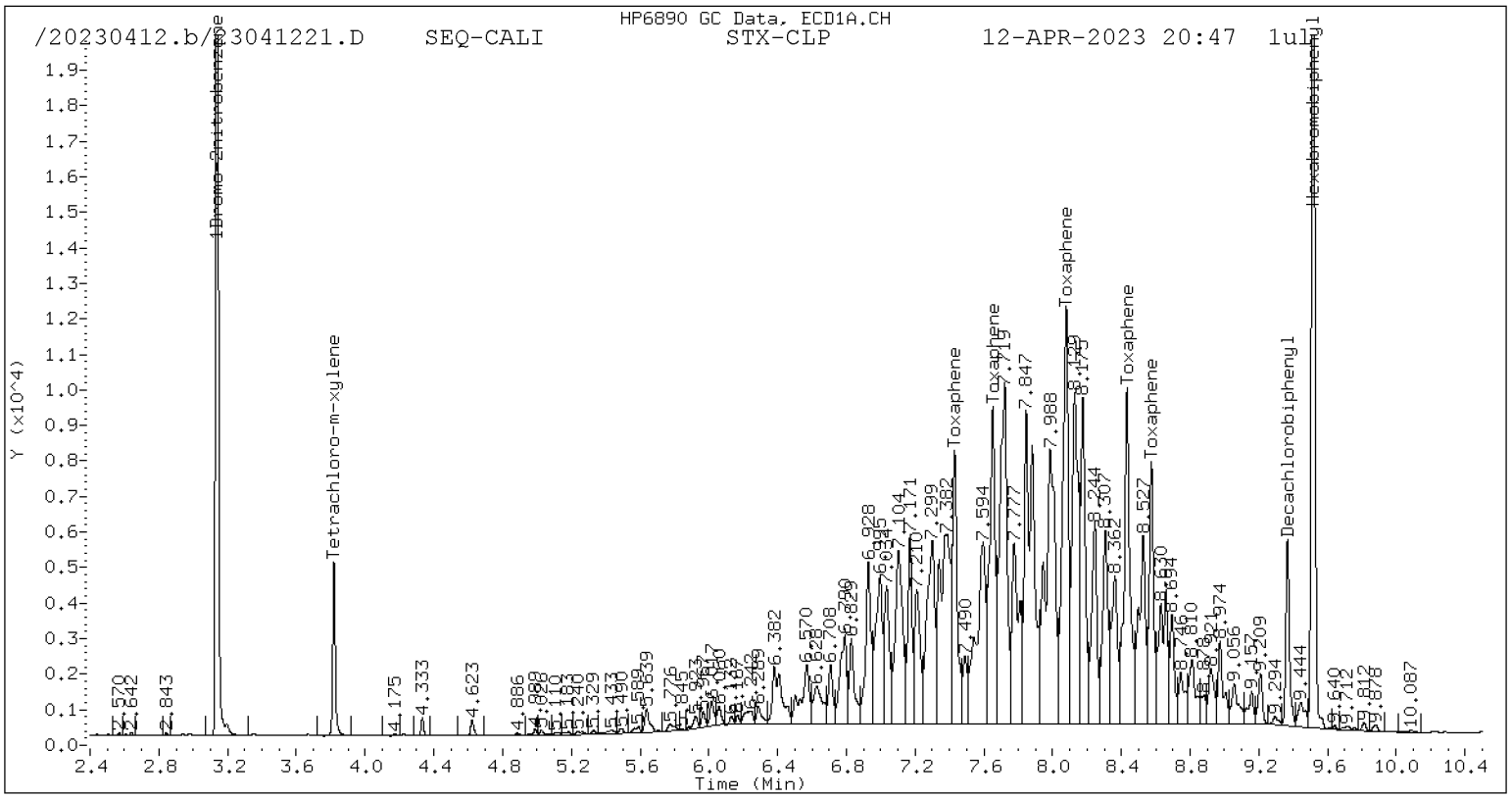
/20230412.b/23041221.D SEQ-CALI STX-CLP 12-APR-2023 20:47 1ul



/20230412.b/B20230412.b/23041221.D SEQ-CALI CLP2 12-APR-2023 20:47 1ul

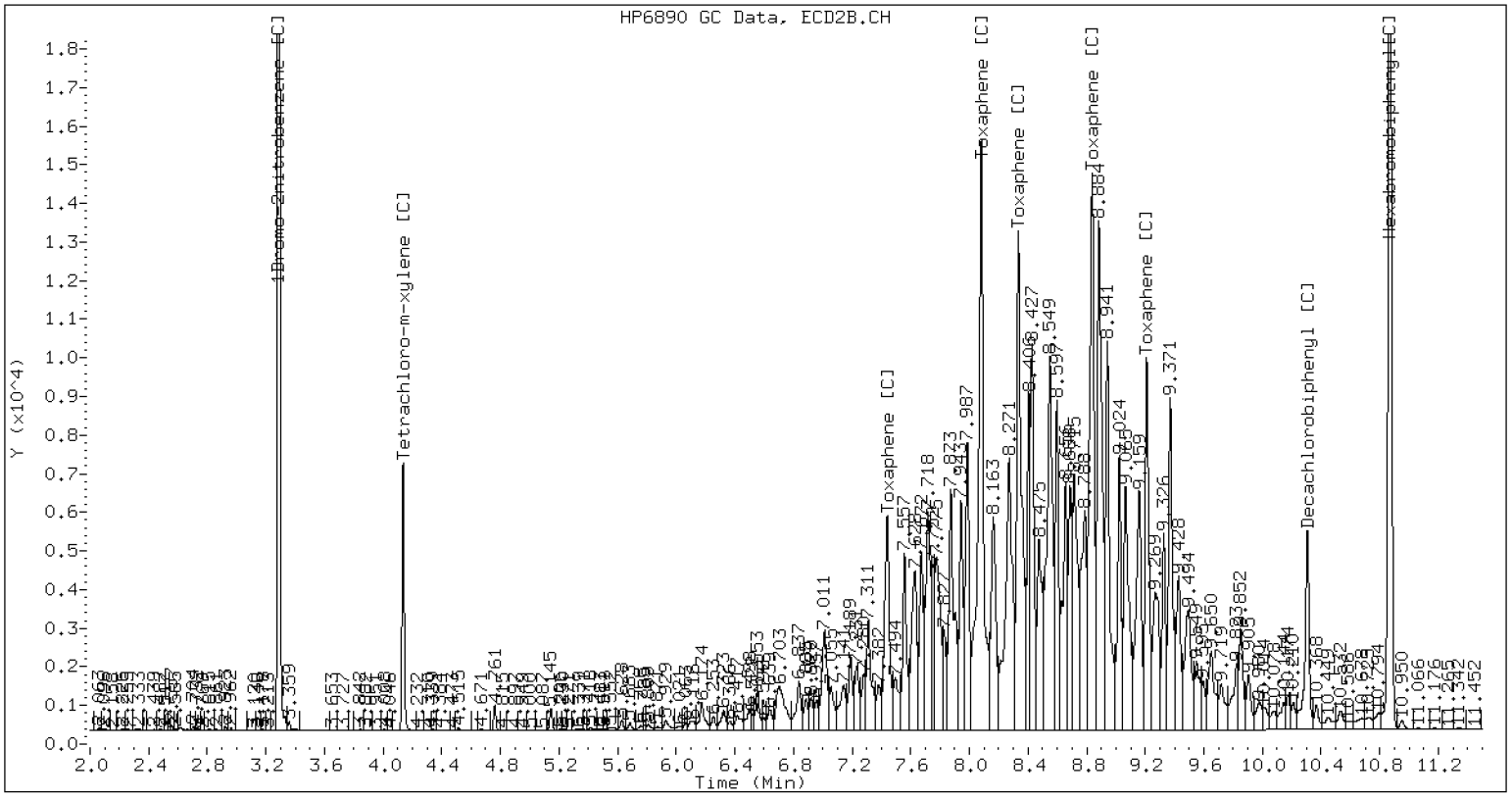


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041221.D SEQ-CALI CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041222.D
Data file 2: /20230412.b/B20230412.b/23041222.D
Method: \20230412.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALJ
Client ID:
Injection Date: 12-APR-2023 21:05
Report Date: 04/13/2023 13:06
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.819	0.000	252501	4.136	-0.000	349014	19.37	19.72	1.8	Tetrachloro-m-xylene
9.367	0.001	411141	10.306	-0.000	491352	42.72	47.90	11.4	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	931444	7.8
Hexabromobiphenyl	663237	816041	23.0

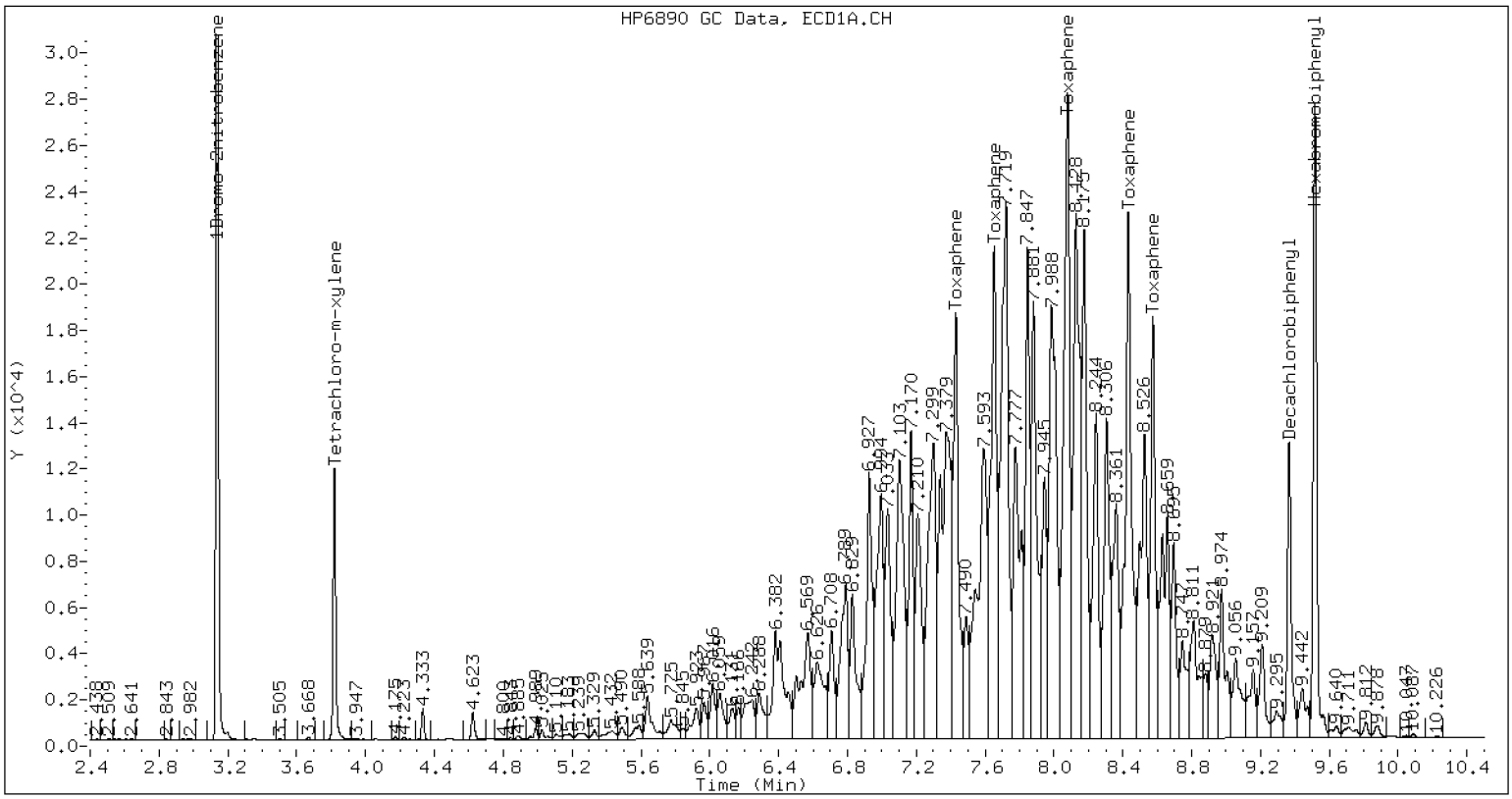
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1287009	-13.1
Hexabromobiphenyl	870561	849848	-2.4

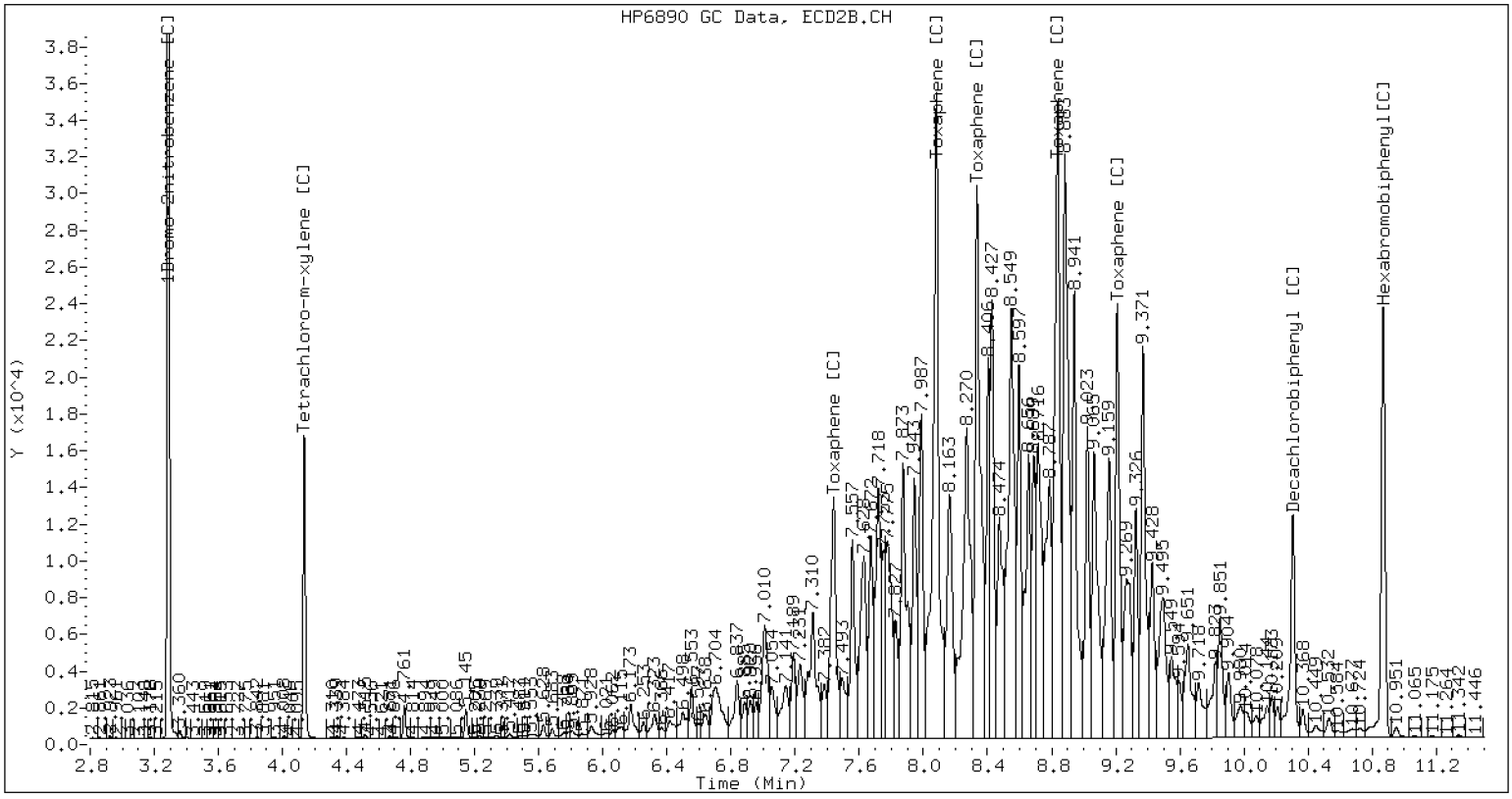
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	7.429	-0.001	797088	2639.8	1	7.440	-0.000	629948	2302.4	
Toxaphene	2	7.652	-0.001	1032073	2553.4	2	8.081	-0.002	1823289	2257.7	
Toxaphene	3	8.078	-0.001	1374882	2494.6	3	8.335	-0.001	1449258	2298.5	
Toxaphene	4	8.432	-0.001	1177736	2710.5	4	8.838	-0.001	1557874	2300.6	
Toxaphene	5	8.575	-0.001	709132	2710.4	5	9.210	-0.001	862039	2324.0	
Total STX-CLPAve (5 peaks): 2621.744						Total CLP2Ave (5 peaks): 2296.637					RPD = 13
Corrected Ave (5 peaks): 2621.744						Corrected Ave (5 peaks): 2296.637					RPD = 13

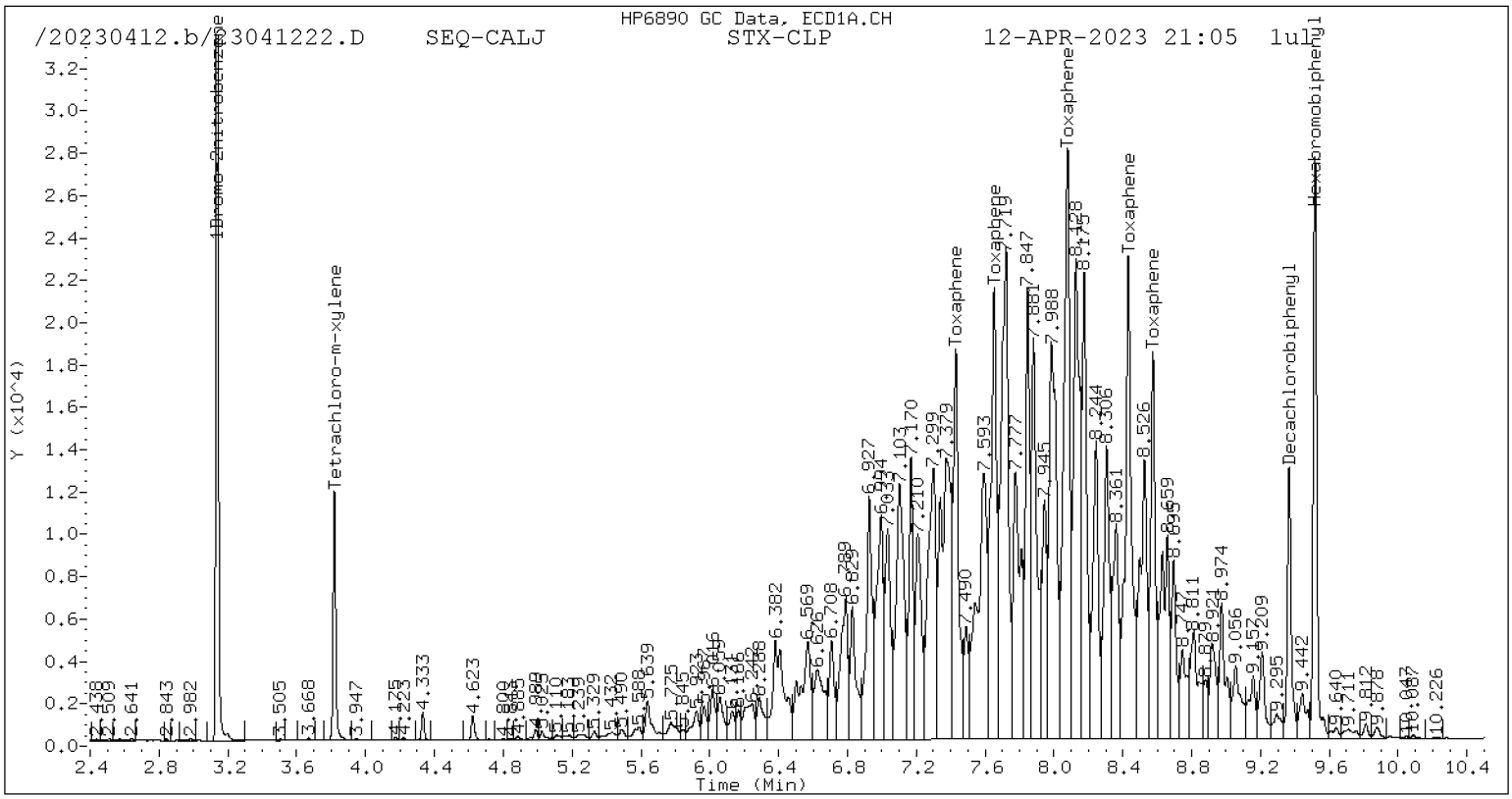
/20230412.b/23041222.D SEQ-CALJ STX-CLP 12-APR-2023 21:05 1ul



/20230412.b/B20230412.b/23041222.D SEQ-CALJ CLP2 12-APR-2023 21:05 1ul

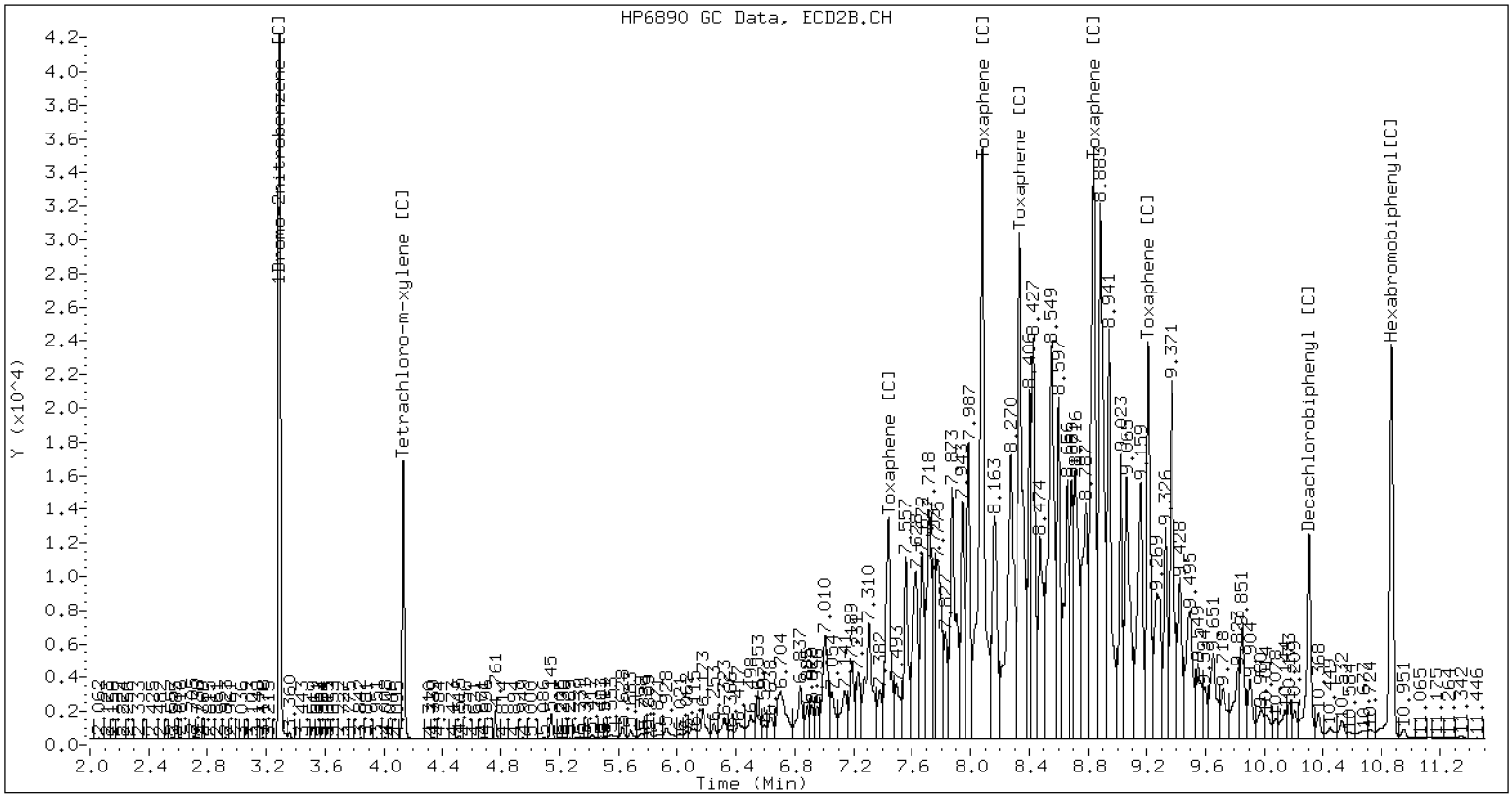


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041222.D SEQ-CALJ CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041223.D
Data file 2: /20230412.b/B20230412.b/23041223.D
Method: \20230412.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALK
Client ID:
Injection Date: 12-APR-2023 21:24
Report Date: 04/13/2023 13:06
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.820	0.001	478616	4.136	-0.000	664045	37.29	37.94	1.7	Tetrachloro-m-xylene
9.367	0.001	786481	10.307	0.001	944710	75.08	93.37	21.7	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	917226	6.1
Hexabromobiphenyl	663237	888107	33.9

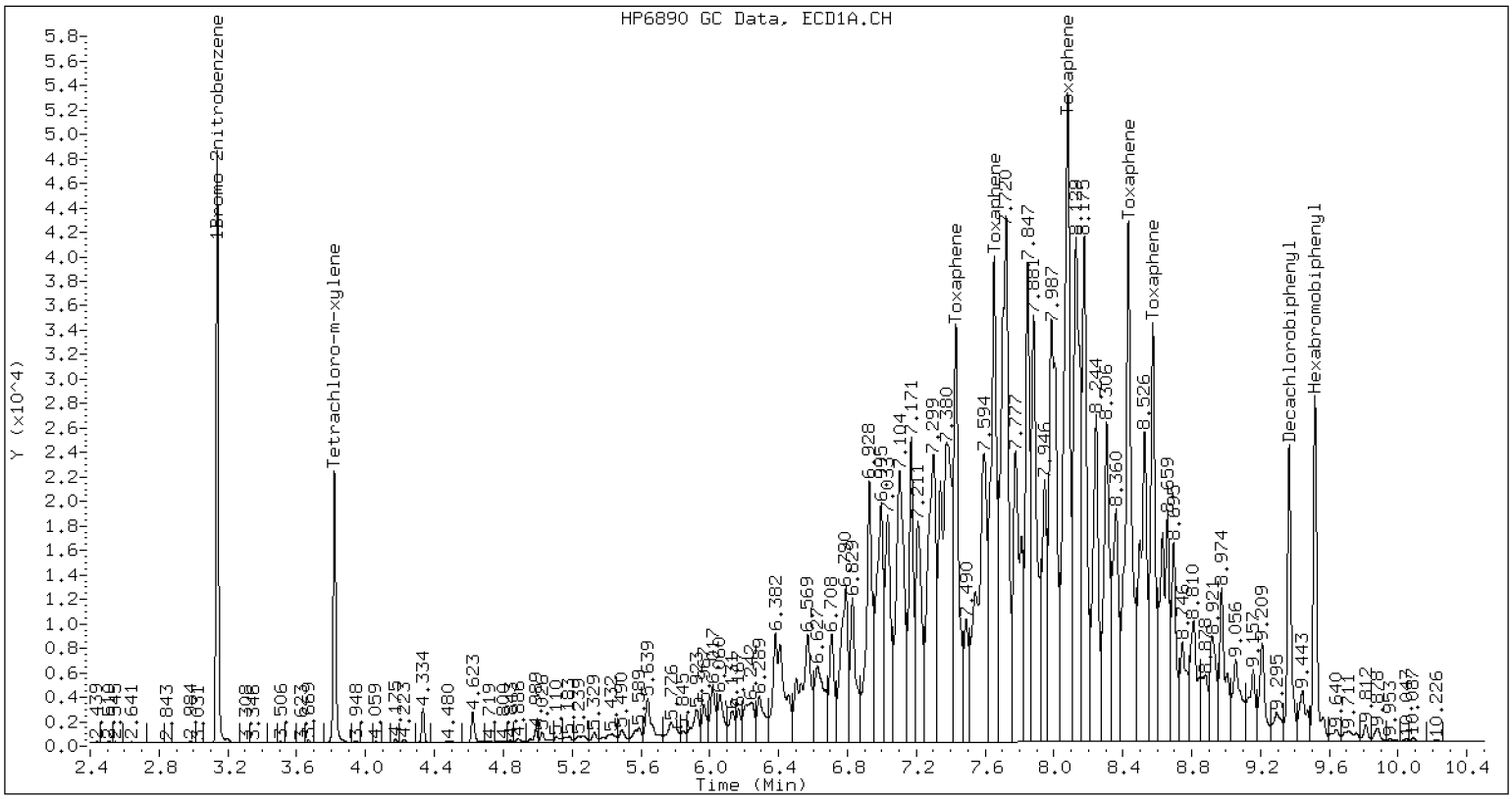
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1272946	-14.0
Hexabromobiphenyl	870561	838283	-3.7

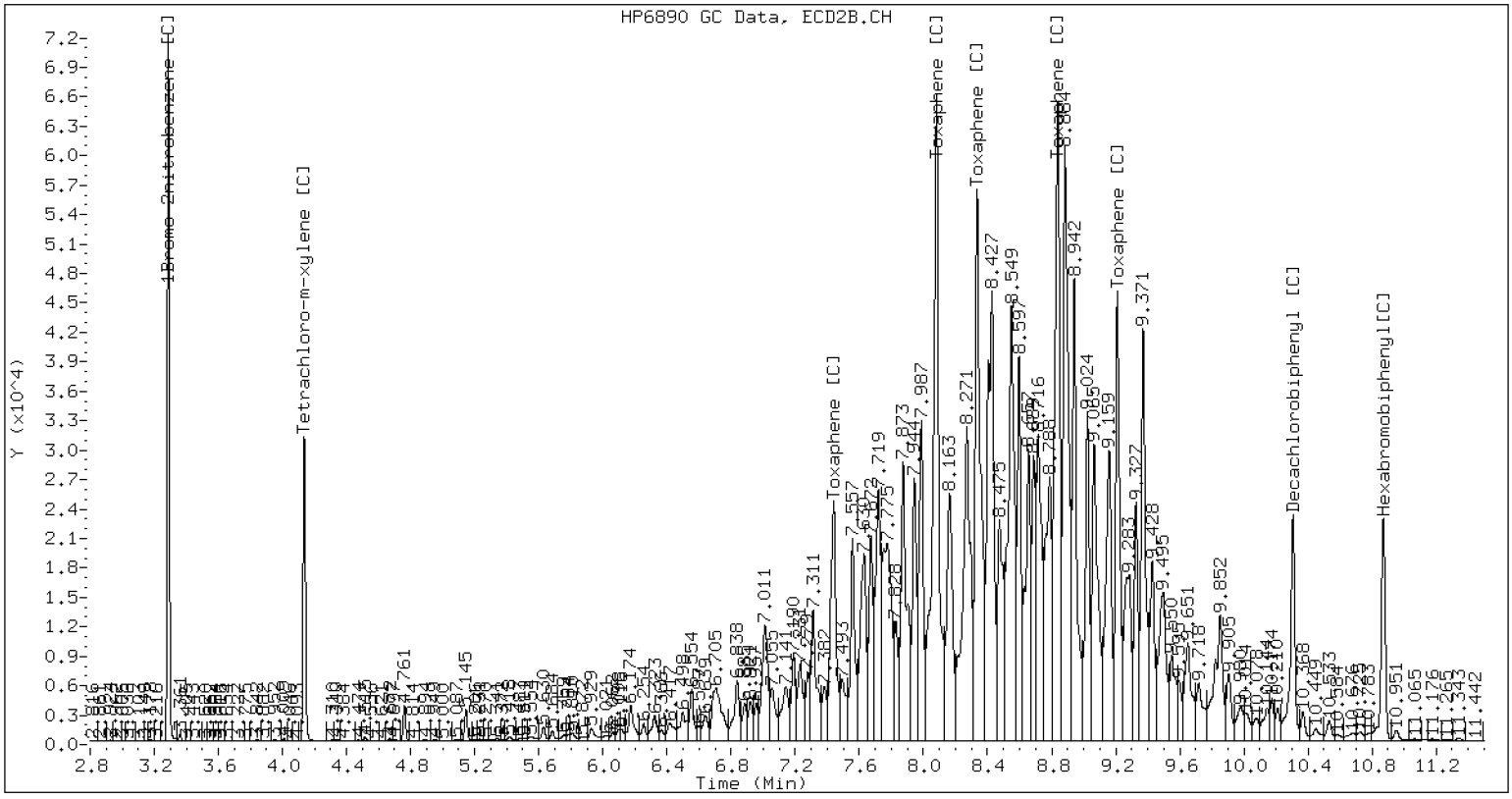
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	7.429	-0.001	1418710	4317.2	1	7.440	0.000	1190021	4409.5	
Toxaphene	2	7.652	-0.001	1929987	4387.5	2	8.082	-0.001	3433292	4309.9	
Toxaphene	3	8.079	-0.000	2596396	4328.7	3	8.335	-0.001	2739705	4405.0	
Toxaphene	4	8.432	-0.000	2227368	4710.1	4	8.839	-0.000	2971015	4448.0	
Toxaphene	5	8.575	-0.001	1346952	4730.5	5	9.210	-0.000	1678180	4586.6	
Total STX-CLPAve (5 peaks): 4494.806						Total CLP2Ave (5 peaks): 4431.818					RPD = 1
Corrected Ave (5 peaks): 4494.806						Corrected Ave (5 peaks): 4431.818					RPD = 1

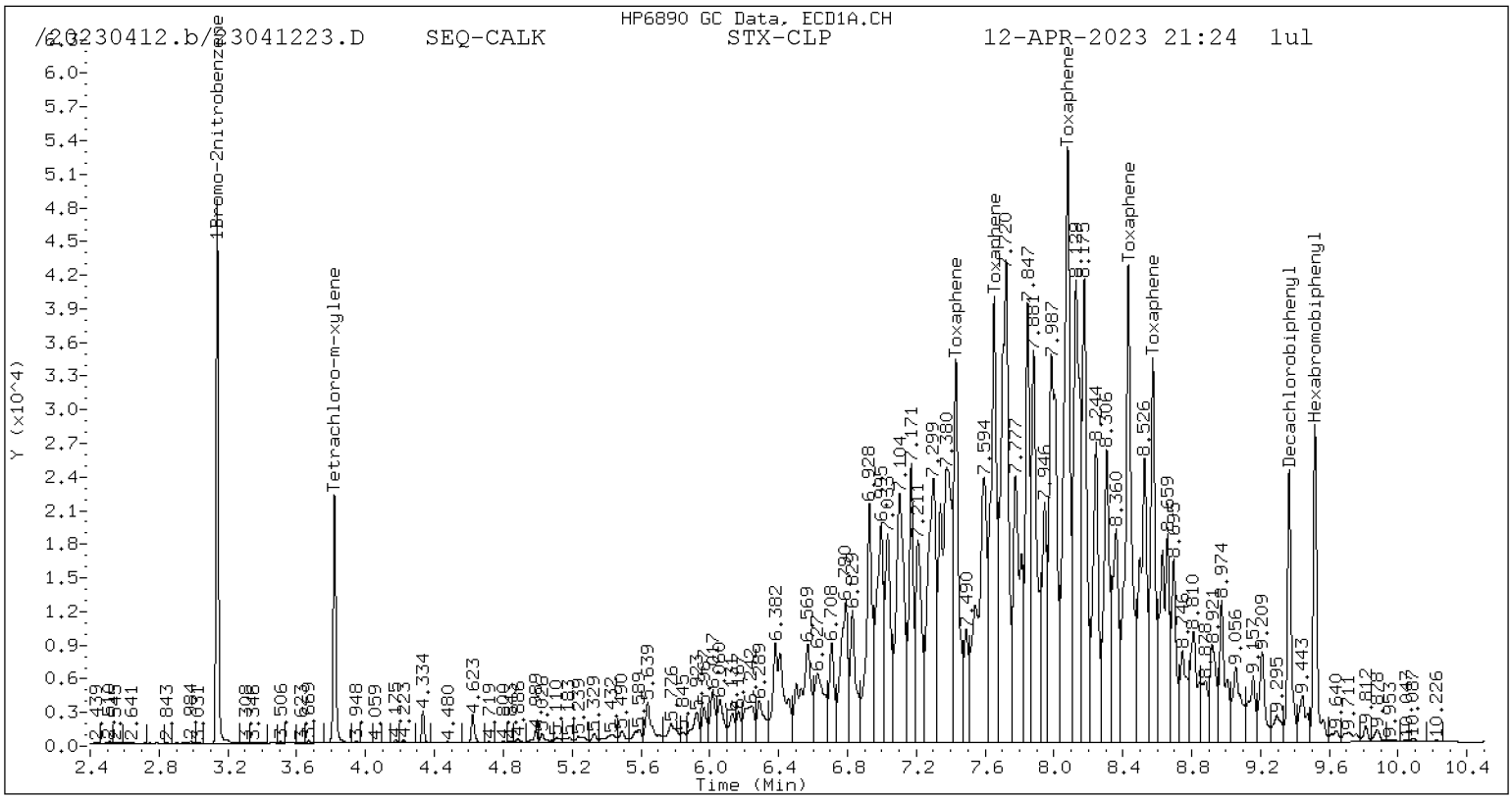
/20230412.b/23041223.D SEQ-CALK STX-CLP 12-APR-2023 21:24 1ul



/20230412.b/B20230412.b/23041223.D SEQ-CALK CLP2 12-APR-2023 21:24 1ul

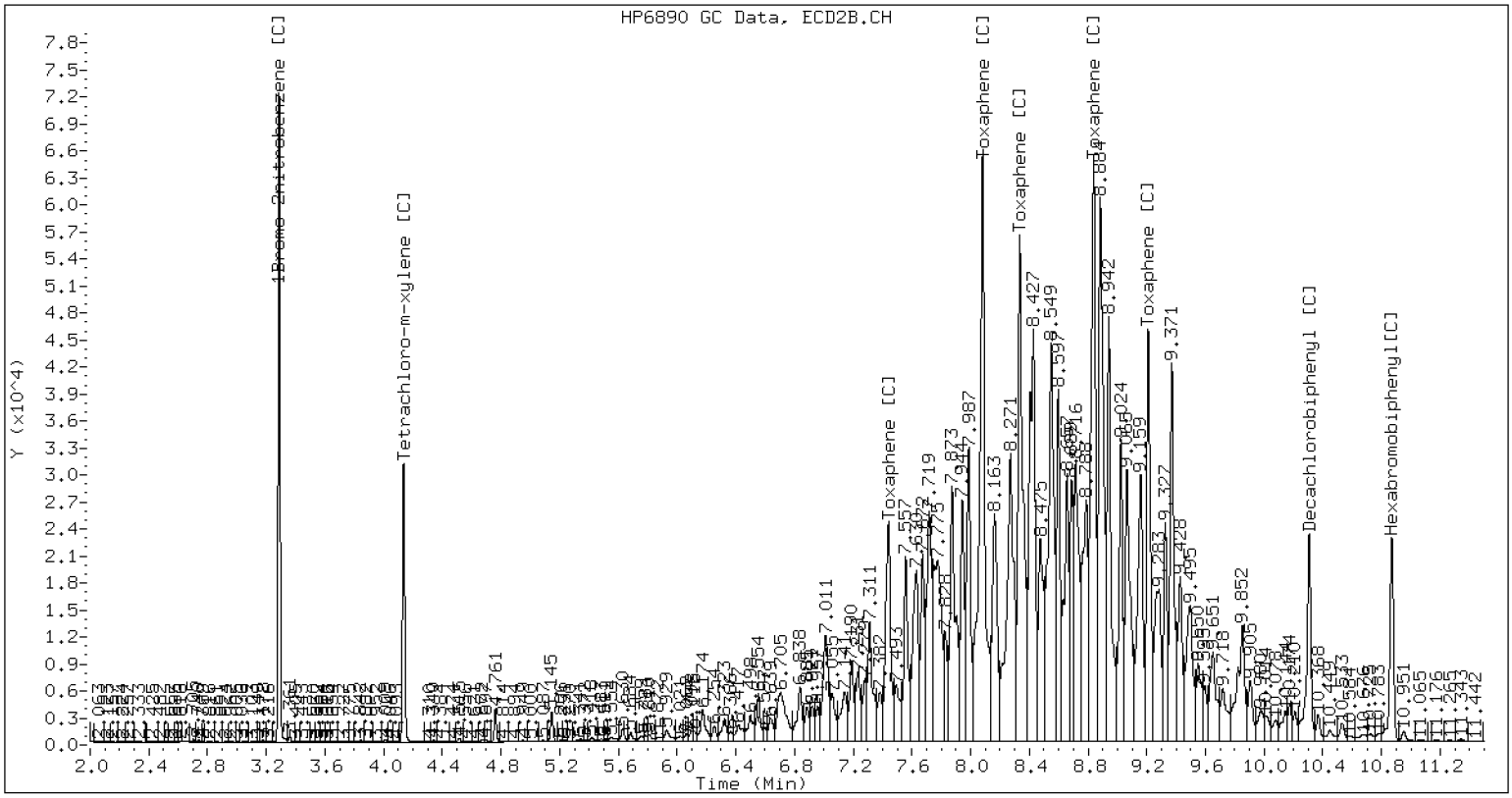


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

/20230412.b/B20230412.b/23041223.D SEQ-CALK CLP2



CLP-2 Manual Integration: NO

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041224.D
Data file 2: /20230412.b/B20230412.b/23041224.D
Method: \20230412.b\PEST.m
Compound Sublist: TOXAPH.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CALL
Client ID:
Injection Date: 12-APR-2023 21:42
Report Date: 04/13/2023 13:06
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
3.819	0.000	895380	4.136	-0.000	1216061	70.47	70.31	0.2	Tetrachloro-m-xylene
9.366	0.000	1481211	10.306	-0.000	1790917	116.97	168.24	36.0	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	908010	5.1
Hexabromobiphenyl	663237	1073617	61.9

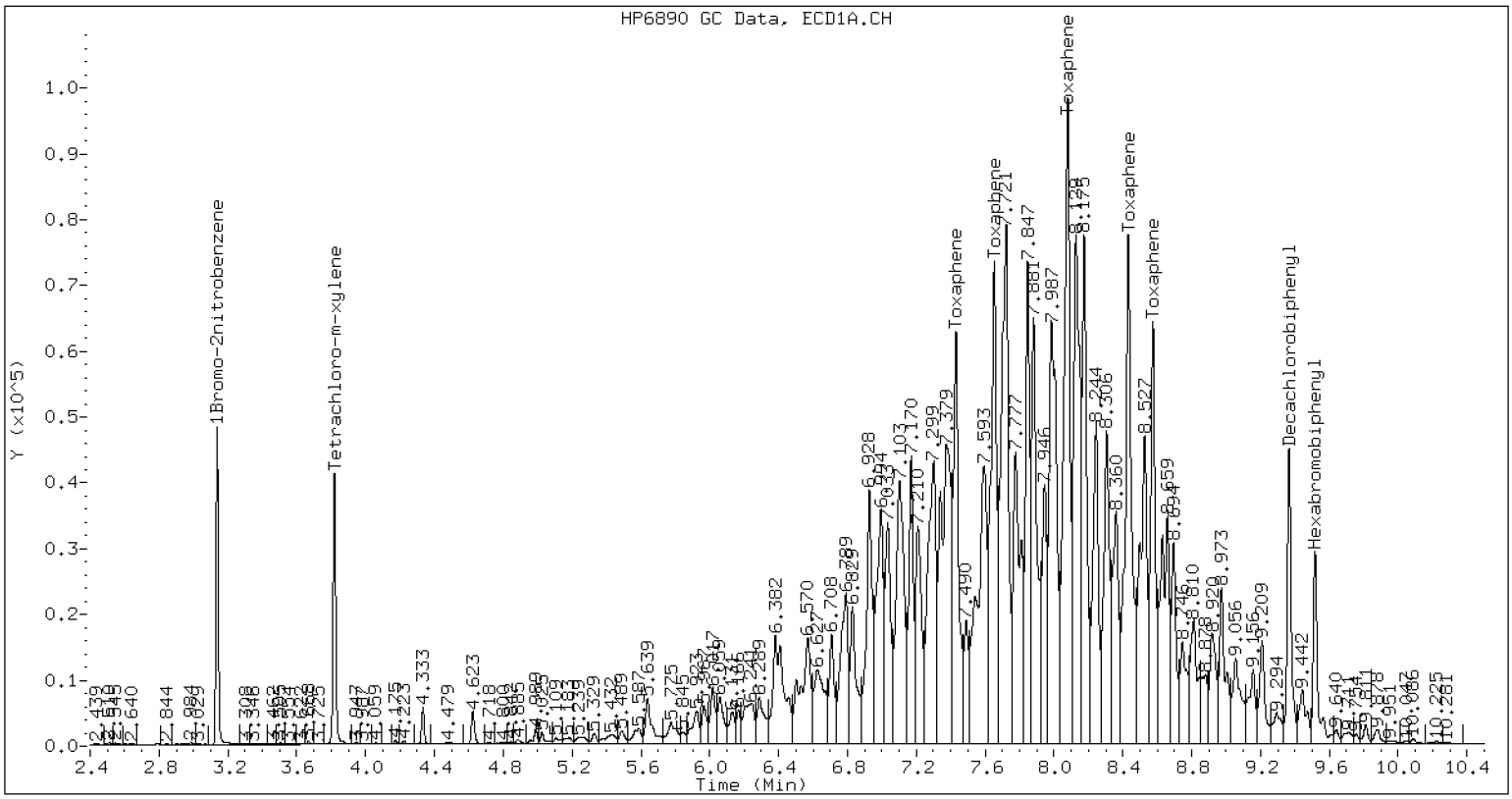
Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	1257770	-15.1
Hexabromobiphenyl	870561	881950	1.3

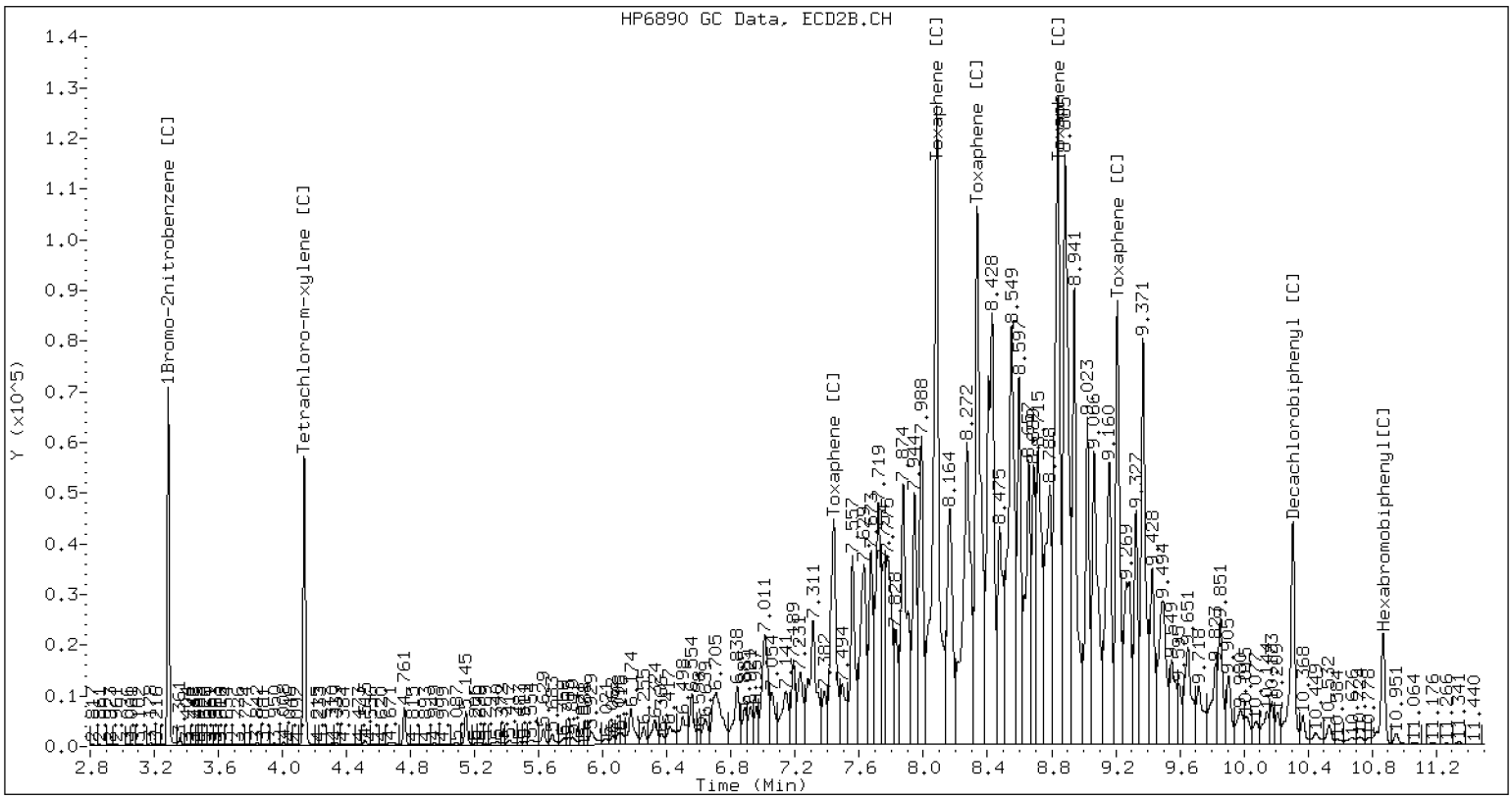
* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

		STX-CLP Col					CLP2 Col				
Cpnd	Peak#	RT	Shift	Height	Amount	Peak#	RT	Shift	Height	Amount	
Toxaphene	1	7.430	-0.000	2786527	7014.4	1	7.440	0.000	2199872	7747.7	
Toxaphene	2	7.652	-0.001	3557899	6690.7	2	8.083	0.000	6483577	7736.1	
Toxaphene	3	8.079	-0.000	4809205	6632.4	3	8.336	-0.000	5124179	7830.9	
Toxaphene	4	8.432	-0.001	4063530	7108.2	4	8.839	0.000	5684314	8088.9	
Toxaphene	5	8.575	-0.001	2519164	7318.6	5	9.210	0.000	3217244	8357.7	
Total STX-CLPAve (5 peaks): 6952.870						Total CLP2Ave (5 peaks): 7952.272					RPD = 13
Corrected Ave (5 peaks): 6952.870						Corrected Ave (5 peaks): 7952.272					RPD = 13

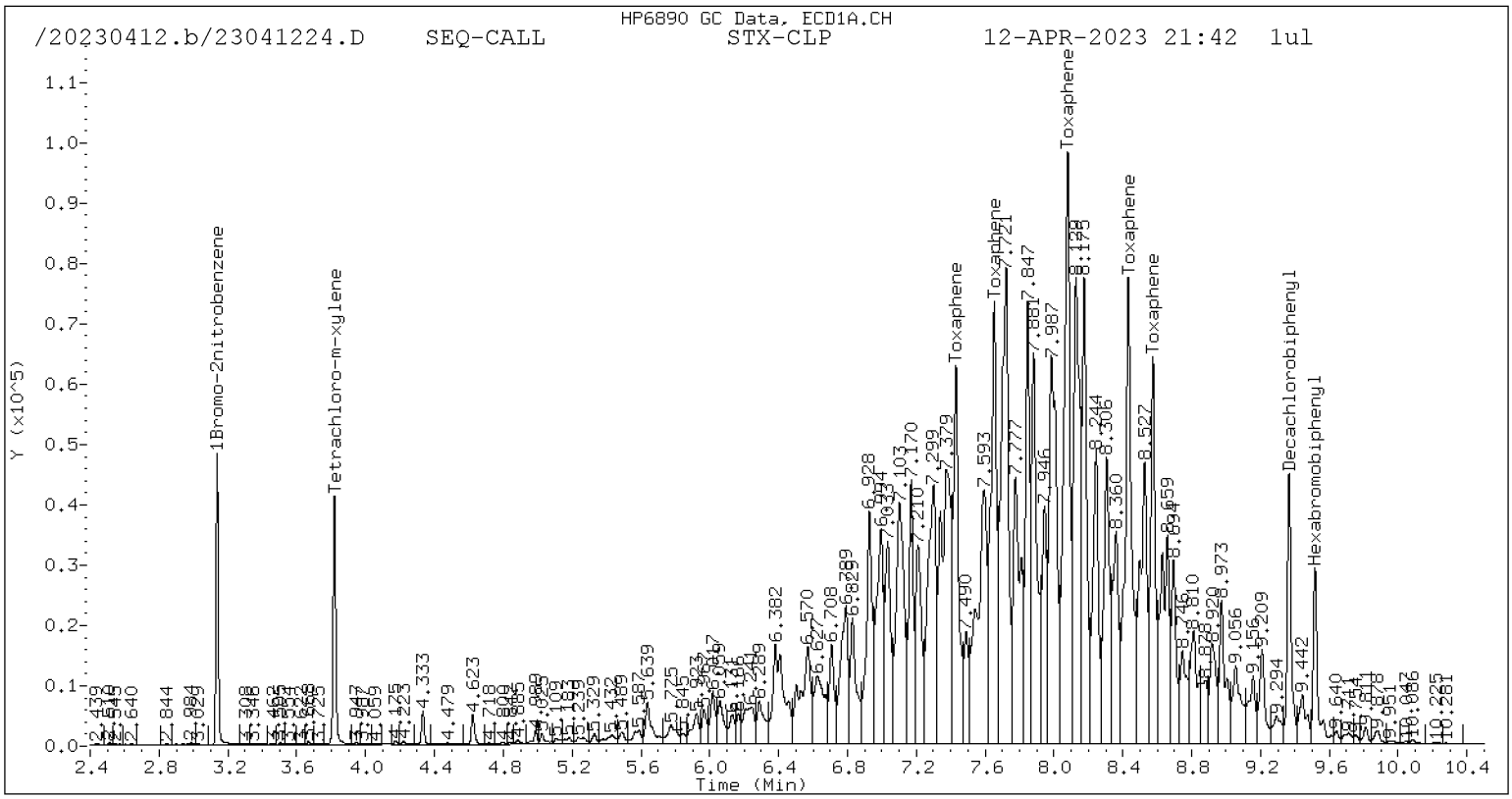
/20230412.b/23041224.D SEQ-CALL STX-CLP 12-APR-2023 21:42 1ul



/20230412.b/B20230412.b/23041224.D SEQ-CALL CLP2 12-APR-2023 21:42 1ul

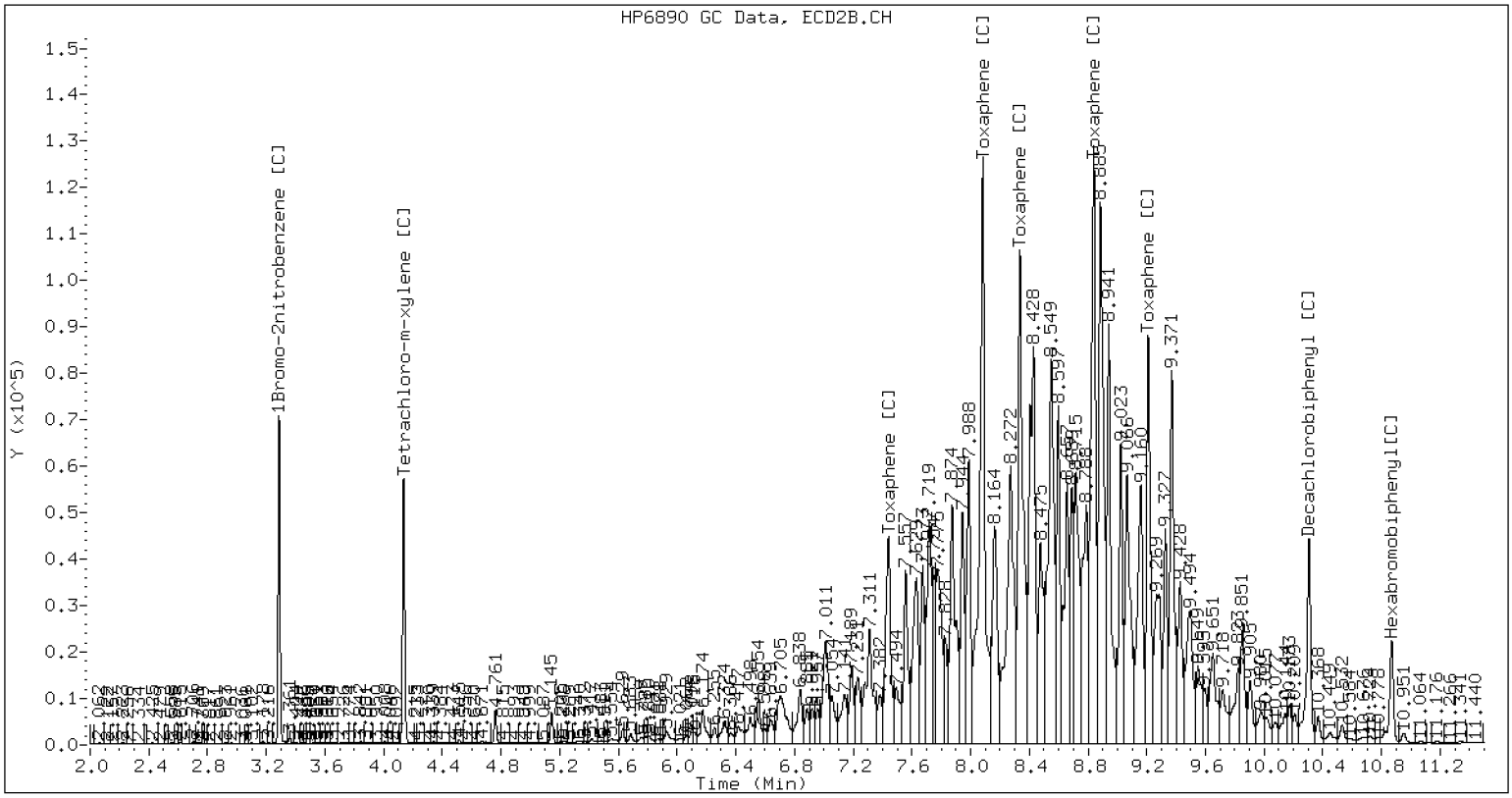


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

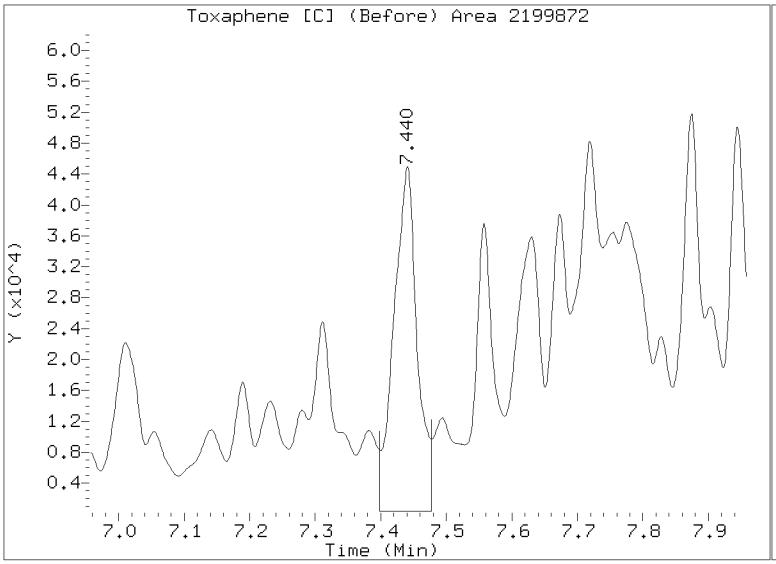
/20230412.b/B20230412.b/23041224.D SEQ-CALL CLP2

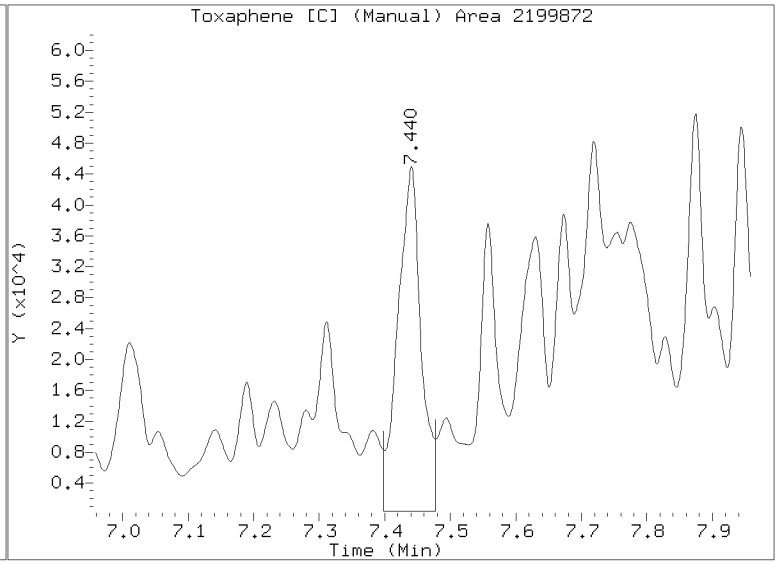


CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230412.b/B20230412.b/23041224.D
Injection Date: 12-APR-2023 21:42
Lab ID:SEQ-CALL Client ID:





Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	GD00035
Lab File ID:	23041228.D	Calibration Date:	04/12/2023
Sequence:	SLD0187	Injection Date:	04/12/23
Lab Sample ID:	SLD0187-ICV1	Injection Time:	22:55
Sequence Name:	INDA		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF		
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT	
Hexachlorobenzene	A	20.000	17.7	1.5480310	1.3661750		-11.7	+/-20	
Hexachlorobenzene [2C]	A	20.000	17.6	1.4821210	1.3050430		-11.9	+/-20	
Decachlorobiphenyl	A	40.000	31.9	0.9435985	0.7530461		-20.2	+/-20	*
Decachlorobiphenyl [2C]	A	40.000	33.5	0.9656083	0.8094568		-16.2	+/-20	
Tetrachlorometaxylene	A	40.000	35.4	1.1193850	0.9917150		-11.4	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	35.8	1.1000560	0.9834952		-10.6	+/-20	

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041228.D
Data file 2: /20230412.b/B20230412.b/23041228.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-ICV1
Client ID:
Injection Date: 12-APR-2023 22:55
Report Date: 04/14/2023 08:20
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.334	0.001	207474	4.761	-0.001	284638	17.97	18.02	0.3	alpha-BHC
4.718	0.001	79749	5.229	-0.001	108826	17.30	17.35	0.3	beta-BHC
4.902	0.001	188168	5.577	-0.000	236979	18.00	16.85	6.6	delta-BHC
4.637	0.000	181942	5.151	-0.001	248772	17.93	17.92	0.1	gamma-BHC (Lindane)
5.125	0.001	169303	5.671	-0.000	221956	18.03	18.23	1.1	Heptachlor
5.449	0.001	171374	6.070	-0.001	227085	17.94	17.96	0.1	Aldrin
6.125	0.000	147922	6.728	-0.001	191017	17.16	17.17	0.0	Heptachlor epoxide b
6.568	0.001	138197	7.172	-0.000	168955	17.98	17.82	0.9	Endosulfan I
6.828	0.000	292815	7.466	0.000	372477	36.01	35.84	0.5	Dieldrin
6.490	0.001	275927	7.257	0.000	356702	35.98	36.06	0.2	4,4'-DDE
7.079	0.001	245544	7.789	-0.001	306841	33.13	32.56	1.7	Endrin
7.314	0.000	244805	8.000	-0.001	303230	35.28	34.06	3.5	Endosulfan II
7.137	0.001	235742	7.862	-0.000	294896	35.44	34.23	3.5	4,4'-DDD
8.178	0.001	226658	8.597	-0.001	277723	34.64	33.88	2.2	Endosulfan sulfate
7.431	0.000	252763	8.180	-0.001	301143	35.28	34.65	1.8	4,4'-DDT
7.920	-0.000	503445	8.820	-0.002	607472	164.03	163.00	0.6	Methoxychlor
8.452	0.000	256795	9.119	-0.000	304196	34.40	33.98	1.2	Endrin ketone
7.743	-0.000	185676	8.331	-0.000	217531	35.06	33.79	3.7	Endrin aldehyde
6.267	0.001	150498	6.939	0.000	188905	17.84	17.70	0.8	trans-Chlordane
6.414	0.001	150678	7.099	-0.001	185516	17.79	17.66	0.8	cis-Chlordane
2.309	-0.000	207080	2.453	-0.000	181778	17.39	12.68	31.4	Hexachlorobutadiene
4.175	0.000	180316	4.622	0.000	242905	17.65	17.61	0.2	Hexachlorobenzene
3.820	0.001	261785	4.136	-0.000	366112	35.44	35.76	0.9	Tetrachloro-m-xylene
9.366	0.000	161464	10.306	0.000	189508	31.92	33.53	4.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

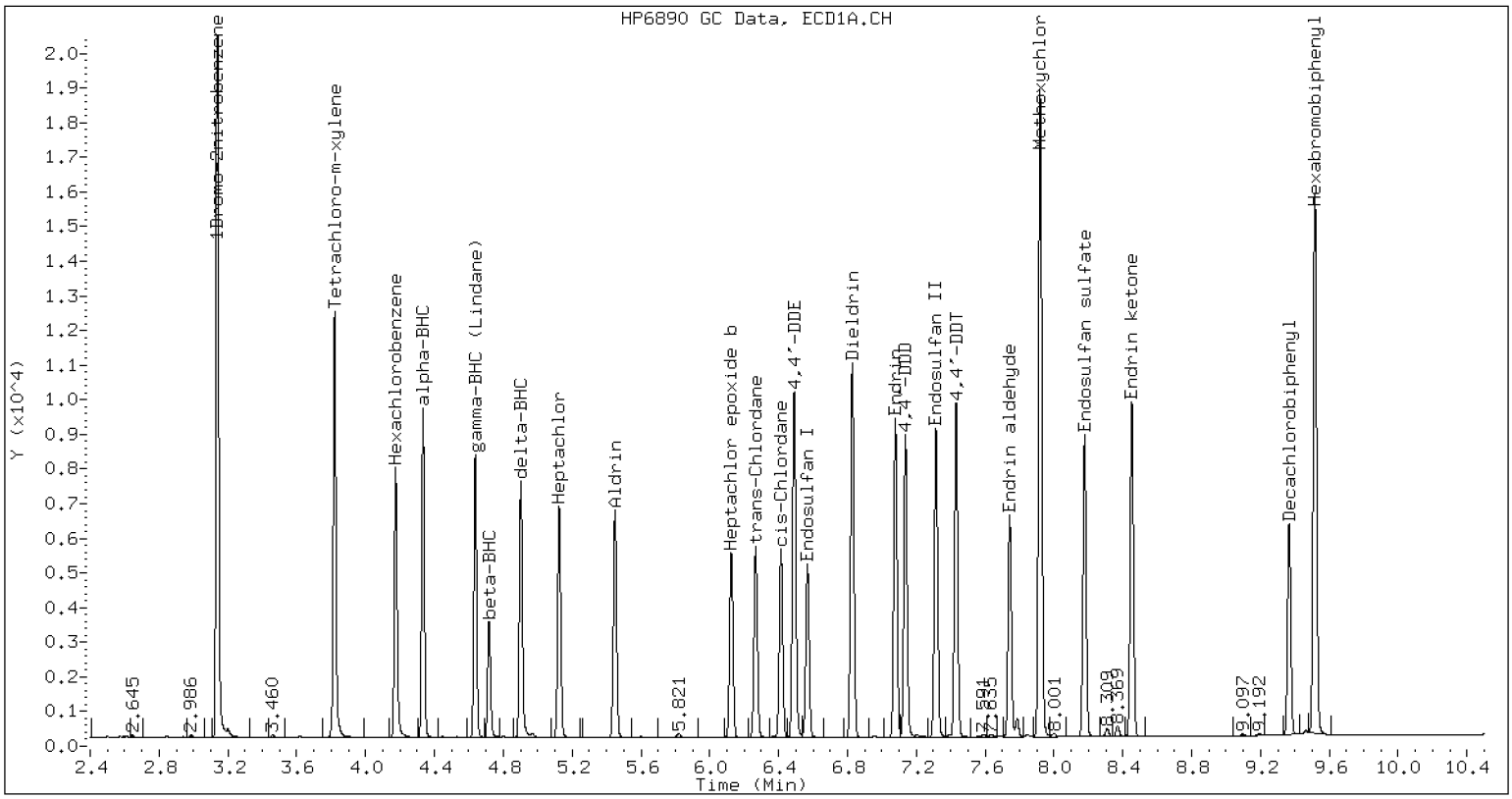
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	527944	-38.9
Hexabromobiphenyl	663237	428829	-35.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	744512	-49.7
Hexabromobiphenyl	870561	468235	-46.2

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230412.b/23041228.D SEQ-ICV1 STX-CLP 12-APR-2023 22:55 1ul



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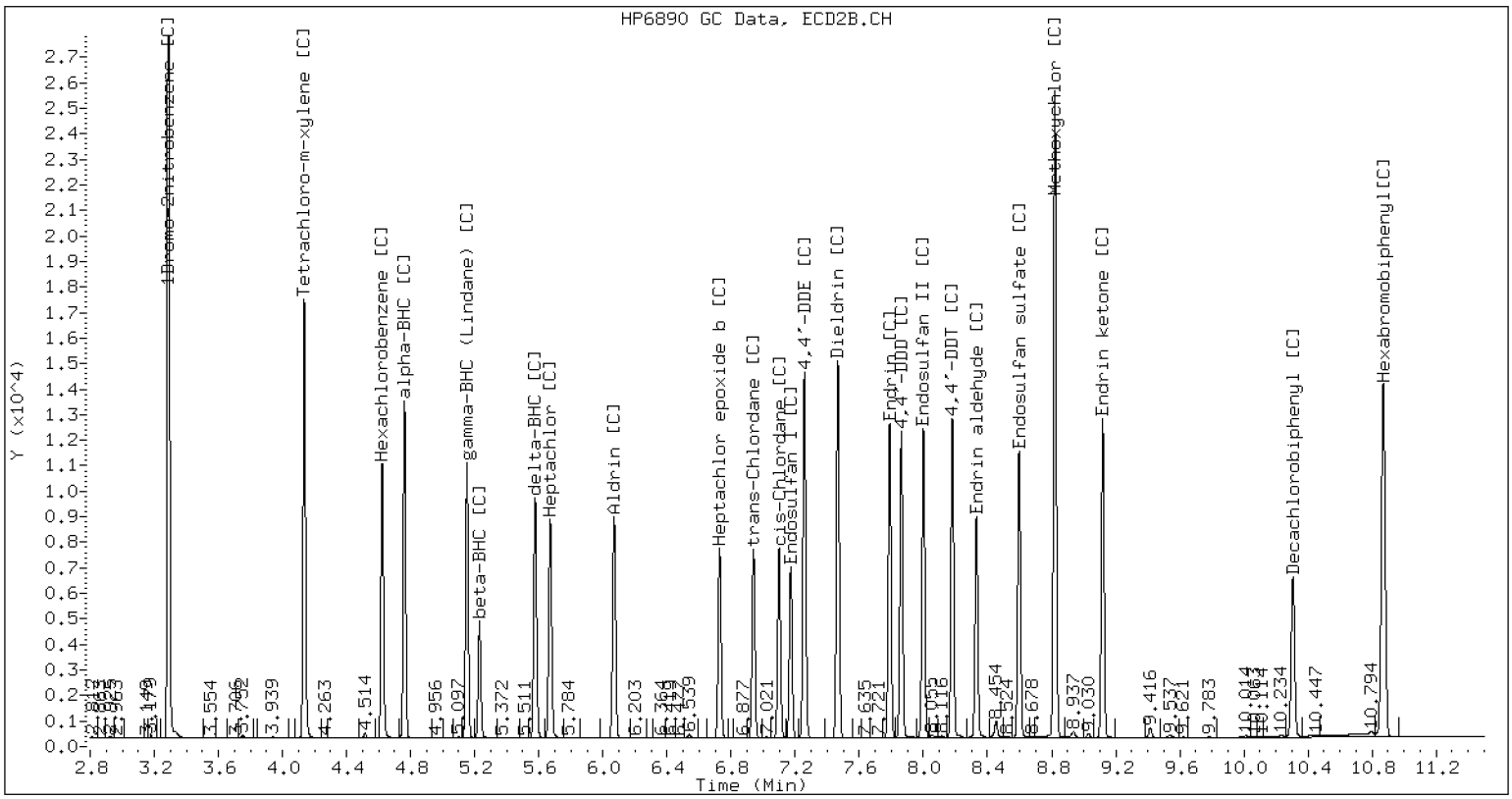
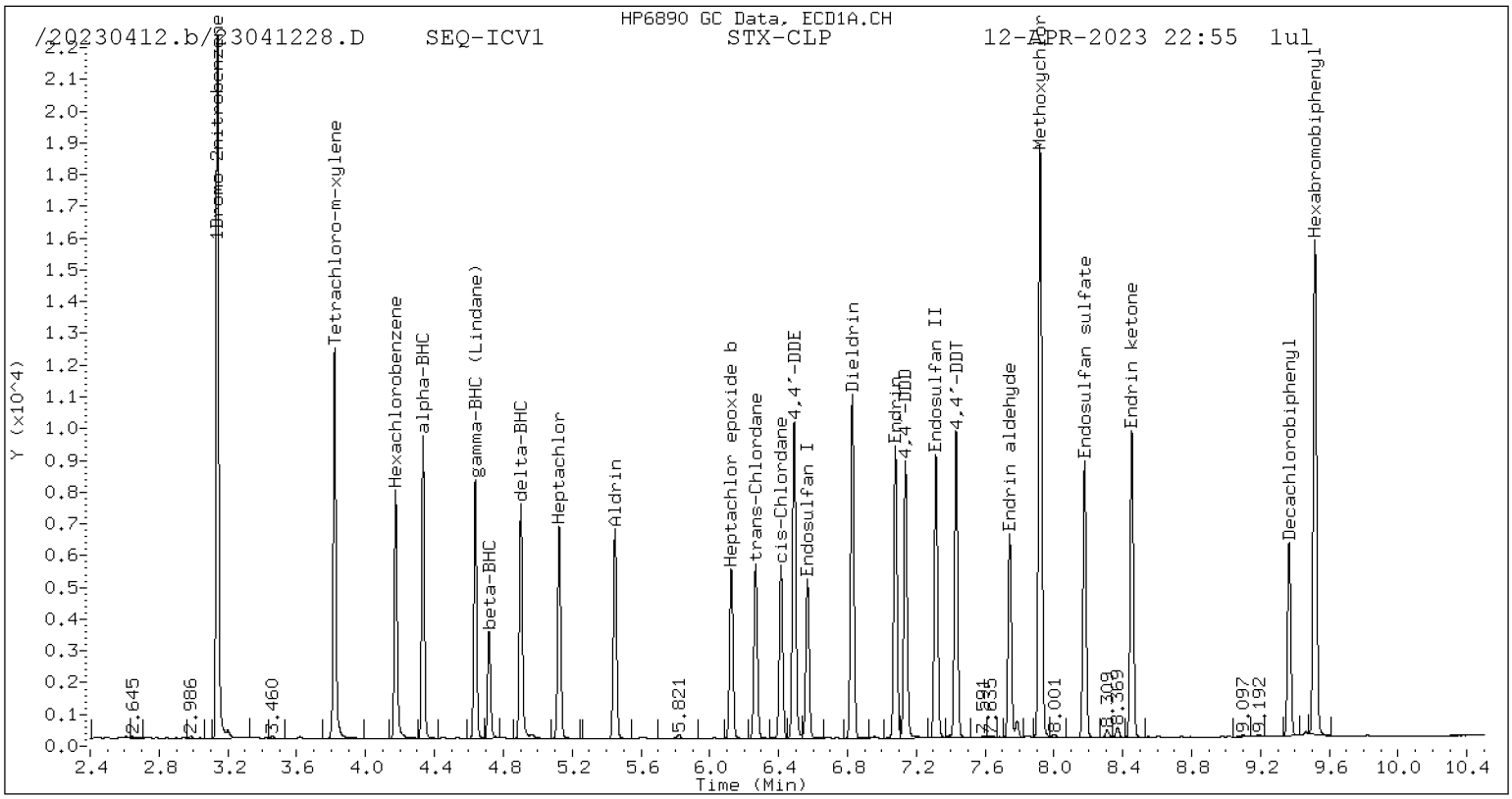


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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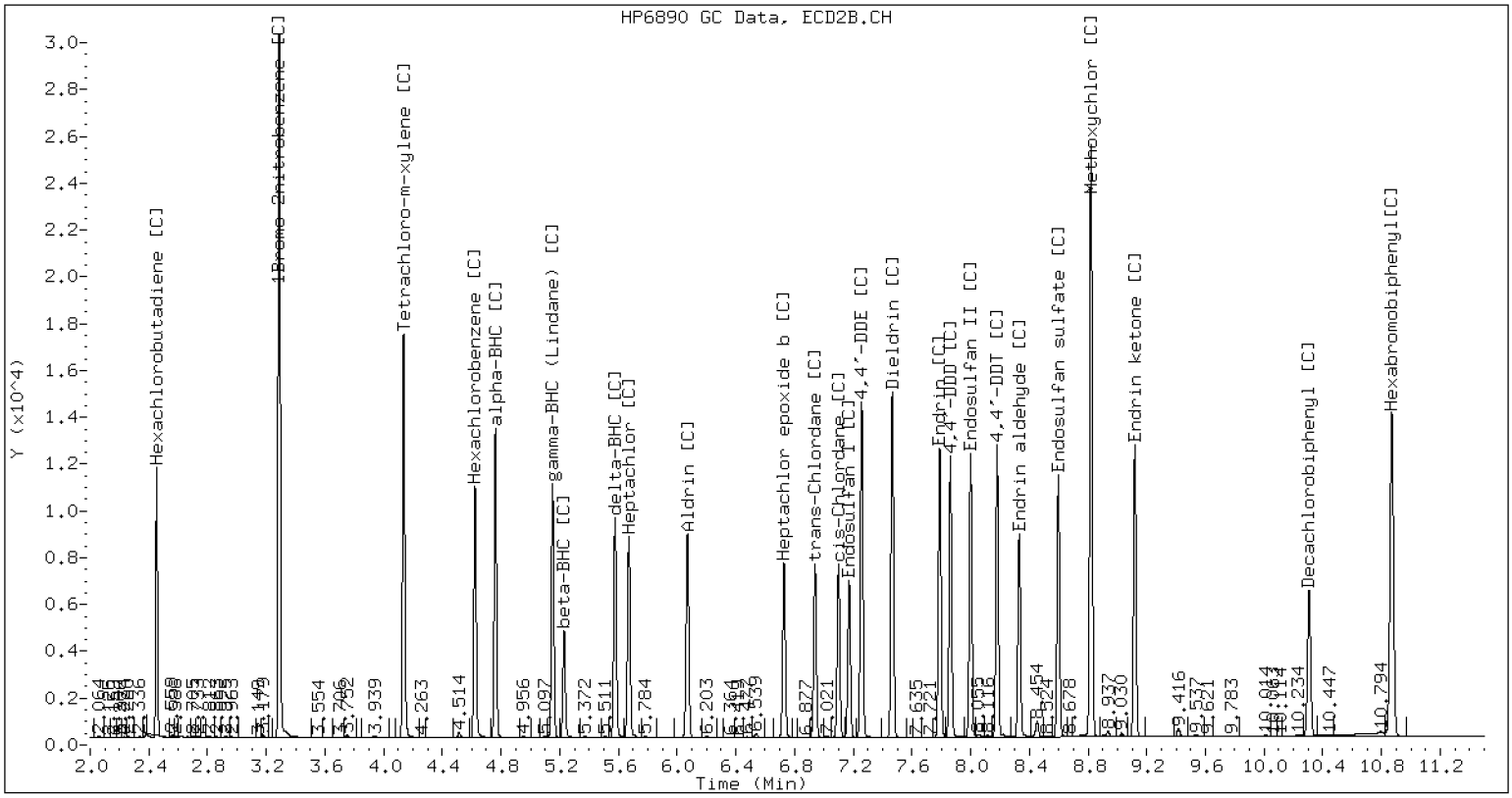


CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	GD00035
Lab File ID:	23051303.D	Calibration Date:	04/12/2023
Sequence:	SLE0423	Injection Date:	05/13/23
Lab Sample ID:	SLE0423-ICV1	Injection Time:	16:11
Sequence Name:	INDA		

		CONC. (ng/mL)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Hexachlorobenzene	A	20.000	18.2	1.5480310	1.4089830		-9.0	+/-20
Hexachlorobenzene [2C]	A	20.000	19.2	1.4821210	1.4271930		-4.0	+/-20
Decachlorobiphenyl	A	40.000	33.0	0.9435985	0.7787650		-17.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	36.4	0.9656083	0.8796870		-9.0	+/-20
Tetrachlorometaxylene	A	40.000	32.0	1.1193850	0.8947082		-20.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.1	1.1000560	1.0752180		-2.3	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230513.b/23051303.D
Data file 2: /20230513.b/B20230513.b/23051303.D
Method: \20230513.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SLE0423-ICV1
Client ID:
Injection Date: 13-MAY-2023 16:11
Report Date: 05/25/2023 19:14
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.311	0.000	308653	4.736	0.000	265740	18.91	19.56	3.3	alpha-BHC
4.694	0.000	118143	5.202	0.000	102072	18.13	18.91	4.2	beta-BHC
4.878	0.000	272698	5.549	0.000	134046	18.45	11.08	49.9*	delta-BHC
4.614	0.000	268745	5.125	0.000	230509	18.74	19.29	2.9	gamma-BHC (Lindane)
5.100	0.000	249767	5.641	0.000	210605	18.82	20.10	6.6	Heptachlor
5.423	0.000	254135	6.039	0.000	213949	18.82	19.67	4.4	Aldrin
6.097	0.000	217811	6.699	0.000	179833	17.87	18.78	5.0	Heptachlor epoxide b
6.540	0.000	203825	7.143	0.000	158888	18.76	19.48	3.7	Endosulfan I
6.801	0.000	431492	7.437	0.000	349433	37.53	39.08	4.1	Dieldrin
6.464	0.000	411916	7.229	0.000	335467	38.00	39.42	3.7	4,4'-DDE
7.052	0.000	380226	7.761	0.000	301554	34.90	35.27	1.0	Endrin
7.288	0.000	352875	7.972	0.000	281800	34.59	34.89	0.9	Endosulfan II
7.112	0.000	349500	7.835	0.000	276141	35.74	35.33	1.2	4,4'-DDD
8.152	0.000	325684	8.571	0.000	256028	33.86	34.42	1.6	Endosulfan sulfate
7.406	0.000	354951	8.154	0.000	274314	33.71	34.79	3.2	4,4'-DDT
7.896	0.000	744334	8.795	0.000	576200	164.98	170.41	3.2	Methoxychlor
8.426	0.000	345530	9.092	0.000	273731	31.48	33.70	6.8	Endrin ketone
7.717	0.000	263282	8.304	0.000	197882	33.82	33.88	0.2	Endrin aldehyde
6.240	0.000	221546	6.910	0.000	177890	18.58	19.38	4.2	trans-Chlordane
6.387	0.000	221078	7.071	0.000	176076	18.47	19.48	5.3	cis-Chlordane
2.294	0.000	279067	2.438	0.000	116787	16.58	9.47	54.6*	Hexachlorobutadiene
4.154	0.000	262917	4.598	0.000	228556	18.20	19.26	5.6	Hexachlorobenzene
3.799	0.000	333906	4.114	0.000	344379	31.97	39.10	20.1	Tetrachloro-m-xylene
9.342	0.000	245457	10.274	0.000	186853	33.01	36.44	9.9	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

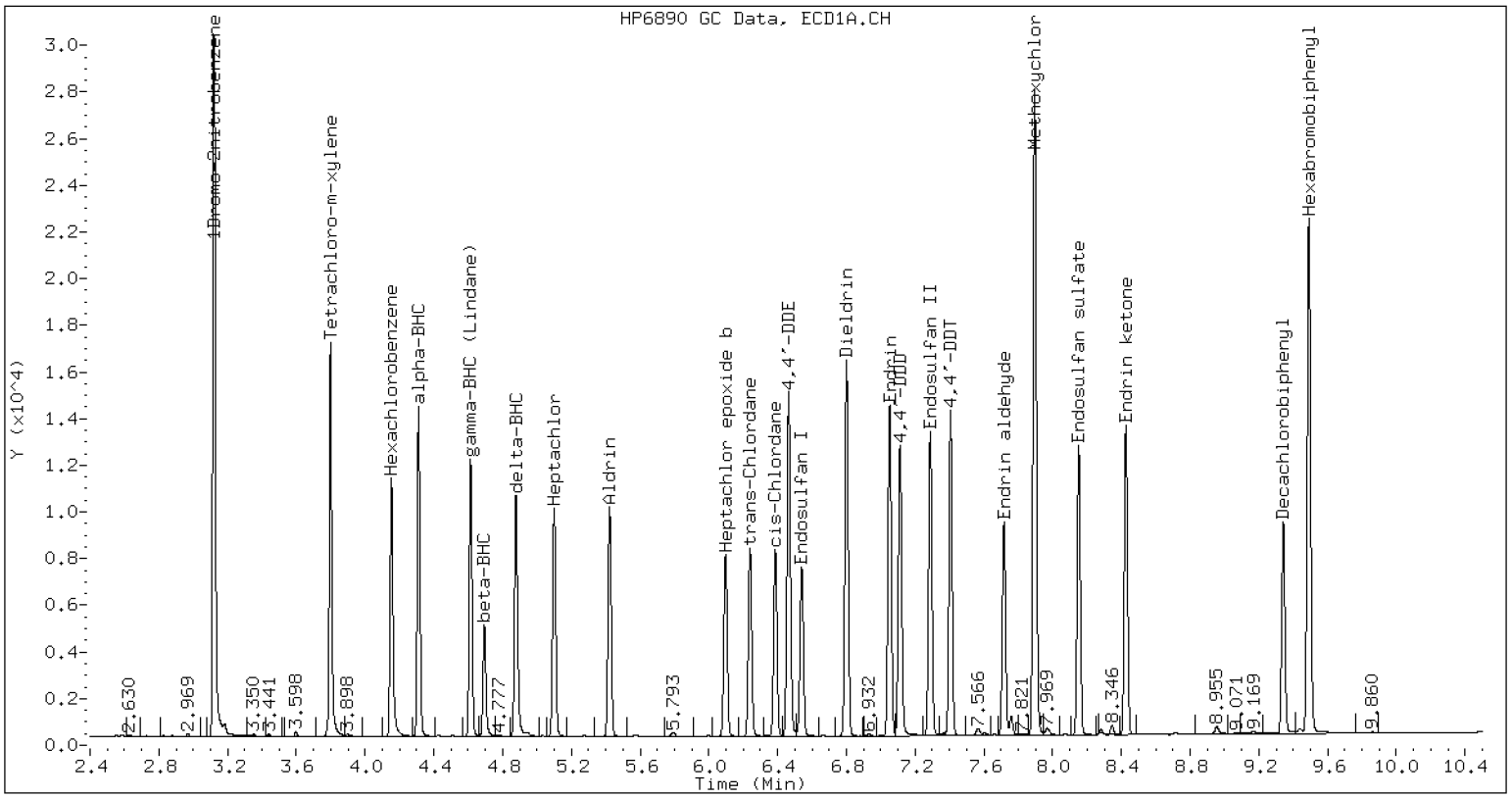
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	932757	746402	-20.0
Hexabromobiphenyl	745426	630375	-15.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1248665	640575	-48.7
Hexabromobiphenyl	754634	424817	-43.7

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230513.b/23051303.D SLE0423-ICV1 STX-CLP 13-MAY-2023 16:11 1ul



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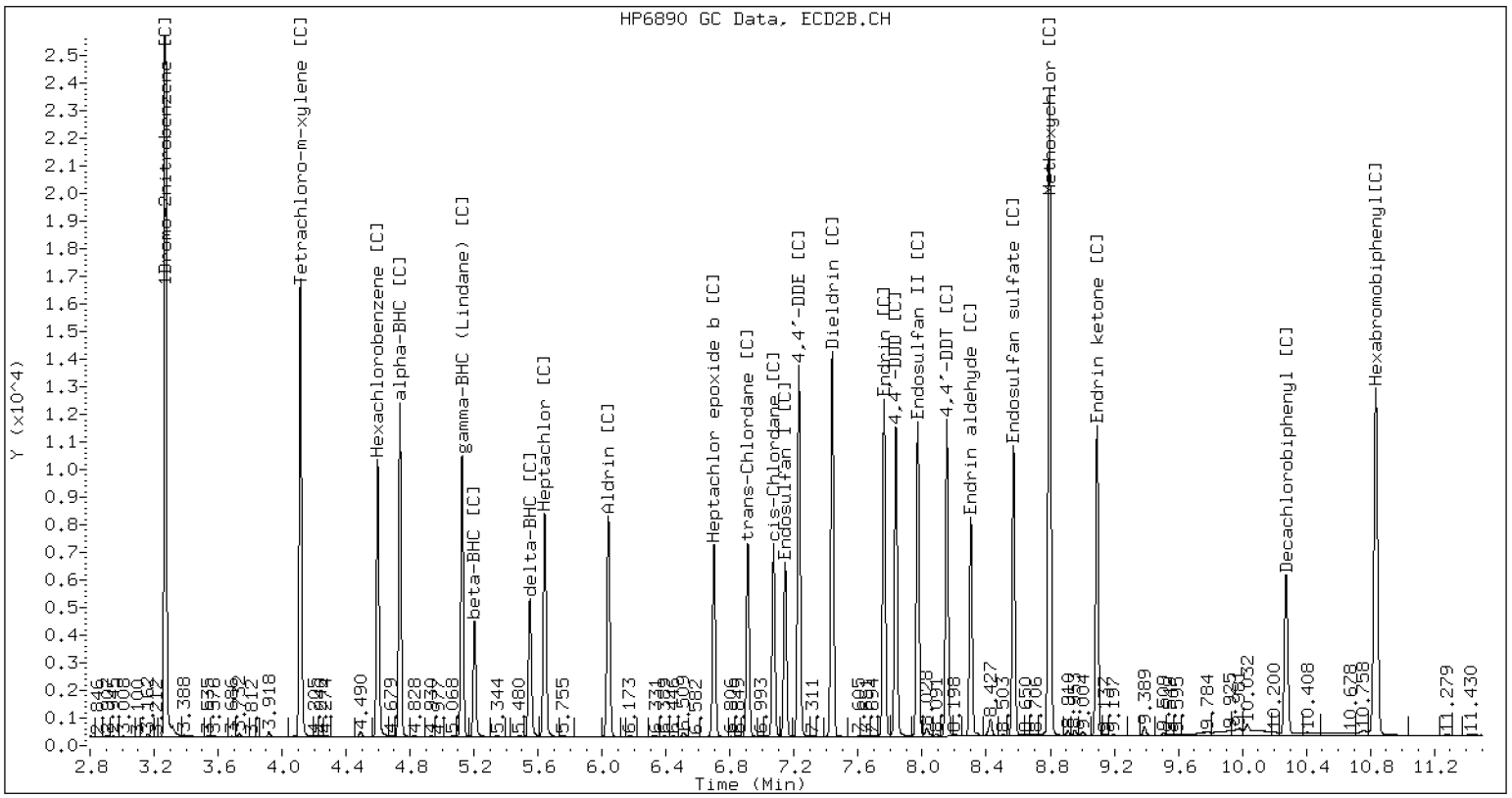
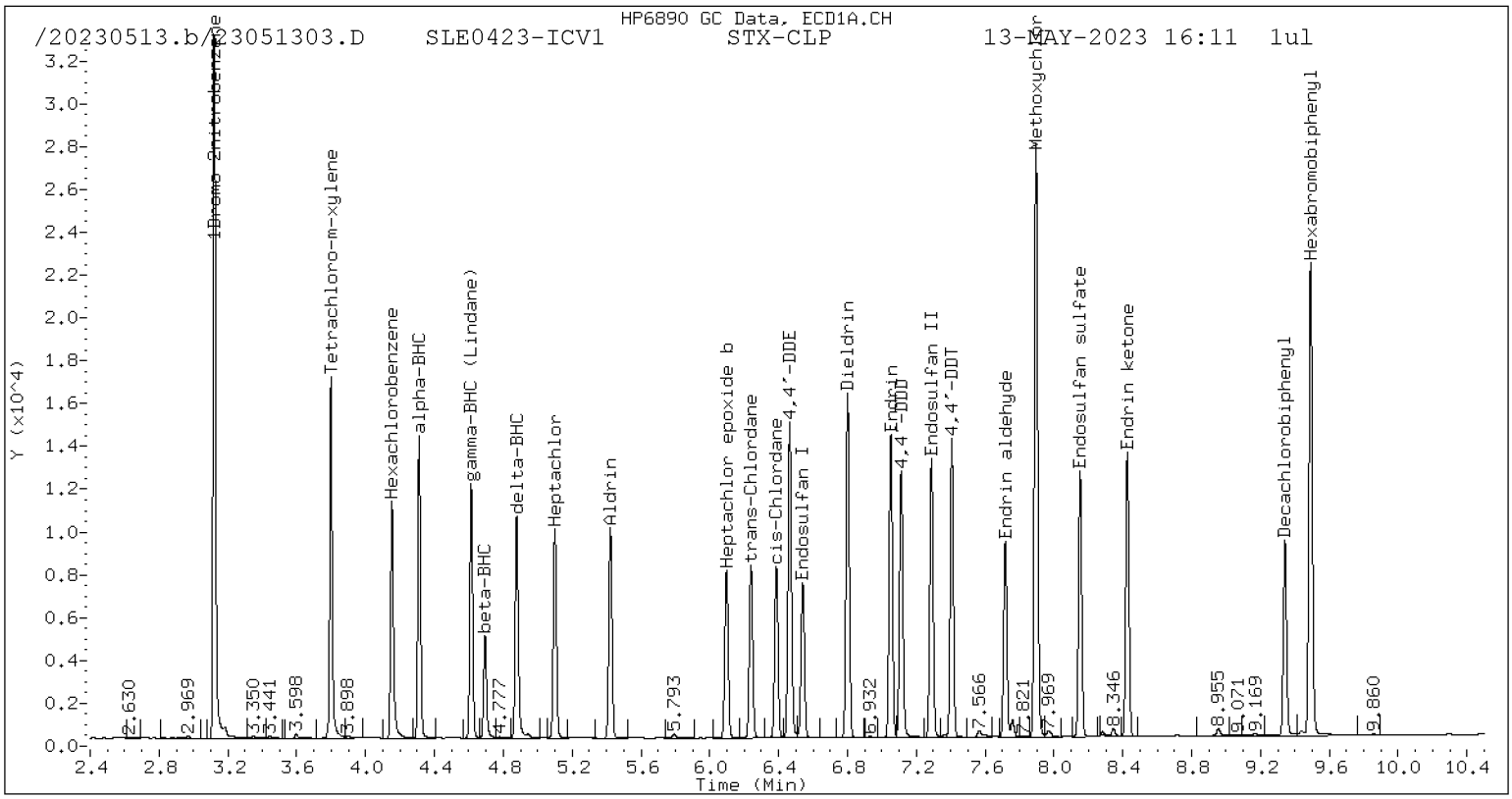


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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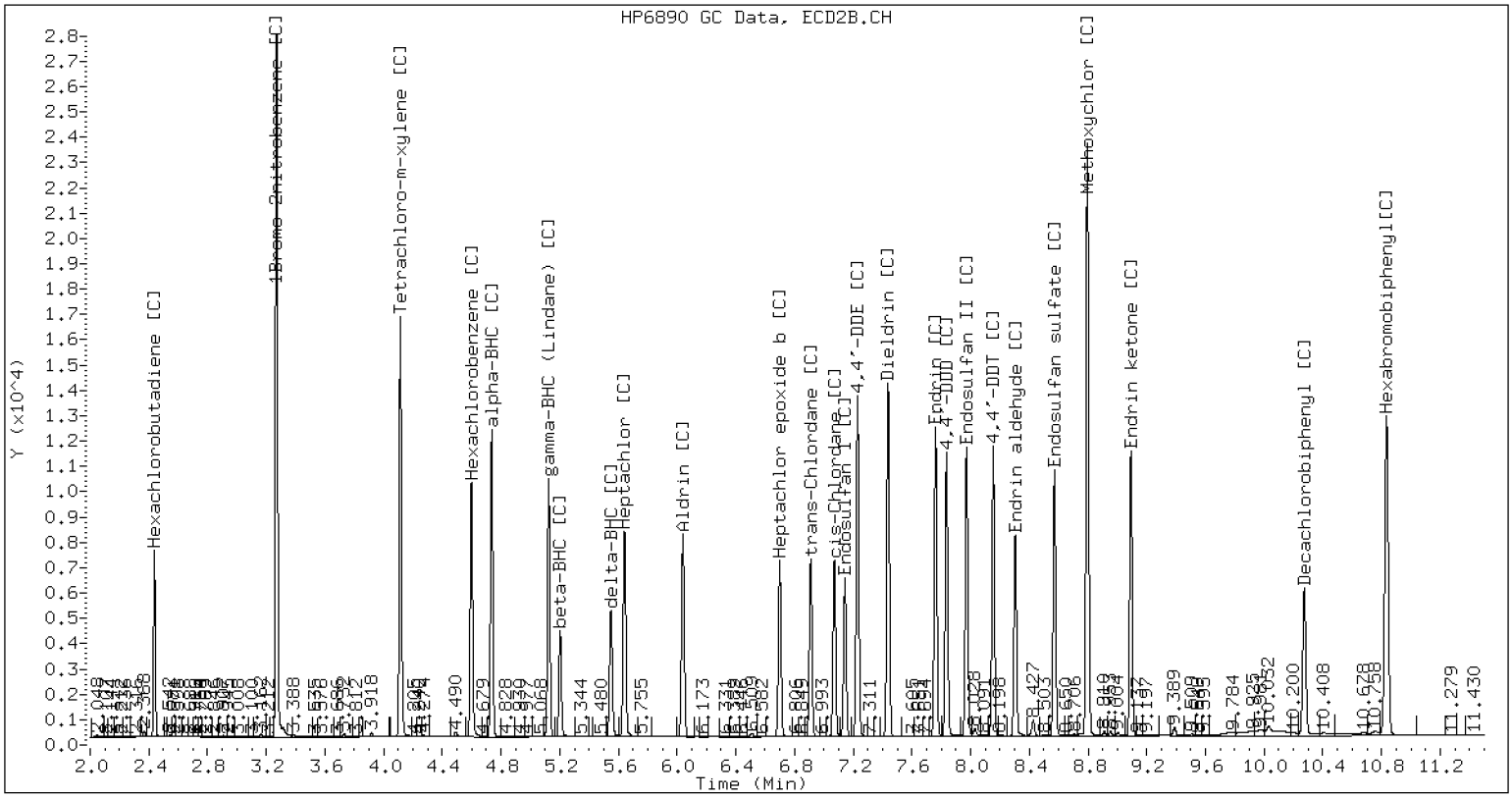


CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	GD00035
Lab File ID:	23041235.D	Calibration Date:	04/12/2023
Sequence:	SLD0187	Injection Date:	04/13/23
Lab Sample ID:	SLD0187-CCV1	Injection Time:	01:04
Sequence Name:	INDA		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF		
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT	
Hexachlorobenzene	A	20.000	17.7	1.5480310	1.3705910		-11.5	+/-20	
Hexachlorobenzene [2C]	A	20.000	17.6	1.4821210	1.3041330		-12.0	+/-20	
Decachlorobiphenyl	A	40.000	31.5	0.9435985	0.7437408		-21.2	+/-20	*
Decachlorobiphenyl [2C]	A	40.000	33.7	0.9656083	0.8132911		-15.8	+/-20	
Tetrachlorometaxylene	A	40.000	35.5	1.1193850	0.9929160		-11.3	+/-20	
Tetrachlorometaxylene [2C]	A	40.000	35.7	1.1000560	0.9804321		-10.9	+/-20	

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230412.b/23041235.D
Data file 2: /20230412.b/B20230412.b/23041235.D
Method: \20230412.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SEQ-CCV1
Client ID:
Injection Date: 13-APR-2023 01:04
Report Date: 04/14/2023 08:21
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.333	0.000	208008	4.761	-0.001	287888	18.06	18.02	0.2	alpha-BHC
4.717	0.000	79862	5.229	-0.001	109669	17.36	17.28	0.5	beta-BHC
4.902	0.001	188433	5.576	-0.001	237187	18.07	16.67	8.0	delta-BHC
4.636	-0.001	182247	5.151	-0.001	252117	18.00	17.94	0.3	gamma-BHC (Lindane)
5.124	0.000	169287	5.670	-0.001	224742	18.07	18.24	0.9	Heptachlor
5.448	0.000	171419	6.070	-0.001	229274	17.99	17.93	0.3	Aldrin
6.124	-0.001	148660	6.728	-0.001	192857	17.28	17.13	0.9	Heptachlor epoxide b
6.566	-0.001	138285	7.171	-0.001	170414	18.03	17.76	1.5	Endosulfan I
6.827	-0.001	293527	7.465	-0.001	375070	36.17	35.67	1.4	Dieldrin
6.489	-0.000	275619	7.256	-0.001	359780	36.02	35.95	0.2	4,4'-DDE
7.078	-0.000	245317	7.788	-0.002	307967	32.47	32.73	0.8	Endrin
7.313	-0.001	244401	7.999	-0.002	305137	34.55	34.32	0.6	Endosulfan II
7.136	0.000	235703	7.861	-0.001	297615	34.76	34.60	0.5	4,4'-DDD
8.177	-0.000	226454	8.596	-0.002	280518	33.95	34.27	0.9	Endosulfan sulfate
7.430	-0.001	252702	8.179	-0.002	304879	34.60	35.13	1.5	4,4'-DDT
7.918	-0.002	503978	8.819	-0.003	618699	161.08	166.25	3.2	Methoxychlor
8.451	-0.001	257108	9.118	-0.001	308074	33.78	34.46	2.0	Endrin ketone
7.742	-0.001	185692	8.330	-0.001	219950	34.39	34.22	0.5	Endrin aldehyde
6.266	-0.000	150597	6.938	-0.001	190549	17.89	17.65	1.4	trans-Chlordane
6.413	-0.000	150637	7.099	-0.001	186807	17.83	17.57	1.4	cis-Chlordane
2.309	-0.000	206970	2.453	-0.000	178864	17.42	12.33	34.2	Hexachlorobutadiene
4.175	-0.000	180515	4.622	-0.000	245593	17.71	17.60	0.6	Hexachlorobenzene
3.820	0.001	261546	4.136	-0.000	369268	35.48	35.65	0.5	Tetrachloro-m-xylene
9.366	-0.000	162565	10.304	-0.002	190132	31.53	33.69	6.6	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

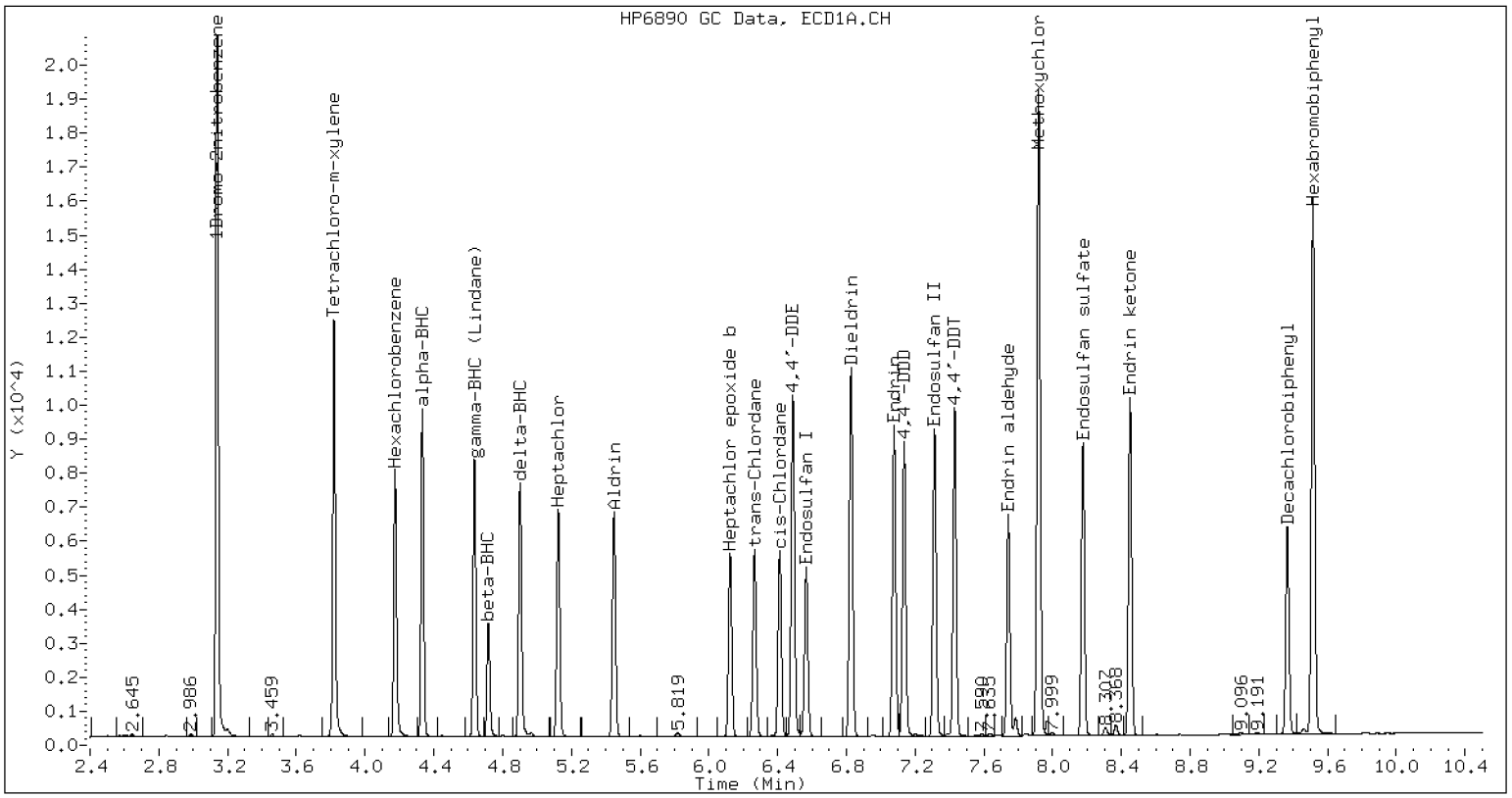
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	864333	526824	-39.0
Hexabromobiphenyl	663237	437155	-34.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1480846	753276	-49.1
Hexabromobiphenyl	870561	467562	-46.3

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

/20230412.b/23041235.D SEQ-CCV1 STX-CLP 13-APR-2023 01:04 1ul



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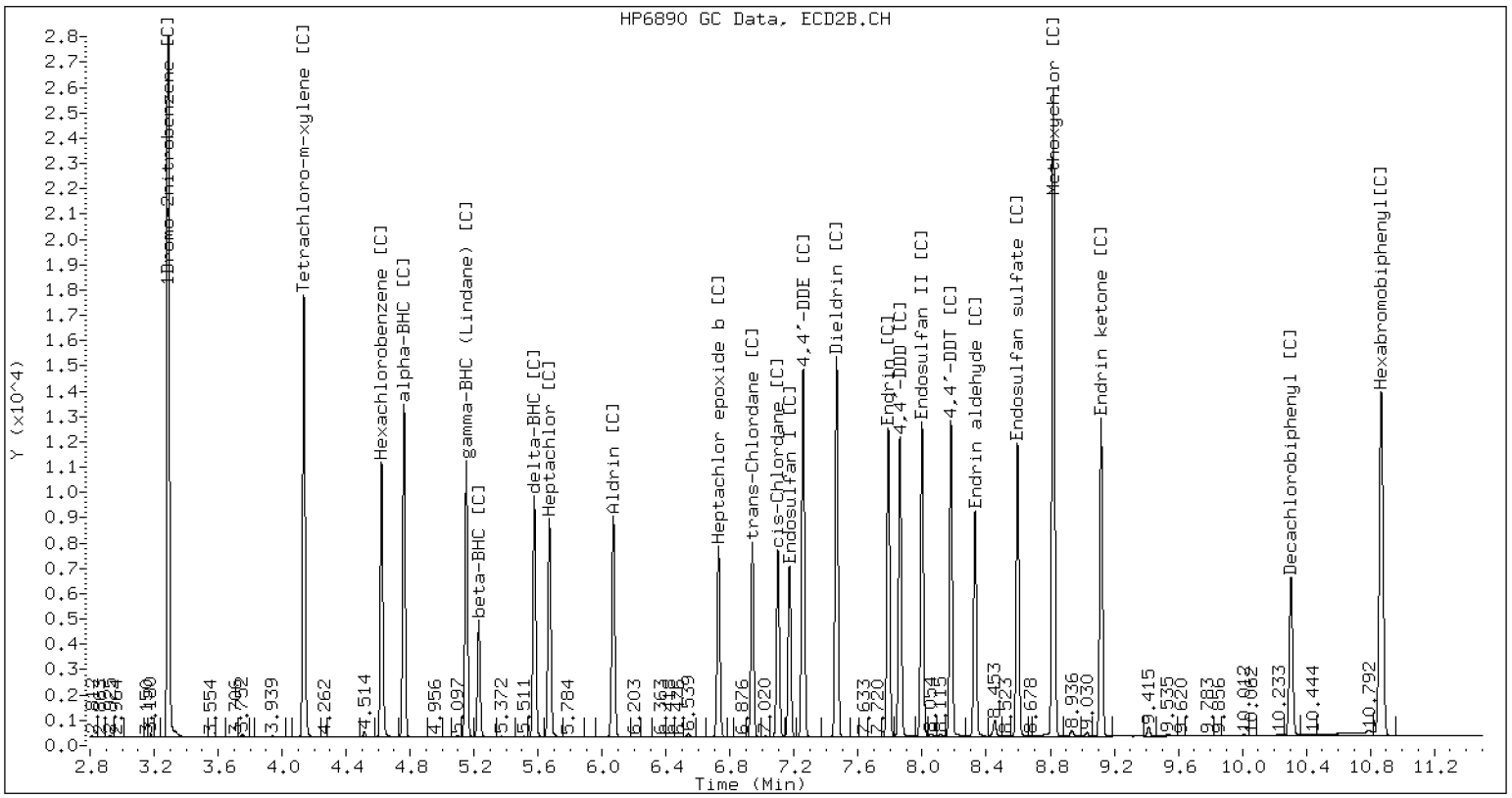
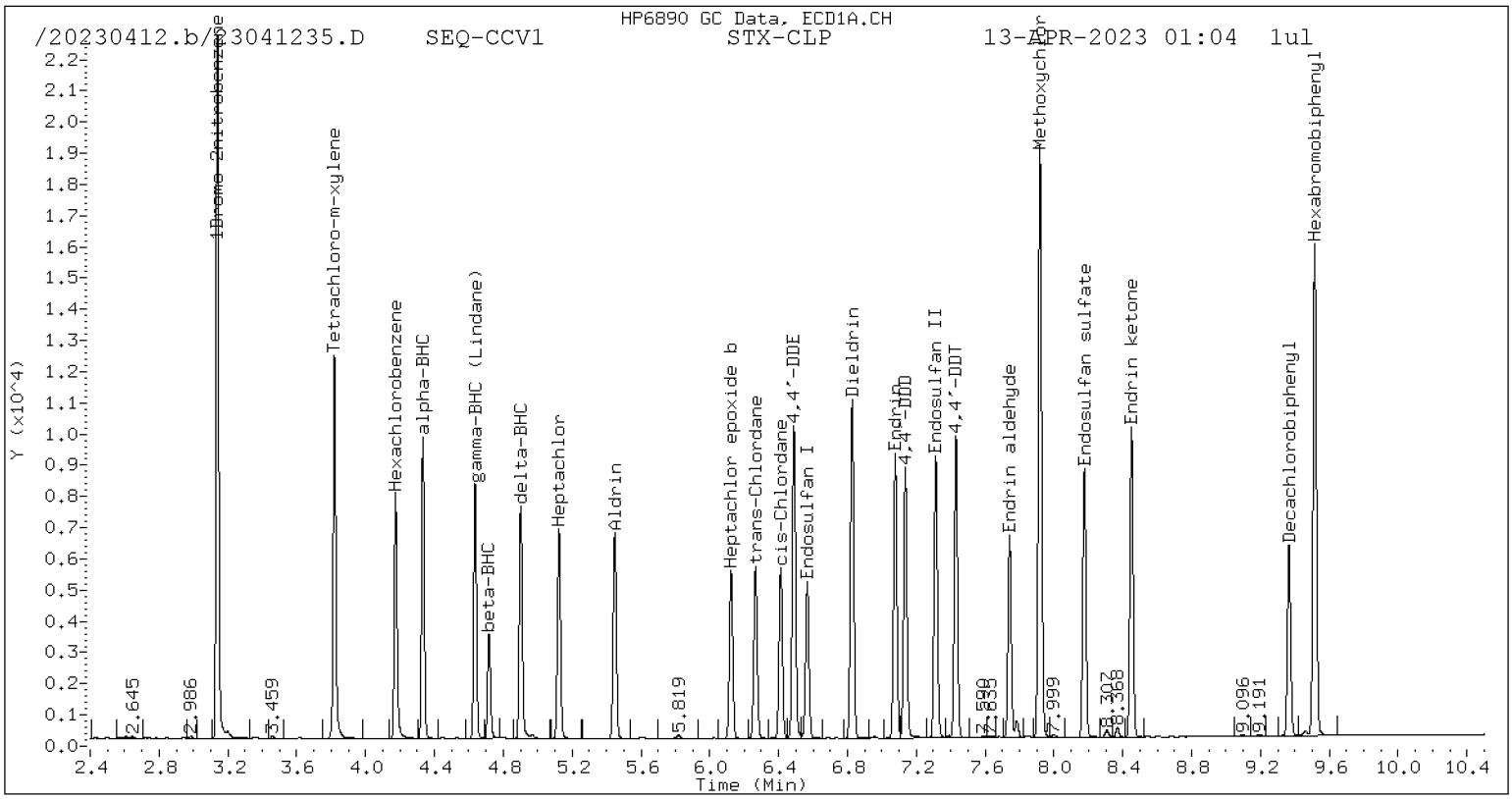


Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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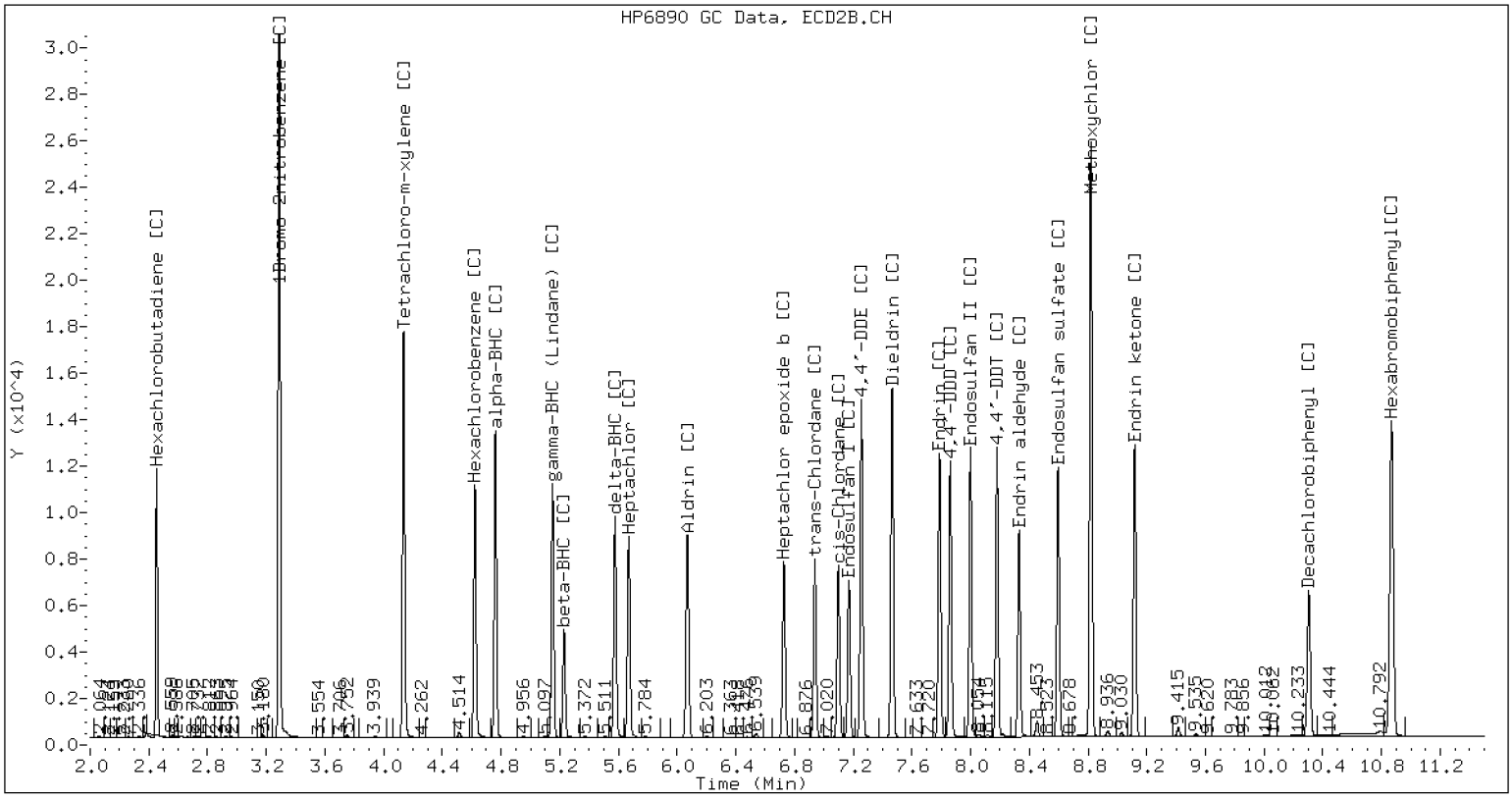


CLP-2 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD6	Calibration:	GD00035
Lab File ID:	23051319.D	Calibration Date:	04/12/2023
Sequence:	SLE0423	Injection Date:	05/13/23
Lab Sample ID:	SLE0423-CCV1	Injection Time:	21:10
Sequence Name:	INDA		

		CONC. (ng/mL)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Hexachlorobenzene	A	20.000	17.7	1.5480310	1.3671320		-11.7	+/-20
Hexachlorobenzene [2C]	A	20.000	18.0	1.4821210	1.3375800		-9.8	+/-20
Decachlorobiphenyl	A	40.000	32.6	0.9435985	0.7686068		-18.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	35.5	0.9656083	0.8569593		-11.3	+/-20
Tetrachlorometaxylene	A	40.000	32.1	1.1193850	0.8984622		-19.7	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.4	1.1000560	1.0286160		-6.5	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 8081 Pesticide Quantitation Report

Data file 1: /20230513.b/23051319.D
Data file 2: /20230513.b/B20230513.b/23051319.D
Method: \20230513.b\PEST.m
Compound Sublist: INDA.sub
Instrument, Inj. Vol.: ecd6.i, 1ul
Operator: JGR

ARI ID: SLE0423-CCV1
Client ID:
Injection Date: 13-MAY-2023 21:10
Report Date: 05/25/2023 19:15
Units: ng/mL
Dilution Factor: 1.000

STX-CLP Col			CLP2 Col			STX-CLP	CLP2		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
4.312	0.001	260291	4.737	0.001	245934	18.35	18.23	0.7	alpha-BHC
4.695	0.001	98407	5.204	0.001	94848	17.37	17.70	1.9	beta-BHC
4.879	0.001	231771	5.550	0.002	132596	18.04	11.04	48.2*	delta-BHC
4.614	0.001	227040	5.125	0.000	215853	18.21	18.20	0.1	gamma-BHC (Lindane)
5.101	0.001	211728	5.643	0.002	196392	18.35	18.88	2.8	Heptachlor
5.424	0.001	208636	6.040	0.002	192935	17.77	17.86	0.5	Aldrin
6.099	0.002	177135	6.700	0.001	155378	16.72	16.34	2.3	Heptachlor epoxide b
6.542	0.001	158862	7.144	0.001	128831	16.82	15.91	5.6	Endosulfan I
6.803	0.002	337407	7.439	0.002	264433	33.76	29.78	12.5	Dieldrin
6.465	0.001	325292	7.231	0.001	262463	34.52	31.06	10.6	4,4'-DDE
7.053	0.001	292765	7.763	0.002	224653	39.42	32.89	18.1	Endrin
7.290	0.002	261220	7.974	0.002	208746	37.56	32.35	14.9	Endosulfan II
7.113	0.001	264463	7.837	0.001	202369	39.68	32.41	20.2	4,4'-DDD
8.153	0.001	229776	8.572	0.002	187019	35.05	31.47	10.7	Endosulfan sulfate
7.408	0.001	265614	8.155	0.001	205331	37.00	32.59	12.7	4,4'-DDT
7.897	0.002	583382	8.797	0.001	455513	189.68	168.63	11.7	Methoxychlor
8.428	0.002	258616	9.094	0.001	220523	34.57	33.99	1.7	Endrin ketone
7.718	0.001	192298	8.305	0.001	148474	36.23	31.82	13.0	Endrin aldehyde
6.241	0.001	175876	6.912	0.001	148840	16.97	16.33	3.8	trans-Chlordane
6.389	0.002	173505	7.072	0.001	144181	16.67	16.06	3.7	cis-Chlordane
2.294	0.000	244947	2.438	0.000	116317	16.74	9.49	55.2*	Hexachlorobutadiene
4.154	0.001	221770	4.598	0.001	212693	17.66	18.05	2.2	Hexachlorobenzene
3.799	0.000	291489	4.115	0.001	327127	32.11	37.40	15.2	Tetrachloro-m-xylene
9.344	0.002	165149	10.276	0.002	145420	32.58	35.50	8.6	Decachlorobiphenyl

* Indicates RPD > 40%
A Indicates Peak Height was used for Column 1 quantitation instead of Area
B Indicates Peak Height was used for Column 2 quantitation instead of Area
M Indicates Column 1 peak was manually integrated
N Indicates Column 2 peak was manually integrated

~ Indicates recovery outside QC Limits

INTERNAL STANDARD SUMMARY

Column 1

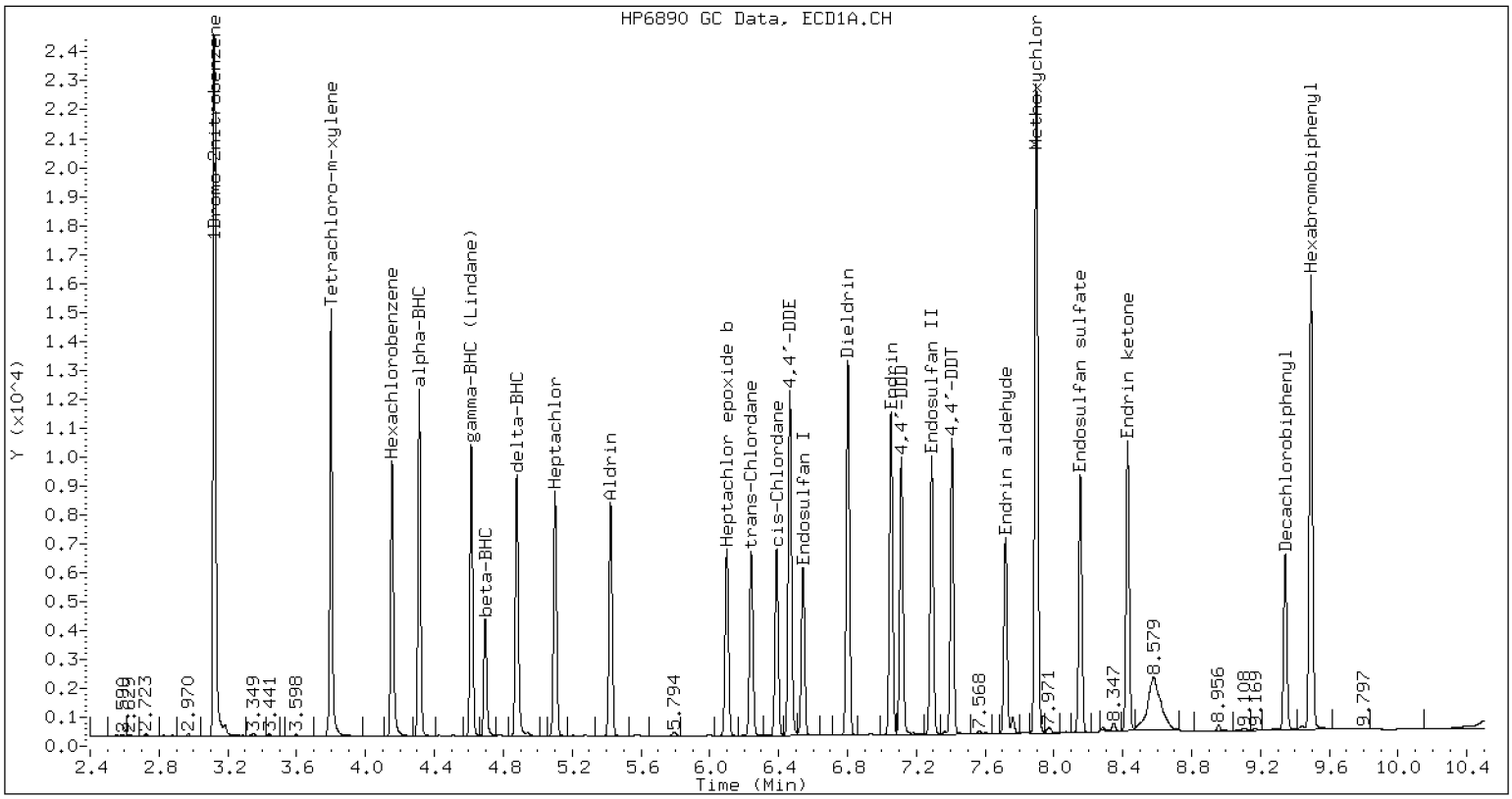
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	932757	648862	-30.4
Hexabromobiphenyl	745426	429736	-42.4

Column 2

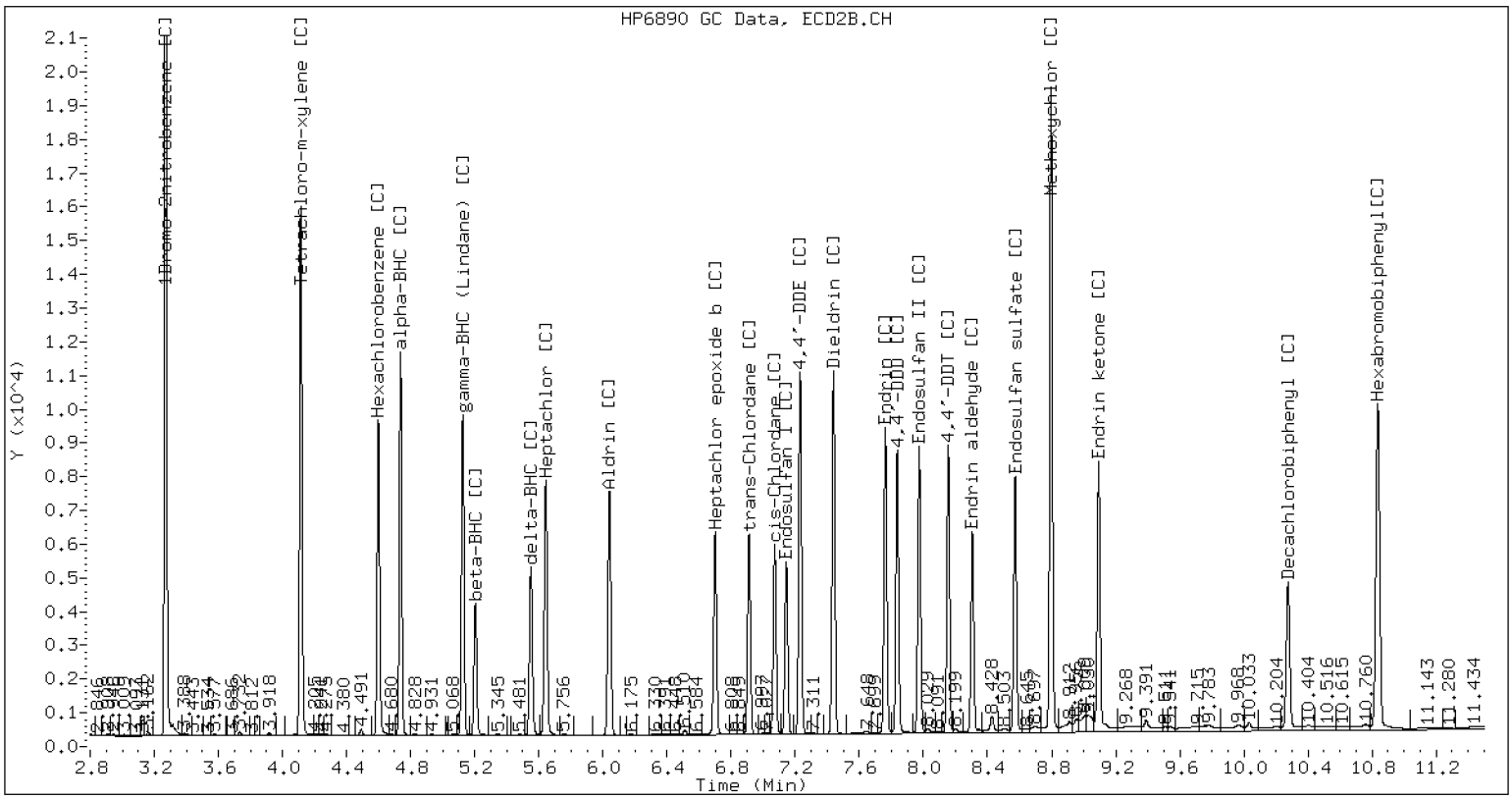
Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	1248665	636053	-49.1
Hexabromobiphenyl	754634	339386	-55.0 <-

* Standard Areas taken from Initial Cal Level 5
Initial Calibration Date: 12-APR-2023
<- Indicates standard response outside Limits (-50 to +100%)

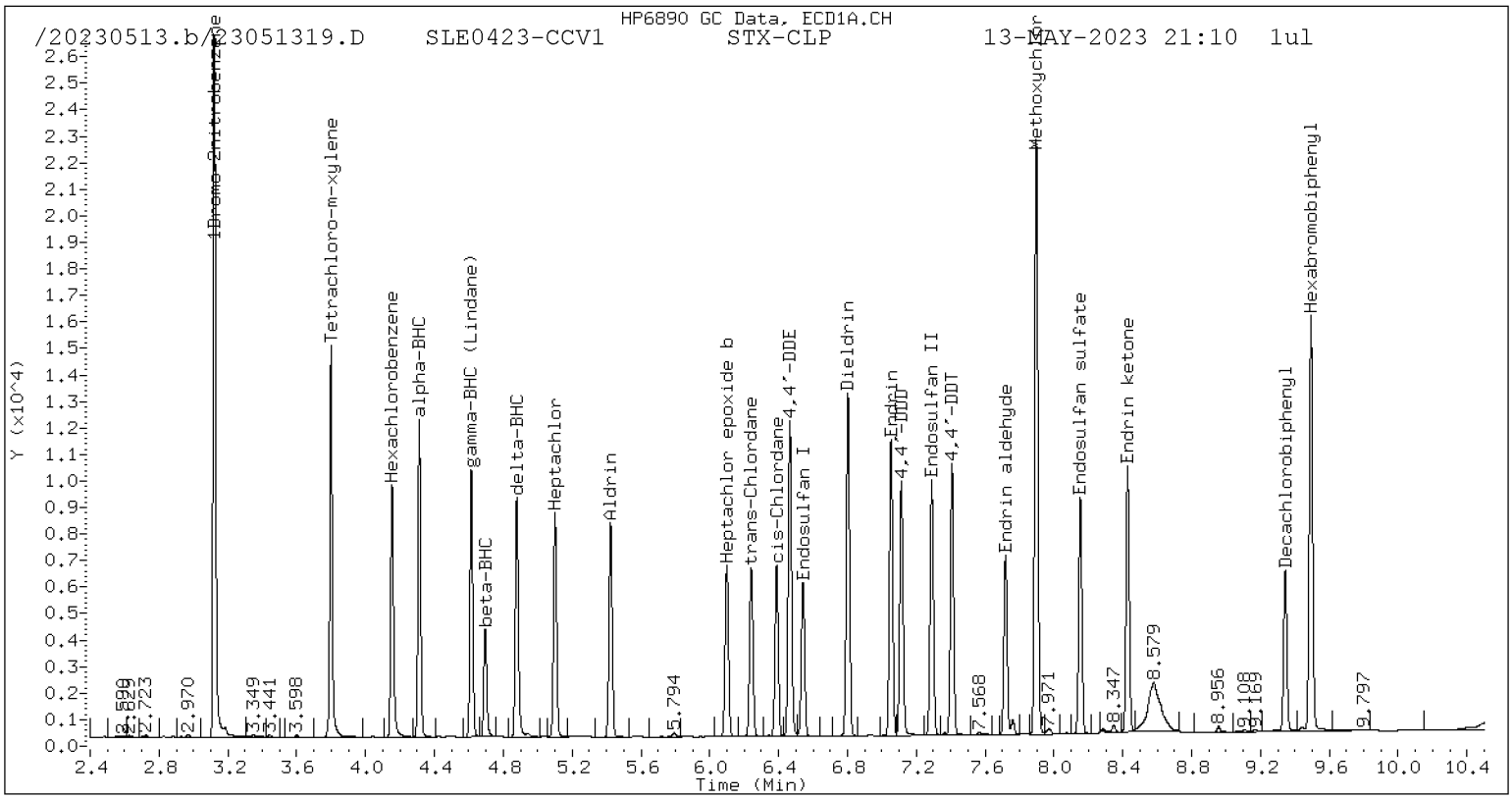
/20230513.b/23051319.D SLE0423-CCV1 STX-CLP 13-MAY-2023 21:10 1ul



/20230513.b/B20230513.b/23051319.D SLE0423-CCV1 CLP2 13-MAY-2023 21:10 1ul



Pesticide Dual Column Chromatograms



STX-CLP Manual Integration: NO

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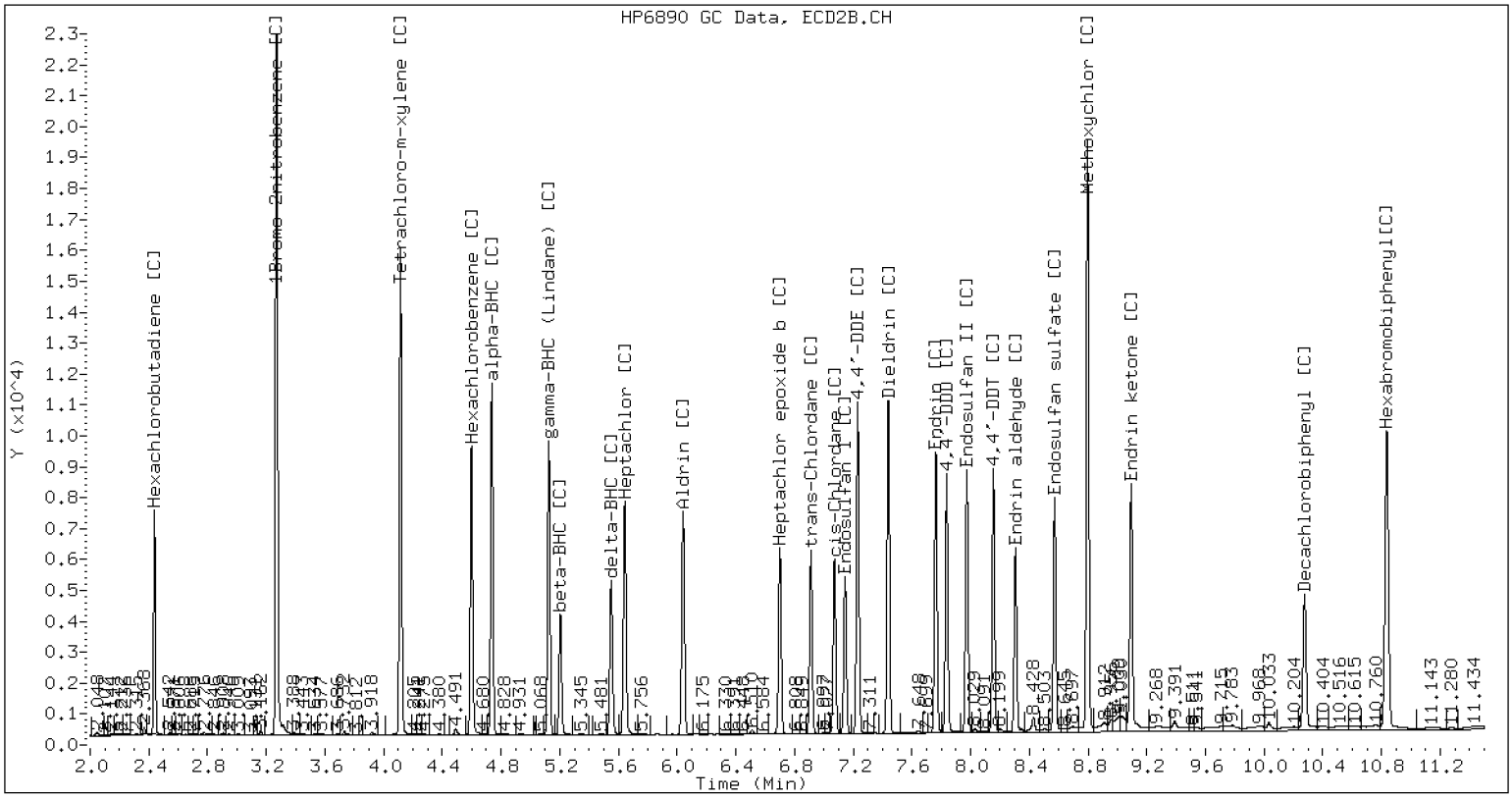
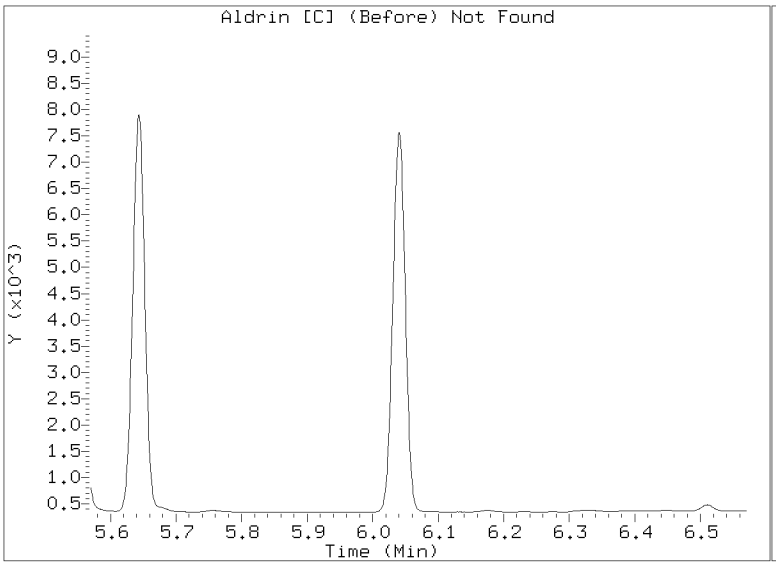
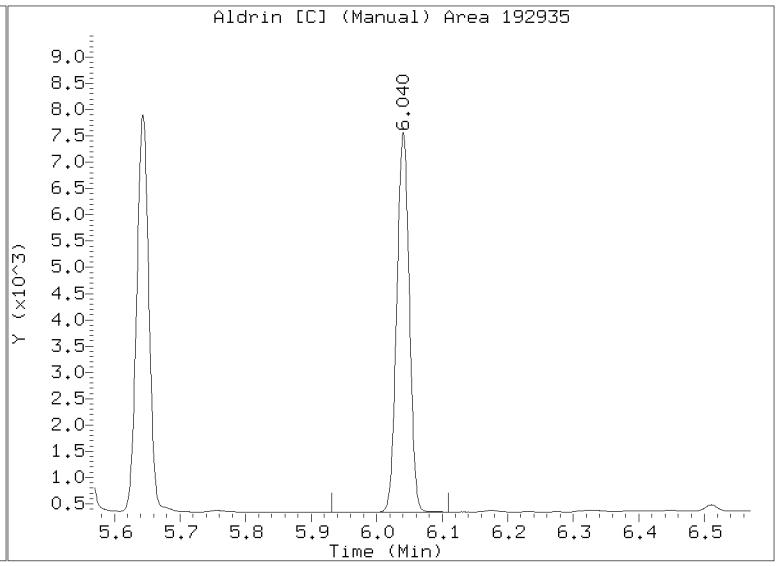


CLP-2 Manual Integration: NO

Manual Peak Adjustment Report, CLP-2

Datafile: /20230513.b/B20230513.b/23051319.D
Injection Date: 13-MAY-2023 21:10
Lab ID:SEQ-CCV1 Client ID:





Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0187	Instrument:	ECD6
		Calibration:	GD00035

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Cal Standard	SLD0187-CAL1	23041204.D	23041204.D	NA	04/12/23 15:34
Cal Standard	SLD0187-CAL2	23041205.D	23041205.D	NA	04/12/23 15:53
Cal Standard	SLD0187-CAL3	23041206.D	23041206.D	NA	04/12/23 16:11
Cal Standard	SLD0187-CAL5	23041207.D	23041207.D	NA	04/12/23 16:30
Cal Standard	SLD0187-CAL4	23041208.D	23041208.D	NA	04/12/23 16:48
Cal Standard	SLD0187-CAL6	23041209.D	23041209.D	NA	04/12/23 17:06
Cal Standard	SLD0187-CAL7	23041210.D	23041210.D	NA	04/12/23 17:25
Initial Cal Check	SLD0187-ICV1	23041228.D	23041228.D	NA	04/12/23 22:55
Calibration Check	SLD0187-CCV1	23041235.D	23041235.D	NA	04/13/23 01:04

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLD0187

Instrument: ECD6
Calibration ID: UNASSIGNED

Printed: 4/14/2023 8:38:57AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLD0187-PEM1	QC		1		L002116	L000844		
SLD0187-CAL1	QC		2		L003348	L000844		
SLD0187-CAL2	QC		3		L003347	L000844		
SLD0187-CAL3	QC		4		L003346	L000844		
SLD0187-CAL4	QC		5		L003345	L000844		
SLD0187-CAL5	QC		6		L003344	L000844		
SLD0187-CAL6	QC		7		L003343	L000844		
SLD0187-CAL7	QC		8		L000560	L000844		
SLD0187-CAL8	QC		9		L003342	L000844		
SLD0187-CAL9	QC		10		L003341	L000844		
SLD0187-CALA	QC		11		L003340	L000844		
SLD0187-CALB	QC		12		L003339	L000844		
SLD0187-CALC	QC		13		L003338	L000844		
SLD0187-CALD	QC		14		L003337	L000844		
SLD0187-CALE	QC		15		L000377	L000844		
SLD0187-CALF	QC		16		L003398	L000844		
SLD0187-CALG	QC		17		L003397	L000844		
SLD0187-CALH	QC		18		L003396	L000844		
SLD0187-CALI	QC		19		L003395	L000844		
SLD0187-CALJ	QC		20		L003394	L000844		
SLD0187-CALK	QC		21		L003393	L000844		

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLD0187

Instrument: ECD6
Calibration ID: UNASSIGNED

Printed: 4/14/2023 8:38:57AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLD0187-CALL	QC		22		L000559	L000844		
SLD0187-SCV1	QC		23		L003155	L000844		
SLD0187-SCV2	QC		24		L003156	L000844		
SLD0187-PEM2	QC		25		L002116	L000844		
SLD0187-ICV1	QC		26		L003344	L000844		
SLD0187-ICV2	QC		27		L003338	L000844		
BLD0075-BLK1	QC		28			L000844		
BLD0075-BS1	QC		29			L000844		
BLD0075-MRL1	QC		30			L000844		
23D0028-01	8081B Pest	E 01	31			L000844	Associated Earth Sciences, Inc	
SLD0187-PEM3	QC		32		L002116	L000844		
SLD0187-CCV1	QC		33		L003344	L000844		
SLD0187-CCV2	QC		34		L003338	L000844		
BLD0009-BLK1	QC		35			L000844		
BLD0009-BS1	QC		36			L000844		
BLD0009-BSD1	QC		37			L000844		
BLD0009-MS1	QC		38			L000844		
BLD0009-MSD1	QC		39			L000844		
23C0752-01	8081B Pest (PSDDA)	A 03	40			L000844	Anchor QEA, LLC	
23C0752-02	8081B Pest (PSDDA)	A 03	41			L000844	Anchor QEA, LLC	
23C0752-03	8081B Pest (PSDDA)	A 03	42			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLD0187

Instrument: ECD6
Calibration ID: UNASSIGNED

Printed: 4/14/2023 8:38:57AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
23C0752-04	8081B Pest (PSDDA)	A 03	43			L000844	Anchor QEA, LLC	
23C0752-06	8081B Pest (PSDDA)	A 03	44			L000844	Anchor QEA, LLC	
SLD0187-PEM4	QC		45		L002116	L000844		
SLD0187-CCV3	QC		46		L000845	L000844		
SLD0187-CCV4	QC		47		L003338	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230412.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	12-APR-2023 14:57	23041202.D	1	SEQ-IB	
2	12-APR-2023 15:16	23041203.D	1	SEQ-PEM1	
3	12-APR-2023 15:34	23041204.D	1	SEQ-CAL1	
4	12-APR-2023 15:53	23041205.D	1	SEQ-CAL2	
5	12-APR-2023 16:11	23041206.D	1	SEQ-CAL3	
6	12-APR-2023 16:30	23041207.D	1	SEQ-CAL5	
7	12-APR-2023 16:48	23041208.D	1	SEQ-CAL4	
8	12-APR-2023 17:06	23041209.D	1	SEQ-CAL6	
9	12-APR-2023 17:25	23041210.D	1	SEQ-CAL7	
10	12-APR-2023 17:43	23041211.D	1	SEQ-CAL8	
11	12-APR-2023 18:02	23041212.D	1	SEQ-CAL9	
12	12-APR-2023 18:20	23041213.D	1	SEQ-CALA	
13	12-APR-2023 18:38	23041214.D	1	SEQ-CALB	
14	12-APR-2023 18:57	23041215.D	1	SEQ-CALC	
15	12-APR-2023 19:15	23041216.D	1	SEQ-CALD	
16	12-APR-2023 19:34	23041217.D	1	SEQ-CALE	
17	12-APR-2023 19:52	23041218.D	1	SEQ-CALF	
18	12-APR-2023 20:10	23041219.D	1	SEQ-CALG	
19	12-APR-2023 20:29	23041220.D	1	SEQ-CALH	
20	12-APR-2023 20:47	23041221.D	1	SEQ-CALI	
21	12-APR-2023 21:05	23041222.D	1	SEQ-CALJ	
22	12-APR-2023 21:24	23041223.D	1	SEQ-CALK	
23	12-APR-2023 21:42	23041224.D	1	SEQ-CALL	
24	12-APR-2023 22:00	23041225.D	1	SEQ-SCV1	
25	12-APR-2023 22:19	23041226.D	1	SEQ-SCV2	
26	12-APR-2023 22:37	23041227.D	1	SEQ-PEM2	
27	12-APR-2023 22:55	23041228.D	1	SEQ-ICV1	
28	12-APR-2023 23:14	23041229.D	1	SEQ-ICV2	
29	12-APR-2023 23:32	23041230.D	1	BLD0075-BLK1	
30	12-APR-2023 23:50	23041231.D	1	BLD0075-BS1	
31	13-APR-2023 00:09	23041232.D	1	BLD0075-MRL1	
32	13-APR-2023 00:27	23041233.D	1	23D0028-01	
33	13-APR-2023 00:45	23041234.D	1	SEQ-PEM3	
34	13-APR-2023 01:04	23041235.D	1	SEQ-CCV1	
35	13-APR-2023 01:22	23041236.D	1	SEQ-CCV2	
36	13-APR-2023 01:40	23041237.D	1	BLD0009-BLK1	
37	13-APR-2023 01:59	23041238.D	1	BLD0009-BS1	
38	13-APR-2023 02:17	23041239.D	1	BLD0009-BSD1	
39	13-APR-2023 02:35	23041240.D	1	BLD0009-MS1	
40	13-APR-2023 02:53	23041241.D	1	BLD0009-MSD1	
41	13-APR-2023 03:12	23041242.D	1	23C0752-01	
42	13-APR-2023 03:30	23041243.D	1	23C0752-02	
43	13-APR-2023 03:48	23041244.D	1	23C0752-03	
44	13-APR-2023 04:07	23041245.D	1	23C0752-04	
45	13-APR-2023 04:25	23041246.D	1	23C0752-06	
46	13-APR-2023 04:43	23041247.D	1	SEQ-PEM4	
47	13-APR-2023 05:02	23041248.D	1	SEQ-CCV3	
48	13-APR-2023 05:20	23041249.D	1	SEQ-CCV4	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230412.b

ARI Job No.: SEQ- Method: PEST.m Instrument: ecd6.i Date: 12-APR-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1457	23041202.D	SEQ-IB		1	NO MANUAL INTEGRATION
1516	23041203.D	SEQ-PEM1		1	NO MANUAL INTEGRATION
1534	23041204.D	SEQ-CAL1		1	NO MANUAL INTEGRATION
1553	23041205.D	SEQ-CAL2		1	NO MANUAL INTEGRATION
1611	23041206.D	SEQ-CAL3		1	NO MANUAL INTEGRATION
1630	23041207.D	SEQ-CAL5		1	NO MANUAL INTEGRATION
1648	23041208.D	SEQ-CAL4		1	NO MANUAL INTEGRATION
1706	23041209.D	SEQ-CAL6		1	NO MANUAL INTEGRATION
1725	23041210.D	SEQ-CAL7		1	alpha-BHC, beta-BHC, delta-BHC, gamma-BHC (Lindane), Heptachlor, Aldrin, Heptachlor epoxide b, Erdosulfan I, Dieldrin, 4,4'-DDE, Endrin, Endosulfan II, 4,4'-DDD, Endosulfan sulfate, 4,4'-DDT, Methoxychlor, Endrin ketone, Endrin aldehyde, trans-Chlordane, cis-Chlordane, Hexachlorobe
1743	23041211.D	SEQ-CAL8		1	NO MANUAL INTEGRATION
1802	23041212.D	SEQ-CAL9		1	NO MANUAL INTEGRATION
1820	23041213.D	SEQ-CALA		1	NO MANUAL INTEGRATION
1838	23041214.D	SEQ-CALB		1	NO MANUAL INTEGRATION
1857	23041215.D	SEQ-CALC		1	NO MANUAL INTEGRATION
1915	23041216.D	SEQ-CALD		1	NO MANUAL INTEGRATION
1934	23041217.D	SEQ-CALE		1	Oxychlordane, 2,4-DDE, trans-Nonachlor, 2,4-DDD, 2,4-DDT, cis-Nonachlor, Mirex,
1952	23041218.D	SEQ-CALF		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230412.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2010	23041219.D	SEQ-CALG		1	NO MANUAL INTEGRATION
2029	23041220.D	SEQ-CALH		1	NO MANUAL INTEGRATION
2047	23041221.D	SEQ-CALI		1	NO MANUAL INTEGRATION
2105	23041222.D	SEQ-CALJ		1	NO MANUAL INTEGRATION
2124	23041223.D	SEQ-CALK		1	NO MANUAL INTEGRATION
2142	23041224.D	SEQ-CALL		1	NO MANUAL INTEGRATION
2200	23041225.D	SEQ-SCV1		1	NO MANUAL INTEGRATION
2219	23041226.D	SEQ-SCV2		1	NO MANUAL INTEGRATION
2237	23041227.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
2255	23041228.D	SEQ-ICV1		1	NO MANUAL INTEGRATION
2314	23041229.D	SEQ-ICV2		1	NO MANUAL INTEGRATION
2332	23041230.D	BLD0075-BLK1		1	NO MANUAL INTEGRATION
2350	23041231.D	BLD0075-BS1		1	NO MANUAL INTEGRATION
0009	23041232.D	BLD0075-MRL1		1	NO MANUAL INTEGRATION
0027	23041233.D	23D0028-01		1	NO MANUAL INTEGRATION
0045	23041234.D	SEQ-PEM3		1	Endrin, 4,4'-DDD,
0104	23041235.D	SEQ-CCV1		1	NO MANUAL INTEGRATION
0122	23041236.D	SEQ-CCV2		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230412.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0140	23041237.D	BLD0009-BLK1		1	NO MANUAL INTEGRATION
0159	23041238.D	BLD0009-BS1		1	NO MANUAL INTEGRATION
0217	23041239.D	BLD0009-BSD1		1	NO MANUAL INTEGRATION
0235	23041240.D	BLD0009-MS1		1	Endrin, 4,4'-DDD, 4,4'-DDT,
0253	23041241.D	BLD0009-MSD1		1	Aldrin,
0312	23041242.D	23C0752-01		1	delta-BHC, gamma-BHC (Lindane), Endrin, 4,4'-DDD, 4,4'-DDT, Endrin aldehyde, Toxaphene, cis-Nonachlor,
0330	23041243.D	23C0752-02		1	Endrin, 4,4'-DDD, 4,4'-DDT, trans-Chlordane, cis-Chlordane, Toxaphene, trans-Nonachlor, cis-Nonachlor, Chlordane (NOS),
0348	23041244.D	23C0752-03		1	Dieldrin, 4,4'-DDD, cis-Chlordane, Hexachlorobenzene, trans-Nonachlor, cis-Nonachlor, Chlordane (NOS),
0407	23041245.D	23C0752-04		1	delta-BHC, Endrin, 4,4'-DDD, 4,4'-DDT, trans-Chlordane, cis-Chlordane, Toxaphene, trans-Nonachlor, cis-Nonachlor, Chlordane (NOS),
0425	23041246.D	23C0752-06		1	Endrin, 4,4'-DDT, cis-Chlordane, Toxaphene, cis-Nonachlor, Mirex, Chlordane (NOS),
0443	23041247.D	SEQ-PEM4		1	Endrin, 4,4'-DDD,
0502	23041248.D	SEQ-CCV3		1	Hexabromobiphenyl,
0520	23041249.D	SEQ-CCV4		1	NO MANUAL INTEGRATION

Security Status Report

Date: 14-Apr-2023 08:24

23041202.D	Data Locked	yev, 14-
23041203.D	Data Locked	yev, 14-
23041204.D	Data Locked	yev, 14-
23041205.D	Data Locked	yev, 14-
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23041234.D	Data Locked	yev, 14-
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23041237.D	Data Locked	yev, 14-
23041238.D	Data Locked	yev, 14-
23041239.D	Data Locked	yev, 14-
23041240.D	Data Locked	yev, 14-
23041241.D	Data Locked	yev, 14-
23041242.D	Data Locked	yev, 14-
23041243.D	Data Locked	yev, 14-
23041244.D	Data Locked	yev, 14-
23041245.D	Data Locked	yev, 14-
23041246.D	Data Locked	yev, 14-
23041247.D	Data Locked	yev, 14-
23041248.D	Data Locked	yev, 14-
23041249.D	Data Locked	yev, 14-

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0423	Instrument:	ECD6
		Calibration:	GD00035

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLE0423-ICV1	23051303.D	23051303.D	NA	05/13/23 16:11
Blank	BLD0606-BLK1	23051304.D	23051304.D	Solid	05/13/23 16:30
LCS	BLD0606-BS1	23051305.D	23051305.D	Solid	05/13/23 16:48
LCS Dup	BLD0606-BSD1	23051306.D	23051306.D	Solid	05/13/23 17:07
LDW23-SS1801	23D0396-01	23051316.D	23051316.D	Solid	05/13/23 20:14
LDW23-SS1802	23D0396-03	23051317.D	23051317.D	Solid	05/13/23 20:32
Calibration Check	SLE0423-CCV1	23051319.D	23051319.D	NA	05/13/23 21:10

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLE0423

Instrument: ECD6
Calibration ID: GD00035

Printed: 5/25/2023 7:26:56PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLE0423-PEM1	QC		1		L002116	L000844		
SLE0423-ICV1	QC		2		L003344	L000844		
BLD0606-BLK1	QC		3			L000844		
BLD0606-BS1	QC		4			L000844		
BLD0606-BSD1	QC		5			L000844		
BLD0606-MS1	QC		6			L000844		
BLD0606-MSD1	QC		7			L000844		
23D0394-01	8081B Pest (PSDDA)	A 01	8			L000844	Anchor QEA, LLC	
23D0394-02	8081B Pest (PSDDA)	A 01	9			L000844	Anchor QEA, LLC	
23D0394-04	8081B Pest (PSDDA)	A 01	10			L000844	Anchor QEA, LLC	
23D0394-06	8081B Pest (PSDDA)	A 01	11			L000844	Anchor QEA, LLC	
23D0394-08	8081B Pest (PSDDA)	A 01	12			L000844	Anchor QEA, LLC	
23D0394-11	8081B Pest (PSDDA)	A 01	13			L000844	Anchor QEA, LLC	
23D0394-12	8081B Pest (PSDDA)	A 01	14			L000844	Anchor QEA, LLC	
23D0396-01	8081B Pest (PSDDA)	A 01	15			L000844	Anchor QEA, LLC	
23D0396-03	8081B Pest (PSDDA)	A 01	16			L000844	Anchor QEA, LLC	
SLE0423-PEM2	QC		17		L002116	L000844		
SLE0423-CCV1	QC		18		L003344	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230519.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	19-MAY-2023 12:32	23051902.D	1	SEQ-PEM1	
2	19-MAY-2023 12:51	23051903.D	1	SEQ-INDA1	
3	19-MAY-2023 13:09	23051904.D	1	SEQ-WNDA1	
4	19-MAY-2023 13:28	23051905.D	1	SEQ-TOXA1	
5	19-MAY-2023 13:47	23051906.D	1	SEQ-TECH1	
6	19-MAY-2023 14:05	23051907.D	1	BLE0314-BLK1	
7	19-MAY-2023 14:24	23051908.D	1	BLE0314-BS1	
8	19-MAY-2023 14:43	23051909.D	1	BLE0314-BS2	
9	19-MAY-2023 15:01	23051910.D	1	BLE0314-BS3	
10	19-MAY-2023 15:20	23051911.D	1	23D0671-07	
11	19-MAY-2023 15:39	23051912.D	1	23D0671-07RE1	10
12	19-MAY-2023 15:57	23051913.D	1	23D0671-07RE	100
13	19-MAY-2023 16:16	23051914.D	1	23D0671-08	
14	19-MAY-2023 16:35	23051915.D	1	23D0671-08RE1	10
15	19-MAY-2023 16:54	23051916.D	1	23D0671-08RE	100
16	19-MAY-2023 17:12	23051917.D	1	23D0671-09	
17	19-MAY-2023 17:31	23051918.D	1	23D0671-09RE1	10
18	19-MAY-2023 17:50	23051919.D	1	23D0671-09RE	100
19	19-MAY-2023 18:08	23051920.D	1	SEQ-PEM2	
20	19-MAY-2023 18:27	23051921.D	1	SEQ-INDA2	
21	19-MAY-2023 18:46	23051922.D	1	SEQ-WNDA2	
22	19-MAY-2023 19:04	23051923.D	1	SEQ-TOXA2	
23	19-MAY-2023 19:23	23051924.D	1	SEQ-TECH2	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230519.b

ARI Job No.: SEQ- Method: PEST.m Instrument: ecd6.i Date: 19-MAY-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1232	23051902.D	SEQ-PEM1		1	Endrin, 4,4'-DDD,
1251	23051903.D	SEQ-INDA1		1	Hexabromobiphenyl,
1309	23051904.D	SEQ-WNDA1		1	Hexabromobiphenyl,
1328	23051905.D	SEQ-TOXA1		1	NO MANUAL INTEGRATION
1347	23051906.D	SEQ-TECH1		1	NO MANUAL INTEGRATION
1405	23051907.D	BLE0314-BLK1		1	NO MANUAL INTEGRATION
1424	23051908.D	BLE0314-BS1		1	NO MANUAL INTEGRATION
1443	23051909.D	BLE0314-BS2		1	NO MANUAL INTEGRATION
1501	23051910.D	BLE0314-BS3		1	NO MANUAL INTEGRATION
1520	23051911.D	23D0671-07		1	NO MANUAL INTEGRATION
1539	23051912.D	23D0671-07RE1	10	1	NO MANUAL INTEGRATION
1557	23051913.D	23D0671-07RE	100	1	NO MANUAL INTEGRATION
1616	23051914.D	23D0671-08		1	NO MANUAL INTEGRATION
1635	23051915.D	23D0671-08RE1	10	1	NO MANUAL INTEGRATION
1654	23051916.D	23D0671-08RE	100	1	NO MANUAL INTEGRATION
1712	23051917.D	23D0671-09		1	NO MANUAL INTEGRATION
1731	23051918.D	23D0671-09RE1	10	1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd6.i\20230519.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1750	23051919.D	23D0671-09RE	100	1	NO MANUAL INTEGRATION
1808	23051920.D	SEQ-PEM2		1	NO MANUAL INTEGRATION
1827	23051921.D	SEQ-INDA2		1	NO MANUAL INTEGRATION
1846	23051922.D	SEQ-WNDA2		1	NO MANUAL INTEGRATION
1904	23051923.D	SEQ-TOXA2		1	NO MANUAL INTEGRATION
1923	23051924.D	SEQ-TECH2		1	NO MANUAL INTEGRATION

Security Status Report

Date: 25-May-2023 19:15

23051902.D	Data Locked	yev, 25-
23051903.D	Data Locked	yev, 25-
23051904.D	Data Locked	yev, 25-
23051905.D	Data Locked	yev, 25-
23051906.D	Data Locked	yev, 25-
23051907.D	Data Locked	yev, 25-
23051908.D	Data Locked	yev, 25-
23051909.D	Data Locked	yev, 25-
23051910.D	Data Locked	yev, 25-
23051911.D	Data Locked	yev, 25-
23051912.D	Data Locked	yev, 25-
23051913.D	Data Locked	yev, 25-
23051914.D	Data Locked	yev, 25-
23051915.D	Data Locked	yev, 25-
23051916.D	Data Locked	yev, 25-
23051917.D	Data Locked	yev, 25-
23051918.D	Data Locked	yev, 25-
23051919.D	Data Locked	yev, 25-
23051920.D	Data Locked	yev, 25-
23051921.D	Data Locked	yev, 25-
23051922.D	Data Locked	yev, 25-
23051923.D	Data Locked	yev, 25-
23051924.D	Data Locked	yev, 25-

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0187	Instrument:	ECD6
Calibration:	GD00035	Calibration Date:	04/12/2023

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLD0187-ICV1 (Solid)				Lab File ID: 23041228.D			Analyzed: 04/12/23 22:55	
Decachlorobiphenyl	40.000	79.8	80 - 120	9.366	9.365571	0.0004	+/-0.1	*
Decachlorobiphenyl [2C]	40.000	83.8	80 - 120	10.306	10.30529	0.0007	+/-0.1	
Tetrachlorometaxylene	40.000	88.6	80 - 120	3.82	3.819	0.0010	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	89.4	80 - 120	4.135	4.135572	-0.0006	+/-0.1	
SLD0187-CCV1 (Solid)				Lab File ID: 23041235.D			Analyzed: 04/13/23 01:04	
Decachlorobiphenyl	40.000	78.8	80 - 120	9.365	9.365571	-0.0006	+/-0.1	*
Decachlorobiphenyl [2C]	40.000	84.2	80 - 120	10.304	10.30529	-0.0013	+/-0.1	
Tetrachlorometaxylene	40.000	88.7	80 - 120	3.819	3.819	0.0000	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	89.1	80 - 120	4.135	4.135572	-0.0006	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0423
Instrument: ECD6
Calibration: GD00035
Calibration Date: 04/12/2023

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0423-ICV1 (Solid)				Lab File ID: 23051303.D			Analyzed: 05/13/23 16:11	
Decachlorobiphenyl	40.000	82.5	80 - 120	9.342	9.365571	-0.0236	+/-0.1	
Decachlorobiphenyl [2C]	40.000	91.0	80 - 120	10.273	10.30529	-0.0323	+/-0.1	
Tetrachlorometaxylene	40.000	80.0	80 - 120	3.798	3.819	-0.0210	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	97.8	80 - 120	4.113	4.135572	-0.0226	+/-0.1	
BLD0606-BLK1 (Solid)				Lab File ID: 23051304.D			Analyzed: 05/13/23 16:30	
Decachlorobiphenyl	8.0000	61.4	30 - 160	9.341	9.365571	-0.0246	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	65.4	30 - 160	10.274	10.30529	-0.0313	+/-0.1	
Tetrachlorometaxylene	8.0000	58.1	30 - 160	3.799	3.819	-0.0200	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	57.6	30 - 160	4.113	4.135572	-0.0226	+/-0.1	
BLD0606-BS1 (Solid)				Lab File ID: 23051305.D			Analyzed: 05/13/23 16:48	
Decachlorobiphenyl	8.0000	69.7	30 - 160	9.342	9.365571	-0.0236	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	72.9	30 - 160	10.275	10.30529	-0.0303	+/-0.1	
Tetrachlorometaxylene	8.0000	66.9	30 - 160	3.799	3.819	-0.0200	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	63.5	30 - 160	4.113	4.135572	-0.0226	+/-0.1	
BLD0606-BSD1 (Solid)				Lab File ID: 23051306.D			Analyzed: 05/13/23 17:07	
Decachlorobiphenyl	8.0000	72.3	30 - 160	9.342	9.365571	-0.0236	+/-0.1	
Decachlorobiphenyl [2C]	8.0000	71.5	30 - 160	10.274	10.30529	-0.0313	+/-0.1	
Tetrachlorometaxylene	8.0000	64.8	30 - 160	3.799	3.819	-0.0200	+/-0.1	
Tetrachlorometaxylene [2C]	8.0000	62.9	30 - 160	4.113	4.135572	-0.0226	+/-0.1	
23D0396-01 (Solid)				Lab File ID: 23051316.D			Analyzed: 05/13/23 20:14	
Decachlorobiphenyl	7.9953	60.8	30 - 160	9.347	9.365571	-0.0186	+/-0.1	
Decachlorobiphenyl [2C]	7.9953	63.0	30 - 160	10.278	10.30529	-0.0273	+/-0.1	
Tetrachlorometaxylene	7.9953	52.3	30 - 160	3.798	3.819	-0.0210	+/-0.1	
Tetrachlorometaxylene [2C]	7.9953	53.3	30 - 160	4.113	4.135572	-0.0226	+/-0.1	
23D0396-03 (Solid)				Lab File ID: 23051317.D			Analyzed: 05/13/23 20:32	
Decachlorobiphenyl	7.9879	59.0	30 - 160	9.346	9.365571	-0.0196	+/-0.1	
Decachlorobiphenyl [2C]	7.9879	61.5	30 - 160	10.278	10.30529	-0.0273	+/-0.1	
Tetrachlorometaxylene	7.9879	52.8	30 - 160	3.798	3.819	-0.0210	+/-0.1	
Tetrachlorometaxylene [2C]	7.9879	55.6	30 - 160	4.113	4.135572	-0.0226	+/-0.1	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG/WO:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0423	Instrument:	ECD6
Calibration:	GD00035	Calibration Date:	04/12/2023

Surrogate Compound	Spike Level ng/mL	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0423-CCV1 (Solid)				Lab File ID: 23051319.D			Analyzed: 05/13/23 21:10	
Decachlorobiphenyl	40.000	81.5	80 - 120	9.343	9.365571	-0.0226	+/-0.1	
Decachlorobiphenyl [2C]	40.000	88.7	80 - 120	10.275	10.30529	-0.0303	+/-0.1	
Tetrachlorometaxylene	40.000	80.3	80 - 120	3.799	3.819	-0.0200	+/-0.1	
Tetrachlorometaxylene [2C]	40.000	93.5	80 - 120	4.114	4.135572	-0.0216	+/-0.1	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLD0187	Instrument:	ECD6
		Calibration:	GD00035

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLD0187-ICV1)		(Solid)		Lab File ID: 23041228.D				Analyzed: 04/12/23 22:55	
1-Bromo-2-Nitrobenzene	527944	3.138	527944	3.138	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	428829	9.515	428829	9.515	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	744512	3.287	744512	3.287	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	468235	10.869	468235	10.869	100	50 - 200	0.000	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0423
Instrument: ECD6
Calibration: GD00035

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLE0423-ICV1)		(Solid)		Lab File ID: 23051303.D				Analyzed: 05/13/23 16:11	
1-Bromo-2-Nitrobenzene	746402	3.12	746402	3.12	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	630375	9.491	630375	9.491	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	640575	3.269	640575	3.269	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	424817	10.834	424817	10.834	100	50 - 200	0.000	+/-0.50	
Blank (BLD0606-BLK1)		(Solid)		Lab File ID: 23051304.D				Analyzed: 05/13/23 16:30	
1-Bromo-2-Nitrobenzene	854265	3.12	746402	3.12	114	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	731936	9.49	630375	9.491	116	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	775487	3.269	640575	3.269	121	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	500266	10.833	424817	10.834	118	50 - 200	-0.001	+/-0.50	
LCS (BLD0606-BS1)		(Solid)		Lab File ID: 23051305.D				Analyzed: 05/13/23 16:48	
1-Bromo-2-Nitrobenzene	814875	3.12	746402	3.12	109	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	686460	9.491	630375	9.491	109	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	757251	3.269	640575	3.269	118	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	493938	10.834	424817	10.834	116	50 - 200	0.000	+/-0.50	
LCS Dup (BLD0606-BSD1)		(Solid)		Lab File ID: 23051306.D				Analyzed: 05/13/23 17:07	
1-Bromo-2-Nitrobenzene	826105	3.12	746402	3.12	111	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	679915	9.491	630375	9.491	108	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	770564	3.269	640575	3.269	120	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	502713	10.834	424817	10.834	118	50 - 200	0.000	+/-0.50	
LDW23-SS1801 (23D0396-01)		(Solid)		Lab File ID: 23051316.D				Analyzed: 05/13/23 20:14	
1-Bromo-2-Nitrobenzene	1399601	3.119	746402	3.12	188	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	876824	9.497	630375	9.491	139	50 - 200	0.006	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1313494	3.268	640575	3.269	205	50 - 200	-0.001	+/-0.50	*
Hexabromobiphenyl [2C]	644626	10.839	424817	10.834	152	50 - 200	0.005	+/-0.50	
LDW23-SS1802 (23D0396-03)		(Solid)		Lab File ID: 23051317.D				Analyzed: 05/13/23 20:32	
1-Bromo-2-Nitrobenzene	1410491	3.119	746402	3.12	189	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	884703	9.497	630375	9.491	140	50 - 200	0.006	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	1283782	3.268	640575	3.269	200	50 - 200	-0.001	+/-0.50	*
Hexabromobiphenyl [2C]	663781	10.839	424817	10.834	156	50 - 200	0.005	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23D0396-03	File ID:	23051317.D
Sampled:	04/12/23 15:03	Prepared:	04/25/23 11:56	Analyzed:	05/13/23 20:32
Solids:	43.88	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD6
Batch:	BLD0606	Sequence:	SLE0423		
GC Column(1):	STX-CLP			GC Column(2):	STX-CLPII

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Hexachlorobenzene	* 1	4.152	4.174429	0.0224	24914	0.18	56.
	2	4.592	4.621714	0.0297	38041	0.32	

* Column used for quantitation

HOLDING TIME SUMMARY

Analysis: EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	04/25/23 11:56	13	14	05/13/23 20:14	18	40	
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	04/25/23 11:56	12	14	05/13/23 20:32	18	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8081B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD6

Analyte	MDL	RL	Units
Hexachlorobenzene	0.15	0.50	ug/kg
Hexachlorobenzene [2C]	0.15	0.50	ug/kg

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

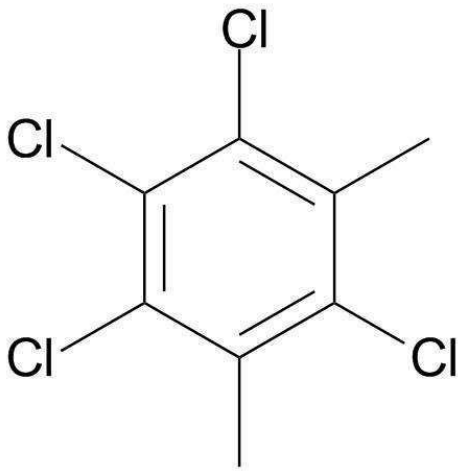
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

AccuStandard
125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

2,

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: APP-9-112-D-20X
Description: Hexachlorobenzene in Dichloromethane
Lot: 219051389
Solvent: Dichloromethane
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: May 13, 2019
Expiration: May 13, 2029
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463
ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY AT-1339
ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobenzene	118-74-1	99.0	2002	1982

J006504
Hexachlorobenzene
Solvent / Lot: Dichloromethane
Prep: 6/21/2021 by YZ
Exp: 5/13/2029
Location:

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034 – General Requirements for the Competence of Reference Material Producers ANAB Certificate Number AR-1463

   ISO/IEC 17025 – General Requirements for the Competence of Testing And Calibration Laboratories ANAB Certificate Number AT-1339

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations Certificate Number 3774

2 **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7

3 **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards and calibrated using an in-house procedure. Good Laboratory Practices have been used throughout the preparation of this .

4 **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5 **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6 **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7 **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

RESTEK®
110 Benner Circle
Bellefonte, PA 16823-8812
Tel: (800)356-1688
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www.restek.com

CERTIFIED REFERENCE MATERIAL

Certificate of Analysis

ISO 17034 Accredited
Reference Material Producer
Certificate #3222.01

ISO/IEC 17025 Accredited
Testing Laboratory
Certificate #3222.02

FOR LABORATORY USE ONLY-READ SDS PRIOR TO USE.

This Reference Material is intended for Laboratory Use Only as a standard for the qualitative and/or quantitative determination of the analyte(s) listed.

Catalog No. : 32292 **Lot No.:** A0185477

Description : Organochlorine Pesticide Mix AB # 2

Organochlorine Pesticide Mix AB # 2 8-80 µg/mL, Hexane/Toluene(1:1), 1mL/ampul

Container Size : 2 mL **Pkg Amt:** > 1 mL

Expiration Date : May 31, 2026 **Storage:** 10°C or colder

Ship: Ambient

C E R T I F I E D V A L U E S

Elution Order	Compound	Grav. Conc. (weight/volume)	Expanded Uncertainty (95% C.L.; K=2)	
1	alpha-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-84-6 (Lot 12307600)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
2	gamma-BHC (Lindane)	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 58-89-9 (Lot 13087200)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
3	beta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-85-7 (Lot 0588007-4)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
4	delta-BHC	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 319-86-8 (Lot 13112400)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed
5	Heptachlor	8.0 µg/mL	+/- 0.0654 µg/mL	Gravimetric
	CAS # 76-44-8 (Lot 803759)		+/- 0.3672 µg/mL	Unstressed
	Purity 99%		+/- 0.5281 µg/mL	Stressed
6	Aldrin	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 309-00-2 (Lot 12983100)		+/- 0.3702 µg/mL	Unstressed
	Purity 96%		+/- 0.5323 µg/mL	Stressed
7	Heptachlor epoxide (isomer B)	8.1 µg/mL	+/- 0.0660 µg/mL	Gravimetric
	CAS # 1024-57-3 (Lot 13168200)		+/- 0.3703 µg/mL	Unstressed
	Purity 99%		+/- 0.5325 µg/mL	Stressed

8	trans-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-74-2	(Lot 32943)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
9	cis-Chlordane		8.0	µg/mL	+/-	0.0657	µg/mL	Gravimetric
	CAS # 5103-71-9	(Lot 31766)			+/-	0.3689	µg/mL	Unstressed
	Purity 98%				+/-	0.5305	µg/mL	Stressed
10	Endosulfan I		8.0	µg/mL	+/-	0.0654	µg/mL	Gravimetric
	CAS # 959-98-8	(Lot BCCF4060)			+/-	0.3672	µg/mL	Unstressed
	Purity 99%				+/-	0.5281	µg/mL	Stressed
11	4,4'-DDE		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 72-55-9	(Lot GHYQG)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
12	Dieldrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 60-57-1	(Lot 11129900)			+/-	0.7408	µg/mL	Unstressed
	Purity 98%				+/-	1.0653	µg/mL	Stressed
13	Endrin		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-20-8	(Lot 13157400)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
14	4,4'-DDD		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 72-54-8	(Lot HAN02)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
15	Endosulfan II		16.0	µg/mL	+/-	0.1309	µg/mL	Gravimetric
	CAS # 33213-65-9	(Lot 12448900)			+/-	0.7345	µg/mL	Unstressed
	Purity 99%				+/-	1.0562	µg/mL	Stressed
16	4,4'-DDT		16.1	µg/mL	+/-	0.1315	µg/mL	Gravimetric
	CAS # 50-29-3	(Lot 220428JLM)			+/-	0.7378	µg/mL	Unstressed
	Purity 98%				+/-	1.0610	µg/mL	Stressed
17	Endrin aldehyde		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 7421-93-4	(Lot 30720)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed
18	Endosulfan sulfate		16.1	µg/mL	+/-	0.1320	µg/mL	Gravimetric
	CAS # 1031-07-8	(Lot BCCB0424)			+/-	0.7406	µg/mL	Unstressed
	Purity 99%				+/-	1.0650	µg/mL	Stressed
19	Methoxychlor		80.2	µg/mL	+/-	0.5781	µg/mL	Gravimetric
	CAS # 72-43-5	(Lot 13027000)			+/-	3.6697	µg/mL	Unstressed
	Purity 98%				+/-	5.2871	µg/mL	Stressed
20	Endrin ketone		16.1	µg/mL	+/-	0.1314	µg/mL	Gravimetric
	CAS # 53494-70-5	(Lot 13026800)			+/-	0.7375	µg/mL	Unstressed
	Purity 99%				+/-	1.0606	µg/mL	Stressed

Solvent: Hexane/Toluene (50:50)
CAS # 110-54-3/108-88-3
Purity 99%

Column:
30m x .25mm x .2um
Rtx-CLP II (cat.# 11323)

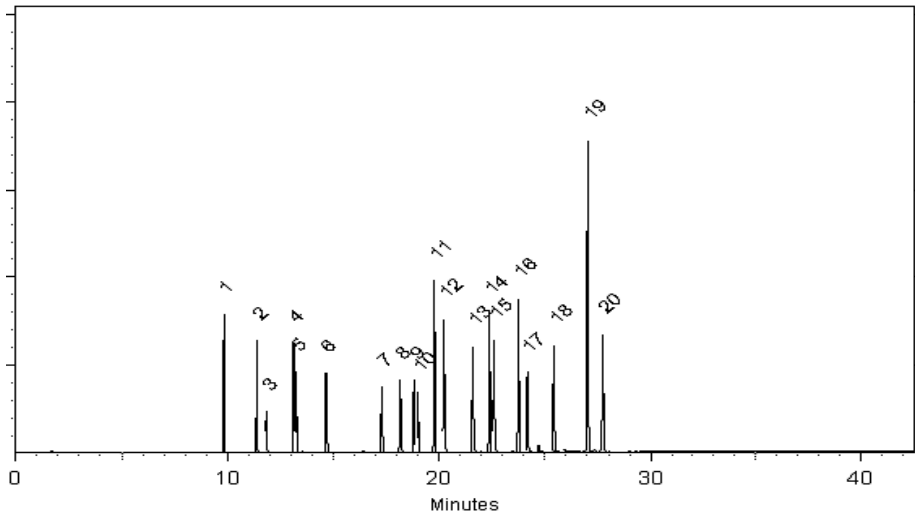
Carrier Gas:
helium-constant pressure 20 psi.

Temp. Program:
150°C to 300°C
@ 4°C/min. (hold 5 min.)

Inj. Temp:
200°C

Det. Temp:
300°C

Det. Type:
ECD



This chromatogram represents a general set of testing conditions chosen for product acceptance. For optimal results in your lab, conditions should be adjusted for your specific instrument, method, and application.

Morgan Craighead - Mix Technician

Date Mixed: 19-May-2022 **Balance:** B442140311

Fang-Yun Lo - QC Analyst

Date Passed: 26-May-2022

Manufactured under Restek's ISO 9001:2015 Registered Quality System Certificate #FM 80397

General Certified Reference Material Notes

Expiration Notes:

- Expiration date valid for unopened ampul stored in compliance with the recommended conditions.
- Uncertainty, concentration, and expiration of the CRM are based on the unopened product being stored according to the recommended condition found in the storage field.

Purity Notes:

- Purity and/or chemical identity are determined by one or more of the following techniques: GC/FID, HPLC, GC/μECD, GC/MS, LC/MS, RI, and/or melting point.
- Compounds with a listed purity of less than 99% have been weight corrected to compensate for impurities and/or salts. A correction factor is used to calculate the amount of compound necessary to achieve the desired concentration of the parent compound in solution.
- Purity of isomeric compounds is reported as the sum of the isomers.
- Purity values are rounded to the nearest whole number.

Certified Uncertainty Value Notes:

- The uncertainties are determined in accordance with ISO 17034 and Guide 35. The certified combined stressed uncertainty value (includes gravimetric uncertainty, homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty and were combined using the following formula:

$$U_{combined\ stressed} = k\sqrt{U^2_{gravimetric} + U^2_{homogeneity} + U^2_{storage\ stability} + U^2_{shipping\ stability}}$$

k is a coverage factor of 2, which gives a level of confidence of approximately 95%.

- It is important to note that the shipping stability uncertainty was obtained under temperature extremes for specific time intervals; therefore, the certified combined stressed uncertainty value should only be applied to the product if it was stored at non-standard temperature conditions up to and including 7 days. Contact Restek Technical Service at www.restek.com/Contact-Us for use recommendations if your shipment was in-transit for more than 7 days at non-standard temperature conditions.
- Apply the certified combined unstressed uncertainty value if the product was received under standard shipping conditions. Apply the certified combined stressed uncertainty value if the product was received under non-standard conditions as specified below.

Label Conditions	Standard Conditions	Non-Standard Conditions
25°C Nominal (Room Temperature)	< 60°C	≥ 60°C up to 7 days
10°C or colder (Refrigerate)	< 40°C	≥ 40°C up to 7 days
0°C or colder (Freezer) -20°C or colder (Deep Freezer)	< 25°C	≥ 25°C up to 7 days

- Separate (not combined) uncertainty values for gravimetric uncertainty are also displayed on the certificate, if needed, separate homogeneity between-ampul uncertainty, storage stability uncertainty and shipping stability uncertainty values are available by contacting Restek Technical Service at www.restek.com/Contact-Us.
- The packaged amount is the minimum sample size for which uncertainty is valid. The ampules are over-filled to ensure that the minimum packaged amount can be sufficiently transferred.

Manufacturing Notes:

- Concentration is based upon gravimetric preparation using either a balance whose calibration has been verified daily using NIST traceable weights, and/or dilutions with Class A glassware.

Handling Notes:

- Stability of the unopened product, when stored in compliance with the recommended conditions, is guaranteed through the expiration displayed on the product label and certificate. Contact Restek for additional opened product stability information, with the knowledge/understanding that open product stability is subject to the specific handling and environmental conditions to which the product is exposed. For your convenience Restek supplies deactivated vials with most standards packed in 2mL ampules. Larger volume deactivated vials are available through Restek as a custom ordered item. Additionally, Restek sells DMDCS for the purpose of glassware deactivation as catalog number 31861, which includes complete instructions.

125 Market Street
New Haven, CT 06513
USA

AccuStandard® Inc.

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CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

1. **Quality Standards:**

   ISO 17034:2016 – General Requirements for the Competence of Reference Material Producers

   ISO/IEC 17025:2017 – General Requirements for the Competence of Testing And Calibration Laboratories

   ISO 9001:2015 – Quality Management System – Requirements Eagle Registrations

2. **Intended Use:** The product covered by this certificate is designed for calibration or for use in quality control procedures for the specified chemical compounds listed on the reverse side. This product can be used for quantification and/or identification. This product can also be used as a reference material to validate analytical procedures, subject to the conditions under Section 7.

3. **Manufacturing:** All balances are calibrated daily using an in-house procedure with weights that are compared annually to master weights and traceable to NIST. The balances are also calibrated annually by an ISO/IEC 17025 accredited calibration laboratory. Please refer to the NIST test number listed on the front of this certificate. Class A glassware is used in the manufacture and quality control of all standards. Good Laboratory Practices have been used throughout the preparation of this Standard.

4. **Homogeneity:** This product is sufficiently homogeneous and any sample size would be within the uncertainty budget.

5. **Stability:** The manufacturer guarantees the stability of this solution through the expiration date stated on the label, when handled and stored according to the conditions stated on the label

6. **Uncertainty:** The uncertainty values as stated on the face of this certificate have been determined using the EURACHEM/CITAC Guide. We report a combined expanded uncertainty equal to the positive square root of the total variance of the uncertainty of the components using the following formula: $u_a = \sqrt{(u(\mathrm{V}))^2 + (u(\mathrm{m}))^2 + (u(\mathrm{IV}))^2 + (u(\mathrm{RO}))^2}$ This formula represents uncertainty components from the mass, volume, short-term stability, long-term stability and homogeneity factors associated with the production of this product. The expanded uncertainty, assumes a normal distribution and a coverage factor of k=2 is chosen using approximately a 95% confidence level.

7. **Legal Notice and Limit of Liability:** This product is for routine laboratory analysis and research purposes only. The company's liability will be limited to replacement of product or refund of purchase price. Notice of claims must be made within thirty (30) days from date of delivery.

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New Haven, CT 06513
USA

AccuStandard®

Tel (203)786-5290
Fax (203)786-5287
www.AccuStandard.com

CERTIFICATE OF ANALYSIS

Catalog No: M-502-36-10X
Description: Hexachlorobutadiene
Lot: 222031188
Solvent: Methanol
Hazards: *Refer to SDS for complete safety information*

Signal Word: Danger

Date Certified: Mar 11, 2022
Expiration: Apr 11, 2024
Sample Size: 1 mL
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

ANAB ACCREDITED REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/MS)	Prepared Concentration² (µg/mL)	Certified Analyte Concentration¹ (µg/mL)
Hexachlorobutadiene	87-68-3	98.0	2002	1962

K011468

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

² All weights are traceable through NIST, Test No. 684/289871-17

¹ Certified Analyte Concentration = Purity x Prepared Concentration.

The Uncertainty associated with the certified concentration reported on this certificate is ±2.4%. This value is the combined expanded uncertainty and represents an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1801

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23D0396-01 A	File ID:	05102332ECD7.D
Sampled:	04/12/23 09:56	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 19:27
% Solids:	43.01	Preparation:	EPA 3546 (Microwave)	Initial/Final:	29.1 g Wet / 2.5 mL
Batch:	BLD0608	Sequence:	SLE0165	Calibration:	GE00022
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	5	20.0	7.8	20.0	U, D
11104-28-2	Aroclor 1221	1	5	20.0	7.8	20.0	U, D
11141-16-5	Aroclor 1232	1	5	20.0	7.8	20.0	U, D
53469-21-9	Aroclor 1242	1	5	20.0	7.8	20.0	U, D
12672-29-6	Aroclor 1248	1	5	56.2	7.8	20.0	D
11097-69-1	Aroclor 1254	1	5	80.6	7.8	20.0	D
11096-82-5	Aroclor 1260	2	5	71.4	2.9	20.0	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9898*	*7.91*	*99.0*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9898*	*5.89*	*73.7*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9898*	*7.10*	*88.8*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9898*	*6.54*	*81.8*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102332ECD7.D
Data file 2: /230510.b/230510.b/05102332ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23D0396-01RE1
Client ID:
Injection Date: 10-MAY-2023 19:27
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 5.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.740	-0.002	56605	5.625	-0.005	34063	5.9	6.5	10.4	Tetrachloro-m-xylene
13.830	-0.010	52668	14.061	-0.008	45355	7.9	7.1	10.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	637325	6.0
Hexabromobiphenyl	876625	665891	-24.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	378214	8.3
Hexabromobiphenyl	652984	449569	-31.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.395	-0.003	9072	55.8	1	8.251	-0.009	8952	49.8
Aroclor-1248	2	8.512	-0.011	14034	33.2	2	8.657	-0.010	7855	41.3
Aroclor-1248	3	8.931	-0.011	34131	42.0	3	9.094	-0.025	12960	58.2
Aroclor-1248	4	9.234	-0.005	39053	94.2	4	9.513	-0.033	12909	48.3
	Total Col1Ave (4 peaks):				56.3	Total Col2Ave (4 peaks):				49.4 RPD = 13
	Corrected Ave (3 peaks):				43.6	Corrected Ave (3 peaks):				46.5 RPD = 6
Aroclor-1254	1	9.234	-0.010	39053	59.6	1	9.390	-0.012	22038	76.7
Aroclor-1254	2	9.310	-0.012	16803	57.1	2	9.487	-0.011	9307	54.5
Aroclor-1254	3	9.607	-0.006	34362	81.3	3	9.909	-0.014	13510	58.0
Aroclor-1254	4	9.734	-0.017	55257	66.7	4	10.059	-0.018	38174	75.1
Aroclor-1254	5	10.068	-0.046	69503	138.9	5	10.304	-0.022	47572	94.3
	Total Col1Ave (5 peaks):				80.7	Total Col2Ave (5 peaks):				71.7 RPD = 12
	Corrected Ave (4 peaks):				66.2	Corrected Ave (4 peaks):				66.1 RPD = 0
Aroclor-1260	1	10.980	-0.012	20392	57.9	1	11.594	-0.011	19769	82.8
Aroclor-1260	2	11.295	-0.014	19489	56.1	2	11.855	-0.016	33368	53.4
Aroclor-1260	3	11.666	-0.019	49310	56.7	3	12.373	-0.015	14103	91.1
Aroclor-1260	4	12.068	-0.022	23535	55.2	4	12.439	-0.016	24367	58.4
Aroclor-1260	5	12.184	-0.009	13126	70.6	NS	---			----
	Total Col1Ave (5 peaks):				59.3	Total Col2Ave (4 peaks):				71.4 RPD = 19
	Corrected Ave (4 peaks):				56.5	Corrected Ave (3 peaks):				64.9 RPD = 14
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.842 - 13.741) = 1094604 Col1 Total PCB = 0.2 ppm*

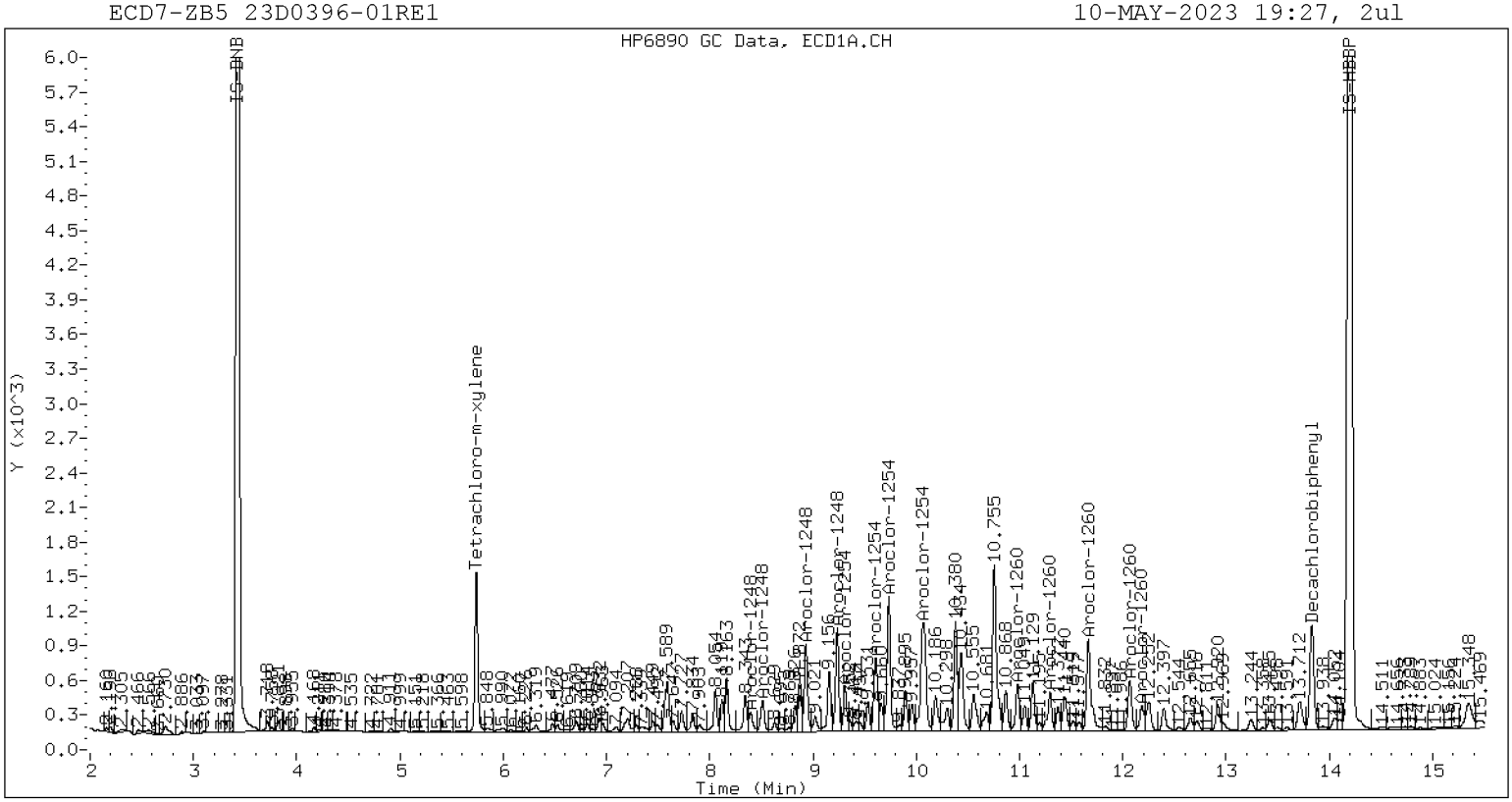
Total PCB Area Col2 (5.730 - 13.969) = 689047 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

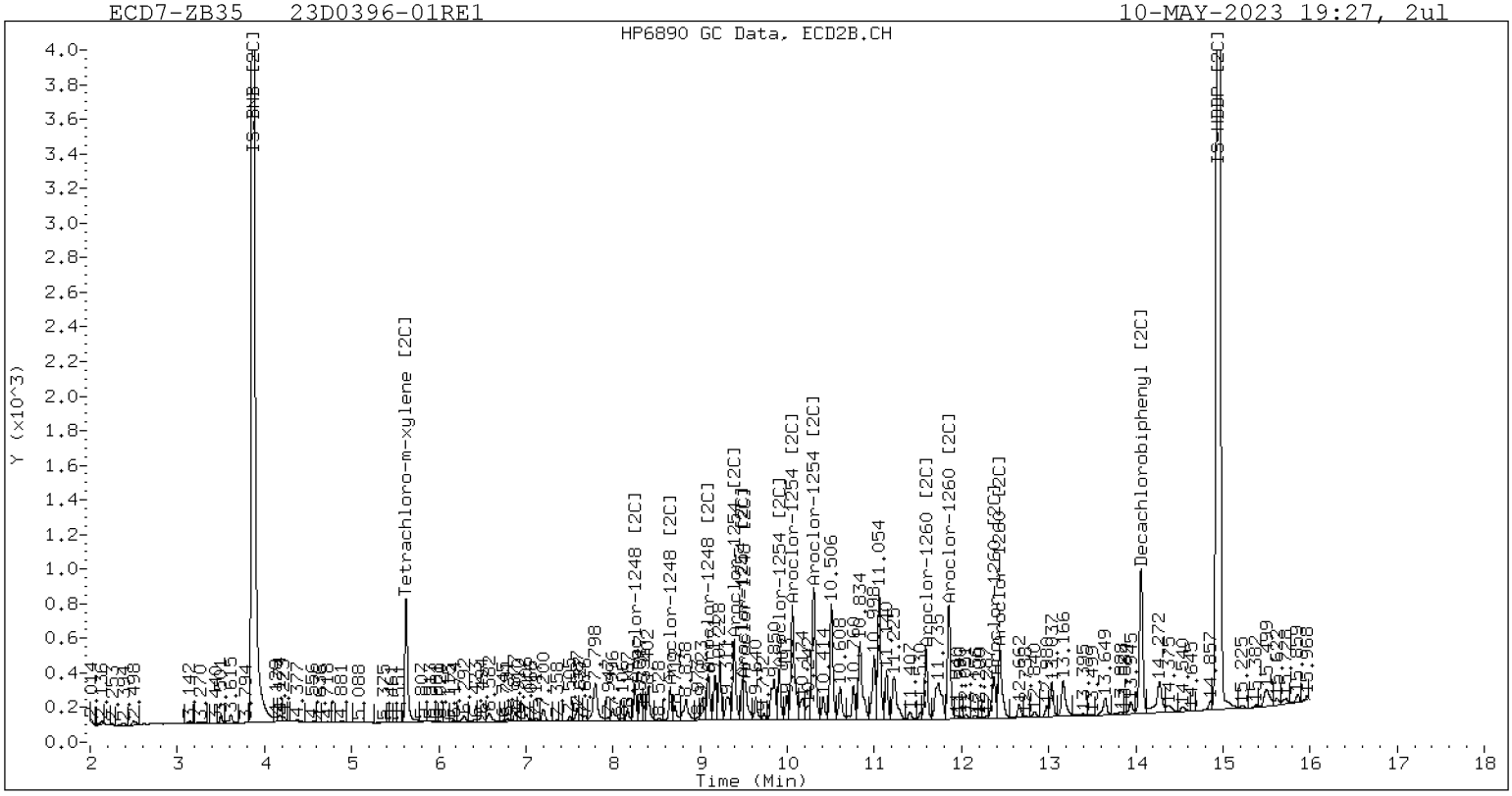
PCB Dual Column Chromatograms

ECD7-ZB5 23D0396-01RE1 10-MAY-2023 19:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23D0396-01RE1 10-MAY-2023 19:27, 2ul

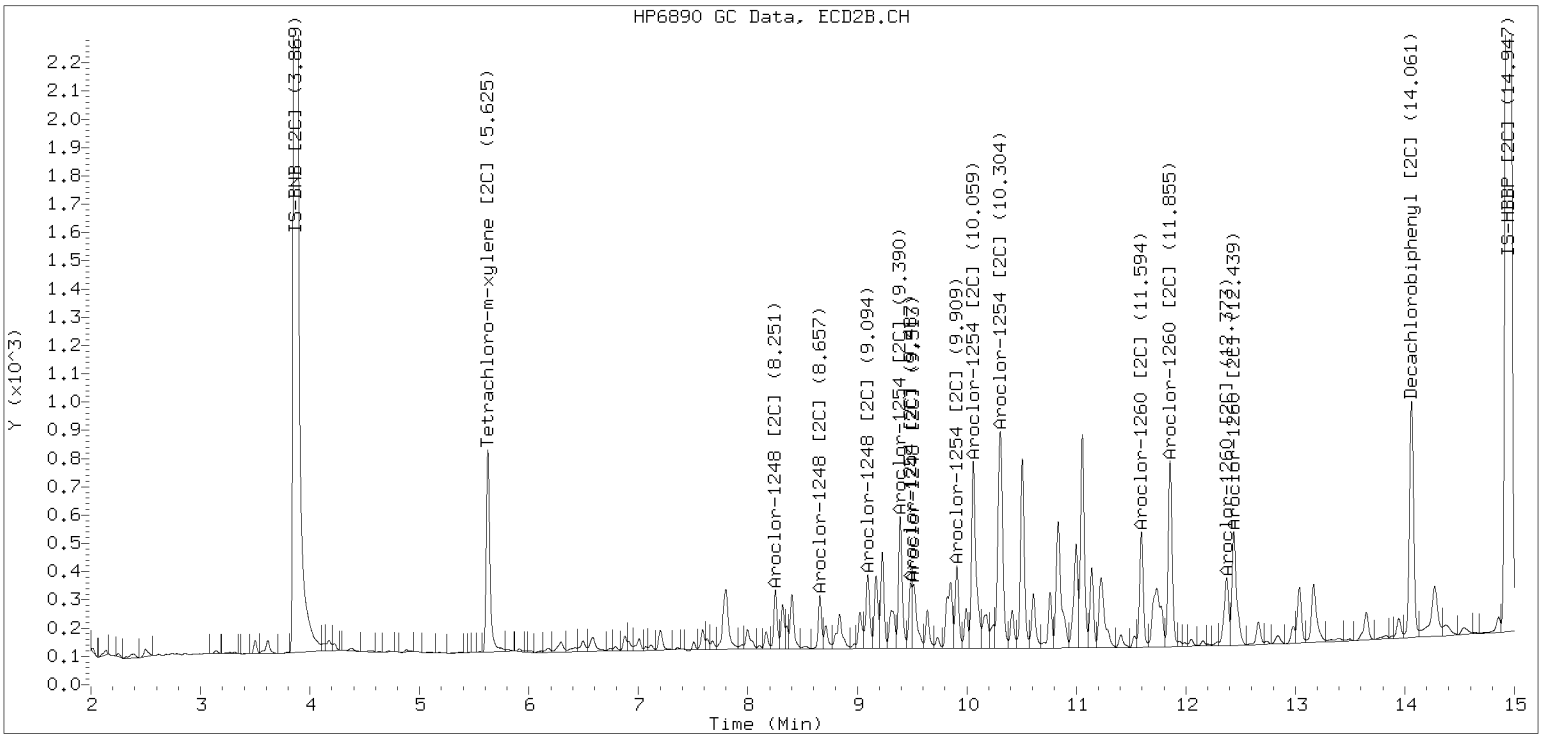


ZB-35 Manual Integration: YES

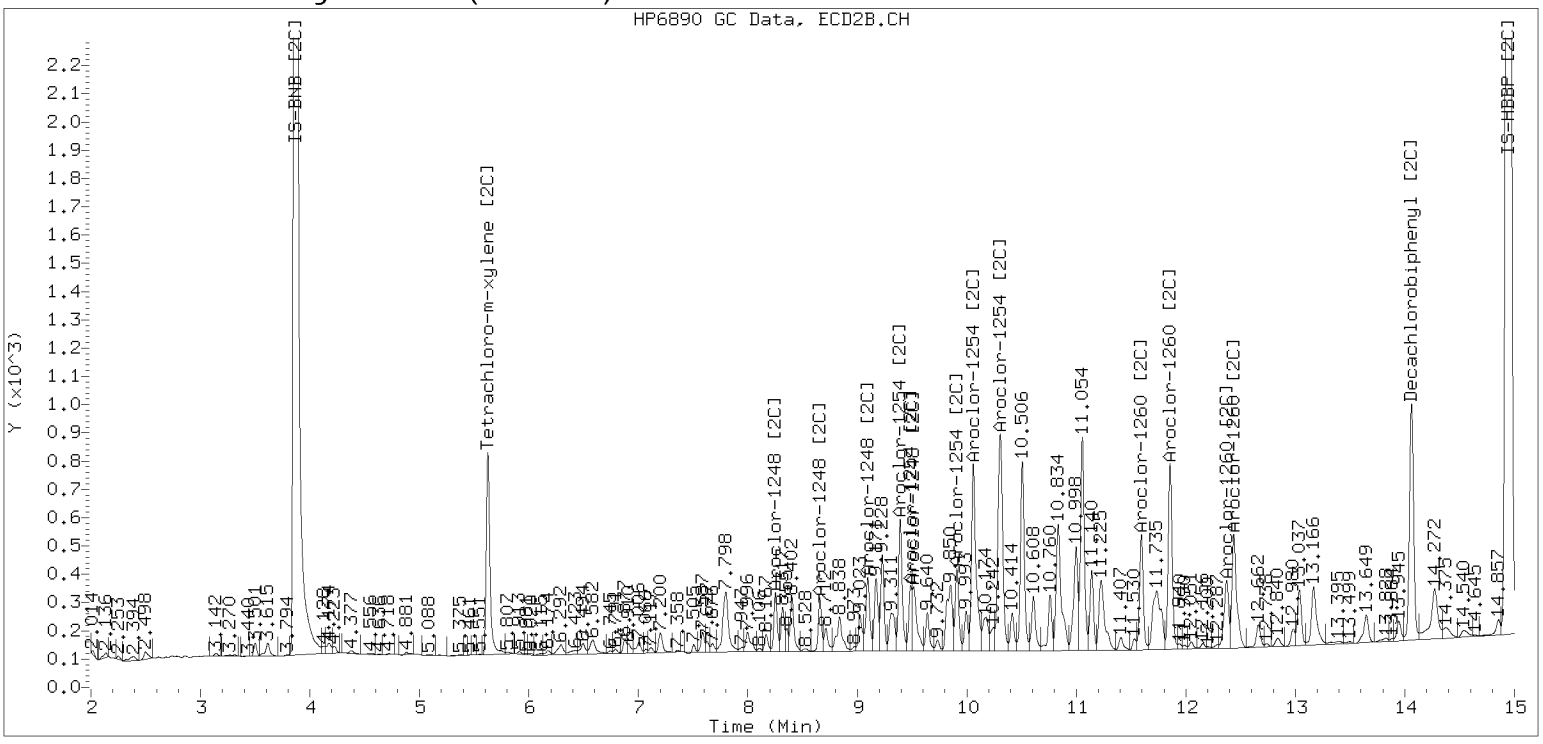
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230510.b/230510.b/05102332ECD7.D Injection Date: 10-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1801

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23D0396-02 A	File ID:	05102333ECD7.D
Sampled:	04/12/23 10:15	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 19:47
% Solids:	48.93	Preparation:	EPA 3546 (Microwave)	Initial/Final:	25.29 g Wet / 2.5 mL
Batch:	BLD0608	Sequence:	SLE0165	Calibration:	GE00022
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	5	20.2	7.9	20.2	U, D
11104-28-2	Aroclor 1221	1	5	20.2	7.9	20.2	U, D
11141-16-5	Aroclor 1232	1	5	20.2	7.9	20.2	U, D
53469-21-9	Aroclor 1242	1	5	20.2	7.9	20.2	D, U
12672-29-6	Aroclor 1248	1	5	52.1	7.9	20.2	D
11097-69-1	Aroclor 1254	2	5	64.9	7.9	20.2	D
11096-82-5	Aroclor 1260	2	5	75.3	3.0	20.2	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*8.0812*	*7.71*	*95.4*	*40 - 126*	
Tetrachlorometaxylene	*1*	*8.0812*	*5.55*	*68.7*	*44 - 120*	
Decachlorobiphenyl	*2*	*8.0812*	*7.13*	*88.2*	*40 - 126*	
Tetrachlorometaxylene	*2*	*8.0812*	*6.01*	*74.4*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102333ECD7.D
Data file 2: /230510.b/230510.b/05102333ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23D0396-02RE1
Client ID:
Injection Date: 10-MAY-2023 19:47
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 5.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.740	-0.002	54179	5.625	-0.005	31612	5.5	6.0	7.9	Tetrachloro-m-xylene
13.832	-0.008	49518	14.062	-0.008	43676	7.6	7.1	7.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	654584	8.8
Hexabromobiphenyl	876625	649213	-25.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	386188	10.6
Hexabromobiphenyl	652984	436013	-33.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.396	-0.002	8556	51.2	1	8.251	-0.008	8598	46.8
Aroclor-1248	2	8.513	-0.011	13356	30.8	2	8.658	-0.010	7640	39.4
Aroclor-1248	3	8.932	-0.010	33112	39.7	3	9.095	-0.025	11693	51.4
Aroclor-1248	4	9.234	-0.004	35964	84.5	4	9.513	-0.033	12037	44.1
		Total Col1Ave (4 peaks):			51.5		Total Col2Ave (4 peaks):			45.4 RPD = 13
		Corrected Ave (3 peaks):			40.5		Corrected Ave (3 peaks):			43.4 RPD = 7
Aroclor-1254	1	9.234	-0.010	35964	53.5	1	9.391	-0.011	20062	68.4
Aroclor-1254	2	9.311	-0.011	18302	60.5	2	9.486	-0.011	8843	50.7
Aroclor-1254	3	9.608	-0.005	29543	68.0	3	9.909	-0.014	11362	47.8
Aroclor-1254	4	9.735	-0.017	50172	59.0	4	10.058	-0.018	35373	68.2
Aroclor-1254	5	10.064	-0.050	65055	126.6	5	10.306	-0.020	44297	86.0
		Total Col1Ave (5 peaks):			73.5		Total Col2Ave (5 peaks):			64.2 RPD = 14
		Corrected Ave (4 peaks):			60.3		Corrected Ave (4 peaks):			58.8 RPD = 3
Aroclor-1260	1	10.981	-0.012	21085	61.4	1	11.594	-0.011	19462	84.0
Aroclor-1260	2	11.296	-0.014	16771	49.5	2	11.856	-0.015	34564	57.1
Aroclor-1260	3	11.667	-0.018	48473	57.1	3	12.373	-0.015	14323	95.4
Aroclor-1260	4	12.067	-0.022	24968	60.1	4	12.439	-0.016	24890	61.5
Aroclor-1260	5	12.182	-0.011	11586	63.9	NS	---			----
		Total Col1Ave (5 peaks):			58.4		Total Col2Ave (4 peaks):			74.5 RPD = 24
		Corrected Ave (4 peaks):			57.0		Corrected Ave (3 peaks):			67.5 RPD = 17
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.842 - 13.741) = 1046051 Col1 Total PCB = 0.1 ppm*

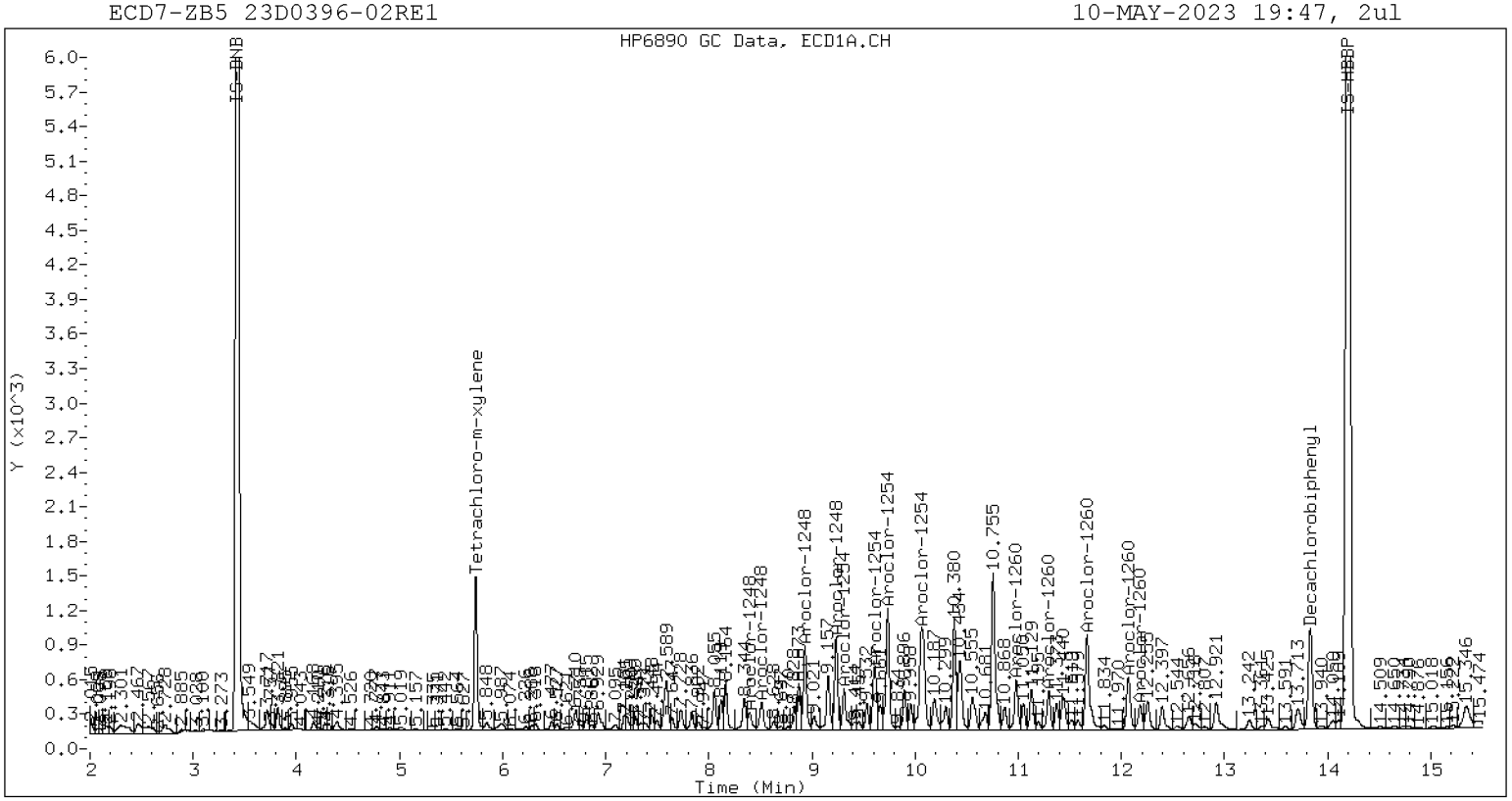
Total PCB Area Col2 (5.730 - 13.969) = 673973 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

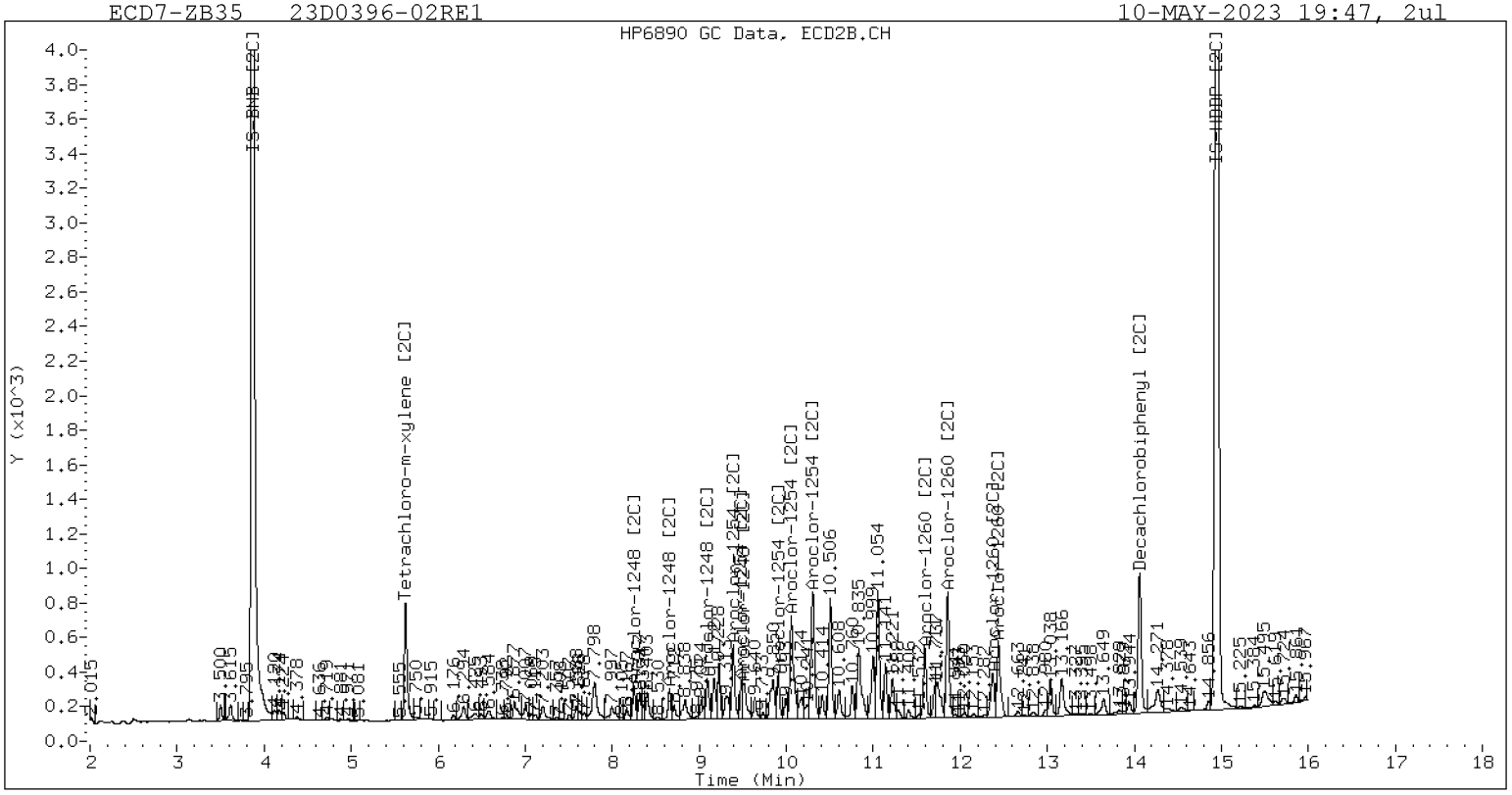
PCB Dual Column Chromatograms

ECD7-ZB5 23D0396-02RE1 10-MAY-2023 19:47, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23D0396-02RE1 10-MAY-2023 19:47, 2ul

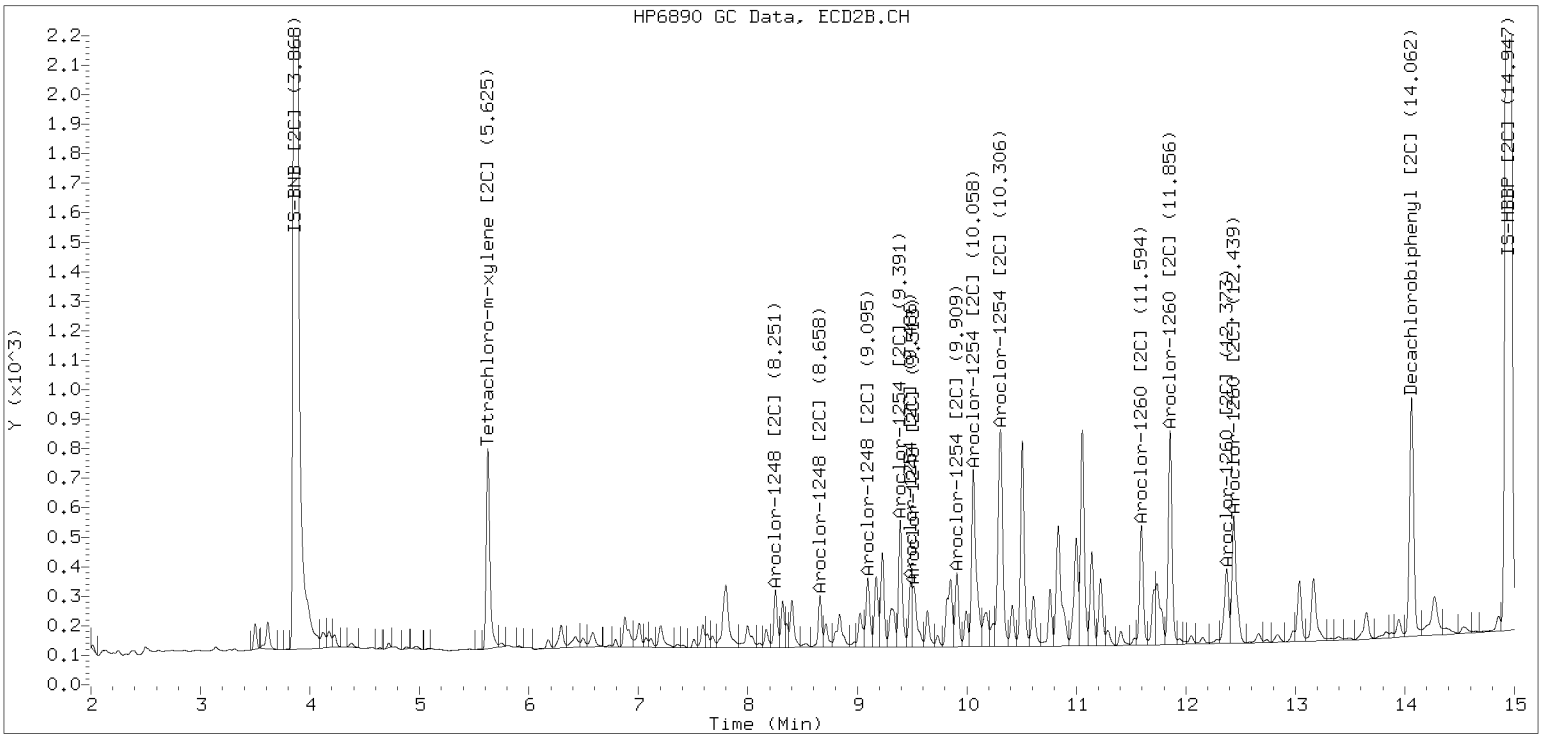


ZB-35 Manual Integration: YES

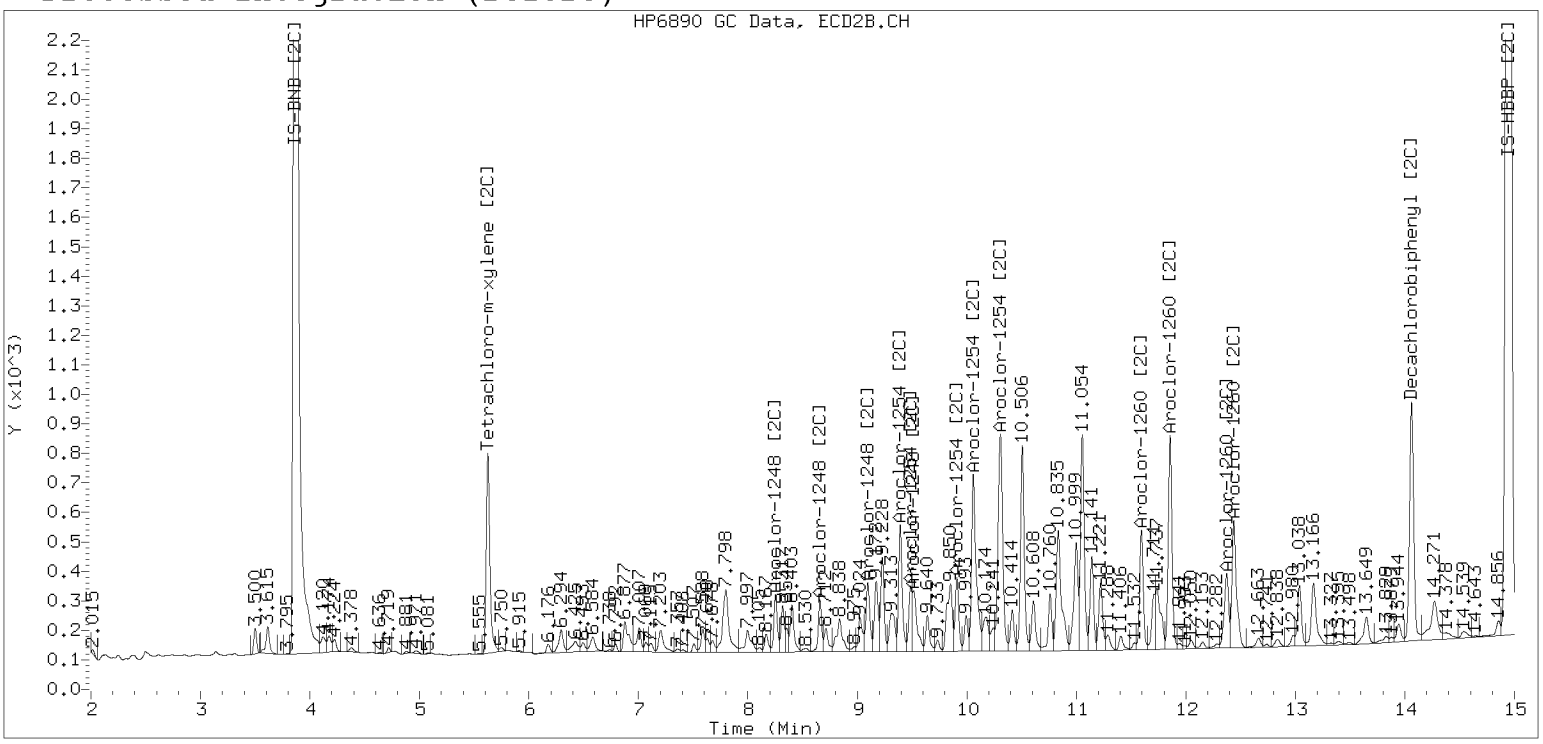
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230510.b/230510.b/05102333ECD7.D Injection Date: 10-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SS1802

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23D0396-03 A	File ID:	05102334ECD7.D
Sampled:	04/12/23 15:03	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 20:08
% Solids:	43.88	Preparation:	EPA 3546 (Microwave)	Initial/Final:	28.49 g Wet / 2.5 mL
Batch:	BLD0608	Sequence:	SLE0165	Calibration:	GE00022
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	5	20.0	7.8	20.0	D, U
11104-28-2	Aroclor 1221	1	5	20.0	7.8	20.0	D, U
11141-16-5	Aroclor 1232	1	5	20.0	7.8	20.0	D, U
53469-21-9	Aroclor 1242	1	5	20.0	7.8	20.0	D, U
12672-29-6	Aroclor 1248	1	5	50.7	7.8	20.0	D
11097-69-1	Aroclor 1254	1	5	73.0	7.8	20.0	D
11096-82-5	Aroclor 1260	2	5	77.5	2.9	20.0	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9991*	*7.65*	*95.6*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9991*	*5.59*	*69.9*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9991*	*6.98*	*87.3*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9991*	*6.36*	*79.5*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102334ECD7.D
Data file 2: /230510.b/230510.b/05102334ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23D0396-03RE1
Client ID:
Injection Date: 10-MAY-2023 20:08
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 5.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.740	-0.002	54002	5.625	-0.005	32591	5.6	6.4	12.8	Tetrachloro-m-xylene
13.832	-0.009	49780	14.063	-0.006	43542	7.7	7.0	9.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	641188	6.6
Hexabromobiphenyl	876625	651283	-25.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	372581	6.7
Hexabromobiphenyl	652984	438974	-32.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	ZB5 Col RT	Shift	Area	Amount	Peak#	ZB35 Col RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.003	8301	50.7	1	8.251	-0.009	8639	48.7
Aroclor-1248	2	8.513	-0.010	12549	29.5	2	8.658	-0.010	7616	40.7
Aroclor-1248	3	8.932	-0.010	30739	37.6	3	9.094	-0.025	12109	55.2
Aroclor-1248	4	9.234	-0.004	35463	85.1	4	9.514	-0.032	11917	45.3
		Total Col1Ave (4 peaks):			50.7		Total Col2Ave (4 peaks):			47.5 RPD = 7
		Corrected Ave (3 peaks):			39.3		Corrected Ave (3 peaks):			44.9 RPD = 13
Aroclor-1254	1	9.234	-0.010	35463	53.8	1	9.391	-0.011	20923	73.9
Aroclor-1254	2	9.310	-0.011	14673	49.6	2	9.488	-0.010	8537	50.8
Aroclor-1254	3	9.607	-0.006	30692	72.1	3	9.909	-0.013	11910	51.9
Aroclor-1254	4	9.735	-0.016	50870	61.0	4	10.059	-0.018	35040	70.0
Aroclor-1254	5	10.069	-0.045	64554	128.3	5	10.305	-0.021	44041	88.7
		Total Col1Ave (5 peaks):			73.0		Total Col2Ave (5 peaks):			67.0 RPD = 8
		Corrected Ave (4 peaks):			59.1		Corrected Ave (4 peaks):			61.6 RPD = 4
Aroclor-1260	1	10.981	-0.012	20266	58.8	1	11.595	-0.011	19367	83.1
Aroclor-1260	2	11.296	-0.014	16987	50.0	2	11.856	-0.015	34248	56.2
Aroclor-1260	3	11.667	-0.018	52861	62.1	3	12.372	-0.016	16845	111.5
Aroclor-1260	4	12.068	-0.021	23542	56.5	4	12.438	-0.017	24117	59.2
Aroclor-1260	5	12.181	-0.012	11389	62.6	NS	---			----
		Total Col1Ave (5 peaks):			58.0		Total Col2Ave (4 peaks):			77.5 RPD = 29
		Corrected Ave (4 peaks):			56.8		Corrected Ave (3 peaks):			66.1 RPD = 15
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.842 - 13.741) = 1020586 Col1 Total PCB = 0.1 ppm*

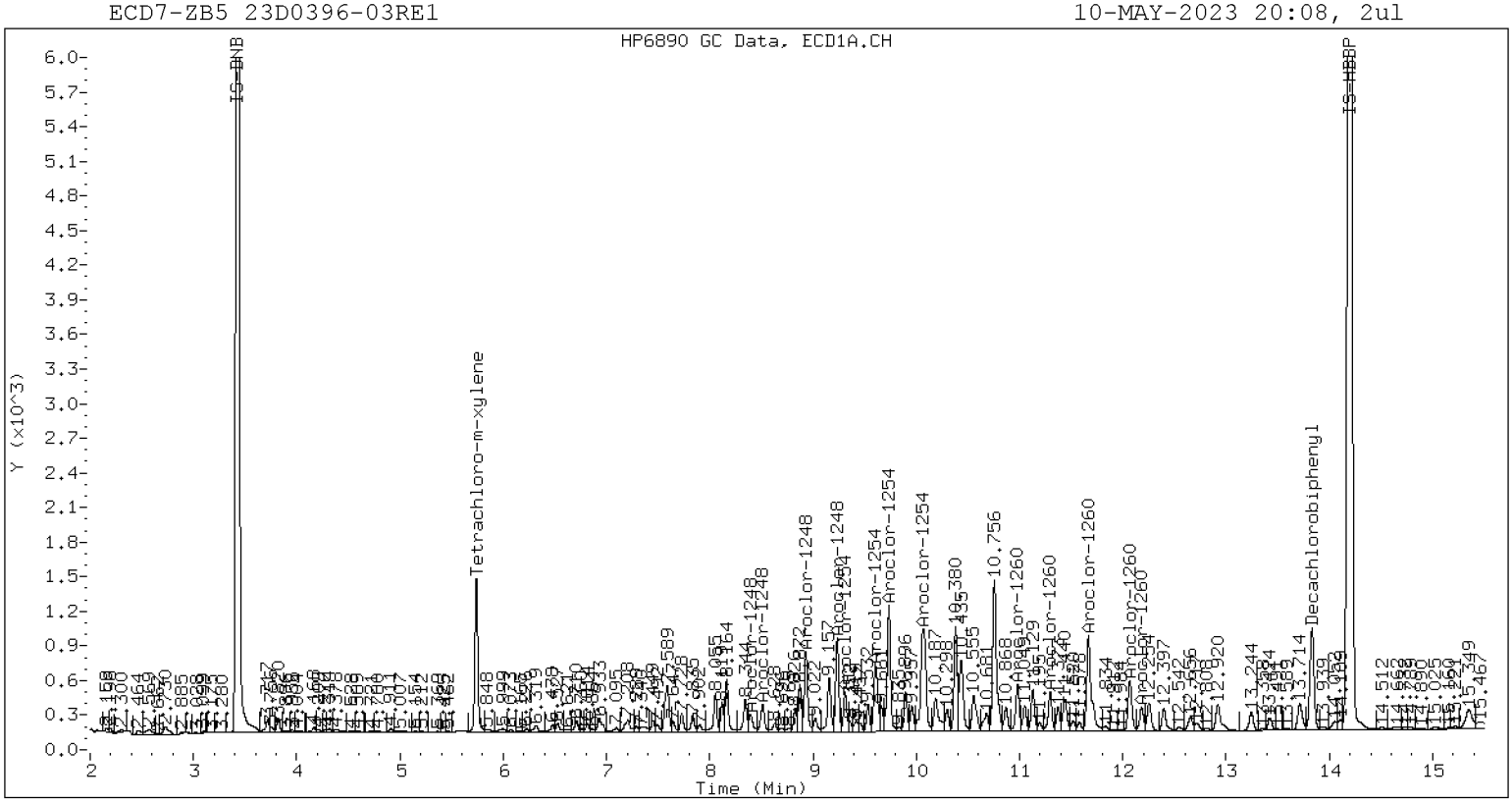
Total PCB Area Col2 (5.730 - 13.969) = 664880 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

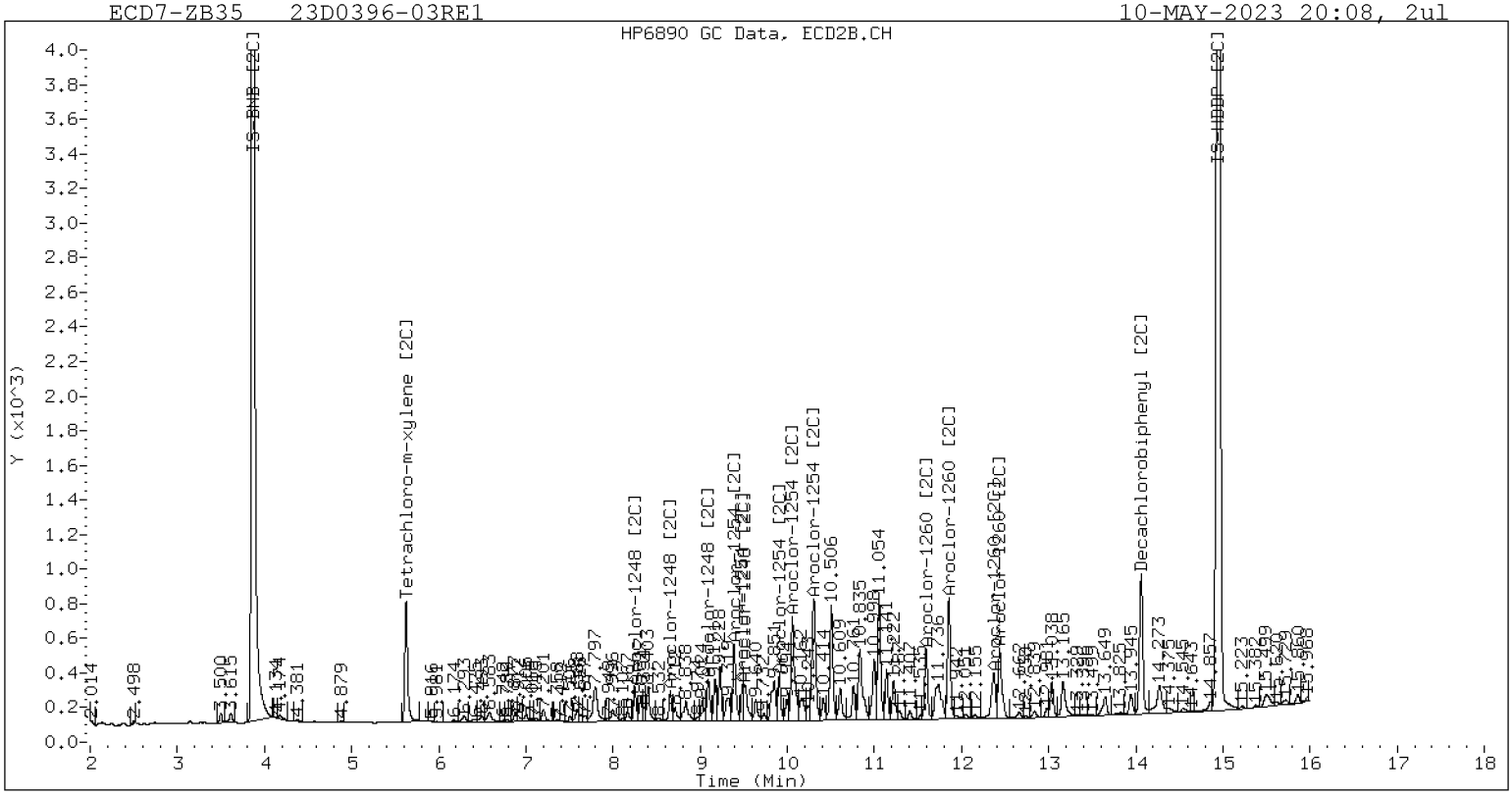
PCB Dual Column Chromatograms

ECD7-ZB5 23D0396-03RE1 10-MAY-2023 20:08, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23D0396-03RE1 10-MAY-2023 20:08, 2ul

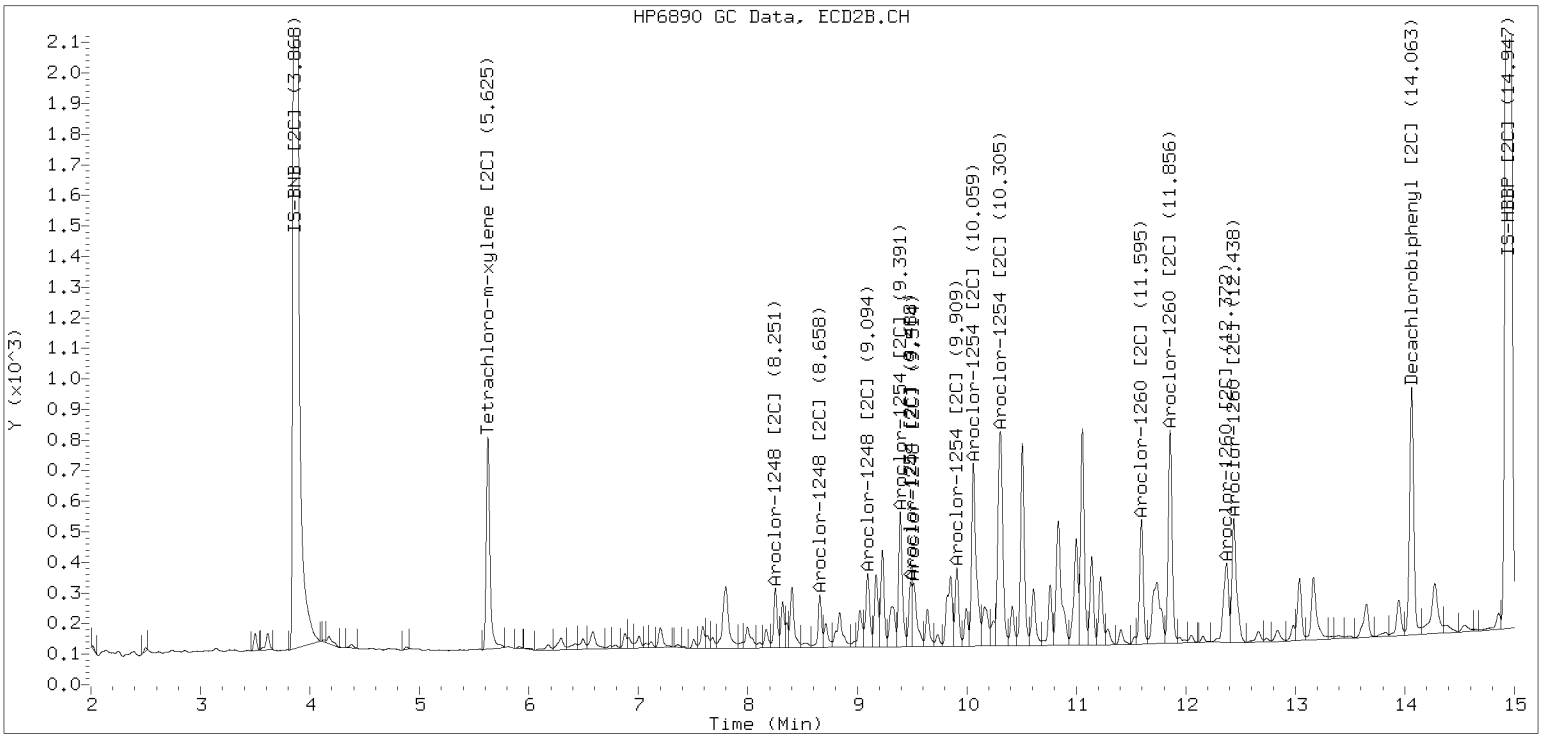


ZB-35 Manual Integration: YES

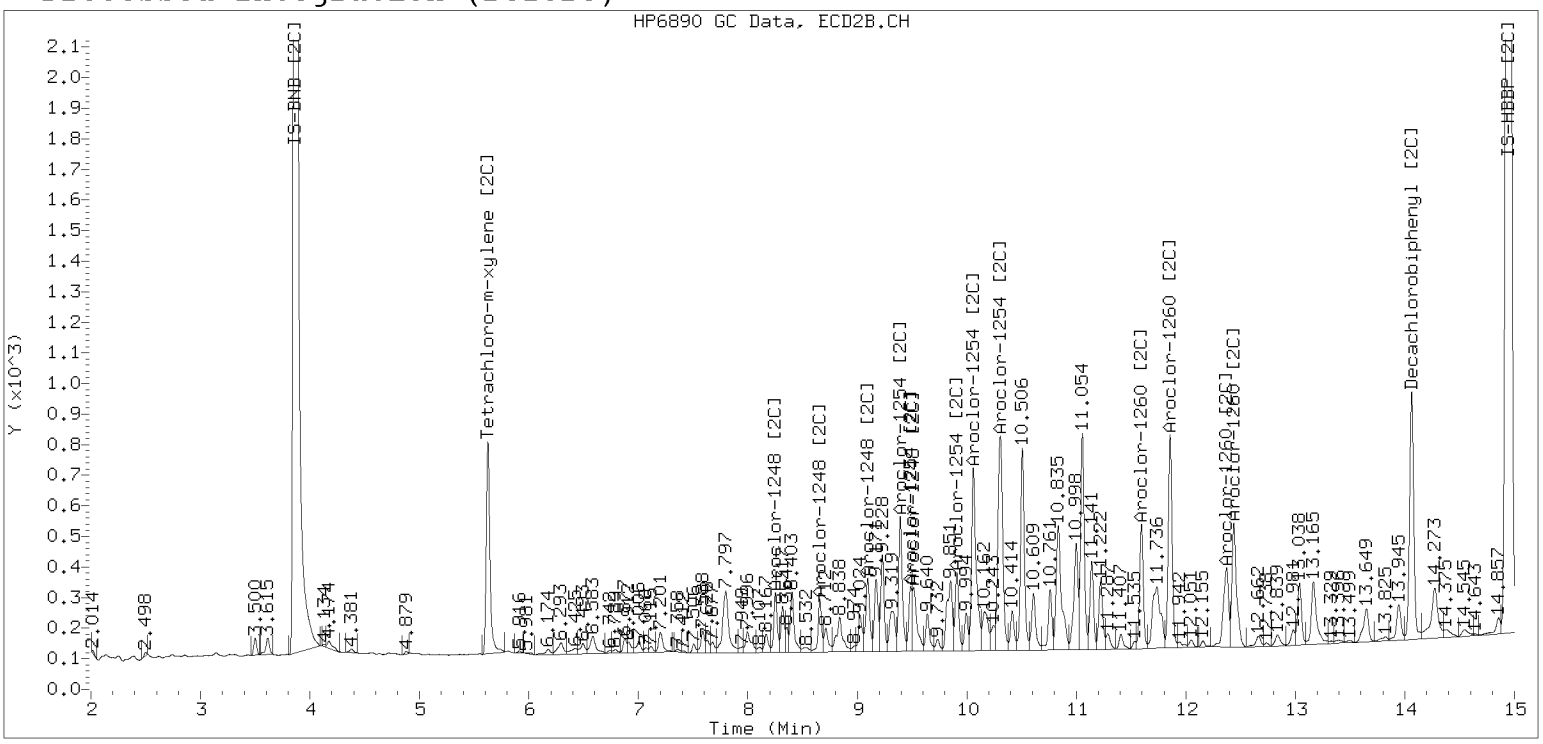
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230510.b/230510.b/05102334ECD7.D Injection Date: 10-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

LDW23-SC1802

ORGANIC ANALYSIS DATA SHEET
EPA 8082A

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Solid	Laboratory ID:	23D0396-04 A	File ID:	05102335ECD7.D
Sampled:	04/12/23 15:40	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 20:29
% Solids:	49.03	Preparation:	EPA 3546 (Microwave)	Initial/Final:	25.55 g Wet / 2.5 mL
Batch:	BLD0608	Sequence:	SLE0165	Calibration:	GE00022
Instrument:	ECD7	Column 1:	ZB5	Column 2:	ZB35

CAS NO.	COMPOUND	Col #	DILUTION	CONC. (ug/kg dry)	MDL	MRL	Q
12674-11-2	Aroclor 1016	1	5	20.0	7.8	20.0	D, U
11104-28-2	Aroclor 1221	1	5	20.0	7.8	20.0	D, U
11141-16-5	Aroclor 1232	1	5	20.0	7.8	20.0	D, U
53469-21-9	Aroclor 1242	1	5	20.0	7.8	20.0	D, U
12672-29-6	Aroclor 1248	1	5	44.7	7.8	20.0	D
11097-69-1	Aroclor 1254	2	5	65.1	7.8	20.0	D
11096-82-5	Aroclor 1260	2	5	73.8	2.9	20.0	D

SURROGATES	Col #	ADDED (ug/kg dry)	CONC (ug/kg dry)	% REC	QC LIMITS	Q
Decachlorobiphenyl	*1*	*7.9827*	*7.50*	*93.9*	*40 - 126*	
Tetrachlorometaxylene	*1*	*7.9827*	*5.83*	*73.1*	*44 - 120*	
Decachlorobiphenyl	*2*	*7.9827*	*6.94*	*86.9*	*40 - 126*	
Tetrachlorometaxylene	*2*	*7.9827*	*6.35*	*79.5*	*44 - 120*	

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102335ECD7.D
Data file 2: /230510.b/230510.b/05102335ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 23D0396-04RE1
Client ID:
Injection Date: 10-MAY-2023 20:29
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 5.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.739	-0.003	57417	5.624	-0.006	33152	5.8	6.4	8.4	Tetrachloro-m-xylene
13.832	-0.009	48545	14.063	-0.007	42977	7.5	7.0	7.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	652278	8.4
Hexabromobiphenyl	876625	646909	-26.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	378979	8.5
Hexabromobiphenyl	652984	435374	-33.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1248	1	8.395	-0.003	6424	38.6	1	8.251	-0.009	8268	45.9
Aroclor-1248	2	8.512	-0.011	10286	23.8	2	8.658	-0.010	6937	36.4
Aroclor-1248	3	8.932	-0.011	29973	36.0	3	9.095	-0.024	10673	47.8
Aroclor-1248	4	9.234	-0.005	34230	80.7	4	9.504	-0.041	10064	37.6
		Total Col1Ave (4 peaks):			44.8		Total Col2Ave (4 peaks):			41.9 RPD = 7
		Corrected Ave (3 peaks):			32.8		Corrected Ave (3 peaks):			40.0 RPD = 20
Aroclor-1254	1	9.234	-0.010	34230	51.1	1	9.391	-0.011	19784	68.7
Aroclor-1254	2	9.310	-0.012	16854	56.0	2	9.484	-0.013	9684	56.6
Aroclor-1254	3	9.608	-0.005	28640	66.2	3	9.909	-0.013	10811	46.3
Aroclor-1254	4	9.734	-0.017	48674	57.4	4	10.059	-0.018	34690	68.1
Aroclor-1254	5	10.064	-0.050	62829	122.7	5	10.306	-0.020	43794	86.7
		Total Col1Ave (5 peaks):			70.7		Total Col2Ave (5 peaks):			65.3 RPD = 8
		Corrected Ave (4 peaks):			57.7		Corrected Ave (4 peaks):			59.9 RPD = 4
Aroclor-1260	1	10.981	-0.012	19929	58.3	1	11.594	-0.011	19099	82.6
Aroclor-1260	2	11.295	-0.014	15258	45.2	2	11.855	-0.016	34510	57.1
Aroclor-1260	3	11.666	-0.019	44899	53.1	3	12.373	-0.014	14031	93.6
Aroclor-1260	4	12.067	-0.022	23663	57.1	4	12.439	-0.016	25230	62.5
Aroclor-1260	5	12.181	-0.012	11038	61.1	NS	---			----
		Total Col1Ave (5 peaks):			55.0		Total Col2Ave (4 peaks):			73.9 RPD = 29
		Corrected Ave (4 peaks):			53.4		Corrected Ave (3 peaks):			67.4 RPD = 23
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
		Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks			

Total PCB Area Col1 (5.842 - 13.741) = 947548 Col1 Total PCB = 0.1 ppm*

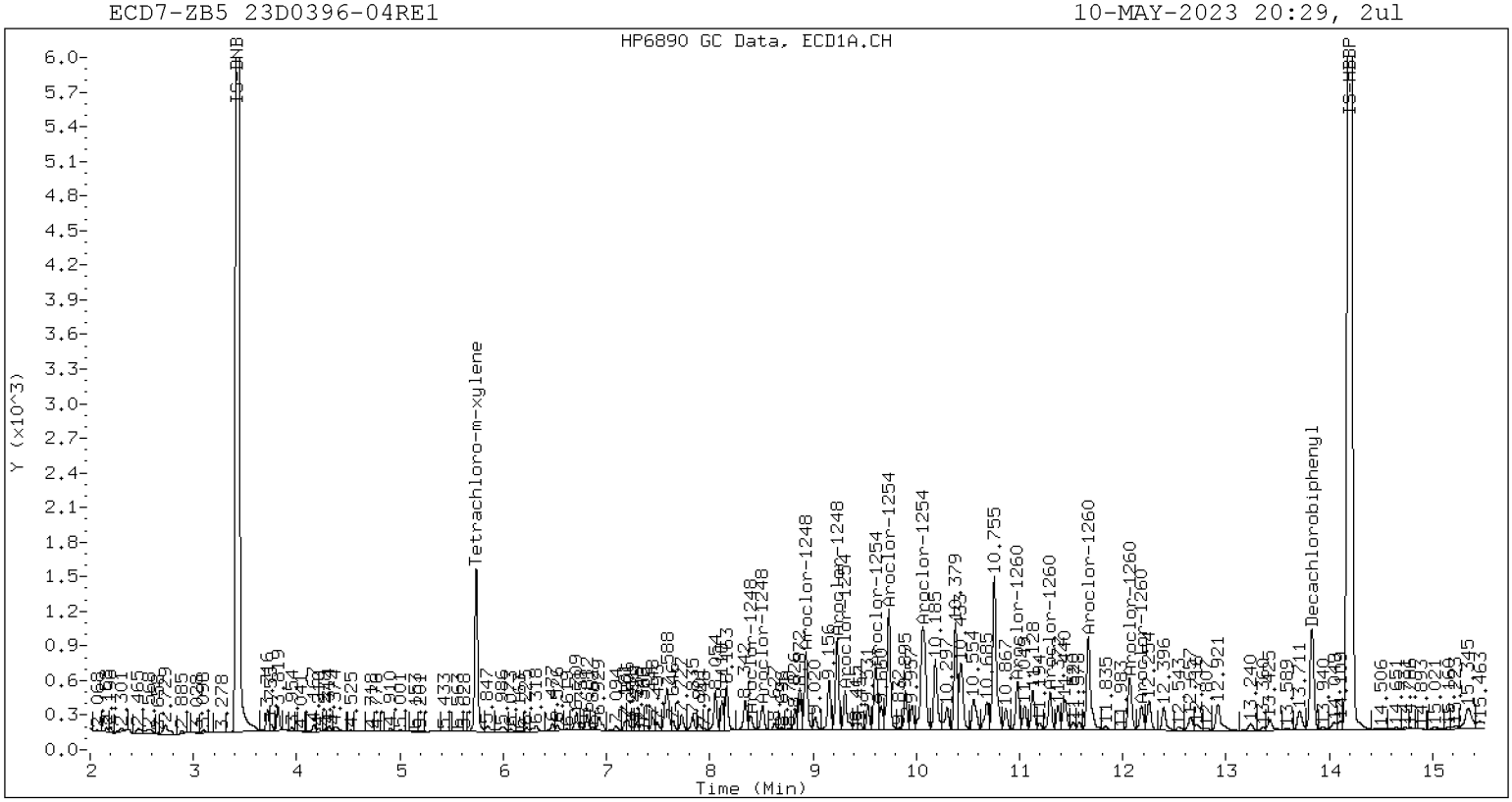
Total PCB Area Col2 (5.730 - 13.969) = 666240 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

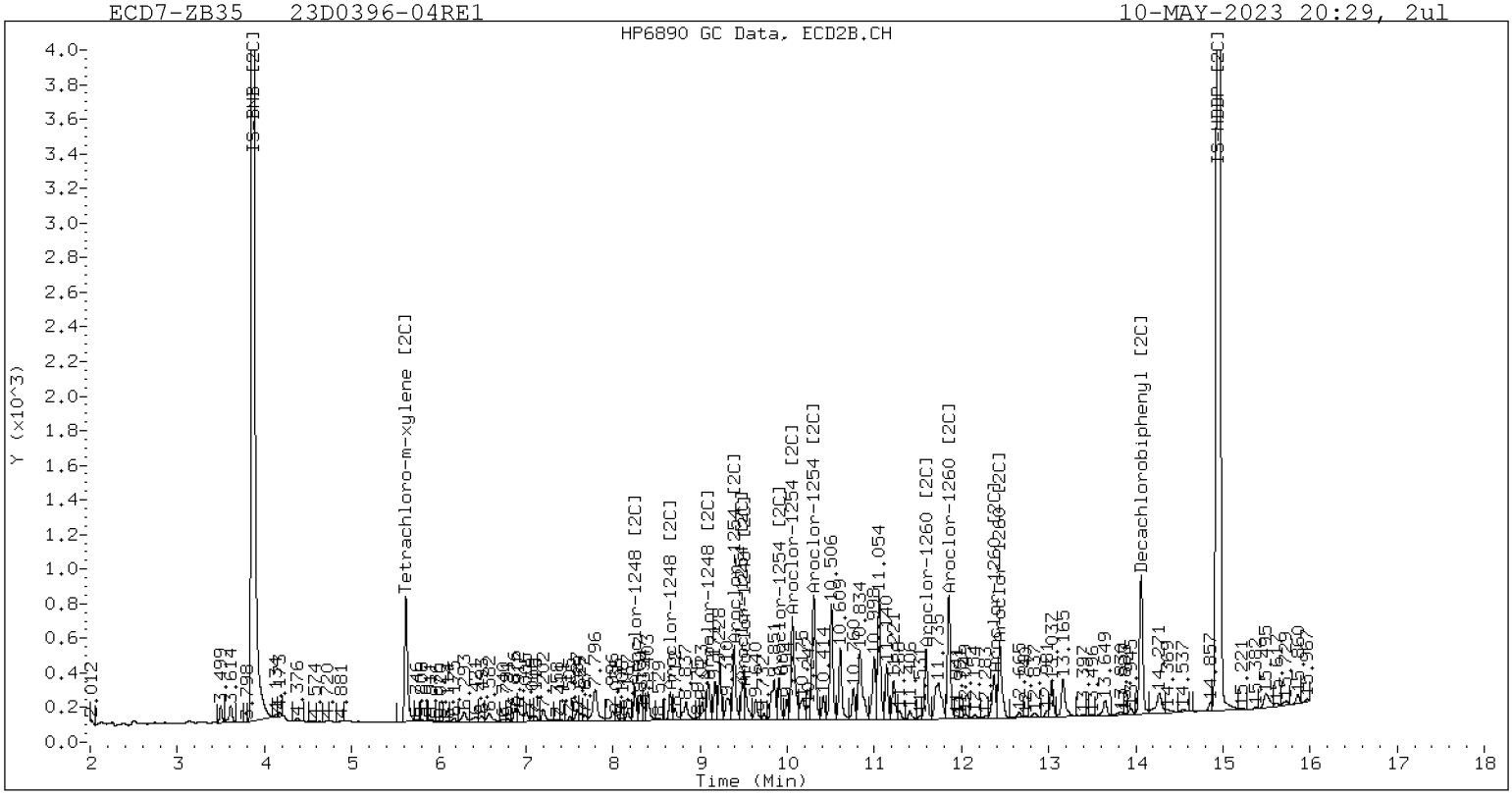
PCB Dual Column Chromatograms

ECD7-ZB5 23D0396-04RE1 10-MAY-2023 20:29, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 23D0396-04RE1 10-MAY-2023 20:29, 2ul

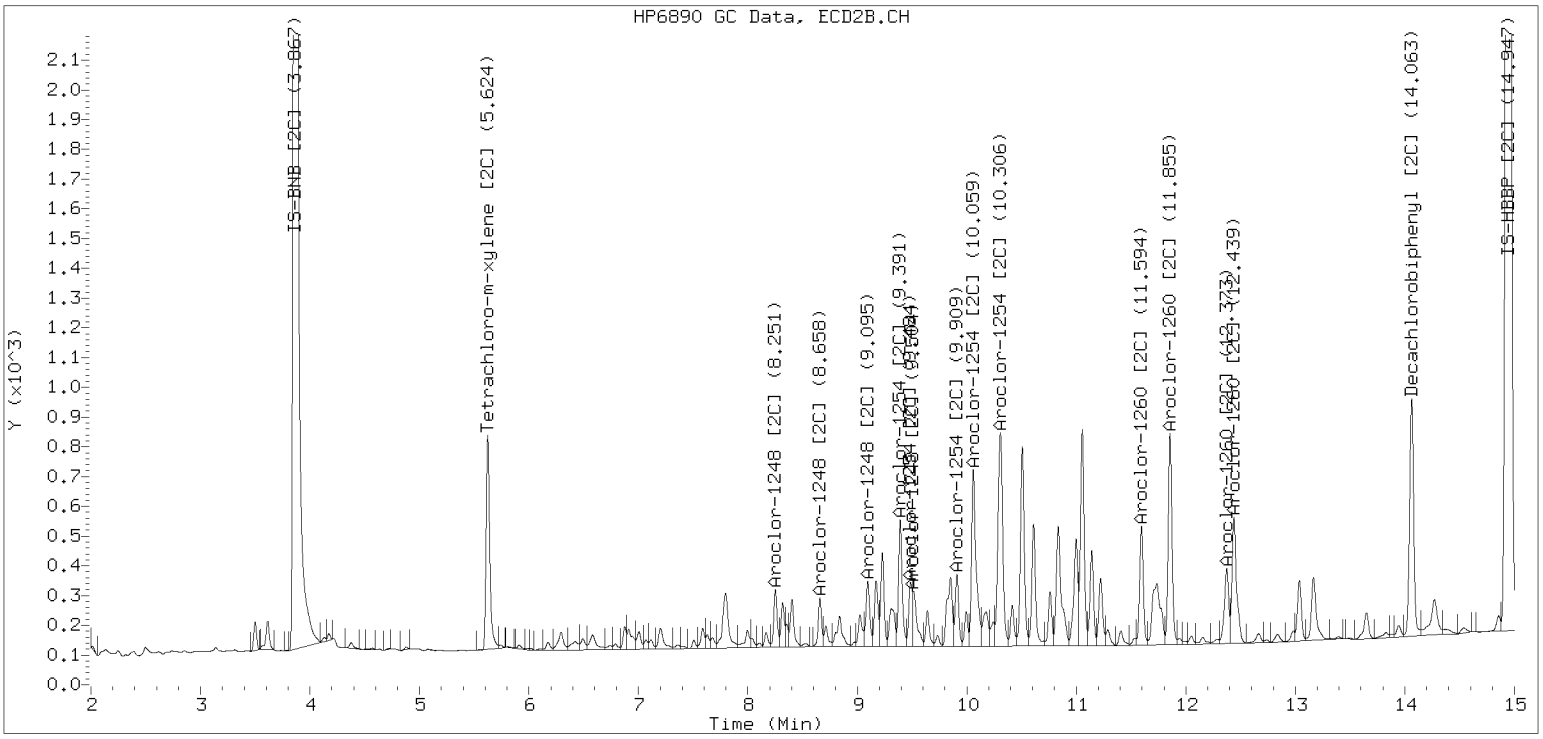


ZB-35 Manual Integration: YES

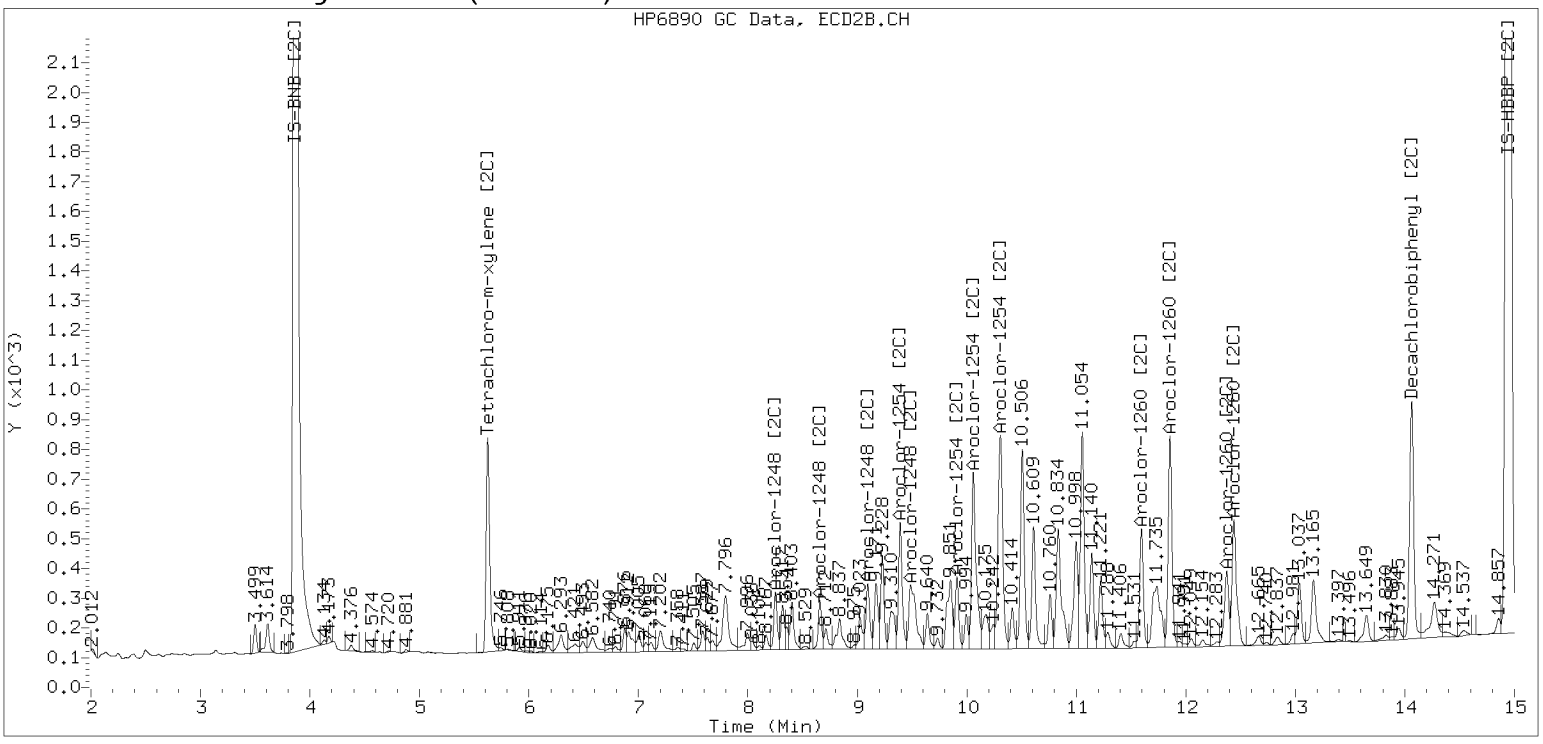
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230510.b/230510.b/05102335ECD7.D Injection Date: 10-MAY-2023

Manual Integration (After)



Processed Integration (Before)



PREPARATION BATCH SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0608 Batch Matrix: Solid
Preparation: EPA 3546 (Microwave)

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	05102332ECD7.D	04/25/23 16:03	
LDW23-SC1801	23D0396-02	05102333ECD7.D	04/25/23 16:03	
LDW23-SS1802	23D0396-03	05102334ECD7.D	04/25/23 16:03	
LDW23-SC1802	23D0396-04	05102335ECD7.D	04/25/23 16:03	
Blank	BLD0608-BLK1	05102309ECD7.D	04/25/23 16:03	
LCS	BLD0608-BS1	05102310ECD7.D	04/25/23 16:03	
LCS Dup	BLD0608-BSD1	05102311ECD7.D	04/25/23 16:03	
Reference	BLD0608-SRM1	05102312ECD7.D	04/25/23 16:03	

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0608

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

Matrix: Solid **Date Prepared:** 04/25/23 **Balance ID:** B146462614 **Set Up By:** CTD 4/21/23

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)
23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

The following standards may be missing from this batch!

Designator	Description
QLS 5	QLS Spike

Analysis: 8082A PCB Solid 4

Lab Number & Container	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Initial (g) Target Dry: 12.5 Actual	(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL) 1 2 3	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
23D0394-01 A	46.4	(26.96)	26.96	5mL	5mL	2mL	2.5	1.0	
23D0394-02 A	76.2	(16.41)	16.45	5mL	5mL	2mL	2.5	1.0	
23D0394-03 A	75.5	(16.57)	16.59	5mL	5mL	2mL	2.5	1.0	
23D0394-04 A	76.8	(16.28)	16.28	5mL	5mL	2mL	2.5	1.0	
23D0394-05 A	56.7	(22.04)	22.04	5mL	5mL	2mL	2.5	1.0	
23D0394-06 A	90.3	(13.84)	13.85	5mL	5mL	2mL	2.5	1.0	
23D0394-07 A	87.2	(14.34)	14.36	5mL	5mL	2mL	2.5	1.0	
23D0394-08 A	78.3	(15.96)	15.97	5mL	5mL	2mL	2.5	1.0	
23D0394-09 A	79.4	(15.75)	15.75	5mL	5mL	2mL	2.5	1.0	
23D0394-10 A	78.0	(16.03)	16.03	5mL	5mL	2mL	2.5	1.0	
23D0394-11 A	77.4	(16.15)	16.15	5mL	5mL	2mL	2.5	1.0	
23D0394-12 A	80.4	(15.55)	15.58	5mL	5mL	2mL	2.5	1.0	
23D0394-13 A	76.5	(16.35)	16.39	5mL	5mL	2mL	2.5	1.0	
23D0396-01 A	43.0	(29.06)	29.06	5mL	5mL	2mL	2.5	1.0	
23D0396-02 A	48.9	(25.55)	25.29	5mL	5mL	2mL	2.5	1.0	
23D0396-03 A	43.9	(28.49)	28.49	5mL	5mL	2mL	2.5	1.0	
23D0396-04 A	49.0	(25.50)	25.55	5mL	5mL	2mL	2.5	1.0	

Batch QC

Lab Number	% Solids	Initial (g) Target Dry: 12.5 (Wet)	Initial (g) Target Dry: 12.5 Actual	(REQ) Acid C/U (5mL)	(REQ) Sulfur C/U (5mL) 1 2 3	(REQ) Silica Gel C/U (2:5)	Final Effective Vol (mL)	Vol (mL) to Lab	Extraction Comments
BLD0608-BLK1	100.0	(12.50)	12.50	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLD0608-BS1	100.0	(12.50)	12.50	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLD0608-BSD1	100.0	(12.50)	12.50	5mL	5mL	2mL	2.5	1.0	(10g Actual Wt.)
BLD0608-MS1	90.3	(13.84)	13.84	5mL	5mL	2mL	2.5	1.0	Use 23D0394-06
BLD0608-MSD1	90.3	(13.84)	13.84	5mL	5mL	2mL	2.5	1.0	Use 23D0394-06
BLD0608-SRM1	100.0	~~(12.50)~~ (2.50)	2.50	5mL	5mL	2mL	2.5	1.0	Use K003528

+1g DI WATER

Client ID Verified By 04/25/23 Date

ARS 5/3/23 Preparation Reviewed By Date

04/25/23 16:03 Extraction Date and Time

Printed: 4/21/2023 12:10:25PM

Analytical Resources, LLC
Analytical Chemists and Consultants

ORGANICS PREPARATION BENCH SHEET

Batch: BLD0608

Prepared using: EPA 3546 (Microwave)

8082A PCB Solid 4 in Solid (Version:7 Aroclors)

WO Comments

23D0394: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)
23D0396: <C>BPR SRM, MS, DUP </C> <M>BPR PS, MS/MSD </M> <E>BPR 8270E RM K000591, SIM PAH RM I009127 PCB RM J006840-43, 7935-36,K011477-79, MS/MSD </E>
<H>BPR L001273-1275, Dup </H> Store in freezer (except GS)

Prep Steps

Microwave
1 2 3
4/26/23
Analyst/Date

KD
100°C
Hexane Exchange
(2 X 20 mL)
1 2 3 4 5 6
CTD 5/2/23
Analyst/Date

TurboVap
Pre Cleanups
1 2 3 4 5
AKRS 5/3/23
Analyst/Date

TurboVap
Post Cleanups
1 2 3 4 5
AKRS 5/3/23
Analyst/Date

Vialing
AKRS 5/3/23
Analyst/Date

Reagents Used

Station/Reagent	Standard ID
Microwave Analyst: CT/NL Date: 4/26/23	
Neutral Glass Wool	L004237
1:1 Hexane/Acetone	L004246
Hexane	L004957
Anhydrous Sodium Sulfate	L004875
KD Analyst: CTD Date: 5/2/23	
Anhydrous Sodium Sulfate	N/A
Hexane	L003500
Vialing Analyst: AKRS Date: 5/3/23	
Hexane	L003500
Concentrated Sulfuric Acid	L001033
Silica Gel (SPE) Darts	L003133
Sodium Sulfite	L002427
Tetrabutylammonium hydrogensulfate (TBAS)	L003029

Surrogates & Spike Standards Used

Type	Vial ID / Standard ID	Vol uL	Analyst	Witness
Surrogate 2µg/mL	N L003667 Exp Date: 7/21/2023	50µL	CT	
Spike 20µg/mL	1 L001587 Exp Date: 8/13/2023	63µL	CT	

MANUALLY ENTER EXPIRATION DATES!

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

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

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0043	Cleanup Type:	Sulfuric Acid
Cleanup Method:	EPA 3665 Sulfuric Acid Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LCS Dup	BLD0608-BSD1	05102311ECD7.D	05/03/2023	
LDW23-SC1801	23D0396-02	05102333ECD7.D	05/03/2023	
LCS	BLD0608-BS1	05102310ECD7.D	05/03/2023	
Blank	BLD0608-BLK1	05102309ECD7.D	05/03/2023	
LDW23-SS1802	23D0396-03	05102334ECD7.D	05/03/2023	
LDW23-SS1801	23D0396-01	05102332ECD7.D	05/03/2023	
LDW23-SC1802	23D0396-04	05102335ECD7.D	05/03/2023	
Reference	BLD0608-SRM1	05102312ECD7.D	05/03/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLE0043

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 5/3/2023 2:55:27PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23D0394-01	A	LDW23-SS1098	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-02	A	LDW23-SS1071	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-03	A	LDW23-IT1071	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-04	A	LDW23-SS1078	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-05	A	LDW23-IT1067	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-06	A	LDW23-SS1807	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-07	A	LDW23-IT1087	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-08	A	LDW23-SS1055	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-09	A	LDW23-IT1055	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-10	A	LDW23-IT1050	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-11	A	LDW23-SS1034	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-12	A	LDW23-SS1806	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-13	A	LDW23-IT1806	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-01	A	LDW23-SS1801	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-02	A	LDW23-SC1801	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-03	A	LDW23-SS1802	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-04	A	LDW23-SC1802	A 01	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
BLD0608-BLK1	-	Blank	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-BS1	-	LCS	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-BSD1	-	LCS Dup	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-MS1	-	Matrix Spike	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	5/3/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLE0043

Matrix: Solid **Cleanup using: Organics - EPA 3665 Sulfuric Acid Cleanup - uL** **Printed: 5/3/2023 2:55:27PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLD0608-SRM1	-	Reference	-	2.5	2.5	-	5/3/2023	NRB	

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0044	Cleanup Type:	Sulfur
Cleanup Method:	EPA 3660B Sulfur Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SC1802	23D0396-04	05102335ECD7.D	05/03/2023	
Reference	BLD0608-SRM1	05102312ECD7.D	05/03/2023	
LCS	BLD0608-BS1	05102310ECD7.D	05/03/2023	
LDW23-SS1801	23D0396-01	05102332ECD7.D	05/03/2023	
LDW23-SS1802	23D0396-03	05102334ECD7.D	05/03/2023	
LDW23-SC1801	23D0396-02	05102333ECD7.D	05/03/2023	
Blank	BLD0608-BLK1	05102309ECD7.D	05/03/2023	
LCS Dup	BLD0608-BSD1	05102311ECD7.D	05/03/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLE0044

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 5/3/2023 2:56:12PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23D0394-01	A	LDW23-SS1098	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-02	A	LDW23-SS1071	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-03	A	LDW23-IT1071	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-04	A	LDW23-SS1078	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-05	A	LDW23-IT1067	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-06	A	LDW23-SS1807	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-07	A	LDW23-IT1087	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-08	A	LDW23-SS1055	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-09	A	LDW23-IT1055	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-10	A	LDW23-IT1050	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-11	A	LDW23-SS1034	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-12	A	LDW23-SS1806	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-13	A	LDW23-IT1806	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-01	A	LDW23-SS1801	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-02	A	LDW23-SC1801	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-03	A	LDW23-SS1802	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-04	A	LDW23-SC1802	A 01	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
BLD0608-BLK1	-	Blank	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-BS1	-	LCS	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-BSD1	-	LCS Dup	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-MS1	-	Matrix Spike	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	5/3/2023	NRB	

CLEANUP BENCH SHEET

CLE0044

Matrix: Solid **Cleanup using: Organics - EPA 3660B Sulfur Cleanup - uL** **Printed: 5/3/2023 2:56:12PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLD0608-SRM1	-	Reference	-	2.5	2.5	-	5/3/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BATCH SUMMARY

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Cleanup Batch:	CLE0045	Cleanup Type:	Silica Gel
Cleanup Method:	EPA 3630C Silica Gel Cleanup - uL	Analysis:	EPA 8082A

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1802	23D0396-03	05102334ECD7.D	05/03/2023	
LDW23-SC1802	23D0396-04	05102335ECD7.D	05/03/2023	
LDW23-SC1801	23D0396-02	05102333ECD7.D	05/03/2023	
Blank	BLD0608-BLK1	05102309ECD7.D	05/03/2023	
LCS	BLD0608-BS1	05102310ECD7.D	05/03/2023	
LCS Dup	BLD0608-BSD1	05102311ECD7.D	05/03/2023	
Reference	BLD0608-SRM1	05102312ECD7.D	05/03/2023	
LDW23-SS1801	23D0396-01	05102332ECD7.D	05/03/2023	

Analytical Resources, LLC
Analytical Chemists and Consultants

CLEANUP BENCH SHEET

CLE0045

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 5/3/2023 2:56:47PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
23D0394-01	A	LDW23-SS1098	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-02	A	LDW23-SS1071	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-03	A	LDW23-IT1071	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-04	A	LDW23-SS1078	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-05	A	LDW23-IT1067	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-06	A	LDW23-SS1807	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-07	A	LDW23-IT1087	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-08	A	LDW23-SS1055	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-09	A	LDW23-IT1055	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-10	A	LDW23-IT1050	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-11	A	LDW23-SS1034	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-12	A	LDW23-SS1806	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0394-13	A	LDW23-IT1806	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-01	A	LDW23-SS1801	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-02	A	LDW23-SC1801	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-03	A	LDW23-SS1802	A 04	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
23D0396-04	A	LDW23-SC1802	A 01	2.5	2.5	8082A PCB Solid 4	5/3/2023	NRB	
BLD0608-BLK1	-	Blank	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-BS1	-	LCS	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-BSD1	-	LCS Dup	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-MS1	-	Matrix Spike	-	2.5	2.5	-	5/3/2023	NRB	
BLD0608-MSD1	-	Matrix Spike Dup	-	2.5	2.5	-	5/3/2023	NRB	

CLEANUP BENCH SHEET

CLE0045

Matrix: Solid **Cleanup using: Organics - EPA 3630C Silica Gel Cleanup - uL** **Printed: 5/3/2023 2:56:47PM**

Lab Number	Sample Container	Sample Name	Extract Container	Initial (uL)	Final (uL)	Analysis	Clean Up Date	Cleaned By	Cleanup Comments
BLD0608-SRM1	-	Reference	-	2.5	2.5	-	5/3/2023	NRB	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I

METHOD BLANK DATA SHEET

EPA 8082A

Blank

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Solid	Laboratory ID:	BLD0608-BLK1	File ID:	05102309ECD7.D
Sampled:	N/A	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 11:27
Solids:		Preparation:	EPA 3546 (Microwave)	Initial/Final:	12.5 g / 2.5 mL
Batch:	BLD0608	Sequence:	SLE0165	Calibration:	GE00022
Instrument:	ECD7	Column:	ZB5	Cleanups:	Silica Gel, Sulfur, Sulfuric Acid

CAS NO.	COMPOUND	DILUTION	CONC: (ug/kg wet)	Q	DL	RL
12674-11-2	Aroclor 1016	1	4.0	U	1.6	4.0
11104-28-2	Aroclor 1221	1	4.0	U	1.6	4.0
11141-16-5	Aroclor 1232	1	4.0	U	1.6	4.0
53469-21-9	Aroclor 1242	1	4.0	U	1.6	4.0
12672-29-6	Aroclor 1248	1	4.0	U	1.6	4.0
11097-69-1	Aroclor 1254	1	4.0	U	1.6	4.0
11096-82-5	Aroclor 1260	1	4.0	U	0.6	4.0

SURROGATES	ADDED: (ug/kg wet)	FOUND: (ug/kg wet)	% REC	QC LIMITS	Q
Decachlorobiphenyl	8.0000	7.60	95.0	40 - 126	
Tetrachlorometaxylene	8.0000	6.53	81.6	44 - 120	
Decachlorobiphenyl [2C]	8.0000	8.11	101	40 - 126	
Tetrachlorometaxylene [2C]	8.0000	6.41	80.1	44 - 120	

[2C] indicates second-column analyte, present if quantification on any batch samples used second column data.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102309ECD7.D
Data file 2: /230510.b/230510.b/05102309ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLD0608-BLK1
Client ID:
Injection Date: 10-MAY-2023 11:27
Report Date: 05/11/2023 17:14
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.001	300573	5.629	-0.002	156871	32.6	32.1	1.8	Tetrachloro-m-xylene
13.839	-0.002	333383	14.067	-0.003	335488	38.0	40.5	6.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	611383	1.6
Hexabromobiphenyl	876625	878062	0.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	355732	1.8
Hexabromobiphenyl	652984	582943	-10.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	---			0.0
Aroclor-1221	3	---			0.0	3	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	---			0.0	1	---			0.0
Aroclor-1260	2	---			0.0	2	---			0.0
Aroclor-1260	3	---			0.0	3	---			0.0
Aroclor-1260	4	---			0.0	4	---			0.0
Aroclor-1260	5	---			0.0	NS	---			----
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	---			0.0	1	---			0.0
Aroclor-1262	2	---			0.0	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	---			0.0	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	---			0.0	3	---			0.0
Aroclor-1268	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.842 - 13.741) = 197206 Col1 Total PCB = 0.0 ppm*

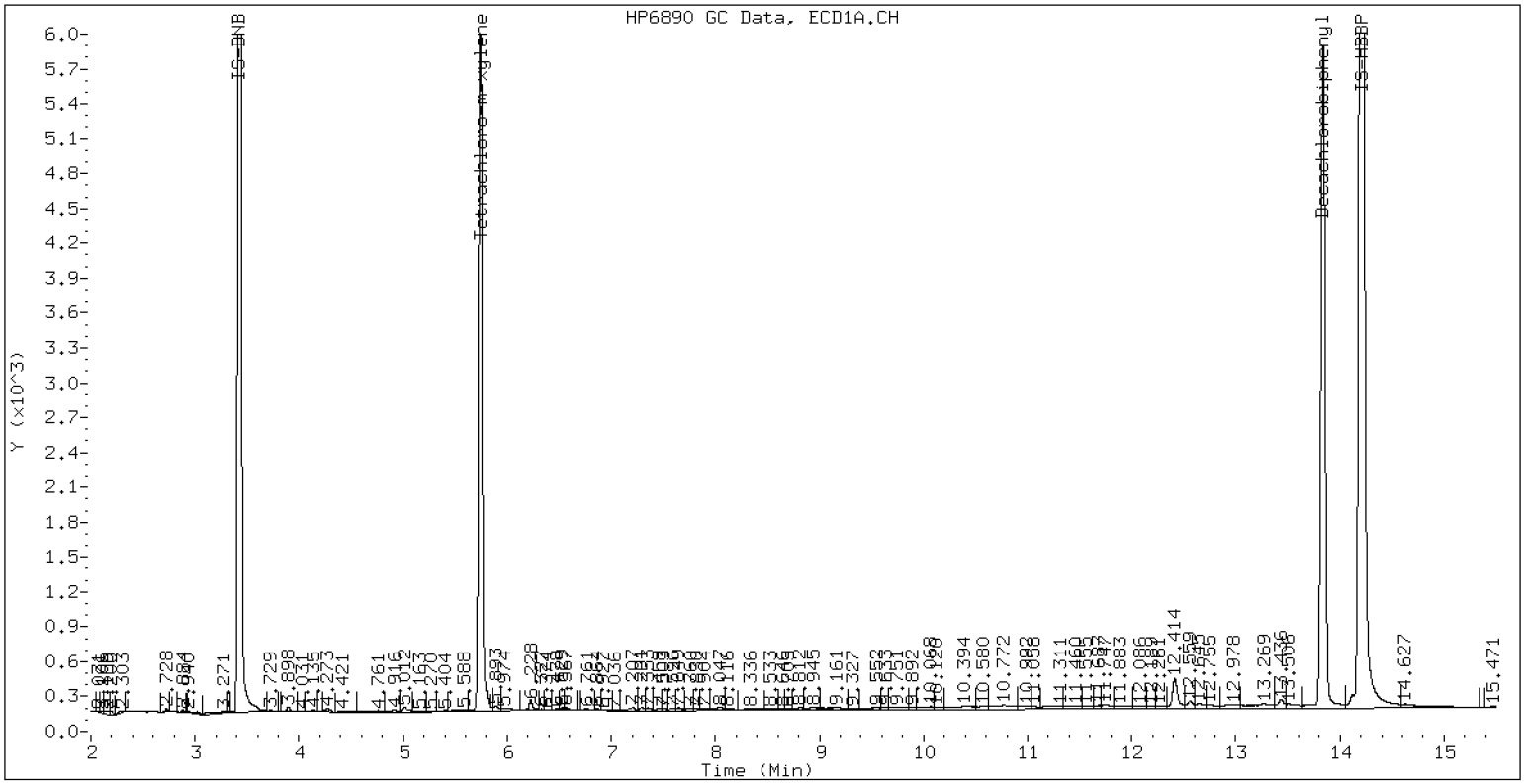
Total PCB Area Col2 (5.730 - 13.969) = 18174 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

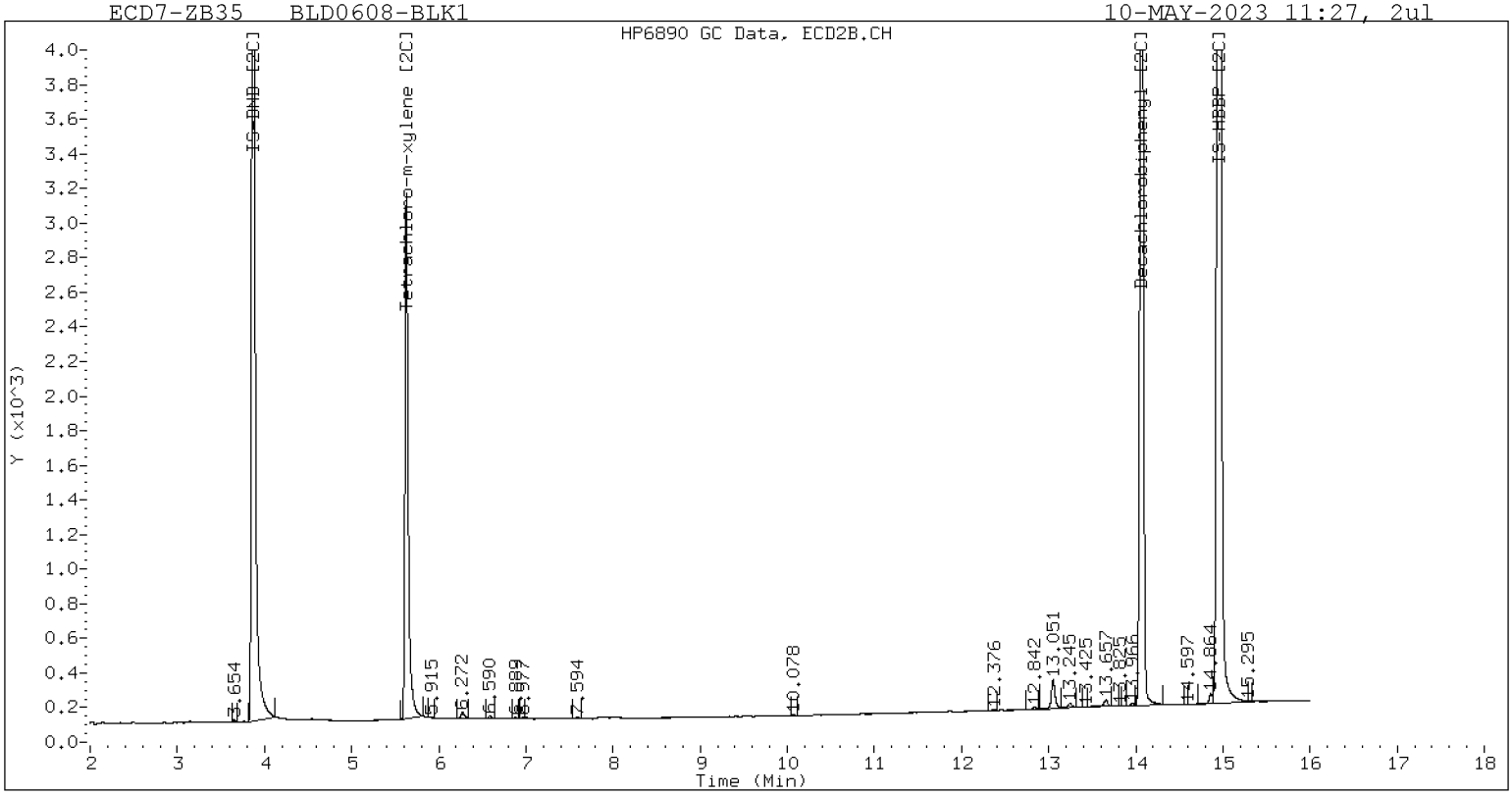
PCB Dual Column Chromatograms

ECD7-ZB5 BLD0608-BLK1 10-MAY-2023 11:27, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLD0608-BLK1 10-MAY-2023 11:27, 2ul



ZB-35 Manual Integration: NO

LCS / LCS DUPLICATE RECOVERY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/10/23 11:48
Batch:	BLD0608	Laboratory ID:	BLD0608-BS1
Preparation:	EPA 3546 (Microwave)	Sequence Name:	LCS
Initial/Final:	12.5 g / 2.5 mL		

COMPOUND	SPIKE ADDED (ug/kg wet)	LCS CONCENTRATION (ug/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Aroclor 1016	101	84.1		83.4	56 - 120
Aroclor 1260 [2C]	101	103		103	58 - 120

* Indicates values outside of QC limits

COMPOUND	SPIKE ADDED (ug/kg wet)	LCSD CONCENTRATION (ug/kg wet)	Q	LCSD % REC. #	% RPD #	QC LIMITS	
						RPD	REC.
Aroclor 1016	101	84.1		83.4	0.00709	30	56 - 120
Aroclor 1260 [2C]	101	102		101	1.09	30	58 - 120

* Indicates values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102310ECD7.D
Data file 2: /230510.b/230510.b/05102310ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLD0608-BS1
Client ID:
Injection Date: 10-MAY-2023 11:48
Report Date: 05/11/2023 17:14
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	322118	5.628	-0.002	168874	34.6	33.0	4.7	Tetrachloro-m-xylene
13.838	-0.003	350566	14.068	-0.001	369085	38.4	42.8	10.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	617689	2.7
Hexabromobiphenyl	876625	913056	4.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	371575	6.4
Hexabromobiphenyl	652984	606968	-7.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	-0.001	98106	410.2	1	7.203	-0.001	80985	385.0
Aroclor-1016	2	7.592	-0.001	338489	452.6	2	7.803	-0.007	190447	424.9
Aroclor-1016	3	7.732	-0.001	140056	405.1	3	8.002	-0.006	78312	396.1
Aroclor-1016	4	8.396	-0.002	59067	414.1	4	8.256	-0.005	59487	378.8
Total Col1Ave (4 peaks):					420.5	Total Col2Ave (4 peaks):				396.2 RPD = 6
Corrected Ave (3 peaks):					409.8	Corrected Ave (3 peaks):				386.6 RPD = 6
Aroclor-1221	1	4.664	0.001	1822	41.9	1	4.894	-0.000	247	9.0
Aroclor-1221	2	6.068	-0.002	11833	135.8	2	6.244	-0.001	7785	137.1
Aroclor-1221	3	6.320	-0.001	61313	296.2	3	6.569	-0.003	35583	398.3
Total Col1Ave (3 peaks):					158.0	Total Col2Ave (3 peaks):				181.4 RPD = 14
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.664	0.001	1822	63.0	1	4.894	0.000	247	17.1
Aroclor-1232	2	6.068	-0.002	11833	196.5	2	7.203	-0.002	80985	981.6
Aroclor-1232	3	7.592	-0.003	338489	1180.0	3	7.803	-0.011	190447	1149.2
Aroclor-1232	4	8.521	-0.006	130089	1059.5	4	8.663	-0.006	60500	1260.5
Total Col1Ave (4 peaks):					624.8	Total Col2Ave (4 peaks):				852.1 RPD = 31
Corrected Ave (3 peaks):					439.7	Corrected Ave (3 peaks):				716.0 RPD = 48*
Aroclor-1242	1	7.212	-0.000	98106	504.1	1	7.203	-0.002	80985	487.7
Aroclor-1242	2	7.592	-0.003	338489	548.8	2	7.803	-0.006	190447	539.1
Aroclor-1242	3	8.396	-0.002	59067	495.1	3	9.109	-0.011	10617	93.7
Aroclor-1242	4	8.521	-0.004	130089	471.2	4	9.533	-0.017	4477	32.8
Total Col1Ave (4 peaks):					504.8	Total Col2Ave (4 peaks):				288.3 RPD = 55*
Corrected Ave (3 peaks):					490.1	Corrected Ave (3 peaks):				204.7 RPD = 82*
Aroclor-1248	1	8.396	-0.002	59067	374.6	1	8.256	-0.004	59487	336.5
Aroclor-1248	2	8.521	-0.002	130089	317.5	2	8.663	-0.005	60500	324.0
Aroclor-1248	3	8.938	-0.004	104022	132.0	3	9.109	-0.011	10617	48.5
Aroclor-1248	4	9.243	0.004	105499	262.7	4	9.533	-0.013	4477	17.1
Total Col1Ave (4 peaks):					271.7	Total Col2Ave (4 peaks):				181.5 RPD = 40
Corrected Ave (3 peaks):					237.4	Corrected Ave (3 peaks):				129.9 RPD = 59*
Aroclor-1254	1	9.243	-0.002	105499	166.2	1	9.399	-0.003	53821	190.6
Aroclor-1254	2	---			0.0	2	9.487	-0.010	1527	9.1
Aroclor-1254	3	9.610	-0.002	21380	52.2	3	9.920	-0.003	12127	53.0
Aroclor-1254	4	9.747	-0.005	61350	76.4	4	10.096	0.019	123261	246.8
Aroclor-1254	5	10.065	-0.049	285045	587.9	5	10.320	-0.006	158132	319.2
Total Col1Ave (4 peaks):					220.7	Total Col2Ave (5 peaks):				163.8 RPD = 30
Corrected Ave (3 peaks):					98.3	Corrected Ave (4 peaks):				124.9 RPD = 24
Aroclor-1260	1	10.990	-0.003	221353	458.5	1	11.602	-0.004	163908	508.5
Aroclor-1260	2	11.306	-0.004	225504	473.3	2	11.867	-0.004	419890	498.0
Aroclor-1260	3	11.679	-0.006	564218	472.8	3	12.385	-0.003	115585	553.2
Aroclor-1260	4	12.083	-0.007	285661	488.7	4	12.450	-0.005	285508	506.9
Aroclor-1260	5	12.190	-0.004	115084	451.6	NS	---			----
Total Col1Ave (5 peaks):					469.0	Total Col2Ave (4 peaks):				516.6 RPD = 10
Corrected Ave (4 peaks):					464.0	Corrected Ave (3 peaks):				504.5 RPD = 8
Aroclor-1262	1	10.770	-0.009	448514	1085.8	1	11.149	-0.004	153458	312.0
Aroclor-1262	2	12.190	-0.005	115084	198.1	2	11.602	-0.003	163908	395.2
Aroclor-1262	3	12.264	-0.005	138215	221.3	3	12.385	-0.001	115585	255.0
Aroclor-1262	4	12.931	-0.008	122402	240.5	4	12.450	-0.006	285508	386.5
Total Col1Ave (4 peaks):					436.5	Total Col2Ave (4 peaks):				337.2 RPD = 26
Corrected Ave (3 peaks):					220.0	Corrected Ave (3 peaks):				317.8 RPD = 36
Aroclor-1268	1	12.190	-0.006	115084	79.0	1	12.385	-0.000	115585	100.6
Aroclor-1268	2	12.264	-0.004	138215	95.6	2	12.450	-0.003	285508	231.2
Aroclor-1268	3	12.668	0.020	61037	52.5	3	12.840	-0.003	7613	7.2
Aroclor-1268	4	13.433	-0.004	39533	11.9	4	13.658	-0.005	33830	10.0
Total Col1Ave (4 peaks):					59.7	Total Col2Ave (4 peaks):				87.3 RPD = 37

Corrected Ave (3 peaks): 47.8 Corrected Ave (3 peaks): 39.3 RPD = 20

Total PCB Area Col1 (5.842 - 13.741) = 6123040 Col1 Total PCB = 0.9 ppm*

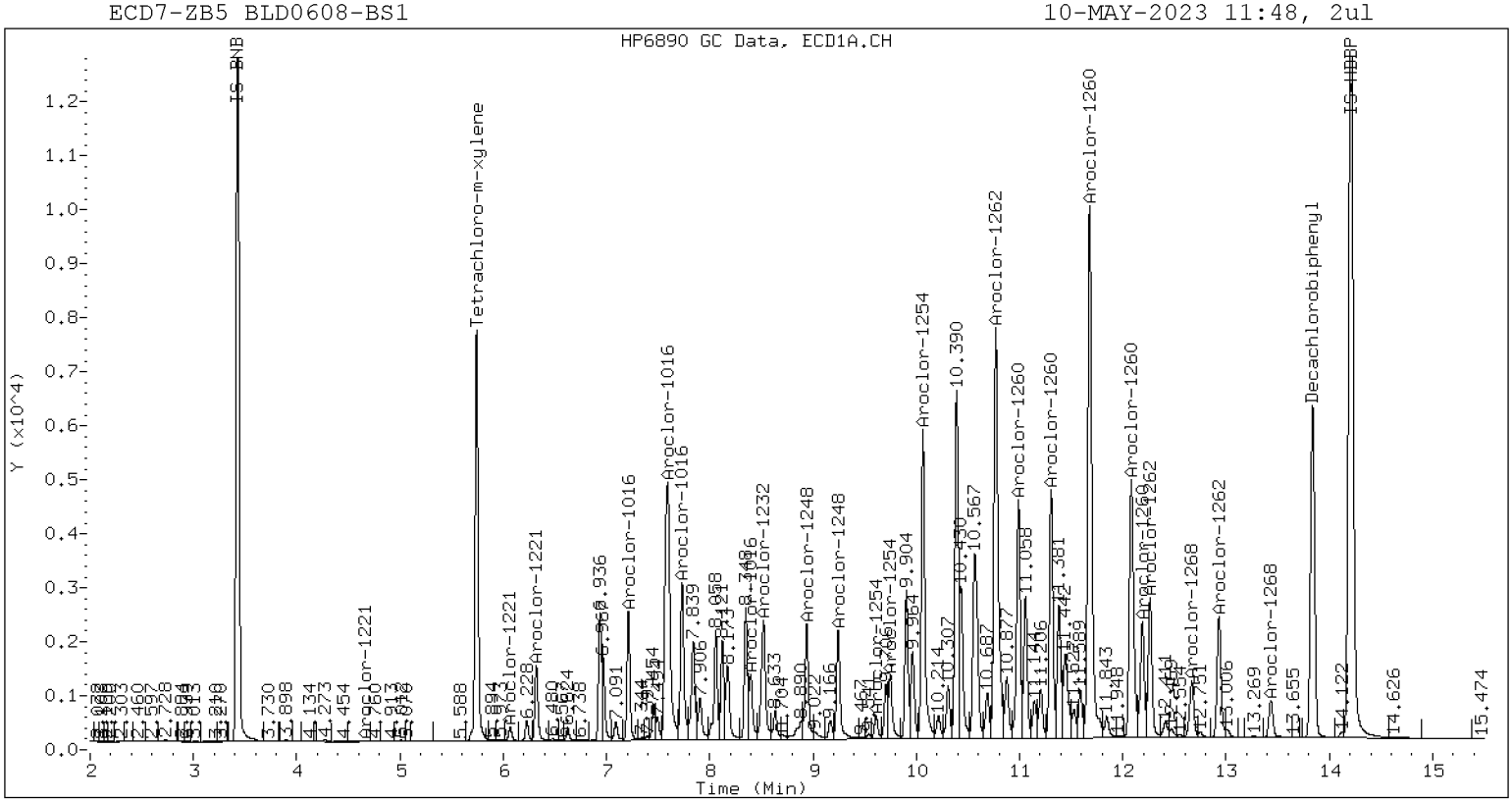
Total PCB Area Col2 (5.730 - 13.969) = 3804886 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

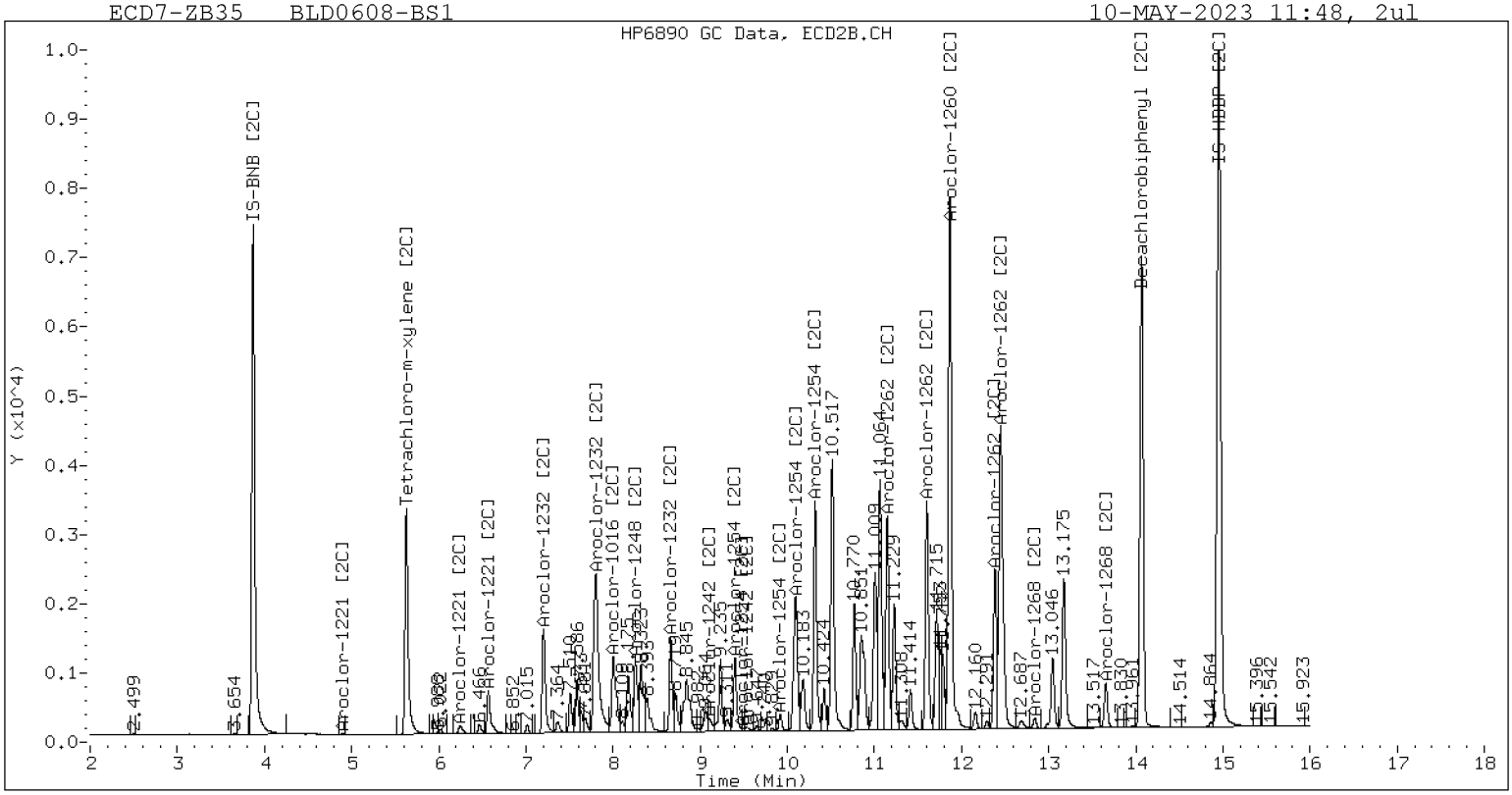
PCB Dual Column Chromatograms

ECD7-ZB5 BLD0608-BS1 10-MAY-2023 11:48, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLD0608-BS1 10-MAY-2023 11:48, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102311ECD7.D
Data file 2: /230510.b/230510.b/05102311ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLD0608-BSD1
Client ID:
Injection Date: 10-MAY-2023 12:09
Report Date: 05/11/2023 17:14
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	324358	5.628	-0.003	169452	34.3	34.2	0.3	Tetrachloro-m-xylene
13.839	-0.002	356405	14.068	-0.001	368280	38.0	41.8	9.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	628555	4.5
Hexabromobiphenyl	876625	938712	7.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	360652	3.3
Hexabromobiphenyl	652984	620639	-5.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	-0.001	100060	411.1	1	7.203	-0.001	81816	400.8
Aroclor-1016	2	7.593	0.000	346652	455.5	2	7.804	-0.007	194468	447.0
Aroclor-1016	3	7.732	-0.001	143100	406.7	3	8.003	-0.006	78857	410.9
Aroclor-1016	4	8.396	-0.002	59292	408.5	4	8.257	-0.003	58164	381.6
Total Col1Ave (4 peaks):					420.5	Total Col2Ave (4 peaks):				410.1 RPD = 3
Corrected Ave (3 peaks):					408.8	Corrected Ave (3 peaks):				397.8 RPD = 3
Aroclor-1221	1	4.664	0.000	1863	42.1	1	---			0.0
Aroclor-1221	2	6.068	-0.002	11119	125.4	2	6.246	0.001	7394	134.1
Aroclor-1221	3	6.319	-0.001	62055	294.6	3	6.569	-0.003	36289	418.5
Total Col1Ave (3 peaks):					154.0	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.664	0.000	1863	63.3	1	---			0.0
Aroclor-1232	2	6.068	-0.002	11119	181.5	2	7.203	-0.002	81816	1021.7
Aroclor-1232	3	7.593	-0.001	346652	1187.6	3	7.804	-0.011	194468	1209.0
Aroclor-1232	4	8.520	-0.006	133568	1069.1	4	8.664	-0.005	59773	1283.1
Total Col1Ave (4 peaks):					625.3	Total Col2Ave (3 peaks):				1171.3 RPD = 61*
Corrected Ave (3 peaks):					437.9	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.212	-0.000	100060	505.2	1	7.203	-0.002	81816	507.6
Aroclor-1242	2	7.593	-0.001	346652	552.3	2	7.804	-0.005	194468	567.1
Aroclor-1242	3	8.396	-0.002	59292	488.4	3	9.110	-0.010	10173	92.5
Aroclor-1242	4	8.520	-0.004	133568	475.4	4	9.534	-0.016	4472	33.8
Total Col1Ave (4 peaks):					505.4	Total Col2Ave (4 peaks):				300.3 RPD = 51*
Corrected Ave (3 peaks):					489.7	Corrected Ave (3 peaks):				211.3 RPD = 79*
Aroclor-1248	1	8.396	-0.002	59292	369.6	1	8.257	-0.003	58164	339.0
Aroclor-1248	2	8.520	-0.003	133568	320.4	2	8.664	-0.004	59773	329.8
Aroclor-1248	3	8.938	-0.004	136017	169.6	3	9.110	-0.009	10173	47.9
Aroclor-1248	4	9.243	0.004	97537	238.6	4	9.534	-0.012	4472	17.6
Total Col1Ave (4 peaks):					274.6	Total Col2Ave (4 peaks):				183.6 RPD = 40
Corrected Ave (3 peaks):					242.9	Corrected Ave (3 peaks):				131.8 RPD = 59*
Aroclor-1254	1	9.243	-0.002	97537	151.0	1	9.400	-0.002	55512	202.6
Aroclor-1254	2	---			0.0	2	9.534	0.036	4472	27.5
Aroclor-1254	3	9.610	-0.002	22914	54.9	3	9.921	-0.002	12199	54.9
Aroclor-1254	4	9.748	-0.004	64120	78.5	4	10.096	0.019	124553	257.0
Aroclor-1254	5	10.065	-0.049	292840	593.6	5	10.320	-0.006	155788	324.0
Total Col1Ave (4 peaks):					219.5	Total Col2Ave (5 peaks):				173.2 RPD = 24
Corrected Ave (3 peaks):					94.8	Corrected Ave (4 peaks):				135.5 RPD = 35
Aroclor-1260	1	10.989	-0.003	227427	458.2	1	11.603	-0.003	164437	498.9
Aroclor-1260	2	11.306	-0.004	229988	469.5	2	11.868	-0.003	401678	465.9
Aroclor-1260	3	11.679	-0.005	593553	483.8	3	12.385	-0.002	124158	581.1
Aroclor-1260	4	12.083	-0.006	287955	479.2	4	12.450	-0.005	286981	498.3
Aroclor-1260	5	12.190	-0.003	119487	456.0	NS	---			----
Total Col1Ave (5 peaks):					469.3	Total Col2Ave (4 peaks):				511.1 RPD = 9
Corrected Ave (4 peaks):					465.7	Corrected Ave (3 peaks):				487.7 RPD = 5
Aroclor-1262	1	10.768	-0.010	456353	1074.6	1	11.149	-0.004	151860	302.0
Aroclor-1262	2	12.190	-0.004	119487	200.1	2	11.603	-0.002	164437	387.7
Aroclor-1262	3	12.265	-0.005	144659	225.3	3	12.385	-0.001	124158	267.9
Aroclor-1262	4	12.932	-0.007	134880	257.8	4	12.450	-0.006	286981	379.9
Total Col1Ave (4 peaks):					439.5	Total Col2Ave (4 peaks):				334.4 RPD = 27
Corrected Ave (3 peaks):					227.7	Corrected Ave (3 peaks):				316.6 RPD = 33
Aroclor-1268	1	12.190	-0.005	119487	79.8	1	12.385	0.000	124158	105.7
Aroclor-1268	2	12.265	-0.003	144659	97.3	2	12.450	-0.002	286981	227.3
Aroclor-1268	3	12.669	0.021	66294	55.4	3	12.842	-0.001	7808	7.2
Aroclor-1268	4	13.434	-0.003	49895	14.6	4	13.658	-0.006	39438	11.4
Total Col1Ave (4 peaks):					61.8	Total Col2Ave (4 peaks):				87.9 RPD = 35
Corrected Ave (3 peaks):					50.0	Corrected Ave (3 peaks):				41.4 RPD = 19

Total PCB Area Col1 (5.842 - 13.741) = 6358891 Col1 Total PCB = 0.9 ppm*

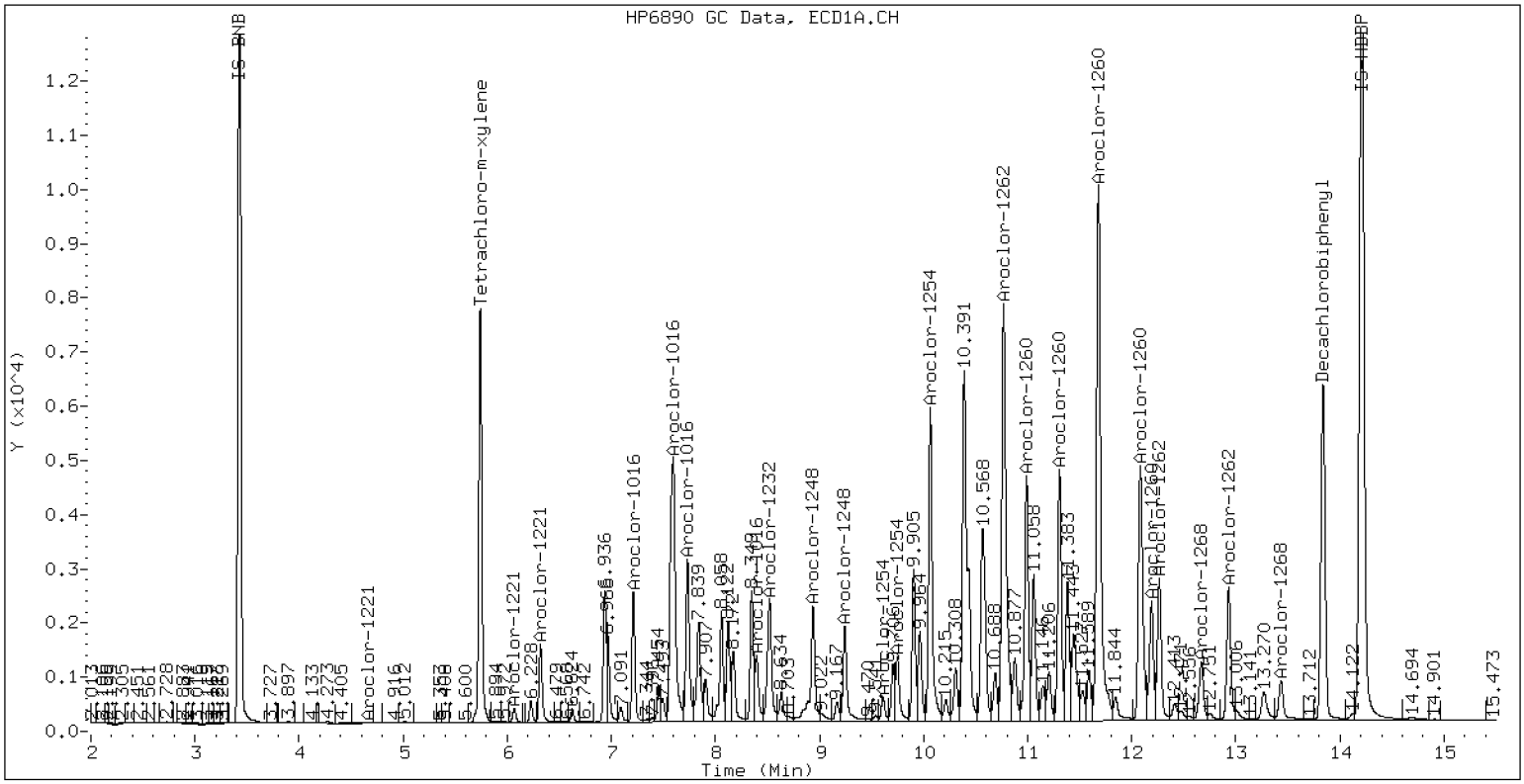
Total PCB Area Col2 (5.730 - 13.969) = 3814914 Col2 Total PCB = 0.9 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

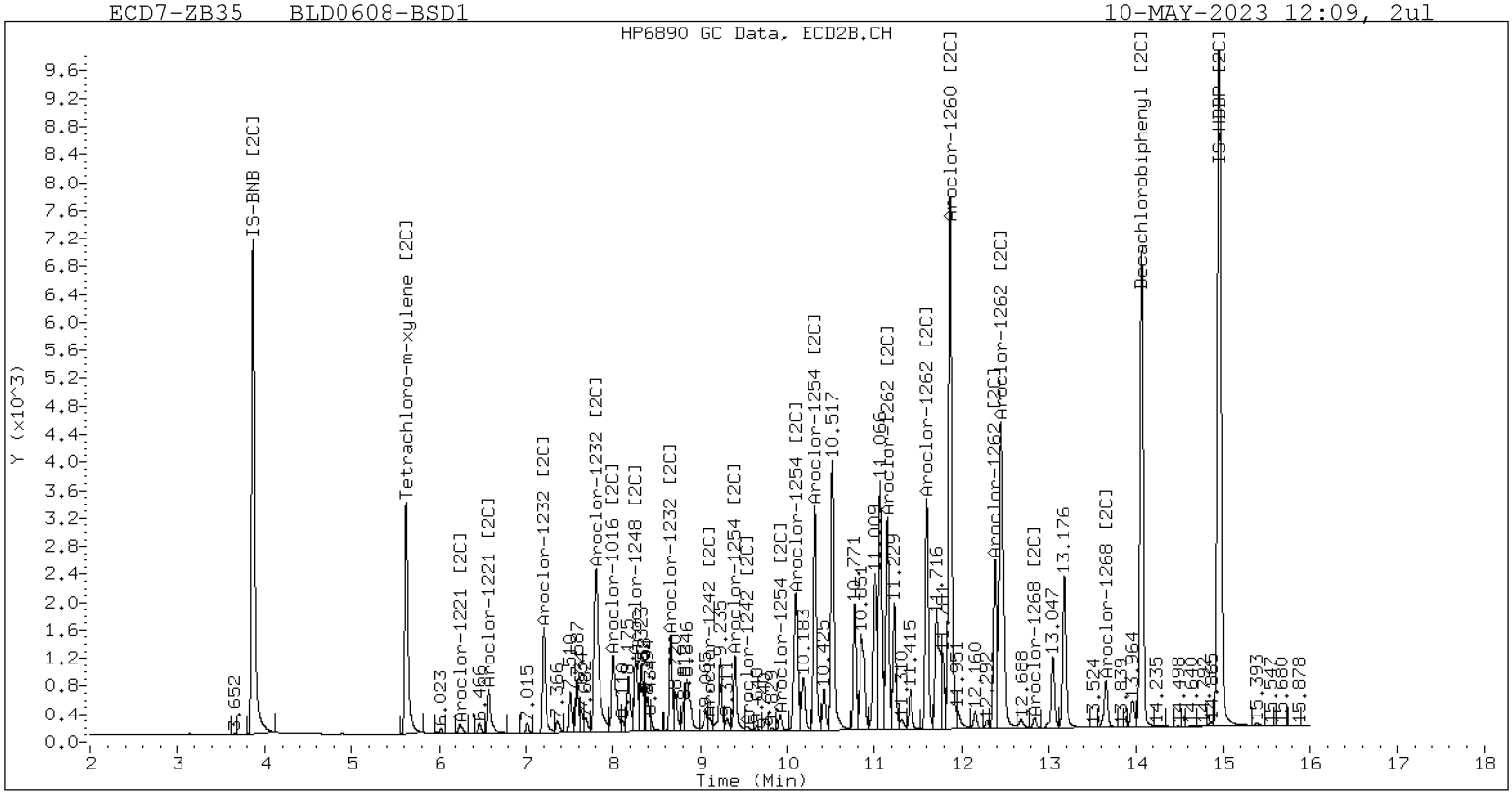
PCB Dual Column Chromatograms

ECD7-ZB5 BLD0608-BSD1 10-MAY-2023 12:09, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLD0608-BSD1 10-MAY-2023 12:09, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

STANDARD REFERENCE MATERIAL RECOVERY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0608-SRM1
Batch: BLD0608
Initial/Final: 2.5 g / 2.5 mL
Preparation: EPA 3546 (Microwave)
Analyzed: 05/10/2023 12:30
Standard ID: K003528
Expires: 04/12/2023
Standard Lot#: PSRM0151
Description: Puget Sound reference-SRM

ANALYTE	TRUE (ug/kg wet)	FOUND (ug/kg wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Aroclor 1260	108.00	97.5	2.9	20.0		90.3	38 - 167
Aroclor 1260 [2C]	108.00	119	2.9	20.0		110	38 - 167

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102312ECD7.D
Data file 2: /230510.b/230510.b/05102312ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: BLD0608-SRM1
Client ID:
Injection Date: 10-MAY-2023 12:30
Report Date: 05/11/2023 17:14
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.740	-0.001	275312	5.626	-0.005	151909	28.3	30.6	7.7	Tetrachloro-m-xylene
13.834	-0.006	262273	14.064	-0.006	247573	33.2	33.1	0.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	645892	7.4
Hexabromobiphenyl	876625	790119	-9.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	361093	3.4
Hexabromobiphenyl	652984	526637	-19.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.181	-0.031	13236	52.9	1	7.210	0.005	7247	35.5
Aroclor-1016	2	7.590	-0.003	9720	12.4	2	7.801	-0.010	12949	29.7
Aroclor-1016	3	7.736	0.003	4603	12.7	3	7.998	-0.010	1924	10.0
Aroclor-1016	4	8.395	-0.003	3110	20.9	4	8.253	-0.007	7321	48.0
Total Col1Ave (4 peaks):					24.7	Total Col2Ave (4 peaks):				30.8 RPD = 22
Corrected Ave (3 peaks):					15.3	Corrected Ave (3 peaks):				25.1 RPD = 48*
Aroclor-1221	1	4.587	-0.076	108	2.4	1	4.879	-0.016	715	26.8
Aroclor-1221	2	5.977	-0.092	5730	62.9	2	6.292	0.047	10292	186.4
Aroclor-1221	3	6.331	0.010	2125	9.8	3	6.583	0.011	4577	52.7
Total Col1Ave (3 peaks):					25.0	Total Col2Ave (3 peaks):				88.7 RPD = 112*
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.587	-0.076	108	3.6	1	4.879	-0.015	715	51.1
Aroclor-1232	2	5.977	-0.092	5730	91.0	2	7.210	0.005	7247	90.4
Aroclor-1232	3	7.590	-0.005	9720	32.4	3	7.801	-0.014	12949	80.4
Aroclor-1232	4	8.515	-0.012	6252	48.7	4	8.659	-0.010	5712	122.5
Total Col1Ave (4 peaks):					43.9	Total Col2Ave (4 peaks):				86.1 RPD = 65*
Corrected Ave (3 peaks):					28.2	Corrected Ave (3 peaks):				74.0 RPD = 90*
Aroclor-1242	1	7.181	-0.031	13236	65.0	1	7.210	0.005	7247	44.9
Aroclor-1242	2	7.590	-0.005	9720	15.1	2	7.801	-0.008	12949	37.7
Aroclor-1242	3	8.395	-0.004	3110	24.9	3	9.098	-0.021	7172	65.2
Aroclor-1242	4	8.515	-0.010	6252	21.7	4	9.488	-0.062	12223	92.1
Total Col1Ave (4 peaks):					31.7	Total Col2Ave (4 peaks):				60.0 RPD = 62*
Corrected Ave (3 peaks):					20.6	Corrected Ave (3 peaks):				49.3 RPD = 82*
Aroclor-1248	1	8.395	-0.004	3110	18.9	1	8.253	-0.007	7321	42.6
Aroclor-1248	2	8.515	-0.008	6252	14.6	2	8.659	-0.008	5712	31.5
Aroclor-1248	3	8.936	-0.006	23989	29.1	3	9.098	-0.021	7172	33.7
Aroclor-1248	4	9.237	-0.002	32830	78.2	4	9.488	-0.057	12223	47.9
Total Col1Ave (4 peaks):					35.2	Total Col2Ave (4 peaks):				38.9 RPD = 10
Corrected Ave (3 peaks):					20.9	Corrected Ave (3 peaks):				35.9 RPD = 53*
Aroclor-1254	1	9.237	-0.007	32830	49.5	1	9.394	-0.008	20158	73.5
Aroclor-1254	2	9.312	-0.009	12222	41.0	2	9.488	-0.009	12223	75.0
Aroclor-1254	3	9.607	-0.006	21254	49.6	3	9.912	-0.011	10035	45.1
Aroclor-1254	4	9.737	-0.014	47407	56.5	4	10.064	-0.013	37900	78.1
Aroclor-1254	5	10.061	-0.053	74859	147.7	5	10.313	-0.013	48970	101.7
Total Col1Ave (5 peaks):					68.8	Total Col2Ave (5 peaks):				74.7 RPD = 8
Corrected Ave (4 peaks):					49.1	Corrected Ave (4 peaks):				67.9 RPD = 32
Aroclor-1260	1	10.983	-0.009	41680	99.8	1	11.597	-0.009	34866	124.7
Aroclor-1260	2	11.296	-0.014	33748	81.8	2	11.859	-0.012	77238	105.6
Aroclor-1260	3	11.669	-0.016	103816	100.5	3	12.377	-0.011	25865	142.7
Aroclor-1260	4	12.070	-0.019	54928	108.6	4	12.442	-0.013	49842	102.0
Aroclor-1260	5	12.183	-0.010	21315	96.6	NS	---			----
Total Col1Ave (5 peaks):					97.5	Total Col2Ave (4 peaks):				118.7 RPD = 20
Corrected Ave (4 peaks):					94.7	Corrected Ave (3 peaks):				110.7 RPD = 16
Aroclor-1262	1	10.758	-0.021	98036	274.3	1	11.144	-0.010	30533	71.6
Aroclor-1262	2	12.183	-0.012	21315	42.4	2	11.597	-0.008	34866	96.9
Aroclor-1262	3	12.257	-0.013	25987	48.1	3	12.377	-0.010	25865	65.8
Aroclor-1262	4	12.922	-0.017	27841	63.2	4	12.442	-0.014	49842	77.8
Total Col1Ave (4 peaks):					107.0	Total Col2Ave (4 peaks):				78.0 RPD = 31
Corrected Ave (3 peaks):					51.2	Corrected Ave (3 peaks):				71.7 RPD = 33
Aroclor-1268	1	12.183	-0.012	21315	16.9	1	12.377	-0.008	25865	26.0
Aroclor-1268	2	12.257	-0.011	25987	20.8	2	12.442	-0.010	49842	46.5
Aroclor-1268	3	12.660	0.012	13396	13.3	3	12.838	-0.005	2295	2.5
Aroclor-1268	4	13.427	-0.010	7054	2.5	4	13.651	-0.012	9698	3.3
Total Col1Ave (4 peaks):					13.4	Total Col2Ave (4 peaks):				19.6 RPD = 38

Corrected Ave (3 peaks): 10.9 Corrected Ave (3 peaks): 10.6 RPD = 3

Total PCB Area Col1 (5.842 - 13.741) = 1248973 Col1 Total PCB = 0.2 ppm*

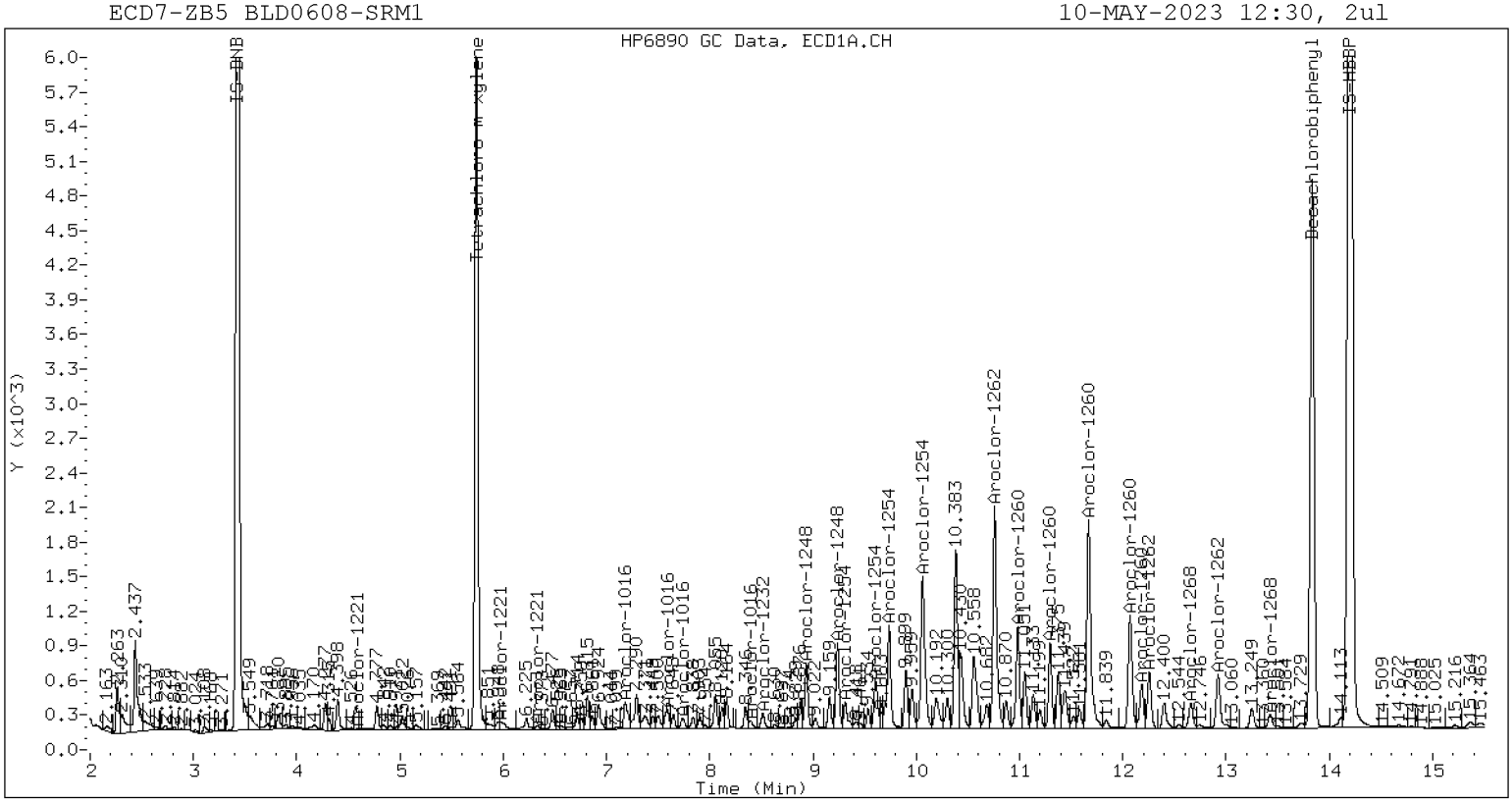
Total PCB Area Col2 (5.730 - 13.969) = 895126 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

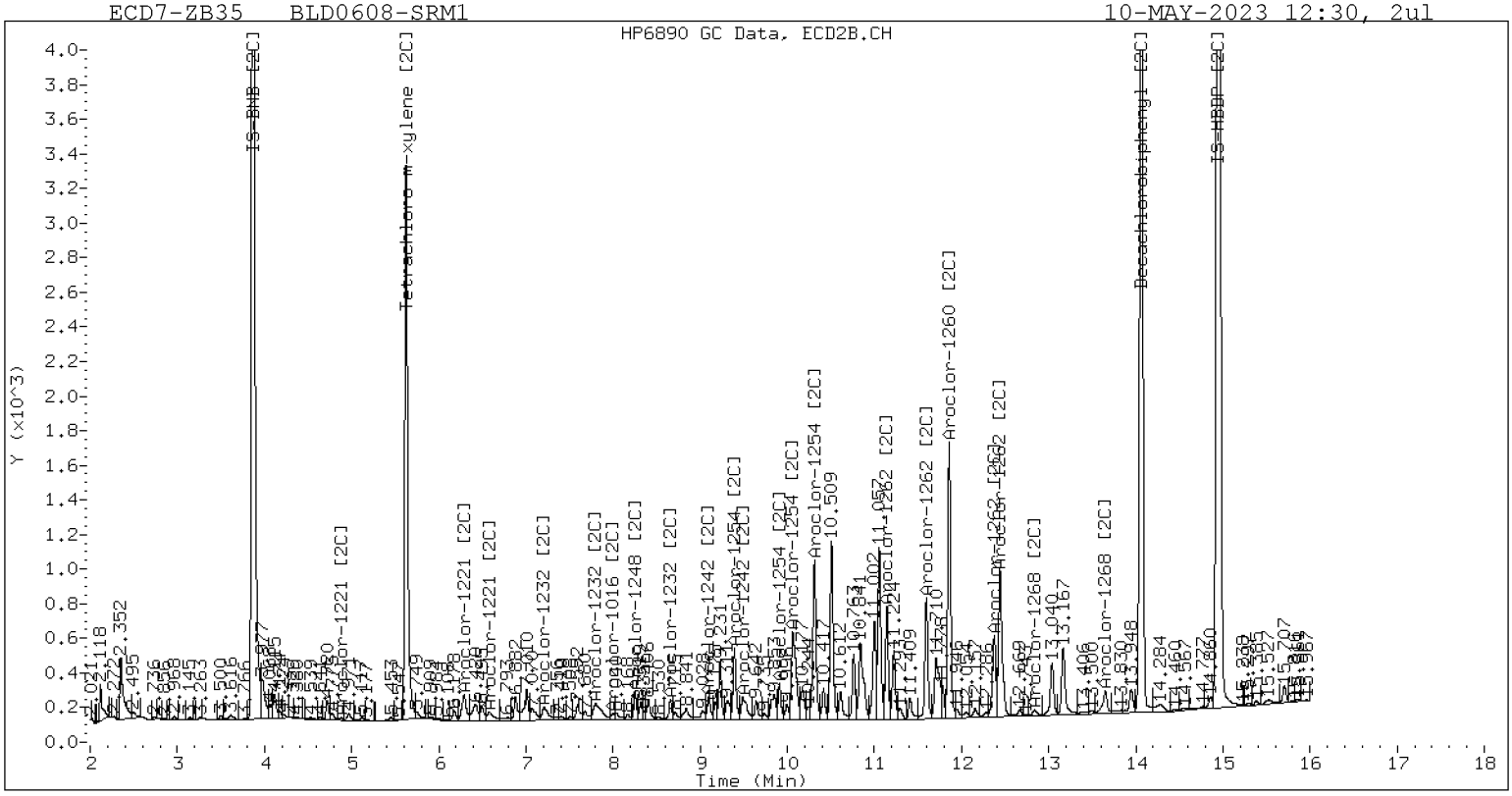
PCB Dual Column Chromatograms

ECD7-ZB5 BLD0608-SRM1 10-MAY-2023 12:30, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 BLD0608-SRM1 10-MAY-2023 12:30, 2ul



ZB-35 Manual Integration: NO

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (1):	ZB5

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1016	250	0.0494162	20	4.532998E-02	50	4.853547E-02	1000	0.0432727	100	5.300612E-02	500	4.707631E-02
Aroclor-1016 (1)	250	3.137838E-02	20	3.258869E-02	50	3.226345E-02	1000	2.592113E-02	100	3.461726E-02	500	2.908922E-02
Aroclor-1016 (2)	250	0.1020916	20	8.781887E-02	50	0.0941758	1000	0.0925401	100	0.1052028	500	9.933727E-02
Aroclor-1016 (3)	250	4.518712E-02	20	0.0437516	50	4.849089E-02	1000	3.826082E-02	100	5.093761E-02	500	4.204761E-02
Aroclor-1016 (4)	250	0.0190077	20	1.716078E-02	50	1.921174E-02	1000	1.636875E-02	100	2.126675E-02	500	1.783115E-02
Aroclor 1260	250	5.260043E-02	20	5.628385E-02	50	5.196241E-02	1000	4.766185E-02	100	5.558896E-02	500	0.0504862
Aroclor-1260 (1)	250	4.229749E-02	20	4.580229E-02	50	0.0418668	1000	0.0383433	100	4.489466E-02	500	4.061411E-02
Aroclor-1260 (2)	250	4.189449E-02	20	4.433945E-02	50	4.114713E-02	1000	3.831045E-02	100	4.437556E-02	500	4.042893E-02
Aroclor-1260 (3)	250	0.1051013	20	0.1116982	50	0.1043382	1000	9.463532E-02	100	0.1111587	500	0.1004267
Aroclor-1260 (4)	250	0.0516917	20	5.459749E-02	50	4.999767E-02	1000	0.0472006	100	5.381565E-02	500	0.0499592
Aroclor-1260 (5)	250	2.201717E-02	20	2.498183E-02	50	2.246226E-02	1000	1.981958E-02	100	2.370029E-02	500	2.100203E-02
Decachlorobiphenyl	40	0.7794462	3.2	0.8975218	8	0.8371499	160	0.7050808	16	0.8485148	80	0.7271303
Tetrachlorometaxylene	40	1.226686	3.2	1.21049	8	1.182524	160	1.140526	16	1.29993	80	1.168782

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221							250	1.457516E-02				
Aroclor-1221 (1)							250	5.626378E-03				
Aroclor-1221 (2)							250	1.128806E-02				
Aroclor-1221 (3)							250	2.681103E-02				
Aroclor 1232									250	1.614998E-02		
Aroclor-1232 (1)									250	3.747872E-03		
Aroclor-1232 (2)									250	7.798392E-03		
Aroclor-1232 (3)									250	3.715176E-02		
Aroclor-1232 (4)									250	1.590191E-02		
Aroclor 1242	250	3.907373E-02										
Aroclor-1242 (1)	250	2.520807E-02										
Aroclor-1242 (2)	250	7.988013E-02										
Aroclor-1242 (3)	250	1.545019E-02										
Aroclor-1242 (4)	250	3.575655E-02										
Aroclor 1248			250	5.688792E-02								
Aroclor-1248 (1)			250	2.041932E-02								
Aroclor-1248 (2)			250	5.306328E-02								
Aroclor-1248 (3)			250	0.1020488								
Aroclor-1248 (4)			250	5.202029E-02								
Aroclor 1254					250	6.780072E-02						
Aroclor-1254 (1)					250	8.222188E-02						
Aroclor-1254 (2)					250	3.694251E-02						
Aroclor-1254 (3)					250	5.307929E-02						
Aroclor-1254 (4)					250	0.1039691						
Aroclor-1254 (5)					250	6.279077E-02						
Aroclor 1262							250	4.659643E-02				
Aroclor-1262 (1)							250	3.619126E-02				
Aroclor-1262 (2)							250	5.089701E-02				

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (1):	ZB5

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (3)							250	5.471234E-02				
Aroclor-1262 (4)							250	4.458506E-02				
Aroclor 1268									250	0.161799		
Aroclor-1268 (1)									250	0.1275909		
Aroclor-1268 (2)									250	0.1267143		
Aroclor-1268 (3)									250	0.1019109		
Aroclor-1268 (4)									250	0.2909801		

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016	0.0477728	7.1			RSD (20)	
Aroclor-1016 (1)	3.097636E-02	9.9			RSD (20)	
Aroclor-1016 (2)	9.686107E-02	6.7			RSD (20)	
Aroclor-1016 (3)	4.477928E-02	10.1			RSD (20)	
Aroclor-1016 (4)	1.847448E-02	9.4			RSD (20)	
Aroclor 1221		0.0			RSD (20)	
Aroclor-1221 (1)		0.0			RSD (20)	
Aroclor-1221 (2)		0.0			RSD (20)	
Aroclor-1221 (3)		0.0			RSD (20)	
Aroclor 1232		0.0			RSD (20)	
Aroclor-1232 (1)		0.0			RSD (20)	
Aroclor-1232 (2)		0.0			RSD (20)	
Aroclor-1232 (3)		0.0			RSD (20)	
Aroclor-1232 (4)		0.0			RSD (20)	
Aroclor 1242		0.0			RSD (20)	
Aroclor-1242 (1)		0.0			RSD (20)	
Aroclor-1242 (2)		0.0			RSD (20)	
Aroclor-1242 (3)		0.0			RSD (20)	
Aroclor-1242 (4)		0.0			RSD (20)	
Aroclor 1248		0.0			RSD (20)	
Aroclor-1248 (1)		0.0			RSD (20)	
Aroclor-1248 (2)		0.0			RSD (20)	
Aroclor-1248 (3)		0.0			RSD (20)	
Aroclor-1248 (4)		0.0			RSD (20)	
Aroclor 1254		0.0			RSD (20)	
Aroclor-1254 (1)		0.0			RSD (20)	
Aroclor-1254 (2)		0.0			RSD (20)	
Aroclor-1254 (3)		0.0			RSD (20)	
Aroclor-1254 (4)		0.0			RSD (20)	
Aroclor-1254 (5)		0.0			RSD (20)	
Aroclor 1260	5.243062E-02	6.1			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (1):	ZB5

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1)	4.230311E-02	6.5			RSD (20)	
Aroclor-1260 (2)	4.174934E-02	5.6			RSD (20)	
Aroclor-1260 (3)	0.1045597	6.2			RSD (20)	
Aroclor-1260 (4)	5.121039E-02	5.4			RSD (20)	
Aroclor-1260 (5)	2.233053E-02	8.3			RSD (20)	
Aroclor 1262		0.0			RSD (20)	
Aroclor-1262 (1)		0.0			RSD (20)	
Aroclor-1262 (2)		0.0			RSD (20)	
Aroclor-1262 (3)		0.0			RSD (20)	
Aroclor-1262 (4)		0.0			RSD (20)	
Aroclor 1268		0.0			RSD (20)	
Aroclor-1268 (1)		0.0			RSD (20)	
Aroclor-1268 (2)		0.0			RSD (20)	
Aroclor-1268 (3)		0.0			RSD (20)	
Aroclor-1268 (4)		0.0			RSD (20)	
Decachlorobiphenyl	0.7991406	9.4			RSD (20)	
Tetrachlorometaxylene	1.204823	4.6			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (2):	ZB35

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RRF	Conc	**RRF**	Conc	RRF	Conc	RRF	Conc	**RRF**	Conc	**RRF**
Aroclor 1016 [2C]	250	5.431445E-02	20	5.755321E-02	50	5.623255E-02	1000	4.860069E-02	100	5.851589E-02	500	5.204411E-02
Aroclor-1016 (1) [2C]	250	4.442671E-02	20	5.158091E-02	50	4.743051E-02	1000	3.802133E-02	100	4.866225E-02	500	4.159498E-02
Aroclor-1016 (2) [2C]	250	9.745237E-02	20	9.849733E-02	50	9.560411E-02	1000	9.038411E-02	100	0.1018298	500	9.528017E-02
Aroclor-1016 (3) [2C]	250	4.229758E-02	20	4.378709E-02	50	4.462224E-02	1000	3.801497E-02	100	4.621674E-02	500	0.0404581
Aroclor-1016 (4) [2C]	250	3.308114E-02	20	3.634753E-02	50	3.727334E-02	1000	2.798232E-02	100	3.735476E-02	500	3.084311E-02
Aroclor 1260 [2C]	250	6.505764E-02	20	6.569768E-02	50	6.337683E-02	1000	5.893668E-02	100	6.768726E-02	500	6.232632E-02
Aroclor-1260 (1) [2C]	250	4.278892E-02	20	4.543978E-02	50	4.273243E-02	1000	3.816214E-02	100	4.503751E-02	500	4.075974E-02
Aroclor-1260 (2) [2C]	250	0.1137836	20	0.1128173	50	0.1108523	1000	0.1019853	100	0.1191905	500	0.1081464
Aroclor-1260 (3) [2C]	250	2.779854E-02	20	2.783171E-02	50	2.651547E-02	1000	2.742971E-02	100	2.791113E-02	500	2.774857E-02
Aroclor-1260 (4) [2C]	250	0.0758595	20	7.670195E-02	50	7.340713E-02	1000	6.816956E-02	100	7.860987E-02	500	7.265057E-02
Decachlorobiphenyl [2C]	40	1.183432	3.2	1.044344	8	1.074026	160	1.130044	16	1.220049	80	1.164189
Tetrachlorometaxylene [2C]	40	1.130537	3.2	1.090766	8	1.076407	160	1.045589	16	1.181288	80	1.078696

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor 1221 [2C]							250	1.245566E-02				
Aroclor-1221 (1) [2C]							250	5.90099E-03				
Aroclor-1221 (2) [2C]							250	1.222989E-02				
Aroclor-1221 (3) [2C]							250	1.923608E-02				
Aroclor 1232 [2C]									250	1.671987E-02		
Aroclor-1232 (1) [2C]									250	3.102529E-03		
Aroclor-1232 (2) [2C]									250	0.0177626		
Aroclor-1232 (3) [2C]									250	3.568085E-02		
Aroclor-1232 (4) [2C]									250	1.033351E-02		
Aroclor 1242 [2C]	250	4.139652E-02										
Aroclor-1242 (1) [2C]	250	0.0357524										
Aroclor-1242 (2) [2C]	250	0.0760619										
Aroclor-1242 (3) [2C]	250	2.438456E-02										
Aroclor-1242 (4) [2C]	250	2.938723E-02										
Aroclor 1248 [2C]			250	4.547256E-02								
Aroclor-1248 (1) [2C]			250	3.805793E-02								
Aroclor-1248 (2) [2C]			250	4.020106E-02								
Aroclor-1248 (3) [2C]			250	4.712363E-02								
Aroclor-1248 (4) [2C]			250	5.650761E-02								
Aroclor 1254 [2C]					250	0.0720677						
Aroclor-1254 (1) [2C]					250	6.078104E-02						
Aroclor-1254 (2) [2C]					250	3.610738E-02						
Aroclor-1254 (3) [2C]					250	4.926631E-02						
Aroclor-1254 (4) [2C]					250	0.1075138						
Aroclor-1254 (5) [2C]					250	0.1066699						
Aroclor 1262 [2C]							250	6.915026E-02				
Aroclor-1262 (1) [2C]							250	0.0648231				
Aroclor-1262 (2) [2C]							250	5.467008E-02				

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (2):	ZB35

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF	Conc	RRF
Aroclor-1262 (3) [2C]							250	5.974148E-02				
Aroclor-1262 (4) [2C]							250	9.736639E-02				
Aroclor 1268 [2C]									250	0.2250713		
Aroclor-1268 (1) [2C]									250	0.1513931		
Aroclor-1268 (2) [2C]									250	0.1627614		
Aroclor-1268 (3) [2C]									250	0.1393777		
Aroclor-1268 (4) [2C]									250	0.4467531		

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor 1016 [2C]	5.454348E-02	6.8			RSD (20)	
Aroclor-1016 (1) [2C]	4.528611E-02	10.9			RSD (20)	
Aroclor-1016 (2) [2C]	9.650798E-02	4.0			RSD (20)	
Aroclor-1016 (3) [2C]	4.256612E-02	7.0			RSD (20)	
Aroclor-1016 (4) [2C]	0.0338137	11.4			RSD (20)	
Aroclor 1221 [2C]		0.0			RSD (20)	
Aroclor-1221 (1) [2C]		0.0			RSD (20)	
Aroclor-1221 (2) [2C]		0.0			RSD (20)	
Aroclor-1221 (3) [2C]		0.0			RSD (20)	
Aroclor 1232 [2C]		0.0			RSD (20)	
Aroclor-1232 (1) [2C]		0.0			RSD (20)	
Aroclor-1232 (2) [2C]		0.0			RSD (20)	
Aroclor-1232 (3) [2C]		0.0			RSD (20)	
Aroclor-1232 (4) [2C]		0.0			RSD (20)	
Aroclor 1242 [2C]		0.0			RSD (20)	
Aroclor-1242 (1) [2C]		0.0			RSD (20)	
Aroclor-1242 (2) [2C]		0.0			RSD (20)	
Aroclor-1242 (3) [2C]		0.0			RSD (20)	
Aroclor-1242 (4) [2C]		0.0			RSD (20)	
Aroclor 1248 [2C]		0.0			RSD (20)	
Aroclor-1248 (1) [2C]		0.0			RSD (20)	
Aroclor-1248 (2) [2C]		0.0			RSD (20)	
Aroclor-1248 (3) [2C]		0.0			RSD (20)	
Aroclor-1248 (4) [2C]		0.0			RSD (20)	
Aroclor 1254 [2C]		0.0			RSD (20)	
Aroclor-1254 (1) [2C]		0.0			RSD (20)	
Aroclor-1254 (2) [2C]		0.0			RSD (20)	
Aroclor-1254 (3) [2C]		0.0			RSD (20)	
Aroclor-1254 (4) [2C]		0.0			RSD (20)	
Aroclor-1254 (5) [2C]		0.0			RSD (20)	
Aroclor 1260 [2C]	6.384707E-02	4.8			RSD (20)	

INITIAL CALIBRATION DATA

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00022	Instrument:	ECD7
Calibration Date:	05/05/2023	Column (2):	ZB35

COMPOUND	Mean RRF	RRF RSD	Linear COD	Quad COD	Limit Type & Limit	Q
Aroclor-1260 (1) [2C]	4.248675E-02	6.4			RSD (20)	
Aroclor-1260 (2) [2C]	0.1111292	5.2			RSD (20)	
Aroclor-1260 (3) [2C]	2.753919E-02	1.9			RSD (20)	
Aroclor-1260 (4) [2C]	7.423309E-02	5.0			RSD (20)	
Aroclor 1262 [2C]		0.0			RSD (20)	
Aroclor-1262 (1) [2C]		0.0			RSD (20)	
Aroclor-1262 (2) [2C]		0.0			RSD (20)	
Aroclor-1262 (3) [2C]		0.0			RSD (20)	
Aroclor-1262 (4) [2C]		0.0			RSD (20)	
Aroclor 1268 [2C]		0.0			RSD (20)	
Aroclor-1268 (1) [2C]		0.0			RSD (20)	
Aroclor-1268 (2) [2C]		0.0			RSD (20)	
Aroclor-1268 (3) [2C]		0.0			RSD (20)	
Aroclor-1268 (4) [2C]		0.0			RSD (20)	
Decachlorobiphenyl [2C]	1.136014	5.9			RSD (20)	
Tetrachlorometaxylene [2C]	1.100547	4.4			RSD (20)	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLE0079

Instrument: ECD7
Calibration ID: GE00022

Printed: 5/6/2023 11:44:56AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLE0079-CAL1	QC		1		L000856	L000844		
SLE0079-CAL2	QC		2		L000859	L000844		
SLE0079-CAL3	QC		3		L000858	L000844		
SLE0079-CAL4	QC		4		L000731	L000844		
SLE0079-CAL5	QC		5		L000857	L000844		
SLE0079-CAL6	QC		6		L000855	L000844		
SLE0079-CAL7	QC		7		L000860	L000844		
SLE0079-CAL8	QC		8		L000861	L000844		
SLE0079-CAL9	QC		9		L000862	L000844		
SLE0079-CALA	QC		10		L004996	L000844		
SLE0079-CALB	QC		11		L004997	L000844		
SLE0079-SCV1	QC		12		L002065	L000844		
SLE0079-SCV2	QC		13		L003970	L000844		
SLE0079-SCV3	QC		14		L002066	L000844		
SLE0079-SCV4	QC		15		L002067	L000844		
SLE0079-SCV5	QC		16		L002068	L000844		
SLE0079-SCV6	QC		17		L002069	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	05-MAY-2023 23:06	05052320ECD7.D	1	IB	
2	05-MAY-2023 23:26	05052321ECD7.D	1	0.25PPMAR1660	
3	05-MAY-2023 23:47	05052322ECD7.D	1	0.02PPMAR1660	
4	06-MAY-2023 00:08	05052323ECD7.D	1	0.05PPMAR1660	
5	06-MAY-2023 00:29	05052324ECD7.D	1	1.0PPMAR1660	
6	06-MAY-2023 00:50	05052325ECD7.D	1	0.1PPMAR1660	
7	06-MAY-2023 01:11	05052326ECD7.D	1	0.5PPMAR1660	
8	06-MAY-2023 01:31	05052327ECD7.D	1	0.25PPMAR1242	
9	06-MAY-2023 01:52	05052328ECD7.D	1	0.25PPMAR1248	
10	06-MAY-2023 02:13	05052329ECD7.D	1	0.25PPMAR1254	
11	06-MAY-2023 02:34	05052330ECD7.D	1	0.25PPMAR2162	
12	06-MAY-2023 02:55	05052331ECD7.D	1	0.25PPMAR3268	
13	06-MAY-2023 03:16	05052332ECD7.D	1	AR1660SCV	
14	06-MAY-2023 03:36	05052333ECD7.D	1	AR1242SCV	
15	06-MAY-2023 03:57	05052334ECD7.D	1	AR1248SCV	
16	06-MAY-2023 04:18	05052335ECD7.D	1	AR1254SCV	
17	06-MAY-2023 04:39	05052336ECD7.D	1	AR2162SCV	
18	06-MAY-2023 05:00	05052337ECD7.D	1	AR3268SCV	
19	06-MAY-2023 05:21	05052338ECD7.D	1	DDTS	
20	06-MAY-2023 05:41	05052339ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

ARI Job No.: Method: PCB.m Instrument: ecd7.i Date: 05-MAY-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1548	05052301ECD7.D			1	NO MANUAL INTEGRATION
1609	05052302ECD7.D			1	NO MANUAL INTEGRATION
1711	05052303ECD7.D			1	NO MANUAL INTEGRATION
1732	05052304ECD7.D			1	NO MANUAL INTEGRATION
1753	05052305ECD7.D			1	NO MANUAL INTEGRATION
1814	05052306ECD7.D			1	NO MANUAL INTEGRATION
1835	05052307ECD7.D			1	NO MANUAL INTEGRATION
1856	05052308ECD7.D			1	NO MANUAL INTEGRATION
1916	05052309ECD7.D			1	NO MANUAL INTEGRATION
1937	05052310ECD7.D			1	NO MANUAL INTEGRATION
1958	05052311ECD7.D			1	NO MANUAL INTEGRATION
2019	05052312ECD7.D			1	NO MANUAL INTEGRATION
2040	05052313ECD7.D			1	NO MANUAL INTEGRATION
2101	05052314ECD7.D			1	NO MANUAL INTEGRATION
2121	05052315ECD7.D			1	NO MANUAL INTEGRATION
2142	05052316ECD7.D			1	NO MANUAL INTEGRATION
2203	05052317ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2224	05052318ECD7.D			1	NO MANUAL INTEGRATION
2245	05052319ECD7.D			1	NO MANUAL INTEGRATION
2306	05052320ECD7.D	IB		1	NO MANUAL INTEGRATION
2326	05052321ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
2347	05052322ECD7.D	0.02PPMAR1660		1	NO MANUAL INTEGRATION
0008	05052323ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
0029	05052324ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
0050	05052325ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
0111	05052326ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
0131	05052327ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
0152	05052328ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
0213	05052329ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
0234	05052330ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
0255	05052331ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
0316	05052332ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
0336	05052333ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
0357	05052334ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
0418	05052335ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0439	05052336ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
0500	05052337ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
0521	05052338ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0541	05052339ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1548	05052301ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1609	05052302ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1711	05052303ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1732	05052304ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1753	05052305ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1814	05052306ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1835	05052307ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1856	05052308ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1916	05052309ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1937	05052310ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1958	05052311ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2019	05052312ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2040	05052313ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2101	05052314ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2121	05052315ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2142	05052316ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2203	05052317ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2224	05052318ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2245	05052319ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2306	05052320ECD7.D	IB		1	NO MANUAL INTEGRATION
2326	05052321ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
2347	05052322ECD7.D	0.02PPMAR1660		1	Aroclor-1016 [2C],
0008	05052323ECD7.D	0.05PPMAR1660		1	Aroclor-1016 [2C],
0029	05052324ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
0050	05052325ECD7.D	0.1PPMAR1660		1	Aroclor-1016 [2C],
0111	05052326ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
0132	05052327ECD7.D	0.25PPMAR1242		1	Aroclor-1242 [2C],
0152	05052328ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
0213	05052329ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
0234	05052330ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
0255	05052331ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
0316	05052332ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0336	05052333ECD7.D	AR1242SCV		1	Aroclor-1242 [2C],
0357	05052334ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
0418	05052335ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
0439	05052336ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
0500	05052337ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
0521	05052338ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0541	05052339ECD7.D	DDT BD		1	NO MANUAL INTEGRATION

Security Status Report

Date: 06-May-2023 09:12

05052320ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052321ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052322ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052323ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052324ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052325ECD7.D	Data Locked	richardl, 06-May-2023 09:12
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05052327ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052328ECD7.D	Data Locked	richardl, 06-May-2023 09:12
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05052330ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052331ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052332ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052333ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052334ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052335ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052336ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052337ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052338ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052339ECD7.D	Data Locked	richardl, 06-May-2023 09:12

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230505.b\05052322ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230505.b\05052323ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230505.b\05052325ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230505.b\05052321ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230505.b\05052326ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230505.b\05052324ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230505.b\05052331ECD7.D
Level 8: \\target\share\chem4\ecd7.i\230505.b\05052338ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
2 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00563	+++++	0.00563	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01129	+++++	0.01129	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02681	+++++	0.02681	0.000
3 Aroclor-1242(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02521	+++++	0.02521	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07988	+++++	0.07988	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.01545	+++++	0.01545	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.03576	+++++	0.03576	0.000
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00375	+++++	0.00375	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.00780	+++++	0.00780	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.03715	+++++	0.03715	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.01590	+++++	0.01590	0.000
7 Aroclor-1016(1)	0.03259	0.03226	0.03462	0.03138	0.02909	0.02592	+++++	+++++	0.03098	9.876
(2)	0.08782	0.09418	0.10520	0.10209	0.09934	0.09254	+++++	+++++	0.09686	6.702
(3)	0.04375	0.04849	0.05094	0.04519	0.04205	0.03826	+++++	+++++	0.04478	10.130
(4)	0.01716	0.01921	0.02127	0.01901	0.01783	0.01637	+++++	+++++	0.01847	9.437
6 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02042	+++++	0.02042	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.05306	+++++	0.05306	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.10205	+++++	0.10205	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.05202	+++++	0.05202	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
8 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.08222	+++++	0.08222	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.03694	+++++	0.03694	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.05308	+++++	0.05308	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.10397	+++++	0.10397	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++	0.06279	+++++	0.06279	0.000
9 Aroclor-1260(1)	0.04580	0.04187	0.04489	0.04230	0.04061	0.03834	+++++	+++++	0.04230	6.490
(2)	0.04434	0.04115	0.04438	0.04189	0.04043	0.03831	+++++	+++++	0.04175	5.623
(3)	0.11170	0.10434	0.11116	0.10510	0.10043	0.09464	+++++	+++++	0.10456	6.204
(4)	0.05460	0.05000	0.05382	0.05169	0.04996	0.04720	+++++	+++++	0.05121	5.355
(5)	0.02498	0.02246	0.02370	0.02202	0.02100	0.01982	+++++	+++++	0.02233	8.279
10 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03619	+++++	0.03619	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****				
	0.05090	*****							0.05090	0.000
(3)	*****	*****	*****	*****	*****	*****				
	0.05471	*****							0.05471	0.000
(4)	*****	*****	*****	*****	*****	*****				
	0.04459	*****							0.04459	0.000
11 Aroclor-1268(1)	*****	*****	*****	*****	*****	*****				
	0.12759	*****							0.12759	0.000
(2)	*****	*****	*****	*****	*****	*****				
	0.12671	*****							0.12671	0.000
(3)	*****	*****	*****	*****	*****	*****				
	0.10191	*****							0.10191	0.000
(4)	*****	*****	*****	*****	*****	*****				
	0.29098	*****							0.29098	0.000
42 2,4-DDE	*****	*****	*****	*****	*****	*****				
	*****	636							636	0.000
43 2,4-DDD	*****	*****	*****	*****	*****	*****				
	*****	1208							1208	0.000
44 2,4-DDT	*****	*****	*****	*****	*****	*****				
	*****	*****							*****	*****
46 4,4-DDE	*****	*****	*****	*****	*****	*****				
	*****	1492							1492	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
47 4,4-DDD	*****	*****	*****	*****	*****	*****	*****	708	708	0.000
48 4,4-DDT	*****	*****	*****	*****	*****	*****	*****	630	630	0.000
49 Hexachlorobutadiene	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
50 Hexachlorobenzene	*****	*****	*****	*****	*****	*****	*****	*****	*****	*****
$ 1 Tetrachloro-m-xylene	1.21049	1.18252	1.29993	1.22669	1.16878	1.14053	*****	*****	1.20482	4.619
$ 13 Decachlorobiphenyl	0.89752	0.83715	0.84851	0.77945	0.72713	0.70508	*****	*****	0.79914	9.361

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052322ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052323ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052325ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052321ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052326ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052324ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052331ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
1 Aroclor-1221 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00590	0.00590	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01223	0.01223	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.01924	0.01924	0.000
4 Aroclor-1232 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00310	0.00310	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01776	0.01776	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.03568	0.03568	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.01033	0.01033	0.000
3 Aroclor-1242 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03575	0.03575	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
(2)	*****	*****	*****	*****	*****	*****	0.07606	0.07606	0.000
(3)	*****	*****	*****	*****	*****	*****	0.02438	0.02438	0.000
(4)	*****	*****	*****	*****	*****	*****	0.02939	0.02939	0.000
6 Aroclor-1248 [2C](1)	*****	*****	*****	*****	*****	*****	0.03806	0.03806	0.000
(2)	*****	*****	*****	*****	*****	*****	0.04020	0.04020	0.000
(3)	*****	*****	*****	*****	*****	*****	0.04712	0.04712	0.000
(4)	*****	*****	*****	*****	*****	*****	0.05651	0.05651	0.000
7 Aroclor-1016 [2C](1)	0.05158	0.04743	0.04866	0.04443	0.04159	0.03802	*****	0.04529	10.942
(2)	0.09850	0.09560	0.10183	0.09745	0.09528	0.09038	*****	0.09651	3.959
(3)	0.04379	0.04462	0.04622	0.04230	0.04046	0.03801	*****	0.04257	6.991
(4)	0.03635	0.03727	0.03735	0.03308	0.03084	0.02798	*****	0.03381	11.400

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
8 Aroclor-1254 [2C](1)	*****	*****	*****	*****	*****	*****	0.06078	0.06078	0.000
(2)	*****	*****	*****	*****	*****	*****	0.03611	0.03611	0.000
(3)	*****	*****	*****	*****	*****	*****	0.04927	0.04927	0.000
(4)	*****	*****	*****	*****	*****	*****	0.10751	0.10751	0.000
(5)	*****	*****	*****	*****	*****	*****	0.10667	0.10667	0.000
10 Aroclor-1262 [2C](1)	*****	*****	*****	*****	*****	*****	0.06482	0.06482	0.000
(2)	*****	*****	*****	*****	*****	*****	0.05467	0.05467	0.000
(3)	*****	*****	*****	*****	*****	*****	0.05974	0.05974	0.000
(4)	*****	*****	*****	*****	*****	*****	0.09737	0.09737	0.000
9 Aroclor-1260 [2C](1)	0.04544	0.04273	0.04504	0.04279	0.04076	0.03816	*****	0.04249	6.408
(2)	0.11282	0.11085	0.11919	0.11378	0.10815	0.10199	*****	0.11113	5.208

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
(3)	0.02783	0.02652	0.02791	0.02780	0.02775	0.02743	#####	0.02754	1.918
(4)	0.07670	0.07341	0.07861	0.07586	0.07265	0.06817	#####	0.07423	4.962
11 Aroclor-1268 [2C](1)	#####	#####	#####	#####	#####	#####	0.15139	0.15139	0.000
(2)	#####	#####	#####	#####	#####	#####	0.16276	0.16276	0.000
(3)	#####	#####	#####	#####	#####	#####	0.13938	0.13938	0.000
(4)	#####	#####	#####	#####	#####	#####	0.44675	0.44675	0.000
41 2,4-DDE [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
42 2,4-DDD [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
44 4,4-DDE [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
45 4,4-DDD/2,4-DDT [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
46 4,4-DDT [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 Tetrachloro-m-xylene [2C]	1.09077	1.07641	1.18129	1.13054	1.07870	1.04559	+++++	1.10055	4.376
$ 13 Decachlorobiphenyl [2C]	1.04434	1.07403	1.22005	1.18343	1.16419	1.13004	+++++	1.13601	5.890

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230505.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	05052321ECD7	05052322ECD7	05052323ECD7	05052324ECD7	05052325ECD7	05052326ECD7
INJ.DATE:	05-MAY-2023	05-MAY-2023	06-MAY-2023	06-MAY-2023	06-MAY-2023	06-MAY-2023
INJ.TIME:	23:26	23:47	00:08	00:29	00:50	01:11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 41 IS-BNB	3.429	3.429	3.428	3.429	3.428	3.428	3.428	3.328-3.528	3.429	0.000
$ 1 Tetrachloro-m-xylene	5.743	5.742	5.741	5.746	5.741	5.743	5.742	5.642-5.842	5.743	0.002
2 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	4.663	4.563-4.763	+++++	+++++
3 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	7.212	7.112-7.312	+++++	+++++
4 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	4.664	4.564-4.764	+++++	+++++
7 Aroclor-1016	7.213	7.213	7.214	7.213	7.212	7.212	7.212	7.112-7.312	7.213	0.001
6 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	8.399	8.299-8.499	+++++	+++++
8 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	9.246	9.146-9.346	+++++	+++++
9 Aroclor-1260	10.995	10.998	10.998	10.992	10.995	10.993	10.993	10.893-11.093	10.995	0.003
10 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	10.779	10.679-10.879	+++++	+++++
11 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	12.196	12.096-12.296	+++++	+++++
$ 13 Decachlorobiphenyl	13.841	13.843	13.843	13.842	13.841	13.842	13.840	13.740-13.940	13.842	0.001
* 12 IS-HBBP	14.215	14.216	14.217	14.215	14.214	14.215	14.214	14.114-14.314	14.215	0.001
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.206	9.156-9.256	+++++	+++++
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	9.753	9.703-9.803	+++++	+++++
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.293	10.243-10.343	+++++	+++++
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.635	9.535-9.735	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230505.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.243	10.143-10.343	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.706	10.606-10.806	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230505.b\230505.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	05052320ECD7	05052321ECD7	05052322ECD7	05052323ECD7	05052324ECD7	05052325ECD7	05052326ECD7
INJ.DATE:	05-MAY-2023	05-MAY-2023	05-MAY-2023	06-MAY-2023	06-MAY-2023	06-MAY-2023	06-MAY-2023
INJ.TIME:	23:06	23:26	23:47	00:08	00:29	00:50	01:11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 40 IS-BNB [2C]	3.869	3.869	3.869	3.869	3.869	3.869	3.869	3.868	3.768-3.968	3.869	0.000
$ 2 Tetrachloro-m-xylene [	5.629	5.629	5.630	5.630	5.627	5.629	5.629	5.628	5.528-5.728	5.629	0.001
1 Aroclor-1221 [2C]	0.000	+++++	+++++	+++++	+++++	+++++	+++++	4.894	4.794-4.994	0.000	0.000
4 Aroclor-1232 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.894	4.794-4.994	+++++	+++++
3 Aroclor-1242 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.203	7.103-7.303	+++++	+++++
6 Aroclor-1248 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.260	8.160-8.360	+++++	+++++
7 Aroclor-1016 [2C]	+++++	7.204	7.206	7.205	7.203	7.204	7.204	7.204	7.104-7.304	7.204	0.001
8 Aroclor-1254 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.404	9.304-9.504	+++++	+++++
10 Aroclor-1262 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.153	11.053-11.253	+++++	+++++
9 Aroclor-1260 [2C]	+++++	11.605	11.610	11.609	11.604	11.608	11.606	11.606	11.506-11.706	11.607	0.002
11 Aroclor-1268 [2C]	0.000	+++++	+++++	+++++	+++++	+++++	+++++	12.385	12.285-12.485	0.000	0.000
$ 13 Decachlorobiphenyl [2C	14.070	14.070	14.071	14.070	14.071	14.069	14.070	14.068	13.968-14.168	14.070	0.000
* 12 IS-HBBP [2C]	14.958	14.957	14.959	14.959	14.956	14.957	14.958	14.957	14.857-15.057	14.958	0.001
41 2,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.867	9.817-9.917	+++++	+++++
42 2,4-DDD [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.492	9.442-9.542	+++++	+++++
44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.165	10.065-10.265	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.625	10.525-10.725	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230505.b\230505.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.046	10.946-11.146	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052320ECD7.D
Data file 2: /230505.b/230505.b/05052320ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 05-MAY-2023 23:06
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	296285	5.629	0.001	163258	35.5	37.4	5.3	Tetrachloro-m-xylene
13.841	0.001	288612	14.070	0.002	318424	35.7	37.3	4.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	554412	-7.8
Hexabromobiphenyl	876625	809662	-7.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	317324	-9.2
Hexabromobiphenyl	652984	600612	-8.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.272	0.027	1585	32.7
Aroclor-1221	3	---			0.0	3	6.588	0.017	408	5.3
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	10.995	0.002	1624	3.8	1	---			0.0
Aroclor-1260	2	11.305	-0.005	1450	3.4	2	---			0.0
Aroclor-1260	3	11.770	0.084	3781	3.6	3	---			0.0
Aroclor-1260	4	12.138	0.048	1272	2.5	4	---			0.0
Aroclor-1260	5	12.271	0.078	413	1.8	NS	---			----
	Total Col1Ave (5 peaks):				3.0	Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.800	0.021	2445	6.7	1	---			0.0
Aroclor-1262	2	12.271	0.077	413	0.8	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	12.989	0.050	944	2.1	4	---			0.0
	Total Col1Ave (3 peaks):				3.2	Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	12.271	0.076	413	0.3	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.649	0.001	2092	2.0	3	12.847	0.004	632	0.6
Aroclor-1268	4	13.443	0.006	5651	1.9	4	13.663	-0.001	2018	0.6
	Total Col1Ave (3 peaks):				1.4	Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.842 - 13.740) = 65805 Col1 Total PCB = 0.0 ppm*

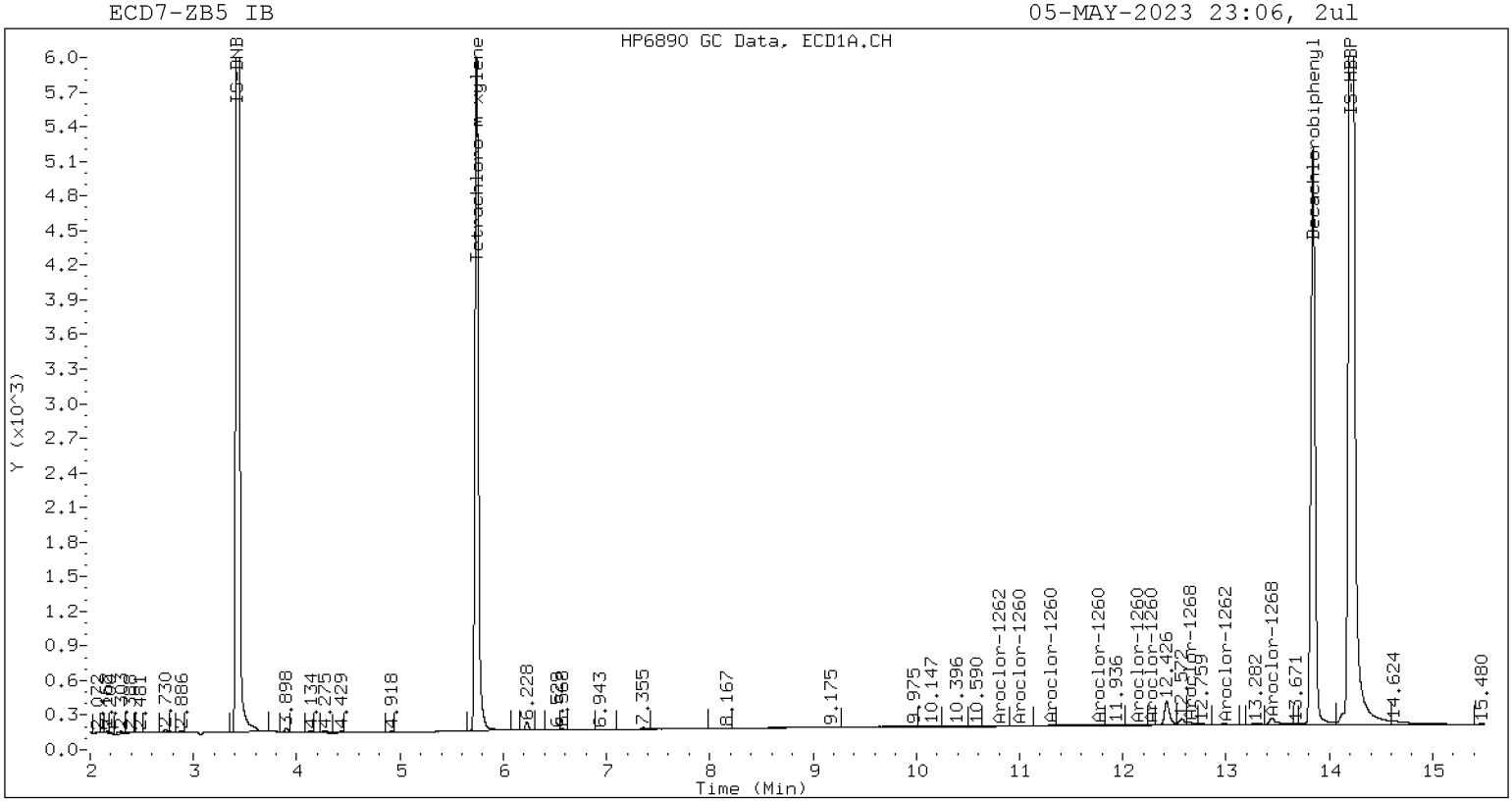
Total PCB Area Col2 (5.728 - 13.968) = 16664 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

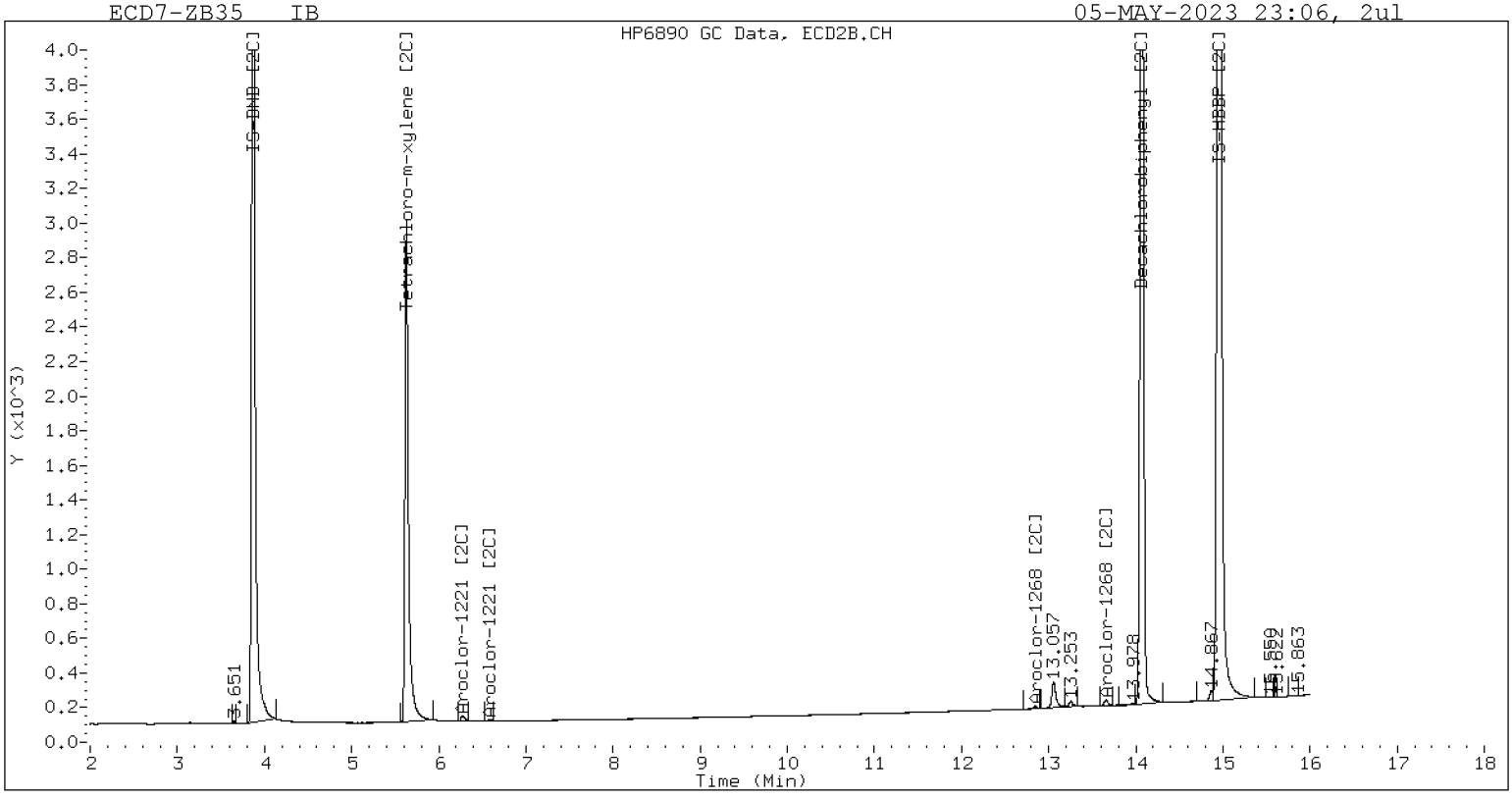
PCB Dual Column Chromatograms

ECD7-ZB5 IB 05-MAY-2023 23:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 IB 05-MAY-2023 23:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052321ECD7.D
Data file 2: /230505.b/230505.b/05052321ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1660
Client ID:
Injection Date: 05-MAY-2023 23:26
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	368910	5.629	0.000	197442	40.7	41.1	0.9	Tetrachloro-m-xylene
13.841	0.001	341641	14.070	0.002	386381	39.0	41.7	6.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	601474	0.0
Hexabromobiphenyl	876625	876625	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	349289	0.0
Hexabromobiphenyl	652984	652984	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	58979	253.2	1	7.204	-0.000	48493	245.3
Aroclor-1016	2	7.595	0.001	191892	263.5	2	7.811	0.003	106372	252.4
Aroclor-1016	3	7.735	0.002	84934	252.3	3	8.010	0.004	46169	248.4
Aroclor-1016	4	8.399	0.001	35727	257.2	4	8.260	0.001	36109	244.6
Total Col1Ave (4 peaks):					256.6	Total Col2Ave (4 peaks):				247.7 RPD = 4
Corrected Ave (3 peaks):					254.2	Corrected Ave (3 peaks):				246.1 RPD = 3
CalAmt %D:					2.6	CalAmt %D:				-0.9
Aroclor-1260	1	10.995	0.002	115872	250.0	1	11.605	-0.000	87314	251.8
Aroclor-1260	2	11.312	0.002	114768	250.9	2	11.872	-0.000	232184	256.0
Aroclor-1260	3	11.687	0.001	287920	251.3	3	12.389	0.001	56725	252.4
Aroclor-1260	4	12.091	0.002	141607	252.3	4	12.456	0.000	154797	255.5
Aroclor-1260	5	12.195	0.002	60315	246.5	NS	---			----
Total Col1Ave (5 peaks):					250.2	Total Col2Ave (4 peaks):				253.9 RPD = 1
Corrected Ave (4 peaks):					249.7	Corrected Ave (3 peaks):				253.2 RPD = 1
CalAmt %D:					0.1	CalAmt %D:				1.6

Total PCB Area Col1 (5.842 - 13.740) = 3355836 Col1 Total PCB = 0.5 ppm*

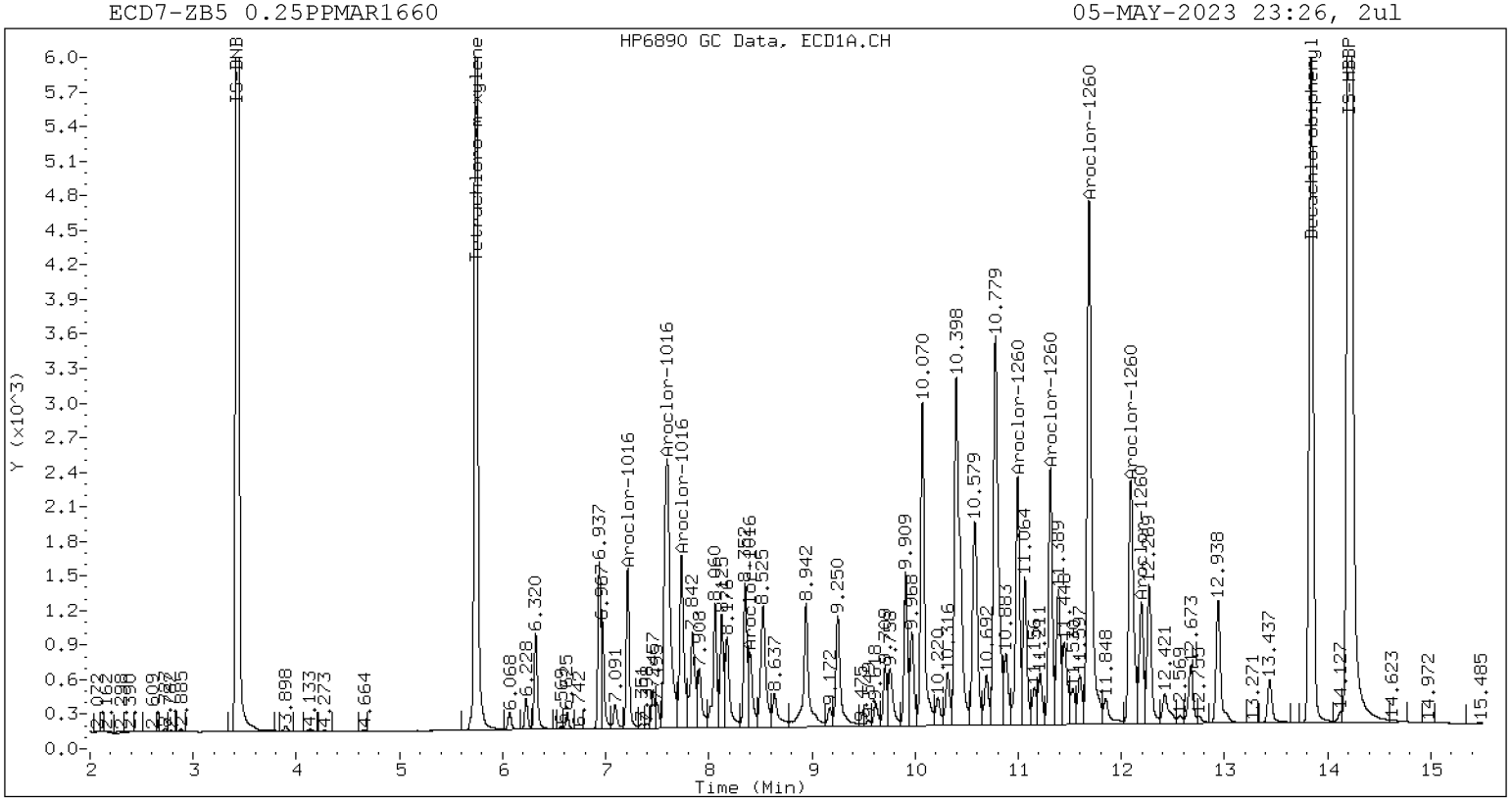
Total PCB Area Col2 (5.728 - 13.968) = 2087295 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

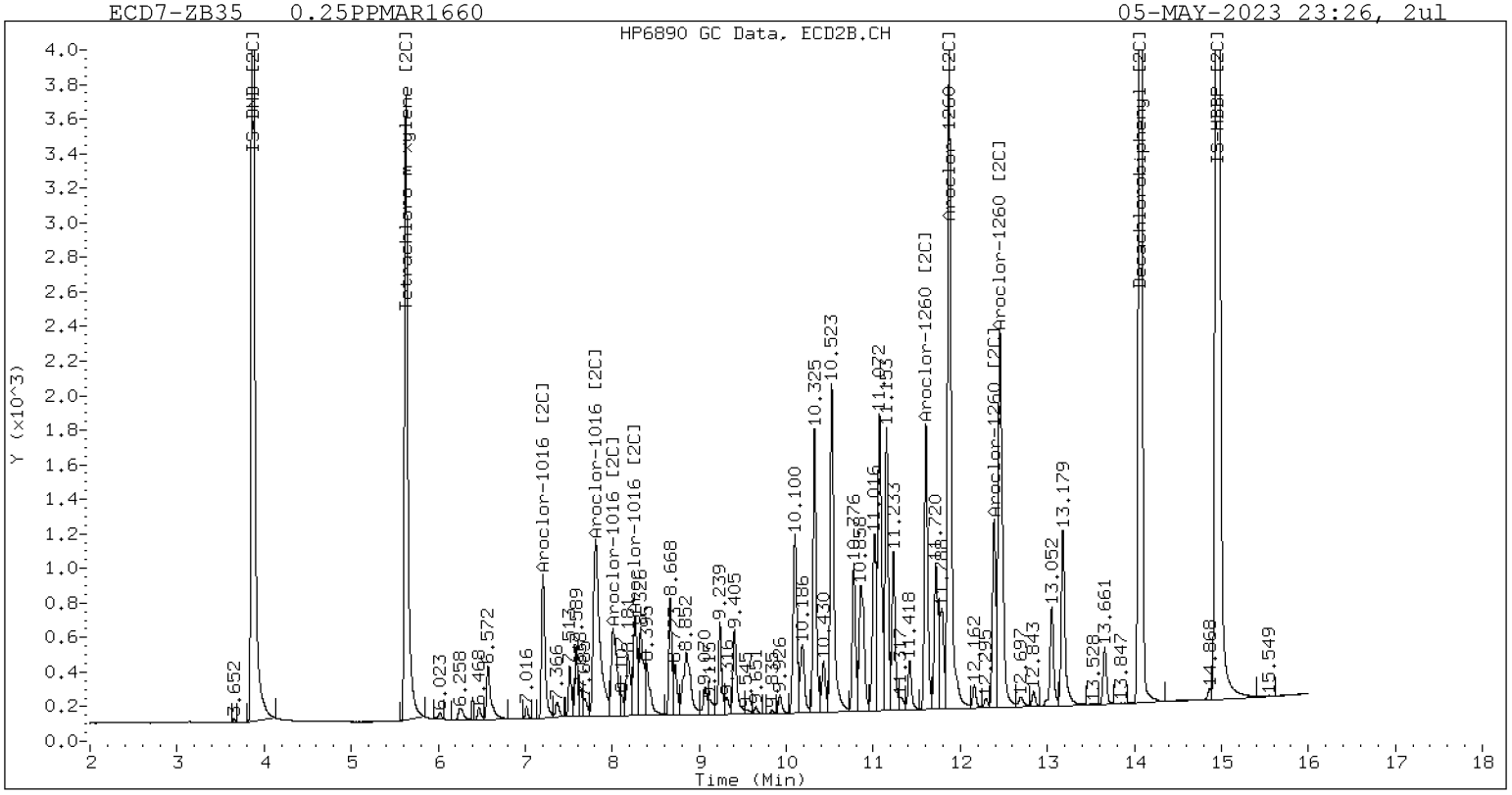
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1660 05-MAY-2023 23:26, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1660 05-MAY-2023 23:26, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052322ECD7.D
Data file 2: /230505.b/230505.b/05052322ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.02PPMAR1660
Client ID:
Injection Date: 05-MAY-2023 23:47
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	28836	5.630	0.002	14779	3.2	3.2	1.4	Tetrachloro-m-xylene
13.843	0.002	31610	14.071	0.002	27131	3.6	2.9	20.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	595544	-1.0
Hexabromobiphenyl	876625	880480	0.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	338730	-3.0
Hexabromobiphenyl	652984	649475	-0.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	4852	21.0	1	7.206	0.002	4368	22.8
Aroclor-1016	2	7.595	0.001	13075	18.1	2	7.819	0.012	8341	20.4
Aroclor-1016	3	7.737	0.004	6514	19.5	3	8.043	0.038	3708	20.6
Aroclor-1016	4	8.400	0.002	2555	18.6	4	8.261	0.002	3078	21.5
Total Col1Ave (4 peaks):					19.3	Total Col2Ave (4 peaks):				21.3 RPD = 10
Corrected Ave (3 peaks):					18.8	Corrected Ave (3 peaks):				20.8 RPD = 10
CalAmt %D:					-3.4	CalAmt %D:				6.6
Aroclor-1260	1	10.998	0.005	10082	21.7	1	11.610	0.004	7378	21.4
Aroclor-1260	2	11.316	0.006	9760	21.2	2	11.878	0.006	18318	20.3
Aroclor-1260	3	11.694	0.008	24587	21.4	3	12.392	0.004	4519	20.2
Aroclor-1260	4	12.098	0.008	12018	21.3	4	12.461	0.006	12454	20.7
Aroclor-1260	5	12.198	0.005	5499	22.4	NS	---			----
Total Col1Ave (5 peaks):					21.6	Total Col2Ave (4 peaks):				20.6 RPD = 4
Corrected Ave (4 peaks):					21.4	Corrected Ave (3 peaks):				20.4 RPD = 5
CalAmt %D:					8.0	CalAmt %D:				3.2

Total PCB Area Col1 (5.842 - 13.740) = 294199 Col1 Total PCB = 0.0 ppm*

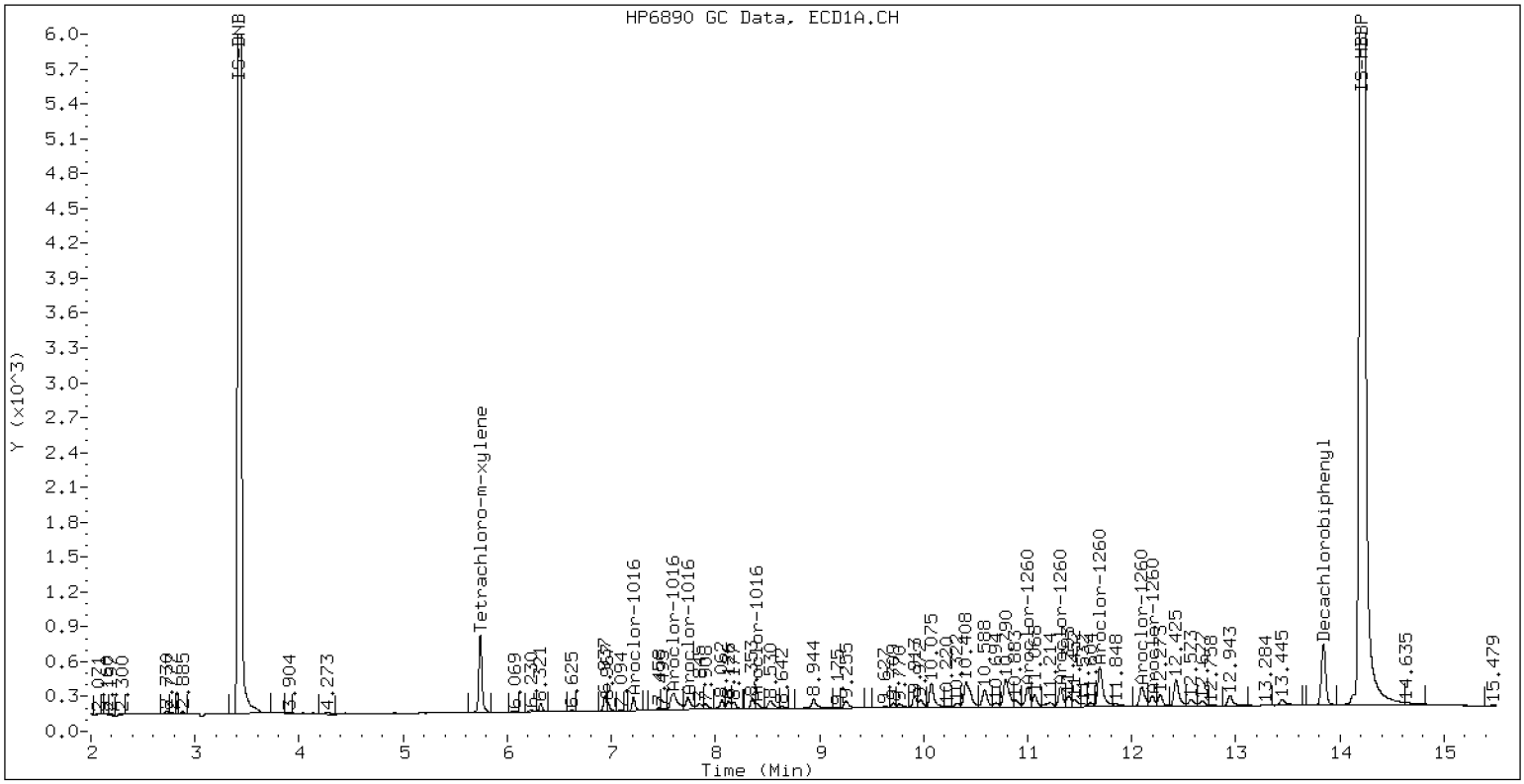
Total PCB Area Col2 (5.728 - 13.968) = 173796 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

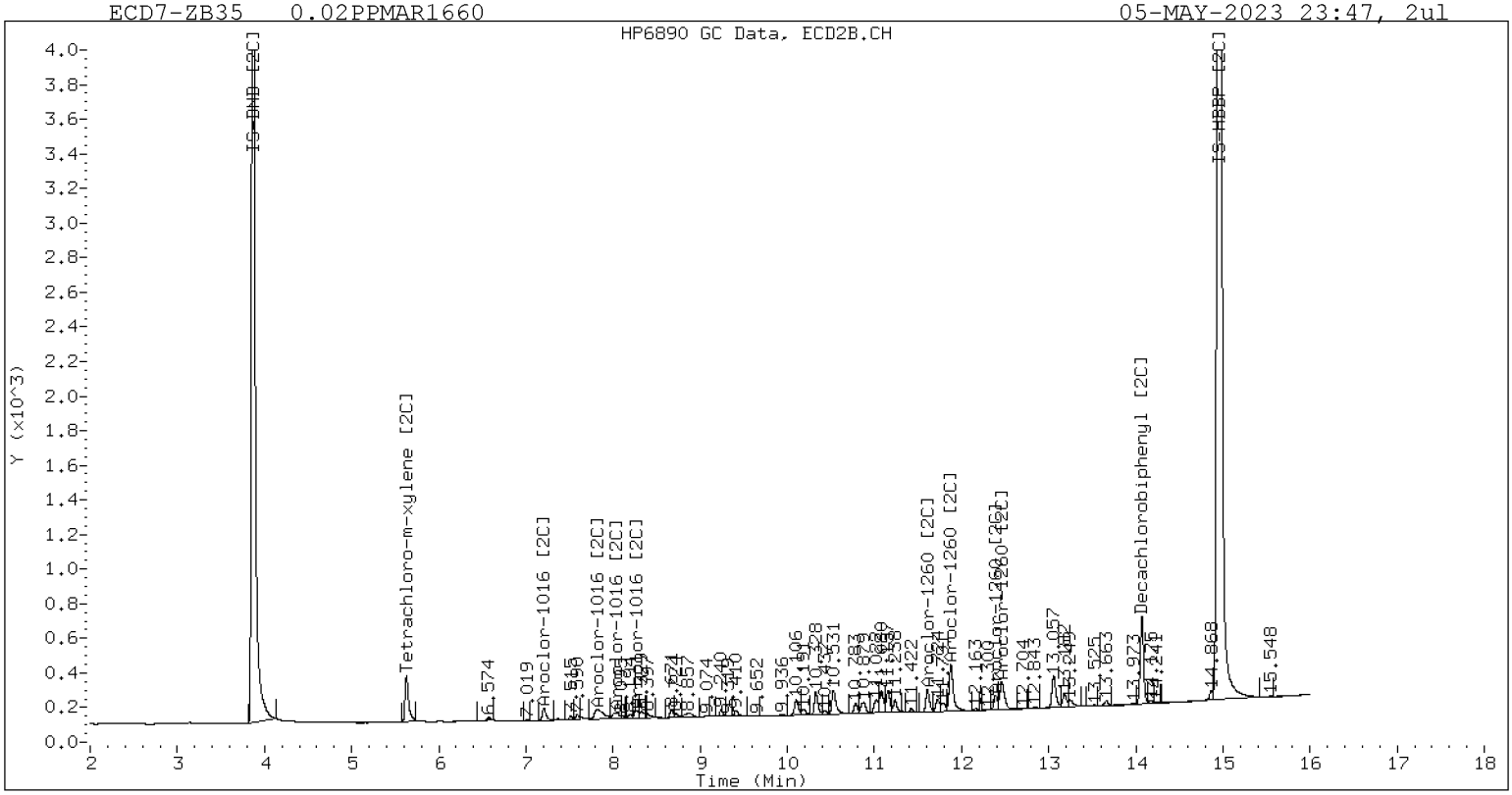
PCB Dual Column Chromatograms

ECD7-ZB5 0.02PPMAR1660 05-MAY-2023 23:47, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.02PPMAR1660 05-MAY-2023 23:47, 2ul

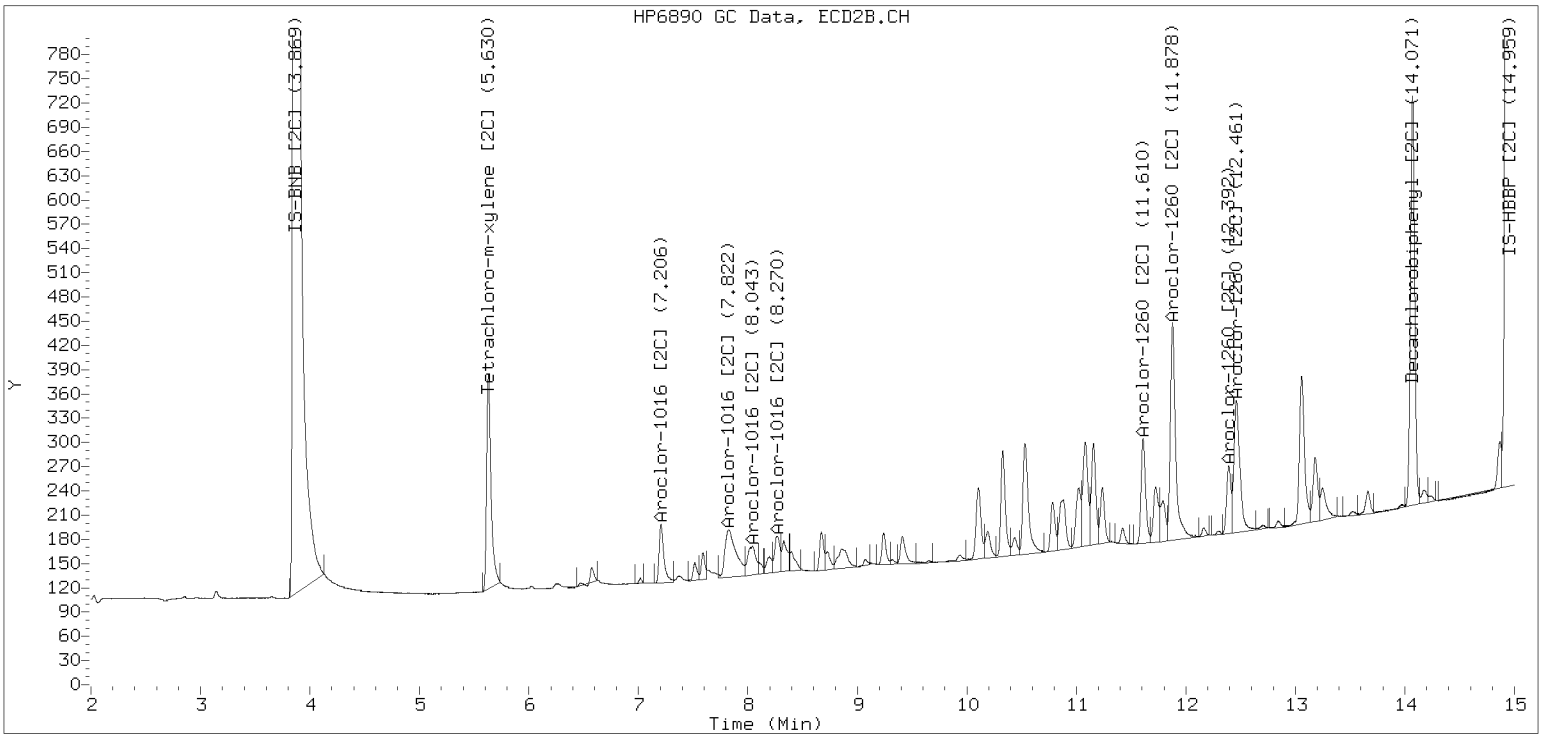


ZB-35 Manual Integration: YES

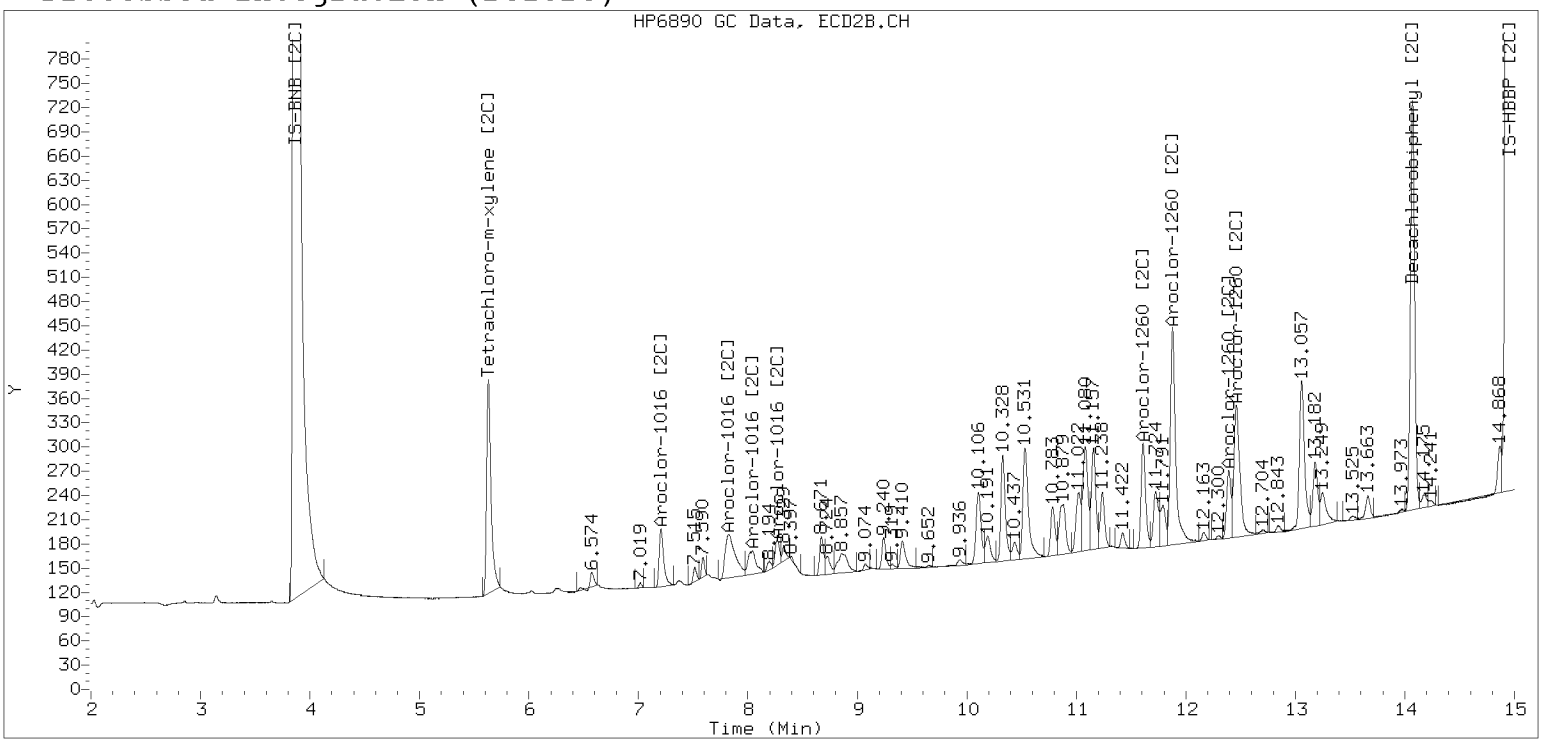
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052322ECD7.D Injection Date: 05-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052323ECD7.D
Data file 2: /230505.b/230505.b/05052323ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPMAR1660
Client ID:
Injection Date: 06-MAY-2023 00:08
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	72149	5.630	0.001	37778	7.9	7.8	0.3	Tetrachloro-m-xylene
13.843	0.002	75564	14.070	0.002	71601	8.4	7.6	10.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	610127	1.4
Hexabromobiphenyl	876625	902634	3.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	350964	0.5
Hexabromobiphenyl	652984	666660	2.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.001	12303	52.1	1	7.205	0.001	10404	52.4
Aroclor-1016	2	7.595	0.000	35912	48.6	2	7.821	0.013	20971	49.5
Aroclor-1016	3	7.736	0.003	18491	54.1	3	8.016	0.010	9788	52.4
Aroclor-1016	4	8.400	0.002	7326	52.0	4	8.264	0.005	8176	55.1
Total Col1Ave (4 peaks):					51.7	Total Col2Ave (4 peaks):				52.4 RPD = 1
Corrected Ave (3 peaks):					50.9	Corrected Ave (3 peaks):				51.4 RPD = 1
CalAmt %D:					3.4	CalAmt %D:				4.7
Aroclor-1260	1	10.998	0.005	23619	49.5	1	11.609	0.003	17805	50.3
Aroclor-1260	2	11.316	0.006	23213	49.3	2	11.876	0.004	46188	49.9
Aroclor-1260	3	11.693	0.007	58862	49.9	3	12.391	0.003	11048	48.1
Aroclor-1260	4	12.096	0.006	28206	48.8	4	12.460	0.004	30586	49.4
Aroclor-1260	5	12.197	0.004	12672	50.3	NS	---			----
Total Col1Ave (5 peaks):					49.6	Total Col2Ave (4 peaks):				49.4 RPD = 0
Corrected Ave (4 peaks):					49.4	Corrected Ave (3 peaks):				49.2 RPD = 0
CalAmt %D:					-0.9	CalAmt %D:				-1.1

Total PCB Area Col1 (5.842 - 13.740) = 697433 Col1 Total PCB = 0.1 ppm*

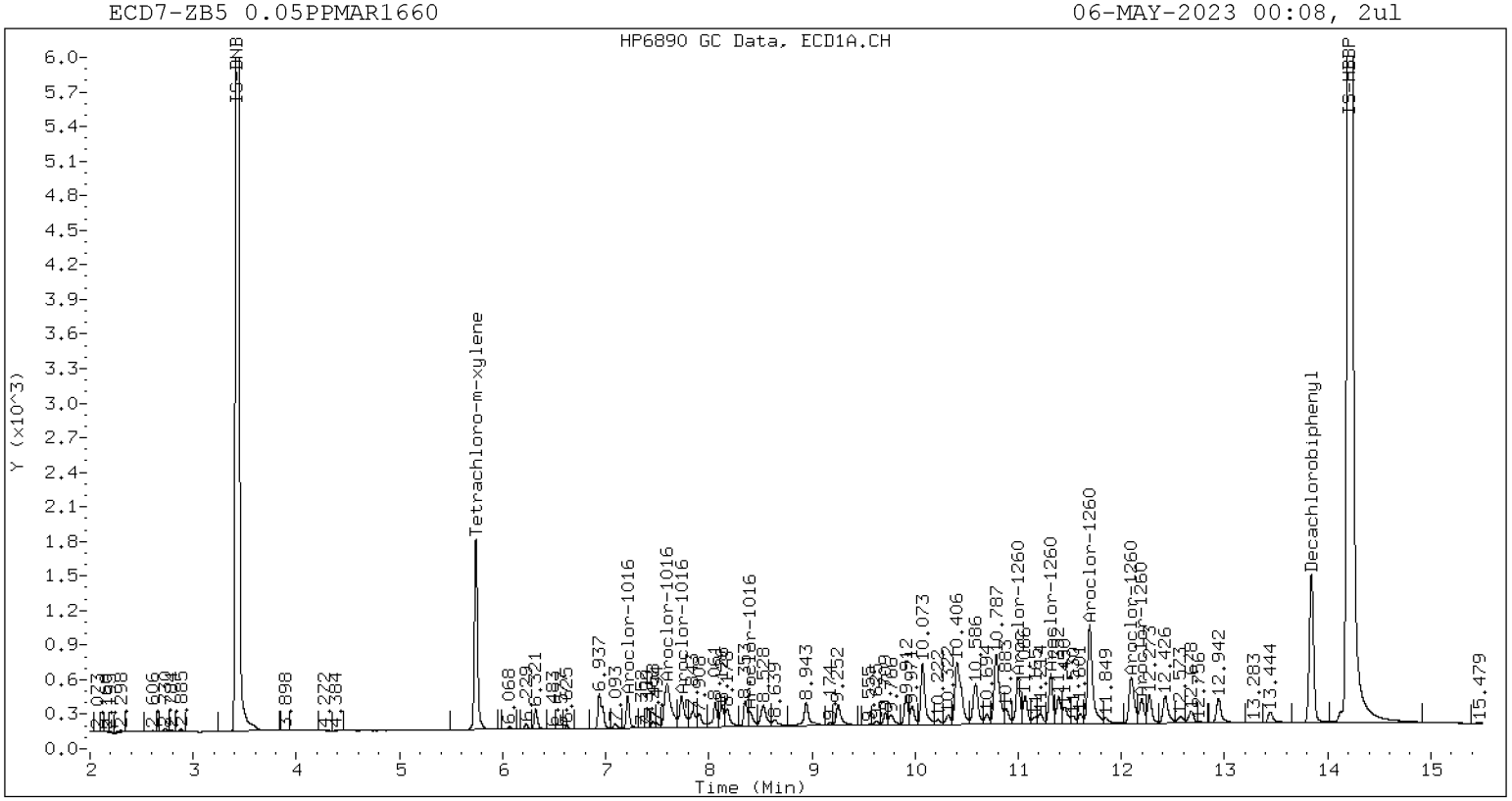
Total PCB Area Col2 (5.728 - 13.968) = 429325 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

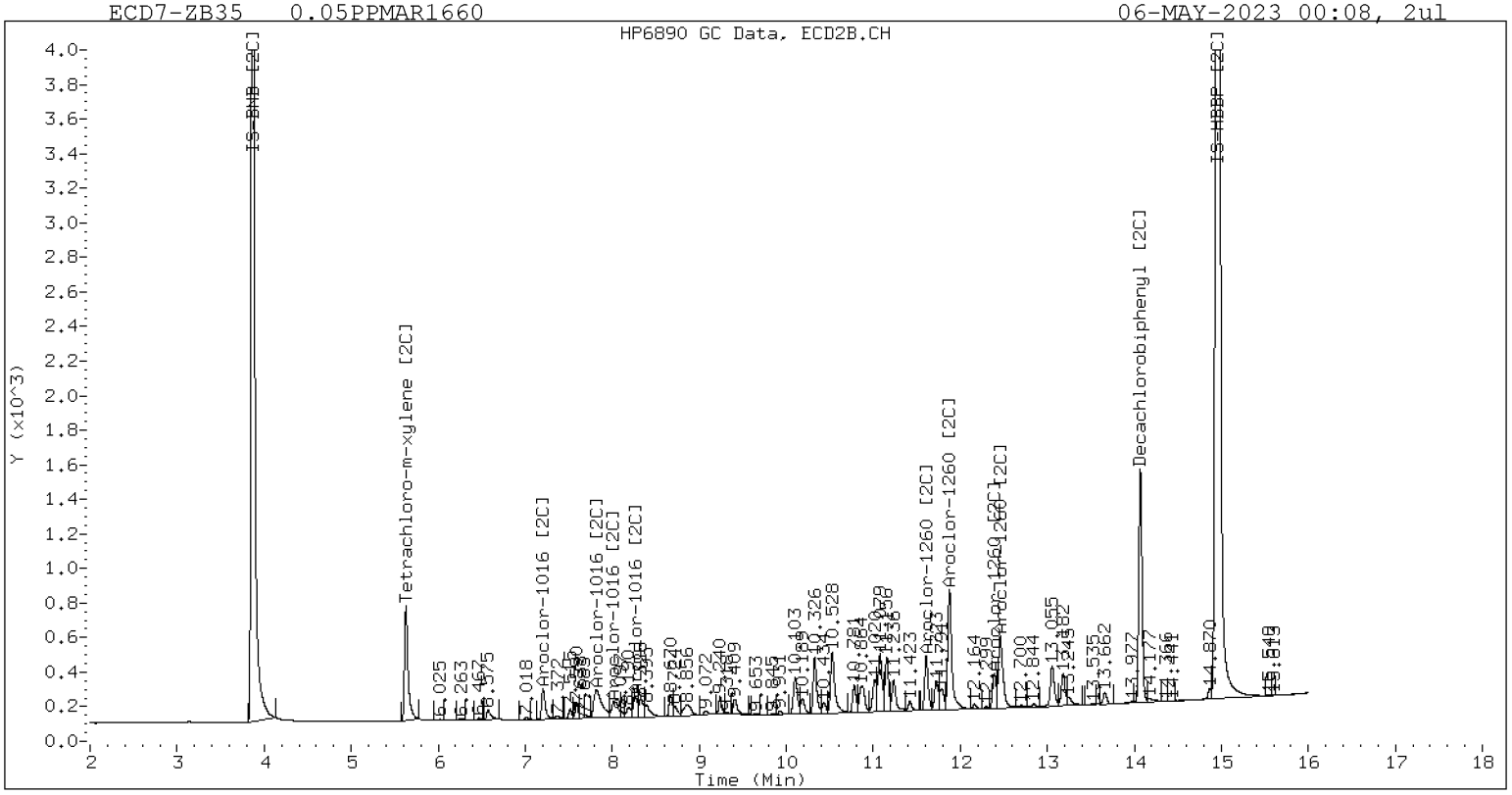
PCB Dual Column Chromatograms

ECD7-ZB5 0.05PPMAR1660 06-MAY-2023 00:08, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.05PPMAR1660 06-MAY-2023 00:08, 2ul

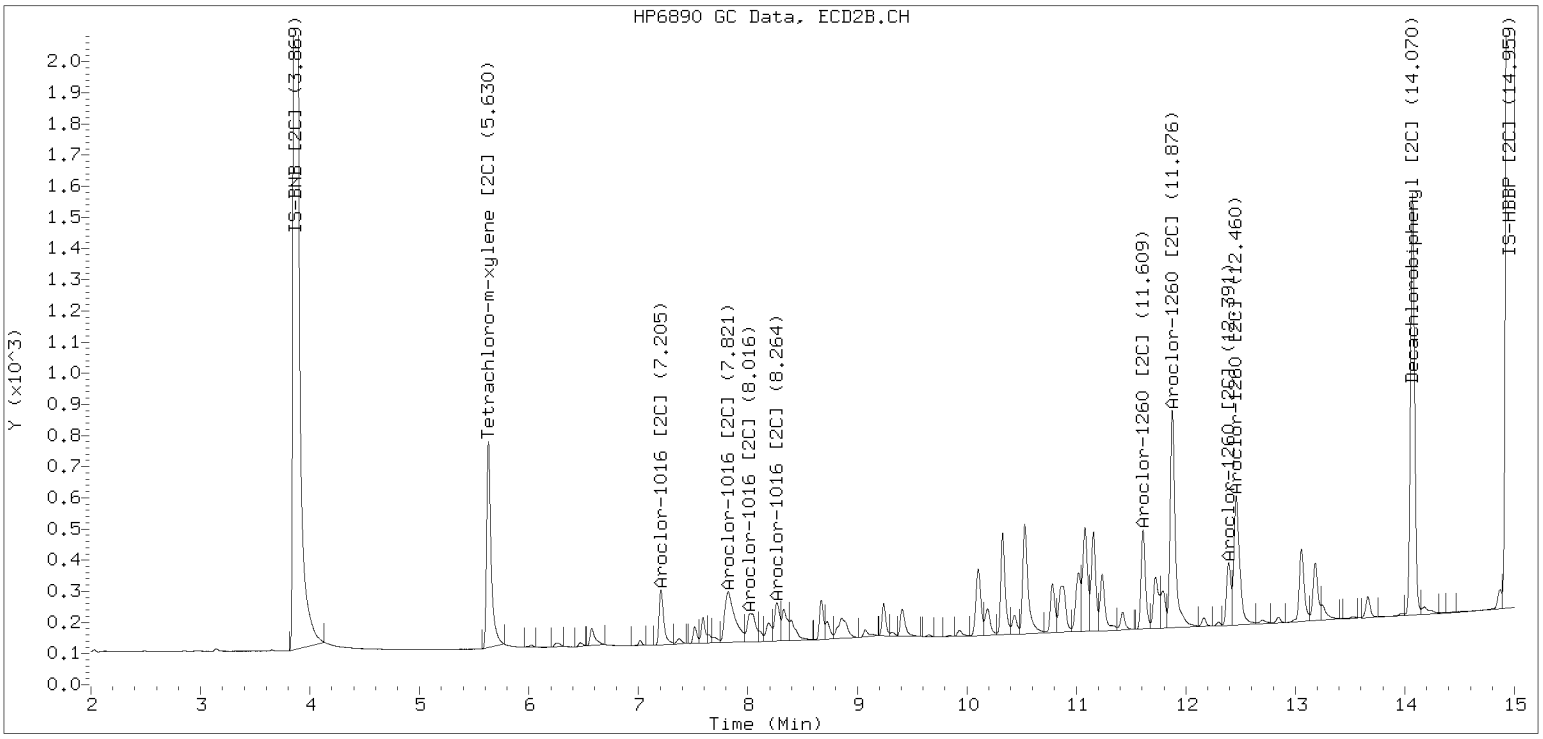


ZB-35 Manual Integration: YES

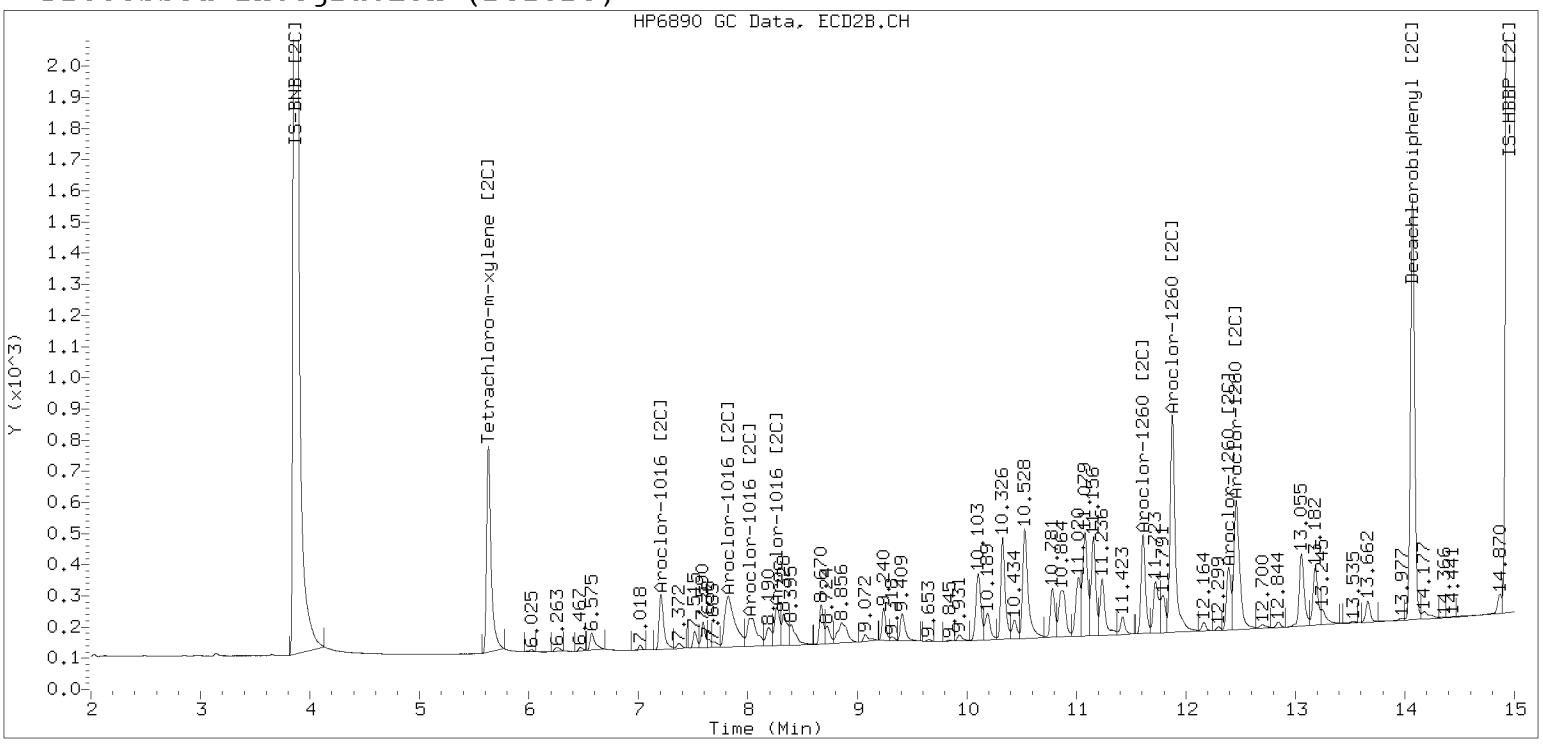
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052323ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052324ECD7.D
Data file 2: /230505.b/230505.b/05052324ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPMAR1660
Client ID:
Injection Date: 06-MAY-2023 00:29
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.746	0.004	1354956	5.627	-0.001	709704	151.5	152.0	0.4	Tetrachloro-m-xylene
13.842	0.002	1208957	14.071	0.002	1442827	141.2	159.2	12.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	594005	-1.2
Hexabromobiphenyl	876625	857318	-2.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	339380	-2.8
Hexabromobiphenyl	652984	638394	-2.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	192466	836.8	1	7.203	-0.001	161296	839.6
Aroclor-1016	2	7.595	0.000	687116	955.4	2	7.804	-0.003	383432	936.5
Aroclor-1016	3	7.732	-0.000	284089	854.4	3	8.002	-0.003	161269	893.1
Aroclor-1016	4	8.397	-0.001	121539	886.0	4	8.257	-0.002	118708	827.5
Total Col1Ave (4 peaks):					883.2	Total Col2Ave (4 peaks):				874.2 RPD = 1
Corrected Ave (3 peaks):					859.1	Corrected Ave (3 peaks):				853.4 RPD = 1
CalAmt %D:					-11.7	CalAmt %D:				-12.6
Aroclor-1260	1	10.992	-0.001	410905	906.4	1	11.604	-0.002	304531	898.2
Aroclor-1260	2	11.309	-0.001	410553	917.6	2	11.869	-0.003	813835	917.7
Aroclor-1260	3	11.683	-0.003	1014157	905.1	3	12.387	-0.001	218887	996.0
Aroclor-1260	4	12.087	-0.003	505824	921.7	4	12.453	-0.003	543988	918.3
Aroclor-1260	5	12.193	-0.001	212396	887.6	NS	---			----
Total Col1Ave (5 peaks):					907.7	Total Col2Ave (4 peaks):				932.6 RPD = 3
Corrected Ave (4 peaks):					904.2	Corrected Ave (3 peaks):				911.4 RPD = 1
CalAmt %D:					-9.2	CalAmt %D:				-6.7

Total PCB Area Col1 (5.842 - 13.740) = 11665793 Col1 Total PCB = 1.8 ppm*

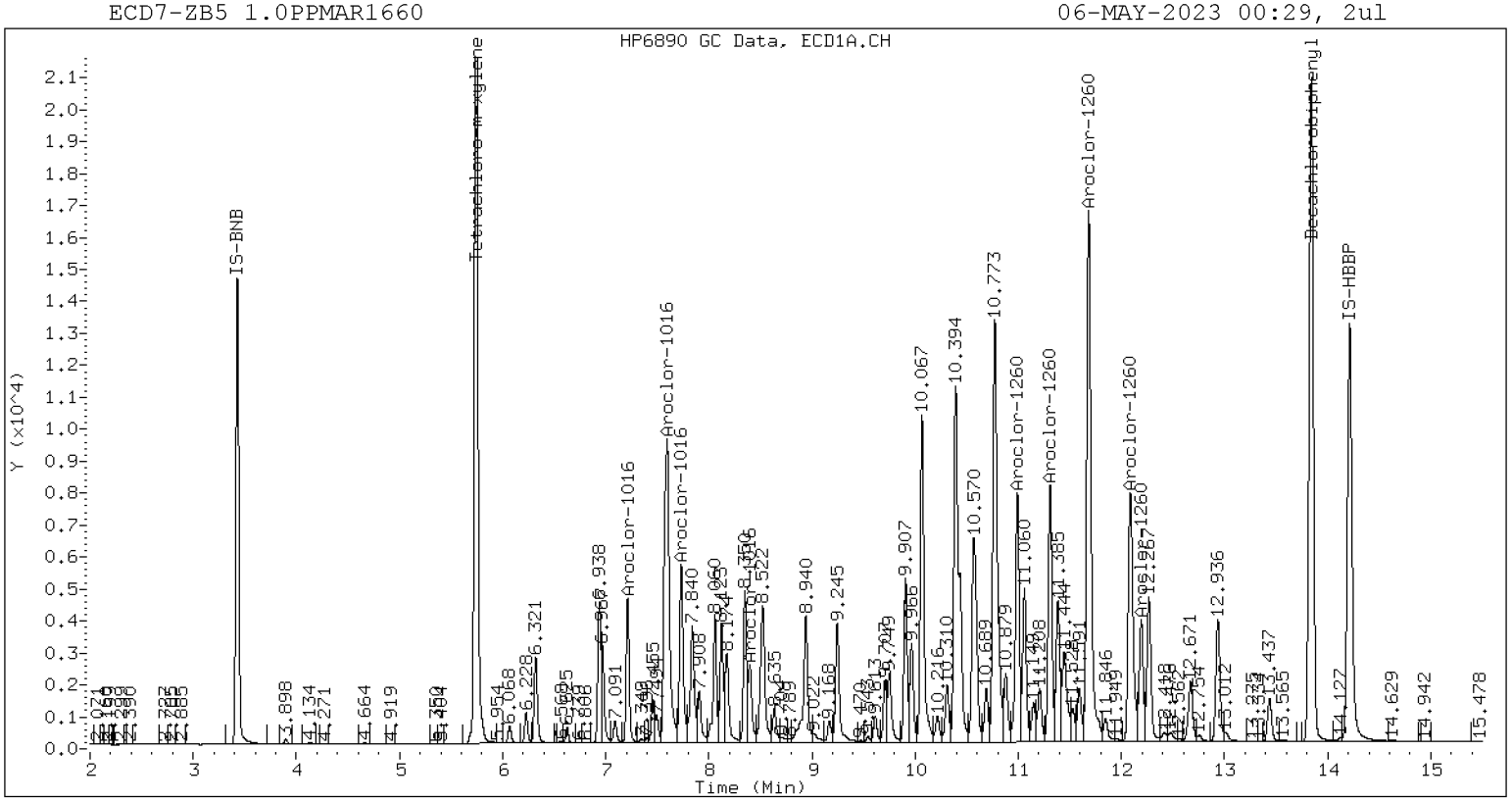
Total PCB Area Col2 (5.728 - 13.968) = 7382788 Col2 Total PCB = 1.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

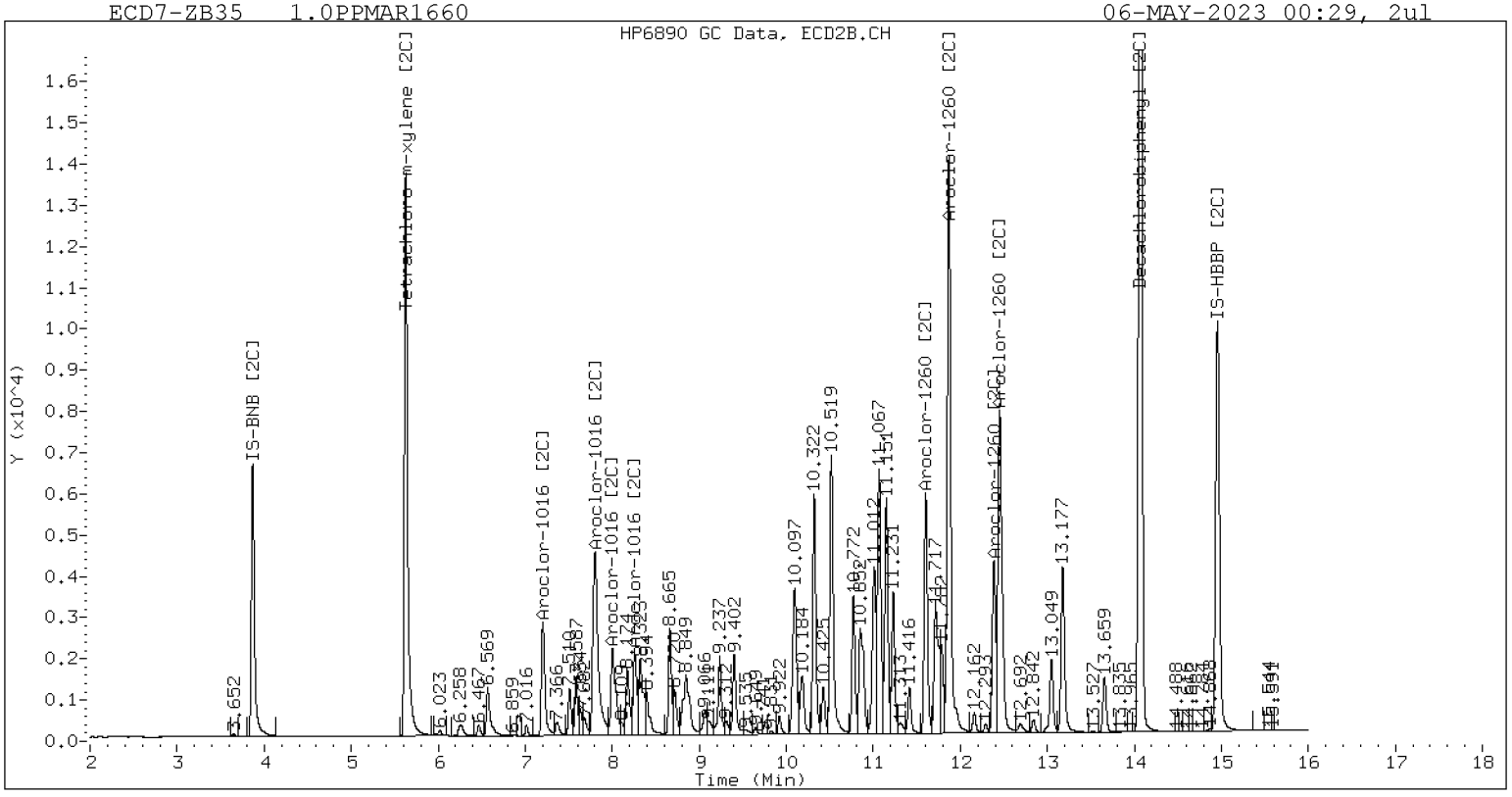
PCB Dual Column Chromatograms

ECD7-ZB5 1.0PPMAR1660 06-MAY-2023 00:29, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 1.0PPMAR1660 06-MAY-2023 00:29, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052325ECD7.D
Data file 2: /230505.b/230505.b/05052325ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPMAR1660
Client ID:
Injection Date: 06-MAY-2023 00:50
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	166260	5.629	0.000	87721	17.3	17.2	0.5	Tetrachloro-m-xylene
13.841	0.000	162151	14.069	0.001	170994	17.0	17.2	1.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	639496	6.3
Hexabromobiphenyl	876625	955499	9.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	371294	6.3
Hexabromobiphenyl	652984	700767	7.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	-0.000	27672	111.8	1	7.204	0.000	22585	107.5
Aroclor-1016	2	7.595	0.000	84096	108.6	2	7.815	0.008	47261	105.5
Aroclor-1016	3	7.735	0.002	40718	113.8	3	8.012	0.007	21450	108.6
Aroclor-1016	4	8.399	0.001	17000	115.1	4	8.262	0.003	17337	110.5
Total Col1Ave (4 peaks):					112.3	Total Col2Ave (4 peaks):				108.0 RPD = 4
Corrected Ave (3 peaks):					111.4	Corrected Ave (3 peaks):				107.2 RPD = 4
CalAmt %D:					12.3	CalAmt %D:				8.0
Aroclor-1260	1	10.995	0.002	53621	106.1	1	11.608	0.002	39451	106.0
Aroclor-1260	2	11.313	0.003	53001	106.3	2	11.874	0.002	104406	107.3
Aroclor-1260	3	11.690	0.004	132765	106.3	3	12.391	0.003	24449	101.4
Aroclor-1260	4	12.093	0.003	64276	105.1	4	12.457	0.002	68859	105.9
Aroclor-1260	5	12.196	0.003	28307	106.1	NS	---			----
Total Col1Ave (5 peaks):					106.0	Total Col2Ave (4 peaks):				105.1 RPD = 1
Corrected Ave (4 peaks):					105.9	Corrected Ave (3 peaks):				104.4 RPD = 1
CalAmt %D:					6.0	CalAmt %D:				5.1

Total PCB Area Col1 (5.842 - 13.740) = 1580756 Col1 Total PCB = 0.2 ppm*

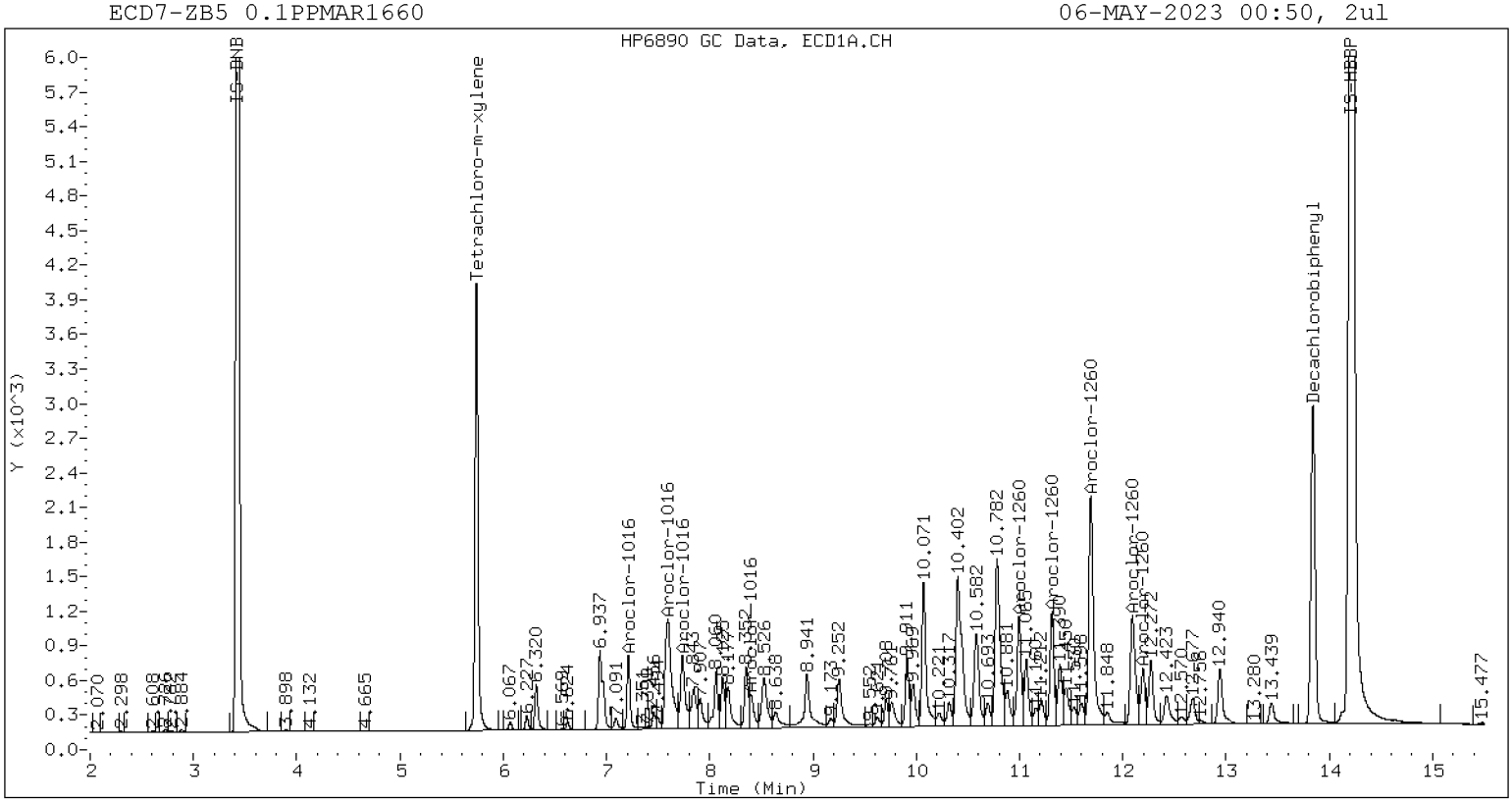
Total PCB Area Col2 (5.728 - 13.968) = 950746 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

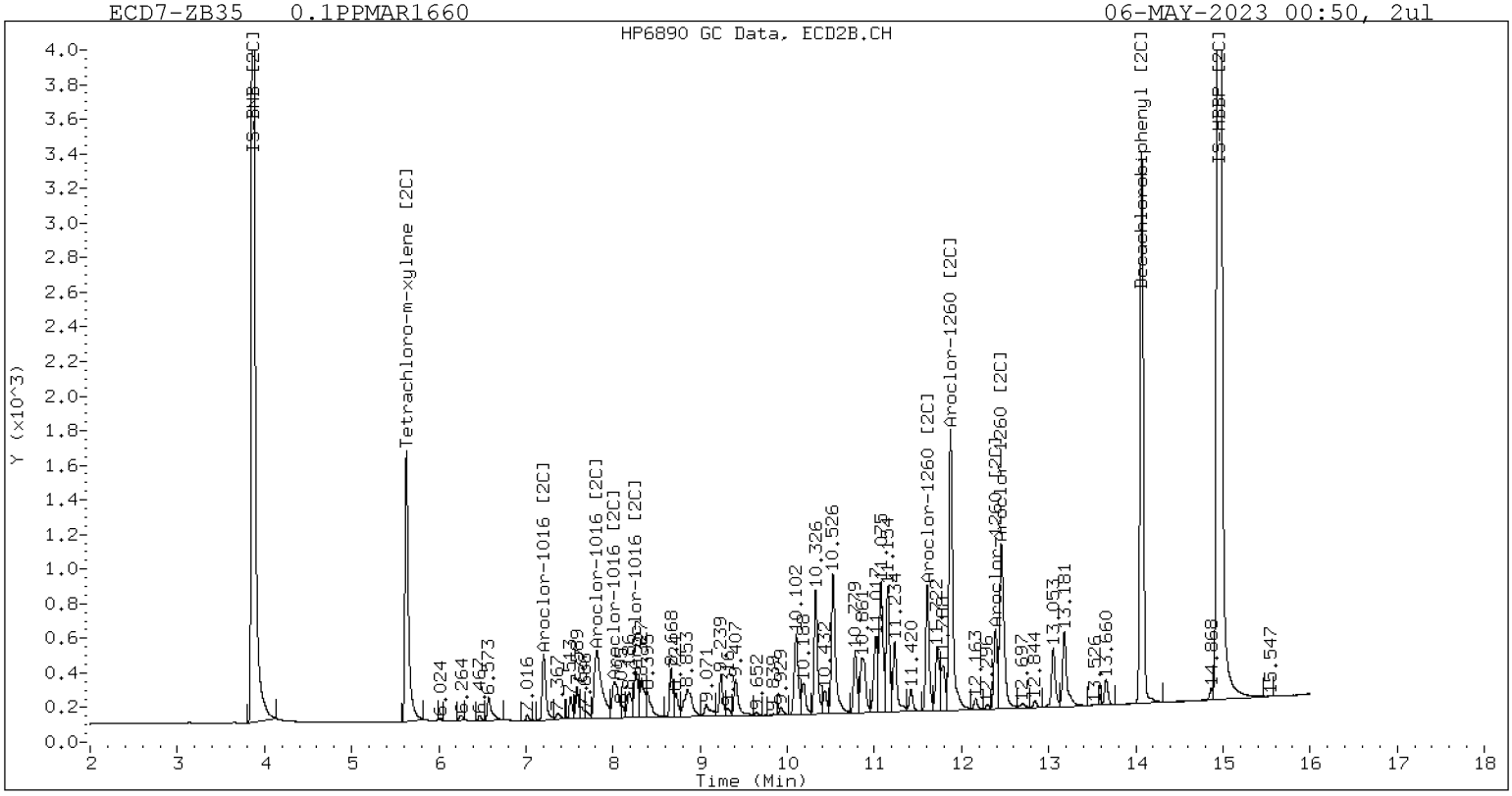
PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPMAR1660 06-MAY-2023 00:50, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPMAR1660 06-MAY-2023 00:50, 2ul

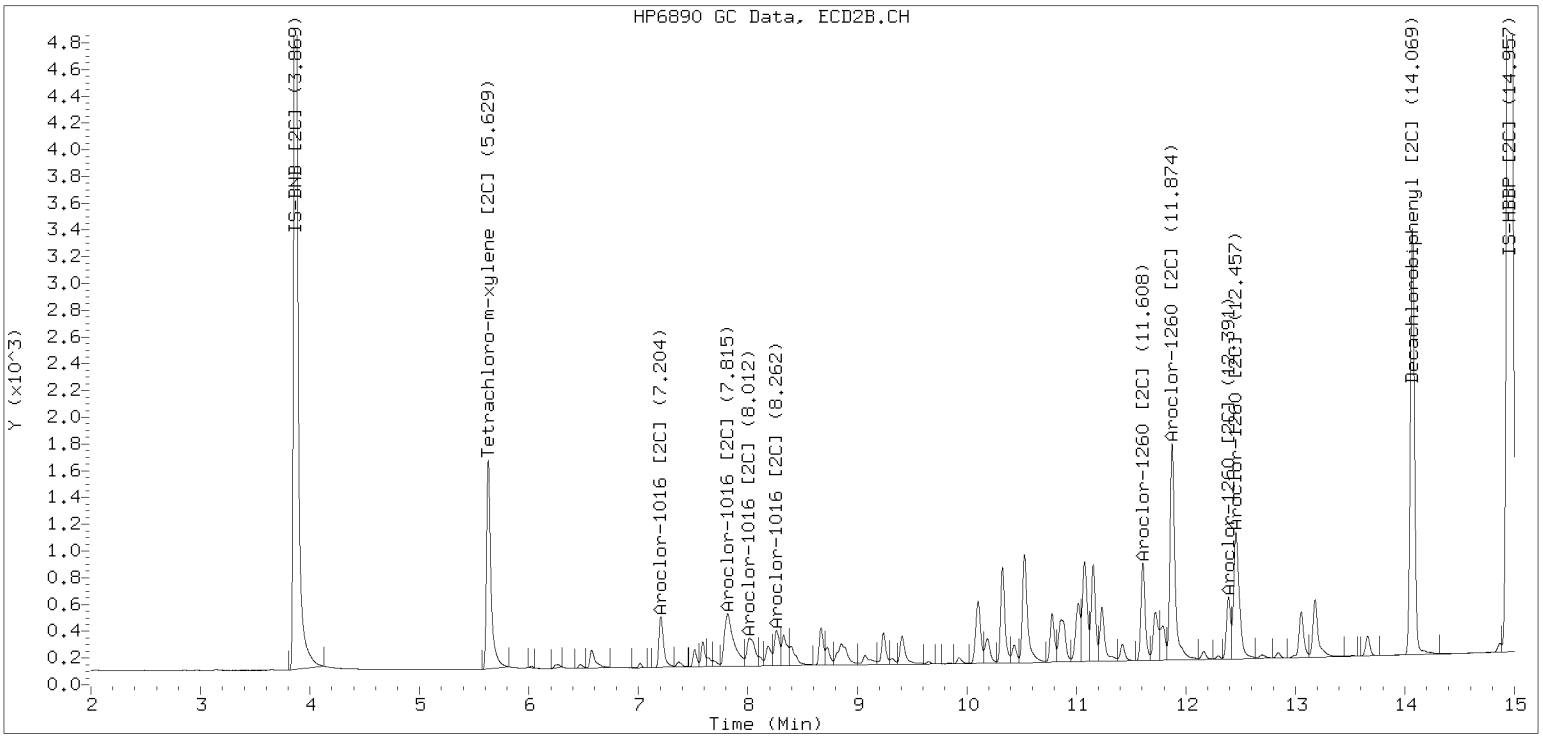


ZB-35 Manual Integration: YES

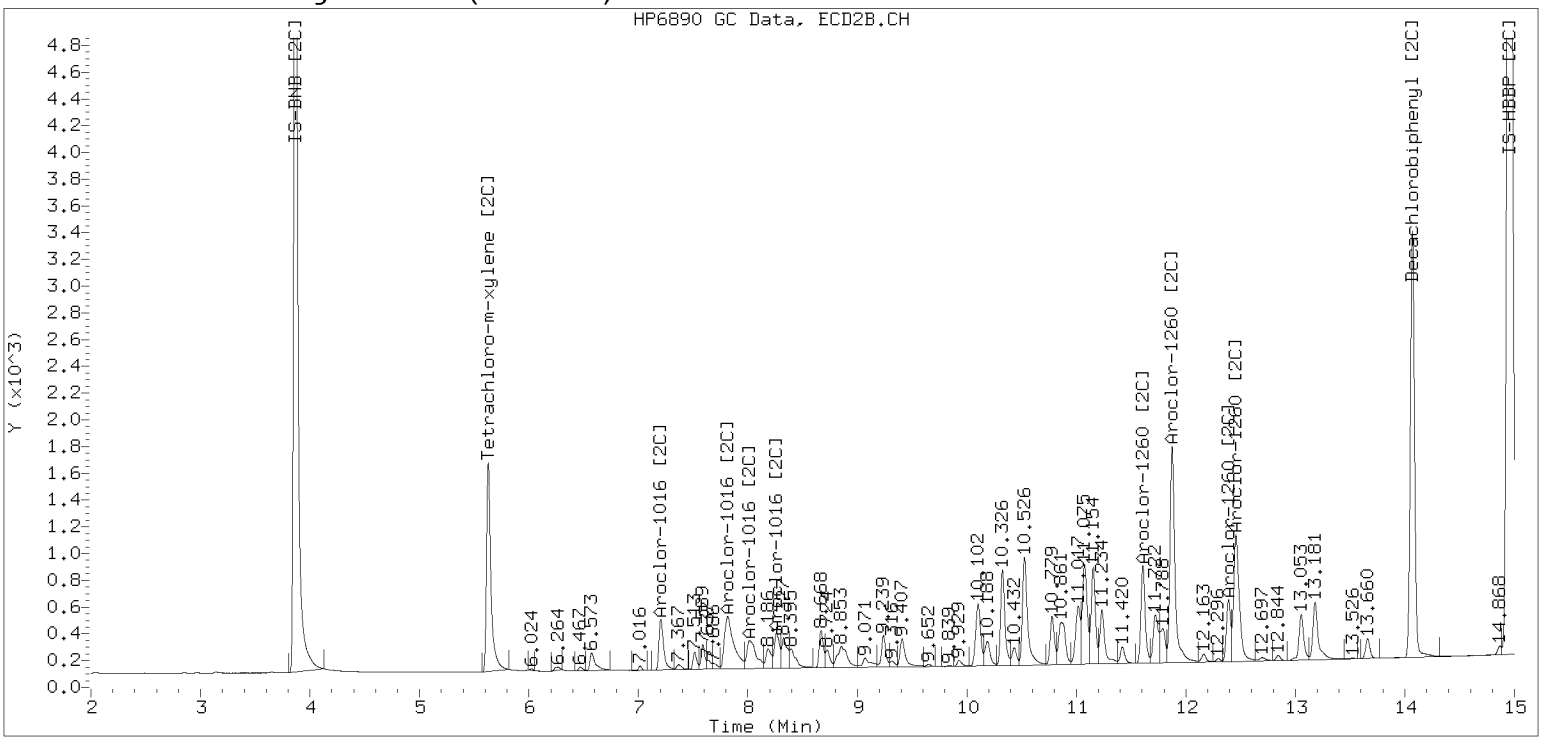
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052325ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052326ECD7.D
Data file 2: /230505.b/230505.b/05052326ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPMAR1660
Client ID:
Injection Date: 06-MAY-2023 01:11
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	726106	5.629	0.000	386361	77.6	78.4	1.0	Tetrachloro-m-xylene
13.842	0.002	662159	14.070	0.002	782852	72.8	82.0	11.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	621250	3.3
Hexabromobiphenyl	876625	910647	3.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	358174	2.5
Hexabromobiphenyl	652984	672444	3.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	0.000	112948	469.5	1	7.204	0.000	93114	459.2
Aroclor-1016	2	7.594	0.000	385708	512.8	2	7.808	0.000	213293	493.6
Aroclor-1016	3	7.733	0.000	163263	469.5	3	8.006	0.000	90569	475.2
Aroclor-1016	4	8.398	0.000	69235	482.6	4	8.259	0.000	69045	456.1
Total Col1Ave (4 peaks):					483.6	Total Col2Ave (4 peaks):				471.0 RPD = 3
Corrected Ave (3 peaks):					473.9	Corrected Ave (3 peaks):				463.5 RPD = 2
CalAmt %D:					-3.3	CalAmt %D:				-5.8
Aroclor-1260	1	10.993	0.000	231157	480.0	1	11.606	0.000	171304	479.7
Aroclor-1260	2	11.310	0.000	230103	484.2	2	11.872	0.000	454515	486.6
Aroclor-1260	3	11.686	0.000	571583	480.2	3	12.388	0.000	116621	503.8
Aroclor-1260	4	12.090	0.000	284345	487.8	4	12.455	0.000	305334	489.3
Aroclor-1260	5	12.193	0.000	119534	470.3	NS	---			----
Total Col1Ave (5 peaks):					480.5	Total Col2Ave (4 peaks):				489.8 RPD = 2
Corrected Ave (4 peaks):					478.7	Corrected Ave (3 peaks):				485.2 RPD = 1
CalAmt %D:					-3.9	CalAmt %D:				-2.0

Total PCB Area Col1 (5.842 - 13.740) = 6615607 Col1 Total PCB = 1.0 ppm*

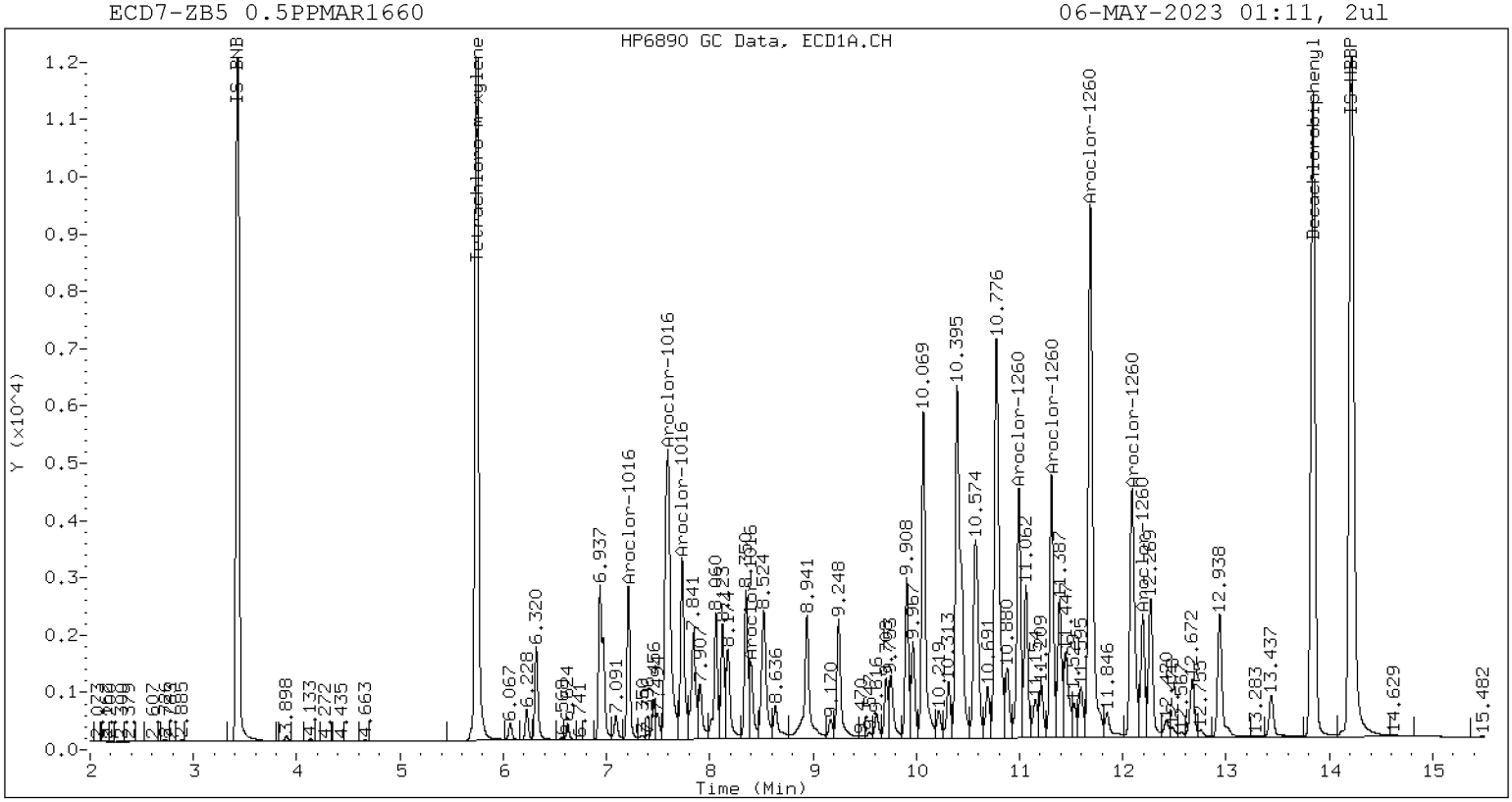
Total PCB Area Col2 (5.728 - 13.968) = 4121423 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

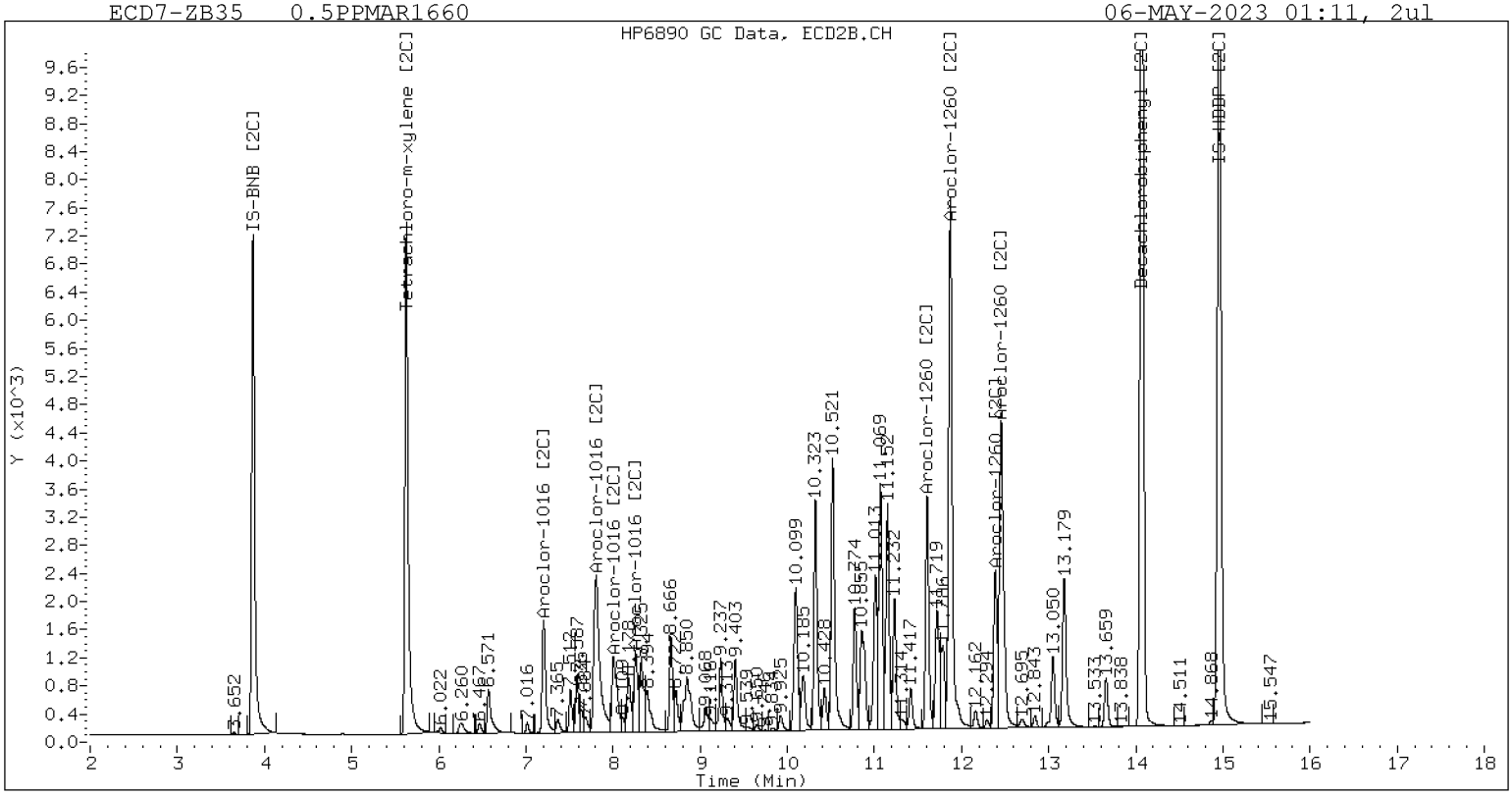
PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPMAR1660 06-MAY-2023 01:11, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPMAR1660 06-MAY-2023 01:11, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052327ECD7.D
Data file 2: /230505.b/230505.b/05052327ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1242
Client ID:
Injection Date: 06-MAY-2023 01:31
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	447397	5.627	-0.001	235808	47.5	47.6	0.3	Tetrachloro-m-xylene
13.842	0.001	336070	14.068	0.000	375985	36.4	38.8	6.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	625349	4.0
Hexabromobiphenyl	876625	923197	5.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	359808	3.0
Hexabromobiphenyl	652984	683116	4.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.212	0.000	49262	250.0	1	7.203	0.000	40200	250.0
Aroclor-1242	2	7.595	0.000	156103	250.0	2	7.812	0.000	85524	250.0
Aroclor-1242	3	8.398	0.000	30193	250.0	3	9.123	0.000	27418	250.0
Aroclor-1242	4	8.525	0.000	69876	250.0	4	9.550	0.000	33043	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 1203666 Col1 Total PCB = 0.2 ppm*

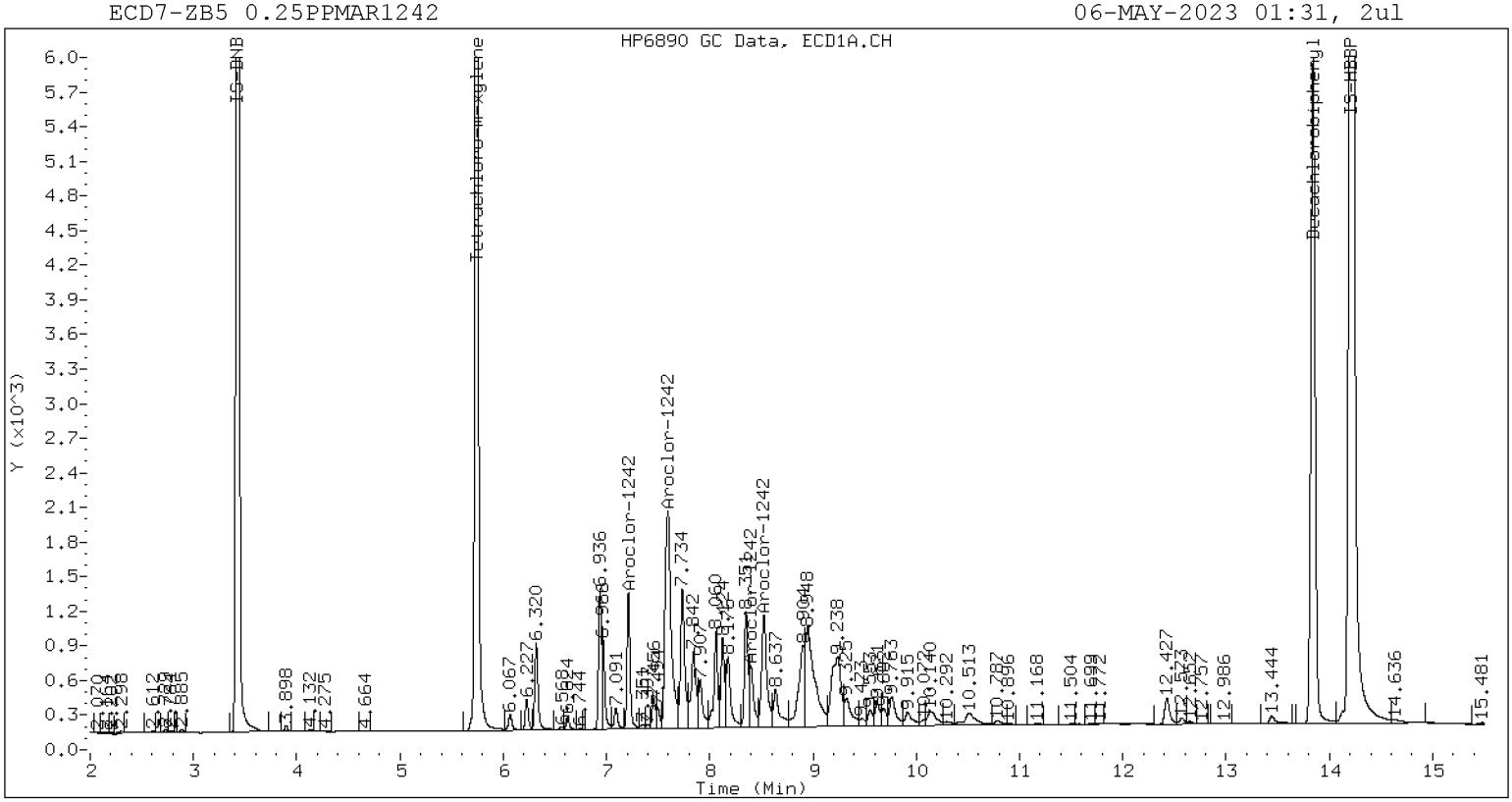
Total PCB Area Col2 (5.728 - 13.968) = 643088 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

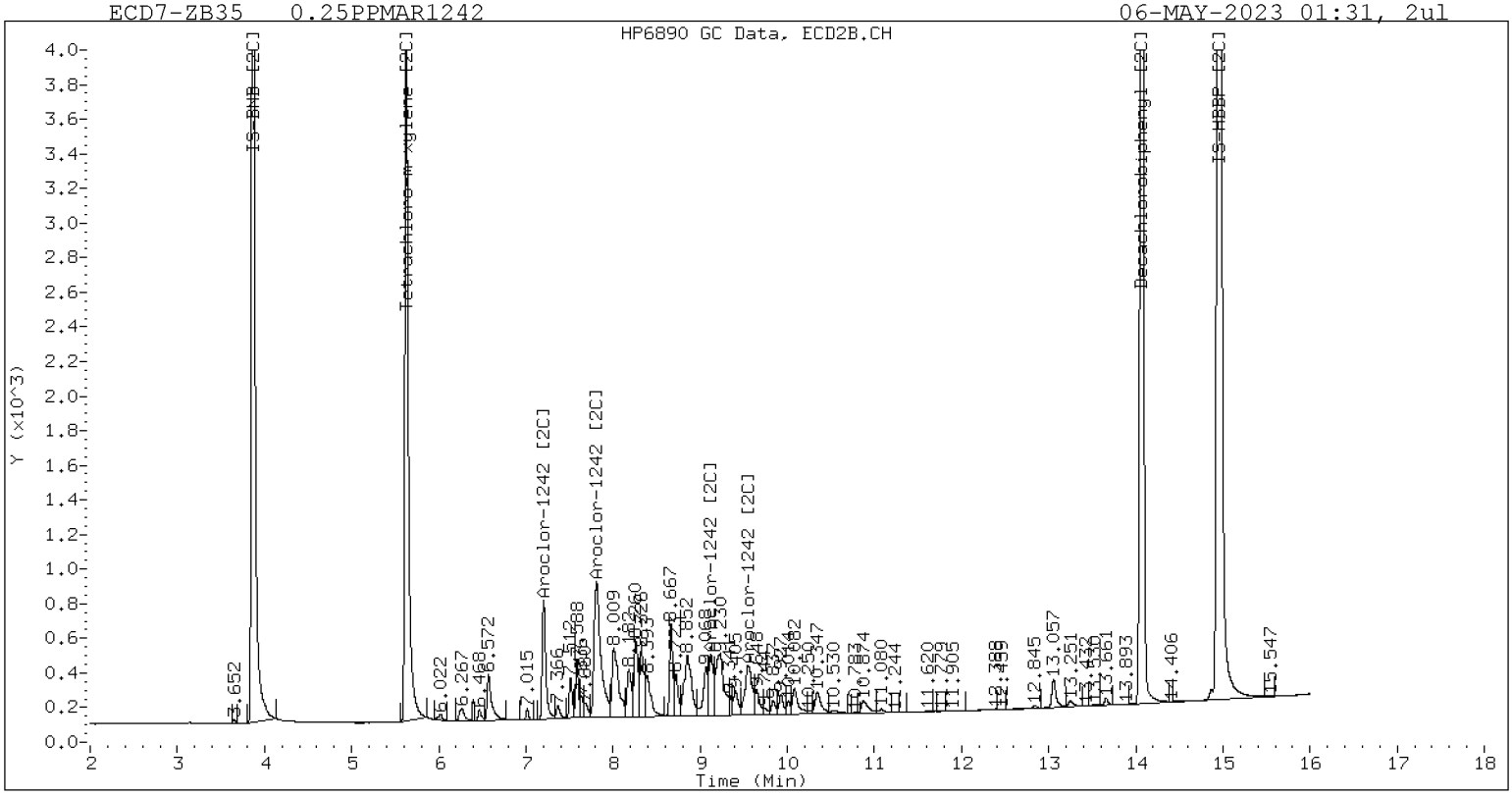
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1242 06-MAY-2023 01:31, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1242 06-MAY-2023 01:31, 2ul

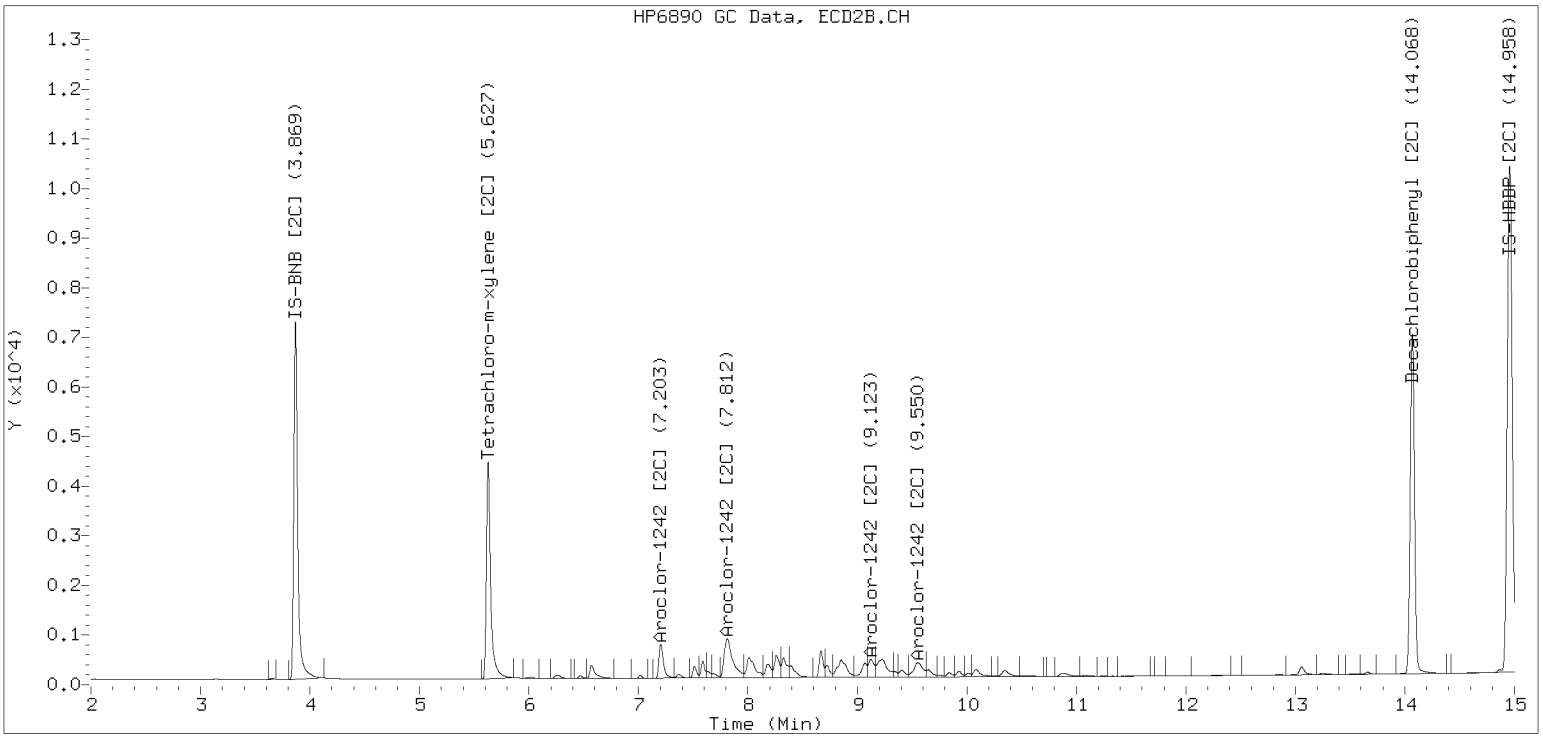


ZB-35 Manual Integration: YES

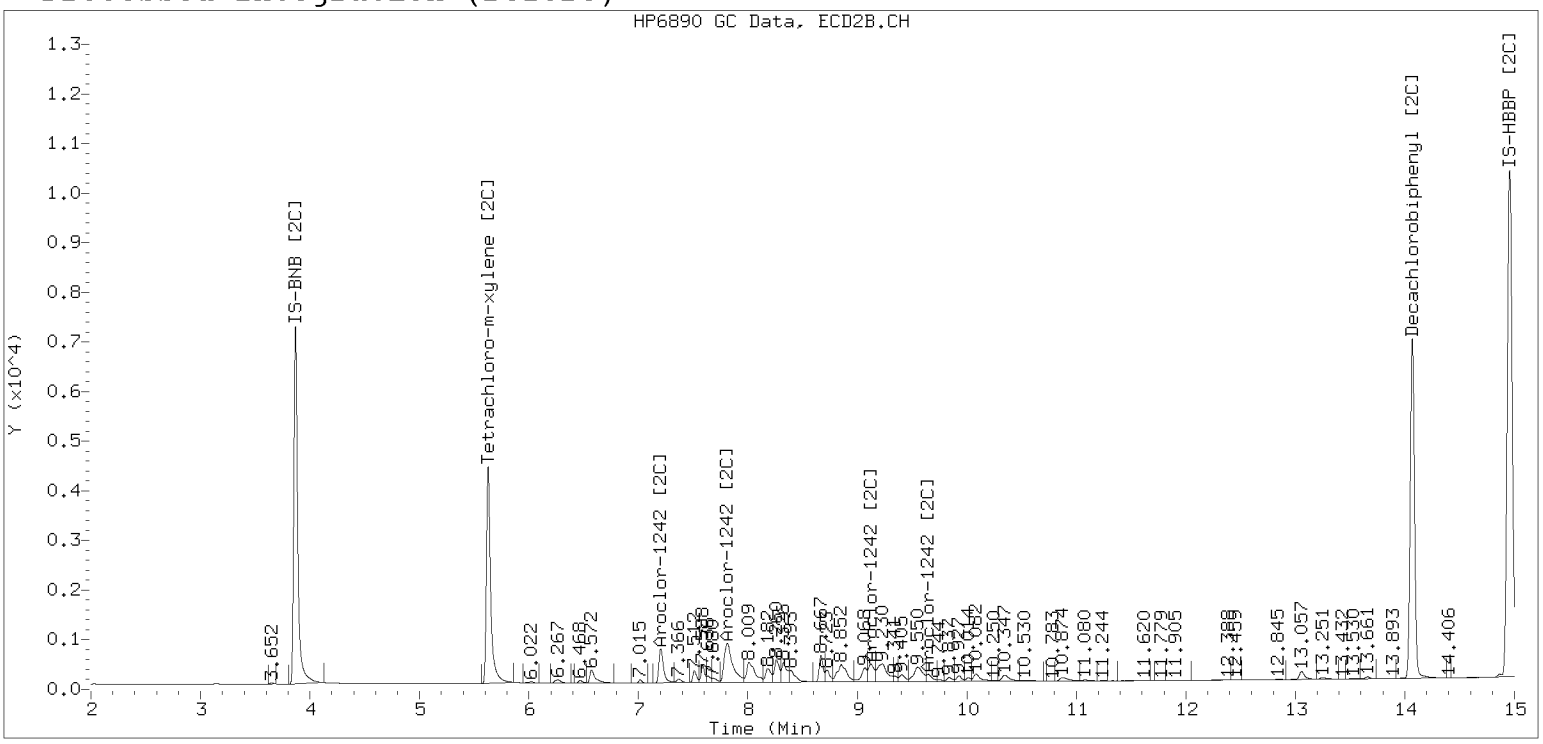
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052327ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052328ECD7.D
Data file 2: /230505.b/230505.b/05052328ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1248
Client ID:
Injection Date: 06-MAY-2023 01:52
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	363354	5.628	-0.000	193087	38.8	39.5	1.9	Tetrachloro-m-xylene
13.843	0.003	347513	14.070	0.002	386262	38.0	40.3	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	621905	3.4
Hexabromobiphenyl	876625	915805	4.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	354920	1.6
Hexabromobiphenyl	652984	674778	3.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.399	0.000	39684	250.0	1	8.260	0.000	42211	250.0
Aroclor-1248	2	8.524	0.000	103126	250.0	2	8.667	0.000	44588	250.0
Aroclor-1248	3	8.944	0.000	198327	250.0	3	9.120	0.000	52266	250.0
Aroclor-1248	4	9.243	0.000	101099	250.0	4	9.546	0.000	62674	250.0

Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0

Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 1607435 Col1 Total PCB = 0.2 ppm*

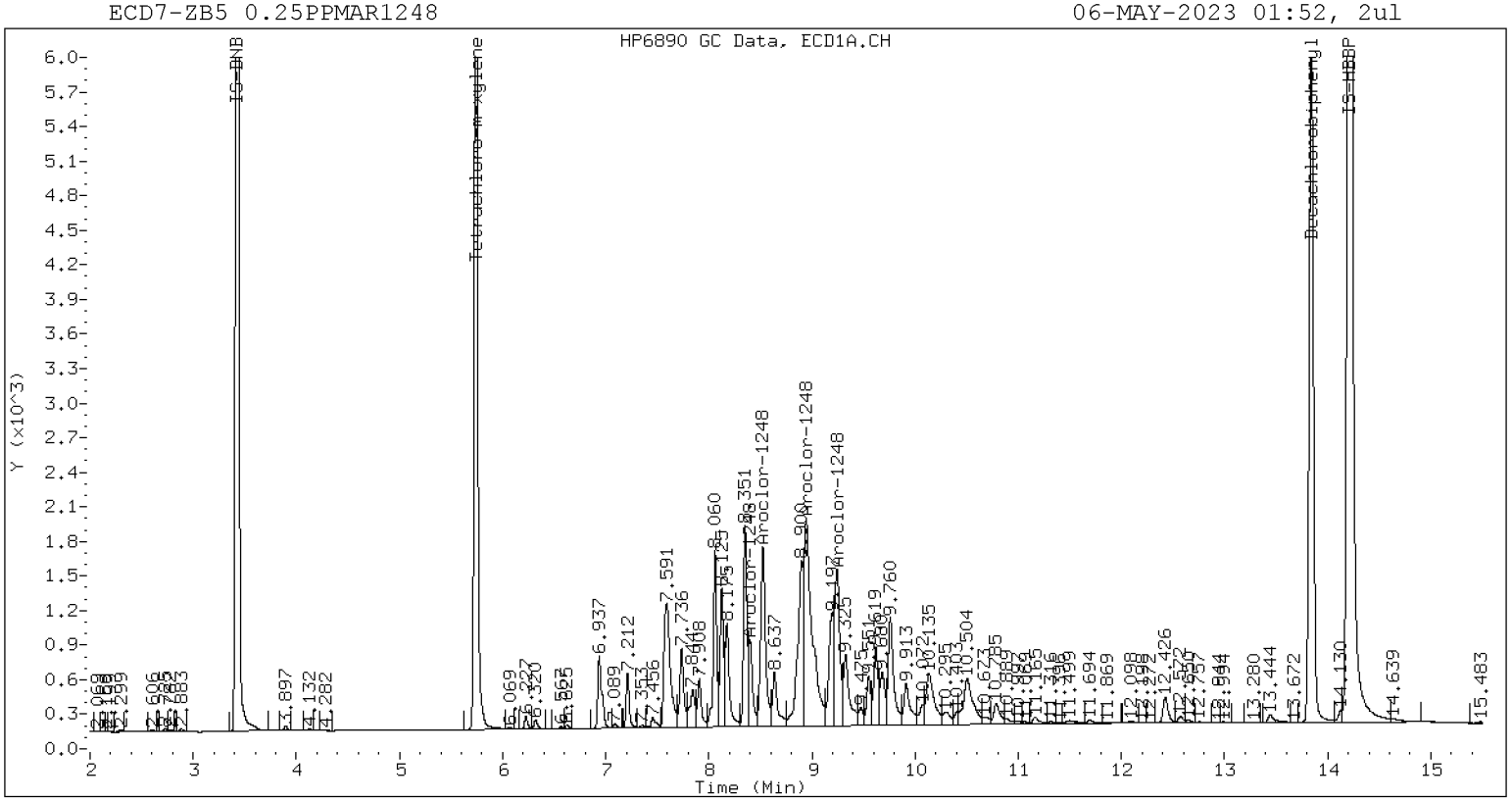
Total PCB Area Col2 (5.728 - 13.968) = 866525 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

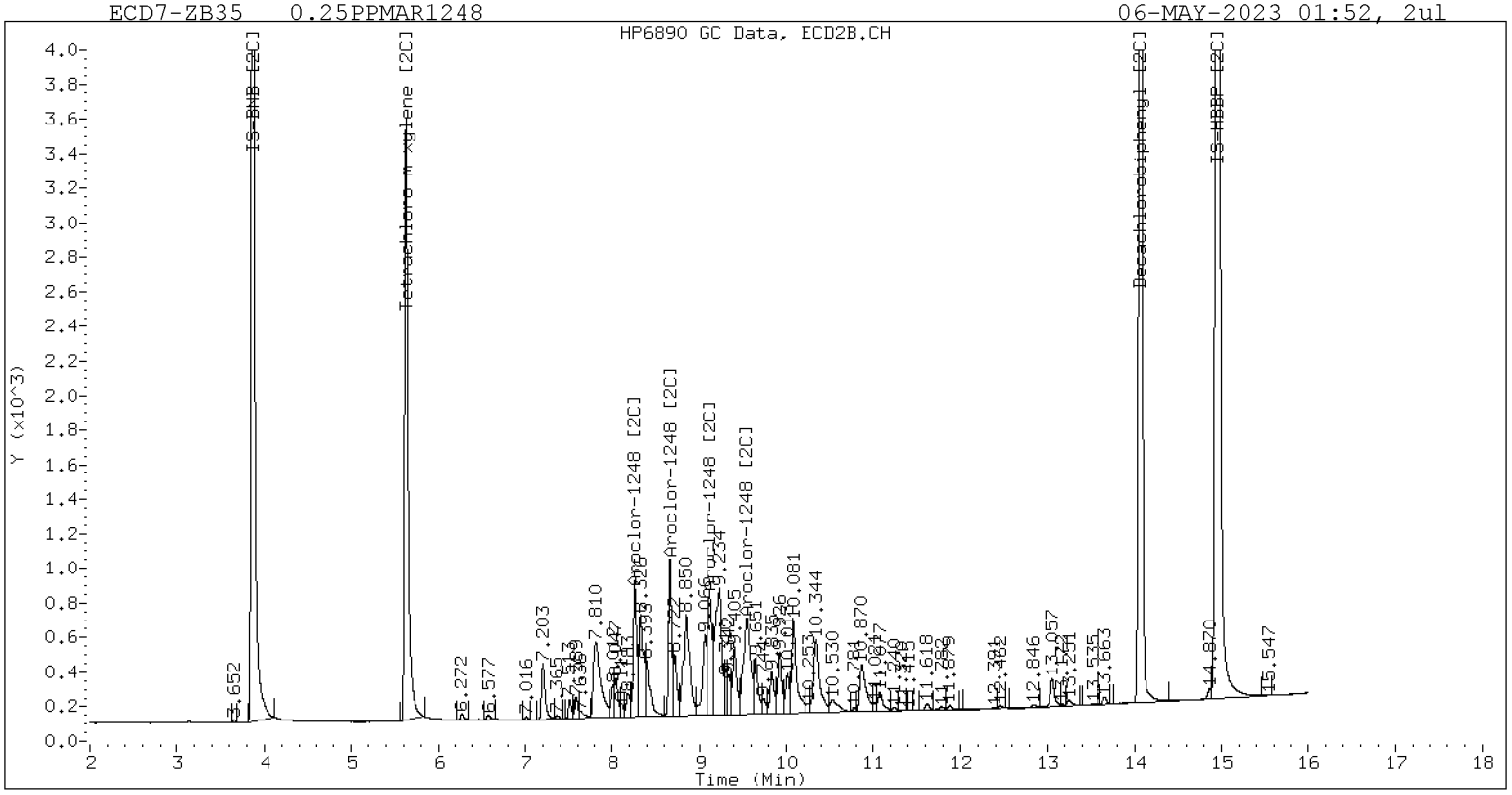
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1248 06-MAY-2023 01:52, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1248 06-MAY-2023 01:52, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052329ECD7.D
Data file 2: /230505.b/230505.b/05052329ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1254
Client ID:
Injection Date: 06-MAY-2023 02:13
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	357984	5.629	0.001	190255	37.8	38.5	1.8	Tetrachloro-m-xylene
13.842	0.002	347079	14.071	0.002	385540	37.4	39.8	6.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	628765	4.5
Hexabromobiphenyl	876625	929076	6.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	359470	2.9
Hexabromobiphenyl	652984	682882	4.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.246	0.000	161557	250.0	1	9.404	0.000	68278	250.0
Aroclor-1254	2	9.325	0.000	72588	250.0	2	9.499	0.000	40561	250.0
Aroclor-1254	3	9.618	0.000	104295	250.0	3	9.924	0.000	55343	250.0
Aroclor-1254	4	9.756	0.000	204288	250.0	4	10.078	0.000	120775	250.0
Aroclor-1254	5	10.126	0.000	123377	250.0	5	10.328	0.000	119827	250.0

Total Col1Ave (5 peaks): 250.0 Total Col2Ave (5 peaks): 250.0 RPD = 0

Corrected Ave (4 peaks): 250.0 Corrected Ave (4 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 2115446 Col1 Total PCB = 0.3 ppm*

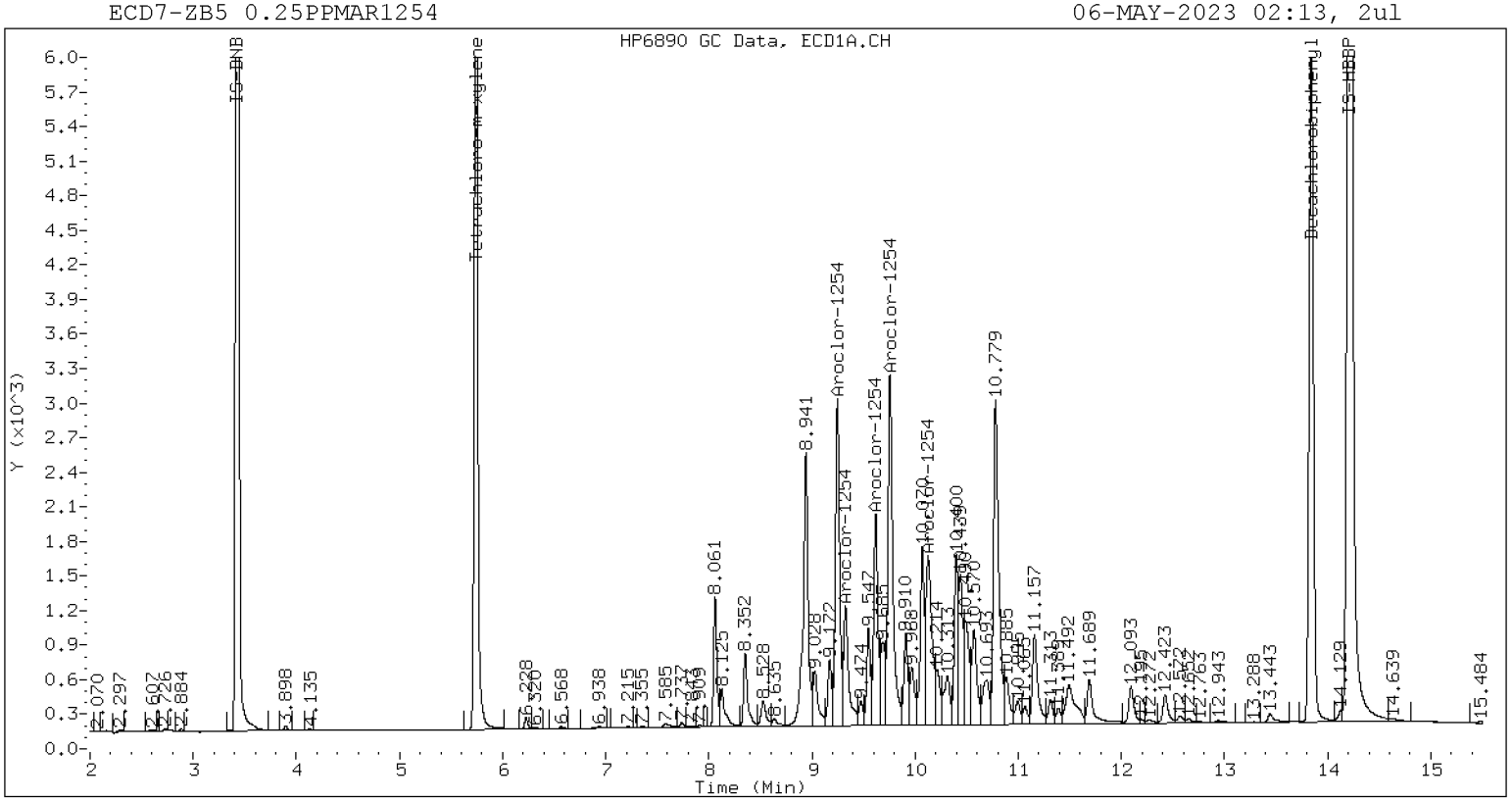
Total PCB Area Col2 (5.728 - 13.968) = 1173654 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

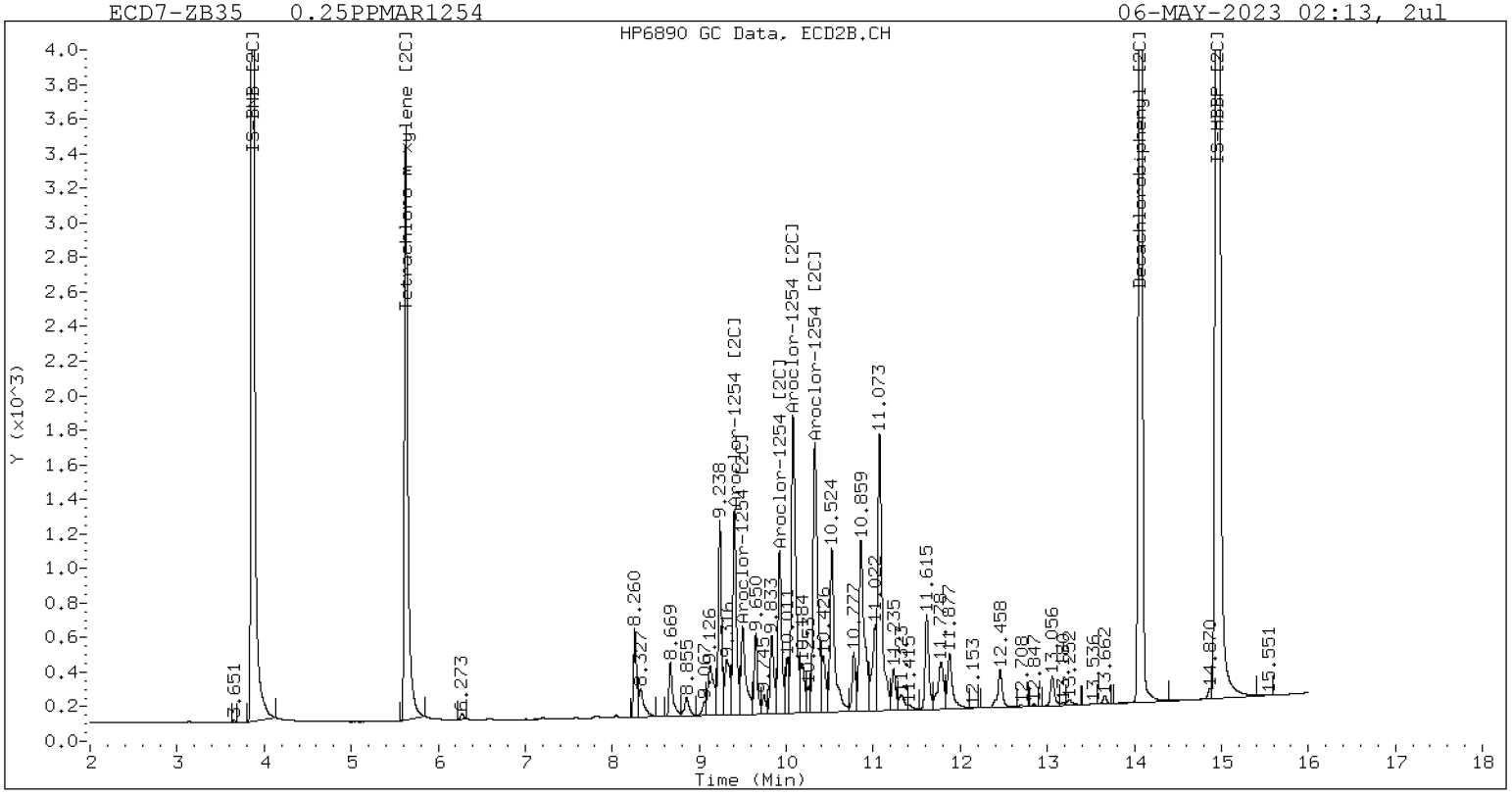
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1254 06-MAY-2023 02:13, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1254 06-MAY-2023 02:13, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052330ECD7.D
Data file 2: /230505.b/230505.b/05052330ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR2162
Client ID:
Injection Date: 06-MAY-2023 02:34
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	379099	5.628	0.000	200082	39.7	40.8	2.7	Tetrachloro-m-xylene
13.842	0.001	358012	14.071	0.003	396142	38.1	40.5	6.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	634497	5.5
Hexabromobiphenyl	876625	940541	7.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	356713	2.1
Hexabromobiphenyl	652984	688599	5.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1221	1	4.663	0.000	11156	250.0	1	4.894	0.000	6578	250.0
Aroclor-1221	2	6.069	0.000	22382	250.0	2	6.245	0.000	13633	250.0
Aroclor-1221	3	6.321	0.000	53161	250.0	3	6.572	0.000	21443	250.0
Total Col1Ave (3 peaks):					250.0	Total Col2Ave (3 peaks):				250.0 RPD = 0
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.779	0.000	106373	250.0	1	11.153	0.000	139491	250.0
Aroclor-1262	2	12.195	0.000	149596	250.0	2	11.605	0.000	117643	250.0
Aroclor-1262	3	12.269	0.000	160810	250.0	3	12.386	0.000	128556	250.0
Aroclor-1262	4	12.939	0.000	131044	250.0	4	12.456	0.000	209520	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 2742242 Col1 Total PCB = 0.4 ppm*

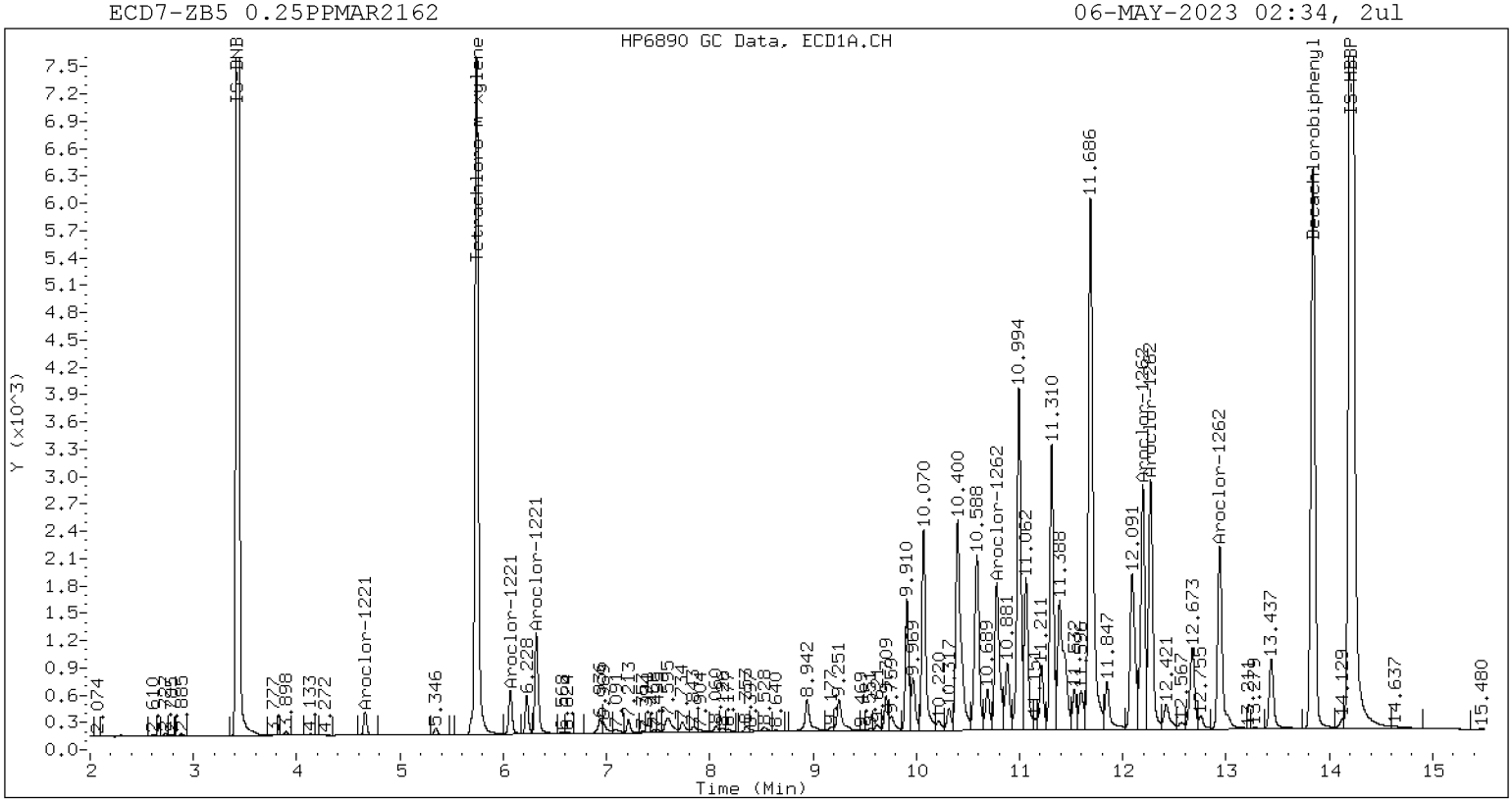
Total PCB Area Col2 (5.728 - 13.968) = 1852573 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

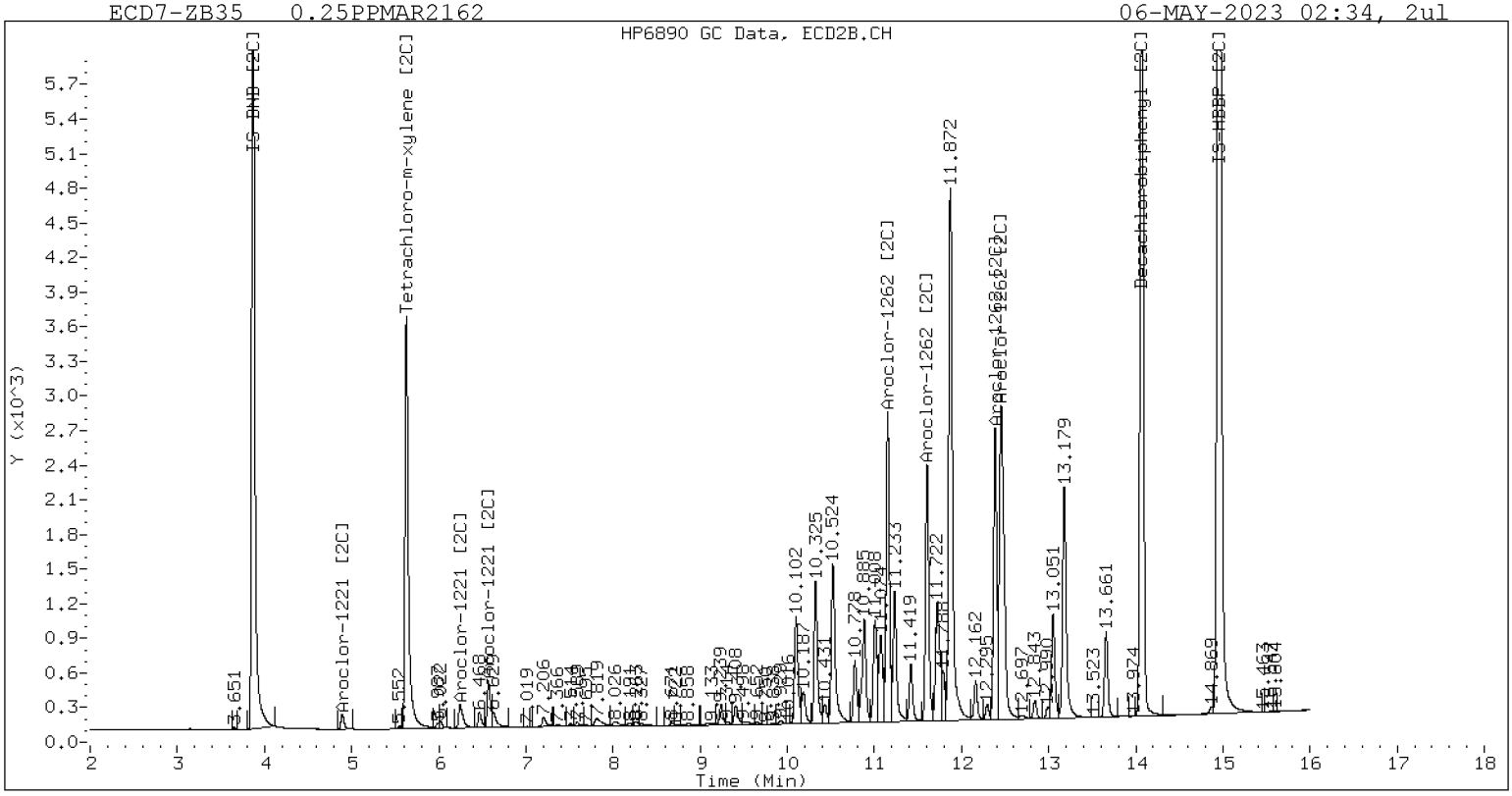
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR2162 06-MAY-2023 02:34, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR2162 06-MAY-2023 02:34, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052331ECD7.D
Data file 2: /230505.b/230505.b/05052331ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR3268
Client ID:
Injection Date: 06-MAY-2023 02:55
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	378314	5.628	0.000	200538	38.9	40.3	3.4	Tetrachloro-m-xylene
13.840	0.000	502472	14.068	0.000	573501	52.2	57.3	9.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	644974	7.2
Hexabromobiphenyl	876625	963091	9.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	361821	3.6
Hexabromobiphenyl	652984	704753	7.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.664	0.000	7554	250.0	1	4.894	0.000	3508	250.0
Aroclor-1232	2	6.069	0.000	15718	250.0	2	7.205	0.000	20084	250.0
Aroclor-1232	3	7.595	0.000	74881	250.0	3	7.815	0.000	40344	250.0
Aroclor-1232	4	8.527	0.000	32051	250.0	4	8.669	0.000	11684	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.196	0.000	384005	250.0	1	12.385	0.000	333421	250.0
Aroclor-1268	2	12.268	0.000	381367	250.0	2	12.452	0.000	358458	250.0
Aroclor-1268	3	12.648	0.000	306717	250.0	3	12.843	0.000	306959	250.0
Aroclor-1268	4	13.437	0.000	875751	250.0	4	13.663	0.000	983908	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 3124318 Col1 Total PCB = 0.4 ppm*

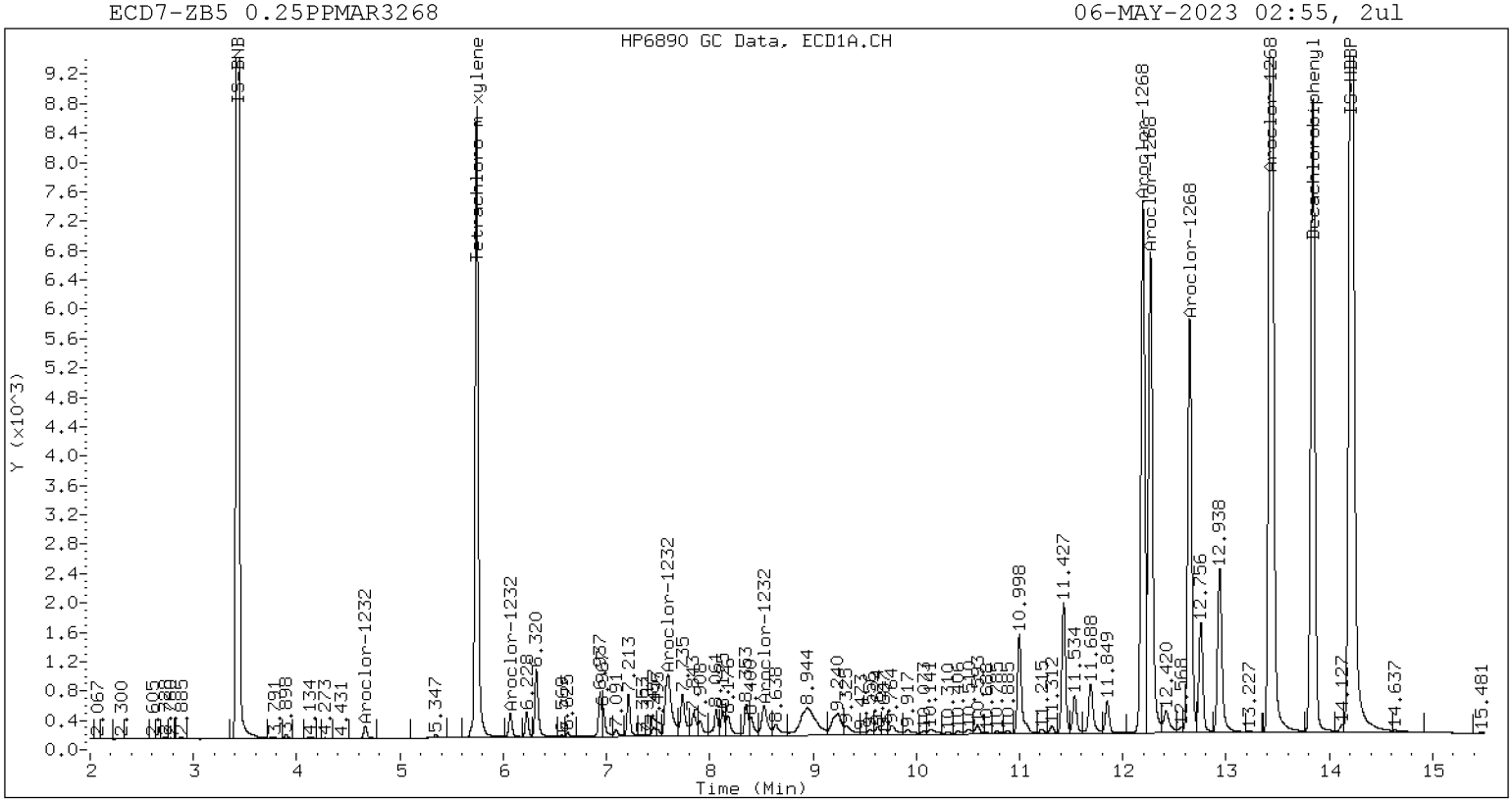
Total PCB Area Col2 (5.728 - 13.968) = 2731202 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

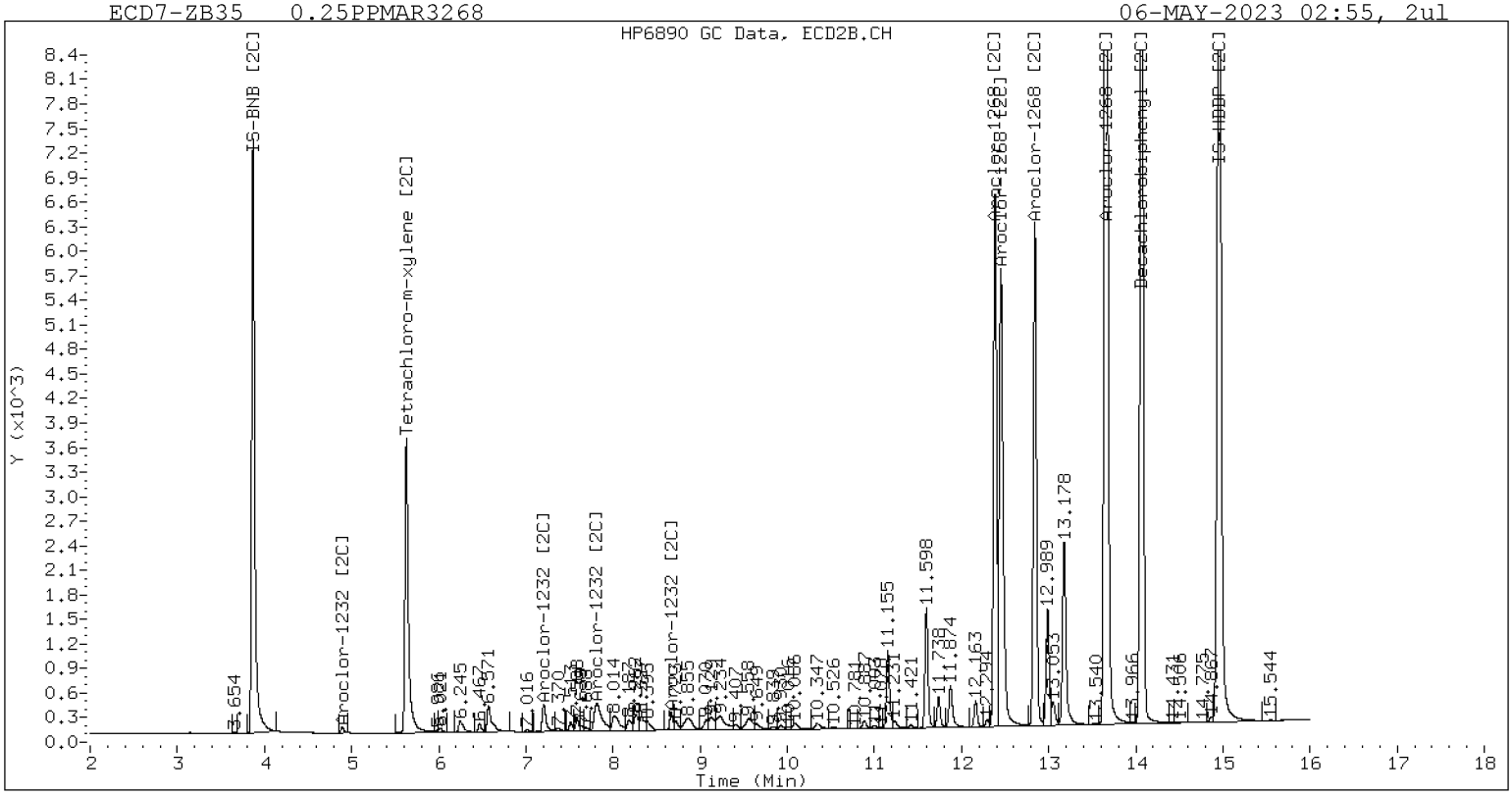
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR3268 06-MAY-2023 02:55, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR3268 06-MAY-2023 02:55, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052332ECD7.D
Data file 2: /230505.b/230505.b/05052332ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660SCV
Client ID:
Injection Date: 06-MAY-2023 03:16
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	356595	9.840	-0.028	300	36.9	0.0	----	Tetrachloro-m-xylene
13.842	0.002	347188	9.537	0.045	1824	36.9	0.0	----	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	642284	6.8
Hexabromobiphenyl	876625	941356	7.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	361711	3.6
Hexabromobiphenyl	652984	690563	5.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	61654	247.9	1	7.205	0.001	50106	244.7
Aroclor-1016	2	7.594	-0.001	199228	256.2	2	7.811	0.003	109839	251.7
Aroclor-1016	3	7.734	0.001	89643	249.3	3	8.009	0.004	48594	252.5
Aroclor-1016	4	8.399	0.001	38714	261.0	4	8.260	0.001	36878	241.2
Total Col1Ave (4 peaks):					253.6	Total Col2Ave (4 peaks):				247.5 RPD = 2
Corrected Ave (3 peaks):					251.1	Corrected Ave (3 peaks):				245.9 RPD = 2
Aroclor-1221	1	4.663	-0.000	436	9.7	1	---			0.0
Aroclor-1221	2	6.068	-0.001	8521	94.0	2	6.251	0.005	5766	104.3
Aroclor-1221	3	6.320	-0.001	41973	195.0	3	6.572	0.000	23212	266.9
Total Col1Ave (3 peaks):					99.6	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.663	-0.000	436	14.5	1	---			0.0
Aroclor-1232	2	6.068	-0.002	8521	136.1	2	7.205	0.000	50106	623.9
Aroclor-1232	3	7.594	-0.001	199228	667.9	3	7.811	-0.004	109839	680.8
Aroclor-1232	4	8.526	-0.001	85985	673.5	4	8.667	-0.003	34670	742.1
Total Col1Ave (4 peaks):					373.0	Total Col2Ave (3 peaks):				682.3 RPD = 59*
Corrected Ave (3 peaks):					272.8	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.213	0.001	61654	304.6	1	7.205	0.001	50106	310.0
Aroclor-1242	2	7.594	-0.001	199228	310.7	2	7.811	-0.002	109839	319.4
Aroclor-1242	3	8.399	0.000	38714	312.1	3	9.069	-0.054	21513	195.1
Aroclor-1242	4	8.526	0.001	85985	299.5	4	9.650	0.100	1501	11.3
Total Col1Ave (4 peaks):					306.7	Total Col2Ave (4 peaks):				208.9 RPD = 38
Corrected Ave (3 peaks):					304.9	Corrected Ave (3 peaks):				172.1 RPD = 56*
Aroclor-1248	1	8.399	-0.000	38714	236.2	1	8.260	0.000	36878	214.3
Aroclor-1248	2	8.526	0.001	85985	201.8	2	8.667	-0.001	34670	190.7
Aroclor-1248	3	8.941	-0.003	81615	99.6	3	9.069	-0.051	21513	101.0
Aroclor-1248	4	9.249	0.006	52526	125.8	4	9.537	-0.008	1824	7.1
Total Col1Ave (4 peaks):					165.8	Total Col2Ave (4 peaks):				128.3 RPD = 26
Corrected Ave (3 peaks):					142.4	Corrected Ave (3 peaks):				99.6 RPD = 35
Aroclor-1254	1	9.249	0.003	52526	79.6	1	9.405	0.001	24726	90.0
Aroclor-1254	2	---			0.0	2	9.537	0.038	1824	11.2
Aroclor-1254	3	9.619	0.001	7081	16.6	3	9.926	0.002	3128	14.0
Aroclor-1254	4	9.756	0.001	21856	26.2	4	10.101	0.023	62581	128.7
Aroclor-1254	5	10.069	-0.057	159796	317.0	5	10.324	-0.004	85433	177.1
Total Col1Ave (4 peaks):					109.8	Total Col2Ave (5 peaks):				84.2 RPD = 26
Corrected Ave (3 peaks):					40.8	Corrected Ave (4 peaks):				61.0 RPD = 40
Aroclor-1260	1	10.995	0.001	145767	292.8	1	11.605	-0.000	99761	272.0
Aroclor-1260	2	11.311	0.001	142028	289.1	2	11.872	0.000	273505	285.1
Aroclor-1260	3	11.686	0.000	354468	288.1	3	12.389	0.001	70545	296.8
Aroclor-1260	4	12.092	0.002	161281	267.6	4	12.455	-0.000	180783	282.1
Aroclor-1260	5	12.194	0.001	76105	289.6	NS	---			----
Total Col1Ave (5 peaks):					285.5	Total Col2Ave (4 peaks):				284.0 RPD = 1
Corrected Ave (4 peaks):					283.6	Corrected Ave (3 peaks):				279.8 RPD = 1
Aroclor-1262	1	10.777	-0.001	215850	506.9	1	11.153	-0.001	104059	186.0
Aroclor-1262	2	12.194	-0.000	76105	127.1	2	11.605	0.001	99761	211.4
Aroclor-1262	3	12.271	0.001	94628	147.0	3	12.389	0.003	70545	136.8
Aroclor-1262	4	12.939	-0.000	78852	150.3	4	12.455	-0.001	180783	215.1
Total Col1Ave (4 peaks):					232.8	Total Col2Ave (4 peaks):				187.3 RPD = 22
Corrected Ave (3 peaks):					141.5	Corrected Ave (3 peaks):				178.1 RPD = 23
Aroclor-1268	1	12.194	-0.001	76105	50.7	1	12.389	0.004	70545	54.0
Aroclor-1268	2	12.271	0.003	94628	63.5	2	12.455	0.003	180783	128.7
Aroclor-1268	3	12.675	0.026	38830	32.4	3	12.844	0.001	3082	2.6
Aroclor-1268	4	13.440	0.003	19986	5.8	4	13.661	-0.002	14882	3.9
Total Col1Ave (4 peaks):					38.1	Total Col2Ave (4 peaks):				47.3 RPD = 21
Corrected Ave (3 peaks):					29.6	Corrected Ave (3 peaks):				20.1 RPD = 38

Total PCB Area Col1 (5.842 - 13.740) = 3657118 Col1 Total PCB = 0.5 ppm*

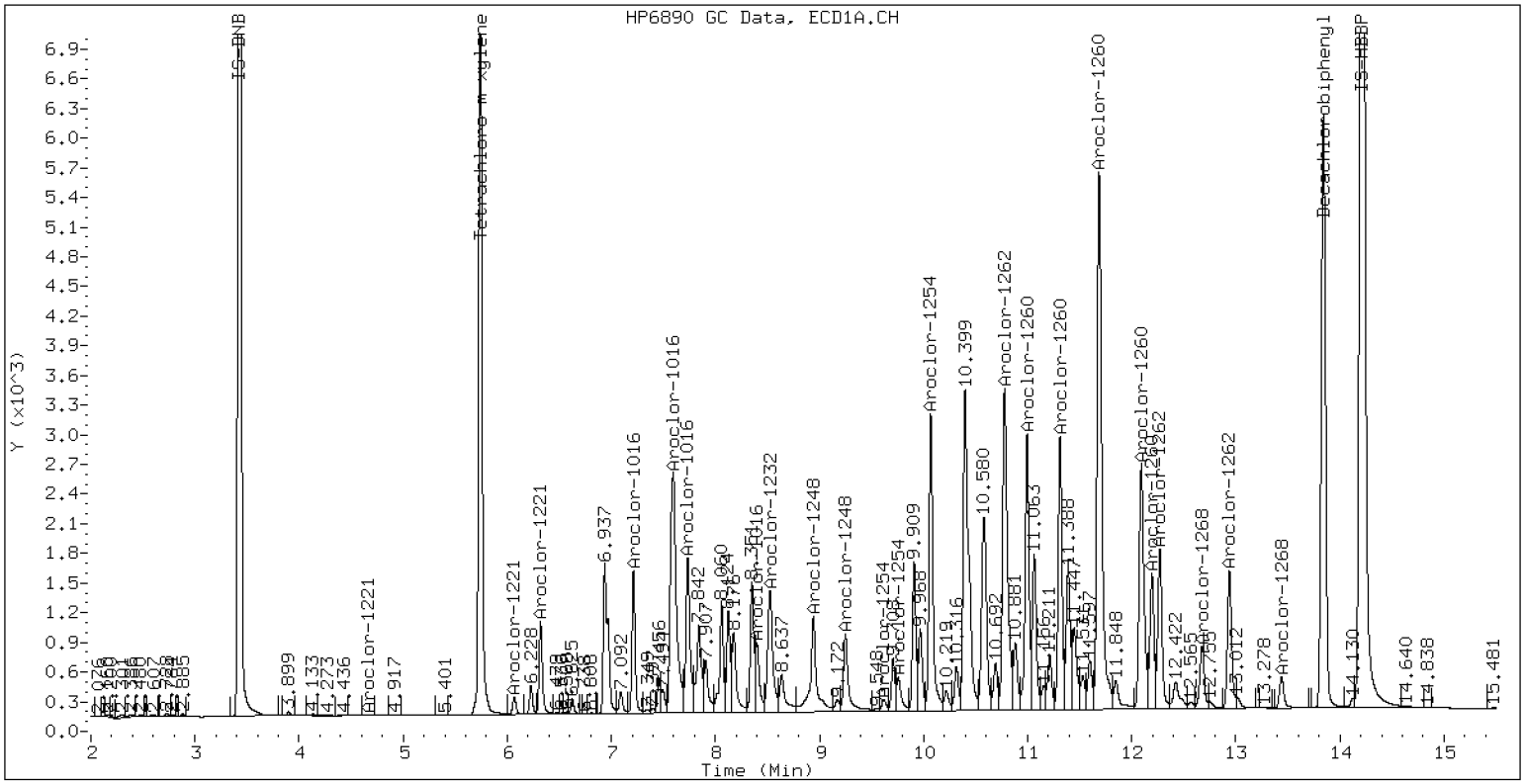
Total PCB Area Col2 (5.842 - 13.740) = 2240312 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

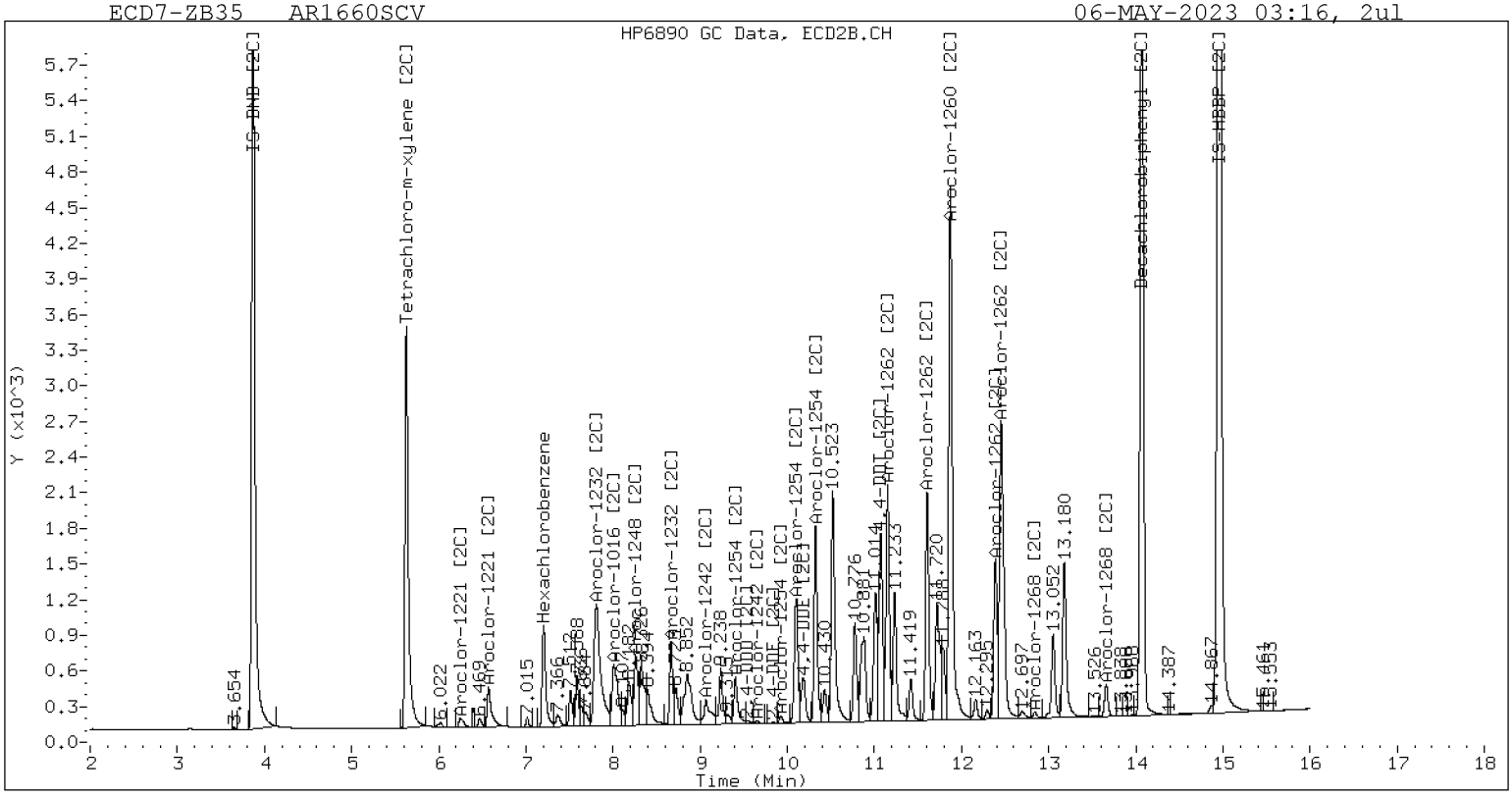
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660SCV 06-MAY-2023 03:16, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660SCV 06-MAY-2023 03:16, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052333ECD7.D
Data file 2: /230505.b/230505.b/05052333ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242SCV
Client ID:
Injection Date: 06-MAY-2023 03:36
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.744	0.002	319899	9.837	-0.030	6399	32.8	0.0	----	Tetrachloro-m-xylene
13.842	0.002	398699	----			40.9	0.0	----	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	648004	7.7
Hexabromobiphenyl	876625	976327	11.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	365379	4.6
Hexabromobiphenyl	652984	695394	6.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	47446	189.1	1	7.205	0.001	36469	176.3
Aroclor-1016	2	7.594	-0.000	147684	188.2	2	7.814	0.007	77885	176.7
Aroclor-1016	3	7.735	0.002	67175	185.2	3	8.012	0.006	38400	197.5
Aroclor-1016	4	8.398	0.000	30565	204.3	4	8.261	0.002	27551	178.4
Total Col1Ave (4 peaks): 191.7						Total Col2Ave (4 peaks): 182.2			RPD = 5	
Corrected Ave (3 peaks): 187.5						Corrected Ave (3 peaks): 177.1			RPD = 6	
Aroclor-1221	1	4.666	0.002	870	19.1	1	---			0.0
Aroclor-1221	2	6.069	0.000	7118	77.8	2	6.257	0.011	4359	78.0
Aroclor-1221	3	6.322	0.001	32969	151.8	3	6.573	0.001	16609	189.0
Total Col1Ave (3 peaks): 82.9						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.666	0.002	870	28.7	1	---			0.0
Aroclor-1232	2	6.069	0.000	7118	112.7	2	7.205	-0.000	36469	449.5
Aroclor-1232	3	7.594	-0.001	147684	490.8	3	7.814	-0.001	77885	477.9
Aroclor-1232	4	8.526	-0.000	70601	548.1	4	8.668	-0.001	25417	538.5
Total Col1Ave (4 peaks): 295.1						Total Col2Ave (3 peaks): 488.7			RPD = 49*	
Corrected Ave (3 peaks): 210.7						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.213	0.001	47446	232.4	1	7.205	0.001	36469	223.3
Aroclor-1242	2	7.594	-0.000	147684	228.2	2	7.814	0.002	77885	224.2
Aroclor-1242	3	8.398	0.000	30565	244.2	3	9.124	0.001	25864	232.2
Aroclor-1242	4	8.526	0.002	70601	243.8	4	9.552	0.001	32437	241.7
Total Col1Ave (4 peaks): 237.2						Total Col2Ave (4 peaks): 230.4			RPD = 3	
Corrected Ave (3 peaks): 234.8						Corrected Ave (3 peaks): 226.6			RPD = 4	
Aroclor-1248	1	8.398	-0.001	30565	184.8	1	8.261	0.001	27551	158.5
Aroclor-1248	2	8.526	0.002	70601	164.3	2	8.668	0.001	25417	138.4
Aroclor-1248	3	8.946	0.002	172847	209.1	3	9.124	0.004	25864	120.2
Aroclor-1248	4	9.243	-0.001	87363	207.3	4	9.552	0.006	32437	125.7
Total Col1Ave (4 peaks): 191.4						Total Col2Ave (4 peaks): 135.7			RPD = 34	
Corrected Ave (3 peaks): 185.5						Corrected Ave (3 peaks): 128.1			RPD = 37	
Aroclor-1254	1	9.243	-0.004	87363	131.2	1	9.406	0.002	13247	47.7
Aroclor-1254	2	9.326	0.001	28949	96.7	2	9.552	0.053	32437	196.7
Aroclor-1254	3	9.622	0.004	20780	48.3	3	9.927	0.003	10002	44.5
Aroclor-1254	4	9.762	0.006	35470	42.1	4	10.082	0.005	19933	40.6
Aroclor-1254	5	10.140	0.015	28075	55.2	5	10.341	0.013	19432	39.9
Total Col1Ave (5 peaks): 74.7						Total Col2Ave (5 peaks): 73.9			RPD = 1	
Corrected Ave (4 peaks): 60.6						Corrected Ave (4 peaks): 43.2			RPD = 34	
Aroclor-1260	1	10.998	0.005	3609	7.0	1	11.618	0.012	2137	5.8
Aroclor-1260	2	11.317	0.007	3837	7.5	2	11.879	0.007	1437	1.5
Aroclor-1260	3	11.765	0.080	33905	26.6	3	12.382	-0.006	12460	52.1
Aroclor-1260	4	12.097	0.007	9099	14.6	4	---			0.0
Aroclor-1260	5	12.272	0.079	2060	7.6	NS	---			----
Total Col1Ave (5 peaks): 12.6						Total Col2Ave (3 peaks): 19.8			RPD = 44*	
Corrected Ave (4 peaks): 9.2						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.787	0.009	24040	54.4	1	11.078	-0.075	7864	14.0
Aroclor-1262	2	12.272	0.077	2060	3.3	2	11.618	0.013	2137	4.5
Aroclor-1262	3	---			0.0	3	12.382	-0.004	12460	24.0
Aroclor-1262	4	12.937	-0.002	16041	29.5	4	---			0.0
Total Col1Ave (3 peaks): 29.1						Total Col2Ave (3 peaks): 14.1			RPD = 69*	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.272	0.076	2060	1.3	1	12.382	-0.003	12460	9.5
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.649	0.001	4324	3.5	3	12.845	0.002	951	0.8
Aroclor-1268	4	13.442	0.005	15801	4.4	4	13.628	-0.035	6512	1.7
Total Col1Ave (3 peaks): 3.1						Total Col2Ave (3 peaks): 4.0			RPD = 25	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.842 - 13.740) = 1489022 Col1 Total PCB = 0.2 ppm*

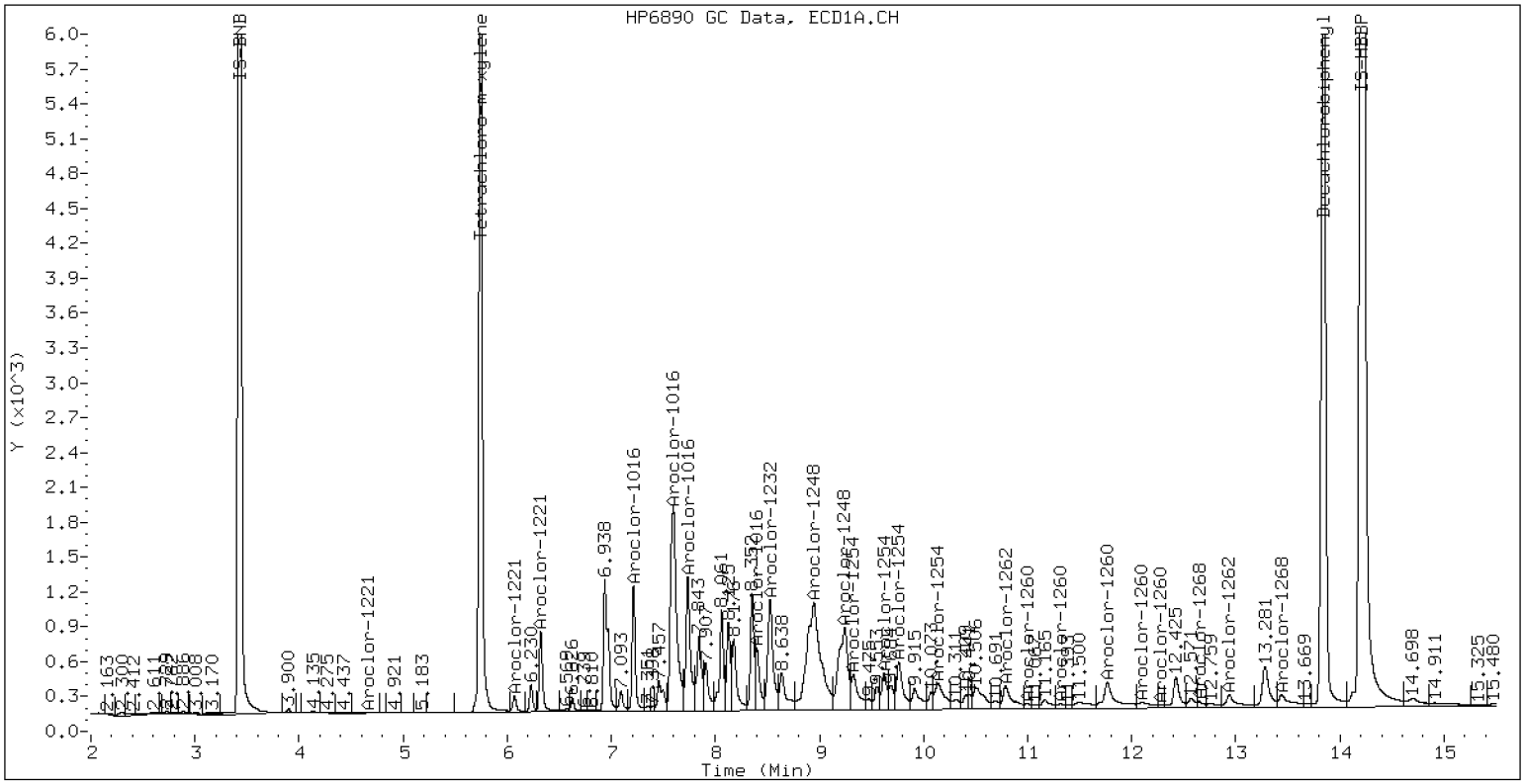
Total PCB Area Col2 (5.842 - 13.740) = 667658 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

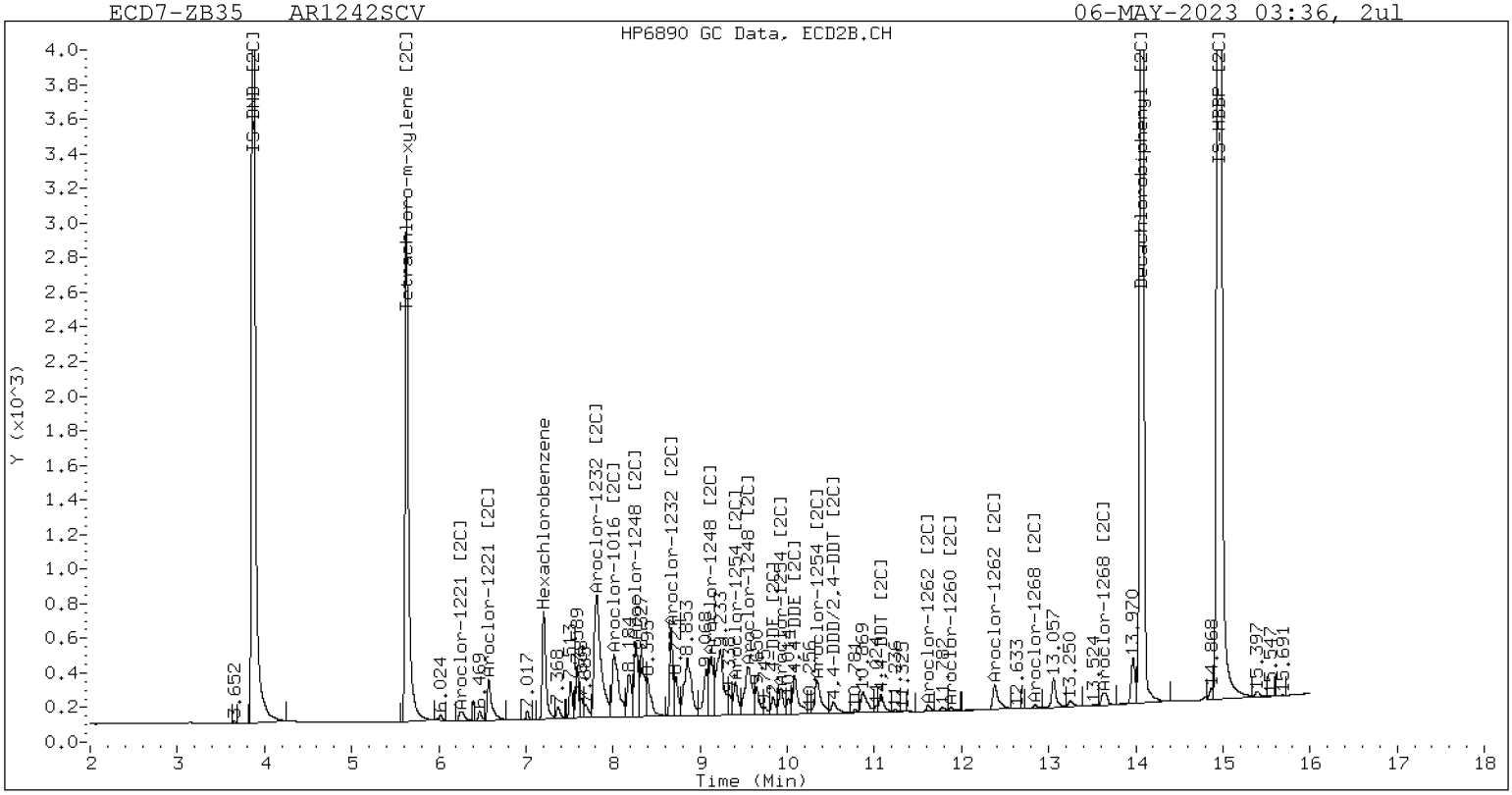
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242SCV 06-MAY-2023 03:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242SCV 06-MAY-2023 03:36, 2ul

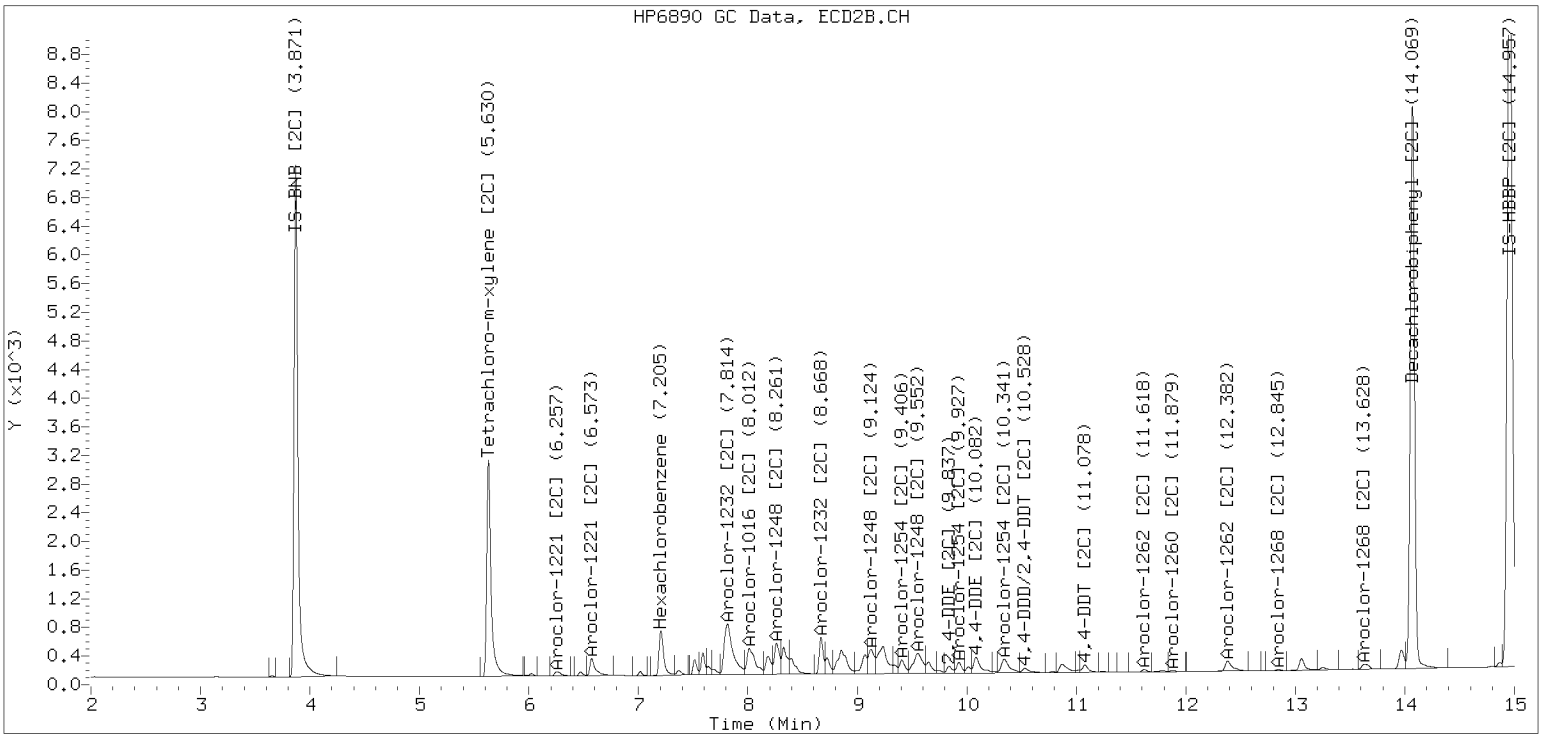


ZB-35 Manual Integration: YES

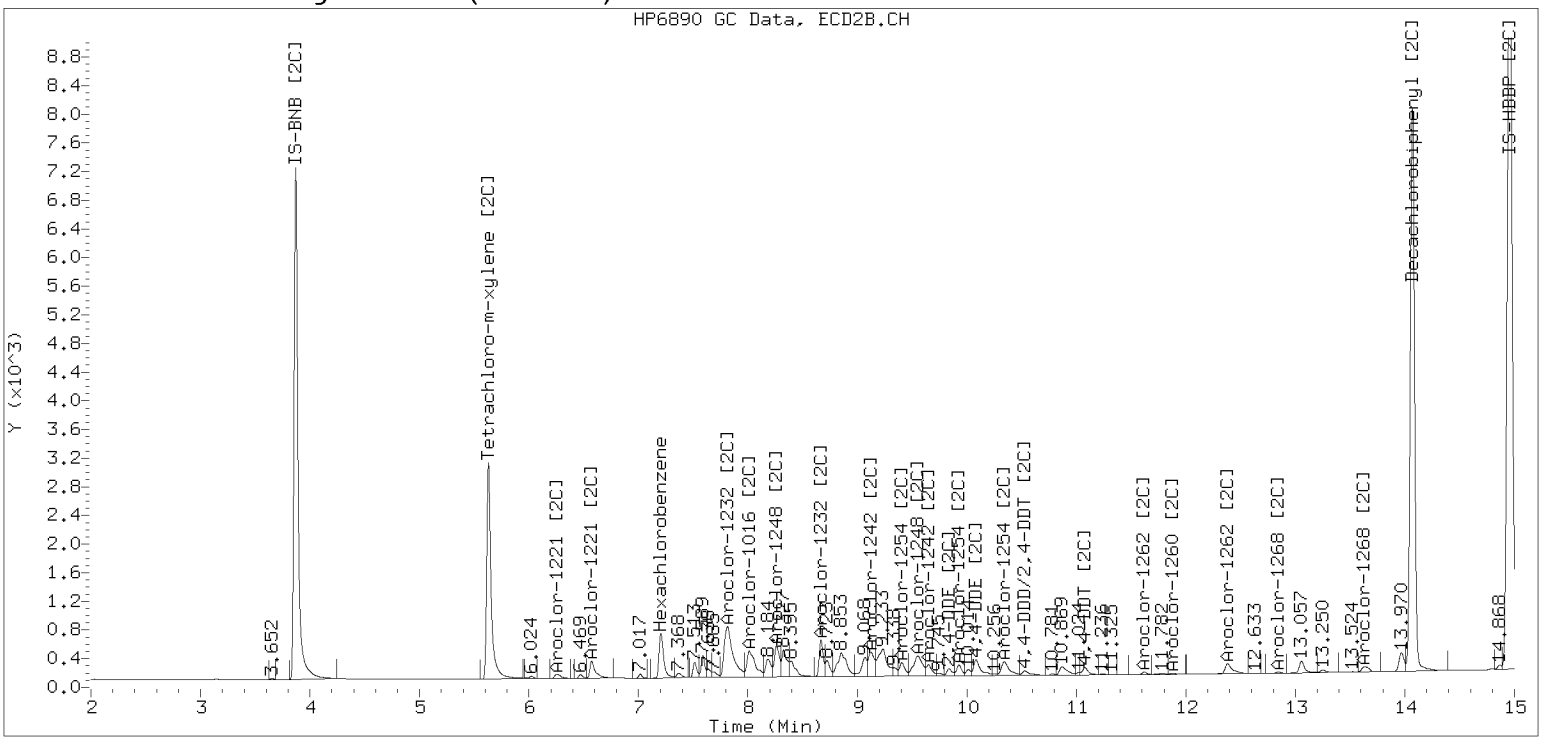
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052333ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052334ECD7.D
Data file 2: /230505.b/230505.b/05052334ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248SCV
Client ID:
Injection Date: 06-MAY-2023 03:57
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	356328	9.834	-0.033	15805	36.8	0.0	----	Tetrachloro-m-xylene
13.842	0.001	339452	----			35.7	0.0	----	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	643038	6.9
Hexabromobiphenyl	876625	952051	8.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	359604	3.0
Hexabromobiphenyl	652984	692982	6.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	0.000	19871	79.8	1	7.203	-0.001	18843	92.6
Aroclor-1016	2	7.589	-0.006	95111	122.2	2	7.812	0.005	52352	120.7
Aroclor-1016	3	7.736	0.003	37565	104.4	3	8.012	0.006	8263	43.2
Aroclor-1016	4	8.399	0.002	41542	279.7	4	8.260	0.001	42833	281.8
Total Col1Ave (4 peaks):					146.5	Total Col2Ave (4 peaks):				134.6 RPD = 9
Corrected Ave (3 peaks):					102.1	Corrected Ave (3 peaks):				85.5 RPD = 18
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.066	-0.003	351	3.9	2	6.275	0.029	1573	28.6
Aroclor-1221	3	6.320	-0.001	3509	16.3	3	6.576	0.004	967	11.2
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.066	-0.003	351	5.6	2	7.203	-0.001	18843	236.0
Aroclor-1232	3	7.589	-0.006	95111	318.5	3	7.812	-0.002	52352	326.4
Aroclor-1232	4	8.524	-0.002	105782	827.6	4	8.667	-0.002	44962	968.0
Total Col1Ave (3 peaks):					383.9	Total Col2Ave (3 peaks):				510.1 RPD = 28
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.212	0.000	19871	98.1	1	7.203	-0.000	18843	117.2
Aroclor-1242	2	7.589	-0.006	95111	148.1	2	7.812	-0.000	52352	153.1
Aroclor-1242	3	8.399	0.001	41542	334.5	3	9.120	-0.003	52681	480.6
Aroclor-1242	4	8.524	-0.000	105782	368.1	4	9.650	0.100	23342	176.7
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				231.9 RPD = 2
Corrected Ave (3 peaks):					193.6	Corrected Ave (3 peaks):				149.0 RPD = 26
Aroclor-1248	1	8.399	0.001	41542	253.1	1	8.260	-0.001	42833	250.4
Aroclor-1248	2	8.524	-0.000	105782	248.0	2	8.667	0.000	44962	248.8
Aroclor-1248	3	8.944	-0.000	206928	252.3	3	9.120	-0.000	52681	248.7
Aroclor-1248	4	9.242	-0.001	105227	251.7	4	9.548	0.002	63343	249.4
Total Col1Ave (4 peaks):					251.3	Total Col2Ave (4 peaks):				249.3 RPD = 1
Corrected Ave (3 peaks):					250.6	Corrected Ave (3 peaks):				249.0 RPD = 1
Aroclor-1254	1	9.242	-0.004	105227	159.2	1	9.404	0.000	25835	94.6
Aroclor-1254	2	9.324	-0.001	51326	172.8	2	9.548	0.049	63343	390.3
Aroclor-1254	3	9.619	0.001	41394	97.0	3	9.925	0.001	22609	102.1
Aroclor-1254	4	9.759	0.003	72223	86.4	4	10.079	0.001	43816	90.7
Aroclor-1254	5	10.135	0.010	49936	98.9	5	10.345	0.016	42513	88.7
Total Col1Ave (5 peaks):					122.9	Total Col2Ave (5 peaks):				153.3 RPD = 22
Corrected Ave (4 peaks):					110.4	Corrected Ave (4 peaks):				94.0 RPD = 16
Aroclor-1260	1	10.998	0.005	1863	3.7	1	11.617	0.011	2599	7.1
Aroclor-1260	2	11.314	0.004	1152	2.3	2	11.877	0.005	1951	2.0
Aroclor-1260	3	11.695	0.009	1829	1.5	3	12.389	0.001	857	3.6
Aroclor-1260	4	12.097	0.007	1266	2.1	4	12.458	0.003	1302	2.0
Aroclor-1260	5	12.195	0.002	464	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.3	Total Col2Ave (4 peaks):				3.7 RPD = 48*
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				2.5 RPD = 29
Aroclor-1262	1	10.784	0.005	15405	35.8	1	11.077	-0.077	9003	16.0
Aroclor-1262	2	12.195	0.000	464	0.8	2	11.617	0.012	2599	5.5
Aroclor-1262	3	12.271	0.002	489	0.8	3	12.389	0.003	857	1.7
Aroclor-1262	4	12.940	0.001	1638	3.1	4	12.458	0.002	1302	1.5
Total Col1Ave (4 peaks):					10.1	Total Col2Ave (4 peaks):				6.2 RPD = 48*
Corrected Ave (3 peaks):					1.5	Corrected Ave (3 peaks):				2.9 RPD = 61*
Aroclor-1268	1	12.195	-0.001	464	0.3	1	12.389	0.004	857	0.7
Aroclor-1268	2	12.271	0.003	489	0.3	2	12.458	0.006	1302	0.9
Aroclor-1268	3	12.649	0.001	1831	1.5	3	12.845	0.002	676	0.6
Aroclor-1268	4	13.443	0.006	5387	1.6	4	13.661	-0.003	2707	0.7
Total Col1Ave (4 peaks):					0.9	Total Col2Ave (4 peaks):				0.7 RPD = 26
Corrected Ave (3 peaks):					0.7	Corrected Ave (3 peaks):				0.6 RPD = 11

Total PCB Area Col1 (5.842 - 13.740) = 1634238 Col1 Total PCB = 0.2 ppm*

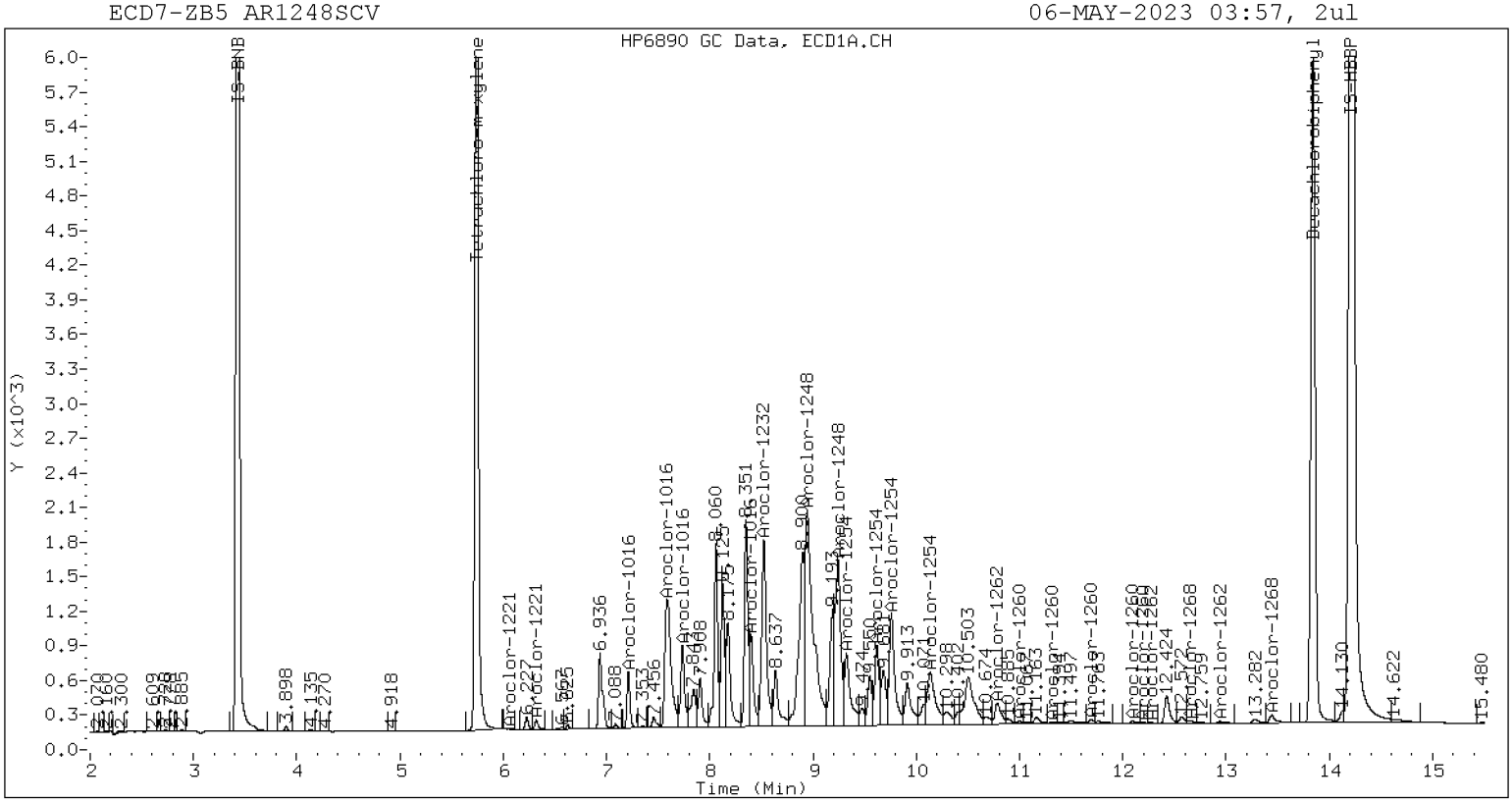
Total PCB Area Col2 (5.842 - 13.740) = 874053 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

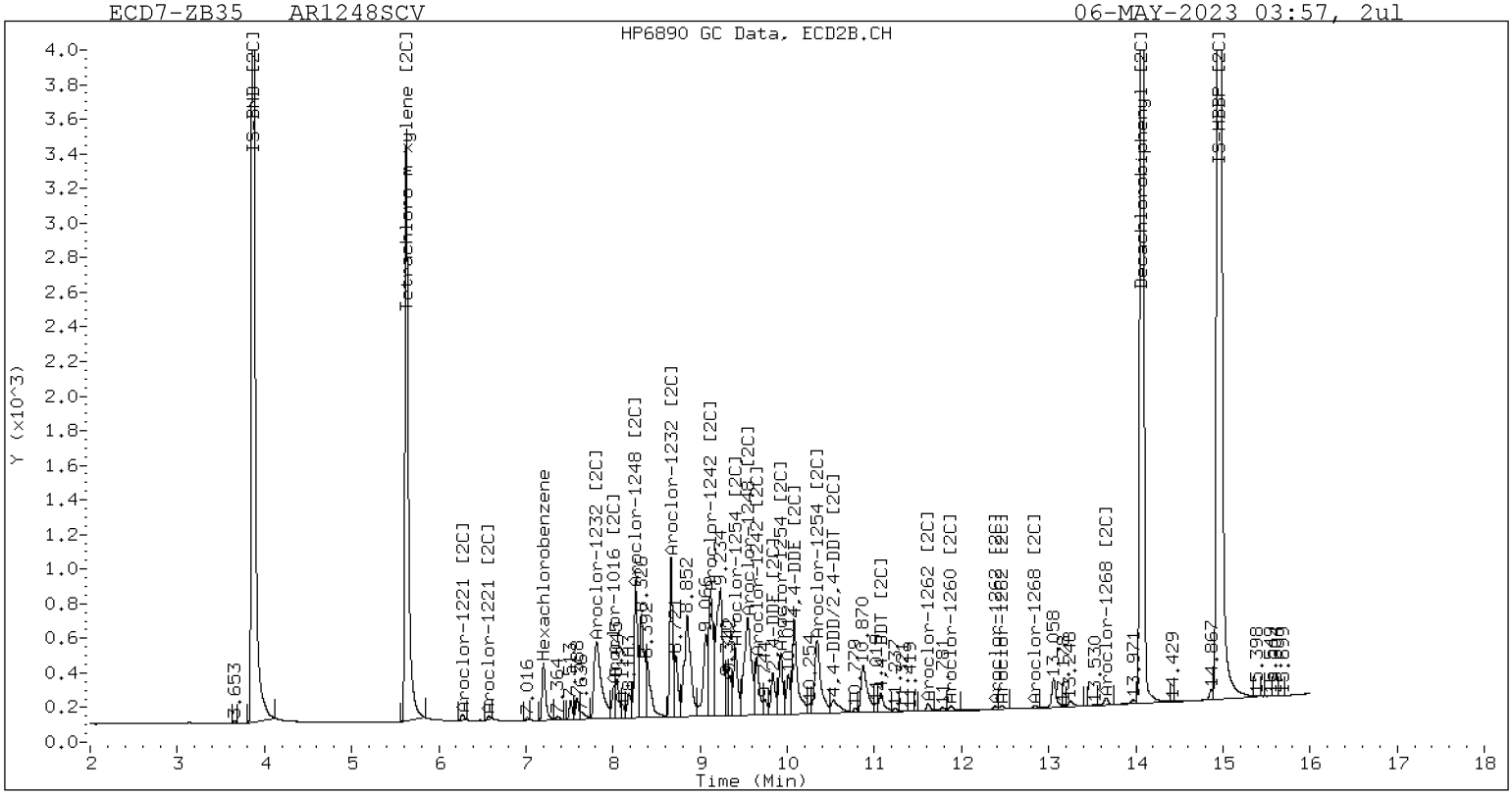
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248SCV 06-MAY-2023 03:57, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248SCV 06-MAY-2023 03:57, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052335ECD7.D
Data file 2: /230505.b/230505.b/05052335ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254SCV
Client ID:
Injection Date: 06-MAY-2023 04:18
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	368022	5.631	0.002	192033	37.6	38.3	2.0	Tetrachloro-m-xylene
13.843	0.002	352066	14.070	0.002	385384	36.0	38.5	6.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	650234	8.1
Hexabromobiphenyl	876625	980276	11.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	364142	4.3
Hexabromobiphenyl	652984	705291	8.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.002	635	2.5	1	---			0.0
Aroclor-1016	2	7.590	-0.004	2512	3.2	2	---			0.0
Aroclor-1016	3	7.738	0.005	1594	4.4	3	---			0.0
Aroclor-1016	4	8.351	-0.047	31774	211.6	4	---			0.0
Total Col1Ave (4 peaks):					55.4	Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.052	-0.018	242	2.6	2	---			0.0
Aroclor-1221	3	6.322	0.001	427	2.0	3	---			0.0
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.052	-0.018	242	3.8	2	---			0.0
Aroclor-1232	3	7.590	-0.005	2512	8.3	3	---			0.0
Aroclor-1232	4	8.528	0.001	13950	107.9	4	---			0.0
Total Col1Ave (3 peaks):					40.0	Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.214	0.002	635	3.1	1	---			0.0
Aroclor-1242	2	7.590	-0.005	2512	3.9	2	---			0.0
Aroclor-1242	3	8.351	-0.047	31774	253.0	3	9.125	0.002	23963	215.9
Aroclor-1242	4	8.528	0.004	13950	48.0	4	9.649	0.099	23982	179.3
Total Col1Ave (4 peaks):					77.0	Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.351	-0.048	31774	191.4	1	8.260	-0.000	23490	135.6
Aroclor-1248	2	8.528	0.004	13950	32.3	2	8.669	0.002	16693	91.2
Aroclor-1248	3	8.941	-0.003	154338	186.1	3	9.125	0.005	23963	111.7
Aroclor-1248	4	9.246	0.003	158369	374.6	4	9.499	-0.047	38716	150.5
Total Col1Ave (4 peaks):					196.1	Total Col2Ave (4 peaks):			122.3	RPD = 46*
Corrected Ave (3 peaks):					136.6	Corrected Ave (3 peaks):			112.8	RPD = 19
Aroclor-1254	1	9.246	-0.001	158369	237.0	1	9.404	0.000	67493	244.0
Aroclor-1254	2	9.325	-0.000	72386	241.1	2	9.499	-0.000	38716	235.6
Aroclor-1254	3	9.617	-0.001	103602	240.1	3	9.925	0.001	53972	240.7
Aroclor-1254	4	9.756	0.000	201259	238.2	4	10.079	0.001	116950	239.0
Aroclor-1254	5	10.127	0.001	122207	239.5	5	10.327	-0.001	118439	243.9
Total Col1Ave (5 peaks):					239.2	Total Col2Ave (5 peaks):			240.6	RPD = 1
Corrected Ave (4 peaks):					238.7	Corrected Ave (4 peaks):			239.8	RPD = 0
Aroclor-1260	1	10.994	0.001	13538	26.1	1	11.615	0.009	33465	89.3
Aroclor-1260	2	11.313	0.003	13900	27.2	2	11.876	0.004	25534	26.1
Aroclor-1260	3	11.689	0.004	32548	25.4	3	12.404	0.016	1811	7.5
Aroclor-1260	4	12.093	0.003	25285	40.3	4	12.458	0.002	14842	22.7
Aroclor-1260	5	12.273	0.079	2534	9.3	NS	---			----
Total Col1Ave (5 peaks):					25.6	Total Col2Ave (4 peaks):			36.4	RPD = 35
Corrected Ave (4 peaks):					22.0	Corrected Ave (3 peaks):			18.7	RPD = 16
Aroclor-1262	1	10.779	0.000	210018	473.6	1	11.073	-0.081	114323	200.0
Aroclor-1262	2	12.273	0.078	2534	4.1	2	11.615	0.010	33465	69.4
Aroclor-1262	3	---			0.0	3	12.404	0.018	1811	3.4
Aroclor-1262	4	12.939	0.001	1830	3.3	4	12.458	0.002	14842	17.3
Total Col1Ave (3 peaks):					160.3	Total Col2Ave (4 peaks):			72.6	RPD = 75*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):			30.1	
Aroclor-1268	1	12.273	0.077	2534	1.6	1	12.404	0.019	1811	1.4
Aroclor-1268	2	---			0.0	2	12.458	0.005	14842	10.3
Aroclor-1268	3	12.654	0.006	2669	2.1	3	12.847	0.004	835	0.7
Aroclor-1268	4	13.442	0.004	6266	1.8	4	13.662	-0.001	2350	0.6
Total Col1Ave (3 peaks):					1.8	Total Col2Ave (4 peaks):			3.2	RPD = 55*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):			0.9	

Total PCB Area Col1 (5.842 - 13.740) = 2123119 Col1 Total PCB = 0.3 ppm*

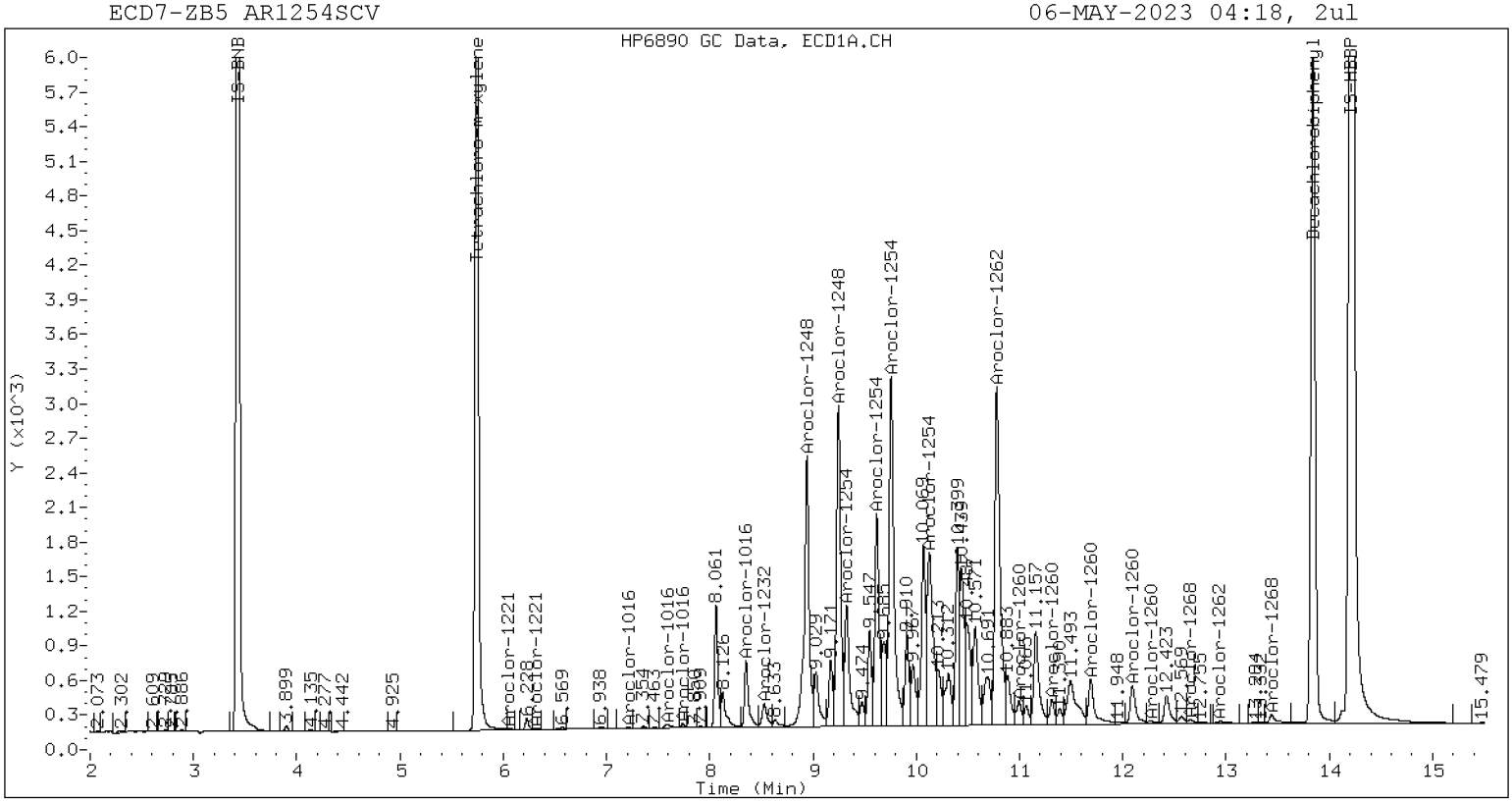
Total PCB Area Col2 (5.728 - 13.968) = 1146487 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

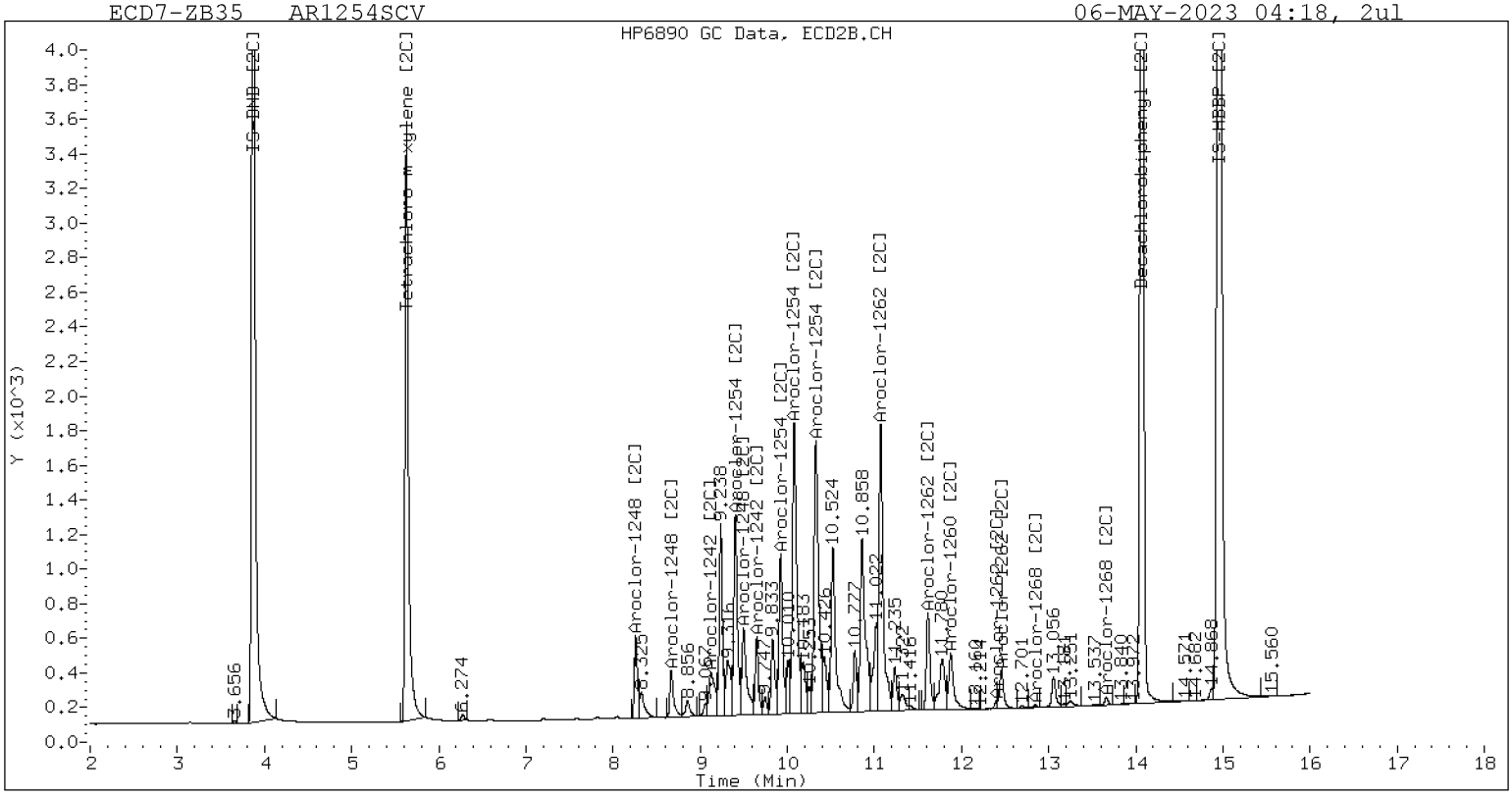
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254SCV 06-MAY-2023 04:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254SCV 06-MAY-2023 04:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052336ECD7.D
Data file 2: /230505.b/230505.b/05052336ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162SCV
Client ID:
Injection Date: 06-MAY-2023 04:39
Report Date: 05/06/2023 11:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	358254	5.628	-0.000	183759	37.8	39.1	3.3	Tetrachloro-m-xylene
13.842	0.002	344347	14.070	0.002	373300	37.1	38.8	4.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	629547	4.7
Hexabromobiphenyl	876625	929713	6.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	341980	-2.1
Hexabromobiphenyl	652984	678097	3.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	6601	27.1	1	7.207	0.003	3935	20.3
Aroclor-1016	2	7.595	0.000	13419	17.6	2	7.821	0.013	6146	14.9
Aroclor-1016	3	7.735	0.003	7114	20.2	3	8.027	0.021	3201	17.6
Aroclor-1016	4	8.353	-0.045	3916	26.9	4	8.262	0.003	2131	14.7
Total Col1Ave (4 peaks):					23.0	Total Col2Ave (4 peaks):				16.9 RPD = 30
Corrected Ave (3 peaks):					21.6	Corrected Ave (3 peaks):				15.7 RPD = 31
Aroclor-1221	1	4.663	-0.001	13184	297.8	1	4.893	-0.001	7253	287.5
Aroclor-1221	2	6.070	0.000	25527	287.4	2	6.244	-0.001	14853	284.1
Aroclor-1221	3	6.321	0.000	59985	284.3	3	6.571	-0.001	24083	292.9
Total Col1Ave (3 peaks):					289.8	Total Col2Ave (3 peaks):				288.2 RPD = 1
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.663	-0.001	13184	447.0	1	4.893	-0.001	7253	546.9
Aroclor-1232	2	6.070	0.000	25527	416.0	2	7.207	0.002	3935	51.8
Aroclor-1232	3	7.595	-0.000	13419	45.9	3	7.821	0.006	6146	40.3
Aroclor-1232	4	8.528	0.001	2679	21.4	4	8.671	0.002	1120	25.4
Total Col1Ave (4 peaks):					232.6	Total Col2Ave (4 peaks):				166.1 RPD = 33
Corrected Ave (3 peaks):					161.1	Corrected Ave (3 peaks):				39.2 RPD = 122*
Aroclor-1242	1	7.213	0.001	6601	33.3	1	7.207	0.004	3935	25.7
Aroclor-1242	2	7.595	-0.000	13419	21.3	2	7.821	0.008	6146	18.9
Aroclor-1242	3	8.353	-0.045	3916	32.2	3	9.133	0.010	881	8.5
Aroclor-1242	4	8.528	0.003	2679	9.5	4	9.651	0.101	516	4.1
Total Col1Ave (4 peaks):					24.1	Total Col2Ave (4 peaks):				14.3 RPD = 51*
Corrected Ave (3 peaks):					21.0	Corrected Ave (3 peaks):				10.5 RPD = 67*
Aroclor-1248	1	8.353	-0.046	3916	24.4	1	8.262	0.002	2131	13.1
Aroclor-1248	2	8.528	0.003	2679	6.4	2	8.671	0.004	1120	6.5
Aroclor-1248	3	8.942	-0.002	25144	31.3	3	9.133	0.013	881	4.4
Aroclor-1248	4	9.251	0.008	25583	62.5	4	9.500	-0.045	335	1.4
Total Col1Ave (4 peaks):					31.1	Total Col2Ave (4 peaks):				6.3 RPD = 132*
Corrected Ave (3 peaks):					20.7	Corrected Ave (3 peaks):				4.1 RPD = 134*
Aroclor-1254	1	9.251	0.005	25583	39.5	1	9.408	0.004	9719	37.4
Aroclor-1254	2	---			0.0	2	9.500	0.001	335	2.2
Aroclor-1254	3	9.620	0.002	4245	10.2	3	9.928	0.004	2055	9.8
Aroclor-1254	4	9.758	0.003	11050	13.5	4	10.100	0.022	55162	120.0
Aroclor-1254	5	10.071	-0.055	129151	261.4	5	10.325	-0.004	68421	150.1
Total Col1Ave (4 peaks):					81.1	Total Col2Ave (5 peaks):				63.9 RPD = 24
Corrected Ave (3 peaks):					21.1	Corrected Ave (4 peaks):				42.3 RPD = 67*
Aroclor-1260	1	10.995	0.002	206643	420.3	1	11.605	-0.001	119902	332.9
Aroclor-1260	2	11.311	0.001	167443	345.1	2	11.872	0.000	293746	311.8
Aroclor-1260	3	11.687	0.001	390491	321.4	3	12.386	-0.002	131462	563.2
Aroclor-1260	4	12.091	0.001	120118	201.8	4	12.456	0.000	212898	338.4
Aroclor-1260	5	12.195	0.002	155588	599.5	NS	---			----
Total Col1Ave (5 peaks):					377.6	Total Col2Ave (4 peaks):				386.6 RPD = 2
Corrected Ave (4 peaks):					322.2	Corrected Ave (3 peaks):				327.7 RPD = 2
Aroclor-1262	1	10.777	-0.001	114050	271.2	1	11.153	0.000	141861	258.2
Aroclor-1262	2	12.195	0.001	155588	263.0	2	11.605	0.000	119902	258.7
Aroclor-1262	3	12.269	0.000	167998	264.2	3	12.386	-0.000	131462	259.6
Aroclor-1262	4	12.938	-0.001	136019	262.5	4	12.456	0.000	212898	258.0
Total Col1Ave (4 peaks):					265.2	Total Col2Ave (4 peaks):				258.6 RPD = 3
Corrected Ave (3 peaks):					263.3	Corrected Ave (3 peaks):				258.3 RPD = 2
Aroclor-1268	1	12.195	-0.000	155588	104.9	1	12.386	0.001	131462	102.4
Aroclor-1268	2	12.269	0.001	167998	114.1	2	12.456	0.003	212898	154.3
Aroclor-1268	3	12.675	0.027	60611	51.2	3	12.843	-0.000	8393	7.1
Aroclor-1268	4	13.439	0.001	49821	14.7	4	13.661	-0.002	39480	10.4
Total Col1Ave (4 peaks):					71.2	Total Col2Ave (4 peaks):				68.6 RPD = 4

Corrected Ave (3 peaks): 56.9 Corrected Ave (3 peaks): 40.0 RPD = 35

Total PCB Area Col1 (5.842 - 13.740) = 2870829 Col1 Total PCB = 0.4 ppm*

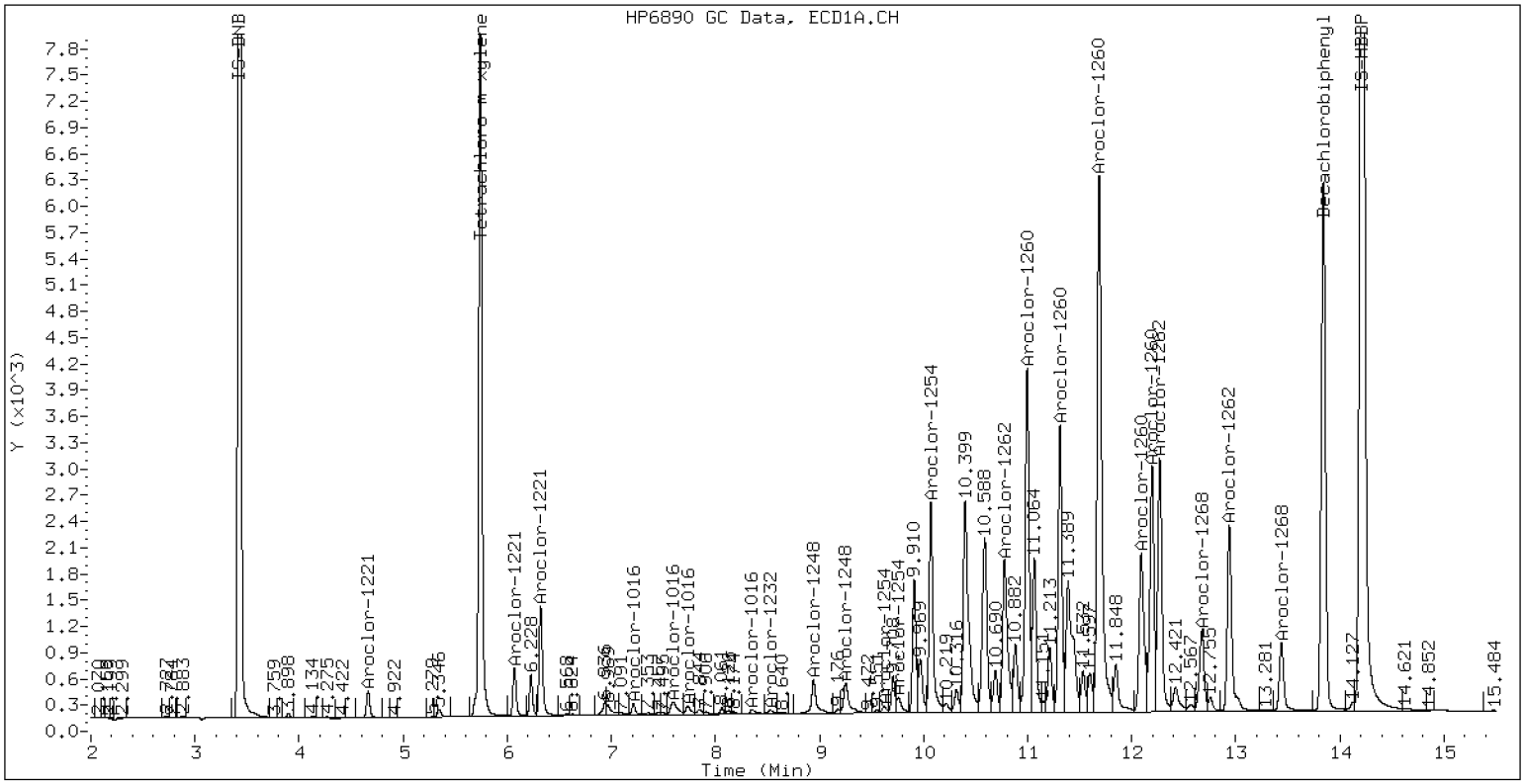
Total PCB Area Col2 (5.728 - 13.968) = 1885829 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

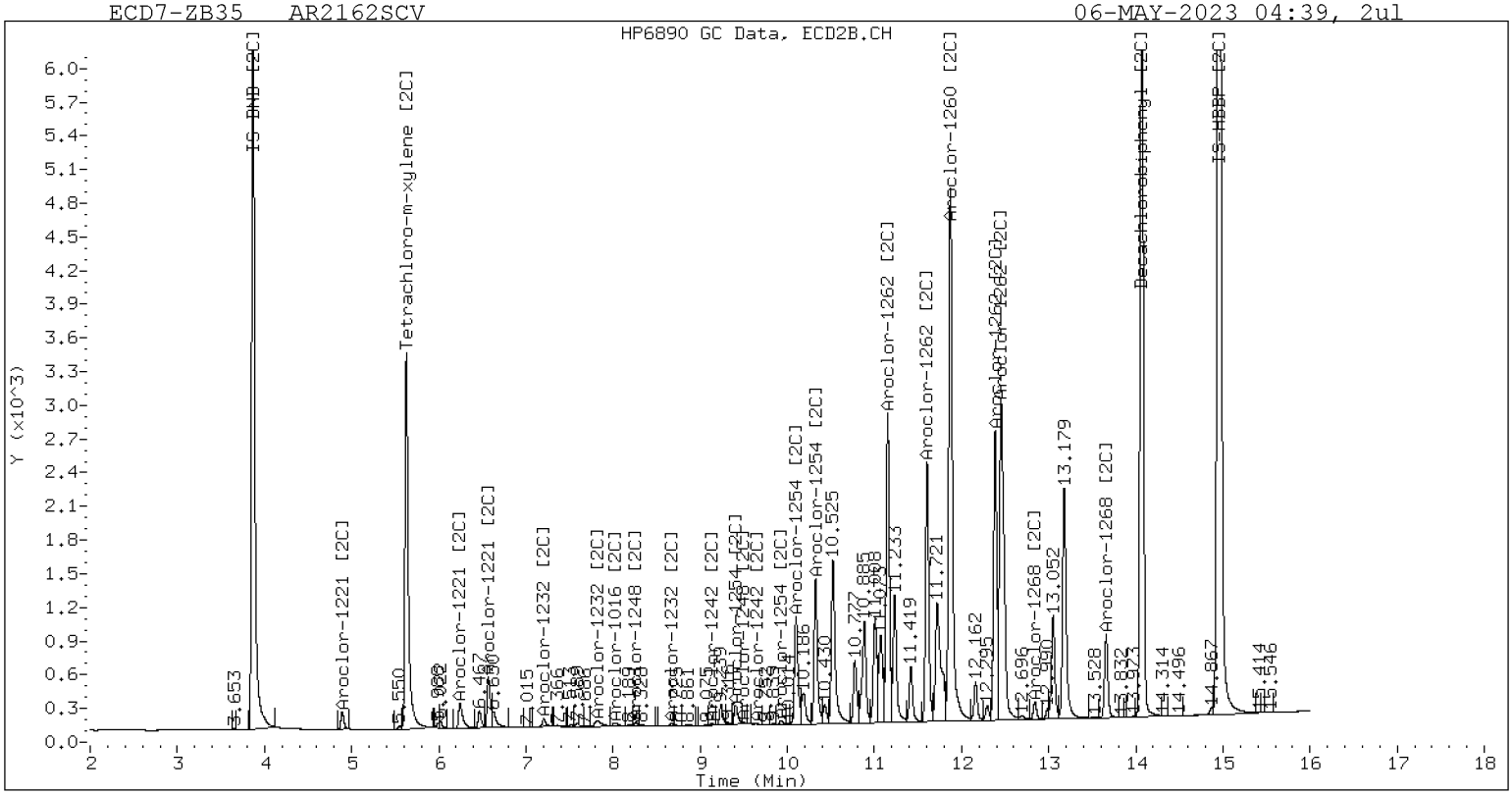
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162SCV 06-MAY-2023 04:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162SCV 06-MAY-2023 04:39, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052337ECD7.D
Data file 2: /230505.b/230505.b/05052337ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268SCV
Client ID:
Injection Date: 06-MAY-2023 05:00
Report Date: 05/06/2023 11:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	373749	5.629	0.001	196946	38.4	40.4	5.2	Tetrachloro-m-xylene
13.842	0.002	525409	14.069	0.001	586548	55.1	59.3	7.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	646456	7.5
Hexabromobiphenyl	876625	954969	8.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	354120	1.4
Hexabromobiphenyl	652984	696139	6.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.001	28623	114.3	1	7.205	0.002	23124	115.4
Aroclor-1016	2	7.597	0.002	85721	109.5	2	7.815	0.007	47496	111.2
Aroclor-1016	3	7.735	0.002	41343	114.3	3	8.014	0.008	24029	127.5
Aroclor-1016	4	8.400	0.002	16653	111.6	4	8.262	0.003	15421	103.0
Total Col1Ave (4 peaks):					112.4	Total Col2Ave (4 peaks):				114.3 RPD = 2
Corrected Ave (3 peaks):					111.8	Corrected Ave (3 peaks):				109.9 RPD = 2
Aroclor-1221	1	4.664	0.001	7272	159.9	1	4.895	0.000	4045	154.9
Aroclor-1221	2	6.070	0.001	13478	147.8	2	6.246	0.000	9235	170.6
Aroclor-1221	3	6.321	0.001	43831	202.3	3	6.572	0.000	24300	285.4
Total Col1Ave (3 peaks):					170.0	Total Col2Ave (3 peaks):				203.6 RPD = 18
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.664	0.001	7272	240.1	1	4.895	0.001	4045	294.5
Aroclor-1232	2	6.070	0.001	13478	213.9	2	7.205	0.001	23124	294.1
Aroclor-1232	3	7.597	0.002	85721	285.5	3	7.815	0.000	47496	300.7
Aroclor-1232	4	8.527	0.000	36809	286.5	4	8.669	-0.000	14324	313.2
Total Col1Ave (4 peaks):					256.5	Total Col2Ave (4 peaks):				300.6 RPD = 16
Corrected Ave (3 peaks):					246.5	Corrected Ave (3 peaks):				296.5 RPD = 18
Aroclor-1242	1	7.214	0.002	28623	140.5	1	7.205	0.002	23124	146.1
Aroclor-1242	2	7.597	0.002	85721	132.8	2	7.815	0.002	47496	141.1
Aroclor-1242	3	8.400	0.002	16653	133.4	3	9.128	0.005	14403	133.4
Aroclor-1242	4	8.527	0.003	36809	127.4	4	9.648	0.098	5512	42.4
Total Col1Ave (4 peaks):					133.5	Total Col2Ave (4 peaks):				115.7 RPD = 14
Corrected Ave (3 peaks):					131.2	Corrected Ave (3 peaks):				105.6 RPD = 22
Aroclor-1248	1	8.400	0.001	16653	100.9	1	8.262	0.002	15421	91.5
Aroclor-1248	2	8.527	0.003	36809	85.8	2	8.669	0.002	14324	80.5
Aroclor-1248	3	8.944	0.000	89377	108.4	3	9.128	0.008	14403	69.0
Aroclor-1248	4	9.238	-0.005	41570	98.9	4	9.560	0.015	17331	69.3
Total Col1Ave (4 peaks):					98.5	Total Col2Ave (4 peaks):				77.6 RPD = 24
Corrected Ave (3 peaks):					95.2	Corrected Ave (3 peaks):				72.9 RPD = 26
Aroclor-1254	1	9.238	-0.008	41570	62.6	1	9.407	0.003	5487	20.4
Aroclor-1254	2	9.326	0.001	12640	42.3	2	9.560	0.061	17331	108.4
Aroclor-1254	3	9.624	0.006	7232	16.9	3	9.929	0.005	3481	16.0
Aroclor-1254	4	9.764	0.008	11671	13.9	4	10.086	0.009	7259	15.3
Aroclor-1254	5	10.139	0.014	7544	14.9	5	10.345	0.017	6610	14.0
Total Col1Ave (5 peaks):					30.1	Total Col2Ave (5 peaks):				34.8 RPD = 14
Corrected Ave (4 peaks):					22.0	Corrected Ave (4 peaks):				16.4 RPD = 29
Aroclor-1260	1	10.998	0.005	85093	168.5	1	11.598	-0.008	75237	203.5
Aroclor-1260	2	11.313	0.003	6363	12.8	2	11.873	0.001	33655	34.8
Aroclor-1260	3	11.688	0.002	47857	38.3	3	12.384	-0.004	346138	1444.4
Aroclor-1260	4	12.094	0.004	1291	2.1	4	12.453	-0.002	373218	577.8
Aroclor-1260	5	12.195	0.001	406211	1523.9	NS	---			----
Total Col1Ave (5 peaks):					349.1	Total Col2Ave (4 peaks):				565.1 RPD = 47*
Corrected Ave (4 peaks):					55.4	Corrected Ave (3 peaks):				272.0 RPD = 132*
Aroclor-1262	1	10.785	0.006	4006	9.3	1	11.156	0.002	52531	93.1
Aroclor-1262	2	12.195	0.000	406211	668.6	2	11.598	-0.007	75237	158.2
Aroclor-1262	3	12.268	-0.002	403730	618.2	3	12.384	-0.002	346138	665.8
Aroclor-1262	4	12.937	-0.002	145536	273.5	4	12.453	-0.002	373218	440.5
Total Col1Ave (4 peaks):					392.4	Total Col2Ave (4 peaks):				339.4 RPD = 14
Corrected Ave (3 peaks):					300.3	Corrected Ave (3 peaks):				230.6 RPD = 26
Aroclor-1268	1	12.195	-0.001	406211	266.7	1	12.384	-0.001	346138	262.7
Aroclor-1268	2	12.268	-0.000	403730	266.9	2	12.453	0.001	373218	263.5
Aroclor-1268	3	12.648	-0.000	323568	266.0	3	12.844	0.001	316122	260.6
Aroclor-1268	4	13.439	0.002	920777	265.1	4	13.663	0.000	1029335	264.8
Total Col1Ave (4 peaks):					266.2	Total Col2Ave (4 peaks):				262.9 RPD = 1

Corrected Ave (3 peaks): 265.9 Corrected Ave (3 peaks): 262.3 RPD = 1

Total PCB Area Col1 (5.842 - 13.740) = 3325332 Col1 Total PCB = 0.5 ppm*

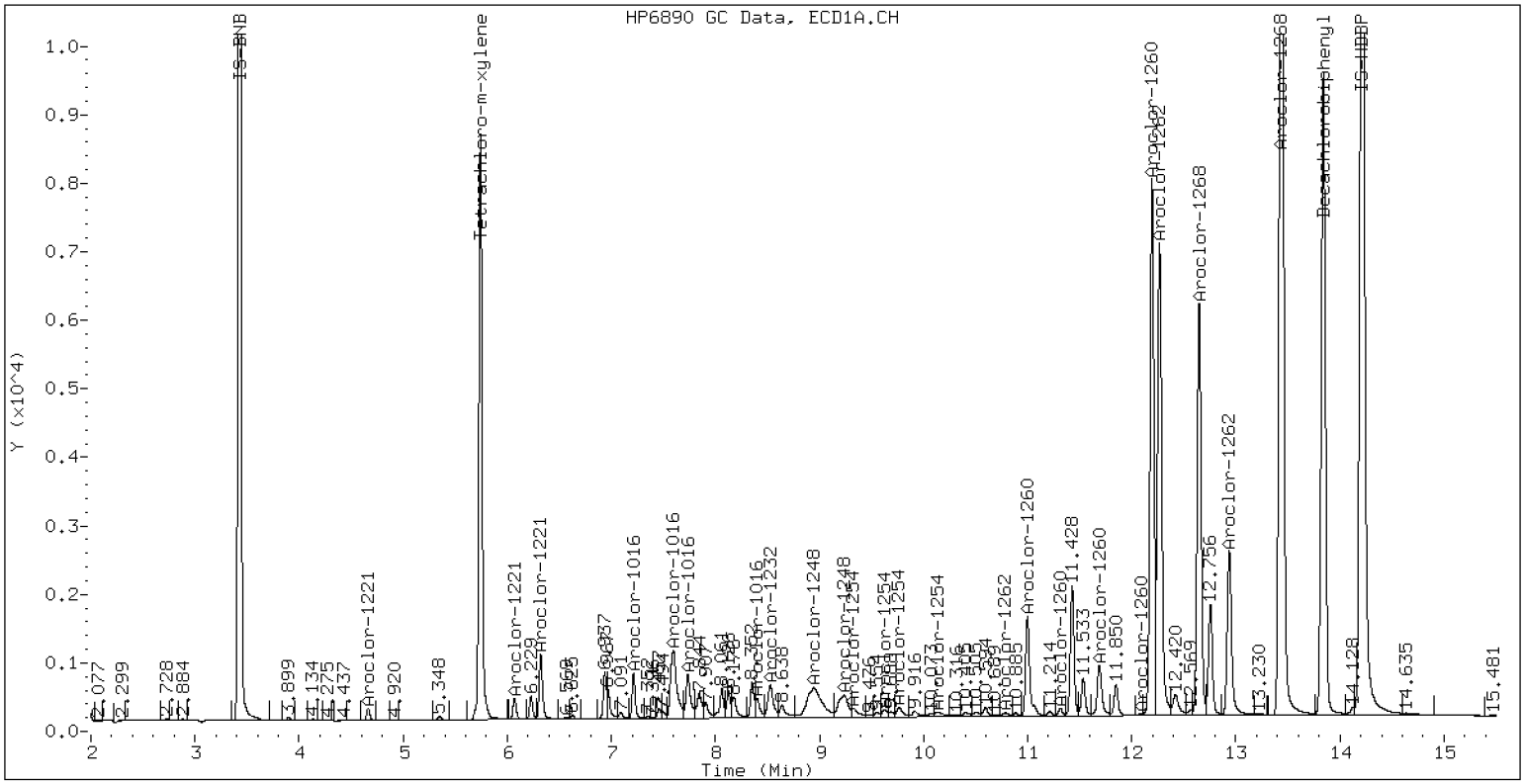
Total PCB Area Col2 (5.728 - 13.968) = 2876097 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

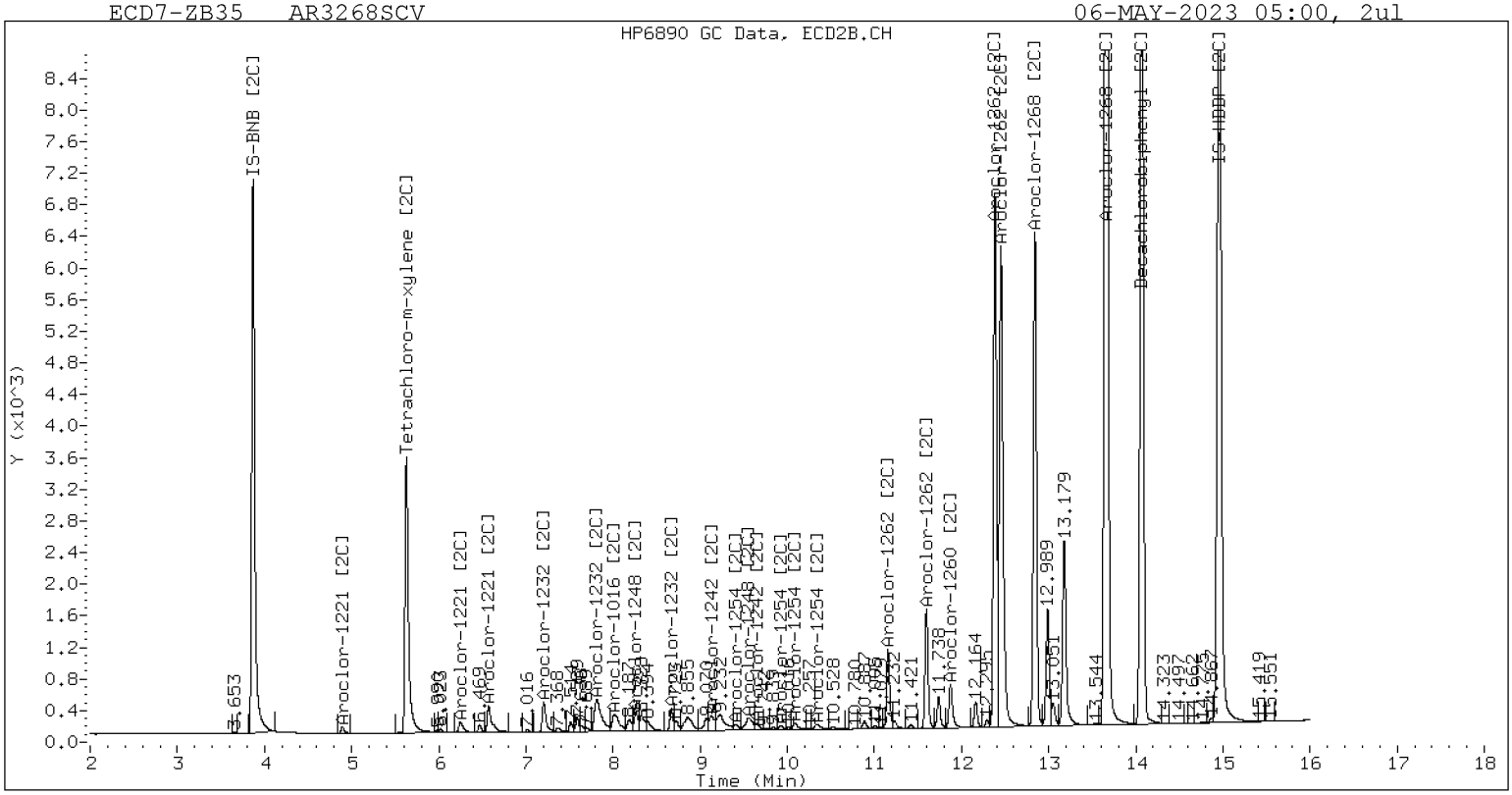
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268SCV 06-MAY-2023 05:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268SCV 06-MAY-2023 05:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230505.b/05052338ECD7.D ARI ID: DDTS

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
9.206	0.000	428189	9.867	0.000	428008	0.100	0.000	----	2,4-DDE
0.000	-10.293	0	10.625	0.000	621468	0.000	0.000#	----	2,4-DDT
9.635	0.000	1004111	10.165	0.000	369270	0.100	0.000	----	4,4-DDE
10.243	0.000	476377	10.625	0.000	621468	0.100	0.000#	----	4,4-DDD

\# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230505.b/05052339ECD7.D ARI ID: DDT BD

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
9.158	-0.049	12021	9.884	0.017	17091	0.002	0.000	----	2,4-DDE
0.000	-10.293	0	10.633	0.008	326807	0.000	0.000#	----	2,4-DDT
9.644	0.009	16770	10.190	0.025	488	0.001	0.000	----	4,4-DDE
10.216	-0.028	403865	10.633	0.008	326807	0.068	0.000#	----	4,4-DDD

\# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLE0079

Instrument: ECD7
Calibration ID: GE00022

Printed: 5/6/2023 11:44:56AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLE0079-CAL1	QC		1		L000856	L000844		
SLE0079-CAL2	QC		2		L000859	L000844		
SLE0079-CAL3	QC		3		L000858	L000844		
SLE0079-CAL4	QC		4		L000731	L000844		
SLE0079-CAL5	QC		5		L000857	L000844		
SLE0079-CAL6	QC		6		L000855	L000844		
SLE0079-CAL7	QC		7		L000860	L000844		
SLE0079-CAL8	QC		8		L000861	L000844		
SLE0079-CAL9	QC		9		L000862	L000844		
SLE0079-CALA	QC		10		L004996	L000844		
SLE0079-CALB	QC		11		L004997	L000844		
SLE0079-SCV1	QC		12		L002065	L000844		
SLE0079-SCV2	QC		13		L003970	L000844		
SLE0079-SCV3	QC		14		L002066	L000844		
SLE0079-SCV4	QC		15		L002067	L000844		
SLE0079-SCV5	QC		16		L002068	L000844		
SLE0079-SCV6	QC		17		L002069	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	05-MAY-2023 23:06	05052320ECD7.D	1	IB	
2	05-MAY-2023 23:26	05052321ECD7.D	1	0.25PPMAR1660	
3	05-MAY-2023 23:47	05052322ECD7.D	1	0.02PPMAR1660	
4	06-MAY-2023 00:08	05052323ECD7.D	1	0.05PPMAR1660	
5	06-MAY-2023 00:29	05052324ECD7.D	1	1.0PPMAR1660	
6	06-MAY-2023 00:50	05052325ECD7.D	1	0.1PPMAR1660	
7	06-MAY-2023 01:11	05052326ECD7.D	1	0.5PPMAR1660	
8	06-MAY-2023 01:31	05052327ECD7.D	1	0.25PPMAR1242	
9	06-MAY-2023 01:52	05052328ECD7.D	1	0.25PPMAR1248	
10	06-MAY-2023 02:13	05052329ECD7.D	1	0.25PPMAR1254	
11	06-MAY-2023 02:34	05052330ECD7.D	1	0.25PPMAR2162	
12	06-MAY-2023 02:55	05052331ECD7.D	1	0.25PPMAR3268	
13	06-MAY-2023 03:16	05052332ECD7.D	1	AR1660SCV	
14	06-MAY-2023 03:36	05052333ECD7.D	1	AR1242SCV	
15	06-MAY-2023 03:57	05052334ECD7.D	1	AR1248SCV	
16	06-MAY-2023 04:18	05052335ECD7.D	1	AR1254SCV	
17	06-MAY-2023 04:39	05052336ECD7.D	1	AR2162SCV	
18	06-MAY-2023 05:00	05052337ECD7.D	1	AR3268SCV	
19	06-MAY-2023 05:21	05052338ECD7.D	1	DDTS	
20	06-MAY-2023 05:41	05052339ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

ARI Job No.: Method: PCB.m Instrument: ecd7.i Date: 05-MAY-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1548	05052301ECD7.D			1	NO MANUAL INTEGRATION
1609	05052302ECD7.D			1	NO MANUAL INTEGRATION
1711	05052303ECD7.D			1	NO MANUAL INTEGRATION
1732	05052304ECD7.D			1	NO MANUAL INTEGRATION
1753	05052305ECD7.D			1	NO MANUAL INTEGRATION
1814	05052306ECD7.D			1	NO MANUAL INTEGRATION
1835	05052307ECD7.D			1	NO MANUAL INTEGRATION
1856	05052308ECD7.D			1	NO MANUAL INTEGRATION
1916	05052309ECD7.D			1	NO MANUAL INTEGRATION
1937	05052310ECD7.D			1	NO MANUAL INTEGRATION
1958	05052311ECD7.D			1	NO MANUAL INTEGRATION
2019	05052312ECD7.D			1	NO MANUAL INTEGRATION
2040	05052313ECD7.D			1	NO MANUAL INTEGRATION
2101	05052314ECD7.D			1	NO MANUAL INTEGRATION
2121	05052315ECD7.D			1	NO MANUAL INTEGRATION
2142	05052316ECD7.D			1	NO MANUAL INTEGRATION
2203	05052317ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2224	05052318ECD7.D			1	NO MANUAL INTEGRATION
2245	05052319ECD7.D			1	NO MANUAL INTEGRATION
2306	05052320ECD7.D	IB		1	NO MANUAL INTEGRATION
2326	05052321ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
2347	05052322ECD7.D	0.02PPMAR1660		1	NO MANUAL INTEGRATION
0008	05052323ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
0029	05052324ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
0050	05052325ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
0111	05052326ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
0131	05052327ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
0152	05052328ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
0213	05052329ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
0234	05052330ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
0255	05052331ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
0316	05052332ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
0336	05052333ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
0357	05052334ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
0418	05052335ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0439	05052336ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
0500	05052337ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
0521	05052338ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0541	05052339ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1548	05052301ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1609	05052302ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1711	05052303ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1732	05052304ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1753	05052305ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1814	05052306ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1835	05052307ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1856	05052308ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1916	05052309ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1937	05052310ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1958	05052311ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2019	05052312ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2040	05052313ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2101	05052314ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2121	05052315ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2142	05052316ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2203	05052317ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2224	05052318ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2245	05052319ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2306	05052320ECD7.D	IB		1	NO MANUAL INTEGRATION
2326	05052321ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
2347	05052322ECD7.D	0.02PPMAR1660		1	Aroclor-1016 [2C],
0008	05052323ECD7.D	0.05PPMAR1660		1	Aroclor-1016 [2C],
0029	05052324ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
0050	05052325ECD7.D	0.1PPMAR1660		1	Aroclor-1016 [2C],
0111	05052326ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
0132	05052327ECD7.D	0.25PPMAR1242		1	Aroclor-1242 [2C],
0152	05052328ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
0213	05052329ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
0234	05052330ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
0255	05052331ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
0316	05052332ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0336	05052333ECD7.D	AR1242SCV		1	Aroclor-1242 [2C],
0357	05052334ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
0418	05052335ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
0439	05052336ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
0500	05052337ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
0521	05052338ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0541	05052339ECD7.D	DDT BD		1	NO MANUAL INTEGRATION

Security Status Report

Date: 06-May-2023 09:12

05052320ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052321ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052322ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052323ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052324ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052325ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052326ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052327ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052328ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052329ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052330ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052331ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052332ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052333ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052334ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052335ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052336ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052337ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052338ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052339ECD7.D	Data Locked	richardl, 06-May-2023 09:12

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230505.b\05052322ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230505.b\05052323ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230505.b\05052325ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230505.b\05052321ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230505.b\05052326ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230505.b\05052324ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230505.b\05052331ECD7.D
Level 8: \\target\share\chem4\ecd7.i\230505.b\05052338ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
2 Aroclor-1221(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00563	+++++	0.00563	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01129	+++++	0.01129	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02681	+++++	0.02681	0.000
3 Aroclor-1242(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.02521	+++++	0.02521	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07988	+++++	0.07988	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.01545	+++++	0.01545	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.03576	+++++	0.03576	0.000
4 Aroclor-1232(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00375	+++++	0.00375	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.00780	+++++							0.00780	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.03715	+++++							0.03715	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.01590	+++++							0.01590	0.000
7 Aroclor-1016(1)	0.03259	0.03226	0.03462	0.03138	0.02909	0.02592				
	+++++	+++++							0.03098	9.876
(2)	0.08782	0.09418	0.10520	0.10209	0.09934	0.09254				
	+++++	+++++							0.09686	6.702
(3)	0.04375	0.04849	0.05094	0.04519	0.04205	0.03826				
	+++++	+++++							0.04478	10.130
(4)	0.01716	0.01921	0.02127	0.01901	0.01783	0.01637				
	+++++	+++++							0.01847	9.437
6 Aroclor-1248(1)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.02042	+++++							0.02042	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05306	+++++							0.05306	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.10205	+++++							0.10205	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05202	+++++							0.05202	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
8 Aroclor-1254(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.08222	+++++	0.08222	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.03694	+++++	0.03694	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.05308	+++++	0.05308	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.10397	+++++	0.10397	0.000
(5)	+++++	+++++	+++++	+++++	+++++	+++++	0.06279	+++++	0.06279	0.000
9 Aroclor-1260(1)	0.04580	0.04187	0.04489	0.04230	0.04061	0.03834	+++++	+++++	0.04230	6.490
(2)	0.04434	0.04115	0.04438	0.04189	0.04043	0.03831	+++++	+++++	0.04175	5.623
(3)	0.11170	0.10434	0.11116	0.10510	0.10043	0.09464	+++++	+++++	0.10456	6.204
(4)	0.05460	0.05000	0.05382	0.05169	0.04996	0.04720	+++++	+++++	0.05121	5.355
(5)	0.02498	0.02246	0.02370	0.02202	0.02100	0.01982	+++++	+++++	0.02233	8.279
10 Aroclor-1262(1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03619	+++++	0.03619	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05090	+++++							0.05090	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.05471	+++++							0.05471	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.04459	+++++							0.04459	0.000
11 Aroclor-1268(1)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.12759	+++++							0.12759	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.12671	+++++							0.12671	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.10191	+++++							0.10191	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++				
	0.29098	+++++							0.29098	0.000
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	636							636	0.000
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	1208							1208	0.000
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	+++++							+++++	+++++
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++				
	+++++	1492							1492	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 05:21
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m
Last Edit : 06-May-2023 09:04 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	0.000e+00 Level 8	___ RRF	% RSD
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	+++++	708	708	0.000
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	+++++	630	630	0.000
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 1 Tetrachloro-m-xylene	1.21049	1.18252	1.29993	1.22669	1.16878	1.14053	+++++	+++++	1.20482	4.619
$ 13 Decachlorobiphenyl	0.89752	0.83715	0.84851	0.77945	0.72713	0.70508	+++++	+++++	0.79914	9.361

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Calibration File Names:
Level 1: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052322ECD7.D
Level 2: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052323ECD7.D
Level 3: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052325ECD7.D
Level 4: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052321ECD7.D
Level 5: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052326ECD7.D
Level 6: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052324ECD7.D
Level 7: \\target\share\chem4\ecd7.i\230505.b\230505.b\05052331ECD7.D

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
1 Aroclor-1221 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00590	0.00590	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01223	0.01223	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.01924	0.01924	0.000
4 Aroclor-1232 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.00310	0.00310	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.01776	0.01776	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.03568	0.03568	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.01033	0.01033	0.000
3 Aroclor-1242 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03575	0.03575	0.000

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.07606	0.07606	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.02438	0.02438	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.02939	0.02939	0.000
6 Aroclor-1248 [2C](1)	+++++	+++++	+++++	+++++	+++++	+++++	0.03806	0.03806	0.000
(2)	+++++	+++++	+++++	+++++	+++++	+++++	0.04020	0.04020	0.000
(3)	+++++	+++++	+++++	+++++	+++++	+++++	0.04712	0.04712	0.000
(4)	+++++	+++++	+++++	+++++	+++++	+++++	0.05651	0.05651	0.000
7 Aroclor-1016 [2C](1)	0.05158	0.04743	0.04866	0.04443	0.04159	0.03802	+++++	0.04529	10.942
(2)	0.09850	0.09560	0.10183	0.09745	0.09528	0.09038	+++++	0.09651	3.959
(3)	0.04379	0.04462	0.04622	0.04230	0.04046	0.03801	+++++	0.04257	6.991
(4)	0.03635	0.03727	0.03735	0.03308	0.03084	0.02798	+++++	0.03381	11.400

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	RRF	% RSD
8 Aroclor-1254 [2C](1)	*****	*****	*****	*****	*****	*****	0.06078	0.06078	0.000
(2)	*****	*****	*****	*****	*****	*****	0.03611	0.03611	0.000
(3)	*****	*****	*****	*****	*****	*****	0.04927	0.04927	0.000
(4)	*****	*****	*****	*****	*****	*****	0.10751	0.10751	0.000
(5)	*****	*****	*****	*****	*****	*****	0.10667	0.10667	0.000
10 Aroclor-1262 [2C](1)	*****	*****	*****	*****	*****	*****	0.06482	0.06482	0.000
(2)	*****	*****	*****	*****	*****	*****	0.05467	0.05467	0.000
(3)	*****	*****	*****	*****	*****	*****	0.05974	0.05974	0.000
(4)	*****	*****	*****	*****	*****	*****	0.09737	0.09737	0.000
9 Aroclor-1260 [2C](1)	0.04544	0.04273	0.04504	0.04279	0.04076	0.03816	*****	0.04249	6.408
(2)	0.11282	0.11085	0.11919	0.11378	0.10815	0.10199	*****	0.11113	5.208

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
(3)	0.02783	0.02652	0.02791	0.02780	0.02775	0.02743	#####	0.02754	1.918
(4)	0.07670	0.07341	0.07861	0.07586	0.07265	0.06817	#####	0.07423	4.962
11 Aroclor-1268 [2C](1)	#####	#####	#####	#####	#####	#####	0.15139	0.15139	0.000
(2)	#####	#####	#####	#####	#####	#####	0.16276	0.16276	0.000
(3)	#####	#####	#####	#####	#####	#####	0.13938	0.13938	0.000
(4)	#####	#####	#####	#####	#####	#####	0.44675	0.44675	0.000
41 2,4-DDE [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
42 2,4-DDD [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
44 4,4-DDE [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
45 4,4-DDD/2,4-DDT [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####
46 4,4-DDT [2C]	#####	#####	#####	#####	#####	#####	#####	#####	#####

ARI Labs, Inc.

INITIAL CALIBRATION DATA

Start Cal Date : 05-MAY-2023 23:26
End Cal Date : 06-MAY-2023 02:55
Quant Method : ISTD
Origin : Disabled
Target Version : 4.14
Integrator : HP Genie
Method file : \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Last Edit : 06-May-2023 11:14 ecd7.i
Curve Type : Average

Compound	20.000 Level 1	50.000 Level 2	100.000 Level 3	250.000 Level 4	500.000 Level 5	1000.000 Level 6	250.000 Level 7	___ RRF	% RSD
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++	+++++
$ 2 Tetrachloro-m-xylene [2C]	1.09077	1.07641	1.18129	1.13054	1.07870	1.04559	+++++	1.10055	4.376
$ 13 Decachlorobiphenyl [2C]	1.04434	1.07403	1.22005	1.18343	1.16419	1.13004	+++++	1.13601	5.890

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230505.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06
FILENAME:	05052321ECD7	05052322ECD7	05052323ECD7	05052324ECD7	05052325ECD7	05052326ECD7
INJ.DATE:	05-MAY-2023	05-MAY-2023	06-MAY-2023	06-MAY-2023	06-MAY-2023	06-MAY-2023
INJ.TIME:	23:26	23:47	00:08	00:29	00:50	01:11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 41 IS-BNB	3.429	3.429	3.428	3.429	3.428	3.428	3.428	3.328-3.528	3.429	0.000
$ 1 Tetrachloro-m-xylene	5.743	5.742	5.741	5.746	5.741	5.743	5.742	5.642-5.842	5.743	0.002
2 Aroclor-1221	+++++	+++++	+++++	+++++	+++++	+++++	4.663	4.563-4.763	+++++	+++++
3 Aroclor-1242	+++++	+++++	+++++	+++++	+++++	+++++	7.212	7.112-7.312	+++++	+++++
4 Aroclor-1232	+++++	+++++	+++++	+++++	+++++	+++++	4.664	4.564-4.764	+++++	+++++
7 Aroclor-1016	7.213	7.213	7.214	7.213	7.212	7.212	7.212	7.112-7.312	7.213	0.001
6 Aroclor-1248	+++++	+++++	+++++	+++++	+++++	+++++	8.399	8.299-8.499	+++++	+++++
8 Aroclor-1254	+++++	+++++	+++++	+++++	+++++	+++++	9.246	9.146-9.346	+++++	+++++
9 Aroclor-1260	10.995	10.998	10.998	10.992	10.995	10.993	10.993	10.893-11.093	10.995	0.003
10 Aroclor-1262	+++++	+++++	+++++	+++++	+++++	+++++	10.779	10.679-10.879	+++++	+++++
11 Aroclor-1268	+++++	+++++	+++++	+++++	+++++	+++++	12.196	12.096-12.296	+++++	+++++
$ 13 Decachlorobiphenyl	13.841	13.843	13.843	13.842	13.841	13.842	13.840	13.740-13.940	13.842	0.001
* 12 IS-HBBP	14.215	14.216	14.217	14.215	14.214	14.215	14.214	14.114-14.314	14.215	0.001
42 2,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.206	9.156-9.256	+++++	+++++
43 2,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	9.753	9.703-9.803	+++++	+++++
44 2,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.293	10.243-10.343	+++++	+++++
46 4,4-DDE	+++++	+++++	+++++	+++++	+++++	+++++	9.635	9.535-9.735	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Batch File: \\target\share\chem4\ecd7.i\230505.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	EXPEC RT	RT WINDOW	AVG RT	STD DEV
47 4,4-DDD	+++++	+++++	+++++	+++++	+++++	+++++	10.243	10.143-10.343	+++++	+++++
48 4,4-DDT	+++++	+++++	+++++	+++++	+++++	+++++	10.706	10.606-10.806	+++++	+++++
49 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	1.842	1.742-1.942	+++++	+++++
50 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	6.708	6.608-6.808	+++++	+++++

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230505.b\230505.b
Inst ID: ecd7.i

ID:	RT01	RT02	RT03	RT04	RT05	RT06	RT07
FILENAME:	05052320ECD7	05052321ECD7	05052322ECD7	05052323ECD7	05052324ECD7	05052325ECD7	05052326ECD7
INJ.DATE:	05-MAY-2023	05-MAY-2023	05-MAY-2023	06-MAY-2023	06-MAY-2023	06-MAY-2023	06-MAY-2023
INJ.TIME:	23:06	23:26	23:47	00:08	00:29	00:50	01:11

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
* 40 IS-BNB [2C]	3.869	3.869	3.869	3.869	3.869	3.869	3.869	3.868	3.768-3.968	3.869	0.000
$ 2 Tetrachloro-m-xylene [	5.629	5.629	5.630	5.630	5.627	5.629	5.629	5.628	5.528-5.728	5.629	0.001
1 Aroclor-1221 [2C]	0.000	+++++	+++++	+++++	+++++	+++++	+++++	4.894	4.794-4.994	0.000	0.000
4 Aroclor-1232 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	4.894	4.794-4.994	+++++	+++++
3 Aroclor-1242 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.203	7.103-7.303	+++++	+++++
6 Aroclor-1248 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	8.260	8.160-8.360	+++++	+++++
7 Aroclor-1016 [2C]	+++++	7.204	7.206	7.205	7.203	7.204	7.204	7.204	7.104-7.304	7.204	0.001
8 Aroclor-1254 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.404	9.304-9.504	+++++	+++++
10 Aroclor-1262 [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.153	11.053-11.253	+++++	+++++
9 Aroclor-1260 [2C]	+++++	11.605	11.610	11.609	11.604	11.608	11.606	11.606	11.506-11.706	11.607	0.002
11 Aroclor-1268 [2C]	0.000	+++++	+++++	+++++	+++++	+++++	+++++	12.385	12.285-12.485	0.000	0.000
$ 13 Decachlorobiphenyl [2C	14.070	14.070	14.071	14.070	14.071	14.069	14.070	14.068	13.968-14.168	14.070	0.000
* 12 IS-HBBP [2C]	14.958	14.957	14.959	14.959	14.956	14.957	14.958	14.957	14.857-15.057	14.958	0.001
41 2,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.867	9.817-9.917	+++++	+++++
42 2,4-DDD [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	9.492	9.442-9.542	+++++	+++++
44 4,4-DDE [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.165	10.065-10.265	+++++	+++++
45 4,4-DDD/2,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	10.625	10.525-10.725	+++++	+++++

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

ARI Labs, Inc.
RETENTION TIME SUMMARY REPORT

Method File: \\target\share\chem4\ecd7.i\230505.b\PCB.m\PCB2.m
Batch File: \\target\share\chem4\ecd7.i\230505.b\230505.b
Inst ID: ecd7.i

Compound	RT01	RT02	RT03	RT04	RT05	RT06	RT07	EXPEC RT	RT WINDOW	AVG RT	STD DEV
46 4,4-DDT [2C]	+++++	+++++	+++++	+++++	+++++	+++++	+++++	11.046	10.946-11.146	+++++	+++++
48 Hexachlorobutadiene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	1.703	1.603-1.803	+++++	+++++
49 Hexachlorobenzene	+++++	+++++	+++++	+++++	+++++	+++++	+++++	7.178	7.078-7.278	+++++	+++++

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052320ECD7.D
Data file 2: /230505.b/230505.b/05052320ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: IB
Client ID:
Injection Date: 05-MAY-2023 23:06
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	296285	5.629	0.001	163258	35.5	37.4	5.3	Tetrachloro-m-xylene
13.841	0.001	288612	14.070	0.002	318424	35.7	37.3	4.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	554412	-7.8
Hexabromobiphenyl	876625	809662	-7.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	317324	-9.2
Hexabromobiphenyl	652984	600612	-8.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	---			0.0	1	---			0.0
Aroclor-1016	2	---			0.0	2	---			0.0
Aroclor-1016	3	---			0.0	3	---			0.0
Aroclor-1016	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	---			0.0	2	6.272	0.027	1585	32.7
Aroclor-1221	3	---			0.0	3	6.588	0.017	408	5.3
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	---			0.0	2	---			0.0
Aroclor-1232	3	---			0.0	3	---			0.0
Aroclor-1232	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	---			0.0	1	---			0.0
Aroclor-1242	2	---			0.0	2	---			0.0
Aroclor-1242	3	---			0.0	3	---			0.0
Aroclor-1242	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	---			0.0	1	---			0.0
Aroclor-1248	2	---			0.0	2	---			0.0
Aroclor-1248	3	---			0.0	3	---			0.0
Aroclor-1248	4	---			0.0	4	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1254	1	---			0.0	1	---			0.0
Aroclor-1254	2	---			0.0	2	---			0.0
Aroclor-1254	3	---			0.0	3	---			0.0
Aroclor-1254	4	---			0.0	4	---			0.0
Aroclor-1254	5	---			0.0	5	---			0.0
	Col1Ave: <3 Quant Peaks					Col2Ave: <3 Quant Peaks				
Aroclor-1260	1	10.995	0.002	1624	3.8	1	---			0.0
Aroclor-1260	2	11.305	-0.005	1450	3.4	2	---			0.0
Aroclor-1260	3	11.770	0.084	3781	3.6	3	---			0.0
Aroclor-1260	4	12.138	0.048	1272	2.5	4	---			0.0
Aroclor-1260	5	12.271	0.078	413	1.8	NS	---			----
	Total Col1Ave (5 peaks):				3.0	Col2Ave: <3 Quant Peaks				
Aroclor-1262	1	10.800	0.021	2445	6.7	1	---			0.0
Aroclor-1262	2	12.271	0.077	413	0.8	2	---			0.0
Aroclor-1262	3	---			0.0	3	---			0.0
Aroclor-1262	4	12.989	0.050	944	2.1	4	---			0.0
	Total Col1Ave (3 peaks):				3.2	Col2Ave: <3 Quant Peaks				
Aroclor-1268	1	12.271	0.076	413	0.3	1	---			0.0
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.649	0.001	2092	2.0	3	12.847	0.004	632	0.6
Aroclor-1268	4	13.443	0.006	5651	1.9	4	13.663	-0.001	2018	0.6
	Total Col1Ave (3 peaks):				1.4	Col2Ave: <3 Quant Peaks				

Total PCB Area Col1 (5.842 - 13.740) = 65805 Col1 Total PCB = 0.0 ppm*

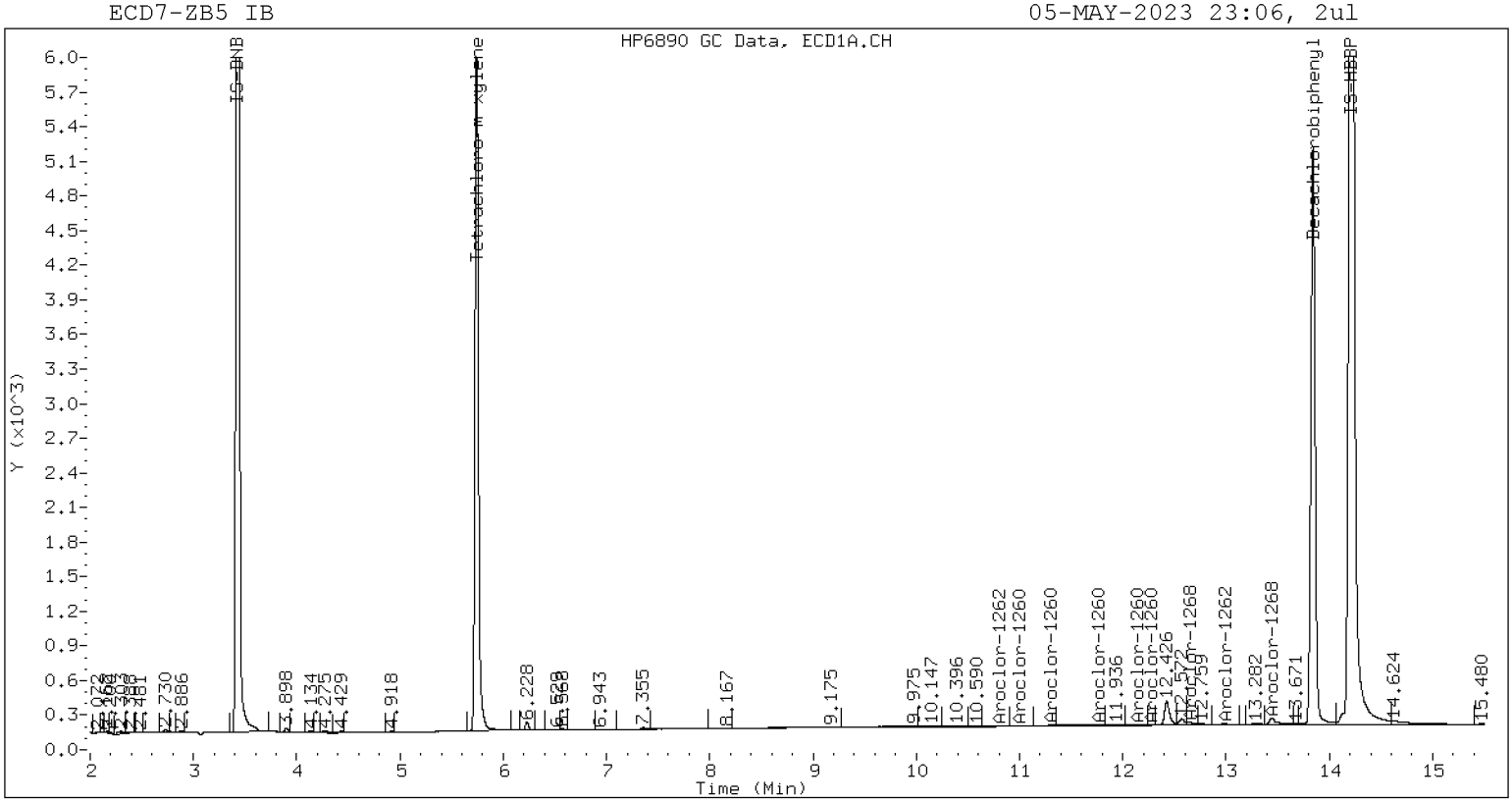
Total PCB Area Col2 (5.728 - 13.968) = 16664 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

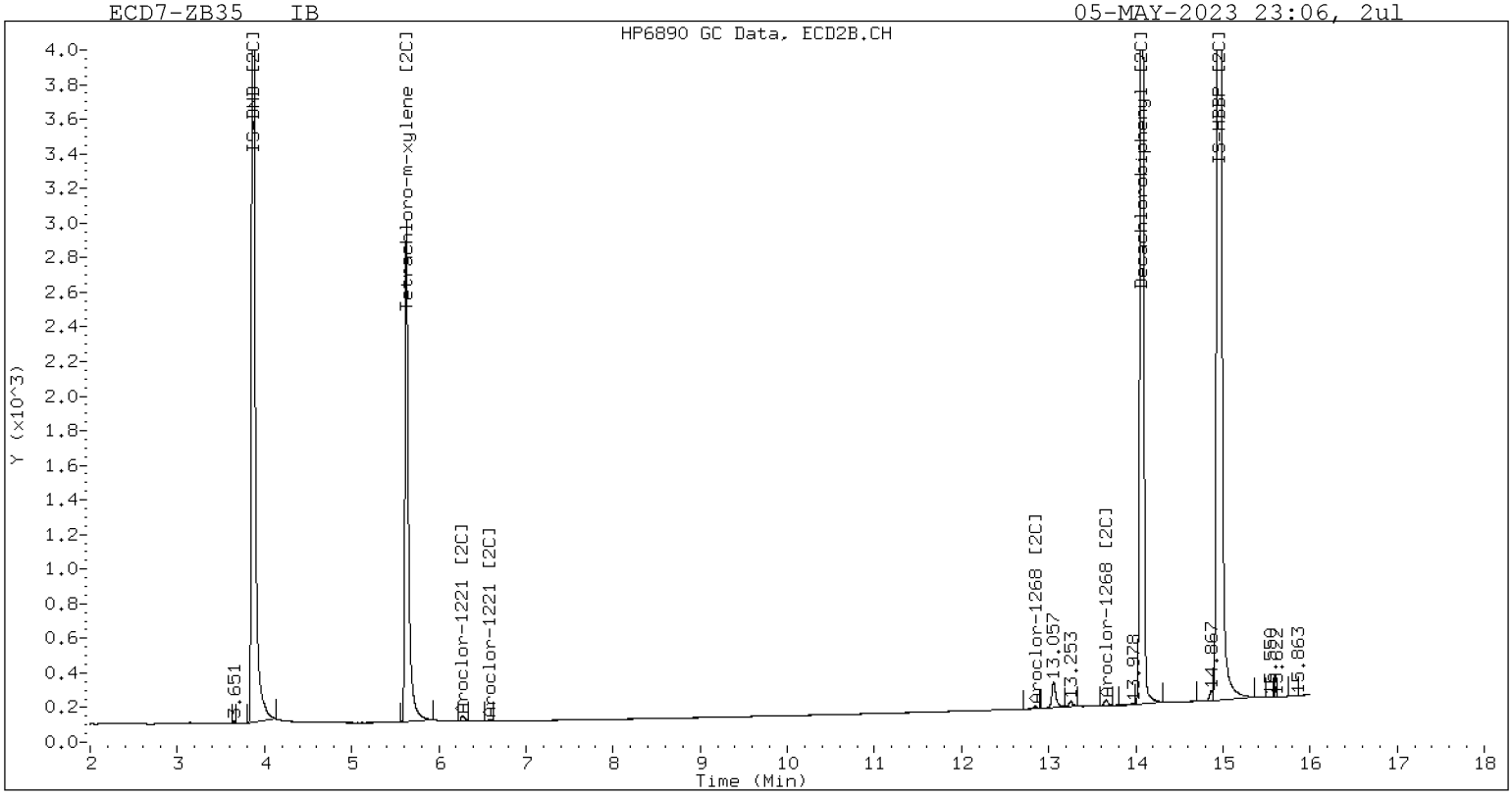
PCB Dual Column Chromatograms

ECD7-ZB5 IB 05-MAY-2023 23:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 IB 05-MAY-2023 23:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052321ECD7.D
Data file 2: /230505.b/230505.b/05052321ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1660
Client ID:
Injection Date: 05-MAY-2023 23:26
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	368910	5.629	0.000	197442	40.7	41.1	0.9	Tetrachloro-m-xylene
13.841	0.001	341641	14.070	0.002	386381	39.0	41.7	6.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	601474	0.0
Hexabromobiphenyl	876625	876625	0.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	349289	0.0
Hexabromobiphenyl	652984	652984	0.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	58979	253.2	1	7.204	-0.000	48493	245.3
Aroclor-1016	2	7.595	0.001	191892	263.5	2	7.811	0.003	106372	252.4
Aroclor-1016	3	7.735	0.002	84934	252.3	3	8.010	0.004	46169	248.4
Aroclor-1016	4	8.399	0.001	35727	257.2	4	8.260	0.001	36109	244.6
Total Col1Ave (4 peaks):					256.6	Total Col2Ave (4 peaks):				247.7 RPD = 4
Corrected Ave (3 peaks):					254.2	Corrected Ave (3 peaks):				246.1 RPD = 3
CalAmt %D:					2.6	CalAmt %D:				-0.9
Aroclor-1260	1	10.995	0.002	115872	250.0	1	11.605	-0.000	87314	251.8
Aroclor-1260	2	11.312	0.002	114768	250.9	2	11.872	-0.000	232184	256.0
Aroclor-1260	3	11.687	0.001	287920	251.3	3	12.389	0.001	56725	252.4
Aroclor-1260	4	12.091	0.002	141607	252.3	4	12.456	0.000	154797	255.5
Aroclor-1260	5	12.195	0.002	60315	246.5	NS	---			----
Total Col1Ave (5 peaks):					250.2	Total Col2Ave (4 peaks):				253.9 RPD = 1
Corrected Ave (4 peaks):					249.7	Corrected Ave (3 peaks):				253.2 RPD = 1
CalAmt %D:					0.1	CalAmt %D:				1.6

Total PCB Area Col1 (5.842 - 13.740) = 3355836 Col1 Total PCB = 0.5 ppm*

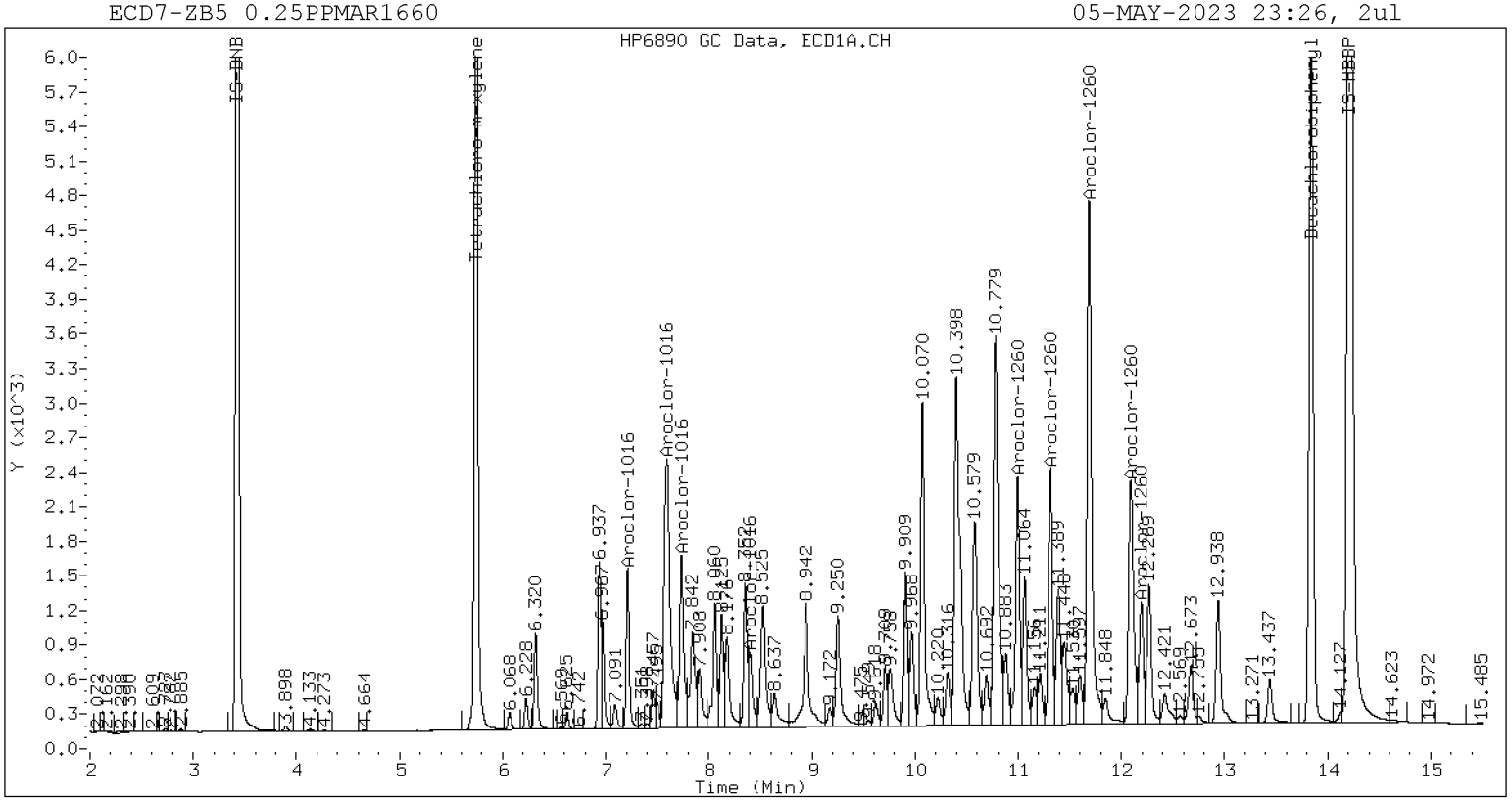
Total PCB Area Col2 (5.728 - 13.968) = 2087295 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

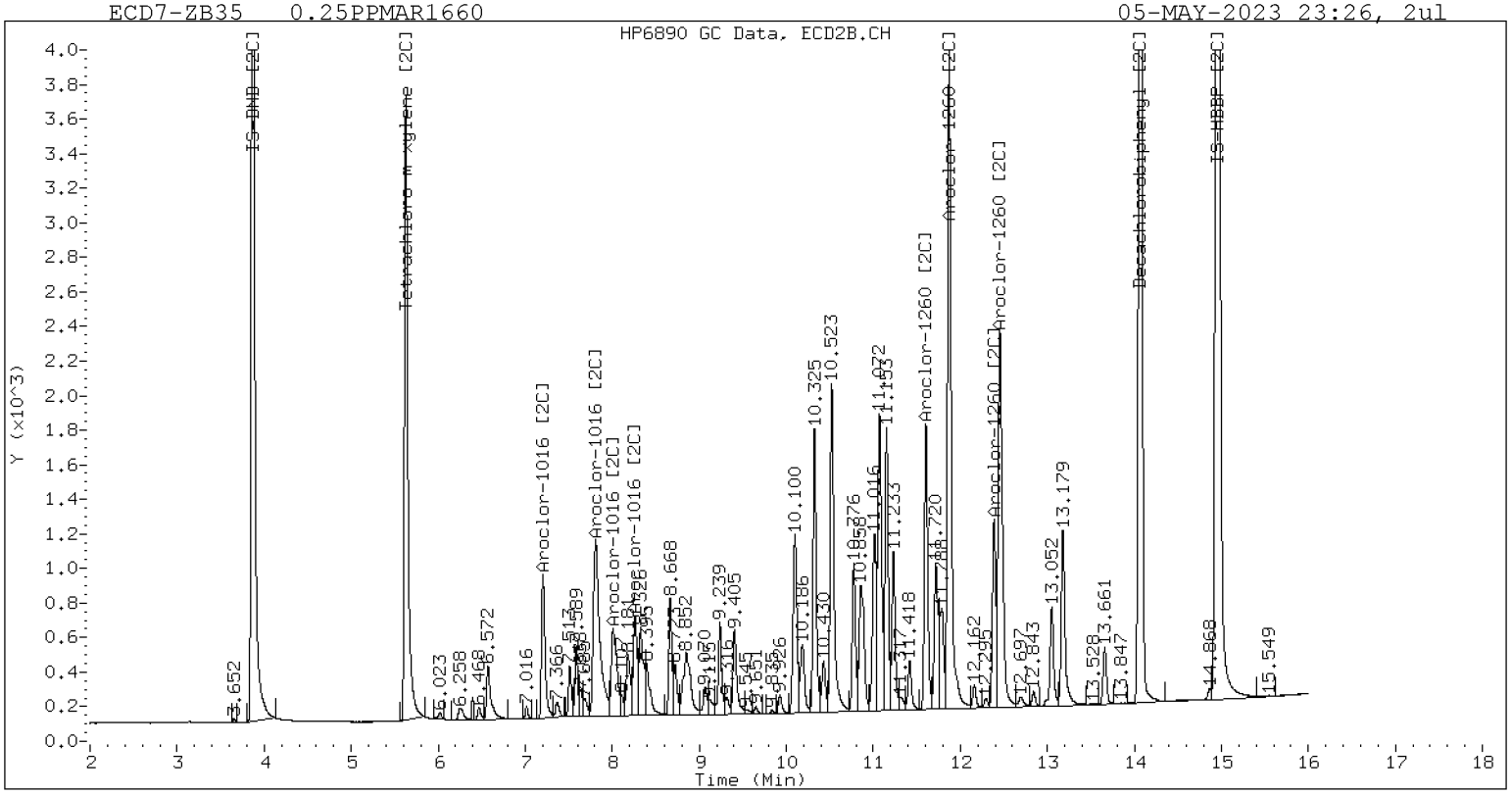
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1660 05-MAY-2023 23:26, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1660 05-MAY-2023 23:26, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052322ECD7.D
Data file 2: /230505.b/230505.b/05052322ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.02PPMAR1660
Client ID:
Injection Date: 05-MAY-2023 23:47
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	28836	5.630	0.002	14779	3.2	3.2	1.4	Tetrachloro-m-xylene
13.843	0.002	31610	14.071	0.002	27131	3.6	2.9	20.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	595544	-1.0
Hexabromobiphenyl	876625	880480	0.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	338730	-3.0
Hexabromobiphenyl	652984	649475	-0.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	4852	21.0	1	7.206	0.002	4368	22.8
Aroclor-1016	2	7.595	0.001	13075	18.1	2	7.819	0.012	8341	20.4
Aroclor-1016	3	7.737	0.004	6514	19.5	3	8.043	0.038	3708	20.6
Aroclor-1016	4	8.400	0.002	2555	18.6	4	8.261	0.002	3078	21.5
Total Col1Ave (4 peaks):					19.3	Total Col2Ave (4 peaks):				21.3 RPD = 10
Corrected Ave (3 peaks):					18.8	Corrected Ave (3 peaks):				20.8 RPD = 10
CalAmt %D:					-3.4	CalAmt %D:				6.6
Aroclor-1260	1	10.998	0.005	10082	21.7	1	11.610	0.004	7378	21.4
Aroclor-1260	2	11.316	0.006	9760	21.2	2	11.878	0.006	18318	20.3
Aroclor-1260	3	11.694	0.008	24587	21.4	3	12.392	0.004	4519	20.2
Aroclor-1260	4	12.098	0.008	12018	21.3	4	12.461	0.006	12454	20.7
Aroclor-1260	5	12.198	0.005	5499	22.4	NS	---			----
Total Col1Ave (5 peaks):					21.6	Total Col2Ave (4 peaks):				20.6 RPD = 4
Corrected Ave (4 peaks):					21.4	Corrected Ave (3 peaks):				20.4 RPD = 5
CalAmt %D:					8.0	CalAmt %D:				3.2

Total PCB Area Col1 (5.842 - 13.740) = 294199 Col1 Total PCB = 0.0 ppm*

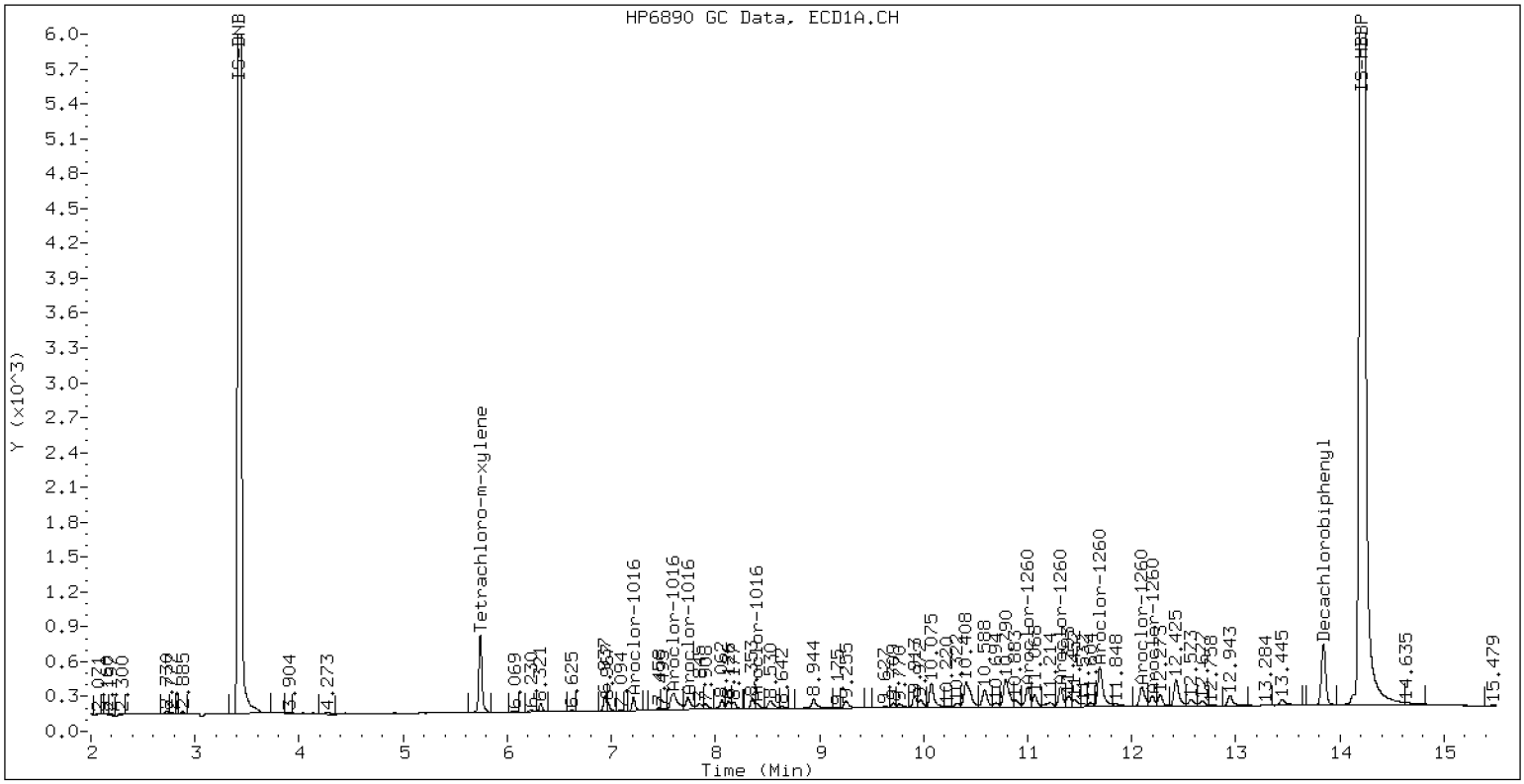
Total PCB Area Col2 (5.728 - 13.968) = 173796 Col2 Total PCB = 0.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

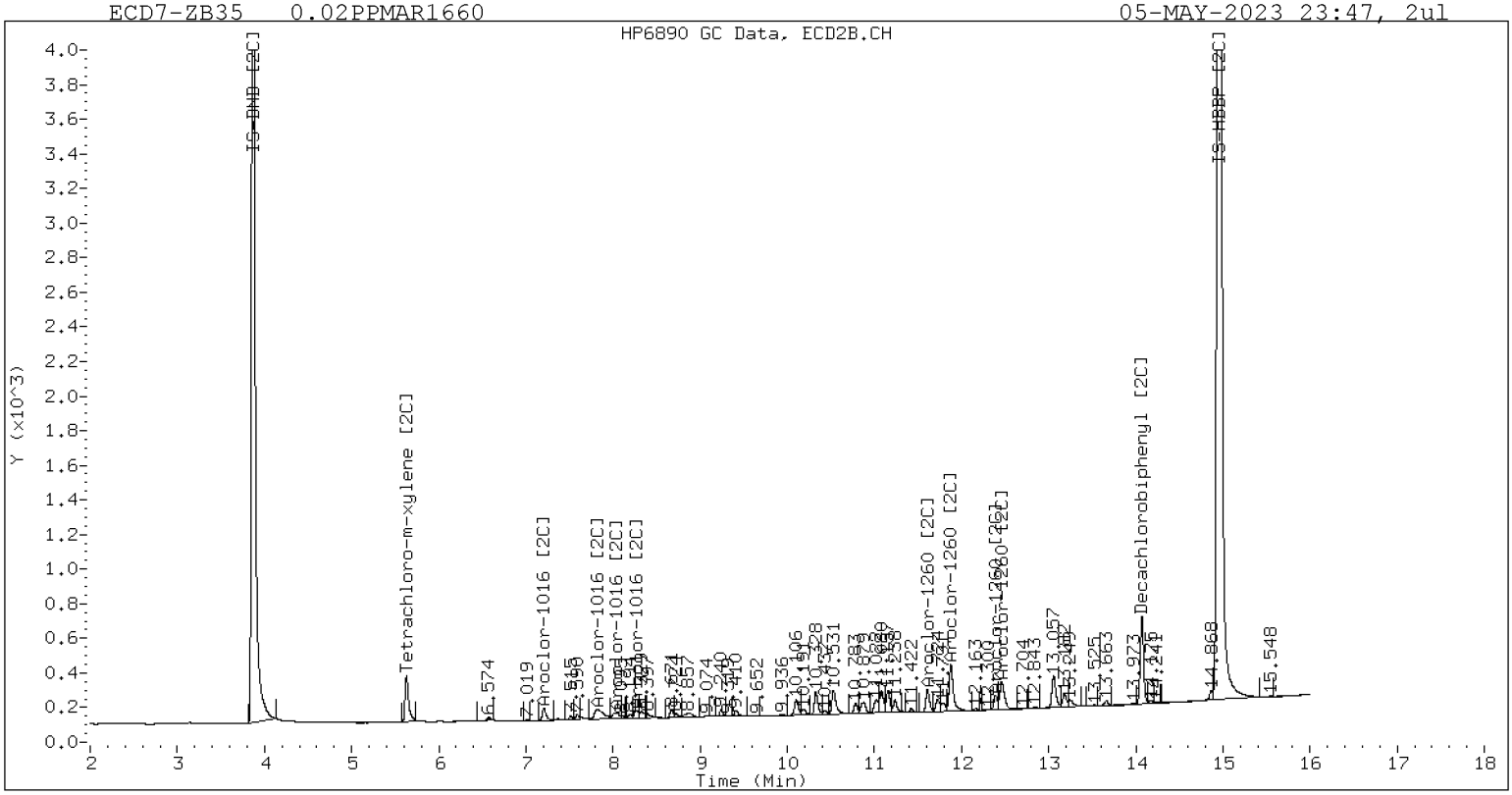
PCB Dual Column Chromatograms

ECD7-ZB5 0.02PPMAR1660 05-MAY-2023 23:47, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.02PPMAR1660 05-MAY-2023 23:47, 2ul

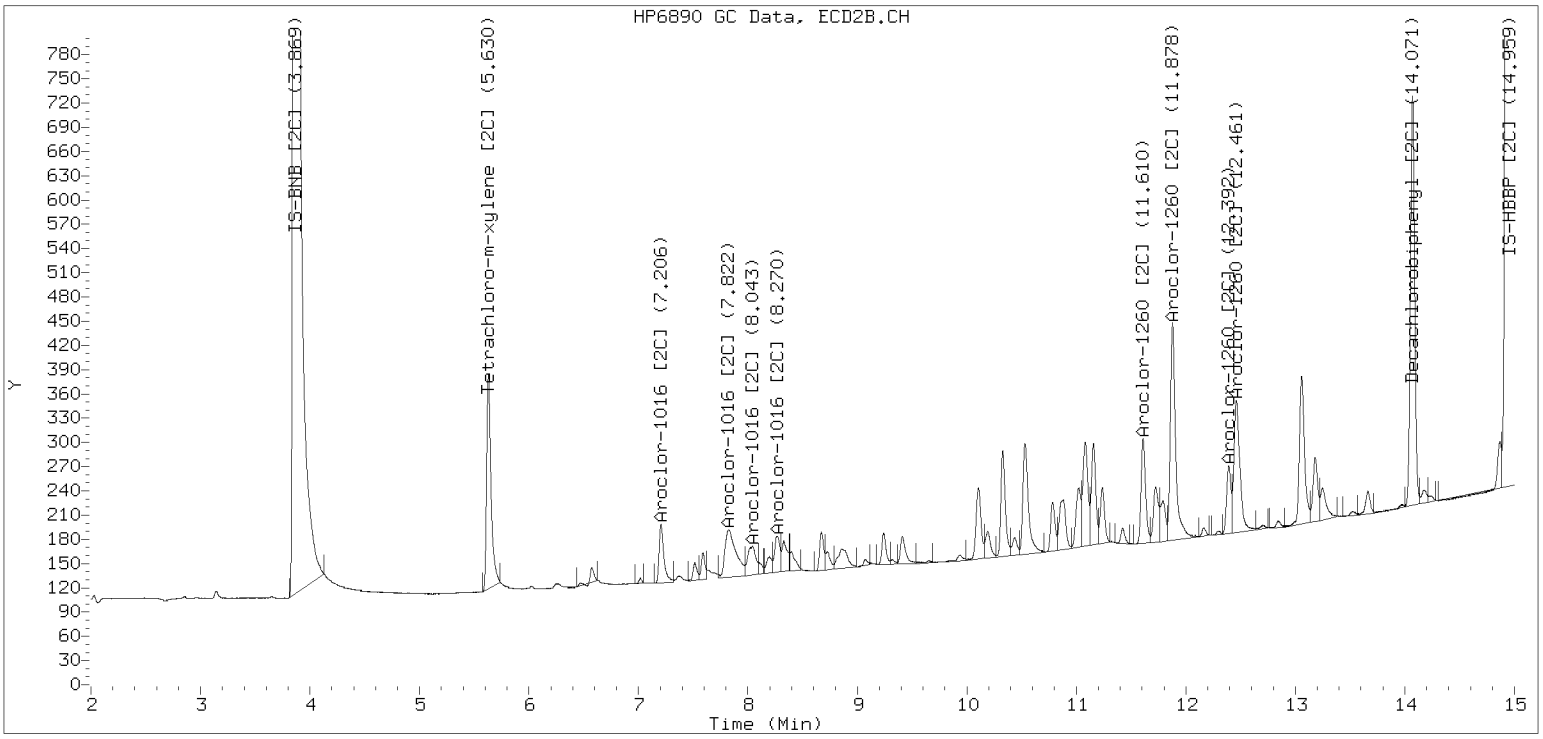


ZB-35 Manual Integration: YES

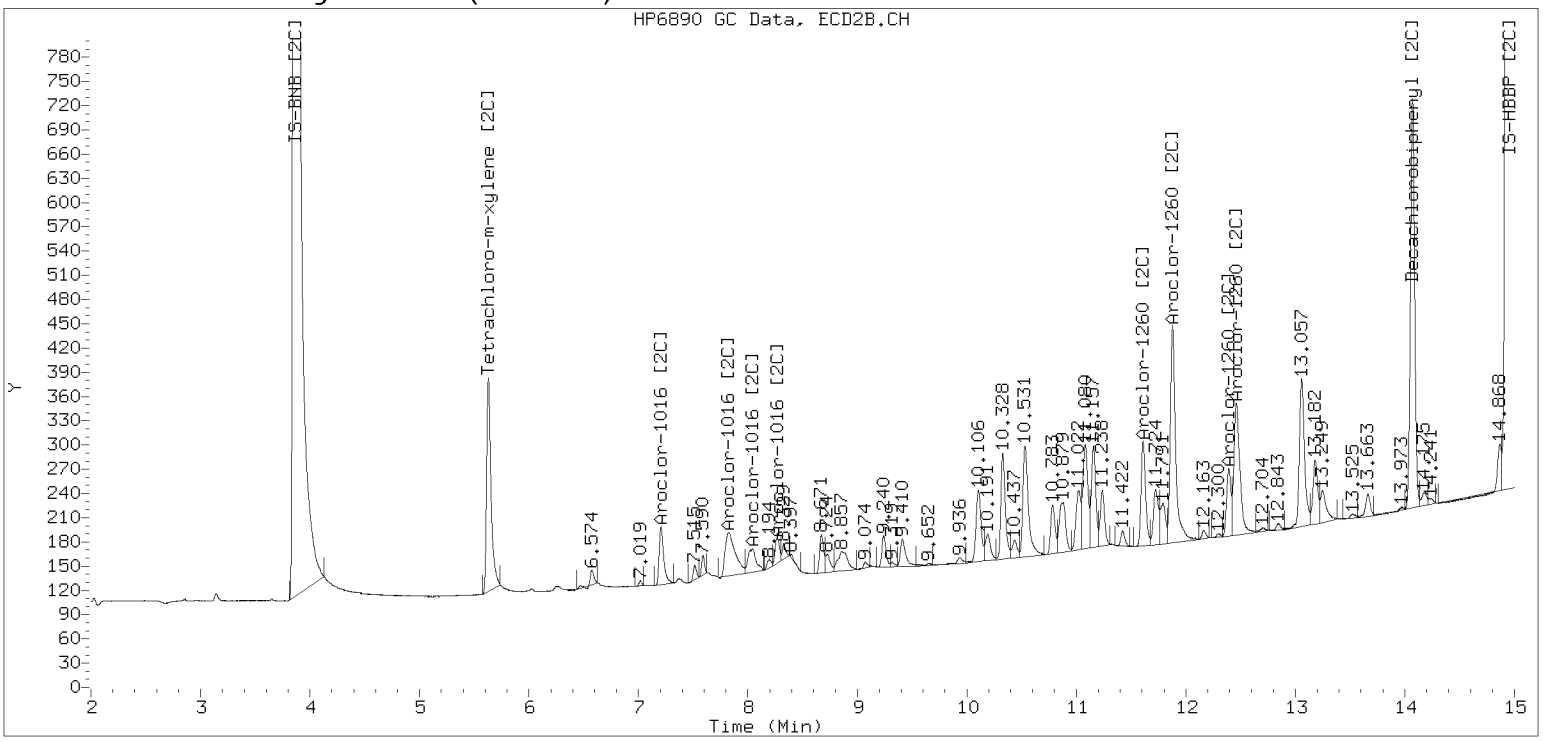
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052322ECD7.D Injection Date: 05-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052323ECD7.D
Data file 2: /230505.b/230505.b/05052323ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.05PPMAR1660
Client ID:
Injection Date: 06-MAY-2023 00:08
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	72149	5.630	0.001	37778	7.9	7.8	0.3	Tetrachloro-m-xylene
13.843	0.002	75564	14.070	0.002	71601	8.4	7.6	10.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	610127	1.4
Hexabromobiphenyl	876625	902634	3.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	350964	0.5
Hexabromobiphenyl	652984	666660	2.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.001	12303	52.1	1	7.205	0.001	10404	52.4
Aroclor-1016	2	7.595	0.000	35912	48.6	2	7.821	0.013	20971	49.5
Aroclor-1016	3	7.736	0.003	18491	54.1	3	8.016	0.010	9788	52.4
Aroclor-1016	4	8.400	0.002	7326	52.0	4	8.264	0.005	8176	55.1
Total Col1Ave (4 peaks):					51.7	Total Col2Ave (4 peaks):				52.4 RPD = 1
Corrected Ave (3 peaks):					50.9	Corrected Ave (3 peaks):				51.4 RPD = 1
CalAmt %D:					3.4	CalAmt %D:				4.7
Aroclor-1260	1	10.998	0.005	23619	49.5	1	11.609	0.003	17805	50.3
Aroclor-1260	2	11.316	0.006	23213	49.3	2	11.876	0.004	46188	49.9
Aroclor-1260	3	11.693	0.007	58862	49.9	3	12.391	0.003	11048	48.1
Aroclor-1260	4	12.096	0.006	28206	48.8	4	12.460	0.004	30586	49.4
Aroclor-1260	5	12.197	0.004	12672	50.3	NS	---			----
Total Col1Ave (5 peaks):					49.6	Total Col2Ave (4 peaks):				49.4 RPD = 0
Corrected Ave (4 peaks):					49.4	Corrected Ave (3 peaks):				49.2 RPD = 0
CalAmt %D:					-0.9	CalAmt %D:				-1.1

Total PCB Area Col1 (5.842 - 13.740) = 697433 Col1 Total PCB = 0.1 ppm*

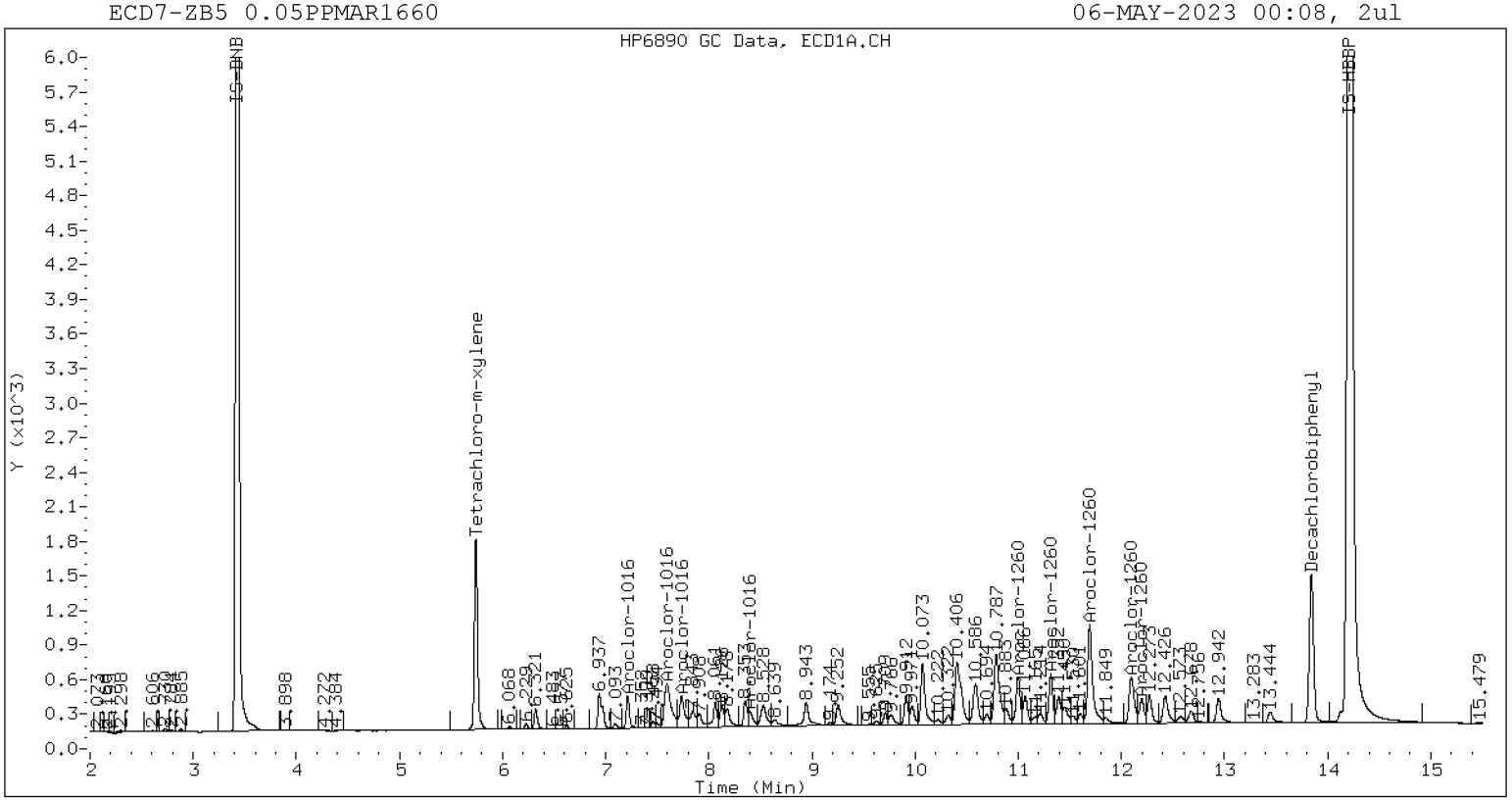
Total PCB Area Col2 (5.728 - 13.968) = 429325 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

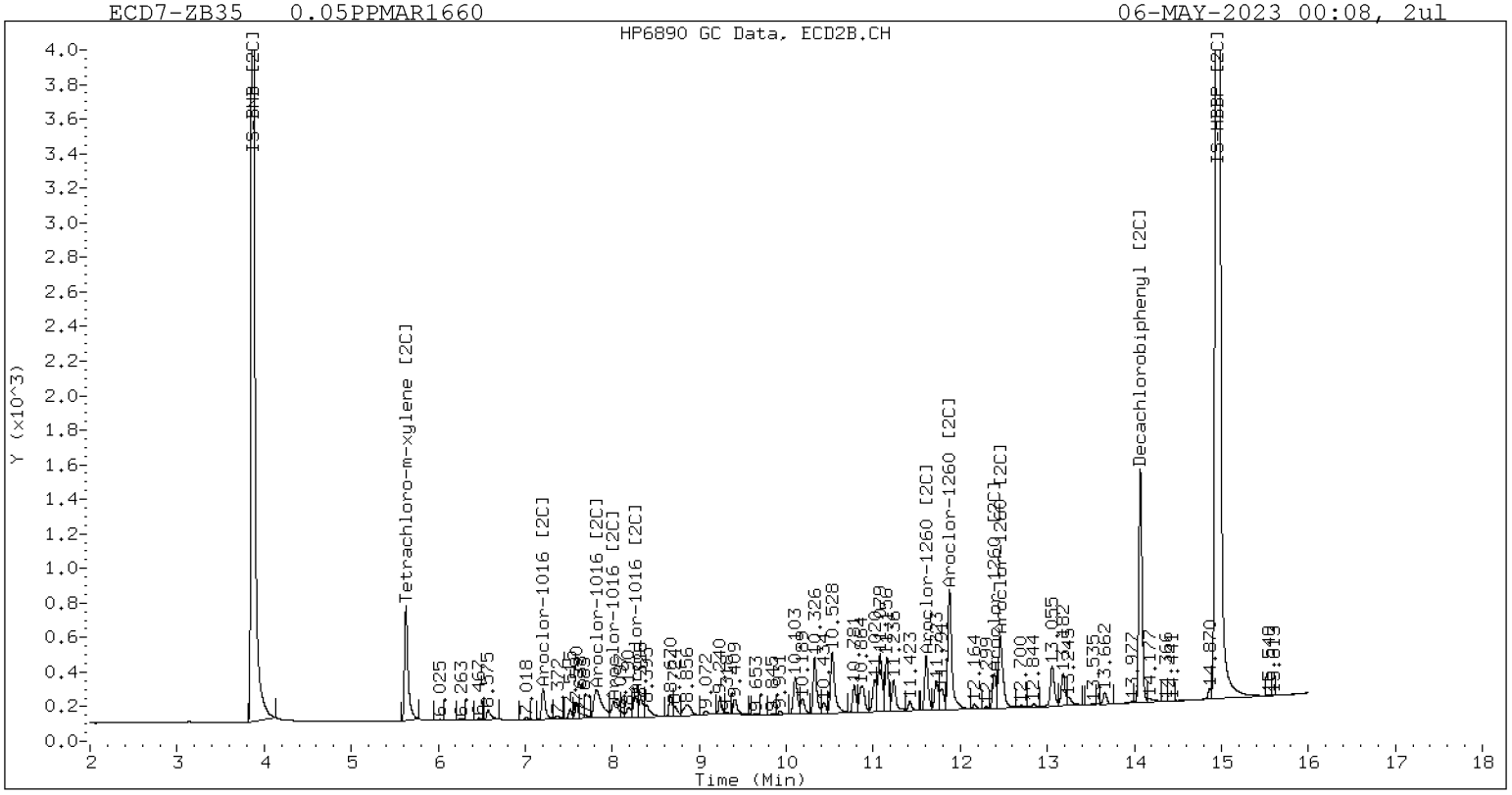
PCB Dual Column Chromatograms

ECD7-ZB5 0.05PPMAR1660 06-MAY-2023 00:08, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.05PPMAR1660 06-MAY-2023 00:08, 2ul

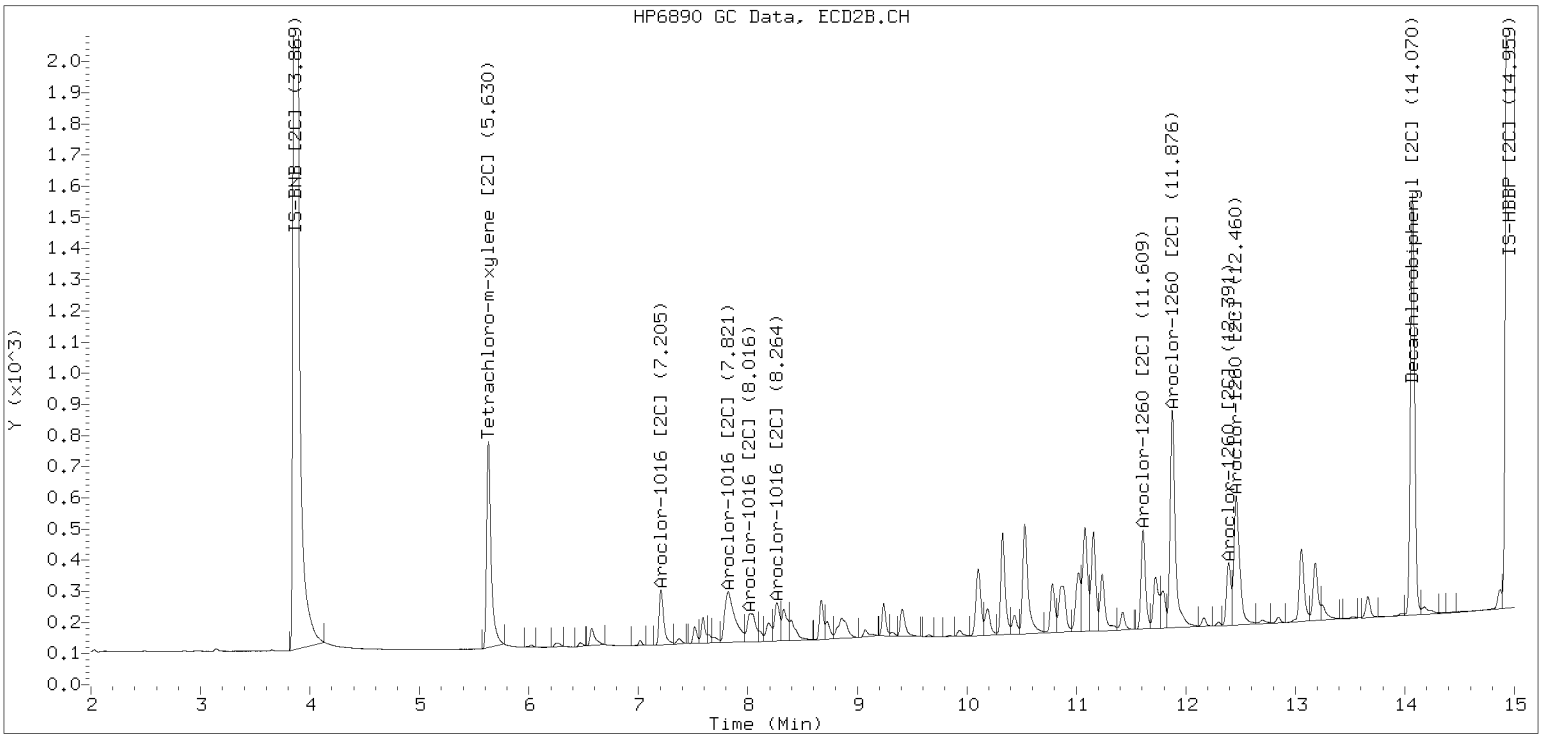


ZB-35 Manual Integration: YES

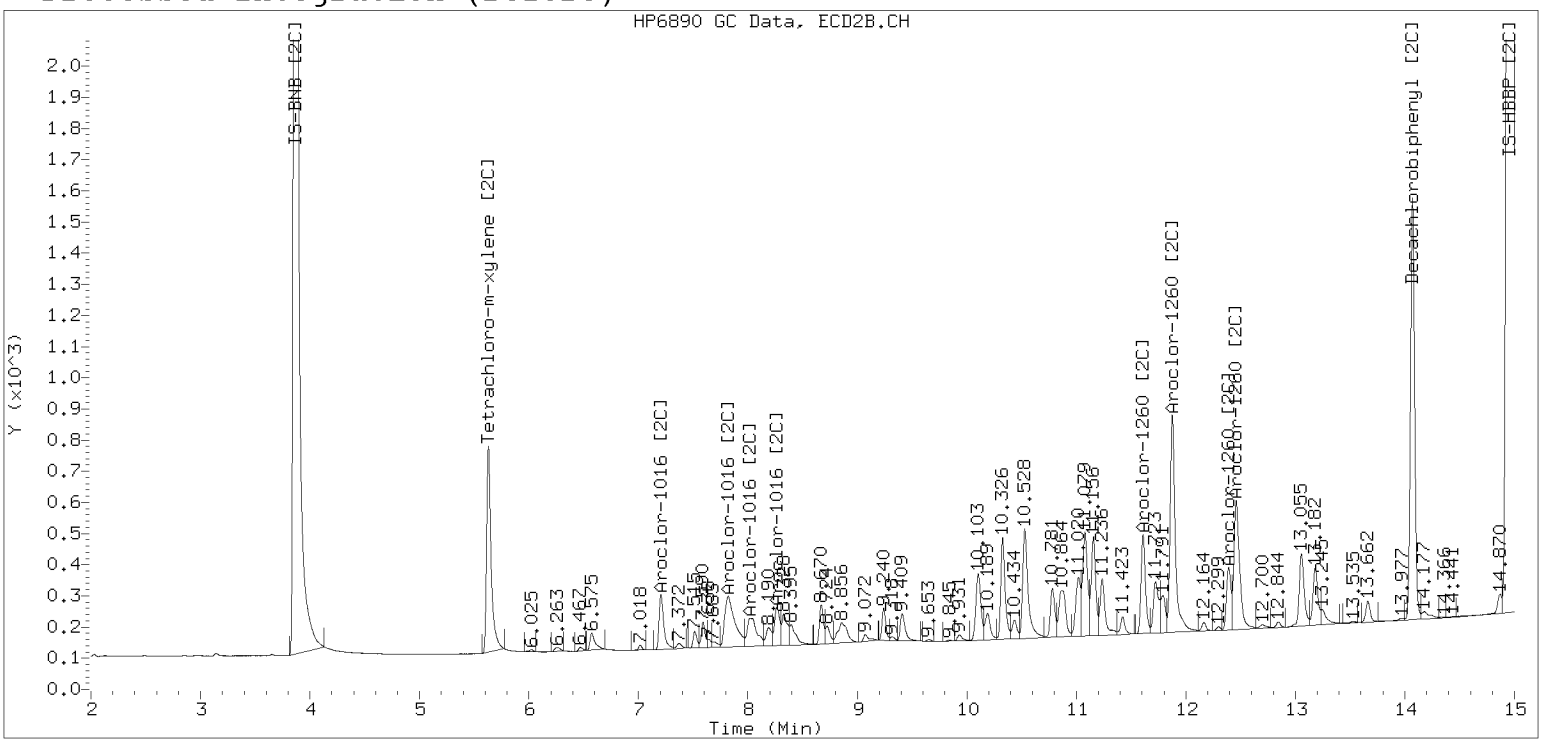
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052323ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052324ECD7.D
Data file 2: /230505.b/230505.b/05052324ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 1.0PPMAR1660
Client ID:
Injection Date: 06-MAY-2023 00:29
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.746	0.004	1354956	5.627	-0.001	709704	151.5	152.0	0.4	Tetrachloro-m-xylene
13.842	0.002	1208957	14.071	0.002	1442827	141.2	159.2	12.0	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	594005	-1.2
Hexabromobiphenyl	876625	857318	-2.2

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	339380	-2.8
Hexabromobiphenyl	652984	638394	-2.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	192466	836.8	1	7.203	-0.001	161296	839.6
Aroclor-1016	2	7.595	0.000	687116	955.4	2	7.804	-0.003	383432	936.5
Aroclor-1016	3	7.732	-0.000	284089	854.4	3	8.002	-0.003	161269	893.1
Aroclor-1016	4	8.397	-0.001	121539	886.0	4	8.257	-0.002	118708	827.5
	Total Col1Ave (4 peaks):				883.2	Total Col2Ave (4 peaks):				874.2 RPD = 1
	Corrected Ave (3 peaks):				859.1	Corrected Ave (3 peaks):				853.4 RPD = 1
			CalAmt %D:		-11.7			CalAmt %D:		-12.6
Aroclor-1260	1	10.992	-0.001	410905	906.4	1	11.604	-0.002	304531	898.2
Aroclor-1260	2	11.309	-0.001	410553	917.6	2	11.869	-0.003	813835	917.7
Aroclor-1260	3	11.683	-0.003	1014157	905.1	3	12.387	-0.001	218887	996.0
Aroclor-1260	4	12.087	-0.003	505824	921.7	4	12.453	-0.003	543988	918.3
Aroclor-1260	5	12.193	-0.001	212396	887.6	NS	---			----
	Total Col1Ave (5 peaks):				907.7	Total Col2Ave (4 peaks):				932.6 RPD = 3
	Corrected Ave (4 peaks):				904.2	Corrected Ave (3 peaks):				911.4 RPD = 1
			CalAmt %D:		-9.2			CalAmt %D:		-6.7

Total PCB Area Col1 (5.842 - 13.740) = 11665793 Col1 Total PCB = 1.8 ppm*

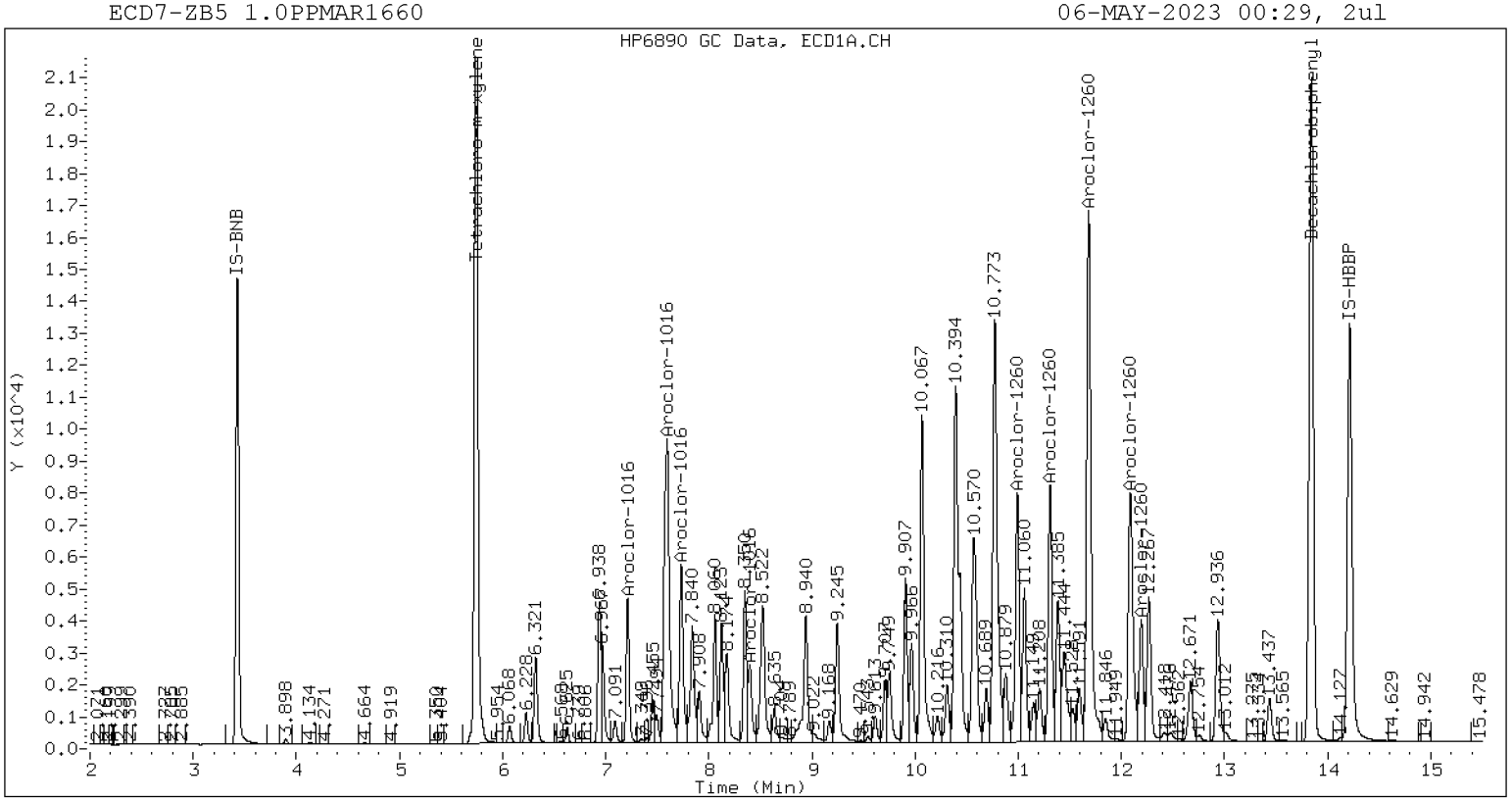
Total PCB Area Col2 (5.728 - 13.968) = 7382788 Col2 Total PCB = 1.8 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

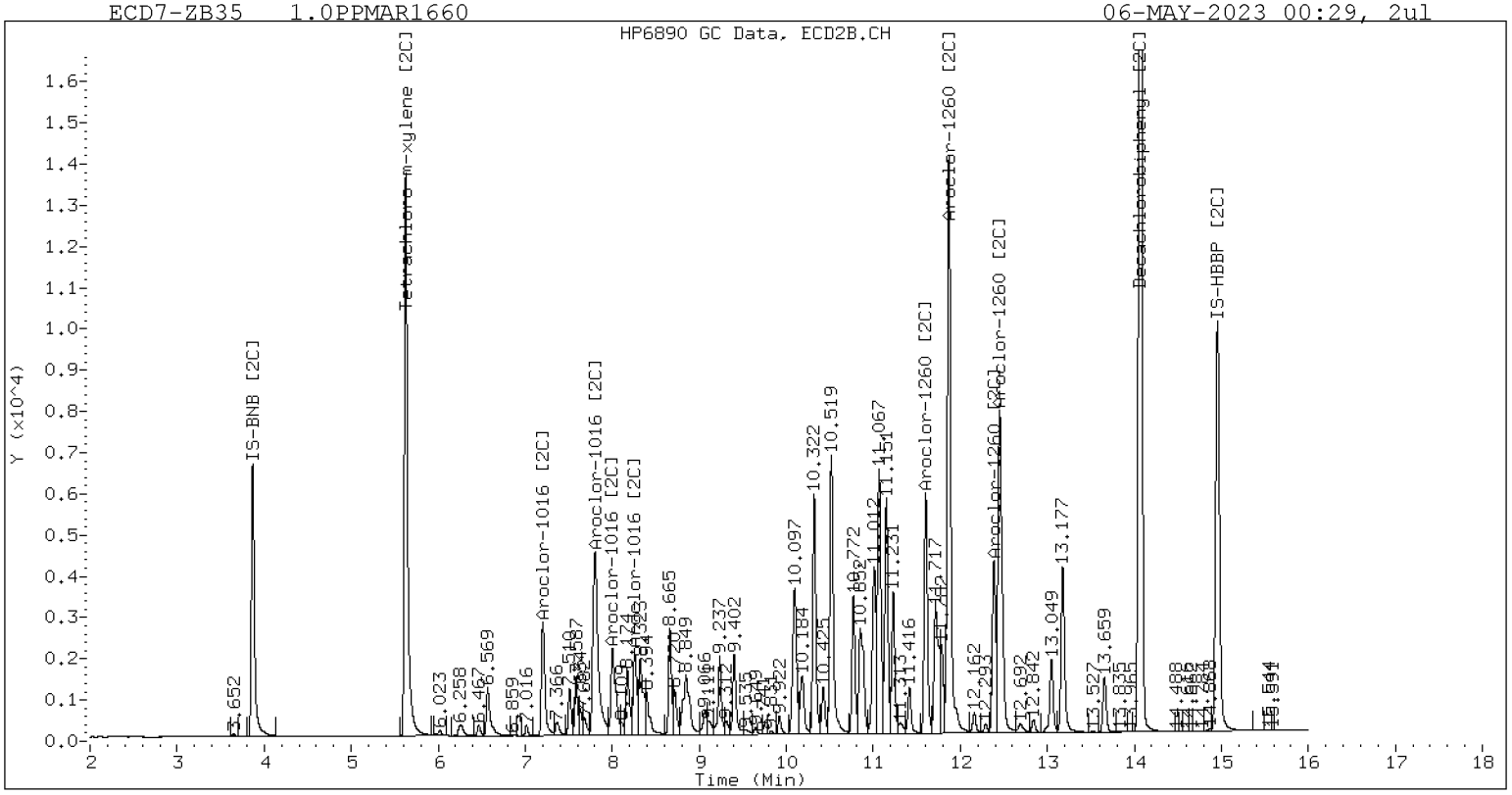
PCB Dual Column Chromatograms

ECD7-ZB5 1.0PPMAR1660 06-MAY-2023 00:29, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 1.0PPMAR1660 06-MAY-2023 00:29, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052325ECD7.D
Data file 2: /230505.b/230505.b/05052325ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.1PPMAR1660
Client ID:
Injection Date: 06-MAY-2023 00:50
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	166260	5.629	0.000	87721	17.3	17.2	0.5	Tetrachloro-m-xylene
13.841	0.000	162151	14.069	0.001	170994	17.0	17.2	1.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	639496	6.3
Hexabromobiphenyl	876625	955499	9.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	371294	6.3
Hexabromobiphenyl	652984	700767	7.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	-0.000	27672	111.8	1	7.204	0.000	22585	107.5
Aroclor-1016	2	7.595	0.000	84096	108.6	2	7.815	0.008	47261	105.5
Aroclor-1016	3	7.735	0.002	40718	113.8	3	8.012	0.007	21450	108.6
Aroclor-1016	4	8.399	0.001	17000	115.1	4	8.262	0.003	17337	110.5
Total Col1Ave (4 peaks):					112.3	Total Col2Ave (4 peaks):				108.0 RPD = 4
Corrected Ave (3 peaks):					111.4	Corrected Ave (3 peaks):				107.2 RPD = 4
CalAmt %D:					12.3	CalAmt %D:				8.0
Aroclor-1260	1	10.995	0.002	53621	106.1	1	11.608	0.002	39451	106.0
Aroclor-1260	2	11.313	0.003	53001	106.3	2	11.874	0.002	104406	107.3
Aroclor-1260	3	11.690	0.004	132765	106.3	3	12.391	0.003	24449	101.4
Aroclor-1260	4	12.093	0.003	64276	105.1	4	12.457	0.002	68859	105.9
Aroclor-1260	5	12.196	0.003	28307	106.1	NS	---			----
Total Col1Ave (5 peaks):					106.0	Total Col2Ave (4 peaks):				105.1 RPD = 1
Corrected Ave (4 peaks):					105.9	Corrected Ave (3 peaks):				104.4 RPD = 1
CalAmt %D:					6.0	CalAmt %D:				5.1

Total PCB Area Col1 (5.842 - 13.740) = 1580756 Col1 Total PCB = 0.2 ppm*

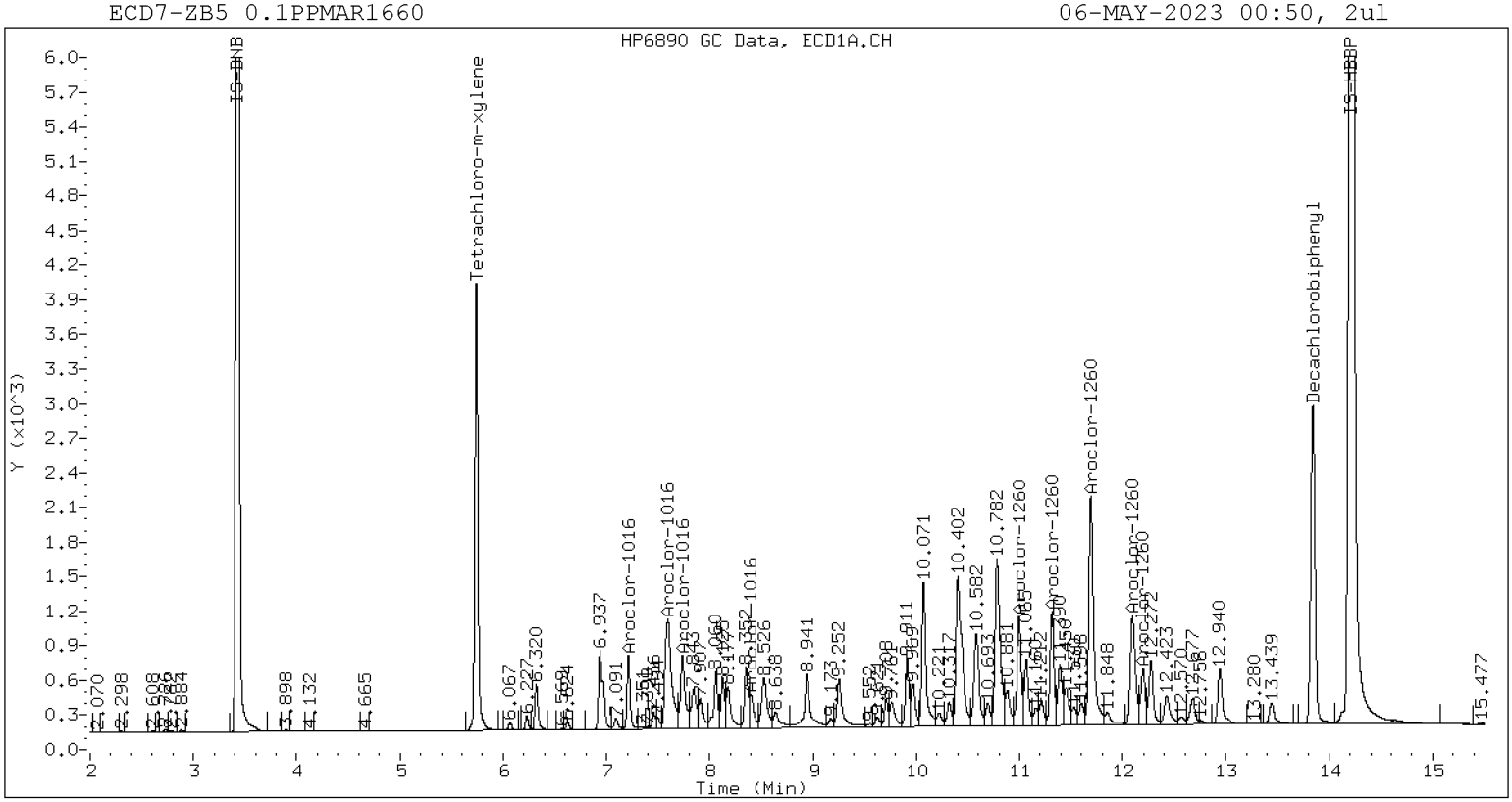
Total PCB Area Col2 (5.728 - 13.968) = 950746 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

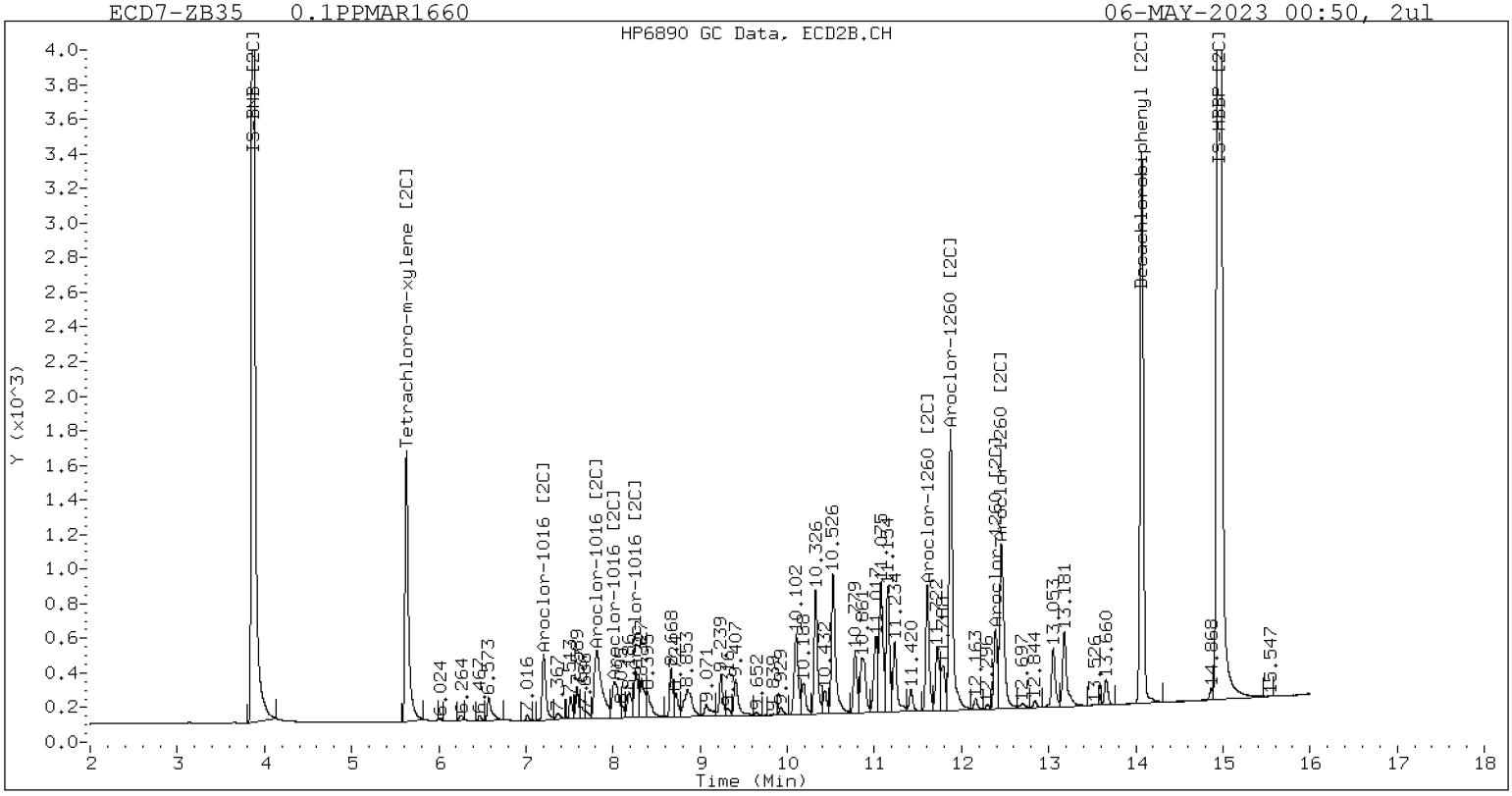
PCB Dual Column Chromatograms

ECD7-ZB5 0.1PPMAR1660 06-MAY-2023 00:50, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.1PPMAR1660 06-MAY-2023 00:50, 2ul

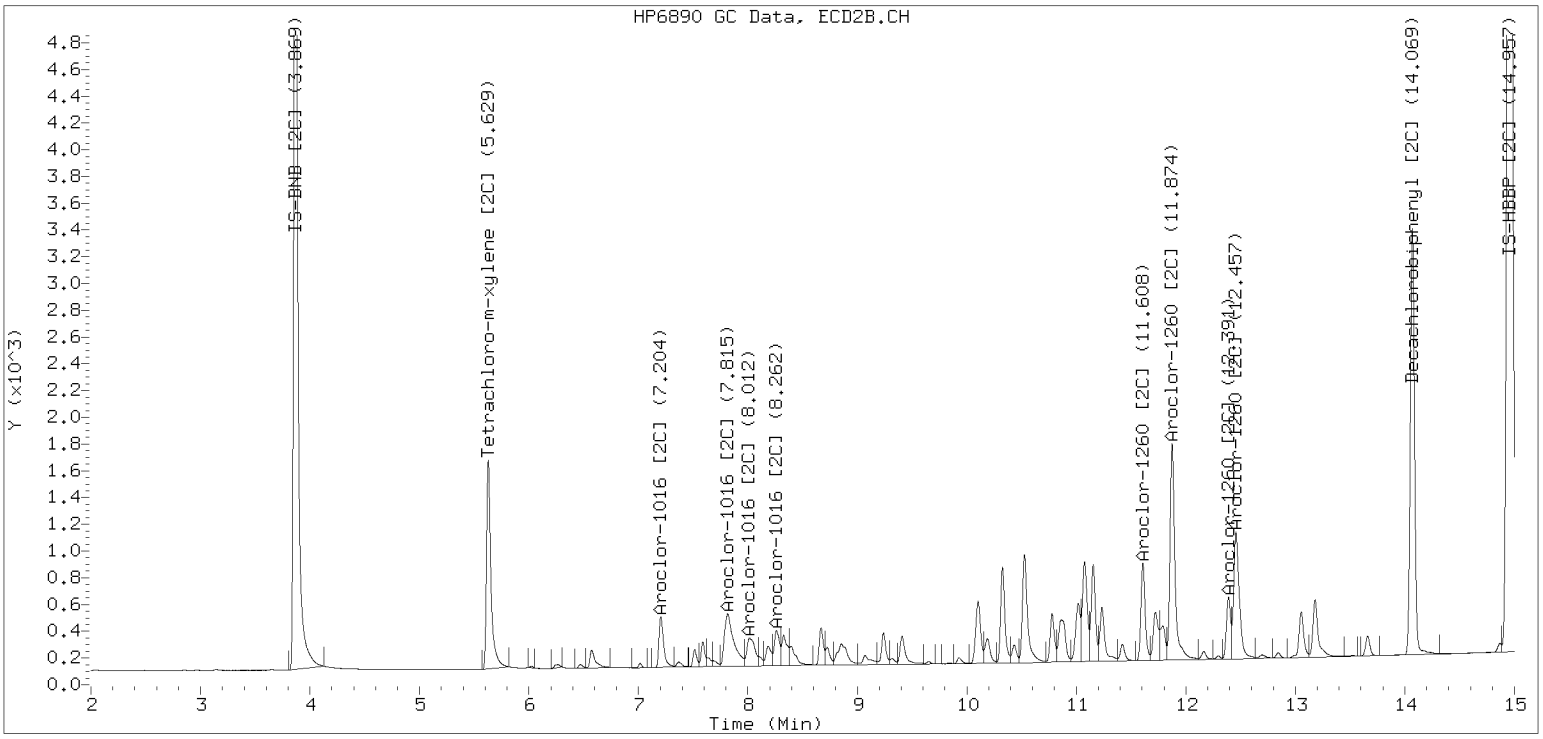


ZB-35 Manual Integration: YES

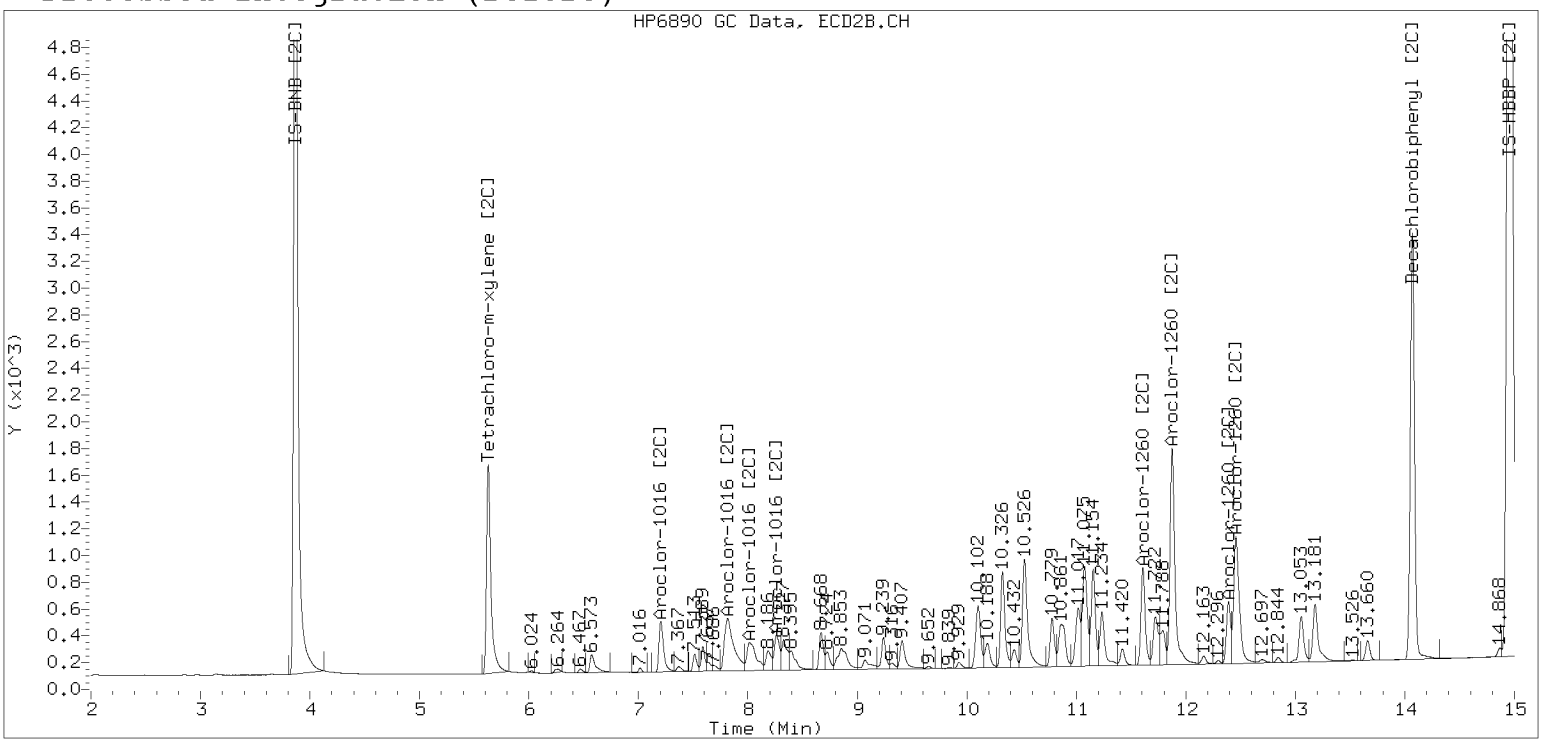
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052325ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052326ECD7.D
Data file 2: /230505.b/230505.b/05052326ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.5PPMAR1660
Client ID:
Injection Date: 06-MAY-2023 01:11
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	726106	5.629	0.000	386361	77.6	78.4	1.0	Tetrachloro-m-xylene
13.842	0.002	662159	14.070	0.002	782852	72.8	82.0	11.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	621250	3.3
Hexabromobiphenyl	876625	910647	3.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	358174	2.5
Hexabromobiphenyl	652984	672444	3.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	0.000	112948	469.5	1	7.204	0.000	93114	459.2
Aroclor-1016	2	7.594	0.000	385708	512.8	2	7.808	0.000	213293	493.6
Aroclor-1016	3	7.733	0.000	163263	469.5	3	8.006	0.000	90569	475.2
Aroclor-1016	4	8.398	0.000	69235	482.6	4	8.259	0.000	69045	456.1
Total Col1Ave (4 peaks):					483.6	Total Col2Ave (4 peaks):				471.0 RPD = 3
Corrected Ave (3 peaks):					473.9	Corrected Ave (3 peaks):				463.5 RPD = 2
CalAmt %D:					-3.3	CalAmt %D:				-5.8
Aroclor-1260	1	10.993	0.000	231157	480.0	1	11.606	0.000	171304	479.7
Aroclor-1260	2	11.310	0.000	230103	484.2	2	11.872	0.000	454515	486.6
Aroclor-1260	3	11.686	0.000	571583	480.2	3	12.388	0.000	116621	503.8
Aroclor-1260	4	12.090	0.000	284345	487.8	4	12.455	0.000	305334	489.3
Aroclor-1260	5	12.193	0.000	119534	470.3	NS	---			----
Total Col1Ave (5 peaks):					480.5	Total Col2Ave (4 peaks):				489.8 RPD = 2
Corrected Ave (4 peaks):					478.7	Corrected Ave (3 peaks):				485.2 RPD = 1
CalAmt %D:					-3.9	CalAmt %D:				-2.0

Total PCB Area Col1 (5.842 - 13.740) = 6615607 Col1 Total PCB = 1.0 ppm*

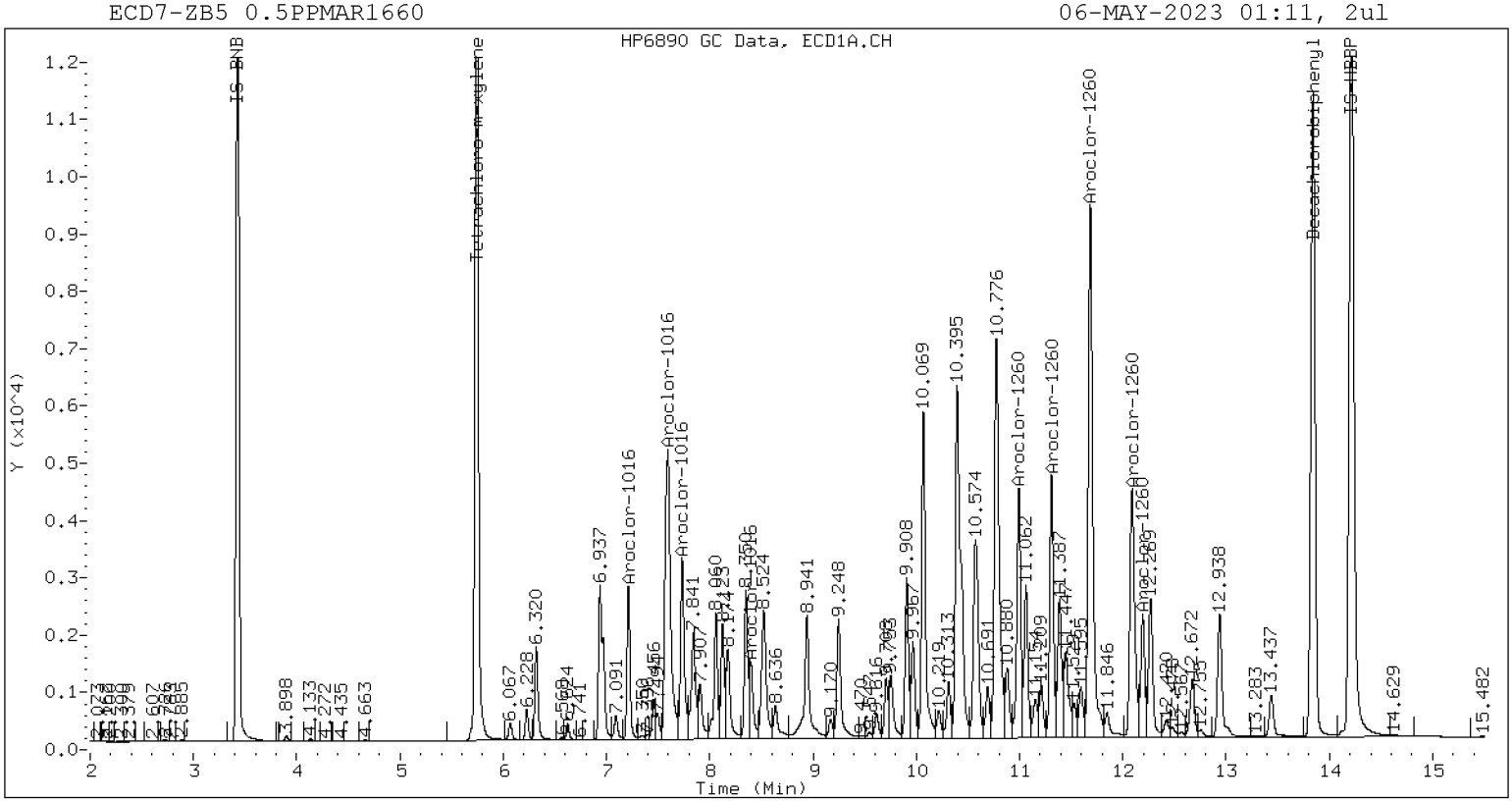
Total PCB Area Col2 (5.728 - 13.968) = 4121423 Col2 Total PCB = 1.0 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

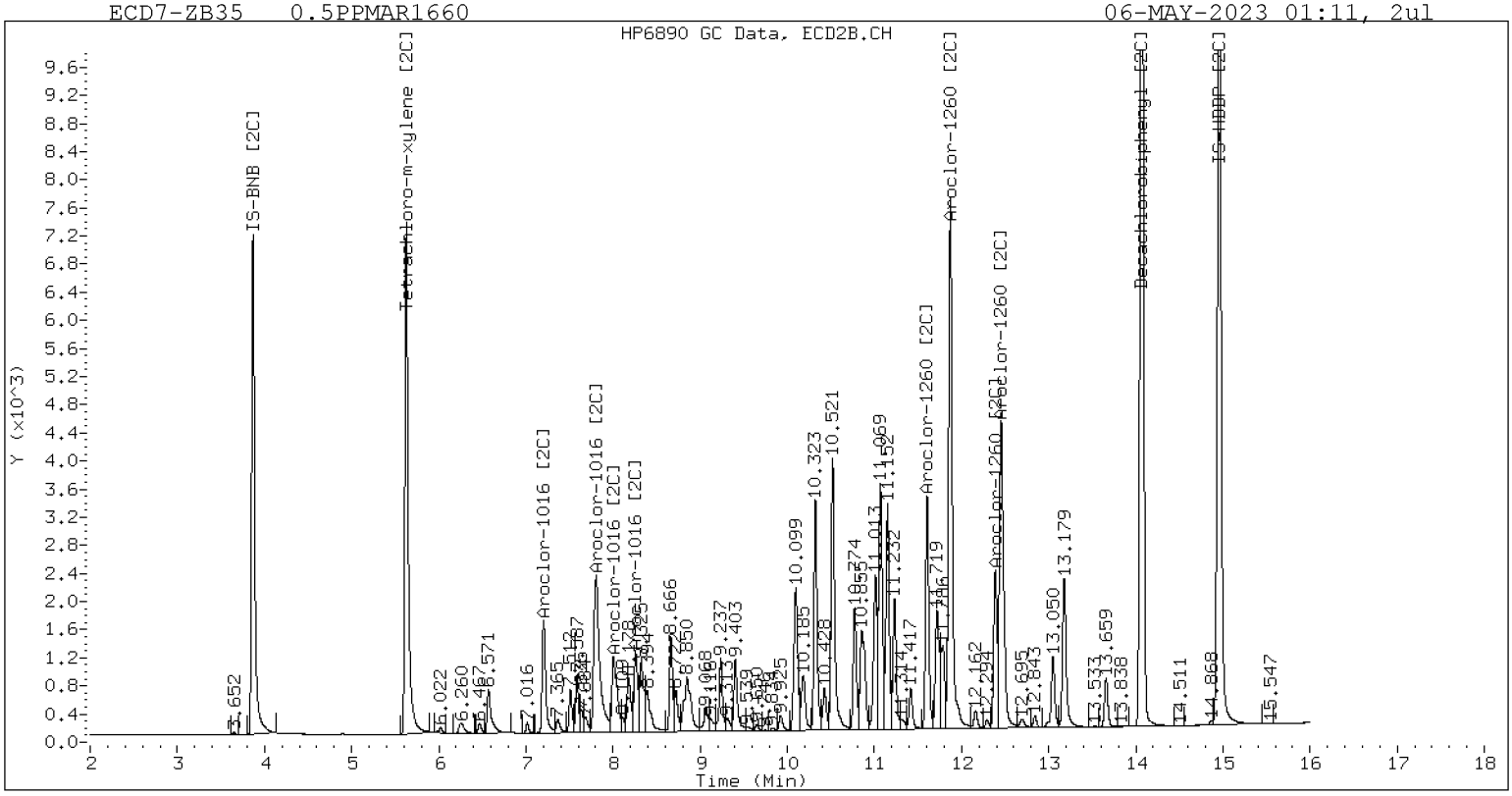
PCB Dual Column Chromatograms

ECD7-ZB5 0.5PPMAR1660 06-MAY-2023 01:11, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.5PPMAR1660 06-MAY-2023 01:11, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052327ECD7.D
Data file 2: /230505.b/230505.b/05052327ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1242
Client ID:
Injection Date: 06-MAY-2023 01:31
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	447397	5.627	-0.001	235808	47.5	47.6	0.3	Tetrachloro-m-xylene
13.842	0.001	336070	14.068	0.000	375985	36.4	38.8	6.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	625349	4.0
Hexabromobiphenyl	876625	923197	5.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	359808	3.0
Hexabromobiphenyl	652984	683116	4.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.212	0.000	49262	250.0	1	7.203	0.000	40200	250.0
Aroclor-1242	2	7.595	0.000	156103	250.0	2	7.812	0.000	85524	250.0
Aroclor-1242	3	8.398	0.000	30193	250.0	3	9.123	0.000	27418	250.0
Aroclor-1242	4	8.525	0.000	69876	250.0	4	9.550	0.000	33043	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 1203666 Col1 Total PCB = 0.2 ppm*

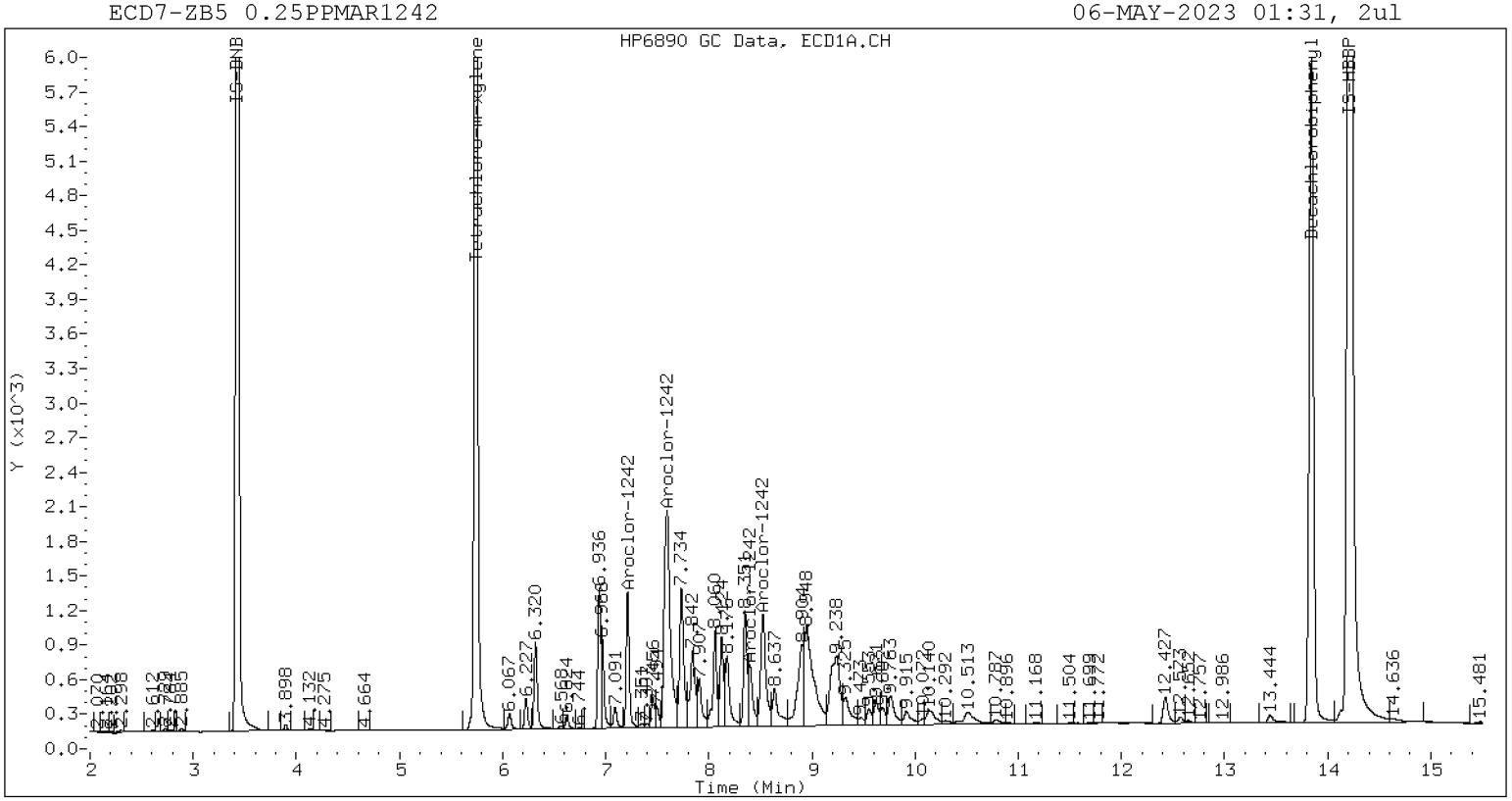
Total PCB Area Col2 (5.728 - 13.968) = 643088 Col2 Total PCB = 0.1 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

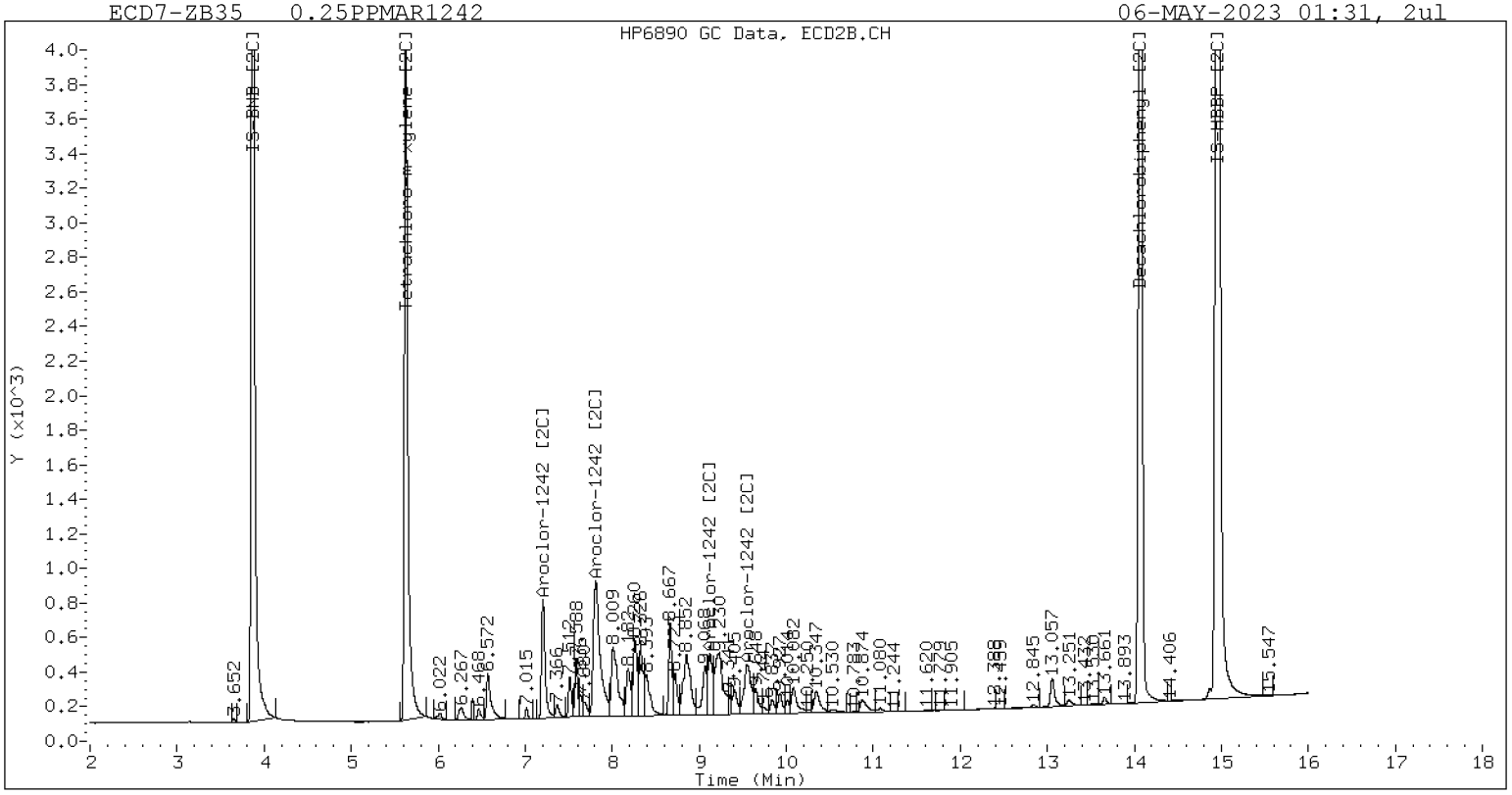
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1242 06-MAY-2023 01:31, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1242 06-MAY-2023 01:31, 2ul

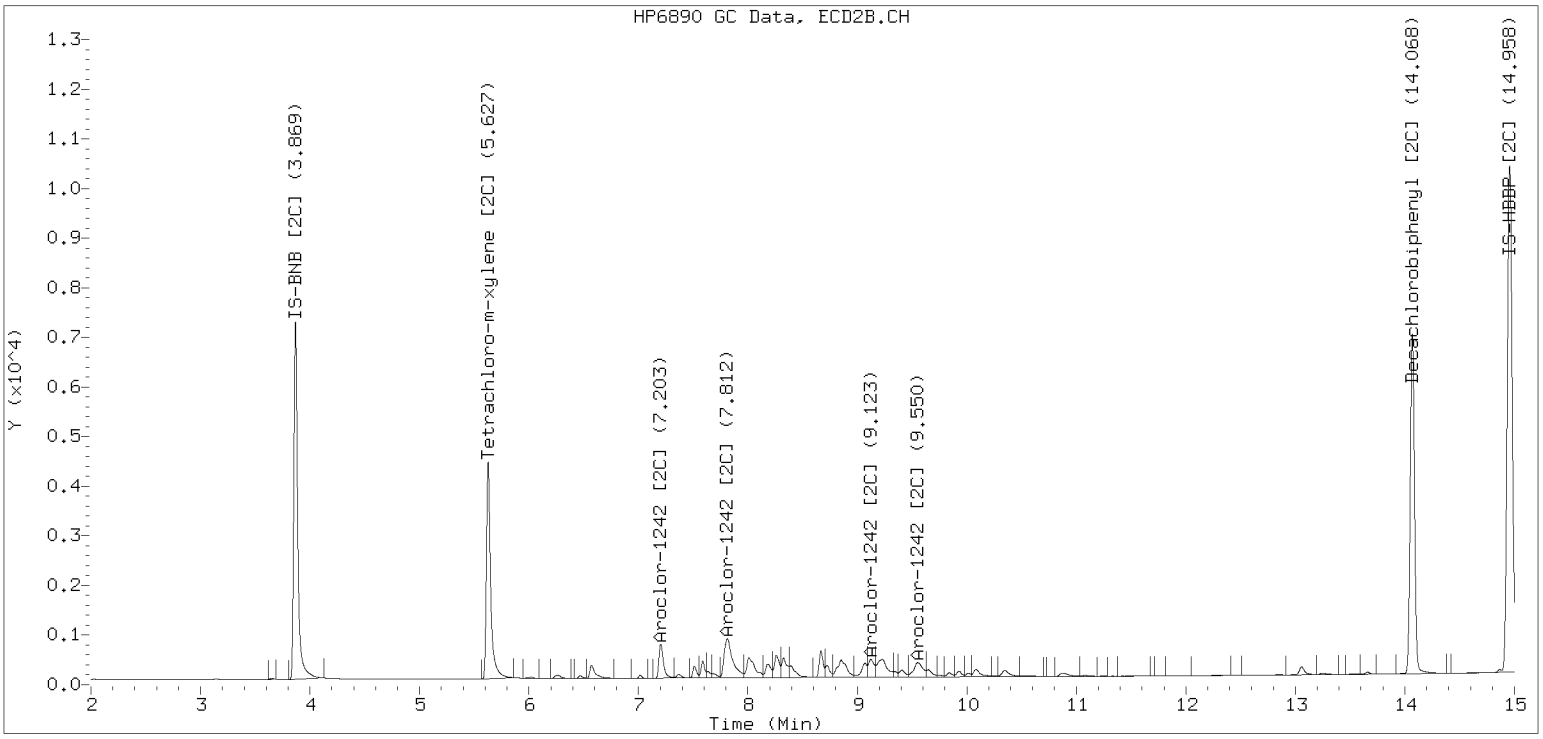


ZB-35 Manual Integration: YES

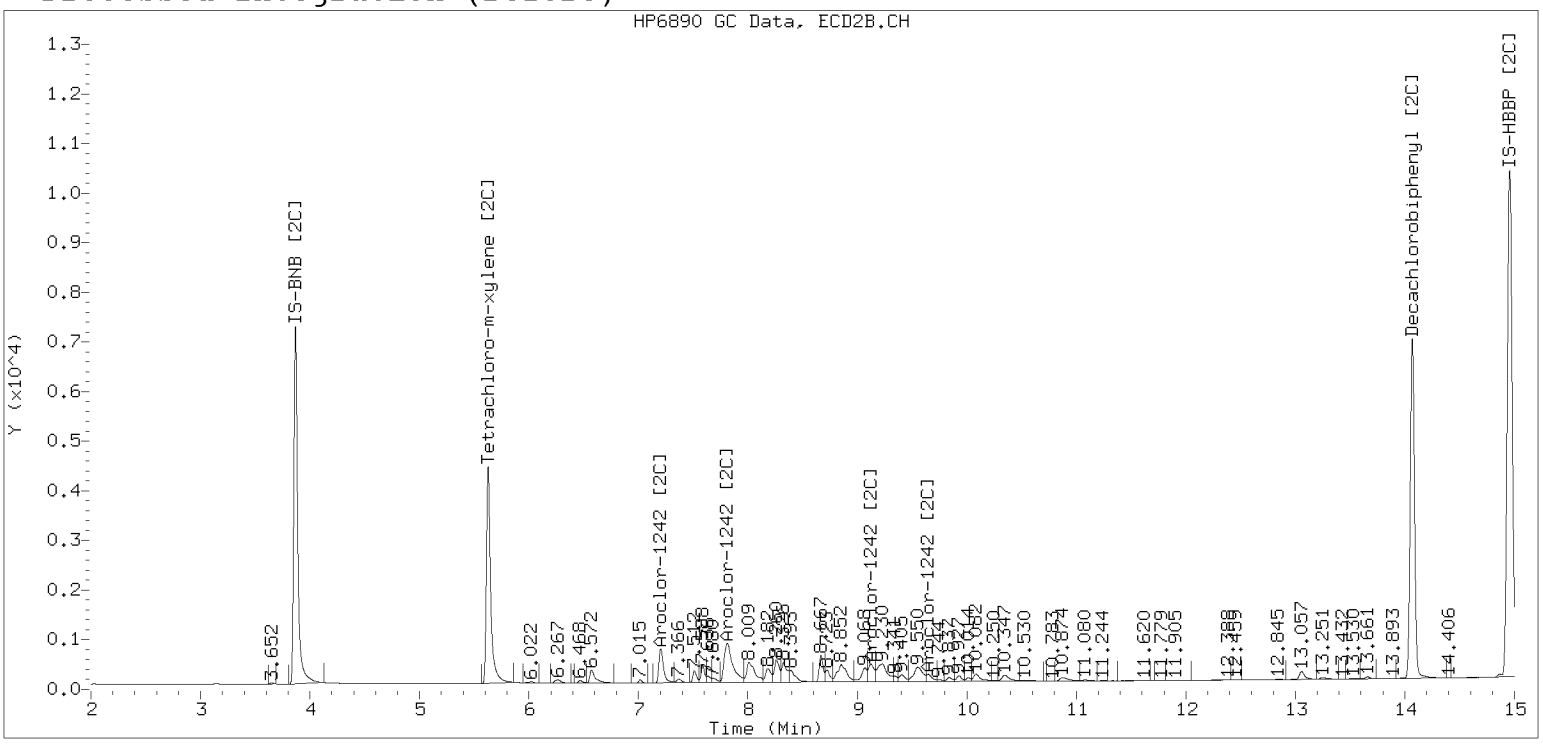
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052327ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052328ECD7.D
Data file 2: /230505.b/230505.b/05052328ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1248
Client ID:
Injection Date: 06-MAY-2023 01:52
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	363354	5.628	-0.000	193087	38.8	39.5	1.9	Tetrachloro-m-xylene
13.843	0.003	347513	14.070	0.002	386262	38.0	40.3	5.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	621905	3.4
Hexabromobiphenyl	876625	915805	4.5

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	354920	1.6
Hexabromobiphenyl	652984	674778	3.3

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.399	0.000	39684	250.0	1	8.260	0.000	42211	250.0
Aroclor-1248	2	8.524	0.000	103126	250.0	2	8.667	0.000	44588	250.0
Aroclor-1248	3	8.944	0.000	198327	250.0	3	9.120	0.000	52266	250.0
Aroclor-1248	4	9.243	0.000	101099	250.0	4	9.546	0.000	62674	250.0

Total Col1Ave (4 peaks): 250.0 Total Col2Ave (4 peaks): 250.0 RPD = 0

Corrected Ave (3 peaks): 250.0 Corrected Ave (3 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 1607435 Col1 Total PCB = 0.2 ppm*

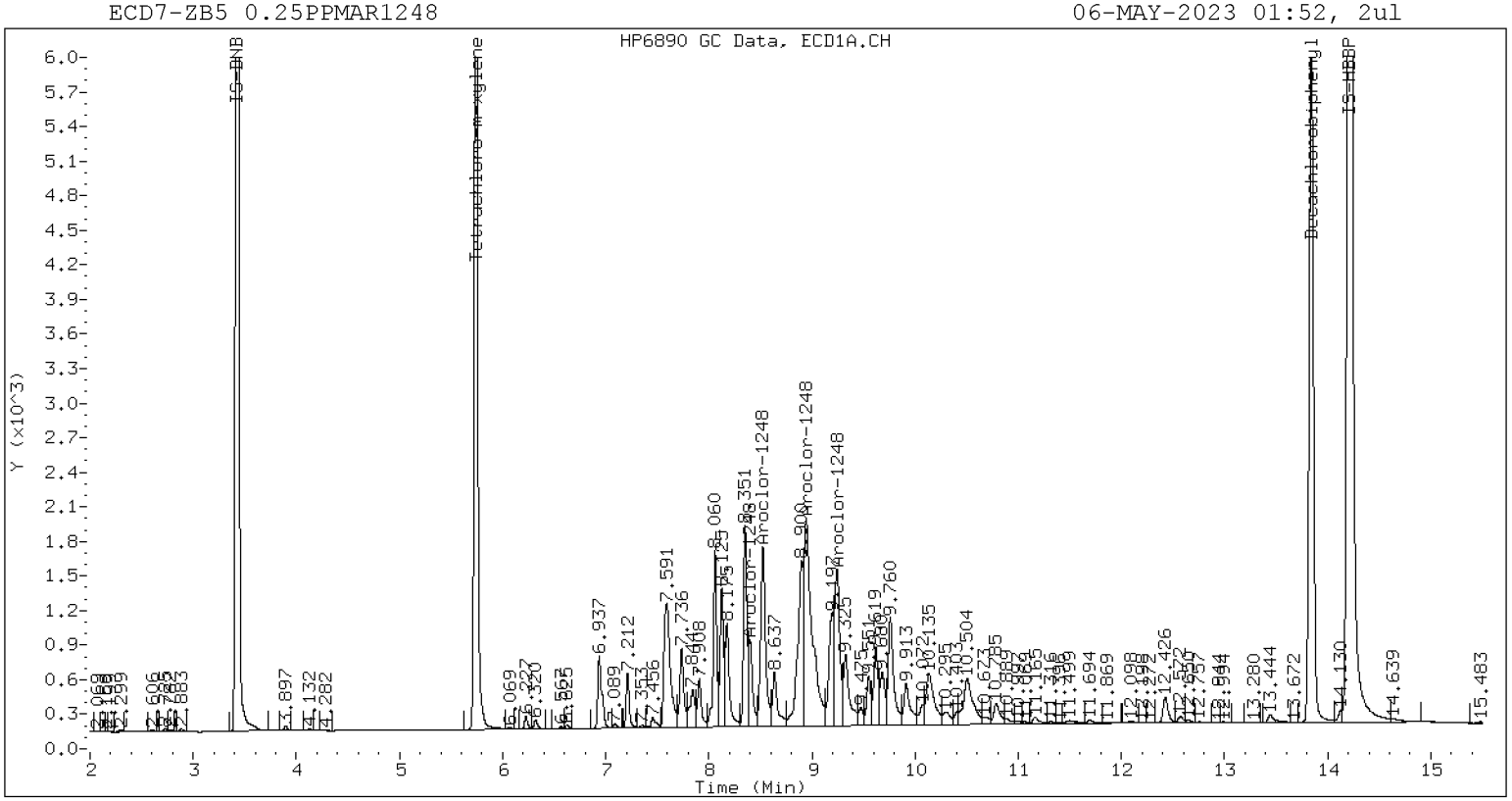
Total PCB Area Col2 (5.728 - 13.968) = 866525 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

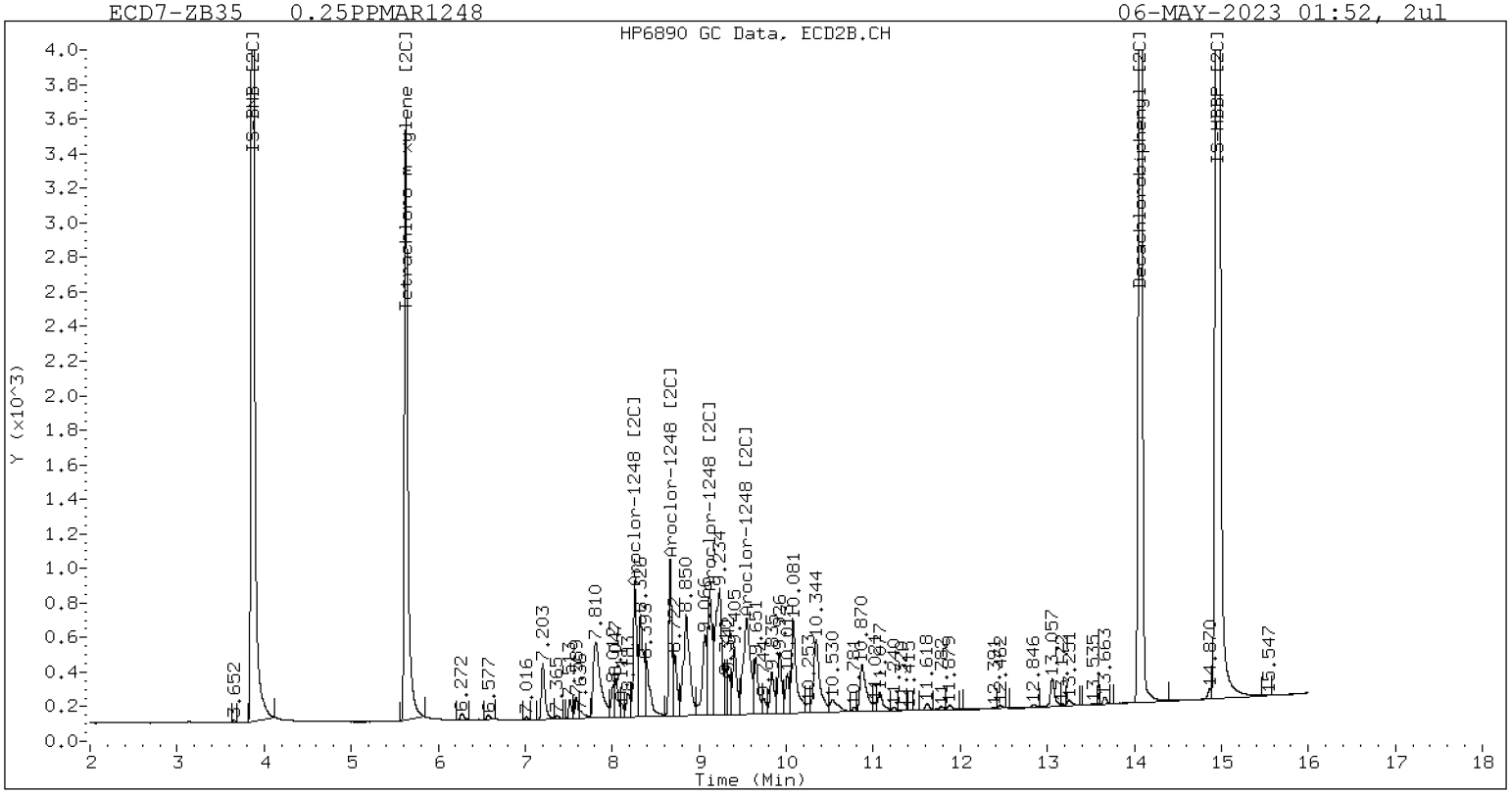
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1248 06-MAY-2023 01:52, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1248 06-MAY-2023 01:52, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052329ECD7.D
Data file 2: /230505.b/230505.b/05052329ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR1254
Client ID:
Injection Date: 06-MAY-2023 02:13
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	357984	5.629	0.001	190255	37.8	38.5	1.8	Tetrachloro-m-xylene
13.842	0.002	347079	14.071	0.002	385540	37.4	39.8	6.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	628765	4.5
Hexabromobiphenyl	876625	929076	6.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	359470	2.9
Hexabromobiphenyl	652984	682882	4.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.246	0.000	161557	250.0	1	9.404	0.000	68278	250.0
Aroclor-1254	2	9.325	0.000	72588	250.0	2	9.499	0.000	40561	250.0
Aroclor-1254	3	9.618	0.000	104295	250.0	3	9.924	0.000	55343	250.0
Aroclor-1254	4	9.756	0.000	204288	250.0	4	10.078	0.000	120775	250.0
Aroclor-1254	5	10.126	0.000	123377	250.0	5	10.328	0.000	119827	250.0

Total Col1Ave (5 peaks): 250.0 Total Col2Ave (5 peaks): 250.0 RPD = 0

Corrected Ave (4 peaks): 250.0 Corrected Ave (4 peaks): 250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 2115446 Col1 Total PCB = 0.3 ppm*

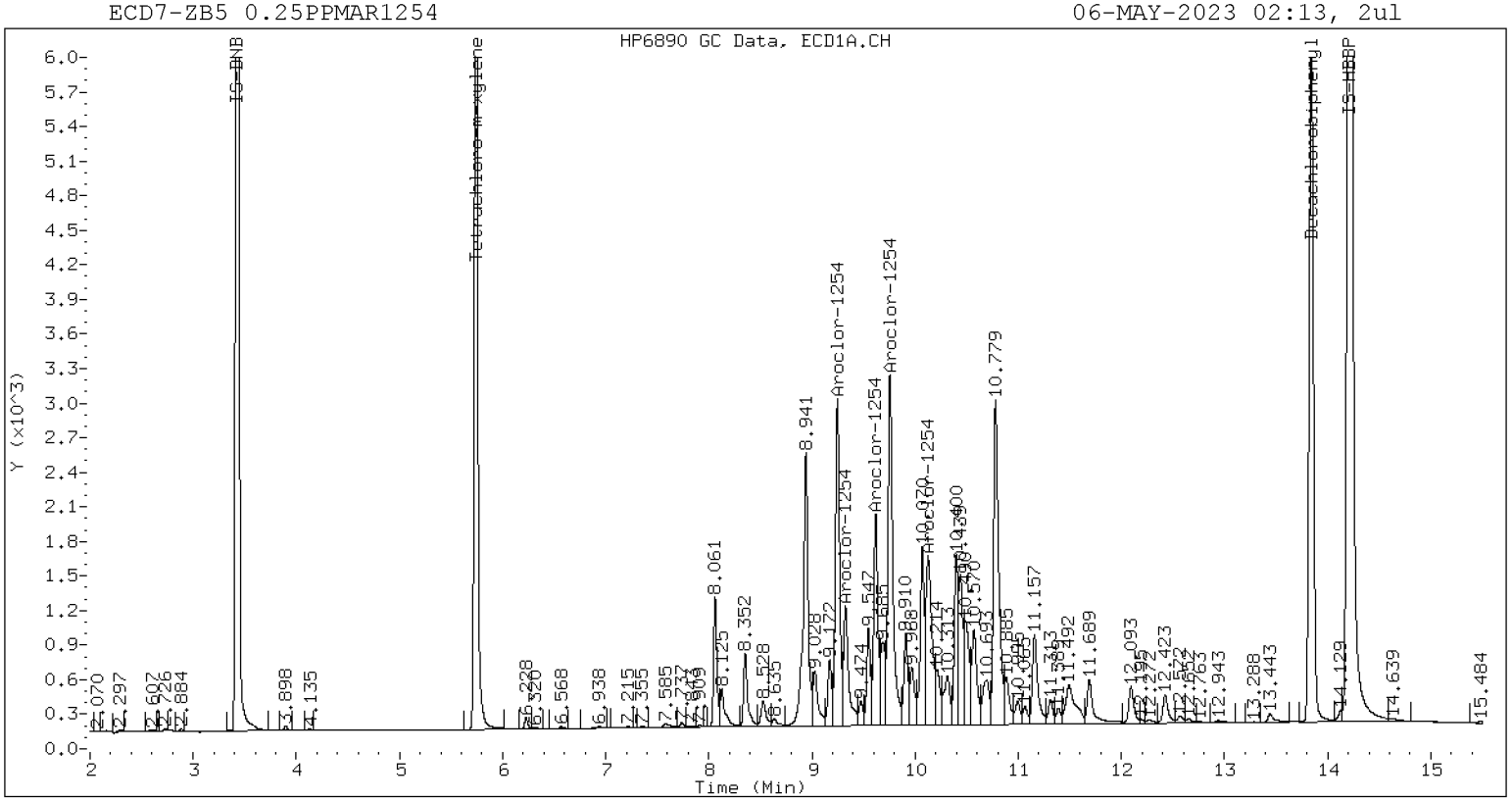
Total PCB Area Col2 (5.728 - 13.968) = 1173654 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

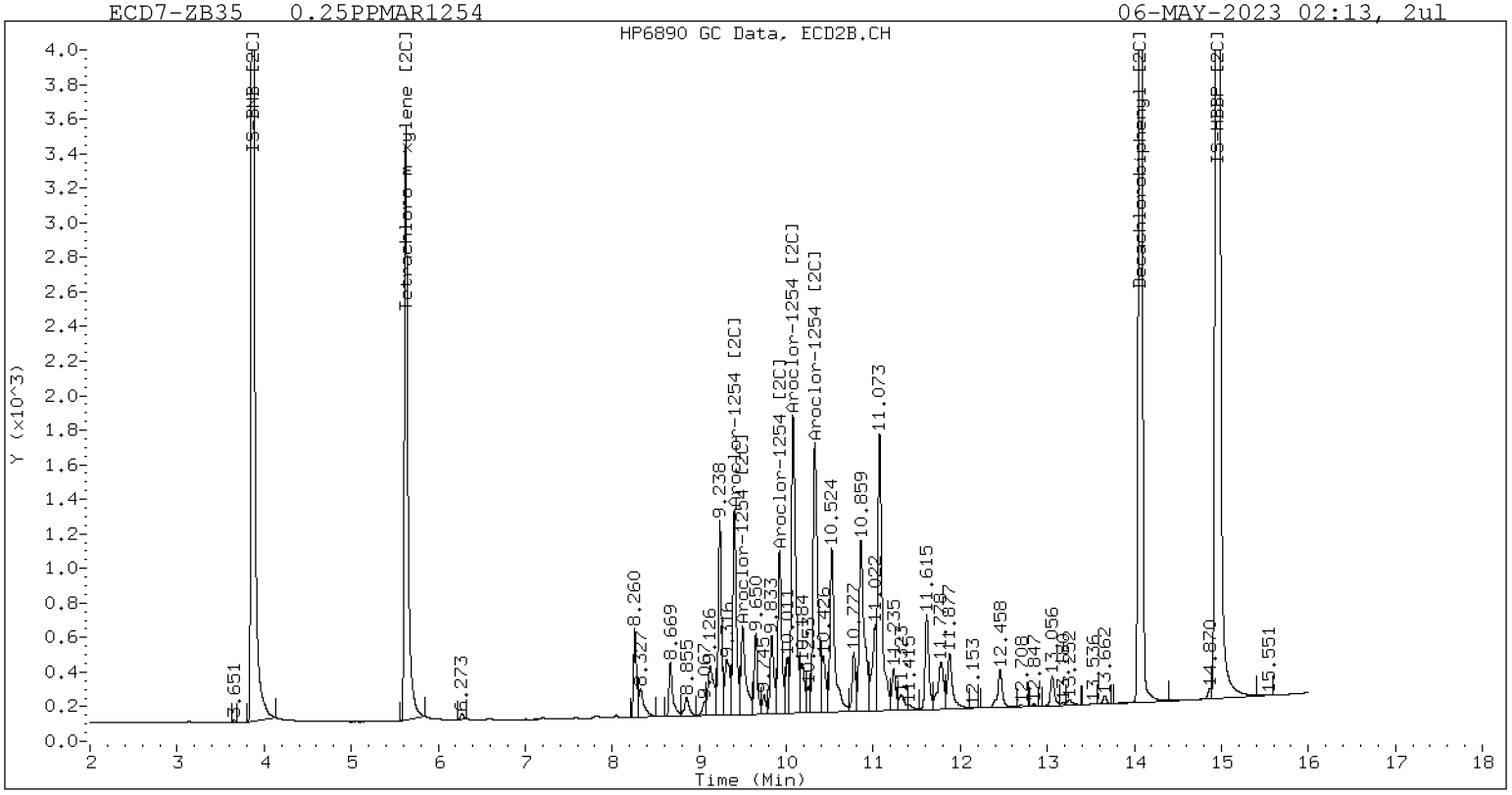
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR1254 06-MAY-2023 02:13, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR1254 06-MAY-2023 02:13, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052330ECD7.D
Data file 2: /230505.b/230505.b/05052330ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR2162.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR2162
Client ID:
Injection Date: 06-MAY-2023 02:34
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	379099	5.628	0.000	200082	39.7	40.8	2.7	Tetrachloro-m-xylene
13.842	0.001	358012	14.071	0.003	396142	38.1	40.5	6.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	634497	5.5
Hexabromobiphenyl	876625	940541	7.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	356713	2.1
Hexabromobiphenyl	652984	688599	5.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
		ZB5 Col					ZB35 Col			
Aroclor-1221	1	4.663	0.000	11156	250.0	1	4.894	0.000	6578	250.0
Aroclor-1221	2	6.069	0.000	22382	250.0	2	6.245	0.000	13633	250.0
Aroclor-1221	3	6.321	0.000	53161	250.0	3	6.572	0.000	21443	250.0
Total Col1Ave (3 peaks):					250.0	Total Col2Ave (3 peaks):				250.0 RPD = 0
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.779	0.000	106373	250.0	1	11.153	0.000	139491	250.0
Aroclor-1262	2	12.195	0.000	149596	250.0	2	11.605	0.000	117643	250.0
Aroclor-1262	3	12.269	0.000	160810	250.0	3	12.386	0.000	128556	250.0
Aroclor-1262	4	12.939	0.000	131044	250.0	4	12.456	0.000	209520	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 2742242 Col1 Total PCB = 0.4 ppm*

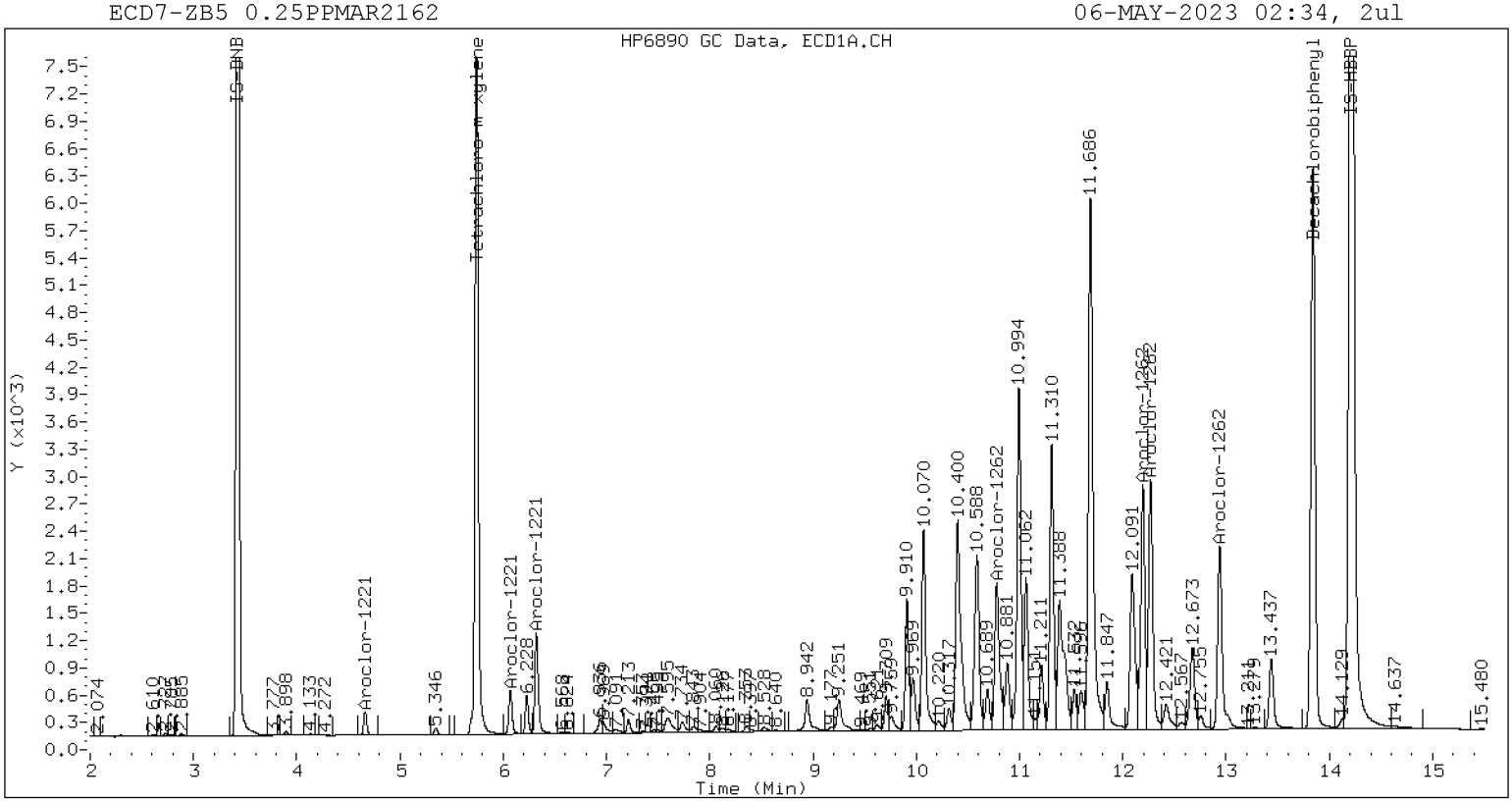
Total PCB Area Col2 (5.728 - 13.968) = 1852573 Col2 Total PCB = 0.4 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

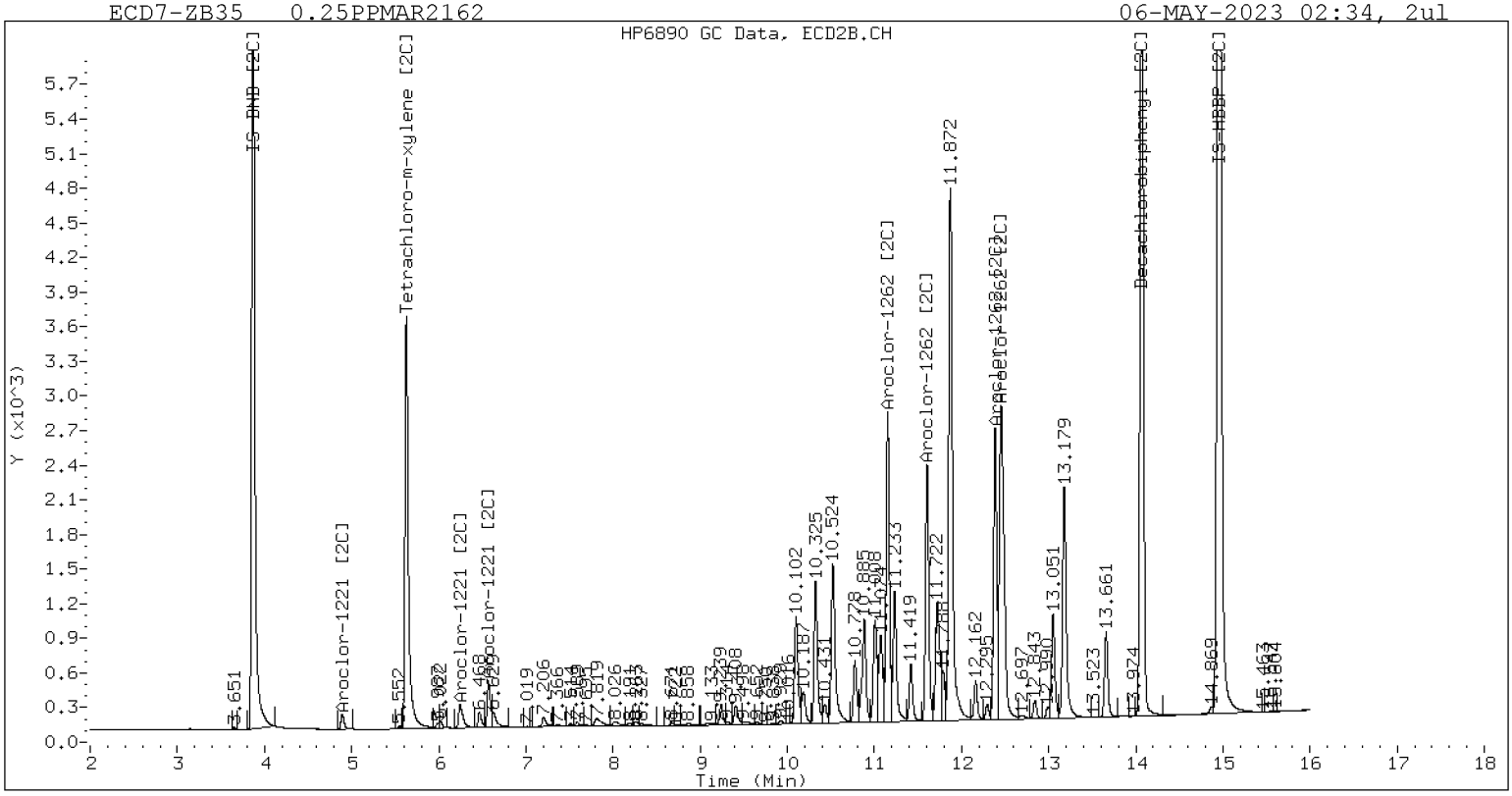
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR2162 06-MAY-2023 02:34, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR2162 06-MAY-2023 02:34, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052331ECD7.D
Data file 2: /230505.b/230505.b/05052331ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: AR3268.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: 0.25PPMAR3268
Client ID:
Injection Date: 06-MAY-2023 02:55
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	378314	5.628	0.000	200538	38.9	40.3	3.4	Tetrachloro-m-xylene
13.840	0.000	502472	14.068	0.000	573501	52.2	57.3	9.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	644974	7.2
Hexabromobiphenyl	876625	963091	9.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	361821	3.6
Hexabromobiphenyl	652984	704753	7.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1232	1	4.664	0.000	7554	250.0	1	4.894	0.000	3508	250.0
Aroclor-1232	2	6.069	0.000	15718	250.0	2	7.205	0.000	20084	250.0
Aroclor-1232	3	7.595	0.000	74881	250.0	3	7.815	0.000	40344	250.0
Aroclor-1232	4	8.527	0.000	32051	250.0	4	8.669	0.000	11684	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0
Aroclor-1268	1	12.196	0.000	384005	250.0	1	12.385	0.000	333421	250.0
Aroclor-1268	2	12.268	0.000	381367	250.0	2	12.452	0.000	358458	250.0
Aroclor-1268	3	12.648	0.000	306717	250.0	3	12.843	0.000	306959	250.0
Aroclor-1268	4	13.437	0.000	875751	250.0	4	13.663	0.000	983908	250.0
Total Col1Ave (4 peaks):					250.0	Total Col2Ave (4 peaks):				250.0 RPD = 0
Corrected Ave (3 peaks):					250.0	Corrected Ave (3 peaks):				250.0 RPD = 0

Total PCB Area Col1 (5.842 - 13.740) = 3124318 Col1 Total PCB = 0.4 ppm*

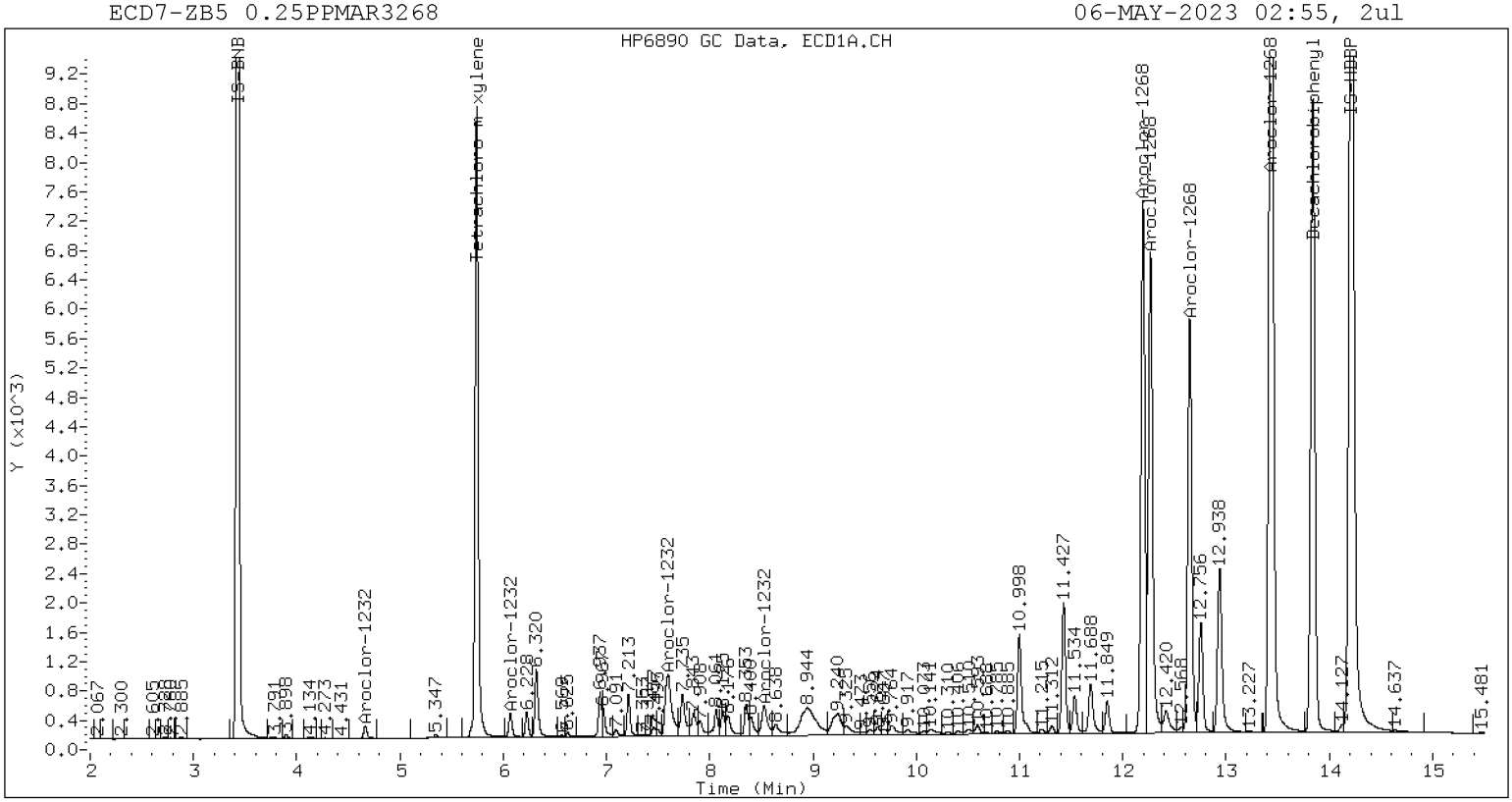
Total PCB Area Col2 (5.728 - 13.968) = 2731202 Col2 Total PCB = 0.6 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

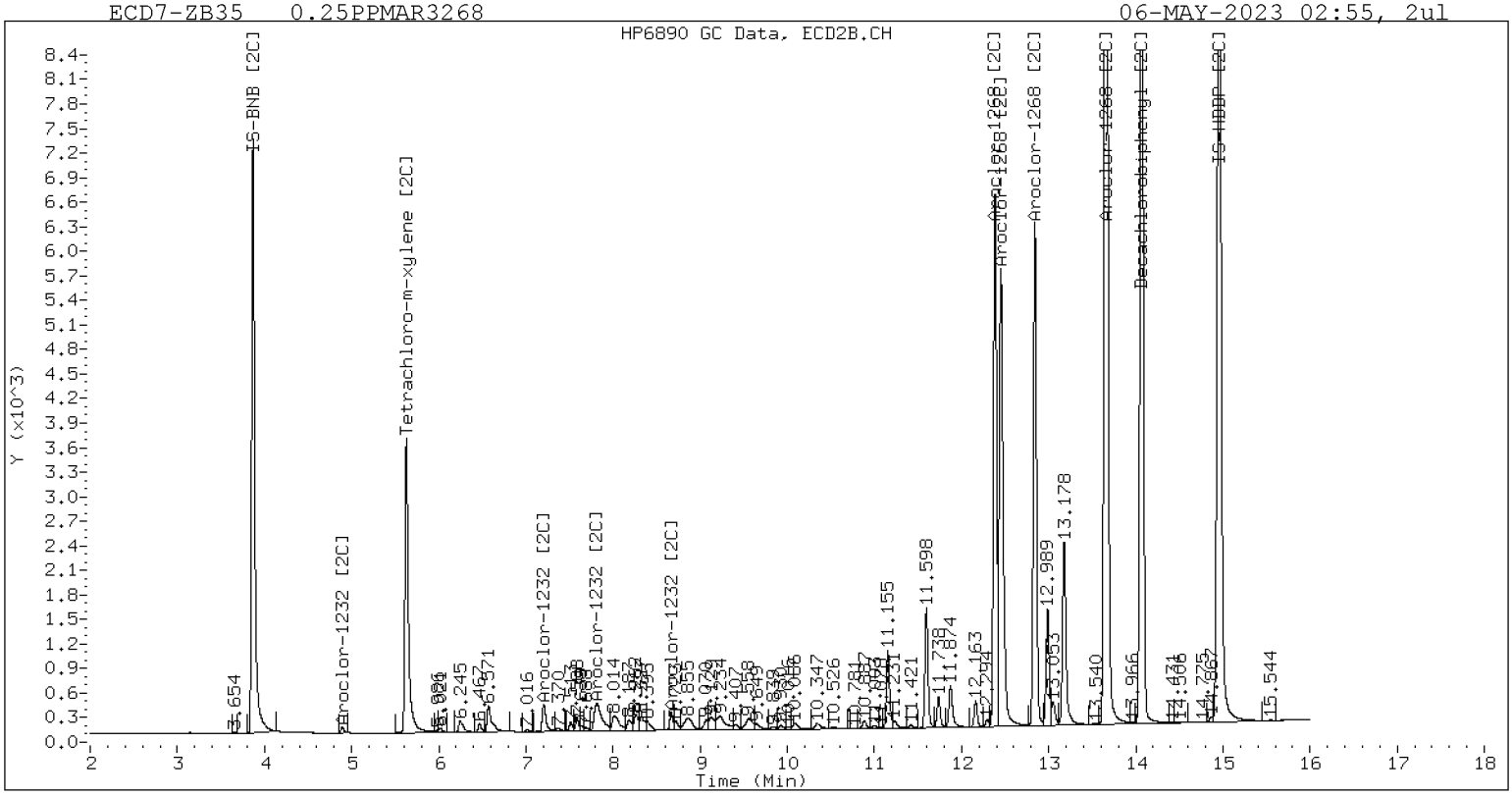
PCB Dual Column Chromatograms

ECD7-ZB5 0.25PPMAR3268 06-MAY-2023 02:55, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 0.25PPMAR3268 06-MAY-2023 02:55, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052332ECD7.D
Data file 2: /230505.b/230505.b/05052332ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660SCV
Client ID:
Injection Date: 06-MAY-2023 03:16
Report Date: 05/06/2023 12:06
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	356595	5.629	0.000	185340	36.9	37.2	1.0	Tetrachloro-m-xylene
13.842	0.002	347188	14.070	0.002	384711	36.9	39.2	6.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	642284	6.8
Hexabromobiphenyl	876625	941356	7.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	361711	3.6
Hexabromobiphenyl	652984	690563	5.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	61654	247.9	1	7.205	0.001	50106	244.7
Aroclor-1016	2	7.594	-0.001	199228	256.2	2	7.811	0.003	109839	251.7
Aroclor-1016	3	7.734	0.001	89643	249.3	3	8.009	0.004	48594	252.5
Aroclor-1016	4	8.399	0.001	38714	261.0	4	8.260	0.001	36878	241.2
Total Col1Ave (4 peaks):					253.6	Total Col2Ave (4 peaks):				247.5 RPD = 2
Corrected Ave (3 peaks):					251.1	Corrected Ave (3 peaks):				245.9 RPD = 2
Aroclor-1221	1	4.663	-0.000	436	9.7	1	---			0.0
Aroclor-1221	2	6.068	-0.001	8521	94.0	2	6.251	0.005	5766	104.3
Aroclor-1221	3	6.320	-0.001	41973	195.0	3	6.572	0.000	23212	266.9
Total Col1Ave (3 peaks):					99.6	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.663	-0.000	436	14.5	1	---			0.0
Aroclor-1232	2	6.068	-0.002	8521	136.1	2	7.205	0.000	50106	623.9
Aroclor-1232	3	7.594	-0.001	199228	667.9	3	7.811	-0.004	109839	680.8
Aroclor-1232	4	8.526	-0.001	85985	673.5	4	8.667	-0.003	34670	742.1
Total Col1Ave (4 peaks):					373.0	Total Col2Ave (3 peaks):				682.3 RPD = 59*
Corrected Ave (3 peaks):					272.8	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.213	0.001	61654	304.6	1	7.205	0.001	50106	310.0
Aroclor-1242	2	7.594	-0.001	199228	310.7	2	7.811	-0.002	109839	319.4
Aroclor-1242	3	8.399	0.000	38714	312.1	3	9.069	-0.054	21513	195.1
Aroclor-1242	4	8.526	0.001	85985	299.5	4	9.537	-0.013	1824	13.7
Total Col1Ave (4 peaks):					306.7	Total Col2Ave (4 peaks):				209.6 RPD = 38
Corrected Ave (3 peaks):					304.9	Corrected Ave (3 peaks):				172.9 RPD = 55*
Aroclor-1248	1	8.399	-0.000	38714	236.2	1	8.260	0.000	36878	214.3
Aroclor-1248	2	8.526	0.001	85985	201.8	2	8.667	-0.001	34670	190.7
Aroclor-1248	3	8.941	-0.003	81615	99.6	3	9.069	-0.051	21513	101.0
Aroclor-1248	4	9.249	0.006	52526	125.8	4	9.537	-0.008	1824	7.1
Total Col1Ave (4 peaks):					165.8	Total Col2Ave (4 peaks):				128.3 RPD = 26
Corrected Ave (3 peaks):					142.4	Corrected Ave (3 peaks):				99.6 RPD = 35
Aroclor-1254	1	9.249	0.003	52526	79.6	1	9.405	0.001	24726	90.0
Aroclor-1254	2	---			0.0	2	9.537	0.038	1824	11.2
Aroclor-1254	3	9.619	0.001	7081	16.6	3	9.926	0.002	3128	14.0
Aroclor-1254	4	9.756	0.001	21856	26.2	4	10.101	0.023	62581	128.7
Aroclor-1254	5	10.069	-0.057	159796	317.0	5	10.324	-0.004	85433	177.1
Total Col1Ave (4 peaks):					109.8	Total Col2Ave (5 peaks):				84.2 RPD = 26
Corrected Ave (3 peaks):					40.8	Corrected Ave (4 peaks):				61.0 RPD = 40
Aroclor-1260	1	10.995	0.001	145767	292.8	1	11.605	-0.000	99761	272.0
Aroclor-1260	2	11.311	0.001	142028	289.1	2	11.872	0.000	273505	285.1
Aroclor-1260	3	11.686	0.000	354468	288.1	3	12.389	0.001	70545	296.8
Aroclor-1260	4	12.092	0.002	161281	267.6	4	12.455	-0.000	180783	282.1
Aroclor-1260	5	12.194	0.001	76105	289.6	NS	---			----
Total Col1Ave (5 peaks):					285.5	Total Col2Ave (4 peaks):				284.0 RPD = 1
Corrected Ave (4 peaks):					283.6	Corrected Ave (3 peaks):				279.8 RPD = 1
Aroclor-1262	1	10.777	-0.001	215850	506.9	1	11.153	-0.001	104059	186.0
Aroclor-1262	2	12.194	-0.000	76105	127.1	2	11.605	0.001	99761	211.4
Aroclor-1262	3	12.271	0.001	94628	147.0	3	12.389	0.003	70545	136.8
Aroclor-1262	4	12.939	-0.000	78852	150.3	4	12.455	-0.001	180783	215.1
Total Col1Ave (4 peaks):					232.8	Total Col2Ave (4 peaks):				187.3 RPD = 22
Corrected Ave (3 peaks):					141.5	Corrected Ave (3 peaks):				178.1 RPD = 23
Aroclor-1268	1	12.194	-0.001	76105	50.7	1	12.389	0.004	70545	54.0
Aroclor-1268	2	12.271	0.003	94628	63.5	2	12.455	0.003	180783	128.7
Aroclor-1268	3	12.675	0.026	38830	32.4	3	12.844	0.001	3082	2.6
Aroclor-1268	4	13.440	0.003	19986	5.8	4	13.661	-0.002	14882	3.9
Total Col1Ave (4 peaks):					38.1	Total Col2Ave (4 peaks):				47.3 RPD = 21
Corrected Ave (3 peaks):					29.6	Corrected Ave (3 peaks):				20.1 RPD = 38

Total PCB Area Col1 (5.842 - 13.740) = 3657118 Col1 Total PCB = 0.5 ppm*

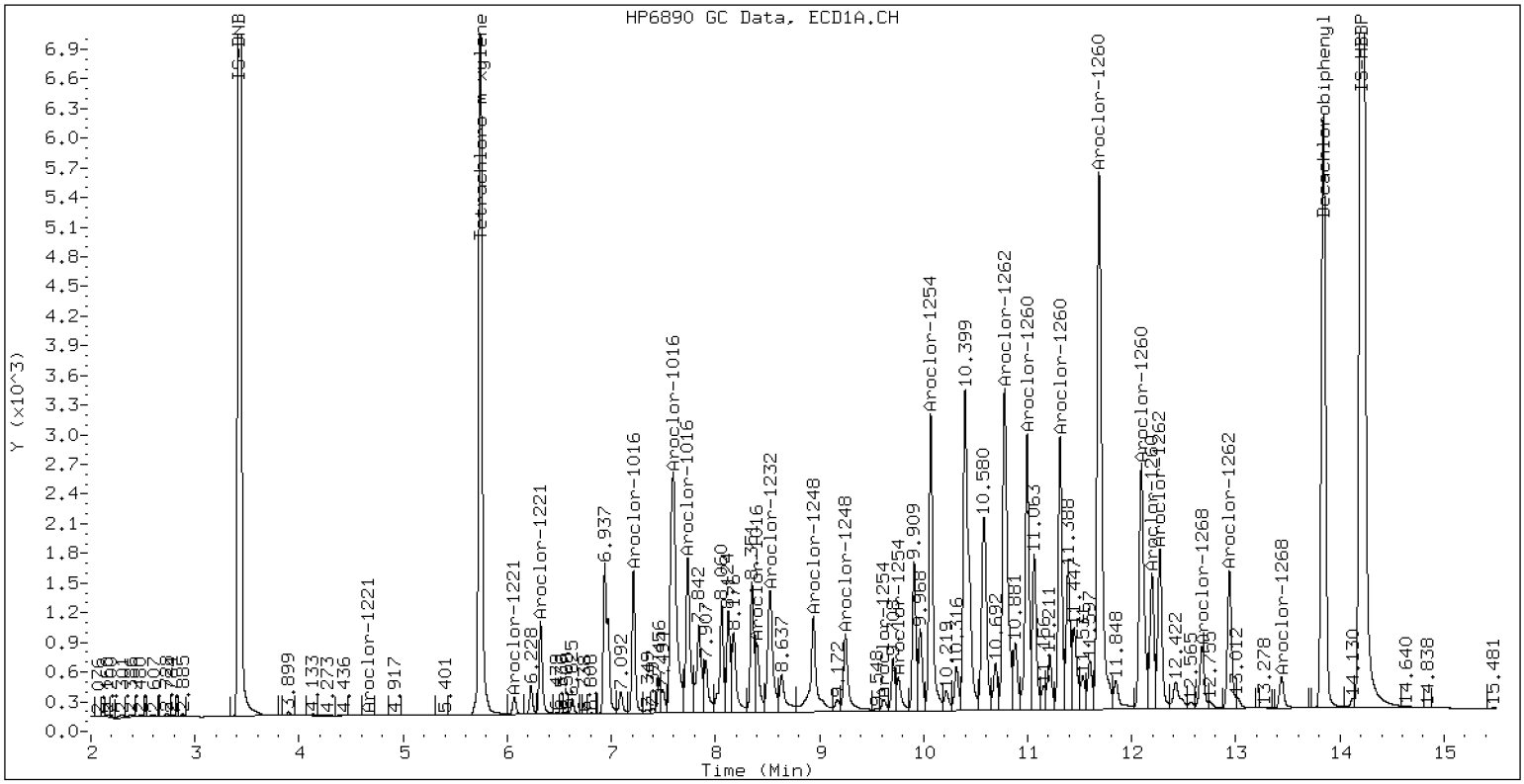
Total PCB Area Col2 (5.728 - 13.968) = 2255286 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

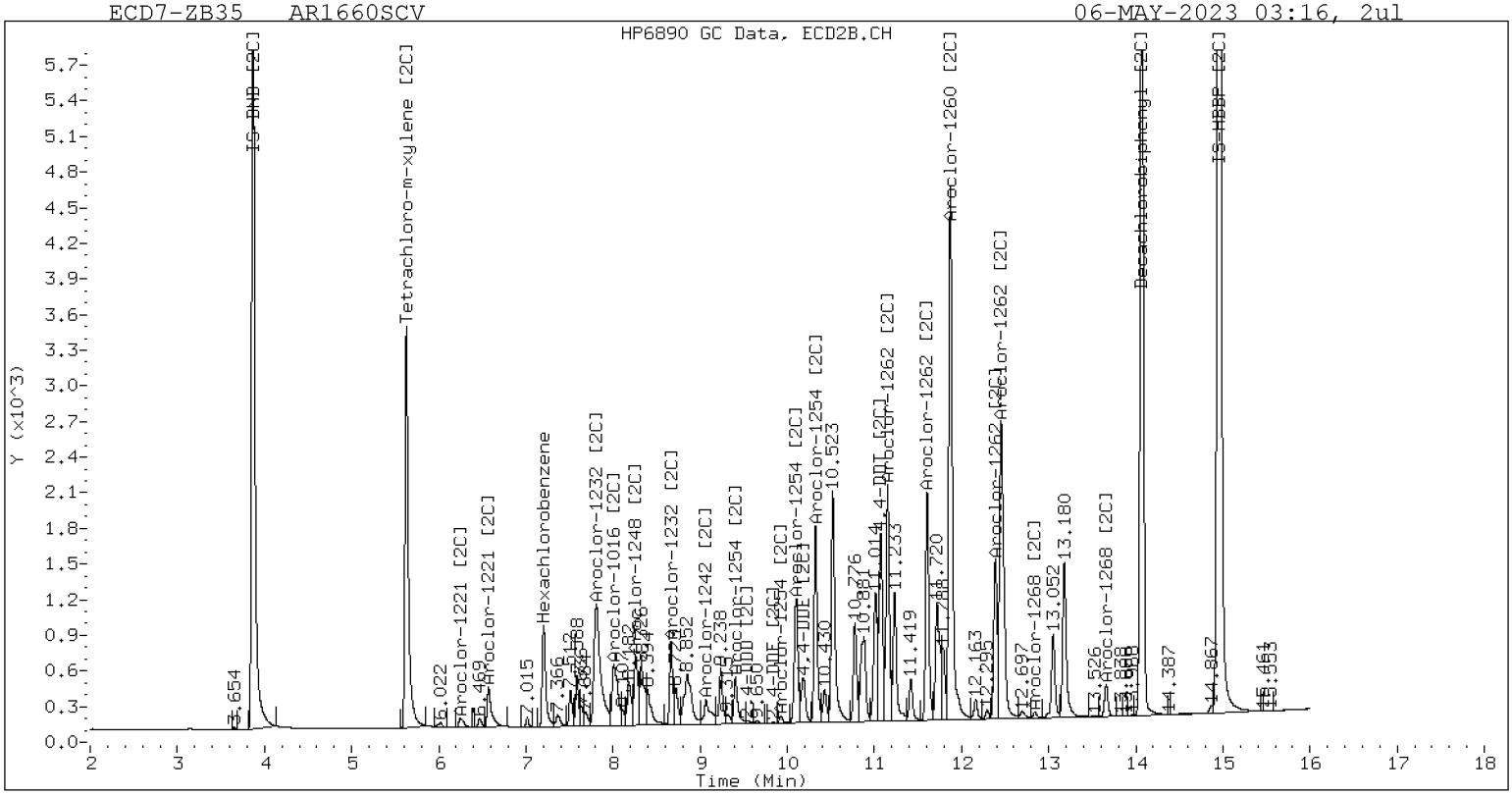
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660SCV 06-MAY-2023 03:16, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660SCV 06-MAY-2023 03:16, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052333ECD7.D
Data file 2: /230505.b/230505.b/05052333ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242SCV
Client ID:
Injection Date: 06-MAY-2023 03:36
Report Date: 05/06/2023 12:06
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.744	0.002	319899	5.630	0.002	167866	32.8	33.4	1.9	Tetrachloro-m-xylene
13.842	0.002	398699	14.069	0.001	434332	40.9	44.0	7.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	648004	7.7
Hexabromobiphenyl	876625	976327	11.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	365379	4.6
Hexabromobiphenyl	652984	695394	6.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	47446	189.1	1	7.205	0.001	36469	176.3
Aroclor-1016	2	7.594	-0.000	147684	188.2	2	7.814	0.007	77885	176.7
Aroclor-1016	3	7.735	0.002	67175	185.2	3	8.012	0.006	38400	197.5
Aroclor-1016	4	8.398	0.000	30565	204.3	4	8.261	0.002	27551	178.4
Total Col1Ave (4 peaks): 191.7						Total Col2Ave (4 peaks): 182.2			RPD = 5	
Corrected Ave (3 peaks): 187.5						Corrected Ave (3 peaks): 177.1			RPD = 6	
Aroclor-1221	1	4.666	0.002	870	19.1	1	---			0.0
Aroclor-1221	2	6.069	0.000	7118	77.8	2	6.257	0.011	4359	78.0
Aroclor-1221	3	6.322	0.001	32969	151.8	3	6.573	0.001	16609	189.0
Total Col1Ave (3 peaks): 82.9						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.666	0.002	870	28.7	1	---			0.0
Aroclor-1232	2	6.069	0.000	7118	112.7	2	7.205	-0.000	36469	449.5
Aroclor-1232	3	7.594	-0.001	147684	490.8	3	7.814	-0.001	77885	477.9
Aroclor-1232	4	8.526	-0.000	70601	548.1	4	8.668	-0.001	25417	538.5
Total Col1Ave (4 peaks): 295.1						Total Col2Ave (3 peaks): 488.7			RPD = 49*	
Corrected Ave (3 peaks): 210.7						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.213	0.001	47446	232.4	1	7.205	0.001	36469	223.3
Aroclor-1242	2	7.594	-0.000	147684	228.2	2	7.814	0.002	77885	224.2
Aroclor-1242	3	8.398	0.000	30565	244.2	3	9.124	0.001	25864	232.2
Aroclor-1242	4	8.526	0.002	70601	243.8	4	9.552	0.001	32437	241.7
Total Col1Ave (4 peaks): 237.2						Total Col2Ave (4 peaks): 230.4			RPD = 3	
Corrected Ave (3 peaks): 234.8						Corrected Ave (3 peaks): 226.6			RPD = 4	
Aroclor-1248	1	8.398	-0.001	30565	184.8	1	8.261	0.001	27551	158.5
Aroclor-1248	2	8.526	0.002	70601	164.3	2	8.668	0.001	25417	138.4
Aroclor-1248	3	8.946	0.002	172847	209.1	3	9.124	0.004	25864	120.2
Aroclor-1248	4	9.243	-0.001	87363	207.3	4	9.552	0.006	32437	125.7
Total Col1Ave (4 peaks): 191.4						Total Col2Ave (4 peaks): 135.7			RPD = 34	
Corrected Ave (3 peaks): 185.5						Corrected Ave (3 peaks): 128.1			RPD = 37	
Aroclor-1254	1	9.243	-0.004	87363	131.2	1	9.406	0.002	13247	47.7
Aroclor-1254	2	9.326	0.001	28949	96.7	2	9.552	0.053	32437	196.7
Aroclor-1254	3	9.622	0.004	20780	48.3	3	9.927	0.003	10002	44.5
Aroclor-1254	4	9.762	0.006	35470	42.1	4	10.082	0.005	19933	40.6
Aroclor-1254	5	10.140	0.015	28075	55.2	5	10.341	0.013	19432	39.9
Total Col1Ave (5 peaks): 74.7						Total Col2Ave (5 peaks): 73.9			RPD = 1	
Corrected Ave (4 peaks): 60.6						Corrected Ave (4 peaks): 43.2			RPD = 34	
Aroclor-1260	1	10.998	0.005	3609	7.0	1	11.618	0.012	2137	5.8
Aroclor-1260	2	11.317	0.007	3837	7.5	2	11.879	0.007	1437	1.5
Aroclor-1260	3	11.765	0.080	33905	26.6	3	12.382	-0.006	12460	52.1
Aroclor-1260	4	12.097	0.007	9099	14.6	4	---			0.0
Aroclor-1260	5	12.272	0.079	2060	7.6	NS	---			----
Total Col1Ave (5 peaks): 12.6						Total Col2Ave (3 peaks): 19.8			RPD = 44*	
Corrected Ave (4 peaks): 9.2						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.787	0.009	24040	54.4	1	11.078	-0.075	7864	14.0
Aroclor-1262	2	12.272	0.077	2060	3.3	2	11.618	0.013	2137	4.5
Aroclor-1262	3	---			0.0	3	12.382	-0.004	12460	24.0
Aroclor-1262	4	12.937	-0.002	16041	29.5	4	---			0.0
Total Col1Ave (3 peaks): 29.1						Total Col2Ave (3 peaks): 14.1			RPD = 69*	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.272	0.076	2060	1.3	1	12.382	-0.003	12460	9.5
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.649	0.001	4324	3.5	3	12.845	0.002	951	0.8
Aroclor-1268	4	13.442	0.005	15801	4.4	4	13.628	-0.035	6512	1.7
Total Col1Ave (3 peaks): 3.1						Total Col2Ave (3 peaks): 4.0			RPD = 25	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.842 - 13.740) = 1489022 Col1 Total PCB = 0.2 ppm*

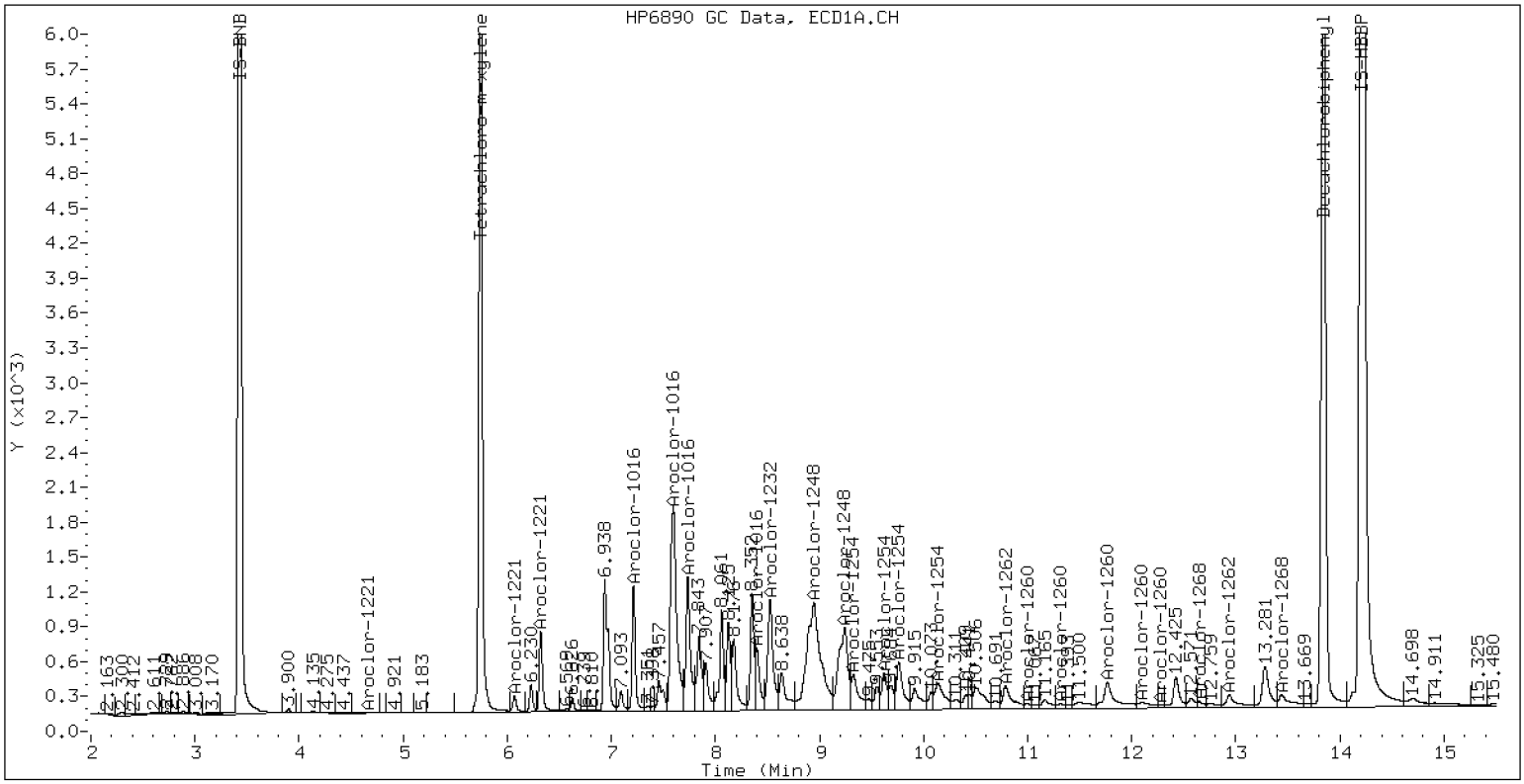
Total PCB Area Col2 (5.728 - 13.968) = 667658 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

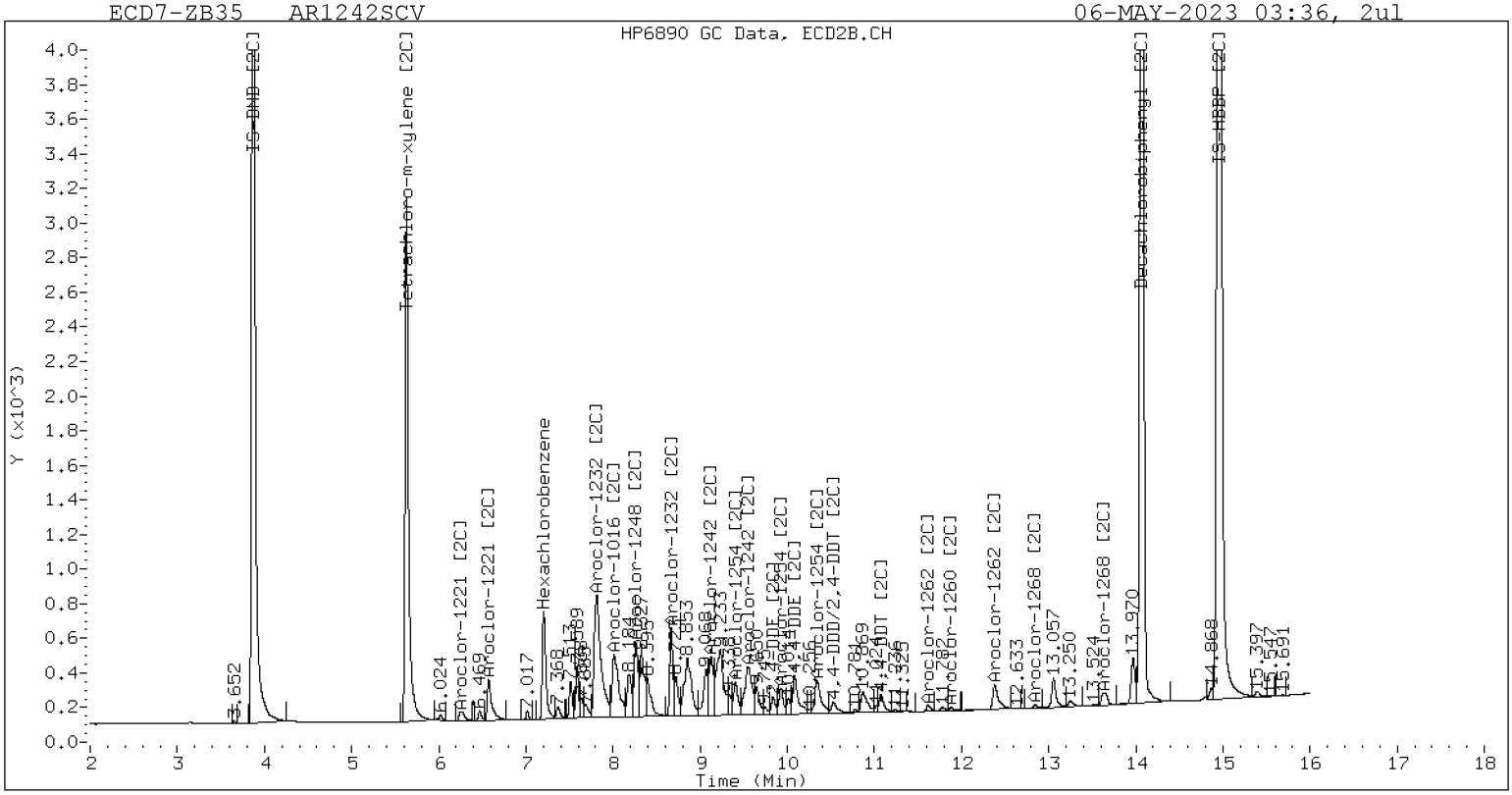
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242SCV 06-MAY-2023 03:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242SCV 06-MAY-2023 03:36, 2ul

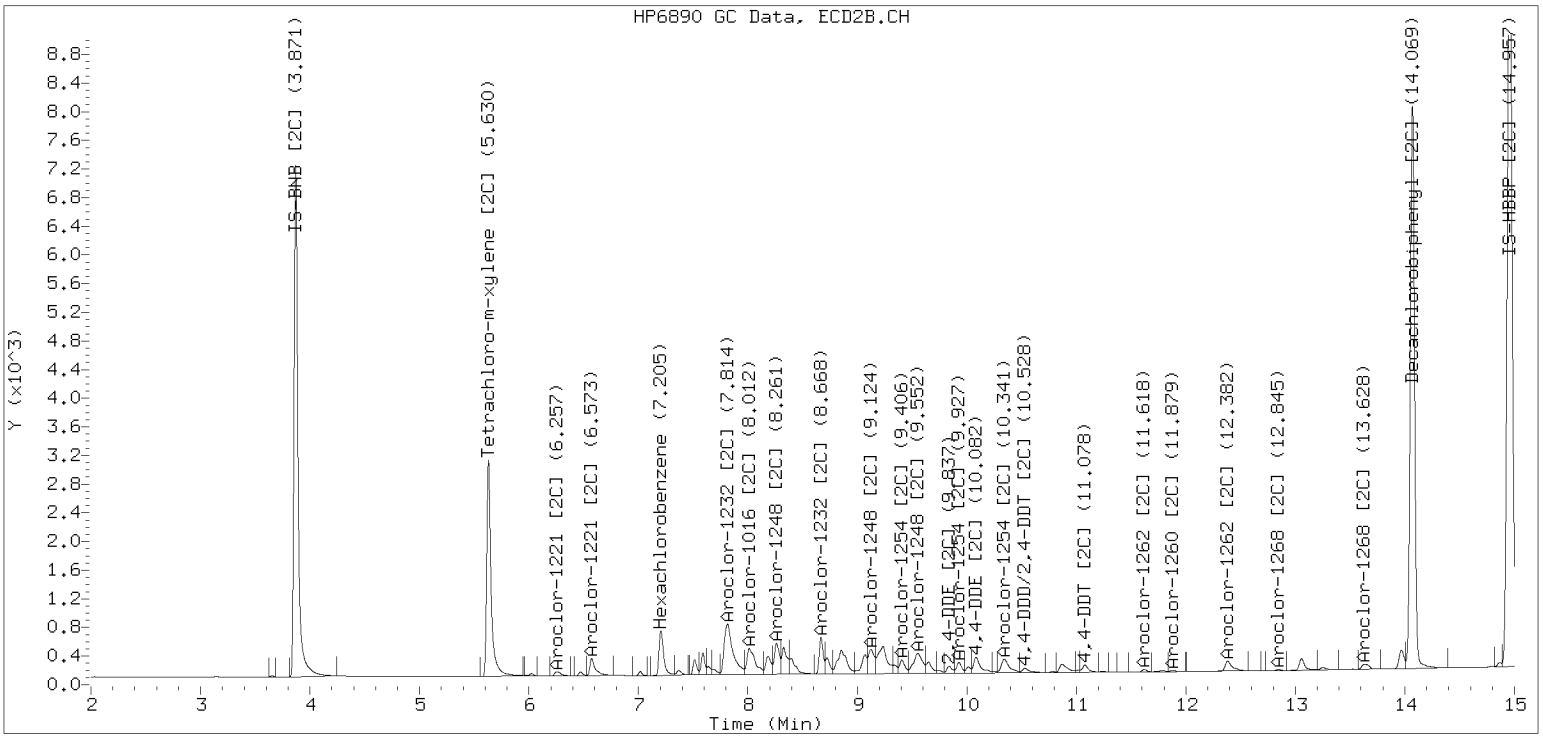


ZB-35 Manual Integration: NO

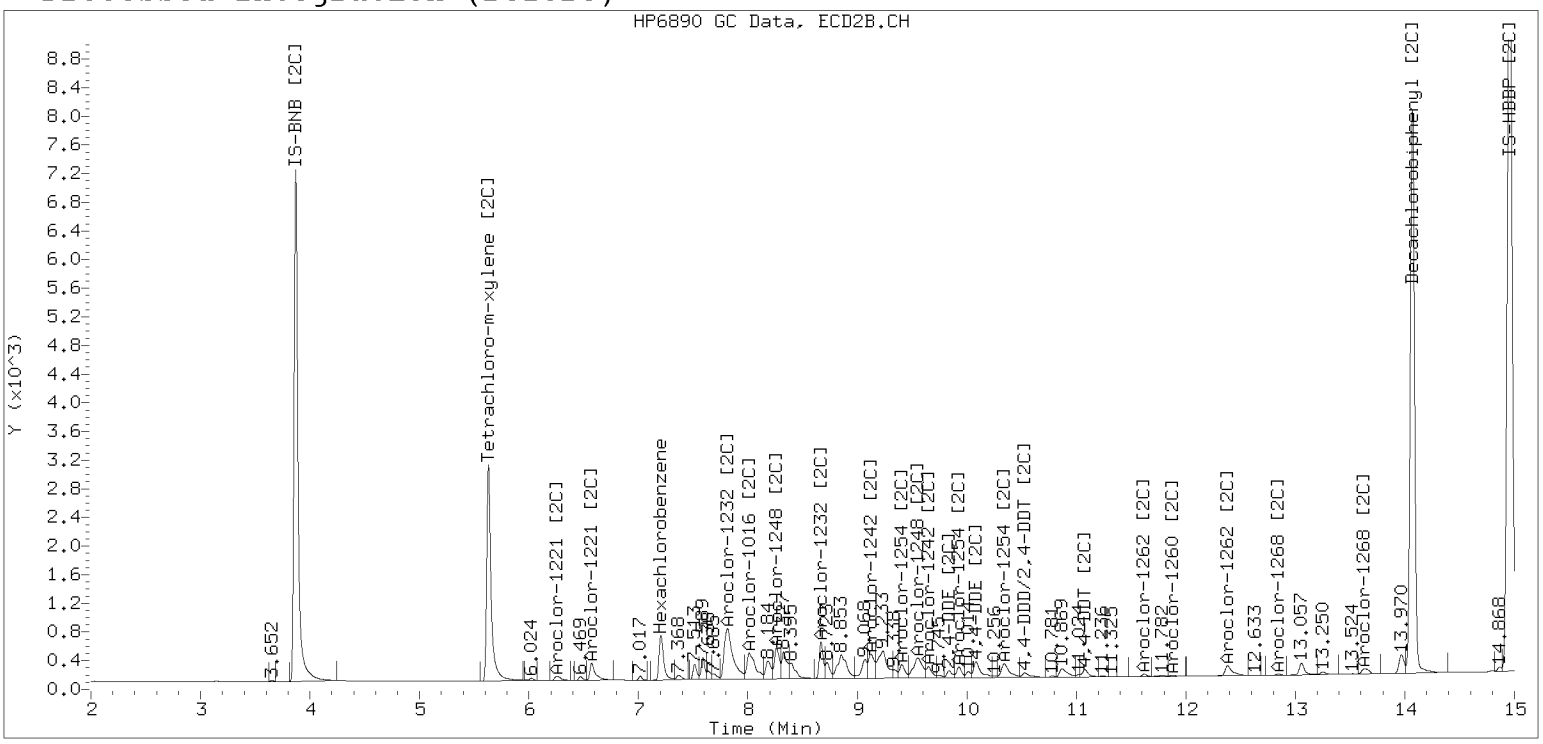
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052333ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052334ECD7.D
Data file 2: /230505.b/230505.b/05052334ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248SCV
Client ID:
Injection Date: 06-MAY-2023 03:57
Report Date: 05/06/2023 12:07
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	356328	5.629	0.000	186552	36.8	37.7	2.5	Tetrachloro-m-xylene
13.842	0.001	339452	14.070	0.002	373861	35.7	38.0	6.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	643038	6.9
Hexabromobiphenyl	876625	952051	8.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	359604	3.0
Hexabromobiphenyl	652984	692982	6.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	0.000	19871	79.8	1	7.203	-0.001	18843	92.6
Aroclor-1016	2	7.589	-0.006	95111	122.2	2	7.812	0.005	52352	120.7
Aroclor-1016	3	7.736	0.003	37565	104.4	3	8.012	0.006	8263	43.2
Aroclor-1016	4	8.399	0.002	41542	279.7	4	8.260	0.001	42833	281.8
Total Col1Ave (4 peaks):					146.5	Total Col2Ave (4 peaks):				134.6 RPD = 9
Corrected Ave (3 peaks):					102.1	Corrected Ave (3 peaks):				85.5 RPD = 18
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.066	-0.003	351	3.9	2	6.275	0.029	1573	28.6
Aroclor-1221	3	6.320	-0.001	3509	16.3	3	6.576	0.004	967	11.2
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.066	-0.003	351	5.6	2	7.203	-0.001	18843	236.0
Aroclor-1232	3	7.589	-0.006	95111	318.5	3	7.812	-0.002	52352	326.4
Aroclor-1232	4	8.524	-0.002	105782	827.6	4	8.667	-0.002	44962	968.0
Total Col1Ave (3 peaks):					383.9	Total Col2Ave (3 peaks):				510.1 RPD = 28
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.212	0.000	19871	98.1	1	7.203	-0.000	18843	117.2
Aroclor-1242	2	7.589	-0.006	95111	148.1	2	7.812	-0.000	52352	153.1
Aroclor-1242	3	8.399	0.001	41542	334.5	3	9.120	-0.003	52681	480.6
Aroclor-1242	4	8.524	-0.000	105782	368.1	4	9.548	-0.002	63343	479.5
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				307.6 RPD = 26
Corrected Ave (3 peaks):					193.6	Corrected Ave (3 peaks):				250.0 RPD = 25
Aroclor-1248	1	8.399	0.001	41542	253.1	1	8.260	-0.001	42833	250.4
Aroclor-1248	2	8.524	-0.000	105782	248.0	2	8.667	0.000	44962	248.8
Aroclor-1248	3	8.944	-0.000	206928	252.3	3	9.120	-0.000	52681	248.7
Aroclor-1248	4	9.242	-0.001	105227	251.7	4	9.548	0.002	63343	249.4
Total Col1Ave (4 peaks):					251.3	Total Col2Ave (4 peaks):				249.3 RPD = 1
Corrected Ave (3 peaks):					250.6	Corrected Ave (3 peaks):				249.0 RPD = 1
Aroclor-1254	1	9.242	-0.004	105227	159.2	1	9.404	0.000	25835	94.6
Aroclor-1254	2	9.324	-0.001	51326	172.8	2	9.548	0.049	63343	390.3
Aroclor-1254	3	9.619	0.001	41394	97.0	3	9.925	0.001	22609	102.1
Aroclor-1254	4	9.759	0.003	72223	86.4	4	10.079	0.001	43816	90.7
Aroclor-1254	5	10.135	0.010	49936	98.9	5	10.345	0.016	42513	88.7
Total Col1Ave (5 peaks):					122.9	Total Col2Ave (5 peaks):				153.3 RPD = 22
Corrected Ave (4 peaks):					110.4	Corrected Ave (4 peaks):				94.0 RPD = 16
Aroclor-1260	1	10.998	0.005	1863	3.7	1	11.617	0.011	2599	7.1
Aroclor-1260	2	11.314	0.004	1152	2.3	2	11.877	0.005	1951	2.0
Aroclor-1260	3	11.695	0.009	1829	1.5	3	12.389	0.001	857	3.6
Aroclor-1260	4	12.097	0.007	1266	2.1	4	12.458	0.003	1302	2.0
Aroclor-1260	5	12.195	0.002	464	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.3	Total Col2Ave (4 peaks):				3.7 RPD = 48*
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				2.5 RPD = 29
Aroclor-1262	1	10.784	0.005	15405	35.8	1	11.077	-0.077	9003	16.0
Aroclor-1262	2	12.195	0.000	464	0.8	2	11.617	0.012	2599	5.5
Aroclor-1262	3	12.271	0.002	489	0.8	3	12.389	0.003	857	1.7
Aroclor-1262	4	12.940	0.001	1638	3.1	4	12.458	0.002	1302	1.5
Total Col1Ave (4 peaks):					10.1	Total Col2Ave (4 peaks):				6.2 RPD = 48*
Corrected Ave (3 peaks):					1.5	Corrected Ave (3 peaks):				2.9 RPD = 61*
Aroclor-1268	1	12.195	-0.001	464	0.3	1	12.389	0.004	857	0.7
Aroclor-1268	2	12.271	0.003	489	0.3	2	12.458	0.006	1302	0.9
Aroclor-1268	3	12.649	0.001	1831	1.5	3	12.845	0.002	676	0.6
Aroclor-1268	4	13.443	0.006	5387	1.6	4	13.661	-0.003	2707	0.7
Total Col1Ave (4 peaks):					0.9	Total Col2Ave (4 peaks):				0.7 RPD = 26
Corrected Ave (3 peaks):					0.7	Corrected Ave (3 peaks):				0.6 RPD = 11

Total PCB Area Col1 (5.842 - 13.740) = 1634238 Col1 Total PCB = 0.2 ppm*

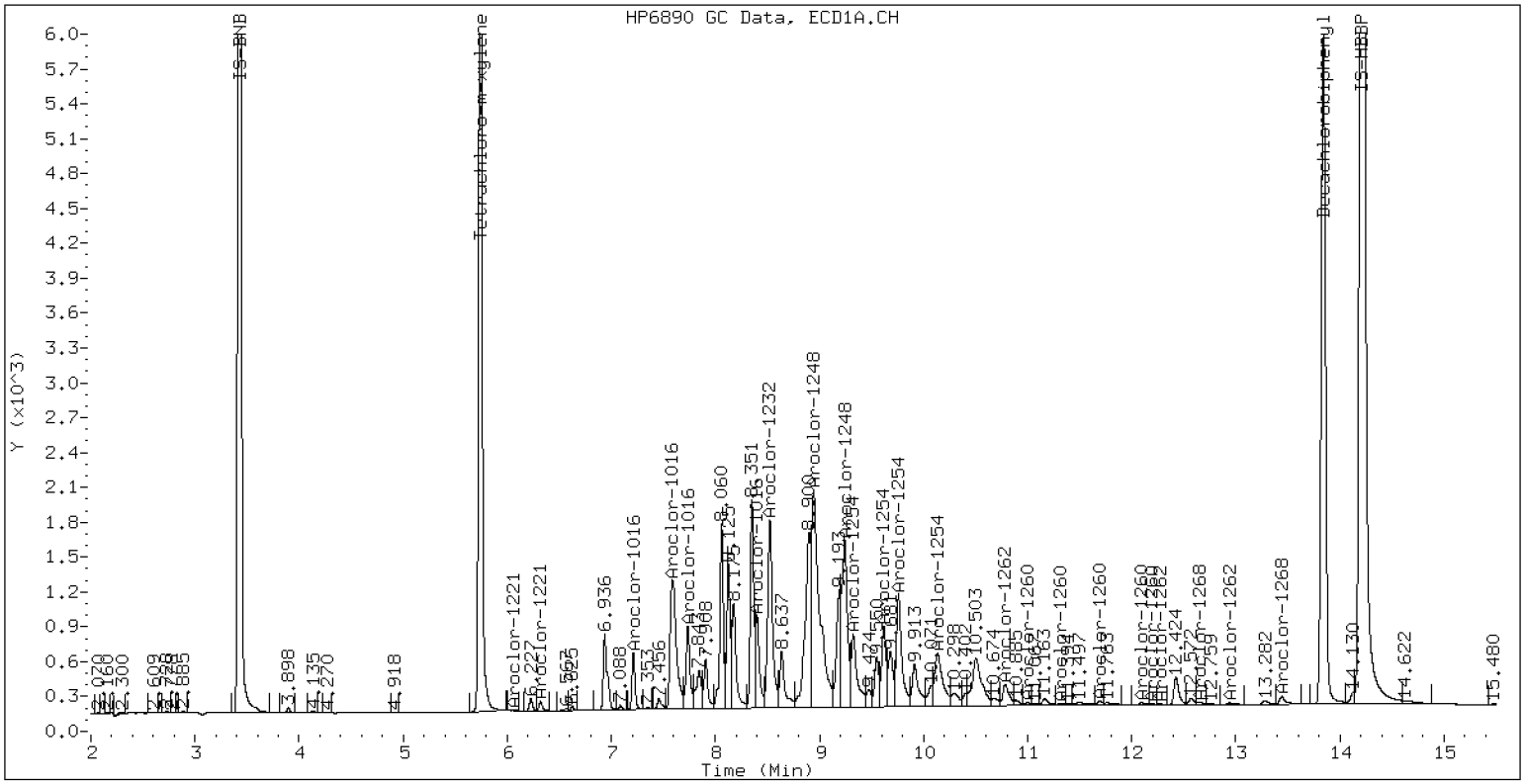
Total PCB Area Col2 (5.728 - 13.968) = 876760 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

PCB Dual Column Chromatograms

ECD7-ZB5 AR1248SCV 06-MAY-2023 03:57, 2ul



ZB-5 Manual Integration: NO

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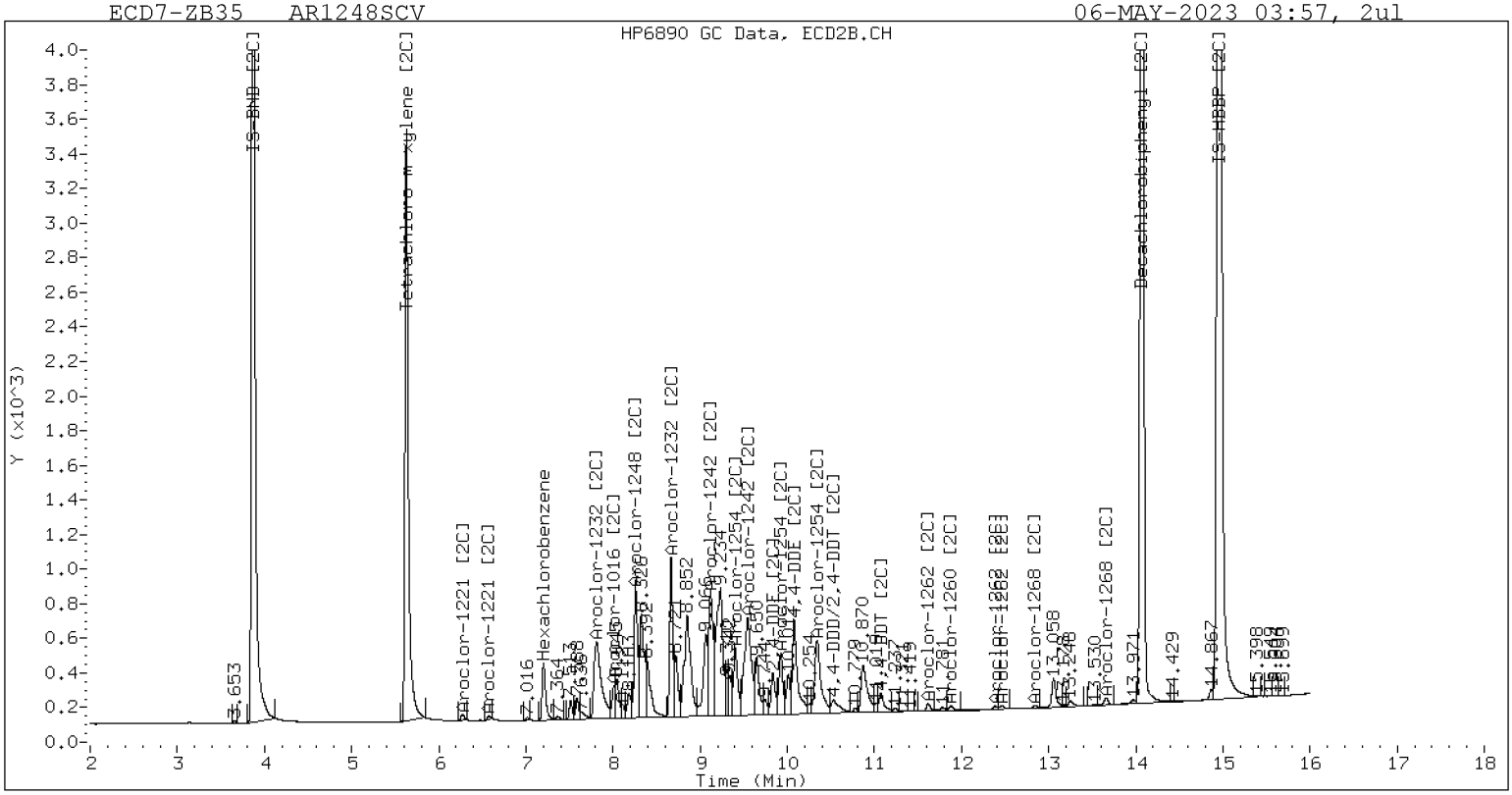


ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052335ECD7.D
Data file 2: /230505.b/230505.b/05052335ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254SCV
Client ID:
Injection Date: 06-MAY-2023 04:18
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	368022	5.631	0.002	192033	37.6	38.3	2.0	Tetrachloro-m-xylene
13.843	0.002	352066	14.070	0.002	385384	36.0	38.5	6.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	650234	8.1
Hexabromobiphenyl	876625	980276	11.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	364142	4.3
Hexabromobiphenyl	652984	705291	8.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.002	635	2.5	1	---			0.0
Aroclor-1016	2	7.590	-0.004	2512	3.2	2	---			0.0
Aroclor-1016	3	7.738	0.005	1594	4.4	3	---			0.0
Aroclor-1016	4	8.351	-0.047	31774	211.6	4	---			0.0
Total Col1Ave (4 peaks):					55.4	Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.052	-0.018	242	2.6	2	---			0.0
Aroclor-1221	3	6.322	0.001	427	2.0	3	---			0.0
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.052	-0.018	242	3.8	2	---			0.0
Aroclor-1232	3	7.590	-0.005	2512	8.3	3	---			0.0
Aroclor-1232	4	8.528	0.001	13950	107.9	4	---			0.0
Total Col1Ave (3 peaks):					40.0	Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.214	0.002	635	3.1	1	---			0.0
Aroclor-1242	2	7.590	-0.005	2512	3.9	2	---			0.0
Aroclor-1242	3	8.351	-0.047	31774	253.0	3	9.125	0.002	23963	215.9
Aroclor-1242	4	8.528	0.004	13950	48.0	4	9.649	0.099	23982	179.3
Total Col1Ave (4 peaks):					77.0	Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.351	-0.048	31774	191.4	1	8.260	-0.000	23490	135.6
Aroclor-1248	2	8.528	0.004	13950	32.3	2	8.669	0.002	16693	91.2
Aroclor-1248	3	8.941	-0.003	154338	186.1	3	9.125	0.005	23963	111.7
Aroclor-1248	4	9.246	0.003	158369	374.6	4	9.499	-0.047	38716	150.5
Total Col1Ave (4 peaks):					196.1	Total Col2Ave (4 peaks):			122.3	RPD = 46*
Corrected Ave (3 peaks):					136.6	Corrected Ave (3 peaks):			112.8	RPD = 19
Aroclor-1254	1	9.246	-0.001	158369	237.0	1	9.404	0.000	67493	244.0
Aroclor-1254	2	9.325	-0.000	72386	241.1	2	9.499	-0.000	38716	235.6
Aroclor-1254	3	9.617	-0.001	103602	240.1	3	9.925	0.001	53972	240.7
Aroclor-1254	4	9.756	0.000	201259	238.2	4	10.079	0.001	116950	239.0
Aroclor-1254	5	10.127	0.001	122207	239.5	5	10.327	-0.001	118439	243.9
Total Col1Ave (5 peaks):					239.2	Total Col2Ave (5 peaks):			240.6	RPD = 1
Corrected Ave (4 peaks):					238.7	Corrected Ave (4 peaks):			239.8	RPD = 0
Aroclor-1260	1	10.994	0.001	13538	26.1	1	11.615	0.009	33465	89.3
Aroclor-1260	2	11.313	0.003	13900	27.2	2	11.876	0.004	25534	26.1
Aroclor-1260	3	11.689	0.004	32548	25.4	3	12.404	0.016	1811	7.5
Aroclor-1260	4	12.093	0.003	25285	40.3	4	12.458	0.002	14842	22.7
Aroclor-1260	5	12.273	0.079	2534	9.3	NS	---			----
Total Col1Ave (5 peaks):					25.6	Total Col2Ave (4 peaks):			36.4	RPD = 35
Corrected Ave (4 peaks):					22.0	Corrected Ave (3 peaks):			18.7	RPD = 16
Aroclor-1262	1	10.779	0.000	210018	473.6	1	11.073	-0.081	114323	200.0
Aroclor-1262	2	12.273	0.078	2534	4.1	2	11.615	0.010	33465	69.4
Aroclor-1262	3	---			0.0	3	12.404	0.018	1811	3.4
Aroclor-1262	4	12.939	0.001	1830	3.3	4	12.458	0.002	14842	17.3
Total Col1Ave (3 peaks):					160.3	Total Col2Ave (4 peaks):			72.6	RPD = 75*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):			30.1	
Aroclor-1268	1	12.273	0.077	2534	1.6	1	12.404	0.019	1811	1.4
Aroclor-1268	2	---			0.0	2	12.458	0.005	14842	10.3
Aroclor-1268	3	12.654	0.006	2669	2.1	3	12.847	0.004	835	0.7
Aroclor-1268	4	13.442	0.004	6266	1.8	4	13.662	-0.001	2350	0.6
Total Col1Ave (3 peaks):					1.8	Total Col2Ave (4 peaks):			3.2	RPD = 55*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):			0.9	

Total PCB Area Col1 (5.842 - 13.740) = 2123119 Col1 Total PCB = 0.3 ppm*

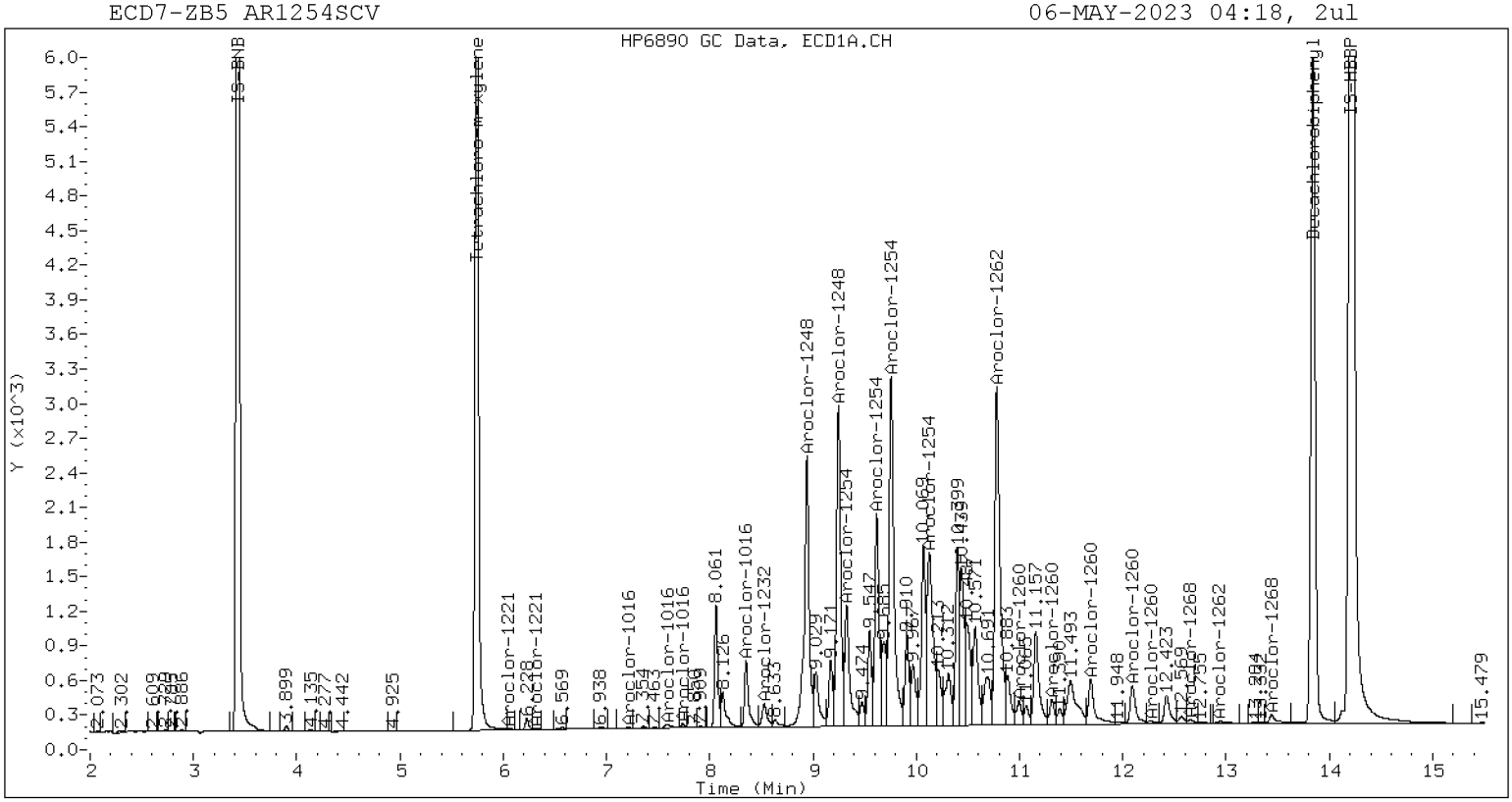
Total PCB Area Col2 (5.728 - 13.968) = 1146487 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

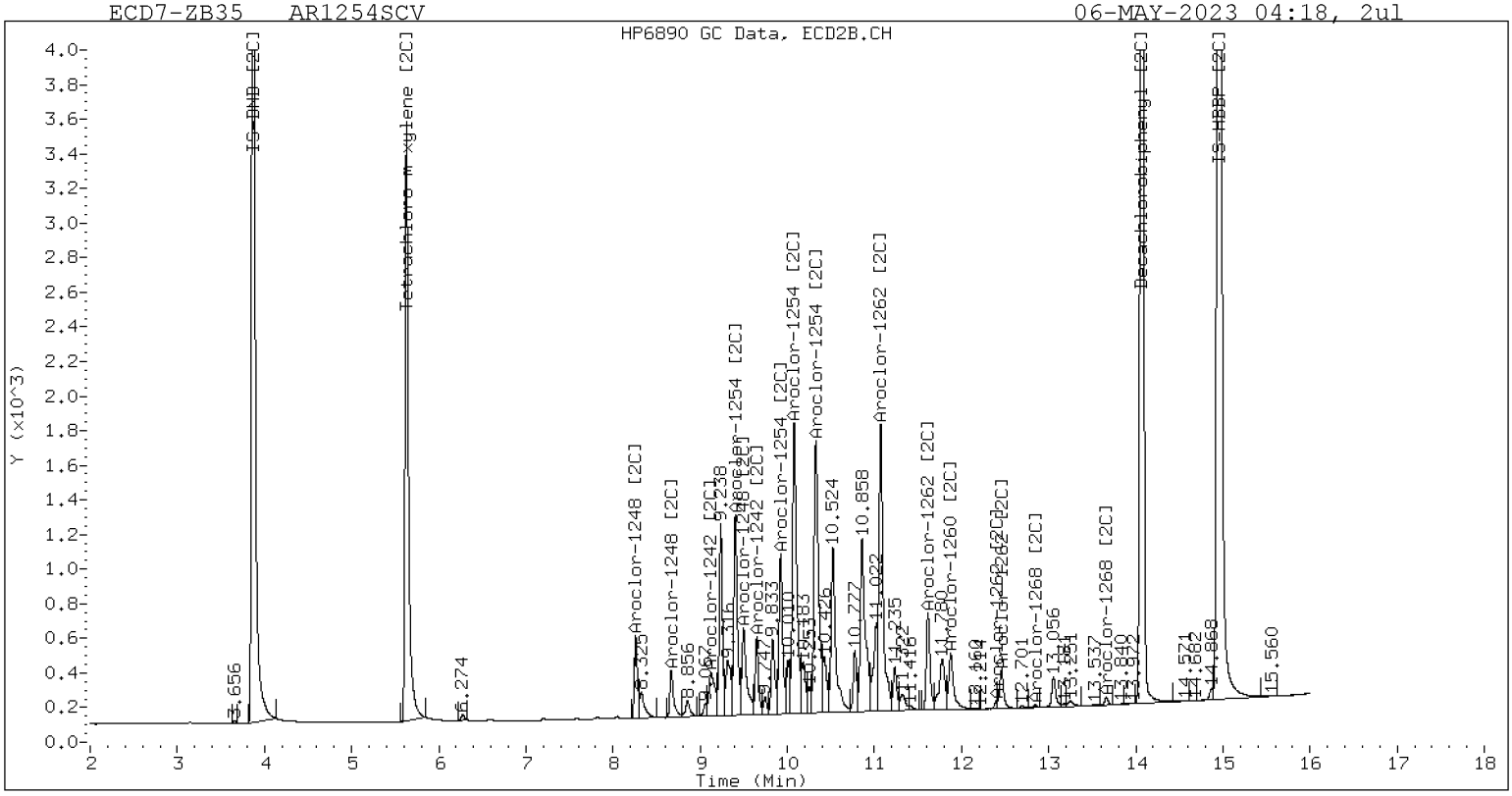
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254SCV 06-MAY-2023 04:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254SCV 06-MAY-2023 04:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052336ECD7.D
Data file 2: /230505.b/230505.b/05052336ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162SCV
Client ID:
Injection Date: 06-MAY-2023 04:39
Report Date: 05/06/2023 11:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	358254	5.628	-0.000	183759	37.8	39.1	3.3	Tetrachloro-m-xylene
13.842	0.002	344347	14.070	0.002	373300	37.1	38.8	4.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	629547	4.7
Hexabromobiphenyl	876625	929713	6.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	341980	-2.1
Hexabromobiphenyl	652984	678097	3.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	6601	27.1	1	7.207	0.003	3935	20.3
Aroclor-1016	2	7.595	0.000	13419	17.6	2	7.821	0.013	6146	14.9
Aroclor-1016	3	7.735	0.003	7114	20.2	3	8.027	0.021	3201	17.6
Aroclor-1016	4	8.353	-0.045	3916	26.9	4	8.262	0.003	2131	14.7
Total Col1Ave (4 peaks):					23.0	Total Col2Ave (4 peaks):				16.9 RPD = 30
Corrected Ave (3 peaks):					21.6	Corrected Ave (3 peaks):				15.7 RPD = 31
Aroclor-1221	1	4.663	-0.001	13184	297.8	1	4.893	-0.001	7253	287.5
Aroclor-1221	2	6.070	0.000	25527	287.4	2	6.244	-0.001	14853	284.1
Aroclor-1221	3	6.321	0.000	59985	284.3	3	6.571	-0.001	24083	292.9
Total Col1Ave (3 peaks):					289.8	Total Col2Ave (3 peaks):				288.2 RPD = 1
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.663	-0.001	13184	447.0	1	4.893	-0.001	7253	546.9
Aroclor-1232	2	6.070	0.000	25527	416.0	2	7.207	0.002	3935	51.8
Aroclor-1232	3	7.595	-0.000	13419	45.9	3	7.821	0.006	6146	40.3
Aroclor-1232	4	8.528	0.001	2679	21.4	4	8.671	0.002	1120	25.4
Total Col1Ave (4 peaks):					232.6	Total Col2Ave (4 peaks):				166.1 RPD = 33
Corrected Ave (3 peaks):					161.1	Corrected Ave (3 peaks):				39.2 RPD = 122*
Aroclor-1242	1	7.213	0.001	6601	33.3	1	7.207	0.004	3935	25.7
Aroclor-1242	2	7.595	-0.000	13419	21.3	2	7.821	0.008	6146	18.9
Aroclor-1242	3	8.353	-0.045	3916	32.2	3	9.133	0.010	881	8.5
Aroclor-1242	4	8.528	0.003	2679	9.5	4	9.651	0.101	516	4.1
Total Col1Ave (4 peaks):					24.1	Total Col2Ave (4 peaks):				14.3 RPD = 51*
Corrected Ave (3 peaks):					21.0	Corrected Ave (3 peaks):				10.5 RPD = 67*
Aroclor-1248	1	8.353	-0.046	3916	24.4	1	8.262	0.002	2131	13.1
Aroclor-1248	2	8.528	0.003	2679	6.4	2	8.671	0.004	1120	6.5
Aroclor-1248	3	8.942	-0.002	25144	31.3	3	9.133	0.013	881	4.4
Aroclor-1248	4	9.251	0.008	25583	62.5	4	9.500	-0.045	335	1.4
Total Col1Ave (4 peaks):					31.1	Total Col2Ave (4 peaks):				6.3 RPD = 132*
Corrected Ave (3 peaks):					20.7	Corrected Ave (3 peaks):				4.1 RPD = 134*
Aroclor-1254	1	9.251	0.005	25583	39.5	1	9.408	0.004	9719	37.4
Aroclor-1254	2	---			0.0	2	9.500	0.001	335	2.2
Aroclor-1254	3	9.620	0.002	4245	10.2	3	9.928	0.004	2055	9.8
Aroclor-1254	4	9.758	0.003	11050	13.5	4	10.100	0.022	55162	120.0
Aroclor-1254	5	10.071	-0.055	129151	261.4	5	10.325	-0.004	68421	150.1
Total Col1Ave (4 peaks):					81.1	Total Col2Ave (5 peaks):				63.9 RPD = 24
Corrected Ave (3 peaks):					21.1	Corrected Ave (4 peaks):				42.3 RPD = 67*
Aroclor-1260	1	10.995	0.002	206643	420.3	1	11.605	-0.001	119902	332.9
Aroclor-1260	2	11.311	0.001	167443	345.1	2	11.872	0.000	293746	311.8
Aroclor-1260	3	11.687	0.001	390491	321.4	3	12.386	-0.002	131462	563.2
Aroclor-1260	4	12.091	0.001	120118	201.8	4	12.456	0.000	212898	338.4
Aroclor-1260	5	12.195	0.002	155588	599.5	NS	---			----
Total Col1Ave (5 peaks):					377.6	Total Col2Ave (4 peaks):				386.6 RPD = 2
Corrected Ave (4 peaks):					322.2	Corrected Ave (3 peaks):				327.7 RPD = 2
Aroclor-1262	1	10.777	-0.001	114050	271.2	1	11.153	0.000	141861	258.2
Aroclor-1262	2	12.195	0.001	155588	263.0	2	11.605	0.000	119902	258.7
Aroclor-1262	3	12.269	0.000	167998	264.2	3	12.386	-0.000	131462	259.6
Aroclor-1262	4	12.938	-0.001	136019	262.5	4	12.456	0.000	212898	258.0
Total Col1Ave (4 peaks):					265.2	Total Col2Ave (4 peaks):				258.6 RPD = 3
Corrected Ave (3 peaks):					263.3	Corrected Ave (3 peaks):				258.3 RPD = 2
Aroclor-1268	1	12.195	-0.000	155588	104.9	1	12.386	0.001	131462	102.4
Aroclor-1268	2	12.269	0.001	167998	114.1	2	12.456	0.003	212898	154.3
Aroclor-1268	3	12.675	0.027	60611	51.2	3	12.843	-0.000	8393	7.1
Aroclor-1268	4	13.439	0.001	49821	14.7	4	13.661	-0.002	39480	10.4
Total Col1Ave (4 peaks):					71.2	Total Col2Ave (4 peaks):				68.6 RPD = 4

Corrected Ave (3 peaks): 56.9 Corrected Ave (3 peaks): 40.0 RPD = 35

Total PCB Area Col1 (5.842 - 13.740) = 2870829 Col1 Total PCB = 0.4 ppm*

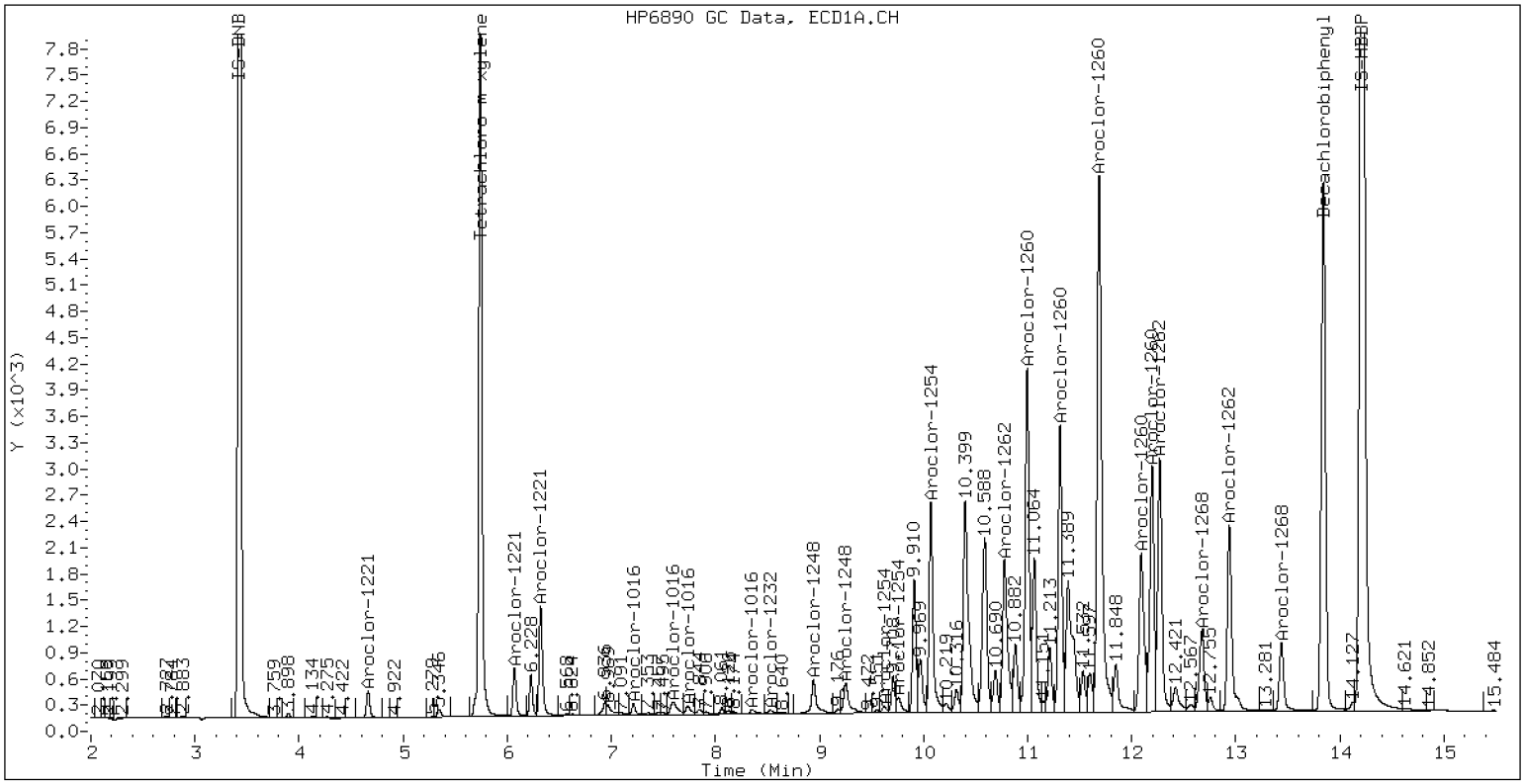
Total PCB Area Col2 (5.728 - 13.968) = 1885829 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

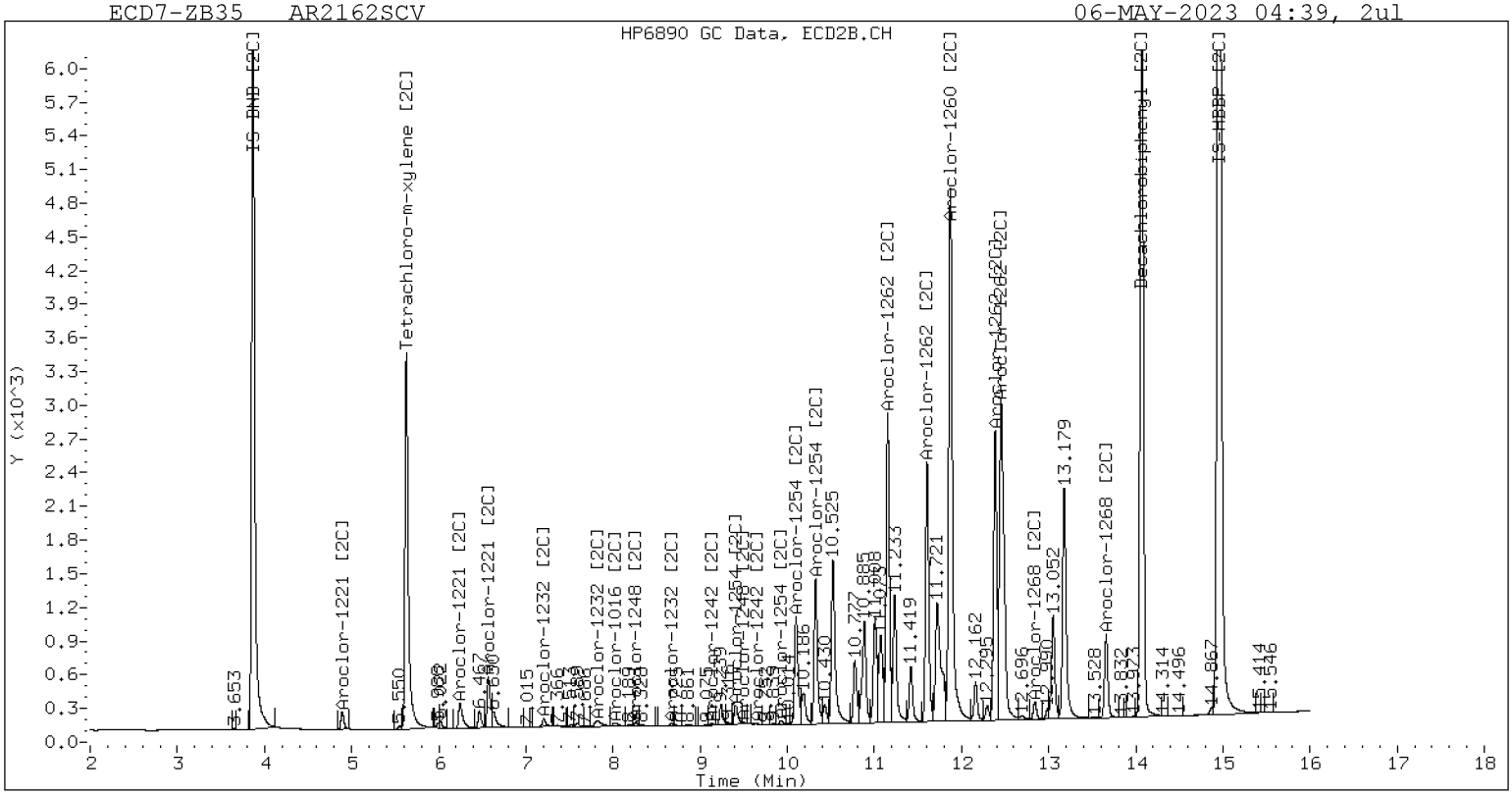
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162SCV 06-MAY-2023 04:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162SCV 06-MAY-2023 04:39, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052337ECD7.D
Data file 2: /230505.b/230505.b/05052337ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268SCV
Client ID:
Injection Date: 06-MAY-2023 05:00
Report Date: 05/06/2023 11:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	373749	5.629	0.001	196946	38.4	40.4	5.2	Tetrachloro-m-xylene
13.842	0.002	525409	14.069	0.001	586548	55.1	59.3	7.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	646456	7.5
Hexabromobiphenyl	876625	954969	8.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	354120	1.4
Hexabromobiphenyl	652984	696139	6.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.001	28623	114.3	1	7.205	0.002	23124	115.4
Aroclor-1016	2	7.597	0.002	85721	109.5	2	7.815	0.007	47496	111.2
Aroclor-1016	3	7.735	0.002	41343	114.3	3	8.014	0.008	24029	127.5
Aroclor-1016	4	8.400	0.002	16653	111.6	4	8.262	0.003	15421	103.0
Total Col1Ave (4 peaks):					112.4	Total Col2Ave (4 peaks):				114.3 RPD = 2
Corrected Ave (3 peaks):					111.8	Corrected Ave (3 peaks):				109.9 RPD = 2
Aroclor-1221	1	4.664	0.001	7272	159.9	1	4.895	0.000	4045	154.9
Aroclor-1221	2	6.070	0.001	13478	147.8	2	6.246	0.000	9235	170.6
Aroclor-1221	3	6.321	0.001	43831	202.3	3	6.572	0.000	24300	285.4
Total Col1Ave (3 peaks):					170.0	Total Col2Ave (3 peaks):				203.6 RPD = 18
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.664	0.001	7272	240.1	1	4.895	0.001	4045	294.5
Aroclor-1232	2	6.070	0.001	13478	213.9	2	7.205	0.001	23124	294.1
Aroclor-1232	3	7.597	0.002	85721	285.5	3	7.815	0.000	47496	300.7
Aroclor-1232	4	8.527	0.000	36809	286.5	4	8.669	-0.000	14324	313.2
Total Col1Ave (4 peaks):					256.5	Total Col2Ave (4 peaks):				300.6 RPD = 16
Corrected Ave (3 peaks):					246.5	Corrected Ave (3 peaks):				296.5 RPD = 18
Aroclor-1242	1	7.214	0.002	28623	140.5	1	7.205	0.002	23124	146.1
Aroclor-1242	2	7.597	0.002	85721	132.8	2	7.815	0.002	47496	141.1
Aroclor-1242	3	8.400	0.002	16653	133.4	3	9.128	0.005	14403	133.4
Aroclor-1242	4	8.527	0.003	36809	127.4	4	9.648	0.098	5512	42.4
Total Col1Ave (4 peaks):					133.5	Total Col2Ave (4 peaks):				115.7 RPD = 14
Corrected Ave (3 peaks):					131.2	Corrected Ave (3 peaks):				105.6 RPD = 22
Aroclor-1248	1	8.400	0.001	16653	100.9	1	8.262	0.002	15421	91.5
Aroclor-1248	2	8.527	0.003	36809	85.8	2	8.669	0.002	14324	80.5
Aroclor-1248	3	8.944	0.000	89377	108.4	3	9.128	0.008	14403	69.0
Aroclor-1248	4	9.238	-0.005	41570	98.9	4	9.560	0.015	17331	69.3
Total Col1Ave (4 peaks):					98.5	Total Col2Ave (4 peaks):				77.6 RPD = 24
Corrected Ave (3 peaks):					95.2	Corrected Ave (3 peaks):				72.9 RPD = 26
Aroclor-1254	1	9.238	-0.008	41570	62.6	1	9.407	0.003	5487	20.4
Aroclor-1254	2	9.326	0.001	12640	42.3	2	9.560	0.061	17331	108.4
Aroclor-1254	3	9.624	0.006	7232	16.9	3	9.929	0.005	3481	16.0
Aroclor-1254	4	9.764	0.008	11671	13.9	4	10.086	0.009	7259	15.3
Aroclor-1254	5	10.139	0.014	7544	14.9	5	10.345	0.017	6610	14.0
Total Col1Ave (5 peaks):					30.1	Total Col2Ave (5 peaks):				34.8 RPD = 14
Corrected Ave (4 peaks):					22.0	Corrected Ave (4 peaks):				16.4 RPD = 29
Aroclor-1260	1	10.998	0.005	85093	168.5	1	11.598	-0.008	75237	203.5
Aroclor-1260	2	11.313	0.003	6363	12.8	2	11.873	0.001	33655	34.8
Aroclor-1260	3	11.688	0.002	47857	38.3	3	12.384	-0.004	346138	1444.4
Aroclor-1260	4	12.094	0.004	1291	2.1	4	12.453	-0.002	373218	577.8
Aroclor-1260	5	12.195	0.001	406211	1523.9	NS	---			----
Total Col1Ave (5 peaks):					349.1	Total Col2Ave (4 peaks):				565.1 RPD = 47*
Corrected Ave (4 peaks):					55.4	Corrected Ave (3 peaks):				272.0 RPD = 132*
Aroclor-1262	1	10.785	0.006	4006	9.3	1	11.156	0.002	52531	93.1
Aroclor-1262	2	12.195	0.000	406211	668.6	2	11.598	-0.007	75237	158.2
Aroclor-1262	3	12.268	-0.002	403730	618.2	3	12.384	-0.002	346138	665.8
Aroclor-1262	4	12.937	-0.002	145536	273.5	4	12.453	-0.002	373218	440.5
Total Col1Ave (4 peaks):					392.4	Total Col2Ave (4 peaks):				339.4 RPD = 14
Corrected Ave (3 peaks):					300.3	Corrected Ave (3 peaks):				230.6 RPD = 26
Aroclor-1268	1	12.195	-0.001	406211	266.7	1	12.384	-0.001	346138	262.7
Aroclor-1268	2	12.268	-0.000	403730	266.9	2	12.453	0.001	373218	263.5
Aroclor-1268	3	12.648	-0.000	323568	266.0	3	12.844	0.001	316122	260.6
Aroclor-1268	4	13.439	0.002	920777	265.1	4	13.663	0.000	1029335	264.8
Total Col1Ave (4 peaks):					266.2	Total Col2Ave (4 peaks):				262.9 RPD = 1

Corrected Ave (3 peaks): 265.9 Corrected Ave (3 peaks): 262.3 RPD = 1

Total PCB Area Col1 (5.842 - 13.740) = 3325332 Col1 Total PCB = 0.5 ppm*

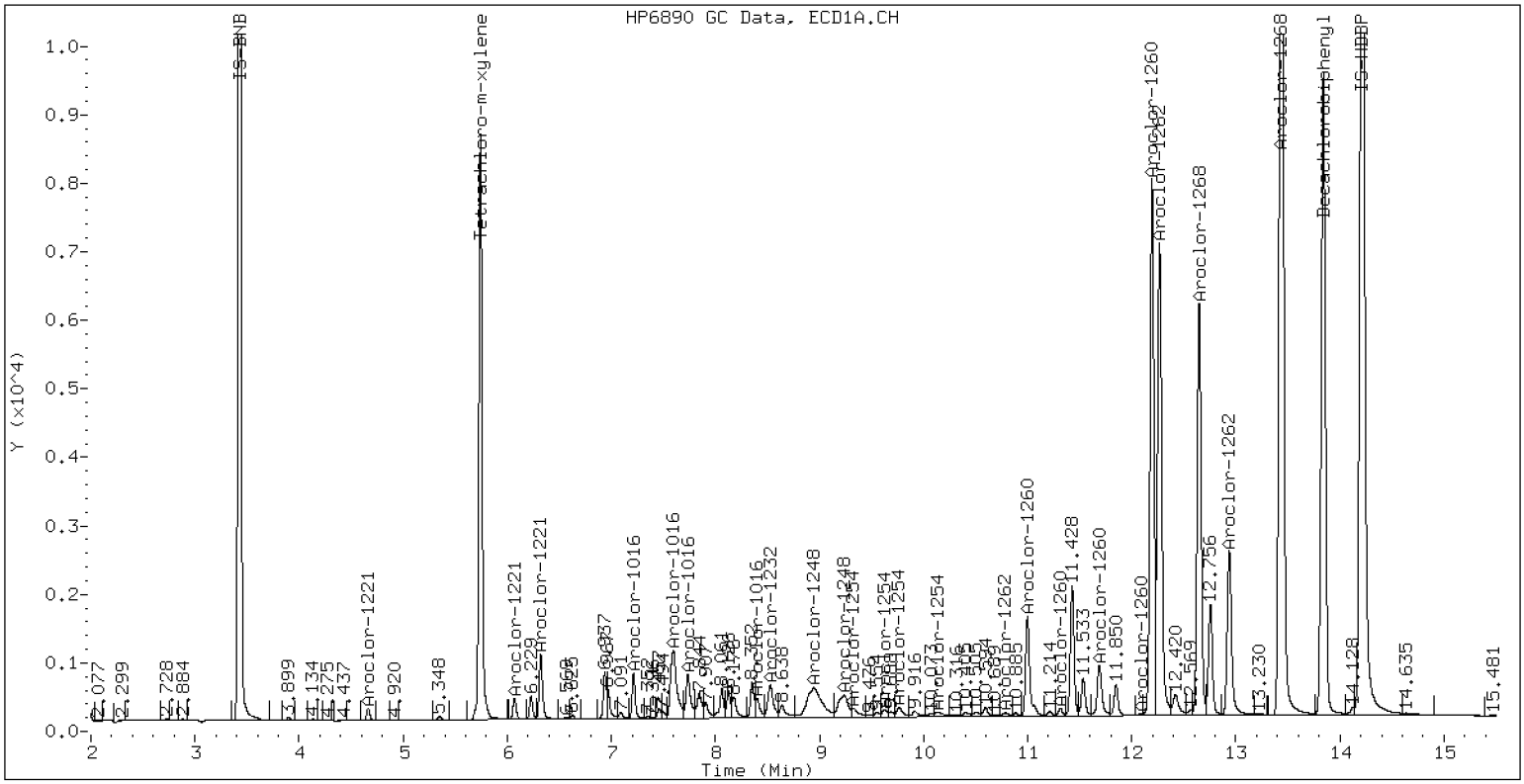
Total PCB Area Col2 (5.728 - 13.968) = 2876097 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

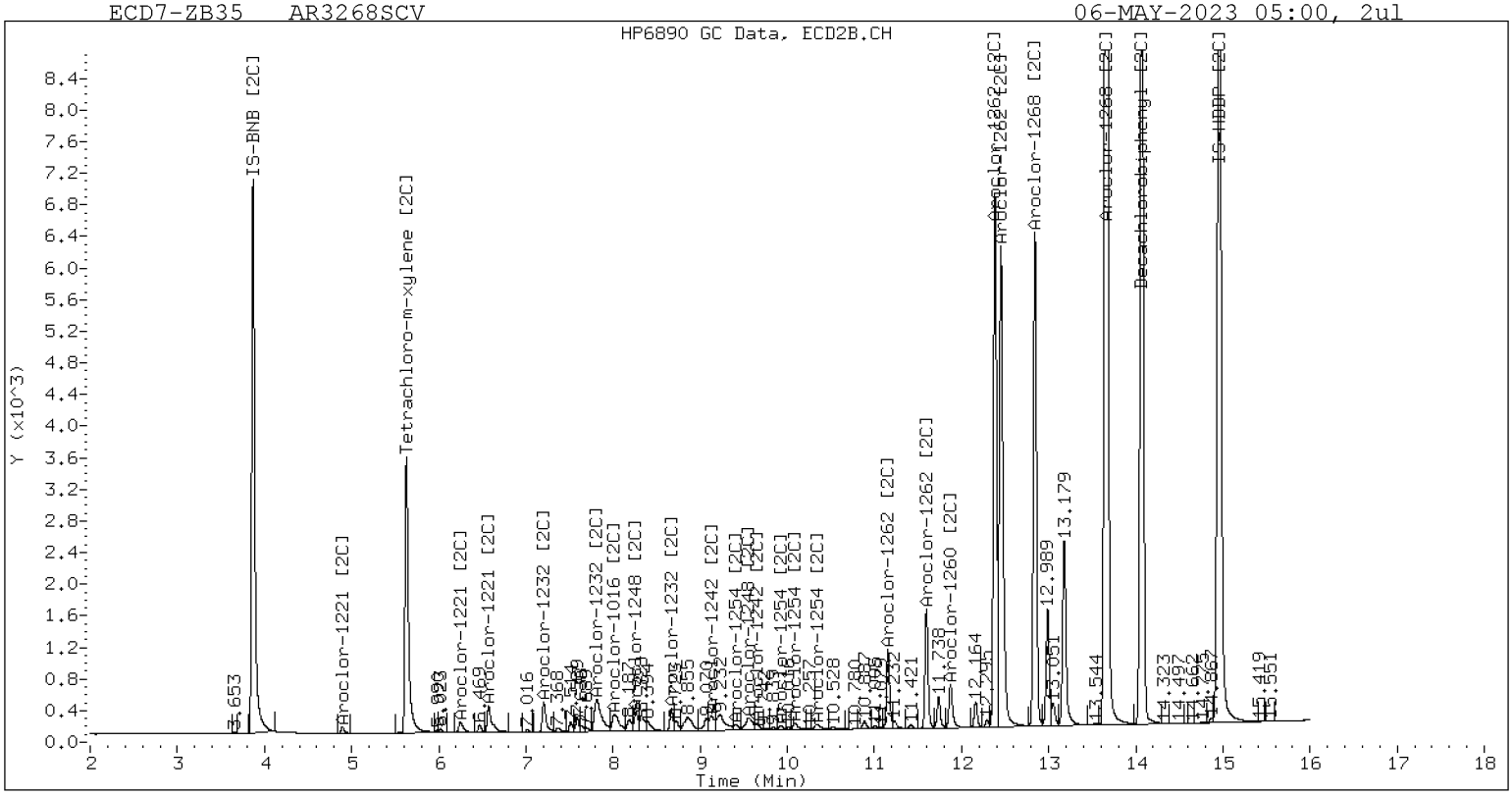
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268SCV 06-MAY-2023 05:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268SCV 06-MAY-2023 05:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230505.b/05052338ECD7.D ARI ID: DDTS

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
9.206	0.000	428189	9.867	0.000	428008	0.100	0.000	----	2,4-DDE
0.000	-10.293	0	10.625	0.000	621468	0.000	0.000#	----	2,4-DDT
9.635	0.000	1004111	10.165	0.000	369270	0.100	0.000	----	4,4-DDE
10.243	0.000	476377	10.625	0.000	621468	0.100	0.000#	----	4,4-DDD

# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

Analytical Resources Inc.
8082 DDT SCREEN REPORT

Data file 1: /230505.b/05052339ECD7.D ARI ID: DDT BD

ZB5 Col RT	ZB5 Col Shift	ZB5 Col Response	ZB35 Col RT	ZB35 Col Shift	ZB35 Col Response	ZB5 on col	ZB35 on col	RPD	Compound/Flag
9.158	-0.049	12021	9.884	0.017	17091	0.002	0.000	----	2,4-DDE
0.000	-10.293	0	10.633	0.008	326807	0.000	0.000#	----	2,4-DDT
9.644	0.009	16770	10.190	0.025	488	0.001	0.000	----	4,4-DDE
10.216	-0.028	403865	10.633	0.008	326807	0.068	0.000#	----	4,4-DDD

\# Indicates value is from co-eluting peaks
* Indicates RPD > 40%

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00022
Laboratory ID: SLE0079-SCV1
Sequence: SLE0079
Sequence Name: AR1660SCV1
Standard ID: L002065

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1016	250.00	254	1.4	20.00
Aroclor 1016 [2C]	250.00	248	-1.0	20.00
Aroclor 1260	250.00	285	14.2	20.00
Aroclor 1260 [2C]	250.00	284	13.6	20.00
Decachlorobiphenyl	40.000	36.9	-7.7	20.00
Tetrachlorometaxylene	40.000	36.9	-7.8	20.00
Decachlorobiphenyl [2C]	40.000	39.2	-1.9	20.00
Tetrachlorometaxylene [2C]	40.000	37.2	-6.9	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052332ECD7.D
Data file 2: /230505.b/230505.b/05052332ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660SCV
Client ID:
Injection Date: 06-MAY-2023 03:16
Report Date: 05/06/2023 12:06
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	356595	5.629	0.000	185340	36.9	37.2	1.0	Tetrachloro-m-xylene
13.842	0.002	347188	14.070	0.002	384711	36.9	39.2	6.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	642284	6.8
Hexabromobiphenyl	876625	941356	7.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	361711	3.6
Hexabromobiphenyl	652984	690563	5.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	61654	247.9	1	7.205	0.001	50106	244.7
Aroclor-1016	2	7.594	-0.001	199228	256.2	2	7.811	0.003	109839	251.7
Aroclor-1016	3	7.734	0.001	89643	249.3	3	8.009	0.004	48594	252.5
Aroclor-1016	4	8.399	0.001	38714	261.0	4	8.260	0.001	36878	241.2
Total Col1Ave (4 peaks):					253.6	Total Col2Ave (4 peaks):				247.5 RPD = 2
Corrected Ave (3 peaks):					251.1	Corrected Ave (3 peaks):				245.9 RPD = 2
Aroclor-1221	1	4.663	-0.000	436	9.7	1	---			0.0
Aroclor-1221	2	6.068	-0.001	8521	94.0	2	6.251	0.005	5766	104.3
Aroclor-1221	3	6.320	-0.001	41973	195.0	3	6.572	0.000	23212	266.9
Total Col1Ave (3 peaks):					99.6	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.663	-0.000	436	14.5	1	---			0.0
Aroclor-1232	2	6.068	-0.002	8521	136.1	2	7.205	0.000	50106	623.9
Aroclor-1232	3	7.594	-0.001	199228	667.9	3	7.811	-0.004	109839	680.8
Aroclor-1232	4	8.526	-0.001	85985	673.5	4	8.667	-0.003	34670	742.1
Total Col1Ave (4 peaks):					373.0	Total Col2Ave (3 peaks):				682.3 RPD = 59*
Corrected Ave (3 peaks):					272.8	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.213	0.001	61654	304.6	1	7.205	0.001	50106	310.0
Aroclor-1242	2	7.594	-0.001	199228	310.7	2	7.811	-0.002	109839	319.4
Aroclor-1242	3	8.399	0.000	38714	312.1	3	9.069	-0.054	21513	195.1
Aroclor-1242	4	8.526	0.001	85985	299.5	4	9.537	-0.013	1824	13.7
Total Col1Ave (4 peaks):					306.7	Total Col2Ave (4 peaks):				209.6 RPD = 38
Corrected Ave (3 peaks):					304.9	Corrected Ave (3 peaks):				172.9 RPD = 55*
Aroclor-1248	1	8.399	-0.000	38714	236.2	1	8.260	0.000	36878	214.3
Aroclor-1248	2	8.526	0.001	85985	201.8	2	8.667	-0.001	34670	190.7
Aroclor-1248	3	8.941	-0.003	81615	99.6	3	9.069	-0.051	21513	101.0
Aroclor-1248	4	9.249	0.006	52526	125.8	4	9.537	-0.008	1824	7.1
Total Col1Ave (4 peaks):					165.8	Total Col2Ave (4 peaks):				128.3 RPD = 26
Corrected Ave (3 peaks):					142.4	Corrected Ave (3 peaks):				99.6 RPD = 35
Aroclor-1254	1	9.249	0.003	52526	79.6	1	9.405	0.001	24726	90.0
Aroclor-1254	2	---			0.0	2	9.537	0.038	1824	11.2
Aroclor-1254	3	9.619	0.001	7081	16.6	3	9.926	0.002	3128	14.0
Aroclor-1254	4	9.756	0.001	21856	26.2	4	10.101	0.023	62581	128.7
Aroclor-1254	5	10.069	-0.057	159796	317.0	5	10.324	-0.004	85433	177.1
Total Col1Ave (4 peaks):					109.8	Total Col2Ave (5 peaks):				84.2 RPD = 26
Corrected Ave (3 peaks):					40.8	Corrected Ave (4 peaks):				61.0 RPD = 40
Aroclor-1260	1	10.995	0.001	145767	292.8	1	11.605	-0.000	99761	272.0
Aroclor-1260	2	11.311	0.001	142028	289.1	2	11.872	0.000	273505	285.1
Aroclor-1260	3	11.686	0.000	354468	288.1	3	12.389	0.001	70545	296.8
Aroclor-1260	4	12.092	0.002	161281	267.6	4	12.455	-0.000	180783	282.1
Aroclor-1260	5	12.194	0.001	76105	289.6	NS	---			----
Total Col1Ave (5 peaks):					285.5	Total Col2Ave (4 peaks):				284.0 RPD = 1
Corrected Ave (4 peaks):					283.6	Corrected Ave (3 peaks):				279.8 RPD = 1
Aroclor-1262	1	10.777	-0.001	215850	506.9	1	11.153	-0.001	104059	186.0
Aroclor-1262	2	12.194	-0.000	76105	127.1	2	11.605	0.001	99761	211.4
Aroclor-1262	3	12.271	0.001	94628	147.0	3	12.389	0.003	70545	136.8
Aroclor-1262	4	12.939	-0.000	78852	150.3	4	12.455	-0.001	180783	215.1
Total Col1Ave (4 peaks):					232.8	Total Col2Ave (4 peaks):				187.3 RPD = 22
Corrected Ave (3 peaks):					141.5	Corrected Ave (3 peaks):				178.1 RPD = 23
Aroclor-1268	1	12.194	-0.001	76105	50.7	1	12.389	0.004	70545	54.0
Aroclor-1268	2	12.271	0.003	94628	63.5	2	12.455	0.003	180783	128.7
Aroclor-1268	3	12.675	0.026	38830	32.4	3	12.844	0.001	3082	2.6
Aroclor-1268	4	13.440	0.003	19986	5.8	4	13.661	-0.002	14882	3.9
Total Col1Ave (4 peaks):					38.1	Total Col2Ave (4 peaks):				47.3 RPD = 21
Corrected Ave (3 peaks):					29.6	Corrected Ave (3 peaks):				20.1 RPD = 38

Total PCB Area Col1 (5.842 - 13.740) = 3657118 Col1 Total PCB = 0.5 ppm*

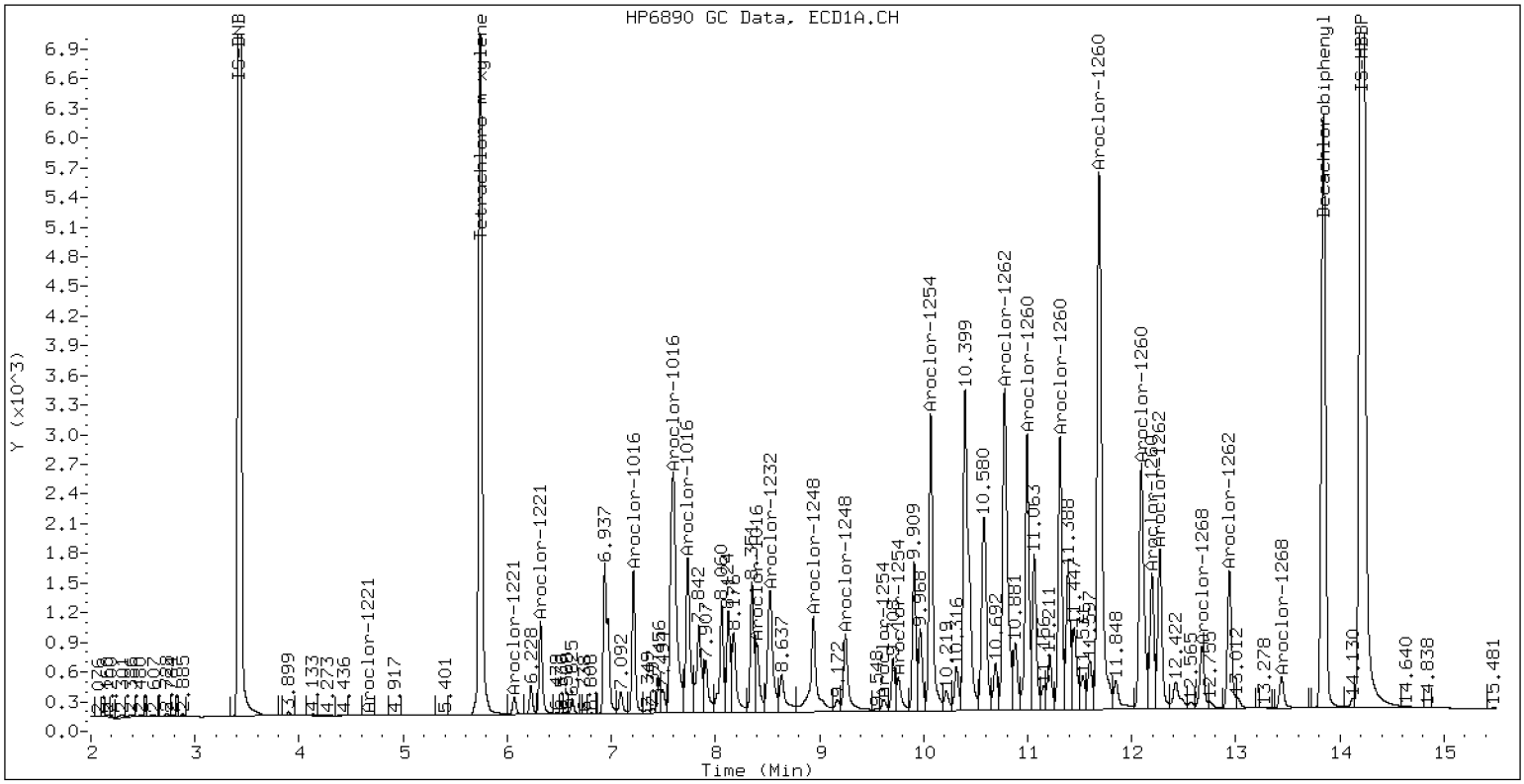
Total PCB Area Col2 (5.728 - 13.968) = 2255286 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

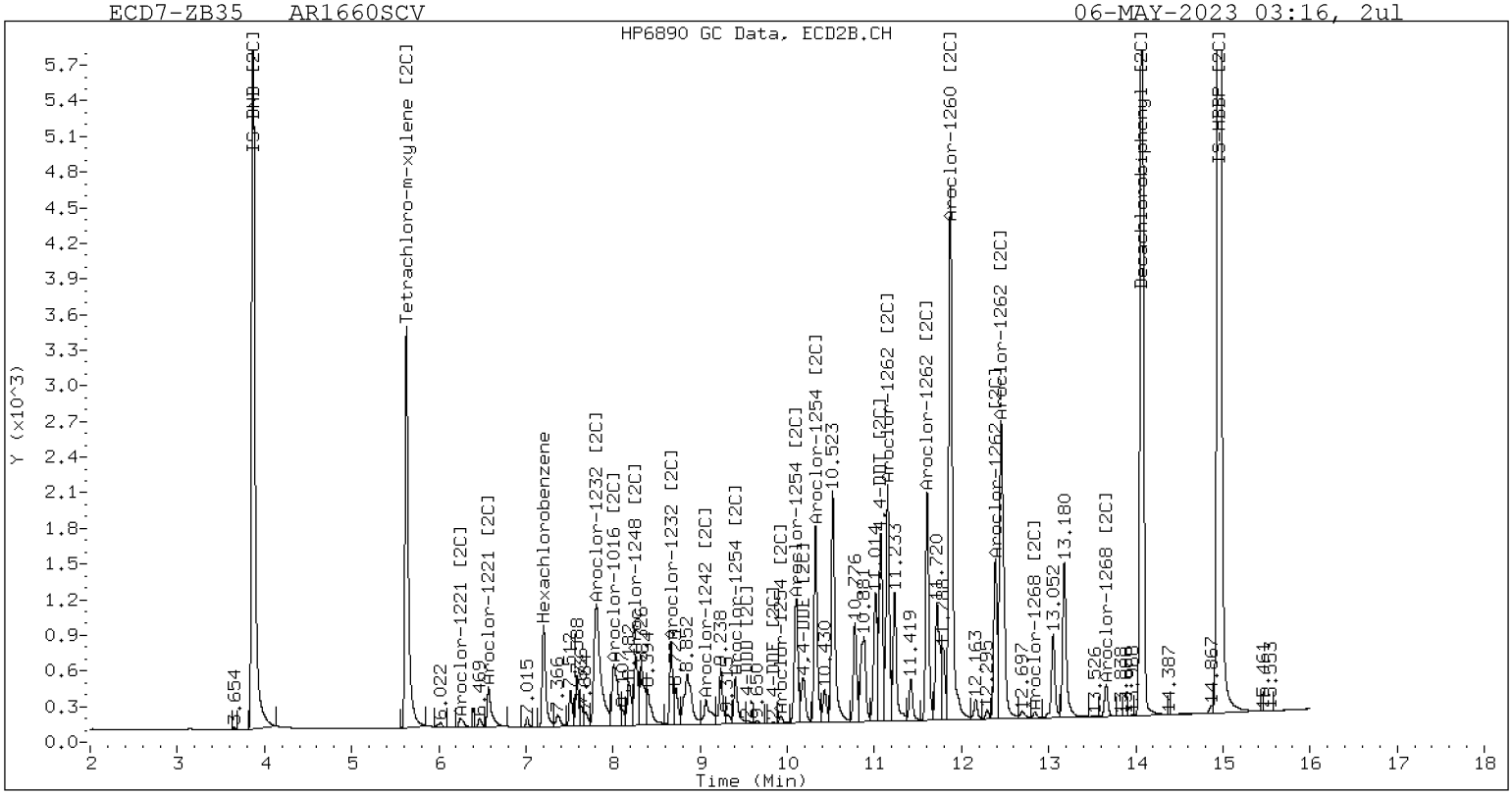
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660SCV 06-MAY-2023 03:16, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660SCV 06-MAY-2023 03:16, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00022
Laboratory ID: SLE0079-SCV2
Sequence: SLE0079
Sequence Name: AR1242SCV2
Standard ID: L003970

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1242	250.00	237	-5.1	20.00
Aroclor 1242 [2C]	250.00	230	-7.9	20.00
Decachlorobiphenyl	40.000	40.9	2.2	20.00
Tetrachlorometaxylene	40.000	32.8	-18.1	20.00
Decachlorobiphenyl [2C]	40.000	44.0	10.0	20.00
Tetrachlorometaxylene [2C]	40.000	33.4	-16.5	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052333ECD7.D
Data file 2: /230505.b/230505.b/05052333ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242SCV
Client ID:
Injection Date: 06-MAY-2023 03:36
Report Date: 05/06/2023 12:06
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.744	0.002	319899	5.630	0.002	167866	32.8	33.4	1.9	Tetrachloro-m-xylene
13.842	0.002	398699	14.069	0.001	434332	40.9	44.0	7.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	648004	7.7
Hexabromobiphenyl	876625	976327	11.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	365379	4.6
Hexabromobiphenyl	652984	695394	6.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	47446	189.1	1	7.205	0.001	36469	176.3
Aroclor-1016	2	7.594	-0.000	147684	188.2	2	7.814	0.007	77885	176.7
Aroclor-1016	3	7.735	0.002	67175	185.2	3	8.012	0.006	38400	197.5
Aroclor-1016	4	8.398	0.000	30565	204.3	4	8.261	0.002	27551	178.4
Total Col1Ave (4 peaks): 191.7						Total Col2Ave (4 peaks): 182.2			RPD = 5	
Corrected Ave (3 peaks): 187.5						Corrected Ave (3 peaks): 177.1			RPD = 6	
Aroclor-1221	1	4.666	0.002	870	19.1	1	---			0.0
Aroclor-1221	2	6.069	0.000	7118	77.8	2	6.257	0.011	4359	78.0
Aroclor-1221	3	6.322	0.001	32969	151.8	3	6.573	0.001	16609	189.0
Total Col1Ave (3 peaks): 82.9						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.666	0.002	870	28.7	1	---			0.0
Aroclor-1232	2	6.069	0.000	7118	112.7	2	7.205	-0.000	36469	449.5
Aroclor-1232	3	7.594	-0.001	147684	490.8	3	7.814	-0.001	77885	477.9
Aroclor-1232	4	8.526	-0.000	70601	548.1	4	8.668	-0.001	25417	538.5
Total Col1Ave (4 peaks): 295.1						Total Col2Ave (3 peaks): 488.7			RPD = 49*	
Corrected Ave (3 peaks): 210.7						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.213	0.001	47446	232.4	1	7.205	0.001	36469	223.3
Aroclor-1242	2	7.594	-0.000	147684	228.2	2	7.814	0.002	77885	224.2
Aroclor-1242	3	8.398	0.000	30565	244.2	3	9.124	0.001	25864	232.2
Aroclor-1242	4	8.526	0.002	70601	243.8	4	9.552	0.001	32437	241.7
Total Col1Ave (4 peaks): 237.2						Total Col2Ave (4 peaks): 230.4			RPD = 3	
Corrected Ave (3 peaks): 234.8						Corrected Ave (3 peaks): 226.6			RPD = 4	
Aroclor-1248	1	8.398	-0.001	30565	184.8	1	8.261	0.001	27551	158.5
Aroclor-1248	2	8.526	0.002	70601	164.3	2	8.668	0.001	25417	138.4
Aroclor-1248	3	8.946	0.002	172847	209.1	3	9.124	0.004	25864	120.2
Aroclor-1248	4	9.243	-0.001	87363	207.3	4	9.552	0.006	32437	125.7
Total Col1Ave (4 peaks): 191.4						Total Col2Ave (4 peaks): 135.7			RPD = 34	
Corrected Ave (3 peaks): 185.5						Corrected Ave (3 peaks): 128.1			RPD = 37	
Aroclor-1254	1	9.243	-0.004	87363	131.2	1	9.406	0.002	13247	47.7
Aroclor-1254	2	9.326	0.001	28949	96.7	2	9.552	0.053	32437	196.7
Aroclor-1254	3	9.622	0.004	20780	48.3	3	9.927	0.003	10002	44.5
Aroclor-1254	4	9.762	0.006	35470	42.1	4	10.082	0.005	19933	40.6
Aroclor-1254	5	10.140	0.015	28075	55.2	5	10.341	0.013	19432	39.9
Total Col1Ave (5 peaks): 74.7						Total Col2Ave (5 peaks): 73.9			RPD = 1	
Corrected Ave (4 peaks): 60.6						Corrected Ave (4 peaks): 43.2			RPD = 34	
Aroclor-1260	1	10.998	0.005	3609	7.0	1	11.618	0.012	2137	5.8
Aroclor-1260	2	11.317	0.007	3837	7.5	2	11.879	0.007	1437	1.5
Aroclor-1260	3	11.765	0.080	33905	26.6	3	12.382	-0.006	12460	52.1
Aroclor-1260	4	12.097	0.007	9099	14.6	4	---			0.0
Aroclor-1260	5	12.272	0.079	2060	7.6	NS	---			----
Total Col1Ave (5 peaks): 12.6						Total Col2Ave (3 peaks): 19.8			RPD = 44*	
Corrected Ave (4 peaks): 9.2						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.787	0.009	24040	54.4	1	11.078	-0.075	7864	14.0
Aroclor-1262	2	12.272	0.077	2060	3.3	2	11.618	0.013	2137	4.5
Aroclor-1262	3	---			0.0	3	12.382	-0.004	12460	24.0
Aroclor-1262	4	12.937	-0.002	16041	29.5	4	---			0.0
Total Col1Ave (3 peaks): 29.1						Total Col2Ave (3 peaks): 14.1			RPD = 69*	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.272	0.076	2060	1.3	1	12.382	-0.003	12460	9.5
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.649	0.001	4324	3.5	3	12.845	0.002	951	0.8
Aroclor-1268	4	13.442	0.005	15801	4.4	4	13.628	-0.035	6512	1.7
Total Col1Ave (3 peaks): 3.1						Total Col2Ave (3 peaks): 4.0			RPD = 25	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.842 - 13.740) = 1489022 Col1 Total PCB = 0.2 ppm*

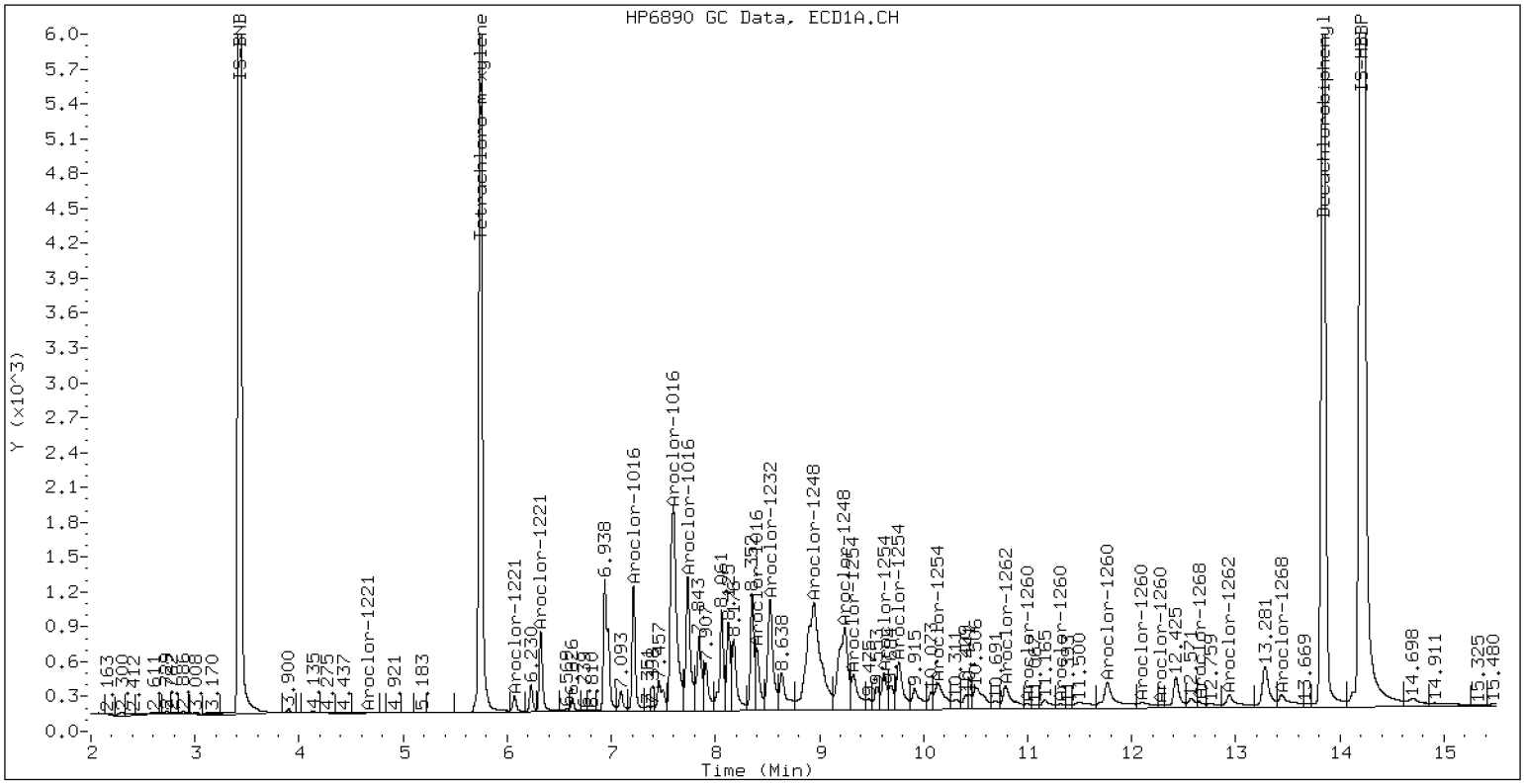
Total PCB Area Col2 (5.728 - 13.968) = 667658 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

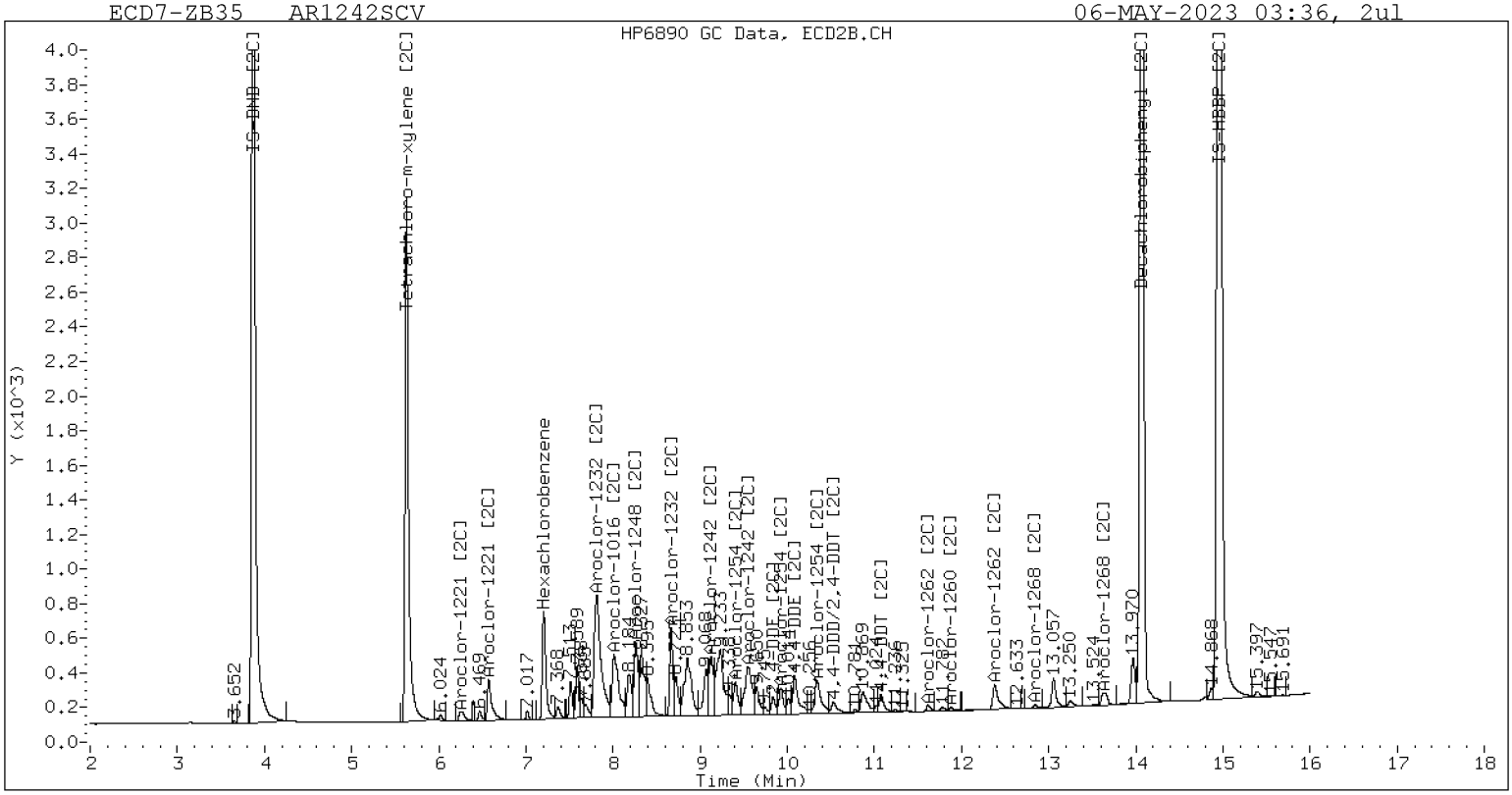
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242SCV 06-MAY-2023 03:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242SCV 06-MAY-2023 03:36, 2ul

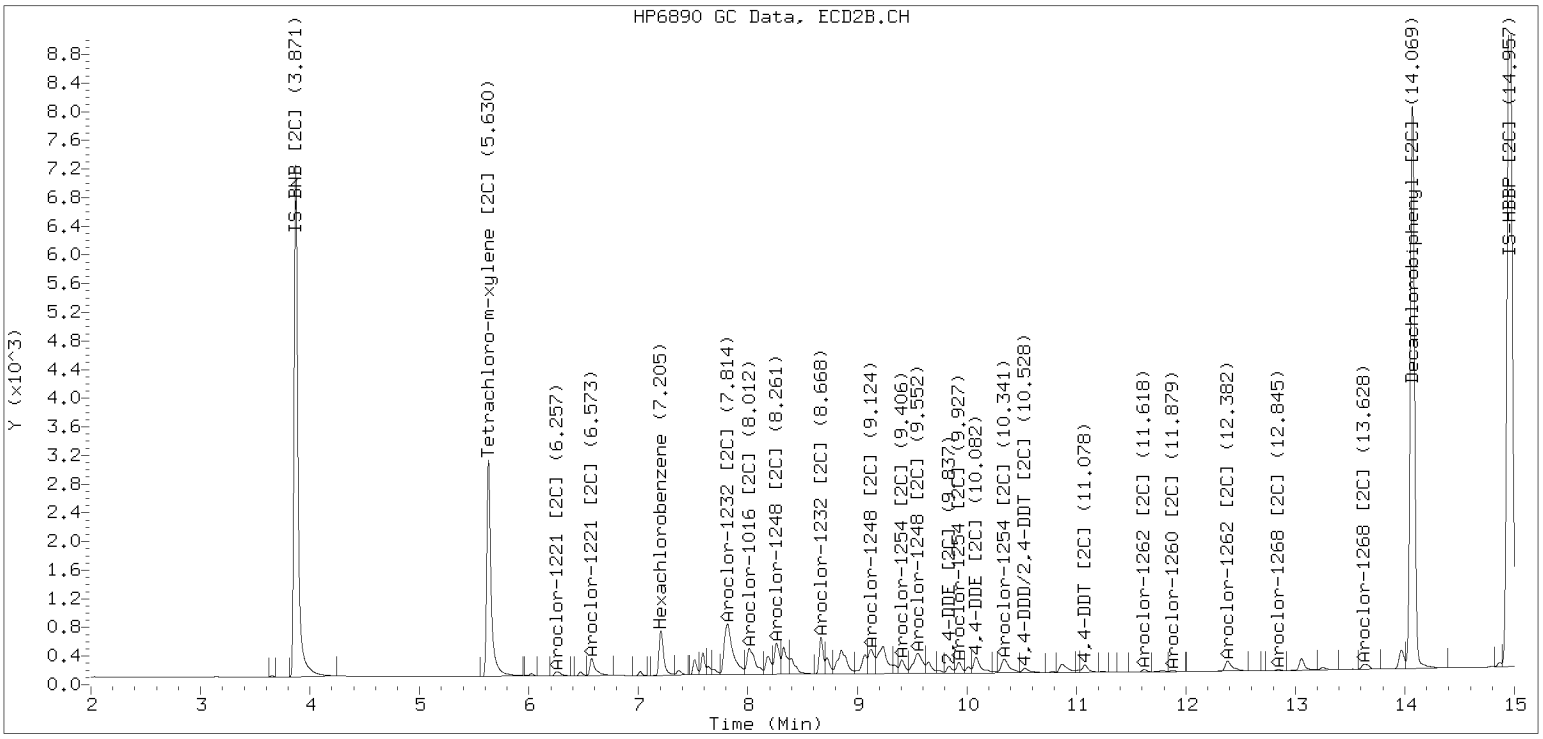


ZB-35 Manual Integration: NO

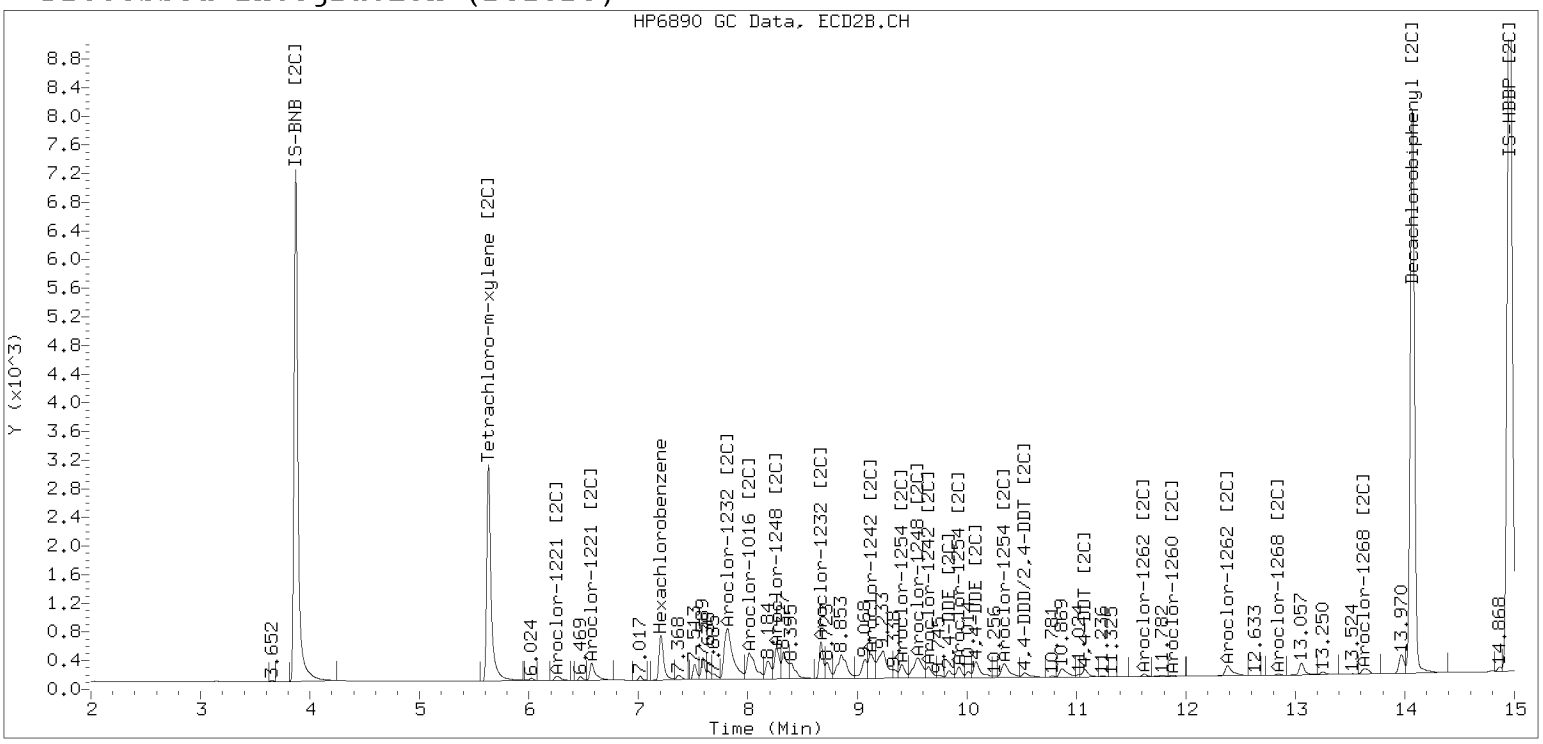
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052333ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00022
Laboratory ID: SLE0079-SCV3
Sequence: SLE0079
Sequence Name: AR1248SCV3
Standard ID: L002066

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1248	250.00	251	0.5	20.00
Aroclor 1248 [2C]	250.00	249	-0.3	20.00
Decachlorobiphenyl	40.000	35.7	-10.8	20.00
Tetrachlorometaxylene	40.000	36.8	-8.0	20.00
Decachlorobiphenyl [2C]	40.000	38.0	-5.0	20.00
Tetrachlorometaxylene [2C]	40.000	37.7	-5.7	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052334ECD7.D
Data file 2: /230505.b/230505.b/05052334ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248SCV
Client ID:
Injection Date: 06-MAY-2023 03:57
Report Date: 05/06/2023 12:07
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	356328	5.629	0.000	186552	36.8	37.7	2.5	Tetrachloro-m-xylene
13.842	0.001	339452	14.070	0.002	373861	35.7	38.0	6.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	643038	6.9
Hexabromobiphenyl	876625	952051	8.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	359604	3.0
Hexabromobiphenyl	652984	692982	6.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	0.000	19871	79.8	1	7.203	-0.001	18843	92.6
Aroclor-1016	2	7.589	-0.006	95111	122.2	2	7.812	0.005	52352	120.7
Aroclor-1016	3	7.736	0.003	37565	104.4	3	8.012	0.006	8263	43.2
Aroclor-1016	4	8.399	0.002	41542	279.7	4	8.260	0.001	42833	281.8
Total Col1Ave (4 peaks):					146.5	Total Col2Ave (4 peaks):				134.6 RPD = 9
Corrected Ave (3 peaks):					102.1	Corrected Ave (3 peaks):				85.5 RPD = 18
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.066	-0.003	351	3.9	2	6.275	0.029	1573	28.6
Aroclor-1221	3	6.320	-0.001	3509	16.3	3	6.576	0.004	967	11.2
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.066	-0.003	351	5.6	2	7.203	-0.001	18843	236.0
Aroclor-1232	3	7.589	-0.006	95111	318.5	3	7.812	-0.002	52352	326.4
Aroclor-1232	4	8.524	-0.002	105782	827.6	4	8.667	-0.002	44962	968.0
Total Col1Ave (3 peaks):					383.9	Total Col2Ave (3 peaks):				510.1 RPD = 28
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.212	0.000	19871	98.1	1	7.203	-0.000	18843	117.2
Aroclor-1242	2	7.589	-0.006	95111	148.1	2	7.812	-0.000	52352	153.1
Aroclor-1242	3	8.399	0.001	41542	334.5	3	9.120	-0.003	52681	480.6
Aroclor-1242	4	8.524	-0.000	105782	368.1	4	9.548	-0.002	63343	479.5
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				307.6 RPD = 26
Corrected Ave (3 peaks):					193.6	Corrected Ave (3 peaks):				250.0 RPD = 25
Aroclor-1248	1	8.399	0.001	41542	253.1	1	8.260	-0.001	42833	250.4
Aroclor-1248	2	8.524	-0.000	105782	248.0	2	8.667	0.000	44962	248.8
Aroclor-1248	3	8.944	-0.000	206928	252.3	3	9.120	-0.000	52681	248.7
Aroclor-1248	4	9.242	-0.001	105227	251.7	4	9.548	0.002	63343	249.4
Total Col1Ave (4 peaks):					251.3	Total Col2Ave (4 peaks):				249.3 RPD = 1
Corrected Ave (3 peaks):					250.6	Corrected Ave (3 peaks):				249.0 RPD = 1
Aroclor-1254	1	9.242	-0.004	105227	159.2	1	9.404	0.000	25835	94.6
Aroclor-1254	2	9.324	-0.001	51326	172.8	2	9.548	0.049	63343	390.3
Aroclor-1254	3	9.619	0.001	41394	97.0	3	9.925	0.001	22609	102.1
Aroclor-1254	4	9.759	0.003	72223	86.4	4	10.079	0.001	43816	90.7
Aroclor-1254	5	10.135	0.010	49936	98.9	5	10.345	0.016	42513	88.7
Total Col1Ave (5 peaks):					122.9	Total Col2Ave (5 peaks):				153.3 RPD = 22
Corrected Ave (4 peaks):					110.4	Corrected Ave (4 peaks):				94.0 RPD = 16
Aroclor-1260	1	10.998	0.005	1863	3.7	1	11.617	0.011	2599	7.1
Aroclor-1260	2	11.314	0.004	1152	2.3	2	11.877	0.005	1951	2.0
Aroclor-1260	3	11.695	0.009	1829	1.5	3	12.389	0.001	857	3.6
Aroclor-1260	4	12.097	0.007	1266	2.1	4	12.458	0.003	1302	2.0
Aroclor-1260	5	12.195	0.002	464	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.3	Total Col2Ave (4 peaks):				3.7 RPD = 48*
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				2.5 RPD = 29
Aroclor-1262	1	10.784	0.005	15405	35.8	1	11.077	-0.077	9003	16.0
Aroclor-1262	2	12.195	0.000	464	0.8	2	11.617	0.012	2599	5.5
Aroclor-1262	3	12.271	0.002	489	0.8	3	12.389	0.003	857	1.7
Aroclor-1262	4	12.940	0.001	1638	3.1	4	12.458	0.002	1302	1.5
Total Col1Ave (4 peaks):					10.1	Total Col2Ave (4 peaks):				6.2 RPD = 48*
Corrected Ave (3 peaks):					1.5	Corrected Ave (3 peaks):				2.9 RPD = 61*
Aroclor-1268	1	12.195	-0.001	464	0.3	1	12.389	0.004	857	0.7
Aroclor-1268	2	12.271	0.003	489	0.3	2	12.458	0.006	1302	0.9
Aroclor-1268	3	12.649	0.001	1831	1.5	3	12.845	0.002	676	0.6
Aroclor-1268	4	13.443	0.006	5387	1.6	4	13.661	-0.003	2707	0.7
Total Col1Ave (4 peaks):					0.9	Total Col2Ave (4 peaks):				0.7 RPD = 26
Corrected Ave (3 peaks):					0.7	Corrected Ave (3 peaks):				0.6 RPD = 11

Total PCB Area Col1 (5.842 - 13.740) = 1634238 Col1 Total PCB = 0.2 ppm*

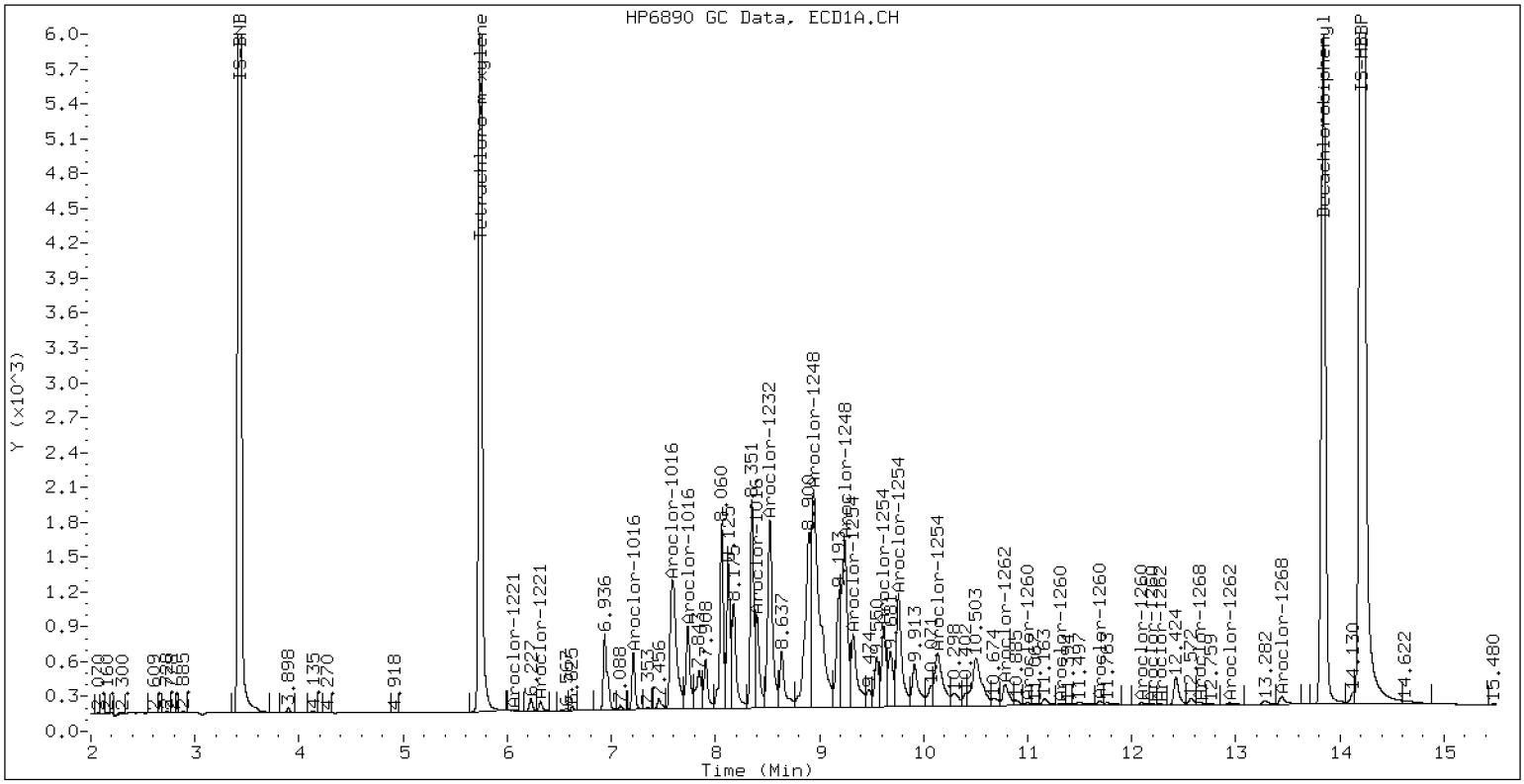
Total PCB Area Col2 (5.728 - 13.968) = 876760 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

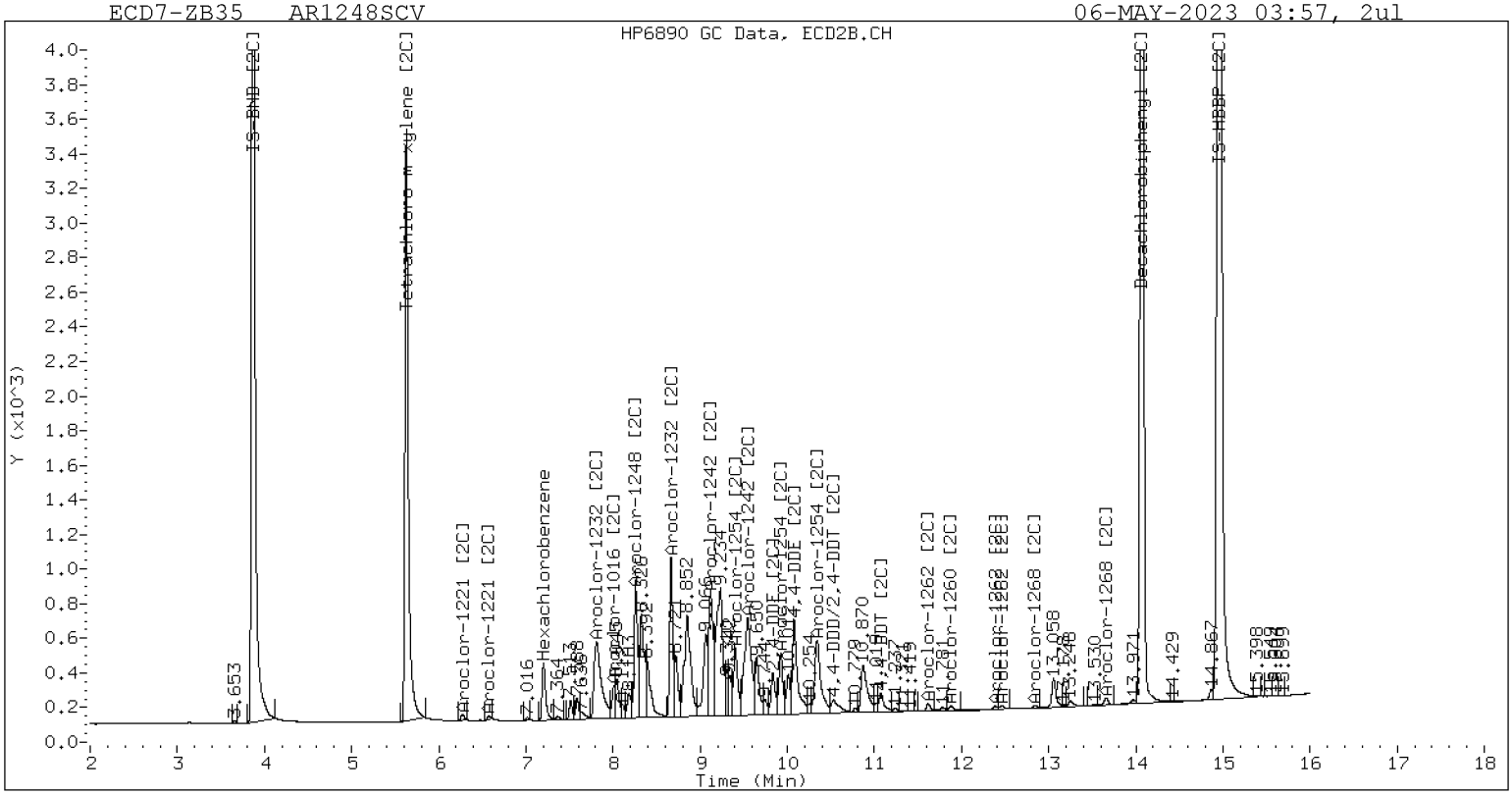
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248SCV 06-MAY-2023 03:57, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248SCV 06-MAY-2023 03:57, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00022
Laboratory ID: SLE0079-SCV4
Sequence: SLE0079
Sequence Name: AR1254SCV4
Standard ID: L002067

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1254	250.00	239	-4.3	20.00
Aroclor 1254 [2C]	250.00	241	-3.8	20.00
Decachlorobiphenyl	40.000	36.0	-10.1	20.00
Tetrachlorometaxylene	40.000	37.6	-6.0	20.00
Decachlorobiphenyl [2C]	40.000	38.5	-3.8	20.00
Tetrachlorometaxylene [2C]	40.000	38.3	-4.2	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052335ECD7.D
Data file 2: /230505.b/230505.b/05052335ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254SCV
Client ID:
Injection Date: 06-MAY-2023 04:18
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	368022	5.631	0.002	192033	37.6	38.3	2.0	Tetrachloro-m-xylene
13.843	0.002	352066	14.070	0.002	385384	36.0	38.5	6.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	650234	8.1
Hexabromobiphenyl	876625	980276	11.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	364142	4.3
Hexabromobiphenyl	652984	705291	8.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.002	635	2.5	1	---			0.0
Aroclor-1016	2	7.590	-0.004	2512	3.2	2	---			0.0
Aroclor-1016	3	7.738	0.005	1594	4.4	3	---			0.0
Aroclor-1016	4	8.351	-0.047	31774	211.6	4	---			0.0
Total Col1Ave (4 peaks):					55.4	Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.052	-0.018	242	2.6	2	---			0.0
Aroclor-1221	3	6.322	0.001	427	2.0	3	---			0.0
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.052	-0.018	242	3.8	2	---			0.0
Aroclor-1232	3	7.590	-0.005	2512	8.3	3	---			0.0
Aroclor-1232	4	8.528	0.001	13950	107.9	4	---			0.0
Total Col1Ave (3 peaks):					40.0	Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.214	0.002	635	3.1	1	---			0.0
Aroclor-1242	2	7.590	-0.005	2512	3.9	2	---			0.0
Aroclor-1242	3	8.351	-0.047	31774	253.0	3	9.125	0.002	23963	215.9
Aroclor-1242	4	8.528	0.004	13950	48.0	4	9.649	0.099	23982	179.3
Total Col1Ave (4 peaks):					77.0	Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.351	-0.048	31774	191.4	1	8.260	-0.000	23490	135.6
Aroclor-1248	2	8.528	0.004	13950	32.3	2	8.669	0.002	16693	91.2
Aroclor-1248	3	8.941	-0.003	154338	186.1	3	9.125	0.005	23963	111.7
Aroclor-1248	4	9.246	0.003	158369	374.6	4	9.499	-0.047	38716	150.5
Total Col1Ave (4 peaks):					196.1	Total Col2Ave (4 peaks):			122.3	RPD = 46*
Corrected Ave (3 peaks):					136.6	Corrected Ave (3 peaks):			112.8	RPD = 19
Aroclor-1254	1	9.246	-0.001	158369	237.0	1	9.404	0.000	67493	244.0
Aroclor-1254	2	9.325	-0.000	72386	241.1	2	9.499	-0.000	38716	235.6
Aroclor-1254	3	9.617	-0.001	103602	240.1	3	9.925	0.001	53972	240.7
Aroclor-1254	4	9.756	0.000	201259	238.2	4	10.079	0.001	116950	239.0
Aroclor-1254	5	10.127	0.001	122207	239.5	5	10.327	-0.001	118439	243.9
Total Col1Ave (5 peaks):					239.2	Total Col2Ave (5 peaks):			240.6	RPD = 1
Corrected Ave (4 peaks):					238.7	Corrected Ave (4 peaks):			239.8	RPD = 0
Aroclor-1260	1	10.994	0.001	13538	26.1	1	11.615	0.009	33465	89.3
Aroclor-1260	2	11.313	0.003	13900	27.2	2	11.876	0.004	25534	26.1
Aroclor-1260	3	11.689	0.004	32548	25.4	3	12.404	0.016	1811	7.5
Aroclor-1260	4	12.093	0.003	25285	40.3	4	12.458	0.002	14842	22.7
Aroclor-1260	5	12.273	0.079	2534	9.3	NS	---			----
Total Col1Ave (5 peaks):					25.6	Total Col2Ave (4 peaks):			36.4	RPD = 35
Corrected Ave (4 peaks):					22.0	Corrected Ave (3 peaks):			18.7	RPD = 16
Aroclor-1262	1	10.779	0.000	210018	473.6	1	11.073	-0.081	114323	200.0
Aroclor-1262	2	12.273	0.078	2534	4.1	2	11.615	0.010	33465	69.4
Aroclor-1262	3	---			0.0	3	12.404	0.018	1811	3.4
Aroclor-1262	4	12.939	0.001	1830	3.3	4	12.458	0.002	14842	17.3
Total Col1Ave (3 peaks):					160.3	Total Col2Ave (4 peaks):			72.6	RPD = 75*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):			30.1	
Aroclor-1268	1	12.273	0.077	2534	1.6	1	12.404	0.019	1811	1.4
Aroclor-1268	2	---			0.0	2	12.458	0.005	14842	10.3
Aroclor-1268	3	12.654	0.006	2669	2.1	3	12.847	0.004	835	0.7
Aroclor-1268	4	13.442	0.004	6266	1.8	4	13.662	-0.001	2350	0.6
Total Col1Ave (3 peaks):					1.8	Total Col2Ave (4 peaks):			3.2	RPD = 55*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):			0.9	

Total PCB Area Col1 (5.842 - 13.740) = 2123119 Col1 Total PCB = 0.3 ppm*

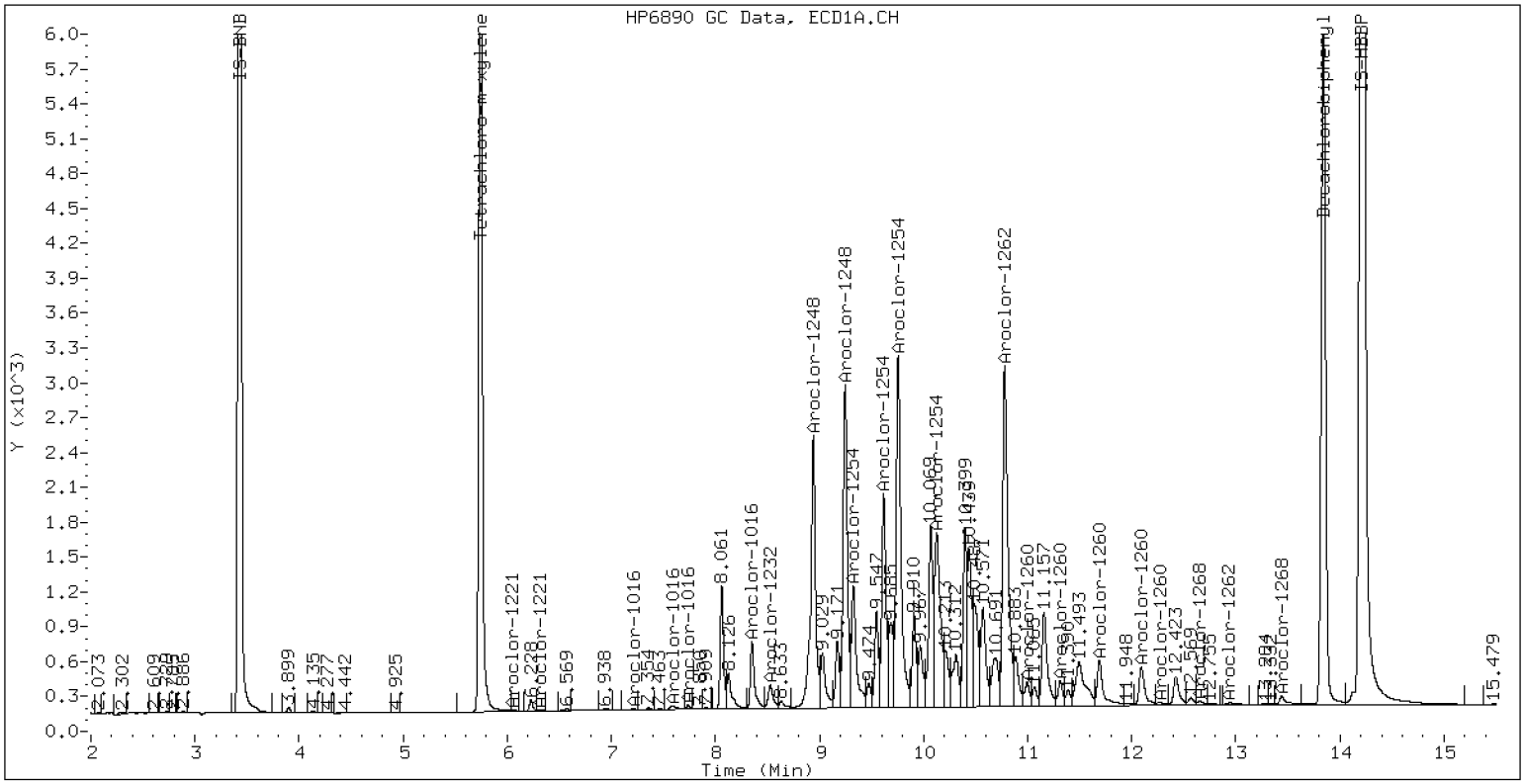
Total PCB Area Col2 (5.728 - 13.968) = 1146487 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

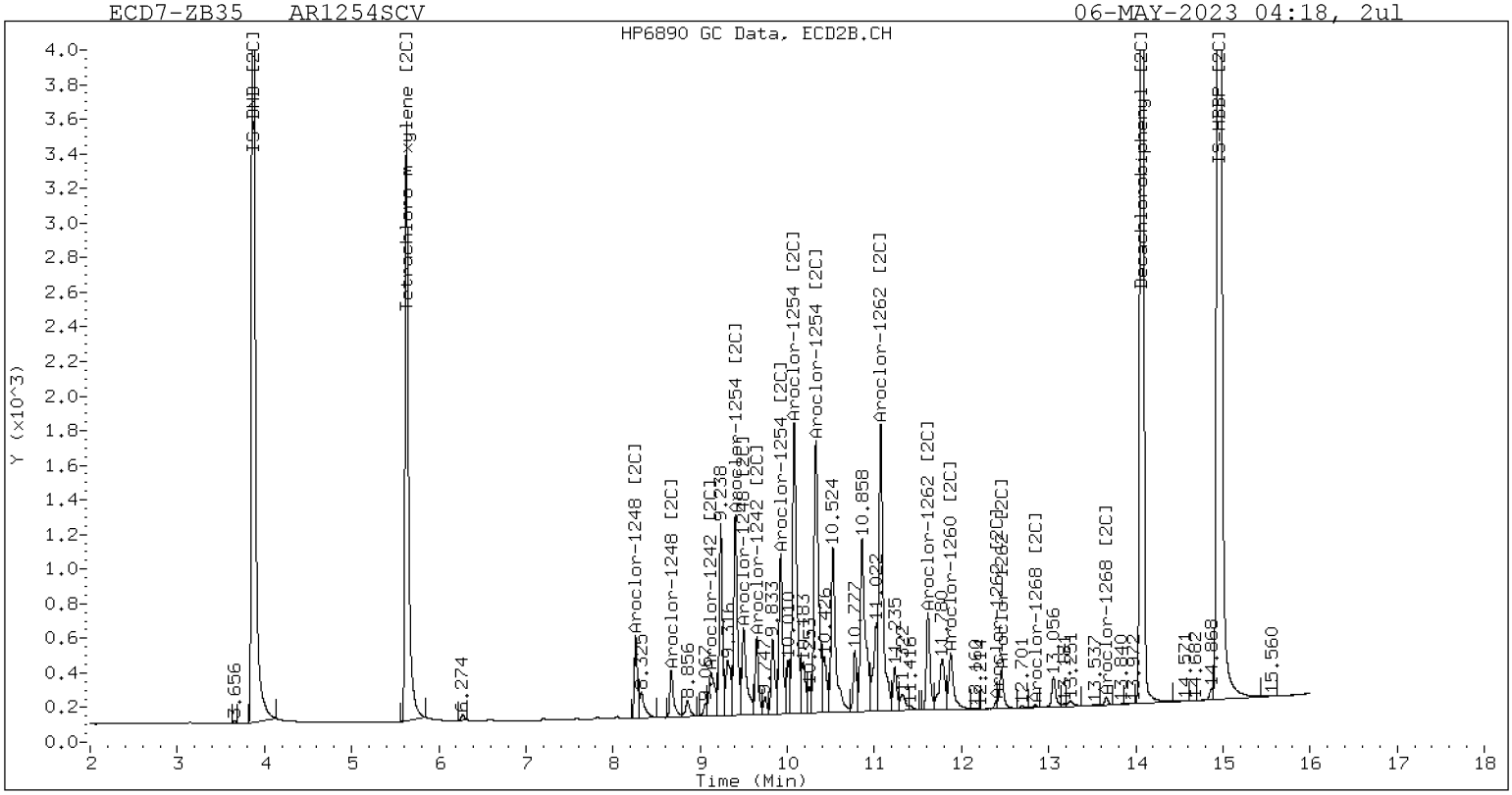
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254SCV 06-MAY-2023 04:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254SCV 06-MAY-2023 04:18, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00022
Laboratory ID: SLE0079-SCV5
Sequence: SLE0079
Sequence Name: AR2162SCV5
Standard ID: L002068

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1221	250.00	290	15.9	20.00
Aroclor 1221 [2C]	250.00	288	15.3	20.00
Aroclor 1262	250.00	265	6.1	20.00
Aroclor 1262 [2C]	250.00	259	3.5	20.00
Decachlorobiphenyl	40.000	37.1	-7.3	20.00
Tetrachlorometaxylene	40.000	37.8	-5.5	20.00
Decachlorobiphenyl [2C]	40.000	38.8	-3.1	20.00
Tetrachlorometaxylene [2C]	40.000	39.1	-2.4	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052336ECD7.D
Data file 2: /230505.b/230505.b/05052336ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162SCV
Client ID:
Injection Date: 06-MAY-2023 04:39
Report Date: 05/06/2023 11:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	358254	5.628	-0.000	183759	37.8	39.1	3.3	Tetrachloro-m-xylene
13.842	0.002	344347	14.070	0.002	373300	37.1	38.8	4.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	629547	4.7
Hexabromobiphenyl	876625	929713	6.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	341980	-2.1
Hexabromobiphenyl	652984	678097	3.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	6601	27.1	1	7.207	0.003	3935	20.3
Aroclor-1016	2	7.595	0.000	13419	17.6	2	7.821	0.013	6146	14.9
Aroclor-1016	3	7.735	0.003	7114	20.2	3	8.027	0.021	3201	17.6
Aroclor-1016	4	8.353	-0.045	3916	26.9	4	8.262	0.003	2131	14.7
Total Col1Ave (4 peaks):					23.0	Total Col2Ave (4 peaks):				16.9 RPD = 30
Corrected Ave (3 peaks):					21.6	Corrected Ave (3 peaks):				15.7 RPD = 31
Aroclor-1221	1	4.663	-0.001	13184	297.8	1	4.893	-0.001	7253	287.5
Aroclor-1221	2	6.070	0.000	25527	287.4	2	6.244	-0.001	14853	284.1
Aroclor-1221	3	6.321	0.000	59985	284.3	3	6.571	-0.001	24083	292.9
Total Col1Ave (3 peaks):					289.8	Total Col2Ave (3 peaks):				288.2 RPD = 1
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.663	-0.001	13184	447.0	1	4.893	-0.001	7253	546.9
Aroclor-1232	2	6.070	0.000	25527	416.0	2	7.207	0.002	3935	51.8
Aroclor-1232	3	7.595	-0.000	13419	45.9	3	7.821	0.006	6146	40.3
Aroclor-1232	4	8.528	0.001	2679	21.4	4	8.671	0.002	1120	25.4
Total Col1Ave (4 peaks):					232.6	Total Col2Ave (4 peaks):				166.1 RPD = 33
Corrected Ave (3 peaks):					161.1	Corrected Ave (3 peaks):				39.2 RPD = 122*
Aroclor-1242	1	7.213	0.001	6601	33.3	1	7.207	0.004	3935	25.7
Aroclor-1242	2	7.595	-0.000	13419	21.3	2	7.821	0.008	6146	18.9
Aroclor-1242	3	8.353	-0.045	3916	32.2	3	9.133	0.010	881	8.5
Aroclor-1242	4	8.528	0.003	2679	9.5	4	9.651	0.101	516	4.1
Total Col1Ave (4 peaks):					24.1	Total Col2Ave (4 peaks):				14.3 RPD = 51*
Corrected Ave (3 peaks):					21.0	Corrected Ave (3 peaks):				10.5 RPD = 67*
Aroclor-1248	1	8.353	-0.046	3916	24.4	1	8.262	0.002	2131	13.1
Aroclor-1248	2	8.528	0.003	2679	6.4	2	8.671	0.004	1120	6.5
Aroclor-1248	3	8.942	-0.002	25144	31.3	3	9.133	0.013	881	4.4
Aroclor-1248	4	9.251	0.008	25583	62.5	4	9.500	-0.045	335	1.4
Total Col1Ave (4 peaks):					31.1	Total Col2Ave (4 peaks):				6.3 RPD = 132*
Corrected Ave (3 peaks):					20.7	Corrected Ave (3 peaks):				4.1 RPD = 134*
Aroclor-1254	1	9.251	0.005	25583	39.5	1	9.408	0.004	9719	37.4
Aroclor-1254	2	---			0.0	2	9.500	0.001	335	2.2
Aroclor-1254	3	9.620	0.002	4245	10.2	3	9.928	0.004	2055	9.8
Aroclor-1254	4	9.758	0.003	11050	13.5	4	10.100	0.022	55162	120.0
Aroclor-1254	5	10.071	-0.055	129151	261.4	5	10.325	-0.004	68421	150.1
Total Col1Ave (4 peaks):					81.1	Total Col2Ave (5 peaks):				63.9 RPD = 24
Corrected Ave (3 peaks):					21.1	Corrected Ave (4 peaks):				42.3 RPD = 67*
Aroclor-1260	1	10.995	0.002	206643	420.3	1	11.605	-0.001	119902	332.9
Aroclor-1260	2	11.311	0.001	167443	345.1	2	11.872	0.000	293746	311.8
Aroclor-1260	3	11.687	0.001	390491	321.4	3	12.386	-0.002	131462	563.2
Aroclor-1260	4	12.091	0.001	120118	201.8	4	12.456	0.000	212898	338.4
Aroclor-1260	5	12.195	0.002	155588	599.5	NS	---			----
Total Col1Ave (5 peaks):					377.6	Total Col2Ave (4 peaks):				386.6 RPD = 2
Corrected Ave (4 peaks):					322.2	Corrected Ave (3 peaks):				327.7 RPD = 2
Aroclor-1262	1	10.777	-0.001	114050	271.2	1	11.153	0.000	141861	258.2
Aroclor-1262	2	12.195	0.001	155588	263.0	2	11.605	0.000	119902	258.7
Aroclor-1262	3	12.269	0.000	167998	264.2	3	12.386	-0.000	131462	259.6
Aroclor-1262	4	12.938	-0.001	136019	262.5	4	12.456	0.000	212898	258.0
Total Col1Ave (4 peaks):					265.2	Total Col2Ave (4 peaks):				258.6 RPD = 3
Corrected Ave (3 peaks):					263.3	Corrected Ave (3 peaks):				258.3 RPD = 2
Aroclor-1268	1	12.195	-0.000	155588	104.9	1	12.386	0.001	131462	102.4
Aroclor-1268	2	12.269	0.001	167998	114.1	2	12.456	0.003	212898	154.3
Aroclor-1268	3	12.675	0.027	60611	51.2	3	12.843	-0.000	8393	7.1
Aroclor-1268	4	13.439	0.001	49821	14.7	4	13.661	-0.002	39480	10.4
Total Col1Ave (4 peaks):					71.2	Total Col2Ave (4 peaks):				68.6 RPD = 4

Corrected Ave (3 peaks): 56.9 Corrected Ave (3 peaks): 40.0 RPD = 35

Total PCB Area Col1 (5.842 - 13.740) = 2870829 Col1 Total PCB = 0.4 ppm*

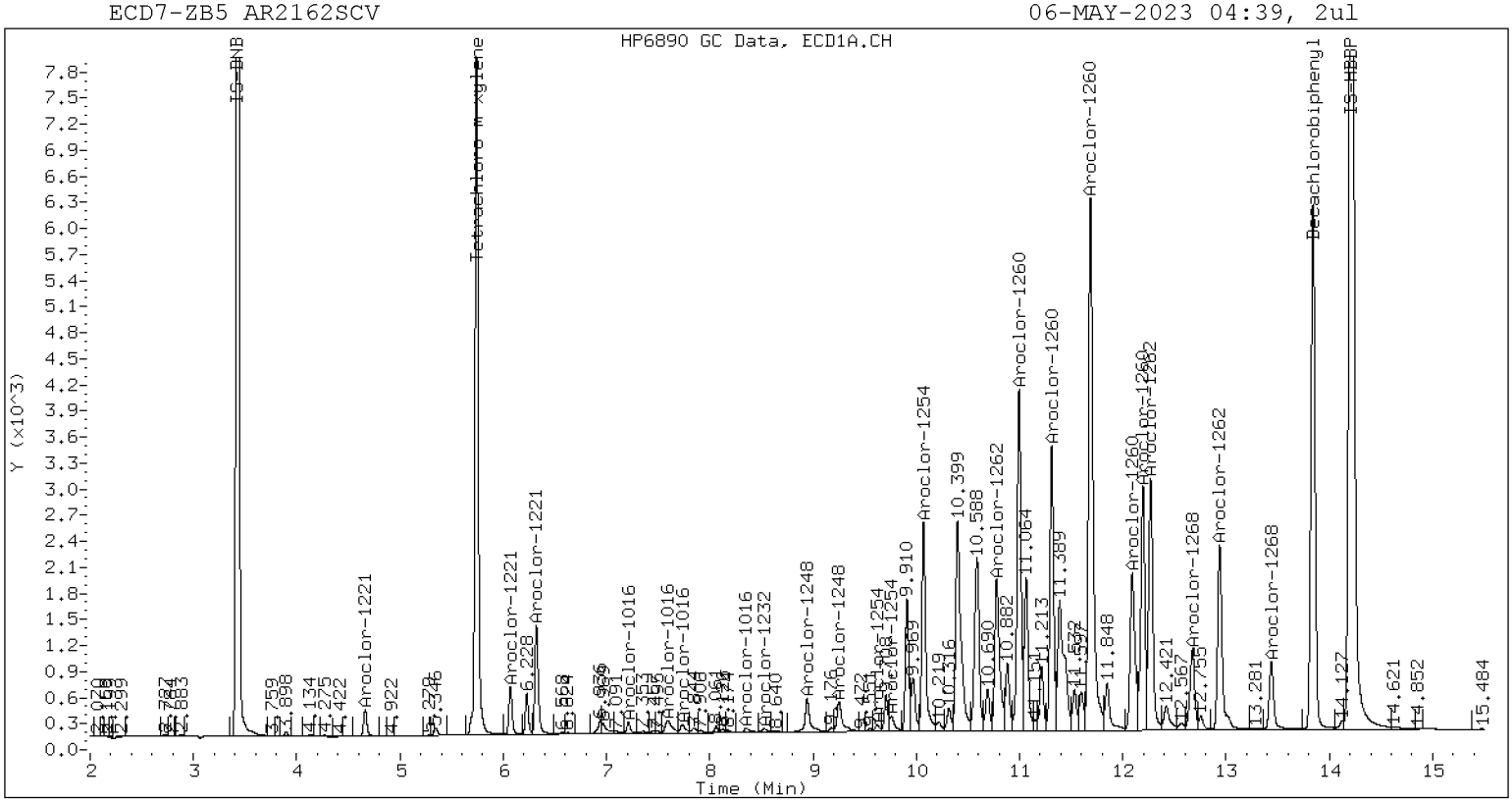
Total PCB Area Col2 (5.728 - 13.968) = 1885829 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

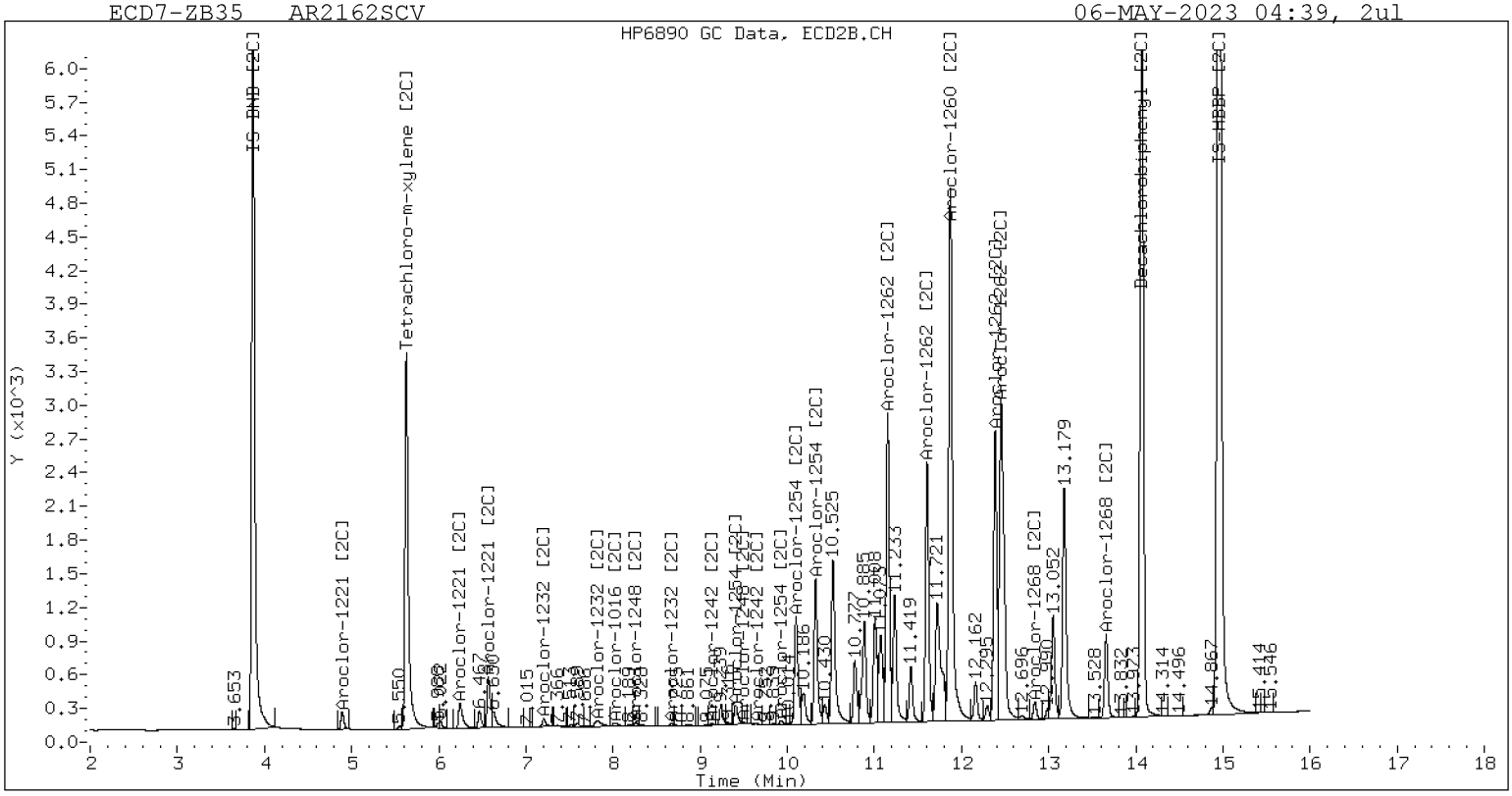
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162SCV 06-MAY-2023 04:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162SCV 06-MAY-2023 04:39, 2ul



ZB-35 Manual Integration: NO

SECOND-SOURCE CALIBRATION VERIFICATION

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00022
Laboratory ID: SLE0079-SCV6
Sequence: SLE0079
Sequence Name: AR3268SCV6
Standard ID: L002069

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Aroclor 1232	250.00	256	2.6	20.00
Aroclor 1232 [2C]	250.00	301	20.3	20.00
Aroclor 1268	250.00	266	6.5	20.00
Aroclor 1268 [2C]	250.00	263	5.2	20.00
Decachlorobiphenyl	40.000	55.1	37.7	20.00
Tetrachlorometaxylene	40.000	38.4	-4.0	20.00
Decachlorobiphenyl [2C]	40.000	59.3	48.3	20.00
Tetrachlorometaxylene [2C]	40.000	40.4	1.1	20.00

* Indicates values outside of QC limits
[2C] indicates second-column analyte.

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052337ECD7.D
Data file 2: /230505.b/230505.b/05052337ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268SCV
Client ID:
Injection Date: 06-MAY-2023 05:00
Report Date: 05/06/2023 11:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	373749	5.629	0.001	196946	38.4	40.4	5.2	Tetrachloro-m-xylene
13.842	0.002	525409	14.069	0.001	586548	55.1	59.3	7.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	646456	7.5
Hexabromobiphenyl	876625	954969	8.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	354120	1.4
Hexabromobiphenyl	652984	696139	6.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.001	28623	114.3	1	7.205	0.002	23124	115.4
Aroclor-1016	2	7.597	0.002	85721	109.5	2	7.815	0.007	47496	111.2
Aroclor-1016	3	7.735	0.002	41343	114.3	3	8.014	0.008	24029	127.5
Aroclor-1016	4	8.400	0.002	16653	111.6	4	8.262	0.003	15421	103.0
Total Col1Ave (4 peaks):					112.4	Total Col2Ave (4 peaks):				114.3 RPD = 2
Corrected Ave (3 peaks):					111.8	Corrected Ave (3 peaks):				109.9 RPD = 2
Aroclor-1221	1	4.664	0.001	7272	159.9	1	4.895	0.000	4045	154.9
Aroclor-1221	2	6.070	0.001	13478	147.8	2	6.246	0.000	9235	170.6
Aroclor-1221	3	6.321	0.001	43831	202.3	3	6.572	0.000	24300	285.4
Total Col1Ave (3 peaks):					170.0	Total Col2Ave (3 peaks):				203.6 RPD = 18
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.664	0.001	7272	240.1	1	4.895	0.001	4045	294.5
Aroclor-1232	2	6.070	0.001	13478	213.9	2	7.205	0.001	23124	294.1
Aroclor-1232	3	7.597	0.002	85721	285.5	3	7.815	0.000	47496	300.7
Aroclor-1232	4	8.527	0.000	36809	286.5	4	8.669	-0.000	14324	313.2
Total Col1Ave (4 peaks):					256.5	Total Col2Ave (4 peaks):				300.6 RPD = 16
Corrected Ave (3 peaks):					246.5	Corrected Ave (3 peaks):				296.5 RPD = 18
Aroclor-1242	1	7.214	0.002	28623	140.5	1	7.205	0.002	23124	146.1
Aroclor-1242	2	7.597	0.002	85721	132.8	2	7.815	0.002	47496	141.1
Aroclor-1242	3	8.400	0.002	16653	133.4	3	9.128	0.005	14403	133.4
Aroclor-1242	4	8.527	0.003	36809	127.4	4	9.648	0.098	5512	42.4
Total Col1Ave (4 peaks):					133.5	Total Col2Ave (4 peaks):				115.7 RPD = 14
Corrected Ave (3 peaks):					131.2	Corrected Ave (3 peaks):				105.6 RPD = 22
Aroclor-1248	1	8.400	0.001	16653	100.9	1	8.262	0.002	15421	91.5
Aroclor-1248	2	8.527	0.003	36809	85.8	2	8.669	0.002	14324	80.5
Aroclor-1248	3	8.944	0.000	89377	108.4	3	9.128	0.008	14403	69.0
Aroclor-1248	4	9.238	-0.005	41570	98.9	4	9.560	0.015	17331	69.3
Total Col1Ave (4 peaks):					98.5	Total Col2Ave (4 peaks):				77.6 RPD = 24
Corrected Ave (3 peaks):					95.2	Corrected Ave (3 peaks):				72.9 RPD = 26
Aroclor-1254	1	9.238	-0.008	41570	62.6	1	9.407	0.003	5487	20.4
Aroclor-1254	2	9.326	0.001	12640	42.3	2	9.560	0.061	17331	108.4
Aroclor-1254	3	9.624	0.006	7232	16.9	3	9.929	0.005	3481	16.0
Aroclor-1254	4	9.764	0.008	11671	13.9	4	10.086	0.009	7259	15.3
Aroclor-1254	5	10.139	0.014	7544	14.9	5	10.345	0.017	6610	14.0
Total Col1Ave (5 peaks):					30.1	Total Col2Ave (5 peaks):				34.8 RPD = 14
Corrected Ave (4 peaks):					22.0	Corrected Ave (4 peaks):				16.4 RPD = 29
Aroclor-1260	1	10.998	0.005	85093	168.5	1	11.598	-0.008	75237	203.5
Aroclor-1260	2	11.313	0.003	6363	12.8	2	11.873	0.001	33655	34.8
Aroclor-1260	3	11.688	0.002	47857	38.3	3	12.384	-0.004	346138	1444.4
Aroclor-1260	4	12.094	0.004	1291	2.1	4	12.453	-0.002	373218	577.8
Aroclor-1260	5	12.195	0.001	406211	1523.9	NS	---			----
Total Col1Ave (5 peaks):					349.1	Total Col2Ave (4 peaks):				565.1 RPD = 47*
Corrected Ave (4 peaks):					55.4	Corrected Ave (3 peaks):				272.0 RPD = 132*
Aroclor-1262	1	10.785	0.006	4006	9.3	1	11.156	0.002	52531	93.1
Aroclor-1262	2	12.195	0.000	406211	668.6	2	11.598	-0.007	75237	158.2
Aroclor-1262	3	12.268	-0.002	403730	618.2	3	12.384	-0.002	346138	665.8
Aroclor-1262	4	12.937	-0.002	145536	273.5	4	12.453	-0.002	373218	440.5
Total Col1Ave (4 peaks):					392.4	Total Col2Ave (4 peaks):				339.4 RPD = 14
Corrected Ave (3 peaks):					300.3	Corrected Ave (3 peaks):				230.6 RPD = 26
Aroclor-1268	1	12.195	-0.001	406211	266.7	1	12.384	-0.001	346138	262.7
Aroclor-1268	2	12.268	-0.000	403730	266.9	2	12.453	0.001	373218	263.5
Aroclor-1268	3	12.648	-0.000	323568	266.0	3	12.844	0.001	316122	260.6
Aroclor-1268	4	13.439	0.002	920777	265.1	4	13.663	0.000	1029335	264.8
Total Col1Ave (4 peaks):					266.2	Total Col2Ave (4 peaks):				262.9 RPD = 1

Corrected Ave (3 peaks): 265.9 Corrected Ave (3 peaks): 262.3 RPD = 1

Total PCB Area Col1 (5.842 - 13.740) = 3325332 Col1 Total PCB = 0.5 ppm*

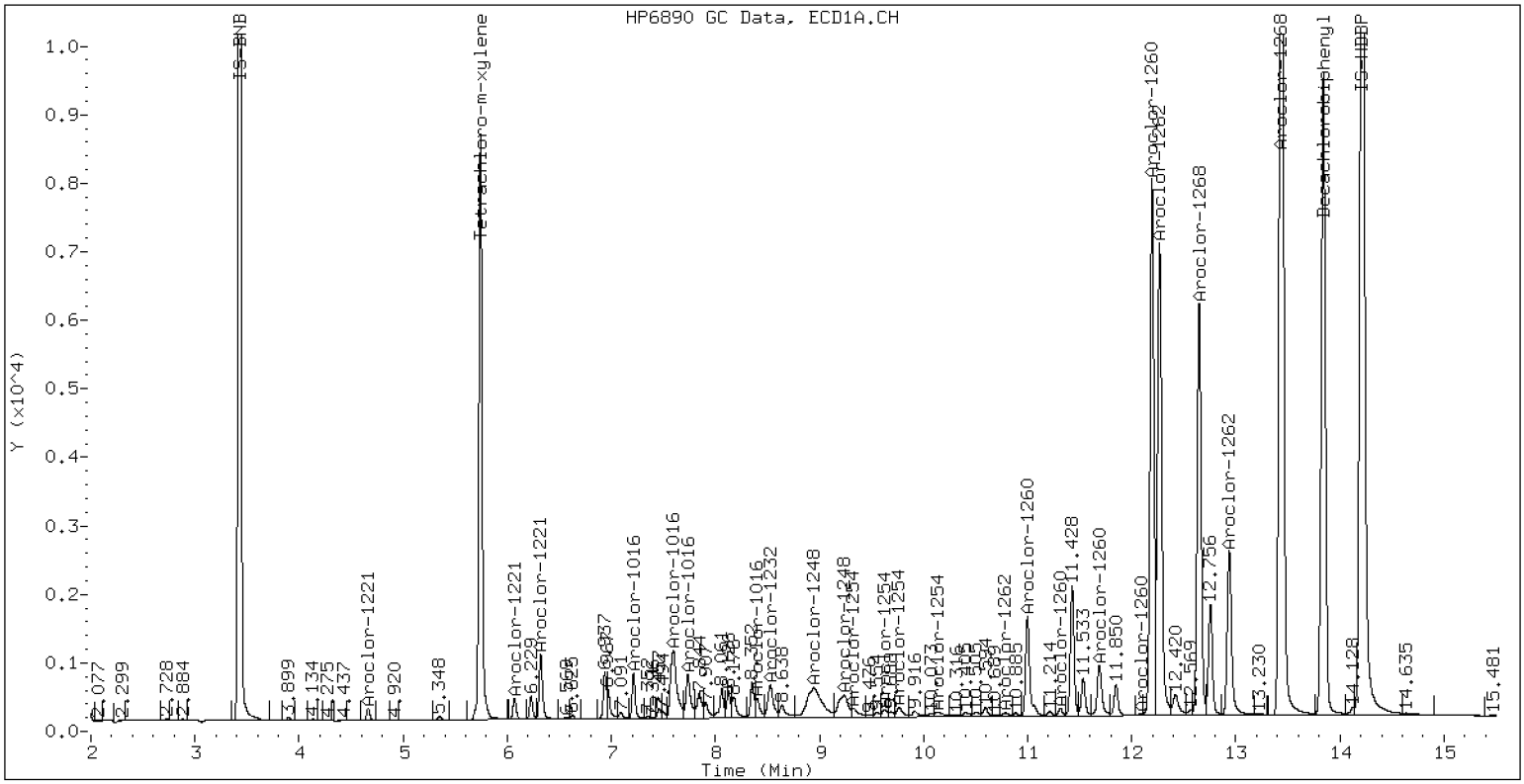
Total PCB Area Col2 (5.728 - 13.968) = 2876097 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

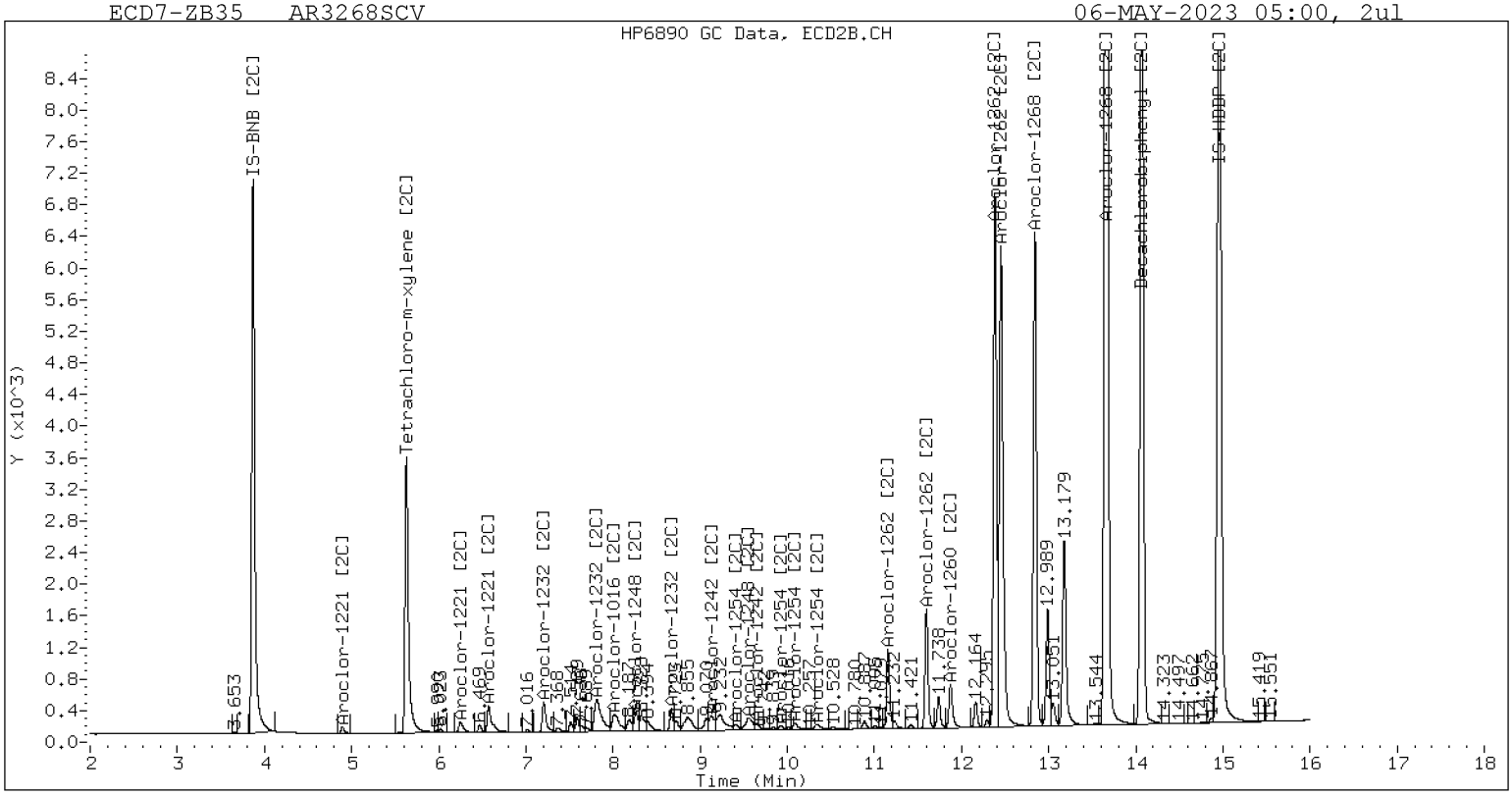
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268SCV 06-MAY-2023 05:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268SCV 06-MAY-2023 05:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102302ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/10/23
Lab Sample ID:	SLE0165-ICV1	Injection Time:	09:01
Sequence Name:	AR1254ICV1		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1254	A	250.00	248	0.0678007	0.0673034		-0.9	+/-20
Aroclor-1254 (1)	A	250.00	220	0.0822219	0.0722310			
Aroclor-1254 (2)	A	250.00	240	0.0369425	0.0355417			
Aroclor-1254 (3)	A	250.00	255	0.0530793	0.0542044			
Aroclor-1254 (4)	A	250.00	260	0.1039691	0.1082194			
Aroclor-1254 (5)	A	250.00	264	0.0627908	0.0663203			
Aroclor 1254 [2C]	A	250.00	248	0.0720677	0.0717254		-0.7	+/-20
Aroclor-1254 (1) [2C]	A	250.00	253	0.0607810	0.0615324			
Aroclor-1254 (2) [2C]	A	250.00	242	0.0361074	0.0348829			
Aroclor-1254 (3) [2C]	A	250.00	249	0.0492663	0.0490441			
Aroclor-1254 (4) [2C]	A	250.00	251	0.1075138	0.1080675			
Aroclor-1254 (5) [2C]	A	250.00	246	0.1066699	0.1051002			
Decachlorobiphenyl	A	40.000	45.4	0.7991406	0.9081228		13.5	+/-20
Tetrachlorometaxylene	A	40.000	38.2	1.2048230	1.1514950		-4.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	43.7	1.1360140	1.2413210		9.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.5	1.1005470	1.0864580		-1.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102302ECD7.D
Data file 2: /230510.b/230510.b/05102302ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254ICV1
Client ID:
Injection Date: 10-MAY-2023 09:01
Report Date: 05/11/2023 17:14
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	368741	5.628	-0.003	202518	38.2	39.5	3.2	Tetrachloro-m-xylene
13.842	0.001	340843	14.068	-0.002	350219	45.5	43.7	3.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	640456	6.5
Hexabromobiphenyl	876625	750654	-14.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	372804	6.7
Hexabromobiphenyl	652984	564268	-13.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.244	0.000	144565	219.6	1	9.400	-0.003	71686	253.1
Aroclor-1254	2	9.321	0.000	71134	240.5	2	9.494	-0.004	40639	241.5
Aroclor-1254	3	9.613	0.000	108486	255.3	3	9.920	-0.003	57137	248.9
Aroclor-1254	4	9.751	0.000	216593	260.2	4	10.071	-0.005	125900	251.3
Aroclor-1254	5	10.114	0.000	132735	264.1	5	10.322	-0.004	122443	246.3

Total Col1Ave (5 peaks): 247.9 Total Col2Ave (5 peaks): 248.2 RPD = 0

Corrected Ave (4 peaks): 243.9 Corrected Ave (4 peaks): 247.0 RPD = 1

CalAmt %D: -0.8 CalAmt %D: -0.7

Total PCB Area Col1 (5.842 - 13.741) = 2182891 Col1 Total PCB = 0.3 ppm*

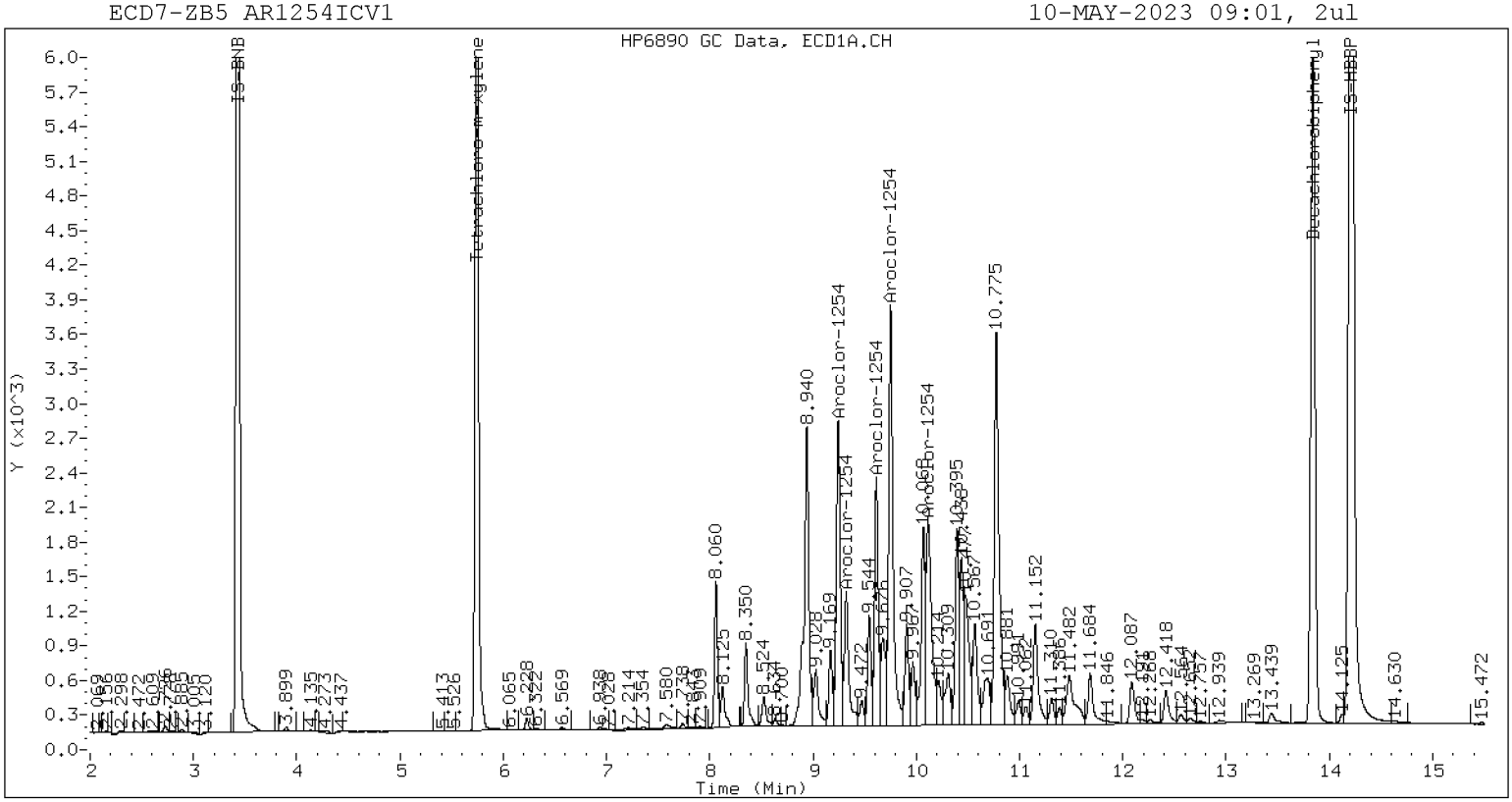
Total PCB Area Col2 (5.730 - 13.969) = 1203060 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

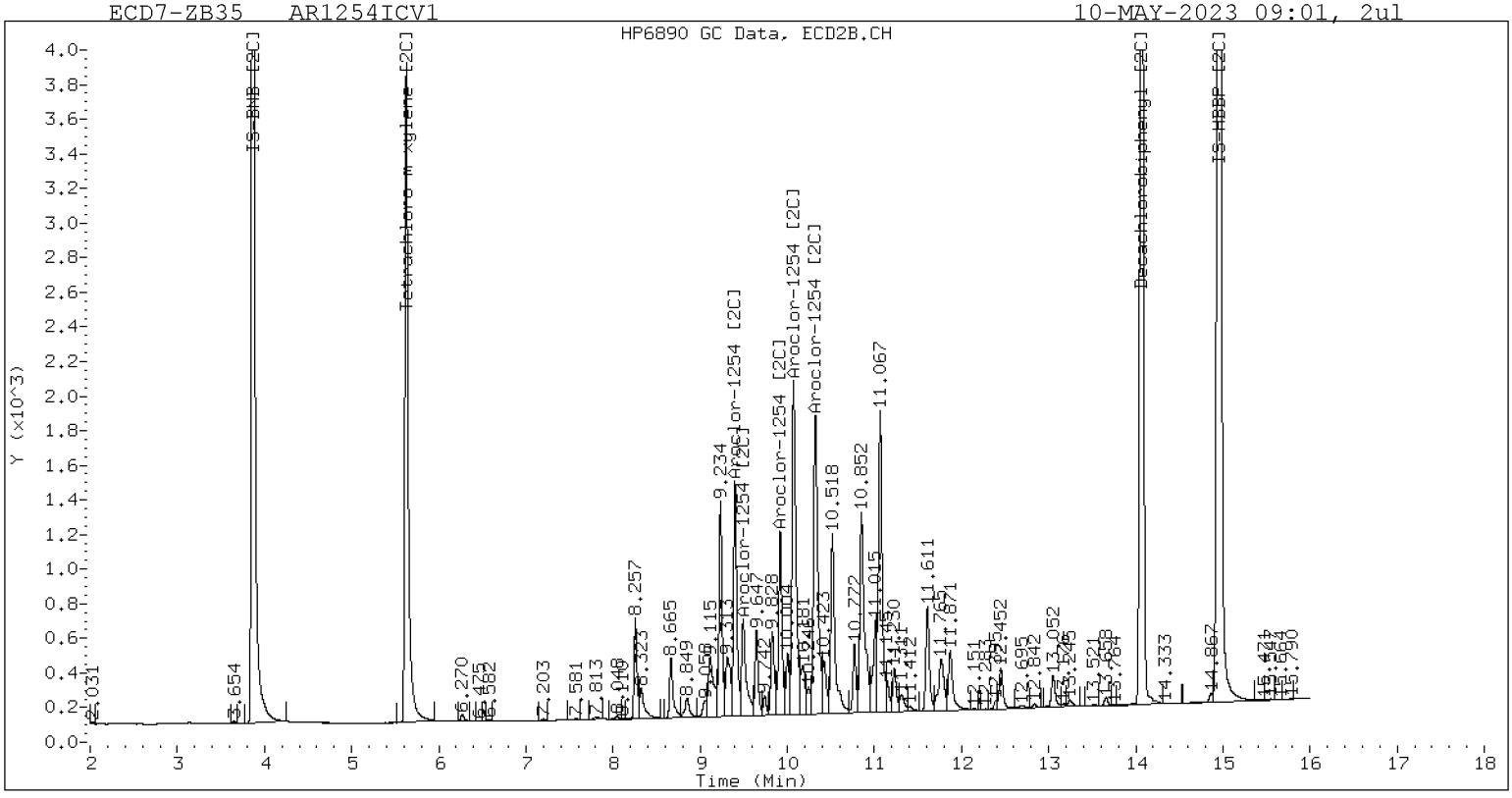
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254ICV1 10-MAY-2023 09:01, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254ICV1 10-MAY-2023 09:01, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102303ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/10/23
Lab Sample ID:	SLE0165-ICV2	Injection Time:	09:22
Sequence Name:	AR1660ICV2		

		CONC. (ug/L)		RESPONSE FACTOR			% DRIFT/DIFF	
COMPOUND	TYPE	STD	ICV	ICAL	ICV	MIN	ICV	LIMIT
Aroclor 1016	A	250.00	246	0.0477728	0.0479263		-1.5	+/-20
Aroclor-1016 (1)	A	250.00	236	0.0309764	0.0291996		-5.6	
Aroclor-1016 (2)	A	250.00	260	0.0968611	0.1007684		4.0	
Aroclor-1016 (3)	A	250.00	244	0.0447793	0.0436373		-2.4	
Aroclor-1016 (4)	A	250.00	245	0.0184745	0.0180998		-2.0	
Aroclor 1016 [2C]	A	250.00	245	0.0545435	0.0555499		-2.0	+/-20
Aroclor-1016 (1) [2C]	A	250.00	222	0.0452861	0.0402854		-11.2	
Aroclor-1016 (2) [2C]	A	250.00	285	0.0965080	0.1099961		14.0	
Aroclor-1016 (3) [2C]	A	250.00	229	0.0425661	0.0389816		-8.4	
Aroclor-1016 (4) [2C]	A	250.00	244	0.0338137	0.0329365		-2.4	
Aroclor 1260	A	250.00	271	0.0524306	0.0571015		8.5	+/-20
Aroclor-1260 (1)	A	250.00	270	0.0423031	0.0456787		8.0	
Aroclor-1260 (2)	A	250.00	271	0.0417493	0.0451941		8.4	
Aroclor-1260 (3)	A	250.00	276	0.1045597	0.1154902		10.4	
Aroclor-1260 (4)	A	250.00	268	0.0512104	0.0549340		7.2	
Aroclor-1260 (5)	A	250.00	271	0.0223305	0.0242106		8.4	
Aroclor 1260 [2C]	A	250.00	260	0.0638471	0.0663217		3.8	+/-20
Aroclor-1260 (1) [2C]	A	250.00	255	0.0424868	0.0432898		2.0	
Aroclor-1260 (2) [2C]	A	250.00	261	0.1111292	0.1160156		4.4	
Aroclor-1260 (3) [2C]	A	250.00	262	0.0275392	0.0288179		4.8	
Aroclor-1260 (4) [2C]	A	250.00	260	0.0742331	0.0771634		4.0	
Decachlorobiphenyl	A	40.000	41.7	0.7991406	0.8328288		4.3	+/-20
Tetrachlorometaxylene	A	40.000	39.5	1.2048230	1.1903900		-1.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	43.1	1.1360140	1.2237580		7.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	45.5	1.1005470	1.2524740		13.8	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102303ECD7.D
Data file 2: /230510.b/230510.b/05102303ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660ICV2
Client ID:
Injection Date: 10-MAY-2023 09:22
Report Date: 05/11/2023 17:14
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	331514	5.628	-0.002	182292	39.5	45.5	14.1	Tetrachloro-m-xylene
13.841	0.001	332479	14.069	-0.001	294260	41.7	43.1	3.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	556984	-7.4
Hexabromobiphenyl	876625	798433	-8.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	291091	-16.7
Hexabromobiphenyl	652984	480912	-26.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	50824	235.7	1	7.203	-0.001	36646	222.4
Aroclor-1016	2	7.594	0.001	175395	260.1	2	7.807	-0.004	100059	284.9
Aroclor-1016	3	7.733	0.000	75954	243.6	3	8.006	-0.003	35460	228.9
Aroclor-1016	4	8.397	-0.001	31504	244.9	4	8.259	-0.002	29961	243.5
Total Col1Ave (4 peaks):					246.1	Total Col2Ave (4 peaks):				244.9 RPD = 0
Corrected Ave (3 peaks):					241.4	Corrected Ave (3 peaks):				231.6 RPD = 4
CalAmt %D:					-1.6	CalAmt %D:				-2.0
Aroclor-1260	1	10.992	-0.000	113973	269.9	1	11.604	-0.002	65058	254.7
Aroclor-1260	2	11.309	-0.001	112764	270.6	2	11.870	-0.001	174354	261.0
Aroclor-1260	3	11.683	-0.002	288160	276.1	3	12.387	-0.001	43309	261.6
Aroclor-1260	4	12.088	-0.001	137066	268.2	4	12.454	-0.001	115965	259.9
Aroclor-1260	5	12.193	-0.000	60408	271.0	NS	---			----
Total Col1Ave (5 peaks):					271.2	Total Col2Ave (4 peaks):				259.3 RPD = 4
Corrected Ave (4 peaks):					270.0	Corrected Ave (3 peaks):				258.5 RPD = 4
CalAmt %D:					8.5	CalAmt %D:				3.7

Total PCB Area Col1 (5.842 - 13.741) = 3155736 Col1 Total PCB = 0.5 ppm*

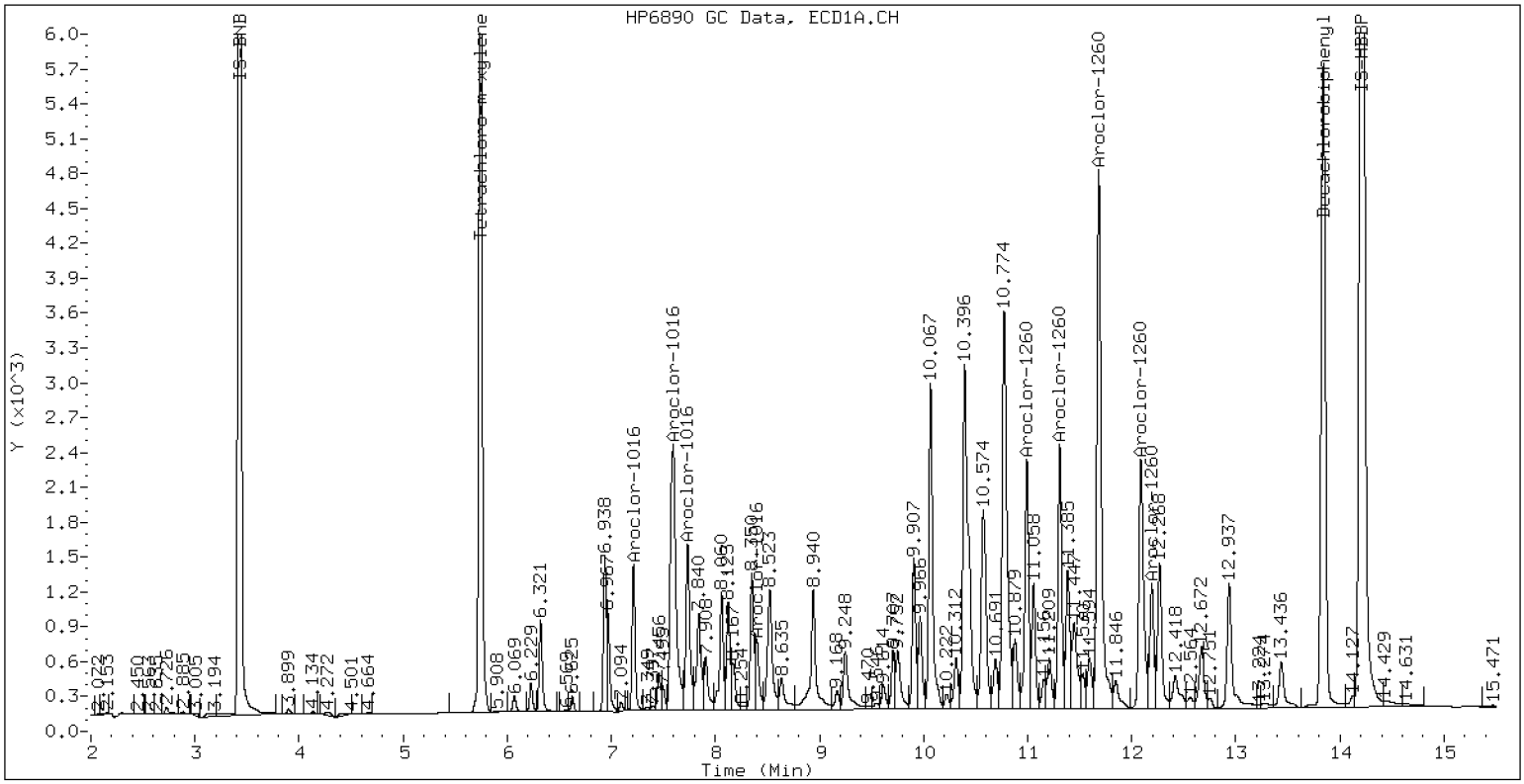
Total PCB Area Col2 (5.730 - 13.969) = 1655620 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

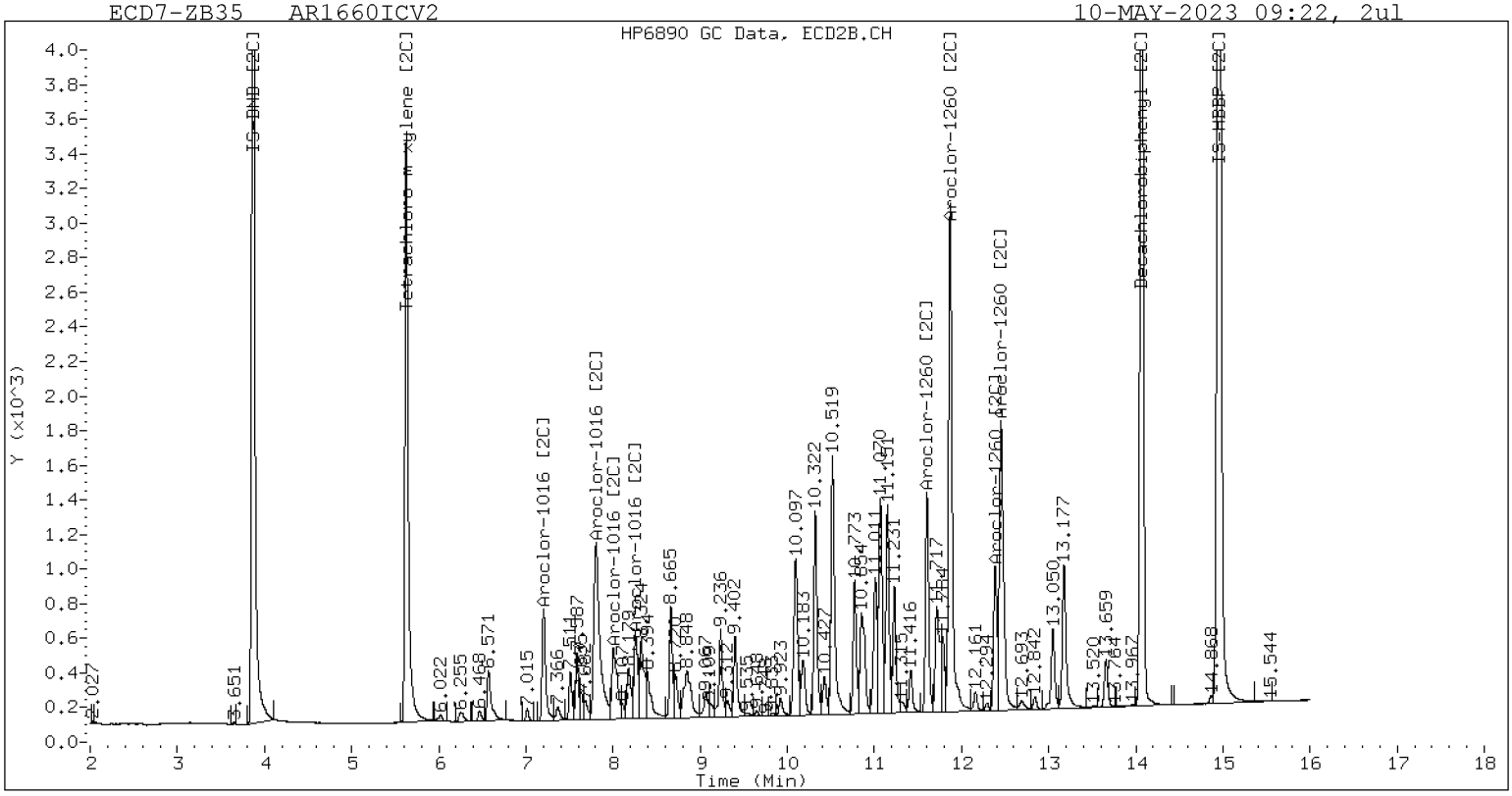
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660ICV2 10-MAY-2023 09:22, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660ICV2 10-MAY-2023 09:22, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05052332ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0079	Injection Date:	05/06/23
Lab Sample ID:	SLE0079-SCV1	Injection Time:	03:16
Sequence Name:	AR1660SCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	254	0.0477728	0.0484819		1.4	+/-20
Aroclor 1016 [2C]	A	250.00	248	0.0545435	0.0542791		-1.0	+/-20
Aroclor 1260	A	250.00	285	0.0524306	0.0598047		14.2	+/-20
Aroclor 1260 [2C]	A	250.00	284	0.0638471	0.0723577		13.6	+/-20
Decachlorobiphenyl	A	40.000	36.9	0.7991406	0.7376338		-7.7	+/-20
Tetrachlorometaxylene	A	40.000	36.9	1.2048230	1.1103970		-7.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	39.2	1.1360140	1.1141950		-1.9	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.2	1.1005470	1.0247960		-6.9	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052332ECD7.D
Data file 2: /230505.b/230505.b/05052332ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660SCV
Client ID:
Injection Date: 06-MAY-2023 03:16
Report Date: 05/06/2023 12:06
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	356595	5.629	0.000	185340	36.9	37.2	1.0	Tetrachloro-m-xylene
13.842	0.002	347188	14.070	0.002	384711	36.9	39.2	6.1	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	642284	6.8
Hexabromobiphenyl	876625	941356	7.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	361711	3.6
Hexabromobiphenyl	652984	690563	5.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	61654	247.9	1	7.205	0.001	50106	244.7
Aroclor-1016	2	7.594	-0.001	199228	256.2	2	7.811	0.003	109839	251.7
Aroclor-1016	3	7.734	0.001	89643	249.3	3	8.009	0.004	48594	252.5
Aroclor-1016	4	8.399	0.001	38714	261.0	4	8.260	0.001	36878	241.2
Total Col1Ave (4 peaks):					253.6	Total Col2Ave (4 peaks):				247.5 RPD = 2
Corrected Ave (3 peaks):					251.1	Corrected Ave (3 peaks):				245.9 RPD = 2
Aroclor-1221	1	4.663	-0.000	436	9.7	1	---			0.0
Aroclor-1221	2	6.068	-0.001	8521	94.0	2	6.251	0.005	5766	104.3
Aroclor-1221	3	6.320	-0.001	41973	195.0	3	6.572	0.000	23212	266.9
Total Col1Ave (3 peaks):					99.6	Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.663	-0.000	436	14.5	1	---			0.0
Aroclor-1232	2	6.068	-0.002	8521	136.1	2	7.205	0.000	50106	623.9
Aroclor-1232	3	7.594	-0.001	199228	667.9	3	7.811	-0.004	109839	680.8
Aroclor-1232	4	8.526	-0.001	85985	673.5	4	8.667	-0.003	34670	742.1
Total Col1Ave (4 peaks):					373.0	Total Col2Ave (3 peaks):				682.3 RPD = 59*
Corrected Ave (3 peaks):					272.8	Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.213	0.001	61654	304.6	1	7.205	0.001	50106	310.0
Aroclor-1242	2	7.594	-0.001	199228	310.7	2	7.811	-0.002	109839	319.4
Aroclor-1242	3	8.399	0.000	38714	312.1	3	9.069	-0.054	21513	195.1
Aroclor-1242	4	8.526	0.001	85985	299.5	4	9.537	-0.013	1824	13.7
Total Col1Ave (4 peaks):					306.7	Total Col2Ave (4 peaks):				209.6 RPD = 38
Corrected Ave (3 peaks):					304.9	Corrected Ave (3 peaks):				172.9 RPD = 55*
Aroclor-1248	1	8.399	-0.000	38714	236.2	1	8.260	0.000	36878	214.3
Aroclor-1248	2	8.526	0.001	85985	201.8	2	8.667	-0.001	34670	190.7
Aroclor-1248	3	8.941	-0.003	81615	99.6	3	9.069	-0.051	21513	101.0
Aroclor-1248	4	9.249	0.006	52526	125.8	4	9.537	-0.008	1824	7.1
Total Col1Ave (4 peaks):					165.8	Total Col2Ave (4 peaks):				128.3 RPD = 26
Corrected Ave (3 peaks):					142.4	Corrected Ave (3 peaks):				99.6 RPD = 35
Aroclor-1254	1	9.249	0.003	52526	79.6	1	9.405	0.001	24726	90.0
Aroclor-1254	2	---			0.0	2	9.537	0.038	1824	11.2
Aroclor-1254	3	9.619	0.001	7081	16.6	3	9.926	0.002	3128	14.0
Aroclor-1254	4	9.756	0.001	21856	26.2	4	10.101	0.023	62581	128.7
Aroclor-1254	5	10.069	-0.057	159796	317.0	5	10.324	-0.004	85433	177.1
Total Col1Ave (4 peaks):					109.8	Total Col2Ave (5 peaks):				84.2 RPD = 26
Corrected Ave (3 peaks):					40.8	Corrected Ave (4 peaks):				61.0 RPD = 40
Aroclor-1260	1	10.995	0.001	145767	292.8	1	11.605	-0.000	99761	272.0
Aroclor-1260	2	11.311	0.001	142028	289.1	2	11.872	0.000	273505	285.1
Aroclor-1260	3	11.686	0.000	354468	288.1	3	12.389	0.001	70545	296.8
Aroclor-1260	4	12.092	0.002	161281	267.6	4	12.455	-0.000	180783	282.1
Aroclor-1260	5	12.194	0.001	76105	289.6	NS	---			----
Total Col1Ave (5 peaks):					285.5	Total Col2Ave (4 peaks):				284.0 RPD = 1
Corrected Ave (4 peaks):					283.6	Corrected Ave (3 peaks):				279.8 RPD = 1
Aroclor-1262	1	10.777	-0.001	215850	506.9	1	11.153	-0.001	104059	186.0
Aroclor-1262	2	12.194	-0.000	76105	127.1	2	11.605	0.001	99761	211.4
Aroclor-1262	3	12.271	0.001	94628	147.0	3	12.389	0.003	70545	136.8
Aroclor-1262	4	12.939	-0.000	78852	150.3	4	12.455	-0.001	180783	215.1
Total Col1Ave (4 peaks):					232.8	Total Col2Ave (4 peaks):				187.3 RPD = 22
Corrected Ave (3 peaks):					141.5	Corrected Ave (3 peaks):				178.1 RPD = 23
Aroclor-1268	1	12.194	-0.001	76105	50.7	1	12.389	0.004	70545	54.0
Aroclor-1268	2	12.271	0.003	94628	63.5	2	12.455	0.003	180783	128.7
Aroclor-1268	3	12.675	0.026	38830	32.4	3	12.844	0.001	3082	2.6
Aroclor-1268	4	13.440	0.003	19986	5.8	4	13.661	-0.002	14882	3.9
Total Col1Ave (4 peaks):					38.1	Total Col2Ave (4 peaks):				47.3 RPD = 21
Corrected Ave (3 peaks):					29.6	Corrected Ave (3 peaks):				20.1 RPD = 38

Total PCB Area Col1 (5.842 - 13.740) = 3657118 Col1 Total PCB = 0.5 ppm*

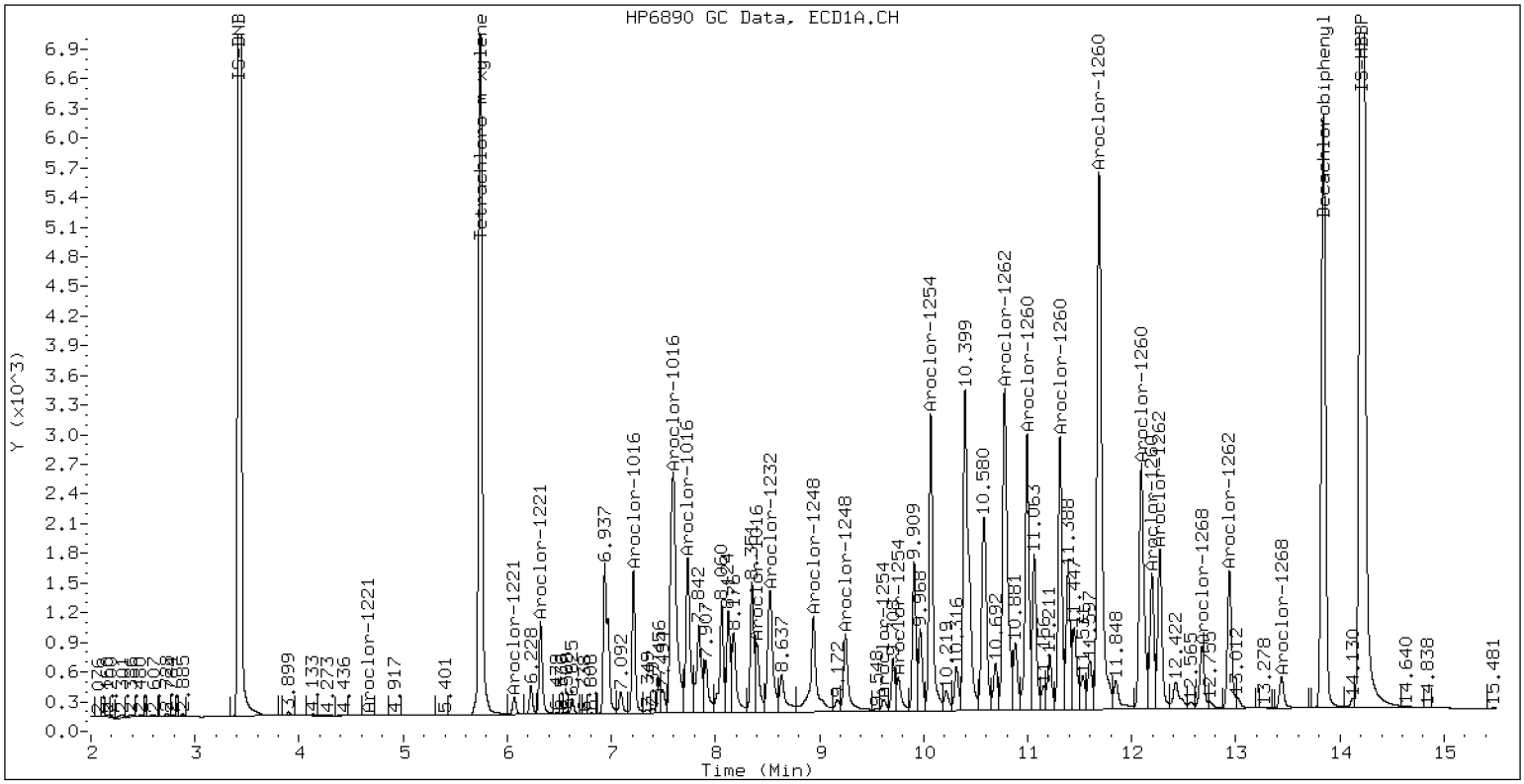
Total PCB Area Col2 (5.728 - 13.968) = 2255286 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

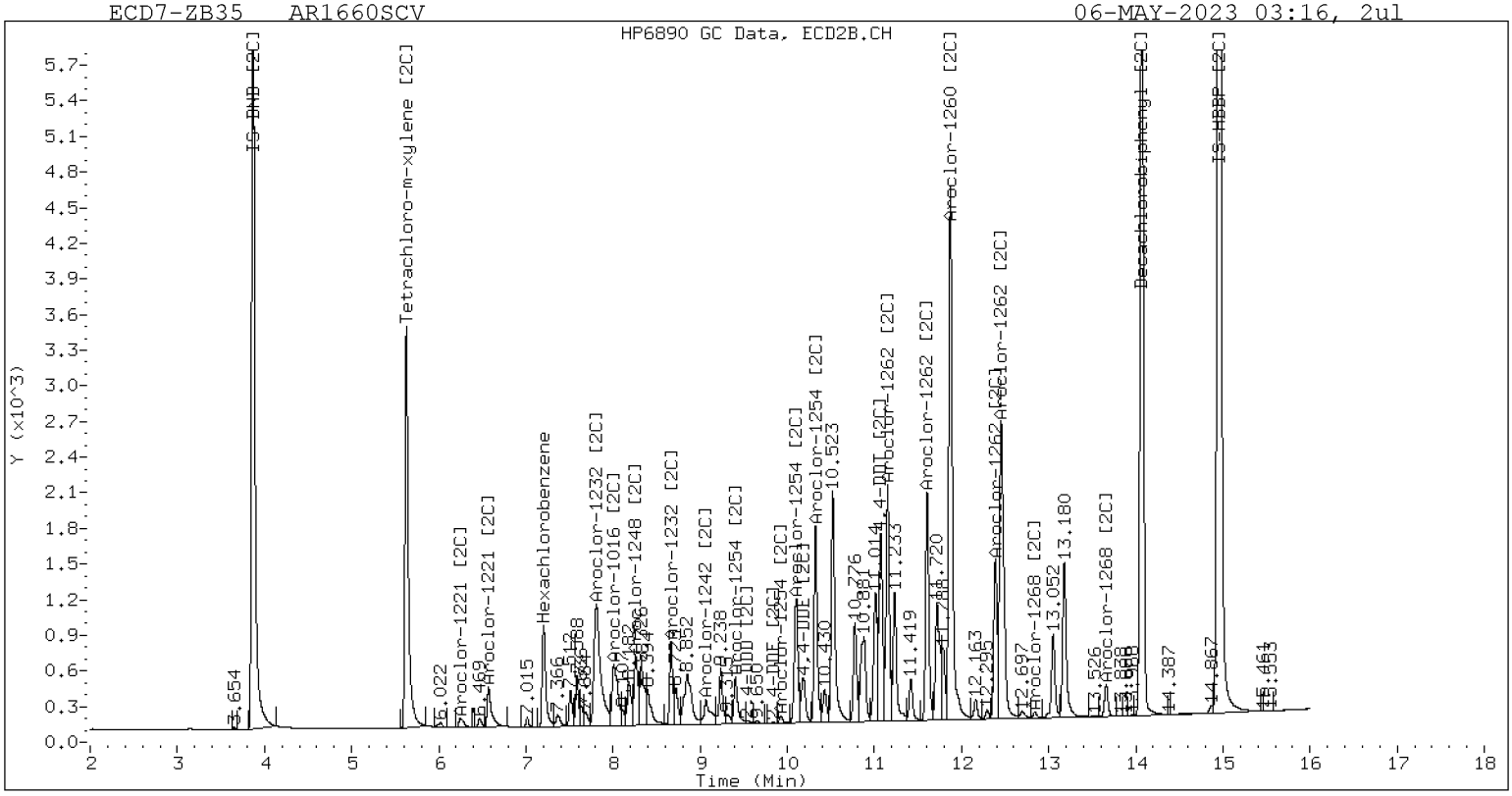
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660SCV 06-MAY-2023 03:16, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660SCV 06-MAY-2023 03:16, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05052333ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0079	Injection Date:	05/06/23
Lab Sample ID:	SLE0079-SCV2	Injection Time:	03:36
Sequence Name:	AR1242SCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	237	0.0390737	0.0365795		-5.1	+/-20
Aroclor 1242 [2C]	A	250.00	230	0.0413965	0.0378029		-7.9	+/-20
Decachlorobiphenyl	A	40.000	40.9	0.7991406	0.8167325		2.2	+/-20
Tetrachlorometaxylene	A	40.000	32.8	1.2048230	0.9873365		-18.1	+/-20
Decachlorobiphenyl [2C]	A	40.000	44.0	1.1360140	1.2491680		10.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	33.4	1.1005470	0.9188596		-16.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052333ECD7.D
Data file 2: /230505.b/230505.b/05052333ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242SCV
Client ID:
Injection Date: 06-MAY-2023 03:36
Report Date: 05/06/2023 12:06
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.744	0.002	319899	5.630	0.002	167866	32.8	33.4	1.9	Tetrachloro-m-xylene
13.842	0.002	398699	14.069	0.001	434332	40.9	44.0	7.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	648004	7.7
Hexabromobiphenyl	876625	976327	11.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	365379	4.6
Hexabromobiphenyl	652984	695394	6.5

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.001	47446	189.1	1	7.205	0.001	36469	176.3
Aroclor-1016	2	7.594	-0.000	147684	188.2	2	7.814	0.007	77885	176.7
Aroclor-1016	3	7.735	0.002	67175	185.2	3	8.012	0.006	38400	197.5
Aroclor-1016	4	8.398	0.000	30565	204.3	4	8.261	0.002	27551	178.4
Total Col1Ave (4 peaks): 191.7						Total Col2Ave (4 peaks): 182.2			RPD = 5	
Corrected Ave (3 peaks): 187.5						Corrected Ave (3 peaks): 177.1			RPD = 6	
Aroclor-1221	1	4.666	0.002	870	19.1	1	---			0.0
Aroclor-1221	2	6.069	0.000	7118	77.8	2	6.257	0.011	4359	78.0
Aroclor-1221	3	6.322	0.001	32969	151.8	3	6.573	0.001	16609	189.0
Total Col1Ave (3 peaks): 82.9						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	4.666	0.002	870	28.7	1	---			0.0
Aroclor-1232	2	6.069	0.000	7118	112.7	2	7.205	-0.000	36469	449.5
Aroclor-1232	3	7.594	-0.001	147684	490.8	3	7.814	-0.001	77885	477.9
Aroclor-1232	4	8.526	-0.000	70601	548.1	4	8.668	-0.001	25417	538.5
Total Col1Ave (4 peaks): 295.1						Total Col2Ave (3 peaks): 488.7			RPD = 49*	
Corrected Ave (3 peaks): 210.7						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.213	0.001	47446	232.4	1	7.205	0.001	36469	223.3
Aroclor-1242	2	7.594	-0.000	147684	228.2	2	7.814	0.002	77885	224.2
Aroclor-1242	3	8.398	0.000	30565	244.2	3	9.124	0.001	25864	232.2
Aroclor-1242	4	8.526	0.002	70601	243.8	4	9.552	0.001	32437	241.7
Total Col1Ave (4 peaks): 237.2						Total Col2Ave (4 peaks): 230.4			RPD = 3	
Corrected Ave (3 peaks): 234.8						Corrected Ave (3 peaks): 226.6			RPD = 4	
Aroclor-1248	1	8.398	-0.001	30565	184.8	1	8.261	0.001	27551	158.5
Aroclor-1248	2	8.526	0.002	70601	164.3	2	8.668	0.001	25417	138.4
Aroclor-1248	3	8.946	0.002	172847	209.1	3	9.124	0.004	25864	120.2
Aroclor-1248	4	9.243	-0.001	87363	207.3	4	9.552	0.006	32437	125.7
Total Col1Ave (4 peaks): 191.4						Total Col2Ave (4 peaks): 135.7			RPD = 34	
Corrected Ave (3 peaks): 185.5						Corrected Ave (3 peaks): 128.1			RPD = 37	
Aroclor-1254	1	9.243	-0.004	87363	131.2	1	9.406	0.002	13247	47.7
Aroclor-1254	2	9.326	0.001	28949	96.7	2	9.552	0.053	32437	196.7
Aroclor-1254	3	9.622	0.004	20780	48.3	3	9.927	0.003	10002	44.5
Aroclor-1254	4	9.762	0.006	35470	42.1	4	10.082	0.005	19933	40.6
Aroclor-1254	5	10.140	0.015	28075	55.2	5	10.341	0.013	19432	39.9
Total Col1Ave (5 peaks): 74.7						Total Col2Ave (5 peaks): 73.9			RPD = 1	
Corrected Ave (4 peaks): 60.6						Corrected Ave (4 peaks): 43.2			RPD = 34	
Aroclor-1260	1	10.998	0.005	3609	7.0	1	11.618	0.012	2137	5.8
Aroclor-1260	2	11.317	0.007	3837	7.5	2	11.879	0.007	1437	1.5
Aroclor-1260	3	11.765	0.080	33905	26.6	3	12.382	-0.006	12460	52.1
Aroclor-1260	4	12.097	0.007	9099	14.6	4	---			0.0
Aroclor-1260	5	12.272	0.079	2060	7.6	NS	---			----
Total Col1Ave (5 peaks): 12.6						Total Col2Ave (3 peaks): 19.8			RPD = 44*	
Corrected Ave (4 peaks): 9.2						Corrected Ave: < 3 Peaks				
Aroclor-1262	1	10.787	0.009	24040	54.4	1	11.078	-0.075	7864	14.0
Aroclor-1262	2	12.272	0.077	2060	3.3	2	11.618	0.013	2137	4.5
Aroclor-1262	3	---			0.0	3	12.382	-0.004	12460	24.0
Aroclor-1262	4	12.937	-0.002	16041	29.5	4	---			0.0
Total Col1Ave (3 peaks): 29.1						Total Col2Ave (3 peaks): 14.1			RPD = 69*	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1268	1	12.272	0.076	2060	1.3	1	12.382	-0.003	12460	9.5
Aroclor-1268	2	---			0.0	2	---			0.0
Aroclor-1268	3	12.649	0.001	4324	3.5	3	12.845	0.002	951	0.8
Aroclor-1268	4	13.442	0.005	15801	4.4	4	13.628	-0.035	6512	1.7
Total Col1Ave (3 peaks): 3.1						Total Col2Ave (3 peaks): 4.0			RPD = 25	
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				

Total PCB Area Col1 (5.842 - 13.740) = 1489022 Col1 Total PCB = 0.2 ppm*

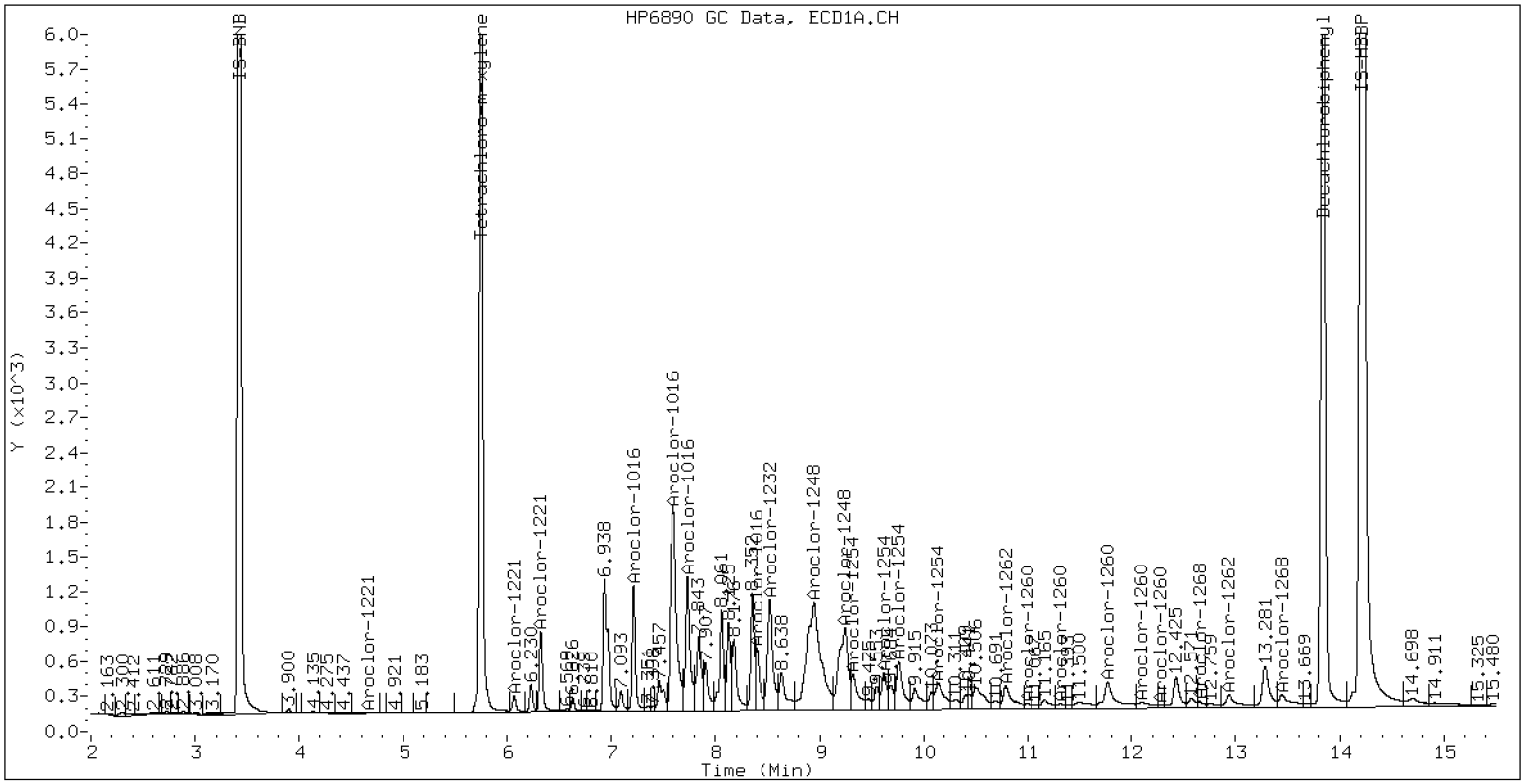
Total PCB Area Col2 (5.728 - 13.968) = 667658 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

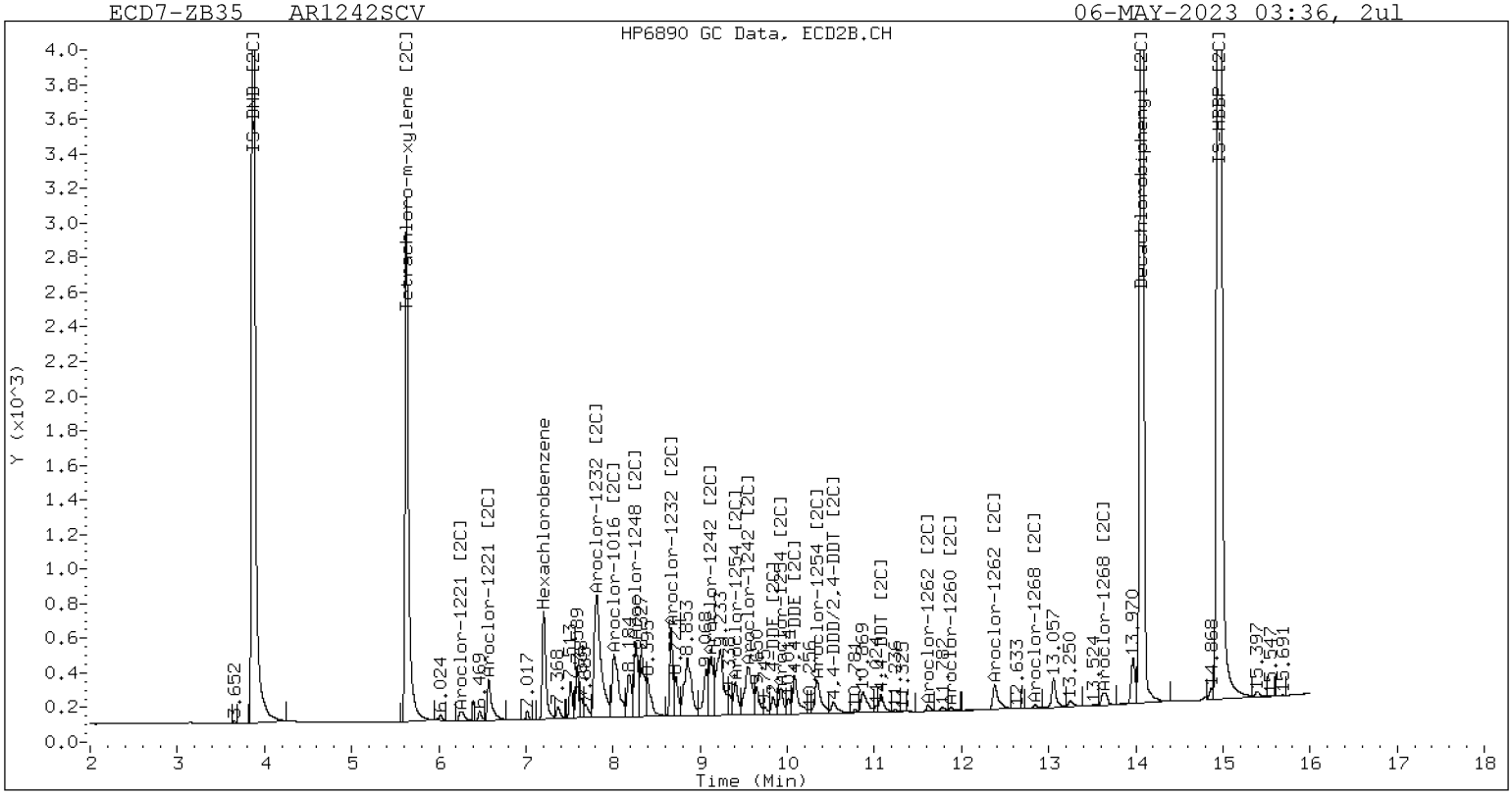
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242SCV 06-MAY-2023 03:36, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242SCV 06-MAY-2023 03:36, 2ul

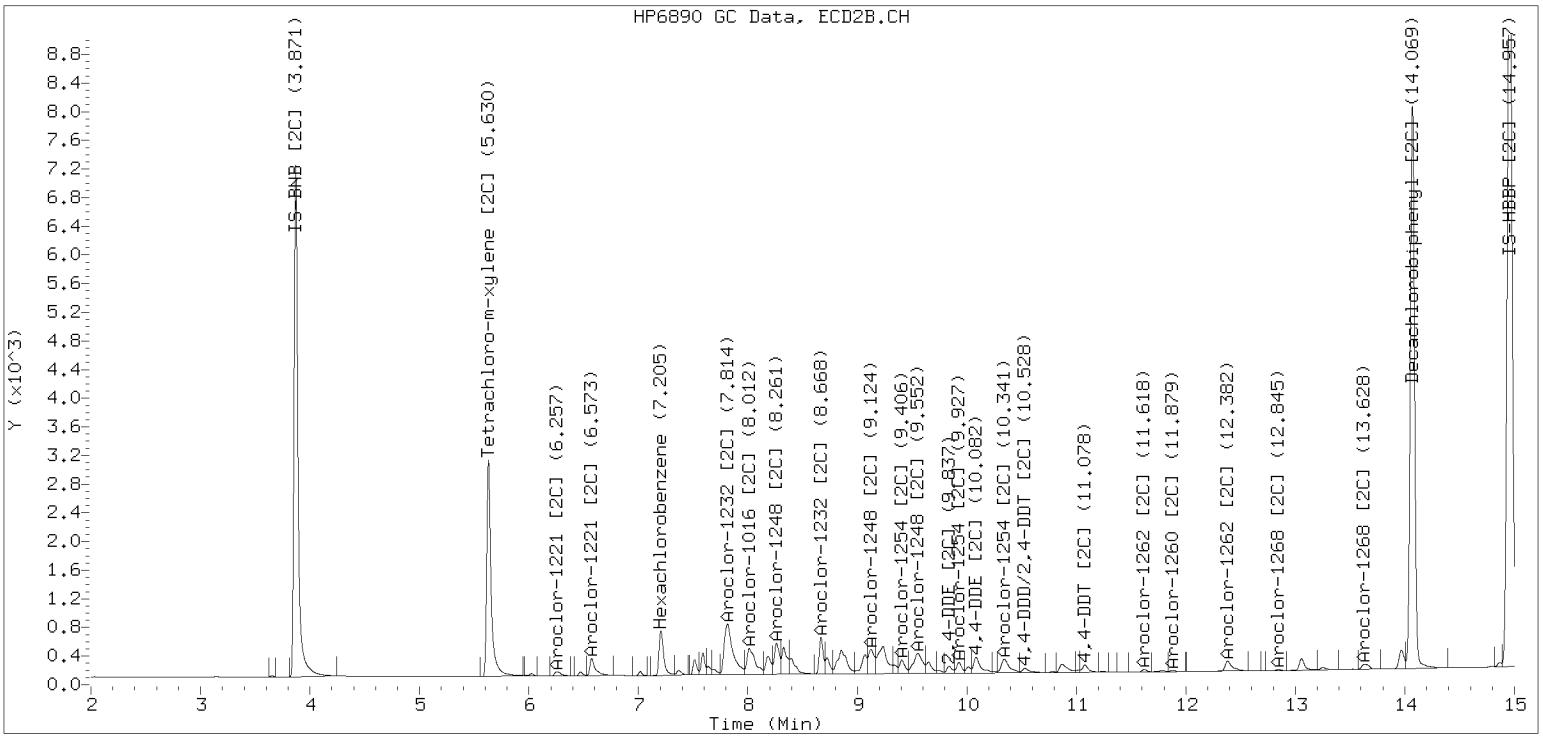


ZB-35 Manual Integration: NO

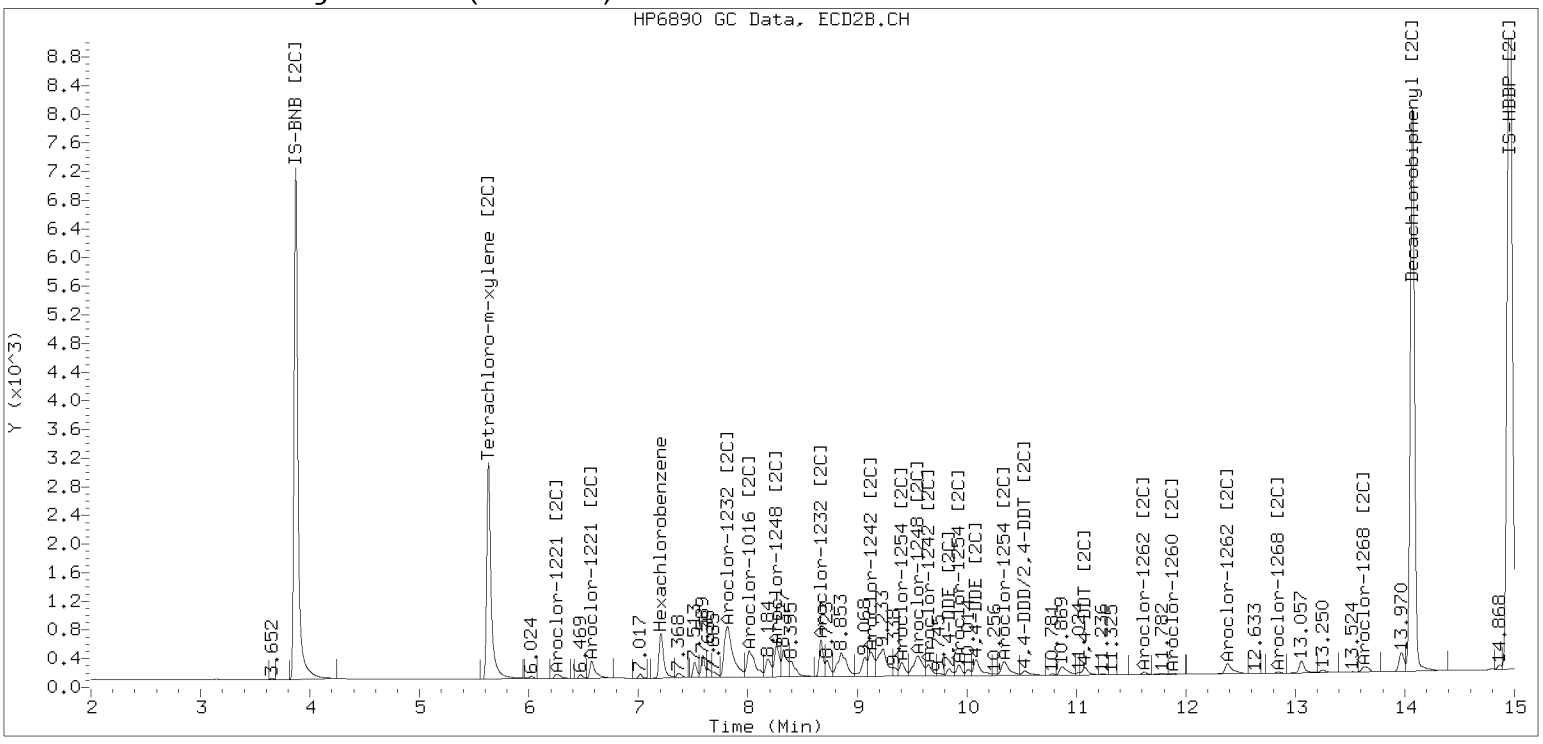
Manual Peak Adjustment, ZB-35

Datafile: ecd7.i/230505.b/230505.b/05052333ECD7.D Injection Date: 06-MAY-2023

Manual Integration (After)



Processed Integration (Before)



Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05052334ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0079	Injection Date:	05/06/23
Lab Sample ID:	SLE0079-SCV3	Injection Time:	03:57
Sequence Name:	AR1248SCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	251	0.0568879	0.0571636		0.5	+/-20
Aroclor 1248 [2C]	A	250.00	249	0.0454726	0.0453430		-0.3	+/-20
Decachlorobiphenyl	A	40.000	35.7	0.7991406	0.7130963		-10.8	+/-20
Tetrachlorometaxylene	A	40.000	36.8	1.2048230	1.1082640		-8.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.0	1.1360140	1.0789920		-5.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	37.7	1.1005470	1.0375410		-5.7	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052334ECD7.D
Data file 2: /230505.b/230505.b/05052334ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248SCV
Client ID:
Injection Date: 06-MAY-2023 03:57
Report Date: 05/06/2023 12:07
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	356328	5.629	0.000	186552	36.8	37.7	2.5	Tetrachloro-m-xylene
13.842	0.001	339452	14.070	0.002	373861	35.7	38.0	6.2	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	643038	6.9
Hexabromobiphenyl	876625	952051	8.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	359604	3.0
Hexabromobiphenyl	652984	692982	6.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.212	0.000	19871	79.8	1	7.203	-0.001	18843	92.6
Aroclor-1016	2	7.589	-0.006	95111	122.2	2	7.812	0.005	52352	120.7
Aroclor-1016	3	7.736	0.003	37565	104.4	3	8.012	0.006	8263	43.2
Aroclor-1016	4	8.399	0.002	41542	279.7	4	8.260	0.001	42833	281.8
Total Col1Ave (4 peaks):					146.5	Total Col2Ave (4 peaks):				134.6 RPD = 9
Corrected Ave (3 peaks):					102.1	Corrected Ave (3 peaks):				85.5 RPD = 18
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.066	-0.003	351	3.9	2	6.275	0.029	1573	28.6
Aroclor-1221	3	6.320	-0.001	3509	16.3	3	6.576	0.004	967	11.2
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.066	-0.003	351	5.6	2	7.203	-0.001	18843	236.0
Aroclor-1232	3	7.589	-0.006	95111	318.5	3	7.812	-0.002	52352	326.4
Aroclor-1232	4	8.524	-0.002	105782	827.6	4	8.667	-0.002	44962	968.0
Total Col1Ave (3 peaks):					383.9	Total Col2Ave (3 peaks):				510.1 RPD = 28
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1242	1	7.212	0.000	19871	98.1	1	7.203	-0.000	18843	117.2
Aroclor-1242	2	7.589	-0.006	95111	148.1	2	7.812	-0.000	52352	153.1
Aroclor-1242	3	8.399	0.001	41542	334.5	3	9.120	-0.003	52681	480.6
Aroclor-1242	4	8.524	-0.000	105782	368.1	4	9.548	-0.002	63343	479.5
Total Col1Ave (4 peaks):					237.2	Total Col2Ave (4 peaks):				307.6 RPD = 26
Corrected Ave (3 peaks):					193.6	Corrected Ave (3 peaks):				250.0 RPD = 25
Aroclor-1248	1	8.399	0.001	41542	253.1	1	8.260	-0.001	42833	250.4
Aroclor-1248	2	8.524	-0.000	105782	248.0	2	8.667	0.000	44962	248.8
Aroclor-1248	3	8.944	-0.000	206928	252.3	3	9.120	-0.000	52681	248.7
Aroclor-1248	4	9.242	-0.001	105227	251.7	4	9.548	0.002	63343	249.4
Total Col1Ave (4 peaks):					251.3	Total Col2Ave (4 peaks):				249.3 RPD = 1
Corrected Ave (3 peaks):					250.6	Corrected Ave (3 peaks):				249.0 RPD = 1
Aroclor-1254	1	9.242	-0.004	105227	159.2	1	9.404	0.000	25835	94.6
Aroclor-1254	2	9.324	-0.001	51326	172.8	2	9.548	0.049	63343	390.3
Aroclor-1254	3	9.619	0.001	41394	97.0	3	9.925	0.001	22609	102.1
Aroclor-1254	4	9.759	0.003	72223	86.4	4	10.079	0.001	43816	90.7
Aroclor-1254	5	10.135	0.010	49936	98.9	5	10.345	0.016	42513	88.7
Total Col1Ave (5 peaks):					122.9	Total Col2Ave (5 peaks):				153.3 RPD = 22
Corrected Ave (4 peaks):					110.4	Corrected Ave (4 peaks):				94.0 RPD = 16
Aroclor-1260	1	10.998	0.005	1863	3.7	1	11.617	0.011	2599	7.1
Aroclor-1260	2	11.314	0.004	1152	2.3	2	11.877	0.005	1951	2.0
Aroclor-1260	3	11.695	0.009	1829	1.5	3	12.389	0.001	857	3.6
Aroclor-1260	4	12.097	0.007	1266	2.1	4	12.458	0.003	1302	2.0
Aroclor-1260	5	12.195	0.002	464	1.7	NS	---			----
Total Col1Ave (5 peaks):					2.3	Total Col2Ave (4 peaks):				3.7 RPD = 48*
Corrected Ave (4 peaks):					1.9	Corrected Ave (3 peaks):				2.5 RPD = 29
Aroclor-1262	1	10.784	0.005	15405	35.8	1	11.077	-0.077	9003	16.0
Aroclor-1262	2	12.195	0.000	464	0.8	2	11.617	0.012	2599	5.5
Aroclor-1262	3	12.271	0.002	489	0.8	3	12.389	0.003	857	1.7
Aroclor-1262	4	12.940	0.001	1638	3.1	4	12.458	0.002	1302	1.5
Total Col1Ave (4 peaks):					10.1	Total Col2Ave (4 peaks):				6.2 RPD = 48*
Corrected Ave (3 peaks):					1.5	Corrected Ave (3 peaks):				2.9 RPD = 61*
Aroclor-1268	1	12.195	-0.001	464	0.3	1	12.389	0.004	857	0.7
Aroclor-1268	2	12.271	0.003	489	0.3	2	12.458	0.006	1302	0.9
Aroclor-1268	3	12.649	0.001	1831	1.5	3	12.845	0.002	676	0.6
Aroclor-1268	4	13.443	0.006	5387	1.6	4	13.661	-0.003	2707	0.7
Total Col1Ave (4 peaks):					0.9	Total Col2Ave (4 peaks):				0.7 RPD = 26
Corrected Ave (3 peaks):					0.7	Corrected Ave (3 peaks):				0.6 RPD = 11

Total PCB Area Col1 (5.842 - 13.740) = 1634238 Col1 Total PCB = 0.2 ppm*

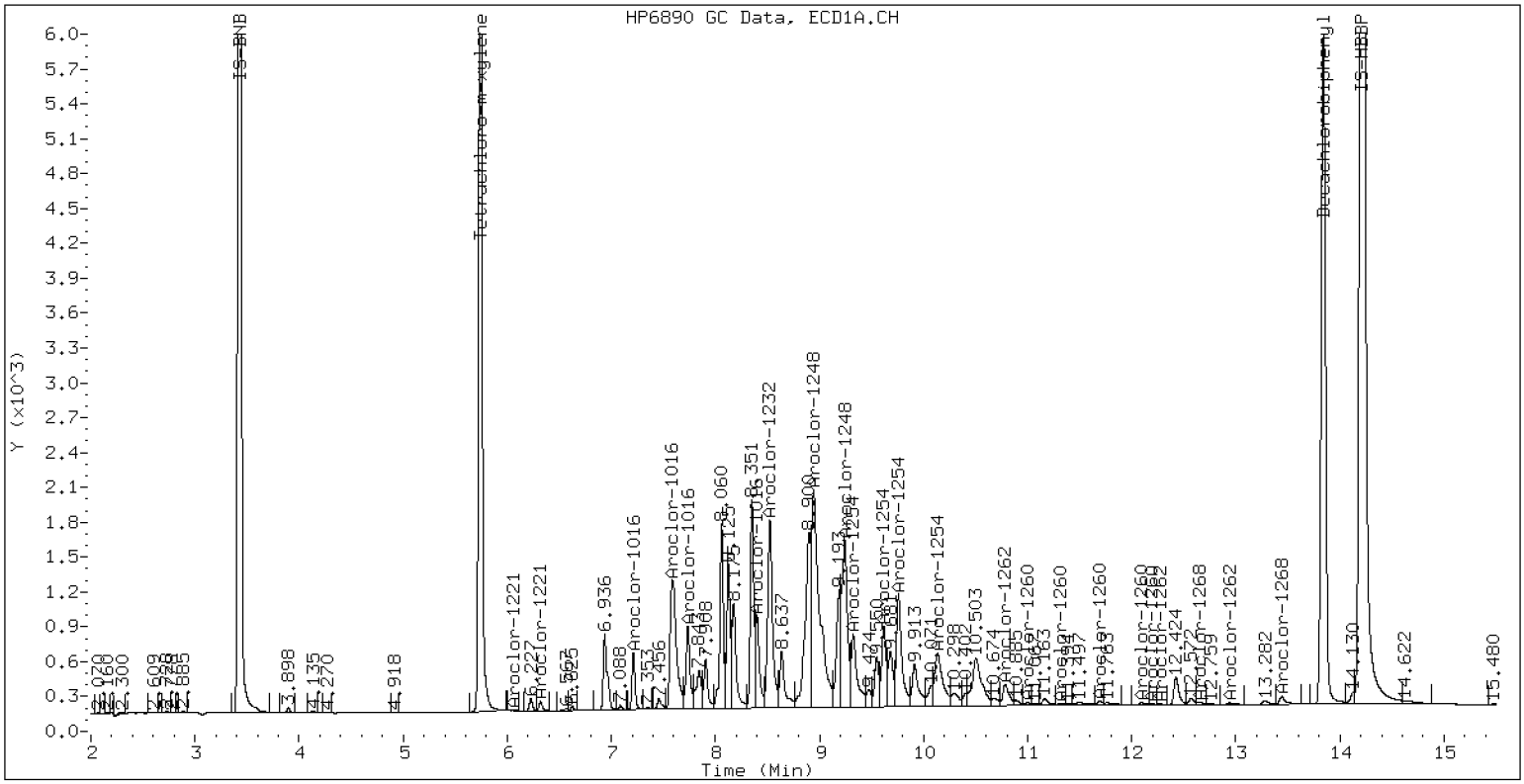
Total PCB Area Col2 (5.728 - 13.968) = 876760 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

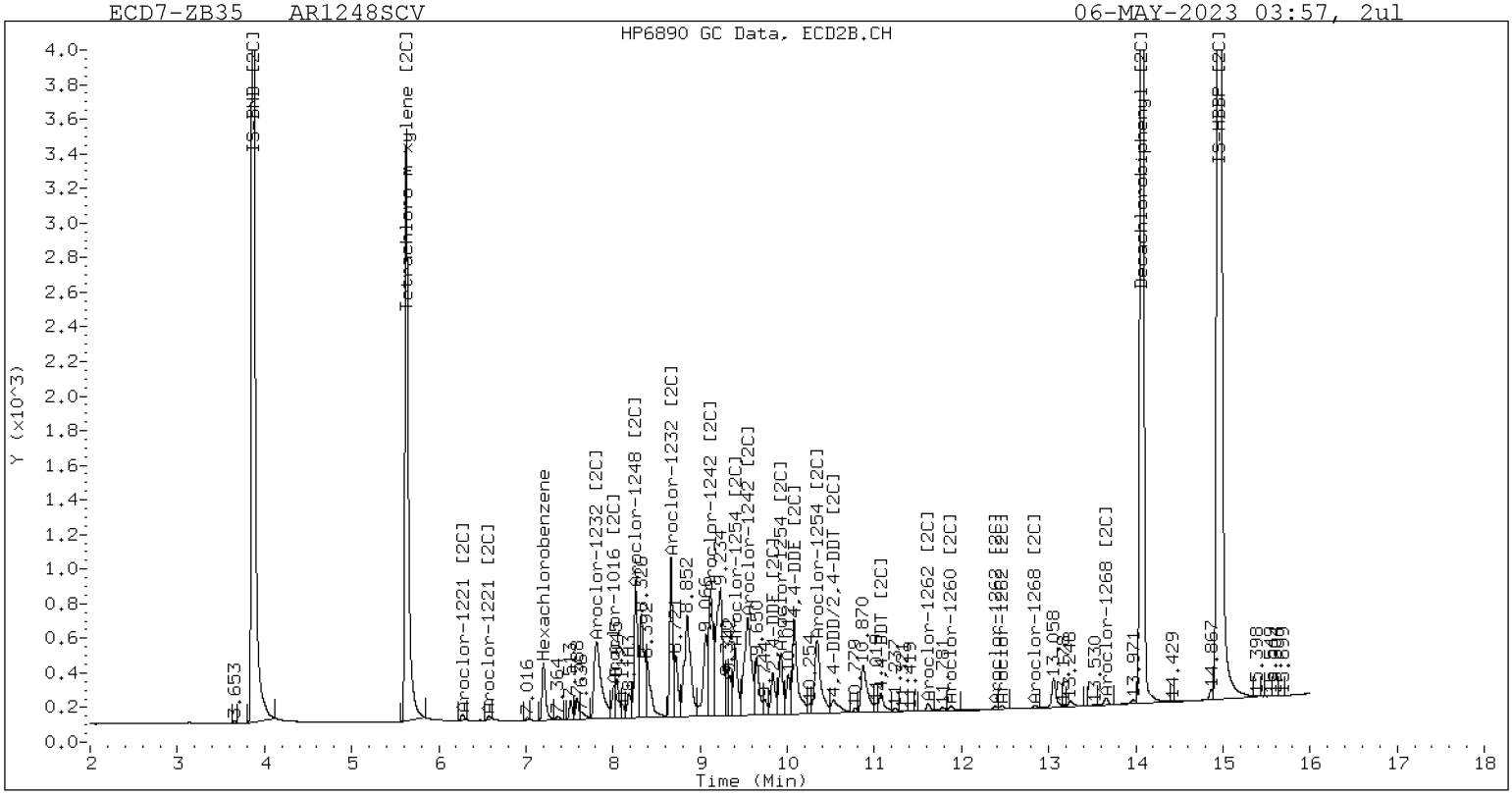
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248SCV 06-MAY-2023 03:57, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248SCV 06-MAY-2023 03:57, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05052335ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0079	Injection Date:	05/06/23
Lab Sample ID:	SLE0079-SCV4	Injection Time:	04:18
Sequence Name:	AR1254SCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	239	0.0678007	0.0647470		-4.3	+/-20
Aroclor 1254 [2C]	A	250.00	241	0.0720677	0.0695237		-3.8	+/-20
Decachlorobiphenyl	A	40.000	36.0	0.7991406	0.7182997		-10.1	+/-20
Tetrachlorometaxylene	A	40.000	37.6	1.2048230	1.1319680		-6.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.5	1.1360140	1.0928370		-3.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	38.3	1.1005470	1.0547150		-4.2	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052335ECD7.D
Data file 2: /230505.b/230505.b/05052335ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254SCV
Client ID:
Injection Date: 06-MAY-2023 04:18
Report Date: 05/06/2023 11:30
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	368022	5.631	0.002	192033	37.6	38.3	2.0	Tetrachloro-m-xylene
13.843	0.002	352066	14.070	0.002	385384	36.0	38.5	6.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	650234	8.1
Hexabromobiphenyl	876625	980276	11.8

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	364142	4.3
Hexabromobiphenyl	652984	705291	8.0

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.002	635	2.5	1	---			0.0
Aroclor-1016	2	7.590	-0.004	2512	3.2	2	---			0.0
Aroclor-1016	3	7.738	0.005	1594	4.4	3	---			0.0
Aroclor-1016	4	8.351	-0.047	31774	211.6	4	---			0.0
Total Col1Ave (4 peaks):					55.4	Col2Ave: <3 Quant Peaks				
Aroclor-1221	1	---			0.0	1	---			0.0
Aroclor-1221	2	6.052	-0.018	242	2.6	2	---			0.0
Aroclor-1221	3	6.322	0.001	427	2.0	3	---			0.0
Col1Ave: <3 Quant Peaks						Col2Ave: <3 Quant Peaks				
Aroclor-1232	1	---			0.0	1	---			0.0
Aroclor-1232	2	6.052	-0.018	242	3.8	2	---			0.0
Aroclor-1232	3	7.590	-0.005	2512	8.3	3	---			0.0
Aroclor-1232	4	8.528	0.001	13950	107.9	4	---			0.0
Total Col1Ave (3 peaks):					40.0	Col2Ave: <3 Quant Peaks				
Aroclor-1242	1	7.214	0.002	635	3.1	1	---			0.0
Aroclor-1242	2	7.590	-0.005	2512	3.9	2	---			0.0
Aroclor-1242	3	8.351	-0.047	31774	253.0	3	9.125	0.002	23963	215.9
Aroclor-1242	4	8.528	0.004	13950	48.0	4	9.649	0.099	23982	179.3
Total Col1Ave (4 peaks):					77.0	Col2Ave: <3 Quant Peaks				
Aroclor-1248	1	8.351	-0.048	31774	191.4	1	8.260	-0.000	23490	135.6
Aroclor-1248	2	8.528	0.004	13950	32.3	2	8.669	0.002	16693	91.2
Aroclor-1248	3	8.941	-0.003	154338	186.1	3	9.125	0.005	23963	111.7
Aroclor-1248	4	9.246	0.003	158369	374.6	4	9.499	-0.047	38716	150.5
Total Col1Ave (4 peaks):					196.1	Total Col2Ave (4 peaks):			122.3	RPD = 46*
Corrected Ave (3 peaks):					136.6	Corrected Ave (3 peaks):			112.8	RPD = 19
Aroclor-1254	1	9.246	-0.001	158369	237.0	1	9.404	0.000	67493	244.0
Aroclor-1254	2	9.325	-0.000	72386	241.1	2	9.499	-0.000	38716	235.6
Aroclor-1254	3	9.617	-0.001	103602	240.1	3	9.925	0.001	53972	240.7
Aroclor-1254	4	9.756	0.000	201259	238.2	4	10.079	0.001	116950	239.0
Aroclor-1254	5	10.127	0.001	122207	239.5	5	10.327	-0.001	118439	243.9
Total Col1Ave (5 peaks):					239.2	Total Col2Ave (5 peaks):			240.6	RPD = 1
Corrected Ave (4 peaks):					238.7	Corrected Ave (4 peaks):			239.8	RPD = 0
Aroclor-1260	1	10.994	0.001	13538	26.1	1	11.615	0.009	33465	89.3
Aroclor-1260	2	11.313	0.003	13900	27.2	2	11.876	0.004	25534	26.1
Aroclor-1260	3	11.689	0.004	32548	25.4	3	12.404	0.016	1811	7.5
Aroclor-1260	4	12.093	0.003	25285	40.3	4	12.458	0.002	14842	22.7
Aroclor-1260	5	12.273	0.079	2534	9.3	NS	---			----
Total Col1Ave (5 peaks):					25.6	Total Col2Ave (4 peaks):			36.4	RPD = 35
Corrected Ave (4 peaks):					22.0	Corrected Ave (3 peaks):			18.7	RPD = 16
Aroclor-1262	1	10.779	0.000	210018	473.6	1	11.073	-0.081	114323	200.0
Aroclor-1262	2	12.273	0.078	2534	4.1	2	11.615	0.010	33465	69.4
Aroclor-1262	3	---			0.0	3	12.404	0.018	1811	3.4
Aroclor-1262	4	12.939	0.001	1830	3.3	4	12.458	0.002	14842	17.3
Total Col1Ave (3 peaks):					160.3	Total Col2Ave (4 peaks):			72.6	RPD = 75*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):			30.1	
Aroclor-1268	1	12.273	0.077	2534	1.6	1	12.404	0.019	1811	1.4
Aroclor-1268	2	---			0.0	2	12.458	0.005	14842	10.3
Aroclor-1268	3	12.654	0.006	2669	2.1	3	12.847	0.004	835	0.7
Aroclor-1268	4	13.442	0.004	6266	1.8	4	13.662	-0.001	2350	0.6
Total Col1Ave (3 peaks):					1.8	Total Col2Ave (4 peaks):			3.2	RPD = 55*
Corrected Ave: < 3 Peaks						Corrected Ave (3 peaks):			0.9	

Total PCB Area Col1 (5.842 - 13.740) = 2123119 Col1 Total PCB = 0.3 ppm*

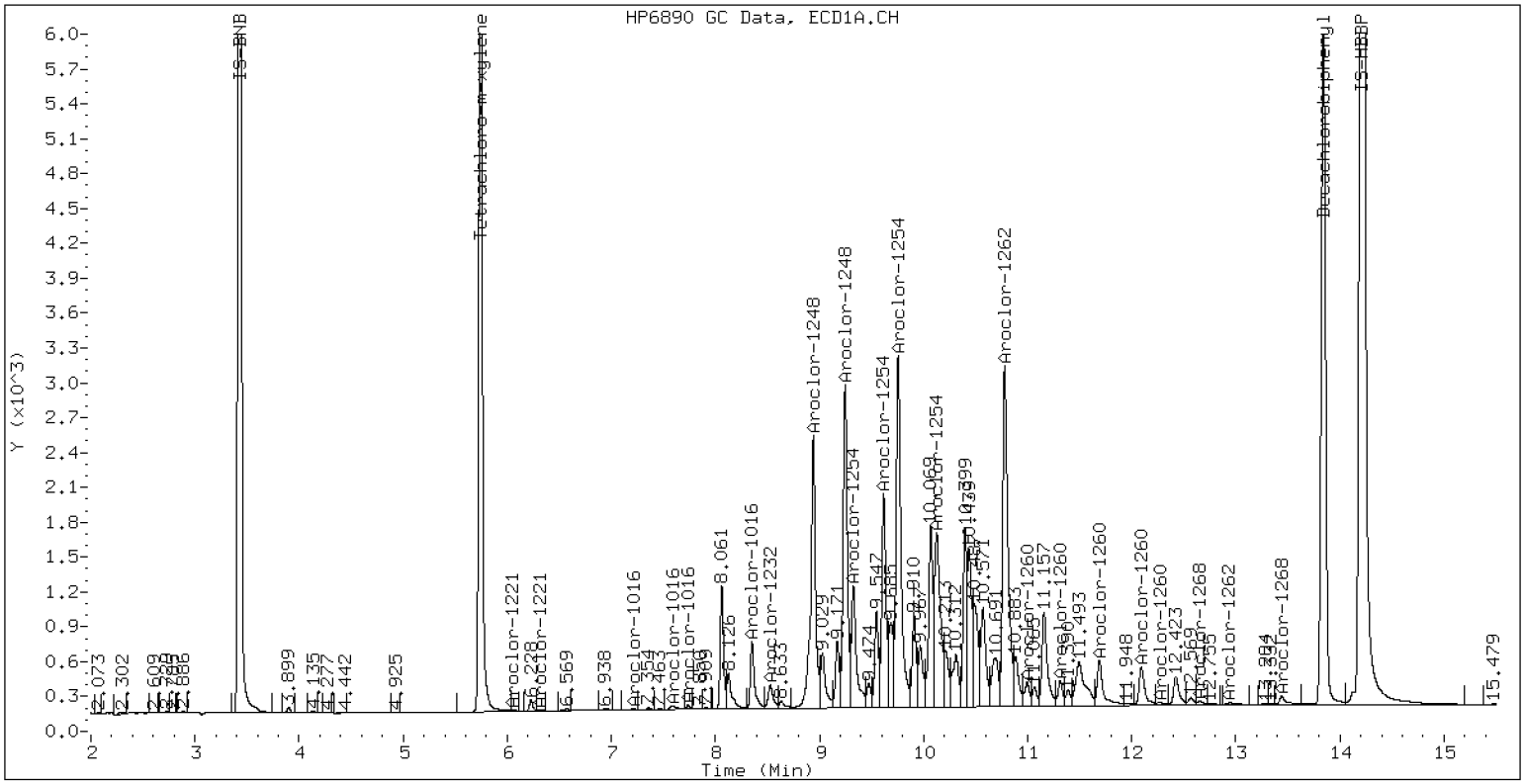
Total PCB Area Col2 (5.728 - 13.968) = 1146487 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

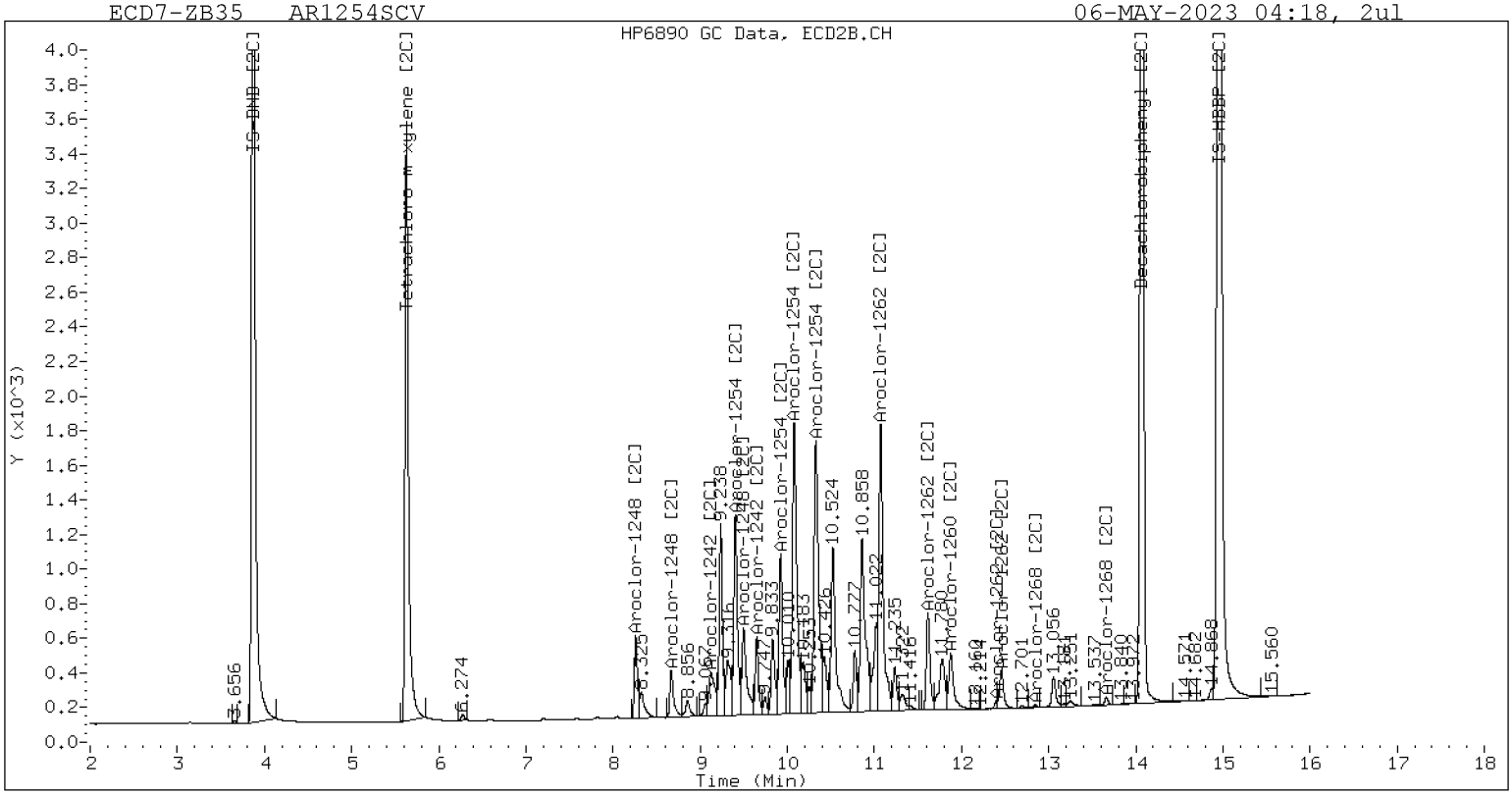
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254SCV 06-MAY-2023 04:18, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254SCV 06-MAY-2023 04:18, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05052336ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0079	Injection Date:	05/06/23
Lab Sample ID:	SLE0079-SCV5	Injection Time:	04:39
Sequence Name:	AR2162SCV5		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1221	A	250.00	290	0.0145752	0.0167225		15.9	+/-20
Aroclor 1221 [2C]	A	250.00	288	0.0124557	0.0144068		15.3	+/-20
Aroclor 1262	A	250.00	265	0.0465964	0.0493619		6.1	+/-20
Aroclor 1262 [2C]	A	250.00	259	0.0691503	0.0715087		3.5	+/-20
Decachlorobiphenyl	A	40.000	37.1	0.7991406	0.7407598		-7.3	+/-20
Tetrachlorometaxylene	A	40.000	37.8	1.2048230	1.1381330		-5.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	38.8	1.1360140	1.1010220		-3.1	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.1	1.1005470	1.0746770		-2.4	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052336ECD7.D
Data file 2: /230505.b/230505.b/05052336ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR2162SCV
Client ID:
Injection Date: 06-MAY-2023 04:39
Report Date: 05/06/2023 11:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	358254	5.628	-0.000	183759	37.8	39.1	3.3	Tetrachloro-m-xylene
13.842	0.002	344347	14.070	0.002	373300	37.1	38.8	4.5	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	629547	4.7
Hexabromobiphenyl	876625	929713	6.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	341980	-2.1
Hexabromobiphenyl	652984	678097	3.8

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	6601	27.1	1	7.207	0.003	3935	20.3
Aroclor-1016	2	7.595	0.000	13419	17.6	2	7.821	0.013	6146	14.9
Aroclor-1016	3	7.735	0.003	7114	20.2	3	8.027	0.021	3201	17.6
Aroclor-1016	4	8.353	-0.045	3916	26.9	4	8.262	0.003	2131	14.7
Total Col1Ave (4 peaks):					23.0	Total Col2Ave (4 peaks):				16.9 RPD = 30
Corrected Ave (3 peaks):					21.6	Corrected Ave (3 peaks):				15.7 RPD = 31
Aroclor-1221	1	4.663	-0.001	13184	297.8	1	4.893	-0.001	7253	287.5
Aroclor-1221	2	6.070	0.000	25527	287.4	2	6.244	-0.001	14853	284.1
Aroclor-1221	3	6.321	0.000	59985	284.3	3	6.571	-0.001	24083	292.9
Total Col1Ave (3 peaks):					289.8	Total Col2Ave (3 peaks):				288.2 RPD = 1
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.663	-0.001	13184	447.0	1	4.893	-0.001	7253	546.9
Aroclor-1232	2	6.070	0.000	25527	416.0	2	7.207	0.002	3935	51.8
Aroclor-1232	3	7.595	-0.000	13419	45.9	3	7.821	0.006	6146	40.3
Aroclor-1232	4	8.528	0.001	2679	21.4	4	8.671	0.002	1120	25.4
Total Col1Ave (4 peaks):					232.6	Total Col2Ave (4 peaks):				166.1 RPD = 33
Corrected Ave (3 peaks):					161.1	Corrected Ave (3 peaks):				39.2 RPD = 122*
Aroclor-1242	1	7.213	0.001	6601	33.3	1	7.207	0.004	3935	25.7
Aroclor-1242	2	7.595	-0.000	13419	21.3	2	7.821	0.008	6146	18.9
Aroclor-1242	3	8.353	-0.045	3916	32.2	3	9.133	0.010	881	8.5
Aroclor-1242	4	8.528	0.003	2679	9.5	4	9.651	0.101	516	4.1
Total Col1Ave (4 peaks):					24.1	Total Col2Ave (4 peaks):				14.3 RPD = 51*
Corrected Ave (3 peaks):					21.0	Corrected Ave (3 peaks):				10.5 RPD = 67*
Aroclor-1248	1	8.353	-0.046	3916	24.4	1	8.262	0.002	2131	13.1
Aroclor-1248	2	8.528	0.003	2679	6.4	2	8.671	0.004	1120	6.5
Aroclor-1248	3	8.942	-0.002	25144	31.3	3	9.133	0.013	881	4.4
Aroclor-1248	4	9.251	0.008	25583	62.5	4	9.500	-0.045	335	1.4
Total Col1Ave (4 peaks):					31.1	Total Col2Ave (4 peaks):				6.3 RPD = 132*
Corrected Ave (3 peaks):					20.7	Corrected Ave (3 peaks):				4.1 RPD = 134*
Aroclor-1254	1	9.251	0.005	25583	39.5	1	9.408	0.004	9719	37.4
Aroclor-1254	2	---			0.0	2	9.500	0.001	335	2.2
Aroclor-1254	3	9.620	0.002	4245	10.2	3	9.928	0.004	2055	9.8
Aroclor-1254	4	9.758	0.003	11050	13.5	4	10.100	0.022	55162	120.0
Aroclor-1254	5	10.071	-0.055	129151	261.4	5	10.325	-0.004	68421	150.1
Total Col1Ave (4 peaks):					81.1	Total Col2Ave (5 peaks):				63.9 RPD = 24
Corrected Ave (3 peaks):					21.1	Corrected Ave (4 peaks):				42.3 RPD = 67*
Aroclor-1260	1	10.995	0.002	206643	420.3	1	11.605	-0.001	119902	332.9
Aroclor-1260	2	11.311	0.001	167443	345.1	2	11.872	0.000	293746	311.8
Aroclor-1260	3	11.687	0.001	390491	321.4	3	12.386	-0.002	131462	563.2
Aroclor-1260	4	12.091	0.001	120118	201.8	4	12.456	0.000	212898	338.4
Aroclor-1260	5	12.195	0.002	155588	599.5	NS	---			----
Total Col1Ave (5 peaks):					377.6	Total Col2Ave (4 peaks):				386.6 RPD = 2
Corrected Ave (4 peaks):					322.2	Corrected Ave (3 peaks):				327.7 RPD = 2
Aroclor-1262	1	10.777	-0.001	114050	271.2	1	11.153	0.000	141861	258.2
Aroclor-1262	2	12.195	0.001	155588	263.0	2	11.605	0.000	119902	258.7
Aroclor-1262	3	12.269	0.000	167998	264.2	3	12.386	-0.000	131462	259.6
Aroclor-1262	4	12.938	-0.001	136019	262.5	4	12.456	0.000	212898	258.0
Total Col1Ave (4 peaks):					265.2	Total Col2Ave (4 peaks):				258.6 RPD = 3
Corrected Ave (3 peaks):					263.3	Corrected Ave (3 peaks):				258.3 RPD = 2
Aroclor-1268	1	12.195	-0.000	155588	104.9	1	12.386	0.001	131462	102.4
Aroclor-1268	2	12.269	0.001	167998	114.1	2	12.456	0.003	212898	154.3
Aroclor-1268	3	12.675	0.027	60611	51.2	3	12.843	-0.000	8393	7.1
Aroclor-1268	4	13.439	0.001	49821	14.7	4	13.661	-0.002	39480	10.4
Total Col1Ave (4 peaks):					71.2	Total Col2Ave (4 peaks):				68.6 RPD = 4

Corrected Ave (3 peaks): 56.9 Corrected Ave (3 peaks): 40.0 RPD = 35

Total PCB Area Col1 (5.842 - 13.740) = 2870829 Col1 Total PCB = 0.4 ppm*

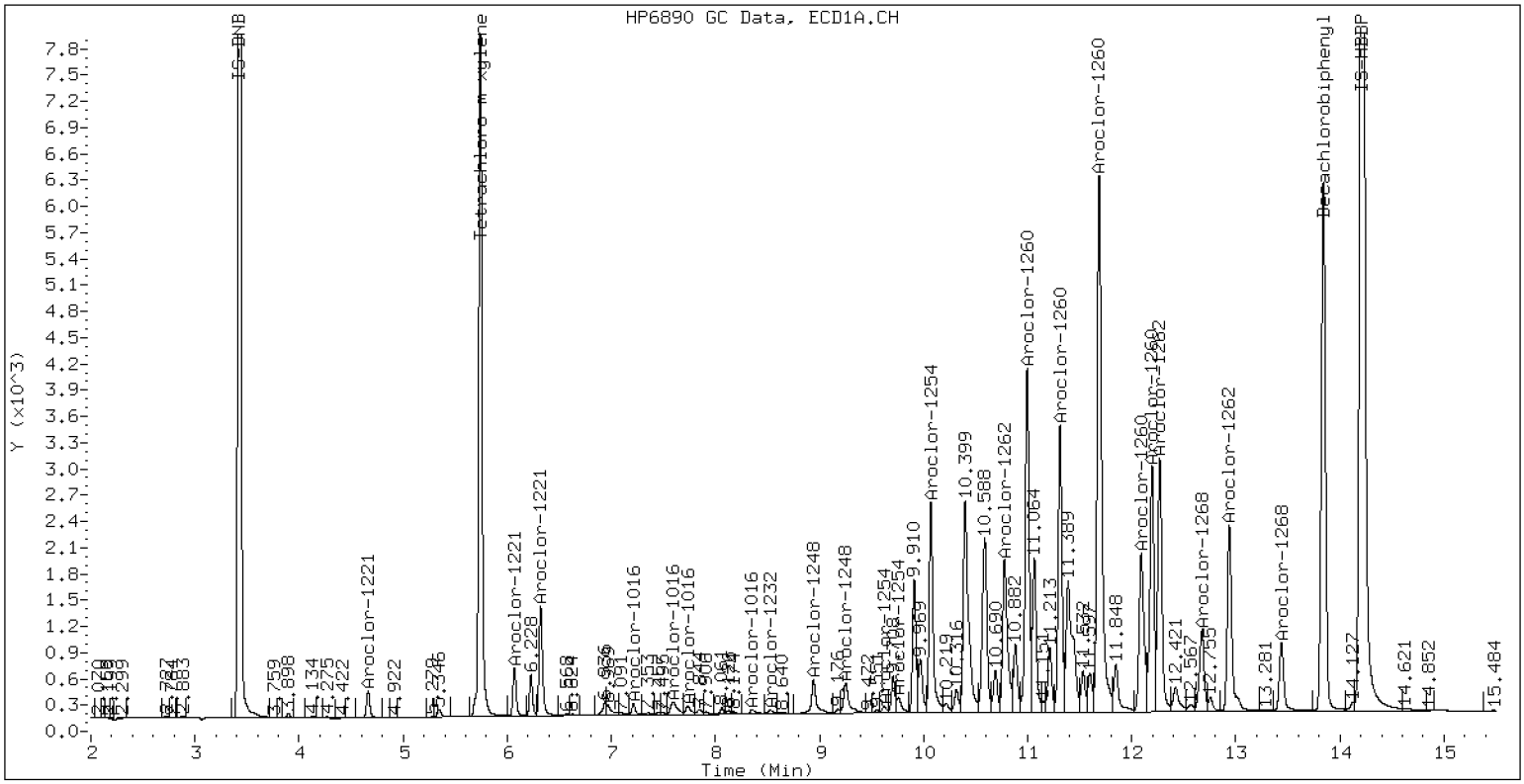
Total PCB Area Col2 (5.728 - 13.968) = 1885829 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

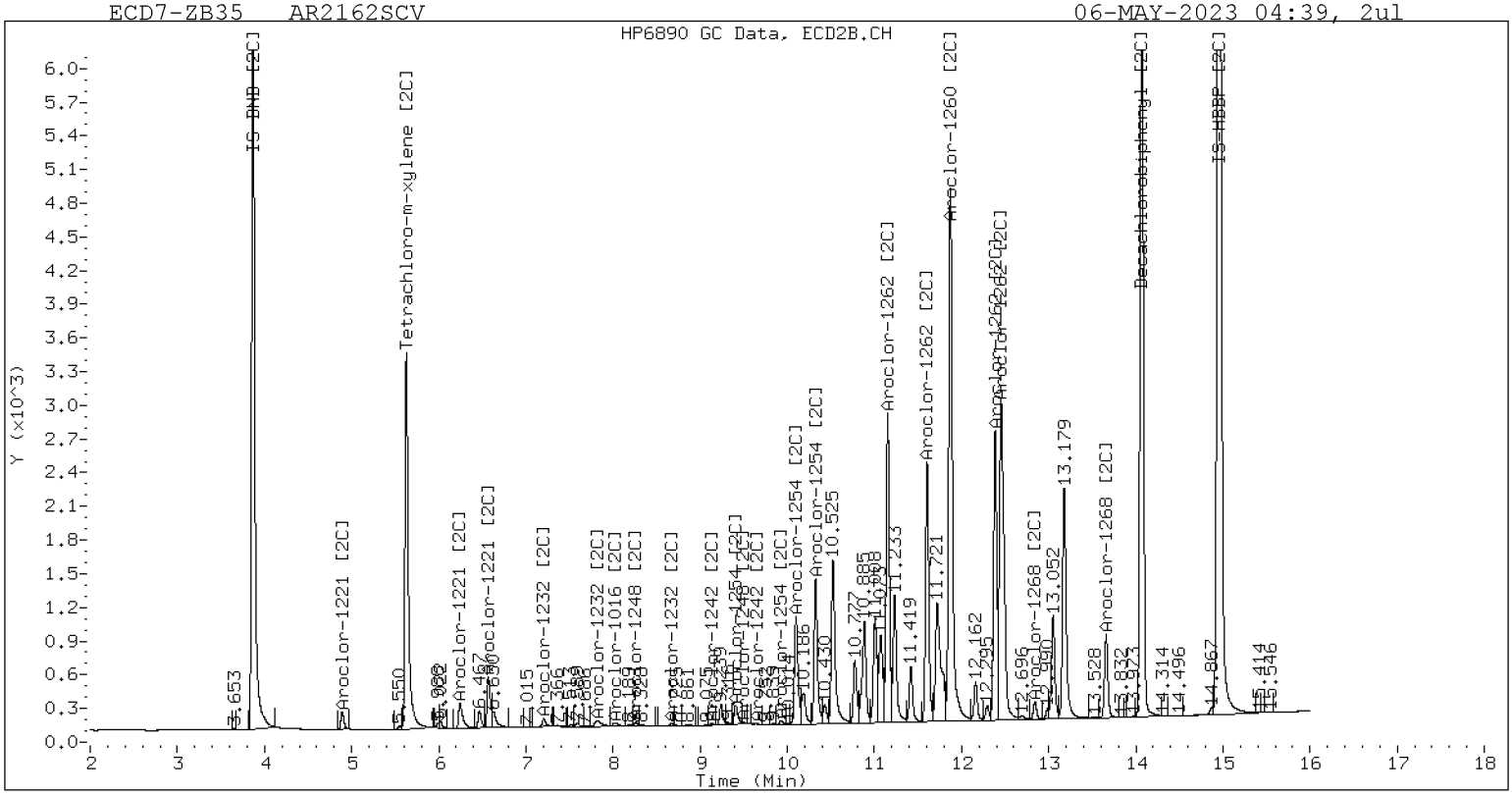
PCB Dual Column Chromatograms

ECD7-ZB5 AR2162SCV 06-MAY-2023 04:39, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR2162SCV 06-MAY-2023 04:39, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

SECOND-SOURCE
CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05052337ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0079	Injection Date:	05/06/23
Lab Sample ID:	SLE0079-SCV6	Injection Time:	05:00
Sequence Name:	AR3268SCV6		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1232	A	250.00	256	0.0161500	0.0177311		2.6	+/-20
Aroclor 1232 [2C]	A	250.00	301	0.0167199	0.0201037		20.3	+/-20
Aroclor 1268	A	250.00	266	0.1617990	0.1720924		6.5	+/-20
Aroclor 1268 [2C]	A	250.00	263	0.2250713	0.2372875		5.2	+/-20
Decachlorobiphenyl	A	40.000	55.1	0.7991406	1.1003690		37.7	+/-20
Tetrachlorometaxylene	A	40.000	38.4	1.2048230	1.1563010		-4.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	59.3	1.1360140	1.6851460		48.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	40.4	1.1005470	1.1123120		1.1	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230505.b/05052337ECD7.D
Data file 2: /230505.b/230505.b/05052337ECD7.D
Method: \\target\share\chem4\ecd7.i\230505.b\PCB.m
Compound Sublist: PCB.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR3268SCV
Client ID:
Injection Date: 06-MAY-2023 05:00
Report Date: 05/06/2023 11:31
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.001	373749	5.629	0.001	196946	38.4	40.4	5.2	Tetrachloro-m-xylene
13.842	0.002	525409	14.069	0.001	586548	55.1	59.3	7.4	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	646456	7.5
Hexabromobiphenyl	876625	954969	8.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	354120	1.4
Hexabromobiphenyl	652984	696139	6.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.214	0.001	28623	114.3	1	7.205	0.002	23124	115.4
Aroclor-1016	2	7.597	0.002	85721	109.5	2	7.815	0.007	47496	111.2
Aroclor-1016	3	7.735	0.002	41343	114.3	3	8.014	0.008	24029	127.5
Aroclor-1016	4	8.400	0.002	16653	111.6	4	8.262	0.003	15421	103.0
Total Col1Ave (4 peaks):					112.4	Total Col2Ave (4 peaks):				114.3 RPD = 2
Corrected Ave (3 peaks):					111.8	Corrected Ave (3 peaks):				109.9 RPD = 2
Aroclor-1221	1	4.664	0.001	7272	159.9	1	4.895	0.000	4045	154.9
Aroclor-1221	2	6.070	0.001	13478	147.8	2	6.246	0.000	9235	170.6
Aroclor-1221	3	6.321	0.001	43831	202.3	3	6.572	0.000	24300	285.4
Total Col1Ave (3 peaks):					170.0	Total Col2Ave (3 peaks):				203.6 RPD = 18
Corrected Ave: < 3 Peaks						Corrected Ave: < 3 Peaks				
Aroclor-1232	1	4.664	0.001	7272	240.1	1	4.895	0.001	4045	294.5
Aroclor-1232	2	6.070	0.001	13478	213.9	2	7.205	0.001	23124	294.1
Aroclor-1232	3	7.597	0.002	85721	285.5	3	7.815	0.000	47496	300.7
Aroclor-1232	4	8.527	0.000	36809	286.5	4	8.669	-0.000	14324	313.2
Total Col1Ave (4 peaks):					256.5	Total Col2Ave (4 peaks):				300.6 RPD = 16
Corrected Ave (3 peaks):					246.5	Corrected Ave (3 peaks):				296.5 RPD = 18
Aroclor-1242	1	7.214	0.002	28623	140.5	1	7.205	0.002	23124	146.1
Aroclor-1242	2	7.597	0.002	85721	132.8	2	7.815	0.002	47496	141.1
Aroclor-1242	3	8.400	0.002	16653	133.4	3	9.128	0.005	14403	133.4
Aroclor-1242	4	8.527	0.003	36809	127.4	4	9.648	0.098	5512	42.4
Total Col1Ave (4 peaks):					133.5	Total Col2Ave (4 peaks):				115.7 RPD = 14
Corrected Ave (3 peaks):					131.2	Corrected Ave (3 peaks):				105.6 RPD = 22
Aroclor-1248	1	8.400	0.001	16653	100.9	1	8.262	0.002	15421	91.5
Aroclor-1248	2	8.527	0.003	36809	85.8	2	8.669	0.002	14324	80.5
Aroclor-1248	3	8.944	0.000	89377	108.4	3	9.128	0.008	14403	69.0
Aroclor-1248	4	9.238	-0.005	41570	98.9	4	9.560	0.015	17331	69.3
Total Col1Ave (4 peaks):					98.5	Total Col2Ave (4 peaks):				77.6 RPD = 24
Corrected Ave (3 peaks):					95.2	Corrected Ave (3 peaks):				72.9 RPD = 26
Aroclor-1254	1	9.238	-0.008	41570	62.6	1	9.407	0.003	5487	20.4
Aroclor-1254	2	9.326	0.001	12640	42.3	2	9.560	0.061	17331	108.4
Aroclor-1254	3	9.624	0.006	7232	16.9	3	9.929	0.005	3481	16.0
Aroclor-1254	4	9.764	0.008	11671	13.9	4	10.086	0.009	7259	15.3
Aroclor-1254	5	10.139	0.014	7544	14.9	5	10.345	0.017	6610	14.0
Total Col1Ave (5 peaks):					30.1	Total Col2Ave (5 peaks):				34.8 RPD = 14
Corrected Ave (4 peaks):					22.0	Corrected Ave (4 peaks):				16.4 RPD = 29
Aroclor-1260	1	10.998	0.005	85093	168.5	1	11.598	-0.008	75237	203.5
Aroclor-1260	2	11.313	0.003	6363	12.8	2	11.873	0.001	33655	34.8
Aroclor-1260	3	11.688	0.002	47857	38.3	3	12.384	-0.004	346138	1444.4
Aroclor-1260	4	12.094	0.004	1291	2.1	4	12.453	-0.002	373218	577.8
Aroclor-1260	5	12.195	0.001	406211	1523.9	NS	---			----
Total Col1Ave (5 peaks):					349.1	Total Col2Ave (4 peaks):				565.1 RPD = 47*
Corrected Ave (4 peaks):					55.4	Corrected Ave (3 peaks):				272.0 RPD = 132*
Aroclor-1262	1	10.785	0.006	4006	9.3	1	11.156	0.002	52531	93.1
Aroclor-1262	2	12.195	0.000	406211	668.6	2	11.598	-0.007	75237	158.2
Aroclor-1262	3	12.268	-0.002	403730	618.2	3	12.384	-0.002	346138	665.8
Aroclor-1262	4	12.937	-0.002	145536	273.5	4	12.453	-0.002	373218	440.5
Total Col1Ave (4 peaks):					392.4	Total Col2Ave (4 peaks):				339.4 RPD = 14
Corrected Ave (3 peaks):					300.3	Corrected Ave (3 peaks):				230.6 RPD = 26
Aroclor-1268	1	12.195	-0.001	406211	266.7	1	12.384	-0.001	346138	262.7
Aroclor-1268	2	12.268	-0.000	403730	266.9	2	12.453	0.001	373218	263.5
Aroclor-1268	3	12.648	-0.000	323568	266.0	3	12.844	0.001	316122	260.6
Aroclor-1268	4	13.439	0.002	920777	265.1	4	13.663	0.000	1029335	264.8
Total Col1Ave (4 peaks):					266.2	Total Col2Ave (4 peaks):				262.9 RPD = 1

Corrected Ave (3 peaks): 265.9 Corrected Ave (3 peaks): 262.3 RPD = 1

Total PCB Area Col1 (5.842 - 13.740) = 3325332 Col1 Total PCB = 0.5 ppm*

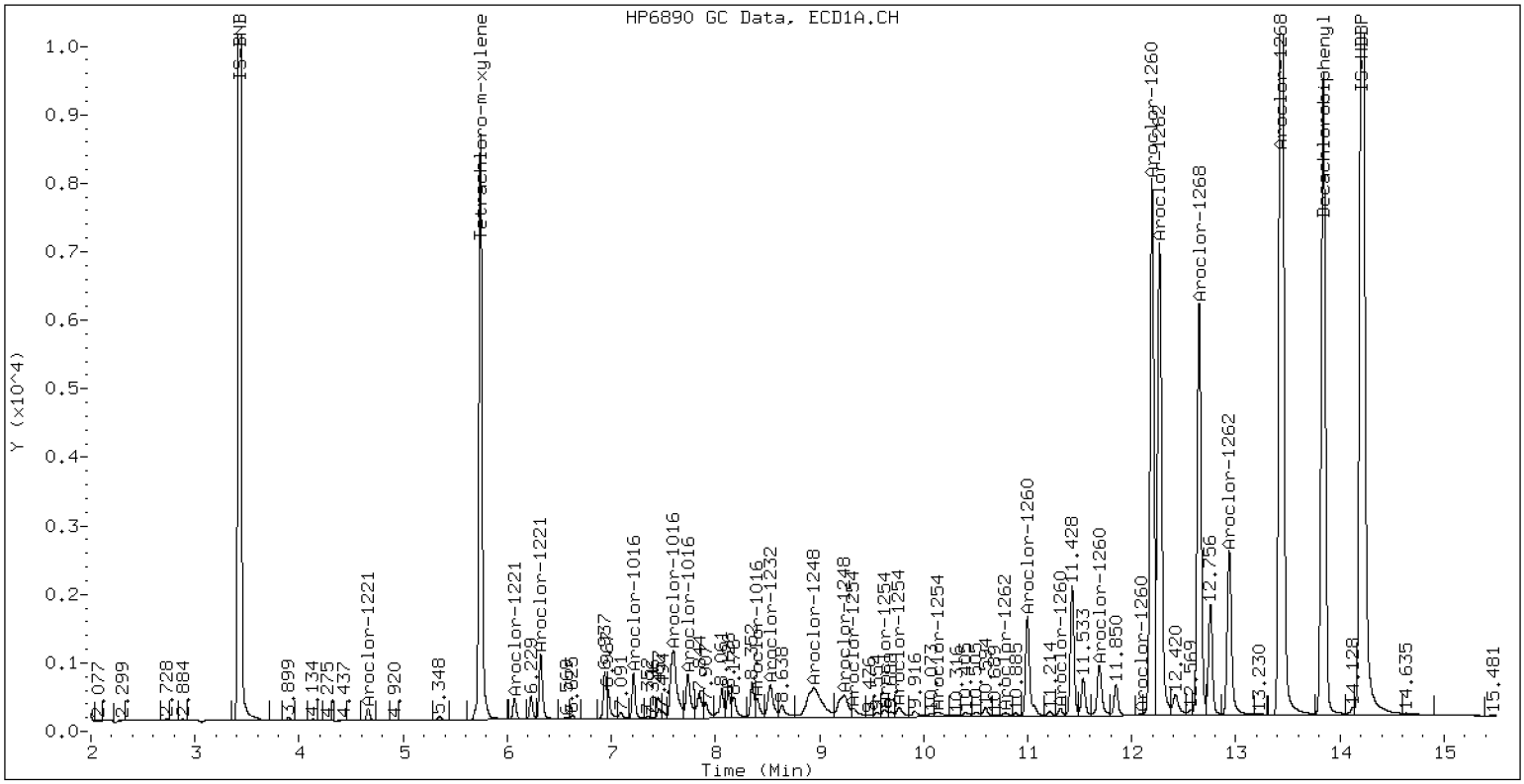
Total PCB Area Col2 (5.728 - 13.968) = 2876097 Col2 Total PCB = 0.7 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

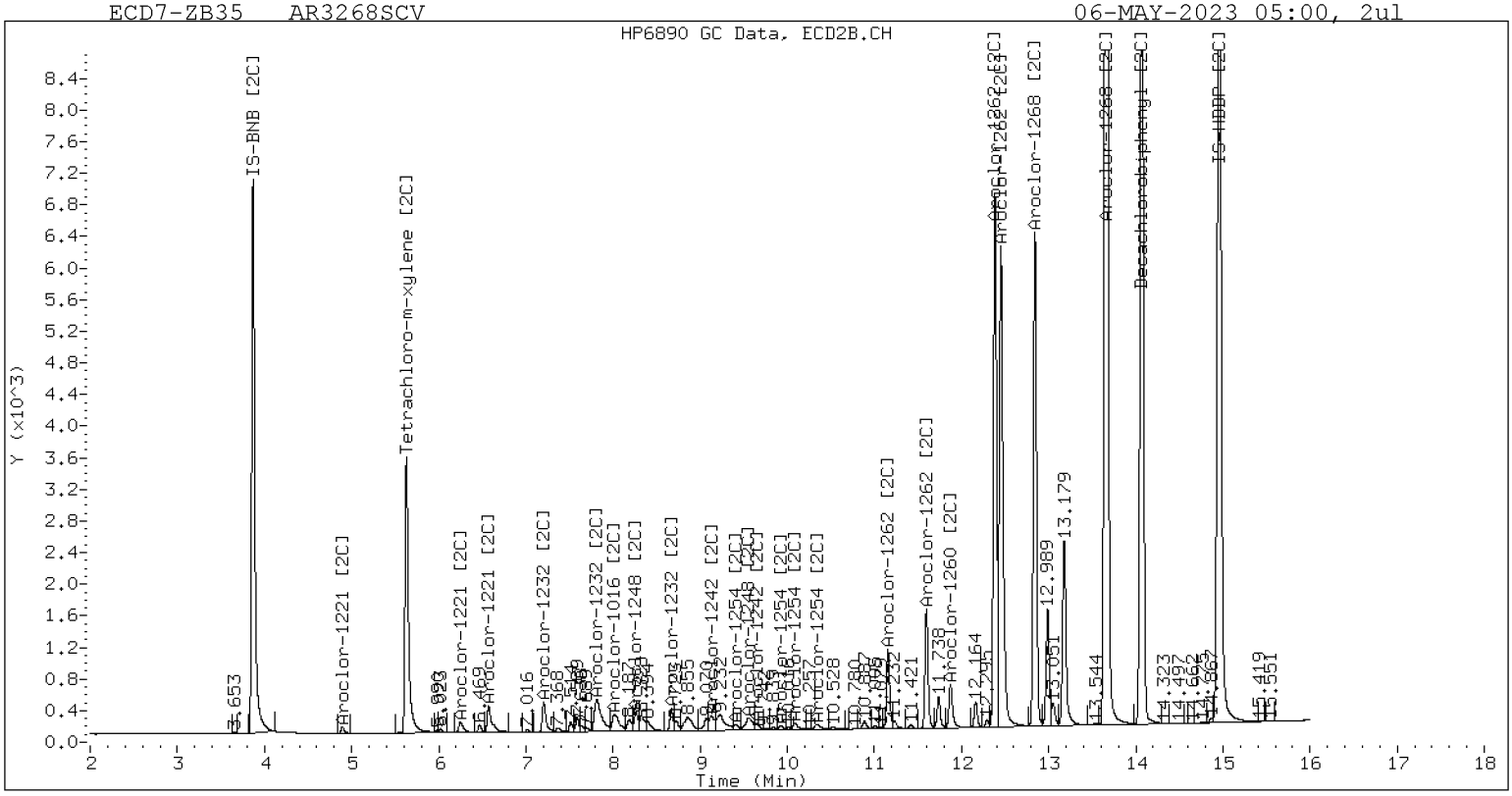
PCB Dual Column Chromatograms

ECD7-ZB5 AR3268SCV 06-MAY-2023 05:00, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR3268SCV 06-MAY-2023 05:00, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102307ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/10/23
Lab Sample ID:	SLE0165-CCV1	Injection Time:	10:46
Sequence Name:	AR1248CCV1		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	243	0.0568879	0.0552389		-3.0	+/-20
Aroclor-1248 (1)	A	250.00	251		0.0205264			
Aroclor-1248 (2)	A	250.00	254		0.0539123			
Aroclor-1248 (3)	A	250.00	249		0.1015087			
Aroclor-1248 (4)	A	250.00	216		0.0450081			
Aroclor 1248 [2C]	A	250.00	254	0.0454726	0.0462148		1.5	+/-20
Aroclor-1248 (1) [2C]	A	250.00	248		0.0377656			
Aroclor-1248 (2) [2C]	A	250.00	255		0.0410380			
Aroclor-1248 (3) [2C]	A	250.00	256		0.0482138			
Aroclor-1248 (4) [2C]	A	250.00	256		0.0578420			
Decachlorobiphenyl	A	40.000	39.1	0.7991406	0.7820268		-2.3	+/-20
Tetrachlorometaxylene	A	40.000	38.6	1.2048230	1.1613990		-3.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	44.5	1.1360140	1.2648350		11.3	+/-20
Tetrachlorometaxylene [2C]	A	40.000	40.1	1.1005470	1.1024910		0.3	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102307ECD7.D
Data file 2: /230510.b/230510.b/05102307ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV1
Client ID:
Injection Date: 10-MAY-2023 10:46
Report Date: 05/11/2023 17:14
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	-0.000	341169	5.628	-0.002	189311	38.6	40.1	3.8	Tetrachloro-m-xylene
13.841	0.000	339445	14.070	0.000	360325	39.1	44.5	12.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	587514	-2.3
Hexabromobiphenyl	876625	868116	-1.0

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	343424	-1.7
Hexabromobiphenyl	652984	569758	-12.7

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.398	0.000	37686	251.3	1	8.258	-0.001	40530	248.1
Aroclor-1248	2	8.523	0.000	98982	254.0	2	8.665	-0.002	44042	255.2
Aroclor-1248	3	8.942	0.000	186368	248.7	3	9.118	-0.002	51743	255.8
Aroclor-1248	4	9.239	0.000	82634	216.3	4	9.540	-0.005	62076	255.9
Total Col1Ave (4 peaks):					242.6	Total Col2Ave (4 peaks):				253.7 RPD = 5
Corrected Ave (3 peaks):					238.8	Corrected Ave (3 peaks):				253.0 RPD = 6
CalAmt %D:					-3.0	CalAmt %D:				1.5

Total PCB Area Col1 (5.842 - 13.741) = 1514350 Col1 Total PCB = 0.2 ppm*

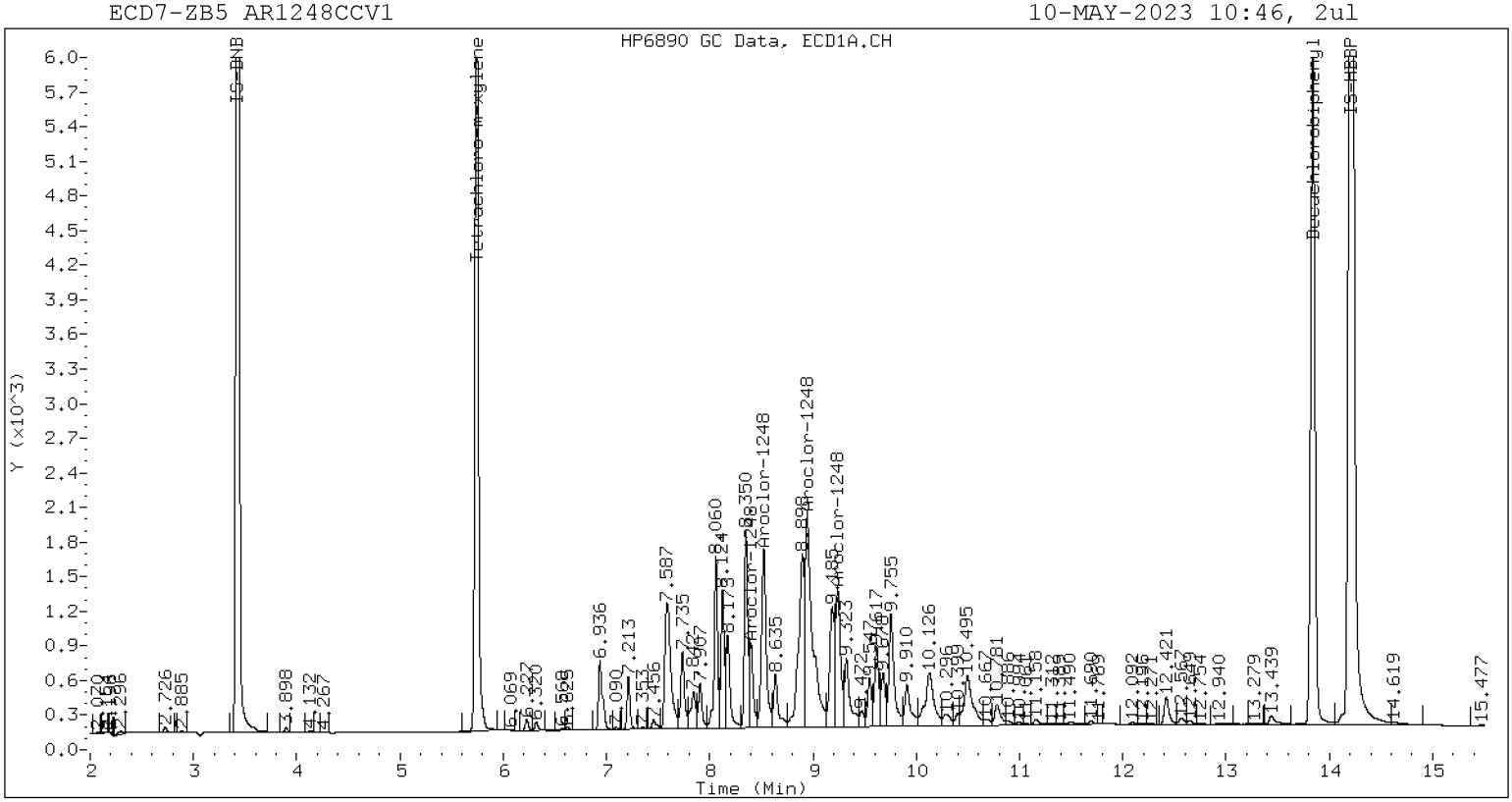
Total PCB Area Col2 (5.730 - 13.969) = 833806 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

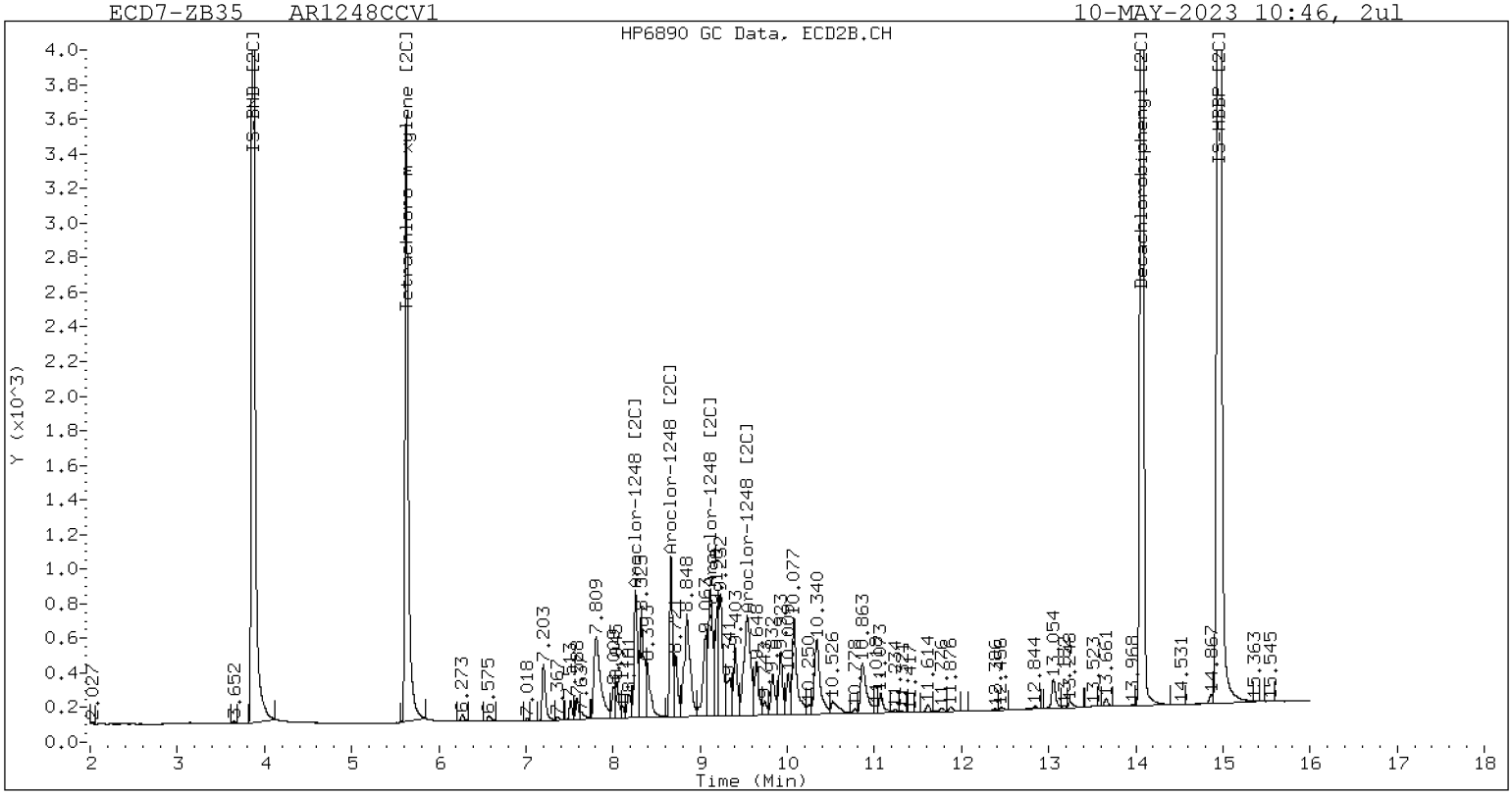
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV1 10-MAY-2023 10:46, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCV1 10-MAY-2023 10:46, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102308ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/10/23
Lab Sample ID:	SLE0165-CCV2	Injection Time:	11:06
Sequence Name:	AR1660CCV2		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	251	0.0477728	0.0485915		0.4	+/-20
Aroclor-1016 (1)	A	250.00	244	0.0309764	0.0302823		-2.4	
Aroclor-1016 (2)	A	250.00	261	0.0968611	0.1010711		4.4	
Aroclor-1016 (3)	A	250.00	248	0.0447793	0.0444500		-0.8	
Aroclor-1016 (4)	A	250.00	251	0.0184745	0.0185626		0.4	
Aroclor 1016 [2C]	A	250.00	242	0.0545435	0.0549463		-3.4	+/-20
Aroclor-1016 (1) [2C]	A	250.00	222	0.0452861	0.0402501		-11.2	
Aroclor-1016 (2) [2C]	A	250.00	282	0.0965080	0.1088753		12.8	
Aroclor-1016 (3) [2C]	A	250.00	231	0.0425661	0.0393943		-7.6	
Aroclor-1016 (4) [2C]	A	250.00	231	0.0338137	0.0312654		-7.6	
Aroclor 1260	A	250.00	264	0.0524306	0.0555714		5.5	+/-20
Aroclor-1260 (1)	A	250.00	263	0.0423031	0.0444607		5.2	
Aroclor-1260 (2)	A	250.00	263	0.0417493	0.0439609		5.2	
Aroclor-1260 (3)	A	250.00	270	0.1045597	0.1130272		8.0	
Aroclor-1260 (4)	A	250.00	258	0.0512104	0.0527561		3.2	
Aroclor-1260 (5)	A	250.00	265	0.0223305	0.0236521		6.0	
Aroclor 1260 [2C]	A	250.00	251	0.0638471	0.0638354		0.3	+/-20
Aroclor-1260 (1) [2C]	A	250.00	252	0.0424868	0.0429215		0.8	
Aroclor-1260 (2) [2C]	A	250.00	248	0.1111292	0.1102730		-0.8	
Aroclor-1260 (3) [2C]	A	250.00	253	0.0275392	0.0279025		1.2	
Aroclor-1260 (4) [2C]	A	250.00	250	0.0742331	0.0742445		0.0	
Decachlorobiphenyl	A	40.000	41.2	0.7991406	0.8234335		3.0	+/-20
Tetrachlorometaxylene	A	40.000	39.1	1.2048230	1.1779260		-2.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	42.8	1.1360140	1.2144400		7.0	+/-20
Tetrachlorometaxylene [2C]	A	40.000	45.4	1.1005470	1.2498170		13.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102308ECD7.D
Data file 2: /230510.b/230510.b/05102308ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV2
Client ID:
Injection Date: 10-MAY-2023 11:06
Report Date: 05/11/2023 17:14
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	318878	5.628	-0.002	176431	39.1	45.4	14.9	Tetrachloro-m-xylene
13.841	0.000	325824	14.069	-0.000	295625	41.2	42.8	3.7	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	541423	-10.0
Hexabromobiphenyl	876625	791379	-9.7

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	282331	-19.2
Hexabromobiphenyl	652984	486850	-25.4

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	51236	244.4	1	7.204	0.000	35512	222.2
Aroclor-1016	2	7.593	0.000	171007	260.9	2	7.808	-0.003	96059	282.0
Aroclor-1016	3	7.733	0.000	75207	248.2	3	8.007	-0.002	34757	231.4
Aroclor-1016	4	8.398	0.000	31407	251.2	4	8.260	-0.000	27585	231.2
Total Col1Ave (4 peaks):					251.2	Total Col2Ave (4 peaks):				241.7 RPD = 4
Corrected Ave (3 peaks):					247.9	Corrected Ave (3 peaks):				228.2 RPD = 8
CalAmt %D:					0.5	CalAmt %D:				-3.3
Aroclor-1260	1	10.993	0.000	109954	262.8	1	11.606	0.000	65301	252.6
Aroclor-1260	2	11.310	0.000	108718	263.2	2	11.872	0.001	167770	248.1
Aroclor-1260	3	11.685	0.000	279523	270.2	3	12.389	0.001	42451	253.3
Aroclor-1260	4	12.089	0.000	130469	257.5	4	12.456	0.001	112956	250.0
Aroclor-1260	5	12.193	0.000	58493	264.8	NS	---			----
Total Col1Ave (5 peaks):					263.7	Total Col2Ave (4 peaks):				251.0 RPD = 5
Corrected Ave (4 peaks):					262.1	Corrected Ave (3 peaks):				250.2 RPD = 5
CalAmt %D:					5.5	CalAmt %D:				0.4

Total PCB Area Col1 (5.842 - 13.741) = 3094370 Col1 Total PCB = 0.5 ppm*

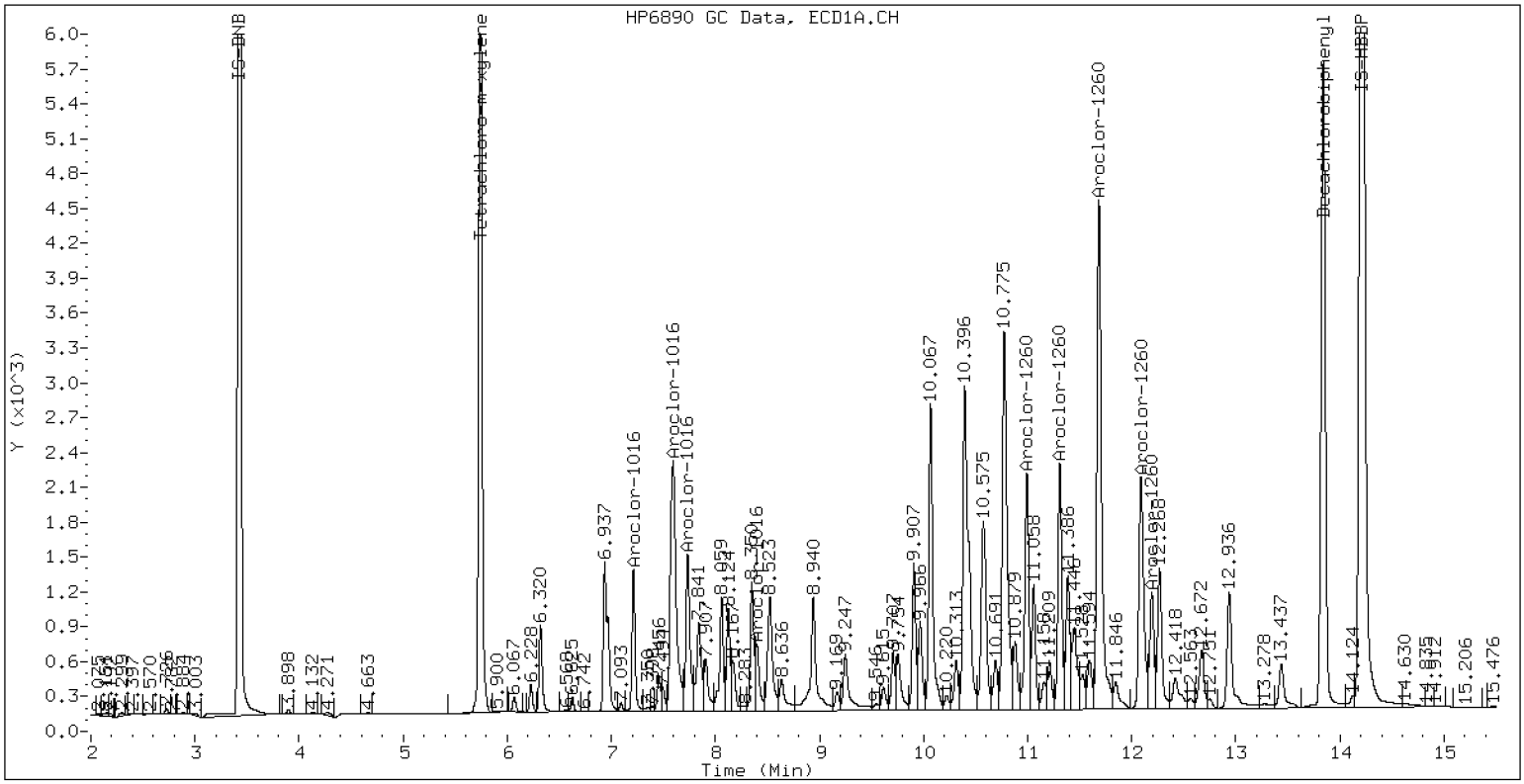
Total PCB Area Col2 (5.730 - 13.969) = 1600865 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

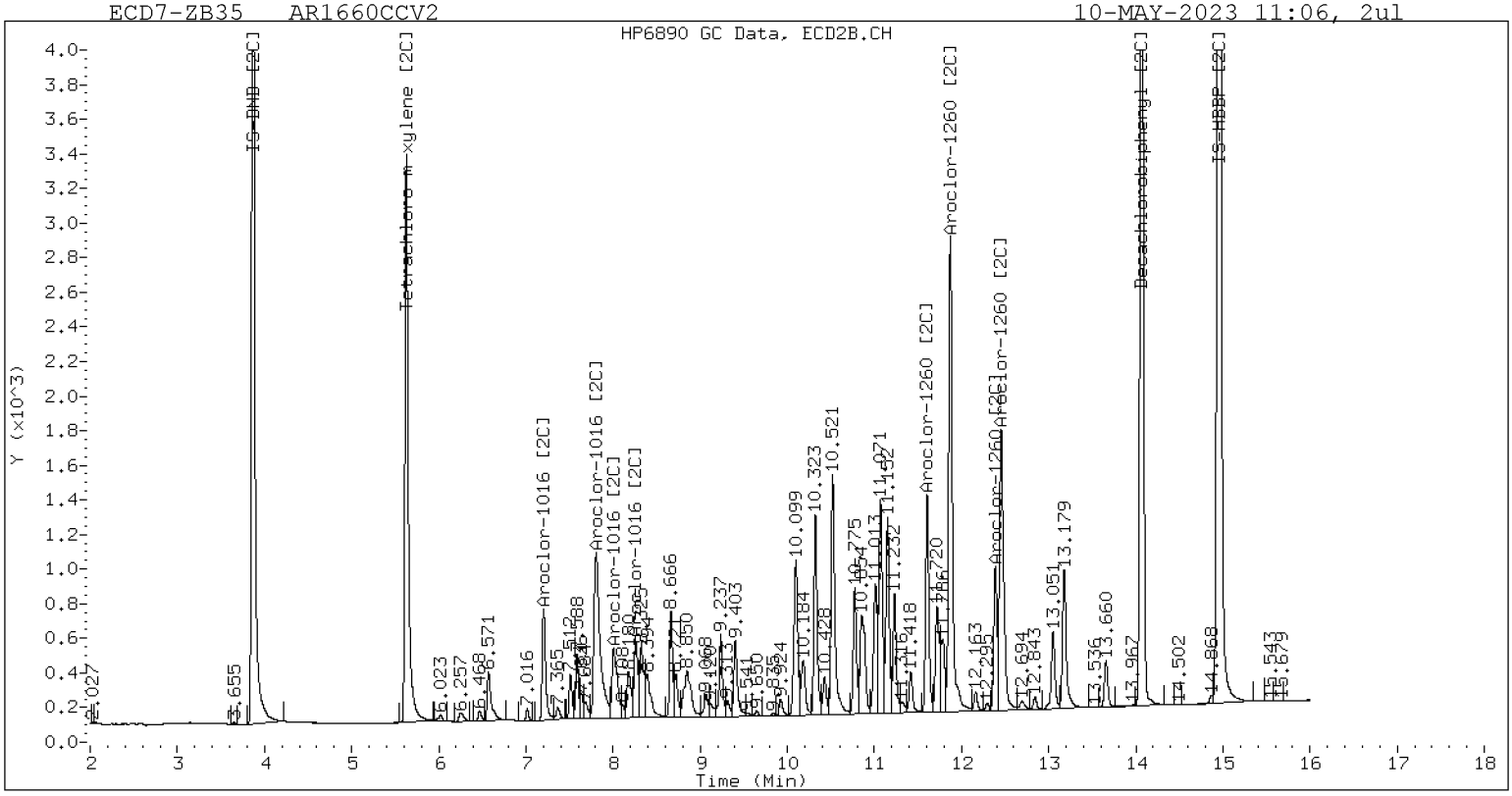
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV2 10-MAY-2023 11:06, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV2 10-MAY-2023 11:06, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102325ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/10/23
Lab Sample ID:	SLE0165-CCV3	Injection Time:	17:01
Sequence Name:	AR1242CCV3		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1242	A	250.00	249	0.0390737	0.0392643		-0.6	+/-20
Aroclor-1242 (1)	A	250.00	249		0.0251471			
Aroclor-1242 (2)	A	250.00	254		0.0811931			
Aroclor-1242 (3)	A	250.00	240		0.0148044			
Aroclor-1242 (4)	A	250.00	251		0.0359127			
Aroclor 1242 [2C]	A	250.00	256	0.0413965	0.0424919		2.2	+/-20
Aroclor-1242 (1) [2C]	A	250.00	252		0.0360875			
Aroclor-1242 (2) [2C]	A	250.00	260		0.0789723			
Aroclor-1242 (3) [2C]	A	250.00	254		0.0247711			
Aroclor-1242 (4) [2C]	A	250.00	256		0.0301368			
Decachlorobiphenyl	A	40.000	38.0	0.7991406	0.7592616		-5.0	+/-20
Tetrachlorometaxylene	A	40.000	47.2	1.2048230	1.4202340		18.0	+/-20
Decachlorobiphenyl [2C]	A	40.000	41.5	1.1360140	1.1794330		3.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	47.6	1.1005470	1.3104800		19.0	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102325ECD7.D
Data file 2: /230510.b/230510.b/05102325ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1242.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1242CCV3
Client ID:
Injection Date: 10-MAY-2023 17:01
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.000	423442	5.628	-0.003	232276	47.2	47.6	1.0	Tetrachloro-m-xylene
13.841	0.001	276670	14.070	0.000	282568	38.0	41.5	8.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	596299	-0.9
Hexabromobiphenyl	876625	728787	-16.9

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	354490	1.5
Hexabromobiphenyl	652984	479159	-26.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col					ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1242	1	7.212	0.000	46860	249.4	1	7.205	0.000	39977	252.3
Aroclor-1242	2	7.594	-0.001	151298	254.1	2	7.809	0.000	87484	259.6
Aroclor-1242	3	8.399	0.000	27587	239.6	3	9.119	0.000	27441	254.0
Aroclor-1242	4	8.525	0.000	66921	251.1	4	9.550	0.000	33385	256.4
Total Col1Ave (4 peaks):					248.5	Total Col2Ave (4 peaks):				255.6 RPD = 3
Corrected Ave (3 peaks):					246.7	Corrected Ave (3 peaks):				254.2 RPD = 3
CalAmt %D:					-0.6	CalAmt %D:				2.2

Total PCB Area Col1 (5.842 - 13.741) = 1146511 Col1 Total PCB = 0.2 ppm*

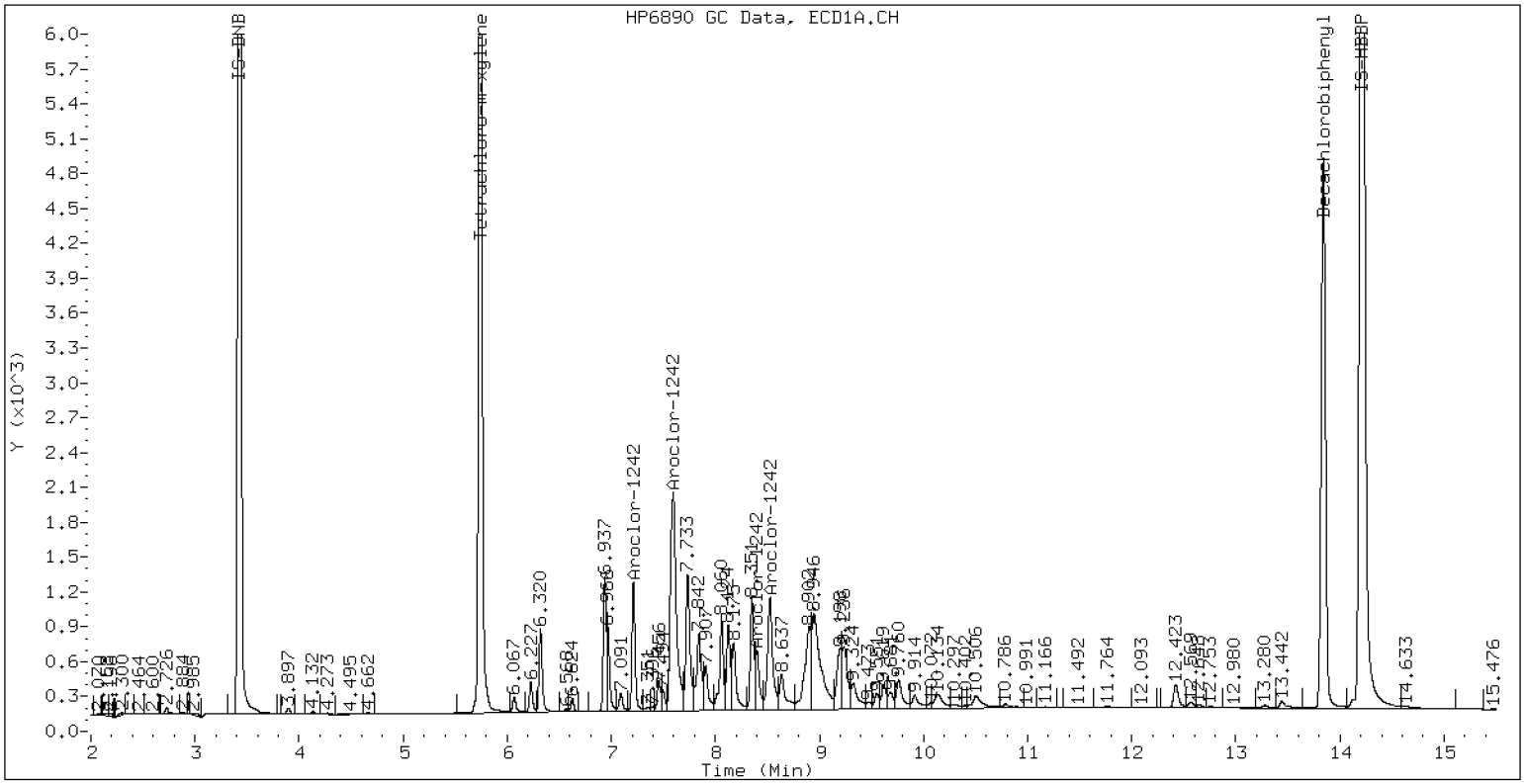
Total PCB Area Col2 (5.730 - 13.969) = 639271 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

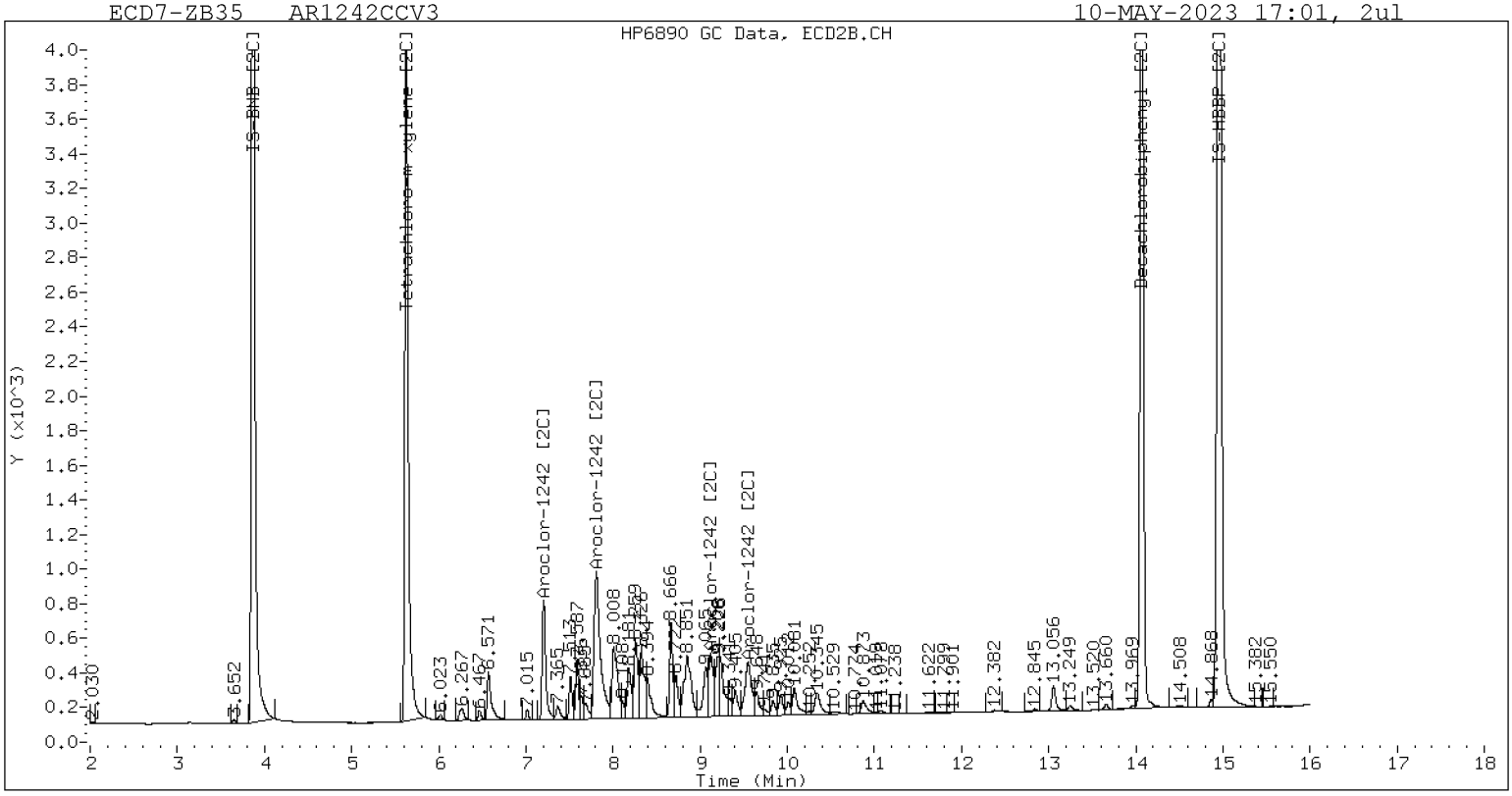
PCB Dual Column Chromatograms

ECD7-ZB5 AR1242CCV3 10-MAY-2023 17:01, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1242CCV3 10-MAY-2023 17:01, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102326ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/10/23
Lab Sample ID:	SLE0165-CCV4	Injection Time:	17:22
Sequence Name:	AR1660CCV4		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	260	0.0477728	0.0501101		4.1	+/-20
Aroclor-1016 (1)	A	250.00	256	0.0309764	0.0317617		2.4	
Aroclor-1016 (2)	A	250.00	266	0.0968611	0.1029834		6.4	
Aroclor-1016 (3)	A	250.00	260	0.0447793	0.0465233		4.0	
Aroclor-1016 (4)	A	250.00	259	0.0184745	0.0191721		3.6	
Aroclor 1016 [2C]	A	250.00	259	0.0545435	0.0587274		3.6	+/-20
Aroclor-1016 (1) [2C]	A	250.00	241	0.0452861	0.0436619		-3.6	
Aroclor-1016 (2) [2C]	A	250.00	298	0.0965080	0.1149455		19.2	
Aroclor-1016 (3) [2C]	A	250.00	258	0.0425661	0.0439787		3.2	
Aroclor-1016 (4) [2C]	A	250.00	239	0.0338137	0.0323234		-4.4	
Aroclor 1260	A	250.00	268	0.0524306	0.0562864		7.2	+/-20
Aroclor-1260 (1)	A	250.00	273	0.0423031	0.0462502		9.2	
Aroclor-1260 (2)	A	250.00	269	0.0417493	0.0449790		7.6	
Aroclor-1260 (3)	A	250.00	271	0.1045597	0.1132467		8.4	
Aroclor-1260 (4)	A	250.00	259	0.0512104	0.0530088		3.6	
Aroclor-1260 (5)	A	250.00	268	0.0223305	0.0239471		7.2	
Aroclor 1260 [2C]	A	250.00	267	0.0638471	0.0675047		6.7	+/-20
Aroclor-1260 (1) [2C]	A	250.00	274	0.0424868	0.0465217		9.6	
Aroclor-1260 (2) [2C]	A	250.00	260	0.1111292	0.1155846		4.0	
Aroclor-1260 (3) [2C]	A	250.00	270	0.0275392	0.0297642		8.0	
Aroclor-1260 (4) [2C]	A	250.00	263	0.0742331	0.0781483		5.2	
Decachlorobiphenyl	A	40.000	41.9	0.7991406	0.8370921		4.8	+/-20
Tetrachlorometaxylene	A	40.000	39.5	1.2048230	1.1906450		-1.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	42.3	1.1360140	1.2005180		5.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	46.6	1.1005470	1.2834480		16.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102326ECD7.D
Data file 2: /230510.b/230510.b/05102326ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV4
Client ID:
Injection Date: 10-MAY-2023 17:22
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.000	325380	5.629	-0.002	178285	39.5	46.6	16.5	Tetrachloro-m-xylene
13.841	0.000	314295	14.069	-0.000	274951	41.9	42.3	0.9	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	546561	-9.1
Hexabromobiphenyl	876625	750921	-14.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	277822	-20.5
Hexabromobiphenyl	652984	458054	-29.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	54249	256.3	1	7.204	-0.001	37907	241.0
Aroclor-1016	2	7.594	0.000	175896	265.8	2	7.809	-0.002	99795	297.8
Aroclor-1016	3	7.734	0.001	79462	259.7	3	8.008	-0.000	38182	258.3
Aroclor-1016	4	8.398	0.000	32746	259.4	4	8.260	-0.001	28063	239.0
Total Col1Ave (4 peaks):					260.3	Total Col2Ave (4 peaks):				259.0 RPD = 1
Corrected Ave (3 peaks):					258.5	Corrected Ave (3 peaks):				246.1 RPD = 5
CalAmt %D:					4.1	CalAmt %D:				3.6
Aroclor-1260	1	10.993	0.001	108532	273.3	1	11.606	-0.000	66592	273.7
Aroclor-1260	2	11.310	0.000	105549	269.3	2	11.871	-0.000	165450	260.0
Aroclor-1260	3	11.686	0.001	265748	270.8	3	12.388	0.000	42605	270.2
Aroclor-1260	4	12.090	0.001	124392	258.8	4	12.454	-0.000	111863	263.2
Aroclor-1260	5	12.194	0.001	56195	268.1	NS	---			----
Total Col1Ave (5 peaks):					268.1	Total Col2Ave (4 peaks):				266.8 RPD = 0
Corrected Ave (4 peaks):					266.7	Corrected Ave (3 peaks):				264.5 RPD = 1
CalAmt %D:					7.2	CalAmt %D:				6.7

Total PCB Area Col1 (5.842 - 13.741) = 3172858 Col1 Total PCB = 0.5 ppm*

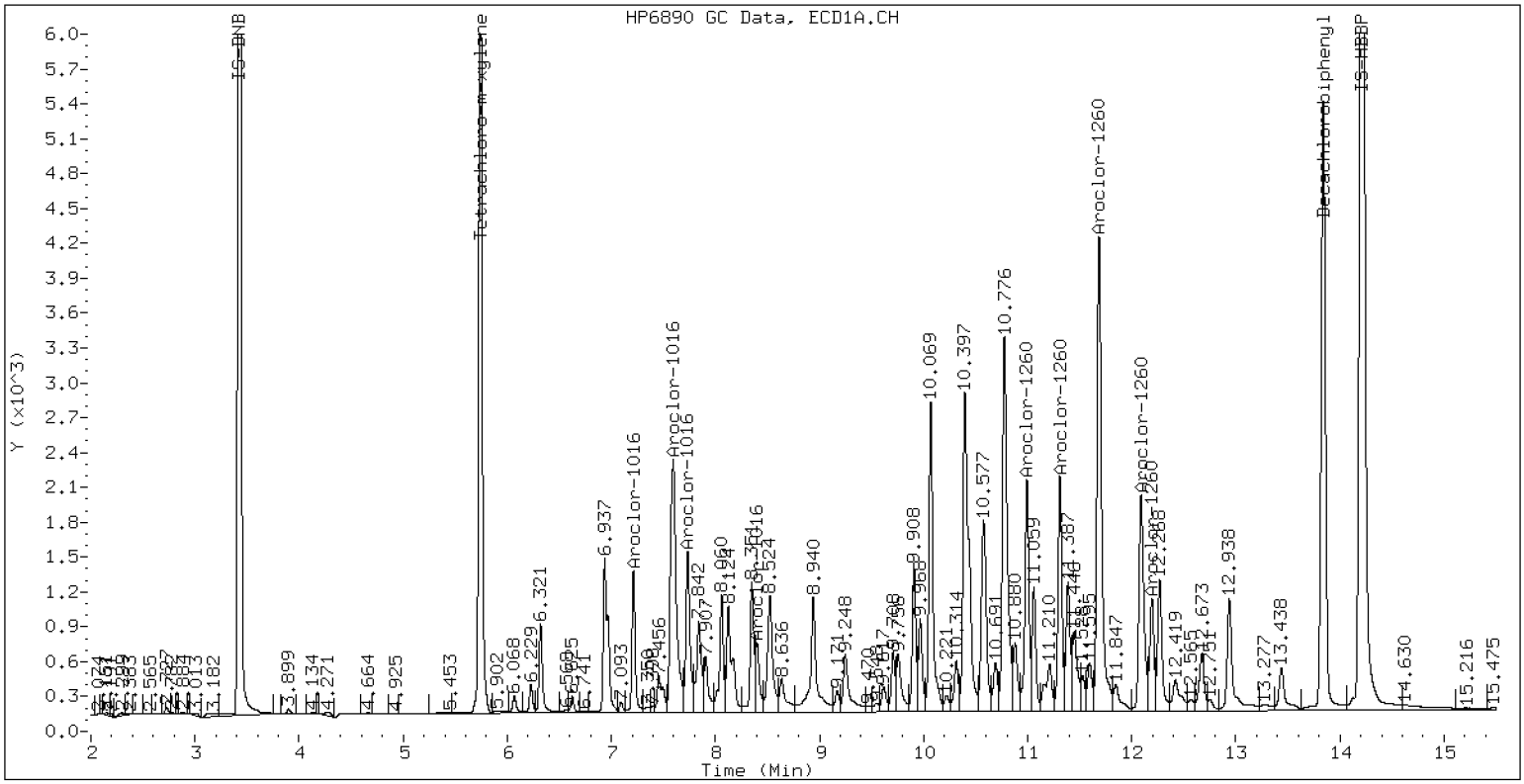
Total PCB Area Col2 (5.730 - 13.969) = 1633678 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

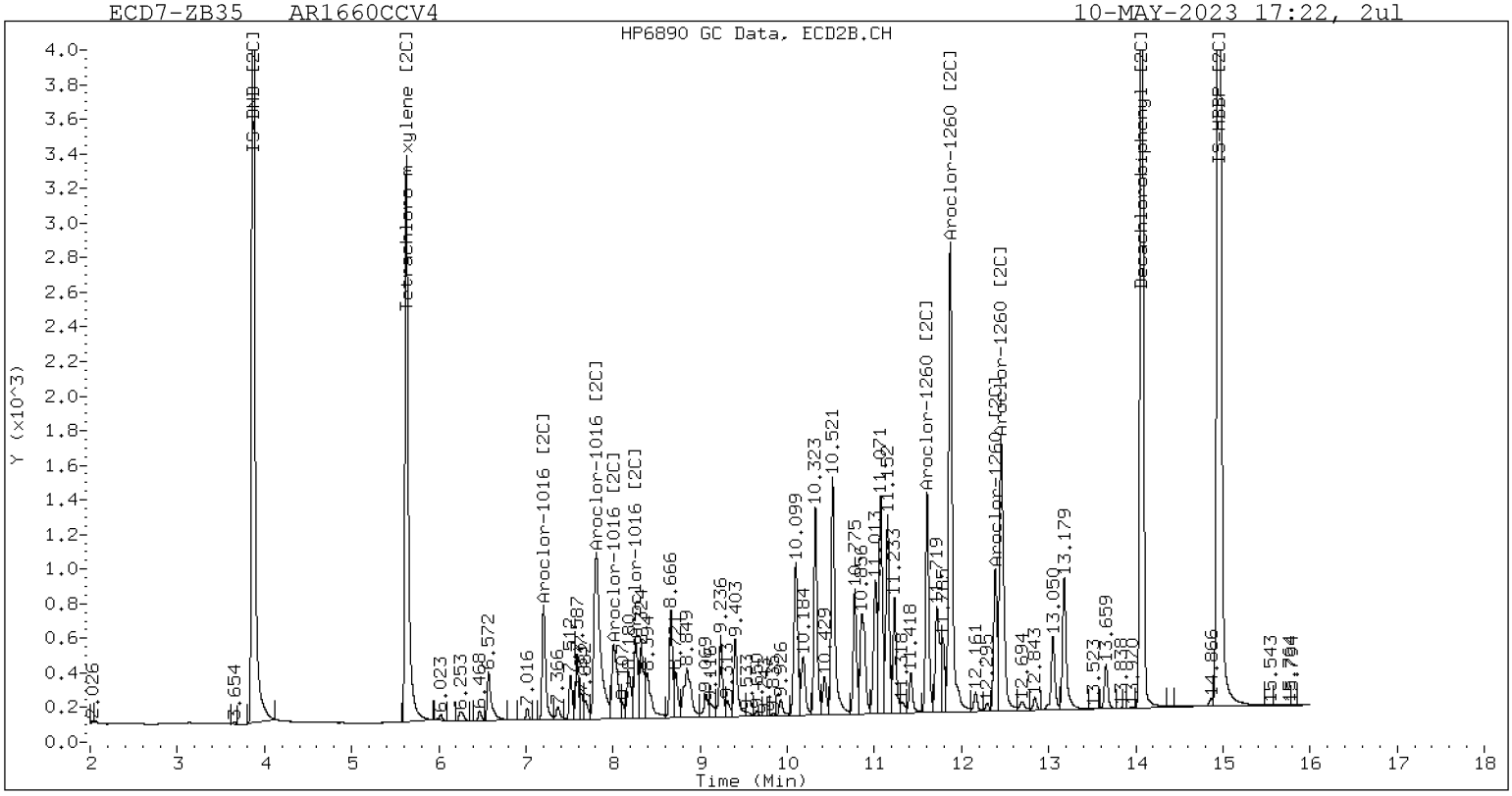
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV4 10-MAY-2023 17:22, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV4 10-MAY-2023 17:22, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102336ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/10/23
Lab Sample ID:	SLE0165-CCV5	Injection Time:	20:50
Sequence Name:	AR1254CCV5		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1254	A	250.00	235	0.0678007	0.0636052		-5.9	+/-20
Aroclor-1254 (1)	A	250.00	215		0.0707416			
Aroclor-1254 (2)	A	250.00	234		0.0346168			
Aroclor-1254 (3)	A	250.00	238		0.0504967			
Aroclor-1254 (4)	A	250.00	239		0.0993076			
Aroclor-1254 (5)	A	250.00	250		0.0628635			
Aroclor 1254 [2C]	A	250.00	248	0.0720677	0.0714104		-0.7	+/-20
Aroclor-1254 (1) [2C]	A	250.00	252		0.0613402			
Aroclor-1254 (2) [2C]	A	250.00	250		0.0361087			
Aroclor-1254 (3) [2C]	A	250.00	246		0.0484252			
Aroclor-1254 (4) [2C]	A	250.00	247		0.1063414			
Aroclor-1254 (5) [2C]	A	250.00	246		0.1048368			
Decachlorobiphenyl	A	40.000	38.0	0.7991406	0.7589304		-5.0	+/-20
Tetrachlorometaxylene	A	40.000	37.1	1.2048230	1.1165380		-7.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	42.7	1.1360140	1.2119950		6.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	39.3	1.1005470	1.0812900		-1.8	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102336ECD7.D
Data file 2: /230510.b/230510.b/05102336ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1254.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1254CCV5
Client ID:
Injection Date: 10-MAY-2023 20:50
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.741	-0.001	360850	5.628	-0.003	198579	37.1	39.3	5.8	Tetrachloro-m-xylene
13.841	0.001	311846	14.070	0.001	319645	38.0	42.7	11.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	646373	7.5
Hexabromobiphenyl	876625	821804	-6.3

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	367300	5.2
Hexabromobiphenyl	652984	527469	-19.2

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

	ZB5 Col				ZB35 Col				
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1254	1	9.244	-0.000	142892	215.1	1	9.402	0.000	70407	252.3
Aroclor-1254	2	9.324	0.003	69923	234.3	2	9.497	0.000	41446	250.0
Aroclor-1254	3	9.615	0.002	101999	237.8	3	9.922	0.000	55583	245.7
Aroclor-1254	4	9.754	0.002	200593	238.8	4	10.077	0.000	122060	247.3
Aroclor-1254	5	10.121	0.007	126979	250.3	5	10.326	0.000	120333	245.7

Total Col1Ave (5 peaks): 235.3 Total Col2Ave (5 peaks): 248.2 RPD = 5

Corrected Ave (4 peaks): 231.5 Corrected Ave (4 peaks): 247.2 RPD = 7

CalAmt %D: -5.9 CalAmt %D: -0.7

Total PCB Area Col1 (5.842 - 13.741) = 2045329 Col1 Total PCB = 0.3 ppm*

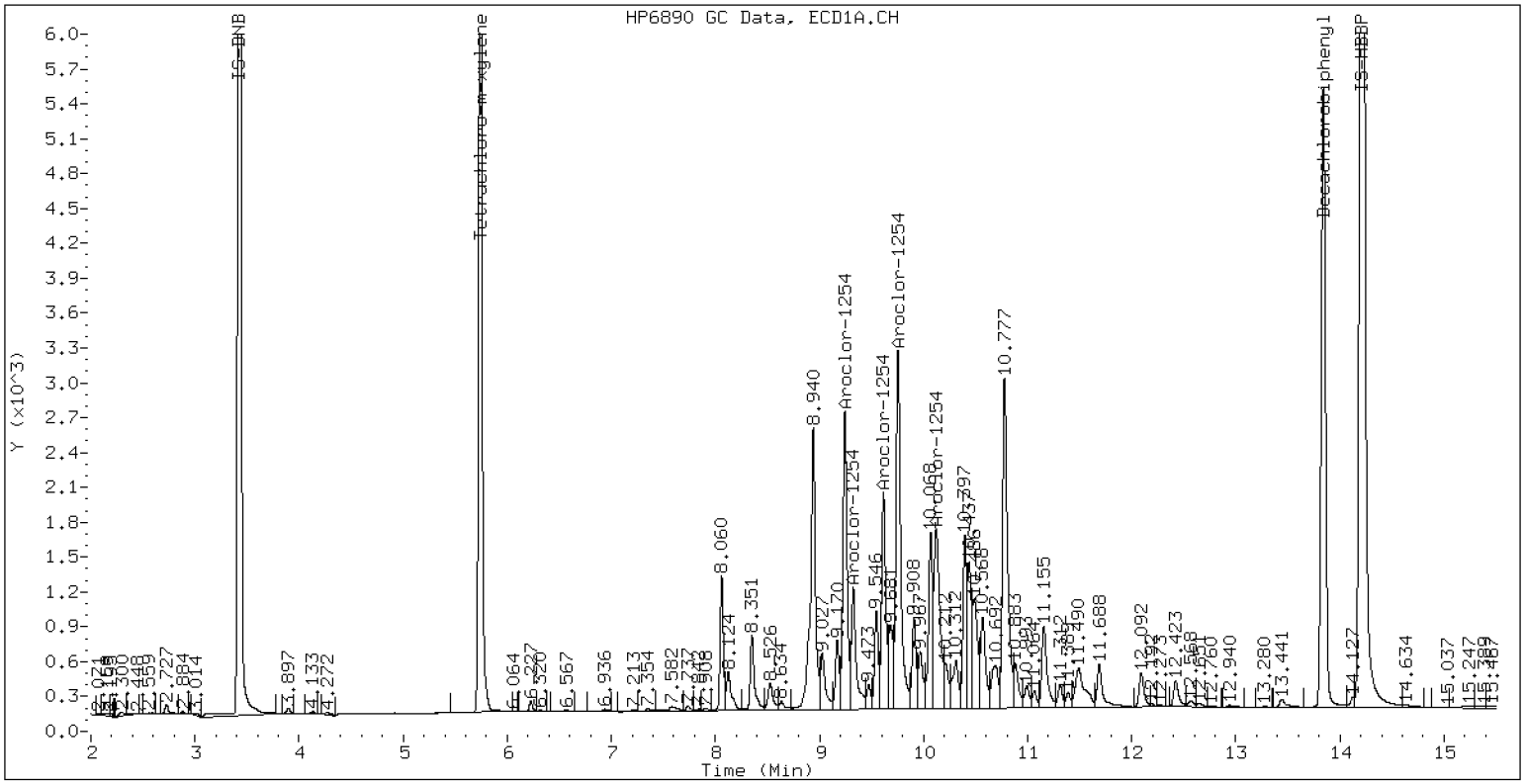
Total PCB Area Col2 (5.730 - 13.969) = 1168317 Col2 Total PCB = 0.3 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

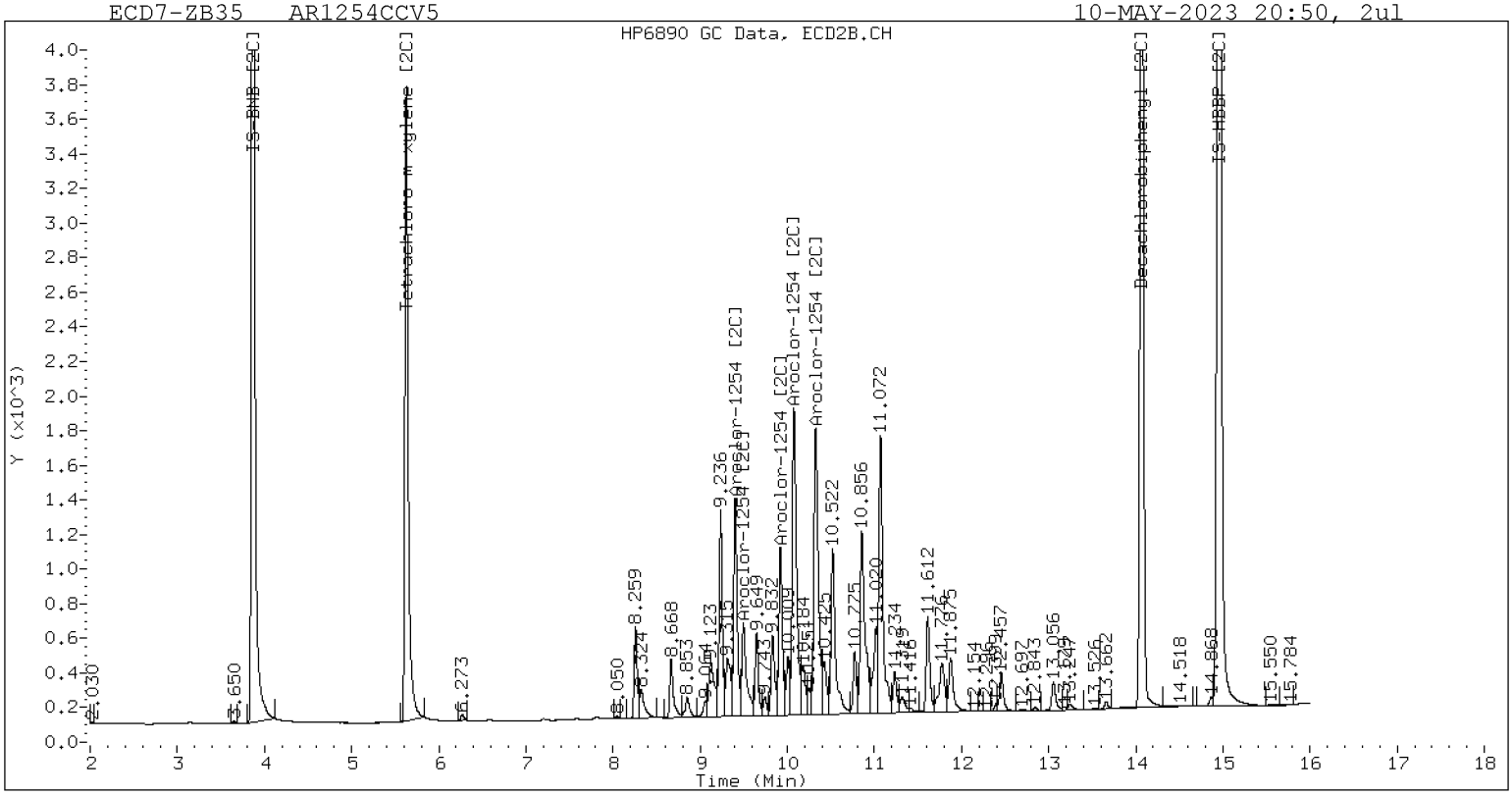
PCB Dual Column Chromatograms

ECD7-ZB5 AR1254CCV5 10-MAY-2023 20:50, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1254CCV5 10-MAY-2023 20:50, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102337ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/10/23
Lab Sample ID:	SLE0165-CCV6	Injection Time:	21:11
Sequence Name:	AR1660CCV6		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	251	0.0477728	0.0485512		0.3	+/-20
Aroclor-1016 (1)	A	250.00	242	0.0309764	0.0300026		-3.2	
Aroclor-1016 (2)	A	250.00	261	0.0968611	0.1010940		4.4	
Aroclor-1016 (3)	A	250.00	248	0.0447793	0.0445000		-0.8	
Aroclor-1016 (4)	A	250.00	252	0.0184745	0.0186080		0.8	
Aroclor 1016 [2C]	A	250.00	258	0.0545435	0.0586371		3.2	+/-20
Aroclor-1016 (1) [2C]	A	250.00	242	0.0452861	0.0439023		-3.2	
Aroclor-1016 (2) [2C]	A	250.00	297	0.0965080	0.1148068		18.8	
Aroclor-1016 (3) [2C]	A	250.00	260	0.0425661	0.0443377		4.0	
Aroclor-1016 (4) [2C]	A	250.00	233	0.0338137	0.0315016		-6.8	
Aroclor 1260	A	250.00	267	0.0524306	0.0563908		7.0	+/-20
Aroclor-1260 (1)	A	250.00	273	0.0423031	0.0461339		9.2	
Aroclor-1260 (2)	A	250.00	270	0.0417493	0.0450187		8.0	
Aroclor-1260 (3)	A	250.00	275	0.1045597	0.1150104		10.0	
Aroclor-1260 (4)	A	250.00	254	0.0512104	0.0521395		1.6	
Aroclor-1260 (5)	A	250.00	265	0.0223305	0.0236514		6.0	
Aroclor 1260 [2C]	A	250.00	262	0.0638471	0.0663838		4.9	+/-20
Aroclor-1260 (1) [2C]	A	250.00	271	0.0424868	0.0461151		8.4	
Aroclor-1260 (2) [2C]	A	250.00	256	0.1111292	0.1136372		2.4	
Aroclor-1260 (3) [2C]	A	250.00	264	0.0275392	0.0290519		5.6	
Aroclor-1260 (4) [2C]	A	250.00	258	0.0742331	0.0767311		3.2	
Decachlorobiphenyl	A	40.000	41.1	0.7991406	0.8208640		2.8	+/-20
Tetrachlorometaxylene	A	40.000	38.9	1.2048230	1.1726340		-2.8	+/-20
Decachlorobiphenyl [2C]	A	40.000	43.0	1.1360140	1.2218700		7.5	+/-20
Tetrachlorometaxylene [2C]	A	40.000	46.2	1.1005470	1.2715930		15.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102337ECD7.D
Data file 2: /230510.b/230510.b/05102337ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV6
Client ID:
Injection Date: 10-MAY-2023 21:11
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.742	0.001	331373	5.629	-0.001	179425	38.9	46.2	17.1	Tetrachloro-m-xylene
13.840	-0.001	318109	14.069	0.000	287591	41.1	43.0	4.6	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	565177	-6.0
Hexabromobiphenyl	876625	775059	-11.6

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	282205	-19.2
Hexabromobiphenyl	652984	470739	-27.9

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	52990	242.1	1	7.203	-0.001	38717	242.4
Aroclor-1016	2	7.593	-0.000	178550	260.9	2	7.811	0.000	101247	297.4
Aroclor-1016	3	7.734	0.001	78595	248.4	3	8.008	-0.001	39101	260.4
Aroclor-1016	4	8.398	0.000	32865	251.8	4	8.260	-0.000	27781	232.9
Total Col1Ave (4 peaks):					250.8	Total Col2Ave (4 peaks):				258.3 RPD = 3
Corrected Ave (3 peaks):					247.5	Corrected Ave (3 peaks):				245.2 RPD = 1
CalAmt %D:					0.3	CalAmt %D:				3.3
Aroclor-1260	1	10.994	0.001	111739	272.6	1	11.605	-0.001	67838	271.3
Aroclor-1260	2	11.311	0.001	109038	269.6	2	11.872	0.001	167167	255.6
Aroclor-1260	3	11.686	0.001	278562	275.0	3	12.388	0.000	42737	263.7
Aroclor-1260	4	12.090	0.001	126285	254.5	4	12.455	-0.000	112876	258.4
Aroclor-1260	5	12.194	0.001	57285	264.8	NS	---			----
Total Col1Ave (5 peaks):					267.3	Total Col2Ave (4 peaks):				262.3 RPD = 2
Corrected Ave (4 peaks):					265.4	Corrected Ave (3 peaks):				259.3 RPD = 2
CalAmt %D:					6.9	CalAmt %D:				4.9

Total PCB Area Col1 (5.842 - 13.741) = 3135055 Col1 Total PCB = 0.5 ppm*

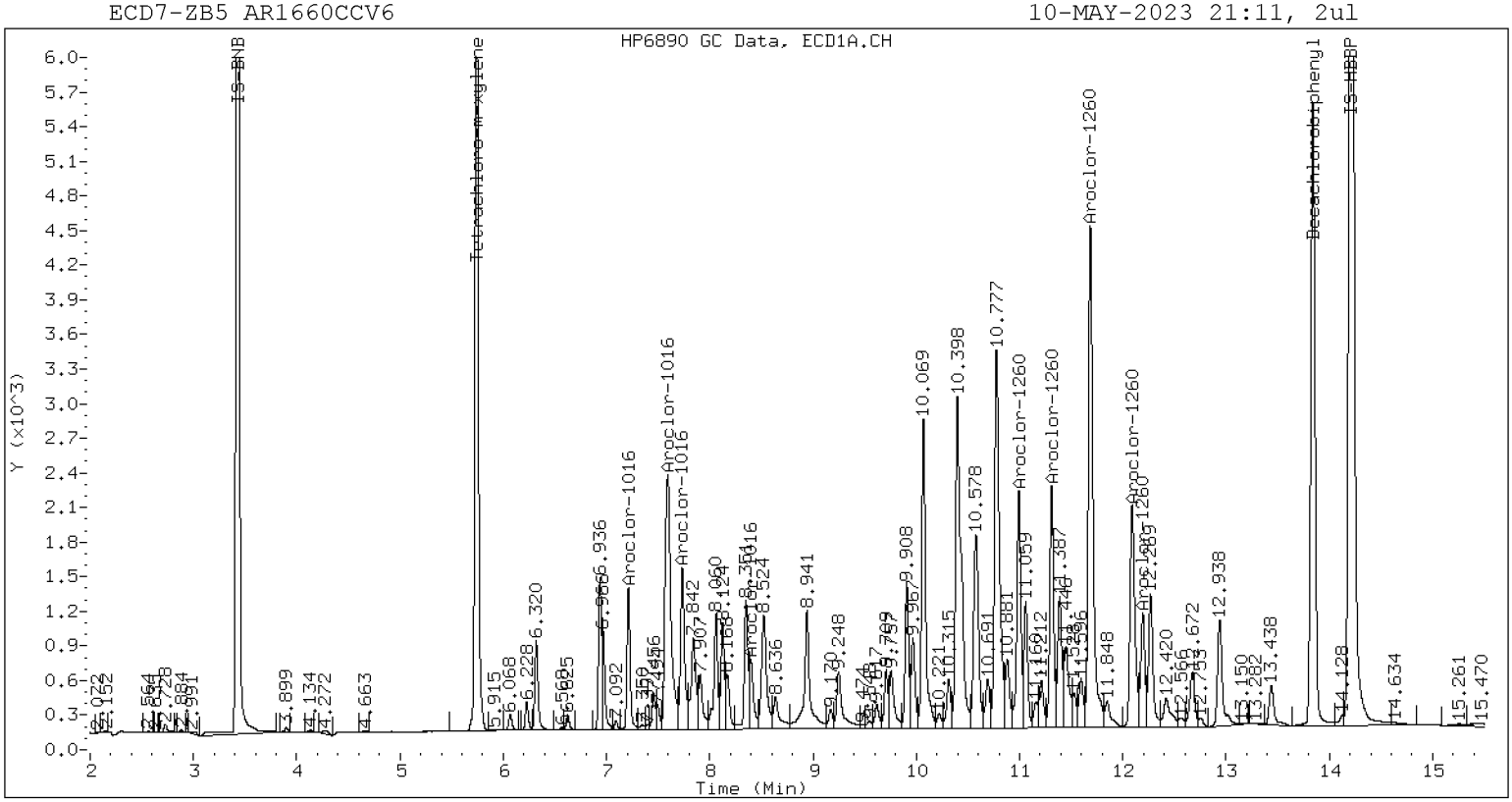
Total PCB Area Col2 (5.730 - 13.969) = 1651387 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

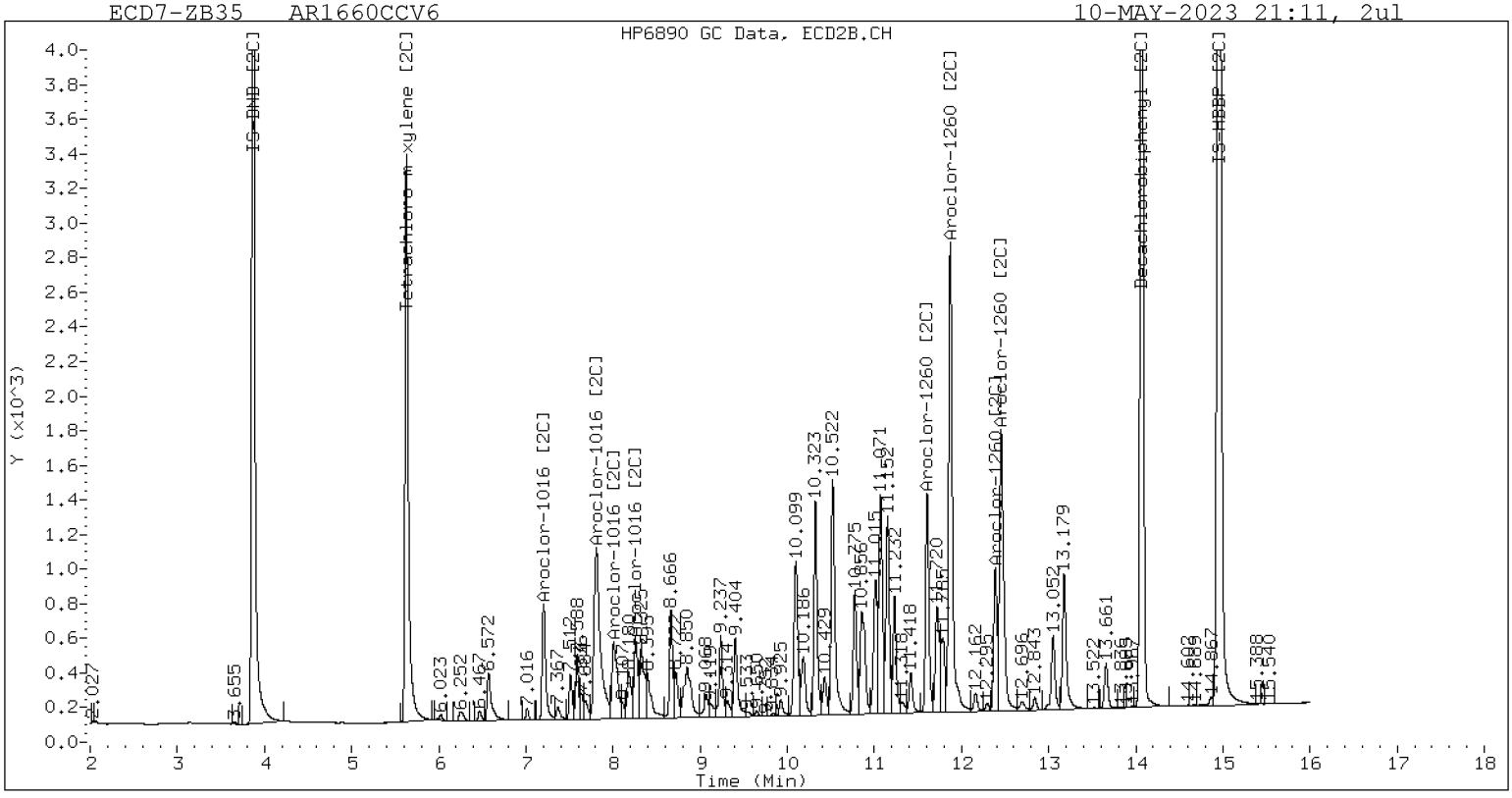
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV6 10-MAY-2023 21:11, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV6 10-MAY-2023 21:11, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102353ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/11/23
Lab Sample ID:	SLE0165-CCV7	Injection Time:	02:44
Sequence Name:	AR1248CCV7		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1248	A	250.00	243	0.0568879	0.0554996		-2.9	+/-20
Aroclor-1248 (1)	A	250.00	250		0.0204518			
Aroclor-1248 (2)	A	250.00	253		0.0537266			
Aroclor-1248 (3)	A	250.00	253		0.1031349			
Aroclor-1248 (4)	A	250.00	215		0.0446848			
Aroclor 1248 [2C]	A	250.00	255	0.0454726	0.0463830		1.9	+/-20
Aroclor-1248 (1) [2C]	A	250.00	250		0.0379869			
Aroclor-1248 (2) [2C]	A	250.00	257		0.0413609			
Aroclor-1248 (3) [2C]	A	250.00	255		0.0481007			
Aroclor-1248 (4) [2C]	A	250.00	257		0.0580837			
Decachlorobiphenyl	A	40.000	39.1	0.7991406	0.7805295		-2.3	+/-20
Tetrachlorometaxylene	A	40.000	38.7	1.2048230	1.1647230		-3.3	+/-20
Decachlorobiphenyl [2C]	A	40.000	43.1	1.1360140	1.2236380		7.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	40.2	1.1005470	1.1053460		0.5	+/-20

* Values outside of QC limits

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102353ECD7.D
Data file 2: /230510.b/230510.b/05102353ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1248.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1248CCV7
Client ID:
Injection Date: 11-MAY-2023 02:44
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.002	357716	5.631	0.000	196042	38.7	40.2	3.8	Tetrachloro-m-xylene
13.842	0.001	313358	14.070	0.000	321320	39.1	43.1	9.8	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	614251	2.1
Hexabromobiphenyl	876625	802937	-8.4

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	354716	1.6
Hexabromobiphenyl	652984	525188	-19.6

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1248	1	8.400	0.002	39258	250.4	1	8.260	0.000	42108	249.5
Aroclor-1248	2	8.525	0.002	103130	253.1	2	8.668	0.000	45848	257.2
Aroclor-1248	3	8.945	0.003	197971	252.7	3	9.119	0.000	53319	255.2
Aroclor-1248	4	9.240	0.001	85774	214.7	4	9.546	0.000	64385	257.0
Total Col1Ave (4 peaks):					242.7	Total Col2Ave (4 peaks):				254.7 RPD = 5
Corrected Ave (3 peaks):					239.3	Corrected Ave (3 peaks):				253.9 RPD = 6
CalAmt %D:					-2.9	CalAmt %D:				1.9

Total PCB Area Col1 (5.842 - 13.741) = 1589356 Col1 Total PCB = 0.2 ppm*

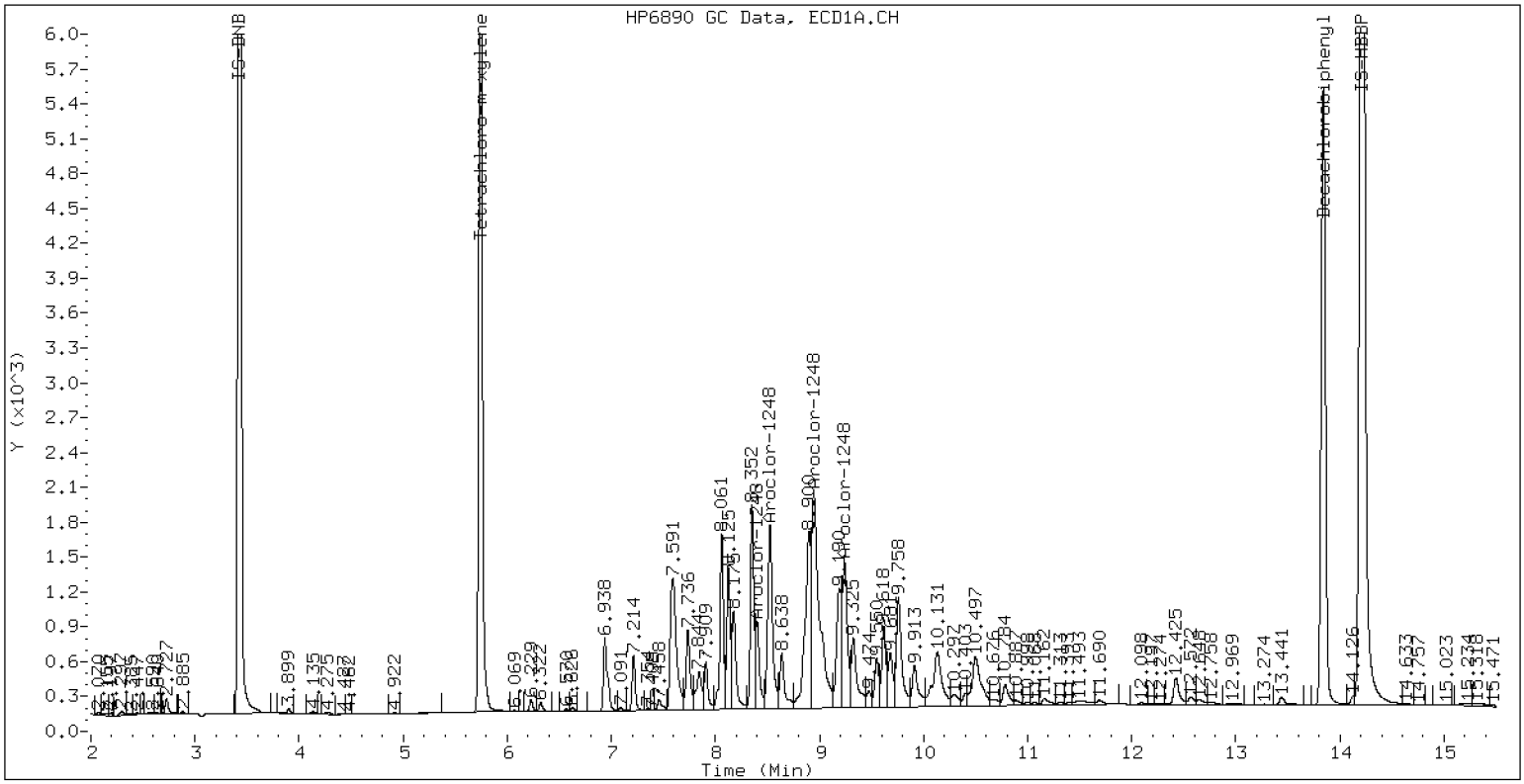
Total PCB Area Col2 (5.730 - 13.969) = 869443 Col2 Total PCB = 0.2 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

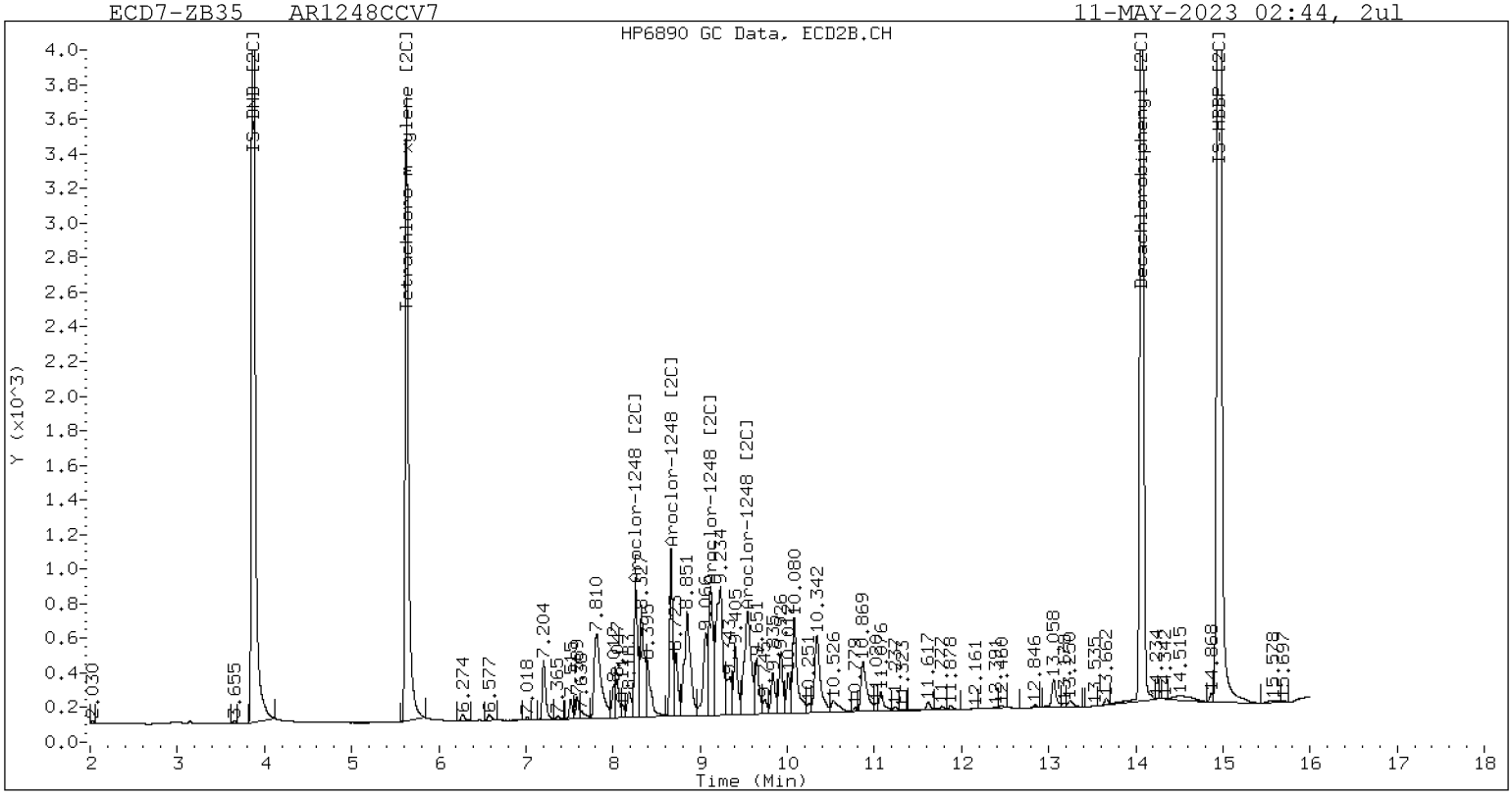
PCB Dual Column Chromatograms

ECD7-ZB5 AR1248CCV7 11-MAY-2023 02:44, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1248CCV7 11-MAY-2023 02:44, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

CONTINUING CALIBRATION CHECK
EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Instrument ID:	ECD7	Calibration:	GE00022
Lab File ID:	05102354ECD7.D	Calibration Date:	05/05/2023
Sequence:	SLE0165	Injection Date:	05/11/23
Lab Sample ID:	SLE0165-CCV8	Injection Time:	03:05
Sequence Name:	AR1660CCV8		

		CONC. (ug/L)		RESPONSE FACTOR (RRF)			% DRIFT/DIFF	
COMPOUND	TYPE	STD	CCV	ICAL	CCV	MIN	CCV	LIMIT
Aroclor 1016	A	250.00	260	0.0477728	0.0504096		4.1	+/-20
Aroclor-1016 (1)	A	250.00	250	0.0309764	0.0309629		0.0	
Aroclor-1016 (2)	A	250.00	271	0.0968611	0.1049003		8.4	
Aroclor-1016 (3)	A	250.00	259	0.0447793	0.0464755		3.6	
Aroclor-1016 (4)	A	250.00	261	0.0184745	0.0192995		4.4	
Aroclor 1016 [2C]	A	250.00	260	0.0545435	0.0591036		4.0	+/-20
Aroclor-1016 (1) [2C]	A	250.00	243	0.0452861	0.0440733		-2.8	
Aroclor-1016 (2) [2C]	A	250.00	301	0.0965080	0.1161212		20.4	
Aroclor-1016 (3) [2C]	A	250.00	260	0.0425661	0.0443127		4.0	
Aroclor-1016 (4) [2C]	A	250.00	236	0.0338137	0.0319072		-5.6	
Aroclor 1260	A	250.00	270	0.0524306	0.0570280		8.2	+/-20
Aroclor-1260 (1)	A	250.00	276	0.0423031	0.0466818		10.4	
Aroclor-1260 (2)	A	250.00	273	0.0417493	0.0456222		9.2	
Aroclor-1260 (3)	A	250.00	278	0.1045597	0.1161311		11.2	
Aroclor-1260 (4)	A	250.00	258	0.0512104	0.0528235		3.2	
Aroclor-1260 (5)	A	250.00	267	0.0223305	0.0238812		6.8	
Aroclor 1260 [2C]	A	250.00	258	0.0638471	0.0653122		3.3	+/-20
Aroclor-1260 (1) [2C]	A	250.00	266	0.0424868	0.0452688		6.4	
Aroclor-1260 (2) [2C]	A	250.00	251	0.1111292	0.1117514		0.4	
Aroclor-1260 (3) [2C]	A	250.00	262	0.0275392	0.0288715		4.8	
Aroclor-1260 (4) [2C]	A	250.00	254	0.0742331	0.0753569		1.6	
Decachlorobiphenyl	A	40.000	41.3	0.7991406	0.8260517		3.3	+/-20
Tetrachlorometaxylene	A	40.000	40.2	1.2048230	1.2095010		0.5	+/-20
Decachlorobiphenyl [2C]	A	40.000	41.9	1.1360140	1.1892450		4.8	+/-20
Tetrachlorometaxylene [2C]	A	40.000	47.4	1.1005470	1.3042010		18.5	+/-20

* Values outside of QC limits

Analytical Resources Inc.
Dual Column 608/8082 PCB Quantitation Report

Data file 1: /230510.b/05102354ECD7.D
Data file 2: /230510.b/230510.b/05102354ECD7.D
Method: \\target\share\chem4\ecd7.i\230510.b\PCB.m
Compound Sublist: AR1660.sub
Instrument, Inj. Vol.: ecd7.i, 2ul
Quant Method: Internal Std

ARI ID: AR1660CCV8
Client ID:
Injection Date: 11-MAY-2023 03:05
Report Date: 05/11/2023 17:17
Matrix: NONE
Dilution Factor: 1.0

SURROGATES

ZB5 Col			ZB35 Col			ZB5	ZB35		
RT	Shift	Response	RT	Shift	Response	on col	on col	RPD	Compound/Flag
5.743	0.002	335691	5.630	0.000	181314	40.2	47.4	16.6	Tetrachloro-m-xylene
13.840	-0.000	322047	14.069	0.000	286847	41.3	41.9	1.3	Decachlorobiphenyl

* Indicates RPD > 40%

INTERNAL STANDARD SUMMARY

Column 1

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	601474	555090	-7.7
Hexabromobiphenyl	876625	779726	-11.1

Column 2

Standard Cpnd	Standard Area*	Sample Area	%D
Bromo-Nitrobenzene	349289	278046	-20.4
Hexabromobiphenyl	652984	482402	-26.1

* Standard Areas taken from Initial Cal Level 3
Initial Calibration Date: 05-MAY-2023
<- Indicates standard response outside Limits (-50 to +100%)

		ZB5 Col				ZB35 Col			
Aroclor	Peak#	RT	Shift	Area	Amount	Peak#	RT	Shift	Area	Amount
Aroclor-1016	1	7.213	0.000	53710	249.9	1	7.204	0.000	38295	243.3
Aroclor-1016	2	7.595	0.002	181966	270.7	2	7.811	0.000	100897	300.8
Aroclor-1016	3	7.734	0.001	80619	259.5	3	8.008	0.000	38503	260.3
Aroclor-1016	4	8.399	0.001	33478	261.2	4	8.260	0.000	27724	235.9
Total Col1Ave (4 peaks):					260.3	Total Col2Ave (4 peaks):				260.1 RPD = 0
Corrected Ave (3 peaks):					256.8	Corrected Ave (3 peaks):				246.5 RPD = 4
CalAmt %D:					4.1	CalAmt %D:				4.0
Aroclor-1260	1	10.994	0.001	113747	275.9	1	11.606	0.000	68243	266.4
Aroclor-1260	2	11.311	0.001	111165	273.2	2	11.871	0.000	168466	251.4
Aroclor-1260	3	11.685	0.000	282970	277.7	3	12.388	0.000	43524	262.1
Aroclor-1260	4	12.091	0.002	128712	257.9	4	12.455	0.000	113601	253.8
Aroclor-1260	5	12.193	0.000	58190	267.4	NS	---			----
Total Col1Ave (5 peaks):					270.4	Total Col2Ave (4 peaks):				258.4 RPD = 5
Corrected Ave (4 peaks):					268.6	Corrected Ave (3 peaks):				255.8 RPD = 5
CalAmt %D:					8.2	CalAmt %D:				3.4

Total PCB Area Col1 (5.842 - 13.741) = 3208791 Col1 Total PCB = 0.5 ppm*

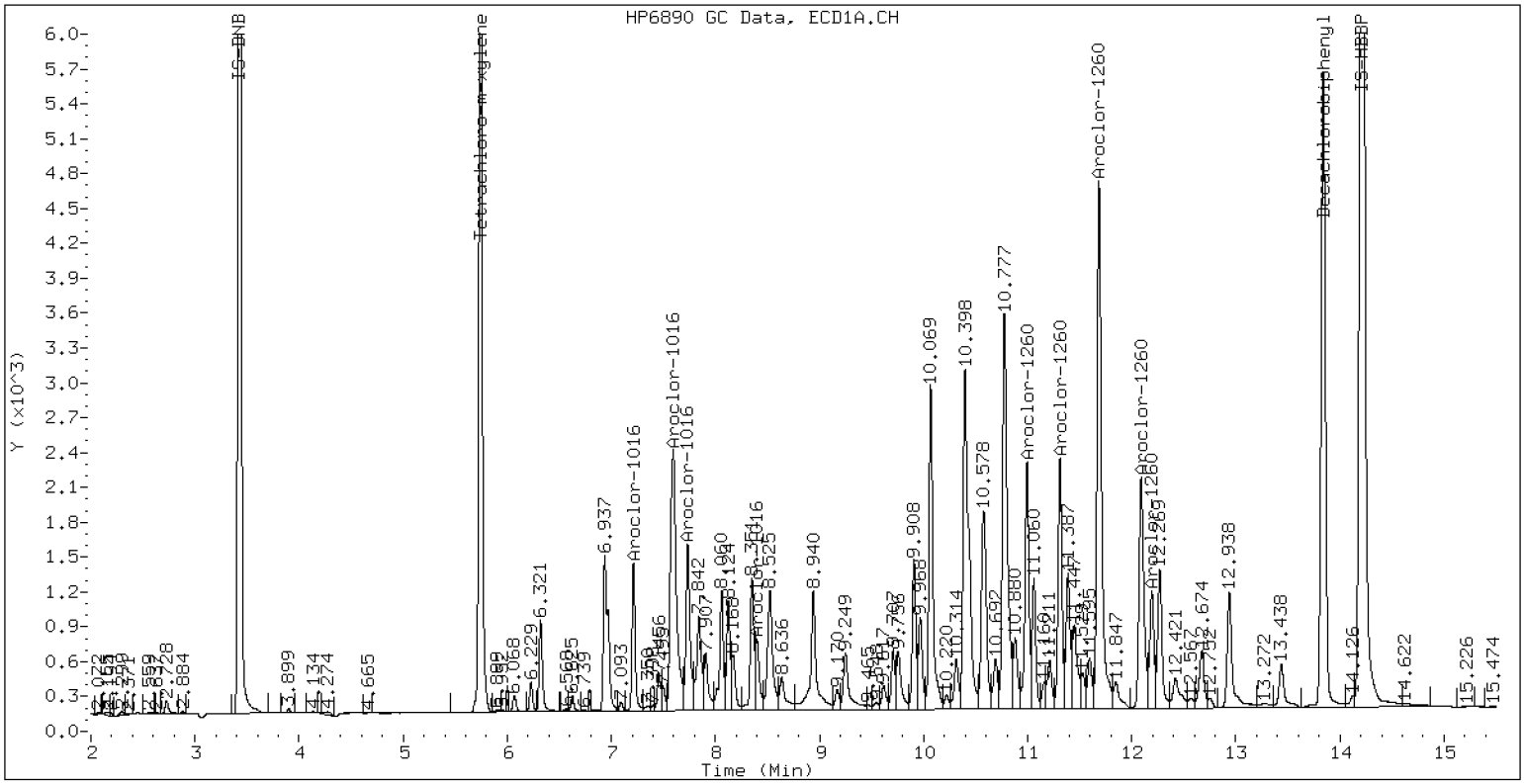
Total PCB Area Col2 (5.730 - 13.969) = 1653405 Col2 Total PCB = 0.5 ppm*

* Quantitated against AR1660 0.25ppm in Ical

PCB-Form 10 Mod.

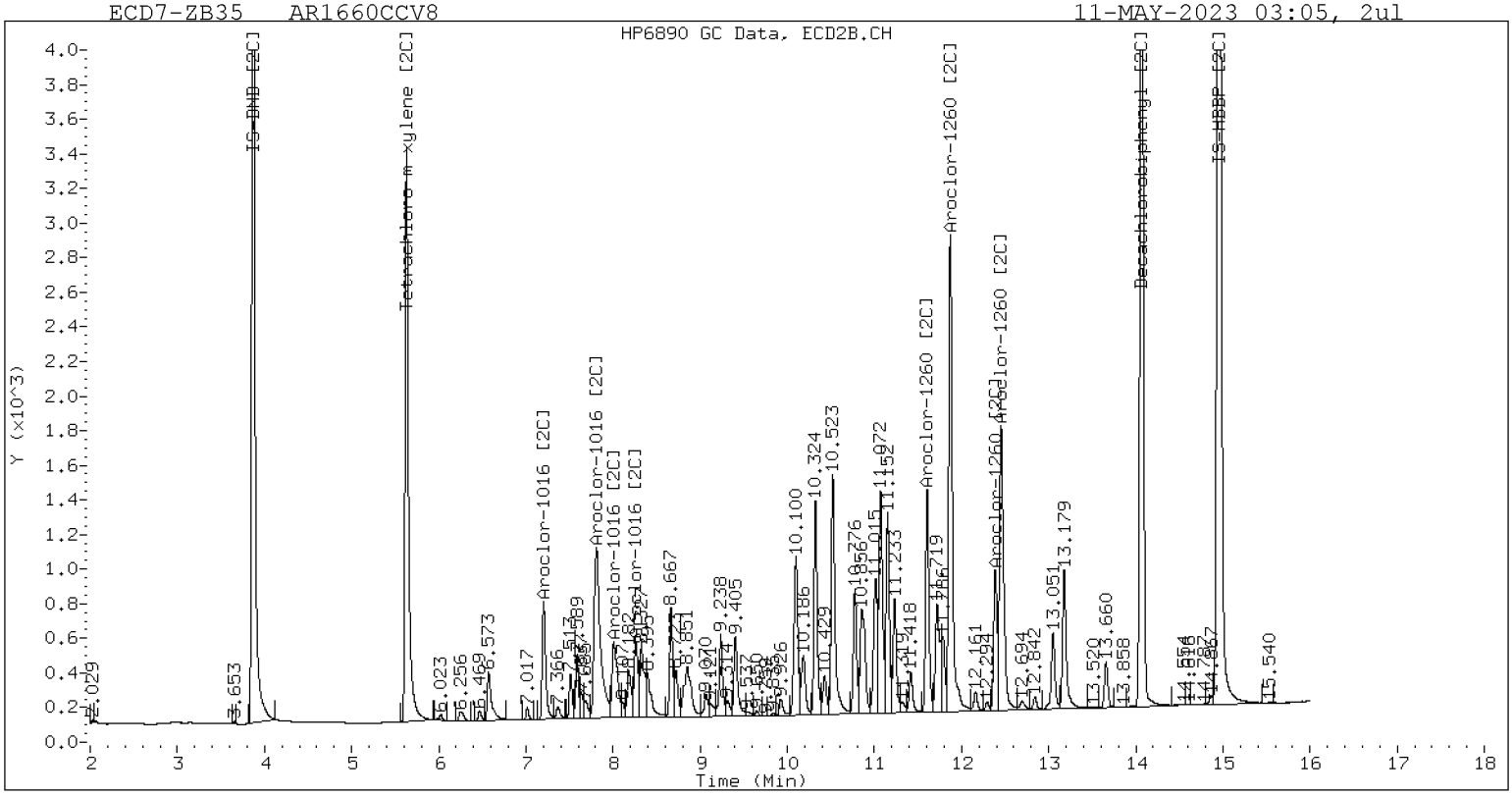
PCB Dual Column Chromatograms

ECD7-ZB5 AR1660CCV8 11-MAY-2023 03:05, 2ul



ZB-5 Manual Integration: NO

ECD7-ZB35 AR1660CCV8 11-MAY-2023 03:05, 2ul



ZB-35 Manual Integration: NO

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0079
Instrument: ECD7
Calibration: GE00022

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Cal Standard	SLE0079-CAL1	05052321ECD7.D	05052321ECD7.D	NA	05/05/23 23:26
Cal Standard	SLE0079-CAL2	05052322ECD7.D	05052322ECD7.D	NA	05/05/23 23:47
Cal Standard	SLE0079-CAL3	05052323ECD7.D	05052323ECD7.D	NA	05/06/23 00:08
Cal Standard	SLE0079-CAL4	05052324ECD7.D	05052324ECD7.D	NA	05/06/23 00:29
Cal Standard	SLE0079-CAL5	05052325ECD7.D	05052325ECD7.D	NA	05/06/23 00:50
Cal Standard	SLE0079-CAL6	05052326ECD7.D	05052326ECD7.D	NA	05/06/23 01:11
Cal Standard	SLE0079-CAL7	05052327ECD7.D	05052327ECD7.D	NA	05/06/23 01:31
Cal Standard	SLE0079-CAL8	05052328ECD7.D	05052328ECD7.D	NA	05/06/23 01:52
Cal Standard	SLE0079-CAL9	05052329ECD7.D	05052329ECD7.D	NA	05/06/23 02:13
Cal Standard	SLE0079-CALA	05052330ECD7.D	05052330ECD7.D	NA	05/06/23 02:34
Cal Standard	SLE0079-CALB	05052331ECD7.D	05052331ECD7.D	NA	05/06/23 02:55
Secondary Cal Check	SLE0079-SCV1	05052332ECD7.D	05052332ECD7.D	NA	05/06/23 03:16
Secondary Cal Check	SLE0079-SCV2	05052333ECD7.D	05052333ECD7.D	NA	05/06/23 03:36
Secondary Cal Check	SLE0079-SCV3	05052334ECD7.D	05052334ECD7.D	NA	05/06/23 03:57
Secondary Cal Check	SLE0079-SCV4	05052335ECD7.D	05052335ECD7.D	NA	05/06/23 04:18
Secondary Cal Check	SLE0079-SCV5	05052336ECD7.D	05052336ECD7.D	NA	05/06/23 04:39
Secondary Cal Check	SLE0079-SCV6	05052337ECD7.D	05052337ECD7.D	NA	05/06/23 05:00

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLE0079

Instrument: ECD7
Calibration ID: GE00022

Printed: 5/6/2023 11:44:56AM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLE0079-CAL1	QC		1		L000856	L000844		
SLE0079-CAL2	QC		2		L000859	L000844		
SLE0079-CAL3	QC		3		L000858	L000844		
SLE0079-CAL4	QC		4		L000731	L000844		
SLE0079-CAL5	QC		5		L000857	L000844		
SLE0079-CAL6	QC		6		L000855	L000844		
SLE0079-CAL7	QC		7		L000860	L000844		
SLE0079-CAL8	QC		8		L000861	L000844		
SLE0079-CAL9	QC		9		L000862	L000844		
SLE0079-CALA	QC		10		L004996	L000844		
SLE0079-CALB	QC		11		L004997	L000844		
SLE0079-SCV1	QC		12		L002065	L000844		
SLE0079-SCV2	QC		13		L003970	L000844		
SLE0079-SCV3	QC		14		L002066	L000844		
SLE0079-SCV4	QC		15		L002067	L000844		
SLE0079-SCV5	QC		16		L002068	L000844		
SLE0079-SCV6	QC		17		L002069	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	05-MAY-2023 23:06	05052320ECD7.D	1	IB	
2	05-MAY-2023 23:26	05052321ECD7.D	1	0.25PPMAR1660	
3	05-MAY-2023 23:47	05052322ECD7.D	1	0.02PPMAR1660	
4	06-MAY-2023 00:08	05052323ECD7.D	1	0.05PPMAR1660	
5	06-MAY-2023 00:29	05052324ECD7.D	1	1.0PPMAR1660	
6	06-MAY-2023 00:50	05052325ECD7.D	1	0.1PPMAR1660	
7	06-MAY-2023 01:11	05052326ECD7.D	1	0.5PPMAR1660	
8	06-MAY-2023 01:31	05052327ECD7.D	1	0.25PPMAR1242	
9	06-MAY-2023 01:52	05052328ECD7.D	1	0.25PPMAR1248	
10	06-MAY-2023 02:13	05052329ECD7.D	1	0.25PPMAR1254	
11	06-MAY-2023 02:34	05052330ECD7.D	1	0.25PPMAR2162	
12	06-MAY-2023 02:55	05052331ECD7.D	1	0.25PPMAR3268	
13	06-MAY-2023 03:16	05052332ECD7.D	1	AR1660SCV	
14	06-MAY-2023 03:36	05052333ECD7.D	1	AR1242SCV	
15	06-MAY-2023 03:57	05052334ECD7.D	1	AR1248SCV	
16	06-MAY-2023 04:18	05052335ECD7.D	1	AR1254SCV	
17	06-MAY-2023 04:39	05052336ECD7.D	1	AR2162SCV	
18	06-MAY-2023 05:00	05052337ECD7.D	1	AR3268SCV	
19	06-MAY-2023 05:21	05052338ECD7.D	1	DDTS	
20	06-MAY-2023 05:41	05052339ECD7.D	1	DDT BD	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

ARI Job No.: Method: PCB.m Instrument: ecd7.i Date: 05-MAY-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1548	05052301ECD7.D			1	NO MANUAL INTEGRATION
1609	05052302ECD7.D			1	NO MANUAL INTEGRATION
1711	05052303ECD7.D			1	NO MANUAL INTEGRATION
1732	05052304ECD7.D			1	NO MANUAL INTEGRATION
1753	05052305ECD7.D			1	NO MANUAL INTEGRATION
1814	05052306ECD7.D			1	NO MANUAL INTEGRATION
1835	05052307ECD7.D			1	NO MANUAL INTEGRATION
1856	05052308ECD7.D			1	NO MANUAL INTEGRATION
1916	05052309ECD7.D			1	NO MANUAL INTEGRATION
1937	05052310ECD7.D			1	NO MANUAL INTEGRATION
1958	05052311ECD7.D			1	NO MANUAL INTEGRATION
2019	05052312ECD7.D			1	NO MANUAL INTEGRATION
2040	05052313ECD7.D			1	NO MANUAL INTEGRATION
2101	05052314ECD7.D			1	NO MANUAL INTEGRATION
2121	05052315ECD7.D			1	NO MANUAL INTEGRATION
2142	05052316ECD7.D			1	NO MANUAL INTEGRATION
2203	05052317ECD7.D			1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2224	05052318ECD7.D			1	NO MANUAL INTEGRATION
2245	05052319ECD7.D			1	NO MANUAL INTEGRATION
2306	05052320ECD7.D	IB		1	NO MANUAL INTEGRATION
2326	05052321ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
2347	05052322ECD7.D	0.02PPMAR1660		1	NO MANUAL INTEGRATION
0008	05052323ECD7.D	0.05PPMAR1660		1	NO MANUAL INTEGRATION
0029	05052324ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
0050	05052325ECD7.D	0.1PPMAR1660		1	NO MANUAL INTEGRATION
0111	05052326ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
0131	05052327ECD7.D	0.25PPMAR1242		1	NO MANUAL INTEGRATION
0152	05052328ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
0213	05052329ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
0234	05052330ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
0255	05052331ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
0316	05052332ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION
0336	05052333ECD7.D	AR1242SCV		1	NO MANUAL INTEGRATION
0357	05052334ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
0418	05052335ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0439	05052336ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
0500	05052337ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
0521	05052338ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0541	05052339ECD7.D	DDT BD		1	NO MANUAL INTEGRATION
1548	05052301ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1609	05052302ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1711	05052303ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1732	05052304ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1753	05052305ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1814	05052306ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1835	05052307ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1856	05052308ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
1916	05052309ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1937	05052310ECD7.D	RINSE		1	NO MANUAL INTEGRATION
1958	05052311ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2019	05052312ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2040	05052313ECD7.D	RINSE		1	NO MANUAL INTEGRATION
2101	05052314ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2121	05052315ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2142	05052316ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2203	05052317ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2224	05052318ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2245	05052319ECD7.D	HEX RINSE		1	NO MANUAL INTEGRATION
2306	05052320ECD7.D	IB		1	NO MANUAL INTEGRATION
2326	05052321ECD7.D	0.25PPMAR1660		1	NO MANUAL INTEGRATION
2347	05052322ECD7.D	0.02PPMAR1660		1	Aroclor-1016 [2C],
0008	05052323ECD7.D	0.05PPMAR1660		1	Aroclor-1016 [2C],
0029	05052324ECD7.D	1.0PPMAR1660		1	NO MANUAL INTEGRATION
0050	05052325ECD7.D	0.1PPMAR1660		1	Aroclor-1016 [2C],
0111	05052326ECD7.D	0.5PPMAR1660		1	NO MANUAL INTEGRATION
0132	05052327ECD7.D	0.25PPMAR1242		1	Aroclor-1242 [2C],
0152	05052328ECD7.D	0.25PPMAR1248		1	NO MANUAL INTEGRATION
0213	05052329ECD7.D	0.25PPMAR1254		1	NO MANUAL INTEGRATION
0234	05052330ECD7.D	0.25PPMAR2162		1	NO MANUAL INTEGRATION
0255	05052331ECD7.D	0.25PPMAR3268		1	NO MANUAL INTEGRATION
0316	05052332ECD7.D	AR1660SCV		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230505.b\230505.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0336	05052333ECD7.D	AR1242SCV		1	Aroclor-1242 [2C],
0357	05052334ECD7.D	AR1248SCV		1	NO MANUAL INTEGRATION
0418	05052335ECD7.D	AR1254SCV		1	NO MANUAL INTEGRATION
0439	05052336ECD7.D	AR2162SCV		1	NO MANUAL INTEGRATION
0500	05052337ECD7.D	AR3268SCV		1	NO MANUAL INTEGRATION
0521	05052338ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0541	05052339ECD7.D	DDT BD		1	NO MANUAL INTEGRATION

Security Status Report

Date: 06-May-2023 09:12

05052320ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052321ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052322ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052323ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052324ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052325ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052326ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052327ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052328ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052329ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052330ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052331ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052332ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052333ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052334ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052335ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052336ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052337ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052338ECD7.D	Data Locked	richardl, 06-May-2023 09:12
05052339ECD7.D	Data Locked	richardl, 06-May-2023 09:12

Analytical Resources, LLC
Analytical Chemists and Consultants

Dual Column

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0165
Instrument: ECD7
Calibration: GE00022

Sample Name	Lab Sample ID	Column 1 File ID	Column 2 File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLE0165-ICV1	05102302ECD7.D	05102302ECD7.D	NA	05/10/23 09:01
Initial Cal Check	SLE0165-ICV2	05102303ECD7.D	05102303ECD7.D	NA	05/10/23 09:22
Calibration Check	SLE0165-CCV1	05102307ECD7.D	05102307ECD7.D	NA	05/10/23 10:46
Calibration Check	SLE0165-CCV2	05102308ECD7.D	05102308ECD7.D	NA	05/10/23 11:06
Blank	BLD0608-BLK1	05102309ECD7.D	05102309ECD7.D	Solid	05/10/23 11:27
LCS	BLD0608-BS1	05102310ECD7.D	05102310ECD7.D	Solid	05/10/23 11:48
LCS Dup	BLD0608-BSD1	05102311ECD7.D	05102311ECD7.D	Solid	05/10/23 12:09
Reference	BLD0608-SRM1	05102312ECD7.D	05102312ECD7.D	Solid	05/10/23 12:30
Calibration Check	SLE0165-CCV3	05102325ECD7.D	05102325ECD7.D	NA	05/10/23 17:01
Calibration Check	SLE0165-CCV4	05102326ECD7.D	05102326ECD7.D	NA	05/10/23 17:22
LDW23-SS1801	23D0396-01	05102332ECD7.D	05102332ECD7.D	Solid	05/10/23 19:27
LDW23-SC1801	23D0396-02	05102333ECD7.D	05102333ECD7.D	Solid	05/10/23 19:47
LDW23-SS1802	23D0396-03	05102334ECD7.D	05102334ECD7.D	Solid	05/10/23 20:08
LDW23-SC1802	23D0396-04	05102335ECD7.D	05102335ECD7.D	Solid	05/10/23 20:29
Calibration Check	SLE0165-CCV5	05102336ECD7.D	05102336ECD7.D	NA	05/10/23 20:50
Calibration Check	SLE0165-CCV6	05102337ECD7.D	05102337ECD7.D	NA	05/10/23 21:11
Calibration Check	SLE0165-CCV7	05102353ECD7.D	05102353ECD7.D	NA	05/11/23 02:44
Calibration Check	SLE0165-CCV8	05102354ECD7.D	05102354ECD7.D	NA	05/11/23 03:05

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLE0165

Instrument: ECD7
Calibration ID: GE00022

Printed: 5/11/2023 5:26:08PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLE0165-ICV1	QC		1		L000862	L000844		
SLE0165-ICV2	QC		2		L000856	L000844		
BLE0164-BLK1	QC		3			L000844		
BLE0164-BS1	QC		4			L000844		
23E0020-01	8.3 PCBs 0.01 ug/L or 20 ug/	A 01	5			L000844	Nucor Steel Corporation	
SLE0165-CCV1	QC		6		L000861	L000844		
SLE0165-CCV2	QC		7		L000856	L000844		
BLD0608-BLK1	QC		8			L000844		
BLD0608-BS1	QC		9			L000844		
BLD0608-BSD1	QC		10			L000844		
BLD0608-SRM1	QC		11			L000844		
23D0394-01	8082A PCB Solid 4	A 04	12			L000844	Anchor QEA, LLC	
23D0394-03	8082A PCB Solid 4	A 04	13			L000844	Anchor QEA, LLC	
23D0394-04	8082A PCB Solid 4	A 04	14			L000844	Anchor QEA, LLC	
23D0394-06	8082A PCB Solid 4	A 04	15			L000844	Anchor QEA, LLC	
BLD0608-MS1	QC		16			L000844		
BLD0608-MSD1	QC		17			L000844		
23D0394-07	8082A PCB Solid 4	A 04	18			L000844	Anchor QEA, LLC	
23D0394-08	8082A PCB Solid 4	A 04	19			L000844	Anchor QEA, LLC	
23D0394-09	8082A PCB Solid 4	A 04	20			L000844	Anchor QEA, LLC	
23D0394-10	8082A PCB Solid 4	A 04	21			L000844	Anchor QEA, LLC	

Samples Loaded By Date

Data Processed By Date

ANALYSIS SEQUENCE

SLE0165

Instrument: ECD7
Calibration ID: GE00022

Printed: 5/11/2023 5:26:08PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
SLE0165-CCV3	QC		22		L000860	L000844		
SLE0165-CCV4	QC		23		L000856	L000844		
23D0394-02	8082A PCB Solid 4	A 04	24			L000844	Anchor QEA, LLC	
23D0394-05	8082A PCB Solid 4	A 04	25			L000844	Anchor QEA, LLC	
23D0394-11	8082A PCB Solid 4	A 04	26			L000844	Anchor QEA, LLC	
23D0394-12	8082A PCB Solid 4	A 04	27			L000844	Anchor QEA, LLC	
23D0394-13	8082A PCB Solid 4	A 04	28			L000844	Anchor QEA, LLC	
23D0396-01	8082A PCB Solid 4	A 04	29			L000844	Anchor QEA, LLC	
23D0396-02	8082A PCB Solid 4	A 04	30			L000844	Anchor QEA, LLC	
23D0396-03	8082A PCB Solid 4	A 04	31			L000844	Anchor QEA, LLC	
23D0396-04	8082A PCB Solid 4	A 01	32			L000844	Anchor QEA, LLC	
SLE0165-CCV5	QC		33		L000862	L000844		
SLE0165-CCV6	QC		34		L000856	L000844		
BLD0712-BLK1	QC		35			L000844		
BLD0712-BS1	QC		36			L000844		
BLD0712-BSD1	QC		37			L000844		
23D0563-01	8082A PCB Solid 4	A 04	38			L000844	Haley & Aldrich	
23D0563-02	8082A PCB Solid 4	A 04	39			L000844	Haley & Aldrich	
23D0563-03	8082A PCB Solid 4	A 04	40			L000844	Haley & Aldrich	
23D0563-04	8082A PCB Solid 4	A 04	41			L000844	Haley & Aldrich	
BLD0712-MS1	QC		42			L000844		

Samples Loaded By Date

Data Processed By Date

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS SEQUENCE

SLE0165

Instrument: ECD7
Calibration ID: GE00022

Printed: 5/11/2023 5:26:08PM

Lab Number	Analysis	Container	Order	Position	STD ID	ISTD ID	Client	Comments
BLD0712-MSD1	QC		43			L000844		
23D0563-05	8082A PCB Solid 4	A 04	44			L000844	Haley & Aldrich	
23D0563-06	8082A PCB Solid 4	A 04	45			L000844	Haley & Aldrich	
23D0563-07	8082A PCB Solid 4	A 04	46			L000844	Haley & Aldrich	
23D0563-08	8082A PCB Solid 4	A 04	47			L000844	Haley & Aldrich	
23D0571-01	8082A PCB Solid 4	A 04	48			L000844	Haley & Aldrich	
23D0571-02	8082A PCB Solid 4	A 04	49			L000844	Haley & Aldrich	
SLE0165-CCV7	QC		50		L000861	L000844		
SLE0165-CCV8	QC		51		L000856	L000844		

Samples Loaded By Date

Data Processed By Date

GC LOG SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230510.b

	Inject Date/Time	Filename	DF	LabID	ClientID
1	10-MAY-2023 08:41	05102301ECD7.D	1	DDTS	
2	10-MAY-2023 09:01	05102302ECD7.D	1	AR1254ICV1	
3	10-MAY-2023 09:22	05102303ECD7.D	1	AR1660ICV2	
4	10-MAY-2023 09:43	05102304ECD7.D	1	BLE0164-BLK1	
5	10-MAY-2023 10:04	05102305ECD7.D	1	BLE0164-BS1	
6	10-MAY-2023 10:25	05102306ECD7.D	1	23E0020-01	
7	10-MAY-2023 10:46	05102307ECD7.D	1	AR1248CCV1	
8	10-MAY-2023 11:06	05102308ECD7.D	1	AR1660CCV2	
9	10-MAY-2023 11:27	05102309ECD7.D	1	BLD0608-BLK1	
10	10-MAY-2023 11:48	05102310ECD7.D	1	BLD0608-BS1	
11	10-MAY-2023 12:09	05102311ECD7.D	1	BLD0608-BSD1	
12	10-MAY-2023 12:30	05102312ECD7.D	1	BLD0608-SRM1	
13	10-MAY-2023 12:51	05102313ECD7.D	1	23D0394-01	
14	10-MAY-2023 13:12	05102314ECD7.D	5	23D0394-02RE1	
15	10-MAY-2023 13:32	05102315ECD7.D	5	23D0394-03RE1	
16	10-MAY-2023 13:53	05102316ECD7.D	5	23D0394-04RE1	
17	10-MAY-2023 14:14	05102317ECD7.D	100	23D0394-05RE	
18	10-MAY-2023 14:35	05102318ECD7.D	5	23D0394-06RE1	
19	10-MAY-2023 14:56	05102319ECD7.D	5	BLD0608-MS1RE1	
20	10-MAY-2023 15:17	05102320ECD7.D	5	BLD0608-MSD1RE	
21	10-MAY-2023 15:37	05102321ECD7.D	5	23D0394-07RE1	
22	10-MAY-2023 15:58	05102322ECD7.D	5	23D0394-08RE1	
23	10-MAY-2023 16:19	05102323ECD7.D	5	23D0394-09RE1	
24	10-MAY-2023 16:40	05102324ECD7.D	5	23D0394-10RE1	
25	10-MAY-2023 17:01	05102325ECD7.D	1	AR1242CCV3	
26	10-MAY-2023 17:22	05102326ECD7.D	1	AR1660CCV4	
27	10-MAY-2023 17:43	05102327ECD7.D	25	23D0394-02RE2	
28	10-MAY-2023 18:03	05102328ECD7.D	500	23D0394-05RE	
29	10-MAY-2023 18:24	05102329ECD7.D	5	23D0394-11RE1	
30	10-MAY-2023 18:45	05102330ECD7.D	5	23D0394-12RE1	
31	10-MAY-2023 19:06	05102331ECD7.D	5	23D0394-13RE1	
32	10-MAY-2023 19:27	05102332ECD7.D	5	23D0396-01RE1	
33	10-MAY-2023 19:47	05102333ECD7.D	5	23D0396-02RE1	
34	10-MAY-2023 20:08	05102334ECD7.D	5	23D0396-03RE1	
35	10-MAY-2023 20:29	05102335ECD7.D	5	23D0396-04RE1	
36	10-MAY-2023 20:50	05102336ECD7.D	1	AR1254CCV5	
37	10-MAY-2023 21:11	05102337ECD7.D	1	AR1660CCV6	
38	10-MAY-2023 21:32	05102338ECD7.D	1	BLD0712-BLK1	
39	10-MAY-2023 21:52	05102339ECD7.D	1	BLD0712-BS1	
40	10-MAY-2023 22:13	05102340ECD7.D	1	BLD0712-BSD1	
41	10-MAY-2023 22:34	05102341ECD7.D	1	23D0563-01	
42	10-MAY-2023 22:55	05102342ECD7.D	1	23D0563-02	
43	10-MAY-2023 23:16	05102343ECD7.D	1	23D0563-03	
44	10-MAY-2023 23:36	05102344ECD7.D	1	23D0563-04	
45	10-MAY-2023 23:57	05102345ECD7.D	1	BLD0712-MS1	
46	11-MAY-2023 00:18	05102346ECD7.D	1	BLD0712-MSD1	
47	11-MAY-2023 00:39	05102347ECD7.D	1	23D0563-05	
48	11-MAY-2023 01:00	05102348ECD7.D	1	23D0563-06	
49	11-MAY-2023 01:21	05102349ECD7.D	1	23D0563-07	
50	11-MAY-2023 01:41	05102350ECD7.D	1	23D0563-08	

	Inject Date/Time	Filename	DF	LabID	ClientID
51	11-MAY-2023 02:02	05102351ECD7.D	1	23D0571-01	
52	11-MAY-2023 02:23	05102352ECD7.D	1	23D0571-02	
53	11-MAY-2023 02:44	05102353ECD7.D	1	AR1248CCV7	
54	11-MAY-2023 03:05	05102354ECD7.D	1	AR1660CCV8	

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230510.b

ARI Job No.: DDTS Method: PCB.m Instrument: ecd7.i Date: 10-MAY-2023

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0841	05102301ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0901	05102302ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
0922	05102303ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
0943	05102304ECD7.D	BLE0164-BLK1		1	NO MANUAL INTEGRATION
1004	05102305ECD7.D	BLE0164-BS1		1	NO MANUAL INTEGRATION
1025	05102306ECD7.D	23E0020-01		1	NO MANUAL INTEGRATION
1046	05102307ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1106	05102308ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
1127	05102309ECD7.D	BLD0608-BLK1		1	NO MANUAL INTEGRATION
1148	05102310ECD7.D	BLD0608-BS1		1	NO MANUAL INTEGRATION
1209	05102311ECD7.D	BLD0608-BSD1		1	NO MANUAL INTEGRATION
1230	05102312ECD7.D	BLD0608-SRM1		1	NO MANUAL INTEGRATION
1251	05102313ECD7.D	23D0394-01		1	NO MANUAL INTEGRATION
1312	05102314ECD7.D	23D0394-02RE1		5	NO MANUAL INTEGRATION
1332	05102315ECD7.D	23D0394-03RE1		5	NO MANUAL INTEGRATION
1353	05102316ECD7.D	23D0394-04RE1		5	NO MANUAL INTEGRATION
1414	05102317ECD7.D	23D0394-05RE		100	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230510.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1435	05102318ECD7.D	23D0394-06RE1		5	NO MANUAL INTEGRATION
1456	05102319ECD7.D	BLD0608-MS1RE1		5	NO MANUAL INTEGRATION
1517	05102320ECD7.D	BLD0608-MSD1RE		5	NO MANUAL INTEGRATION
1537	05102321ECD7.D	23D0394-07RE1		5	NO MANUAL INTEGRATION
1558	05102322ECD7.D	23D0394-08RE1		5	NO MANUAL INTEGRATION
1619	05102323ECD7.D	23D0394-09RE1		5	NO MANUAL INTEGRATION
1640	05102324ECD7.D	23D0394-10RE1		5	NO MANUAL INTEGRATION
1701	05102325ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
1722	05102326ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
1743	05102327ECD7.D	23D0394-02RE2		25	NO MANUAL INTEGRATION
1803	05102328ECD7.D	23D0394-05RE		500	NO MANUAL INTEGRATION
1824	05102329ECD7.D	23D0394-11RE1		5	NO MANUAL INTEGRATION
1845	05102330ECD7.D	23D0394-12RE1		5	NO MANUAL INTEGRATION
1906	05102331ECD7.D	23D0394-13RE1		5	NO MANUAL INTEGRATION
1927	05102332ECD7.D	23D0396-01RE1		5	NO MANUAL INTEGRATION
1947	05102333ECD7.D	23D0396-02RE1		5	NO MANUAL INTEGRATION
2008	05102334ECD7.D	23D0396-03RE1		5	NO MANUAL INTEGRATION
2029	05102335ECD7.D	23D0396-04RE1		5	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230510.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2050	05102336ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
2111	05102337ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
2132	05102338ECD7.D	BLD0712-BLK1		1	NO MANUAL INTEGRATION
2152	05102339ECD7.D	BLD0712-BS1		1	NO MANUAL INTEGRATION
2213	05102340ECD7.D	BLD0712-BSD1		1	NO MANUAL INTEGRATION
2234	05102341ECD7.D	23D0563-01		1	NO MANUAL INTEGRATION
2255	05102342ECD7.D	23D0563-02		1	NO MANUAL INTEGRATION
2316	05102343ECD7.D	23D0563-03		1	NO MANUAL INTEGRATION
2336	05102344ECD7.D	23D0563-04		1	NO MANUAL INTEGRATION
2357	05102345ECD7.D	BLD0712-MS1		1	NO MANUAL INTEGRATION
0018	05102346ECD7.D	BLD0712-MSD1		1	NO MANUAL INTEGRATION
0039	05102347ECD7.D	23D0563-05		1	NO MANUAL INTEGRATION
0100	05102348ECD7.D	23D0563-06		1	NO MANUAL INTEGRATION
0121	05102349ECD7.D	23D0563-07		1	NO MANUAL INTEGRATION
0141	05102350ECD7.D	23D0563-08		1	NO MANUAL INTEGRATION
0202	05102351ECD7.D	23D0571-01		1	NO MANUAL INTEGRATION
0223	05102352ECD7.D	23D0571-02		1	NO MANUAL INTEGRATION
0244	05102353ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230510.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0305	05102354ECD7.D	AR1660CCV8		1	NO MANUAL INTEGRATION
0841	05102301ECD7.D	DDTS		1	NO MANUAL INTEGRATION
0901	05102302ECD7.D	AR1254ICV1		1	NO MANUAL INTEGRATION
0922	05102303ECD7.D	AR1660ICV2		1	NO MANUAL INTEGRATION
0943	05102304ECD7.D	BLE0164-BLK1		1	NO MANUAL INTEGRATION
1004	05102305ECD7.D	BLE0164-BS1		1	NO MANUAL INTEGRATION
1025	05102306ECD7.D	23E0020-01		1	NO MANUAL INTEGRATION
1046	05102307ECD7.D	AR1248CCV1		1	NO MANUAL INTEGRATION
1106	05102308ECD7.D	AR1660CCV2		1	NO MANUAL INTEGRATION
1127	05102309ECD7.D	BLD0608-BLK1		1	NO MANUAL INTEGRATION
1148	05102310ECD7.D	BLD0608-BS1		1	NO MANUAL INTEGRATION
1209	05102311ECD7.D	BLD0608-BSD1		1	NO MANUAL INTEGRATION
1230	05102312ECD7.D	BLD0608-SRM1		1	NO MANUAL INTEGRATION
1251	05102313ECD7.D	23D0394-01		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
1312	05102314ECD7.D	23D0394-02RE1		5	Aroclor-1248 [2C],
1332	05102315ECD7.D	23D0394-03RE1		5	Aroclor-1248 [2C],
1353	05102316ECD7.D	23D0394-04RE1		5	Aroclor-1248 [2C], Tetrachloro-m-xylene [2C],
1414	05102317ECD7.D	23D0394-05RE		100	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230510.b\230510.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
1435	05102318ECD7.D	23D0394-06RE1		5	Aroclor-1248 [2C], Tetrachloro-m-xylene [2C],
1456	05102319ECD7.D	BLD0608-MS1RE1		5	NO MANUAL INTEGRATION
1517	05102320ECD7.D	BLD0608-MSD1RE		5	NO MANUAL INTEGRATION
1537	05102321ECD7.D	23D0394-07RE1		5	Aroclor-1254 [2C],
1558	05102322ECD7.D	23D0394-08RE1		5	NO MANUAL INTEGRATION
1619	05102323ECD7.D	23D0394-09RE1		5	NO MANUAL INTEGRATION
1640	05102324ECD7.D	23D0394-10RE1		5	Aroclor-1248 [2C],
1701	05102325ECD7.D	AR1242CCV3		1	NO MANUAL INTEGRATION
1722	05102326ECD7.D	AR1660CCV4		1	NO MANUAL INTEGRATION
1743	05102327ECD7.D	23D0394-02RE2		25	Aroclor-1248 [2C], Aroclor-1254 [2C], Tetrachloro-m-xylene [2C],
1803	05102328ECD7.D	23D0394-05RE		500	NO MANUAL INTEGRATION
1824	05102329ECD7.D	23D0394-11RE1		5	Aroclor-1248 [2C], Aroclor-1254 [2C],
1845	05102330ECD7.D	23D0394-12RE1		5	Aroclor-1248 [2C],
1906	05102331ECD7.D	23D0394-13RE1		5	Aroclor-1248 [2C],
1927	05102332ECD7.D	23D0396-01RE1		5	Aroclor-1248 [2C],
1947	05102333ECD7.D	23D0396-02RE1		5	Aroclor-1248 [2C],
2008	05102334ECD7.D	23D0396-03RE1		5	Aroclor-1248 [2C],
2029	05102335ECD7.D	23D0396-04RE1		5	Aroclor-1248 [2C], Aroclor-1254 [2C],

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230510.b\230510.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
2050	05102336ECD7.D	AR1254CCV5		1	NO MANUAL INTEGRATION
2111	05102337ECD7.D	AR1660CCV6		1	NO MANUAL INTEGRATION
2132	05102338ECD7.D	BLD0712-BLK1		1	NO MANUAL INTEGRATION
2152	05102339ECD7.D	BLD0712-BS1		1	NO MANUAL INTEGRATION
2213	05102340ECD7.D	BLD0712-BSD1		1	NO MANUAL INTEGRATION
2234	05102341ECD7.D	23D0563-01		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
2255	05102342ECD7.D	23D0563-02		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
2316	05102343ECD7.D	23D0563-03		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
2336	05102344ECD7.D	23D0563-04		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
2357	05102345ECD7.D	BLD0712-MS1		1	NO MANUAL INTEGRATION
0018	05102346ECD7.D	BLD0712-MSD1		1	NO MANUAL INTEGRATION
0039	05102347ECD7.D	23D0563-05		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
0100	05102348ECD7.D	23D0563-06		1	Aroclor-1248 [2C],
0121	05102349ECD7.D	23D0563-07		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
0141	05102350ECD7.D	23D0563-08		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
0202	05102351ECD7.D	23D0571-01		1	Aroclor-1248 [2C], Aroclor-1254 [2C],
0223	05102352ECD7.D	23D0571-02		1	NO MANUAL INTEGRATION
0244	05102353ECD7.D	AR1248CCV7		1	NO MANUAL INTEGRATION

MANUAL INTEGRATION SUMMARY FOR DATABATCH - \\target\share\chem4\ecd7.i\230510.b\230510.b

Time	Filename	LabID	ClientId	DF	Manually Integrated Compounds
0305	05102354ECD7.D	AR1660CCV8		1	NO MANUAL INTEGRATION

Security Status Report

Date: 11-May-2023 17:24

05102301ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102302ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102303ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102304ECD7.D	Data Locked	richardl, 11-May-2023 17:24
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05102307ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102308ECD7.D	Data Locked	richardl, 11-May-2023 17:24
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05102310ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102311ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102312ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102313ECD7.D	Data Locked	richardl, 11-May-2023 17:24
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05102333ECD7.D	Data Locked	richardl, 11-May-2023 17:24
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05102337ECD7.D	Data Locked	richardl, 11-May-2023 17:24
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05102340ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102341ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102342ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102343ECD7.D	Data Locked	richardl, 11-May-2023 17:24
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05102352ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102353ECD7.D	Data Locked	richardl, 11-May-2023 17:24
05102354ECD7.D	Data Locked	richardl, 11-May-2023 17:24

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0079
Instrument: ECD7
Calibration: GE00022
Calibration Date: 05/06/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0079-SCV1 (Water)			Lab File ID: 05052332ECD7.D			Analyzed: 05/06/23 03:16		
Decachlorobiphenyl	40.000	92.3	80 - 120	13.842	13.8415	0.0005	N/A	
Tetrachlorometaxylene	40.000	92.2	80 - 120	5.741	5.742	-0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	98.1	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	93.1	80 - 120	5.628	5.628167	-0.0002	N/A	
SLE0079-SCV2 (Water)			Lab File ID: 05052333ECD7.D			Analyzed: 05/06/23 03:36		
Decachlorobiphenyl	40.000	102	80 - 120	13.842	13.8415	0.0005	N/A	
Tetrachlorometaxylene	40.000	81.9	80 - 120	5.743	5.742	0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	110	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	83.5	80 - 120	5.63	5.628167	0.0018	N/A	
SLE0079-SCV3 (Water)			Lab File ID: 05052334ECD7.D			Analyzed: 05/06/23 03:57		
Decachlorobiphenyl	40.000	89.2	80 - 120	13.841	13.8415	-0.0005	N/A	
Tetrachlorometaxylene	40.000	92.0	80 - 120	5.741	5.742	-0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	95.0	80 - 120	14.07	14.06967	0.0003	N/A	
Tetrachlorometaxylene [2C]	40.000	94.3	80 - 120	5.628	5.628167	-0.0002	N/A	
SLE0079-SCV4 (Water)			Lab File ID: 05052335ECD7.D			Analyzed: 05/06/23 04:18		
Decachlorobiphenyl	40.000	89.9	80 - 120	13.842	13.8415	0.0005	N/A	
Tetrachlorometaxylene	40.000	94.0	80 - 120	5.743	5.742	0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	96.2	80 - 120	14.07	14.06967	0.0003	N/A	
Tetrachlorometaxylene [2C]	40.000	95.8	80 - 120	5.63	5.628167	0.0018	N/A	
SLE0079-SCV5 (Water)			Lab File ID: 05052336ECD7.D			Analyzed: 05/06/23 04:39		
Decachlorobiphenyl	40.000	92.7	80 - 120	13.841	13.8415	-0.0005	N/A	
Tetrachlorometaxylene	40.000	94.5	80 - 120	5.742	5.742	0.0000	N/A	
Decachlorobiphenyl [2C]	40.000	96.9	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	97.6	80 - 120	5.628	5.628167	-0.0002	N/A	
SLE0079-SCV6 (Water)			Lab File ID: 05052337ECD7.D			Analyzed: 05/06/23 05:00		
Decachlorobiphenyl	40.000	138	80 - 120	13.841	13.8415	-0.0005	N/A	
Tetrachlorometaxylene	40.000	96.0	80 - 120	5.742	5.742	0.0000	N/A	
Decachlorobiphenyl [2C]	40.000	148	80 - 120	14.068	14.06967	-0.0017	N/A	
Tetrachlorometaxylene [2C]	40.000	101	80 - 120	5.629	5.628167	0.0008	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0165
Instrument: ECD7
Calibration: GE00022
Calibration Date: 05/06/2023

Surrogate Compound	Spike Level ug/L	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
SLE0165-ICV1 (Solid)			Lab File ID: 05102302ECD7.D			Analyzed: 05/10/23 09:01		
Decachlorobiphenyl	40.000	114	80 - 120	13.841	13.8415	-0.0005	N/A	
Tetrachlorometaxylene	40.000	95.5	80 - 120	5.743	5.742	0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	109	80 - 120	14.067	14.06967	-0.0027	N/A	
Tetrachlorometaxylene [2C]	40.000	98.8	80 - 120	5.627	5.628167	-0.0012	N/A	
SLE0165-ICV2 (Solid)			Lab File ID: 05102303ECD7.D			Analyzed: 05/10/23 09:22		
Decachlorobiphenyl	40.000	104	80 - 120	13.841	13.8415	-0.0005	N/A	
Tetrachlorometaxylene	40.000	98.8	80 - 120	5.742	5.742	0.0000	N/A	
Decachlorobiphenyl [2C]	40.000	108	80 - 120	14.068	14.06967	-0.0017	N/A	
Tetrachlorometaxylene [2C]	40.000	114	80 - 120	5.628	5.628167	-0.0002	N/A	
SLE0165-CCV1 (Solid)			Lab File ID: 05102307ECD7.D			Analyzed: 05/10/23 10:46		
Decachlorobiphenyl	40.000	97.8	80 - 120	13.84	13.8415	-0.0015	N/A	
Tetrachlorometaxylene	40.000	96.5	80 - 120	5.741	5.742	-0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	111	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	100	80 - 120	5.628	5.628167	-0.0002	N/A	
SLE0165-CCV2 (Solid)			Lab File ID: 05102308ECD7.D			Analyzed: 05/10/23 11:06		
Decachlorobiphenyl	40.000	103	80 - 120	13.84	13.8415	-0.0015	N/A	
Tetrachlorometaxylene	40.000	97.8	80 - 120	5.741	5.742	-0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	107	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	114	80 - 120	5.628	5.628167	-0.0002	N/A	
BLD0608-BLK1 (Solid)			Lab File ID: 05102309ECD7.D			Analyzed: 05/10/23 11:27		
Decachlorobiphenyl	8.0000	95.0	40 - 126	13.838	13.8415	-0.0035	N/A	
Tetrachlorometaxylene	8.0000	81.6	44 - 120	5.742	5.742	0.0000	N/A	
Decachlorobiphenyl [2C]	8.0000	101	40 - 126	14.066	14.06967	-0.0037	N/A	
Tetrachlorometaxylene [2C]	8.0000	80.1	44 - 120	5.628	5.628167	-0.0002	N/A	
BLD0608-BS1 (Solid)			Lab File ID: 05102310ECD7.D			Analyzed: 05/10/23 11:48		
Decachlorobiphenyl	8.0000	96.1	40 - 126	13.837	13.8415	-0.0045	N/A	
Tetrachlorometaxylene	8.0000	86.6	44 - 120	5.742	5.742	0.0000	N/A	
Decachlorobiphenyl [2C]	8.0000	107	40 - 126	14.068	14.06967	-0.0017	N/A	
Tetrachlorometaxylene [2C]	8.0000	82.6	44 - 120	5.628	5.628167	-0.0002	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0165
Instrument: ECD7
Calibration: GE00022
Calibration Date: 05/06/2023

Surrogate Compound	Spike Level ug/kg wet	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
BLD0608-BSD1 (Solid)			Lab File ID: 05102311ECD7.D			Analyzed: 05/10/23 12:09		
Decachlorobiphenyl	8.0000	95.0	40 - 126	13.838	13.8415	-0.0035	N/A	
Tetrachlorometaxylene	8.0000	85.7	44 - 120	5.741	5.742	-0.0010	N/A	
Decachlorobiphenyl [2C]	8.0000	104	40 - 126	14.067	14.06967	-0.0027	N/A	
Tetrachlorometaxylene [2C]	8.0000	85.4	44 - 120	5.627	5.628167	-0.0012	N/A	
BLD0608-SRM1 (Solid)			Lab File ID: 05102312ECD7.D			Analyzed: 05/10/23 12:30		
Decachlorobiphenyl	40.000	83.1	40 - 126	13.834	13.8415	-0.0075	N/A	
Tetrachlorometaxylene	40.000	70.8	44 - 120	5.74	5.742	-0.0020	N/A	
Decachlorobiphenyl [2C]	40.000	82.8	40 - 126	14.063	14.06967	-0.0067	N/A	
Tetrachlorometaxylene [2C]	40.000	76.5	44 - 120	5.625	5.628167	-0.0032	N/A	
SLE0165-CCV3 (Solid)			Lab File ID: 05102325ECD7.D			Analyzed: 05/10/23 17:01		
Decachlorobiphenyl	40.000	95.0	80 - 120	13.841	13.8415	-0.0005	N/A	
Tetrachlorometaxylene	40.000	118	80 - 120	5.741	5.742	-0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	104	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	119	80 - 120	5.627	5.628167	-0.0012	N/A	
SLE0165-CCV4 (Solid)			Lab File ID: 05102326ECD7.D			Analyzed: 05/10/23 17:22		
Decachlorobiphenyl	40.000	105	80 - 120	13.84	13.8415	-0.0015	N/A	
Tetrachlorometaxylene	40.000	98.8	80 - 120	5.742	5.742	0.0000	N/A	
Decachlorobiphenyl [2C]	40.000	106	80 - 120	14.068	14.06967	-0.0017	N/A	
Tetrachlorometaxylene [2C]	40.000	117	80 - 120	5.628	5.628167	-0.0002	N/A	
23D0396-01 (Solid)			Lab File ID: 05102332ECD7.D			Analyzed: 05/10/23 19:27		
Decachlorobiphenyl	7.9898	99.0	40 - 126	13.83	13.8415	-0.0115	N/A	
Tetrachlorometaxylene	7.9898	73.7	44 - 120	5.739	5.742	-0.0030	N/A	
Decachlorobiphenyl [2C]	7.9898	88.8	40 - 126	14.061	14.06967	-0.0087	N/A	
Tetrachlorometaxylene [2C]	7.9898	81.8	44 - 120	5.624	5.628167	-0.0042	N/A	
23D0396-02 (Solid)			Lab File ID: 05102333ECD7.D			Analyzed: 05/10/23 19:47		
Decachlorobiphenyl	8.0812	95.4	40 - 126	13.832	13.8415	-0.0095	N/A	
Tetrachlorometaxylene	8.0812	68.7	44 - 120	5.739	5.742	-0.0030	N/A	
Decachlorobiphenyl [2C]	8.0812	88.2	40 - 126	14.061	14.06967	-0.0087	N/A	
Tetrachlorometaxylene [2C]	8.0812	74.4	44 - 120	5.625	5.628167	-0.0032	N/A	

SURROGATE RECOVERY AND RT SUMMARY
EPA 8082A

Laboratory: Analytical Resources, LLC
SDG/WO: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0165
Instrument: ECD7
Calibration: GE00022
Calibration Date: 05/06/2023

Surrogate Compound	Spike Level ug/kg dry	% Recovery	Recovery Limits	RT	Calibration Mean RT	RT Diff	RT Diff Limit	Q
23D0396-03 (Solid)			Lab File ID: 05102334ECD7.D			Analyzed: 05/10/23 20:08		
Decachlorobiphenyl	7.9991	95.6	40 - 126	13.831	13.8415	-0.0105	N/A	
Tetrachlorometaxylene	7.9991	69.9	44 - 120	5.739	5.742	-0.0030	N/A	
Decachlorobiphenyl [2C]	7.9991	87.3	40 - 126	14.062	14.06967	-0.0077	N/A	
Tetrachlorometaxylene [2C]	7.9991	79.5	44 - 120	5.625	5.628167	-0.0032	N/A	
23D0396-04 (Solid)			Lab File ID: 05102335ECD7.D			Analyzed: 05/10/23 20:29		
Decachlorobiphenyl	7.9827	93.9	40 - 126	13.831	13.8415	-0.0105	N/A	
Tetrachlorometaxylene	7.9827	73.1	44 - 120	5.738	5.742	-0.0040	N/A	
Decachlorobiphenyl [2C]	7.9827	86.9	40 - 126	14.062	14.06967	-0.0077	N/A	
Tetrachlorometaxylene [2C]	7.9827	79.5	44 - 120	5.624	5.628167	-0.0042	N/A	
SLE0165-CCV5 (Solid)			Lab File ID: 05102336ECD7.D			Analyzed: 05/10/23 20:50		
Decachlorobiphenyl	40.000	95.0	80 - 120	13.841	13.8415	-0.0005	N/A	
Tetrachlorometaxylene	40.000	92.8	80 - 120	5.741	5.742	-0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	107	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	98.3	80 - 120	5.627	5.628167	-0.0012	N/A	
SLE0165-CCV6 (Solid)			Lab File ID: 05102337ECD7.D			Analyzed: 05/10/23 21:11		
Decachlorobiphenyl	40.000	103	80 - 120	13.839	13.8415	-0.0025	N/A	
Tetrachlorometaxylene	40.000	97.3	80 - 120	5.742	5.742	0.0000	N/A	
Decachlorobiphenyl [2C]	40.000	108	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	116	80 - 120	5.629	5.628167	0.0008	N/A	
SLE0165-CCV7 (Solid)			Lab File ID: 05102353ECD7.D			Analyzed: 05/11/23 02:44		
Decachlorobiphenyl	40.000	97.8	80 - 120	13.841	13.8415	-0.0005	N/A	
Tetrachlorometaxylene	40.000	96.8	80 - 120	5.743	5.742	0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	108	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	101	80 - 120	5.63	5.628167	0.0018	N/A	
SLE0165-CCV8 (Solid)			Lab File ID: 05102354ECD7.D			Analyzed: 05/11/23 03:05		
Decachlorobiphenyl	40.000	103	80 - 120	13.84	13.8415	-0.0015	N/A	
Tetrachlorometaxylene	40.000	101	80 - 120	5.743	5.742	0.0010	N/A	
Decachlorobiphenyl [2C]	40.000	105	80 - 120	14.069	14.06967	-0.0007	N/A	
Tetrachlorometaxylene [2C]	40.000	119	80 - 120	5.63	5.628167	0.0018	N/A	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0079	Instrument:	ECD7
		Calibration:	GE00022

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Secondary Cal Check (SLE0079-SCV1)		(Water)	Lab File ID: 05052332ECD7.D				Analyzed: 05/06/23 03:16		
1-Bromo-2-Nitrobenzene	642284	3.428	601474	3.428	107	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	941356	14.215	876625	14.215	107	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	361711	3.868	349289	3.869	104	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	690563	14.957	652984	14.956	106	50 - 200	0.001	+/-0.50	
Secondary Cal Check (SLE0079-SCV2)		(Water)	Lab File ID: 05052333ECD7.D				Analyzed: 05/06/23 03:36		
1-Bromo-2-Nitrobenzene	648004	3.43	601474	3.428	108	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	976327	14.214	876625	14.215	111	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	365379	3.87	349289	3.869	105	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	695394	14.957	652984	14.956	106	50 - 200	0.001	+/-0.50	
Secondary Cal Check (SLE0079-SCV3)		(Water)	Lab File ID: 05052334ECD7.D				Analyzed: 05/06/23 03:57		
1-Bromo-2-Nitrobenzene	643038	3.428	601474	3.428	107	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	952051	14.215	876625	14.215	109	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	359604	3.868	349289	3.869	103	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	692982	14.957	652984	14.956	106	50 - 200	0.001	+/-0.50	
Secondary Cal Check (SLE0079-SCV4)		(Water)	Lab File ID: 05052335ECD7.D				Analyzed: 05/06/23 04:18		
1-Bromo-2-Nitrobenzene	650234	3.43	601474	3.428	108	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl	980276	14.214	876625	14.215	112	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	364142	3.87	349289	3.869	104	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	705291	14.957	652984	14.956	108	50 - 200	0.001	+/-0.50	
Secondary Cal Check (SLE0079-SCV5)		(Water)	Lab File ID: 05052336ECD7.D				Analyzed: 05/06/23 04:39		
1-Bromo-2-Nitrobenzene	629547	3.428	601474	3.428	105	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	929713	14.214	876625	14.215	106	50 - 200	-0.001	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	341980	3.868	349289	3.869	98	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	678097	14.957	652984	14.956	104	50 - 200	0.001	+/-0.50	
Secondary Cal Check (SLE0079-SCV6)		(Water)	Lab File ID: 05052337ECD7.D				Analyzed: 05/06/23 05:00		
1-Bromo-2-Nitrobenzene	646456	3.429	601474	3.428	107	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl	954969	14.213	876625	14.215	109	50 - 200	-0.002	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	354120	3.869	349289	3.869	101	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	696139	14.957	652984	14.956	107	50 - 200	0.001	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0165
Instrument: ECD7
Calibration: GE00022

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
Initial Cal Check (SLE0165-ICV1)		(Solid)	Lab File ID: 05102302ECD7.D				Analyzed: 05/10/23 09:01		
1-Bromo-2-Nitrobenzene	640456	3.429	640456	3.429	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	750654	14.211	750654	14.211	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	372804	3.869	372804	3.869	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	564268	14.956	564268	14.956	100	50 - 200	0.000	+/-0.50	
Initial Cal Check (SLE0165-ICV2)		(Solid)	Lab File ID: 05102303ECD7.D				Analyzed: 05/10/23 09:22		
1-Bromo-2-Nitrobenzene	556984	3.429	556984	3.429	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl	798433	14.214	798433	14.214	100	50 - 200	0.000	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	291091	3.868	291091	3.868	100	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	480912	14.954	480912	14.954	100	50 - 200	0.000	+/-0.50	
Blank (BLD0608-BLK1)		(Solid)	Lab File ID: 05102309ECD7.D				Analyzed: 05/10/23 11:27		
1-Bromo-2-Nitrobenzene	611383	3.428	556984	3.429	110	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	878062	14.208	798433	14.214	110	50 - 200	-0.006	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	355732	3.87	291091	3.868	122	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	582943	14.954	480912	14.954	121	50 - 200	0.000	+/-0.50	
LCS (BLD0608-BS1)		(Solid)	Lab File ID: 05102310ECD7.D				Analyzed: 05/10/23 11:48		
1-Bromo-2-Nitrobenzene	617689	3.428	556984	3.429	111	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	913056	14.209	798433	14.214	114	50 - 200	-0.005	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	371575	3.87	291091	3.868	128	50 - 200	0.002	+/-0.50	
Hexabromobiphenyl [2C]	606968	14.953	480912	14.954	126	50 - 200	-0.001	+/-0.50	
LCS Dup (BLD0608-BSD1)		(Solid)	Lab File ID: 05102311ECD7.D				Analyzed: 05/10/23 12:09		
1-Bromo-2-Nitrobenzene	628555	3.428	556984	3.429	113	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	938712	14.208	798433	14.214	118	50 - 200	-0.006	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	360652	3.869	291091	3.868	124	50 - 200	0.001	+/-0.50	
Hexabromobiphenyl [2C]	620639	14.955	480912	14.954	129	50 - 200	0.001	+/-0.50	
Reference (BLD0608-SRM1)		(Solid)	Lab File ID: 05102312ECD7.D				Analyzed: 05/10/23 12:30		
1-Bromo-2-Nitrobenzene	645892	3.427	556984	3.429	116	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	790119	14.2	798433	14.214	99	50 - 200	-0.014	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	361093	3.868	291091	3.868	124	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	526637	14.95	480912	14.954	110	50 - 200	-0.004	+/-0.50	

INTERNAL STANDARD AREA AND RT SUMMARY

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0165
Instrument: ECD7
Calibration: GE00022

Internal Standard	Response	RT	Reference Response	Reference RT	Area %	Area % Limits	RT Diff	RT Diff Limit	Q
LDW23-SS1801 (23D0396-01)		(Solid)	Lab File ID: 05102332ECD7.D					Analyzed: 05/10/23 19:27	
1-Bromo-2-Nitrobenzene	637325	3.428	556984	3.429	114	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	665891	14.198	798433	14.214	83	50 - 200	-0.016	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	378214	3.868	291091	3.868	130	50 - 200	0.000	+/-0.50	
Hexabromobiphenyl [2C]	449569	14.946	480912	14.954	93	50 - 200	-0.008	+/-0.50	
LDW23-SC1801 (23D0396-02)		(Solid)	Lab File ID: 05102333ECD7.D					Analyzed: 05/10/23 19:47	
1-Bromo-2-Nitrobenzene	654584	3.428	556984	3.429	118	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl	649213	14.198	798433	14.214	81	50 - 200	-0.016	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	386188	3.867	291091	3.868	133	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	436013	14.947	480912	14.954	91	50 - 200	-0.007	+/-0.50	
LDW23-SS1802 (23D0396-03)		(Solid)	Lab File ID: 05102334ECD7.D					Analyzed: 05/10/23 20:08	
1-Bromo-2-Nitrobenzene	641188	3.427	556984	3.429	115	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	651283	14.198	798433	14.214	82	50 - 200	-0.016	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	372581	3.867	291091	3.868	128	50 - 200	-0.001	+/-0.50	
Hexabromobiphenyl [2C]	438974	14.947	480912	14.954	91	50 - 200	-0.007	+/-0.50	
LDW23-SC1802 (23D0396-04)		(Solid)	Lab File ID: 05102335ECD7.D					Analyzed: 05/10/23 20:29	
1-Bromo-2-Nitrobenzene	652278	3.427	556984	3.429	117	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl	646909	14.197	798433	14.214	81	50 - 200	-0.017	+/-0.50	
1-Bromo-2-Nitrobenzene [2C]	378979	3.866	291091	3.868	130	50 - 200	-0.002	+/-0.50	
Hexabromobiphenyl [2C]	435374	14.947	480912	14.954	91	50 - 200	-0.007	+/-0.50	

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23D0396-01	File ID:	05102332ECD7.D
Sampled:	04/12/23 09:56	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 19:27
Solids:	43.01	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLD0608	Sequence:	SLE0165		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.395	8.398	0.003	24072.5	56.2	13.1
	2	8.25	8.26	0.01	10669	49.3	
Aroclor 1254	* 1	9.233	9.246	0.013	42995.6	80.6	11.8
	2	9.39	9.403	0.013	26120.2	71.6	
Aroclor 1260	1	10.98	10.99483	0.0148	25170.4	59.2	18.7
	* 2	11.594	11.60617	0.0122	22901.75	71.4	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23D0396-02	File ID:	05102333ECD7.D
Sampled:	04/12/23 10:15	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 19:47
Solids:	48.93	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLD0608	Sequence:	SLE0165		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.396	8.398	0.002	22747	52.1	12.7
	2	8.251	8.26	0.009	9992	45.9	
Aroclor 1254	1	9.234	9.246	0.012	39807.2	60.9	6.4
	* 2	9.39	9.403	0.013	23987.4	64.9	
Aroclor 1260	1	10.98	10.99483	0.0148	24576.6	59.0	24.3
	* 2	11.594	11.60617	0.0122	23309.75	75.3	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23D0396-03	File ID:	05102334ECD7.D
Sampled:	04/12/23 15:03	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 20:08
Solids:	43.88	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLD0608	Sequence:	SLE0165		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.395	8.398	0.003	21763	50.7	6.5
	2	8.251	8.26	0.009	10070.25	47.5	
Aroclor 1254	* 1	9.234	9.246	0.012	39250.4	73.0	8.6
	2	9.391	9.403	0.012	24090.2	67.0	
Aroclor 1260	1	10.981	10.99483	0.0138	25009	58.0	28.8
	* 2	11.594	11.60617	0.0122	23644.25	77.5	

* Column used for quantitation

Analytical Resources, LLC
Analytical Chemists and Consultants

DUAL COLUMN CONFIRMATION SUMMARY

Laboratory:	Analytical Resources, LLC			SDG:	23D0396
Client:	Anchor QEA, LLC			Project:	AOC5 MR Phase 1
Matrix:	Sediment	Laboratory ID:	23D0396-04	File ID:	05102335ECD7.D
Sampled:	04/12/23 15:40	Prepared:	04/25/23 16:03	Analyzed:	05/10/23 20:29
Solids:	49.03	Preparation:	EPA 3546 (Microwave)	Instrument:	ECD7
Batch:	BLD0608	Sequence:	SLE0165		
GC Column(1):	ZB5			GC Column(2):	ZB35

COMPOUND	COL	RT	EXP RT	RT DIFF	AREA	CONC	RPD
Aroclor 1248	* 1	8.395	8.398	0.003	20228.25	44.7	6.7
	2	8.25	8.26	0.01	8985.5	41.8	
Aroclor 1254	1	9.233	9.246	0.013	38245.4	57.6	12.2
	* 2	9.39	9.403	0.013	23752.6	65.1	
Aroclor 1260	1	10.98	10.99483	0.0148	22957.4	54.8	29.5
	* 2	11.594	11.60617	0.0122	23217.5	73.8	

* Column used for quantitation

HOLDING TIME SUMMARY

Analysis: EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	04/25/23 16:03	13	14	05/10/23 19:27	15	40	
LDW23-SC1801 23D0396-02	04/12/23 10:15	04/12/23 16:32	04/25/23 16:03	13	14	05/10/23 19:47	15	40	
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	04/25/23 16:03	13	14	05/10/23 20:08	15	40	
LDW23-SC1802 23D0396-04	04/12/23 15:40	04/12/23 16:32	04/25/23 16:03	13	14	05/10/23 20:29	15	40	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 8082A

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ECD7

Analyte	MDL	RL	Units
Aroclor 1016	1.6	4.0	ug/kg
Aroclor 1016 [2C]	1.6	4.0	ug/kg
Aroclor 1221	1.6	4.0	ug/kg
Aroclor 1221 [2C]	1.6	4.0	ug/kg
Aroclor 1232	1.6	4.0	ug/kg
Aroclor 1232 [2C]	1.6	4.0	ug/kg
Aroclor 1242	1.6	4.0	ug/kg
Aroclor 1242 [2C]	1.6	4.0	ug/kg
Aroclor 1248	1.6	4.0	ug/kg
Aroclor 1248 [2C]	1.6	4.0	ug/kg
Aroclor 1254	1.6	4.0	ug/kg
Aroclor 1254 [2C]	1.6	4.0	ug/kg
Aroclor 1260	0.6	4.0	ug/kg
Aroclor 1260 [2C]	0.6	4.0	ug/kg

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New Haven, CT 06513
USA

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CERTIFICATE OF ANALYSIS

Catalog No: S-279N
Description: Tetrachloro-m-xylene
Lot: 0052481B-1
Solvent: N/A
Hazards: *Refer to SDS for complete safety information*

Signal Word: Warning

Date Certified: Jul 28, 2005
Expiration: Jul 28, 2015
Sample Size: 100 mg
Components: 1
Storage Condition: Ambient (>5 °C)

Certified Reference Material

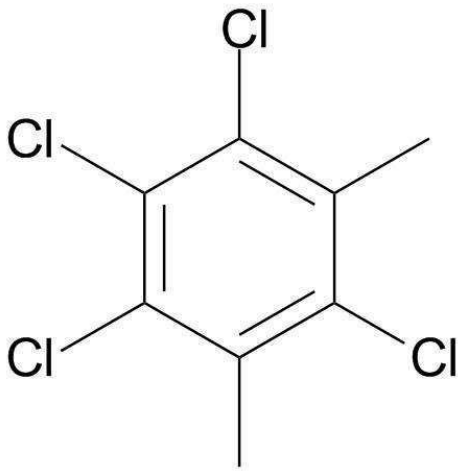
ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER AR-1463

ilac-MRA

Component	CAS #	Purity % (GC/FID)	Prepared Concentration	Certified Analyte Concentration[1]
Tetrachloro-meta-xylene	877-09-8	96.0	N/A	N/A

Identification:

Molecular formula: C8H6Cl4
Molecular weight: 243.94



C000147
tetrachlormetaxylene
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

This Certified Reference Material was verified in accordance with ISO/IEC 17025

A product with a suffix (-1A, -2B, etc. or -01, -02, etc.) on its lot number has had its expiration date extended and is identical to the same lot number without the suffix.

[1] The Uncertainty calculated for this product is ±2.4%. These values are the expanded uncertainty and represent an estimated standard deviation equal to the positive square root of the total variation of the uncertainty of components. A normal distribution is assumed and a coverage factor of K=2 is chosen using approximately a 95% confidence level.

Labels and certificates follow U.S. Conventions in reporting numerical values: A comma (,) is used to separate units of one-thousand or greater. A period (.) is used as a decimal place marker.

Metrological traceability is established through in-house validated methods.

Purity, if stated, is equal to 100% minus found impurity components. Impurity components have not been identified.

Hazard Information: Please refer to the SDS for information regarding the hazards associated with using this material.

This product was prepared according to in-house procedures and is guaranteed to be homogeneous.

Certified By: Larry Decker, Organic QC Manager

For use in routine laboratory analysis.

AccuStandard is accredited to ISO 17034, ISO/IEC 17025 and certified to ISO 9001:2015

QR-ORG/INO-001
Rev. 5/18

AccuStandard
125 Market Street
New Haven, CT 06513
(203) 786-5290

CERTIFICATE OF PRODUCT DATA

PRODUCT: C-209N
DESCRIPTION: 2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl
LOT #: 990521LB-AC
SOLVENT: N/A

EXPIRATION: Jul 28, 2015

This product is guaranteed accurate to ±0.5% of the Certified Analyte concentration through the Expiration Date on the Label.

Component	CAS #	Purity % (GC/MS)	Prepared Concentration[1]	Certified Analyte Concentration[2]
2,2',3,3',4,4',5,5',6,6'-Decachlorobiphenyl	2051-24-3	100	N/A	N/A

2,

C000148
decachlorbiphenyl
Expires 1/15/2020
Prepared By Joshua Rains 1/15/2014

* I1768A

Certified by: R. Cooper

1. All weights are traceable through National Institute of Standards & Technology, Test No. 822/254480
2. Certified Analyte Concentration = Purity x Prepared Concentration. The Uncertainty calculated for this product is ±4% which is the Combined Uncertainty uc(y). It represents an estimated standard deviation equal to the positive square root of the total variance of the uncertainty of components. The Expanded Uncertainty is U which is Uc(y) *K where K is the coverage factor at the 95% confidence level (K=2).
3. A product with a suffix (-1A, -2B, etc.) on its lot# has had its expiration date extended and is identical to the same lot# without the suffix.

Please note: AccuStandard follows the U.S. conventions in reporting numerical values, on both certificates and labels.

A comma (,) is used to separate units of one-thousand or greater.
A period (.) is used as a decimal place marker.

This product was manufactured in accordance to quality system requirements of ISO 9001:2000 and ISO 17025

* Recertified 2 4-6-09 JS

Analytical Standard Record

Standard ID: C000148 **Printed: 4/23/2015 11:54:44AM**

Description:	decachlorbiphenyl	Expires:	15-Jan-2020
Standard Type:	Other	Prepared:	15-Jan-2014
Solvent:	na/a	Prepared By:	Joshua Rains
Final Volume (mls):	1	Department:	Organics
Vials:	1	Last Edit:	27-Feb-2015 13:03 by JGR
Vendor:	Accustandard	Lot #:	990521lb-ac
Vendor Catalog #:			

Comments

see i1768a
SOM calibrations added 06/12/14 sdrd

Analyte	CAS Number	Concentration	Units
Decachlorobiphenyl [2C]	2051-24-3	1000000	ug/mL
Decachlorobiphenyl	2051-24-3	1000000	ug/mL
DCB 1660 [2C]	2051-24-3	1000000	ug/mL
DCB 1660	2051-24-3	1000000	ug/mL
DCB [2C]	2051-24-3	1000000	ug/mL
DCB (A) [2C]	2051-24-3	1000000	ug/mL
DCB (A)	2051-24-3	1000000	ug/mL
DCB	2051-24-3	1000000	ug/mL

Reviewed By Date

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Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.: AL0-101461
Description: Aroclor 1254
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL13053
Certification Date: November 29, 2018
Expiration Date: November 30, 2026

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1254	11097-69-1	1000	± 0.246%

I09808
Recd. JP
02/24/20

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Certificate No. 2427.02

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Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

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Chemical Testing Laboratory
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IL11110613_us

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101468
Description: Aroclor 1221
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14017
Certification Date: August 20, 2019
Expiration Date: August 31, 2027

Andrea L Gill
Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1221	11104-28-2	1000	± 0.553%

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Rcd JK
06/18/21

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Reference Material Producer
Certicate No. 2427.02

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ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101469
Description: Aroclor 1232
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Isooctane

Lot Number: CL14914
Certification Date: January 31, 2020
Expiration Date: January 31, 2028

Andrea L Gill
Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1232	11141-16-5	1000	± 0.738%

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06/18/21

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Certicate No. 2427.02

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101470	**Lot Number:**	CL14018
Description:	Aroclor 1242	**Certification Date:**	August 20, 2019
Storage:	4 °C	**Expiration Date:**	August 31, 2027
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1242	53469-21-9	1000	± 0.553%

J006468
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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.:	AL0-101471	**Lot Number:**	CL15384
Description:	Aroclor 1248	**Certification Date:**	June 19, 2020
Storage:	4 °C	**Expiration Date:**	June 30, 2028
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1248	12672-29-6	1000	± 0.520%

JJ06469
Reed, JR
06/18/21

ACCREDITED
Reference Material Producer
Certicate No. 2427.02

phenova Certified Reference Materials | A Phenomenex Company

Phenova is an accredited ISO/IEC 17034 Reference Material Producer and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ACCREDITED
Chemical Testing Laboratory
Certicate No. 2427.03

IL64691018 us

Certificate of Analysis

Produced by Phenova
6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
Access your Safety Data Sheets and digital Certificates at www.phenova.com/documents.

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

Certificate of Analysis

Agilent

Aroclor 1016 Solution

Product Number: PP-282 **Page:** 1 of 1

Lot Number: CR-0761 **Lot Issue Date:** 28-Feb-2017 **Expiration Date:** 31-Mar-2025

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1016	012674-11-2	NT01016	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1254 Reed JR 02/05/22

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 9001
Registered
TUV USA, Inc.

Agilent

Certificate of Analysis

Product Name: Aroclor 1260 Standard

Product Number: PP-362-1 **Lot Issue Date:** 20-Jan-2021

Lot Number: 0006582048 **Expiration Date:** 28-Feb-2025

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1260	011096-82-5	NT01023	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K 1255

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

MJBourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert
No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert
No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

ISO 17034

Agilent
Trusted Answers

Reference Material Certificate

Product Name:	Aroclor 1248 Standard	**Lot Number:**	0006626997
Product Number:	PP-342-1	**Lot Issue Date:**	17-Aug-2021
Storage Conditions:	Store at Room Temperature (15° to 30°C).	**Expiration Date:**	30-Sep-2025

	CERTIFIED VALUES				
Component Name	Concentration		Expanded Uncertainty	CAS#	Analyte Lot
Aroclor 1248	100.3	±	0.5 µg/mL	012672-29-6	NT01582

Matrix: isooctane (2,2,4-trimethylpentane)

K1257

Description:
This document is prepared in accordance with ISO 17034 and Guide 31. This analytical reference material standard was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed above.

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This analytical reference standard was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Safety:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this analytical reference material.

Intended Use:
This analytical reference standard is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Expiration of Certification:
The certification of this analytical reference standard is valid until the expiration date specified above, provided the material is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the material is damaged, contaminated, or otherwise modified.

Certificate of Analysis

Agilent

Aroclor 1254 Solution

Product Number: PP-352 **Page:** 1 of 1

Lot Number: CS-2321 **Lot Issue Date:** 04-May-2018 **Expiration Date:** 31-May-2026

This ISO Guide 34 Reference Material (RM) was manufactured and verified in accordance with ULTRA's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1254	011097-69-1	RM00922	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1258

ULTRA uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

John Russo
President

Monica Bourgeois
Director of QA/RA

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 9001
Registered
TUV USA, Inc.

Agilent

Certificate of Analysis

Product Name: Aroclor 1221 Standard

Product Number: PP-292-1 **Lot Issue Date:** 28-Apr-2020

Lot Number: 0006535333 **Expiration Date:** 31-May-2024

Description:

This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system, and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1221	011104-28-2	RM04278	100.2 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1259

Traceability:

The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:

This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:

This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:

Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:

Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:

The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:

If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

MBourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER

ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026

www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY

ISO 17025 Cert No. AT-1937

250 Smith Street North Kingstown, Rhode Island 02852 www.agilent.com/quality

Agilent

Certificate of Analysis
ISO 17034

Aroclor 1262 Standard

Product Number: PP-372-1 **Page:** 1 of 1

Lot Number: 0006499800 **Lot Issue Date:** 04-Nov-2019 **Expiration Date:** 30-Nov-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent Technologies ISO 9001 registered quality system. A review of the gravimetric preparation data by our ISO 17025 accredited laboratory serves to verify the concentration of each analyte. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1262	037324-23-5	RM14263	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1260

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

Agilent

Certificate of Analysis
ISO 17034

Aroclor 1232 Standard

Product Number: PP-302-1 **Page:** 1 of 1

Lot Number: CF-2197A **Lot Issue Date:** 05-Jul-2016 **Expiration Date:** 31-Aug-2023

This ISO 17034 Reference Material (RM) was manufactured and verified in accordance with Agilent's ISO 9001 registered quality system, and the analyte concentrations were verified by our ISO 17025 accredited laboratory. The true value and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	True Value
Aroclor 1232	011141-16-5	NT01717	100.4 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage: Store at Room Temperature (15° to 30°C).

K1261

Agilent uses balances calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z-540-1 and ISO 9001, and calibrated Class A glassware in the manufacturing of these standards.

M Bourgeois

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO GUIDE 34 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

Produced in accordance with TUV USA Inc 56 100 18560026 registered ISO 9001 Quality Management System

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO17025 Cert No. AT-1937

Agilent

Certificate of Analysis

Product Name: Aroclor 1268 Standard

Product Number: PP-382-1 **Lot Issue Date:** 09-Feb-2021

Lot Number: 0006587800 **Expiration Date:** 31-Mar-2029

Description:
This analytical reference material (RM) was manufactured and verified in accordance with an ISO 9001 registered quality system and analyte concentrations were verified by an ISO 17025 accredited laboratory. The concentration and uncertainty value at the 95% confidence level for each analyte, determined gravimetrically, is listed below.

Analyte	CAS#	Analyte Lot	Concentration ± Uncertainty
Aroclor 1268	011100-14-4	RM00937	100.0 ± 0.5 µg/mL

Matrix: isooctane (2,2,4-trimethylpentane)

Storage Conditions: Store at Room Temperature (15° to 30°C).

K1262

Traceability:
The balances used for these measurements are calibrated with weights traceable to NIST in compliance with ANSI/NCSL Z540.3, ISO 9001, ISO 17025, and ISO 17034. Calibrated Class A glassware is used for volumetric measurements. Thermometers are calibrated against a NIST traceable thermometer in accordance with NIST Special Publication 1088.

Homogeneity:
This RM was unitized according to an in-house procedure and is guaranteed to be homogeneous. There is no minimum sub-sample size required.

Intended Use:
This RM is intended for the preparation of working reference samples for use in routine laboratory analyses, calibration of instruments, validation of analytical methods, assessments of measurement methods, and continuing calibration verification.

Instructions for Use:
Sample aliquots for analysis should be withdrawn at 20°C to 25°C immediately after opening the container and should be processed without delay for the certified values to be valid within the stated uncertainties.

Hazards:
Refer to the Safety Data Sheet on www.agilent.com for information regarding this RM.

Expiration of Certification:
The certification of this RM is valid until the expiration date specified above, provided the RM is handled and stored in accordance with the instructions given in this certificate. This certification is nullified if the RM is damaged, contaminated, or otherwise modified.

Maintenance of Certification:
If substantive changes are noted that affect the certification before the expiration of this certificate, Agilent will notify the purchaser.

Sample lot approver:

Monica Bourgeois
QMS Representative

ANAB ACCREDITED ISO 17034 REFERENCE MATERIAL PRODUCER
ISO 17034 Cert No. AR-1936

RM was produced in accordance with TUV USA Inc registered ISO 9001 Quality Management System. Cert # 56 100 18560026
Page: 1 of 1
www.agilent.com/quality/
CSD-QA-015.1

ANAB ACCREDITED ISO/IEC 17025 TESTING LABORATORY
ISO 17025 Cert No. AT-1937

Recipient Copy

CHAIN-OF-CUSTODY RECORD

COC No. 15350

Order Number: CB014765

Date Shipped: 4/11/2022

AirBill No(s): 519204140444

From: QATS LABORATORY
2700 CHANDLER AVENUE, BLDG. B
LAS VEGAS, NV 89120
PHONE: 1-702-895-8712

To: Kelly Bottem
Analytical Resources, Inc.
4611 S. 134th Place SUITE 100
Tukwila WA 98168
206-695-6211

K003525
K003528

Sample ID	Qty	Description/Remarks	→ Catalogue Number
PSRM0148	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0149	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0150	1	PUGET SOUND SEDIMENT RM	PS-SRM
PSRM0151	1	PUGET SOUND SEDIMENT RM	PS-SRM

4/11/2022

BOEING PLANT 2

Please use the enclosed Sample Preparation Instructions. If catalogue number(s) are listed at the top of the Sample Preparation Instructions use the Sample Preparation Instructions with catalogue number(s) matching the catalogue number(s) of each of the samples listed above.

Relinquished by: (Signature)	Date/Time 1400 4/11/2022	Received by: (Signature)	Date/Time 0955 04/12/22
Custody Seal(s): Present/Absent PRESENT	Remarks:		
Relinquished by: (Signature)	Date/Time	Received by: (Signature)	Date/Time

PUGET SOUND SEDIMENT REFERENCE MATERIAL
QATS LABORATORY INSTRUCTIONS FOR
HRGC/HRMS CDD/CDF/CB CONGENER AND GC/ECD AROCLOR ANALYSIS

NOTE: These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the analytical protocols or your contract, disregard these instructions.

APPLICATION: For the analysis of CDD/CDF and CB Congener analytes using project-specified HRGC/HRMS methods, and Aroclors using project-specified GC/ECD methods.

CAUTION: Read instructions carefully before opening bottles and proceeding with the analyses.

Contains CDD/CDF, CB Congener, and/or Aroclors
HAZARDOUS MATERIAL

Safety Data Sheets
Available Upon Request

(A) *SAMPLE DESCRIPTION*

Enclosed is a Puget Sound (Washington State) Sediment Reference Material (SRM) set for chlorinated dibenzo-p-dioxins/chlorinated dibenzofurans (CDD/CDF), and/or chlorinated biphenyl (CB) congener analysis using project-specified high resolution gas chromatography/ high resolution mass spectrometry (HRGC/HRMS) methods. This SRM is also suitable for Aroclors analysis using project-specified gas chromatography/electron capture detection (GC/ECD) methods. This set consists of one (1) or more bottles, each with approximately 30 grams of Puget Sound SRM containing CDD/CDF, CB Congener, and/or Aroclor analytes. Check the chain-of-custody record to determine the number of bottles provided for CDD/CDF, CB Congener, and/or Aroclor analysis. None of the bottles are to be opened until SRM preparation/analysis is to occur.

CAUTION: The SRM could contain compounds that are light sensitive and should be protected from light during storage. Store the SRM at ≤ 6° C, preferably at < 0° C, until SRM preparation and analysis is to occur. Allow the bottle(s) to reach ambient temperature before opening.

(B) *BREAKAGE OR MISSING ITEMS*

Check the contents of the shipment carefully for any broken, leaking, or missing items. Refer to the enclosed chain-of-custody record. Report any problems to Mr. Keith Strout, APTIM Federal Services, LLC, at (702) 895-8722. If requested, return the chain-of-custody record with appropriate annotations and signatures to the address provided below.

QUALITY ASSURANCE TECHNICAL SUPPORT LABORATORY
APTIM Federal Services, LLC
2700 Chandler Avenue - Building C
Las Vegas, NV 89120

(C) *ANALYSIS REQUIREMENTS*

The SRM is to be analyzed as described in the project-specified methods employed for the analysis of CDD/CDF and/or CB Congener analytes using HRGC/HRMS instrumentation and/or Aroclors using GC/ECD instrumentation. These instructions are for advisory purposes only. If any apparent conflict exists between these instructions and the project-specified methods, or your contract, disregard these instructions.

(D) *SAMPLE ANALYSIS*

General Instructions

The SRM contains CDD/CDF, CB Congener, and Aroclor analytes which are known or suspected to have severe health effects. Employing appropriate safety precautions, this SRM is to be handled, prepared, and analyzed exactly as you would process samples received from a known or suspected hazardous waste site. The SRM should be handled only by trained and experienced analysts in facilities expressly designed to handle such materials. When calculating the concentrations of analytes, use 0% as the soil moisture content.

Allow the bottle(s) to reach ambient temperature before opening and removing gravimetric amounts for sample preparation. To begin the extraction and analysis procedure, break the seal and open the bottle carefully. Weigh out the appropriate aliquot for extraction and analysis as prescribed in the project-specified methods (typically 10 grams for HRGC/HRMS methods and 30 grams for GC/ECD methods), or in accordance with your contract.

Proceed immediately with the extraction and analysis as described in the project-specified methods or your contract.

(E) *REPORTING*

Report the results for the prepared SRM as received.

Report the analytical results for the SRM to EPA or other appropriate Agency, using the format and other instructions for submission of data packages as specified in your contract.

Certificate of Analysis

Phenova Certified Reference Materials are sold by Phenomenex.
411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at **www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards**

Certified Reference Material

This product is included in Phenova's ISO/IEC 17025 and ISO Guide 34 Scopes of Accreditation

Catalog No.:	AL0-101467	**Lot Number:**	CL12975
Description:	Aroclor 1016	**Certification Date:**	November 19, 2018
Storage:	4 °C	**Expiration Date:**	October 31, 2026
Provided As:	1 mL in 2 mL Ampoule in Isooctane		

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1016	12674-11-2	1000	± 0.553%

K5829

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Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.

Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

IL11110613_us

Certificate of Analysis

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411 Madrid Ave., Torrance, CA 90501 USA ▪ Tel: 310-212-0555 ▪ Fax: 310-328-7768 ▪ info@phenomenex.com
Access your MSDS and digital C of A at www.phenomenex.com/mysupport. Re-order at www.phenomenex.com/standards

1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO Guide 34[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in the calibration and calibration verification of chromatographic instrumentation performed in routine laboratory analysis.

4. Instruction: Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all certified analytes in the mixture.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Material Safety Data Sheet (MSDS) is available at www.phenomenex.com/mysupport.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

   $$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO Guide 34. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO Guide 34.

12. Period of Validity: The Certified Values and their uncertainties are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31:2000(E) – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35:2006(E) – Reference Material – General and Statistical Principles for Certification.
[3] ISO Guide 34:2009(E) – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025:2005(E) – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

ACCREDITED
Reference Material Producer
Certificate No. 2427.02

phenova® Certified Reference Materials

Manufactured by Phenova, Inc.
Phenova's testing and calibration results are internationally recognized through the ILAC MRA. Phenova is an accredited ISO Guide 34 Reference Material Provider and ISO/IEC 17025 accredited Chemical Testing Laboratory.

ilac-MRA ACCREDITED
Chemical Testing Laboratory
Certificate No. 2427.03

ILT1116613_US

Certificate of Analysis

phenova Certified Reference Materials | A Phenomenex Company

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6390 Joyce Drive STE 100, Golden, CO 80403 USA ▪ Tel: 303-940-0033 ▪ Fax: 303-940-0043 ▪ info@phenova.com
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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101462
Description: Aroclor 1260
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL18021
Certification Date: February 14, 2022
Expiration Date: February 28, 2030

Andrea L Gill

Andrea Gill, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1260	11096-82-5	1000	± 0.553%

K005830

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1. Quality Document: This Certificate of Analysis has been created in accordance with ISO Guide 31[1] and ISO Guide 35.[2]

2. Quality Standards: Phenova is accredited by A2LA to ISO 17034[3] and ISO/IEC 17025[4] as a producer of Certified Reference Materials and Reference Materials. This ensures that our manufacturing processes have been accredited to and meet strict international standards.

3. Intended Use: The product is manufactured for use in calibration, calibration verification, quantification, identification and other appropriate analytical control applications. The product is intended for routine laboratory analysis and research purposes only. Only trained personnel should handle this product.

4. Handling and Usage Notes: Store according to recommended conditions listed and avoid prolonged exposure to light. Visually inspect the solution inside the ampoule for any un-dissolved material. If particulate is visible, sonicate the unopened ampoule until material is fully dissolved. Dilute as required, use only class A glassware and diluents compatible with all analytes in the mixture. Considerations should be made related to repeated use of the opened product. Once opened, exposure to light, air, heat, objects, and additional transfer vessels may cause evaporation, degradation or contamination resulting in changes in concentration, uncertainty and stability duration. Store opened standards in a clean, tightly capped vessel under the recommended temperature. Appropriate controls, such as the use of additional verification standards should be used to confirm the opened product is fit for purpose under repeated use conditions.

5. Hazardous Situation: The product is intended for use by experienced professional personnel. A Safety Data Sheet (SDS) is available at www.phenova.com/documents.

6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

9. Expanded Uncertainty: The expanded uncertainty (uCRM) as stated is determined in accordance with ISO/IEC Guide 98[5] and ISO Guide 35 incorporating Type A standard uncertainty at a 95% confidence level. The uncertainty contains elements of manufacturing (uM), homogeneity analysis (uH) and long-term stability testing (uLTS). The uncertainty is calculated based on the root-sum-of-squares equation times a coverage factor (k=2).

$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

10. Metrological Traceability: The property value (certified value and its uncertainty) are traceable through an unbroken chain of calibration to the SI base unit kg through a NIST traceable weight in accordance with ISO 17034. This is achieved through calibration of balances, verification of weights, use of national methodology for glassware calibration and product homogeneity and stability testing utilizing an ISO/IEC 17025 methodology.

11. Values Obtained During Product Testing: This product is subjected to verification, homogeneity and stability testing using an ISO/IEC 17025 chromatographic methodology. All values obtained during testing meet criteria in accordance with ISO 17034.

12. Period of Validity: The Certified Values, Uncertainties and Expiration Date are based on the unopened product being stored according to the recommended storage condition listed and are guaranteed until the expiration date. This product will be monitored during the period of validity and customers notified of any significant changes in stability.

References:

[1] ISO Guide 31 – Reference Materials – Contents of Certificates and Labels.
[2] ISO Guide 35 – Reference Material – General and Statistical Principles for Certification.
[3] ISO 17034 – General Requirements for the Competence of Reference Material Producers.
[4] ISO/IEC 17025 – General Requirements for the Competence of Testing and Calibration Laboratories.
[5] ISO/IEC Guide 98-3:2008(E) – Uncertainty of Measurement – Part 3: Guide to Expression of Uncertainty in Measurement (GUM: 1995)

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Certified Reference Material

This product is certified in accordance with Phenova's ISO 17034 accreditation and supported by Phenova's ISO/IEC 17025 chemical testing accreditation

Catalog No.: AL0-101283
Description: Aroclor 1268 Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL18942
Certification Date: September 7, 2022
Expiration Date: August 31, 2030

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1268	11100-14-4	100	± 0.561%

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6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

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$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

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Certified Reference Material

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Catalog No.: AL0-101282
Description: Aroclor 1262 Standard
Storage: 4 °C
Provided As: 1 mL in 2 mL Ampoule in Hexane

Lot Number: CL19082
Certification Date: October 18, 2022
Expiration Date: September 30, 2030

Aaron Dukes, Certified Reference Materials Manager

Component	CAS #	Certified Value µg/mL	Expanded Uncertainty
Aroclor 1262	37324-23-5	100	± 0.665%

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6. Level of Homogeneity: The product has been certified to guarantee the certified values and their uncertainties at a volume of 2 µL.

7. Certified Value: Certified Value is based upon gravimetric and volumetric preparation using calibrated balances and Class A glassware.

8. Raw Materials and Purity: Phenova reference standard products are prepared from the highest quality starting materials. The purity of this material was verified using an ISO/IEC 17025 methodology.

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$$uCRM = k\sqrt{uM^2 + uH^2 + uLTS^2}$$

   Transport conditions (short-term stability) have been tested such that there is no contribution to the uncertainty reported. The expanded uncertainty applies to the product as received.

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Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1801

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-01 C	SDG:	23D0396
Sampled:	04/12/23 09:56	Prepared:	04/27/23 15:14	File ID:	SMM 05-01-23-064
% Solids:	48.05	Preparation:	SMM EPA 7471B	Analyzed:	05/01/23 14:50
Batch:	BLD0688	Sequence:	SLE0012	Initial/Final:	0.221 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GE00003

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.221	1	0.00989	0.0471	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 7471B

Total Metals

LDW23-SS1802

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-03 C	SDG:	23D0396
Sampled:	04/12/23 15:03	Prepared:	04/27/23 15:14	File ID:	SMM 05-01-23-065
% Solids:	47.50	Preparation:	SMM EPA 7471B	Analyzed:	05/01/23 14:52
Batch:	BLD0688	Sequence:	SLE0012	Initial/Final:	0.205 g Wet / 50 mL
Instrument:	HYDRA			Calibration:	GE00003

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	0.174	1	0.0108	0.0513	

PREPARATION BATCH SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC SDG: 23D0396

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

Batch: BLD0688 Batch Matrix: Solid Preparation: SMM EPA 7471B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	SMM 05-01-23-064	04/27/23 15:14	Store frozen
LDW23-SS1802	23D0396-03	SMM 05-01-23-065	04/27/23 15:14	Store frozen
Blank	BLD0688-BLK1	SMM 05-01-23-044	04/27/23 15:14	
LCS	BLD0688-BS1	SMM 05-01-23-045	04/27/23 15:14	

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Mercury Digestion Log

Prep Code: SMM Balance ID: BAL10 Matrix: Soil
Analyst: AR Block ID: 9 Date: 04/27/23
Bath Temp: 95°C Start Time: 1418 End Time: 1514

ARI Sample ID	Sample Bottle #	pH<2	Initial Weight (g) Volume (mL)	Final Volume (mL)	# $KMnO_4$ Aliquots	CLP	Comments
23D1360-01	C		0.265	50	1		
↓ -03	B		0.209				
23D394-01	C		0.219				
-02	B		0.264				
-04	C		0.258				
-06			0.258				
-08			0.255				
-11			0.288				
↓ -12			0.254				
23D396-01			0.221				
↓ -03	↓		0.205				23D394-01
BLD688-blk	—		—				↓
-bs	—		—				
-dup	—		0.219				
-MS	—		0.215				
↓ -MSD	—		0.218				
23D37-02	D		0.211				
↓ -04	↓		0.221	↓	↓		

MC 04/27/23

Chemical/Reagent ID:
HNO_3: L4188 H_2SO_4: L923 HCl: —
5% $K_2S_2O_8$: K3350 5% $KMnO_4$: K11727 Digest Tube Lot: 2210117

Form I

METHOD BLANK DATA SHEET

EPA 7471B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23D0396

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

Batch: BLD0688 | Laboratory ID: BLD0688-BLK1 | Prepared: 04/27/23 15:14

Matrix: Solid | Preparation: SMM EPA 7471B | Analyzed: 05/01/23 14:03

Sequence: SLE0012 | Calibration: GE00003 | Instrument: HYDRA

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7439-97-6	Mercury	ND	1	0.00525	0.0250	U

LCS / LCS DUPLICATE RECOVERY

EPA 7471B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/01/23 14:06
Batch:	BLD0688	Laboratory ID:	BLD0688-BS1
Preparation:	SMM EPA 7471B	Sequence Name:	LCS
Initial/Final:	0.2 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Mercury	0.500	0.441		88.2	80 - 120

* Indicates values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00003	Instrument:	HYDRA
Calibration Date:	05/01/2023 15:11		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Mercury	0	0	0.0001	6280000	0.0005	5844000	0.001	5860000	0.002	5878000	0.005	5719400

INITIAL CALIBRATION DATA

EPA 7471B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00003	Instrument:	HYDRA
Calibration Date:	05/01/2023 15:11		

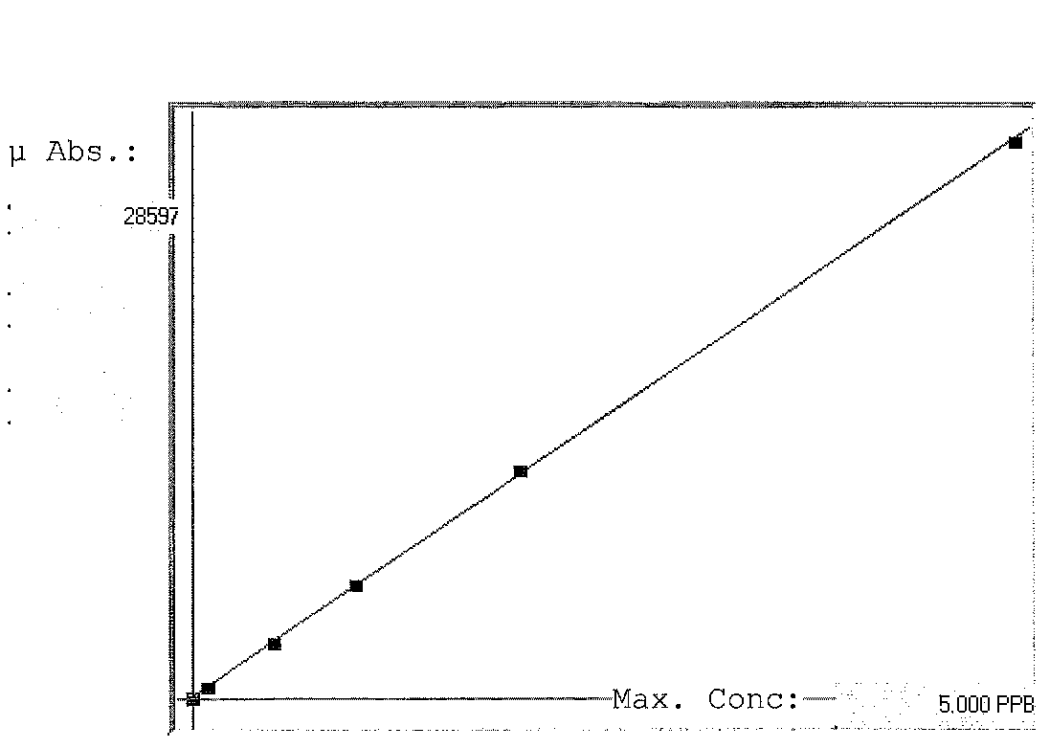
COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Mercury	4930233	49.1	0.9999		0.99	

SMM 05-01-23 GE00003 SLE0012

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 01 May 2023 10:50:09

Sample ID	Mean	Units		Date	Method
SEQ-CAL1	-6	PPB		01 May 2023 10:51:23	ARI 5 ppb (NO 0.05)
SEQ-CAL2	628	PPB		01 May 2023 10:53:44	ARI 5 ppb (NO 0.05)
SEQ-CAL3	2922	PPB		01 May 2023 10:56:05	ARI 5 ppb (NO 0.05)
SEQ-CAL4	5860	PPB		01 May 2023 10:58:26	ARI 5 ppb (NO 0.05)
SEQ-CAL5	11756	PPB		01 May 2023 11:00:46	ARI 5 ppb (NO 0.05)
SEQ-CAL6	28597	PPB		01 May 2023 11:03:06	ARI 5 ppb (NO 0.05)
SEQ-ICV	101.8% 4.0705	PPB	✓	01 May 2023 11:30:14	ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0184	PPB	✓	01 May 2023 11:32:33	ARI 5 ppb (NO 0.05)
SEQ-CRL	93.7% 0.0937	PPB	✓	01 May 2023 11:34:55	ARI 5 ppb (NO 0.05)
SEQ-CCV	102.3% 4.0916	PPB	✓	01 May 2023 11:37:16	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0184	PPB	✓	01 May 2023 11:39:34	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.6% 4.0257	PPB	✓	01 May 2023 11:41:56	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0198	PPB	✓	01 May 2023 11:44:15	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.5% 4.0604	PPB	✓	01 May 2023 12:53:53	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0176	PPB	✓	01 May 2023 12:56:11	ARI 5 ppb (NO 0.05)
BLD0668-BLK1	-0.0112	PPB		01 May 2023 12:58:33	ARI 5 ppb (NO 0.05)
BLD0668-BS1	1.7744	PPB	✓	01 May 2023 13:00:52	ARI 5 ppb (NO 0.05)
23D0420-01	0.0689	PPB		01 May 2023 13:03:11	ARI 5 ppb (NO 0.05)
BLD0668-DUP1	0.0696	PPB		01 May 2023 13:05:30	ARI 5 ppb (NO 0.05)
BLD0668-MS1	0.6552	PPB	x del	01 May 2023 13:07:49	ARI 5 ppb (NO 0.05)
23D0297-01	0.1601	PPB		01 May 2023 13:10:08	ARI 5 ppb (NO 0.05)
23D0297-02	0.0801	PPB		01 May 2023 13:12:27	ARI 5 ppb (NO 0.05)
23D0297-03	0.1859	PPB		01 May 2023 13:14:47	ARI 5 ppb (NO 0.05)
23D0297-04	0.2936	PPB		01 May 2023 13:17:06	ARI 5 ppb (NO 0.05)
23D0297-05	0.0732	PPB		01 May 2023 13:19:26	ARI 5 ppb (NO 0.05)
SEQ-CCV	102.4% 4.0960	PPB	✓	01 May 2023 13:21:47	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0186	PPB	✓	01 May 2023 13:24:05	ARI 5 ppb (NO 0.05)
23D0297-06	0.0398	PPB		01 May 2023 13:26:26	ARI 5 ppb (NO 0.05)
23D0297-07	0.0703	PPB		01 May 2023 13:28:47	ARI 5 ppb (NO 0.05)
23D0297-08	0.0831	PPB		01 May 2023 13:31:07	ARI 5 ppb (NO 0.05)
23D0303-01	0.3177	PPB		01 May 2023 13:33:26	ARI 5 ppb (NO 0.05)
23D0303-02	0.1133	PPB		01 May 2023 13:35:45	ARI 5 ppb (NO 0.05)
23D0383-01	0.6445	PPB		01 May 2023 13:38:04	ARI 5 ppb (NO 0.05)
23D0384-01	0.5203	PPB		01 May 2023 13:40:23	ARI 5 ppb (NO 0.05)
23D0421-01	0.2459	PPB		01 May 2023 13:42:42	ARI 5 ppb (NO 0.05)
23D0437-01	0.1558	PPB		01 May 2023 13:45:01	ARI 5 ppb (NO 0.05)
23D0437-02	0.1899	PPB		01 May 2023 13:47:20	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.7% 4.0674	PPB	✓	01 May 2023 13:49:40	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0209	PPB	✓	01 May 2023 13:51:58	ARI 5 ppb (NO 0.05)
23D0544-01	0.0877	PPB		01 May 2023 13:54:20	ARI 5 ppb (NO 0.05)
23D0544-02	0.0209	PPB		01 May 2023 13:56:40	ARI 5 ppb (NO 0.05)
23D0579-01	0.0805	PPB		01 May 2023 13:59:01	ARI 5 ppb (NO 0.05)
BLD0668-MS1	0.8611	PPB	✓	01 May 2023 14:01:22	ARI 5 ppb (NO 0.05)
BLD0688-BLK1	-0.0117	PPB		01 May 2023 14:03:42	ARI 5 ppb (NO 0.05)
BLD0688-BS1	1.7632	PPB	✓	01 May 2023 14:06:01	ARI 5 ppb (NO 0.05)
23D0394-01	0.3509	PPB		01 May 2023 14:08:21	ARI 5 ppb (NO 0.05)
BLD0688-DUP1	0.2577	PPB		01 May 2023 14:10:40	ARI 5 ppb (NO 0.05)
BLD0688-MS1	1.3034	PPB	✓	01 May 2023 14:13:00	ARI 5 ppb (NO 0.05)
BLD0688-MSD1	1.2637	PPB	✓	01 May 2023 14:15:19	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.2% 4.0078	PPB	✓	01 May 2023 14:17:38	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0184	PPB	✓	01 May 2023 14:19:56	ARI 5 ppb (NO 0.05)
23D0037-02	0.3471	PPB		01 May 2023 14:22:18	ARI 5 ppb (NO 0.05)
23D0037-04	0.3311	PPB		01 May 2023 14:24:37	ARI 5 ppb (NO 0.05)
23D0136-01	0.6340	PPB		01 May 2023 14:26:58	ARI 5 ppb (NO 0.05)
23D0136-03	0.4205	PPB		01 May 2023 14:29:17	ARI 5 ppb (NO 0.05)
23D0394-02	0.0943	PPB		01 May 2023 14:31:38	ARI 5 ppb (NO 0.05)
23D0394-04	0.1059	PPB		01 May 2023 14:33:58	ARI 5 ppb (NO 0.05)
23D0394-06	0.0143	PPB		01 May 2023 14:36:20	ARI 5 ppb (NO 0.05)
23D0394-08	0.2875	PPB		01 May 2023 14:38:39	ARI 5 ppb (NO 0.05)
23D0394-11	0.8730	PPB		01 May 2023 14:40:58	ARI 5 ppb (NO 0.05)

ARI 5 ppb (NO 0.05)



Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
SEQ-CAL1 - Blank	0.000	-0.018	-0.018	-5	3.399	-9	-1	-7		
SEQ-CAL2 - 0.1 PPB	0.100	0.093	-0.007	628	0.2 %	629	629	627		
SEQ-CAL3 - 0.5 PPB	0.500	0.494	-0.006	2921	0.5 %	2903	2929	2933		
SEQ-CAL4 - 1.0 PPB	1.000	1.008	0.008	5859	1.5 %	5735	5938	5906		
SEQ-CAL5 - 2.0 PPB	2.000	2.039	0.039	11755	1.0 %	11615	11914	11738		
SEQ-CAL6 - 5.0 PPB	5.000	4.983	-0.017	28597	1.1 %	29018	28454	28319		

Mercury Analysis Log

Analyst: ML
Instrument: HYDRA

Date: 05/01/23
Page: 1 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
SEQ -CAL1	3mm	1X		
-CAL2				
-CAL3				
-CAL4				
-CAL5				
-CAL6				
-ICV			✓4.07	
-ICB			✓-0.018	
-CRL			✓0.973	
-CCV			✓4.09	
-CCB			✓-0.018	
-CCV			✓4.02	
-CCB			✓-0.019	
-CCV			✓4.06	
-CCB			✓-0.017	
BLD0668 -BLK1				
-LCS1			✓1.774	88.7%R
23D0420 -01				
BLD0668 -DUP1				RPD = 1.01
-MS1			x 0.655	58.6%R ; DL1
23D0297 -01				
-02				
-03				
-04				
-05				
SEQ -CCV			✓4.09	
-CCB			✓-0.018	
23D0297 -06				
-07				
-08				

Chemical/Reagent ID:
10% $SnCl_2$: L4336

14% NH_2OH/NaCl: L4334

Standard ID:
Standard: L4785-L4790

ICV/CCV: L4782

Mercury Analysis Log

Analyst: — Date: —

Instrument: — Page: 2 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
23D0303 -01				
↓ -02				
23D0383 -01				
23D0384 -01				
23D0421 -01				
23D0437 -01				
↓ -02				
SEQ -CCV			✓4.06	
↓ -CCB			✓-0.02	
23D0544 -01				
↓ -02				
23D0579 -01				
BLD0668 -MS1			✓0.861	79.2 %R
BLD0688 -BLK1				
↓ -BS1			✓1.763	88.1 %R
23D0394 -01				
BLD0688 -DUP1				NO RPD
↓ -MS1			✓1.303	95.2 %R
↓ -MSD1			✓1.263	91.2 %R
SEQ -CCV			✓4.00	
↓ -CCB			✓-0.018	
23D0037 -02				
↓ -04				
23D0136 -01				
↓ -03				
23D0394 -02				
↓ -04				
↓ -06				
↓ -08				
↓ -11				

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID: — ICV/CCV: —

Standard: —

Mercury Analysis Log

Analyst: — Date: —

Instrument: — Page: 3 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
↓ -12				
SEQ -CCV			✓3.85	
↓ -CCB			✓-0.02	
23D0396 -01				
↓ -03				
SEQ -CCV			✓3.92	
↓ -CCB	↓	↓	✓-0.02	

MJ 05/01/23

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID:

Standard: — ICV/CCV: —

SMM 05-01-23 GE00003 SLE0012

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 01 May 2023 10:50:09

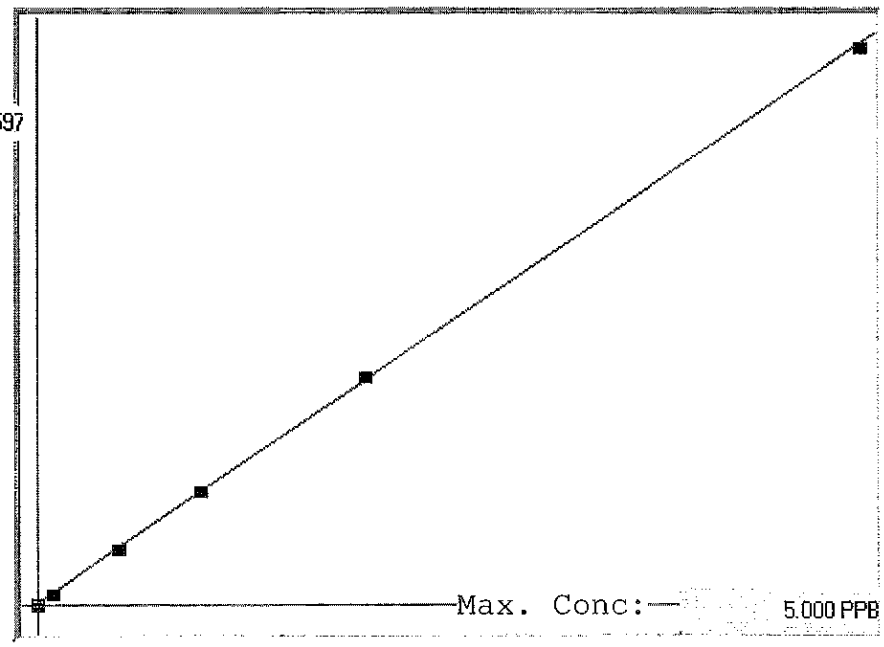
Sample ID	Mean	Units		Date	Method
SEQ-CAL1	-6	PPB		01 May 2023 10:51:23	ARI 5 ppb (NO 0.05)
SEQ-CAL2	628	PPB		01 May 2023 10:53:44	ARI 5 ppb (NO 0.05)
SEQ-CAL3	2922	PPB		01 May 2023 10:56:05	ARI 5 ppb (NO 0.05)
SEQ-CAL4	5860	PPB		01 May 2023 10:58:26	ARI 5 ppb (NO 0.05)
SEQ-CAL5	11756	PPB		01 May 2023 11:00:46	ARI 5 ppb (NO 0.05)
SEQ-CAL6	28597	PPB		01 May 2023 11:03:06	ARI 5 ppb (NO 0.05)
SEQ-ICV	101.8% 4.0705	PPB	✓	01 May 2023 11:30:14	ARI 5 ppb (NO 0.05)
SEQ-ICB	-0.0184	PPB	✓	01 May 2023 11:32:33	ARI 5 ppb (NO 0.05)
SEQ-CRL	93.7% 0.0937	PPB	✓	01 May 2023 11:34:55	ARI 5 ppb (NO 0.05)
SEQ-CCV	102.3% 4.0916	PPB	✓	01 May 2023 11:37:16	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0184	PPB	✓	01 May 2023 11:39:34	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.6% 4.0257	PPB	✓	01 May 2023 11:41:56	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0198	PPB	✓	01 May 2023 11:44:15	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.5% 4.0604	PPB	✓	01 May 2023 12:53:53	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0176	PPB	✓	01 May 2023 12:56:11	ARI 5 ppb (NO 0.05)
BLD0668-BLK1	-0.0112	PPB		01 May 2023 12:58:33	ARI 5 ppb (NO 0.05)
BLD0668-BS1	1.7744	PPB	✓	01 May 2023 13:00:52	ARI 5 ppb (NO 0.05)
23D0420-01	0.0689	PPB		01 May 2023 13:03:11	ARI 5 ppb (NO 0.05)
BLD0668-DUP1	0.0696	PPB		01 May 2023 13:05:30	ARI 5 ppb (NO 0.05)
BLD0668-MS1	0.6552	PPB	✗ del	01 May 2023 13:07:49	ARI 5 ppb (NO 0.05)
23D0297-01	0.1601	PPB		01 May 2023 13:10:08	ARI 5 ppb (NO 0.05)
23D0297-02	0.0801	PPB		01 May 2023 13:12:27	ARI 5 ppb (NO 0.05)
23D0297-03	0.1859	PPB		01 May 2023 13:14:47	ARI 5 ppb (NO 0.05)
23D0297-04	0.2936	PPB		01 May 2023 13:17:06	ARI 5 ppb (NO 0.05)
23D0297-05	0.0732	PPB		01 May 2023 13:19:26	ARI 5 ppb (NO 0.05)
SEQ-CCV	102.4% 4.0960	PPB	✓	01 May 2023 13:21:47	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0186	PPB	✓	01 May 2023 13:24:05	ARI 5 ppb (NO 0.05)
23D0297-06	0.0398	PPB		01 May 2023 13:26:26	ARI 5 ppb (NO 0.05)
23D0297-07	0.0703	PPB		01 May 2023 13:28:47	ARI 5 ppb (NO 0.05)
23D0297-08	0.0831	PPB		01 May 2023 13:31:07	ARI 5 ppb (NO 0.05)
23D0303-01	0.3177	PPB		01 May 2023 13:33:26	ARI 5 ppb (NO 0.05)
23D0303-02	0.1133	PPB		01 May 2023 13:35:45	ARI 5 ppb (NO 0.05)
23D0383-01	0.6445	PPB		01 May 2023 13:38:04	ARI 5 ppb (NO 0.05)
23D0384-01	0.5203	PPB		01 May 2023 13:40:23	ARI 5 ppb (NO 0.05)
23D0421-01	0.2459	PPB		01 May 2023 13:42:42	ARI 5 ppb (NO 0.05)
23D0437-01	0.1558	PPB		01 May 2023 13:45:01	ARI 5 ppb (NO 0.05)
23D0437-02	0.1899	PPB		01 May 2023 13:47:20	ARI 5 ppb (NO 0.05)
SEQ-CCV	101.7% 4.0674	PPB	✓	01 May 2023 13:49:40	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0209	PPB	✓	01 May 2023 13:51:58	ARI 5 ppb (NO 0.05)
23D0544-01	0.0877	PPB		01 May 2023 13:54:20	ARI 5 ppb (NO 0.05)
23D0544-02	0.0209	PPB		01 May 2023 13:56:40	ARI 5 ppb (NO 0.05)
23D0579-01	0.0805	PPB		01 May 2023 13:59:01	ARI 5 ppb (NO 0.05)
BLD0668-MS1	0.8611	PPB	✓	01 May 2023 14:01:22	ARI 5 ppb (NO 0.05)
BLD0688-BLK1	-0.0117	PPB		01 May 2023 14:03:42	ARI 5 ppb (NO 0.05)
BLD0688-BS1	1.7632	PPB	✓	01 May 2023 14:06:01	ARI 5 ppb (NO 0.05)
23D0394-01	0.3509	PPB		01 May 2023 14:08:21	ARI 5 ppb (NO 0.05)
BLD0688-DUP1	0.2577	PPB		01 May 2023 14:10:40	ARI 5 ppb (NO 0.05)
BLD0688-MS1	1.3034	PPB	✓	01 May 2023 14:13:00	ARI 5 ppb (NO 0.05)
BLD0688-MSD1	1.2637	PPB	✓	01 May 2023 14:15:19	ARI 5 ppb (NO 0.05)
SEQ-CCV	100.2% 4.0078	PPB	✓	01 May 2023 14:17:38	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0184	PPB	✓	01 May 2023 14:19:56	ARI 5 ppb (NO 0.05)
23D0037-02	0.3471	PPB		01 May 2023 14:22:18	ARI 5 ppb (NO 0.05)
23D0037-04	0.3311	PPB		01 May 2023 14:24:37	ARI 5 ppb (NO 0.05)
23D0136-01	0.6340	PPB		01 May 2023 14:26:58	ARI 5 ppb (NO 0.05)
23D0136-03	0.4205	PPB		01 May 2023 14:29:17	ARI 5 ppb (NO 0.05)
23D0394-02	0.0943	PPB		01 May 2023 14:31:38	ARI 5 ppb (NO 0.05)
23D0394-04	0.1059	PPB		01 May 2023 14:33:58	ARI 5 ppb (NO 0.05)
23D0394-06	0.0143	PPB		01 May 2023 14:36:20	ARI 5 ppb (NO 0.05)
23D0394-08	0.2875	PPB		01 May 2023 14:38:39	ARI 5 ppb (NO 0.05)
23D0394-11	0.8730	PPB		01 May 2023 14:40:58	ARI 5 ppb (NO 0.05)

SMM 05-01-23

Method: ARI 5 ppb (NO 0.05) Operator: Admin Date of Analysis: 01 May 2023 10:50:09

Sample ID	Mean	Units		Date	Method
23D0394-12	0.1077	PPB		01 May 2023 14:43:18	ARI 5 ppb (NO 0.05)
SEQ-CCV	96.4% 3.8556	PPB	✓	01 May 2023 14:45:37	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0205	PPB	✓	01 May 2023 14:47:56	ARI 5 ppb (NO 0.05)
23D0396-01	0.4693	PPB		01 May 2023 14:50:18	ARI 5 ppb (NO 0.05)
23D0396-03	0.3397	PPB		01 May 2023 14:52:38	ARI 5 ppb (NO 0.05)
SEQ-CCV	98.1% 3.9221	PPB	✓	01 May 2023 14:54:57	ARI 5 ppb (NO 0.05)
SEQ-CCB	-0.0201	PPB	✓	01 May 2023 14:57:16	ARI 5 ppb (NO 0.05)

ARI 5 ppb (NO 0.05)



A= 0.0000e+000

B= 1.7483e-004

C= -1.6511e-002

Rho= 0.9999378

Accept=Accepted

Accepted Date=

05/01/23 11:29

Std ID	Conc.	Calc.	Dev.	Mean	SD or %RSD	Rep 1	Rep 2	Rep 3	Rep 4	Rep 5
SEQ-CAL1 - Blank	0.000	-0.018	-0.018	-5	3.399	-9	-1	-7		
SEQ-CAL2 - 0.1 PPB	0.100	0.093	-0.007	628	0.2 %	629	629	627		
SEQ-CAL3 - 0.5 PPB	0.500	0.494	-0.006	2921	0.5 %	2903	2929	2933		
SEQ-CAL4 - 1.0 PPB	1.000	1.008	0.008	5859	1.5 %	5735	5938	5906		
SEQ-CAL5 - 2.0 PPB	2.000	2.039	0.039	11755	1.0 %	11615	11914	11738		
SEQ-CAL6 - 5.0 PPB	5.000	4.983	-0.017	28597	1.1 %	29018	28454	28319		

Mercury Analysis Log

Analyst: ML
Instrument: HYDRA
Date: 05/01/23
Page: 1 of 3

ARI Sample ID		Prep Code	Dilution	QC Data (ppb)	Comments
SEQ	-CAL1	3mm	1X		
	-CAL2				
	-CAL3				
	-CAL4				
	-CAL5				
	-CAL6				
	-ICV			✓4.07	
	-ICB			✓-0.018	
	-CRL			✓0.93	
	-CCV			✓4.09	
	-CCB			✓-0.018	
	-CCV			✓4.07	
	-CCB			✓-0.019	
	-CCV			✓4.06	
↓	-CCB			✓-0.017	
23D0668	-BLK1				
↓	-LCS1			✓1.774	80.7 %R
23D0420	-01				
23D0668	-DUP1				RPD = 1.01
↓	-MS1			✗0.655	58.6 %R ; DL1
23D0297	-01				
	-02				
	-03				
	-04				
↓	-05				
SEQ	-CCV			✓4.09	
↓	-CCB			✓-0.018	
23D0297	-06				
	-07				
↓	-08				

Chemical/Reagent ID:
10% $SnCl_2$: L4336
14% NH_2OH/NaCl: L4337

Standard ID:
Standard: L4785-L4790
ICV/CCV: L4782

Mercury Analysis Log

Analyst: — Date: —

Instrument: — Page: 2 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
23D0303 -01				
↓ -02				
23D0383 -01				
23D0384 -01				
23D0421 -01				
23D0437 -01				
↓ -02				
SEQ -CCV			√4.06	
↓ -CCB			√-0.02	
23D0544 -01				
↓ -02				
23D0579 -01				
BLD0668 -MS1			√0.861	79.2 %R
BLD0688 -BK1				
↓ -BS1			√1.763	88.1 %R
23D0394 -01				
BLD0688 -DUP1				NO RPD
↓ -MS1			√1.303	95.2 %R
↓ -MSD1			√1.263	91.2 %R
SEQ -CCV			√4.00	
↓ -CCB			√-0.018	
23D0037 -02				
↓ -04				
23D0136 -01				
↓ -03				
23D0394 -02				
-04				
-06				
-08				
-11				

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID: —

Standard: — ICV/CCV: —

Mercury Analysis Log

Analyst: — Date: —

Instrument: — Page: 3 of 3

ARI Sample ID	Prep Code	Dilution	QC Data (ppb)	Comments
↓ -12				
SEQ -CCV			✓3.85	
↓ -CCB			✓-0.02	
23D0396 -01				
↓ -03				
SEQ -CCV			✓3.92	
↓ -CCB	↓	↓	✓-0.02	

MH 05/01/23

Chemical/Reagent ID:

10% $SnCl_2$: — 14% NH_2OH/NaCl: —

Standard ID:

Standard: — ICV/CCV: —

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GE00003
Control Limt: +/- 20.00%
Sequence: SLE0012

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0012-ICV1	Mercury	0.0040000	0.00407	102	mg/L	EPA 7471B
SLE0012-CCV1	Mercury	0.0040000	0.00409	102	mg/L	EPA 7471B
SLE0012-CCV2	Mercury	0.0040000	0.00403	101	mg/L	EPA 7471B
SLE0012-CCV3	Mercury	0.0040000	0.00406	102	mg/L	EPA 7471B
SLE0012-CCV4	Mercury	0.0040000	0.00410	102	mg/L	EPA 7471B
SLE0012-CCV5	Mercury	0.0040000	0.00407	102	mg/L	EPA 7471B
SLE0012-CCV6	Mercury	0.0040000	0.00401	100	mg/L	EPA 7471B
SLE0012-CCV7	Mercury	0.0040000	0.00386	96.4	mg/L	EPA 7471B
SLE0012-CCV8	Mercury	0.0040000	0.00392	98.1	mg/L	EPA 7471B

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 7471B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: HYDRA
Sequence: SLE0012

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00003
Date Analyzed: 05/01/23 11:32

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0012-ICB1	Mercury	-0.000018	0.000021	0.000100	mg/L	
SLE0012-CCB1	Mercury	-0.000018	0.000021	0.000100	mg/L	
SLE0012-CCB2	Mercury	-0.000020	0.000021	0.000100	mg/L	
SLE0012-CCB3	Mercury	-0.000018	0.000021	0.000100	mg/L	
SLE0012-CCB4	Mercury	-0.000019	0.000021	0.000100	mg/L	
SLE0012-CCB5	Mercury	-0.000021	0.000021	0.000100	mg/L	
SLE0012-CCB6	Mercury	-0.000018	0.000021	0.000100	mg/L	
SLE0012-CCB7	Mercury	-0.000021	0.000021	0.000100	mg/L	
SLE0012-CCB8	Mercury	-0.000020	0.000021	0.000100	mg/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0012
Instrument: HYDRA
Calibration: GE00003

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SLE0012-CAL1	SMM 05-01-23-001	NA	05/01/23 10:51
Cal Standard	SLE0012-CAL2	SMM 05-01-23-002	NA	05/01/23 10:53
Cal Standard	SLE0012-CAL3	SMM 05-01-23-003	NA	05/01/23 10:56
Cal Standard	SLE0012-CAL4	SMM 05-01-23-004	NA	05/01/23 10:58
Cal Standard	SLE0012-CAL5	SMM 05-01-23-005	NA	05/01/23 11:00
Cal Standard	SLE0012-CAL6	SMM 05-01-23-006	NA	05/01/23 11:03
Initial Cal Check	SLE0012-ICV1	SMM 05-01-23-007	NA	05/01/23 11:30
Initial Cal Blank	SLE0012-ICB1	SMM 05-01-23-008	NA	05/01/23 11:32
Instrument RL Check	SLE0012-CRL1	SMM 05-01-23-009	NA	05/01/23 11:34
Calibration Check	SLE0012-CCV1	SMM 05-01-23-010	NA	05/01/23 11:37
Calibration Blank	SLE0012-CCB1	SMM 05-01-23-011	NA	05/01/23 11:39
Calibration Check	SLE0012-CCV2	SMM 05-01-23-012	NA	05/01/23 11:41
Calibration Blank	SLE0012-CCB2	SMM 05-01-23-013	NA	05/01/23 11:44
Calibration Check	SLE0012-CCV3	SMM 05-01-23-014	NA	05/01/23 12:53
Calibration Blank	SLE0012-CCB3	SMM 05-01-23-015	NA	05/01/23 12:56
Calibration Check	SLE0012-CCV4	SMM 05-01-23-026	NA	05/01/23 13:21
Calibration Blank	SLE0012-CCB4	SMM 05-01-23-027	NA	05/01/23 13:24
Calibration Check	SLE0012-CCV5	SMM 05-01-23-038	NA	05/01/23 13:49
Calibration Blank	SLE0012-CCB5	SMM 05-01-23-039	NA	05/01/23 13:51
Blank	BLD0688-BLK1	SMM 05-01-23-044	Solid	05/01/23 14:03
LCS	BLD0688-BS1	SMM 05-01-23-045	Solid	05/01/23 14:06
Calibration Check	SLE0012-CCV6	SMM 05-01-23-050	NA	05/01/23 14:17
Calibration Blank	SLE0012-CCB6	SMM 05-01-23-051	NA	05/01/23 14:19
Calibration Check	SLE0012-CCV7	SMM 05-01-23-062	NA	05/01/23 14:45
Calibration Blank	SLE0012-CCB7	SMM 05-01-23-063	NA	05/01/23 14:47
LDW23-SS1801	23D0396-01	SMM 05-01-23-064	Solid	05/01/23 14:50
LDW23-SS1802	23D0396-03	SMM 05-01-23-065	Solid	05/01/23 14:52
Calibration Check	SLE0012-CCV8	SMM 05-01-23-066	NA	05/01/23 14:54
Calibration Blank	SLE0012-CCB8	SMM 05-01-23-067	NA	05/01/23 14:57

DETECTION LEVEL STANDARD
EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: HYDRA
Calibration: GE00003
Sequence: SLE0012
Lab Sample ID: SLE0012-CRL1

Analyte	True	Found	%R	Units	QC Limts
Mercury	0.000100	0.000094	93.7	mg/L	70 - 130

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	04/27/23 15:14	15	28	05/01/23 14:50	19	28	
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	04/27/23 15:14	15	28	05/01/23 14:52	19	28	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 7471B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: HYDRA

Analyte	MDL	RL	Units
Mercury	0.00525	0.0250	mg/kg

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Refine your results. Redefine your industry.

Certificate of Analysis

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Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGHG1
Lot Number:	S2-HG711246
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Mercury
Starting Material:	Hg Metal
Starting Material Lot#:	1959
Starting Material Purity:	99.9993%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 1000 ± 3 µg/mL

Density: 1.026 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **1004 ± 6 µg/mL**
ICP Assay NIST SRM 3133 Lot Number: 160921

Assay Method #2 **998 ± 3 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **1001 ± 3 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000210	M	Eu	<	0.000210	O	Na		0.000626	M	Se	<	0.008100	M	Zn	<	0.000810
M	Al		0.000161	O	Fe	<	0.001600	M	Nb	<	0.000410	O	Si		0.000626	M	Zr	<	0.000410
M	As	<	0.002500	M	Ga	<	0.000210	M	Nd	<	0.000210	M	Sm	<	0.000210				
O	Au	<	0.001700	M	Gd	<	0.000210	O	Ni	<	0.001400	M	Sn	<	0.000410				
M	B	<	0.008500	M	Ge	<	0.000410	M	Os	<	0.003900	O	Sr	<	0.000110				
M	Ba	<	0.000210	M	Hf	<	0.000210	O	P	<	0.029000	M	Ta	<	0.000210				
O	Be	<	0.000110	s	Hg	<		M	Pb	<	0.000210	M	Tb	<	0.000210				
M	Bi	<	0.001100	M	Ho	<	0.000210	M	Pd	<	0.003500	M	Te	<	0.005700				
O	Ca		0.004754	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	O	Ti	<	0.000430				
M	Ce	<	0.000210	O	K		0.000731	M	Rb	<	0.000210	O	Tl	<	0.005400				
M	Co	<	0.000210	M	La	<	0.000210	M	Re	<	0.000210	M	Tm	<	0.000210				
O	Cr	<	0.003300	O	Li	<	0.000110	M	Rh	<	0.001100	M	U	<	0.000410				
M	Cs	<	0.000410	M	Lu	<	0.000210	M	Ru	<	0.000810	M	V	<	0.000210				
M	Cu	<	0.000810	O	Mg		0.000104	O	S	<	0.022000	M	W	<	0.001100				
M	Dy	<	0.000210	O	Mn	<	0.000430	M	Sb	<	0.000210	M	Y	<	0.000210				
M	Er	<	0.000210	M	Mo	<	0.000210	M	Sc	<	0.000210	M	Yb	<	0.000210				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 200.59 +2 4 Hg(OH)(aq) 1+
Chemical Compatibility - Stable in HNO3. Avoid basic media forming insoluble carbonate. The sulfide, basic carbonate, oxalate, phosphate, arsenite, arsenate and iodide are insoluble in water.
Stability - 2-100 ppb levels not stable in 1% HNO3 / LDPE container, stable in 10% HNO3 packaged in borosilicate glass. 1-100 ppm levels stable in 7% HNO3 packaged in borosilicate glass. 1000-10,000 ppm solutions are chemically stable for years in 5-10% HNO3 / LDPE container.
Hg Containing Samples (Preparation and Solution) - Metal (soluble in HNO3); Oxide (Soluble in HNO3); Ores and Organic based (The literature has more references to the preparation of Hg containing samples than any other element. Please consult the literature for your specific sample type, since such preparations are prone to error. Or e-mail our technical staff and we will contact you to discuss your particular sample preparation questions in further detail.).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 202 amu	9 ppt	n/a	186W16O
ICP-OES 184.950 nm	0.03 / 0.005 µg/mL	1	
ICP-OES 194.227 nm	0.03 / 0.005 µg/mL	1	V
ICP-OES 253.652 nm	0.1 / 0.03 µg/mL	1	Ta, Co, Th ,Rh , Fe, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 18, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 18, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
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Christiansburg, VA 24073 · USA
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	QCP-QCS-4
Lot Number:	R2-MEB695951
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	5 µg/mL ea: Mercury

Second Source: Whenever possible, this solution was manufactured from a second set of concentrates in our manufacturing facility.

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Mercury, Hg	**5.011 ± 0.023 µg/mL**		

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Hg	ICP Assay	3133	061204
Hg	EDTA	928	928
Hg	Calculated		See Sec. 4.2

The follow ing equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 20, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 20, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1801

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-01 D	SDG:	23D0396
Sampled:	04/12/23 09:56	Prepared:	04/17/23 15:18	File ID:	
% Solids:	48.05	Preparation:	No Prep Wet Chem	Analyzed:	04/17/23 15:20
Batch:	BLD0445	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	48.05	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1801

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-02 D	SDG:	23D0396
Sampled:	04/12/23 10:15	Prepared:	04/17/23 15:18	File ID:	
% Solids:	50.19	Preparation:	No Prep Wet Chem	Analyzed:	04/17/23 15:20
Batch:	BLD0445	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	50.19	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SS1802

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-03 D	SDG:	23D0396
Sampled:	04/12/23 15:03	Prepared:	04/17/23 15:18	File ID:	
% Solids:	47.50	Preparation:	No Prep Wet Chem	Analyzed:	04/17/23 15:20
Batch:	BLD0445	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	47.50	1	0.04	0.04	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
SM 2540 G-97

LDW23-SC1802

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-04 D	SDG:	23D0396
Sampled:	04/12/23 15:40	Prepared:	04/17/23 15:18	File ID:	
% Solids:	49.45	Preparation:	No Prep Wet Chem	Analyzed:	04/17/23 15:20
Batch:	BLD0445	Sequence:		Initial/Final:	5 g Wet / 5 g
Instrument:	BAL2			Calibration:	

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	49.45	1	0.04	0.04	

PREPARATION BATCH SUMMARY

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0445 Batch Matrix: Solid
Preparation: No Prep Wet Chem

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01		04/17/23 15:18	
LDW23-SC1801	23D0396-02		04/17/23 15:18	
LDW23-SS1802	23D0396-03		04/17/23 15:18	
LDW23-SC1802	23D0396-04		04/17/23 15:18	
Blank	BLD0445-BLK1		04/17/23 15:18	
LDW23-SS1801	BLD0445-DUP1		04/17/23 15:18	
LDW23-SS1801	BLD0445-DUP2		04/17/23 15:18	

TOTAL SOLIDS/VOLATILE SOLIDS (TS / TVS) BENCHSHEET for Solid samples

Method: PSEP 1986, SM2540, EPA 160.1

(dry at 104 (12-24 hr) then combust at 550 (30 min))

Batch:	BLD0445
Date:	4/17/2023 15:20
Analyst:	UW

Instrumentation

Drying Ovens:	12	**Analytical Balance:**	BAL2
Muffle Furnace:	2		

Batch drying time

record times as mm/dd/yy hh:mm

date/time in oven:	4/17/2023 15:33	
date/time out:	4/18/2023 9:30	
elapsed hrs =	18.0	OK

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

Oven Temps, °C	
Start Temp	105
Dry Cycle 1	102
Dry Cycle 2	
Dry Cycle 3	

TVS (mg/kg dry wt) calculated as:
Final ash wt (g) = (min ash wt - tare wt)
TVS (mg/kg) = [(Dry wt-Ash wt)/ (dry weight)] *1,000,000
if ash wt > dry wt, "Chk for Err"
if dry wt-ash wt < 0.001 g, "< (1/dry wt)*1,000,000

Balance Calibration Check

Record weights to 4 places

Cal Weight ID:		CV-02	CV-02	CV-02	CV-02	CV-02		CV-02	CV-02	CV-02	
Date & Time:		4/17/23 15:20	4/17/23 15:25	4/18/23 10:00							
Cal Wt (g):	10.0000	9.9999	9.9999	10.0000							
		Cal OK!	Cal OK!	Cal OK!							

Sample ID	Dish #	Tare Wt. (g)	Dish & Sample (g)	Dry Wt 104C (grams) 1	2	3	dry Wt (g)	TS (%)	Notes	ASH WT 550C (grams) 1	2	3	Ash Wt (g)	TVS (mg/kg)	TVS (%)	Notes
BLD0445-BLK1	46	0.8221	0.0000	0.8220			-0.0001	0.01%								
23D0357-01	47	0.8364	4.1473	1.5401			0.7037	21.25%								
23D0393-09	48	0.7919	6.1285	5.3751			4.5832	85.88%								
23D0396-01	49	0.7861	7.3163	3.9241			3.1380	48.05%								
BLD0445-DUP1	50	0.8326	8.2171	4.4042			3.5716	48.37%	RPD=0.6							
BLD0445-DUP2	51	0.7889	7.6960	4.1375			3.3486	48.48%	RSD=0.5							
23D0396-02	52	0.8364	7.4042	4.1327			3.2963	50.19%								
23D0396-03	53	0.7865	7.4981	3.9747			3.1882	47.50%								
23D0396-04	54	0.8217	6.0102	3.3874			2.5657	49.45%								

NOTE: Do not enter data in blue shaded cells as they are calculated fields. Green shaded cells MAY be altered if a rewigh is called for.

TOTAL SOLIDS (TS) BENCHSHEET for Solid samples

Method: Total Solids, Metals Correction

dry at 104°C (12-24 hr)

Batch:	BLD0746
Date:	4/28/2023 15:50
Analyst:	ml

Instrumentation

Drying Oven:	7	**Analytical Balance:**	10

Batch drying time

record times as mm/dd/yy hh:mm

date/time in oven:	4/27/2023 16:50	
date/time out:	4/28/2023 15:47	
elapsed hrs =	22.9	OK

Temp in: 104 °C

Temp out: 106 °C

TS (%) calculated as:
Final dry wt (g) = (Dry Wt - Tare Wt)
TS = (Final Dry Wt)/ (grams Sample-Tare)

Sample ID	Tare Weight (g)	Tare + Sample Weight (g)	Tare + Sample Dry Weight @ 104°C (g) 1	2	3	dry Wt (g)	TS (%)	Notes
23D0136-01	1.0050	10.0040	5.3750			4.3700	48.56%	
23D0136-03	1.0220	10.0560	5.4950			4.4730	49.51%	
23D0394-01	1.0160	10.0960	5.2190			4.2030	46.29%	
23D0394-02	1.0210	10.0190	7.5620			6.5410	72.69%	
23D0394-03	1.0200	10.0520	7.4960			6.4760	71.70%	
23D0394-04	1.0040	10.0360	7.5750			6.5710	72.75%	
23D0394-05	1.0230	10.0090	5.4400			4.4170	49.15%	
23D0394-06	1.0160	10.0650	9.2290			8.2130	90.76%	
23D0394-07	1.0080	10.0700	8.8200			7.8120	86.21%	
23D0394-08	1.0000	10.0720	7.9530			6.9530	76.64%	
23D0394-09	0.9850	10.0430	8.2160			7.2310	79.83%	
23D0394-10	1.0250	10.0890	8.0580			7.0330	77.59%	
23D0394-11	1.0030	10.0130	7.5760			6.5730	72.95%	
23D0394-12	0.9980	10.0480	7.9510			6.9530	76.83%	
23D0394-13	0.9850	10.0730	7.6270			6.6420	73.09%	
23D0396-01	1.0090	10.0260	5.3790			4.3700	48.46%	
23D0396-03	0.9860	10.0260	5.2990			4.3130	47.71%	
23D0420-01	1.0060	10.0250	9.8650			8.8590	98.23%	
23D0421-01	1.0210	10.0060	9.9270			8.9060	99.12%	

Form I

METHOD BLANK DATA SHEET

SM 2540 G-97

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0445
Laboratory ID: BLD0445-BLK1
Prepared: 04/17/23 15:18
Matrix: Solid
Preparation: No Prep Wet Chem
Analyzed: 04/17/23 15:20
Sequence:
Calibration:
Instrument: BAL2

CAS NO.	Analyte	Concentration (%)	Dilution Factor	MDL	MRL	Q
	Total Solids	ND	1	0.04	0.04	U

LDW23-SS1801

DUPLICATES

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0445-DUP1
Batch: BLD0445
Lab Source ID: 23D0396-01
Preparation: No Prep Wet Chem
Initial/Final: 5 g / 5 g
Source Sample Name: LDW23-SS1801
% Solids: 48.05

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	48.05	48.37	0.648	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

DUPLICATES

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLD0445-DUP2
Batch: BLD0445
Lab Source ID: 23D0396-01
Preparation: No Prep Wet Chem
Initial/Final: 5 g / 5 g
Source Sample Name: LDW23-SS1801
% Solids: 48.05

ANALYTE	CONTROL LIMIT	SAMPLE CONCENTRATION	DUPLICATE CONCENTRATION	RPD %	Q
Total Solids	20	48.05	48.48	0.884	

*: Values outside of QC limits
L: Analyte concentration is <=5 times the reporting limit and the replicate control limit defaults to Dup = +/- RL instead of 20% RPD

HOLDING TIME SUMMARY

Analysis: SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	04/17/23 15:18	5	28	04/17/23 15:20	5	28	
LDW23-SC1801 23D0396-02	04/12/23 10:15	04/12/23 16:32	04/17/23 15:18	5	28	04/17/23 15:20	5	28	
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	04/17/23 15:18	5	28	04/17/23 15:20	5	28	
LDW23-SC1802 23D0396-04	04/12/23 15:40	04/12/23 16:32	04/17/23 15:18	4	28	04/17/23 15:20	5	28	
Duplicate BLD0445-DUP1	04/12/23 09:56	04/12/23 16:32	04/17/23 15:18	5	28	04/17/23 15:20	5	28	
Duplicate BLD0445-DUP2	04/12/23 09:56	04/12/23 16:32	04/17/23 15:18	5	28	04/17/23 15:20	5	28	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

SM 2540 G-97

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument:

Analyte	MDL	RL	Units
Total Solids	0.04	0.04	%

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SS1801

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-01 C	SDG:	23D0396
Sampled:	04/12/23 09:56	Prepared:	04/28/23 15:38	File ID:	XDT_m1230511-127
% Solids:	48.05	Preparation:	SWN EPA 3050B	Analyzed:	05/11/23 22:44
Batch:	BLD0687	Sequence:	SLE0209	Initial/Final:	1.033 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00042

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	28.8	20	0.52	1.01	
7439-92-1	Lead	30.4	20	0.10	0.20	
7440-22-4	Silver	0.32	20	0.04	0.40	J

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B

Total Metals

LDW23-SS1802

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-03 C	SDG:	23D0396
Sampled:	04/12/23 15:03	Prepared:	04/28/23 15:38	File ID:	XDT_m1230511-128
% Solids:	47.50	Preparation:	SWN EPA 3050B	Analyzed:	05/11/23 22:48
Batch:	BLD0687	Sequence:	SLE0209	Initial/Final:	1.02 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00042

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium	28.9	20	0.54	1.03	
7439-92-1	Lead	28.8	20	0.11	0.21	
7440-22-4	Silver	0.28	20	0.05	0.41	J

PREPARATION BATCH SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0687 Batch Matrix: Solid
Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	XDT_m1230511-127	04/28/23 15:38	
LDW23-SS1802	23D0396-03	XDT_m1230511-128	04/28/23 15:38	
Blank	BLD0687-BLK1	XDT_m1230509a-069	04/28/23 15:38	
Blank	BLD0687-BLK2	XDT_m1230510A-031	04/28/23 15:38	Added 5/11/2023 by MCB
LCS	BLD0687-BS1	XDT_m1230509a-070	04/28/23 15:38	
LCS	BLD0687-BS2	XDT_m1230510A-033	04/28/23 15:38	Added 5/11/2023 by MCB

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: AR Date: 04/28/23 Time: 1016 - 1538 Balance ID: BAL10

Matrix: Soil Block ID: #16 Block Temp: 96C Thermometer: 20-4

ARI Sample ID	Btl #	pH<2	Prep Code: SWN Initial Wt (g) Vol (mL)	Prep Code: SWN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23D136-01	C		1.003	50			
-03			1.002				
23D394-01			1.018				
-02	B		1.051				
-03			1.058				
-04	C		1.065				
-05			1.012				
-06			1.074				
-07			1.019				
-08			1.039				
-09			1.018				
-10			1.036				
-11			1.033				
-12	B		1.008				
-13	C		1.087				
23D396-01			1.033				
-03			1.030				
BLD687-blk	—		—				23D394-01
-bs	—		—				
-dup	—		1.016				
-MS	—		1.019				
-MSD	—		1.014				
23D37-02	D		1.063				
-04			1.012				
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—

Chemical/Reagent ID:

HNO_3: L4188 1:1 HNO_3: L4206 HCl: — H_2O_2: K11056

Tube Lot#: 2210117 Boiling Chip Lot#: — (DoD Only)

Form I

METHOD BLANK DATA SHEET

EPA 6020B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23D0396

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

Batch: BLD0687 | Laboratory ID: BLD0687-BLK1 | Prepared: 04/28/23 15:38

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 05/09/23 21:43

Sequence: SLE0163 | Calibration: GE00034 | Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-47-3	Chromium-52	ND	20	0.26	0.50	U
7439-92-1	Lead-208	ND	20	0.05	0.10	U

Form I

METHOD BLANK DATA SHEET

EPA 6020B

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23D0396

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

Batch: BLD0687 | Laboratory ID: BLD0687-BLK2 | Prepared: 04/28/23 15:38

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 05/10/23 17:54

Sequence: SLE0204 | Calibration: GE00040 | Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-22-4	Silver-107	ND	20	0.02	0.20	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/09/23 21:48
Batch:	BLD0687	Laboratory ID:	BLD0687-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Chromium-52	25.0	25.6		102	80 - 120
Lead-208	25.0	27.6		110	80 - 120

* Indicates values outside of QC limits

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6020B

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/10/23 18:05
Batch:	BLD0687	Laboratory ID:	BLD0687-BS2
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Silver-107	25.0	25.1		101	80 - 120

* Indicates values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Control Limt: +/- 10.00%
Sequence: SLE0163

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0163-ICV1	Chromium-52	50.000	49.9	99.8	ug/L	EPA 6020B
	Chromium-53	50.000	51.3	103	ug/L	EPA 6020B
	Lead-208	50.000	51.5	103	ug/L	EPA 6020B
	Silver-107	50.000	51.7	103	ug/L	EPA 6020B
SLE0163-CCV1	Chromium-52	50.000	49.1	98.2	ug/L	EPA 6020B
	Chromium-53	50.000	51.6	103	ug/L	EPA 6020B
	Lead-208	50.000	50.2	100	ug/L	EPA 6020B
	Silver-107	50.000	50.0	100	ug/L	EPA 6020B
SLE0163-CCV2	Chromium-52	50.000	48.9	97.9	ug/L	EPA 6020B
	Chromium-53	50.000	51.0	102	ug/L	EPA 6020B
	Lead-208	50.000	51.6	103	ug/L	EPA 6020B
	Silver-107	50.000	47.4	94.7	ug/L	EPA 6020B
SLE0163-CCV3	Chromium-52	50.000	48.4	96.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
	Lead-208	50.000	53.8	108	ug/L	EPA 6020B
	Silver-107	50.000	45.0	90.0	ug/L	EPA 6020B
SLE0163-CCV4	Chromium-52	50.000	48.4	96.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
	Lead-208	50.000	52.1	104	ug/L	EPA 6020B
	Silver-107	50.000	45.3	90.7	ug/L	EPA 6020B
SLE0163-CCV5	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.5	ug/L	EPA 6020B
	Lead-208	50.000	53.1	106	ug/L	EPA 6020B
	Silver-107	50.000	45.2	90.4	ug/L	EPA 6020B
SLE0163-CCV6	Chromium-52	50.000	48.0	96.1	ug/L	EPA 6020B
	Chromium-53	50.000	50.3	101	ug/L	EPA 6020B
	Lead-208	50.000	53.0	106	ug/L	EPA 6020B
	Silver-107	50.000	47.0	94.1	ug/L	EPA 6020B
SLE0163-CCV7	Chromium-52	50.000	48.4	96.9	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B
	Lead-208	50.000	51.0	102	ug/L	EPA 6020B
SLE0163-CCV8	Chromium-52	50.000	48.7	97.5	ug/L	EPA 6020B
	Chromium-53	50.000	50.4	101	ug/L	EPA 6020B
	Lead-208	50.000	52.6	105	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Control Limt: +/- 10.00%
Sequence: SLE0163

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0163-CCV9	Chromium-52	50.000	49.4	98.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
	Lead-208	50.000	52.4	105	ug/L	EPA 6020B
SLE0163-CCVA	Chromium-52	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-53	50.000	50.6	101	ug/L	EPA 6020B
	Lead-208	50.000	51.3	103	ug/L	EPA 6020B
SLE0163-CCVB	Chromium-52	50.000	49.1	98.3	ug/L	EPA 6020B
	Chromium-53	50.000	51.1	102	ug/L	EPA 6020B
	Lead-208	50.000	52.3	105	ug/L	EPA 6020B
SLE0163-CCVC	Chromium-52	50.000	48.3	96.6	ug/L	EPA 6020B
	Chromium-53	50.000	49.9	99.7	ug/L	EPA 6020B
	Lead-208	50.000	56.3	113	ug/L	EPA 6020B
SLE0163-CCVD	Chromium-52	50.000	48.0	96.0	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
	Lead-208	50.000	53.8	108	ug/L	EPA 6020B
SLE0163-CCVE	Chromium-52	50.000	48.6	97.3	ug/L	EPA 6020B
	Chromium-53	50.000	50.2	100	ug/L	EPA 6020B
	Lead-208	50.000	54.9	110	ug/L	EPA 6020B
SLE0163-CCVF	Chromium-52	50.000	48.7	97.4	ug/L	EPA 6020B
	Chromium-53	50.000	51.0	102	ug/L	EPA 6020B
	Lead-208	50.000	54.3	109	ug/L	EPA 6020B

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Control Limt: +/- 10.00%
Sequence: SLE0204

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0204-ICV1	Chromium-52	50.000	52.9	106	ug/L	EPA 6020B
	Chromium-53	50.000	51.3	103	ug/L	EPA 6020B
	Lead-208	50.000	52.6	105	ug/L	EPA 6020B
	Silver-107	50.000	50.8	102	ug/L	EPA 6020B
SLE0204-CCV1	Chromium-52	50.000	51.5	103	ug/L	EPA 6020B
	Chromium-53	50.000	50.5	101	ug/L	EPA 6020B
	Lead-208	50.000	50.3	101	ug/L	EPA 6020B
	Silver-107	50.000	50.1	100	ug/L	EPA 6020B
SLE0204-CCV2	Chromium-52	50.000	49.6	99.2	ug/L	EPA 6020B
	Chromium-53	50.000	49.3	98.6	ug/L	EPA 6020B
	Lead-208	50.000	50.8	102	ug/L	EPA 6020B
	Silver-107	50.000	48.8	97.6	ug/L	EPA 6020B
SLE0204-CCV3	Chromium-52	50.000	50.1	100	ug/L	EPA 6020B
	Chromium-53	50.000	49.4	98.7	ug/L	EPA 6020B
	Lead-208	50.000	50.4	101	ug/L	EPA 6020B
	Silver-107	50.000	49.2	98.5	ug/L	EPA 6020B
SLE0204-CCV4	Chromium-52	50.000	50.6	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.0	ug/L	EPA 6020B
	Lead-208	50.000	51.7	103	ug/L	EPA 6020B
	Silver-107	50.000	49.8	99.6	ug/L	EPA 6020B
SLE0204-CCV5	Chromium-52	50.000	51.1	102	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	98.9	ug/L	EPA 6020B
	Lead-208	50.000	52.8	106	ug/L	EPA 6020B
	Silver-107	50.000	48.1	96.2	ug/L	EPA 6020B
SLE0204-CCV6	Chromium-52	50.000	49.2	98.3	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
	Lead-208	50.000	49.6	99.2	ug/L	EPA 6020B
	Silver-107	50.000	47.6	95.1	ug/L	EPA 6020B
SLE0204-CCV7	Chromium-52	50.000	49.7	99.4	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.8	ug/L	EPA 6020B
	Lead-208	50.000	50.5	101	ug/L	EPA 6020B
	Silver-107	50.000	48.6	97.2	ug/L	EPA 6020B
SLE0204-CCV8	Chromium-52	50.000	50.7	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.7	99.4	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Control Limt: +/- 10.00%
Sequence: SLE0204

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0204-CCV8	Lead-208	50.000	50.1	100	ug/L	EPA 6020B
	Silver-107	50.000	49.5	99.1	ug/L	EPA 6020B
SLE0204-CCV9	Chromium-52	50.000	49.4	98.8	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.8	ug/L	EPA 6020B
	Lead-208	50.000	52.2	104	ug/L	EPA 6020B
	Silver-107	50.000	48.8	97.6	ug/L	EPA 6020B
SLE0204-CCVA	Chromium-52	50.000	50.2	100	ug/L	EPA 6020B
	Chromium-53	50.000	49.4	98.7	ug/L	EPA 6020B
	Lead-208	50.000	51.6	103	ug/L	EPA 6020B
	Silver-107	50.000	48.9	97.9	ug/L	EPA 6020B
SLE0204-CCVB	Chromium-52	50.000	50.3	101	ug/L	EPA 6020B
	Chromium-53	50.000	49.0	98.1	ug/L	EPA 6020B
	Lead-208	50.000	51.7	103	ug/L	EPA 6020B
	Silver-107	50.000	48.8	97.6	ug/L	EPA 6020B
SLE0204-CCVC	Chromium-52	50.000	49.0	98.0	ug/L	EPA 6020B
	Chromium-53	50.000	48.4	96.7	ug/L	EPA 6020B
	Lead-208	50.000	51.2	102	ug/L	EPA 6020B
	Silver-107	50.000	48.1	96.2	ug/L	EPA 6020B
SLE0204-CCVD	Chromium-52	50.000	49.9	99.8	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.8	ug/L	EPA 6020B
	Lead-208	50.000	53.3	107	ug/L	EPA 6020B
	Silver-107	50.000	46.0	92.1	ug/L	EPA 6020B
SLE0204-CCVE	Chromium-52	50.000	48.9	97.7	ug/L	EPA 6020B
	Chromium-53	50.000	48.1	96.3	ug/L	EPA 6020B
	Lead-208	50.000	54.9	110	ug/L	EPA 6020B
	Silver-107	50.000	46.3	92.6	ug/L	EPA 6020B
SLE0204-CCVF	Chromium-52	50.000	48.7	97.4	ug/L	EPA 6020B
	Chromium-53	50.000	47.7	95.4	ug/L	EPA 6020B
	Lead-208	50.000	55.3	111	ug/L	EPA 6020B
	Silver-107	50.000	45.7	91.5	ug/L	EPA 6020B
SLE0204-CCVG	Chromium-52	50.000	49.5	99.0	ug/L	EPA 6020B
	Chromium-53	50.000	48.8	97.5	ug/L	EPA 6020B
	Lead-208	50.000	55.0	110	ug/L	EPA 6020B
	Silver-107	50.000	46.7	93.3	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Control Limt: +/- 10.00%
Sequence: SLE0204

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0204-CCVH	Chromium-52	50.000	49.5	99.0	ug/L	EPA 6020B
	Chromium-53	50.000	48.3	96.7	ug/L	EPA 6020B
	Lead-208	50.000	55.5	111	ug/L	EPA 6020B
	Silver-107	50.000	46.7	93.4	ug/L	EPA 6020B
SLE0204-CCVI	Chromium-52	50.000	50.2	100	ug/L	EPA 6020B
	Chromium-53	50.000	48.3	96.6	ug/L	EPA 6020B
	Lead-208	50.000	54.3	109	ug/L	EPA 6020B
	Silver-107	50.000	46.8	93.5	ug/L	EPA 6020B
SLE0204-CCVJ	Chromium-52	50.000	49.8	99.7	ug/L	EPA 6020B
	Chromium-53	50.000	49.3	98.5	ug/L	EPA 6020B
	Lead-208	50.000	55.8	112	ug/L	EPA 6020B
	Silver-107	50.000	45.7	91.4	ug/L	EPA 6020B

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Control Limt: +/- 10.00%
Sequence: SLE0209

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0209-ICV1	Chromium-52	50.000	51.3	103	ug/L	EPA 6020B
	Chromium-53	50.000	51.2	102	ug/L	EPA 6020B
	Lead-208	50.000	51.4	103	ug/L	EPA 6020B
	Silver-107	50.000	51.0	102	ug/L	EPA 6020B
SLE0209-CCV1	Chromium-52	50.000	49.3	98.5	ug/L	EPA 6020B
	Chromium-53	50.000	48.7	97.4	ug/L	EPA 6020B
	Lead-208	50.000	49.4	98.9	ug/L	EPA 6020B
	Silver-107	50.000	50.0	100	ug/L	EPA 6020B
SLE0209-CCV2	Chromium-52	50.000	48.9	97.8	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.8	ug/L	EPA 6020B
	Lead-208	50.000	48.9	97.8	ug/L	EPA 6020B
	Silver-107	50.000	49.9	99.9	ug/L	EPA 6020B
SLE0209-CCV3	Chromium-52	50.000	48.7	97.4	ug/L	EPA 6020B
	Chromium-53	50.000	49.5	99.0	ug/L	EPA 6020B
	Lead-208	50.000	48.6	97.3	ug/L	EPA 6020B
	Silver-107	50.000	51.2	102	ug/L	EPA 6020B
SLE0209-CCV4	Chromium-52	50.000	48.9	97.7	ug/L	EPA 6020B
	Chromium-53	50.000	49.2	98.4	ug/L	EPA 6020B
	Lead-208	50.000	49.9	99.7	ug/L	EPA 6020B
	Silver-107	50.000	50.2	100	ug/L	EPA 6020B
SLE0209-CCV5	Lead-208	50.000	50.9	102	ug/L	EPA 6020B
SLE0209-CCV6	Lead-208	50.000	50.2	100	ug/L	EPA 6020B
SLE0209-CCV7	Chromium-52	50.000	46.9	93.7	ug/L	EPA 6020B
	Chromium-53	50.000	47.4	94.9	ug/L	EPA 6020B
	Lead-208	50.000	49.0	98.1	ug/L	EPA 6020B
	Silver-107	50.000	48.7	97.5	ug/L	EPA 6020B
SLE0209-CCV8	Chromium-52	50.000	48.0	96.1	ug/L	EPA 6020B
	Chromium-53	50.000	48.7	97.5	ug/L	EPA 6020B
	Lead-208	50.000	49.5	99.0	ug/L	EPA 6020B
	Silver-107	50.000	49.5	98.9	ug/L	EPA 6020B
SLE0209-CCVA	Chromium-52	50.000	47.9	95.8	ug/L	EPA 6020B
	Chromium-53	50.000	48.3	96.6	ug/L	EPA 6020B
	Lead-208	50.000	49.0	98.0	ug/L	EPA 6020B
	Silver-107	50.000	50.3	101	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Control Limt: +/- 10.00%
Sequence: SLE0209

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0209-CCVB	Chromium-52	50.000	47.8	95.6	ug/L	EPA 6020B
	Chromium-53	50.000	47.8	95.6	ug/L	EPA 6020B
	Lead-208	50.000	49.0	97.9	ug/L	EPA 6020B
	Silver-107	50.000	48.6	97.2	ug/L	EPA 6020B
SLE0209-CCVC	Chromium-52	50.000	48.9	97.7	ug/L	EPA 6020B
	Chromium-53	50.000	48.9	97.7	ug/L	EPA 6020B
	Lead-208	50.000	48.5	96.9	ug/L	EPA 6020B
	Silver-107	50.000	49.2	98.4	ug/L	EPA 6020B
SLE0209-CCVD	Chromium-52	50.000	47.5	95.1	ug/L	EPA 6020B
	Chromium-53	50.000	48.0	96.0	ug/L	EPA 6020B
	Lead-208	50.000	49.1	98.2	ug/L	EPA 6020B
	Silver-107	50.000	50.4	101	ug/L	EPA 6020B
SLE0209-CCVE	Chromium-52	50.000	48.6	97.2	ug/L	EPA 6020B
	Chromium-53	50.000	48.2	96.3	ug/L	EPA 6020B
	Lead-208	50.000	49.2	98.4	ug/L	EPA 6020B
	Silver-107	50.000	49.0	98.0	ug/L	EPA 6020B
SLE0209-CCVF	Chromium-52	50.000	48.5	97.0	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	97.0	ug/L	EPA 6020B
	Lead-208	50.000	49.2	98.4	ug/L	EPA 6020B
	Silver-107	50.000	50.3	101	ug/L	EPA 6020B
SLE0209-CCVG	Chromium-52	50.000	48.0	96.1	ug/L	EPA 6020B
	Chromium-53	50.000	48.1	96.3	ug/L	EPA 6020B
	Lead-208	50.000	49.5	98.9	ug/L	EPA 6020B
	Silver-107	50.000	48.9	97.8	ug/L	EPA 6020B
SLE0209-CCVH	Chromium-52	50.000	48.0	95.9	ug/L	EPA 6020B
	Chromium-53	50.000	47.9	95.8	ug/L	EPA 6020B
	Lead-208	50.000	50.7	101	ug/L	EPA 6020B
	Silver-107	50.000	49.5	99.1	ug/L	EPA 6020B
SLE0209-CCVI	Chromium-52	50.000	48.5	97.1	ug/L	EPA 6020B
	Chromium-53	50.000	48.1	96.1	ug/L	EPA 6020B
	Lead-208	50.000	50.7	101	ug/L	EPA 6020B
	Silver-107	50.000	48.7	97.4	ug/L	EPA 6020B
SLE0209-CCVJ	Chromium-52	50.000	48.2	96.4	ug/L	EPA 6020B
	Chromium-53	50.000	48.5	96.9	ug/L	EPA 6020B

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Control Limt: +/- 10.00%
Sequence: SLE0209

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0209-CCVJ	Lead-208	50.000	51.3	103	ug/L	EPA 6020B
	Silver-107	50.000	48.7	97.3	ug/L	EPA 6020B
SLE0209-CCVK	Chromium-52	50.000	47.3	94.7	ug/L	EPA 6020B
	Chromium-53	50.000	47.1	94.3	ug/L	EPA 6020B
	Lead-208	50.000	52.1	104	ug/L	EPA 6020B
	Silver-107	50.000	47.2	94.4	ug/L	EPA 6020B
SLE0209-CCVL	Chromium-52	50.000	46.5	92.9	ug/L	EPA 6020B
	Chromium-53	50.000	46.7	93.3	ug/L	EPA 6020B
	Lead-208	50.000	53.3	107	ug/L	EPA 6020B
	Silver-107	50.000	47.2	94.4	ug/L	EPA 6020B
SLE0209-CCVM	Chromium-52	50.000	46.3	92.7	ug/L	EPA 6020B
	Chromium-53	50.000	46.3	92.5	ug/L	EPA 6020B
	Lead-208	50.000	50.3	101	ug/L	EPA 6020B
	Silver-107	50.000	48.4	96.7	ug/L	EPA 6020B
SLE0209-CCVN	Chromium-52	50.000	43.3	86.6	ug/L	EPA 6020B
	Chromium-53	50.000	42.9	85.8	ug/L	EPA 6020B
	Lead-208	50.000	51.6	103	ug/L	EPA 6020B
	Silver-107	50.000	49.5	98.9	ug/L	EPA 6020B
SLE0209-CCVO	Chromium-52	50.000	43.1	86.1	ug/L	EPA 6020B
	Chromium-53	50.000	42.5	85.1	ug/L	EPA 6020B
	Lead-208	50.000	52.0	104	ug/L	EPA 6020B
	Silver-107	50.000	49.0	98.0	ug/L	EPA 6020B
SLE0209-CCVP	Chromium-52	50.000	43.1	86.3	ug/L	EPA 6020B
	Chromium-53	50.000	42.5	85.1	ug/L	EPA 6020B
	Lead-208	50.000	55.5	111	ug/L	EPA 6020B
	Silver-107	50.000	48.3	96.5	ug/L	EPA 6020B

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/09/23 15:55

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-IBL1	Chromium-52	0.00200	0.26	0.500	ug/L	
SLE0163-IBL1	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0163-IBL1	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0163-IBL1	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0163-ICB1	Chromium-52	-0.0120	0.26	0.500	ug/L	
SLE0163-ICB1	Chromium-53	-0.0200	0.239	0.500	ug/L	
SLE0163-ICB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0163-ICB1	Silver-107	0.00	0.022	0.200	ug/L	
SLE0163-CCB1	Chromium-52	0.00100	0.26	0.500	ug/L	
SLE0163-CCB1	Chromium-53	-0.0150	0.239	0.500	ug/L	
SLE0163-CCB1	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0163-CCB1	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0163-IBL2	Chromium-52	-0.0300	0.26	0.500	ug/L	
SLE0163-IBL2	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0163-IBL2	Lead-208	0.00700	0.0513	0.100	ug/L	
SLE0163-IBL2	Silver-107	0.0110	0.022	0.200	ug/L	
SLE0163-IBL3	Chromium-52	-0.0100	0.26	0.500	ug/L	
SLE0163-IBL3	Chromium-53	-0.0110	0.239	0.500	ug/L	
SLE0163-IBL3	Lead-208	0.00500	0.0513	0.100	ug/L	
SLE0163-IBL3	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0163-CCB2	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLE0163-CCB2	Chromium-53	-0.0290	0.239	0.500	ug/L	
SLE0163-CCB2	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0163-CCB2	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0163-IBL4	Chromium-52	0.139	0.26	0.500	ug/L	
SLE0163-IBL4	Chromium-53	-0.0230	0.239	0.500	ug/L	
SLE0163-IBL4	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0163-IBL4	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0163-IBL5	Chromium-52	-0.0380	0.26	0.500	ug/L	
SLE0163-IBL5	Chromium-53	-0.0340	0.239	0.500	ug/L	
SLE0163-IBL5	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0163-IBL5	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0163-CCB3	Chromium-52	-0.0300	0.26	0.500	ug/L	
SLE0163-CCB3	Chromium-53	-0.0480	0.239	0.500	ug/L	
SLE0163-CCB3	Lead-208	0.00400	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/09/23 18:47

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-CCB3	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0163-CCB4	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0163-CCB4	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0163-CCB4	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0163-CCB4	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0163-IBL6	Chromium-52	0.186	0.26	0.500	ug/L	
SLE0163-IBL6	Chromium-53	0.0140	0.239	0.500	ug/L	
SLE0163-IBL6	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0163-IBL6	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0163-CCB5	Chromium-52	-0.0110	0.26	0.500	ug/L	
SLE0163-CCB5	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0163-CCB5	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0163-CCB5	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0163-IBL7	Chromium-52	0.00400	0.26	0.500	ug/L	
SLE0163-IBL7	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLE0163-IBL7	Lead-208	0.00500	0.0513	0.100	ug/L	
SLE0163-IBL7	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0163-CCB6	Chromium-52	0.00700	0.26	0.500	ug/L	
SLE0163-CCB6	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLE0163-CCB6	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0163-CCB6	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0163-CCB7	Chromium-52	0.00900	0.26	0.500	ug/L	
SLE0163-CCB7	Chromium-53	0.00700	0.239	0.500	ug/L	
SLE0163-CCB7	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0163-IBL8	Chromium-52	0.0840	0.26	0.500	ug/L	
SLE0163-IBL8	Chromium-53	0.0180	0.239	0.500	ug/L	
SLE0163-IBL8	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0163-CCB8	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0163-CCB8	Chromium-53	0.00500	0.239	0.500	ug/L	
SLE0163-CCB8	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0163-IBL9	Chromium-52	0.0680	0.26	0.500	ug/L	
SLE0163-IBL9	Chromium-53	0.0370	0.239	0.500	ug/L	
SLE0163-IBL9	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0163-CCB9	Chromium-52	0.00400	0.26	0.500	ug/L	
SLE0163-CCB9	Chromium-53	0.00600	0.239	0.500	ug/L	
SLE0163-CCB9	Lead-208	0.00200	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/10/23 00:11

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-IBLA	Chromium-52	0.00500	0.26	0.500	ug/L	
SLE0163-IBLA	Chromium-53	0.0140	0.239	0.500	ug/L	
SLE0163-IBLA	Lead-208	0.0190	0.0513	0.100	ug/L	
SLE0163-CCBA	Chromium-52	0.0260	0.26	0.500	ug/L	
SLE0163-CCBA	Chromium-53	0.0110	0.239	0.500	ug/L	
SLE0163-CCBA	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0163-IBLB	Chromium-52	-0.00800	0.26	0.500	ug/L	
SLE0163-IBLB	Chromium-53	0.00	0.239	0.500	ug/L	
SLE0163-IBLB	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0163-CCBB	Chromium-52	0.0720	0.26	0.500	ug/L	
SLE0163-CCBB	Chromium-53	0.0430	0.239	0.500	ug/L	
SLE0163-CCBB	Lead-208	0.0710	0.0513	0.100	ug/L	
SLE0163-IBLC	Chromium-52	0.0480	0.26	0.500	ug/L	
SLE0163-IBLC	Chromium-53	0.0230	0.239	0.500	ug/L	
SLE0163-IBLC	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0163-IBLD	Chromium-52	0.106	0.26	0.500	ug/L	
SLE0163-IBLD	Chromium-53	0.0450	0.239	0.500	ug/L	
SLE0163-IBLD	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0163-CCBC	Chromium-52	-0.0270	0.26	0.500	ug/L	
SLE0163-CCBC	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0163-CCBC	Lead-208	0.00600	0.0513	0.100	ug/L	
SLE0163-IBLE	Chromium-52	0.0210	0.26	0.500	ug/L	
SLE0163-IBLE	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLE0163-IBLE	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0163-IBLF	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0163-IBLF	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0163-IBLF	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0163-CCBD	Chromium-52	-0.00900	0.26	0.500	ug/L	
SLE0163-CCBD	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0163-CCBD	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0163-IBLG	Chromium-52	0.0120	0.26	0.500	ug/L	
SLE0163-IBLG	Chromium-53	0.0150	0.239	0.500	ug/L	
SLE0163-IBLG	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0163-IBLH	Chromium-52	0.0300	0.26	0.500	ug/L	
SLE0163-IBLH	Chromium-53	0.00400	0.239	0.500	ug/L	
SLE0163-IBLH	Lead-208	0.00	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/10/23 04:07

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-CCBE	Chromium-52	0.0280	0.26	0.500	ug/L	
SLE0163-CCBE	Chromium-53	0.00100	0.239	0.500	ug/L	
SLE0163-CCBE	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0163-IBLI	Chromium-52	0.0200	0.26	0.500	ug/L	
SLE0163-IBLI	Chromium-53	0.00100	0.239	0.500	ug/L	
SLE0163-IBLI	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0163-CCBF	Chromium-52	0.0210	0.26	0.500	ug/L	
SLE0163-CCBF	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLE0163-CCBF	Lead-208	0.00200	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/10/23 16:19

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-IBL1	Chromium-52	0.0110	0.26	0.500	ug/L	
SLE0204-IBL1	Chromium-53	0.00400	0.239	0.500	ug/L	
SLE0204-IBL1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-IBL1	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0204-ICB1	Chromium-52	0.0170	0.26	0.500	ug/L	
SLE0204-ICB1	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0204-ICB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-ICB1	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0204-CCB1	Chromium-52	0.00600	0.26	0.500	ug/L	
SLE0204-CCB1	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0204-CCB1	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0204-CCB1	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0204-IBL2	Chromium-52	0.0130	0.26	0.500	ug/L	
SLE0204-IBL2	Chromium-53	0.00600	0.239	0.500	ug/L	
SLE0204-IBL2	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0204-IBL2	Silver-107	0.00800	0.022	0.200	ug/L	
SLE0204-CCB2	Chromium-52	0.0230	0.26	0.500	ug/L	
SLE0204-CCB2	Chromium-53	0.0280	0.239	0.500	ug/L	
SLE0204-CCB2	Lead-208	0.0300	0.0513	0.100	ug/L	
SLE0204-CCB2	Silver-107	0.0300	0.022	0.200	ug/L	
SLE0204-CCB3	Chromium-52	-0.0200	0.26	0.500	ug/L	
SLE0204-CCB3	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLE0204-CCB3	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0204-CCB3	Silver-107	0.00600	0.022	0.200	ug/L	
SLE0204-IBL3	Chromium-52	-0.0220	0.26	0.500	ug/L	
SLE0204-IBL3	Chromium-53	-0.0170	0.239	0.500	ug/L	
SLE0204-IBL3	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0204-IBL3	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-CCB4	Chromium-52	-0.0320	0.26	0.500	ug/L	
SLE0204-CCB4	Chromium-53	-0.0110	0.239	0.500	ug/L	
SLE0204-CCB4	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-CCB4	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0204-IBL4	Chromium-52	-0.00700	0.26	0.500	ug/L	
SLE0204-IBL4	Chromium-53	0.00500	0.239	0.500	ug/L	
SLE0204-IBL4	Lead-208	0.00400	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/10/23 19:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-IBL4	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-IBL5	Chromium-52	0.0360	0.26	0.500	ug/L	
SLE0204-IBL5	Chromium-53	0.0240	0.239	0.500	ug/L	
SLE0204-IBL5	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0204-IBL5	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-CCB5	Chromium-52	-0.0410	0.26	0.500	ug/L	
SLE0204-CCB5	Chromium-53	-0.0180	0.239	0.500	ug/L	
SLE0204-CCB5	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-CCB5	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0204-CCB6	Chromium-52	-0.0280	0.26	0.500	ug/L	
SLE0204-CCB6	Chromium-53	-0.0190	0.239	0.500	ug/L	
SLE0204-CCB6	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-CCB6	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0204-IBL6	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLE0204-IBL6	Chromium-53	0.00200	0.239	0.500	ug/L	
SLE0204-IBL6	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0204-IBL6	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0204-CCB7	Chromium-52	-0.00900	0.26	0.500	ug/L	
SLE0204-CCB7	Chromium-53	0.0110	0.239	0.500	ug/L	
SLE0204-CCB7	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-CCB7	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0204-IBL7	Chromium-52	-0.0510	0.26	0.500	ug/L	
SLE0204-IBL7	Chromium-53	-0.0130	0.239	0.500	ug/L	
SLE0204-IBL7	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0204-IBL7	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0204-CCB8	Chromium-52	-0.0260	0.26	0.500	ug/L	
SLE0204-CCB8	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0204-CCB8	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0204-CCB8	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0204-IBL8	Chromium-52	0.0300	0.26	0.500	ug/L	
SLE0204-IBL8	Chromium-53	0.0250	0.239	0.500	ug/L	
SLE0204-IBL8	Lead-208	0.275	0.0513	0.100	ug/L	
SLE0204-IBL8	Silver-107	0.00800	0.022	0.200	ug/L	
SLE0204-CCB9	Chromium-52	-0.0280	0.26	0.500	ug/L	
SLE0204-CCB9	Chromium-53	-0.0110	0.239	0.500	ug/L	
SLE0204-CCB9	Lead-208	0.00700	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/10/23 23:28

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-CCB9	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0204-IBL9	Chromium-52	-0.0200	0.26	0.500	ug/L	
SLE0204-IBL9	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLE0204-IBL9	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-IBL9	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-CCBA	Chromium-52	-0.0330	0.26	0.500	ug/L	
SLE0204-CCBA	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLE0204-CCBA	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0204-CCBA	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0204-IBLA	Chromium-52	-0.0310	0.26	0.500	ug/L	
SLE0204-IBLA	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0204-IBLA	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0204-IBLA	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-CCBB	Chromium-52	-0.0160	0.26	0.500	ug/L	
SLE0204-CCBB	Chromium-53	-0.0100	0.239	0.500	ug/L	
SLE0204-CCBB	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-CCBB	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0204-CCBC	Chromium-52	0.0180	0.26	0.500	ug/L	
SLE0204-CCBC	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLE0204-CCBC	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0204-CCBC	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0204-IBLB	Chromium-52	-0.0440	0.26	0.500	ug/L	
SLE0204-IBLB	Chromium-53	0.00800	0.239	0.500	ug/L	
SLE0204-IBLB	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0204-IBLB	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-CCBD	Chromium-52	-0.0360	0.26	0.500	ug/L	
SLE0204-CCBD	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLE0204-CCBD	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-CCBD	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0204-IBLC	Chromium-52	0.0230	0.26	0.500	ug/L	
SLE0204-IBLC	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLE0204-IBLC	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0204-IBLC	Silver-107	0.00	0.022	0.200	ug/L	
SLE0204-IBLD	Chromium-52	-0.0450	0.26	0.500	ug/L	
SLE0204-IBLD	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0204-IBLD	Lead-208	-0.00100	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/11/23 03:20

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-IBLD	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-CCBE	Chromium-52	-0.0500	0.26	0.500	ug/L	
SLE0204-CCBE	Chromium-53	-0.0140	0.239	0.500	ug/L	
SLE0204-CCBE	Lead-208	-0.00200	0.0513	0.100	ug/L	
SLE0204-CCBE	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0204-IBLE	Chromium-52	-0.0460	0.26	0.500	ug/L	
SLE0204-IBLE	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0204-IBLE	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-IBLE	Silver-107	0.00	0.022	0.200	ug/L	
SLE0204-IBLF	Chromium-52	-0.0490	0.26	0.500	ug/L	
SLE0204-IBLF	Chromium-53	-0.00100	0.239	0.500	ug/L	
SLE0204-IBLF	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-IBLF	Silver-107	0.00	0.022	0.200	ug/L	
SLE0204-CCBF	Chromium-52	-0.0610	0.26	0.500	ug/L	
SLE0204-CCBF	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0204-CCBF	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-CCBF	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0204-CCBG	Chromium-52	0.0140	0.26	0.500	ug/L	
SLE0204-CCBG	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLE0204-CCBG	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-CCBG	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0204-IBLG	Chromium-52	0.0210	0.26	0.500	ug/L	
SLE0204-IBLG	Chromium-53	0.00400	0.239	0.500	ug/L	
SLE0204-IBLG	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0204-IBLG	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0204-CCBH	Chromium-52	-0.00600	0.26	0.500	ug/L	
SLE0204-CCBH	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLE0204-CCBH	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-CCBH	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0204-IBLH	Chromium-52	0.0130	0.26	0.500	ug/L	
SLE0204-IBLH	Chromium-53	0.00100	0.239	0.500	ug/L	
SLE0204-IBLH	Lead-208	-0.00400	0.0513	0.100	ug/L	
SLE0204-IBLH	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-CCBI	Chromium-52	0.00400	0.26	0.500	ug/L	
SLE0204-CCBI	Chromium-53	0.00100	0.239	0.500	ug/L	
SLE0204-CCBI	Lead-208	-0.00300	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/11/23 06:42

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-CCBI	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0204-IBLI	Chromium-52	0.0160	0.26	0.500	ug/L	
SLE0204-IBLI	Chromium-53	0.00500	0.239	0.500	ug/L	
SLE0204-IBLI	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-IBLI	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-IBLJ	Chromium-52	0.00900	0.26	0.500	ug/L	
SLE0204-IBLJ	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0204-IBLJ	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-IBLJ	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0204-CCBJ	Chromium-52	0.0140	0.26	0.500	ug/L	
SLE0204-CCBJ	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLE0204-CCBJ	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0204-CCBJ	Silver-107	0.00100	0.022	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/11/23 14:29

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBL1	Chromium-52	0.0410	0.26	0.500	ug/L	
SLE0209-IBL1	Chromium-53	0.00600	0.239	0.500	ug/L	
SLE0209-IBL1	Lead-208	0.0180	0.0513	0.100	ug/L	
SLE0209-IBL1	Silver-107	0.0350	0.022	0.200	ug/L	
SLE0209-ICB1	Chromium-52	0.0310	0.26	0.500	ug/L	
SLE0209-ICB1	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLE0209-ICB1	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0209-ICB1	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0209-CCB1	Chromium-52	0.00200	0.26	0.500	ug/L	
SLE0209-CCB1	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0209-CCB1	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCB1	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0209-IBL2	Chromium-52	0.0290	0.26	0.500	ug/L	
SLE0209-IBL2	Chromium-53	0.0330	0.239	0.500	ug/L	
SLE0209-IBL2	Lead-208	0.00700	0.0513	0.100	ug/L	
SLE0209-IBL2	Silver-107	0.00800	0.022	0.200	ug/L	
SLE0209-IBL3	Chromium-52	0.0330	0.26	0.500	ug/L	
SLE0209-IBL3	Chromium-53	0.0220	0.239	0.500	ug/L	
SLE0209-IBL3	Lead-208	0.00600	0.0513	0.100	ug/L	
SLE0209-IBL3	Silver-107	0.00300	0.022	0.200	ug/L	
SLE0209-CCB2	Chromium-52	0.0150	0.26	0.500	ug/L	
SLE0209-CCB2	Chromium-53	0.00100	0.239	0.500	ug/L	
SLE0209-CCB2	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0209-CCB2	Silver-107	0.00400	0.022	0.200	ug/L	
SLE0209-CCB3	Chromium-52	-0.0180	0.26	0.500	ug/L	
SLE0209-CCB3	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLE0209-CCB3	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCB3	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0209-IBL4	Chromium-52	0.140	0.26	0.500	ug/L	
SLE0209-IBL4	Chromium-53	0.0650	0.239	0.500	ug/L	
SLE0209-IBL4	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0209-IBL4	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0209-IBL5	Chromium-52	0.100	0.26	0.500	ug/L	
SLE0209-IBL5	Chromium-53	0.00700	0.239	0.500	ug/L	
SLE0209-IBL5	Lead-208	0.00300	0.0513	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/11/23 17:21

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBL5	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0209-CCB4	Chromium-52	0.00300	0.26	0.500	ug/L	
SLE0209-CCB4	Chromium-53	-0.00500	0.239	0.500	ug/L	
SLE0209-CCB4	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCB4	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0209-IBL6	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0209-CCB5	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-IBL7	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-IBL8	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-CCB6	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-IBL9	Chromium-52	0.0410	0.26	0.500	ug/L	
SLE0209-IBL9	Chromium-53	0.00600	0.239	0.500	ug/L	
SLE0209-IBL9	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-IBL9	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0209-IBLA	Chromium-52	0.0520	0.26	0.500	ug/L	
SLE0209-IBLA	Chromium-53	0.125	0.239	0.500	ug/L	
SLE0209-IBLA	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-IBLA	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-CCB7	Chromium-52	0.0560	0.26	0.500	ug/L	
SLE0209-CCB7	Chromium-53	0.0220	0.239	0.500	ug/L	
SLE0209-CCB7	Lead-208	0.0110	0.0513	0.100	ug/L	
SLE0209-CCB7	Silver-107	0.0100	0.022	0.200	ug/L	
SLE0209-CCB8	Chromium-52	-0.0190	0.26	0.500	ug/L	
SLE0209-CCB8	Chromium-53	-0.0160	0.239	0.500	ug/L	
SLE0209-CCB8	Lead-208	0.0100	0.0513	0.100	ug/L	
SLE0209-CCB8	Silver-107	0.00800	0.022	0.200	ug/L	
SLE0209-CCBA	Chromium-52	0.00900	0.26	0.500	ug/L	
SLE0209-CCBA	Chromium-53	0.0230	0.239	0.500	ug/L	
SLE0209-CCBA	Lead-208	0.0170	0.0513	0.100	ug/L	
SLE0209-CCBA	Silver-107	0.0220	0.022	0.200	ug/L	
SLE0209-IBLC	Chromium-52	0.0110	0.26	0.500	ug/L	
SLE0209-IBLC	Chromium-53	0.00200	0.239	0.500	ug/L	
SLE0209-IBLC	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-IBLC	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-IBLD	Chromium-52	-0.0200	0.26	0.500	ug/L	
SLE0209-IBLD	Chromium-53	-0.00800	0.239	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/11/23 20:49

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBLD	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0209-IBLD	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0209-CCBB	Chromium-52	0.00	0.26	0.500	ug/L	
SLE0209-CCBB	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLE0209-CCBB	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCBB	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0209-IBLE	Chromium-52	-0.0100	0.26	0.500	ug/L	
SLE0209-IBLE	Chromium-53	-0.0140	0.239	0.500	ug/L	
SLE0209-IBLE	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0209-IBLE	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0209-IBLF	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLE0209-IBLF	Chromium-53	-0.0170	0.239	0.500	ug/L	
SLE0209-IBLF	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-IBLF	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-CCBC	Chromium-52	-0.0270	0.26	0.500	ug/L	
SLE0209-CCBC	Chromium-53	-0.0200	0.239	0.500	ug/L	
SLE0209-CCBC	Lead-208	0.00300	0.0513	0.100	ug/L	
SLE0209-CCBC	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0209-CCBD	Chromium-52	-0.00400	0.26	0.500	ug/L	
SLE0209-CCBD	Chromium-53	0.00700	0.239	0.500	ug/L	
SLE0209-CCBD	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-CCBD	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-IBLG	Chromium-52	0.0110	0.26	0.500	ug/L	
SLE0209-IBLG	Chromium-53	-0.00200	0.239	0.500	ug/L	
SLE0209-IBLG	Lead-208	-0.00200	0.0513	0.100	ug/L	
SLE0209-IBLG	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0209-CCBE	Chromium-52	-0.00400	0.26	0.500	ug/L	
SLE0209-CCBE	Chromium-53	0.00	0.239	0.500	ug/L	
SLE0209-CCBE	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-CCBE	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-IBLH	Chromium-52	0.00400	0.26	0.500	ug/L	
SLE0209-IBLH	Chromium-53	-0.00900	0.239	0.500	ug/L	
SLE0209-IBLH	Lead-208	-0.00200	0.0513	0.100	ug/L	
SLE0209-IBLH	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0209-CCBF	Chromium-52	0.00100	0.26	0.500	ug/L	
SLE0209-CCBF	Chromium-53	0.00	0.239	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/12/23 00:09

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-CCBF	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-CCBF	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-IBLI	Chromium-52	0.0220	0.26	0.500	ug/L	
SLE0209-IBLI	Chromium-53	-0.00400	0.239	0.500	ug/L	
SLE0209-IBLI	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-IBLI	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0209-CCBG	Chromium-52	-0.00400	0.26	0.500	ug/L	
SLE0209-CCBG	Chromium-53	-0.00800	0.239	0.500	ug/L	
SLE0209-CCBG	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-CCBG	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-IBLJ	Chromium-52	0.00300	0.26	0.500	ug/L	
SLE0209-IBLJ	Chromium-53	-0.0120	0.239	0.500	ug/L	
SLE0209-IBLJ	Lead-208	0.00200	0.0513	0.100	ug/L	
SLE0209-IBLJ	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-CCBH	Chromium-52	0.0140	0.26	0.500	ug/L	
SLE0209-CCBH	Chromium-53	0.00200	0.239	0.500	ug/L	
SLE0209-CCBH	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCBH	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-IBLK	Chromium-52	0.00700	0.26	0.500	ug/L	
SLE0209-IBLK	Chromium-53	-0.00700	0.239	0.500	ug/L	
SLE0209-IBLK	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-IBLK	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0209-IBLL	Chromium-52	-0.00300	0.26	0.500	ug/L	
SLE0209-IBLL	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0209-IBLL	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0209-IBLL	Silver-107	-0.00200	0.022	0.200	ug/L	
SLE0209-CCBI	Chromium-52	-0.0150	0.26	0.500	ug/L	
SLE0209-CCBI	Chromium-53	-0.00600	0.239	0.500	ug/L	
SLE0209-CCBI	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCBI	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-CCBJ	Chromium-52	-0.0240	0.26	0.500	ug/L	
SLE0209-CCBJ	Chromium-53	-0.00300	0.239	0.500	ug/L	
SLE0209-CCBJ	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCBJ	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0209-IBLM	Chromium-52	-0.0150	0.26	0.500	ug/L	
SLE0209-IBLM	Chromium-53	-0.00600	0.239	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/12/23 03:46

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBLM	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0209-IBLM	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-IBLN	Chromium-52	0.0370	0.26	0.500	ug/L	
SLE0209-IBLN	Chromium-53	0.00500	0.239	0.500	ug/L	
SLE0209-IBLN	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0209-IBLN	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0209-CCBK	Chromium-52	-0.00600	0.26	0.500	ug/L	
SLE0209-CCBK	Chromium-53	0.00200	0.239	0.500	ug/L	
SLE0209-CCBK	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCBK	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0209-IBLO	Chromium-52	0.0140	0.26	0.500	ug/L	
SLE0209-IBLO	Chromium-53	0.00500	0.239	0.500	ug/L	
SLE0209-IBLO	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0209-IBLO	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-CCBL	Chromium-52	-0.0270	0.26	0.500	ug/L	
SLE0209-CCBL	Chromium-53	0.00100	0.239	0.500	ug/L	
SLE0209-CCBL	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCBL	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0209-IBLP	Chromium-52	0.0420	0.26	0.500	ug/L	
SLE0209-IBLP	Chromium-53	0.566	0.239	0.500	ug/L	
SLE0209-IBLP	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0209-IBLP	Silver-107	0.00	0.022	0.200	ug/L	
SLE0209-CCBM	Chromium-52	-0.0220	0.26	0.500	ug/L	
SLE0209-CCBM	Chromium-53	0.321	0.239	0.500	ug/L	
SLE0209-CCBM	Lead-208	0.00100	0.0513	0.100	ug/L	
SLE0209-CCBM	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0209-IBLQ	Chromium-52	-0.0420	0.26	0.500	ug/L	
SLE0209-IBLQ	Chromium-53	0.192	0.239	0.500	ug/L	
SLE0209-IBLQ	Lead-208	-0.00200	0.0513	0.100	ug/L	
SLE0209-IBLQ	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0209-IBLR	Chromium-52	0.0530	0.26	0.500	ug/L	
SLE0209-IBLR	Chromium-53	0.841	0.239	0.500	ug/L	
SLE0209-IBLR	Lead-208	0.00400	0.0513	0.100	ug/L	
SLE0209-IBLR	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0209-CCBN	Chromium-52	-0.0620	0.26	0.500	ug/L	
SLE0209-CCBN	Chromium-53	0.364	0.239	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/12/23 07:11

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-CCBN	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-CCBN	Silver-107	0.00200	0.022	0.200	ug/L	
SLE0209-CCBO	Chromium-52	-0.00500	0.26	0.500	ug/L	
SLE0209-CCBO	Chromium-53	-0.0460	0.239	0.500	ug/L	
SLE0209-CCBO	Lead-208	0.00	0.0513	0.100	ug/L	
SLE0209-CCBO	Silver-107	0.00100	0.022	0.200	ug/L	
SLE0209-IBLS	Chromium-52	-0.0170	0.26	0.500	ug/L	
SLE0209-IBLS	Chromium-53	-0.157	0.239	0.500	ug/L	
SLE0209-IBLS	Lead-208	-0.00300	0.0513	0.100	ug/L	
SLE0209-IBLS	Silver-107	-0.00100	0.022	0.200	ug/L	
SLE0209-CCBP	Chromium-52	-0.0330	0.26	0.500	ug/L	
SLE0209-CCBP	Chromium-53	-0.183	0.239	0.500	ug/L	
SLE0209-CCBP	Lead-208	-0.00100	0.0513	0.100	ug/L	
SLE0209-CCBP	Silver-107	0.00	0.022	0.200	ug/L	

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0163
Instrument: ICPMS1
Calibration: GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0163-CAL1	XDT_m1230509a-001	NA	05/09/23 15:21
CAL 1 - LOW CHECK	SLE0163-CAL2	XDT_m1230509a-002	NA	05/09/23 15:26
CAL 2	SLE0163-CAL3	XDT_m1230509a-003	NA	05/09/23 15:30
CAL 3	SLE0163-CAL4	XDT_m1230509a-004	NA	05/09/23 15:36
CAL 4	SLE0163-CAL5	XDT_m1230509a-005	NA	05/09/23 15:41
CAL 5	SLE0163-CAL6	XDT_m1230509a-006	NA	05/09/23 15:48
RINSE	SLE0163-IBL1	XDT_m1230509a-007	NA	05/09/23 15:55
Initial Cal Check	SLE0163-ICV1	XDT_m1230509a-009	NA	05/09/23 16:02
Initial Cal Blank	SLE0163-ICB1	XDT_m1230509a-011	NA	05/09/23 16:14
Calibration Check	SLE0163-CCV1	XDT_m1230509a-012	NA	05/09/23 16:20
Calibration Blank	SLE0163-CCB1	XDT_m1230509a-014	NA	05/09/23 16:32
Instrument RL Check	SLE0163-CRL1	XDT_m1230509a-015	NA	05/09/23 16:39
Interference Check B	SLE0163-IFB1	XDT_m1230509a-017	NA	05/09/23 16:49
Interference Check A	SLE0163-IFA1	XDT_m1230509a-018	NA	05/09/23 16:54
LR300	SLE0163-HCV2	XDT_m1230509a-020	NA	05/09/23 17:04
LR200	SLE0163-HCV1	XDT_m1230509a-021	NA	05/09/23 17:11
Instrument Blank	SLE0163-IBL2	XDT_m1230509a-022	NA	05/09/23 17:16
Instrument Blank	SLE0163-IBL3	XDT_m1230509a-023	NA	05/09/23 17:23
Calibration Check	SLE0163-CCV2	XDT_m1230509a-024	NA	05/09/23 17:29
Calibration Blank	SLE0163-CCB2	XDT_m1230509a-025	NA	05/09/23 17:36
ZZZZZ	BLE0256-BLK1	XDT_m1230509a-026	Water	05/09/23 17:44
ZZZZZ	BLE0256-BS1	XDT_m1230509a-027	Water	05/09/23 17:49
Instrument Blank	SLE0163-IBL4	XDT_m1230509a-033	NA	05/09/23 18:24
Instrument Blank	SLE0163-IBL5	XDT_m1230509a-035	NA	05/09/23 18:35
Calibration Check	SLE0163-CCV3	XDT_m1230509a-036	NA	05/09/23 18:40
Calibration Blank	SLE0163-CCB3	XDT_m1230509a-037	NA	05/09/23 18:47
Calibration Check	SLE0163-CCV4	XDT_m1230509a-039	NA	05/09/23 18:59
Calibration Blank	SLE0163-CCB4	XDT_m1230509a-040	NA	05/09/23 19:06
ZZZZZ	23D0297-08	XDT_m1230509a-046	Solid	05/09/23 19:39

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0420-07	XDT_m1230509a-047	Solid	05/09/23 19:44
Instrument Blank	SLE0163-IBL6	XDT_m1230509a-050	NA	05/09/23 19:57
Calibration Check	SLE0163-CCV5	XDT_m1230509a-051	NA	05/09/23 20:01
Calibration Blank	SLE0163-CCB5	XDT_m1230509a-052	NA	05/09/23 20:09
ZZZZZ	23C0715-02	XDT_m1230509a-053	Water	05/09/23 20:15
ZZZZZ	23C0715-04	XDT_m1230509a-054	Water	05/09/23 20:23
ZZZZZ	23C0690-08	XDT_m1230509a-055	Water	05/09/23 20:27
ZZZZZ	23C0690-10	XDT_m1230509a-056	Water	05/09/23 20:32
ZZZZZ	23C0690-04	XDT_m1230509a-057	Water	05/09/23 20:37
Instrument Blank	SLE0163-IBL7	XDT_m1230509a-062	NA	05/09/23 21:00
Calibration Check	SLE0163-CCV6	XDT_m1230509a-063	NA	05/09/23 21:05
Calibration Blank	SLE0163-CCB6	XDT_m1230509a-064	NA	05/09/23 21:12
Calibration Check	SLE0163-CCV7	XDT_m1230509a-067	NA	05/09/23 21:32
Calibration Blank	SLE0163-CCB7	XDT_m1230509a-068	NA	05/09/23 21:39
Blank	BLD0687-BLK1	XDT_m1230509a-069	Solid	05/09/23 21:43
LCS	BLD0687-BS1	XDT_m1230509a-070	Solid	05/09/23 21:48
Instrument Blank	SLE0163-IBL8	XDT_m1230509a-078	NA	05/09/23 22:22
Calibration Check	SLE0163-CCV8	XDT_m1230509a-079	NA	05/09/23 22:26
Calibration Blank	SLE0163-CCB8	XDT_m1230509a-080	NA	05/09/23 22:33
Instrument Blank	SLE0163-IBL9	XDT_m1230509a-090	NA	05/09/23 23:17
Calibration Check	SLE0163-CCV9	XDT_m1230509a-091	NA	05/09/23 23:21
Calibration Blank	SLE0163-CCB9	XDT_m1230509a-092	NA	05/09/23 23:28
Instrument Blank	SLE0163-IBLA	XDT_m1230509a-102	NA	05/10/23 00:11
Calibration Check	SLE0163-CCVA	XDT_m1230509a-103	NA	05/10/23 00:15
Calibration Blank	SLE0163-CCBA	XDT_m1230509a-104	NA	05/10/23 00:23
Instrument Blank	SLE0163-IBLB	XDT_m1230509a-114	NA	05/10/23 01:06
Calibration Check	SLE0163-CCVB	XDT_m1230509a-115	NA	05/10/23 01:10
Calibration Blank	SLE0163-CCBB	XDT_m1230509a-116	NA	05/10/23 01:17
Instrument Blank	SLE0163-IBLC	XDT_m1230509a-122	NA	05/10/23 01:43

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0163-IBLD	XDT_m1230509a-126	NA	05/10/23 02:01
Calibration Check	SLE0163-CCVC	XDT_m1230509a-127	NA	05/10/23 02:05
Calibration Blank	SLE0163-CCBC	XDT_m1230509a-128	NA	05/10/23 02:12
Instrument Blank	SLE0163-IBLE	XDT_m1230509a-133	NA	05/10/23 02:36
Instrument Blank	SLE0163-IBLF	XDT_m1230509a-138	NA	05/10/23 02:59
Calibration Check	SLE0163-CCVD	XDT_m1230509a-139	NA	05/10/23 03:04
Calibration Blank	SLE0163-CCBD	XDT_m1230509a-140	NA	05/10/23 03:11
Instrument Blank	SLE0163-IBLG	XDT_m1230509a-145	NA	05/10/23 03:34
Instrument Blank	SLE0163-IBLH	XDT_m1230509a-150	NA	05/10/23 03:55
Calibration Check	SLE0163-CCVE	XDT_m1230509a-151	NA	05/10/23 04:00
Calibration Blank	SLE0163-CCBE	XDT_m1230509a-152	NA	05/10/23 04:07
ZZZZZ	23D0477-05	XDT_m1230509a-156	Water	05/10/23 04:24
ZZZZZ	23D0477-17	XDT_m1230509a-157	Water	05/10/23 04:28
ZZZZZ	23D0477-19	XDT_m1230509a-158	Water	05/10/23 04:32
ZZZZZ	BLE0077-DUP1	XDT_m1230509a-159	Water	05/10/23 04:37
ZZZZZ	BLE0077-MS1	XDT_m1230509a-160	Water	05/10/23 04:41
ZZZZZ	BLE0077-MSD1	XDT_m1230509a-161	Water	05/10/23 04:47
Instrument Blank	SLE0163-IBLI	XDT_m1230509a-162	NA	05/10/23 04:51
Calibration Check	SLE0163-CCVF	XDT_m1230509a-163	NA	05/10/23 04:56
Calibration Blank	SLE0163-CCBF	XDT_m1230509a-164	NA	05/10/23 05:03

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0204	Instrument:	ICPMS1
		Calibration:	GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0204-CAL1	XDT_m1230510A-008	NA	05/10/23 15:47
CAL 1 - LOW CHECK	SLE0204-CAL2	XDT_m1230510A-009	NA	05/10/23 15:51
CAL 2	SLE0204-CAL3	XDT_m1230510A-010	NA	05/10/23 15:56
CAL 3	SLE0204-CAL4	XDT_m1230510A-011	NA	05/10/23 16:01
CAL 4	SLE0204-CAL5	XDT_m1230510A-012	NA	05/10/23 16:05
CAL 5	SLE0204-CAL6	XDT_m1230510A-013	NA	05/10/23 16:12
RINSE	SLE0204-IBL1	XDT_m1230510A-014	NA	05/10/23 16:19
Initial Cal Check	SLE0204-ICV1	XDT_m1230510A-016	NA	05/10/23 16:25
Initial Cal Blank	SLE0204-ICB1	XDT_m1230510A-017	NA	05/10/23 16:32
Calibration Check	SLE0204-CCV1	XDT_m1230510A-018	NA	05/10/23 16:37
Calibration Blank	SLE0204-CCB1	XDT_m1230510A-019	NA	05/10/23 16:44
Instrument RL Check	SLE0204-CRL1	XDT_m1230510A-020	NA	05/10/23 16:49
Interference Check A	SLE0204-IFA1	XDT_m1230510A-021	NA	05/10/23 16:56
Interference Check B	SLE0204-IFB1	XDT_m1230510A-022	NA	05/10/23 17:00
LR200	SLE0204-HCV1	XDT_m1230510A-023	NA	05/10/23 17:06
LR300	SLE0204-HCV2	XDT_m1230510A-024	NA	05/10/23 17:11
Instrument Blank	SLE0204-IBL2	XDT_m1230510A-025	NA	05/10/23 17:18
Calibration Check	SLE0204-CCV2	XDT_m1230510A-026	NA	05/10/23 17:24
Calibration Blank	SLE0204-CCB2	XDT_m1230510A-027	NA	05/10/23 17:32
Calibration Check	SLE0204-CCV3	XDT_m1230510A-029	NA	05/10/23 17:41
Calibration Blank	SLE0204-CCB3	XDT_m1230510A-030	NA	05/10/23 17:49
Blank	BLD0687-BLK2	XDT_m1230510A-031	Solid	05/10/23 17:54
LCS	BLD0687-BS2	XDT_m1230510A-033	Solid	05/10/23 18:05
ZZZZZ	BLE0298-BLK1	XDT_m1230510A-034	Water	05/10/23 18:11
ZZZZZ	BLE0298-BS1	XDT_m1230510A-035	Water	05/10/23 18:15
ZZZZZ	23D0297-01	XDT_m1230510A-037	Solid	05/10/23 18:27
ZZZZZ	23D0297-01	XDT_m1230510A-037	Solid	05/10/23 18:27
ZZZZZ	BLD0728-DUP2	XDT_m1230510A-038	Solid	05/10/23 18:32
Instrument Blank	SLE0204-IBL3	XDT_m1230510A-040	NA	05/10/23 18:41

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLE0204-CCV4	XDT_m1230510A-041	NA	05/10/23 18:45
Calibration Blank	SLE0204-CCB4	XDT_m1230510A-042	NA	05/10/23 18:53
ZZZZZ	BLE0143-BLK1	XDT_m1230510A-045	Solid	05/10/23 19:07
ZZZZZ	BLE0143-BS1	XDT_m1230510A-047	Solid	05/10/23 19:19
ZZZZZ	BLD0728-MS2	XDT_m1230510A-048	Solid	05/10/23 19:23
Instrument Blank	SLE0204-IBL4	XDT_m1230510A-050	NA	05/10/23 19:33
Instrument Blank	SLE0204-IBL5	XDT_m1230510A-052	NA	05/10/23 19:44
Calibration Check	SLE0204-CCV5	XDT_m1230510A-053	NA	05/10/23 19:48
Calibration Blank	SLE0204-CCB5	XDT_m1230510A-054	NA	05/10/23 19:56
Calibration Check	SLE0204-CCV6	XDT_m1230510A-057	NA	05/10/23 20:30
Calibration Blank	SLE0204-CCB6	XDT_m1230510A-058	NA	05/10/23 20:37
ZZZZZ	BLD0578-BLK1	XDT_m1230510A-059	Solid	05/10/23 20:44
ZZZZZ	BLD0578-BS1	XDT_m1230510A-060	Solid	05/10/23 20:48
ZZZZZ	BLE0072-BLK1	XDT_m1230510A-061	Solid	05/10/23 20:53
ZZZZZ	23D0394-01	XDT_m1230510A-063	Solid	05/10/23 21:02
ZZZZZ	23D0394-01	XDT_m1230510A-063	Solid	05/10/23 21:02
ZZZZZ	23D0394-01	XDT_m1230510A-063	Solid	05/10/23 21:02
Instrument Blank	SLE0204-IBL6	XDT_m1230510A-068	NA	05/10/23 21:25
Calibration Check	SLE0204-CCV7	XDT_m1230510A-069	NA	05/10/23 21:29
Calibration Blank	SLE0204-CCB7	XDT_m1230510A-070	NA	05/10/23 21:37
ZZZZZ	23A0467-02	XDT_m1230510A-071	Solid	05/10/23 21:41
ZZZZZ	23A0467-02	XDT_m1230510A-071	Solid	05/10/23 21:41
ZZZZZ	23A0467-02	XDT_m1230510A-071	Solid	05/10/23 21:41
ZZZZZ	23A0467-04	XDT_m1230510A-073	Solid	05/10/23 21:50
ZZZZZ	23A0467-04	XDT_m1230510A-073	Solid	05/10/23 21:50
ZZZZZ	23A0467-04	XDT_m1230510A-073	Solid	05/10/23 21:50
ZZZZZ	23A0467-05	XDT_m1230510A-074	Solid	05/10/23 21:54
ZZZZZ	23A0467-05	XDT_m1230510A-074	Solid	05/10/23 21:54
ZZZZZ	23A0467-05	XDT_m1230510A-074	Solid	05/10/23 21:54

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0467-01	XDT_m1230510A-075	Solid	05/10/23 21:59
ZZZZZ	23A0467-01	XDT_m1230510A-075	Solid	05/10/23 21:59
ZZZZZ	23A0467-01	XDT_m1230510A-075	Solid	05/10/23 21:59
ZZZZZ	BLD0578-DUP1	XDT_m1230510A-076	Solid	05/10/23 22:03
ZZZZZ	BLD0578-MS1	XDT_m1230510A-077	Solid	05/10/23 22:08
ZZZZZ	BLD0578-MSD1	XDT_m1230510A-078	Solid	05/10/23 22:12
ZZZZZ	BLD0578-PS1	XDT_m1230510A-079	Solid	05/10/23 22:16
Instrument Blank	SLE0204-IBL7	XDT_m1230510A-080	NA	05/10/23 22:21
Calibration Check	SLE0204-CCV8	XDT_m1230510A-081	NA	05/10/23 22:25
Calibration Blank	SLE0204-CCB8	XDT_m1230510A-082	NA	05/10/23 22:32
ZZZZZ	23A0467-06	XDT_m1230510A-083	Solid	05/10/23 22:37
ZZZZZ	23A0467-06	XDT_m1230510A-083	Solid	05/10/23 22:37
ZZZZZ	23A0467-06	XDT_m1230510A-083	Solid	05/10/23 22:37
ZZZZZ	23A0467-07	XDT_m1230510A-084	Solid	05/10/23 22:41
ZZZZZ	23A0467-07	XDT_m1230510A-084	Solid	05/10/23 22:41
ZZZZZ	23A0467-07	XDT_m1230510A-084	Solid	05/10/23 22:41
ZZZZZ	23A0467-08	XDT_m1230510A-085	Solid	05/10/23 22:46
ZZZZZ	23A0467-08	XDT_m1230510A-085	Solid	05/10/23 22:46
ZZZZZ	23A0467-08	XDT_m1230510A-085	Solid	05/10/23 22:46
ZZZZZ	23A0467-09	XDT_m1230510A-086	Solid	05/10/23 22:50
ZZZZZ	23A0467-09	XDT_m1230510A-086	Solid	05/10/23 22:50
ZZZZZ	23A0467-09	XDT_m1230510A-086	Solid	05/10/23 22:50
ZZZZZ	23D0393-04	XDT_m1230510A-087	Solid	05/10/23 22:54
ZZZZZ	BLE0072-DUP1	XDT_m1230510A-088	Solid	05/10/23 22:59
ZZZZZ	BLE0072-MS1	XDT_m1230510A-089	Solid	05/10/23 23:03
ZZZZZ	BLE0072-MSD1	XDT_m1230510A-090	Solid	05/10/23 23:08
Instrument Blank	SLE0204-IBL8	XDT_m1230510A-092	NA	05/10/23 23:16
Calibration Check	SLE0204-CCV9	XDT_m1230510A-093	NA	05/10/23 23:21
Calibration Blank	SLE0204-CCB9	XDT_m1230510A-094	NA	05/10/23 23:28

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0204
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0071-01	XDT_m1230510A-095	Solid	05/10/23 23:33
ZZZZZ	23C0071-01	XDT_m1230510A-095	Solid	05/10/23 23:33
ZZZZZ	23C0071-01	XDT_m1230510A-095	Solid	05/10/23 23:33
ZZZZZ	23C0071-02	XDT_m1230510A-096	Solid	05/10/23 23:37
ZZZZZ	23C0071-02	XDT_m1230510A-096	Solid	05/10/23 23:37
ZZZZZ	23C0071-02	XDT_m1230510A-096	Solid	05/10/23 23:37
ZZZZZ	23C0071-04	XDT_m1230510A-098	Solid	05/10/23 23:46
ZZZZZ	23C0071-04	XDT_m1230510A-098	Solid	05/10/23 23:46
ZZZZZ	23C0071-04	XDT_m1230510A-098	Solid	05/10/23 23:46
ZZZZZ	23C0071-05	XDT_m1230510A-099	Solid	05/10/23 23:50
ZZZZZ	23C0071-05	XDT_m1230510A-099	Solid	05/10/23 23:50
ZZZZZ	23C0071-05	XDT_m1230510A-099	Solid	05/10/23 23:50
ZZZZZ	23C0071-06	XDT_m1230510A-100	Solid	05/10/23 23:55
ZZZZZ	23C0071-06	XDT_m1230510A-100	Solid	05/10/23 23:55
ZZZZZ	23C0071-06	XDT_m1230510A-100	Solid	05/10/23 23:55
ZZZZZ	23C0109-02	XDT_m1230510A-101	Solid	05/10/23 23:59
ZZZZZ	23C0109-02	XDT_m1230510A-101	Solid	05/10/23 23:59
ZZZZZ	23C0109-02	XDT_m1230510A-101	Solid	05/10/23 23:59
ZZZZZ	23C0109-03	XDT_m1230510A-102	Solid	05/11/23 00:03
ZZZZZ	23C0109-03	XDT_m1230510A-102	Solid	05/11/23 00:03
ZZZZZ	23C0109-03	XDT_m1230510A-102	Solid	05/11/23 00:03
ZZZZZ	23C0108-02	XDT_m1230510A-103	Solid	05/11/23 00:08
ZZZZZ	23C0108-02	XDT_m1230510A-103	Solid	05/11/23 00:08
ZZZZZ	23C0108-02	XDT_m1230510A-103	Solid	05/11/23 00:08
Instrument Blank	SLE0204-IBL9	XDT_m1230510A-104	NA	05/11/23 00:12
Calibration Check	SLE0204-CCVA	XDT_m1230510A-105	NA	05/11/23 00:16
Calibration Blank	SLE0204-CCBA	XDT_m1230510A-106	NA	05/11/23 00:24
ZZZZZ	23C0108-06	XDT_m1230510A-107	Solid	05/11/23 00:28
ZZZZZ	23C0108-06	XDT_m1230510A-107	Solid	05/11/23 00:28

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0108-06	XDT_m1230510A-107	Solid	05/11/23 00:28
ZZZZZ	23C0108-07	XDT_m1230510A-108	Solid	05/11/23 00:32
ZZZZZ	23C0108-07	XDT_m1230510A-108	Solid	05/11/23 00:32
ZZZZZ	23C0108-07	XDT_m1230510A-108	Solid	05/11/23 00:32
ZZZZZ	23C0108-08	XDT_m1230510A-109	Solid	05/11/23 00:37
ZZZZZ	23C0108-08	XDT_m1230510A-109	Solid	05/11/23 00:37
ZZZZZ	23C0108-08	XDT_m1230510A-109	Solid	05/11/23 00:37
ZZZZZ	23C0108-09	XDT_m1230510A-110	Solid	05/11/23 00:41
ZZZZZ	23C0108-09	XDT_m1230510A-110	Solid	05/11/23 00:41
ZZZZZ	23C0108-09	XDT_m1230510A-110	Solid	05/11/23 00:41
ZZZZZ	23D0008-03	XDT_m1230510A-112	Solid	05/11/23 00:50
ZZZZZ	23D0008-03	XDT_m1230510A-112	Solid	05/11/23 00:50
ZZZZZ	23D0008-03	XDT_m1230510A-112	Solid	05/11/23 00:50
ZZZZZ	23D0037-01	XDT_m1230510A-113	Solid	05/11/23 00:54
ZZZZZ	23D0037-01	XDT_m1230510A-113	Solid	05/11/23 00:54
ZZZZZ	23D0037-01	XDT_m1230510A-113	Solid	05/11/23 00:54
ZZZZZ	23D0037-03	XDT_m1230510A-114	Solid	05/11/23 00:59
ZZZZZ	23D0037-03	XDT_m1230510A-114	Solid	05/11/23 00:59
ZZZZZ	23D0037-03	XDT_m1230510A-114	Solid	05/11/23 00:59
Instrument Blank	SLE0204-IBLA	XDT_m1230510A-116	NA	05/11/23 01:08
Calibration Check	SLE0204-CCVB	XDT_m1230510A-117	NA	05/11/23 01:12
Calibration Blank	SLE0204-CCBB	XDT_m1230510A-118	NA	05/11/23 01:19
Calibration Check	SLE0204-CCVC	XDT_m1230510A-120	NA	05/11/23 01:28
Calibration Blank	SLE0204-CCBC	XDT_m1230510A-121	NA	05/11/23 01:35
ZZZZZ	23D0063-01	XDT_m1230510A-123	Solid	05/11/23 01:44
ZZZZZ	23D0063-01	XDT_m1230510A-123	Solid	05/11/23 01:44
ZZZZZ	23D0063-01	XDT_m1230510A-123	Solid	05/11/23 01:44
ZZZZZ	23D0063-03	XDT_m1230510A-124	Solid	05/11/23 01:49
ZZZZZ	23D0063-03	XDT_m1230510A-124	Solid	05/11/23 01:49

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0063-03	XDT_m1230510A-124	Solid	05/11/23 01:49
Instrument Blank	SLE0204-IBLB	XDT_m1230510A-131	NA	05/11/23 02:21
Calibration Check	SLE0204-CCVD	XDT_m1230510A-132	NA	05/11/23 02:26
Calibration Blank	SLE0204-CCBD	XDT_m1230510A-133	NA	05/11/23 02:33
Instrument Blank	SLE0204-IBLC	XDT_m1230510A-138	NA	05/11/23 02:57
ZZZZZ	23D0477-21	XDT_m1230510A-141	Water	05/11/23 03:11
ZZZZZ	23D0477-22	XDT_m1230510A-142	Water	05/11/23 03:15
Instrument Blank	SLE0204-IBLD	XDT_m1230510A-143	NA	05/11/23 03:20
Calibration Check	SLE0204-CCVE	XDT_m1230510A-144	NA	05/11/23 03:24
Calibration Blank	SLE0204-CCBE	XDT_m1230510A-145	NA	05/11/23 03:31
Instrument Blank	SLE0204-IBLE	XDT_m1230510A-150	NA	05/11/23 03:57
Instrument Blank	SLE0204-IBLF	XDT_m1230510A-155	NA	05/11/23 04:21
Calibration Check	SLE0204-CCVF	XDT_m1230510A-156	NA	05/11/23 04:26
Calibration Blank	SLE0204-CCBF	XDT_m1230510A-157	NA	05/11/23 04:33
Calibration Check	SLE0204-CCVG	XDT_m1230510A-159	NA	05/11/23 04:42
Calibration Blank	SLE0204-CCBG	XDT_m1230510A-160	NA	05/11/23 04:49
Instrument Blank	SLE0204-IBLG	XDT_m1230510A-170	NA	05/11/23 05:33
Calibration Check	SLE0204-CCVH	XDT_m1230510A-171	NA	05/11/23 05:38
Calibration Blank	SLE0204-CCBH	XDT_m1230510A-172	NA	05/11/23 05:45
Instrument Blank	SLE0204-IBLH	XDT_m1230510A-182	NA	05/11/23 06:31
Calibration Check	SLE0204-CCVI	XDT_m1230510A-183	NA	05/11/23 06:35
Calibration Blank	SLE0204-CCBI	XDT_m1230510A-184	NA	05/11/23 06:42
Instrument Blank	SLE0204-IBLI	XDT_m1230510A-189	NA	05/11/23 07:05
ZZZZZ	23D0636-01	XDT_m1230510A-190	Water	05/11/23 07:09
ZZZZZ	BLE0298-DUP1	XDT_m1230510A-191	Water	05/11/23 07:14
ZZZZZ	BLE0298-MS1	XDT_m1230510A-192	Water	05/11/23 07:19
ZZZZZ	BLE0298-MSD1	XDT_m1230510A-193	Water	05/11/23 07:25
Instrument Blank	SLE0204-IBLJ	XDT_m1230510A-194	NA	05/11/23 07:29
Calibration Check	SLE0204-CCVJ	XDT_m1230510A-195	NA	05/11/23 07:34

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0204	Instrument:	ICPMS1
		Calibration:	GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLE0204-CCBJ	XDT_m1230510A-196	NA	05/11/23 07:41

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0209
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0209-CAL1	XDT_m1230511-006	NA	05/11/23 13:56
CAL 1 - LOW CHECK	SLE0209-CAL2	XDT_m1230511-007	NA	05/11/23 14:00
CAL 2	SLE0209-CAL3	XDT_m1230511-008	NA	05/11/23 14:05
CAL 3	SLE0209-CAL4	XDT_m1230511-009	NA	05/11/23 14:10
CAL 4	SLE0209-CAL5	XDT_m1230511-010	NA	05/11/23 14:15
CAL 5	SLE0209-CAL6	XDT_m1230511-011	NA	05/11/23 14:21
RINSE	SLE0209-IBL1	XDT_m1230511-012	NA	05/11/23 14:29
Initial Cal Check	SLE0209-ICV1	XDT_m1230511-014	NA	05/11/23 14:34
Initial Cal Blank	SLE0209-ICB1	XDT_m1230511-015	NA	05/11/23 14:42
Calibration Check	SLE0209-CCV1	XDT_m1230511-019	NA	05/11/23 15:06
Calibration Blank	SLE0209-CCB1	XDT_m1230511-020	NA	05/11/23 15:13
Instrument RL Check	SLE0209-CRL1	XDT_m1230511-021	NA	05/11/23 15:18
Interference Check A	SLE0209-IFA1	XDT_m1230511-022	NA	05/11/23 15:23
Interference Check B	SLE0209-IFB1	XDT_m1230511-023	NA	05/11/23 15:28
LR200	SLE0209-HCV1	XDT_m1230511-024	NA	05/11/23 15:32
LR300	SLE0209-HCV2	XDT_m1230511-025	NA	05/11/23 15:37
Instrument Blank	SLE0209-IBL2	XDT_m1230511-026	NA	05/11/23 15:50
Instrument Blank	SLE0209-IBL3	XDT_m1230511-027	NA	05/11/23 15:56
Calibration Check	SLE0209-CCV2	XDT_m1230511-028	NA	05/11/23 16:02
Calibration Blank	SLE0209-CCB2	XDT_m1230511-029	NA	05/11/23 16:09
Calibration Check	SLE0209-CCV3	XDT_m1230511-031	NA	05/11/23 16:19
Calibration Blank	SLE0209-CCB3	XDT_m1230511-032	NA	05/11/23 16:27
ZZZZZ	BLE0072-BS2	XDT_m1230511-033	Solid	05/11/23 16:37
ZZZZZ	BLE0342-BLK1	XDT_m1230511-034	Water	05/11/23 16:42
ZZZZZ	BLE0342-BS1	XDT_m1230511-035	Water	05/11/23 16:46
Instrument Blank	SLE0209-IBL4	XDT_m1230511-040	NA	05/11/23 17:10
Instrument Blank	SLE0209-IBL5	XDT_m1230511-042	NA	05/11/23 17:21
Calibration Check	SLE0209-CCV4	XDT_m1230511-043	NA	05/11/23 17:25
Calibration Blank	SLE0209-CCB4	XDT_m1230511-044	NA	05/11/23 17:32

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0209
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0477-04	XDT_m1230511-045	Water	05/11/23 17:42
ZZZZZ	23D0477-08	XDT_m1230511-046	Water	05/11/23 17:43
ZZZZZ	23D0477-10	XDT_m1230511-047	Water	05/11/23 17:44
ZZZZZ	23D0477-12	XDT_m1230511-048	Water	05/11/23 17:46
ZZZZZ	23D0477-18	XDT_m1230511-049	Water	05/11/23 17:47
ZZZZZ	23D0477-20	XDT_m1230511-050	Water	05/11/23 17:48
Instrument Blank	SLE0209-IBL6	XDT_m1230511-054	NA	05/11/23 17:54
Calibration Check	SLE0209-CCV5	XDT_m1230511-055	NA	05/11/23 17:55
Calibration Blank	SLE0209-CCB5	XDT_m1230511-056	NA	05/11/23 17:59
ZZZZZ	23D0477-01	XDT_m1230511-057	Water	05/11/23 18:02
ZZZZZ	23D0477-07	XDT_m1230511-058	Water	05/11/23 18:03
ZZZZZ	23D0477-09	XDT_m1230511-059	Water	05/11/23 18:05
Instrument Blank	SLE0209-IBL7	XDT_m1230511-061	NA	05/11/23 18:08
ZZZZZ	23D0477-02	XDT_m1230511-062	Water	05/11/23 18:09
ZZZZZ	23D0477-03	XDT_m1230511-063	Water	05/11/23 18:10
ZZZZZ	23D0477-06	XDT_m1230511-064	Water	05/11/23 18:12
ZZZZZ	23D0477-11	XDT_m1230511-065	Water	05/11/23 18:13
Instrument Blank	SLE0209-IBL8	XDT_m1230511-066	NA	05/11/23 18:15
Calibration Check	SLE0209-CCV6	XDT_m1230511-067	NA	05/11/23 18:16
Calibration Blank	SLE0209-CCB6	XDT_m1230511-068	NA	05/11/23 18:20
ZZZZZ	23D0477-13	XDT_m1230511-069	Water	05/11/23 18:24
ZZZZZ	23D0477-14	XDT_m1230511-070	Water	05/11/23 18:25
ZZZZZ	23D0477-16	XDT_m1230511-071	Water	05/11/23 18:26
ZZZZZ	23D0477-15	XDT_m1230511-072	Water	05/11/23 18:28
Instrument Blank	SLE0209-IBL9	XDT_m1230511-073	NA	05/11/23 18:29
ZZZZZ	23D0702-04	XDT_m1230511-074	Water	05/11/23 18:34
ZZZZZ	23D0702-04	XDT_m1230511-074	Water	05/11/23 18:34
ZZZZZ	23D0702-04	XDT_m1230511-074	Water	05/11/23 18:34
ZZZZZ	BLE0342-DUP1	XDT_m1230511-075	Water	05/11/23 18:40

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BLE0342-MS1	XDT_m1230511-076	Water	05/11/23 18:45
ZZZZZ	BLE0342-MSD1	XDT_m1230511-077	Water	05/11/23 18:50
Instrument Blank	SLE0209-IBLA	XDT_m1230511-078	NA	05/11/23 18:55
Calibration Check	SLE0209-CCV7	XDT_m1230511-079	NA	05/11/23 18:59
Calibration Blank	SLE0209-CCB7	XDT_m1230511-080	NA	05/11/23 19:07
Calibration Check	SLE0209-CCV8	XDT_m1230511-082	NA	05/11/23 19:18
Calibration Blank	SLE0209-CCB8	XDT_m1230511-083	NA	05/11/23 19:25
Calibration Check	SLE0209-CCVA	XDT_m1230511-094	NA	05/11/23 19:55
Calibration Blank	SLE0209-CCBA	XDT_m1230511-095	NA	05/11/23 20:00
ZZZZZ	23D0636-01	XDT_m1230511-096	Water	05/11/23 20:07
ZZZZZ	23D0636-01	XDT_m1230511-096	Water	05/11/23 20:07
ZZZZZ	BLE0298-DUP2	XDT_m1230511-097	Water	05/11/23 20:11
ZZZZZ	BLE0298-MS2	XDT_m1230511-098	Water	05/11/23 20:16
ZZZZZ	BLE0298-MSD2	XDT_m1230511-099	Water	05/11/23 20:20
Instrument Blank	SLE0209-IBLC	XDT_m1230511-100	NA	05/11/23 20:25
ZZZZZ	23D0568-08	XDT_m1230511-101	Solid	05/11/23 20:30
ZZZZZ	23D0568-08	XDT_m1230511-101	Solid	05/11/23 20:30
ZZZZZ	23D0568-08	XDT_m1230511-101	Solid	05/11/23 20:30
ZZZZZ	BLE0143-DUP1	XDT_m1230511-102	Solid	05/11/23 20:35
ZZZZZ	BLE0143-MS1	XDT_m1230511-103	Solid	05/11/23 20:40
ZZZZZ	BLE0143-MSD1	XDT_m1230511-104	Solid	05/11/23 20:44
Instrument Blank	SLE0209-IBLD	XDT_m1230511-105	NA	05/11/23 20:49
Calibration Check	SLE0209-CCVB	XDT_m1230511-106	NA	05/11/23 20:53
Calibration Blank	SLE0209-CCBB	XDT_m1230511-107	NA	05/11/23 21:00
ZZZZZ	23D0568-02	XDT_m1230511-108	Solid	05/11/23 21:06
ZZZZZ	23D0568-02	XDT_m1230511-108	Solid	05/11/23 21:06
ZZZZZ	23D0568-02	XDT_m1230511-108	Solid	05/11/23 21:06
ZZZZZ	23D0568-03	XDT_m1230511-109	Solid	05/11/23 21:11
ZZZZZ	23D0568-03	XDT_m1230511-109	Solid	05/11/23 21:11

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0209
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0568-03	XDT_m1230511-109	Solid	05/11/23 21:11
ZZZZZ	23D0568-04	XDT_m1230511-110	Solid	05/11/23 21:15
ZZZZZ	23D0568-04	XDT_m1230511-110	Solid	05/11/23 21:15
ZZZZZ	23D0568-04	XDT_m1230511-110	Solid	05/11/23 21:15
ZZZZZ	23D0568-05	XDT_m1230511-111	Solid	05/11/23 21:20
ZZZZZ	23D0568-05	XDT_m1230511-111	Solid	05/11/23 21:20
ZZZZZ	23D0568-05	XDT_m1230511-111	Solid	05/11/23 21:20
ZZZZZ	23D0568-06	XDT_m1230511-112	Solid	05/11/23 21:24
ZZZZZ	23D0568-06	XDT_m1230511-112	Solid	05/11/23 21:24
ZZZZZ	23D0568-06	XDT_m1230511-112	Solid	05/11/23 21:24
ZZZZZ	23D0568-07	XDT_m1230511-113	Solid	05/11/23 21:29
ZZZZZ	23D0568-07	XDT_m1230511-113	Solid	05/11/23 21:29
ZZZZZ	23D0568-07	XDT_m1230511-113	Solid	05/11/23 21:29
Instrument Blank	SLE0209-IBLE	XDT_m1230511-114	NA	05/11/23 21:34
Instrument Blank	SLE0209-IBLF	XDT_m1230511-116	NA	05/11/23 21:46
Calibration Check	SLE0209-CCVC	XDT_m1230511-117	NA	05/11/23 21:50
Calibration Blank	SLE0209-CCBC	XDT_m1230511-118	NA	05/11/23 21:58
Calibration Check	SLE0209-CCVD	XDT_m1230511-120	NA	05/11/23 22:08
Calibration Blank	SLE0209-CCBD	XDT_m1230511-121	NA	05/11/23 22:15
ZZZZZ	23A0467-03	XDT_m1230511-122	Solid	05/11/23 22:22
ZZZZZ	23A0467-03	XDT_m1230511-122	Solid	05/11/23 22:22
ZZZZZ	23A0467-03	XDT_m1230511-122	Solid	05/11/23 22:22
ZZZZZ	23C0071-03	XDT_m1230511-123	Solid	05/11/23 22:27
ZZZZZ	23C0071-03	XDT_m1230511-123	Solid	05/11/23 22:27
ZZZZZ	23C0071-03	XDT_m1230511-123	Solid	05/11/23 22:27
ZZZZZ	23D0008-01	XDT_m1230511-124	Solid	05/11/23 22:31
ZZZZZ	23D0008-01	XDT_m1230511-124	Solid	05/11/23 22:31
ZZZZZ	23D0008-01	XDT_m1230511-124	Solid	05/11/23 22:31
ZZZZZ	23D0136-01	XDT_m1230511-125	Solid	05/11/23 22:35

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0209
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0136-01	XDT_m1230511-125	Solid	05/11/23 22:35
ZZZZZ	23D0136-01	XDT_m1230511-125	Solid	05/11/23 22:35
ZZZZZ	23D0136-03	XDT_m1230511-126	Solid	05/11/23 22:40
ZZZZZ	23D0136-03	XDT_m1230511-126	Solid	05/11/23 22:40
ZZZZZ	23D0136-03	XDT_m1230511-126	Solid	05/11/23 22:40
LDW23-SS1801	23D0396-01	XDT_m1230511-127	Solid	05/11/23 22:44
LDW23-SS1801	23D0396-01	XDT_m1230511-127	Solid	05/11/23 22:44
LDW23-SS1801	23D0396-01	XDT_m1230511-127	Solid	05/11/23 22:44
LDW23-SS1802	23D0396-03	XDT_m1230511-128	Solid	05/11/23 22:48
LDW23-SS1802	23D0396-03	XDT_m1230511-128	Solid	05/11/23 22:48
LDW23-SS1802	23D0396-03	XDT_m1230511-128	Solid	05/11/23 22:48
ZZZZZ	23D0394-02	XDT_m1230511-129	Solid	05/11/23 22:53
ZZZZZ	23D0394-02	XDT_m1230511-129	Solid	05/11/23 22:53
ZZZZZ	23D0394-02	XDT_m1230511-129	Solid	05/11/23 22:53
ZZZZZ	23D0394-04	XDT_m1230511-130	Solid	05/11/23 22:57
ZZZZZ	23D0394-04	XDT_m1230511-130	Solid	05/11/23 22:57
ZZZZZ	23D0394-04	XDT_m1230511-130	Solid	05/11/23 22:57
Instrument Blank	SLE0209-IBLG	XDT_m1230511-131	NA	05/11/23 23:02
Calibration Check	SLE0209-CCVE	XDT_m1230511-132	NA	05/11/23 23:07
Calibration Blank	SLE0209-CCBE	XDT_m1230511-133	NA	05/11/23 23:14
ZZZZZ	23D0394-06	XDT_m1230511-134	Solid	05/11/23 23:18
ZZZZZ	23D0394-06	XDT_m1230511-134	Solid	05/11/23 23:18
ZZZZZ	23D0394-06	XDT_m1230511-134	Solid	05/11/23 23:18
ZZZZZ	23D0394-07	XDT_m1230511-135	Solid	05/11/23 23:23
ZZZZZ	23D0394-07	XDT_m1230511-135	Solid	05/11/23 23:23
ZZZZZ	23D0394-07	XDT_m1230511-135	Solid	05/11/23 23:23
ZZZZZ	23D0394-08	XDT_m1230511-136	Solid	05/11/23 23:27
ZZZZZ	23D0394-08	XDT_m1230511-136	Solid	05/11/23 23:27
ZZZZZ	23D0394-08	XDT_m1230511-136	Solid	05/11/23 23:27

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0209
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0394-11	XDT_m1230511-137	Solid	05/11/23 23:31
ZZZZZ	23D0394-11	XDT_m1230511-137	Solid	05/11/23 23:31
ZZZZZ	23D0394-11	XDT_m1230511-137	Solid	05/11/23 23:31
ZZZZZ	23D0394-12	XDT_m1230511-138	Solid	05/11/23 23:36
ZZZZZ	23D0394-12	XDT_m1230511-138	Solid	05/11/23 23:36
ZZZZZ	23D0394-12	XDT_m1230511-138	Solid	05/11/23 23:36
ZZZZZ	23D0394-13	XDT_m1230511-139	Solid	05/11/23 23:40
ZZZZZ	23D0394-13	XDT_m1230511-139	Solid	05/11/23 23:40
ZZZZZ	23D0394-13	XDT_m1230511-139	Solid	05/11/23 23:40
ZZZZZ	23D0393-24	XDT_m1230511-140	Solid	05/11/23 23:44
ZZZZZ	23D0393-24	XDT_m1230511-140	Solid	05/11/23 23:44
ZZZZZ	23D0393-24	XDT_m1230511-140	Solid	05/11/23 23:44
ZZZZZ	23D0393-28	XDT_m1230511-141	Solid	05/11/23 23:49
ZZZZZ	23D0393-28	XDT_m1230511-141	Solid	05/11/23 23:49
ZZZZZ	23D0393-28	XDT_m1230511-141	Solid	05/11/23 23:49
ZZZZZ	23D0393-29	XDT_m1230511-142	Solid	05/11/23 23:53
ZZZZZ	23D0393-29	XDT_m1230511-142	Solid	05/11/23 23:53
ZZZZZ	23D0393-29	XDT_m1230511-142	Solid	05/11/23 23:53
Instrument Blank	SLE0209-IBLH	XDT_m1230511-143	NA	05/11/23 23:58
Calibration Check	SLE0209-CCVF	XDT_m1230511-144	NA	05/12/23 00:02
Calibration Blank	SLE0209-CCBF	XDT_m1230511-145	NA	05/12/23 00:09
ZZZZZ	23D0393-10	XDT_m1230511-146	Solid	05/12/23 00:14
ZZZZZ	23D0393-10	XDT_m1230511-146	Solid	05/12/23 00:14
ZZZZZ	23D0393-10	XDT_m1230511-146	Solid	05/12/23 00:14
ZZZZZ	23D0393-11	XDT_m1230511-147	Solid	05/12/23 00:19
ZZZZZ	23D0393-11	XDT_m1230511-147	Solid	05/12/23 00:19
ZZZZZ	23D0393-11	XDT_m1230511-147	Solid	05/12/23 00:19
ZZZZZ	23D0393-12	XDT_m1230511-148	Solid	05/12/23 00:23
ZZZZZ	23D0393-12	XDT_m1230511-148	Solid	05/12/23 00:23

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0209
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0393-12	XDT_m1230511-148	Solid	05/12/23 00:23
ZZZZZ	23D0393-15	XDT_m1230511-149	Solid	05/12/23 00:27
ZZZZZ	23D0393-15	XDT_m1230511-149	Solid	05/12/23 00:27
ZZZZZ	23D0393-15	XDT_m1230511-149	Solid	05/12/23 00:27
ZZZZZ	23D0393-16	XDT_m1230511-150	Solid	05/12/23 00:34
ZZZZZ	23D0393-16	XDT_m1230511-150	Solid	05/12/23 00:34
ZZZZZ	23D0393-16	XDT_m1230511-150	Solid	05/12/23 00:34
ZZZZZ	23D0393-17	XDT_m1230511-151	Solid	05/12/23 00:38
ZZZZZ	23D0393-17	XDT_m1230511-151	Solid	05/12/23 00:38
ZZZZZ	23D0393-17	XDT_m1230511-151	Solid	05/12/23 00:38
ZZZZZ	23D0393-18	XDT_m1230511-152	Solid	05/12/23 00:43
ZZZZZ	23D0393-18	XDT_m1230511-152	Solid	05/12/23 00:43
ZZZZZ	23D0393-18	XDT_m1230511-152	Solid	05/12/23 00:43
ZZZZZ	23D0393-19	XDT_m1230511-153	Solid	05/12/23 00:47
ZZZZZ	23D0393-19	XDT_m1230511-153	Solid	05/12/23 00:47
ZZZZZ	23D0393-19	XDT_m1230511-153	Solid	05/12/23 00:47
ZZZZZ	23D0393-22	XDT_m1230511-154	Solid	05/12/23 00:51
ZZZZZ	23D0393-22	XDT_m1230511-154	Solid	05/12/23 00:51
ZZZZZ	23D0393-22	XDT_m1230511-154	Solid	05/12/23 00:51
Instrument Blank	SLE0209-IBLI	XDT_m1230511-155	NA	05/12/23 00:56
Calibration Check	SLE0209-CCVG	XDT_m1230511-156	NA	05/12/23 01:00
Calibration Blank	SLE0209-CCBG	XDT_m1230511-157	NA	05/12/23 01:07
ZZZZZ	23D0393-04	XDT_m1230511-162	Solid	05/12/23 01:29
ZZZZZ	23D0393-04	XDT_m1230511-162	Solid	05/12/23 01:29
ZZZZZ	BLE0072-DUP2	XDT_m1230511-163	Solid	05/12/23 01:34
ZZZZZ	BLE0072-MS2	XDT_m1230511-164	Solid	05/12/23 01:38
ZZZZZ	BLE0072-MSD2	XDT_m1230511-165	Solid	05/12/23 01:43
ZZZZZ	BLE0072-PS2	XDT_m1230511-166	Solid	05/12/23 01:49
Instrument Blank	SLE0209-IBLJ	XDT_m1230511-167	NA	05/12/23 01:54

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Check	SLE0209-CCVH	XDT_m1230511-168	NA	05/12/23 01:58
Calibration Blank	SLE0209-CCBH	XDT_m1230511-169	NA	05/12/23 02:05
ZZZZZ	23D0568-03RE1	XDT_m1230511-170	Solid	05/12/23 02:09
ZZZZZ	23D0568-07RE1	XDT_m1230511-171	Solid	05/12/23 02:14
ZZZZZ	23D0568-07RE1	XDT_m1230511-171	Solid	05/12/23 02:14
ZZZZZ	23D0568-08RE1	XDT_m1230511-172	Solid	05/12/23 02:18
ZZZZZ	BLE0143-DUP2	XDT_m1230511-173	Solid	05/12/23 02:22
ZZZZZ	BLE0143-MS2	XDT_m1230511-174	Solid	05/12/23 02:27
ZZZZZ	BLE0143-MSD2	XDT_m1230511-175	Solid	05/12/23 02:31
Instrument Blank	SLE0209-IBLK	XDT_m1230511-176	NA	05/12/23 02:36
Instrument Blank	SLE0209-IBLL	XDT_m1230511-179	NA	05/12/23 02:56
Calibration Check	SLE0209-CCVI	XDT_m1230511-180	NA	05/12/23 03:00
Calibration Blank	SLE0209-CCBI	XDT_m1230511-181	NA	05/12/23 03:07
Calibration Check	SLE0209-CCVJ	XDT_m1230511-183	NA	05/12/23 03:16
Calibration Blank	SLE0209-CCBJ	XDT_m1230511-184	NA	05/12/23 03:23
ZZZZZ	23D0393-06	XDT_m1230511-186	Solid	05/12/23 03:32
ZZZZZ	23D0393-06	XDT_m1230511-186	Solid	05/12/23 03:32
ZZZZZ	23D0393-06	XDT_m1230511-186	Solid	05/12/23 03:32
Instrument Blank	SLE0209-IBLM	XDT_m1230511-188	NA	05/12/23 03:46
Instrument Blank	SLE0209-IBLN	XDT_m1230511-194	NA	05/12/23 04:12
Calibration Check	SLE0209-CCVK	XDT_m1230511-195	NA	05/12/23 04:17
Calibration Blank	SLE0209-CCBK	XDT_m1230511-196	NA	05/12/23 04:24
Instrument Blank	SLE0209-IBLO	XDT_m1230511-206	NA	05/12/23 05:08
Calibration Check	SLE0209-CCVL	XDT_m1230511-207	NA	05/12/23 05:12
Calibration Blank	SLE0209-CCBL	XDT_m1230511-208	NA	05/12/23 05:19
ZZZZZ	23D0598-06	XDT_m1230511-214	Water	05/12/23 05:47
ZZZZZ	23D0598-08	XDT_m1230511-215	Water	05/12/23 05:51
ZZZZZ	23D0598-10	XDT_m1230511-216	Water	05/12/23 05:55
ZZZZZ	23D0598-12	XDT_m1230511-217	Water	05/12/23 06:00

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0598-12	XDT_m1230511-217	Water	05/12/23 06:00
Instrument Blank	SLE0209-IBLP	XDT_m1230511-218	NA	05/12/23 06:04
Calibration Check	SLE0209-CCVM	XDT_m1230511-219	NA	05/12/23 06:09
Calibration Blank	SLE0209-CCBM	XDT_m1230511-220	NA	05/12/23 06:16
Instrument Blank	SLE0209-IBLQ	XDT_m1230511-225	NA	05/12/23 06:37
Instrument Blank	SLE0209-IBLR	XDT_m1230511-230	NA	05/12/23 07:00
Calibration Check	SLE0209-CCVN	XDT_m1230511-231	NA	05/12/23 07:04
Calibration Blank	SLE0209-CCBN	XDT_m1230511-232	NA	05/12/23 07:11
Calibration Check	SLE0209-CCVO	XDT_m1230511-234	NA	05/12/23 07:20
Calibration Blank	SLE0209-CCBO	XDT_m1230511-235	NA	05/12/23 07:27
Instrument Blank	SLE0209-IBLS	XDT_m1230511-245	NA	05/12/23 08:11
Calibration Check	SLE0209-CCVP	XDT_m1230511-246	NA	05/12/23 08:15
Calibration Blank	SLE0209-CCBP	XDT_m1230511-247	NA	05/12/23 08:22

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0163-IFA1	Chromium-52	0	0.6100		ug/L
	Chromium-53	0	3.6380		ug/L
	Lead-208	0	0.0240		ug/L
	Silver-107	0	0.0030		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0163-IFB1	Chromium-52	20.000	19.239	96.2	ug/L
	Chromium-53	20.000	22.578	113	ug/L
	Lead-208	0	0.0160		ug/L
	Silver-107	20.000	16.458	82.3	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Sequence: SLE0204
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0204-IFA1	Chromium-52	0	0.6610		ug/L
	Chromium-53	0	1.7410		ug/L
	Lead-208	0	0.0270		ug/L
	Silver-107	0	0.0050		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Sequence: SLE0204
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0204-IFB1	Chromium-52	20.000	20.186	101	ug/L
	Chromium-53	20.000	21.276	106	ug/L
	Lead-208	0	0.0180		ug/L
	Silver-107	20.000	18.002	90.0	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Sequence: SLE0209
Standard ID: L005318

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0209-IFA1	Chromium-52	0	0.6190		ug/L
	Chromium-53	0	1.6910		ug/L
	Lead-208	0	0.0170		ug/L
	Silver-107	0	0.0040		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Sequence: SLE0209
Standard ID: L005318

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0209-IFB1	Chromium-52	20.000	19.309	96.5	ug/L
	Chromium-53	20.000	20.701	104	ug/L
	Lead-208	0	0.0190		ug/L
	Silver-107	20.000	18.557	92.8	ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Lab Sample ID: SLE0163-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.488	97.6	ug/L	50 - 150
Chromium-53	0.50000	0.510	102	ug/L	50 - 150
Lead-208	0.10000	0.104	104	ug/L	50 - 150
Silver-107	0.20000	0.217	109	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Sequence: SLE0204
Lab Sample ID: SLE0204-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.523	105	ug/L	50 - 150
Chromium-53	0.50000	0.501	100	ug/L	50 - 150
Lead-208	0.10000	0.107	107	ug/L	50 - 150
Silver-107	0.20000	0.202	101	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Sequence: SLE0209
Lab Sample ID: SLE0209-CRL1

Analyte	True	Found	%R	Units	QC Limts
Chromium-52	0.50000	0.497	99.4	ug/L	50 - 150
Chromium-53	0.50000	0.480	96.0	ug/L	50 - 150
Lead-208	0.10000	0.113	113	ug/L	50 - 150
Silver-107	0.20000	0.206	103	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00034
Laboratory ID: SLE0163-HCV1
Sequence: SLE0163
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	196	-2.0	10.00
Chromium-53	200.00	194	-3.0	10.00
Lead-208	200.00	205	2.4	10.00
Silver-107	200.00	183	-8.3	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00034
Laboratory ID: SLE0163-HCV2
Sequence: SLE0163
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	304	1.2	10.00
Chromium-53	300.00	303	1.0	10.00
Lead-208	300.00	310	3.3	10.00
Silver-107	300.00	286	-4.8	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00040
Laboratory ID: SLE0204-HCV1
Sequence: SLE0204
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	198	-0.8	10.00
Chromium-53	200.00	195	-2.5	10.00
Lead-208	200.00	200	0.004	10.00
Silver-107	200.00	194	-3.2	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00040
Laboratory ID: SLE0204-HCV2
Sequence: SLE0204
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	306	1.9	10.00
Chromium-53	300.00	295	-1.7	10.00
Lead-208	300.00	317	5.5	10.00
Silver-107	300.00	311	3.6	10.00

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00042
Laboratory ID: SLE0209-HCV1
Sequence: SLE0209
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	200.00	193	-3.3	10.00
Chromium-53	200.00	190	-5.1	10.00
Lead-208	200.00	195	-2.3	10.00
Silver-107	200.00	201	0.3	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00042
Laboratory ID: SLE0209-HCV2
Sequence: SLE0209
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Chromium-52	300.00	305	1.7	10.00
Chromium-53	300.00	292	-2.8	10.00
Lead-208	300.00	300	-0.02	10.00
Silver-107	300.00	295	-1.5	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	04/28/23 15:38	16	180	05/11/23 22:44	30	180	
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	04/28/23 15:38	16	180	05/11/23 22:48	29	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS1

Analyte	MDL	RL	Units
Chromium-52	0.26	0.50	mg/kg
Chromium-53	0.24	0.50	mg/kg
Lead-208	0.05	0.10	mg/kg
Silver-107	0.02	0.20	mg/kg

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300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn	0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	< 0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310			
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300			
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444			
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310			
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610			
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310			
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310			
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129			
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000			
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310			
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310			
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600			
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910			
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310			
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

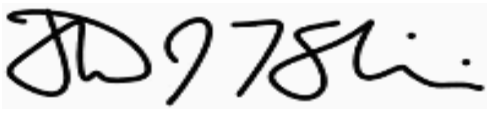
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<	
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	<	0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500				
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614				
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500				
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500				
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500				
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000				
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500				
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000				
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500				
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500				
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500				
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500				
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000				
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500				
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

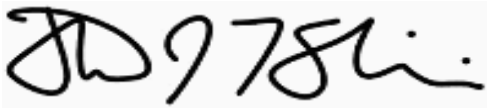
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

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Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

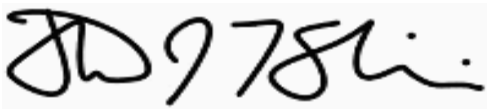
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn	0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	< 0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100			
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800			
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750			
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300			
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100			
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600			
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100			
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800			
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100			
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100			
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100			
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800			
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200			
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100			
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10018 ± 50 µg/mL** ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	**10023 ± 31 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	**10023 ± 30 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.
Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001100	M	Eu	<	0.000270	O	Na		0.040962	M	Se	<	0.005000	M	Zn		0.013054
O	Al		0.016205	O	Fe		0.015754	M	Nb	<	0.000270	O	Si		0.024307	O	Zr	<	0.001900
M	As	<	0.002900	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270				
M	Au	<	0.000520	M	Gd	<	0.000270	M	Ni	<	0.003700	M	Sn	<	0.000790				
M	B	<	0.091000	M	Ge	<	0.000270	M	Os	<	0.000260	M	Sr		0.000630				
M	Ba		0.002700	M	Hf	<	0.000270	O	P	<	0.066000	M	Ta	<	0.000270				
s	Be	<		M	Hg	<	0.000520	M	Pb	<	0.000270	M	Tb	<	0.000270				
M	Bi	<	0.000530	M	Ho	<	0.000270	M	Pd	<	0.000520	M	Te	<	0.003700				
O	Ca		0.072022	M	In	<	0.000790	M	Pr	<	0.000270	M	Th	<	0.000270				
M	Cd	<	0.000790	M	Ir	<	0.000260	M	Pt	<	0.000270	O	Ti	<	0.000400				
M	Ce	<	0.000270	O	K		0.045014	M	Rb	<	0.000270	M	Tl	<	0.000790				
O	Co	<	0.003200	M	La	<	0.000270	M	Re	<	0.000270	M	Tm	<	0.000270				
O	Cr	<	0.001800	O	Li	<	0.000660	M	Rh	<	0.001100	M	U	<	0.000270				
M	Cs		0.001440	M	Lu	<	0.000270	M	Ru	<	0.000260	M	V	<	0.000790				
M	Cu	<	0.002100	O	Mg		0.016205	i	S	<		M	W	<	0.000530				
M	Dy	<	0.000270	M	Mn		0.001215	M	Sb	<	0.000270	M	Y	<	0.000270				
M	Er	<	0.000270	M	Mo	<	0.000530	O	Sc	<	0.000930	M	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10051 ± 52 µg/mL**
ICP Assay NIST SRM 3151 Lot Number: 160729

Assay Method #2 **10051 ± 19 µg/mL**
Volhard NIST SRM 999c Lot Number: 999c

Assay Method #3 **10049 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
fax: 540.585.3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn		0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	<	0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110				
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900				
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100				
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110				
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110				
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110				
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000				
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110				
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110				
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410				
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<					
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000				
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110				
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 $H_2V_{10}O_{28}^{4-}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4, HF, H_3PO_4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na_2CO_3 / KNO_3); Oxides (V_2O_3 - use HCl, V_2O_4 - use HCl or HNO_3, V_2O_5 - use concentrated acids); Ores (Na_2CO_3 / KNO_3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V_2O_5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

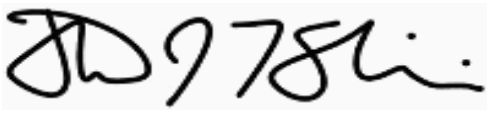
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10059 ± 40 µg/mL**
ICP Assay NIST SRM 3101a Lot Number: 140903

Assay Method #2 **10044 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10049 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

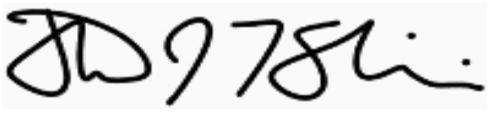
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn	0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	< 0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660			
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660			
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055			
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660			
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660			
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000			
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660			
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660			
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660			
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660			
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660			
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100			
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660			
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660			
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

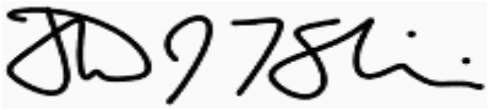
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

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k = coverage factor = 2

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u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

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4.0 TRACEABILITY TO NIST

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4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn		0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	<	0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460				
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300				
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279				
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460				
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460				
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300				
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460				
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700				
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046				
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460				
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460				
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460				
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460				
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720				
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H2O)6+2
Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4 avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10005 ± 45 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 130213

Assay Method #2 **10005 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10005 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

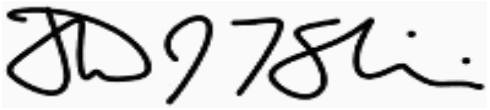
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn	0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	< 0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930			
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800			
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251			
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930			
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930			
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900			
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352			
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592			
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930			
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930			
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930			
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600			
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000			
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860			
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

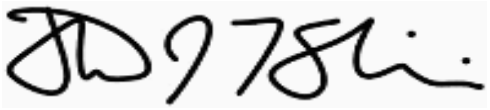
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO_2^{2+}(uranyl)
Chemical Compatibility - Soluble in HCl and HNO_3. Avoid H_3PO_4. H_2SO_4 and HF matrices should not be a problem depending upon [U]. Although the UO_2^{2+} ion is distinctly basic, any U^{+4} will precipitate in basic media. UO_2^{2+}salts are generally soluble in water and UO_2^{2+} is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF_4 and UF_6 are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO_3); Oxide (Soluble in HNO_3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO_3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H_2SO_4.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

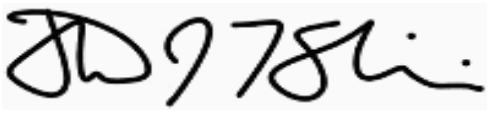
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium,	Thallium,
Uranium,	Vanadium,
Zinc,	Manganese,
Cadmium,	Cobalt,
Chromium,	Copper,
Arsenic,	Barium,
Beryllium,	Nickel,
Lead,	Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

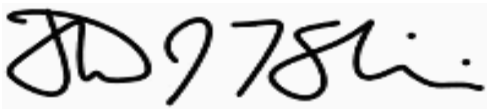
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

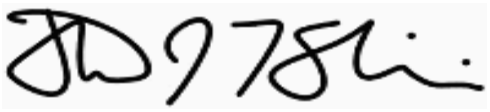
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SS1801

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-01 C	SDG:	23D0396
Sampled:	04/12/23 09:56	Prepared:	04/28/23 15:38	File ID:	XDT_m1230511-127
% Solids:	48.05	Preparation:	SWN EPA 3050B	Analyzed:	05/11/23 22:44
Batch:	BLD0687	Sequence:	SLE0209	Initial/Final:	1.033 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00042

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	14.3	20	0.08	0.40	
7440-43-9	Cadmium	0.39	20	0.06	0.20	
7440-50-8	Copper	77.2	20	0.35	1.01	
7440-66-6	Zinc	143	20	5.9	12.1	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 6020B UCT-KED

Total Metals

LDW23-SS1802

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-03 C	SDG:	23D0396
Sampled:	04/12/23 15:03	Prepared:	04/28/23 15:38	File ID:	XDT_m1230511-128
% Solids:	47.50	Preparation:	SWN EPA 3050B	Analyzed:	05/11/23 22:48
Batch:	BLD0687	Sequence:	SLE0209	Initial/Final:	1.02 g Wet / 50 mL
Instrument:	ICPMS1			Calibration:	GE00042

CAS NO.	Analyte	Concentration (mg/kg dry)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic	13.0	20	0.08	0.41	
7440-43-9	Cadmium	0.40	20	0.06	0.21	
7440-50-8	Copper	71.3	20	0.36	1.03	
7440-66-6	Zinc	137	20	6.0	12.4	

PREPARATION BATCH SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLD0687 Batch Matrix: Solid
Preparation: SWN EPA 3050B

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	XDT_m1230511-127	04/28/23 15:38	
LDW23-SS1802	23D0396-03	XDT_m1230511-128	04/28/23 15:38	
Blank	BLD0687-BLK1	XDT_m1230509a-069	04/28/23 15:38	
Blank	BLD0687-BLK2	XDT_m1230510A-031	04/28/23 15:38	Added 5/11/2023 by MCB
LCS	BLD0687-BS1	XDT_m1230509a-070	04/28/23 15:38	
LCS	BLD0687-BS2	XDT_m1230510A-033	04/28/23 15:38	Added 5/11/2023 by MCB

Analytical Resources, Incorporated
Analytical Chemists and Consultants

Digestion Log

Analyst: AR Date: 04/28/23 Time: 1016 - 1538 Balance ID: BAL10

Matrix: Soil Block ID: #16 Block Temp: 96C Thermometer: 20-4

ARI Sample ID	Btl #	pH<2	Prep Code: SWN Initial Wt (g) Vol (mL)	Prep Code: SWN Final Vol (mL)	Prep Code: Initial Wt (g) Vol (mL)	Prep Code: Final Vol (mL)	Comments
23D136-01	C		1.003	50			
-03			1.002				
23D394-01			1.018				
-02	B		1.051				
-03			1.058				
-04	C		1.065				
-05			1.012				
-06			1.074				
-07			1.019				
-08			1.039				
-09			1.018				
-10			1.036				
-11			1.033				
-12	B		1.008				
-13	C		1.087				
23D396-01			1.033				
-03			1.030				
BLD687-blk	—		—				23D394-01
-bs	—		—				
-dup	—		1.016				
-MS	—		1.019				
-MSD	—		1.014				
23D37-02	D		1.063				
-04			1.012				
—	—	—	—	—	—	—	—
—	—	—	—	—	—	—	—

Chemical/Reagent ID:

HNO_3: L4188 1:1 HNO_3: L4206 HCl: — H_2O_2: K11056

Tube Lot#: 2210117 Boiling Chip Lot#: — (DoD Only)

Form I

METHOD BLANK DATA SHEET

EPA 6020B UCT-KED

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23D0396

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

Batch: BLD0687 | Laboratory ID: BLD0687-BLK1 | Prepared: 04/28/23 15:38

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 05/09/23 21:43

Sequence: SLE0163 | Calibration: GE00034 | Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-38-2	Arsenic-75a	ND	20	0.04	0.20	U
7440-43-9	Cadmium-111	ND	20	0.03	0.10	U
7440-50-8	Copper-63	ND	20	0.17	0.50	U

Form I

METHOD BLANK DATA SHEET

EPA 6020B UCT-KED

Total Metals

Blank

Laboratory: Analytical Resources, LLC | SDG: 23D0396

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

Batch: BLD0687 | Laboratory ID: BLD0687-BLK2 | Prepared: 04/28/23 15:38

Matrix: Solid | Preparation: SWN EPA 3050B | Analyzed: 05/10/23 17:54

Sequence: SLE0204 | Calibration: GE00040 | Instrument: ICPMS1

CAS NO.	Analyte	Concentration (mg/kg wet)	Dilution Factor	MDL	MRL	Q
7440-66-6	Zinc-66	ND	20	2.9	6.0	U

LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/09/23 21:48
Batch:	BLD0687	Laboratory ID:	BLD0687-BS1
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Arsenic-75a	25.0	24.9		99.6	80 - 120
Cadmium-111	25.0	25.7		103	80 - 120
Copper-63	25.0	28.5		114	80 - 120

* Indicates values outside of QC limits

* Indicates values outside of QC limits

LCS / LCS DUPLICATE RECOVERY

EPA 6020B UCT-KED

Total Metals

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/10/23 18:05
Batch:	BLD0687	Laboratory ID:	BLD0687-BS2
Preparation:	SWN EPA 3050B	Sequence Name:	LCS
Initial/Final:	1 g / 50 mL		

COMPOUND	SPIKE ADDED (mg/kg wet)	LCS CONCENTRATION (mg/kg wet)	Q	LCS % REC. #	QC LIMITS REC.
Zinc-66	80.0	81.1		101	80 - 120

* Indicates values outside of QC limits

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00034	Instrument:	ICPMS1
Calibration Date:	05/09/2023 15:21		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	15550	10	15277.5	20	14954	50	14450.62	100	14213.3
Chromium-52	0	0	0.5	52696	10	25665.6	20	24896	50	23824.18	100	24100.37
Chromium-53	0	0	0.5	3292	10	2783.5	20	2747.15	50	2666.92	100	2605
Lead-208	0	0	0.1	92440	10	87764.4	20	87636.2	50	89109.48	100	87067.5

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00034
Calibration Date: 5/9/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	12407.57	49.2	0.9998		0.998	
Chromium-52	25197.03	66.3	0.9999		0.998	
Chromium-53	2349.095	50.1	0.9998		0.998	
Lead-208	74002.93	49.1	0.9999		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00034
Instrument: ICPMS1
Calibration Date: 05/09/2023 15:21

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	320	10	322.8	20	320.65	50	311.22	100	307.61
Cadmium-111	0	0	0.1	410	10	339.5	20	330.1	50	318.02	100	310.93
Cadmium-114	0	0	0.1	710	10	853.7	20	856.85	50	805.66	100	787.91
Copper-63	0	0	0.5	5830	10	4715.1	20	4670.7	50	4392.22	100	4224.14
Copper-65	0	0	0.5	3004	10	2368.8	20	2341.65	50	2245.14	100	2145.83
Zinc-66	0	0	6	643.5	10	673.3	20	638.85	50	607.58	100	582.37
Zinc-67	0	0	6	96.83334	10	106.1	20	105.2	50	97.46	100	97.08

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00034
Calibration Date: 5/9/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	263.7133	49.0	0.9999		0.998	
Cadmium-111	284.7583	50.6	0.9998		0.998	
Cadmium-114	669.02	49.6	0.9996		0.998	
Copper-63	3972.027	51.0	0.9994		0.998	
Copper-65	2017.57	51.2	0.9993		0.998	
Zinc-66	524.2667	49.4	0.9994		0.998	
Zinc-67	83.77889	49.2	0.9997		0.998	

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** SLEΦ163 **Cal:** GEΦΦΦ34

All corrections made by analyst unless otherwise noted. MB 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L5224		
		~~-CAL3~~ CAL2	L5225		
		-CAL3	L5226		
		-CAL4	L5227		
		-CAL5	L5228		
		-CAL6	L5229		
		-IBL1	—		
		-ICV1	L3575		
	✓	-ICB1	—		Std Mode noisy
		-ICB1	L5224		
		-CCV1	L5228		
	✓	-CCB1	—		Std Mode noisy
		-CCB1	L5224		
		-CRL1	L5225		
	✓	-IFA1	—		Std Mode noisy
		-IFB1	L4689		
		-IFA1	L4688		Cr^{53} ↑
	✓	-HCV1	—		Ba^{137} ↓
		-HCV2	L4781		
		-HCV1	L4780		
		-IBL2	—		
		-IBL3	—		
		-CCV2			
		-CCB2			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MS 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLEΦ256-BLK1	REN		
		↓ -BS1			Ge noisy - %R, Values + Analytes OK
		23EΦ192-Φ1		5	
		23EΦ179-Φ1		2	Sc, In, Tb noisy - %R + Analytes OK
		23EΦ141-Φ1		5	
		23EΦΦ96-Φ1		2	
		23DΦ453-Φ1	↓	↓	Ge, In-1 ↓ Cd, Cu, Ni, Zn NR
		SEQ-IBL4			
		23DΦ595-Φ1	REN	20	Zn↑ Zn NR
		SEQ-IBL5			
		-CCV3			Ba137 ↓ - Not Needed
		-CCB3			
	✓	-CAL1			Al, Co, Mo, Se Removed
		-CCV4			Ba137 ↓
		-CCB4			
		BLEΦ119-BLK1	REN		
	✓	↓ -BS1			Ge noisy
		↓ -BS1			
		BLEΦ134-BLK2			As, Cd, Cr, Ni, Pb only
		↓ -BS2	↓		↓
		23DΦ297-Φ8	SWN	100	Cr only
		23AΦ420-Φ7	↓	↓	↓
		23DΦ595-Φ1RE1	REN	↓	Zn only
		23DΦ453-Φ1RE1	↓	10	Cd, Cu, Ni, Zn only

Analytical Resources, Incorporated
Analytical Chemists and Consultants

ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. MB 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBL6			
		-CCV5			Ba 137↓
		-CCB5			
		23CΦ715-Φ2	REN	5	Cr only
		-Φ4		50	
		23CΦ69Φ-Φ8		↓	
		-1Φ		20	
		-Φ4		10	
		230Φ514-Φ5		5	Sc↑/Mn↑ Ag, Cd, Ni only
		BLEΦΦ78-DUP2			Ge noisy - %R + Analytes O/C/Values match parent.
		-MS2			Ag %R↓
		-MSD2			
		SEQ-IBL7			
		-CCV6			
		-CCB6			
✓		-CAL1			Sc, Tb noisy
✓		~~-CCV7~~CAL1			Ag, Ba, Mn Removed
		-CCV7			
		-CCB7			
		BLDΦ687-BLK1	SWN	20	Zn↑ (35.926 / 32.362) - Re-run to Confirm No Zn
		-BS1	↓	↓	
		BLEΦ208-BLK1	REN		Cu only
		-BS1			
		-SRL1		5	

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MB 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ242-Φ5REI	REN		Sc↑ - Not Needed Cu only
		BLEΦ2Φ8 - DUP1	↓	↓	↓ ↓ ↓
		↓ -MS1	↓	↓	↓
		↓ -PS1	↓	↓	Co Conc K47Φ9 ↓ ↓ ↓
		SEQ-IBL8			
		↓ -CCV8			
		↓ -CCB8			
		BLEΦ125-BLK1	SWN	20	
		↓ -BS1	↓	↓	
		230Φ233-~~Φ7~~REI	REN		Cu only
		230Φ234-Φ7REI	↓		↓
		230Φ241-Φ2REI			Sc↑ - Not Needed
		↓ -Φ4REI			↓ ↓
		230Φ242-Φ2REI			
		↓ -Φ4REI			Sc↑ - Not Needed ↓
		230Φ3Φ6-Φ1	↓	2	Cr only
		SEQ-IBL9			
		↓ -CCV9			
		↓ -CCB9			
		230Φ393-Φ9	SWN	20	Sc↑ - Not Needed
		↓ -13	↓	↓	
		-14			
		-2Φ			Sc↑ - Not Needed
		↓ -Φ7	↓	↓	↓ ↓

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLEΦ125-DUP1	SWN	20	Sc↑ - Not Needed
		-MS1	↓	↓	↓ ↓ /As STL ↓
		-MSD1	↓	↓	↓
		-PS1	↓	↓	60mL K7409 / ↓ ↓
		SEQ-IBLA			
		-CCVA			
		-CCBA			
		230Φ393-21	SWN	20	Sc↑ - Not Needed
		-23	↓	↓	↓ ↓
		230Φ394-Φ3	↓	↓	↓
		-Φ5	↓	↓	↓
		-Φ1	↓	↓	No Cr, Pb, Zn
		BLDΦ687-DUP1	↓	↓	↓
		-MS1	↓	↓	↓
		-MSD1	↓	↓	↓
		-PS1	↓	↓	60mL K7409 / Sc↑ ↓
		SEQ-IBLB			
		-CCVB			
		-CCBB			Pb noisy
	✓	230Φ394-Φ7	SWN	20	Sc↑ - Not Needed
		-Φ9	↓	↓	↓ ↓
		-1Φ	↓	↓	↓
	✓	-13	↓	↓	
		230Φ348-Φ1	REN	↓	No Pb

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MS **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBLC			
		23DΦ376-Φ1	REN	100	Cr only
		23DΦ424-Φ1	↓	5	Zn only
		23DΦ374-Φ3	↓	2	Cd, Cu only
		SEQ-IBLD			
		↓ -CCVC			Pb?
		↓ -CCBC			
		23DΦ513-Φ3	REN		
		23DΦ452-Φ1	↓	2	No Pb
		23DΦ462-Φ1	↓	↓	↓
		23DΦ480-Φ1	↓	↓	Ge, In⁻¹ ↓ Cr only
		SEQ-IBLE			
		23DΦ442-Φ2	REN	20	Cr only
		BLEΦΦ54-DUP3	↓	↓	↓
		↓ -MS3	↓	↓	↓
		↓ -MSD3	↓	↓	↓
		SEQ-IBLF			
		↓ -CCVD			
		↓ -CCBD			
		23DΦ537-Φ5	REN		Sc↑ No Cr
		BLEΦ12Φ-DUP2	↓		↓ ↓
		↓ -MS2	↓		↓ ↓
		↓ -MSD2	↓		↓ ↓
		SEQ-IBLG			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/9/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted. MB 5/9/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ464-Φ2	REN	20	Pb only
		↓ -Φ1	↓		↑
		230Φ516-Φ1	↓		Sc† - Not Needed ↑
		↓ -Φ2	↓		↓ ↓ ↓
		SEQ-IBLH			
		↓ -CCVE			
		↓ -CCBE			
		230Φ463-Φ1	REN		Pb only
		↓ -Φ2	↓		Sc† - Not Needed ↓
		↓ -Φ3	↓		↓
		230Φ477-Φ5	↓	5	
		↓ -17	↓	2	
		↓ -19	↓	↓	
		BLEΦΦ77-OUP1	↓	↓	
	OK ✓	↓ -MS1	↓	↓	Ge noisy Pb only
		↓ -MSD1	↓	↓	
		SEQ-IBLI			
		↓ -CCVF			
		↓ -CCBF			
					Remaining CV tubes empty -
					End of usable data
		MB	5/9/23		

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, May 09, 2023 12:18:16
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.134
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	9586.5	9586.549	68.777	0.7	Standard
	In	114.9	71985.5	71985.472	993.919	1.4	Standard
	U	238.1	96089.6	96089.638	954.703	1.0	Standard
⎡	CeO	155.9	2059.6	0.020	0.000	2.4	Standard
| >	Ce	139.9	102412.2	102412.184	475.304	0.5	Standard
⎣	Ce++	70.0	977.8	0.010	0.000	2.3	Standard
	Bkgd	220.0	0.5	0.467	0.183	39.1	Standard

Current Conditions File Data

Current Value	Description
0.91	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.91	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/9/2023 12:18:11 PM
End Time: 5/9/2023 12:24:32 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 9586.55
Obtained Intensity (In 115): 71985.47
Obtained Intensity (U 238): 96089.64
Obtained Intensity (Bkgd 220): 0.47
Obtained Formula (Ce++ 70 / Ce 140): 0.010 (=977.83 / 102412.18)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=2059.62 / 102412.18)
Obtained RSD (Be 9): 0.0072
Obtained RSD (In 115): 0.0138
Obtained RSD (U 238): 0.0099

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/9/2023 12:18:11 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 9586.55
Obtained Intensity (In 115): 71985.47
Obtained Intensity (U 238): 96089.64
Obtained Intensity (Bkgd 220): 0.47
Obtained Formula (Ce++ 70 / Ce 140): 0.010 (=977.83 / 102412.18)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=2059.62 / 102412.18)
Obtained RSD (Be 9): 0.0072
Obtained RSD (In 115): 0.0138
Obtained RSD (U 238): 0.0099

[Passed] Optimum value(s): N/A

Torch Alignment

Optimization Settings:

Method: Torch Alignment.mth.
Intensity Criterion: In 115 Maximum

Optimization Results:

[Cancelled]

End Time: 5/9/2023 12:24:32 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Tuesday, May 09, 2023 12:31:48
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.141
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	11009.8	11009.842	178.493	1.6	Standard
	In	114.9	77649.3	77649.347	893.969	1.2	Standard
	U	238.1	102175.4	102175.448	1799.462	1.8	Standard
⌈	CeO	155.9	2593.5	0.024	0.000	2.1	Standard
| >	Ce	139.9	110114.7	110114.713	947.804	0.9	Standard
⌊	Ce++	70.0	1356.3	0.012	0.000	1.9	Standard
	Bkgd	220.0	0.5	0.467	0.139	29.9	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/9/2023 12:24:37 PM
End Time: 5/9/2023 12:33:53 PM

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.78 mm	0.99 mm	75718.13

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.92
Obtained Intensity (In 115): 85176.17
Obtained Formula (CeO 156 / Ce 140): 0.0219 (=2374.20 / 108222.38)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.691)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.710)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.698)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.693)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.997; Intercept = -14.40

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.995; Intercept = -13.81

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 11009.84
Obtained Intensity (In 115): 77649.35
Obtained Intensity (U 238): 102175.45
Obtained Intensity (Bkgd 220): 0.47
Obtained Formula (Ce++ 70 / Ce 140): 0.012 (=1356.26 / 110114.71)
Obtained Formula (CeO 156 / Ce 140): 0.024 (=2593.50 / 110114.71)
Obtained RSD (Be 9): 0.0162
Obtained RSD (In 115): 0.0115
Obtained RSD (U 238): 0.0176

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/9/2023 12:24:37 PM

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.78 mm	0.99 mm	75718.13

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 0.89/0.96/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 85176.17
		Obtained Formula (CeO 156 / Ce 140): 0.0219 (=2374.20 / 108222.38)
[Passed] Optimum value(s): 0.92

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.691)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.710)
		Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.698)
		Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.693)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.997; Intercept = -14.40

	Analyte	Mass	Points	DAC	MaxIntensity

Li	7	41	-14.5	55363.1
Mg	24	41	-14.5	53532.1
In	115	41	-13	82332.6
Ce	140	41	-12	113235
Pb	208	41	-11	58262.6
U	238	41	-11.5	105395

KED Mode QID

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 0.995; Intercept = -13.81

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-14	37068
Mg	24	41	-14	57523.6
In	115	41	-12	121119
Ce	140	41	-11	119203
Pb	208	41	-10.5	54174.5
U	238	41	-10.5	126490

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.

Intensity Criterion: Be 9 > 2000

Intensity Criterion: In 115 > 40000

Intensity Criterion: U 238 > 30000

Intensity Criterion: Bkgd 220 <= 5

Formula Criterion: Ce++ 70 / Ce 140 <= 0.03

Formula Criterion: CeO 156 / Ce 140 <= 0.025

RSD Criterion: Be 9.0122 < 0.05

RSD Criterion: In 114.904 < 0.05

RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 11009.84

Obtained Intensity (In 115): 77649.35

Obtained Intensity (U 238): 102175.45

Obtained Intensity (Bkgd 220): 0.47

Obtained Formula (Ce++ 70 / Ce 140): 0.012 (=1356.26 / 110114.71)

Obtained Formula (CeO 156 / Ce 140): 0.024 (=2593.50 / 110114.71)

Obtained RSD (Be 9): 0.0162

Obtained RSD (In 115): 0.0115

Obtained RSD (U 238): 0.0176

[Passed] Optimum value(s): N/A

End Time: 5/9/2023 12:33:53 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:21:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				41563	2	Standard
>	**Sc**	**45**		ug/L				330809	3	Standard
	Al	**27**		ug/L				2334	3	Standard
	Cr	**52**		ug/L				13927	3	Standard
	Cr	**53**		ug/L				305	13	Standard
	Mn	**55**		ug/L				504	10	Standard
>	**Ge**	**72**		ug/L				39846	0	KED
	Co	**59**		ug/L				61	115	KED
	Ni	**60**		ug/L				59	45	KED
	Ni	**62**		ug/L				10	61	KED
	Cu	**63**		ug/L				67	77	KED
	Cu	**65**		ug/L				26	67	KED
	Zn	**66**		ug/L				22	39	KED
	Zn	**67**		ug/L				3	91	KED
	As	**75**		ug/L				5	52	KED
	Se	**78**		ug/L				11	15	KED
	Kr	**83**		ug/L				53	4	Standard
>	**In-1**	**115**		ug/L				9311	3	KED
	Mo	**98**		ug/L				10	35	KED
	Cd	**111**		ug/L				2	24	KED
	Cd	**114**		ug/L				8	36	KED
>	**In**	**115**		ug/L				399419	5	Standard
	Ag	**107**		ug/L				46	27	Standard
	Ba	**135**		ug/L				15	25	Standard
	Ba	**137**		ug/L				37	10	Standard
>	**Tb**	**159**		ug/L				173053	2	Standard
	Pb	**208**		ug/L				201	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:26:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	42798	0	Standard
⌈>	**Sc**	**45**		ug/L			330809	347123	0	Standard
|	**Al**	**27**	**20.000**	ug/L	0.473	2	2334	510670	1	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.011	2	13927	26348	0	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.027	5	305	1646	5	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.008	1	504	17661	0	Standard
⌈>	**Ge**	**72**		ug/L			39846	39869	1	KED
|	**Co**	**59**	**0.200**	ug/L	0.010	4	61	1193	4	KED
|	**Ni**	**60**	**0.500**	ug/L	0.020	4	59	852	4	KED
|	**Ni**	**62**	**0.500**	ug/L	0.017	3	10	130	3	KED
|	**Cu**	**63**	**0.500**	ug/L	0.007	1	67	2915	2	KED
|	**Cu**	**65**	**0.500**	ug/L	0.011	2	26	1502	1	KED
|	**Zn**	**66**	**6.000**	ug/L	0.234	3	22	3861	3	KED
|	**Zn**	**67**	**6.000**	ug/L	0.179	2	3	581	2	KED
|	**As**	**75**	**0.200**	ug/L	0.025	12	5	64	11	KED
⌊	**Se**	**78**	**0.500**	ug/L	0.078	15	11	24	7	KED
	Kr	**83**		ug/L			53	56	5	Standard
⌈>	**In-1**	**115**		ug/L			9311	9467	1	KED
|	**Mo**	**98**	**0.200**	ug/L	0.005	2	10	301	2	KED
|	**Cd**	**111**	**0.100**	ug/L	0.019	19	2	41	19	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.010	9	8	71	7	KED
⌈>	**In**	**115**		ug/L			399419	418159	0	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.001	0	46	3110	0	Standard
|	**Ba**	**135**	**0.500**	ug/L	0.026	5	15	2765	4	Standard
⌊	**Ba**	**137**	**0.500**	ug/L	0.011	2	37	5223	1	Standard
⌈>	**Tb**	**159**		ug/L			173053	178365	0	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.001	0	201	9244	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:30:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	45757	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	352525	1	Standard
|	**Al**	**27**	**1000.010**	ug/L	30.286	3	2334	26468702	2	Standard
|	**Cr**	**52**	**10.000**	ug/L	0.380	3	13927	256656	2	Standard
|	**Cr**	**53**	**10.001**	ug/L	0.246	2	305	27835	1	Standard
⌊	**Mn**	**55**	**10.000**	ug/L	0.200	1	504	354551	1	Standard
⌈>	**Ge**	**72**		ug/L			39846	40554	1	KED
|	**Co**	**59**	**10.000**	ug/L	0.201	2	61	57570	1	KED
|	**Ni**	**60**	**10.001**	ug/L	0.381	3	59	17107	2	KED
|	**Ni**	**62**	**10.001**	ug/L	0.245	2	10	2591	1	KED
|	**Cu**	**63**	**9.994**	ug/L	0.252	2	67	47151	1	KED
|	**Cu**	**65**	**9.993**	ug/L	0.097	0	26	23688	0	KED
|	**Zn**	**66**	**10.081**	ug/L	0.410	4	22	6733	2	KED
|	**Zn**	**67**	**10.198**	ug/L	0.331	3	3	1061	2	KED
|	**As**	**75**	**10.000**	ug/L	0.232	2	5	3228	0	KED
⌊	**Se**	**78**	**10.004**	ug/L	0.511	5	11	324	4	KED
	Kr	**83**		ug/L			53	57	8	Standard
⌈>	**In-1**	**115**		ug/L			9311	9322	2	KED
|	**Mo**	**98**	**10.000**	ug/L	0.399	3	10	15075	1	KED
|	**Cd**	**111**	**10.000**	ug/L	0.264	2	2	3395	1	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.282	2	8	8537	1	KED
⌈>	**In**	**115**		ug/L			399419	423194	2	Standard
|	**Ag**	**107**	**10.000**	ug/L	0.180	1	46	152775	1	Standard
|	**Ba**	**135**	**10.000**	ug/L	0.335	3	15	54787	0	Standard
⌊	**Ba**	**137**	**10.000**	ug/L	0.179	1	37	104428	1	Standard
⌈>	**Tb**	**159**		ug/L			173053	183421	0	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.099	0	201	877644	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:36:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	47595	3	Standard
⎡>	**Sc**	**45**		ug/L			330809	351739	1	Standard
⎢	**Al**	**27**	**2000.805**	ug/L	34.694	1	2334	52926238	1	Standard
⎢	**Cr**	**52**	**20.004**	ug/L	0.381	1	13927	497920	1	Standard
⎢	**Cr**	**53**	**19.979**	ug/L	0.398	1	305	54943	1	Standard
⎣	**Mn**	**55**	**20.010**	ug/L	0.446	2	504	708686	1	Standard
⎡>	**Ge**	**72**		ug/L			39846	40958	0	KED
⎢	**Co**	**59**	**19.897**	ug/L	0.485	2	61	113307	1	KED
⎢	**Ni**	**60**	**19.844**	ug/L	0.317	1	59	33205	0	KED
⎢	**Ni**	**62**	**20.073**	ug/L	0.428	2	10	5320	2	KED
⎢	**Cu**	**63**	**19.922**	ug/L	0.288	1	67	93414	0	KED
⎢	**Cu**	**65**	**19.913**	ug/L	0.369	1	26	46833	1	KED
⎢	**Zn**	**66**	**19.726**	ug/L	0.119	0	22	12777	1	KED
⎢	**Zn**	**67**	**20.012**	ug/L	0.361	1	3	2104	1	KED
⎢	**As**	**75**	**19.936**	ug/L	0.225	1	5	6413	0	KED
⎣	**Se**	**78**	**20.063**	ug/L	0.208	1	11	653	0	KED
	Kr	**83**		ug/L			53	40	50	Standard
⎡>	**In-1**	**115**		ug/L			9311	9471	1	KED
⎢	**Mo**	**98**	**19.891**	ug/L	0.453	2	10	29817	0	KED
⎢	**Cd**	**111**	**19.822**	ug/L	0.606	3	2	6602	2	KED
⎣	**Cd**	**114**	**19.951**	ug/L	0.173	0	8	17137	1	KED
⎡>	**In**	**115**		ug/L			399419	429169	0	Standard
⎢	**Ag**	**107**	**19.856**	ug/L	0.529	2	46	299080	2	Standard
⎢	**Ba**	**135**	**20.009**	ug/L	0.126	0	15	111436	0	Standard
⎣	**Ba**	**137**	**19.925**	ug/L	0.122	0	37	207952	0	Standard
⎡>	**Tb**	**159**		ug/L			173053	183959	0	Standard
⎣	**Pb**	**208**	**19.983**	ug/L	0.203	1	201	1752724	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:41:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	44736	2	Standard
⌈>	**Sc**	**45**		ug/L			330809	349834	2	Standard
|	**Al**	**27**	**5002.670**	ug/L	85.281	1	2334	131936826	0	Standard
|	**Cr**	**52**	**49.828**	ug/L	0.750	1	13927	1191209	1	Standard
|	**Cr**	**53**	**49.818**	ug/L	0.724	1	305	133346	1	Standard
⌊	**Mn**	**55**	**49.804**	ug/L	0.314	0	504	1720189	2	Standard
⌈>	**Ge**	**72**		ug/L			39846	38077	3	KED
|	**Co**	**59**	**50.393**	ug/L	1.802	3	61	277406	0	KED
|	**Ni**	**60**	**50.261**	ug/L	1.344	2	59	80152	1	KED
|	**Ni**	**62**	**50.388**	ug/L	1.324	2	10	12894	2	KED
|	**Cu**	**63**	**50.072**	ug/L	1.547	3	67	219611	0	KED
|	**Cu**	**65**	**50.227**	ug/L	1.888	3	26	112257	1	KED
|	**Zn**	**66**	**50.095**	ug/L	1.624	3	22	30379	0	KED
|	**Zn**	**67**	**49.990**	ug/L	3.682	7	3	4873	5	KED
|	**As**	**75**	**50.336**	ug/L	1.209	2	5	15561	1	KED
⌊	**Se**	**78**	**50.148**	ug/L	0.560	1	11	1525	3	KED
	Kr	**83**		ug/L			53	56	3	Standard
⌈>	**In-1**	**115**		ug/L			9311	9162	4	KED
|	**Mo**	**98**	**50.124**	ug/L	2.310	4	10	73507	0	KED
|	**Cd**	**111**	**49.897**	ug/L	1.611	3	2	15901	0	KED
⌊	**Cd**	**114**	**49.751**	ug/L	2.030	4	8	40283	0	KED
⌈>	**In**	**115**		ug/L			399419	409733	3	Standard
|	**Ag**	**107**	**50.048**	ug/L	1.939	3	46	722531	0	Standard
|	**Ba**	**135**	**50.484**	ug/L	2.046	4	15	281808	1	Standard
⌊	**Ba**	**137**	**50.201**	ug/L	1.586	3	37	510053	0	Standard
⌈>	**Tb**	**159**		ug/L			173053	182863	1	Standard
⌊	**Pb**	**208**	**50.182**	ug/L	0.587	1	201	4455474	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:48:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	47319	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	347968	1	Standard
|	**Al**	**27**	**9993.856**	ug/L	146.775	1	2334	261673101	0	Standard
|	**Cr**	**52**	**100.449**	ug/L	0.719	0	13927	2410037	0	Standard
|	**Cr**	**53**	**99.516**	ug/L	1.213	1	305	260500	2	Standard
⌊	**Mn**	**55**	**100.210**	ug/L	1.155	1	504	3466669	2	Standard
⌈>	**Ge**	**72**		ug/L			39846	38576	1	KED
|	**Co**	**59**	**99.502**	ug/L	0.924	0	61	546242	1	KED
|	**Ni**	**60**	**99.028**	ug/L	1.562	1	59	154979	0	KED
|	**Ni**	**62**	**98.838**	ug/L	3.763	3	10	24662	2	KED
|	**Cu**	**63**	**98.803**	ug/L	1.257	1	67	422414	1	KED
|	**Cu**	**65**	**98.726**	ug/L	1.132	1	26	214583	1	KED
|	**Zn**	**66**	**98.730**	ug/L	1.593	1	22	58237	0	KED
|	**Zn**	**67**	**99.578**	ug/L	0.802	0	3	9708	0	KED
|	**As**	**75**	**99.575**	ug/L	1.193	1	5	30761	0	KED
⌊	**Se**	**78**	**98.973**	ug/L	1.063	1	11	2939	2	KED
	Kr	**83**		ug/L			53	64	15	Standard
⌈>	**In-1**	**115**		ug/L			9311	9233	2	KED
|	**Mo**	**98**	**99.424**	ug/L	2.178	2	10	144285	0	KED
|	**Cd**	**111**	**99.240**	ug/L	2.879	2	2	31093	0	KED
⌊	**Cd**	**114**	**99.174**	ug/L	2.885	2	8	78791	0	KED
⌈>	**In**	**115**		ug/L			399419	407313	4	Standard
|	**Ag**	**107**	**99.778**	ug/L	3.274	3	46	1421330	1	Standard
|	**Ba**	**135**	**98.997**	ug/L	2.050	2	15	531703	2	Standard
⌊	**Ba**	**137**	**99.876**	ug/L	2.237	2	37	1004628	2	Standard
⌈>	**Tb**	**159**		ug/L			173053	182429	0	Standard
⌊	**Pb**	**208**	**99.600**	ug/L	2.205	2	201	8706750	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 15:55:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	41474	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	337191	2	Standard
⎢	**Al**	**27**	**0.037**	ug/L	0.020	52	2334	3320	16	Standard
⎢	**Cr**	**52**	**0.002**	ug/L	0.012	558	13927	14239	1	Standard
⎢	**Cr**	**53**	**-0.012**	ug/L	0.005	43	305	281	2	Standard
⎣	**Mn**	**55**	**0.002**	ug/L	0.001	48	504	571	2	Standard
⎡>	**Ge**	**72**		ug/L			39846	39354	1	KED
⎢	**Co**	**59**	**-0.008**	ug/L	0.002	27	61	13	90	KED
⎢	**Ni**	**60**	**-0.015**	ug/L	0.003	20	59	34	14	KED
⎢	**Ni**	**62**	**-0.007**	ug/L	0.016	225	10	8	44	KED
⎢	**Cu**	**63**	**-0.009**	ug/L	0.001	16	67	29	19	KED
⎢	**Cu**	**65**	**-0.001**	ug/L	0.001	144	26	23	12	KED
⎢	**Zn**	**66**	**0.027**	ug/L	0.014	50	22	38	21	KED
⎢	**Zn**	**67**	**0.000**	ug/L	0.011	3252	3	3	34	KED
⎢	**As**	**75**	**0.004**	ug/L	0.004	97	5	7	17	KED
⎣	**Se**	**78**	**-0.002**	ug/L	0.198	8521	11	11	55	KED
	Kr	**83**		ug/L			53	52	24	Standard
⎡>	**In-1**	**115**		ug/L			9311	9513	2	KED
⎢	**Mo**	**98**	**0.026**	ug/L	0.006	22	10	50	18	KED
⎢	**Cd**	**111**	**0.017**	ug/L	0.006	33	2	7	25	KED
⎣	**Cd**	**114**	**0.003**	ug/L	0.004	121	8	10	26	KED
⎡>	**In**	**115**		ug/L			399419	403042	1	Standard
⎢	**Ag**	**107**	**0.003**	ug/L	0.000	13	46	90	5	Standard
⎢	**Ba**	**135**	**0.002**	ug/L	0.001	27	15	25	11	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.001	70	37	49	16	Standard
⎡>	**Tb**	**159**		ug/L			173053	176176	0	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	13	201	379	5	Standard

Sample Information

Sample Date/Time: Tuesday, May 09, 2023 15:48:11
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.m
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Sc	45							
Al	27	**1.0000**	0.075	20.00	1000	2000	5000	10000
Cr	52	**1.0000**	0.069	0.50	10	20	50	100
Cr	53	**1.0000**	0.008	0.50	10	20	50	100
Mn	55	**1.0000**	0.099	0.50	10	20	50	100
Ge	72							
Co	59	**0.9999**	0.142	0.20	10	20	50	100
Ni	60	**0.9998**	0.041	0.50	10	20	50	100
Ni	62	**0.9997**	0.006	0.50	10	20	50	100
Cu	63	**0.9998**	0.111	0.50	10	20	50	100
Cu	65	**0.9997**	0.056	0.50	10	20	50	100
Zn	66	**0.9997**	0.015	6.00	10	20	50	100
Zn	67	**1.0000**	0.003	6.00	10	20	50	100
As	75	**0.9999**	0.008	0.20	10	20	50	100
Se	78	**0.9998**	0.001	0.50	10	20	50	100
Kr	83							
In-1	115							
Mo	98	**0.9999**	0.157	0.20	10	20	50	100
Cd	111	**0.9999**	0.034	0.10	10	20	50	100
Cd	114	**0.9999**	0.086	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.035	0.20	10	20	50	100
Ba	135	**0.9998**	0.013	0.50	10	20	50	100
Ba	137	**1.0000**	0.025	0.50	10	20	50	100
Tb	159							
Pb	208	**1.0000**	0.479	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:02:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	51030	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	348289	1	Standard
⎢	**Al**	**27**	**5055.142**	ug/L	67.080	1	2334	132481604	0	Standard
⎢	**Cr**	**52**	**49.900**	ug/L	0.534	1	13927	1205645	0	Standard
⎢	**Cr**	**53**	**51.349**	ug/L	1.082	2	305	134661	1	Standard
⎣	**Mn**	**55**	**50.670**	ug/L	0.765	1	504	1754341	0	Standard
⎡>	**Ge**	**72**		ug/L			39846	39763	1	KED
⎢	**Co**	**59**	**49.745**	ug/L	0.122	0	61	281520	0	KED
⎢	**Ni**	**60**	**51.058**	ug/L	1.053	2	59	82393	1	KED
⎢	**Ni**	**62**	**51.063**	ug/L	1.423	2	10	13140	1	KED
⎢	**Cu**	**63**	**51.738**	ug/L	0.675	1	67	228017	0	KED
⎢	**Cu**	**65**	**51.510**	ug/L	0.653	1	26	115416	1	KED
⎢	**Zn**	**66**	**49.322**	ug/L	0.636	1	22	30000	0	KED
⎢	**Zn**	**67**	**50.105**	ug/L	1.472	2	3	5037	2	KED
⎢	**As**	**75**	**47.612**	ug/L	0.736	1	5	15163	0	KED
⎣	**Se**	**78**	**79.129**	ug/L	2.195	2	11	2424	3	KED
	Kr	**83**		ug/L			53	51	7	Standard
⎡>	**In-1**	**115**		ug/L			9311	9456	2	KED
⎢	**Mo**	**98**	**48.824**	ug/L	0.912	1	10	72575	0	KED
⎢	**Cd**	**111**	**50.002**	ug/L	1.123	2	2	16048	0	KED
⎣	**Cd**	**114**	**49.630**	ug/L	0.920	1	8	40393	0	KED
⎡>	**In**	**115**		ug/L			399419	407713	2	Standard
⎢	**Ag**	**107**	**51.697**	ug/L	1.768	3	46	737324	0	Standard
⎢	**Ba**	**135**	**51.629**	ug/L	2.097	4	15	277557	2	Standard
⎣	**Ba**	**137**	**51.335**	ug/L	2.490	4	37	516748	2	Standard
⎡>	**Tb**	**159**		ug/L			173053	182624	0	Standard
⎣	**Pb**	**208**	**51.461**	ug/L	0.294	0	201	4503392	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 09, 2023 16:09:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	41853	1	Standard
>	Sc	45		ug/L			330809	321169	12	Standard
	Al	27	0.024	ug/L	0.010	40	2334	2819	4	Standard
	Cr	52	0.036	ug/L	0.071	199	13927	14178	2	Standard
	Cr	53	-0.007	ug/L	0.015	200	305	276	5	Standard
	Mn	55	0.002	ug/L	0.002	129	504	540	1	Standard
>	Ge	72		ug/L			39846	39840	0	KED
	Co	59	-0.009	ug/L	0.001	11	61	12	48	KED
	Ni	60	-0.012	ug/L	0.005	38	59	39	20	KED
	Ni	62	-0.010	ug/L	0.019	189	10	8	58	KED
	Cu	63	-0.008	ug/L	0.003	39	67	29	48	KED
	Cu	65	-0.004	ug/L	0.002	59	26	17	26	KED
	Zn	66	0.007	ug/L	0.005	72	22	26	12	KED
	Zn	67	0.025	ug/L	0.051	199	3	5	88	KED
	As	75	-0.005	ug/L	0.003	59	5	4	22	KED
	Se	78	0.006	ug/L	0.055	989	11	11	14	KED
	Kr	83		ug/L			53	43	15	Standard
>	In-1	115		ug/L			9311	9420	1	KED
	Mo	98	0.013	ug/L	0.007	52	10	30	32	KED
	Cd	111	0.011	ug/L	0.003	25	2	5	16	KED
	Cd	114	-0.002	ug/L	0.011	680	8	6	129	KED
>	In	115		ug/L			399419	373010	11	Standard
	Ag	107	0.003	ug/L	0.002	70	46	77	24	Standard
	Ba	135	0.001	ug/L	0.001	70	15	20	30	Standard
	Ba	137	0.002	ug/L	0.001	24	37	55	3	Standard
>	Tb	159		ug/L			173053	162830	8	Standard
	Pb	208	0.002	ug/L	0.000	19	201	343	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:14:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	41843	0	Standard
⌈>	**Sc**	**45**		ug/L			330809	342999	1	Standard
|	**Al**	**27**	**-0.006**	ug/L	0.005	88	2334	2271	5	Standard
|	**Cr**	**52**	**-0.012**	ug/L	0.017	146	13927	14160	2	Standard
|	**Cr**	**53**	**-0.020**	ug/L	0.007	35	305	265	6	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.000	71	504	500	3	Standard
⌈>	**Ge**	**72**		ug/L			39846	39973	1	KED
|	**Co**	**59**	**-0.009**	ug/L	0.000	3	61	9	20	KED
|	**Ni**	**60**	**-0.016**	ug/L	0.004	27	59	33	21	KED
|	**Ni**	**62**	**0.015**	ug/L	0.015	101	10	14	27	KED
|	**Cu**	**63**	**-0.010**	ug/L	0.001	13	67	22	30	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.003	91	26	18	39	KED
|	**Zn**	**66**	**0.022**	ug/L	0.014	65	22	35	24	KED
|	**Zn**	**67**	**0.013**	ug/L	0.030	232	3	4	65	KED
|	**As**	**75**	**-0.011**	ug/L	0.002	19	5	2	32	KED
⌊	**Se**	**78**	**-0.012**	ug/L	0.077	669	11	10	21	KED
	Kr	**83**		ug/L			53	49	13	Standard
⌈>	**In-1**	**115**		ug/L			9311	9338	1	KED
|	**Mo**	**98**	**0.002**	ug/L	0.006	351	10	13	66	KED
|	**Cd**	**111**	**0.011**	ug/L	0.006	52	2	5	33	KED
⌊	**Cd**	**114**	**-0.007**	ug/L	0.001	18	8	2	45	KED
⌈>	**In**	**115**		ug/L			399419	407275	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	2365	46	47	20	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	77	15	24	27	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	91	37	47	18	Standard
⌈>	**Tb**	**159**		ug/L			173053	175538	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	31	201	287	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:20:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	43825	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	351713	1	Standard
|	**Al**	**27**	**5017.324**	ug/L	66.831	1	2334	132780299	1	Standard
|	**Cr**	**52**	**49.123**	ug/L	1.476	3	13927	1198689	2	Standard
|	**Cr**	**53**	**51.619**	ug/L	0.692	1	305	136698	0	Standard
⌊	**Mn**	**55**	**49.606**	ug/L	0.908	1	504	1734249	0	Standard
⌈>	**Ge**	**72**		ug/L			39846	40000	1	KED
|	**Co**	**59**	**48.873**	ug/L	1.174	2	61	278172	0	KED
|	**Ni**	**60**	**49.785**	ug/L	0.823	1	59	80817	0	KED
|	**Ni**	**62**	**50.064**	ug/L	1.069	2	10	12960	0	KED
|	**Cu**	**63**	**50.263**	ug/L	1.422	2	67	222822	2	KED
|	**Cu**	**65**	**50.231**	ug/L	0.497	0	26	113218	1	KED
|	**Zn**	**66**	**50.271**	ug/L	0.721	1	22	30759	0	KED
|	**Zn**	**67**	**50.586**	ug/L	2.193	4	3	5113	2	KED
|	**As**	**75**	**49.273**	ug/L	0.700	1	5	15785	0	KED
⌊	**Se**	**78**	**50.457**	ug/L	1.106	2	11	1558	1	KED
	Kr	**83**		ug/L			53	58	29	Standard
⌈>	**In-1**	**115**		ug/L			9311	9554	1	KED
|	**Mo**	**98**	**49.118**	ug/L	0.330	0	10	73793	0	KED
|	**Cd**	**111**	**49.809**	ug/L	0.460	0	2	16157	0	KED
⌊	**Cd**	**114**	**49.890**	ug/L	0.661	1	8	41037	0	KED
⌈>	**In**	**115**		ug/L			399419	420946	0	Standard
|	**Ag**	**107**	**50.017**	ug/L	0.387	0	46	737019	0	Standard
|	**Ba**	**135**	**48.935**	ug/L	1.070	2	15	271777	1	Standard
⌊	**Ba**	**137**	**49.517**	ug/L	1.055	2	37	515090	1	Standard
⌈>	**Tb**	**159**		ug/L			173053	183933	0	Standard
⌊	**Pb**	**208**	**50.246**	ug/L	0.471	0	201	4428518	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:27:45

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	41468	2	Standard
>	Sc	45		ug/L			330809	325907	10	Standard
	Al	27	0.264	ug/L	0.444	168	2334	9241	128	Standard
	Cr	52	0.030	ug/L	0.049	165	13927	14310	3	Standard
	Cr	53	-0.010	ug/L	0.013	124	305	274	11	Standard
	Mn	55	0.006	ug/L	0.007	122	504	687	40	Standard
>	Ge	72		ug/L			39846	40680	0	KED
	Co	59	-0.009	ug/L	0.001	7	61	9	40	KED
	Ni	60	-0.013	ug/L	0.007	54	59	39	29	KED
	Ni	62	-0.013	ug/L	0.019	150	10	7	66	KED
	Cu	63	-0.004	ug/L	0.004	88	67	48	35	KED
	Cu	65	-0.004	ug/L	0.002	54	26	17	29	KED
	Zn	66	0.026	ug/L	0.022	85	22	38	35	KED
	Zn	67	0.030	ug/L	0.039	127	3	6	62	KED
	As	75	-0.004	ug/L	0.010	258	5	4	65	KED
	Se	78	-0.004	ug/L	0.091	2092	11	11	24	KED
	Kr	83		ug/L			53	49	13	Standard
>	In-1	115		ug/L			9311	9519	3	KED
	Mo	98	0.010	ug/L	0.009	89	10	26	51	KED
	Cd	111	0.012	ug/L	0.004	37	2	6	24	KED
	Cd	114	-0.006	ug/L	0.004	58	8	3	96	KED
>	In	115		ug/L			399419	387542	11	Standard
	Ag	107	0.005	ug/L	0.006	116	46	119	77	Standard
	Ba	135	0.007	ug/L	0.007	102	15	52	79	Standard
	Ba	137	0.005	ug/L	0.005	98	37	85	61	Standard
>	Tb	159		ug/L			173053	167051	11	Standard
	Pb	208	0.005	ug/L	0.005	89	201	624	67	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:32:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	42147	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	340888	1	Standard
⎢	**Al**	**27**	**0.003**	ug/L	0.003	86	2334	2482	3	Standard
⎢	**Cr**	**52**	**0.001**	ug/L	0.004	592	13927	14368	1	Standard
⎢	**Cr**	**53**	**-0.015**	ug/L	0.016	108	305	277	16	Standard
⎣	**Mn**	**55**	**-0.001**	ug/L	0.001	104	504	493	6	Standard
⎡>	**Ge**	**72**		ug/L			39846	39995	1	KED
⎢	**Co**	**59**	**-0.010**	ug/L	0.000	3	61	6	31	KED
⎢	**Ni**	**60**	**-0.010**	ug/L	0.005	52	59	43	17	KED
⎢	**Ni**	**62**	**-0.020**	ug/L	0.015	76	10	5	66	KED
⎢	**Cu**	**63**	**-0.007**	ug/L	0.001	7	67	37	5	KED
⎢	**Cu**	**65**	**-0.005**	ug/L	0.001	21	26	15	13	KED
⎢	**Zn**	**66**	**0.027**	ug/L	0.006	23	22	38	11	KED
⎢	**Zn**	**67**	**0.013**	ug/L	0.022	175	3	4	49	KED
⎢	**As**	**75**	**-0.007**	ug/L	0.002	33	5	3	19	KED
⎣	**Se**	**78**	**-0.007**	ug/L	0.036	517	11	11	8	KED
	Kr	**83**		ug/L			53	47	17	Standard
⎡>	**In-1**	**115**		ug/L			9311	9242	1	KED
⎢	**Mo**	**98**	**0.002**	ug/L	0.003	138	10	14	32	KED
⎢	**Cd**	**111**	**0.005**	ug/L	0.013	258	2	3	108	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.004	78	8	3	90	KED
⎡>	**In**	**115**		ug/L			399419	405205	1	Standard
⎢	**Ag**	**107**	**-0.001**	ug/L	0.001	120	46	38	27	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.000	19	15	22	4	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.001	81	37	48	17	Standard
⎡>	**Tb**	**159**		ug/L			173053	174170	1	Standard
⎣	**Pb**	**208**	**0.002**	ug/L	0.000	9	201	391	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:39:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	41773	0	Standard
⌈>	**Sc**	**45**		ug/L			330809	348291	1	Standard
|	**Al**	**27**	**19.792**	ug/L	0.092	0	2334	521196	1	Standard
|	**Cr**	**52**	**0.488**	ug/L	0.018	3	13927	26303	0	Standard
|	**Cr**	**53**	**0.510**	ug/L	0.011	2	305	1655	1	Standard
⌊	**Mn**	**55**	**0.502**	ug/L	0.005	1	504	17922	1	Standard
⌈>	**Ge**	**72**		ug/L			39846	41006	0	KED
|	**Co**	**59**	**0.194**	ug/L	0.005	2	61	1194	1	KED
|	**Ni**	**60**	**0.477**	ug/L	0.028	5	59	853	4	KED
|	**Ni**	**62**	**0.513**	ug/L	0.020	3	10	147	4	KED
|	**Cu**	**63**	**0.703**	ug/L	0.023	3	67	3265	2	KED
|	**Cu**	**65**	**0.709**	ug/L	0.009	1	26	1665	1	KED
|	**Zn**	**66**	**6.199**	ug/L	0.134	2	22	3908	2	KED
|	**Zn**	**67**	**5.777**	ug/L	0.453	7	3	601	7	KED
|	**As**	**75**	**0.206**	ug/L	0.027	12	5	73	12	KED
⌊	**Se**	**78**	**0.565**	ug/L	0.190	33	11	29	19	KED
	Kr	**83**		ug/L			53	41	25	Standard
⌈>	**In-1**	**115**		ug/L			9311	9695	0	KED
|	**Mo**	**98**	**0.185**	ug/L	0.019	10	10	293	9	KED
|	**Cd**	**111**	**0.097**	ug/L	0.026	26	2	34	24	KED
⌊	**Cd**	**114**	**0.095**	ug/L	0.013	13	8	87	11	KED
⌈>	**In**	**115**		ug/L			399419	413454	3	Standard
|	**Ag**	**107**	**0.217**	ug/L	0.002	0	46	3192	3	Standard
|	**Ba**	**135**	**0.520**	ug/L	0.027	5	15	2854	5	Standard
⌊	**Ba**	**137**	**0.516**	ug/L	0.032	6	37	5303	3	Standard
⌈>	**Tb**	**159**		ug/L			173053	178882	0	Standard
⌊	**Pb**	**208**	**0.104**	ug/L	0.000	0	201	9154	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 09, 2023 16:44:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	178413	0	Standard
>	Sc	45		ug/L			330809	319836	10	Standard
	Al	27	20673.419	ug/L	2512.933	12	2334	493384416	1	Standard
	Cr	52	0.693	ug/L	0.143	20	13927	28445	0	Standard
	Cr	53	3.584	ug/L	0.380	10	305	8844	1	Standard
	Mn	55	0.198	ug/L	0.027	13	504	6708	2	Standard
>	Ge	72		ug/L			39846	35200	1	KED
	Co	59	0.022	ug/L	0.003	14	61	163	8	KED
	Ni	60	0.094	ug/L	0.008	8	59	186	6	KED
	Ni	62	0.150	ug/L	0.028	18	10	43	15	KED
	Cu	63	0.031	ug/L	0.005	16	67	180	11	KED
	Cu	65	0.039	ug/L	0.004	11	26	100	9	KED
	Zn	66	0.280	ug/L	0.050	17	22	170	14	KED
	Zn	67	0.311	ug/L	0.033	10	3	30	10	KED
	As	75	0.024	ug/L	0.012	51	5	12	28	KED
	Se	78	-0.058	ug/L	0.060	103	11	8	20	KED
	Kr	83		ug/L			53	127	5	Standard
>	In-1	115		ug/L			9311	8388	2	KED
	Mo	98	393.408	ug/L	9.298	2	10	518636	0	KED
	Cd	111	0.089	ug/L	0.013	14	2	27	11	KED
	Cd	114	0.053	ug/L	0.011	20	8	45	18	KED
>	In	115		ug/L			399419	421531	9	Standard
	Ag	107	0.004	ug/L	0.001	34	46	110	8	Standard
	Ba	135	0.106	ug/L	0.002	2	15	606	7	Standard
	Ba	137	0.105	ug/L	0.014	13	37	1120	4	Standard
>	Tb	159		ug/L			173053	165411	10	Standard
	Pb	208	0.025	ug/L	0.003	14	201	2125	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:49:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	175638	0	Standard
>	**Sc**	**45**		ug/L			330809	339423	1	Standard
	Al	**27**	**18992.057**	ug/L	45.740	0	2334	485118632	1	Standard
	Cr	**52**	**19.239**	ug/L	0.158	0	13927	461816	0	Standard
	Cr	**53**	**22.578**	ug/L	0.085	0	305	57886	0	Standard
	Mn	**55**	**19.193**	ug/L	0.108	0	504	647999	0	Standard
>	**Ge**	**72**		ug/L			39846	34003	1	KED
	Co	**59**	**20.391**	ug/L	0.289	1	61	98695	0	KED
	Ni	**60**	**20.684**	ug/L	0.321	1	59	28576	2	KED
	Ni	**62**	**20.454**	ug/L	0.331	1	10	4507	2	KED
	Cu	**63**	**20.310**	ug/L	0.427	2	67	76567	1	KED
	Cu	**65**	**20.188**	ug/L	0.219	1	26	38689	0	KED
	Zn	**66**	**19.206**	ug/L	0.248	1	22	10000	0	KED
	Zn	**67**	**17.986**	ug/L	0.386	2	3	1548	2	KED
	As	**75**	**18.983**	ug/L	0.260	1	5	5172	0	KED
	Se	**78**	**0.069**	ug/L	0.056	82	11	11	14	KED
	Kr	**83**		ug/L			53	140	2	Standard
>	**In-1**	**115**		ug/L			9311	7800	2	KED
	Mo	**98**	**406.780**	ug/L	8.263	2	10	498752	0	KED
	Cd	**111**	**19.887**	ug/L	0.241	1	2	5267	0	KED
	Cd	**114**	**19.859**	ug/L	0.698	3	8	13335	1	KED
>	**In**	**115**		ug/L			399419	458230	2	Standard
	Ag	**107**	**16.458**	ug/L	0.235	1	46	263970	0	Standard
	Ba	**135**	**0.100**	ug/L	0.006	6	15	619	4	Standard
	Ba	**137**	**0.091**	ug/L	0.002	2	37	1078	4	Standard
>	**Tb**	**159**		ug/L			173053	175568	1	Standard
	Pb	**208**	**0.016**	ug/L	0.001	3	201	1560	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:54:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	170222	1	Standard
>	**Sc**	**45**		ug/L			330809	324648	2	Standard
	Al	**27**	**19352.192**	ug/L	285.516	1	2334	472726211	1	Standard
	Cr	**52**	**0.610**	ug/L	0.011	1	13927	27229	1	Standard
	Cr	**53**	**3.638**	ug/L	0.057	1	305	9175	3	Standard
	Mn	**55**	**0.176**	ug/L	0.003	1	504	6185	2	Standard
>	**Ge**	**72**		ug/L			39846	33021	1	KED
	Co	**59**	**0.025**	ug/L	0.003	14	61	168	11	KED
	Ni	**60**	**0.098**	ug/L	0.011	10	59	179	9	KED
	Ni	**62**	**0.139**	ug/L	0.007	5	10	38	5	KED
	Cu	**63**	**0.035**	ug/L	0.007	21	67	182	15	KED
	Cu	**65**	**0.042**	ug/L	0.008	19	26	99	13	KED
	Zn	**66**	**0.318**	ug/L	0.021	6	22	179	7	KED
	Zn	**67**	**0.197**	ug/L	0.069	34	3	19	30	KED
	As	**75**	**0.021**	ug/L	0.011	52	5	10	28	KED
	Se	**78**	**-0.010**	ug/L	0.158	1561	11	9	42	KED
	Kr	**83**		ug/L			53	132	13	Standard
>	**In-1**	**115**		ug/L			9311	7621	0	KED
	Mo	**98**	**403.581**	ug/L	2.915	0	10	483596	0	KED
	Cd	**111**	**0.083**	ug/L	0.014	16	2	23	15	KED
	Cd	**114**	**0.072**	ug/L	0.022	30	8	53	27	KED
>	**In**	**115**		ug/L			399419	454995	0	Standard
	Ag	**107**	**0.003**	ug/L	0.001	32	46	105	16	Standard
	Ba	**135**	**0.108**	ug/L	0.008	7	15	662	7	Standard
	Ba	**137**	**0.100**	ug/L	0.002	2	37	1167	2	Standard
>	**Tb**	**159**		ug/L			173053	173976	1	Standard
	Pb	**208**	**0.024**	ug/L	0.002	7	201	2168	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 16:59:26

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	48313	0	Standard
>	Sc	45		ug/L			330809	322847	0	Standard
	Al	27	19741.425	ug/L	71.368	0	2334	479639166	1	Standard
	Cr	52	198.542	ug/L	3.145	1	13927	4406890	2	Standard
	Cr	53	196.647	ug/L	0.344	0	305	477271	1	Standard
	Mn	55	201.779	ug/L	1.576	0	504	6475346	1	Standard
>	Ge	72		ug/L			39846	32623	0	KED
	Co	59	201.561	ug/L	1.970	0	61	935703	0	KED
	Ni	60	199.185	ug/L	3.001	1	59	263614	1	KED
	Ni	62	199.266	ug/L	1.436	0	10	42052	0	KED
	Cu	63	197.593	ug/L	2.018	1	67	714373	1	KED
	Cu	65	197.712	ug/L	1.492	0	26	363393	0	KED
	Zn	66	193.134	ug/L	0.267	0	22	96338	0	KED
	Zn	67	190.315	ug/L	4.102	2	3	15690	2	KED
	As	75	193.494	ug/L	1.405	0	5	50549	0	KED
	Se	78	191.006	ug/L	1.616	0	11	4787	1	KED
	Kr	83		ug/L			53	150	19	Standard
>	In-1	115		ug/L			9311	7778	1	KED
	Mo	98	201.948	ug/L	3.842	1	10	246930	0	KED
	Cd	111	194.681	ug/L	4.559	2	2	51396	0	KED
	Cd	114	197.729	ug/L	3.254	1	8	132379	0	KED
>	In	115		ug/L			399419	428093	2	Standard
	Ag	107	182.281	ug/L	4.583	2	46	2730498	1	Standard
	Ba	135	183.680	ug/L	3.486	1	15	1037101	1	Standard
	Ba	137	179.582	ug/L	3.813	2	37	1899009	0	Standard
>	Tb	159		ug/L			173053	172141	1	Standard
	Pb	208	205.647	ug/L	3.213	1	201	16960392	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:04:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	52276	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	313429	3	Standard
⎢	**Al**	**27**	**31005.746**	ug/L	562.243	1	2334	731037211	1	Standard
⎢	**Cr**	**52**	**303.658**	ug/L	3.359	1	13927	6535199	2	Standard
⎢	**Cr**	**53**	**303.033**	ug/L	4.581	1	305	713647	1	Standard
⎣	**Mn**	**55**	**306.141**	ug/L	5.471	1	504	9533969	1	Standard
⎡>	**Ge**	**72**		ug/L			39846	32028	0	KED
⎢	**Co**	**59**	**307.176**	ug/L	0.922	0	61	1399949	0	KED
⎢	**Ni**	**60**	**303.679**	ug/L	2.108	0	59	394535	0	KED
⎢	**Ni**	**62**	**300.015**	ug/L	3.229	1	10	62152	0	KED
⎢	**Cu**	**63**	**298.175**	ug/L	1.109	0	67	1058290	0	KED
⎢	**Cu**	**65**	**292.324**	ug/L	4.504	1	26	527452	1	KED
⎢	**Zn**	**66**	**287.385**	ug/L	1.986	0	22	140723	0	KED
⎢	**Zn**	**67**	**280.785**	ug/L	2.491	0	3	22725	0	KED
⎢	**As**	**75**	**294.201**	ug/L	0.913	0	5	75455	0	KED
⎣	**Se**	**78**	**286.480**	ug/L	2.751	0	11	7045	1	KED
	Kr	**83**		ug/L			53	203	8	Standard
⎡>	**In-1**	**115**		ug/L			9311	7480	1	KED
⎢	**Mo**	**98**	**317.999**	ug/L	6.026	1	10	373953	1	KED
⎢	**Cd**	**111**	**295.955**	ug/L	4.835	1	2	75149	0	KED
⎣	**Cd**	**114**	**297.848**	ug/L	4.774	1	8	191772	0	KED
⎡>	**In**	**115**		ug/L			399419	399361	1	Standard
⎢	**Ag**	**107**	**285.536**	ug/L	7.252	2	46	3990262	0	Standard
⎢	**Ba**	**135**	**286.739**	ug/L	3.966	1	15	1510698	1	Standard
⎣	**Ba**	**137**	**298.906**	ug/L	2.154	0	37	2949511	1	Standard
⎡>	**Tb**	**159**		ug/L			173053	165043	0	Standard
⎣	**Pb**	**208**	**309.892**	ug/L	1.883	0	201	24508496	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:11:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	49173	1	Standard
⎡>	**Sc**	**45**		ug/L			330809	326774	2	Standard
⎢	**Al**	**27**	**19953.876**	ug/L	257.214	1	2334	490586538	1	Standard
⎢	**Cr**	**52**	**196.013**	ug/L	1.902	0	13927	4403434	2	Standard
⎢	**Cr**	**53**	**194.069**	ug/L	4.740	2	305	476559	0	Standard
⎣	**Mn**	**55**	**196.114**	ug/L	1.447	0	504	6370172	2	Standard
⎡>	**Ge**	**72**		ug/L			39846	33834	1	KED
⎢	**Co**	**59**	**199.526**	ug/L	1.362	0	61	960591	0	KED
⎢	**Ni**	**60**	**198.863**	ug/L	2.970	1	59	272911	0	KED
⎢	**Ni**	**62**	**198.206**	ug/L	3.678	1	10	43374	0	KED
⎢	**Cu**	**63**	**197.328**	ug/L	2.319	1	67	739866	1	KED
⎢	**Cu**	**65**	**196.798**	ug/L	0.431	0	26	375141	1	KED
⎢	**Zn**	**66**	**194.119**	ug/L	3.134	1	22	100408	0	KED
⎢	**Zn**	**67**	**193.033**	ug/L	3.419	1	3	16502	0	KED
⎢	**As**	**75**	**195.521**	ug/L	2.148	1	5	52970	0	KED
⎣	**Se**	**78**	**192.073**	ug/L	3.589	1	11	4992	0	KED
	Kr	**83**		ug/L			53	131	13	Standard
⎡>	**In-1**	**115**		ug/L			9311	7916	0	KED
⎢	**Mo**	**98**	**205.102**	ug/L	2.356	1	10	255288	0	KED
⎢	**Cd**	**111**	**198.168**	ug/L	0.577	0	2	53261	0	KED
⎣	**Cd**	**114**	**200.016**	ug/L	0.351	0	8	136315	0	KED
⎡>	**In**	**115**		ug/L			399419	410271	3	Standard
⎢	**Ag**	**107**	**183.336**	ug/L	2.976	1	46	2632172	2	Standard
⎢	**Ba**	**135**	**191.519**	ug/L	5.381	2	15	1036079	1	Standard
⎣	**Ba**	**137**	**186.709**	ug/L	2.306	1	37	1892433	2	Standard
⎡>	**Tb**	**159**		ug/L			173053	169948	1	Standard
⎣	**Pb**	**208**	**204.831**	ug/L	0.905	0	201	16680119	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:16:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	44220	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	328384	0	Standard
|	**Al**	**27**	**0.139**	ug/L	0.019	13	2334	5739	7	Standard
|	**Cr**	**52**	**-0.030**	ug/L	0.010	33	13927	13160	1	Standard
|	**Cr**	**53**	**-0.005**	ug/L	0.004	92	305	291	2	Standard
⌊	**Mn**	**55**	**0.016**	ug/L	0.001	3	504	1019	2	Standard
⌈>	**Ge**	**72**		ug/L			39846	35764	0	KED
|	**Co**	**59**	**0.079**	ug/L	0.076	96	61	453	84	KED
|	**Ni**	**60**	**0.073**	ug/L	0.069	93	59	158	61	KED
|	**Ni**	**62**	**0.071**	ug/L	0.062	87	10	26	53	KED
|	**Cu**	**63**	**0.089**	ug/L	0.075	84	67	411	71	KED
|	**Cu**	**65**	**0.086**	ug/L	0.066	77	26	195	67	KED
|	**Zn**	**66**	**0.158**	ug/L	0.082	52	22	106	41	KED
|	**Zn**	**67**	**0.222**	ug/L	0.171	76	3	22	66	KED
|	**As**	**75**	**0.088**	ug/L	0.068	76	5	30	62	KED
⌊	**Se**	**78**	**0.026**	ug/L	0.017	67	11	10	3	KED
	Kr	**83**		ug/L			53	41	5	Standard
⌈>	**In-1**	**115**		ug/L			9311	8209	1	KED
|	**Mo**	**98**	**0.064**	ug/L	0.014	22	10	92	20	KED
|	**Cd**	**111**	**0.010**	ug/L	0.007	66	2	4	40	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.004	55	8	12	23	KED
⌈>	**In**	**115**		ug/L			399419	436393	1	Standard
|	**Ag**	**107**	**0.011**	ug/L	0.001	10	46	213	7	Standard
|	**Ba**	**135**	**0.020**	ug/L	0.001	2	15	131	2	Standard
⌊	**Ba**	**137**	**0.017**	ug/L	0.002	14	37	224	10	Standard
⌈>	**Tb**	**159**		ug/L			173053	168280	0	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	4	201	748	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:23:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	44378	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	331508	1	Standard
⎢	**Al**	**27**	**0.125**	ug/L	0.088	70	2334	5461	41	Standard
⎢	**Cr**	**52**	**-0.010**	ug/L	0.011	112	13927	13730	2	Standard
⎢	**Cr**	**53**	**-0.011**	ug/L	0.002	18	305	277	3	Standard
⎣	**Mn**	**55**	**0.013**	ug/L	0.001	8	504	932	4	Standard
⎡>	**Ge**	**72**		ug/L			39846	36934	1	KED
⎢	**Co**	**59**	**-0.007**	ug/L	0.002	21	61	19	40	KED
⎢	**Ni**	**60**	**-0.009**	ug/L	0.004	41	59	41	13	KED
⎢	**Ni**	**62**	**0.001**	ug/L	0.017	2500	10	10	39	KED
⎢	**Cu**	**63**	**-0.001**	ug/L	0.003	366	67	59	23	KED
⎢	**Cu**	**65**	**0.006**	ug/L	0.005	98	26	35	30	KED
⎢	**Zn**	**66**	**0.084**	ug/L	0.022	26	22	67	18	KED
⎢	**Zn**	**67**	**0.132**	ug/L	0.035	26	3	15	21	KED
⎢	**As**	**75**	**0.001**	ug/L	0.001	44	5	5	4	KED
⎣	**Se**	**78**	**-0.057**	ug/L	0.054	96	11	8	18	KED
	Kr	**83**		ug/L			53	42	13	Standard
⎡>	**In-1**	**115**		ug/L			9311	8509	1	KED
⎢	**Mo**	**98**	**0.039**	ug/L	0.032	80	10	62	68	KED
⎢	**Cd**	**111**	**0.023**	ug/L	0.034	151	2	8	115	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.005	119	8	10	36	KED
⎡>	**In**	**115**		ug/L			399419	429063	4	Standard
⎢	**Ag**	**107**	**0.004**	ug/L	0.001	19	46	102	10	Standard
⎢	**Ba**	**135**	**0.019**	ug/L	0.001	6	15	122	8	Standard
⎣	**Ba**	**137**	**0.015**	ug/L	0.001	7	37	200	7	Standard
⎡>	**Tb**	**159**		ug/L			173053	170125	1	Standard
⎣	**Pb**	**208**	**0.005**	ug/L	0.001	23	201	606	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:29:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	44583	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	339834	1	Standard
|	**Al**	**27**	**5030.884**	ug/L	56.550	1	2334	128648322	0	Standard
|	**Cr**	**52**	**48.940**	ug/L	0.467	0	13927	1154071	0	Standard
|	**Cr**	**53**	**51.004**	ug/L	1.079	2	305	130528	2	Standard
⌊	**Mn**	**55**	**49.483**	ug/L	0.497	1	504	1671832	1	Standard
⌈>	**Ge**	**72**		ug/L			39846	36604	0	KED
|	**Co**	**59**	**50.587**	ug/L	0.991	1	61	263538	1	KED
|	**Ni**	**60**	**51.447**	ug/L	0.418	0	59	76431	0	KED
|	**Ni**	**62**	**51.192**	ug/L	0.463	0	10	12129	1	KED
|	**Cu**	**63**	**52.315**	ug/L	0.490	0	67	212254	0	KED
|	**Cu**	**65**	**52.209**	ug/L	0.649	1	26	107694	1	KED
|	**Zn**	**66**	**51.627**	ug/L	1.298	2	22	28906	1	KED
|	**Zn**	**67**	**51.769**	ug/L	1.778	3	3	4790	3	KED
|	**As**	**75**	**49.425**	ug/L	0.419	0	5	14491	0	KED
⌊	**Se**	**78**	**49.963**	ug/L	1.840	3	11	1412	2	KED
	Kr	**83**		ug/L			53	38	33	Standard
⌈>	**In-1**	**115**		ug/L			9311	8386	2	KED
|	**Mo**	**98**	**51.538**	ug/L	0.722	1	10	67950	0	KED
|	**Cd**	**111**	**52.327**	ug/L	0.646	1	2	14897	1	KED
⌊	**Cd**	**114**	**52.728**	ug/L	1.376	2	8	38058	0	KED
⌈>	**In**	**115**		ug/L			399419	427513	2	Standard
|	**Ag**	**107**	**47.359**	ug/L	0.435	0	46	708747	2	Standard
|	**Ba**	**135**	**48.344**	ug/L	0.506	1	15	272667	2	Standard
⌊	**Ba**	**137**	**48.160**	ug/L	0.598	1	37	508704	1	Standard
⌈>	**Tb**	**159**		ug/L			173053	176247	1	Standard
⌊	**Pb**	**208**	**51.551**	ug/L	1.150	2	201	4353163	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:36:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	42969	1	Standard
⎡>	**Sc**	**45**		ug/L			330809	334273	0	Standard
⎢	**Al**	**27**	**0.053**	ug/L	0.005	8	2334	3696	2	Standard
⎢	**Cr**	**52**	**-0.024**	ug/L	0.013	53	13927	13523	2	Standard
⎢	**Cr**	**53**	**-0.029**	ug/L	0.005	15	305	236	5	Standard
⎣	**Mn**	**55**	**0.001**	ug/L	0.001	41	504	554	3	Standard
⎡>	**Ge**	**72**		ug/L			39846	37744	0	KED
⎢	**Co**	**59**	**-0.008**	ug/L	0.001	9	61	16	24	KED
⎢	**Ni**	**60**	**-0.025**	ug/L	0.002	8	59	17	19	KED
⎢	**Ni**	**62**	**-0.019**	ug/L	0.021	110	10	5	88	KED
⎢	**Cu**	**63**	**-0.007**	ug/L	0.001	12	67	36	9	KED
⎢	**Cu**	**65**	**0.000**	ug/L	0.001	158	26	25	4	KED
⎢	**Zn**	**66**	**0.013**	ug/L	0.025	191	22	28	50	KED
⎢	**Zn**	**67**	**0.042**	ug/L	0.011	26	3	6	15	KED
⎢	**As**	**75**	**-0.006**	ug/L	0.003	47	5	3	21	KED
⎣	**Se**	**78**	**-0.078**	ug/L	0.107	136	11	8	36	KED
	Kr	**83**		ug/L			53	50	35	Standard
⎡>	**In-1**	**115**		ug/L			9311	8708	3	KED
⎢	**Mo**	**98**	**0.027**	ug/L	0.015	54	10	47	43	KED
⎢	**Cd**	**111**	**0.016**	ug/L	0.027	162	2	6	114	KED
⎣	**Cd**	**114**	**0.004**	ug/L	0.012	298	8	10	84	KED
⎡>	**In**	**115**		ug/L			399419	429969	3	Standard
⎢	**Ag**	**107**	**0.004**	ug/L	0.000	7	46	106	3	Standard
⎢	**Ba**	**135**	**0.003**	ug/L	0.001	20	15	35	13	Standard
⎣	**Ba**	**137**	**0.002**	ug/L	0.001	79	37	59	23	Standard
⎡>	**Tb**	**159**		ug/L			173053	170863	1	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.001	14	201	521	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0256-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:44:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	61493	1	Standard
>	Sc	45		ug/L			330809	344234	0	Standard
	Al	27	0.907	ug/L	0.001	0	2334	25925	0	Standard
	Cr	52	0.021	ug/L	0.012	59	13927	14984	1	Standard
	Cr	53	-0.000	ug/L	0.006	2089	305	317	4	Standard
	Mn	55	0.032	ug/L	0.001	3	504	1619	2	Standard
>	Ge	72		ug/L			39846	38337	1	KED
	Co	59	-0.008	ug/L	0.001	18	61	16	48	KED
	Ni	60	-0.017	ug/L	0.008	46	59	29	40	KED
	Ni	62	-0.029	ug/L	0.005	15	10	3	34	KED
	Cu	63	0.071	ug/L	0.008	10	67	368	9	KED
	Cu	65	0.070	ug/L	0.006	8	26	175	6	KED
	Zn	66	0.477	ug/L	0.030	6	22	300	7	KED
	Zn	67	0.473	ug/L	0.074	15	3	48	14	KED
	As	75	-0.008	ug/L	0.006	76	5	3	51	KED
	Se	78	-0.068	ug/L	0.087	128	11	8	29	KED
	Kr	83		ug/L			53	48	13	Standard
>	In-1	115		ug/L			9311	9099	2	KED
	Mo	98	0.021	ug/L	0.007	31	10	40	22	KED
	Cd	111	0.007	ug/L	0.007	98	2	4	49	KED
	Cd	114	-0.001	ug/L	0.007	550	8	6	79	KED
>	In	115		ug/L			399419	433020	0	Standard
	Ag	107	0.000	ug/L	0.000	154	46	53	10	Standard
	Ba	135	0.039	ug/L	0.004	10	15	237	8	Standard
	Ba	137	0.036	ug/L	0.004	9	37	426	8	Standard
>	Tb	159		ug/L			173053	175697	0	Standard
	Pb	208	0.002	ug/L	0.000	16	201	345	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0256-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:49:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41563	68216	0	Standard
> Sc	45		ug/L			330809	346232	1	Standard
Al	27	5121.085	ug/L	60.412	1	2334	133433342	2	Standard
Cr	52	24.481	ug/L	0.104	0	13927	595482	1	Standard
Cr	53	25.383	ug/L	0.167	0	305	66347	1	Standard
Mn	55	24.899	ug/L	0.150	0	504	857407	2	Standard
> Ge	72		ug/L			39846	35317	8	KED
Co	59	26.753	ug/L	2.525	9	61	133789	1	KED
Ni	60	26.926	ug/L	2.427	9	59	38426	0	KED
Ni	62	27.390	ug/L	2.719	9	10	6231	1	KED
Cu	63	27.216	ug/L	2.442	8	67	106032	0	KED
Cu	65	26.994	ug/L	2.474	9	26	53454	0	KED
Zn	66	85.006	ug/L	8.681	10	22	45650	1	KED
Zn	67	81.130	ug/L	7.965	9	3	7203	1	KED
As	75	25.961	ug/L	2.582	9	5	7305	1	KED
Se	78	82.535	ug/L	7.381	8	11	2234	2	KED
Kr	83		ug/L			53	55	18	Standard
> In-1	115		ug/L			9311	8647	2	KED
Mo	98	26.090	ug/L	0.866	3	10	35465	1	KED
Cd	111	25.295	ug/L	0.424	1	2	7427	2	KED
Cd	114	25.797	ug/L	0.357	1	8	19210	2	KED
> In	115		ug/L			399419	436102	2	Standard
Ag	107	23.945	ug/L	0.432	1	46	365595	3	Standard
Ba	135	24.901	ug/L	0.238	0	15	143271	1	Standard
Ba	137	23.729	ug/L	0.674	2	37	255658	1	Standard
> Tb	159		ug/L			173053	175809	0	Standard
Pb	208	25.404	ug/L	0.092	0	201	2140350	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0192-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 17:55:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	189824	1	Standard
>	Sc	45		ug/L			330809	331540	2	Standard
	Al	27	1.055	ug/L	0.051	4	2334	28633	1	Standard
	Cr	52	0.905	ug/L	0.025	2	13927	34507	1	Standard
	Cr	53	0.670	ug/L	0.031	4	305	1973	3	Standard
	Mn	55	83.790	ug/L	1.019	1	504	2760980	1	Standard
>	Ge	72		ug/L			39846	33686	0	KED
	Co	59	0.190	ug/L	0.009	4	61	961	3	KED
	Ni	60	1.186	ug/L	0.027	2	59	1669	2	KED
	Ni	62	1.168	ug/L	0.008	0	10	263	0	KED
	Cu	63	0.028	ug/L	0.009	31	67	162	19	KED
	Cu	65	0.045	ug/L	0.012	26	26	106	20	KED
	Zn	66	0.648	ug/L	0.106	16	22	352	14	KED
	Zn	67	1.110	ug/L	0.041	3	3	97	3	KED
	As	75	0.062	ug/L	0.008	13	5	21	9	KED
	Se	78	0.005	ug/L	0.117	2564	11	9	32	KED
	Kr	83		ug/L			53	47	30	Standard
>	In-1	115		ug/L			9311	7843	0	KED
	Mo	98	0.839	ug/L	0.052	6	10	1043	6	KED
	Cd	111	0.016	ug/L	0.006	35	2	6	24	KED
	Cd	114	-0.001	ug/L	0.004	341	8	5	47	KED
>	In	115		ug/L			399419	438145	3	Standard
	Ag	107	0.001	ug/L	0.000	41	46	69	14	Standard
	Ba	135	6.922	ug/L	0.227	3	15	40002	0	Standard
	Ba	137	6.605	ug/L	0.216	3	37	71503	0	Standard
>	Tb	159		ug/L			173053	165981	0	Standard
	Pb	208	0.004	ug/L	0.000	7	201	493	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0179-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:01:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	60398	0	Standard
>	Sc	45		ug/L			330809	328186	8	Standard
	Al	27	15.112	ug/L	1.215	8	2334	373789	1	Standard
	Cr	52	0.283	ug/L	0.081	28	13927	20086	1	Standard
	Cr	53	0.263	ug/L	0.031	11	305	948	5	Standard
	Mn	55	9.726	ug/L	0.747	7	504	316375	2	Standard
>	Ge	72		ug/L			39846	35095	2	KED
	Co	59	0.116	ug/L	0.007	6	61	632	3	KED
	Ni	60	0.381	ug/L	0.037	9	59	593	7	KED
	Ni	62	0.392	ug/L	0.060	15	10	98	11	KED
	Cu	63	3.614	ug/L	0.039	1	67	14113	1	KED
	Cu	65	3.598	ug/L	0.074	2	26	7135	1	KED
	Zn	66	260.001	ug/L	4.512	1	22	139476	0	KED
	Zn	67	244.228	ug/L	2.847	1	3	21657	1	KED
	As	75	0.349	ug/L	0.016	4	5	103	2	KED
	Se	78	-0.032	ug/L	0.066	205	11	9	21	KED
	Kr	83		ug/L			53	47	17	Standard
>	In-1	115		ug/L			9311	8284	0	KED
	Mo	98	0.221	ug/L	0.015	6	10	297	6	KED
	Cd	111	0.689	ug/L	0.039	5	2	195	5	KED
	Cd	114	0.647	ug/L	0.053	8	8	468	8	KED
>	In	115		ug/L			399419	432019	9	Standard
	Ag	107	0.002	ug/L	0.002	76	46	81	26	Standard
	Ba	135	8.602	ug/L	1.029	11	15	48689	2	Standard
	Ba	137	8.317	ug/L	0.889	10	37	88242	0	Standard
>	Tb	159		ug/L			173053	161522	8	Standard
	Pb	208	0.219	ug/L	0.019	8	201	17064	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0141-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:07:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	52924	1	Standard
>	Sc	45		ug/L			330809	341461	2	Standard
	Al	27	61.633	ug/L	1.682	2	2334	1585403	0	Standard
	Cr	52	2.785	ug/L	0.117	4	13927	79499	1	Standard
	Cr	53	2.701	ug/L	0.043	1	305	7244	2	Standard
	Mn	55	3.301	ug/L	0.051	1	504	112539	2	Standard
>	Ge	72		ug/L			39846	34352	1	KED
	Co	59	0.006	ug/L	0.004	72	61	82	24	KED
	Ni	60	0.135	ug/L	0.008	5	59	239	3	KED
	Ni	62	0.155	ug/L	0.036	23	10	43	19	KED
	Cu	63	1.180	ug/L	0.018	1	67	4549	0	KED
	Cu	65	1.199	ug/L	0.041	3	26	2342	1	KED
	Zn	66	0.794	ug/L	0.103	12	22	436	12	KED
	Zn	67	0.657	ug/L	0.150	22	3	59	21	KED
	As	75	0.014	ug/L	0.019	138	5	8	57	KED
	Se	78	0.006	ug/L	0.095	1513	11	9	24	KED
	Kr	83		ug/L			53	48	27	Standard
>	In-1	115		ug/L			9311	7763	1	KED
	Mo	98	1.043	ug/L	0.034	3	10	1281	1	KED
	Cd	111	0.004	ug/L	0.011	283	2	2	100	KED
	Cd	114	-0.004	ug/L	0.002	41	8	4	25	KED
>	In	115		ug/L			399419	447020	2	Standard
	Ag	107	-0.001	ug/L	0.000	28	46	34	15	Standard
	Ba	135	0.241	ug/L	0.009	3	15	1436	4	Standard
	Ba	137	0.222	ug/L	0.010	4	37	2487	2	Standard
>	Tb	159		ug/L			173053	169100	0	Standard
	Pb	208	0.006	ug/L	0.000	3	201	680	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0096-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:13:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	470063	1	Standard
>	Sc	45		ug/L			330809	323722	3	Standard
	Al	27	6.095	ug/L	0.160	2	2334	150693	1	Standard
	Cr	52	2.267	ug/L	0.039	1	13927	63915	1	Standard
	Cr	53	1.877	ug/L	0.044	2	305	4863	0	Standard
	Mn	55	12.516	ug/L	0.179	1	504	403110	1	Standard
>	Ge	72		ug/L			39846	30290	0	KED
	Co	59	0.238	ug/L	0.021	8	61	1072	9	KED
	Ni	60	4.271	ug/L	0.073	1	59	5291	0	KED
	Ni	62	4.169	ug/L	0.409	9	10	825	10	KED
	Cu	63	3.098	ug/L	0.034	1	67	10448	0	KED
	Cu	65	3.043	ug/L	0.049	1	26	5211	1	KED
	Zn	66	4.701	ug/L	0.224	4	22	2193	4	KED
	Zn	67	6.665	ug/L	0.386	5	3	512	4	KED
	As	75	0.085	ug/L	0.012	14	5	25	12	KED
	Se	78	0.085	ug/L	0.229	269	11	10	49	KED
	Kr	83		ug/L			53	56	8	Standard
>	In-1	115		ug/L			9311	7086	1	KED
	Mo	98	3.459	ug/L	0.034	0	10	3862	2	KED
	Cd	111	0.063	ug/L	0.020	31	2	16	28	KED
	Cd	114	0.043	ug/L	0.002	5	8	32	6	KED
>	In	115		ug/L			399419	439580	3	Standard
	Ag	107	-0.001	ug/L	0.001	44	46	31	24	Standard
	Ba	135	43.924	ug/L	1.330	3	15	254601	0	Standard
	Ba	137	41.233	ug/L	1.244	3	37	447652	0	Standard
>	Tb	159		ug/L			173053	163713	1	Standard
	Pb	208	0.049	ug/L	0.001	2	201	4006	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0453-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:19:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			41563	467188	1	Standard
> Sc	45		ug/L			330809	264702	2	Standard
Al	27	1.789	ug/L	0.065	3	2334	37484	1	Standard
Cr	52	2.326	ug/L	0.014	0	13927	53347	2	Standard
Cr	53	2.016	ug/L	0.029	1	305	4253	2	Standard
Mn	55	90.714	ug/L	0.679	0	504	2386795	2	Standard
> Ge	72		ug/L			39846	23335	1	KED
Co	59	0.924	ug/L	0.015	1	61	3103	0	KED
Ni	60	8.803	ug/L	0.077	0	59	8367	2	KED
Ni	62	8.517	ug/L	0.394	4	10	1291	4	KED
Cu	63	1.575	ug/L	0.058	3	67	4113	5	KED
Cu	65	1.629	ug/L	0.015	0	26	2156	1	KED
Zn	66	9.219	ug/L	0.134	1	22	3301	1	KED
Zn	67	9.015	ug/L	0.346	3	3	533	3	KED
As	75	0.181	ug/L	0.019	10	5	37	10	KED
Se	78	0.030	ug/L	0.197	666	11	7	49	KED
Kr	83		ug/L			53	76	7	Standard
> In-1	115		ug/L			9311	5637	1	KED
Mo	98	4.020	ug/L	0.093	2	10	3568	1	KED
Cd	111	0.129	ug/L	0.025	18	2	26	16	KED
Cd	114	0.086	ug/L	0.024	28	8	46	23	KED
> In	115		ug/L			399419	364153	1	Standard
Ag	107	0.001	ug/L	0.000	42	46	53	8	Standard
Ba	135	14.760	ug/L	0.168	1	15	70933	2	Standard
Ba	137	13.836	ug/L	0.067	0	37	124533	0	Standard
> Tb	159		ug/L			173053	145714	0	Standard
Pb	208	0.013	ug/L	0.001	4	201	1095	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:24:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	45606	1	Standard
⌈>	**Sc**	**45**		ug/L			330809	307255	2	Standard
|	**Al**	**27**	**0.016**	ug/L	0.004	26	2334	2527	0	Standard
|	**Cr**	**52**	**0.139**	ug/L	0.010	7	13927	15868	2	Standard
|	**Cr**	**53**	**-0.023**	ug/L	0.004	18	305	231	4	Standard
⌊	**Mn**	**55**	**0.002**	ug/L	0.000	20	504	536	2	Standard
⌈>	**Ge**	**72**		ug/L			39846	32401	1	KED
|	**Co**	**59**	**-0.010**	ug/L	0.000	4	61	5	33	KED
|	**Ni**	**60**	**-0.024**	ug/L	0.004	14	59	15	30	KED
|	**Ni**	**62**	**-0.024**	ug/L	0.015	65	10	3	86	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.004	73	67	35	38	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.002	291	26	19	20	KED
|	**Zn**	**66**	**0.145**	ug/L	0.025	17	22	90	15	KED
|	**Zn**	**67**	**0.239**	ug/L	0.165	69	3	22	62	KED
|	**As**	**75**	**-0.010**	ug/L	0.002	19	5	2	26	KED
⌊	**Se**	**78**	**-0.061**	ug/L	0.128	208	11	7	42	KED
	Kr	**83**		ug/L			53	37	26	Standard
⌈>	**In-1**	**115**		ug/L			9311	7506	1	KED
|	**Mo**	**98**	**-0.004**	ug/L	0.001	22	10	3	29	KED
|	**Cd**	**111**	**0.007**	ug/L	0.004	64	2	3	31	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.009	259	8	4	142	KED
⌈>	**In**	**115**		ug/L			399419	444777	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.000	21	46	19	36	Standard
|	**Ba**	**135**	**0.007**	ug/L	0.002	33	15	57	21	Standard
⌊	**Ba**	**137**	**0.006**	ug/L	0.002	29	37	109	18	Standard
⌈>	**Tb**	**159**		ug/L			173053	162882	2	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.001	11	201	540	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0595-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:29:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			41563	217510	1	Standard
>	Sc	45		ug/L			330809	342435	1	Standard
	Al	27	31.824	ug/L	0.499	1	2334	822422	1	Standard
	Cr	52	19.730	ug/L	0.247	1	13927	477459	2	Standard
	Cr	53	20.893	ug/L	0.184	0	305	54064	0	Standard
	Mn	55	39.455	ug/L	0.383	0	504	1343286	0	Standard
>	Ge	72		ug/L			39846	33867	0	KED
	Co	59	0.242	ug/L	0.009	3	61	1217	3	KED
	Ni	60	9.441	ug/L	0.159	1	59	13019	1	KED
	Ni	62	9.301	ug/L	0.119	1	10	2046	1	KED
	Cu	63	2.664	ug/L	0.025	0	67	10056	0	KED
	Cu	65	2.573	ug/L	0.048	1	26	4931	1	KED
	Zn	66	312.435	ug/L	5.661	1	22	161764	1	KED
	Zn	67	290.044	ug/L	0.893	0	3	24823	0	KED
	As	75	0.016	ug/L	0.004	23	5	9	10	KED
	Se	78	-0.141	ug/L	0.058	41	11	5	25	KED
	Kr	83		ug/L			53	42	15	Standard
>	In-1	115		ug/L			9311	7696	1	KED
	Mo	98	0.158	ug/L	0.016	9	10	200	7	KED
	Cd	111	0.702	ug/L	0.030	4	2	185	4	KED
	Cd	114	0.730	ug/L	0.032	4	8	490	4	KED
>	In	115		ug/L			399419	472892	1	Standard
	Ag	107	-0.000	ug/L	0.001	454	46	52	21	Standard
	Ba	135	3.767	ug/L	0.076	2	15	23519	0	Standard
	Ba	137	3.536	ug/L	0.078	2	37	41354	1	Standard
>	Tb	159		ug/L			173053	170648	0	Standard
	Pb	208	0.155	ug/L	0.004	2	201	12854	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:35:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	43564	2	Standard
⎡>	**Sc**	**45**		ug/L			330809	314941	1	Standard
⎢	**Al**	**27**	**0.014**	ug/L	0.003	20	2334	2549	2	Standard
⎢	**Cr**	**52**	**-0.038**	ug/L	0.007	18	13927	12445	1	Standard
⎢	**Cr**	**53**	**-0.034**	ug/L	0.006	16	305	210	7	Standard
⎣	**Mn**	**55**	**0.001**	ug/L	0.001	215	504	500	8	Standard
⎡>	**Ge**	**72**		ug/L			39846	34168	1	KED
⎢	**Co**	**59**	**-0.010**	ug/L	0.000	3	61	3	50	KED
⎢	**Ni**	**60**	**-0.024**	ug/L	0.004	17	59	17	33	KED
⎢	**Ni**	**62**	**-0.025**	ug/L	0.000	0	10	3	0	KED
⎢	**Cu**	**63**	**-0.006**	ug/L	0.001	11	67	35	6	KED
⎢	**Cu**	**65**	**0.001**	ug/L	0.004	374	26	24	27	KED
⎢	**Zn**	**66**	**0.158**	ug/L	0.027	17	22	101	13	KED
⎢	**Zn**	**67**	**0.093**	ug/L	0.033	35	3	10	26	KED
⎢	**As**	**75**	**-0.012**	ug/L	0.005	45	5	1	83	KED
⎣	**Se**	**78**	**-0.051**	ug/L	0.024	48	11	8	8	KED
	Kr	**83**		ug/L			53	38	19	Standard
⎡>	**In-1**	**115**		ug/L			9311	7896	0	KED
⎢	**Mo**	**98**	**-0.004**	ug/L	0.003	73	10	4	71	KED
⎢	**Cd**	**111**	**0.007**	ug/L	0.007	98	2	3	50	KED
⎣	**Cd**	**114**	**-0.006**	ug/L	0.003	59	8	3	72	KED
⎡>	**In**	**115**		ug/L			399419	463464	1	Standard
⎢	**Ag**	**107**	**-0.002**	ug/L	0.001	28	46	24	35	Standard
⎢	**Ba**	**135**	**0.007**	ug/L	0.003	35	15	61	24	Standard
⎣	**Ba**	**137**	**0.006**	ug/L	0.001	14	37	113	9	Standard
⎡>	**Tb**	**159**		ug/L			173053	165309	0	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.000	9	201	539	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:40:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	43588	1	Standard
>	**Sc**	**45**		ug/L			330809	337577	3	Standard
	Al	**27**	**4990.853**	ug/L	138.174	2	2334	126726667	1	Standard
	Cr	**52**	**48.378**	ug/L	1.262	2	13927	1132847	0	Standard
	Cr	**53**	**50.449**	ug/L	0.708	1	305	128222	1	Standard
	Mn	**55**	**50.233**	ug/L	0.526	1	504	1685718	2	Standard
>	**Ge**	**72**		ug/L			39846	34741	1	KED
	Co	**59**	**50.848**	ug/L	0.098	0	61	251423	1	KED
	Ni	**60**	**51.512**	ug/L	0.883	1	59	72624	0	KED
	Ni	**62**	**51.601**	ug/L	0.648	1	10	11602	1	KED
	Cu	**63**	**52.642**	ug/L	0.697	1	67	202695	0	KED
	Cu	**65**	**52.433**	ug/L	0.794	1	26	102631	0	KED
	Zn	**66**	**52.649**	ug/L	0.949	1	22	27976	0	KED
	Zn	**67**	**52.513**	ug/L	2.147	4	3	4611	3	KED
	As	**75**	**49.237**	ug/L	1.014	2	5	13699	1	KED
	Se	**78**	**50.234**	ug/L	0.652	1	11	1348	0	KED
	Kr	**83**		ug/L			53	49	7	Standard
>	**In-1**	**115**		ug/L			9311	8141	0	KED
	Mo	**98**	**50.976**	ug/L	0.810	1	10	65258	1	KED
	Cd	**111**	**51.337**	ug/L	0.106	0	2	14190	0	KED
	Cd	**114**	**51.796**	ug/L	0.528	1	8	36304	0	KED
>	**In**	**115**		ug/L			399419	465743	0	Standard
	Ag	**107**	**44.992**	ug/L	0.986	2	46	733544	2	Standard
	Ba	**135**	**45.534**	ug/L	0.929	2	15	279803	1	Standard
	Ba	**137**	**43.749**	ug/L	0.819	1	37	503512	1	Standard
>	**Tb**	**159**		ug/L			173053	175419	0	Standard
	Pb	**208**	**53.785**	ug/L	0.549	1	201	4520944	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:47:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			41563	42485	0	Standard
⎡>	**Sc**	**45**		ug/L			330809	312260	3	Standard
⎢	**Al**	**27**	**0.043**	ug/L	0.006	14	2334	3217	5	Standard
⎢	**Cr**	**52**	**-0.030**	ug/L	0.019	62	13927	12501	1	Standard
⎢	**Cr**	**53**	**-0.048**	ug/L	0.004	8	305	175	7	Standard
⎣	**Mn**	**55**	**-0.000**	ug/L	0.000	67	504	470	3	Standard
⎡>	**Ge**	**72**		ug/L			39846	35618	1	KED
⎢	**Co**	**59**	**-0.010**	ug/L	0.001	8	61	6	62	KED
⎢	**Ni**	**60**	**-0.026**	ug/L	0.005	19	59	15	45	KED
⎢	**Ni**	**62**	**-0.028**	ug/L	0.010	33	10	3	69	KED
⎢	**Cu**	**63**	**-0.009**	ug/L	0.001	11	67	24	15	KED
⎢	**Cu**	**65**	**-0.003**	ug/L	0.004	136	26	17	44	KED
⎢	**Zn**	**66**	**0.035**	ug/L	0.006	17	22	38	10	KED
⎢	**Zn**	**67**	**0.068**	ug/L	0.086	126	3	8	86	KED
⎢	**As**	**75**	**-0.006**	ug/L	0.005	85	5	3	37	KED
⎣	**Se**	**78**	**-0.035**	ug/L	0.092	264	11	9	29	KED
	Kr	**83**		ug/L			53	46	2	Standard
⎡>	**In-1**	**115**		ug/L			9311	8219	2	KED
⎢	**Mo**	**98**	**0.010**	ug/L	0.006	62	10	22	37	KED
⎢	**Cd**	**111**	**0.008**	ug/L	0.014	179	2	4	93	KED
⎣	**Cd**	**114**	**-0.005**	ug/L	0.006	112	8	3	106	KED
⎡>	**In**	**115**		ug/L			399419	435446	4	Standard
⎢	**Ag**	**107**	**0.001**	ug/L	0.000	63	46	60	12	Standard
⎢	**Ba**	**135**	**0.001**	ug/L	0.002	149	15	23	44	Standard
⎣	**Ba**	**137**	**0.001**	ug/L	0.001	78	37	50	13	Standard
⎡>	**Tb**	**159**		ug/L			173053	162511	4	Standard
⎣	**Pb**	**208**	**0.004**	ug/L	0.000	11	201	514	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:54:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				42090	0	Standard
⎡>	**Sc**	**45**		ug/L				332961	2	Standard
⎢	**Cr**	**52**		ug/L				12895	2	Standard
⎢	**Cr**	**53**		ug/L				187	6	Standard
⎣	**Mn**	**55**		ug/L				424	3	Standard
⎡>	**Ge**	**72**		ug/L				35628	1	KED
⎢	**Ni**	**60**		ug/L				10	26	KED
⎢	**Ni**	**62**		ug/L				2	86	KED
⎢	**Cu**	**63**		ug/L				12	37	KED
⎢	**Cu**	**65**		ug/L				10	47	KED
⎢	**Zn**	**66**		ug/L				20	39	KED
⎢	**Zn**	**67**		ug/L				2	43	KED
⎣	**As**	**75**		ug/L				3	34	KED
	Kr	**83**		ug/L				45	4	Standard
⎡>	**In-1**	**115**		ug/L				8466	3	KED
⎢	**Cd**	**111**		ug/L				1	34	KED
⎣	**Cd**	**114**		ug/L				3	52	KED
⎡>	**In**	**115**		ug/L				448865	1	Standard
⎢	**Ag**	**107**		ug/L				40	9	Standard
⎢	**Ba**	**135**		ug/L				11	44	Standard
⎣	**Ba**	**137**		ug/L				19	5	Standard
⎡>	**Tb**	**159**		ug/L				168501	1	Standard
⎣	**Pb**	**208**		ug/L				172	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 18:59:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	42861	2	Standard
>	**Sc**	**45**		ug/L			332961	342352	1	Standard
	Cr	**52**	**48.393**	ug/L	0.603	1	12895	1148797	2	Standard
	Cr	**53**	**50.240**	ug/L	0.892	1	187	129428	2	Standard
	Mn	**55**	**49.914**	ug/L	0.939	1	424	1698864	2	Standard
>	**Ge**	**72**		ug/L			35628	36455	0	KED
	Ni	**60**	**51.317**	ug/L	0.584	1	10	75887	0	KED
	Ni	**62**	**52.179**	ug/L	0.556	1	2	12304	0	KED
	Cu	**63**	**52.820**	ug/L	0.430	0	12	213390	0	KED
	Cu	**65**	**52.452**	ug/L	0.162	0	10	107736	0	KED
	Zn	**66**	**51.454**	ug/L	0.954	1	20	28694	1	KED
	Zn	**67**	**50.889**	ug/L	0.102	0	2	4690	0	KED
	As	**75**	**49.075**	ug/L	0.432	0	3	14328	0	KED
	Kr	**83**		ug/L			45	52	24	Standard
>	**In-1**	**115**		ug/L			8466	8452	1	KED
	Cd	**111**	**50.990**	ug/L	0.707	1	1	14631	0	KED
	Cd	**114**	**51.137**	ug/L	0.782	1	3	37206	0	KED
>	**In**	**115**		ug/L			448865	462302	1	Standard
	Ag	**107**	**45.329**	ug/L	0.211	0	40	733525	1	Standard
	Ba	**135**	**46.066**	ug/L	1.132	2	11	280911	0	Standard
	Ba	**137**	**44.112**	ug/L	0.954	2	19	503821	0	Standard
>	**Tb**	**159**		ug/L			168501	176683	1	Standard
	Pb	**208**	**52.096**	ug/L	0.628	1	172	4410480	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:06:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	43305	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	328091	3	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.021	824	12895	12638	1	Standard
|	**Cr**	**53**	**-0.002**	ug/L	0.007	364	187	180	8	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.001	97	424	396	8	Standard
⌈>	**Ge**	**72**		ug/L			35628	37144	2	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.004	246	10	8	61	KED
|	**Ni**	**62**	**0.005**	ug/L	0.008	160	2	3	50	KED
|	**Cu**	**63**	**0.003**	ug/L	0.001	56	12	24	24	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	373	10	8	75	KED
|	**Zn**	**66**	**-0.004**	ug/L	0.013	353	20	19	36	KED
|	**Zn**	**67**	**0.032**	ug/L	0.034	104	2	5	57	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.002	223	3	3	24	KED
	Kr	**83**		ug/L			45	29	30	Standard
⌈>	**In-1**	**115**		ug/L			8466	8638	2	KED
|	**Cd**	**111**	**0.033**	ug/L	0.059	176	1	11	152	KED
⌊	**Cd**	**114**	**0.034**	ug/L	0.046	136	3	29	119	KED
⌈>	**In**	**115**		ug/L			448865	441677	2	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	73	40	62	24	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.000	54	11	7	25	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	328	19	20	24	Standard
⌈>	**Tb**	**159**		ug/L			168501	167164	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	34	172	233	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:14:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	69068	0	Standard
>	Sc	45		ug/L			332961	339062	1	Standard
	Cr	52	0.181	ug/L	0.004	2	12895	17337	1	Standard
	Cr	53	0.157	ug/L	0.005	2	187	589	3	Standard
	Mn	55	0.145	ug/L	0.001	0	424	5314	1	Standard
>	Ge	72		ug/L			35628	37186	1	KED
	Ni	60	0.016	ug/L	0.004	26	10	34	16	KED
	Ni	62	0.007	ug/L	0.012	162	2	4	65	KED
	Cu	63	0.080	ug/L	0.007	8	12	342	9	KED
	Cu	65	0.082	ug/L	0.013	15	10	182	13	KED
	Zn	66	2.195	ug/L	0.033	1	20	1268	0	KED
	Zn	67	2.421	ug/L	0.311	12	2	229	11	KED
	As	75	-0.003	ug/L	0.004	142	3	2	52	KED
	Kr	83		ug/L			45	41	18	Standard
>	In-1	115		ug/L			8466	8759	2	KED
	Cd	111	0.010	ug/L	0.006	59	1	4	40	KED
	Cd	114	0.003	ug/L	0.003	80	3	6	34	KED
>	In	115		ug/L			448865	455179	2	Standard
	Ag	107	0.000	ug/L	0.001	1022	40	41	18	Standard
	Ba	135	0.057	ug/L	0.010	18	11	354	15	Standard
	Ba	137	0.051	ug/L	0.001	1	19	593	4	Standard
>	Tb	159		ug/L			168501	172687	0	Standard
	Pb	208	0.014	ug/L	0.001	4	172	1316	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-BS1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Tuesday, May 09, 2023 19:18:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	65913	0	Standard
>	**Sc**	**45**		ug/L			332961	337655	1	Standard
	Cr	**52**	**24.707**	ug/L	0.281	1	12895	584791	1	Standard
	Cr	**53**	**25.988**	ug/L	0.282	1	187	66120	2	Standard
	Mn	**55**	**25.988**	ug/L	0.313	1	424	872658	2	Standard
>	**Ge**	**72**		ug/L			35628	34015	11	KED
	Ni	**60**	**28.928**	ug/L	3.451	11	10	39543	0	KED
	Ni	**62**	**28.971**	ug/L	3.148	10	2	6321	1	KED
	Cu	**63**	**29.976**	ug/L	3.547	11	12	111942	0	KED
	Cu	**65**	**29.702**	ug/L	3.366	11	10	56417	1	KED
	Zn	**66**	**92.071**	ug/L	10.538	11	20	47464	1	KED
	Zn	**67**	**86.466**	ug/L	8.847	10	2	7373	2	KED
	As	**75**	**26.430**	ug/L	3.010	11	3	7137	1	KED
	Kr	**83**		ug/L			45	52	18	Standard
>	**In-1**	**115**		ug/L			8466	8450	2	KED
	Cd	**111**	**26.183**	ug/L	0.785	2	1	7513	4	KED
	Cd	**114**	**25.912**	ug/L	0.660	2	3	18853	3	KED
>	**In**	**115**		ug/L			448865	445725	2	Standard
	Ag	**107**	**24.031**	ug/L	0.079	0	40	374977	2	Standard
	Ba	**135**	**24.589**	ug/L	0.460	1	11	144563	0	Standard
	Ba	**137**	**23.305**	ug/L	0.435	1	19	256642	1	Standard
>	**Tb**	**159**		ug/L			168501	171848	1	Standard
	Pb	**208**	**27.383**	ug/L	0.294	1	172	2254912	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:24:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	66007	3	Standard
>	Sc	45		ug/L			332961	335680	0	Standard
	Cr	52	25.125	ug/L	0.269	1	12895	590992	0	Standard
	Cr	53	26.262	ug/L	0.360	1	187	66416	0	Standard
	Mn	55	26.567	ug/L	0.430	1	424	886840	2	Standard
>	Ge	72		ug/L			35628	36217	1	KED
	Ni	60	26.843	ug/L	0.265	0	10	39440	1	KED
	Ni	62	26.232	ug/L	0.186	0	2	6147	2	KED
	Cu	63	28.057	ug/L	0.145	0	12	112608	1	KED
	Cu	65	27.702	ug/L	0.192	0	10	56528	0	KED
	Zn	66	87.024	ug/L	0.889	1	20	48202	1	KED
	Zn	67	80.670	ug/L	1.801	2	2	7384	2	KED
	As	75	24.830	ug/L	0.352	1	3	7202	0	KED
	Kr	83		ug/L			45	45	24	Standard
>	In-1	115		ug/L			8466	8619	2	KED
	Cd	111	26.006	ug/L	0.880	3	1	7607	1	KED
	Cd	114	25.666	ug/L	0.481	1	3	19046	3	KED
>	In	115		ug/L			448865	461265	1	Standard
	Ag	107	23.687	ug/L	0.621	2	40	382366	1	Standard
	Ba	135	23.848	ug/L	0.457	1	11	145107	0	Standard
	Ba	137	22.774	ug/L	0.436	1	19	259535	0	Standard
>	Tb	159		ug/L			168501	172071	1	Standard
	Pb	208	27.496	ug/L	0.504	1	172	2266962	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-BLK2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:29:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	64759	1	Standard
>	Sc	45		ug/L			332961	333825	0	Standard
	Cr	52	0.150	ug/L	0.017	11	12895	16368	1	Standard
	Cr	53	0.098	ug/L	0.001	1	187	433	0	Standard
	Mn	55	0.382	ug/L	0.007	1	424	13092	1	Standard
>	Ge	72		ug/L			35628	36493	0	KED
	Ni	60	0.011	ug/L	0.004	34	10	27	21	KED
	Ni	62	0.021	ug/L	0.014	65	2	7	43	KED
	Cu	63	0.061	ug/L	0.004	6	12	257	6	KED
	Cu	65	0.057	ug/L	0.004	6	10	127	6	KED
	Zn	66	0.632	ug/L	0.030	4	20	373	5	KED
	Zn	67	0.674	ug/L	0.051	7	2	64	7	KED
	As	75	-0.001	ug/L	0.002	115	3	2	16	KED
	Kr	83		ug/L			45	43	15	Standard
>	In-1	115		ug/L			8466	8432	2	KED
	Cd	111	0.006	ug/L	0.005	95	1	3	45	KED
	Cd	114	-0.002	ug/L	0.001	63	3	2	52	KED
>	In	115		ug/L			448865	446651	1	Standard
	Ag	107	0.002	ug/L	0.001	22	40	76	11	Standard
	Ba	135	0.135	ug/L	0.003	2	11	808	2	Standard
	Ba	137	0.138	ug/L	0.008	6	19	1536	4	Standard
>	Tb	159		ug/L			168501	170397	0	Standard
	Pb	208	0.014	ug/L	0.000	2	172	1323	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-BS2
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:33:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	71232	1	Standard
>	Sc	45		ug/L			332961	346017	4	Standard
	Cr	52	26.359	ug/L	0.539	2	12895	638177	2	Standard
	Cr	53	26.857	ug/L	0.944	3	187	69946	1	Standard
	Mn	55	27.397	ug/L	0.898	3	424	941818	0	Standard
>	Ge	72		ug/L			35628	37051	0	KED
	Ni	60	27.210	ug/L	0.160	0	10	40901	0	KED
	Ni	62	27.077	ug/L	0.546	2	2	6490	1	KED
	Cu	63	27.661	ug/L	0.364	1	12	113578	1	KED
	Cu	65	27.335	ug/L	0.171	0	10	57069	0	KED
	Zn	66	87.930	ug/L	2.293	2	20	49824	2	KED
	Zn	67	84.630	ug/L	1.547	1	2	7925	1	KED
	As	75	26.088	ug/L	0.110	0	3	7743	0	KED
	Kr	83		ug/L			45	43	19	Standard
>	In-1	115		ug/L			8466	8673	1	KED
	Cd	111	26.748	ug/L	0.446	1	1	7876	1	KED
	Cd	114	26.501	ug/L	0.294	1	3	19788	0	KED
>	In	115		ug/L			448865	446416	4	Standard
	Ag	107	24.717	ug/L	0.883	3	40	385850	1	Standard
	Ba	135	25.657	ug/L	1.120	4	11	150929	0	Standard
	Ba	137	24.866	ug/L	1.144	4	19	273928	0	Standard
>	Tb	159		ug/L			168501	174613	1	Standard
	Pb	208	27.396	ug/L	0.538	1	172	2291862	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-08
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:39:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	63336	1	Standard
>	**Sc**	**45**		ug/L			332961	361093	0	Standard
	Cr	**52**	**2.659**	ug/L	0.037	1	12895	79801	1	Standard
	Cr	**53**	**2.804**	ug/L	0.029	1	187	7809	0	Standard
	Mn	**55**	**20.060**	ug/L	0.199	0	424	720449	1	Standard
>	**Ge**	**72**		ug/L			35628	38084	1	KED
	Ni	**60**	**1.908**	ug/L	0.071	3	10	2957	1	KED
	Ni	**62**	**2.012**	ug/L	0.197	9	2	497	8	KED
	Cu	**63**	**8.245**	ug/L	0.289	3	12	34803	3	KED
	Cu	**65**	**8.023**	ug/L	0.246	3	10	17218	1	KED
	Zn	**66**	**58.360**	ug/L	0.766	1	20	33994	1	KED
	Zn	**67**	**54.364**	ug/L	0.893	1	2	5234	2	KED
	As	**75**	**0.298**	ug/L	0.021	6	3	94	8	KED
	Kr	**83**		ug/L			45	36	10	Standard
>	**In-1**	**115**		ug/L			8466	9035	0	KED
	Cd	**111**	**0.142**	ug/L	0.014	10	1	45	10	KED
	Cd	**114**	**0.127**	ug/L	0.014	10	3	103	11	KED
>	**In**	**115**		ug/L			448865	454440	2	Standard
	Ag	**107**	**0.016**	ug/L	0.001	3	40	297	5	Standard
	Ba	**135**	**34.910**	ug/L	0.298	0	11	209327	2	Standard
	Ba	**137**	**33.851**	ug/L	0.731	2	19	380014	0	Standard
>	**Tb**	**159**		ug/L			168501	176044	2	Standard
	Pb	**208**	**1.550**	ug/L	0.017	1	172	130891	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0420-07
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:44:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	57200	1	Standard
>	Sc	45		ug/L			332961	394052	1	Standard
	Cr	52	3.550	ug/L	0.045	1	12895	111142	1	Standard
	Cr	53	3.770	ug/L	0.025	0	187	11382	0	Standard
	Mn	55	35.202	ug/L	0.529	1	424	1379290	2	Standard
>	Ge	72		ug/L			35628	38427	0	KED
	Ni	60	3.195	ug/L	0.048	1	10	4990	0	KED
	Ni	62	3.067	ug/L	0.150	4	2	765	5	KED
	Cu	63	8.997	ug/L	0.227	2	12	38323	2	KED
	Cu	65	8.861	ug/L	0.055	0	10	19193	1	KED
	Zn	66	16.189	ug/L	0.177	1	20	9531	0	KED
	Zn	67	15.504	ug/L	0.281	1	2	1508	1	KED
	As	75	1.747	ug/L	0.039	2	3	540	1	KED
	Kr	83		ug/L			45	50	20	Standard
>	In-1	115		ug/L			8466	8966	2	KED
	Cd	111	0.058	ug/L	0.022	38	1	19	32	KED
	Cd	114	0.056	ug/L	0.025	43	3	47	41	KED
>	In	115		ug/L			448865	451130	0	Standard
	Ag	107	0.045	ug/L	0.001	1	40	747	1	Standard
	Ba	135	9.899	ug/L	0.110	1	11	58931	0	Standard
	Ba	137	9.514	ug/L	0.045	0	19	106082	0	Standard
>	Tb	159		ug/L			168501	182935	0	Standard
	Pb	208	4.120	ug/L	0.046	1	172	361352	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0595-01RE1
Sample Dil Factor: 100
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:48:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	86976	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	350786	1	Standard
|	**Cr**	**52**	**4.243**	ug/L	0.071	1	12895	115582	0	Standard
|	**Cr**	**53**	**4.406**	ug/L	0.060	1	187	11808	1	Standard
⌊	**Mn**	**55**	**8.323**	ug/L	0.022	0	424	290623	1	Standard
⌈>	**Ge**	**72**		ug/L			35628	38226	1	KED
|	**Ni**	**60**	**1.962**	ug/L	0.009	0	10	3053	1	KED
|	**Ni**	**62**	**1.984**	ug/L	0.144	7	2	493	8	KED
|	**Cu**	**63**	**0.540**	ug/L	0.014	2	12	2302	1	KED
|	**Cu**	**65**	**0.534**	ug/L	0.015	2	10	1160	1	KED
|	**Zn**	**66**	**64.841**	ug/L	1.522	2	20	37905	1	KED
|	**Zn**	**67**	**59.897**	ug/L	1.863	3	2	5787	2	KED
⌊	**As**	**75**	**0.002**	ug/L	0.003	188	3	3	27	KED
	Kr	**83**		ug/L			45	49	16	Standard
⌈>	**In-1**	**115**		ug/L			8466	8893	0	KED
|	**Cd**	**111**	**0.149**	ug/L	0.010	6	1	46	6	KED
⌊	**Cd**	**114**	**0.141**	ug/L	0.008	5	3	111	5	KED
⌈>	**In**	**115**		ug/L			448865	460930	2	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	44	40	33	11	Standard
|	**Ba**	**135**	**0.814**	ug/L	0.043	5	11	4957	2	Standard
⌊	**Ba**	**137**	**0.775**	ug/L	0.018	2	19	8846	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	173712	0	Standard
⌊	**Pb**	**208**	**0.058**	ug/L	0.001	0	172	4972	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0453-01RE1
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:53:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	160873	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	319215	1	Standard
|	**Cr**	**52**	**0.694**	ug/L	0.020	2	12895	27543	2	Standard
|	**Cr**	**53**	**0.492**	ug/L	0.016	3	187	1358	3	Standard
⌊	**Mn**	**55**	**18.991**	ug/L	0.252	1	424	602918	1	Standard
⌈>	**Ge**	**72**		ug/L			35628	31894	0	KED
|	**Ni**	**60**	**1.833**	ug/L	0.037	2	10	2380	1	KED
|	**Ni**	**62**	**1.692**	ug/L	0.259	15	2	351	14	KED
|	**Cu**	**63**	**0.341**	ug/L	0.012	3	12	1217	2	KED
|	**Cu**	**65**	**0.349**	ug/L	0.005	1	10	636	0	KED
|	**Zn**	**66**	**2.228**	ug/L	0.061	2	20	1104	2	KED
|	**Zn**	**67**	**2.398**	ug/L	0.051	2	2	195	2	KED
⌊	**As**	**75**	**0.037**	ug/L	0.011	29	3	12	22	KED
	Kr	**83**		ug/L			45	40	17	Standard
⌈>	**In-1**	**115**		ug/L			8466	7512	1	KED
|	**Cd**	**111**	**0.034**	ug/L	0.009	26	1	10	23	KED
⌊	**Cd**	**114**	**0.030**	ug/L	0.017	56	3	22	47	KED
⌈>	**In**	**115**		ug/L			448865	434309	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	230	40	38	5	Standard
|	**Ba**	**135**	**2.900**	ug/L	0.038	1	11	16628	0	Standard
⌊	**Ba**	**137**	**2.774**	ug/L	0.007	0	19	29791	2	Standard
⌈>	**Tb**	**159**		ug/L			168501	164060	1	Standard
⌊	**Pb**	**208**	**0.028**	ug/L	0.001	2	172	2397	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 19:57:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	45612	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	316987	2	Standard
|	**Cr**	**52**	**0.186**	ug/L	0.031	16	12895	16303	2	Standard
|	**Cr**	**53**	**0.014**	ug/L	0.005	34	187	211	6	Standard
⌊	**Mn**	**55**	**0.006**	ug/L	0.000	6	424	589	1	Standard
⌈>	**Ge**	**72**		ug/L			35628	34677	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.002	764	10	10	20	KED
|	**Ni**	**62**	**0.000**	ug/L	0.005	1626	2	2	43	KED
|	**Cu**	**63**	**0.008**	ug/L	0.001	19	12	41	14	KED
|	**Cu**	**65**	**0.006**	ug/L	0.003	60	10	20	32	KED
|	**Zn**	**66**	**0.131**	ug/L	0.024	18	20	89	14	KED
|	**Zn**	**67**	**0.117**	ug/L	0.026	22	2	12	17	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.002	147	3	2	20	KED
	Kr	**83**		ug/L			45	43	0	Standard
⌈>	**In-1**	**115**		ug/L			8466	7845	2	KED
|	**Cd**	**111**	**0.008**	ug/L	0.008	101	1	3	56	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	302	3	4	65	KED
⌈>	**In**	**115**		ug/L			448865	441414	2	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	85	40	31	24	Standard
|	**Ba**	**135**	**0.007**	ug/L	0.002	33	11	54	28	Standard
⌊	**Ba**	**137**	**0.008**	ug/L	0.002	21	19	106	15	Standard
⌈>	**Tb**	**159**		ug/L			168501	161328	1	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	5	172	499	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:01:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	43287	1	Standard
>	**Sc**	**45**		ug/L			332961	331897	2	Standard
	Cr	**52**	**48.217**	ug/L	0.398	0	12895	1109511	1	Standard
	Cr	**53**	**49.743**	ug/L	0.721	1	187	124207	1	Standard
	Mn	**55**	**49.306**	ug/L	0.636	1	424	1626734	1	Standard
>	**Ge**	**72**		ug/L			35628	34508	1	KED
	Ni	**60**	**52.467**	ug/L	0.830	1	10	73432	0	KED
	Ni	**62**	**52.382**	ug/L	0.571	1	2	11691	0	KED
	Cu	**63**	**53.232**	ug/L	1.745	3	12	203489	1	KED
	Cu	**65**	**52.855**	ug/L	1.433	2	10	102731	0	KED
	Zn	**66**	**53.194**	ug/L	1.136	2	20	28074	0	KED
	Zn	**67**	**51.354**	ug/L	2.201	4	2	4478	2	KED
	As	**75**	**49.582**	ug/L	1.327	2	3	13699	0	KED
	Kr	**83**		ug/L			45	50	9	Standard
>	**In-1**	**115**		ug/L			8466	7968	2	KED
	Cd	**111**	**52.053**	ug/L	1.431	2	1	14075	0	KED
	Cd	**114**	**52.906**	ug/L	0.442	0	3	36290	2	KED
>	**In**	**115**		ug/L			448865	449953	3	Standard
	Ag	**107**	**45.191**	ug/L	1.998	4	40	711151	1	Standard
	Ba	**135**	**45.689**	ug/L	0.752	1	11	271161	2	Standard
	Ba	**137**	**44.108**	ug/L	1.306	2	19	490120	0	Standard
>	**Tb**	**159**		ug/L			168501	169763	1	Standard
	Pb	**208**	**53.053**	ug/L	0.593	1	172	4315405	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:09:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	42299	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	324014	2	Standard
|	**Cr**	**52**	**-0.011**	ug/L	0.004	35	12895	12291	2	Standard
|	**Cr**	**53**	**-0.006**	ug/L	0.010	156	187	166	11	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.000	1	424	384	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	36283	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.003	1217	10	11	44	KED
|	**Ni**	**62**	**0.003**	ug/L	0.013	488	2	3	91	KED
|	**Cu**	**63**	**0.004**	ug/L	0.002	63	12	27	34	KED
|	**Cu**	**65**	**0.002**	ug/L	0.005	258	10	13	67	KED
|	**Zn**	**66**	**0.001**	ug/L	0.015	2913	20	20	39	KED
|	**Zn**	**67**	**0.020**	ug/L	0.031	156	2	4	65	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.005	2146	3	3	43	KED
	Kr	**83**		ug/L			45	43	4	Standard
⌈>	**In-1**	**115**		ug/L			8466	8302	2	KED
|	**Cd**	**111**	**0.009**	ug/L	0.005	52	1	4	35	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	386	3	4	67	KED
⌈>	**In**	**115**		ug/L			448865	450959	3	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	136	40	56	41	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.001	132	11	14	30	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.000	91	19	24	15	Standard
⌈>	**Tb**	**159**		ug/L			168501	165161	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	16	172	229	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:15:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	52300	1	Standard
>	**Sc**	**45**		ug/L			332961	356794	1	Standard
	Cr	**52**	**0.610**	ug/L	0.013	2	12895	28735	2	Standard
	Cr	**53**	**2.613**	ug/L	0.100	3	187	7208	4	Standard
	Mn	**55**	**0.119**	ug/L	0.003	2	424	4680	1	Standard
>	**Ge**	**72**		ug/L			35628	32041	0	KED
	Ni	**60**	**0.621**	ug/L	0.036	5	10	816	5	KED
	Ni	**62**	**0.681**	ug/L	0.002	0	2	143	0	KED
	Cu	**63**	**0.187**	ug/L	0.009	4	12	675	4	KED
	Cu	**65**	**0.195**	ug/L	0.014	6	10	361	6	KED
	Zn	**66**	**0.315**	ug/L	0.062	19	20	172	17	KED
	Zn	**67**	**0.937**	ug/L	0.156	16	2	78	15	KED
	As	**75**	**20.112**	ug/L	0.129	0	3	5162	1	KED
	Kr	**83**		ug/L			45	33	25	Standard
>	**In-1**	**115**		ug/L			8466	7504	1	KED
	Cd	**111**	**0.024**	ug/L	0.007	29	1	7	25	KED
	Cd	**114**	**0.011**	ug/L	0.003	30	3	10	21	KED
>	**In**	**115**		ug/L			448865	419320	1	Standard
	Ag	**107**	**0.000**	ug/L	0.001	239	40	41	25	Standard
	Ba	**135**	**7.144**	ug/L	0.105	1	11	39531	0	Standard
	Ba	**137**	**6.762**	ug/L	0.169	2	19	70067	1	Standard
>	**Tb**	**159**		ug/L			168501	155378	0	Standard
	Pb	**208**	**0.006**	ug/L	0.001	10	172	637	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0715-04
Sample Dil Factor: 50
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:23:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	48545	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	320770	1	Standard
|	**Cr**	**52**	**7.376**	ug/L	0.083	1	12895	174567	0	Standard
|	**Cr**	**53**	**8.209**	ug/L	0.082	1	187	19964	2	Standard
⌊	**Mn**	**55**	**0.300**	ug/L	0.005	1	424	9974	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	34764	0	KED
|	**Ni**	**60**	**0.364**	ug/L	0.010	2	10	524	3	KED
|	**Ni**	**62**	**0.364**	ug/L	0.020	5	2	84	5	KED
|	**Cu**	**63**	**0.030**	ug/L	0.004	13	12	128	12	KED
|	**Cu**	**65**	**0.036**	ug/L	0.009	25	10	80	21	KED
|	**Zn**	**66**	**0.094**	ug/L	0.026	27	20	69	19	KED
|	**Zn**	**67**	**0.102**	ug/L	0.076	74	2	11	57	KED
⌊	**As**	**75**	**1.011**	ug/L	0.056	5	3	284	5	KED
	Kr	**83**		ug/L			45	40	4	Standard
⌈>	**In-1**	**115**		ug/L			8466	8083	1	KED
|	**Cd**	**111**	**0.008**	ug/L	0.000	2	1	3	0	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.000	23	3	3	2	KED
⌈>	**In**	**115**		ug/L			448865	426257	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	51	40	19	52	Standard
|	**Ba**	**135**	**0.338**	ug/L	0.007	1	11	1913	2	Standard
⌊	**Ba**	**137**	**0.319**	ug/L	0.005	1	19	3376	2	Standard
⌈>	**Tb**	**159**		ug/L			168501	162748	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	13	172	264	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-08
Sample Dil Factor: 50
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:27:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	48889	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	325697	0	Standard
|	**Cr**	**52**	**5.646**	ug/L	0.053	0	12895	138635	0	Standard
|	**Cr**	**53**	**6.214**	ug/L	0.037	0	187	15387	0	Standard
⌊	**Mn**	**55**	**0.009**	ug/L	0.000	4	424	722	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	34543	0	KED
|	**Ni**	**60**	**0.247**	ug/L	0.015	6	10	356	6	KED
|	**Ni**	**62**	**0.256**	ug/L	0.027	10	2	59	9	KED
|	**Cu**	**63**	**0.031**	ug/L	0.003	8	12	129	7	KED
|	**Cu**	**65**	**0.034**	ug/L	0.007	18	10	76	16	KED
|	**Zn**	**66**	**0.473**	ug/L	0.030	6	20	269	5	KED
|	**Zn**	**67**	**0.394**	ug/L	0.078	19	2	36	18	KED
⌊	**As**	**75**	**1.092**	ug/L	0.061	5	3	305	5	KED
	Kr	**83**		ug/L			45	38	19	Standard
⌈>	**In-1**	**115**		ug/L			8466	7880	0	KED
|	**Cd**	**111**	**0.000**	ug/L	0.002	501	1	1	34	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	104	3	2	41	KED
⌈>	**In**	**115**		ug/L			448865	433236	2	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	26	40	25	11	Standard
|	**Ba**	**135**	**0.278**	ug/L	0.006	2	11	1597	0	Standard
⌊	**Ba**	**137**	**0.267**	ug/L	0.009	3	19	2877	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	161495	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	2	172	500	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:32:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	47524	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	327851	2	Standard
|	**Cr**	**52**	**2.057**	ug/L	0.062	3	12895	58899	1	Standard
|	**Cr**	**53**	**3.096**	ug/L	0.066	2	187	7809	1	Standard
⌊	**Mn**	**55**	**0.375**	ug/L	0.013	3	424	12638	3	Standard
⌈>	**Ge**	**72**		ug/L			35628	32720	2	KED
|	**Ni**	**60**	**0.102**	ug/L	0.017	16	10	145	13	KED
|	**Ni**	**62**	**0.122**	ug/L	0.049	40	2	27	34	KED
|	**Cu**	**63**	**0.081**	ug/L	0.005	5	12	304	6	KED
|	**Cu**	**65**	**0.086**	ug/L	0.006	6	10	166	4	KED
|	**Zn**	**66**	**0.078**	ug/L	0.008	9	20	57	6	KED
|	**Zn**	**67**	**0.210**	ug/L	0.060	28	2	19	24	KED
⌊	**As**	**75**	**7.798**	ug/L	0.153	1	3	2045	2	KED
	Kr	**83**		ug/L			45	38	12	Standard
⌈>	**In-1**	**115**		ug/L			8466	7701	0	KED
|	**Cd**	**111**	**0.018**	ug/L	0.014	78	1	6	59	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.006	81	3	8	48	KED
⌈>	**In**	**115**		ug/L			448865	425752	0	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	115	40	27	41	Standard
|	**Ba**	**135**	**0.619**	ug/L	0.016	2	11	3489	3	Standard
⌊	**Ba**	**137**	**0.571**	ug/L	0.009	1	19	6025	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	159571	1	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.000	4	172	584	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0690-04
Sample Dil Factor: 10
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:37:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	47730	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	327913	2	Standard
|	**Cr**	**52**	**0.625**	ug/L	0.030	4	12895	26739	0	Standard
|	**Cr**	**53**	**2.347**	ug/L	0.050	2	187	5966	3	Standard
⌊	**Mn**	**55**	**0.064**	ug/L	0.001	1	424	2507	2	Standard
⌈>	**Ge**	**72**		ug/L			35628	30481	2	KED
|	**Ni**	**60**	**0.190**	ug/L	0.027	14	10	245	15	KED
|	**Ni**	**62**	**0.215**	ug/L	0.035	16	2	44	13	KED
|	**Cu**	**63**	**0.079**	ug/L	0.008	10	12	278	8	KED
|	**Cu**	**65**	**0.077**	ug/L	0.014	17	10	140	17	KED
|	**Zn**	**66**	**0.143**	ug/L	0.030	21	20	83	14	KED
|	**Zn**	**67**	**0.377**	ug/L	0.049	12	2	31	9	KED
⌊	**As**	**75**	**2.965**	ug/L	0.089	3	3	726	3	KED
	Kr	**83**		ug/L			45	68	7	Standard
⌈>	**In-1**	**115**		ug/L			8466	7063	2	KED
|	**Cd**	**111**	**0.012**	ug/L	0.005	42	1	4	26	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.000	15	3	3	0	KED
⌈>	**In**	**115**		ug/L			448865	407878	1	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.000	24	40	14	37	Standard
|	**Ba**	**135**	**2.081**	ug/L	0.047	2	11	11205	0	Standard
⌊	**Ba**	**137**	**1.954**	ug/L	0.041	2	19	19707	1	Standard
⌈>	**Tb**	**159**		ug/L			168501	153180	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	6	172	267	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0514-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:42:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			42090	70596	2	Standard
> Sc	45		ug/L			332961	437667	1	Standard
Cr	52	-0.067	ug/L	0.002	3	12895	14927	1	Standard
Cr	53	0.125	ug/L	0.010	7	187	658	6	Standard
Mn	55	508.121	ug/L	6.931	1	424	22107272	2	Standard
> Ge	72		ug/L			35628	33171	0	KED
Ni	60	1.112	ug/L	0.040	3	10	1505	3	KED
Ni	62	1.164	ug/L	0.061	5	2	252	5	KED
Cu	63	0.053	ug/L	0.008	15	12	207	14	KED
Cu	65	0.055	ug/L	0.012	22	10	112	20	KED
Zn	66	0.208	ug/L	0.015	7	20	124	6	KED
Zn	67	0.585	ug/L	0.126	21	2	51	20	KED
As	75	0.454	ug/L	0.042	9	3	123	8	KED
Kr	83		ug/L			45	57	10	Standard
> In-1	115		ug/L			8466	7545	2	KED
Cd	111	0.014	ug/L	0.010	68	1	5	47	KED
Cd	114	-0.001	ug/L	0.002	330	3	2	36	KED
> In	115		ug/L			448865	437788	1	Standard
Ag	107	-0.001	ug/L	0.000	35	40	27	15	Standard
Ba	135	5.646	ug/L	0.072	1	11	32620	1	Standard
Ba	137	5.339	ug/L	0.108	2	19	57759	0	Standard
> Tb	159		ug/L			168501	165429	0	Standard
Pb	208	0.004	ug/L	0.000	8	172	477	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0078-DUP2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:47:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			42090	71387	0	Standard
> Sc	45		ug/L			332961	443812	1	Standard
Cr	52	-0.068	ug/L	0.006	9	12895	15110	1	Standard
Cr	53	0.117	ug/L	0.002	1	187	640	0	Standard
Mn	55	521.770	ug/L	5.051	0	424	23018673	2	Standard
> Ge	72		ug/L			35628	32218	13	KED
Ni	60	1.192	ug/L	0.116	9	10	1553	4	KED
Ni	62	1.176	ug/L	0.166	14	2	244	5	KED
Cu	63	0.030	ug/L	0.002	5	12	119	17	KED
Cu	65	0.037	ug/L	0.003	9	10	75	12	KED
Zn	66	0.227	ug/L	0.034	15	20	129	15	KED
Zn	67	0.514	ug/L	0.190	37	2	43	37	KED
As	75	0.518	ug/L	0.057	10	3	135	5	KED
Kr	83		ug/L			45	65	23	Standard
> In-1	115		ug/L			8466	7883	4	KED
Cd	111	0.002	ug/L	0.000	21	1	1		KED
Cd	114	-0.003	ug/L	0.003	99	3	1	124	KED
> In	115		ug/L			448865	434051	3	Standard
Ag	107	-0.000	ug/L	0.001	1373	40	38	30	Standard
Ba	135	5.771	ug/L	0.180	3	11	33038	1	Standard
Ba	137	5.561	ug/L	0.151	2	19	59628	0	Standard
> Tb	159		ug/L			168501	165671	0	Standard
Pb	208	0.003	ug/L	0.000	4	172	405	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0078-MS2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:51:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	72202	0	Standard
>	Sc	45		ug/L			332961	462187	1	Standard
	Cr	52	3.572	ug/L	0.061	1	12895	131028	1	Standard
	Cr	53	3.915	ug/L	0.032	0	187	13852	0	Standard
	Mn	55	509.984	ug/L	8.970	1	424	23427369	1	Standard
>	Ge	72		ug/L			35628	34548	1	KED
	Ni	60	6.410	ug/L	0.118	1	10	8991	1	KED
	Ni	62	6.161	ug/L	0.106	1	2	1379	2	KED
	Cu	63	5.418	ug/L	0.103	1	12	20754	2	KED
	Cu	65	5.288	ug/L	0.074	1	10	10300	0	KED
	Zn	66	17.741	ug/L	0.543	3	20	9387	2	KED
	Zn	67	16.561	ug/L	0.933	5	2	1447	4	KED
	As	75	5.669	ug/L	0.046	0	3	1571	2	KED
	Kr	83		ug/L			45	64	16	Standard
>	In-1	115		ug/L			8466	7940	1	KED
	Cd	111	5.395	ug/L	0.103	1	1	1455	2	KED
	Cd	114	5.263	ug/L	0.142	2	3	3600	2	KED
>	In	115		ug/L			448865	446477	3	Standard
	Ag	107	2.929	ug/L	0.027	0	40	45802	2	Standard
	Ba	135	10.484	ug/L	0.341	3	11	61719	0	Standard
	Ba	137	10.141	ug/L	0.316	3	19	111820	1	Standard
>	Tb	159		ug/L			168501	170696	0	Standard
	Pb	208	5.338	ug/L	0.085	1	172	436800	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0078-MSD2
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 20:56:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			42090	95606	1	Standard
>	Sc	45		ug/L			332961	450474	3	Standard
	Cr	52	3.727	ug/L	0.114	3	12895	132425	1	Standard
	Cr	53	4.039	ug/L	0.051	1	187	13919	2	Standard
	Mn	55	510.734	ug/L	12.728	2	424	22856765	1	Standard
>	Ge	72		ug/L			35628	34841	0	KED
	Ni	60	6.663	ug/L	0.158	2	10	9425	2	KED
	Ni	62	6.766	ug/L	0.218	3	2	1527	3	KED
	Cu	63	5.651	ug/L	0.050	0	12	21828	0	KED
	Cu	65	5.542	ug/L	0.130	2	10	10886	2	KED
	Zn	66	17.477	ug/L	0.397	2	20	9328	2	KED
	Zn	67	17.318	ug/L	0.369	2	2	1527	1	KED
	As	75	5.815	ug/L	0.052	0	3	1625	0	KED
	Kr	83		ug/L			45	65	37	Standard
>	In-1	115		ug/L			8466	7886	1	KED
	Cd	111	5.500	ug/L	0.161	2	1	1473	2	KED
	Cd	114	5.709	ug/L	0.102	1	3	3879	1	KED
>	In	115		ug/L			448865	426508	2	Standard
	Ag	107	3.413	ug/L	0.035	1	40	50989	2	Standard
	Ba	135	10.864	ug/L	0.031	0	11	61145	2	Standard
	Ba	137	10.452	ug/L	0.155	1	19	110153	1	Standard
>	Tb	159		ug/L			168501	165456	0	Standard
	Pb	208	5.581	ug/L	0.042	0	172	442650	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:00:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	53251	0	Standard
⌈>	**Sc**	**45**		ug/L			332961	325225	2	Standard
|	**Cr**	**52**	**0.004**	ug/L	0.007	166	12895	12687	1	Standard
|	**Cr**	**53**	**-0.004**	ug/L	0.008	195	187	173	12	Standard
⌊	**Mn**	**55**	**0.009**	ug/L	0.001	10	424	720	6	Standard
⌈>	**Ge**	**72**		ug/L			35628	35314	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.004	6081	10	10	56	KED
|	**Ni**	**62**	**0.011**	ug/L	0.013	114	2	5	57	KED
|	**Cu**	**63**	**0.006**	ug/L	0.003	45	12	36	29	KED
|	**Cu**	**65**	**0.003**	ug/L	0.002	62	10	16	24	KED
|	**Zn**	**66**	**0.166**	ug/L	0.016	9	20	109	7	KED
|	**Zn**	**67**	**0.085**	ug/L	0.032	37	2	10	28	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.004	113	3	2	58	KED
	Kr	**83**		ug/L			45	40	40	Standard
⌈>	**In-1**	**115**		ug/L			8466	7995	3	KED
|	**Cd**	**111**	**0.013**	ug/L	0.004	33	1	5	21	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	252	3	4	49	KED
⌈>	**In**	**115**		ug/L			448865	437984	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	33	40	29	9	Standard
|	**Ba**	**135**	**0.010**	ug/L	0.002	24	11	66	18	Standard
⌊	**Ba**	**137**	**0.010**	ug/L	0.001	12	19	126	12	Standard
⌈>	**Tb**	**159**		ug/L			168501	163101	0	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	5	172	530	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:05:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	47786	2	Standard
⌈>	**Sc**	**45**		ug/L			332961	334412	2	Standard
|	**Cr**	**52**	**48.035**	ug/L	0.975	2	12895	1113580	0	Standard
|	**Cr**	**53**	**50.321**	ug/L	1.009	2	187	126584	0	Standard
⌊	**Mn**	**55**	**49.267**	ug/L	0.882	1	424	1637587	0	Standard
⌈>	**Ge**	**72**		ug/L			35628	36436	0	KED
|	**Ni**	**60**	**50.588**	ug/L	0.832	1	10	74766	1	KED
|	**Ni**	**62**	**50.542**	ug/L	0.700	1	2	11912	0	KED
|	**Cu**	**63**	**51.479**	ug/L	0.931	1	12	207845	1	KED
|	**Cu**	**65**	**51.241**	ug/L	0.707	1	10	105191	1	KED
|	**Zn**	**66**	**51.907**	ug/L	1.181	2	20	28931	1	KED
|	**Zn**	**67**	**52.131**	ug/L	1.746	3	2	4801	2	KED
⌊	**As**	**75**	**48.479**	ug/L	0.486	1	3	14147	1	KED
	Kr	**83**		ug/L			45	43	31	Standard
⌈>	**In-1**	**115**		ug/L			8466	8246	2	KED
|	**Cd**	**111**	**51.464**	ug/L	0.597	1	1	14408	2	KED
⌊	**Cd**	**114**	**52.063**	ug/L	1.573	3	3	36945	0	KED
⌈>	**In**	**115**		ug/L			448865	426451	2	Standard
|	**Ag**	**107**	**47.034**	ug/L	1.428	3	40	701805	1	Standard
|	**Ba**	**135**	**48.092**	ug/L	1.046	2	11	270504	0	Standard
⌊	**Ba**	**137**	**46.543**	ug/L	1.325	2	19	490268	0	Standard
⌈>	**Tb**	**159**		ug/L			168501	167617	1	Standard
⌊	**Pb**	**208**	**52.950**	ug/L	1.170	2	172	4252260	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:12:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			42090	45868	1	Standard
⌈>	**Sc**	**45**		ug/L			332961	332999	0	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.018	269	12895	13047	2	Standard
|	**Cr**	**53**	**-0.010**	ug/L	0.003	27	187	163	4	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.001	23	424	545	4	Standard
⌈>	**Ge**	**72**		ug/L			35628	37183	1	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.002	124	10	8	32	KED
|	**Ni**	**62**	**-0.001**	ug/L	0.009	1712	2	2	86	KED
|	**Cu**	**63**	**0.004**	ug/L	0.003	75	12	27	39	KED
|	**Cu**	**65**	**0.000**	ug/L	0.000	534	10	10	10	KED
|	**Zn**	**66**	**-0.005**	ug/L	0.013	255	20	18	39	KED
|	**Zn**	**67**	**0.006**	ug/L	0.031	537	2	3	91	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.003	721	3	3	31	KED
	Kr	**83**		ug/L			45	42	21	Standard
⌈>	**In-1**	**115**		ug/L			8466	8876	1	KED
|	**Cd**	**111**	**0.005**	ug/L	0.007	132	1	3	62	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.002	44	3	1	93	KED
⌈>	**In**	**115**		ug/L			448865	446461	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	68	40	64	25	Standard
|	**Ba**	**135**	**-0.000**	ug/L	0.001	453	11	10	54	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	266	19	24	50	Standard
⌈>	**Tb**	**159**		ug/L			168501	163711	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	43	172	267	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:22:08

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				44394	1	Standard
⌈>	**Sc**	**45**		ug/L				294037	11	Standard
|	**Cr**	**52**		ug/L				13085	5	Standard
⌊	**Cr**	**53**		ug/L				150	10	Standard
⌈>	**Ge**	**72**		ug/L				37522	1	KED
|	**Ni**	**60**		ug/L				6	45	KED
|	**Ni**	**62**		ug/L				1	86	KED
|	**Cu**	**63**		ug/L				27	10	KED
|	**Cu**	**65**		ug/L				9	34	KED
|	**Zn**	**66**		ug/L				19	10	KED
|	**Zn**	**67**		ug/L				3	50	KED
⌊	**As**	**75**		ug/L				1	33	KED
	Kr	**83**		ug/L				56	7	Standard
⌈>	**In-1**	**115**		ug/L				8889	0	KED
|	**Cd**	**111**		ug/L				5	16	KED
⌊	**Cd**	**114**		ug/L				5	22	KED
⌈>	**Tb**	**159**		ug/L				151668	11	Standard
⌊	**Pb**	**208**		ug/L				135	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:28:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				43915	1	Standard
⎡>	**Sc**	**45**		ug/L				332530	1	Standard
⎢	**Cr**	**52**		ug/L				13137	2	Standard
⎣	**Cr**	**53**		ug/L				163	8	Standard
⎡>	**Ge**	**72**		ug/L				37776	1	KED
⎢	**Ni**	**60**		ug/L				3	100	KED
⎢	**Ni**	**62**		ug/L				0	173	KED
⎢	**Cu**	**63**		ug/L				18	23	KED
⎢	**Cu**	**65**		ug/L				6	41	KED
⎢	**Zn**	**66**		ug/L				19	14	KED
⎢	**Zn**	**67**		ug/L				3	50	KED
⎣	**As**	**75**		ug/L				3	27	KED
	Kr	**83**		ug/L				41	37	Standard
⎡>	**In-1**	**115**		ug/L				8842	2	KED
⎢	**Cd**	**111**		ug/L				3	56	KED
⎣	**Cd**	**114**		ug/L				3	52	KED
⎡>	**Tb**	**159**		ug/L				167464	1	Standard
⎣	**Pb**	**208**		ug/L				168	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:32:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	44013	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	345315	1	Standard
|	**Cr**	**52**	**48.430**	ug/L	0.364	0	13137	1159781	1	Standard
⌊	**Cr**	**53**	**50.466**	ug/L	0.276	0	163	131090	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	37535	1	KED
|	**Ni**	**60**	**51.615**	ug/L	0.193	0	3	78581	1	KED
|	**Ni**	**62**	**51.720**	ug/L	1.419	2	0	12552	1	KED
|	**Cu**	**63**	**51.953**	ug/L	1.352	2	18	216053	1	KED
|	**Cu**	**65**	**51.914**	ug/L	0.930	1	6	109764	0	KED
|	**Zn**	**66**	**52.174**	ug/L	0.673	1	19	29953	0	KED
|	**Zn**	**67**	**51.599**	ug/L	1.919	3	3	4896	2	KED
⌊	**As**	**75**	**49.265**	ug/L	1.350	2	3	14806	1	KED
	Kr	**83**		ug/L			41	43	35	Standard
⌈>	**In-1**	**115**		ug/L			8842	8388	3	KED
|	**Cd**	**111**	**53.409**	ug/L	1.286	2	3	15204	0	KED
⌊	**Cd**	**114**	**53.226**	ug/L	1.663	3	3	38412	1	KED
⌈>	**Tb**	**159**		ug/L			167464	178280	0	Standard
⌊	**Pb**	**208**	**51.042**	ug/L	0.222	0	168	4360458	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:39:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43824	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	333583	3	Standard
|	**Cr**	**52**	**0.009**	ug/L	0.015	167	13137	13372	1	Standard
⌊	**Cr**	**53**	**0.007**	ug/L	0.004	49	163	181	8	Standard
⌈>	**Ge**	**72**		ug/L			37776	38104	1	KED
|	**Ni**	**60**	**0.007**	ug/L	0.004	55	3	14	39	KED
|	**Ni**	**62**	**0.015**	ug/L	0.004	28	0	4	24	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	79	18	29	29	KED
|	**Cu**	**65**	**0.005**	ug/L	0.002	38	6	17	22	KED
|	**Zn**	**66**	**0.027**	ug/L	0.020	72	19	35	32	KED
|	**Zn**	**67**	**0.032**	ug/L	0.063	196	3	6	87	KED
⌊	**As**	**75**	**0.002**	ug/L	0.005	196	3	4	34	KED
	Kr	**83**		ug/L			41	38	46	Standard
⌈>	**In-1**	**115**		ug/L			8842	8742	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.002	190	3	3	17	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	316	3	3	71	KED
⌈>	**Tb**	**159**		ug/L			167464	166881	2	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	19	168	325	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:43:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	62037	1	Standard
>	Sc	45		ug/L			332530	347080	2	Standard
	Cr	52	0.031	ug/L	0.005	16	13137	14448	1	Standard
	Cr	53	0.005	ug/L	0.010	215	163	181	12	Standard
>	Ge	72		ug/L			37776	38309	1	KED
	Ni	60	0.007	ug/L	0.004	59	3	13	41	KED
	Ni	62	0.013	ug/L	0.008	61	0	3	50	KED
	Cu	63	0.125	ug/L	0.012	9	18	551	10	KED
	Cu	65	0.115	ug/L	0.014	12	6	255	12	KED
	Zn	66	33.926	ug/L	0.792	2	19	19883	0	KED
	Zn	67	32.362	ug/L	1.440	4	3	3136	4	KED
	As	75	0.006	ug/L	0.004	59	3	5	19	KED
	Kr	83		ug/L			41	43	11	Standard
>	In-1	115		ug/L			8842	8684	1	KED
	Cd	111	0.007	ug/L	0.002	28	3	5	10	KED
	Cd	114	0.002	ug/L	0.004	194	3	5	61	KED
>	Tb	159		ug/L			167464	175053	1	Standard
	Pb	208	0.018	ug/L	0.000	2	168	1720	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:48:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	55964	1	Standard
>	Sc	45		ug/L			332530	348781	1	Standard
	Cr	52	25.581	ug/L	0.308	1	13137	625219	0	Standard
	Cr	53	26.533	ug/L	0.436	1	163	69689	0	Standard
>	Ge	72		ug/L			37776	37596	1	KED
	Ni	60	27.129	ug/L	0.800	2	3	41364	2	KED
	Ni	62	27.295	ug/L	0.314	1	0	6637	0	KED
	Cu	63	28.464	ug/L	0.375	1	18	118589	0	KED
	Cu	65	27.649	ug/L	0.309	1	6	58563	0	KED
	Zn	66	83.613	ug/L	1.820	2	19	48068	1	KED
	Zn	67	79.563	ug/L	0.952	1	3	7561	0	KED
	As	75	24.908	ug/L	0.390	1	3	7501	0	KED
	Kr	83		ug/L			41	52	11	Standard
>	In-1	115		ug/L			8842	8766	3	KED
	Cd	111	25.724	ug/L	1.511	5	3	7649	3	KED
	Cd	114	25.913	ug/L	1.096	4	3	19540	1	KED
>	Tb	159		ug/L			167464	175745	2	Standard
	Pb	208	27.587	ug/L	0.599	2	168	2322573	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:52:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	68316	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	346906	0	Standard
|	**Cr**	**52**	**0.167**	ug/L	0.013	8	13137	17663	1	Standard
⌊	**Cr**	**53**	**0.165**	ug/L	0.011	6	163	600	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	38158	1	KED
|	**Ni**	**60**	**0.021**	ug/L	0.002	8	3	36	7	KED
|	**Ni**	**62**	**0.031**	ug/L	0.019	61	0	8	58	KED
|	**Cu**	**63**	**0.065**	ug/L	0.006	9	18	292	10	KED
|	**Cu**	**65**	**0.074**	ug/L	0.012	16	6	165	14	KED
|	**Zn**	**66**	**0.800**	ug/L	0.018	2	19	486	2	KED
|	**Zn**	**67**	**0.665**	ug/L	0.024	3	3	67	1	KED
⌊	**As**	**75**	**0.002**	ug/L	0.001	70	3	4	11	KED
	Kr	**83**		ug/L			41	37	25	Standard
⌈>	**In-1**	**115**		ug/L			8842	8908	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.008	128	3	5	44	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	342	3	4	54	KED
⌈>	**Tb**	**159**		ug/L			167464	175571	0	Standard
⌊	**Pb**	**208**	**0.016**	ug/L	0.000	0	168	1534	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 21:56:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	70513	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	340977	0	Standard
|	**Cr**	**52**	**26.792**	ug/L	0.741	2	13137	639498	2	Standard
⌊	**Cr**	**53**	**27.440**	ug/L	0.720	2	163	70453	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	37350	0	KED
|	**Ni**	**60**	**27.844**	ug/L	0.715	2	3	42182	2	KED
|	**Ni**	**62**	**27.618**	ug/L	0.845	3	0	6672	2	KED
|	**Cu**	**63**	**29.062**	ug/L	0.250	0	18	120299	0	KED
|	**Cu**	**65**	**28.942**	ug/L	0.654	2	6	60904	2	KED
|	**Zn**	**66**	**85.225**	ug/L	0.981	1	19	48680	0	KED
|	**Zn**	**67**	**81.664**	ug/L	1.825	2	3	7710	2	KED
⌊	**As**	**75**	**24.868**	ug/L	0.445	1	3	7440	1	KED
	Kr	**83**		ug/L			41	46	13	Standard
⌈>	**In-1**	**115**		ug/L			8842	8589	0	KED
|	**Cd**	**111**	**27.026**	ug/L	0.307	1	3	7884	1	KED
⌊	**Cd**	**114**	**27.268**	ug/L	0.351	1	3	20164	0	KED
⌈>	**Tb**	**159**		ug/L			167464	174528	2	Standard
⌊	**Pb**	**208**	**28.417**	ug/L	0.753	2	168	2375611	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-SRL1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:00:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	56294	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	364897	2	Standard
|	**Cr**	**52**	**0.034**	ug/L	0.015	42	13137	15263	0	Standard
⌊	**Cr**	**53**	**0.110**	ug/L	0.011	10	163	479	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	38320	0	KED
|	**Ni**	**60**	**0.053**	ug/L	0.010	18	3	86	17	KED
|	**Ni**	**62**	**0.084**	ug/L	0.004	4	0	21	5	KED
|	**Cu**	**63**	**0.222**	ug/L	0.008	3	18	960	3	KED
|	**Cu**	**65**	**0.205**	ug/L	0.030	14	6	449	14	KED
|	**Zn**	**66**	**3.738**	ug/L	0.074	1	19	2209	2	KED
|	**Zn**	**67**	**3.704**	ug/L	0.267	7	3	362	7	KED
⌊	**As**	**75**	**0.048**	ug/L	0.004	8	3	18	6	KED
	Kr	**83**		ug/L			41	52	4	Standard
⌈>	**In-1**	**115**		ug/L			8842	8883	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.003	109	3	4	24	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	188	3	4	43	KED
⌈>	**Tb**	**159**		ug/L			167464	176441	0	Standard
⌊	**Pb**	**208**	**0.039**	ug/L	0.001	3	168	3494	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0242-05RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:05:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	76912	1	Standard
>	Sc	45		ug/L			332530	444365	1	Standard
	Cr	52	0.100	ug/L	0.010	10	13137	20587	0	Standard
	Cr	53	0.437	ug/L	0.013	2	163	1677	3	Standard
>	Ge	72		ug/L			37776	36973	1	KED
	Ni	60	0.239	ug/L	0.021	8	3	362	7	KED
	Ni	62	0.228	ug/L	0.014	6	0	55	6	KED
	Cu	63	1.050	ug/L	0.032	3	18	4317	2	KED
	Cu	65	1.030	ug/L	0.044	4	6	2152	4	KED
	Zn	66	17.774	ug/L	0.160	0	19	10065	1	KED
	Zn	67	16.568	ug/L	0.542	3	3	1551	2	KED
	As	75	0.226	ug/L	0.025	11	3	70	10	KED
	Kr	83		ug/L			41	36	32	Standard
>	In-1	115		ug/L			8842	8602	0	KED
	Cd	111	0.022	ug/L	0.012	55	3	9	36	KED
	Cd	114	0.018	ug/L	0.009	51	3	16	41	KED
>	Tb	159		ug/L			167464	174508	0	Standard
	Pb	208	0.062	ug/L	0.002	3	168	5375	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:09:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	76857	1	Standard
>	Sc	45		ug/L			332530	437824	3	Standard
	Cr	52	0.059	ug/L	0.022	37	13137	19067	1	Standard
	Cr	53	0.387	ug/L	0.008	2	163	1488	2	Standard
>	Ge	72		ug/L			37776	37707	0	KED
	Ni	60	0.227	ug/L	0.013	5	3	351	6	KED
	Ni	62	0.203	ug/L	0.038	18	0	50	19	KED
	Cu	63	0.998	ug/L	0.019	1	18	4186	1	KED
	Cu	65	0.977	ug/L	0.025	2	6	2082	2	KED
	Zn	66	16.419	ug/L	0.148	0	19	9484	1	KED
	Zn	67	15.015	ug/L	0.185	1	3	1434	1	KED
	As	75	0.223	ug/L	0.018	8	3	70	7	KED
	Kr	83		ug/L			41	32	11	Standard
>	In-1	115		ug/L			8842	8683	4	KED
	Cd	111	0.023	ug/L	0.017	71	3	10	44	KED
	Cd	114	0.016	ug/L	0.005	28	3	15	19	KED
>	Tb	159		ug/L			167464	174167	0	Standard
	Pb	208	0.066	ug/L	0.001	0	168	5688	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:13:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	75146	1	Standard
>	Sc	45		ug/L			332530	449351	2	Standard
	Cr	52	19.623	ug/L	0.227	1	13137	621972	1	Standard
	Cr	53	20.787	ug/L	0.318	1	163	70380	1	Standard
>	Ge	72		ug/L			37776	36643	1	KED
	Ni	60	27.907	ug/L	0.176	0	3	41481	1	KED
	Ni	62	27.534	ug/L	0.652	2	0	6524	1	KED
	Cu	63	29.770	ug/L	0.496	1	18	120886	0	KED
	Cu	65	29.215	ug/L	0.054	0	6	60316	1	KED
	Zn	66	102.880	ug/L	2.940	2	19	57638	2	KED
	Zn	67	97.201	ug/L	3.698	3	3	9000	2	KED
	As	75	26.102	ug/L	0.599	2	3	7661	1	KED
	Kr	83		ug/L			41	53	25	Standard
>	In-1	115		ug/L			8842	8348	3	KED
	Cd	111	27.232	ug/L	1.149	4	3	7713	0	KED
	Cd	114	26.870	ug/L	1.264	4	3	19293	1	KED
>	Tb	159		ug/L			167464	174115	1	Standard
	Pb	208	27.929	ug/L	0.331	1	168	2330062	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0208-PS1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:18:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	74500	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	448428	2	Standard
|	**Cr**	**52**	**18.411**	ug/L	0.505	2	13137	583315	0	Standard
⌊	**Cr**	**53**	**19.610**	ug/L	0.368	1	163	66270	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36582	0	KED
|	**Ni**	**60**	**26.321**	ug/L	0.770	2	3	39050	2	KED
|	**Ni**	**62**	**26.246**	ug/L	0.679	2	0	6209	1	KED
|	**Cu**	**63**	**28.038**	ug/L	0.651	2	18	113662	1	KED
|	**Cu**	**65**	**27.689**	ug/L	0.520	1	6	57068	1	KED
|	**Zn**	**66**	**97.332**	ug/L	0.474	0	19	54451	1	KED
|	**Zn**	**67**	**91.477**	ug/L	0.614	0	3	8459	0	KED
⌊	**As**	**75**	**24.170**	ug/L	0.230	0	3	7083	1	KED
	Kr	**83**		ug/L			41	48	25	Standard
⌈>	**In-1**	**115**		ug/L			8842	8407	1	KED
|	**Cd**	**111**	**25.243**	ug/L	0.734	2	3	7204	0	KED
⌊	**Cd**	**114**	**25.620**	ug/L	0.330	1	3	18542	1	KED
⌈>	**Tb**	**159**		ug/L			167464	173813	0	Standard
⌊	**Pb**	**208**	**26.463**	ug/L	0.021	0	168	2204193	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:22:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43198	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	330611	1	Standard
|	**Cr**	**52**	**0.084**	ug/L	0.003	3	13137	14960	1	Standard
⌊	**Cr**	**53**	**0.018**	ug/L	0.007	39	163	206	8	Standard
⌈>	**Ge**	**72**		ug/L			37776	35888	2	KED
|	**Ni**	**60**	**0.004**	ug/L	0.004	113	3	8	65	KED
|	**Ni**	**62**	**0.017**	ug/L	0.005	28	0	4	24	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	62	18	27	21	KED
|	**Cu**	**65**	**0.005**	ug/L	0.002	49	6	16	29	KED
|	**Zn**	**66**	**0.026**	ug/L	0.011	44	19	33	20	KED
|	**Zn**	**67**	**0.002**	ug/L	0.054	3569	3	3	132	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	74	3	2	34	KED
	Kr	**83**		ug/L			41	43	15	Standard
⌈>	**In-1**	**115**		ug/L			8842	8399	0	KED
|	**Cd**	**111**	**0.012**	ug/L	0.012	100	3	6	49	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.003	26	3	12	17	KED
⌈>	**Tb**	**159**		ug/L			167464	167100	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	6	168	383	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:26:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43520	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	335932	2	Standard
|	**Cr**	**52**	**48.728**	ug/L	0.629	1	13137	1135038	1	Standard
⌊	**Cr**	**53**	**50.393**	ug/L	0.986	1	163	127316	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36161	1	KED
|	**Ni**	**60**	**51.453**	ug/L	0.476	0	3	75462	1	KED
|	**Ni**	**62**	**52.383**	ug/L	1.697	3	0	12247	1	KED
|	**Cu**	**63**	**52.881**	ug/L	0.742	1	18	211893	1	KED
|	**Cu**	**65**	**51.554**	ug/L	1.263	2	6	105019	2	KED
|	**Zn**	**66**	**51.978**	ug/L	0.717	1	19	28748	0	KED
|	**Zn**	**67**	**52.618**	ug/L	2.696	5	3	4808	3	KED
⌊	**As**	**75**	**50.206**	ug/L	1.150	2	3	14536	0	KED
	Kr	**83**		ug/L			41	57	27	Standard
⌈>	**In-1**	**115**		ug/L			8842	8530	2	KED
|	**Cd**	**111**	**51.308**	ug/L	1.633	3	3	14855	1	KED
⌊	**Cd**	**114**	**50.964**	ug/L	1.073	2	3	37415	0	KED
⌈>	**Tb**	**159**		ug/L			167464	172417	0	Standard
⌊	**Pb**	**208**	**52.646**	ug/L	0.174	0	168	4349601	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:33:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	42389	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	334806	3	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.020	624	13137	13145	0	Standard
⌊	**Cr**	**53**	**0.005**	ug/L	0.003	61	163	178	6	Standard
⌈>	**Ge**	**72**		ug/L			37776	37571	1	KED
|	**Ni**	**60**	**0.007**	ug/L	0.004	59	3	13	43	KED
|	**Ni**	**62**	**0.010**	ug/L	0.005	43	0	3	34	KED
|	**Cu**	**63**	**0.006**	ug/L	0.002	31	18	41	18	KED
|	**Cu**	**65**	**0.006**	ug/L	0.003	58	6	19	36	KED
|	**Zn**	**66**	**0.058**	ug/L	0.019	33	19	52	19	KED
|	**Zn**	**67**	**0.041**	ug/L	0.054	132	3	7	66	KED
⌊	**As**	**75**	**0.002**	ug/L	0.001	66	3	4	11	KED
	Kr	**83**		ug/L			41	43	14	Standard
⌈>	**In-1**	**115**		ug/L			8842	9047	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.005	138	3	4	34	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	1193	3	3	52	KED
⌈>	**Tb**	**159**		ug/L			167464	169661	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	21	168	344	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:38:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	62547	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	345150	2	Standard
|	**Cr**	**52**	**0.028**	ug/L	0.015	52	13137	14297	0	Standard
⌊	**Cr**	**53**	**0.007**	ug/L	0.007	98	163	187	7	Standard
⌈>	**Ge**	**72**		ug/L			37776	37095	0	KED
|	**Ni**	**60**	**0.006**	ug/L	0.003	43	3	12	31	KED
|	**Ni**	**62**	**0.008**	ug/L	0.009	114	0	2	86	KED
|	**Cu**	**63**	**0.109**	ug/L	0.004	3	18	464	3	KED
|	**Cu**	**65**	**0.107**	ug/L	0.015	14	6	231	14	KED
|	**Zn**	**66**	**0.297**	ug/L	0.047	15	19	187	13	KED
|	**Zn**	**67**	**0.211**	ug/L	0.030	14	3	23	12	KED
⌊	**As**	**75**	**0.003**	ug/L	0.006	196	3	4	37	KED
	Kr	**83**		ug/L			41	41	36	Standard
⌈>	**In-1**	**115**		ug/L			8842	8524	0	KED
|	**Cd**	**111**	**0.005**	ug/L	0.011	237	3	4	69	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.007	292	3	5	95	KED
⌈>	**Tb**	**159**		ug/L			167464	174714	0	Standard
⌊	**Pb**	**208**	**0.034**	ug/L	0.001	1	168	3057	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:42:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	56862	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	340124	0	Standard
|	**Cr**	**52**	**25.906**	ug/L	0.166	0	13137	617323	0	Standard
⌊	**Cr**	**53**	**26.617**	ug/L	0.150	0	163	68182	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	36992	2	KED
|	**Ni**	**60**	**26.317**	ug/L	0.848	3	3	39471	2	KED
|	**Ni**	**62**	**26.449**	ug/L	0.618	2	0	6326	1	KED
|	**Cu**	**63**	**27.689**	ug/L	0.479	1	18	113488	1	KED
|	**Cu**	**65**	**27.446**	ug/L	0.903	3	6	57177	2	KED
|	**Zn**	**66**	**81.047**	ug/L	2.298	2	19	45827	0	KED
|	**Zn**	**67**	**76.525**	ug/L	4.022	5	3	7149	2	KED
⌊	**As**	**75**	**24.424**	ug/L	0.752	3	3	7233	0	KED
	Kr	**83**		ug/L			41	50	10	Standard
⌈>	**In-1**	**115**		ug/L			8842	8795	2	KED
|	**Cd**	**111**	**25.001**	ug/L	0.805	3	3	7464	1	KED
⌊	**Cd**	**114**	**25.248**	ug/L	0.671	2	3	19110	0	KED
⌈>	**Tb**	**159**		ug/L			167464	173556	1	Standard
⌊	**Pb**	**208**	**28.160**	ug/L	0.718	2	168	2341304	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0233-07RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:46:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	74224	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	399147	1	Standard
|	**Cr**	**52**	**0.093**	ug/L	0.012	13	13137	18319	1	Standard
⌊	**Cr**	**53**	**0.364**	ug/L	0.026	7	163	1287	6	Standard
⌈>	**Ge**	**72**		ug/L			37776	36948	1	KED
|	**Ni**	**60**	**0.228**	ug/L	0.012	5	3	345	6	KED
|	**Ni**	**62**	**0.217**	ug/L	0.059	27	0	52	28	KED
|	**Cu**	**63**	**1.061**	ug/L	0.005	0	18	4363	1	KED
|	**Cu**	**65**	**1.099**	ug/L	0.031	2	6	2293	1	KED
|	**Zn**	**66**	**30.820**	ug/L	0.640	2	19	17427	2	KED
|	**Zn**	**67**	**28.194**	ug/L	0.428	1	3	2635	1	KED
⌊	**As**	**75**	**0.269**	ug/L	0.030	11	3	83	9	KED
	Kr	**83**		ug/L			41	38	18	Standard
⌈>	**In-1**	**115**		ug/L			8842	8589	2	KED
|	**Cd**	**111**	**0.015**	ug/L	0.009	61	3	7	33	KED
⌊	**Cd**	**114**	**0.014**	ug/L	0.007	46	3	14	34	KED
⌈>	**Tb**	**159**		ug/L			167464	172580	0	Standard
⌊	**Pb**	**208**	**0.164**	ug/L	0.008	4	168	13754	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0234-07RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:51:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	76777	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	345129	2	Standard
|	**Cr**	**52**	**0.326**	ug/L	0.023	7	13137	21331	0	Standard
⌊	**Cr**	**53**	**0.321**	ug/L	0.013	4	163	1001	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	37771	0	KED
|	**Ni**	**60**	**0.357**	ug/L	0.033	9	3	550	9	KED
|	**Ni**	**62**	**0.416**	ug/L	0.050	12	0	102	11	KED
|	**Cu**	**63**	**2.900**	ug/L	0.056	1	18	12154	1	KED
|	**Cu**	**65**	**2.763**	ug/L	0.059	2	6	5886	2	KED
|	**Zn**	**66**	**40.410**	ug/L	0.822	2	19	23353	1	KED
|	**Zn**	**67**	**37.762**	ug/L	1.072	2	3	3608	3	KED
⌊	**As**	**75**	**0.132**	ug/L	0.005	4	3	43	3	KED
	Kr	**83**		ug/L			41	40	12	Standard
⌈>	**In-1**	**115**		ug/L			8842	8686	2	KED
|	**Cd**	**111**	**0.066**	ug/L	0.004	6	3	22	7	KED
⌊	**Cd**	**114**	**0.062**	ug/L	0.008	13	3	50	14	KED
⌈>	**Tb**	**159**		ug/L			167464	173154	0	Standard
⌊	**Pb**	**208**	**0.203**	ug/L	0.003	1	168	17028	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0241-02RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:55:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	74576	1	Standard
> Sc	45		ug/L			332530	443077	2	Standard
Cr	52	0.039	ug/L	0.009	23	13137	18677	1	Standard
Cr	53	1.115	ug/L	0.023	2	163	3929	4	Standard
> Ge	72		ug/L			37776	36516	1	KED
Ni	60	0.167	ug/L	0.009	5	3	251	5	KED
Ni	62	0.180	ug/L	0.012	6	0	43	6	KED
Cu	63	0.681	ug/L	0.035	5	18	2774	4	KED
Cu	65	0.676	ug/L	0.030	4	6	1396	3	KED
Zn	66	5.417	ug/L	0.076	1	19	3042	0	KED
Zn	67	5.476	ug/L	0.418	7	3	509	8	KED
As	75	0.179	ug/L	0.017	9	3	55	9	KED
Kr	83		ug/L			41	43	30	Standard
> In-1	115		ug/L			8842	8398	0	KED
Cd	111	0.024	ug/L	0.010	42	3	10	28	KED
Cd	114	0.036	ug/L	0.006	17	3	29	15	KED
> Tb	159		ug/L			167464	172232	0	Standard
Pb	208	0.058	ug/L	0.002	3	168	4934	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0241-04RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 22:59:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	75881	0	Standard
> Sc	45		ug/L			332530	435318	0	Standard
Cr	52	0.044	ug/L	0.004	9	13137	18495	0	Standard
Cr	53	0.549	ug/L	0.027	4	163	2008	4	Standard
> Ge	72		ug/L			37776	35980	0	KED
Ni	60	0.261	ug/L	0.012	4	3	384	4	KED
Ni	62	0.300	ug/L	0.033	10	0	70	10	KED
Cu	63	0.431	ug/L	0.014	3	18	1737	3	KED
Cu	65	0.428	ug/L	0.017	3	6	873	4	KED
Zn	66	3.432	ug/L	0.061	1	19	1906	2	KED
Zn	67	3.158	ug/L	0.385	12	3	290	12	KED
As	75	0.239	ug/L	0.013	5	3	72	5	KED
Kr	83		ug/L			41	41	27	Standard
> In-1	115		ug/L			8842	8470	1	KED
Cd	111	0.005	ug/L	0.003	67	3	4	20	KED
Cd	114	0.009	ug/L	0.008	86	3	10	56	KED
> Tb	159		ug/L			167464	170221	2	Standard
Pb	208	0.071	ug/L	0.004	6	168	5945	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0242-02RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:04:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	70929	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	366663	3	Standard
|	**Cr**	**52**	**0.141**	ug/L	0.016	11	13137	18034	3	Standard
⌊	**Cr**	**53**	**0.261**	ug/L	0.017	6	163	898	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	36506	0	KED
|	**Ni**	**60**	**0.169**	ug/L	0.018	10	3	253	11	KED
|	**Ni**	**62**	**0.180**	ug/L	0.075	41	0	43	41	KED
|	**Cu**	**63**	**1.181**	ug/L	0.045	3	18	4795	4	KED
|	**Cu**	**65**	**1.190**	ug/L	0.005	0	6	2454	0	KED
|	**Zn**	**66**	**5.681**	ug/L	0.043	0	19	3189	0	KED
|	**Zn**	**67**	**5.523**	ug/L	0.413	7	3	513	6	KED
⌊	**As**	**75**	**0.155**	ug/L	0.008	5	3	48	4	KED
	Kr	**83**		ug/L			41	33	27	Standard
⌈>	**In-1**	**115**		ug/L			8842	8459	2	KED
|	**Cd**	**111**	**0.022**	ug/L	0.014	63	3	9	43	KED
⌊	**Cd**	**114**	**0.016**	ug/L	0.006	38	3	15	27	KED
⌈>	**Tb**	**159**		ug/L			167464	167584	2	Standard
⌊	**Pb**	**208**	**0.158**	ug/L	0.004	2	168	12822	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0242-04RE1
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:08:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	72229	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	450211	1	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.008	263	13137	17686	0	Standard
⌊	**Cr**	**53**	**0.381**	ug/L	0.016	4	163	1508	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	36744	1	KED
|	**Ni**	**60**	**0.197**	ug/L	0.028	14	3	296	13	KED
|	**Ni**	**62**	**0.195**	ug/L	0.022	11	0	46	10	KED
|	**Cu**	**63**	**0.921**	ug/L	0.020	2	18	3769	1	KED
|	**Cu**	**65**	**0.905**	ug/L	0.032	3	6	1880	2	KED
|	**Zn**	**66**	**11.312**	ug/L	0.078	0	19	6372	0	KED
|	**Zn**	**67**	**10.795**	ug/L	0.912	8	3	1005	8	KED
⌊	**As**	**75**	**0.215**	ug/L	0.017	7	3	66	8	KED
	Kr	**83**		ug/L			41	40	7	Standard
⌈>	**In-1**	**115**		ug/L			8842	8332	0	KED
|	**Cd**	**111**	**0.014**	ug/L	0.002	13	3	7	7	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.010	93	3	10	63	KED
⌈>	**Tb**	**159**		ug/L			167464	171471	0	Standard
⌊	**Pb**	**208**	**0.051**	ug/L	0.001	2	168	4341	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0306-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:12:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	62149	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	399512	0	Standard
|	**Cr**	**52**	**0.879**	ug/L	0.013	1	13137	39849	0	Standard
⌊	**Cr**	**53**	**1.638**	ug/L	0.060	3	163	5110	3	Standard
⌈>	**Ge**	**72**		ug/L			37776	36585	0	KED
|	**Ni**	**60**	**0.537**	ug/L	0.023	4	3	800	3	KED
|	**Ni**	**62**	**0.564**	ug/L	0.071	12	0	133	12	KED
|	**Cu**	**63**	**6.167**	ug/L	0.117	1	18	25016	1	KED
|	**Cu**	**65**	**6.092**	ug/L	0.118	1	6	12561	1	KED
|	**Zn**	**66**	**6.496**	ug/L	0.201	3	19	3651	2	KED
|	**Zn**	**67**	**5.908**	ug/L	0.388	6	3	549	6	KED
⌊	**As**	**75**	**0.226**	ug/L	0.016	7	3	69	7	KED
	Kr	**83**		ug/L			41	40	40	Standard
⌈>	**In-1**	**115**		ug/L			8842	8487	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.002	56	3	4	12	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.006	104	3	7	54	KED
⌈>	**Tb**	**159**		ug/L			167464	171494	1	Standard
⌊	**Pb**	**208**	**0.087**	ug/L	0.002	2	168	7332	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:17:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	42974	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	330444	2	Standard
|	**Cr**	**52**	**0.068**	ug/L	0.016	23	13137	14596	0	Standard
⌊	**Cr**	**53**	**0.037**	ug/L	0.003	9	163	254	4	Standard
⌈>	**Ge**	**72**		ug/L			37776	36594	1	KED
|	**Ni**	**60**	**0.005**	ug/L	0.003	68	3	10	44	KED
|	**Ni**	**62**	**0.005**	ug/L	0.008	146	0	1	100	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	131	18	22	24	KED
|	**Cu**	**65**	**0.004**	ug/L	0.003	76	6	14	39	KED
|	**Zn**	**66**	**0.009**	ug/L	0.006	61	19	24	12	KED
|	**Zn**	**67**	**0.015**	ug/L	0.043	287	3	5	78	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.004	178	3	2	44	KED
	Kr	**83**		ug/L			41	39	15	Standard
⌈>	**In-1**	**115**		ug/L			8842	8511	3	KED
|	**Cd**	**111**	**0.005**	ug/L	0.006	127	3	4	40	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.001	42	3	1	90	KED
⌈>	**Tb**	**159**		ug/L			167464	168885	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	23	168	344	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:21:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	42548	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	333394	2	Standard
|	**Cr**	**52**	**49.412**	ug/L	0.917	1	13137	1141947	1	Standard
⌊	**Cr**	**53**	**50.587**	ug/L	0.712	1	163	126853	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	37567	0	KED
|	**Ni**	**60**	**49.823**	ug/L	0.826	1	3	75911	0	KED
|	**Ni**	**62**	**50.531**	ug/L	0.964	1	0	12277	1	KED
|	**Cu**	**63**	**51.458**	ug/L	1.137	2	18	214201	1	KED
|	**Cu**	**65**	**51.146**	ug/L	1.094	2	6	108239	1	KED
|	**Zn**	**66**	**50.488**	ug/L	1.536	3	19	29009	2	KED
|	**Zn**	**67**	**49.685**	ug/L	1.143	2	3	4719	1	KED
⌊	**As**	**75**	**48.971**	ug/L	0.794	1	3	14733	0	KED
	Kr	**83**		ug/L			41	43	14	Standard
⌈>	**In-1**	**115**		ug/L			8842	8531	1	KED
|	**Cd**	**111**	**51.024**	ug/L	0.924	1	3	14778	0	KED
⌊	**Cd**	**114**	**50.921**	ug/L	0.679	1	3	37395	0	KED
⌈>	**Tb**	**159**		ug/L			167464	173325	0	Standard
⌊	**Pb**	**208**	**52.418**	ug/L	0.476	0	168	4353637	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:28:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	42388	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	329230	2	Standard
|	**Cr**	**52**	**0.004**	ug/L	0.006	174	13137	13086	2	Standard
⌊	**Cr**	**53**	**0.006**	ug/L	0.003	52	163	176	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	38020	2	KED
|	**Ni**	**60**	**0.004**	ug/L	0.002	60	3	10	39	KED
|	**Ni**	**62**	**0.003**	ug/L	0.004	174	0	1	86	KED
|	**Cu**	**63**	**0.004**	ug/L	0.001	29	18	37	15	KED
|	**Cu**	**65**	**0.004**	ug/L	0.002	58	6	15	33	KED
|	**Zn**	**66**	**0.044**	ug/L	0.003	6	19	45	2	KED
|	**Zn**	**67**	**0.020**	ug/L	0.001	6	3	5	0	KED
⌊	**As**	**75**	**0.002**	ug/L	0.007	353	3	4	50	KED
	Kr	**83**		ug/L			41	41	5	Standard
⌈>	**In-1**	**115**		ug/L			8842	8830	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.004	125	3	4	24	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.007	191	3	6	85	KED
⌈>	**Tb**	**159**		ug/L			167464	166899	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	13	168	336	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:32:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	66723	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	436323	1	Standard
|	**Cr**	**52**	**10.898**	ug/L	0.175	1	13137	343071	1	Standard
⌊	**Cr**	**53**	**11.531**	ug/L	0.217	1	163	38005	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	39265	0	KED
|	**Ni**	**60**	**11.220**	ug/L	0.408	3	3	17874	4	KED
|	**Ni**	**62**	**11.389**	ug/L	0.583	5	0	2892	4	KED
|	**Cu**	**63**	**83.576**	ug/L	1.813	2	18	363650	1	KED
|	**Cu**	**65**	**82.672**	ug/L	2.864	3	6	182875	3	KED
|	**Zn**	**66**	**51.989**	ug/L	1.551	2	19	31225	2	KED
|	**Zn**	**67**	**50.028**	ug/L	2.582	5	3	4967	5	KED
⌊	**As**	**75**	**2.691**	ug/L	0.095	3	3	849	4	KED
	Kr	**83**		ug/L			41	62	14	Standard
⌈>	**In-1**	**115**		ug/L			8842	8921	0	KED
|	**Cd**	**111**	**0.048**	ug/L	0.024	48	3	18	39	KED
⌊	**Cd**	**114**	**0.047**	ug/L	0.005	10	3	39	8	KED
⌈>	**Tb**	**159**		ug/L			167464	202039	1	Standard
⌊	**Pb**	**208**	**21.218**	ug/L	0.173	0	168	2054225	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:37:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	67326	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	405383	0	Standard
|	**Cr**	**52**	**5.534**	ug/L	0.041	0	13137	169760	1	Standard
⌊	**Cr**	**53**	**5.823**	ug/L	0.096	1	163	17933	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	38501	0	KED
|	**Ni**	**60**	**5.198**	ug/L	0.138	2	3	8120	2	KED
|	**Ni**	**62**	**5.389**	ug/L	0.284	5	0	1342	5	KED
|	**Cu**	**63**	**7.733**	ug/L	0.211	2	18	33013	2	KED
|	**Cu**	**65**	**7.764**	ug/L	0.132	1	6	16845	0	KED
|	**Zn**	**66**	**16.565**	ug/L	0.256	1	19	9770	2	KED
|	**Zn**	**67**	**16.270**	ug/L	0.176	1	3	1586	1	KED
⌊	**As**	**75**	**2.005**	ug/L	0.035	1	3	621	2	KED
	Kr	**83**		ug/L			41	60	15	Standard
⌈>	**In-1**	**115**		ug/L			8842	9013	2	KED
|	**Cd**	**111**	**0.029**	ug/L	0.012	41	3	12	27	KED
⌊	**Cd**	**114**	**0.025**	ug/L	0.008	33	3	22	29	KED
⌈>	**Tb**	**159**		ug/L			167464	191409	1	Standard
⌊	**Pb**	**208**	**1.651**	ug/L	0.012	0	168	151611	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-14
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:41:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	62010	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	396910	2	Standard
|	**Cr**	**52**	**5.907**	ug/L	0.107	1	13137	176332	2	Standard
⌊	**Cr**	**53**	**6.271**	ug/L	0.177	2	163	18885	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	38078	2	KED
|	**Ni**	**60**	**6.273**	ug/L	0.129	2	3	9688	0	KED
|	**Ni**	**62**	**6.519**	ug/L	0.094	1	0	1605	1	KED
|	**Cu**	**63**	**8.704**	ug/L	0.147	1	18	36737	0	KED
|	**Cu**	**65**	**8.597**	ug/L	0.126	1	6	18448	1	KED
|	**Zn**	**66**	**21.517**	ug/L	0.621	2	19	12540	1	KED
|	**Zn**	**67**	**20.880**	ug/L	1.103	5	3	2012	4	KED
⌊	**As**	**75**	**2.029**	ug/L	0.067	3	3	622	2	KED
	Kr	**83**		ug/L			41	55	1	Standard
⌈>	**In-1**	**115**		ug/L			8842	8871	1	KED
|	**Cd**	**111**	**0.026**	ug/L	0.000	1	3	11	0	KED
⌊	**Cd**	**114**	**0.026**	ug/L	0.008	31	3	23	25	KED
⌈>	**Tb**	**159**		ug/L			167464	195670	1	Standard
⌊	**Pb**	**208**	**4.908**	ug/L	0.084	1	168	460307	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-20
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:45:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	66438	0	Standard
>	Sc	45		ug/L			332530	462113	1	Standard
	Cr	52	20.411	ug/L	0.220	1	13137	664650	1	Standard
	Cr	53	21.236	ug/L	0.219	1	163	73949	1	Standard
>	Ge	72		ug/L			37776	38097	0	KED
	Ni	60	31.446	ug/L	0.215	0	3	48594	0	KED
	Ni	62	32.287	ug/L	0.803	2	0	7955	1	KED
	Cu	63	88.628	ug/L	1.675	1	18	374155	1	KED
	Cu	65	87.028	ug/L	0.493	0	6	186790	0	KED
	Zn	66	154.491	ug/L	2.342	1	19	89996	1	KED
	Zn	67	147.083	ug/L	1.849	1	3	14162	1	KED
	As	75	33.201	ug/L	0.342	1	3	10131	0	KED
	Kr	83		ug/L			41	73	18	Standard
>	In-1	115		ug/L			8842	9033	3	KED
	Cd	111	0.156	ug/L	0.019	11	3	51	11	KED
	Cd	114	0.165	ug/L	0.016	9	3	132	8	KED
>	Tb	159		ug/L			167464	202074	1	Standard
	Pb	208	260.681	ug/L	4.402	1	168	25237660	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:50:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	68568	0	Standard
>	**Sc**	**45**		ug/L			332530	474461	3	Standard
	Cr	**52**	**17.106**	ug/L	0.112	0	13137	574925	2	Standard
	Cr	**53**	**17.591**	ug/L	0.457	2	163	62903	0	Standard
>	**Ge**	**72**		ug/L			37776	38147	0	KED
	Ni	**60**	**21.266**	ug/L	0.193	0	3	32905	0	KED
	Ni	**62**	**22.907**	ug/L	0.399	1	0	5651	1	KED
	Cu	**63**	**283.918**	ug/L	0.854	0	18	1200179	0	KED
	Cu	**65**	**280.972**	ug/L	5.354	1	6	603841	1	KED
	Zn	**66**	**750.180**	ug/L	6.407	0	19	437502	1	KED
	Zn	**67**	**699.606**	ug/L	13.303	1	3	67440	2	KED
	As	**75**	**108.894**	ug/L	0.491	0	3	33265	0	KED
	Kr	**83**		ug/L			41	81	21	Standard
>	**In-1**	**115**		ug/L			8842	9882	2	KED
	Cd	**111**	**0.450**	ug/L	0.020	4	3	154	6	KED
	Cd	**114**	**0.431**	ug/L	0.009	2	3	370	4	KED
>	**Tb**	**159**		ug/L			167464	201624	1	Standard
	Pb	**208**	**91.183**	ug/L	0.525	0	168	8809198	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:54:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	68640	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	441223	2	Standard
|	**Cr**	**52**	**14.020**	ug/L	0.106	0	13137	441331	1	Standard
⌊	**Cr**	**53**	**14.729**	ug/L	0.347	2	163	49025	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	38819	0	KED
|	**Ni**	**60**	**18.959**	ug/L	0.127	0	3	29854	0	KED
|	**Ni**	**62**	**19.834**	ug/L	0.297	1	0	4979	0	KED
|	**Cu**	**63**	**170.114**	ug/L	2.552	1	18	731747	0	KED
|	**Cu**	**65**	**167.923**	ug/L	2.713	1	6	367221	0	KED
|	**Zn**	**66**	**521.315**	ug/L	7.460	1	19	309368	0	KED
|	**Zn**	**67**	**479.525**	ug/L	5.573	1	3	47039	1	KED
⌊	**As**	**75**	**90.023**	ug/L	0.504	0	3	27985	0	KED
	Kr	**83**		ug/L			41	69	19	Standard
⌈>	**In-1**	**115**		ug/L			8842	9782	0	KED
|	**Cd**	**111**	**0.370**	ug/L	0.040	10	3	126	10	KED
⌊	**Cd**	**114**	**0.339**	ug/L	0.021	6	3	289	6	KED
⌈>	**Tb**	**159**		ug/L			167464	192460	0	Standard
⌊	**Pb**	**208**	**74.707**	ug/L	0.688	0	168	6889594	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Tuesday, May 09, 2023 23:58:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		13		ug/L			43915	64979	0	Standard
>	Sc		45		ug/L			332530	443054	3	Standard
	Cr		52	32.752	ug/L	0.884	2	13137	1011590	2	Standard
	Cr		53	33.634	ug/L	0.732	2	163	112139	2	Standard
>	Ge		72		ug/L			37776	38076	1	KED
	Ni		60	44.611	ug/L	0.566	1	3	68892	0	KED
	Ni		62	45.904	ug/L	0.710	1	0	11303	0	KED
	Cu		63	226.950	ug/L	2.733	1	18	957497	0	KED
	Cu		65	224.794	ug/L	3.385	1	6	482181	1	KED
	Zn		66	727.010	ug/L	6.400	0	19	423174	0	KED
	Zn		67	674.445	ug/L	9.860	1	3	64885	0	KED
	As	STL	75	118.812	ug/L	1.379	1	3	36224	0	KED
	Kr		83		ug/L			41	88	18	Standard
>	In-1		115		ug/L			8842	10027	2	KED
	Cd		111	22.076	ug/L	0.252	1	3	7517	1	KED
	Cd		114	22.305	ug/L	0.731	3	3	19247	1	KED
>	Tb		159		ug/L			167464	202859	0	Standard
	Pb		208	106.766	ug/L	1.718	1	168	10378358	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:03:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		13		ug/L			43915	63821	1	Standard
>	Sc		45		ug/L			332530	482519	1	Standard
	Cr		52	33.598	ug/L	0.237	0	13137	1130057	1	Standard
	Cr		53	35.142	ug/L	0.527	1	163	127615	0	Standard
>	Ge		72		ug/L			37776	38241	2	KED
	Ni		60	45.464	ug/L	0.909	1	3	70499	0	KED
	Ni		62	46.724	ug/L	1.626	3	0	11550	1	KED
	Cu		63	272.207	ug/L	4.578	1	18	1153275	1	KED
	Cu		65	270.487	ug/L	6.941	2	6	582520	0	KED
	Zn		66	906.004	ug/L	32.281	3	19	529409	1	KED
	Zn		67	853.472	ug/L	20.287	2	3	82443	0	KED
	As	STL	75	127.779	ug/L	3.747	2	3	39113	0	KED
	Kr		83		ug/L			41	79	9	Standard
>	In-1		115		ug/L			8842	9965	1	KED
	Cd		111	22.310	ug/L	0.461	2	3	7550	0	KED
	Cd		114	22.403	ug/L	0.312	1	3	19220	0	KED
>	Tb		159		ug/L			167464	204527	2	Standard
	Pb		208	118.630	ug/L	2.493	2	168	11623211	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0125-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:07:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	69915	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	466397	0	Standard
|	**Cr**	**52**	**35.260**	ug/L	0.668	1	13137	1145388	1	Standard
⌊	**Cr**	**53**	**37.223**	ug/L	0.861	2	163	130646	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	37837	1	KED
|	**Ni**	**60**	**47.571**	ug/L	0.927	1	3	72998	0	KED
|	**Ni**	**62**	**48.020**	ug/L	1.262	2	0	11749	1	KED
|	**Cu**	**63**	**307.495**	ug/L	3.938	1	18	1289200	0	KED
|	**Cu**	**65**	**307.168**	ug/L	4.154	1	6	654744	1	KED
|	**Zn**	**66**	**835.974**	ug/L	8.518	1	19	483546	0	KED
|	**Zn**	**67**	**772.877**	ug/L	9.960	1	3	73894	1	KED
⌊	**As**	**75**	**133.851**	ug/L	1.174	0	3	40555	0	KED
	Kr	**83**		ug/L			41	90	25	Standard
⌈>	**In-1**	**115**		ug/L			8842	9966	3	KED
|	**Cd**	**111**	**22.228**	ug/L	1.367	6	3	7513	2	KED
⌊	**Cd**	**114**	**22.249**	ug/L	0.602	2	3	19082	2	KED
⌈>	**Tb**	**159**		ug/L			167464	199422	3	Standard
⌊	**Pb**	**208**	**116.825**	ug/L	3.030	2	168	11157835	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:11:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	44297	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	334004	1	Standard
|	**Cr**	**52**	**0.005**	ug/L	0.004	84	13137	13312	1	Standard
⌊	**Cr**	**53**	**0.014**	ug/L	0.009	62	163	199	12	Standard
⌈>	**Ge**	**72**		ug/L			37776	38577	0	KED
|	**Ni**	**60**	**0.032**	ug/L	0.004	12	3	54	11	KED
|	**Ni**	**62**	**0.025**	ug/L	0.005	17	0	6	15	KED
|	**Cu**	**63**	**0.024**	ug/L	0.006	24	18	121	19	KED
|	**Cu**	**65**	**0.022**	ug/L	0.010	48	6	53	41	KED
|	**Zn**	**66**	**0.090**	ug/L	0.006	6	19	73	5	KED
|	**Zn**	**67**	**0.019**	ug/L	0.039	209	3	5	66	KED
⌊	**As**	**75**	**0.004**	ug/L	0.001	21	3	4	5	KED
	Kr	**83**		ug/L			41	45	32	Standard
⌈>	**In-1**	**115**		ug/L			8842	8526	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.004	93	3	2	49	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.007	262	3	5	91	KED
⌈>	**Tb**	**159**		ug/L			167464	166472	0	Standard
⌊	**Pb**	**208**	**0.019**	ug/L	0.023	120	168	1661	107	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:15:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43932	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	338852	2	Standard
|	**Cr**	**52**	**48.884**	ug/L	0.354	0	13137	1148454	2	Standard
⌊	**Cr**	**53**	**50.640**	ug/L	0.774	1	163	129058	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	37996	0	KED
|	**Ni**	**60**	**50.320**	ug/L	0.691	1	3	77551	1	KED
|	**Ni**	**62**	**51.453**	ug/L	0.796	1	0	12644	1	KED
|	**Cu**	**63**	**51.393**	ug/L	1.258	2	18	216406	2	KED
|	**Cu**	**65**	**50.813**	ug/L	0.763	1	6	108779	1	KED
|	**Zn**	**66**	**50.104**	ug/L	1.662	3	19	29124	3	KED
|	**Zn**	**67**	**50.777**	ug/L	2.174	4	3	4878	4	KED
⌊	**As**	**75**	**48.552**	ug/L	0.783	1	3	14775	1	KED
	Kr	**83**		ug/L			41	53	17	Standard
⌈>	**In-1**	**115**		ug/L			8842	8658	0	KED
|	**Cd**	**111**	**51.235**	ug/L	0.583	1	3	15064	1	KED
⌊	**Cd**	**114**	**51.309**	ug/L	0.946	1	3	38248	1	KED
⌈>	**Tb**	**159**		ug/L			167464	175902	1	Standard
⌊	**Pb**	**208**	**51.253**	ug/L	0.598	1	168	4320031	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:23:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43964	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	334079	0	Standard
|	**Cr**	**52**	**0.026**	ug/L	0.013	49	13137	13799	1	Standard
⌊	**Cr**	**53**	**0.011**	ug/L	0.002	22	163	191	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	39048	1	KED
|	**Ni**	**60**	**0.032**	ug/L	0.005	16	3	54	16	KED
|	**Ni**	**62**	**0.032**	ug/L	0.011	34	0	8	32	KED
|	**Cu**	**63**	**0.008**	ug/L	0.001	13	18	55	10	KED
|	**Cu**	**65**	**0.013**	ug/L	0.002	18	6	36	13	KED
|	**Zn**	**66**	**0.047**	ug/L	0.010	21	19	48	12	KED
|	**Zn**	**67**	**0.018**	ug/L	0.020	111	3	5	33	KED
⌊	**As**	**75**	**0.006**	ug/L	0.006	109	3	5	34	KED
	Kr	**83**		ug/L			41	43	17	Standard
⌈>	**In-1**	**115**		ug/L			8842	9015	1	KED
|	**Cd**	**111**	**0.011**	ug/L	0.008	67	3	6	31	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.004	368	3	3	99	KED
⌈>	**Tb**	**159**		ug/L			167464	166890	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.003	63	168	490	41	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-21
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:27:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	76459	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	461439	0	Standard
|	**Cr**	**52**	**12.189**	ug/L	0.295	2	13137	403683	2	Standard
⌊	**Cr**	**53**	**12.803**	ug/L	0.219	1	163	44609	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	37976	1	KED
|	**Ni**	**60**	**16.382**	ug/L	0.209	1	3	25233	0	KED
|	**Ni**	**62**	**16.220**	ug/L	0.083	0	0	3984	1	KED
|	**Cu**	**63**	**36.293**	ug/L	0.522	1	18	152726	0	KED
|	**Cu**	**65**	**36.329**	ug/L	0.560	1	6	77721	0	KED
|	**Zn**	**66**	**45.816**	ug/L	0.248	0	19	26617	0	KED
|	**Zn**	**67**	**47.056**	ug/L	0.705	1	3	4518	1	KED
⌊	**As**	**75**	**4.690**	ug/L	0.109	2	3	1429	1	KED
	Kr	**83**		ug/L			41	73	17	Standard
⌈>	**In-1**	**115**		ug/L			8842	8736	1	KED
|	**Cd**	**111**	**0.189**	ug/L	0.005	2	3	59	0	KED
⌊	**Cd**	**114**	**0.181**	ug/L	0.021	11	3	139	9	KED
⌈>	**Tb**	**159**		ug/L			167464	199366	0	Standard
⌊	**Pb**	**208**	**41.556**	ug/L	0.032	0	168	3970092	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-23
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:31:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	74830	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	441642	1	Standard
|	**Cr**	**52**	**36.623**	ug/L	0.591	1	13137	1125730	0	Standard
⌊	**Cr**	**53**	**38.064**	ug/L	0.664	1	163	126487	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	37988	1	KED
|	**Ni**	**60**	**12.386**	ug/L	0.114	0	3	19086	0	KED
|	**Ni**	**62**	**12.278**	ug/L	0.158	1	0	3017	2	KED
|	**Cu**	**63**	**18.922**	ug/L	0.137	0	18	79667	0	KED
|	**Cu**	**65**	**18.771**	ug/L	0.346	1	6	40175	1	KED
|	**Zn**	**66**	**76.354**	ug/L	1.903	2	19	44354	1	KED
|	**Zn**	**67**	**70.776**	ug/L	1.377	1	3	6798	3	KED
⌊	**As**	**75**	**4.424**	ug/L	0.039	0	3	1349	1	KED
	Kr	**83**		ug/L			41	60	15	Standard
⌈>	**In-1**	**115**		ug/L			8842	8705	0	KED
|	**Cd**	**111**	**0.056**	ug/L	0.012	21	3	20	17	KED
⌊	**Cd**	**114**	**0.056**	ug/L	0.016	29	3	45	26	KED
⌈>	**Tb**	**159**		ug/L			167464	202711	1	Standard
⌊	**Pb**	**208**	**19.184**	ug/L	0.279	1	168	1863408	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:36:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	81204	1	Standard
>	**Sc**	**45**		ug/L			332530	472048	1	Standard
	Cr	**52**	**12.545**	ug/L	0.284	2	13137	424433	1	Standard
	Cr	**53**	**13.034**	ug/L	0.074	0	163	46453	1	Standard
>	**Ge**	**72**		ug/L			37776	36942	2	KED
	Ni	**60**	**18.823**	ug/L	0.885	4	3	28185	2	KED
	Ni	**62**	**19.288**	ug/L	0.654	3	0	4607	2	KED
	Cu	**63**	**24.315**	ug/L	0.458	1	18	99529	1	KED
	Cu	**65**	**23.991**	ug/L	0.649	2	6	49914	0	KED
	Zn	**66**	**53.439**	ug/L	1.514	2	19	30186	1	KED
	Zn	**67**	**51.980**	ug/L	2.300	4	3	4852	1	KED
	As	**75**	**5.112**	ug/L	0.171	3	3	1514	0	KED
	Kr	**83**		ug/L			41	81	9	Standard
>	**In-1**	**115**		ug/L			8842	8543	1	KED
	Cd	**111**	**0.058**	ug/L	0.018	31	3	20	25	KED
	Cd	**114**	**0.050**	ug/L	0.025	50	3	40	44	KED
>	**Tb**	**159**		ug/L			167464	199198	1	Standard
	Pb	**208**	**17.282**	ug/L	0.244	1	168	1649623	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:40:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	104122	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	515038	2	Standard
|	**Cr**	**52**	**42.055**	ug/L	0.636	1	13137	1504361	1	Standard
⌊	**Cr**	**53**	**43.668**	ug/L	1.081	2	163	169139	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	37168	0	KED
|	**Ni**	**60**	**29.403**	ug/L	0.197	0	3	44330	1	KED
|	**Ni**	**62**	**29.969**	ug/L	0.413	1	0	7204	1	KED
|	**Cu**	**63**	**111.651**	ug/L	0.972	0	18	459853	0	KED
|	**Cu**	**65**	**110.342**	ug/L	1.453	1	6	231057	1	KED
|	**Zn**	**66**	**254.634**	ug/L	4.479	1	19	144692	1	KED
|	**Zn**	**67**	**247.089**	ug/L	3.927	1	3	23208	1	KED
⌊	**As**	**75**	**12.428**	ug/L	0.299	2	3	3701	1	KED
	Kr	**83**		ug/L			41	103	14	Standard
⌈>	**In-1**	**115**		ug/L			8842	8430	0	KED
|	**Cd**	**111**	**4.208**	ug/L	0.169	4	3	1207	4	KED
⌊	**Cd**	**114**	**4.054**	ug/L	0.070	1	3	2945	1	KED
⌈>	**Tb**	**159**		ug/L			167464	200896	0	Standard
⌊	**Pb**	**208**	**408.445**	ug/L	5.918	1	168	39318569	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:44:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	80379	2	Standard
>	Sc	45		ug/L			332530	492398	2	Standard
	Cr	52	9.571	ug/L	0.119	1	13137	342383	1	Standard
	Cr	53	10.237	ug/L	0.247	2	163	38095	0	Standard
>	Ge	72		ug/L			37776	37178	0	KED
	Ni	60	11.606	ug/L	0.109	0	3	17504	1	KED
	Ni	62	11.670	ug/L	0.022	0	0	2806	0	KED
	Cu	63	26.298	ug/L	0.073	0	18	108361	0	KED
	Cu	65	26.251	ug/L	0.059	0	6	54988	0	KED
	Zn	66	53.995	ug/L	0.132	0	19	30707	0	KED
	Zn	67	52.139	ug/L	1.110	2	3	4901	2	KED
	As	75	5.517	ug/L	0.126	2	3	1646	2	KED
	Kr	83		ug/L			41	83	25	Standard
>	In-1	115		ug/L			8842	8301	0	KED
	Cd	111	0.156	ug/L	0.022	13	3	47	13	KED
	Cd	114	0.115	ug/L	0.022	19	3	85	18	KED
>	Tb	159		ug/L			167464	199826	1	Standard
	Pb	208	9.842	ug/L	0.134	1	168	942472	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:48:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	82668	1	Standard
>	Sc	45		ug/L			332530	494273	1	Standard
	Cr	52	9.506	ug/L	0.087	0	13137	341547	2	Standard
	Cr	53	9.949	ug/L	0.082	0	163	37186	1	Standard
>	Ge	72		ug/L			37776	36431	1	KED
	Ni	60	11.662	ug/L	0.255	2	3	17233	1	KED
	Ni	62	11.870	ug/L	0.391	3	0	2797	2	KED
	Cu	63	26.350	ug/L	0.347	1	18	106385	1	KED
	Cu	65	26.538	ug/L	0.453	1	6	54465	0	KED
	Zn	66	53.674	ug/L	0.468	0	19	29910	0	KED
	Zn	67	52.192	ug/L	2.084	3	3	4806	2	KED
	As	75	5.362	ug/L	0.201	3	3	1567	2	KED
	Kr	83		ug/L			41	81	25	Standard
>	In-1	115		ug/L			8842	8368	0	KED
	Cd	111	0.161	ug/L	0.036	22	3	48	19	KED
	Cd	114	0.156	ug/L	0.027	17	3	115	16	KED
>	Tb	159		ug/L			167464	199076	0	Standard
	Pb	208	9.259	ug/L	0.108	1	168	883390	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:53:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	71590	0	Standard
> Sc	45		ug/L			332530	503058	1	Standard
Cr	52	25.876	ug/L	0.129	0	13137	912014	2	Standard
Cr	53	26.979	ug/L	0.634	2	163	102192	1	Standard
> Ge	72		ug/L			37776	36318	1	KED
Ni	60	37.848	ug/L	0.892	2	3	55740	0	KED
Ni	62	38.324	ug/L	1.404	3	0	8998	1	KED
Cu	63	53.461	ug/L	0.892	1	18	215132	0	KED
Cu	65	53.011	ug/L	0.820	1	6	108451	0	KED
Zn	66	132.730	ug/L	2.404	1	19	73694	0	KED
Zn	67	126.505	ug/L	4.423	3	3	11609	2	KED
As	75	29.176	ug/L	0.295	1	3	8487	0	KED
Kr	83		ug/L			41	84	10	Standard
> In-1	115		ug/L			8842	8355	3	KED
Cd	111	25.260	ug/L	1.145	4	3	7160	0	KED
Cd	114	25.612	ug/L	1.387	5	3	18402	2	KED
> Tb	159		ug/L			167464	196213	0	Standard
Pb	208	32.065	ug/L	0.358	1	168	3014752	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 00:57:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	68041	1	Standard
> Sc	45		ug/L			332530	482139	3	Standard
Cr	52	26.101	ug/L	0.795	3	13137	880882	0	Standard
Cr	53	27.226	ug/L	0.886	3	163	98786	1	Standard
> Ge	72		ug/L			37776	36287	1	KED
Ni	60	36.992	ug/L	0.610	1	3	54440	1	KED
Ni	62	37.272	ug/L	0.787	2	0	8748	2	KED
Cu	63	51.809	ug/L	0.821	1	18	208314	0	KED
Cu	65	51.139	ug/L	0.883	1	6	104533	0	KED
Zn	66	131.098	ug/L	2.376	1	19	72730	0	KED
Zn	67	126.543	ug/L	2.352	1	3	11604	0	KED
As	75	28.833	ug/L	0.529	1	3	8379	0	KED
Kr	83		ug/L			41	90	18	Standard
> In-1	115		ug/L			8842	8417	1	KED
Cd	111	24.845	ug/L	0.751	3	3	7100	1	KED
Cd	114	24.876	ug/L	0.405	1	3	18025	1	KED
> Tb	159		ug/L			167464	196091	0	Standard
Pb	208	31.674	ug/L	0.256	0	168	2976369	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:01:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	79982	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	491748	1	Standard
|	**Cr**	**52**	**26.095**	ug/L	0.043	0	13137	898859	1	Standard
⌊	**Cr**	**53**	**27.271**	ug/L	0.408	1	163	100981	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	36127	0	KED
|	**Ni**	**60**	**37.312**	ug/L	0.492	1	3	54672	0	KED
|	**Ni**	**62**	**38.098**	ug/L	1.551	4	0	8900	3	KED
|	**Cu**	**63**	**53.233**	ug/L	0.315	0	18	213124	0	KED
|	**Cu**	**65**	**52.745**	ug/L	1.040	1	6	107347	1	KED
|	**Zn**	**66**	**133.882**	ug/L	2.016	1	19	73958	1	KED
|	**Zn**	**67**	**128.460**	ug/L	2.300	1	3	11729	1	KED
⌊	**As**	**75**	**29.795**	ug/L	0.468	1	3	8622	1	KED
	Kr	**83**		ug/L			41	88	20	Standard
⌈>	**In-1**	**115**		ug/L			8842	8361	0	KED
|	**Cd**	**111**	**24.504**	ug/L	0.453	1	3	6957	1	KED
⌊	**Cd**	**114**	**25.134**	ug/L	0.476	1	3	18091	1	KED
⌈>	**Tb**	**159**		ug/L			167464	198248	0	Standard
⌊	**Pb**	**208**	**32.328**	ug/L	0.284	0	168	3071107	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:06:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43677	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	326255	1	Standard
|	**Cr**	**52**	**-0.008**	ug/L	0.011	131	13137	12707	1	Standard
⌊	**Cr**	**53**	**-0.000**	ug/L	0.006	1816	163	159	10	Standard
⌈>	**Ge**	**72**		ug/L			37776	36578	0	KED
|	**Ni**	**60**	**0.022**	ug/L	0.006	28	3	35	24	KED
|	**Ni**	**62**	**0.019**	ug/L	0.012	65	0	5	57	KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	27	18	47	17	KED
|	**Cu**	**65**	**0.007**	ug/L	0.002	28	6	20	19	KED
|	**Zn**	**66**	**0.017**	ug/L	0.011	67	19	28	23	KED
|	**Zn**	**67**	**0.008**	ug/L	0.023	292	3	4	49	KED
⌊	**As**	**75**	**0.006**	ug/L	0.004	57	3	5	20	KED
	Kr	**83**		ug/L			41	45	12	Standard
⌈>	**In-1**	**115**		ug/L			8842	8279	3	KED
|	**Cd**	**111**	**0.002**	ug/L	0.004	190	3	3	25	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	429	3	3	68	KED
⌈>	**Tb**	**159**		ug/L			167464	169477	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	6	168	502	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:10:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	44281	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	327572	1	Standard
|	**Cr**	**52**	**49.143**	ug/L	0.606	1	13137	1116097	1	Standard
⌊	**Cr**	**53**	**51.123**	ug/L	0.652	1	163	125962	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36951	1	KED
|	**Ni**	**60**	**50.058**	ug/L	0.801	1	3	75018	0	KED
|	**Ni**	**62**	**51.286**	ug/L	1.408	2	0	12254	1	KED
|	**Cu**	**63**	**52.089**	ug/L	0.729	1	18	213286	0	KED
|	**Cu**	**65**	**50.905**	ug/L	0.828	1	6	105966	0	KED
|	**Zn**	**66**	**51.112**	ug/L	0.820	1	19	28888	0	KED
|	**Zn**	**67**	**50.082**	ug/L	1.029	2	3	4679	1	KED
⌊	**As**	**75**	**49.036**	ug/L	0.301	0	3	14511	0	KED
	Kr	**83**		ug/L			41	42	26	Standard
⌈>	**In-1**	**115**		ug/L			8842	8166	2	KED
|	**Cd**	**111**	**52.272**	ug/L	2.000	3	3	14484	1	KED
⌊	**Cd**	**114**	**52.871**	ug/L	1.570	2	3	37150	1	KED
⌈>	**Tb**	**159**		ug/L			167464	170308	1	Standard
⌊	**Pb**	**208**	**52.307**	ug/L	0.701	1	168	4268418	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:17:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	43109	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	325612	2	Standard
|	**Cr**	**52**	**0.072**	ug/L	0.081	113	13137	14450	11	Standard
⌊	**Cr**	**53**	**0.043**	ug/L	0.073	167	163	263	65	Standard
⌈>	**Ge**	**72**		ug/L			37776	37436	0	KED
|	**Ni**	**60**	**0.022**	ug/L	0.001	4	3	36	2	KED
|	**Ni**	**62**	**0.034**	ug/L	0.012	35	0	8	32	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	62	18	26	18	KED
|	**Cu**	**65**	**0.007**	ug/L	0.003	40	6	21	28	KED
|	**Zn**	**66**	**0.055**	ug/L	0.008	14	19	50	9	KED
|	**Zn**	**67**	**0.061**	ug/L	0.061	100	3	9	60	KED
⌊	**As**	**75**	**0.002**	ug/L	0.002	137	3	4	17	KED
	Kr	**83**		ug/L			41	46	36	Standard
⌈>	**In-1**	**115**		ug/L			8842	8597	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.002	57	3	4	12	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	434	3	4	65	KED
⌈>	**Tb**	**159**		ug/L			167464	166649	0	Standard
⌊	**Pb**	**208**	**0.071**	ug/L	0.117	165	168	5784	160	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-07
Sample Dil Factor: 20
Comments:

DEL

Sample Date/Time: Wednesday, May 10, 2023 01:21:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	70476	0	Standard
>	**Sc**	**45**		ug/L			332530	454088	3	Standard
	Cr	**52**	**9.274**	ug/L	0.428	4	13137	306227	1	Standard
	Cr	**53**	**9.649**	ug/L	0.149	1	163	33129	2	Standard
>	**Ge**	**72**		ug/L			37776	36804	1	KED
	Ni	**60**	**22.087**	ug/L	0.339	1	3	32971	1	KED
	Ni	**62**	**22.142**	ug/L	0.760	3	0	5269	2	KED
	Cu	**63**	**19.212**	ug/L	0.292	1	18	78360	0	KED
	Cu	**65**	**19.361**	ug/L	0.221	1	6	40153	2	KED
	Zn	**66**	**37.347**	ug/L	0.956	2	19	21027	1	KED
	Zn	**67**	**37.471**	ug/L	1.236	3	3	3487	2	KED
	As	**75**	**8.119**	ug/L	0.110	1	3	2396	1	KED
	Kr	**83**		ug/L			41	63	4	Standard
>	**In-1**	**115**		ug/L			8842	8379	0	KED
	Cd	**111**	**0.037**	ug/L	0.005	13	3	13	10	KED
	Cd	**114**	**0.036**	ug/L	0.007	18	3	29	16	KED
>	**Tb**	**159**		ug/L			167464	196394	1	Standard
	Pb	**208**	**2.250**	ug/L	0.026	1	168	211933	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:26:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	72031	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	442093	2	Standard
|	**Cr**	**52**	**71.717**	ug/L	0.932	1	13137	2189974	1	Standard
⌊	**Cr**	**53**	**71.999**	ug/L	1.413	1	163	239287	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	36891	1	KED
|	**Ni**	**60**	**97.415**	ug/L	0.453	0	3	145757	1	KED
|	**Ni**	**62**	**97.295**	ug/L	2.058	2	0	23211	1	KED
|	**Cu**	**63**	**88.365**	ug/L	1.177	1	18	361204	0	KED
|	**Cu**	**65**	**86.840**	ug/L	0.681	0	6	180475	0	KED
|	**Zn**	**66**	**74.426**	ug/L	0.937	1	19	41987	0	KED
|	**Zn**	**67**	**70.743**	ug/L	2.634	3	3	6595	2	KED
⌊	**As**	**75**	**6.223**	ug/L	0.215	3	3	1841	2	KED
	Kr	**83**		ug/L			41	67	18	Standard
⌈>	**In-1**	**115**		ug/L			8842	8311	1	KED
|	**Cd**	**111**	**0.162**	ug/L	0.034	20	3	48	18	KED
⌊	**Cd**	**114**	**0.159**	ug/L	0.028	17	3	117	15	KED
⌈>	**Tb**	**159**		ug/L			167464	187180	0	Standard
⌊	**Pb**	**208**	**62.709**	ug/L	0.140	0	168	5624709	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:30:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	77713	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	463736	2	Standard
|	**Cr**	**52**	**18.360**	ug/L	0.384	2	13137	601715	1	Standard
⌊	**Cr**	**53**	**18.974**	ug/L	0.106	0	163	66328	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36456	0	KED
|	**Ni**	**60**	**36.857**	ug/L	0.266	0	3	54500	0	KED
|	**Ni**	**62**	**38.090**	ug/L	0.927	2	0	8981	2	KED
|	**Cu**	**63**	**45.515**	ug/L	0.433	0	18	183884	0	KED
|	**Cu**	**65**	**44.346**	ug/L	0.798	1	6	91082	1	KED
|	**Zn**	**66**	**212.240**	ug/L	1.662	0	19	118305	1	KED
|	**Zn**	**67**	**201.442**	ug/L	2.984	1	3	18559	1	KED
⌊	**As**	**75**	**4.068**	ug/L	0.084	2	3	1191	2	KED
	Kr	**83**		ug/L			41	99	5	Standard
⌈>	**In-1**	**115**		ug/L			8842	8237	0	KED
|	**Cd**	**111**	**0.439**	ug/L	0.063	14	3	126	13	KED
⌊	**Cd**	**114**	**0.369**	ug/L	0.075	20	3	264	19	KED
⌈>	**Tb**	**159**		ug/L			167464	194681	0	Standard
⌊	**Pb**	**208**	**83.272**	ug/L	1.545	1	168	7767545	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-13
Sample Dil Factor: 20
Comments:

DEL

Sample Date/Time: Wednesday, May 10, 2023 01:34:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	61975	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	412337	2	Standard
|	**Cr**	**52**	**10.299**	ug/L	0.174	1	13137	307251	1	Standard
⌊	**Cr**	**53**	**10.905**	ug/L	0.163	1	163	33978	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	36196	0	KED
|	**Ni**	**60**	**12.289**	ug/L	0.209	1	3	18043	1	KED
|	**Ni**	**62**	**12.165**	ug/L	0.203	1	0	2848	2	KED
|	**Cu**	**63**	**34.043**	ug/L	0.303	0	18	136557	0	KED
|	**Cu**	**65**	**33.882**	ug/L	0.449	1	6	69094	0	KED
|	**Zn**	**66**	**71.033**	ug/L	0.609	0	19	39323	1	KED
|	**Zn**	**67**	**68.352**	ug/L	1.054	1	3	6254	0	KED
⌊	**As**	**75**	**4.810**	ug/L	0.056	1	3	1397	1	KED
	Kr	**83**		ug/L			41	69	32	Standard
⌈>	**In-1**	**115**		ug/L			8842	8353	2	KED
|	**Cd**	**111**	**0.114**	ug/L	0.028	24	3	35	20	KED
⌊	**Cd**	**114**	**0.130**	ug/L	0.026	20	3	97	18	KED
⌈>	**Tb**	**159**		ug/L			167464	189703	2	Standard
⌊	**Pb**	**208**	**32.329**	ug/L	0.882	2	168	2937649	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0348-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:39:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	61599	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	286969	2	Standard
|	**Cr**	**52**	**0.441**	ug/L	0.019	4	13137	20001	3	Standard
⌊	**Cr**	**53**	**1.624**	ug/L	0.010	0	163	3641	3	Standard
⌈>	**Ge**	**72**		ug/L			37776	28084	0	KED
|	**Ni**	**60**	**1.437**	ug/L	0.031	2	3	1640	2	KED
|	**Ni**	**62**	**1.427**	ug/L	0.124	8	0	259	8	KED
|	**Cu**	**63**	**1.953**	ug/L	0.018	0	18	6090	1	KED
|	**Cu**	**65**	**1.982**	ug/L	0.015	0	6	3141	0	KED
|	**Zn**	**66**	**17.083**	ug/L	0.234	1	19	7349	1	KED
|	**Zn**	**67**	**16.172**	ug/L	0.402	2	3	1150	3	KED
⌊	**As**	**75**	**1.246**	ug/L	0.040	3	3	283	3	KED
	Kr	**83**		ug/L			41	55	5	Standard
⌈>	**In-1**	**115**		ug/L			8842	6511	3	KED
|	**Cd**	**111**	**0.020**	ug/L	0.011	53	3	6	31	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.004	42	3	7	26	KED
⌈>	**Tb**	**159**		ug/L			167464	148231	2	Standard
⌊	**Pb**	**208**	**0.125**	ug/L	0.003	2	168	8997	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:43:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	39153	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	310974	3	Standard
|	**Cr**	**52**	**0.048**	ug/L	0.020	42	13137	13306	0	Standard
⌊	**Cr**	**53**	**0.023**	ug/L	0.006	25	163	206	3	Standard
⌈>	**Ge**	**72**		ug/L			37776	32860	0	KED
|	**Ni**	**60**	**0.018**	ug/L	0.008	43	3	26	37	KED
|	**Ni**	**62**	**0.024**	ug/L	0.009	36	0	5	33	KED
|	**Cu**	**63**	**0.014**	ug/L	0.003	20	18	66	15	KED
|	**Cu**	**65**	**0.016**	ug/L	0.001	8	6	34	6	KED
|	**Zn**	**66**	**0.015**	ug/L	0.025	162	19	24	50	KED
|	**Zn**	**67**	**0.029**	ug/L	0.022	77	3	5	33	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	63	3	2	35	KED
	Kr	**83**		ug/L			41	39	22	Standard
⌈>	**In-1**	**115**		ug/L			8842	7552	1	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.004	857	3	2	33	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.005	387	3	2	122	KED
⌈>	**Tb**	**159**		ug/L			167464	163041	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.001	31	168	389	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0376-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:48:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	54293	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	314660	0	Standard
|	**Cr**	**52**	**18.960**	ug/L	0.231	1	13137	421315	1	Standard
⌊	**Cr**	**53**	**19.668**	ug/L	0.106	0	163	46650	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	34247	1	KED
|	**Ni**	**60**	**0.246**	ug/L	0.027	10	3	344	11	KED
|	**Ni**	**62**	**0.304**	ug/L	0.071	23	0	67	22	KED
|	**Cu**	**63**	**0.337**	ug/L	0.010	3	18	1295	2	KED
|	**Cu**	**65**	**0.338**	ug/L	0.027	8	6	657	6	KED
|	**Zn**	**66**	**15.872**	ug/L	0.273	1	19	8326	0	KED
|	**Zn**	**67**	**14.432**	ug/L	0.867	6	3	1252	7	KED
⌊	**As**	**75**	**0.037**	ug/L	0.005	13	3	13	11	KED
	Kr	**83**		ug/L			41	38	35	Standard
⌈>	**In-1**	**115**		ug/L			8842	7536	0	KED
|	**Cd**	**111**	**0.138**	ug/L	0.034	24	3	38	22	KED
⌊	**Cd**	**114**	**0.133**	ug/L	0.007	5	3	89	5	KED
⌈>	**Tb**	**159**		ug/L			167464	161968	1	Standard
⌊	**Pb**	**208**	**0.029**	ug/L	0.001	3	168	2419	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0424-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:52:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	52553	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	344015	2	Standard
|	**Cr**	**52**	**0.601**	ug/L	0.021	3	13137	27749	1	Standard
⌊	**Cr**	**53**	**0.738**	ug/L	0.008	1	163	2076	3	Standard
⌈>	**Ge**	**72**		ug/L			37776	33048	1	KED
|	**Ni**	**60**	**0.694**	ug/L	0.028	4	3	933	2	KED
|	**Ni**	**62**	**0.734**	ug/L	0.055	7	0	157	6	KED
|	**Cu**	**63**	**2.449**	ug/L	0.069	2	18	8982	1	KED
|	**Cu**	**65**	**2.435**	ug/L	0.057	2	6	4539	0	KED
|	**Zn**	**66**	**96.648**	ug/L	0.645	0	19	48842	1	KED
|	**Zn**	**67**	**89.752**	ug/L	1.689	1	3	7497	2	KED
⌊	**As**	**75**	**0.583**	ug/L	0.052	8	3	157	7	KED
	Kr	**83**		ug/L			41	44	8	Standard
⌈>	**In-1**	**115**		ug/L			8842	7616	0	KED
|	**Cd**	**111**	**0.101**	ug/L	0.009	9	3	29	8	KED
⌊	**Cd**	**114**	**0.098**	ug/L	0.028	28	3	67	26	KED
⌈>	**Tb**	**159**		ug/L			167464	163481	0	Standard
⌊	**Pb**	**208**	**0.576**	ug/L	0.008	1	168	45305	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0374-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 01:57:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	61358	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	298471	1	Standard
|	**Cr**	**52**	**1.328**	ug/L	0.021	1	13137	38953	2	Standard
⌊	**Cr**	**53**	**2.563**	ug/L	0.053	2	163	5892	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	27150	0	KED
|	**Ni**	**60**	**1.039**	ug/L	0.074	7	3	1146	7	KED
|	**Ni**	**62**	**1.053**	ug/L	0.117	11	0	185	10	KED
|	**Cu**	**63**	**1.883**	ug/L	0.021	1	18	5678	0	KED
|	**Cu**	**65**	**1.814**	ug/L	0.030	1	6	2779	0	KED
|	**Zn**	**66**	**1.534**	ug/L	0.015	0	19	650	1	KED
|	**Zn**	**67**	**2.394**	ug/L	0.039	1	3	166	0	KED
⌊	**As**	**75**	**0.708**	ug/L	0.026	3	3	156	4	KED
	Kr	**83**		ug/L			41	41	34	Standard
⌈>	**In-1**	**115**		ug/L			8842	6456	0	KED
|	**Cd**	**111**	**0.016**	ug/L	0.005	32	3	6	18	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.021	144	3	10	107	KED
⌈>	**Tb**	**159**		ug/L			167464	147508	0	Standard
⌊	**Pb**	**208**	**0.111**	ug/L	0.002	1	168	8025	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:01:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	38378	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	289398	3	Standard
|	**Cr**	**52**	**0.106**	ug/L	0.021	19	13137	13531	0	Standard
⌊	**Cr**	**53**	**0.045**	ug/L	0.009	19	163	240	10	Standard
⌈>	**Ge**	**72**		ug/L			37776	31531	0	KED
|	**Ni**	**60**	**0.007**	ug/L	0.002	31	3	12	22	KED
|	**Ni**	**62**	**0.016**	ug/L	0.009	58	0	3	50	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	70	18	25	28	KED
|	**Cu**	**65**	**0.004**	ug/L	0.004	102	6	13	57	KED
|	**Zn**	**66**	**0.007**	ug/L	0.006	94	19	19	14	KED
|	**Zn**	**67**	**0.024**	ug/L	0.028	115	3	5	43	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	75	3	2	35	KED
	Kr	**83**		ug/L			41	43	4	Standard
⌈>	**In-1**	**115**		ug/L			8842	6362	13	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.004	68	3	1	43	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.006	471	3	3	102	KED
⌈>	**Tb**	**159**		ug/L			167464	151430	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	7	168	375	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:05:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	38042	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	295762	1	Standard
|	**Cr**	**52**	**48.297**	ug/L	0.492	1	13137	990587	1	Standard
⌊	**Cr**	**53**	**49.856**	ug/L	0.557	1	163	110910	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	30706	0	KED
|	**Ni**	**60**	**52.052**	ug/L	0.958	1	3	64831	2	KED
|	**Ni**	**62**	**52.337**	ug/L	0.771	1	0	10394	1	KED
|	**Cu**	**63**	**53.747**	ug/L	0.463	0	18	182888	0	KED
|	**Cu**	**65**	**53.307**	ug/L	0.946	1	6	92214	1	KED
|	**Zn**	**66**	**52.519**	ug/L	0.263	0	19	24668	0	KED
|	**Zn**	**67**	**52.163**	ug/L	1.222	2	3	4050	3	KED
⌊	**As**	**75**	**49.513**	ug/L	0.209	0	3	12176	0	KED
	Kr	**83**		ug/L			41	48	23	Standard
⌈>	**In-1**	**115**		ug/L			8842	6949	0	KED
|	**Cd**	**111**	**53.499**	ug/L	0.617	1	3	12624	1	KED
⌊	**Cd**	**114**	**53.285**	ug/L	0.173	0	3	31879	0	KED
⌈>	**Tb**	**159**		ug/L			167464	157054	0	Standard
⌊	**Pb**	**208**	**56.321**	ug/L	0.244	0	168	4238669	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:12:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	38212	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	292625	2	Standard
|	**Cr**	**52**	**-0.027**	ug/L	0.006	23	13137	11014	1	Standard
⌊	**Cr**	**53**	**-0.002**	ug/L	0.004	176	163	138	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	31710	0	KED
|	**Ni**	**60**	**0.014**	ug/L	0.003	21	3	20	18	KED
|	**Ni**	**62**	**0.010**	ug/L	0.021	219	0	2	173	KED
|	**Cu**	**63**	**0.005**	ug/L	0.004	80	18	33	43	KED
|	**Cu**	**65**	**0.009**	ug/L	0.005	54	6	21	39	KED
|	**Zn**	**66**	**0.038**	ug/L	0.029	76	19	34	40	KED
|	**Zn**	**67**	**0.055**	ug/L	0.063	113	3	7	66	KED
⌊	**As**	**75**	**0.004**	ug/L	0.005	111	3	4	29	KED
	Kr	**83**		ug/L			41	36	2	Standard
⌈>	**In-1**	**115**		ug/L			8842	7448	0	KED
|	**Cd**	**111**	**0.005**	ug/L	0.002	49	3	4	13	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.005	704	3	3	94	KED
⌈>	**Tb**	**159**		ug/L			167464	154637	1	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.005	91	168	587	66	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0513-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:17:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	76459	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	347951	1	Standard
|	**Cr**	**52**	**0.493**	ug/L	0.017	3	13137	25506	1	Standard
⌊	**Cr**	**53**	**0.822**	ug/L	0.022	2	163	2319	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	31974	0	KED
|	**Ni**	**60**	**1.158**	ug/L	0.038	3	3	1504	2	KED
|	**Ni**	**62**	**1.220**	ug/L	0.067	5	0	252	4	KED
|	**Cu**	**63**	**10.068**	ug/L	0.063	0	18	35687	1	KED
|	**Cu**	**65**	**10.009**	ug/L	0.326	3	6	18033	2	KED
|	**Zn**	**66**	**37.583**	ug/L	0.607	1	19	18387	1	KED
|	**Zn**	**67**	**34.815**	ug/L	0.410	1	3	2816	1	KED
⌊	**As**	**75**	**0.241**	ug/L	0.029	11	3	64	10	KED
	Kr	**83**		ug/L			41	45	12	Standard
⌈>	**In-1**	**115**		ug/L			8842	7250	1	KED
|	**Cd**	**111**	**0.044**	ug/L	0.013	30	3	13	24	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.043	1995	3	1	1511	KED
⌈>	**Tb**	**159**		ug/L			167464	159305	0	Standard
⌊	**Pb**	**208**	**0.255**	ug/L	0.004	1	168	19634	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0452-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:21:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	265955	1	Standard
>	Sc	45		ug/L			332530	286954	2	Standard
	Cr	52	2.337	ug/L	0.054	2	13137	57271	1	Standard
	Cr	53	2.168	ug/L	0.013	0	163	4814	3	Standard
>	Ge	72		ug/L			37776	27762	1	KED
	Ni	60	4.031	ug/L	0.085	2	3	4540	0	KED
	Ni	62	4.109	ug/L	0.167	4	0	738	5	KED
	Cu	63	0.480	ug/L	0.019	3	18	1490	5	KED
	Cu	65	0.462	ug/L	0.024	5	6	727	6	KED
	Zn	66	3.074	ug/L	0.105	3	19	1318	1	KED
	Zn	67	3.103	ug/L	0.461	14	3	220	14	KED
	As	75	0.162	ug/L	0.004	2	3	38	3	KED
	Kr	83		ug/L			41	52	31	Standard
>	In-1	115		ug/L			8842	6337	1	KED
	Cd	111	0.027	ug/L	0.007	26	3	8	17	KED
	Cd	114	0.019	ug/L	0.009	49	3	12	40	KED
>	Tb	159		ug/L			167464	146445	0	Standard
	Pb	208	0.048	ug/L	0.000	0	168	3531	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0462-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:25:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	57550	0	Standard
⌈>	Sc	45		ug/L			332530	362170	3	Standard
|	Cr	52	0.024	ug/L	0.004	14	13137	14910	2	Standard
⌊	Cr	53	0.805	ug/L	0.026	3	163	2367	1	Standard
⌈>	Ge	72		ug/L			37776	30582	0	KED
|	Ni	60	1.767	ug/L	0.052	2	3	2194	2	KED
|	Ni	62	1.654	ug/L	0.208	12	0	327	12	KED
|	Cu	63	0.327	ug/L	0.003	1	18	1123	0	KED
|	Cu	65	0.340	ug/L	0.017	4	6	591	4	KED
|	Zn	66	1.162	ug/L	0.024	2	19	559	1	KED
|	Zn	67	1.521	ug/L	0.207	13	3	120	13	KED
⌊	As	75	0.307	ug/L	0.014	4	3	78	4	KED
	Kr	83		ug/L			41	46	46	Standard
⌈>	In-1	115		ug/L			8842	6969	1	KED
|	Cd	111	0.021	ug/L	0.011	51	3	7	33	KED
⌊	Cd	114	0.012	ug/L	0.007	57	3	9	39	KED
⌈>	Tb	159		ug/L			167464	154961	1	Standard
⌊	Pb	208	0.031	ug/L	0.001	3	168	2438	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0480-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:31:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	293918	1	Standard
>	Sc	45		ug/L			332530	245721	3	Standard
	Cr	52	16.818	ug/L	0.337	2	13137	292820	1	Standard
	Cr	53	17.000	ug/L	0.117	0	163	31500	2	Standard
>	Ge	72		ug/L			37776	21688	0	KED
	Ni	60	4.067	ug/L	0.112	2	3	3579	2	KED
	Ni	62	4.411	ug/L	0.111	2	0	619	1	KED
	Cu	63	0.280	ug/L	0.014	5	18	684	5	KED
	Cu	65	0.280	ug/L	0.045	15	6	346	15	KED
	Zn	66	26.903	ug/L	0.577	2	19	8929	1	KED
	Zn	67	24.123	ug/L	0.949	3	3	1323	3	KED
	As	75	0.097	ug/L	0.016	16	3	18	14	KED
	Kr	83		ug/L			41	84	10	Standard
>	In-1	115		ug/L			8842	5227	2	KED
	Cd	111	0.457	ug/L	0.043	9	3	83	10	KED
	Cd	114	0.436	ug/L	0.073	16	3	198	14	KED
>	Tb	159		ug/L			167464	133894	1	Standard
	Pb	208	0.061	ug/L	0.001	1	168	4043	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:36:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41033	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	288885	0	Standard
|	**Cr**	**52**	**0.021**	ug/L	0.013	59	13137	11833	1	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.005	66	163	124	8	Standard
⌈>	**Ge**	**72**		ug/L			37776	30510	0	KED
|	**Ni**	**60**	**0.016**	ug/L	0.007	44	3	22	38	KED
|	**Ni**	**62**	**0.043**	ug/L	0.024	57	0	8	53	KED
|	**Cu**	**63**	**0.016**	ug/L	0.005	29	18	67	21	KED
|	**Cu**	**65**	**0.015**	ug/L	0.002	10	6	31	9	KED
|	**Zn**	**66**	**0.046**	ug/L	0.035	76	19	37	44	KED
|	**Zn**	**67**	**0.059**	ug/L	0.001	1	3	7	0	KED
⌊	**As**	**75**	**0.000**	ug/L	0.006	2166	3	3	48	KED
	Kr	**83**		ug/L			41	41	16	Standard
⌈>	**In-1**	**115**		ug/L			8842	7030	1	KED
|	**Cd**	**111**	**0.007**	ug/L	0.011	164	3	4	61	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.005	494	3	2	120	KED
⌈>	**Tb**	**159**		ug/L			167464	155077	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	15	168	360	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0442-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:40:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	47786	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	320614	2	Standard
|	**Cr**	**52**	**-0.047**	ug/L	0.009	20	13137	11634	0	Standard
⌊	**Cr**	**53**	**0.036**	ug/L	0.011	29	163	243	10	Standard
⌈>	**Ge**	**72**		ug/L			37776	31329	0	KED
|	**Ni**	**60**	**0.028**	ug/L	0.016	55	3	39	51	KED
|	**Ni**	**62**	**0.041**	ug/L	0.027	65	0	8	61	KED
|	**Cu**	**63**	**0.022**	ug/L	0.004	17	18	90	15	KED
|	**Cu**	**65**	**0.019**	ug/L	0.006	34	6	38	28	KED
|	**Zn**	**66**	**0.083**	ug/L	0.010	11	19	55	8	KED
|	**Zn**	**67**	**0.049**	ug/L	0.061	125	3	6	68	KED
⌊	**As**	**75**	**0.486**	ug/L	0.014	2	3	124	3	KED
	Kr	**83**		ug/L			41	34	20	Standard
⌈>	**In-1**	**115**		ug/L			8842	7187	0	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.006	497	3	2	57	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	172	3	2	45	KED
⌈>	**Tb**	**159**		ug/L			167464	158377	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	3	168	288	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-DUP3
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:45:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	48580	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	319845	2	Standard
|	**Cr**	**52**	**-0.036**	ug/L	0.017	48	13137	11846	0	Standard
⌊	**Cr**	**53**	**0.043**	ug/L	0.001	1	163	260	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	31872	1	KED
|	**Ni**	**60**	**0.025**	ug/L	0.006	21	3	36	21	KED
|	**Ni**	**62**	**0.031**	ug/L	0.035	111	0	6	103	KED
|	**Cu**	**63**	**0.013**	ug/L	0.005	42	18	59	29	KED
|	**Cu**	**65**	**0.008**	ug/L	0.001	17	6	19	11	KED
|	**Zn**	**66**	**0.044**	ug/L	0.014	32	19	38	17	KED
|	**Zn**	**67**	**0.102**	ug/L	0.061	59	3	11	44	KED
⌊	**As**	**75**	**0.478**	ug/L	0.027	5	3	125	6	KED
	Kr	**83**		ug/L			41	37	10	Standard
⌈>	**In-1**	**115**		ug/L			8842	7282	4	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.006	260	3	2	65	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.009	330	3	4	119	KED
⌈>	**Tb**	**159**		ug/L			167464	159075	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	56	168	194	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-MS3
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:49:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	48650	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	325593	1	Standard
|	**Cr**	**52**	**1.193**	ug/L	0.022	1	13137	39485	2	Standard
⌊	**Cr**	**53**	**1.337**	ug/L	0.017	1	163	3429	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	32790	0	KED
|	**Ni**	**60**	**1.435**	ug/L	0.050	3	3	1911	3	KED
|	**Ni**	**62**	**1.465**	ug/L	0.096	6	0	311	6	KED
|	**Cu**	**63**	**1.500**	ug/L	0.023	1	18	5464	1	KED
|	**Cu**	**65**	**1.465**	ug/L	0.049	3	6	2711	3	KED
|	**Zn**	**66**	**4.740**	ug/L	0.030	0	19	2393	1	KED
|	**Zn**	**67**	**4.520**	ug/L	0.268	5	3	377	5	KED
⌊	**As**	**75**	**1.824**	ug/L	0.010	0	3	482	0	KED
	Kr	**83**		ug/L			41	33	23	Standard
⌈>	**In-1**	**115**		ug/L			8842	7441	1	KED
|	**Cd**	**111**	**1.426**	ug/L	0.024	1	3	363	0	KED
⌊	**Cd**	**114**	**1.443**	ug/L	0.006	0	3	927	1	KED
⌈>	**Tb**	**159**		ug/L			167464	160535	1	Standard
⌊	**Pb**	**208**	**1.474**	ug/L	0.013	0	168	113578	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0054-MSD3
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:55:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	48789	0	Standard
⌈>	Sc	45		ug/L			332530	331932	2	Standard
|	Cr	52	1.181	ug/L	0.058	4	13137	39951	0	Standard
⌊	Cr	53	1.291	ug/L	0.018	1	163	3380	1	Standard
⌈>	Ge	72		ug/L			37776	33311	0	KED
|	Ni	60	1.423	ug/L	0.054	3	3	1926	3	KED
|	Ni	62	1.530	ug/L	0.057	3	0	330	4	KED
|	Cu	63	1.462	ug/L	0.039	2	18	5412	2	KED
|	Cu	65	1.474	ug/L	0.006	0	6	2771	0	KED
|	Zn	66	4.603	ug/L	0.074	1	19	2361	2	KED
|	Zn	67	4.744	ug/L	0.403	8	3	402	7	KED
⌊	As	75	1.748	ug/L	0.053	3	3	469	3	KED
	Kr	83		ug/L			41	36	20	Standard
⌈>	In-1	115		ug/L			8842	7697	1	KED
|	Cd	111	1.404	ug/L	0.108	7	3	369	7	KED
⌊	Cd	114	1.441	ug/L	0.078	5	3	958	6	KED
⌈>	Tb	159		ug/L			167464	161131	0	Standard
⌊	Pb	208	1.477	ug/L	0.014	0	168	114240	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 02:59:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	39941	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	297917	1	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.006	189	13137	11703	1	Standard
⌊	**Cr**	**53**	**-0.012**	ug/L	0.005	40	163	119	10	Standard
⌈>	**Ge**	**72**		ug/L			37776	32565	0	KED
|	**Ni**	**60**	**0.010**	ug/L	0.001	9	3	15	6	KED
|	**Ni**	**62**	**0.018**	ug/L	0.019	101	0	4	89	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	77	18	24	27	KED
|	**Cu**	**65**	**0.004**	ug/L	0.003	68	6	13	37	KED
|	**Zn**	**66**	**0.013**	ug/L	0.010	74	19	23	20	KED
|	**Zn**	**67**	**0.060**	ug/L	0.035	58	3	8	35	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.004	107	3	2	44	KED
	Kr	**83**		ug/L			41	43	11	Standard
⌈>	**In-1**	**115**		ug/L			8842	7480	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.011	675	3	2	108	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.000	17	3	3	1	KED
⌈>	**Tb**	**159**		ug/L			167464	156350	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	2	168	356	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:04:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41313	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	307356	1	Standard
|	**Cr**	**52**	**47.979**	ug/L	0.793	1	13137	1022914	2	Standard
⌊	**Cr**	**53**	**50.150**	ug/L	0.721	1	163	115964	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	32572	0	KED
|	**Ni**	**60**	**51.583**	ug/L	0.408	0	3	68147	0	KED
|	**Ni**	**62**	**52.891**	ug/L	0.595	1	0	11142	0	KED
|	**Cu**	**63**	**53.300**	ug/L	0.755	1	18	192386	0	KED
|	**Cu**	**65**	**52.686**	ug/L	0.416	0	6	96684	0	KED
|	**Zn**	**66**	**52.944**	ug/L	0.643	1	19	26378	0	KED
|	**Zn**	**67**	**52.503**	ug/L	2.007	3	3	4324	3	KED
⌊	**As**	**75**	**50.119**	ug/L	0.059	0	3	13074	0	KED
	Kr	**83**		ug/L			41	54	13	Standard
⌈>	**In-1**	**115**		ug/L			8842	7538	0	KED
|	**Cd**	**111**	**51.519**	ug/L	0.413	0	3	13188	0	KED
⌊	**Cd**	**114**	**51.630**	ug/L	0.578	1	3	33508	0	KED
⌈>	**Tb**	**159**		ug/L			167464	162469	1	Standard
⌊	**Pb**	**208**	**53.772**	ug/L	1.113	2	168	4185920	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:11:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40689	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	303870	2	Standard
|	**Cr**	**52**	**-0.009**	ug/L	0.004	40	13137	11822	2	Standard
⌊	**Cr**	**53**	**-0.012**	ug/L	0.004	28	163	121	8	Standard
⌈>	**Ge**	**72**		ug/L			37776	33588	2	KED
|	**Ni**	**60**	**0.007**	ug/L	0.002	21	3	13	14	KED
|	**Ni**	**62**	**0.012**	ug/L	0.010	85	0	3	69	KED
|	**Cu**	**63**	**0.005**	ug/L	0.001	27	18	36	13	KED
|	**Cu**	**65**	**0.006**	ug/L	0.002	42	6	17	29	KED
|	**Zn**	**66**	**0.053**	ug/L	0.022	41	19	44	23	KED
|	**Zn**	**67**	**-0.003**	ug/L	0.046	1477	3	3	124	KED
⌊	**As**	**75**	**0.005**	ug/L	0.002	33	3	4	11	KED
	Kr	**83**		ug/L			41	41	16	Standard
⌈>	**In-1**	**115**		ug/L			8842	7761	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.007	1066	3	2	66	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	559	3	3	34	KED
⌈>	**Tb**	**159**		ug/L			167464	158746	0	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	8	168	313	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0537-05
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:15:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	85852	1	Standard
>	Sc	45		ug/L			332530	667261	4	Standard
	Cr	52	0.012	ug/L	0.014	110	13137	26909	2	Standard
	Cr	53	0.491	ug/L	0.004	0	163	2787	4	Standard
>	Ge	72		ug/L			37776	29764	0	KED
	Ni	60	0.700	ug/L	0.025	3	3	848	3	KED
	Ni	62	0.779	ug/L	0.053	6	0	150	6	KED
	Cu	63	0.380	ug/L	0.028	7	18	1267	7	KED
	Cu	65	0.401	ug/L	0.019	4	6	678	4	KED
	Zn	66	1.572	ug/L	0.120	7	19	730	8	KED
	Zn	67	2.408	ug/L	0.032	1	3	184	1	KED
	As	75	4.400	ug/L	0.049	1	3	1051	0	KED
	Kr	83		ug/L			41	50	20	Standard
>	In-1	115		ug/L			8842	6861	1	KED
	Cd	111	0.014	ug/L	0.005	34	3	6	18	KED
	Cd	114	0.002	ug/L	0.005	244	3	4	71	KED
>	Tb	159		ug/L			167464	156691	1	Standard
	Pb	208	0.035	ug/L	0.002	5	168	2756	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-DUP2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:19:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	86976	0	Standard
> Sc	45		ug/L			332530	644087	3	Standard
Cr	52	0.052	ug/L	0.024	46	13137	27696	0	Standard
Cr	53	0.524	ug/L	0.027	5	163	2851	1	Standard
> Ge	72		ug/L			37776	30041	0	KED
Ni	60	0.766	ug/L	0.024	3	3	935	2	KED
Ni	62	0.814	ug/L	0.105	12	0	158	12	KED
Cu	63	0.224	ug/L	0.002	1	18	761	0	KED
Cu	65	0.234	ug/L	0.016	6	6	401	6	KED
Zn	66	1.462	ug/L	0.170	11	19	687	11	KED
Zn	67	2.310	ug/L	0.089	3	3	178	4	KED
As	75	4.454	ug/L	0.057	1	3	1074	0	KED
Kr	83		ug/L			41	44	39	Standard
> In-1	115		ug/L			8842	6849	1	KED
Cd	111	0.011	ug/L	0.015	131	3	5	66	KED
Cd	114	-0.002	ug/L	0.000	2	3	1	3	KED
> Tb	159		ug/L			167464	153022	1	Standard
Pb	208	0.027	ug/L	0.001	4	168	2098	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-MS2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:24:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	86232	1	Standard
> Sc	45		ug/L			332530	621648	2	Standard
Cr	52	11.436	ug/L	0.224	1	13137	511653	0	Standard
Cr	53	12.330	ug/L	0.162	1	163	57879	1	Standard
> Ge	72		ug/L			37776	29580	0	KED
Ni	60	26.864	ug/L	0.309	1	3	32230	0	KED
Ni	62	26.764	ug/L	0.540	2	0	5120	1	KED
Cu	63	25.690	ug/L	0.096	0	18	84222	0	KED
Cu	65	25.571	ug/L	0.335	1	6	42617	1	KED
Zn	66	76.056	ug/L	0.605	0	19	34406	0	KED
Zn	67	72.263	ug/L	1.184	1	3	5403	0	KED
As	75	28.724	ug/L	0.258	0	3	6806	0	KED
Kr	83		ug/L			41	73	31	Standard
> In-1	115		ug/L			8842	6837	2	KED
Cd	111	24.223	ug/L	0.549	2	3	5623	1	KED
Cd	114	25.016	ug/L	0.566	2	3	14721	1	KED
> Tb	159		ug/L			167464	155552	0	Standard
Pb	208	25.119	ug/L	0.471	1	168	1872259	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-MSD2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:30:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	85695	0	Standard
> Sc	45		ug/L			332530	641390	2	Standard
Cr	52	11.527	ug/L	0.212	1	13137	531914	1	Standard
Cr	53	12.350	ug/L	0.132	1	163	59819	2	Standard
> Ge	72		ug/L			37776	30276	0	KED
Ni	60	27.346	ug/L	0.428	1	3	33583	1	KED
Ni	62	27.615	ug/L	0.121	0	0	5408	0	KED
Cu	63	26.248	ug/L	0.503	1	18	88073	1	KED
Cu	65	26.164	ug/L	0.339	1	6	44631	1	KED
Zn	66	77.475	ug/L	1.231	1	19	35874	1	KED
Zn	67	74.471	ug/L	0.256	0	3	5700	0	KED
As	75	29.345	ug/L	0.019	0	3	7117	0	KED
Kr	83		ug/L			41	64	18	Standard
> In-1	115		ug/L			8842	6798	1	KED
Cd	111	25.904	ug/L	0.121	0	3	5980	0	KED
Cd	114	25.925	ug/L	0.289	1	3	15173	1	KED
> Tb	159		ug/L			167464	154708	1	Standard
Pb	208	25.748	ug/L	0.468	1	168	1908435	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLG
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:34:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41894	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	306227	1	Standard
|	**Cr**	**52**	**0.012**	ug/L	0.006	50	13137	12358	1	Standard
⌊	**Cr**	**53**	**0.015**	ug/L	0.003	19	163	184	4	Standard
⌈>	**Ge**	**72**		ug/L			37776	34308	1	KED
|	**Ni**	**60**	**0.016**	ug/L	0.006	35	3	26	29	KED
|	**Ni**	**62**	**0.026**	ug/L	0.005	20	0	6	17	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	166	18	20	32	KED
|	**Cu**	**65**	**0.004**	ug/L	0.004	117	6	13	62	KED
|	**Zn**	**66**	**-0.007**	ug/L	0.009	118	19	13	31	KED
|	**Zn**	**67**	**-0.003**	ug/L	0.013	406	3	3	34	KED
⌊	**As**	**75**	**0.002**	ug/L	0.004	156	3	3	24	KED
	Kr	**83**		ug/L			41	44	39	Standard
⌈>	**In-1**	**115**		ug/L			8842	7536	1	KED
|	**Cd**	**111**	**0.005**	ug/L	0.010	209	3	4	58	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.002	51	3	1	94	KED
⌈>	**Tb**	**159**		ug/L			167464	162505	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	37	168	188	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0464-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:38:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	49663	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	311893	0	Standard
|	**Cr**	**52**	**0.095**	ug/L	0.008	8	13137	14357	0	Standard
⌊	**Cr**	**53**	**0.047**	ug/L	0.007	13	163	263	5	Standard
⌈>	**Ge**	**72**		ug/L			37776	33466	0	KED
|	**Ni**	**60**	**1.346**	ug/L	0.049	3	3	1829	3	KED
|	**Ni**	**62**	**1.370**	ug/L	0.010	0	0	297	0	KED
|	**Cu**	**63**	**0.376**	ug/L	0.020	5	18	1412	5	KED
|	**Cu**	**65**	**0.360**	ug/L	0.036	10	6	684	9	KED
|	**Zn**	**66**	**3.781**	ug/L	0.068	1	19	1951	2	KED
|	**Zn**	**67**	**3.721**	ug/L	0.411	11	3	318	11	KED
⌊	**As**	**75**	**0.029**	ug/L	0.009	31	3	10	22	KED
	Kr	**83**		ug/L			41	43	4	Standard
⌈>	**In-1**	**115**		ug/L			8842	7513	0	KED
|	**Cd**	**111**	**0.033**	ug/L	0.004	11	3	11	8	KED
⌊	**Cd**	**114**	**0.033**	ug/L	0.018	54	3	24	48	KED
⌈>	**Tb**	**159**		ug/L			167464	161396	0	Standard
⌊	**Pb**	**208**	**22.116**	ug/L	0.149	0	168	1710473	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0464-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:42:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	82109	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	353902	2	Standard
|	**Cr**	**52**	**0.475**	ug/L	0.001	0	13137	25491	2	Standard
⌊	**Cr**	**53**	**0.635**	ug/L	0.016	2	163	1860	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	33788	1	KED
|	**Ni**	**60**	**1.118**	ug/L	0.053	4	3	1535	4	KED
|	**Ni**	**62**	**1.148**	ug/L	0.044	3	0	251	5	KED
|	**Cu**	**63**	**2.887**	ug/L	0.089	3	18	10821	1	KED
|	**Cu**	**65**	**2.885**	ug/L	0.137	4	6	5495	3	KED
|	**Zn**	**66**	**37.145**	ug/L	0.817	2	19	19199	0	KED
|	**Zn**	**67**	**34.845**	ug/L	2.256	6	3	2976	5	KED
⌊	**As**	**75**	**0.417**	ug/L	0.030	7	3	116	7	KED
	Kr	**83**		ug/L			41	37	16	Standard
⌈>	**In-1**	**115**		ug/L			8842	7633	2	KED
|	**Cd**	**111**	**0.024**	ug/L	0.003	14	3	9	11	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.010	111	3	9	72	KED
⌈>	**Tb**	**159**		ug/L			167464	160202	1	Standard
⌊	**Pb**	**208**	**0.318**	ug/L	0.001	0	168	24536	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0516-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:47:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			43915	78090	1	Standard
> Sc	45		ug/L			332530	495888	2	Standard
Cr	52	-0.047	ug/L	0.009	18	13137	17972	0	Standard
Cr	53	0.242	ug/L	0.009	3	163	1144	5	Standard
> Ge	72		ug/L			37776	32026	0	KED
Ni	60	0.573	ug/L	0.048	8	3	747	8	KED
Ni	62	0.638	ug/L	0.028	4	0	132	5	KED
Cu	63	8.279	ug/L	0.030	0	18	29395	0	KED
Cu	65	8.201	ug/L	0.059	0	6	14802	0	KED
Zn	66	10.896	ug/L	0.392	3	19	5350	3	KED
Zn	67	11.156	ug/L	0.398	3	3	906	3	KED
As	75	0.462	ug/L	0.037	8	3	121	8	KED
Kr	83		ug/L			41	36	32	Standard
> In-1	115		ug/L			8842	7235	1	KED
Cd	111	0.015	ug/L	0.011	74	3	6	42	KED
Cd	114	0.010	ug/L	0.003	26	3	9	19	KED
> Tb	159		ug/L			167464	158033	0	Standard
Pb	208	0.138	ug/L	0.002	1	168	10624	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0516-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:51:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	77753	0	Standard
>	Sc	45		ug/L			332530	473153	1	Standard
	Cr	52	-0.039	ug/L	0.012	31	13137	17412	2	Standard
	Cr	53	0.211	ug/L	0.016	7	163	982	4	Standard
>	Ge	72		ug/L			37776	31704	1	KED
	Ni	60	0.545	ug/L	0.007	1	3	704	0	KED
	Ni	62	0.552	ug/L	0.012	2	0	113	0	KED
	Cu	63	8.586	ug/L	0.051	0	18	30181	1	KED
	Cu	65	8.449	ug/L	0.052	0	6	15095	1	KED
	Zn	66	11.587	ug/L	0.188	1	19	5631	0	KED
	Zn	67	11.038	ug/L	0.629	5	3	887	6	KED
	As	75	0.474	ug/L	0.036	7	3	123	6	KED
	Kr	83		ug/L			41	43	2	Standard
>	In-1	115		ug/L			8842	6965	3	KED
	Cd	111	0.014	ug/L	0.002	17	3	6	9	KED
	Cd	114	0.015	ug/L	0.007	47	3	12	37	KED
>	Tb	159		ug/L			167464	156180	1	Standard
	Pb	208	0.146	ug/L	0.003	1	168	11068	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLH
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 03:55:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41383	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	298913	1	Standard
|	**Cr**	**52**	**0.030**	ug/L	0.006	19	13137	12422	1	Standard
⌊	**Cr**	**53**	**0.004**	ug/L	0.008	169	163	156	11	Standard
⌈>	**Ge**	**72**		ug/L			37776	32004	1	KED
|	**Ni**	**60**	**0.029**	ug/L	0.007	23	3	40	22	KED
|	**Ni**	**62**	**0.037**	ug/L	0.005	13	0	8	13	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	108	18	22	32	KED
|	**Cu**	**65**	**0.005**	ug/L	0.001	24	6	14	15	KED
|	**Zn**	**66**	**-0.011**	ug/L	0.010	93	19	11	44	KED
|	**Zn**	**67**	**-0.024**	ug/L	0.014	55	3	1	86	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	69	3	2	35	KED
	Kr	**83**		ug/L			41	36	13	Standard
⌈>	**In-1**	**115**		ug/L			8842	7289	1	KED
|	**Cd**	**111**	**0.000**	ug/L	0.010	201378	3	2	88	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	166	3	2	47	KED
⌈>	**Tb**	**159**		ug/L			167464	153715	0	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	28	168	122	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:00:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40791	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	294234	0	Standard
|	**Cr**	**52**	**48.631**	ug/L	0.411	0	13137	992252	0	Standard
⌊	**Cr**	**53**	**50.210**	ug/L	0.306	0	163	111136	0	Standard
⌈>	**Ge**	**72**		ug/L			37776	32220	0	KED
|	**Ni**	**60**	**51.598**	ug/L	0.887	1	3	67431	1	KED
|	**Ni**	**62**	**52.138**	ug/L	0.502	0	0	10865	1	KED
|	**Cu**	**63**	**52.800**	ug/L	0.882	1	18	188520	1	KED
|	**Cu**	**65**	**52.733**	ug/L	0.669	1	6	95724	1	KED
|	**Zn**	**66**	**51.702**	ug/L	0.419	0	19	25482	0	KED
|	**Zn**	**67**	**51.349**	ug/L	1.347	2	3	4183	2	KED
⌊	**As**	**75**	**49.786**	ug/L	0.584	1	3	12847	0	KED
	Kr	**83**		ug/L			41	40	19	Standard
⌈>	**In-1**	**115**		ug/L			8842	7370	0	KED
|	**Cd**	**111**	**50.635**	ug/L	0.976	1	3	12672	2	KED
⌊	**Cd**	**114**	**51.640**	ug/L	0.932	1	3	32766	1	KED
⌈>	**Tb**	**159**		ug/L			167464	155724	0	Standard
⌊	**Pb**	**208**	**54.900**	ug/L	0.496	0	168	4096616	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:07:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40961	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	290438	2	Standard
|	**Cr**	**52**	**0.028**	ug/L	0.012	43	13137	12031	2	Standard
⌊	**Cr**	**53**	**0.001**	ug/L	0.005	383	163	145	4	Standard
⌈>	**Ge**	**72**		ug/L			37776	32490	1	KED
|	**Ni**	**60**	**0.036**	ug/L	0.006	15	3	50	13	KED
|	**Ni**	**62**	**0.046**	ug/L	0.023	51	0	10	47	KED
|	**Cu**	**63**	**0.006**	ug/L	0.003	59	18	36	34	KED
|	**Cu**	**65**	**0.009**	ug/L	0.005	61	6	21	43	KED
|	**Zn**	**66**	**0.045**	ug/L	0.012	27	19	39	14	KED
|	**Zn**	**67**	**0.045**	ug/L	0.013	27	3	6	15	KED
⌊	**As**	**75**	**0.006**	ug/L	0.005	80	3	4	26	KED
	Kr	**83**		ug/L			41	46	4	Standard
⌈>	**In-1**	**115**		ug/L			8842	7601	1	KED
|	**Cd**	**111**	**0.004**	ug/L	0.015	341	3	4	93	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.006	72	3	8	46	KED
⌈>	**Tb**	**159**		ug/L			167464	151027	3	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.001	29	168	323	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-01
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:11:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	83717	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	363338	2	Standard
|	**Cr**	**52**	**0.327**	ug/L	0.009	2	13137	22486	1	Standard
⌊	**Cr**	**53**	**1.216**	ug/L	0.059	4	163	3495	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	31225	0	KED
|	**Ni**	**60**	**0.744**	ug/L	0.043	5	3	944	5	KED
|	**Ni**	**62**	**0.865**	ug/L	0.063	7	0	175	7	KED
|	**Cu**	**63**	**2.413**	ug/L	0.019	0	18	8366	1	KED
|	**Cu**	**65**	**2.401**	ug/L	0.079	3	6	4229	2	KED
|	**Zn**	**66**	**8.259**	ug/L	0.099	1	19	3958	0	KED
|	**Zn**	**67**	**8.006**	ug/L	0.381	4	3	634	5	KED
⌊	**As**	**75**	**0.493**	ug/L	0.018	3	3	126	3	KED
	Kr	**83**		ug/L			41	39	31	Standard
⌈>	**In-1**	**115**		ug/L			8842	7314	1	KED
|	**Cd**	**111**	**0.013**	ug/L	0.008	64	3	6	32	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.002	22	3	8	13	KED
⌈>	**Tb**	**159**		ug/L			167464	157428	1	Standard
⌊	**Pb**	**208**	**0.237**	ug/L	0.002	0	168	18050	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-02
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:15:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	81905	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	438260	0	Standard
|	**Cr**	**52**	**0.154**	ug/L	0.016	10	13137	21930	1	Standard
⌊	**Cr**	**53**	**0.939**	ug/L	0.009	0	163	3306	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	30901	1	KED
|	**Ni**	**60**	**1.108**	ug/L	0.010	0	3	1391	0	KED
|	**Ni**	**62**	**1.131**	ug/L	0.030	2	0	226	3	KED
|	**Cu**	**63**	**1.257**	ug/L	0.005	0	18	4320	1	KED
|	**Cu**	**65**	**1.229**	ug/L	0.020	1	6	2145	1	KED
|	**Zn**	**66**	**4.583**	ug/L	0.167	3	19	2181	3	KED
|	**Zn**	**67**	**4.549**	ug/L	0.448	9	3	358	8	KED
⌊	**As**	**75**	**2.164**	ug/L	0.026	1	3	538	1	KED
	Kr	**83**		ug/L			41	35	20	Standard
⌈>	**In-1**	**115**		ug/L			8842	7163	1	KED
|	**Cd**	**111**	**0.009**	ug/L	0.010	108	3	5	47	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.006	48	3	10	35	KED
⌈>	**Tb**	**159**		ug/L			167464	155570	0	Standard
⌊	**Pb**	**208**	**0.277**	ug/L	0.001	0	168	20812	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0463-03
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:20:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	78076	0	Standard
⌈>	**Sc**	**45**		ug/L			332530	379664	0	Standard
|	**Cr**	**52**	**0.323**	ug/L	0.004	1	13137	23406	0	Standard
⌊	**Cr**	**53**	**1.227**	ug/L	0.026	2	163	3685	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	31456	1	KED
|	**Ni**	**60**	**1.005**	ug/L	0.036	3	3	1285	3	KED
|	**Ni**	**62**	**0.983**	ug/L	0.085	8	0	200	9	KED
|	**Cu**	**63**	**2.355**	ug/L	0.058	2	18	8222	1	KED
|	**Cu**	**65**	**2.322**	ug/L	0.021	0	6	4120	1	KED
|	**Zn**	**66**	**15.119**	ug/L	0.335	2	19	7286	1	KED
|	**Zn**	**67**	**13.996**	ug/L	0.042	0	3	1115	1	KED
⌊	**As**	**75**	**0.875**	ug/L	0.082	9	3	223	9	KED
	Kr	**83**		ug/L			41	37	17	Standard
⌈>	**In-1**	**115**		ug/L			8842	6933	0	KED
|	**Cd**	**111**	**0.011**	ug/L	0.006	53	3	5	26	KED
⌊	**Cd**	**114**	**0.019**	ug/L	0.008	44	3	14	35	KED
⌈>	**Tb**	**159**		ug/L			167464	156437	1	Standard
⌊	**Pb**	**208**	**0.569**	ug/L	0.010	1	168	42773	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:24:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	51217	3	Standard
⌈>	**Sc**	**45**		ug/L			332530	369725	1	Standard
|	**Cr**	**52**	**3.076**	ug/L	0.013	0	13137	92552	1	Standard
⌊	**Cr**	**53**	**3.394**	ug/L	0.057	1	163	9610	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	32054	0	KED
|	**Ni**	**60**	**4.549**	ug/L	0.075	1	3	5918	2	KED
|	**Ni**	**62**	**4.668**	ug/L	0.062	1	0	968	2	KED
|	**Cu**	**63**	**20.250**	ug/L	0.575	2	18	71932	2	KED
|	**Cu**	**65**	**20.417**	ug/L	0.086	0	6	36874	0	KED
|	**Zn**	**66**	**31.506**	ug/L	0.106	0	19	15455	1	KED
|	**Zn**	**67**	**29.705**	ug/L	0.839	2	3	2409	2	KED
⌊	**As**	**75**	**9.571**	ug/L	0.330	3	3	2459	2	KED
	Kr	**83**		ug/L			41	34	3	Standard
⌈>	**In-1**	**115**		ug/L			8842	7221	0	KED
|	**Cd**	**111**	**0.526**	ug/L	0.059	11	3	131	11	KED
⌊	**Cd**	**114**	**0.584**	ug/L	0.044	7	3	366	8	KED
⌈>	**Tb**	**159**		ug/L			167464	159535	0	Standard
⌊	**Pb**	**208**	**6.386**	ug/L	0.144	2	168	488338	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-17
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:28:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	57372	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	336010	2	Standard
|	**Cr**	**52**	**0.833**	ug/L	0.009	1	13137	32452	3	Standard
⌊	**Cr**	**53**	**1.024**	ug/L	0.024	2	163	2749	1	Standard
⌈>	**Ge**	**72**		ug/L			37776	32424	0	KED
|	**Ni**	**60**	**1.213**	ug/L	0.078	6	3	1598	7	KED
|	**Ni**	**62**	**1.203**	ug/L	0.071	5	0	252	5	KED
|	**Cu**	**63**	**3.894**	ug/L	0.086	2	18	14007	2	KED
|	**Cu**	**65**	**3.853**	ug/L	0.105	2	6	7043	2	KED
|	**Zn**	**66**	**18.808**	ug/L	0.275	1	19	9338	0	KED
|	**Zn**	**67**	**18.352**	ug/L	0.434	2	3	1506	1	KED
⌊	**As**	**75**	**1.022**	ug/L	0.029	2	3	268	3	KED
	Kr	**83**		ug/L			41	37	5	Standard
⌈>	**In-1**	**115**		ug/L			8842	7196	2	KED
|	**Cd**	**111**	**0.008**	ug/L	0.006	82	3	4	34	KED
⌊	**Cd**	**114**	**0.013**	ug/L	0.009	70	3	11	52	KED
⌈>	**Tb**	**159**		ug/L			167464	158062	0	Standard
⌊	**Pb**	**208**	**0.378**	ug/L	0.005	1	168	28792	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-19
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:32:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	59659	1	Standard
>	Sc	45		ug/L			332530	351435	2	Standard
	Cr	52	0.489	ug/L	0.018	3	13137	25644	0	Standard
	Cr	53	0.593	ug/L	0.031	5	163	1738	5	Standard
>	Ge	72		ug/L			37776	32751	0	KED
	Ni	60	1.387	ug/L	0.087	6	3	1845	6	KED
	Ni	62	1.664	ug/L	0.083	4	0	353	4	KED
	Cu	63	4.561	ug/L	0.022	0	18	16568	0	KED
	Cu	65	4.677	ug/L	0.064	1	6	8635	1	KED
	Zn	66	1.677	ug/L	0.094	5	19	856	5	KED
	Zn	67	1.932	ug/L	0.086	4	3	163	4	KED
	As	75	1.329	ug/L	0.071	5	3	351	4	KED
	Kr	83		ug/L			41	33	21	Standard
>	In-1	115		ug/L			8842	7377	0	KED
	Cd	111	0.006	ug/L	0.015	249	3	4	86	KED
	Cd	114	0.003	ug/L	0.006	226	3	4	80	KED
>	Tb	159		ug/L			167464	157325	0	Standard
	Pb	208	0.214	ug/L	0.001	0	168	16290	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0077-DUP1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:37:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			43915	59738	0	Standard
>	Sc	45		ug/L			332530	352960	1	Standard
	Cr	52	0.552	ug/L	0.015	2	13137	27295	2	Standard
	Cr	53	0.668	ug/L	0.027	4	163	1945	4	Standard
>	Ge	72		ug/L			37776	32935	1	KED
	Ni	60	1.370	ug/L	0.064	4	3	1833	3	KED
	Ni	62	1.362	ug/L	0.202	14	0	290	13	KED
	Cu	63	4.578	ug/L	0.125	2	18	16719	1	KED
	Cu	65	4.461	ug/L	0.134	3	6	8279	1	KED
	Zn	66	1.727	ug/L	0.029	1	19	886	0	KED
	Zn	67	1.951	ug/L	0.004	0	3	165	1	KED
	As	75	1.306	ug/L	0.059	4	3	347	5	KED
	Kr	83		ug/L			41	43	11	Standard
>	In-1	115		ug/L			8842	7237	0	KED
	Cd	111	0.003	ug/L	0.002	87	3	3	15	KED
	Cd	114	0.005	ug/L	0.005	92	3	6	46	KED
>	Tb	159		ug/L			167464	159690	0	Standard
	Pb	208	0.210	ug/L	0.002	0	168	16248	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0077-MS1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:41:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	60127	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	360257	0	Standard
|	**Cr**	**52**	**11.376**	ug/L	0.162	1	13137	295102	1	Standard
⌊	**Cr**	**53**	**11.802**	ug/L	0.259	2	163	32122	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	30101	12	KED
|	**Ni**	**60**	**16.661**	ug/L	2.330	13	3	20103	0	KED
|	**Ni**	**62**	**17.130**	ug/L	2.307	13	0	3297	0	KED
|	**Cu**	**63**	**20.887**	ug/L	2.960	14	18	68850	1	KED
|	**Cu**	**65**	**20.775**	ug/L	2.501	12	6	34877	1	KED
|	**Zn**	**66**	**49.868**	ug/L	6.159	12	19	22725	2	KED
|	**Zn**	**67**	**47.467**	ug/L	7.462	15	3	3565	2	KED
⌊	**As**	**75**	**15.372**	ug/L	2.287	14	3	3661	1	KED
	Kr	**83**		ug/L			41	32	21	Standard
⌈>	**In-1**	**115**		ug/L			8842	7505	4	KED
|	**Cd**	**111**	**13.381**	ug/L	0.587	4	3	3408	0	KED
⌊	**Cd**	**114**	**13.622**	ug/L	0.889	6	3	8787	2	KED
⌈>	**Tb**	**159**		ug/L			167464	160575	0	Standard
⌊	**Pb**	**208**	**14.304**	ug/L	0.216	1	168	1100714	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0077-MSD1
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:47:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	58395	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	355338	1	Standard
|	**Cr**	**52**	**11.009**	ug/L	0.575	5	13137	282155	5	Standard
⌊	**Cr**	**53**	**11.525**	ug/L	0.625	5	163	30949	6	Standard
⌈>	**Ge**	**72**		ug/L			37776	33018	0	KED
|	**Ni**	**60**	**15.045**	ug/L	0.157	1	3	20151	0	KED
|	**Ni**	**62**	**14.924**	ug/L	0.333	2	0	3187	2	KED
|	**Cu**	**63**	**19.087**	ug/L	0.317	1	18	69854	2	KED
|	**Cu**	**65**	**18.751**	ug/L	0.012	0	6	34885	0	KED
|	**Zn**	**66**	**45.054**	ug/L	0.034	0	19	22758	0	KED
|	**Zn**	**67**	**43.555**	ug/L	0.609	1	3	3637	1	KED
⌊	**As**	**75**	**14.007**	ug/L	0.196	1	3	3706	1	KED
	Kr	**83**		ug/L			41	52	12	Standard
⌈>	**In-1**	**115**		ug/L			8842	7573	0	KED
|	**Cd**	**111**	**13.397**	ug/L	0.223	1	3	3447	1	KED
⌊	**Cd**	**114**	**13.597**	ug/L	0.059	0	3	8867	0	KED
⌈>	**Tb**	**159**		ug/L			167464	160670	0	Standard
⌊	**Pb**	**208**	**13.927**	ug/L	0.657	4	168	1072141	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:51:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40799	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	296429	3	Standard
|	**Cr**	**52**	**0.020**	ug/L	0.017	87	13137	12102	0	Standard
⌊	**Cr**	**53**	**0.001**	ug/L	0.007	1019	163	146	7	Standard
⌈>	**Ge**	**72**		ug/L			37776	32321	0	KED
|	**Ni**	**60**	**0.034**	ug/L	0.010	28	3	48	26	KED
|	**Ni**	**62**	**0.040**	ug/L	0.006	13	0	8	12	KED
|	**Cu**	**63**	**0.002**	ug/L	0.000	18	18	21	5	KED
|	**Cu**	**65**	**0.004**	ug/L	0.001	31	6	12	17	KED
|	**Zn**	**66**	**0.001**	ug/L	0.004	619	19	17	11	KED
|	**Zn**	**67**	**-0.009**	ug/L	0.014	157	3	2	43	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.001	44	3	2	10	KED
	Kr	**83**		ug/L			41	40	8	Standard
⌈>	**In-1**	**115**		ug/L			8842	7345	1	KED
|	**Cd**	**111**	**0.010**	ug/L	0.008	80	3	5	36	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.006	147	3	5	66	KED
⌈>	**Tb**	**159**		ug/L			167464	154332	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	67	168	190	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 04:56:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	41620	1	Standard
⌈>	**Sc**	**45**		ug/L			332530	296349	2	Standard
|	**Cr**	**52**	**48.679**	ug/L	1.034	2	13137	1000116	1	Standard
⌊	**Cr**	**53**	**51.001**	ug/L	1.433	2	163	113664	2	Standard
⌈>	**Ge**	**72**		ug/L			37776	32571	1	KED
|	**Ni**	**60**	**51.432**	ug/L	1.177	2	3	67930	0	KED
|	**Ni**	**62**	**52.709**	ug/L	0.110	0	0	11103	1	KED
|	**Cu**	**63**	**52.502**	ug/L	0.434	0	18	189495	0	KED
|	**Cu**	**65**	**53.198**	ug/L	0.347	0	6	97619	1	KED
|	**Zn**	**66**	**52.597**	ug/L	0.263	0	19	26204	1	KED
|	**Zn**	**67**	**52.705**	ug/L	1.710	3	3	4339	2	KED
⌊	**As**	**75**	**49.987**	ug/L	0.631	1	3	13039	1	KED
	Kr	**83**		ug/L			41	48	6	Standard
⌈>	**In-1**	**115**		ug/L			8842	7424	3	KED
|	**Cd**	**111**	**51.648**	ug/L	2.278	4	3	13005	0	KED
⌊	**Cd**	**114**	**51.934**	ug/L	1.496	2	3	33167	0	KED
⌈>	**Tb**	**159**		ug/L			167464	158559	1	Standard
⌊	**Pb**	**208**	**54.279**	ug/L	0.484	0	168	4123875	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 05:03:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\050923a_B.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			43915	40643	2	Standard
⌈>	**Sc**	**45**		ug/L			332530	291714	0	Standard
|	**Cr**	**52**	**0.021**	ug/L	0.010	49	13137	11943	2	Standard
⌊	**Cr**	**53**	**-0.003**	ug/L	0.008	256	163	136	13	Standard
⌈>	**Ge**	**72**		ug/L			37776	33501	1	KED
|	**Ni**	**60**	**0.036**	ug/L	0.004	12	3	52	11	KED
|	**Ni**	**62**	**0.044**	ug/L	0.018	40	0	10	39	KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	24	18	42	13	KED
|	**Cu**	**65**	**0.006**	ug/L	0.005	70	6	18	46	KED
|	**Zn**	**66**	**0.057**	ug/L	0.013	22	19	46	12	KED
|	**Zn**	**67**	**0.073**	ug/L	0.047	64	3	9	40	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.006	3391	3	3	48	KED
	Kr	**83**		ug/L			41	37	22	Standard
⌈>	**In-1**	**115**		ug/L			8842	7698	0	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.004	219	3	2	43	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	472	3	3	51	KED
⌈>	**Tb**	**159**		ug/L			167464	151940	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	17	168	331	8	Standard

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00040	Instrument:	ICPMS1
Calibration Date:	05/10/2023 15:47		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	15570	10	16140.9	20	15789.15	50	15195.72	100	15002.63
Chromium-52	0	0	0.5	31020	10	15441.1	20	15000.05	50	14462.12	100	14509.21
Chromium-53	0	0	0.5	1694	10	1654.9	20	1689.3	50	1689.16	100	1684.98
Lead-208	0	0	0.1	90610	10	90331.7	20	89339.2	50	87570.58	100	84871.84

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00040
Calibration Date: 5/10/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	12949.73	49.1	0.9999		0.998	
Chromium-52	15072.08	65.2	1.0000		0.998	
Chromium-53	1402.057	49.0	1.0000		0.998	
Lead-208	73787.22	49.1	0.9997		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00040	Instrument:	ICPMS1
Calibration Date:	05/10/2023 15:47		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	245	10	247.9	20	243.5	50	239.7	100	242.13
Cadmium-111	0	0	0.1	210	10	235.4	20	233.45	50	230.1	100	233.47
Cadmium-114	0	0	0.1	700	10	607.9	20	614.8	50	592.84	100	599.85
Copper-63	0	0	0.5	5004	10	4375	20	4306.25	50	4084.54	100	4030.52
Copper-65	0	0	0.5	2594	10	2169.7	20	2190.8	50	2078.94	100	2074.73
Zinc-66	0	0	6	522.8333	10	539	20	516.55	50	492.7	100	498.85
Zinc-67	0	0	6	86.16666	10	89.3	20	86.65	50	79.74	100	81.23

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00040
Calibration Date: 5/10/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	203.0383	49.0	1.0000		0.998	
Cadmium-111	190.4033	49.2	0.9999		0.998	
Cadmium-114	519.2317	49.6	0.9999		0.998	
Copper-63	3633.385	49.9	0.9998		0.998	
Copper-65	1851.362	50.1	0.9999		0.998	
Zinc-66	428.3222	49.1	0.9998		0.998	
Zinc-67	70.51444	49.3	0.9996		0.998	

Analytical Resources, Incorporated
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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/10/23 **Analyst:** MB **Sequence:** SLEQ204 **Cal:** GEQQQ4Q

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
	✓	SEQ-CAL1	—		
	✓	-CAL2	—		
	✓	-CAL3	—		Sc↑ (New cones)
		SEQ-CAL1	LS276		
		-CAL2	LS225		
		-CAL3	LS226		
		-CAL4	LS227		
		-CAL5	LS228		
		-CAL6	LS229		
		-IBL1	—		
		-ICV1	L3575		
		-ICB1	LS276		
		-CCV1	LS228		
		-CCB1	LS276		
		-CRL1	LS226		
		-IFA1	L4688		C_r^{53}↑
		-IFB1	L4689		
		-HCV1	L478Q		In^{-1} noisy - Cd<100
		-HCV2	L4781		
		-IBL2	—		
		-CCV2			
		-CCB2			
	✓	-CAL1			
		-CCV3			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/10/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCB3			
		BLDΦ687-BLK2	SWN	20	Ag, Zn only
	✓	↓ -BS2	↓	↓	STD Mode noisy ↓
E→D		↓ -BS2	↓	↓	↓
		BLEΦ298-BLK1	REN		
		↓ -BS1	↓		
		BLEΦΦ77-MS2	↓	2	As, Co, Zn only
		230Φ297-Φ1	SWN	100	Ba, Cr only
		BLDΦ728-DUP2	↓	↓	Ba, Cr RPD↑ ↓
	✓	↓ -MS2	↓	↓	Std Mode noisy ↓
		SEQ-IBL3			
		↓ -CCV4			
		↓ -CCB4			
		BLEΦ3Φ1-BLK1	REN		
		↓ -BS1	↓		
		BLEΦ143-BLK1	SWN	20	
	✓	↓ -BS1	↓	↓	Std Mode noisy
		↓ -BS1	↓	↓	
		BLDΦ728-MS2	↓	100	Ba, Cr%R↑ Ba, Cr only
		230Φ348-Φ1	REN	20	Pb only
		SEQ-IBL4			
		230Φ374-Φ3	REN	2	Pb only
		SEQ-IBL5			
		↓ -CCV5			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/10/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCB5			
	√	Rinse			Break in Analysis - Flushed Sample Intro
	√	SEQ-CAL1			Ba Removed
		↓ -CCV6			
		↓ -CCB6			
		BLD0578-BLK1	SWN	20	
		↓ -BS1	↓	↓	
		BLE0072-BLK1			
		↓ -BS1			Std Mode No. 34
		230394-01			No Ag, Cr, Pb
		BLD0687-DUP2			Ag, Cr, Pb, Zn only
		-MS2			↓
		-MSD2			Ag %R ↓
		↓ -PS2	↓	↓	68uL K7409
		SEQ-IBL6			
		↓ -CCV7			
		↓ -CCB7			
		234D467-02	SWN	20	
		-03	↓	↓	Std Mode No. 34
		-04			No Ag, Cr, Pb
		-05			
		↓ -01			
		BLD0578-DUP1			
		↓ -MS1	↓	↓	Ag %R ↓

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/10/23 **Analyst:** MS **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLDΦ578-MSD1	SWN	20	
		↓ -PS1	↓	↓	60 mL K7409
		SEQ-IBL7			
		-CCV8			
		-CCB8			
		23AΦ467-Φ6	SWN	20	
		-Φ7			
		-Φ8			
		-Φ9			
		230Φ393-Φ4			In, Ih ↑ / As, Cu, Pb, Zn ↑ / Cr only
		BLEΦΦ72-DUP1			
		-MS1			
		-MSD1			
		-PS1			/ 60 mL K7409 /
		SEQ-IBL8			
		-CCV9			
		-CCB9			
		23CΦΦ71-Φ1	SWN	20	
		-Φ2			
		-Φ3			Std looks noisy — No Ag, Cr, Pb
		-Φ4			
		-Φ5			
		-Φ6			
		23CΦ1Φ9-Φ2			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/10/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23CΦ1Φ9-Φ3	SWN	20	
		23CΦ1Φ8-Φ2	↓	↓	
		SEQ-IBL9			
		-CCVA			
		-CCBA			
		23CΦ1Φ8-Φ6	SWN	20	
		-Φ7			
		-Φ8			
		-Φ9			
		23DΦΦΦ8-Φ1			Std Mode no Ag,Cr,Pb
		-Φ3			
		23DΦΦ37-Φ1			
		-Φ3			
		-Φ2			
		SEQ-IBLA			
		-CCVB			
		-CCBB			
	✓	-CAL1			
		-CCVC			
		-CCBC			
		23DΦΦ37-Φ4	SWN	20	
		23DΦΦ63-Φ1			
		-Φ3			
		23DΦ452-Φ1	REN	2	Pb only

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/10/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0462-01	REN	2	Pb only
		23E0135-01	↓		
		-02			
		-03			
		-04	↓		
		SEQ-IBLB			
		-CCVD			
		-CCBD			
		23E0138-01	REN	2	
		23E0139-01	↓	↓	
		-02			
		-03	↓	↓	
		SEQ-IBLC			
		23E0136-01	REN		
		23E0137-01	↓		
		23D0477-21			
		-22	↓		
		SEQ-IBLD			
		-CCVE			
		-CCBE			
		23D0477-11	REN	2	No Pb
		-13	↓	↓	↓
		-02			
		23D0480-01	↓	5	↓

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/10/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-IBLE			
		230Φ537-Φ5	REN	5	Cr only
		BLEΦ12Φ-DUP3	↓	↓	↓
		-MS3			
		-MSD3	↓	↓	
		SEQ-IBLF			
		-CCVF			Pb↑
		-CCBF			
	✓	-CAL1			
		-CCVG			
		-CCBG			
		230Φ477-Φ4	REN		No Pb
		-Φ6	↓		↓
		-Φ8			
		-1Φ			
		-12			
		-2Φ			
		BLEΦ1Φ6-DUP1			
		-MS1			
		-MSD1	↓		
		SEQ-IBLG			
		-CCVH			Pb↑
		-CCBH			
		230Φ477-14	REN		No Pb

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/10/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ477-16	REN		No Pb
		-18			
		-Φ1			
		-Φ3			
		-Φ7			
		-Φ9			
		-15			
		230Φ487-Φ2		5	
		SEQ-IBL1			
		-CCVI			
		-CCBI			
		230Φ487-Φ6	REN	2	
		-Φ5			
		-Φ4			
		-Φ3			
		SEQ-IBLI			
		230Φ636-Φ1	REN	10	No Pb
		BLEΦ298-DUP1			
		-MS1			
		-MSD1			
		SEQ-IBLJ			
		-CCVJ			Pb↑
		-CCBJ			
		Rinse/DI			

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Wednesday, May 10, 2023 14:43:46
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.149
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	5723.5	5723.480	56.895	1.0	Standard
	In	114.9	69596.5	-341751.511	924.539	0.3	Standard
	U	238.1	90402.3	90402.284	679.988	0.8	Standard
⌈	CeO	155.9	1526.9	0.017	0.000	1.7	Standard
| >	Ce	139.9	87807.4	87807.445	764.748	0.9	Standard
⌊	Ce++	70.0	422.3	0.005	0.000	1.5	Standard
	Bkgd	220.0	6.3	6.300	3.351	53.2	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/10/2023 2:43:45 PM
End Time: 5/10/2023 2:52:33 PM

STD Performance Check - [Failed]
Obtained Intensity (Be 9): 5723.48
Obtained Intensity (In 115): 69596.54
Obtained Intensity (U 238): 90402.28
Obtained Intensity (Bkgd 220): 6.30 - <Target not achieved>
Obtained Formula (Ce++ 70 / Ce 140): 0.005 (=422.34 / 87807.44)
Obtained Formula (CeO 156 / Ce 140): 0.017 (=1526.95 / 87807.44)
Obtained RSD (Be 9): 0.0099
Obtained RSD (In 115): 0.0027
Obtained RSD (U 238): 0.0075

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
0.90 mm	0.96 mm	88181.32

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.92
Obtained Intensity (In 115): 84673.19
Obtained Formula (CeO 156 / Ce 140): 0.0203 (=2063.15 / 101494.26)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.700)
Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.688)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.698)
Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.701)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.999; Intercept = -15.80

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.987; Intercept = -15.94

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/10/2023 2:43:45 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 5
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 5723.48
		Obtained Intensity (In 115): 69596.54
		Obtained Intensity (U 238): 90402.28
		Obtained Intensity (Bkgd 220): 6.30 - <Target not achieved>
		Obtained Formula (Ce++ 70 / Ce 140): 0.005 (=422.34 / 87807.44)
		Obtained Formula (CeO 156 / Ce 140): 0.017 (=1526.95 / 87807.44)
		Obtained RSD (Be 9): 0.0099
		Obtained RSD (In 115): 0.0027
		Obtained RSD (U 238): 0.0075

		[Failed]
[Failed]

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	0.90 mm	0.96 mm	88181.32

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 0.89/0.96/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 84673.19
		Obtained Formula (CeO 156 / Ce 140): 0.0203 (=2063.15 / 101494.26)
[Passed] Optimum value(s): 0.92

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.663) - <Target not achieved>
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.695)
		Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.699)
		Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.684)
		[Failed]
	Retry 1
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.700)
		Target/Obtained mass (23.985/24.025), Target/Obtained resolution (0.7/0.688)
		Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.698)
		Target/Obtained mass (238.05/238.075), Target/Obtained resolution (0.7/0.701)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.999; Intercept = -15.80

	Analyte	Mass	Points	DAC	MaxIntensity

		Li	7	41	-16	46294.9
		Mg	24	41	-16	32452.8
		In	115	41	-13	86971.9
		Ce	140	41	-12	102732
		Pb	208	41	-11.5	62146.9
		U	238	41	-11.5	114360

KED Mode QID
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.987; Intercept = -15.94

	Analyte	Mass	Points	DAC	MaxIntensity

		Li	7	41	-16	37509.2
		Mg	24	41	-15.5	70742.7
		In	115	41	-13	125291
		Ce	140	41	-11.5	108660
		Pb	208	41	-11	62379.9

U	238	41	-10.5	141719

End Time: 5/10/2023 2:52:33 PM

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/10/2023 2:52:35 PM
End Time: 5/10/2023 2:53:50 PM

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.998; Intercept = -16.07

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/10/2023 2:52:35 PM

KED Mode QID

Optimization Settings:

Method: QID Calibration.mth.

Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:

Initial Try

Optimum value(s): Correlation Coefficient = 0.998; Intercept = -16.07

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-16	38908.9
Mg	24	41	-15.5	65678.6
In	115	41	-12.5	124315
Ce	140	41	-11.5	108152
Pb	208	41	-11	62408
U	238	41	-11	146831

End Time: 5/10/2023 2:53:50 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Wednesday, May 10, 2023 14:53:54
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.157
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6511.5	6511.484	145.377	2.2	Standard
	In	114.9	81325.5	81325.516	897.738	1.1	Standard
	U	238.1	113291.7	113291.661	1664.283	1.5	Standard
⎡	CeO	155.9	1966.6	0.020	0.000	2.4	Standard
| >	Ce	139.9	98993.0	98993.030	999.094	1.0	Standard
⎣	Ce++	70.0	668.1	0.007	0.000	3.1	Standard
	Bkgd	220.0	1.1	1.133	0.650	57.3	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/10/2023 2:53:54 PM
End Time: 5/10/2023 2:55:58 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 6511.48
Obtained Intensity (In 115): 81325.52
Obtained Intensity (U 238): 113291.66
Obtained Intensity (Bkgd 220): 1.13
Obtained Formula (Ce++ 70 / Ce 140): 0.007 (=668.15 / 98993.03)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=1966.60 / 98993.03)
Obtained RSD (Be 9): 0.0223
Obtained RSD (In 115): 0.0110
Obtained RSD (U 238): 0.0147

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/10/2023 2:53:54 PM

STD Performance Check

Optimization Settings:

Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:

Initial Try

Obtained Intensity (Be 9): 6511.48
Obtained Intensity (In 115): 81325.52
Obtained Intensity (U 238): 113291.66
Obtained Intensity (Bkgd 220): 1.13
Obtained Formula (Ce++ 70 / Ce 140): 0.007 (=668.15 / 98993.03)
Obtained Formula (CeO 156 / Ce 140): 0.020 (=1966.60 / 98993.03)
Obtained RSD (Be 9): 0.0223
Obtained RSD (In 115): 0.0110
Obtained RSD (U 238): 0.0147

[Passed] Optimum value(s): N/A

End Time: 5/10/2023 2:55:58 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 15:28:05

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				24207	2	Standard
>	**Sc**	**45**		ug/L				474403	0	Standard
	Cr	**52**		ug/L				8456	1	Standard
	Cr	**53**		ug/L				81	14	Standard
>	**Ge**	**72**		ug/L				28967	4	KED
	Ni	**60**		ug/L				19	10	KED
	Ni	**62**		ug/L				5	78	KED
	Cu	**63**		ug/L				43	9	KED
	Cu	**65**		ug/L				24	15	KED
	Zn	**66**		ug/L				19	22	KED
	Zn	**67**		ug/L				2	173	KED
	As	**75**		ug/L				1	33	KED
	Y	**89**		ug/L				49674	0	Standard
	Kr	**83**		ug/L				32	42	Standard
>	**In-1**	**115**		ug/L				6259	5	KED
	Cd	**111**		ug/L				0	100	KED
	Cd	**114**		ug/L				0	206	KED
>	**In**	**115**		ug/L				474692	1	Standard
	Ag	**107**		ug/L				12	31	Standard
	Ba	**135**		ug/L				15	25	Standard
	Ba	**137**		ug/L				31	30	Standard
>	**Tb**	**159**		ug/L				170775	0	Standard
	Pb	**208**		ug/L				201	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Wednesday, May 10, 2023 15:32:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			24207	25883	2	Standard
⌈>	**Sc**	**45**		ug/L			474403	523902	3	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.021	4	8456	15234	1	Standard
⌊	**Cr**	**53**	**0.500**	ug/L	0.020	4	81	873	1	Standard
⌈>	**Ge**	**72**		ug/L			28967	29195	0	KED
|	**Ni**	**60**	**0.500**	ug/L	0.034	6	19	780	6	KED
|	**Ni**	**62**	**0.500**	ug/L	0.050	10	5	116	9	KED
|	**Cu**	**63**	**0.500**	ug/L	0.026	5	43	2412	4	KED
|	**Cu**	**65**	**0.500**	ug/L	0.034	6	24	1190	5	KED
|	**Zn**	**66**	**6.000**	ug/L	0.090	1	19	3153	0	KED
|	**Zn**	**67**	**6.000**	ug/L	0.211	3	2	498	3	KED
⌊	**As**	**75**	**0.200**	ug/L	0.040	19	1	51	18	KED
	Y	**89**		ug/L			49674	50949	1	Standard
	Kr	**83**		ug/L			32	51	16	Standard
⌈>	**In-1**	**115**		ug/L			6259	6039	1	KED
|	**Cd**	**111**	**0.100**	ug/L	0.020	19	0	23	18	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.009	9	0	63	7	KED
⌈>	**In**	**115**		ug/L			474692	480250	1	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.005	2	12	3172	2	Standard
|	**Ba**	**135**	**0.500**	ug/L	0.016	3	15	2622	4	Standard
⌊	**Ba**	**137**	**0.500**	ug/L	0.009	1	31	4621	2	Standard
⌈>	**Tb**	**159**		ug/L			170775	172878	1	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.002	2	201	9324	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 15:37:02

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			24207	29617	2	Standard
> Sc	45		ug/L			474403	621120	0	Standard
Cr	52	10.000	ug/L	0.223	2	8456	152564	2	Standard
Cr	53	9.997	ug/L	0.230	2	81	16498	2	Standard
> Ge	72		ug/L			28967	29364	0	KED
Ni	60	9.999	ug/L	0.134	1	19	14840	1	KED
Ni	62	10.001	ug/L	0.349	3	5	2328	3	KED
Cu	63	9.997	ug/L	0.249	2	43	42394	2	KED
Cu	65	9.998	ug/L	0.087	0	24	21761	0	KED
Zn	66	9.987	ug/L	0.291	2	19	5247	2	KED
Zn	67	10.157	ug/L	0.430	4	2	885	3	KED
As	75	10.000	ug/L	0.358	3	1	2452	3	KED
Y	89		ug/L			49674	52739	0	Standard
Kr	83		ug/L			32	46	26	Standard
> In-1	115		ug/L			6259	6173	3	KED
Cd	111	10.000	ug/L	0.443	4	0	2332	4	KED
Cd	114	10.000	ug/L	0.345	3	0	6021	3	KED
> In	115		ug/L			474692	482786	2	Standard
Ag	107	10.000	ug/L	0.201	2	12	164963	1	Standard
Ba	135	10.001	ug/L	0.476	4	15	53839	2	Standard
Ba	137	10.001	ug/L	0.260	2	31	95966	0	Standard
> Tb	159		ug/L			170775	178874	0	Standard
Pb	208	10.000	ug/L	0.139	1	201	905833	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 15:47:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				23729	0	Standard
⎡>	**Sc**	**45**		ug/L				509000	1	Standard
⎢	**Cr**	**52**		ug/L				8828	1	Standard
⎣	**Cr**	**53**		ug/L				74	13	Standard
⎡>	**Ge**	**72**		ug/L				29303	1	KED
⎢	**Ni**	**60**		ug/L				5	21	KED
⎢	**Ni**	**62**		ug/L				1	100	KED
⎢	**Cu**	**63**		ug/L				34	20	KED
⎢	**Cu**	**65**		ug/L				19	27	KED
⎢	**Zn**	**66**		ug/L				23	32	KED
⎢	**Zn**	**67**		ug/L				5	0	KED
⎣	**As**	**75**		ug/L				3	9	KED
	Y	**89**		ug/L				48310	2	Standard
	Kr	**83**		ug/L				47	34	Standard
⎡>	**In-1**	**115**		ug/L				6273	3	KED
⎢	**Cd**	**111**		ug/L				2	49	KED
⎣	**Cd**	**114**		ug/L				4	66	KED
⎡>	**In**	**115**		ug/L				463649	3	Standard
⎢	**Ag**	**107**		ug/L				35	3	Standard
⎢	**Ba**	**135**		ug/L				24	20	Standard
⎣	**Ba**	**137**		ug/L				33	18	Standard
⎡>	**Tb**	**159**		ug/L				169186	2	Standard
⎣	**Pb**	**208**		ug/L				224	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 15:51:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	25525	0	Standard
⌈>	**Sc**	**45**		ug/L			509000	512472	1	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.020	4	8828	15510	0	Standard
⌊	**Cr**	**53**	**0.500**	ug/L	0.011	2	74	847	3	Standard
⌈>	**Ge**	**72**		ug/L			29303	29478	0	KED
|	**Ni**	**60**	**0.500**	ug/L	0.012	2	5	719	3	KED
|	**Ni**	**62**	**0.500**	ug/L	0.073	14	1	114	13	KED
|	**Cu**	**63**	**0.500**	ug/L	0.023	4	34	2502	5	KED
|	**Cu**	**65**	**0.500**	ug/L	0.009	1	19	1297	1	KED
|	**Zn**	**66**	**6.000**	ug/L	0.034	0	23	3137	0	KED
|	**Zn**	**67**	**6.000**	ug/L	0.410	6	5	517	5	KED
⌊	**As**	**75**	**0.200**	ug/L	0.016	8	3	49	7	KED
	Y	**89**		ug/L			48310	49051	0	Standard
	Kr	**83**		ug/L			47	36	14	Standard
⌈>	**In-1**	**115**		ug/L			6273	6139	4	KED
|	**Cd**	**111**	**0.100**	ug/L	0.032	31	2	21	31	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.017	16	4	70	16	KED
⌈>	**In**	**115**		ug/L			463649	458533	2	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.006	3	35	3114	1	Standard
|	**Ba**	**135**	**0.500**	ug/L	0.031	6	24	2588	4	Standard
⌊	**Ba**	**137**	**0.500**	ug/L	0.021	4	33	4565	3	Standard
⌈>	**Tb**	**159**		ug/L			169186	175328	1	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.002	2	224	9061	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 15:56:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	28227	5	Standard
⌈>	**Sc**	**45**		ug/L			509000	547188	1	Standard
|	**Cr**	**52**	**10.001**	ug/L	0.180	1	8828	154411	2	Standard
⌊	**Cr**	**53**	**10.000**	ug/L	0.148	1	74	16549	0	Standard
⌈>	**Ge**	**72**		ug/L			29303	30268	1	KED
|	**Ni**	**60**	**10.001**	ug/L	0.091	0	5	15465	0	KED
|	**Ni**	**62**	**10.001**	ug/L	0.274	2	1	2447	1	KED
|	**Cu**	**63**	**9.996**	ug/L	0.164	1	34	43750	0	KED
|	**Cu**	**65**	**9.995**	ug/L	0.109	1	19	21697	1	KED
|	**Zn**	**66**	**10.019**	ug/L	0.157	1	23	5390	0	KED
|	**Zn**	**67**	**10.037**	ug/L	0.375	3	5	893	2	KED
⌊	**As**	**75**	**10.000**	ug/L	0.098	0	3	2479	0	KED
	Y	**89**		ug/L			48310	52333	3	Standard
	Kr	**83**		ug/L			47	35	29	Standard
⌈>	**In-1**	**115**		ug/L			6273	6321	4	KED
|	**Cd**	**111**	**10.000**	ug/L	0.361	3	2	2354	2	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.490	4	4	6079	0	KED
⌈>	**In**	**115**		ug/L			463649	495399	2	Standard
|	**Ag**	**107**	**10.000**	ug/L	0.327	3	35	161409	1	Standard
|	**Ba**	**135**	**10.000**	ug/L	0.202	2	24	54582	0	Standard
⌊	**Ba**	**137**	**9.999**	ug/L	0.141	1	33	95918	1	Standard
⌈>	**Tb**	**159**		ug/L			169186	178590	0	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.024	0	224	903317	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:01:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	29878	4	Standard
⌈>	**Sc**	**45**		ug/L			509000	545359	2	Standard
|	**Cr**	**52**	**20.025**	ug/L	0.642	3	8828	300001	2	Standard
⌊	**Cr**	**53**	**20.105**	ug/L	0.478	2	74	33786	1	Standard
⌈>	**Ge**	**72**		ug/L			29303	30442	0	KED
|	**Ni**	**60**	**19.876**	ug/L	0.260	1	5	30161	1	KED
|	**Ni**	**62**	**20.030**	ug/L	0.349	1	1	4958	1	KED
|	**Cu**	**63**	**19.912**	ug/L	0.144	0	34	86125	1	KED
|	**Cu**	**65**	**20.015**	ug/L	0.243	1	19	43816	1	KED
|	**Zn**	**66**	**19.772**	ug/L	0.229	1	23	10331	1	KED
|	**Zn**	**67**	**19.846**	ug/L	0.513	2	5	1733	2	KED
⌊	**As**	**75**	**19.906**	ug/L	0.056	0	3	4870	0	KED
	Y	**89**		ug/L			48310	53094	1	Standard
	Kr	**83**		ug/L			47	41	20	Standard
⌈>	**In-1**	**115**		ug/L			6273	6343	2	KED
|	**Cd**	**111**	**19.953**	ug/L	0.881	4	2	4669	3	KED
⌊	**Cd**	**114**	**20.027**	ug/L	0.435	2	4	12296	1	KED
⌈>	**In**	**115**		ug/L			463649	489391	1	Standard
|	**Ag**	**107**	**19.959**	ug/L	0.325	1	35	315783	3	Standard
|	**Ba**	**135**	**19.968**	ug/L	0.582	2	24	106955	1	Standard
⌊	**Ba**	**137**	**20.045**	ug/L	0.402	2	33	191641	0	Standard
⌈>	**Tb**	**159**		ug/L			169186	179464	1	Standard
⌊	**Pb**	**208**	**19.937**	ug/L	0.237	1	224	1786784	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:05:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	25400	2	Standard
⌈>	**Sc**	**45**		ug/L			509000	558473	1	Standard
|	**Cr**	**52**	**49.655**	ug/L	0.911	1	8828	723106	2	Standard
⌊	**Cr**	**53**	**49.854**	ug/L	0.903	1	74	84458	2	Standard
⌈>	**Ge**	**72**		ug/L			29303	30015	2	KED
|	**Ni**	**60**	**49.697**	ug/L	0.680	1	5	72172	3	KED
|	**Ni**	**62**	**49.505**	ug/L	0.762	1	1	11513	2	KED
|	**Cu**	**63**	**49.635**	ug/L	1.321	2	34	204227	4	KED
|	**Cu**	**65**	**49.687**	ug/L	0.309	0	19	103947	1	KED
|	**Zn**	**66**	**49.611**	ug/L	1.423	2	23	24635	4	KED
|	**Zn**	**67**	**49.320**	ug/L	1.429	2	5	3987	4	KED
⌊	**As**	**75**	**49.951**	ug/L	0.505	1	3	11985	2	KED
	Y	**89**		ug/L			48310	50964	0	Standard
	Kr	**83**		ug/L			47	54	10	Standard
⌈>	**In-1**	**115**		ug/L			6273	6292	0	KED
|	**Cd**	**111**	**49.924**	ug/L	0.530	1	2	11505	0	KED
⌊	**Cd**	**114**	**49.773**	ug/L	0.306	0	4	29642	0	KED
⌈>	**In**	**115**		ug/L			463649	482571	0	Standard
|	**Ag**	**107**	**49.781**	ug/L	0.756	1	35	759786	0	Standard
|	**Ba**	**135**	**49.982**	ug/L	0.497	0	24	263565	1	Standard
⌊	**Ba**	**137**	**50.029**	ug/L	0.399	0	33	473061	0	Standard
⌈>	**Tb**	**159**		ug/L			169186	178836	0	Standard
⌊	**Pb**	**208**	**49.835**	ug/L	0.541	1	224	4378529	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:12:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	28122	4	Standard
⌈>	**Sc**	**45**		ug/L			509000	558930	1	Standard
|	**Cr**	**52**	**100.051**	ug/L	0.647	0	8828	1450921	2	Standard
⌊	**Cr**	**53**	**99.871**	ug/L	2.158	2	74	168498	0	Standard
⌈>	**Ge**	**72**		ug/L			29303	30158	2	KED
|	**Ni**	**60**	**99.810**	ug/L	1.688	1	5	144647	0	KED
|	**Ni**	**62**	**99.827**	ug/L	1.638	1	1	23190	3	KED
|	**Cu**	**63**	**99.425**	ug/L	2.145	2	34	403052	1	KED
|	**Cu**	**65**	**99.706**	ug/L	2.344	2	19	207473	1	KED
|	**Zn**	**66**	**100.020**	ug/L	2.199	2	23	49885	1	KED
|	**Zn**	**67**	**100.026**	ug/L	1.801	1	5	8123	2	KED
⌊	**As**	**75**	**100.105**	ug/L	1.080	1	3	24213	1	KED
	Y	**89**		ug/L			48310	51944	4	Standard
	Kr	**83**		ug/L			47	57	13	Standard
⌈>	**In-1**	**115**		ug/L			6273	6458	1	KED
|	**Cd**	**111**	**99.701**	ug/L	0.430	0	2	23347	1	KED
⌊	**Cd**	**114**	**99.566**	ug/L	0.654	0	4	59985	0	KED
⌈>	**In**	**115**		ug/L			463649	450932	0	Standard
|	**Ag**	**107**	**101.152**	ug/L	1.685	1	35	1500263	1	Standard
|	**Ba**	**135**	**101.705**	ug/L	0.844	0	24	531312	1	Standard
⌊	**Ba**	**137**	**101.623**	ug/L	2.092	2	33	949210	1	Standard
⌈>	**Tb**	**159**		ug/L			169186	178763	1	Standard
⌊	**Pb**	**208**	**99.203**	ug/L	0.769	0	224	8487184	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:19:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	24581	4	Standard
⌈>	**Sc**	**45**		ug/L			509000	533088	2	Standard
|	**Cr**	**52**	**0.011**	ug/L	0.014	123	8828	9404	4	Standard
⌊	**Cr**	**53**	**0.004**	ug/L	0.001	25	74	84	4	Standard
⌈>	**Ge**	**72**		ug/L			29303	30002	0	KED
|	**Ni**	**60**	**0.000**	ug/L	0.001	370	5	5	33	KED
|	**Ni**	**62**	**-0.000**	ug/L	0.008	4930	1	1	100	KED
|	**Cu**	**63**	**0.003**	ug/L	0.000	18	34	46	4	KED
|	**Cu**	**65**	**0.001**	ug/L	0.006	428	19	22	50	KED
|	**Zn**	**66**	**0.007**	ug/L	0.022	332	23	27	39	KED
|	**Zn**	**67**	**-0.025**	ug/L	0.062	245	5	3	132	KED
⌊	**As**	**75**	**0.004**	ug/L	0.003	71	3	4	17	KED
	Y	**89**		ug/L			48310	48443	1	Standard
	Kr	**83**		ug/L			47	46	13	Standard
⌈>	**In-1**	**115**		ug/L			6273	6574	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.004	71	2	0	100	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.005	343	4	3	89	KED
⌈>	**In**	**115**		ug/L			463649	469846	4	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.001	32	35	105	21	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.000	15	24	19	0	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	351	33	37	31	Standard
⌈>	**Tb**	**159**		ug/L			169186	173731	3	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	37	224	311	8	Standard

Sample Information

Sample Date/Time: Wednesday, May 10, 2023 16:12:26
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.m
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Sc	45							
Cr	52	**1.0000**	0.026	0.50	10	20	50	100
Cr	53	**1.0000**	0.003	0.50	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.048	0.50	10	20	50	100
Ni	62	**0.9999**	0.008	0.50	10	20	50	100
Cu	63	**0.9999**	0.134	0.50	10	20	50	100
Cu	65	**1.0000**	0.069	0.50	10	20	50	100
Zn	66	**1.0000**	0.017	6.00	10	20	50	100
Zn	67	**0.9999**	0.003	6.00	10	20	50	100
As	75	**1.0000**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**1.0000**	0.036	0.10	10	20	50	100
Cd	114	**1.0000**	0.093	0.10	10	20	50	100
In	115							
Ag	107	**0.9998**	0.033	0.20	10	20	50	100
Ba	135	**0.9995**	0.012	0.50	10	20	50	100
Ba	137	**0.9996**	0.021	0.50	10	20	50	100
Tb	159							
Pb	208	**0.9999**	0.479	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:25:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	29797	4	Standard
⌈>	**Sc**	**45**		ug/L			509000	564850	0	Standard
|	**Cr**	**52**	**52.907**	ug/L	1.586	2	8828	780016	3	Standard
⌊	**Cr**	**53**	**51.308**	ug/L	1.827	3	74	87546	3	Standard
⌈>	**Ge**	**72**		ug/L			29303	31782	0	KED
|	**Ni**	**60**	**50.903**	ug/L	0.178	0	5	77766	0	KED
|	**Ni**	**62**	**51.012**	ug/L	1.334	2	1	12489	2	KED
|	**Cu**	**63**	**52.299**	ug/L	0.986	1	34	223527	2	KED
|	**Cu**	**65**	**51.383**	ug/L	1.337	2	19	112722	2	KED
|	**Zn**	**66**	**50.838**	ug/L	0.626	1	23	26741	1	KED
|	**Zn**	**67**	**50.580**	ug/L	0.623	1	5	4332	0	KED
⌊	**As**	**75**	**48.181**	ug/L	0.178	0	3	12285	0	KED
	Y	**89**		ug/L			48310	52288	1	Standard
	Kr	**83**		ug/L			47	44	15	Standard
⌈>	**In-1**	**115**		ug/L			6273	6677	2	KED
|	**Cd**	**111**	**51.665**	ug/L	1.744	3	2	12504	2	KED
⌊	**Cd**	**114**	**51.793**	ug/L	1.375	2	4	32251	0	KED
⌈>	**In**	**115**		ug/L			463649	478187	2	Standard
|	**Ag**	**107**	**50.790**	ug/L	1.892	3	35	798375	1	Standard
|	**Ba**	**135**	**49.978**	ug/L	0.851	1	24	276825	1	Standard
⌊	**Ba**	**137**	**50.115**	ug/L	0.177	0	33	496417	2	Standard
⌈>	**Tb**	**159**		ug/L			169186	183312	0	Standard
⌊	**Pb**	**208**	**52.638**	ug/L	1.364	2	224	4617664	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:32:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	26356	3	Standard
⌈>	**Sc**	**45**		ug/L			509000	539338	1	Standard
|	**Cr**	**52**	**0.017**	ug/L	0.016	94	8828	9587	1	Standard
⌊	**Cr**	**53**	**-0.002**	ug/L	0.002	123	74	75	6	Standard
⌈>	**Ge**	**72**		ug/L			29303	30568	2	KED
|	**Ni**	**60**	**0.001**	ug/L	0.003	424	5	6	69	KED
|	**Ni**	**62**	**0.005**	ug/L	0.012	239	1	3	91	KED
|	**Cu**	**63**	**0.005**	ug/L	0.004	81	34	57	30	KED
|	**Cu**	**65**	**0.004**	ug/L	0.005	126	19	28	37	KED
|	**Zn**	**66**	**0.020**	ug/L	0.026	126	23	34	38	KED
|	**Zn**	**67**	**-0.003**	ug/L	0.045	1369	5	5	66	KED
⌊	**As**	**75**	**0.007**	ug/L	0.008	127	3	4	43	KED
	Y	**89**		ug/L			48310	50406	2	Standard
	Kr	**83**		ug/L			47	43	11	Standard
⌈>	**In-1**	**115**		ug/L			6273	6493	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.004	232	2	1	50	KED
⌊	**Cd**	**114**	**-0.006**	ug/L	0.004	65	4	1	176	KED
⌈>	**In**	**115**		ug/L			463649	465713	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	51	35	73	26	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.001	199	24	21	28	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	389	33	36	31	Standard
⌈>	**Tb**	**159**		ug/L			169186	175668	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	62	224	286	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:37:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	26594	2	Standard
⌈>	**Sc**	**45**		ug/L			509000	564599	1	Standard
|	**Cr**	**52**	**51.471**	ug/L	0.725	1	8828	758784	2	Standard
⌊	**Cr**	**53**	**50.536**	ug/L	0.353	0	74	86184	1	Standard
⌈>	**Ge**	**72**		ug/L			29303	32146	1	KED
|	**Ni**	**60**	**49.546**	ug/L	1.173	2	5	76549	1	KED
|	**Ni**	**62**	**49.050**	ug/L	0.276	0	1	12146	1	KED
|	**Cu**	**63**	**49.725**	ug/L	0.346	0	34	214938	0	KED
|	**Cu**	**65**	**49.566**	ug/L	1.054	2	19	109970	1	KED
|	**Zn**	**66**	**49.855**	ug/L	1.259	2	23	26518	1	KED
|	**Zn**	**67**	**50.337**	ug/L	1.507	2	5	4360	2	KED
⌊	**As**	**75**	**49.689**	ug/L	1.019	2	3	12812	1	KED
	Y	**89**		ug/L			48310	53576	2	Standard
	Kr	**83**		ug/L			47	42	34	Standard
⌈>	**In-1**	**115**		ug/L			6273	6756	1	KED
|	**Cd**	**111**	**49.652**	ug/L	0.968	1	2	12162	1	KED
⌊	**Cd**	**114**	**50.647**	ug/L	0.242	0	4	31925	1	KED
⌈>	**In**	**115**		ug/L			463649	482029	1	Standard
|	**Ag**	**107**	**50.096**	ug/L	0.827	1	35	794203	0	Standard
|	**Ba**	**135**	**49.631**	ug/L	0.673	1	24	277141	0	Standard
⌊	**Ba**	**137**	**49.270**	ug/L	0.397	0	33	491965	0	Standard
⌈>	**Tb**	**159**		ug/L			169186	185684	1	Standard
⌊	**Pb**	**208**	**50.279**	ug/L	0.957	1	224	4467825	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:44:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	26575	3	Standard
⌈>	**Sc**	**45**		ug/L			509000	541589	1	Standard
|	**Cr**	**52**	**0.006**	ug/L	0.013	204	8828	9483	2	Standard
⌊	**Cr**	**53**	**-0.005**	ug/L	0.004	84	74	70	11	Standard
⌈>	**Ge**	**72**		ug/L			29303	32305	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.001	42	5	8	13	KED
|	**Ni**	**62**	**-0.001**	ug/L	0.013	2070	1	1	173	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	105	34	41	9	KED
|	**Cu**	**65**	**-0.005**	ug/L	0.001	17	19	11	16	KED
|	**Zn**	**66**	**0.005**	ug/L	0.012	245	23	28	24	KED
|	**Zn**	**67**	**0.023**	ug/L	0.035	153	5	8	35	KED
⌊	**As**	**75**	**0.004**	ug/L	0.006	144	3	4	37	KED
	Y	**89**		ug/L			48310	50243	2	Standard
	Kr	**83**		ug/L			47	43	16	Standard
⌈>	**In-1**	**115**		ug/L			6273	6862	1	KED
|	**Cd**	**111**	**0.003**	ug/L	0.002	70	2	3	17	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.003	174	4	3	50	KED
⌈>	**In**	**115**		ug/L			463649	462636	4	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	43	35	67	20	Standard
|	**Ba**	**135**	**0.000**	ug/L	0.001	237	24	26	15	Standard
⌊	**Ba**	**137**	**-0.000**	ug/L	0.001	187	33	29	26	Standard
⌈>	**Tb**	**159**		ug/L			169186	175175	2	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	67	224	267	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:49:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	29745	3	Standard
⌈>	**Sc**	**45**		ug/L			509000	544043	0	Standard
|	**Cr**	**52**	**0.523**	ug/L	0.009	1	8828	16764	1	Standard
⌊	**Cr**	**53**	**0.501**	ug/L	0.008	1	74	901	2	Standard
⌈>	**Ge**	**72**		ug/L			29303	32168	0	KED
|	**Ni**	**60**	**0.493**	ug/L	0.024	4	5	767	4	KED
|	**Ni**	**62**	**0.476**	ug/L	0.072	15	1	120	14	KED
|	**Cu**	**63**	**0.708**	ug/L	0.010	1	34	3101	2	KED
|	**Cu**	**65**	**0.727**	ug/L	0.032	4	19	1635	3	KED
|	**Zn**	**66**	**6.250**	ug/L	0.152	2	23	3349	2	KED
|	**Zn**	**67**	**6.111**	ug/L	0.086	1	5	535	0	KED
⌊	**As**	**75**	**0.213**	ug/L	0.006	2	3	58	3	KED
	Y	**89**		ug/L			48310	50496	2	Standard
	Kr	**83**		ug/L			47	45	12	Standard
⌈>	**In-1**	**115**		ug/L			6273	6541	2	KED
|	**Cd**	**111**	**0.113**	ug/L	0.021	18	2	29	16	KED
⌊	**Cd**	**114**	**0.097**	ug/L	0.023	23	4	64	22	KED
⌈>	**In**	**115**		ug/L			463649	478093	1	Standard
|	**Ag**	**107**	**0.202**	ug/L	0.006	2	35	3206	1	Standard
|	**Ba**	**135**	**0.482**	ug/L	0.013	2	24	2696	3	Standard
⌊	**Ba**	**137**	**0.483**	ug/L	0.017	3	33	4821	3	Standard
⌈>	**Tb**	**159**		ug/L			169186	178239	1	Standard
⌊	**Pb**	**208**	**0.107**	ug/L	0.004	4	224	9331	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 16:56:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	82148	4	Standard
>	**Sc**	**45**		ug/L			509000	540030	1	Standard
	Cr	**52**	**0.661**	ug/L	0.017	2	8828	18570	2	Standard
	Cr	**53**	**1.741**	ug/L	0.086	4	74	2916	6	Standard
>	**Ge**	**72**		ug/L			29303	28977	0	KED
	Ni	**60**	**0.108**	ug/L	0.017	15	5	154	13	KED
	Ni	**62**	**0.119**	ug/L	0.014	11	1	28	11	KED
	Cu	**63**	**0.039**	ug/L	0.002	5	34	186	5	KED
	Cu	**65**	**0.033**	ug/L	0.012	37	19	84	28	KED
	Zn	**66**	**0.312**	ug/L	0.053	17	23	172	13	KED
	Zn	**67**	**0.269**	ug/L	0.085	31	5	26	25	KED
	As	**75**	**0.026**	ug/L	0.012	45	3	9	31	KED
	Y	**89**		ug/L			48310	49648	3	Standard
	Kr	**83**		ug/L			47	65	18	Standard
>	**In-1**	**115**		ug/L			6273	5999	0	KED
	Cd	**111**	**0.043**	ug/L	0.020	45	2	11	38	KED
	Cd	**114**	**0.027**	ug/L	0.012	42	4	19	34	KED
>	**In**	**115**		ug/L			463649	441167	0	Standard
	Ag	**107**	**0.005**	ug/L	0.000	7	35	104	5	Standard
	Ba	**135**	**0.113**	ug/L	0.007	5	24	599	5	Standard
	Ba	**137**	**0.114**	ug/L	0.005	4	33	1070	4	Standard
>	**Tb**	**159**		ug/L			169186	167906	0	Standard
	Pb	**208**	**0.027**	ug/L	0.000	0	224	2394	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:00:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	80778	1	Standard
⌈>	**Sc**	**45**		ug/L			509000	530617	1	Standard
|	**Cr**	**52**	**20.186**	ug/L	0.671	3	8828	285340	4	Standard
⌊	**Cr**	**53**	**21.276**	ug/L	0.553	2	74	34155	4	Standard
⌈>	**Ge**	**72**		ug/L			29303	27650	1	KED
|	**Ni**	**60**	**20.512**	ug/L	0.872	4	5	27258	3	KED
|	**Ni**	**62**	**20.858**	ug/L	0.487	2	1	4443	1	KED
|	**Cu**	**63**	**20.580**	ug/L	0.468	2	34	76522	1	KED
|	**Cu**	**65**	**20.103**	ug/L	0.651	3	19	38370	2	KED
|	**Zn**	**66**	**19.662**	ug/L	0.585	2	23	9009	2	KED
|	**Zn**	**67**	**17.951**	ug/L	1.720	9	5	1340	8	KED
⌊	**As**	**75**	**19.651**	ug/L	0.451	2	3	4360	1	KED
	Y	**89**		ug/L			48310	48740	2	Standard
	Kr	**83**		ug/L			47	74	13	Standard
⌈>	**In-1**	**115**		ug/L			6273	6028	0	KED
|	**Cd**	**111**	**18.519**	ug/L	0.593	3	2	4049	2	KED
⌊	**Cd**	**114**	**18.365**	ug/L	0.516	2	4	10330	2	KED
⌈>	**In**	**115**		ug/L			463649	447152	1	Standard
|	**Ag**	**107**	**18.002**	ug/L	0.130	0	35	264803	2	Standard
|	**Ba**	**135**	**0.109**	ug/L	0.010	9	24	587	6	Standard
⌊	**Ba**	**137**	**0.104**	ug/L	0.002	1	33	994	1	Standard
⌈>	**Tb**	**159**		ug/L			169186	168627	2	Standard
⌊	**Pb**	**208**	**0.018**	ug/L	0.001	2	224	1705	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:06:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	26329	2	Standard
>	**Sc**	**45**		ug/L			509000	556001	2	Standard
	Cr	**52**	**198.368**	ug/L	1.458	0	8828	2851709	2	Standard
	Cr	**53**	**195.087**	ug/L	0.307	0	74	327408	2	Standard
>	**Ge**	**72**		ug/L			29303	29227	1	KED
	Ni	**60**	**191.945**	ug/L	3.999	2	5	269634	1	KED
	Ni	**62**	**186.640**	ug/L	4.629	2	1	42024	3	KED
	Cu	**63**	**187.668**	ug/L	2.643	1	34	737510	2	KED
	Cu	**65**	**185.711**	ug/L	3.770	2	19	374570	1	KED
	Zn	**66**	**189.266**	ug/L	0.834	0	23	91483	1	KED
	Zn	**67**	**186.660**	ug/L	4.772	2	5	14685	1	KED
	As	**75**	**193.838**	ug/L	1.289	0	3	45439	0	KED
	Y	**89**		ug/L			48310	49992	1	Standard
	Kr	**83**		ug/L			47	83	11	Standard
>	**In-1**	**115**		ug/L			6273	5371	18	KED
	Cd	**111**	**219.502**	ug/L	43.976	20	2	41729	4	KED
	Cd	**114**	**220.074**	ug/L	39.817	18	4	107921	4	KED
>	**In**	**115**		ug/L			463649	435715	1	Standard
	Ag	**107**	**193.623**	ug/L	0.562	0	35	2774950	2	Standard
	Ba	**135**	**193.128**	ug/L	4.604	2	24	974609	1	Standard
	Ba	**137**	**193.380**	ug/L	2.785	1	33	1745084	0	Standard
>	**Tb**	**159**		ug/L			169186	171188	2	Standard
	Pb	**208**	**200.008**	ug/L	5.919	2	224	16378774	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:11:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	29606	4	Standard
⌈>	**Sc**	**45**		ug/L			509000	552654	1	Standard
|	**Cr**	**52**	**305.580**	ug/L	3.631	1	8828	4362199	2	Standard
⌊	**Cr**	**53**	**294.803**	ug/L	0.531	0	74	491755	1	Standard
⌈>	**Ge**	**72**		ug/L			29303	28899	0	KED
|	**Ni**	**60**	**290.897**	ug/L	5.116	1	5	404100	2	KED
|	**Ni**	**62**	**288.363**	ug/L	1.622	0	1	64187	0	KED
|	**Cu**	**63**	**287.043**	ug/L	2.289	0	34	1115281	0	KED
|	**Cu**	**65**	**287.453**	ug/L	2.535	0	19	573363	1	KED
|	**Zn**	**66**	**285.291**	ug/L	2.722	0	23	136335	0	KED
|	**Zn**	**67**	**287.574**	ug/L	3.024	1	5	22370	1	KED
⌊	**As**	**75**	**305.011**	ug/L	1.315	0	3	70699	0	KED
	Y	**89**		ug/L			48310	49758	1	Standard
	Kr	**83**		ug/L			47	116	11	Standard
⌈>	**In-1**	**115**		ug/L			6273	6204	3	KED
|	**Cd**	**111**	**292.818**	ug/L	9.764	3	2	65819	0	KED
⌊	**Cd**	**114**	**294.321**	ug/L	10.877	3	4	170207	1	KED
⌈>	**In**	**115**		ug/L			463649	405906	0	Standard
|	**Ag**	**107**	**310.853**	ug/L	5.576	1	35	4149787	1	Standard
|	**Ba**	**135**	**294.858**	ug/L	8.523	2	24	1386297	2	Standard
⌊	**Ba**	**137**	**299.321**	ug/L	3.477	1	33	2516816	1	Standard
⌈>	**Tb**	**159**		ug/L			169186	154666	1	Standard
⌊	**Pb**	**208**	**316.508**	ug/L	5.627	1	224	23425103	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:18:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	28126	2	Standard
⌈>	**Sc**	**45**		ug/L			509000	570158	2	Standard
|	**Cr**	**52**	**0.013**	ug/L	0.019	142	8828	10078	2	Standard
⌊	**Cr**	**53**	**0.006**	ug/L	0.004	67	74	93	8	Standard
⌈>	**Ge**	**72**		ug/L			29303	34258	1	KED
|	**Ni**	**60**	**0.006**	ug/L	0.003	41	5	15	27	KED
|	**Ni**	**62**	**0.004**	ug/L	0.015	410	1	3	124	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	95	34	54	23	KED
|	**Cu**	**65**	**0.003**	ug/L	0.001	51	19	29	9	KED
|	**Zn**	**66**	**0.019**	ug/L	0.018	97	23	38	26	KED
|	**Zn**	**67**	**0.031**	ug/L	0.055	177	5	9	52	KED
⌊	**As**	**75**	**0.013**	ug/L	0.005	36	3	7	17	KED
	Y	**89**		ug/L			48310	52547	0	Standard
	Kr	**83**		ug/L			47	52	20	Standard
⌈>	**In-1**	**115**		ug/L			6273	7246	0	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.008	8315	2	2	78	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.003	1197	4	4	43	KED
⌈>	**In**	**115**		ug/L			463649	497647	2	Standard
|	**Ag**	**107**	**0.008**	ug/L	0.002	18	35	175	12	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	54	24	40	19	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.002	44	33	80	23	Standard
⌈>	**Tb**	**159**		ug/L			169186	187495	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	19	224	437	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:24:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	28216	2	Standard
⌈>	**Sc**	**45**		ug/L			509000	614310	2	Standard
|	**Cr**	**52**	**49.614**	ug/L	0.154	0	8828	796164	2	Standard
⌊	**Cr**	**53**	**49.306**	ug/L	0.655	1	74	91479	1	Standard
⌈>	**Ge**	**72**		ug/L			29303	33882	0	KED
|	**Ni**	**60**	**48.761**	ug/L	0.591	1	5	79418	1	KED
|	**Ni**	**62**	**49.065**	ug/L	1.020	2	1	12807	2	KED
|	**Cu**	**63**	**50.335**	ug/L	0.792	1	34	229335	1	KED
|	**Cu**	**65**	**49.788**	ug/L	0.248	0	19	116447	0	KED
|	**Zn**	**66**	**49.118**	ug/L	1.011	2	23	27541	1	KED
|	**Zn**	**67**	**51.803**	ug/L	0.793	1	5	4730	2	KED
⌊	**As**	**75**	**50.107**	ug/L	0.465	0	3	13619	0	KED
	Y	**89**		ug/L			48310	55027	0	Standard
	Kr	**83**		ug/L			47	46	15	Standard
⌈>	**In-1**	**115**		ug/L			6273	7119	3	KED
|	**Cd**	**111**	**50.184**	ug/L	1.227	2	2	12949	0	KED
⌊	**Cd**	**114**	**50.175**	ug/L	0.566	1	4	33318	2	KED
⌈>	**In**	**115**		ug/L			463649	504029	0	Standard
|	**Ag**	**107**	**48.797**	ug/L	0.760	1	35	808976	1	Standard
|	**Ba**	**135**	**49.515**	ug/L	0.138	0	24	289131	0	Standard
⌊	**Ba**	**137**	**49.043**	ug/L	0.770	1	33	512033	0	Standard
⌈>	**Tb**	**159**		ug/L			169186	194827	2	Standard
⌊	**Pb**	**208**	**50.847**	ug/L	1.120	2	224	4739539	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:32:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23729	27340	2	Standard
⌈>	**Sc**	**45**		ug/L			509000	580003	1	Standard
|	**Cr**	**52**	**0.023**	ug/L	0.039	169	8828	10405	7	Standard
⌊	**Cr**	**53**	**0.028**	ug/L	0.037	134	74	133	50	Standard
⌈>	**Ge**	**72**		ug/L			29303	34295	1	KED
|	**Ni**	**60**	**0.001**	ug/L	0.003	301	5	7	66	KED
|	**Ni**	**62**	**-0.004**	ug/L	0.008	221	1	1	173	KED
|	**Cu**	**63**	**0.000**	ug/L	0.002	646	34	41	15	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.005	8359	19	22	46	KED
|	**Zn**	**66**	**0.009**	ug/L	0.009	100	23	32	15	KED
|	**Zn**	**67**	**-0.004**	ug/L	0.023	606	5	6	34	KED
⌊	**As**	**75**	**0.008**	ug/L	0.012	144	3	5	54	KED
	Y	**89**		ug/L			48310	53554	1	Standard
	Kr	**83**		ug/L			47	59	14	Standard
⌈>	**In-1**	**115**		ug/L			6273	7121	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.002	159	2	2	24	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.001	145	4	4	24	KED
⌈>	**In**	**115**		ug/L			463649	495495	2	Standard
|	**Ag**	**107**	**0.030**	ug/L	0.033	110	35	527	103	Standard
|	**Ba**	**135**	**0.024**	ug/L	0.030	120	24	169	102	Standard
⌊	**Ba**	**137**	**0.026**	ug/L	0.031	123	33	303	108	Standard
⌈>	**Tb**	**159**		ug/L			169186	184923	3	Standard
⌊	**Pb**	**208**	**0.030**	ug/L	0.029	98	224	2932	93	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:37:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				26311	4	Standard
⌈>	**Sc**	**45**		ug/L				566891	1	Standard
|	**Cr**	**52**		ug/L				10103	1	Standard
⌊	**Cr**	**53**		ug/L				90	11	Standard
⌈>	**Ge**	**72**		ug/L				32698	0	KED
|	**Ni**	**60**		ug/L				3	50	KED
|	**Ni**	**62**		ug/L				3	34	KED
|	**Cu**	**63**		ug/L				24	19	KED
|	**Cu**	**65**		ug/L				17	11	KED
|	**Zn**	**66**		ug/L				20	48	KED
|	**Zn**	**67**		ug/L				3	132	KED
⌊	**As**	**75**		ug/L				3	45	KED
	Y	**89**		ug/L				53020	2	Standard
	Kr	**83**		ug/L				39	12	Standard
⌈>	**In-1**	**115**		ug/L				7060	1	KED
|	**Cd**	**111**		ug/L				2	89	KED
⌊	**Cd**	**114**		ug/L				3	68	KED
⌈>	**In**	**115**		ug/L				494263	2	Standard
|	**Ag**	**107**		ug/L				53	2	Standard
|	**Ba**	**135**		ug/L				15	33	Standard
⌊	**Ba**	**137**		ug/L				16	52	Standard
⌈>	**Tb**	**159**		ug/L				184968	0	Standard
⌊	**Pb**	**208**		ug/L				252	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:41:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	27086	4	Standard
⌈>	**Sc**	**45**		ug/L			566891	602734	1	Standard
|	**Cr**	**52**	**50.087**	ug/L	0.634	1	10103	788886	3	Standard
⌊	**Cr**	**53**	**49.352**	ug/L	0.393	0	90	89874	2	Standard
⌈>	**Ge**	**72**		ug/L			32698	34111	1	KED
|	**Ni**	**60**	**48.892**	ug/L	0.532	1	3	80169	1	KED
|	**Ni**	**62**	**49.253**	ug/L	0.220	0	3	12944	1	KED
|	**Cu**	**63**	**49.622**	ug/L	1.349	2	24	227559	1	KED
|	**Cu**	**65**	**48.368**	ug/L	0.349	0	17	113892	1	KED
|	**Zn**	**66**	**50.735**	ug/L	0.721	1	20	28634	1	KED
|	**Zn**	**67**	**50.136**	ug/L	0.936	1	3	4607	3	KED
⌊	**As**	**75**	**49.751**	ug/L	0.619	1	3	13613	0	KED
	Y	**89**		ug/L			53020	55757	1	Standard
	Kr	**83**		ug/L			39	41	29	Standard
⌈>	**In-1**	**115**		ug/L			7060	7062	1	KED
|	**Cd**	**111**	**50.589**	ug/L	1.752	3	2	12950	2	KED
⌊	**Cd**	**114**	**50.362**	ug/L	0.801	1	3	33178	2	KED
⌈>	**In**	**115**		ug/L			494263	496605	2	Standard
|	**Ag**	**107**	**49.227**	ug/L	0.708	1	53	803963	0	Standard
|	**Ba**	**135**	**50.459**	ug/L	2.381	4	15	290080	2	Standard
⌊	**Ba**	**137**	**50.527**	ug/L	1.528	3	16	519526	0	Standard
⌈>	**Tb**	**159**		ug/L			184968	193060	1	Standard
⌊	**Pb**	**208**	**50.413**	ug/L	1.135	2	252	4657369	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:49:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	26387	1	Standard
⌈>	**Sc**	**45**		ug/L			566891	577127	1	Standard
|	**Cr**	**52**	**-0.020**	ug/L	0.010	47	10103	9985	2	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.004	53	90	78	9	Standard
⌈>	**Ge**	**72**		ug/L			32698	34100	1	KED
|	**Ni**	**60**	**-0.002**	ug/L	0.001	33	3	0	173	KED
|	**Ni**	**62**	**-0.005**	ug/L	0.007	131	3	1	100	KED
|	**Cu**	**63**	**0.000**	ug/L	0.001	191	24	26	12	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.001	121	17	15	21	KED
|	**Zn**	**66**	**0.001**	ug/L	0.003	512	20	22	9	KED
|	**Zn**	**67**	**-0.023**	ug/L	0.020	89	3	1	100	KED
⌊	**As**	**75**	**0.000**	ug/L	0.005	4102	3	3	37	KED
	Y	**89**		ug/L			53020	51769	1	Standard
	Kr	**83**		ug/L			39	35	17	Standard
⌈>	**In-1**	**115**		ug/L			7060	7354	2	KED
|	**Cd**	**111**	**0.007**	ug/L	0.014	201	2	4	87	KED
⌊	**Cd**	**114**	**0.027**	ug/L	0.026	94	3	22	82	KED
⌈>	**In**	**115**		ug/L			494263	493687	2	Standard
|	**Ag**	**107**	**0.006**	ug/L	0.006	98	53	153	65	Standard
|	**Ba**	**135**	**0.003**	ug/L	0.007	220	15	33	118	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.006	151	16	60	111	Standard
⌈>	**Tb**	**159**		ug/L			184968	186545	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.006	143	252	643	86	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-BLK2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:54:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	37670	3	Standard
⌈>	**Sc**	**45**		ug/L			566891	603363	1	Standard
|	**Cr**	**52**	**-0.001**	ug/L	0.027	4639	10103	10740	2	Standard
⌊	**Cr**	**53**	**0.001**	ug/L	0.013	1768	90	97	22	Standard
⌈>	**Ge**	**72**		ug/L			32698	33573	2	KED
|	**Ni**	**60**	**0.004**	ug/L	0.004	101	3	10	66	KED
|	**Ni**	**62**	**-0.003**	ug/L	0.011	368	3	2	114	KED
|	**Cu**	**63**	**0.070**	ug/L	0.006	8	24	340	8	KED
|	**Cu**	**65**	**0.065**	ug/L	0.006	9	17	166	7	KED
|	**Zn**	**66**	**0.172**	ug/L	0.045	25	20	116	21	KED
|	**Zn**	**67**	**0.168**	ug/L	0.041	24	3	19	17	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.006	226	3	2	60	KED
	Y	**89**		ug/L			53020	54713	1	Standard
	Kr	**83**		ug/L			39	42	18	Standard
⌈>	**In-1**	**115**		ug/L			7060	7281	1	KED
|	**Cd**	**111**	**0.005**	ug/L	0.002	48	2	3	15	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.004	367	3	2	121	KED
⌈>	**In**	**115**		ug/L			494263	517690	1	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	105	53	50	14	Standard
|	**Ba**	**135**	**0.005**	ug/L	0.000	6	15	45	2	Standard
⌊	**Ba**	**137**	**0.008**	ug/L	0.001	16	16	98	12	Standard
⌈>	**Tb**	**159**		ug/L			184968	194843	1	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.001	9	252	1056	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0687-BS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 17:58:46

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	33195	2	Standard
>	Sc	45		ug/L			566891	555862	11	Standard
	Cr	52	27.319	ug/L	2.314	8	10103	398623	3	Standard
	Cr	53	27.123	ug/L	2.036	7	90	45316	4	Standard
>	Ge	72		ug/L			32698	34536	1	KED
	Ni	60	26.277	ug/L	0.423	1	3	43618	0	KED
	Ni	62	25.531	ug/L	0.733	2	3	6793	1	KED
	Cu	63	26.428	ug/L	0.996	3	24	122696	2	KED
	Cu	65	26.366	ug/L	0.643	2	17	62849	1	KED
	Zn	66	81.431	ug/L	3.435	4	20	46502	2	KED
	Zn	67	77.856	ug/L	1.691	2	3	7239	2	KED
	As	75	24.595	ug/L	0.132	0	3	6815	0	KED
	Y	89		ug/L			53020	50937	11	Standard
	Kr	83		ug/L			39	43	2	Standard
>	In-1	115		ug/L			7060	7171	0	KED
	Cd	111	25.205	ug/L	0.178	0	2	6555	0	KED
	Cd	114	25.527	ug/L	0.381	1	3	17079	1	KED
>	In	115		ug/L			494263	475075	13	Standard
	Ag	107	26.777	ug/L	2.851	10	53	414464	4	Standard
	Ba	135	26.576	ug/L	2.759	10	15	144886	4	Standard
	Ba	137	26.205	ug/L	2.206	8	16	255882	5	Standard
>	Tb	159		ug/L			184968	178000	9	Standard
	Pb	208	27.358	ug/L	1.891	6	252	2320134	3	Standard

ICP-MS Quantitative Analysis - Summary Report

BLD

Sample ID: ~~BLE~~0687-BS2

Sample Dil Factor: 20

Comments:

Sample Date/Time: Wednesday, May 10, 2023 18:05:25

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	33167	3	Standard
>	Sc	45		ug/L			566891	617917	1	Standard
	Cr	52	26.566	ug/L	0.336	1	10103	434021	0	Standard
	Cr	53	25.839	ug/L	0.203	0	90	48285	2	Standard
>	Ge	72		ug/L			32698	35114	0	KED
	Ni	60	26.149	ug/L	0.318	1	3	44138	1	KED
	Ni	62	26.557	ug/L	0.236	0	3	7185	1	KED
	Cu	63	26.719	ug/L	0.111	0	24	126165	0	KED
	Cu	65	26.523	ug/L	0.868	3	17	64298	3	KED
	Zn	66	81.101	ug/L	0.657	0	20	47108	0	KED
	Zn	67	79.743	ug/L	2.633	3	3	7539	3	KED
	As	75	25.028	ug/L	0.475	1	3	7052	1	KED
	Y	89		ug/L			53020	54777	2	Standard
	Kr	83		ug/L			39	56	25	Standard
>	In-1	115		ug/L			7060	7190	2	KED
	Cd	111	25.907	ug/L	1.333	5	2	6749	2	KED
	Cd	114	25.906	ug/L	0.432	1	3	17376	2	KED
>	In	115		ug/L			494263	529323	0	Standard
	Ag	107	25.138	ug/L	0.889	3	53	437657	3	Standard
	Ba	135	25.018	ug/L	0.513	2	15	153411	1	Standard
	Ba	137	25.193	ug/L	0.818	3	16	276243	3	Standard
>	Tb	159		ug/L			184968	195659	1	Standard
	Pb	208	26.664	ug/L	0.249	0	252	2496863	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0298-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:11:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	38063	2	Standard
⌈>	Sc	45		ug/L			566891	597496	2	Standard
|	Cr	52	-0.003	ug/L	0.011	446	10103	10607	1	Standard
⌊	Cr	53	0.015	ug/L	0.002	15	90	121	5	Standard
⌈>	Ge	72		ug/L			32698	34566	1	KED
|	Ni	60	0.005	ug/L	0.001	13	3	12	9	KED
|	Ni	62	0.002	ug/L	0.007	416	3	3	50	KED
|	Cu	63	0.028	ug/L	0.004	15	24	154	12	KED
|	Cu	65	0.030	ug/L	0.004	12	17	90	10	KED
|	Zn	66	0.367	ug/L	0.046	12	20	231	10	KED
|	Zn	67	0.380	ug/L	0.094	24	3	39	22	KED
⌊	As	75	-0.002	ug/L	0.003	112	3	2	26	KED
	Y	89		ug/L			53020	53718	2	Standard
	Kr	83		ug/L			39	38	21	Standard
⌈>	In-1	115		ug/L			7060	7412	2	KED
|	Cd	111	-0.002	ug/L	0.004	224	2	1	50	KED
⌊	Cd	114	-0.001	ug/L	0.002	306	3	2	38	KED
⌈>	In	115		ug/L			494263	508864	4	Standard
|	Ag	107	0.001	ug/L	0.001	103	53	76	30	Standard
|	Ba	135	0.044	ug/L	0.001	3	15	276	7	Standard
⌊	Ba	137	0.041	ug/L	0.002	5	16	448	2	Standard
⌈>	Tb	159		ug/L			184968	189447	1	Standard
⌊	Pb	208	0.003	ug/L	0.001	15	252	551	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0298-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:15:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	41219	2	Standard
>	Sc	45		ug/L			566891	595237	2	Standard
	Cr	52	26.019	ug/L	0.637	2	10103	409724	2	Standard
	Cr	53	25.701	ug/L	0.388	1	90	46253	0	Standard
>	Ge	72		ug/L			32698	33724	2	KED
	Ni	60	26.223	ug/L	0.188	0	3	42515	3	KED
	Ni	62	25.826	ug/L	0.457	1	3	6712	3	KED
	Cu	63	27.023	ug/L	0.029	0	24	122552	2	KED
	Cu	65	26.364	ug/L	0.662	2	17	61404	4	KED
	Zn	66	84.748	ug/L	0.880	1	20	47269	1	KED
	Zn	67	82.421	ug/L	2.653	3	3	7480	1	KED
	As	75	25.246	ug/L	0.327	1	3	6830	1	KED
	Y	89		ug/L			53020	55215	3	Standard
	Kr	83		ug/L			39	61	32	Standard
>	In-1	115		ug/L			7060	7117	3	KED
	Cd	111	26.003	ug/L	0.830	3	2	6706	1	KED
	Cd	114	25.869	ug/L	1.271	4	3	17159	2	KED
>	In	115		ug/L			494263	501527	1	Standard
	Ag	107	25.380	ug/L	0.349	1	53	418726	1	Standard
	Ba	135	25.446	ug/L	0.398	1	15	147835	0	Standard
	Ba	137	25.147	ug/L	0.112	0	16	261267	1	Standard
>	Tb	159		ug/L			184968	192205	0	Standard
	Pb	208	25.898	ug/L	0.210	0	252	2382531	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0077-MS2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:21:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	40376	1	Standard
⌈>	Sc	45		ug/L			566891	644293	2	Standard
|	Cr	52	13.646	ug/L	0.334	2	10103	237982	1	Standard
⌊	Cr	53	13.650	ug/L	0.413	3	90	26636	3	Standard
⌈>	Ge	72		ug/L			32698	35599	1	KED
|	Ni	60	14.278	ug/L	0.608	4	3	24427	3	KED
|	Ni	62	14.855	ug/L	0.778	5	3	4078	6	KED
|	Cu	63	17.856	ug/L	0.146	0	24	85486	1	KED
|	Cu	65	17.890	ug/L	0.181	1	17	43971	1	KED
|	Zn	66	44.470	ug/L	0.482	1	20	26195	0	KED
|	Zn	67	44.109	ug/L	0.983	2	3	4229	1	KED
⌊	As	75	14.390	ug/L	0.229	1	3	4111	0	KED
	Y	89		ug/L			53020	82049	1	Standard
	Kr	83		ug/L			39	44	35	Standard
⌈>	In-1	115		ug/L			7060	7585	1	KED
|	Cd	111	13.396	ug/L	0.268	2	2	3686	3	KED
⌊	Cd	114	12.937	ug/L	0.159	1	3	9156	1	KED
⌈>	In	115		ug/L			494263	520828	1	Standard
|	Ag	107	13.168	ug/L	0.834	6	53	225463	4	Standard
|	Ba	135	18.146	ug/L	0.439	2	15	109466	0	Standard
⌊	Ba	137	18.016	ug/L	0.372	2	16	194342	1	Standard
⌈>	Tb	159		ug/L			184968	198562	2	Standard
⌊	Pb	208	13.622	ug/L	0.430	3	252	1294148	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0297-01
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:27:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	43660	3	Standard
⌈>	**Sc**	**45**		ug/L			566891	632000	0	Standard
|	**Cr**	**52**	**2.036**	ug/L	0.025	1	10103	44431	0	Standard
⌊	**Cr**	**53**	**2.030**	ug/L	0.034	1	90	3972	1	Standard
⌈>	**Ge**	**72**		ug/L			32698	35701	1	KED
|	**Ni**	**60**	**2.054**	ug/L	0.066	3	3	3527	2	KED
|	**Ni**	**62**	**2.148**	ug/L	0.146	6	3	593	4	KED
|	**Cu**	**63**	**3.160**	ug/L	0.088	2	24	15197	4	KED
|	**Cu**	**65**	**3.168**	ug/L	0.115	3	17	7823	3	KED
|	**Zn**	**66**	**13.507**	ug/L	0.376	2	20	7993	1	KED
|	**Zn**	**67**	**13.075**	ug/L	0.153	1	3	1260	2	KED
⌊	**As**	**75**	**0.552**	ug/L	0.034	6	3	161	7	KED
	Y	**89**		ug/L			53020	79010	1	Standard
	Kr	**83**		ug/L			39	41	17	Standard
⌈>	**In-1**	**115**		ug/L			7060	7693	2	KED
|	**Cd**	**111**	**0.040**	ug/L	0.009	23	2	13	17	KED
⌊	**Cd**	**114**	**0.048**	ug/L	0.010	21	3	37	18	KED
⌈>	**In**	**115**		ug/L			494263	523935	1	Standard
|	**Ag**	**107**	**0.024**	ug/L	0.002	7	53	473	6	Standard
|	**Ba**	**135**	**6.728**	ug/L	0.172	2	15	40843	2	Standard
⌊	**Ba**	**137**	**6.775**	ug/L	0.223	3	16	73515	1	Standard
⌈>	**Tb**	**159**		ug/L			184968	202392	1	Standard
⌊	**Pb**	**208**	**12.755**	ug/L	0.082	0	252	1235605	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0728-DUP2
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:32:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	44324	2	Standard
>	Sc	45		ug/L			566891	616246	1	Standard
	Cr	52	3.859	ug/L	0.104	2	10103	72247	0	Standard
	Cr	53	3.763	ug/L	0.033	0	90	7097	1	Standard
>	Ge	72		ug/L			32698	35016	1	KED
	Ni	60	3.217	ug/L	0.049	1	3	5417	1	KED
	Ni	62	3.072	ug/L	0.041	1	3	831	0	KED
	Cu	63	5.765	ug/L	0.101	1	24	27162	1	KED
	Cu	65	5.632	ug/L	0.198	3	17	13623	1	KED
	Zn	66	25.143	ug/L	0.668	2	20	14575	1	KED
	Zn	67	24.719	ug/L	0.461	1	3	2332	0	KED
	As	75	0.890	ug/L	0.054	6	3	253	5	KED
	Y	89		ug/L			53020	86822	2	Standard
	Kr	83		ug/L			39	38	5	Standard
>	In-1	115		ug/L			7060	7818	1	KED
	Cd	111	0.092	ug/L	0.014	15	2	28	15	KED
	Cd	114	0.078	ug/L	0.020	25	3	60	24	KED
>	In	115		ug/L			494263	505786	3	Standard
	Ag	107	0.019	ug/L	0.001	7	53	378	3	Standard
	Ba	135	12.943	ug/L	0.471	3	15	75798	1	Standard
	Ba	137	12.936	ug/L	0.581	4	16	135424	1	Standard
>	Tb	159		ug/L			184968	196469	1	Standard
	Pb	208	25.694	ug/L	0.107	0	252	2416204	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0728-MS2
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:36:54

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	43287	3	Standard
>	Sc	45		ug/L			566891	591647	10	Standard
	Cr	52	9.452	ug/L	0.588	6	10103	154071	5	Standard
	Cr	53	9.291	ug/L	0.725	7	90	16595	2	Standard
>	Ge	72		ug/L			32698	35179	0	KED
	Ni	60	8.374	ug/L	0.172	2	3	14163	1	KED
	Ni	62	8.570	ug/L	0.258	3	3	2325	3	KED
	Cu	63	10.707	ug/L	0.135	1	24	50663	1	KED
	Cu	65	10.695	ug/L	0.305	2	17	25987	3	KED
	Zn	66	41.005	ug/L	0.450	1	20	23871	0	KED
	Zn	67	43.282	ug/L	1.509	3	3	4102	4	KED
	As	75	5.955	ug/L	0.067	1	3	1683	0	KED
	Y	89		ug/L			53020	82678	9	Standard
	Kr	83		ug/L			39	48	26	Standard
>	In-1	115		ug/L			7060	7566	2	KED
	Cd	111	5.358	ug/L	0.095	1	2	1472	2	KED
	Cd	114	5.303	ug/L	0.159	2	3	3745	3	KED
>	In	115		ug/L			494263	487343	10	Standard
	Ag	107	4.919	ug/L	0.394	8	53	78463	4	Standard
	Ba	135	79.346	ug/L	6.937	8	15	445104	2	Standard
	Ba	137	79.361	ug/L	5.203	6	16	797381	4	Standard
>	Tb	159		ug/L			184968	188193	8	Standard
	Pb	208	31.645	ug/L	1.866	5	252	2841204	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:41:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	28394	4	Standard
⌈>	**Sc**	**45**		ug/L			566891	585732	2	Standard
|	**Cr**	**52**	**-0.022**	ug/L	0.003	13	10103	10113	1	Standard
⌊	**Cr**	**53**	**-0.017**	ug/L	0.007	42	90	63	22	Standard
⌈>	**Ge**	**72**		ug/L			32698	33367	0	KED
|	**Ni**	**60**	**0.004**	ug/L	0.002	58	3	9	34	KED
|	**Ni**	**62**	**0.007**	ug/L	0.028	390	3	5	141	KED
|	**Cu**	**63**	**0.007**	ug/L	0.006	84	24	54	46	KED
|	**Cu**	**65**	**0.001**	ug/L	0.006	513	17	20	71	KED
|	**Zn**	**66**	**0.082**	ug/L	0.030	36	20	66	24	KED
|	**Zn**	**67**	**0.049**	ug/L	0.088	181	3	8	96	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.004	182	3	2	36	KED
	Y	**89**		ug/L			53020	53017	1	Standard
	Kr	**83**		ug/L			39	46	26	Standard
⌈>	**In-1**	**115**		ug/L			7060	7227	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.006	150	2	1	114	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.000	5	3	1	4	KED
⌈>	**In**	**115**		ug/L			494263	495365	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	81	53	38	35	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.002	109	15	27	49	Standard
⌊	**Ba**	**137**	**0.005**	ug/L	0.001	12	16	66	8	Standard
⌈>	**Tb**	**159**		ug/L			184968	186655	1	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	3	252	641	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:45:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	28727	4	Standard
⌈>	**Sc**	**45**		ug/L			566891	609014	3	Standard
|	**Cr**	**52**	**50.570**	ug/L	0.762	1	10103	804391	2	Standard
⌊	**Cr**	**53**	**49.489**	ug/L	1.195	2	90	91015	1	Standard
⌈>	**Ge**	**72**		ug/L			32698	34132	2	KED
|	**Ni**	**60**	**50.592**	ug/L	1.395	2	3	82971	0	KED
|	**Ni**	**62**	**50.224**	ug/L	3.628	7	3	13194	5	KED
|	**Cu**	**63**	**50.541**	ug/L	1.378	2	24	231886	1	KED
|	**Cu**	**65**	**49.221**	ug/L	0.899	1	17	115932	0	KED
|	**Zn**	**66**	**51.252**	ug/L	1.016	1	20	28936	0	KED
|	**Zn**	**67**	**52.016**	ug/L	2.220	4	3	4779	2	KED
⌊	**As**	**75**	**50.828**	ug/L	0.713	1	3	13915	1	KED
	Y	**89**		ug/L			53020	56257	1	Standard
	Kr	**83**		ug/L			39	47	10	Standard
⌈>	**In-1**	**115**		ug/L			7060	7295	0	KED
|	**Cd**	**111**	**50.371**	ug/L	0.324	0	2	13324	0	KED
⌊	**Cd**	**114**	**51.434**	ug/L	0.839	1	3	35003	1	KED
⌈>	**In**	**115**		ug/L			494263	503811	3	Standard
|	**Ag**	**107**	**49.821**	ug/L	1.108	2	53	825169	1	Standard
|	**Ba**	**135**	**50.659**	ug/L	2.522	4	15	295308	1	Standard
⌊	**Ba**	**137**	**49.729**	ug/L	1.869	3	16	518499	0	Standard
⌈>	**Tb**	**159**		ug/L			184968	191232	2	Standard
⌊	**Pb**	**208**	**51.742**	ug/L	0.772	1	252	4734666	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:53:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	27100	6	Standard
⌈>	**Sc**	**45**		ug/L			566891	604751	2	Standard
|	**Cr**	**52**	**-0.032**	ug/L	0.003	8	10103	10287	2	Standard
⌊	**Cr**	**53**	**-0.011**	ug/L	0.003	28	90	76	7	Standard
⌈>	**Ge**	**72**		ug/L			32698	35074	2	KED
|	**Ni**	**60**	**-0.000**	ug/L	0.000	30	3	3	0	KED
|	**Ni**	**62**	**-0.008**	ug/L	0.008	107	3	1	173	KED
|	**Cu**	**63**	**0.006**	ug/L	0.002	32	24	52	14	KED
|	**Cu**	**65**	**0.002**	ug/L	0.002	76	17	24	19	KED
|	**Zn**	**66**	**-0.002**	ug/L	0.009	530	20	21	25	KED
|	**Zn**	**67**	**0.004**	ug/L	0.011	296	3	4	24	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.002	282	3	3	17	KED
	Y	**89**		ug/L			53020	52811	0	Standard
	Kr	**83**		ug/L			39	43	26	Standard
⌈>	**In-1**	**115**		ug/L			7060	7273	3	KED
|	**Cd**	**111**	**0.001**	ug/L	0.005	577	2	2	57	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.006	392	3	4	91	KED
⌈>	**In**	**115**		ug/L			494263	514317	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	153	53	64	20	Standard
|	**Ba**	**135**	**-0.000**	ug/L	0.001	153	15	13	28	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	65	16	26	22	Standard
⌈>	**Tb**	**159**		ug/L			184968	191895	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	16	252	332	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0301-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 18:57:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	36132	2	Standard
>	Sc	45		ug/L			566891	602137	1	Standard
	Cr	52	0.039	ug/L	0.002	4	10103	11333	1	Standard
	Cr	53	0.041	ug/L	0.004	11	90	170	5	Standard
>	Ge	72		ug/L			32698	35755	1	KED
	Ni	60	0.009	ug/L	0.006	72	3	19	55	KED
	Ni	62	-0.006	ug/L	0.012	205	3	1	173	KED
	Cu	63	0.054	ug/L	0.004	7	24	286	5	KED
	Cu	65	0.049	ug/L	0.005	11	17	139	8	KED
	Zn	66	0.501	ug/L	0.016	3	20	318	1	KED
	Zn	67	0.537	ug/L	0.123	22	3	55	21	KED
	As	75	-0.004	ug/L	0.005	131	3	2	60	KED
	Y	89		ug/L			53020	53484	1	Standard
	Kr	83		ug/L			39	42	9	Standard
>	In-1	115		ug/L			7060	7514	4	KED
	Cd	111	-0.003	ug/L	0.004	162	2	1	69	KED
	Cd	114	0.001	ug/L	0.007	593	3	4	120	KED
>	In	115		ug/L			494263	515717	1	Standard
	Ag	107	-0.001	ug/L	0.001	165	53	41	59	Standard
	Ba	135	0.032	ug/L	0.003	7	15	208	8	Standard
	Ba	137	0.034	ug/L	0.005	15	16	380	13	Standard
>	Tb	159		ug/L			184968	188567	0	Standard
	Pb	208	0.013	ug/L	0.001	6	252	1422	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0301-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:02:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	39347	2	Standard
>	Sc	45		ug/L			566891	602736	1	Standard
	Cr	52	25.728	ug/L	0.632	2	10103	410293	1	Standard
	Cr	53	25.069	ug/L	0.544	2	90	45686	0	Standard
>	Ge	72		ug/L			32698	35760	0	KED
	Ni	60	24.931	ug/L	0.329	1	3	42859	2	KED
	Ni	62	25.470	ug/L	0.338	1	3	7019	2	KED
	Cu	63	26.115	ug/L	0.703	2	24	125575	2	KED
	Cu	65	25.523	ug/L	0.337	1	17	63008	1	KED
	Zn	66	81.836	ug/L	1.535	1	20	48404	0	KED
	Zn	67	77.435	ug/L	1.924	2	3	7455	1	KED
	As	75	24.221	ug/L	0.419	1	3	6951	2	KED
	Y	89		ug/L			53020	55246	3	Standard
	Kr	83		ug/L			39	38	17	Standard
>	In-1	115		ug/L			7060	7223	4	KED
	Cd	111	25.786	ug/L	0.757	2	2	6750	1	KED
	Cd	114	25.761	ug/L	0.217	0	3	17358	3	KED
>	In	115		ug/L			494263	502123	3	Standard
	Ag	107	25.046	ug/L	0.929	3	53	413450	2	Standard
	Ba	135	25.125	ug/L	0.881	3	15	146049	0	Standard
	Ba	137	24.829	ug/L	0.821	3	16	258081	0	Standard
>	Tb	159		ug/L			184968	192140	0	Standard
	Pb	208	26.135	ug/L	0.277	1	252	2403344	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:07:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	33143	1	Standard
>	Sc	45		ug/L			566891	616779	2	Standard
	Cr	52	-0.028	ug/L	0.019	69	10103	10547	0	Standard
	Cr	53	-0.006	ug/L	0.003	40	90	86	4	Standard
>	Ge	72		ug/L			32698	34454	0	KED
	Ni	60	0.008	ug/L	0.004	46	3	16	35	KED
	Ni	62	-0.003	ug/L	0.008	272	3	2	86	KED
	Cu	63	0.012	ug/L	0.003	29	24	79	20	KED
	Cu	65	0.008	ug/L	0.007	86	17	36	43	KED
	Zn	66	0.171	ug/L	0.019	11	20	119	8	KED
	Zn	67	0.203	ug/L	0.083	40	3	22	33	KED
	As	75	-0.003	ug/L	0.003	91	3	2	28	KED
	Y	89		ug/L			53020	56743	3	Standard
	Kr	83		ug/L			39	53	27	Standard
>	In-1	115		ug/L			7060	7418	0	KED
	Cd	111	-0.004	ug/L	0.002	51	2	1	43	KED
	Cd	114	-0.001	ug/L	0.004	676	3	2	100	KED
>	In	115		ug/L			494263	513562	2	Standard
	Ag	107	0.001	ug/L	0.001	216	53	66	31	Standard
	Ba	135	0.034	ug/L	0.003	9	15	215	6	Standard
	Ba	137	0.034	ug/L	0.001	1	16	377	3	Standard
>	Tb	159		ug/L			184968	193668	0	Standard
	Pb	208	0.007	ug/L	0.000	3	252	869	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-BS1
Sample Dil Factor: 20
DEL
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:11:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	31606	2	Standard
>	**Sc**	**45**		ug/L			566891	583965	11	Standard
	Cr	**52**	**27.552**	ug/L	2.680	9	10103	422084	3	Standard
	Cr	**53**	**27.385**	ug/L	2.342	8	90	48042	3	Standard
>	**Ge**	**72**		ug/L			32698	33602	2	KED
	Ni	**60**	**26.623**	ug/L	0.960	3	3	42975	0	KED
	Ni	**62**	**26.995**	ug/L	0.969	3	3	6985	1	KED
	Cu	**63**	**27.153**	ug/L	0.763	2	24	122630	0	KED
	Cu	**65**	**26.767**	ug/L	0.624	2	17	62066	0	KED
	Zn	**66**	**82.288**	ug/L	2.082	2	20	45718	0	KED
	Zn	**67**	**78.775**	ug/L	1.406	1	3	7124	0	KED
	As	**75**	**25.075**	ug/L	0.969	3	3	6756	1	KED
	Y	**89**		ug/L			53020	52675	13	Standard
	Kr	**83**		ug/L			39	52	36	Standard
>	**In-1**	**115**		ug/L			7060	7562	3	KED
	Cd	**111**	**24.984**	ug/L	0.283	1	2	6850	1	KED
	Cd	**114**	**24.822**	ug/L	0.916	3	3	17500	0	KED
>	**In**	**115**		ug/L			494263	489071	10	Standard
	Ag	**107**	**26.745**	ug/L	1.759	6	53	428268	4	Standard
	Ba	**135**	**27.408**	ug/L	2.670	9	15	154205	1	Standard
	Ba	**137**	**27.186**	ug/L	2.617	9	16	273527	2	Standard
>	**Tb**	**159**		ug/L			184968	184312	10	Standard
	Pb	**208**	**28.250**	ug/L	2.382	8	252	2477210	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:19:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	30379	2	Standard
>	Sc	45		ug/L			566891	608076	1	Standard
	Cr	52	26.503	ug/L	0.345	1	10103	426187	2	Standard
	Cr	53	26.098	ug/L	0.180	0	90	47989	1	Standard
>	Ge	72		ug/L			32698	35900	1	KED
	Ni	60	25.767	ug/L	0.436	1	3	44460	0	KED
	Ni	62	26.190	ug/L	0.532	2	3	7243	0	KED
	Cu	63	27.050	ug/L	0.206	0	24	130578	1	KED
	Cu	65	26.509	ug/L	0.178	0	17	65696	1	KED
	Zn	66	81.108	ug/L	0.527	0	20	48170	2	KED
	Zn	67	77.729	ug/L	0.535	0	3	7513	1	KED
	As	75	24.804	ug/L	0.297	1	3	7144	1	KED
	Y	89		ug/L			53020	55160	3	Standard
	Kr	83		ug/L			39	68	12	Standard
>	In-1	115		ug/L			7060	7460	2	KED
	Cd	111	25.512	ug/L	0.374	1	2	6904	3	KED
	Cd	114	24.977	ug/L	0.596	2	3	17384	2	KED
>	In	115		ug/L			494263	513378	4	Standard
	Ag	107	26.260	ug/L	0.377	1	53	443361	3	Standard
	Ba	135	26.060	ug/L	1.712	6	15	154721	2	Standard
	Ba	137	25.388	ug/L	1.063	4	16	269741	2	Standard
>	Tb	159		ug/L			184968	194271	3	Standard
	Pb	208	26.682	ug/L	0.951	3	252	2478789	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0728-MS2
Sample Dil Factor: 100
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:23:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	32572	2	Standard
>	Sc	45		ug/L			566891	634781	1	Standard
	Cr	52	8.923	ug/L	0.181	2	10103	157301	3	Standard
	Cr	53	8.784	ug/L	0.118	1	90	16931	2	Standard
>	Ge	72		ug/L			32698	35227	2	KED
	Ni	60	7.934	ug/L	0.171	2	3	13433	0	KED
	Ni	62	8.105	ug/L	0.290	3	3	2202	3	KED
	Cu	63	10.173	ug/L	0.317	3	24	48187	1	KED
	Cu	65	10.080	ug/L	0.557	5	17	24508	3	KED
	Zn	66	38.423	ug/L	0.769	2	20	22395	0	KED
	Zn	67	40.690	ug/L	1.664	4	3	3860	3	KED
	As	75	5.570	ug/L	0.174	3	3	1576	1	KED
	Y	89		ug/L			53020	85393	1	Standard
	Kr	83		ug/L			39	44	27	Standard
>	In-1	115		ug/L			7060	7444	0	KED
	Cd	111	5.163	ug/L	0.104	2	2	1395	1	KED
	Cd	114	5.160	ug/L	0.024	0	3	3586	0	KED
>	In	115		ug/L			494263	516165	3	Standard
	Ag	107	4.702	ug/L	0.128	2	53	79838	0	Standard
	Ba	135	76.355	ug/L	3.843	5	15	456151	2	Standard
	Ba	137	75.875	ug/L	3.822	5	16	810591	3	Standard
>	Tb	159		ug/L			184968	202938	1	Standard
	Pb	208	30.231	ug/L	0.583	1	252	2935613	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0348-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:28:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	25448	5	Standard
⌈>	**Sc**	**45**		ug/L			566891	529281	3	Standard
|	**Cr**	**52**	**0.440**	ug/L	0.008	1	10103	15429	3	Standard
⌊	**Cr**	**53**	**1.137**	ug/L	0.039	3	90	1900	3	Standard
⌈>	**Ge**	**72**		ug/L			32698	27739	0	KED
|	**Ni**	**60**	**1.356**	ug/L	0.067	4	3	1811	5	KED
|	**Ni**	**62**	**1.314**	ug/L	0.157	11	3	283	10	KED
|	**Cu**	**63**	**1.848**	ug/L	0.018	0	24	6912	0	KED
|	**Cu**	**65**	**1.781**	ug/L	0.011	0	17	3424	0	KED
|	**Zn**	**66**	**16.919**	ug/L	0.501	2	20	7776	2	KED
|	**Zn**	**67**	**15.634**	ug/L	0.215	1	3	1170	0	KED
⌊	**As**	**75**	**1.258**	ug/L	0.034	2	3	282	3	KED
	Y	**89**		ug/L			53020	48610	0	Standard
	Kr	**83**		ug/L			39	43	19	Standard
⌈>	**In-1**	**115**		ug/L			7060	5801	2	KED
|	**Cd**	**111**	**0.005**	ug/L	0.004	92	2	2	33	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.009	90	3	7	62	KED
⌈>	**In**	**115**		ug/L			494263	443792	0	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	64	53	62	14	Standard
|	**Ba**	**135**	**0.370**	ug/L	0.025	6	15	1916	6	Standard
⌊	**Ba**	**137**	**0.371**	ug/L	0.010	2	16	3427	3	Standard
⌈>	**Tb**	**159**		ug/L			184968	173759	1	Standard
⌊	**Pb**	**208**	**0.116**	ug/L	0.001	1	252	9874	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:33:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	24223	2	Standard
⌈>	**Sc**	**45**		ug/L			566891	575088	3	Standard
|	**Cr**	**52**	**-0.007**	ug/L	0.012	171	10103	10143	3	Standard
⌊	**Cr**	**53**	**0.005**	ug/L	0.011	218	90	100	18	Standard
⌈>	**Ge**	**72**		ug/L			32698	30306	11	KED
|	**Ni**	**60**	**0.002**	ug/L	0.002	106	3	6	56	KED
|	**Ni**	**62**	**-0.008**	ug/L	0.004	58	3	1	86	KED
|	**Cu**	**63**	**0.004**	ug/L	0.003	73	24	36	26	KED
|	**Cu**	**65**	**0.003**	ug/L	0.003	113	17	21	26	KED
|	**Zn**	**66**	**0.070**	ug/L	0.009	13	20	54	19	KED
|	**Zn**	**67**	**0.035**	ug/L	0.010	28	3	6	17	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.002	52	3	1	25	KED
	Y	**89**		ug/L			53020	52486	2	Standard
	Kr	**83**		ug/L			39	40	9	Standard
⌈>	**In-1**	**115**		ug/L			7060	6912	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.002	35	2	0	86	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.003	164	3	1	103	KED
⌈>	**In**	**115**		ug/L			494263	502957	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	187	53	45	43	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.001	180	15	19	34	Standard
⌊	**Ba**	**137**	**0.003**	ug/L	0.001	33	16	49	21	Standard
⌈>	**Tb**	**159**		ug/L			184968	186751	0	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.000	10	252	622	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0374-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:40:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26311	27470	2	Standard
>	Sc	45		ug/L			566891	535366	2	Standard
	Cr	52	1.485	ug/L	0.027	1	10103	30025	1	Standard
	Cr	53	2.427	ug/L	0.053	2	90	4007	4	Standard
>	Ge	72		ug/L			32698	26716	2	KED
	Ni	60	0.991	ug/L	0.067	6	3	1276	8	KED
	Ni	62	0.904	ug/L	0.041	4	3	188	2	KED
	Cu	63	1.735	ug/L	0.003	0	24	6252	2	KED
	Cu	65	1.743	ug/L	0.055	3	17	3228	5	KED
	Zn	66	1.685	ug/L	0.077	4	20	761	6	KED
	Zn	67	2.401	ug/L	0.167	6	3	175	8	KED
	As	75	0.727	ug/L	0.067	9	3	158	8	KED
	Y	89		ug/L			53020	49651	1	Standard
	Kr	83		ug/L			39	38	15	Standard
>	In-1	115		ug/L			7060	5871	1	KED
	Cd	111	0.008	ug/L	0.007	86	2	3	41	KED
	Cd	114	0.009	ug/L	0.009	96	3	7	63	KED
>	In	115		ug/L			494263	457235	0	Standard
	Ag	107	-0.000	ug/L	0.001	375	53	46	22	Standard
	Ba	135	19.449	ug/L	0.234	1	15	103026	0	Standard
	Ba	137	19.409	ug/L	0.370	1	16	183823	1	Standard
>	Tb	159		ug/L			184968	175956	0	Standard
	Pb	208	0.110	ug/L	0.002	1	252	9480	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:44:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	24303	5	Standard
⌈>	**Sc**	**45**		ug/L			566891	576791	3	Standard
|	**Cr**	**52**	**0.036**	ug/L	0.027	76	10103	10807	3	Standard
⌊	**Cr**	**53**	**0.024**	ug/L	0.004	15	90	133	5	Standard
⌈>	**Ge**	**72**		ug/L			32698	33136	1	KED
|	**Ni**	**60**	**0.001**	ug/L	0.002	203	3	5	66	KED
|	**Ni**	**62**	**-0.000**	ug/L	0.009	6668	3	3	69	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.001	138	24	20	24	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	284	17	15	37	KED
|	**Zn**	**66**	**0.053**	ug/L	0.010	18	20	50	9	KED
|	**Zn**	**67**	**0.042**	ug/L	0.022	52	3	7	25	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.006	153	3	2	68	KED
	Y	**89**		ug/L			53020	52970	2	Standard
	Kr	**83**		ug/L			39	34	8	Standard
⌈>	**In-1**	**115**		ug/L			7060	6842	2	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.007	143	2	0	173	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.002	57	3	1	90	KED
⌈>	**In**	**115**		ug/L			494263	506336	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	21	53	30	18	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.001	49	15	26	21	Standard
⌊	**Ba**	**137**	**0.003**	ug/L	0.001	35	16	48	23	Standard
⌈>	**Tb**	**159**		ug/L			184968	187814	2	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	5	252	556	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:48:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	24269	4	Standard
⌈>	**Sc**	**45**		ug/L			566891	590553	1	Standard
|	**Cr**	**52**	**51.066**	ug/L	0.308	0	10103	787666	1	Standard
⌊	**Cr**	**53**	**49.455**	ug/L	0.522	1	90	88228	1	Standard
⌈>	**Ge**	**72**		ug/L			32698	33288	2	KED
|	**Ni**	**60**	**49.520**	ug/L	1.070	2	3	79212	1	KED
|	**Ni**	**62**	**50.158**	ug/L	1.195	2	3	12858	0	KED
|	**Cu**	**63**	**50.304**	ug/L	2.007	3	24	225023	1	KED
|	**Cu**	**65**	**50.399**	ug/L	1.418	2	17	115756	1	KED
|	**Zn**	**66**	**51.639**	ug/L	1.107	2	20	28433	1	KED
|	**Zn**	**67**	**50.767**	ug/L	0.397	0	3	4551	1	KED
⌊	**As**	**75**	**49.807**	ug/L	1.104	2	3	13296	0	KED
	Y	**89**		ug/L			53020	54784	0	Standard
	Kr	**83**		ug/L			39	47	4	Standard
⌈>	**In-1**	**115**		ug/L			7060	6811	3	KED
|	**Cd**	**111**	**51.475**	ug/L	1.428	2	2	12706	0	KED
⌊	**Cd**	**114**	**51.093**	ug/L	1.398	2	3	32450	1	KED
⌈>	**In**	**115**		ug/L			494263	508399	2	Standard
|	**Ag**	**107**	**48.081**	ug/L	1.462	3	53	803607	0	Standard
|	**Ba**	**135**	**48.411**	ug/L	0.773	1	15	285047	1	Standard
⌊	**Ba**	**137**	**48.840**	ug/L	0.572	1	16	514273	2	Standard
⌈>	**Tb**	**159**		ug/L			184968	194510	1	Standard
⌊	**Pb**	**208**	**52.796**	ug/L	1.254	2	252	4913375	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 19:56:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	23676	7	Standard
⌈>	**Sc**	**45**		ug/L			566891	595773	0	Standard
|	**Cr**	**52**	**-0.041**	ug/L	0.018	43	10103	9984	3	Standard
⌊	**Cr**	**53**	**-0.018**	ug/L	0.005	27	90	63	14	Standard
⌈>	**Ge**	**72**		ug/L			32698	32613	1	KED
|	**Ni**	**60**	**0.000**	ug/L	0.001	345	3	4	49	KED
|	**Ni**	**62**	**0.000**	ug/L	0.005	5394	3	3	34	KED
|	**Cu**	**63**	**0.002**	ug/L	0.003	144	24	33	39	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.002	574	17	16	24	KED
|	**Zn**	**66**	**-0.015**	ug/L	0.002	15	20	12	8	KED
|	**Zn**	**67**	**0.015**	ug/L	0.045	306	3	5	78	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.004	298	3	2	33	KED
	Y	**89**		ug/L			53020	54754	2	Standard
	Kr	**83**		ug/L			39	36	18	Standard
⌈>	**In-1**	**115**		ug/L			7060	7291	3	KED
|	**Cd**	**111**	**0.001**	ug/L	0.009	818	2	2	94	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.001	91	3	4	26	KED
⌈>	**In**	**115**		ug/L			494263	530983	2	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.001	69	53	74	16	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.001	164	15	12	45	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	103	16	31	44	Standard
⌈>	**Tb**	**159**		ug/L			184968	189359	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	20	252	351	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 20:21:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26311	30742	2	Standard
⌈>	**Sc**	**45**		ug/L			566891	624857	1	Standard
|	**Cr**	**52**	**0.084**	ug/L	0.034	40	10103	12489	5	Standard
⌊	**Cr**	**53**	**0.132**	ug/L	0.039	29	90	350	22	Standard
⌈>	**Ge**	**72**		ug/L			32698	35356	3	KED
|	**Ni**	**60**	**0.546**	ug/L	0.226	41	3	922	37	KED
|	**Ni**	**62**	**0.552**	ug/L	0.142	25	3	153	22	KED
|	**Cu**	**63**	**0.023**	ug/L	0.003	11	24	133	9	KED
|	**Cu**	**65**	**0.022**	ug/L	0.011	48	17	72	36	KED
|	**Zn**	**66**	**0.601**	ug/L	0.108	17	20	372	12	KED
|	**Zn**	**67**	**0.587**	ug/L	0.108	18	3	59	13	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.003	102	3	2	26	KED
	Y	**89**		ug/L			53020	55653	0	Standard
	Kr	**83**		ug/L			39	54	22	Standard
⌈>	**In-1**	**115**		ug/L			7060	7908	3	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.007	242	2	1	124	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	386	3	4	68	KED
⌈>	**In**	**115**		ug/L			494263	523603	3	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	196	53	64	19	Standard
|	**Ba**	**135**	**0.121**	ug/L	0.027	22	15	751	23	Standard
⌊	**Ba**	**137**	**0.118**	ug/L	0.013	11	16	1298	13	Standard
⌈>	**Tb**	**159**		ug/L			184968	191054	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	7	252	724	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 20:26:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				27881	1	Standard
⌈>	**Sc**	**45**		ug/L				600447	1	Standard
|	**Cr**	**52**		ug/L				10860	1	Standard
⌊	**Cr**	**53**		ug/L				113	5	Standard
⌈>	**Ge**	**72**		ug/L				35776	2	KED
|	**Ni**	**60**		ug/L				145	17	KED
|	**Ni**	**62**		ug/L				28	29	KED
|	**Cu**	**63**		ug/L				53	12	KED
|	**Cu**	**65**		ug/L				29	13	KED
|	**Zn**	**66**		ug/L				87	12	KED
|	**Zn**	**67**		ug/L				19	11	KED
⌊	**As**	**75**		ug/L				2	44	KED
	Y	**89**		ug/L				55660	0	Standard
	Kr	**83**		ug/L				44	13	Standard
⌈>	**In-1**	**115**		ug/L				7587	4	KED
|	**Cd**	**111**		ug/L				4	13	KED
⌊	**Cd**	**114**		ug/L				1	106	KED
⌈>	**In**	**115**		ug/L				519229	3	Standard
⌊	**Ag**	**107**		ug/L				33	13	Standard
⌈>	**Tb**	**159**		ug/L				190542	1	Standard
⌊	**Pb**	**208**		ug/L				524	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 20:30:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	29050	1	Standard
⌈>	**Sc**	**45**		ug/L			600447	626146	0	Standard
|	**Cr**	**52**	**49.167**	ug/L	0.927	1	10860	804779	2	Standard
⌊	**Cr**	**53**	**49.187**	ug/L	0.914	1	113	93067	2	Standard
⌈>	**Ge**	**72**		ug/L			35776	35306	0	KED
|	**Ni**	**60**	**48.708**	ug/L	1.092	2	145	82805	2	KED
|	**Ni**	**62**	**48.519**	ug/L	1.369	2	28	13221	2	KED
|	**Cu**	**63**	**49.493**	ug/L	0.730	1	53	234973	1	KED
|	**Cu**	**65**	**49.388**	ug/L	0.330	0	29	120371	1	KED
|	**Zn**	**66**	**50.574**	ug/L	1.281	2	87	29610	2	KED
|	**Zn**	**67**	**50.034**	ug/L	0.468	0	19	4773	1	KED
⌊	**As**	**75**	**49.621**	ug/L	0.526	1	2	14052	0	KED
	Y	**89**		ug/L			55660	56069	3	Standard
	Kr	**83**		ug/L			44	62	6	Standard
⌈>	**In-1**	**115**		ug/L			7587	7367	0	KED
|	**Cd**	**111**	**50.587**	ug/L	0.561	1	4	13516	1	KED
⌊	**Cd**	**114**	**50.851**	ug/L	0.642	1	1	34948	1	KED
⌈>	**In**	**115**		ug/L			519229	515799	3	Standard
⌊	**Ag**	**107**	**47.565**	ug/L	1.435	3	33	806664	2	Standard
⌈>	**Tb**	**159**		ug/L			190542	197846	0	Standard
⌊	**Pb**	**208**	**49.588**	ug/L	0.492	0	524	4695653	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 20:37:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	30403	3	Standard
⌈>	**Sc**	**45**		ug/L			600447	612688	0	Standard
|	**Cr**	**52**	**-0.028**	ug/L	0.012	42	10860	10643	1	Standard
⌊	**Cr**	**53**	**-0.019**	ug/L	0.007	33	113	80	16	Standard
⌈>	**Ge**	**72**		ug/L			35776	35407	2	KED
|	**Ni**	**60**	**-0.008**	ug/L	0.005	61	145	130	8	KED
|	**Ni**	**62**	**-0.052**	ug/L	0.015	29	28	13	28	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	24	53	64	6	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.004	251	29	25	35	KED
|	**Zn**	**66**	**-0.024**	ug/L	0.007	30	87	72	4	KED
|	**Zn**	**67**	**-0.091**	ug/L	0.043	47	19	10	36	KED
⌊	**As**	**75**	**0.010**	ug/L	0.003	36	2	4	22	KED
	Y	**89**		ug/L			55660	55266	2	Standard
	Kr	**83**		ug/L			44	45	19	Standard
⌈>	**In-1**	**115**		ug/L			7587	7638	0	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.000	0	4	1		KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.001	80	1	3	34	KED
⌈>	**In**	**115**		ug/L			519229	538099	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	16	33	101	10	Standard
⌈>	**Tb**	**159**		ug/L			190542	193312	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	34	524	610	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0578-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 20:44:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	40138	4	Standard
⌈>	Sc	45		ug/L			600447	621245	1	Standard
|	Cr	52	0.003	ug/L	0.001	45	10860	11280	1	Standard
⌊	Cr	53	0.007	ug/L	0.004	47	113	131	4	Standard
⌈>	Ge	72		ug/L			35776	35226	1	KED
|	Ni	60	0.016	ug/L	0.020	127	145	170	19	KED
|	Ni	62	0.011	ug/L	0.039	354	28	31	33	KED
|	Cu	63	0.003	ug/L	0.003	102	53	67	23	KED
|	Cu	65	0.007	ug/L	0.002	30	29	46	11	KED
|	Zn	66	0.068	ug/L	0.015	22	87	125	6	KED
|	Zn	67	0.057	ug/L	0.101	177	19	24	38	KED
⌊	As	75	-0.003	ug/L	0.003	105	2	1	78	KED
	Y	89		ug/L			55660	55969	0	Standard
	Kr	83		ug/L			44	39	14	Standard
⌈>	In-1	115		ug/L			7587	7906	1	KED
|	Cd	111	-0.007	ug/L	0.008	103	4	2	98	KED
⌊	Cd	114	0.002	ug/L	0.005	193	1	3	93	KED
⌈>	In	115		ug/L			519229	537592	1	Standard
⌊	Ag	107	0.005	ug/L	0.004	76	33	119	54	Standard
⌈>	Tb	159		ug/L			190542	199925	0	Standard
⌊	Pb	208	0.006	ug/L	0.005	84	524	1100	41	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0578-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 20:48:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	37980	2	Standard
⌈>	Sc	45		ug/L			600447	626934	1	Standard
|	Cr	52	25.864	ug/L	0.160	0	10860	429230	1	Standard
⌊	Cr	53	25.501	ug/L	0.209	0	113	48367	2	Standard
⌈>	Ge	72		ug/L			35776	35083	0	KED
|	Ni	60	26.314	ug/L	0.807	3	145	44509	2	KED
|	Ni	62	25.633	ug/L	0.562	2	28	6954	1	KED
|	Cu	63	27.020	ug/L	0.634	2	53	127486	1	KED
|	Cu	65	27.020	ug/L	0.828	3	29	65447	2	KED
|	Zn	66	81.453	ug/L	3.084	3	87	47326	3	KED
|	Zn	67	77.935	ug/L	0.929	1	19	7377	0	KED
⌊	As	75	24.974	ug/L	0.394	1	2	7029	1	KED
	Y	89		ug/L			55660	56955	1	Standard
	Kr	83		ug/L			44	48	19	Standard
⌈>	In-1	115		ug/L			7587	7518	2	KED
|	Cd	111	25.173	ug/L	0.343	1	4	6865	2	KED
⌊	Cd	114	25.138	ug/L	0.825	3	1	17623	1	KED
⌈>	In	115		ug/L			519229	527783	1	Standard
⌊	Ag	107	25.955	ug/L	0.935	3	33	450479	2	Standard
⌈>	Tb	159		ug/L			190542	197638	2	Standard
⌊	Pb	208	26.529	ug/L	0.826	3	524	2508791	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-BLK1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 20:53:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	37385	3	Standard
⌈>	Sc	45		ug/L			600447	615099	2	Standard
|	Cr	52	0.015	ug/L	0.013	88	10860	11362	1	Standard
⌊	Cr	53	0.002	ug/L	0.005	210	113	120	5	Standard
⌈>	Ge	72		ug/L			35776	34993	1	KED
|	Ni	60	0.065	ug/L	0.008	12	145	250	4	KED
|	Ni	62	0.021	ug/L	0.042	200	28	33	34	KED
|	Cu	63	0.010	ug/L	0.004	39	53	97	17	KED
|	Cu	65	0.009	ug/L	0.003	34	29	51	16	KED
|	Zn	66	0.232	ug/L	0.032	13	87	219	8	KED
|	Zn	67	0.207	ug/L	0.030	14	19	38	7	KED
⌊	As	75	0.001	ug/L	0.009	1125	2	2	105	KED
	Y	89		ug/L			55660	55904	3	Standard
	Kr	83		ug/L			44	43	15	Standard
⌈>	In-1	115		ug/L			7587	7454	2	KED
|	Cd	111	-0.002	ug/L	0.002	84	4	3	15	KED
⌊	Cd	114	0.003	ug/L	0.002	75	1	3	40	KED
⌈>	In	115		ug/L			519229	537278	1	Standard
⌊	Ag	107	0.005	ug/L	0.002	53	33	116	35	Standard
⌈>	Tb	159		ug/L			190542	195405	3	Standard
⌊	Pb	208	0.006	ug/L	0.001	16	524	1060	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-BS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 20:57:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	36094	2	Standard
⌈>	Sc	45		ug/L			600447	572755	10	Standard
|	Cr	52	27.852	ug/L	2.315	8	10860	419085	4	Standard
⌊	Cr	53	27.110	ug/L	1.969	7	113	46728	4	Standard
⌈>	Ge	72		ug/L			35776	35198	0	KED
|	Ni	60	25.504	ug/L	0.222	0	145	43291	1	KED
|	Ni	62	25.791	ug/L	0.614	2	28	7019	1	KED
|	Cu	63	26.575	ug/L	0.425	1	53	125806	1	KED
|	Cu	65	26.358	ug/L	0.294	1	29	64056	1	KED
|	Zn	66	79.691	ug/L	1.477	1	87	46463	1	KED
|	Zn	67	76.937	ug/L	1.501	1	19	7307	2	KED
⌊	As	75	24.014	ug/L	0.245	1	2	6781	0	KED
	Y	89		ug/L			55660	53298	9	Standard
	Kr	83		ug/L			44	53	40	Standard
⌈>	In-1	115		ug/L			7587	7340	4	KED
|	Cd	111	25.290	ug/L	0.565	2	4	6730	1	KED
⌊	Cd	114	25.211	ug/L	0.729	2	1	17251	1	KED
⌈>	In	115		ug/L			519229	495969	9	Standard
⌊	Ag	107	26.638	ug/L	2.172	8	33	432404	2	Standard
⌈>	Tb	159		ug/L			190542	186305	10	Standard
⌊	Pb	208	27.713	ug/L	2.476	8	524	2455977	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:02:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	49327	2	Standard
⌈>	Sc	45		ug/L			600447	731706	2	Standard
|	Cr	52	12.124	ug/L	0.147	1	10860	241826	1	Standard
⌊	Cr	53	12.156	ug/L	0.116	0	113	26975	1	Standard
⌈>	Ge	72		ug/L			35776	34902	1	KED
|	Ni	60	10.919	ug/L	0.231	2	145	18456	0	KED
|	Ni	62	10.987	ug/L	0.493	4	28	2979	2	KED
|	Cu	63	24.875	ug/L	0.831	3	53	116737	1	KED
|	Cu	65	24.816	ug/L	0.603	2	29	59790	0	KED
|	Zn	66	53.146	ug/L	1.002	1	87	30749	0	KED
|	Zn	67	51.278	ug/L	1.131	2	19	4834	0	KED
⌊	As	75	5.436	ug/L	0.145	2	2	1523	2	KED
	Y	89		ug/L			55660	260380	0	Standard
	Kr	83		ug/L			44	76	23	Standard
⌈>	In-1	115		ug/L			7587	7321	2	KED
|	Cd	111	0.108	ug/L	0.008	7	4	32	8	KED
⌊	Cd	114	0.152	ug/L	0.016	10	1	105	10	KED
⌈>	In	115		ug/L			519229	519189	4	Standard
⌊	Ag	107	0.100	ug/L	0.001	0	33	1748	4	Standard
⌈>	Tb	159		ug/L			190542	217094	0	Standard
⌊	Pb	208	9.840	ug/L	0.276	2	524	1022869	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-DUP2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:07:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	48948	3	Standard
⌈>	Sc	45		ug/L			600447	717992	2	Standard
|	Cr	52	12.278	ug/L	0.108	0	10860	240147	1	Standard
⌊	Cr	53	12.202	ug/L	0.281	2	113	26574	3	Standard
⌈>	Ge	72		ug/L			35776	34652	1	KED
|	Ni	60	11.215	ug/L	0.148	1	145	18817	0	KED
|	Ni	62	10.981	ug/L	0.055	0	28	2958	1	KED
|	Cu	63	24.789	ug/L	0.125	0	53	115536	1	KED
|	Cu	65	25.011	ug/L	0.663	2	29	59828	1	KED
|	Zn	66	52.626	ug/L	0.823	1	87	30233	1	KED
|	Zn	67	51.295	ug/L	1.023	1	19	4802	2	KED
⌊	As	75	5.303	ug/L	0.187	3	2	1475	2	KED
	Y	89		ug/L			55660	264619	1	Standard
	Kr	83		ug/L			44	89	9	Standard
⌈>	In-1	115		ug/L			7587	7338	4	KED
|	Cd	111	0.127	ug/L	0.015	11	4	37	6	KED
⌊	Cd	114	0.124	ug/L	0.007	5	1	86	9	KED
⌈>	In	115		ug/L			519229	507795	1	Standard
⌊	Ag	107	0.096	ug/L	0.003	3	33	1642	4	Standard
⌈>	Tb	159		ug/L			190542	217783	1	Standard
⌊	Pb	208	9.267	ug/L	0.055	0	524	966473	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-MS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:12:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	43798	4	Standard
>	Sc	45		ug/L			600447	712380	2	Standard
	Cr	52	33.848	ug/L	0.696	2	10860	634231	2	Standard
	Cr	53	33.218	ug/L	0.454	1	113	71537	1	Standard
>	Ge	72		ug/L			35776	34769	1	KED
	Ni	60	35.480	ug/L	0.262	0	145	59435	1	KED
	Ni	62	35.792	ug/L	0.375	1	28	9613	2	KED
	Cu	63	49.044	ug/L	0.181	0	53	229305	0	KED
	Cu	65	49.587	ug/L	0.401	0	29	119023	1	KED
	Zn	66	127.164	ug/L	1.063	0	87	73182	0	KED
	Zn	67	123.226	ug/L	4.628	3	19	11545	2	KED
	As	75	28.650	ug/L	0.300	1	2	7990	0	KED
	Y	89		ug/L			55660	263207	0	Standard
	Kr	83		ug/L			44	70	9	Standard
>	In-1	115		ug/L			7587	7271	0	KED
	Cd	111	24.050	ug/L	0.279	1	4	6344	0	KED
	Cd	114	24.062	ug/L	0.530	2	1	16324	2	KED
>	In	115		ug/L			519229	498952	2	Standard
	Ag	107	20.136	ug/L	0.422	2	33	330380	0	Standard
>	Tb	159		ug/L			190542	217190	0	Standard
	Pb	208	31.824	ug/L	0.401	1	524	3308209	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-MSD2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:16:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	42886	5	Standard
>	Sc	45		ug/L			600447	713189	2	Standard
	Cr	52	32.799	ug/L	0.728	2	10860	615560	1	Standard
	Cr	53	32.872	ug/L	0.464	1	113	70870	1	Standard
>	Ge	72		ug/L			35776	34920	2	KED
	Ni	60	34.594	ug/L	0.175	0	145	58202	1	KED
	Ni	62	34.631	ug/L	1.105	3	28	9337	1	KED
	Cu	63	47.676	ug/L	1.144	2	53	223798	0	KED
	Cu	65	47.132	ug/L	2.056	4	29	113539	2	KED
	Zn	66	125.287	ug/L	2.668	2	87	72401	1	KED
	Zn	67	124.246	ug/L	1.881	1	19	11692	1	KED
	As	75	27.961	ug/L	0.434	1	2	7831	1	KED
	Y	89		ug/L			55660	247812	1	Standard
	Kr	83		ug/L			44	69	20	Standard
>	In-1	115		ug/L			7587	7305	2	KED
	Cd	111	24.552	ug/L	0.448	1	4	6504	0	KED
	Cd	114	24.586	ug/L	1.060	4	1	16749	3	KED
>	In	115		ug/L			519229	504337	3	Standard
	Ag	107	17.259	ug/L	0.157	0	33	286300	2	Standard
>	Tb	159		ug/L			190542	221250	1	Standard
	Pb	208	30.874	ug/L	0.352	1	524	3269435	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0687-PS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:21:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	48757	4	Standard
⌈>	**Sc**	**45**		ug/L			600447	729719	3	Standard
|	**Cr**	**52**	**33.107**	ug/L	0.489	1	10860	635718	2	Standard
⌊	**Cr**	**53**	**32.943**	ug/L	0.273	0	113	72672	2	Standard
⌈>	**Ge**	**72**		ug/L			35776	34959	1	KED
|	**Ni**	**60**	**36.373**	ug/L	0.157	0	145	61261	1	KED
|	**Ni**	**62**	**36.640**	ug/L	0.186	0	28	9894	1	KED
|	**Cu**	**63**	**49.754**	ug/L	0.930	1	53	233872	1	KED
|	**Cu**	**65**	**49.585**	ug/L	0.881	1	29	119664	2	KED
|	**Zn**	**66**	**132.457**	ug/L	3.739	2	87	76640	2	KED
|	**Zn**	**67**	**126.800**	ug/L	2.433	1	19	11947	1	KED
⌊	**As**	**75**	**30.260**	ug/L	0.577	1	2	8485	0	KED
	Y	**89**		ug/L			55660	274282	1	Standard
	Kr	**83**		ug/L			44	81	11	Standard
⌈>	**In-1**	**115**		ug/L			7587	7422	1	KED
|	**Cd**	**111**	**25.084**	ug/L	0.224	0	4	6753	0	KED
⌊	**Cd**	**114**	**25.290**	ug/L	0.359	1	1	17510	0	KED
⌈>	**In**	**115**		ug/L			519229	501845	2	Standard
⌊	**Ag**	**107**	**24.345**	ug/L	0.418	1	33	401777	1	Standard
⌈>	**Tb**	**159**		ug/L			190542	220281	1	Standard
⌊	**Pb**	**208**	**32.333**	ug/L	0.276	0	524	3409321	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:25:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	28733	3	Standard
⌈>	**Sc**	**45**		ug/L			600447	603287	2	Standard
|	**Cr**	**52**	**-0.017**	ug/L	0.014	80	10860	10646	3	Standard
⌊	**Cr**	**53**	**0.002**	ug/L	0.010	424	113	118	17	Standard
⌈>	**Ge**	**72**		ug/L			35776	35096	0	KED
|	**Ni**	**60**	**0.102**	ug/L	0.008	7	145	314	4	KED
|	**Ni**	**62**	**0.112**	ug/L	0.027	23	28	58	12	KED
|	**Cu**	**63**	**0.004**	ug/L	0.001	33	53	71	8	KED
|	**Cu**	**65**	**0.005**	ug/L	0.009	160	29	41	51	KED
|	**Zn**	**66**	**0.017**	ug/L	0.010	60	87	95	6	KED
|	**Zn**	**67**	**-0.043**	ug/L	0.035	81	19	15	21	KED
⌊	**As**	**75**	**0.000**	ug/L	0.003	2492	2	2	44	KED
	Y	**89**		ug/L			55660	53844	3	Standard
	Kr	**83**		ug/L			44	50	7	Standard
⌈>	**In-1**	**115**		ug/L			7587	7525	0	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.002	62	4	3	17	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.006	149	1	4	90	KED
⌈>	**In**	**115**		ug/L			519229	512731	3	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	11	33	68	8	Standard
⌈>	**Tb**	**159**		ug/L			190542	193475	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	135	524	539	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:29:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	27927	5	Standard
⌈>	**Sc**	**45**		ug/L			600447	636370	1	Standard
|	**Cr**	**52**	**49.675**	ug/L	0.721	1	10860	826310	2	Standard
⌊	**Cr**	**53**	**48.401**	ug/L	0.534	1	113	93080	2	Standard
⌈>	**Ge**	**72**		ug/L			35776	34775	2	KED
|	**Ni**	**60**	**49.673**	ug/L	0.162	0	145	83169	2	KED
|	**Ni**	**62**	**50.020**	ug/L	0.731	1	28	13424	2	KED
|	**Cu**	**63**	**50.381**	ug/L	1.600	3	53	235511	1	KED
|	**Cu**	**65**	**49.220**	ug/L	1.166	2	29	118121	0	KED
|	**Zn**	**66**	**51.392**	ug/L	1.224	2	87	29629	2	KED
|	**Zn**	**67**	**52.114**	ug/L	1.313	2	19	4897	4	KED
⌊	**As**	**75**	**50.182**	ug/L	0.760	1	2	13995	0	KED
	Y	**89**		ug/L			55660	56443	3	Standard
	Kr	**83**		ug/L			44	49	15	Standard
⌈>	**In-1**	**115**		ug/L			7587	7362	1	KED
|	**Cd**	**111**	**49.881**	ug/L	1.210	2	4	13314	1	KED
⌊	**Cd**	**114**	**50.034**	ug/L	1.724	3	1	34349	1	KED
⌈>	**In**	**115**		ug/L			519229	514927	3	Standard
⌊	**Ag**	**107**	**48.588**	ug/L	2.233	4	33	822157	2	Standard
⌈>	**Tb**	**159**		ug/L			190542	200300	2	Standard
⌊	**Pb**	**208**	**50.450**	ug/L	1.358	2	524	4835024	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:37:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	26930	5	Standard
⌈>	**Sc**	**45**		ug/L			600447	613915	1	Standard
|	**Cr**	**52**	**-0.009**	ug/L	0.004	42	10860	10962	2	Standard
⌊	**Cr**	**53**	**0.011**	ug/L	0.007	64	113	135	7	Standard
⌈>	**Ge**	**72**		ug/L			35776	34316	3	KED
|	**Ni**	**60**	**0.071**	ug/L	0.027	37	145	257	19	KED
|	**Ni**	**62**	**0.060**	ug/L	0.053	89	28	43	33	KED
|	**Cu**	**63**	**0.023**	ug/L	0.025	111	53	158	76	KED
|	**Cu**	**65**	**0.023**	ug/L	0.027	118	29	82	79	KED
|	**Zn**	**66**	**-0.028**	ug/L	0.029	104	87	68	26	KED
|	**Zn**	**67**	**-0.033**	ug/L	0.051	155	19	15	30	KED
⌊	**As**	**75**	**0.014**	ug/L	0.024	172	2	6	112	KED
	Y	**89**		ug/L			55660	54932	0	Standard
	Kr	**83**		ug/L			44	48	18	Standard
⌈>	**In-1**	**115**		ug/L			7587	7637	1	KED
|	**Cd**	**111**	**-0.009**	ug/L	0.007	75	4	1	124	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.003	3557	1	1	113	KED
⌈>	**In**	**115**		ug/L			519229	519681	1	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.000	6	33	78	5	Standard
⌈>	**Tb**	**159**		ug/L			190542	193231	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	30	524	613	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:41:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	45032	3	Standard
>	Sc	45		ug/L			600447	742114	2	Standard
	Cr	52	15.234	ug/L	0.188	1	10860	304818	3	Standard
	Cr	53	14.955	ug/L	0.198	1	113	33634	2	Standard
>	Ge	72		ug/L			35776	34523	2	KED
	Ni	60	13.744	ug/L	0.476	3	145	22932	0	KED
	Ni	62	13.777	ug/L	0.715	5	28	3687	2	KED
	Cu	63	35.145	ug/L	1.144	3	53	163083	1	KED
	Cu	65	34.406	ug/L	1.355	3	29	81948	1	KED
	Zn	66	67.279	ug/L	2.612	3	87	38459	1	KED
	Zn	67	66.917	ug/L	3.870	5	19	6229	3	KED
	As	75	7.207	ug/L	0.238	3	2	1996	1	KED
	Y	89		ug/L			55660	305809	2	Standard
	Kr	83		ug/L			44	67	10	Standard
>	In-1	115		ug/L			7587	7350	2	KED
	Cd	111	0.179	ug/L	0.026	14	4	51	12	KED
	Cd	114	0.231	ug/L	0.005	2	1	160	4	KED
>	In	115		ug/L			519229	505016	3	Standard
	Ag	107	0.154	ug/L	0.013	8	33	2584	4	Standard
>	Tb	159		ug/L			190542	223968	1	Standard
	Pb	208	14.203	ug/L	0.190	1	524	1522706	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:45:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	42622	4	Standard
>	Sc	45		ug/L			600447	690566	8	Standard
	Cr	52	15.019	ug/L	0.756	5	10860	279010	4	Standard
	Cr	53	14.873	ug/L	0.661	4	113	31049	4	Standard
>	Ge	72		ug/L			35776	34971	0	KED
	Ni	60	12.825	ug/L	0.224	1	145	21699	1	KED
	Ni	62	13.074	ug/L	0.636	4	28	3549	5	KED
	Cu	63	30.875	ug/L	0.469	1	53	145218	1	KED
	Cu	65	31.639	ug/L	0.368	1	29	76384	0	KED
	Zn	66	60.680	ug/L	0.755	1	87	35170	1	KED
	Zn	67	58.931	ug/L	1.790	3	19	5565	3	KED
	As	75	6.862	ug/L	0.217	3	2	1927	3	KED
	Y	89		ug/L			55660	279514	1	Standard
	Kr	83		ug/L			44	93	4	Standard
>	In-1	115		ug/L			7587	7541	3	KED
	Cd	111	0.206	ug/L	0.031	15	4	60	12	KED
	Cd	114	0.210	ug/L	0.029	13	1	149	12	KED
>	In	115		ug/L			519229	467677	10	Standard
	Ag	107	0.158	ug/L	0.011	6	33	2457	6	Standard
>	Tb	159		ug/L			190542	208844	7	Standard
	Pb	208	14.122	ug/L	0.952	6	524	1406990	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:50:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	42039	1	Standard
⌈>	Sc	45		ug/L			600447	722307	1	Standard
|	Cr	52	15.403	ug/L	0.058	0	10860	299782	1	Standard
⌊	Cr	53	15.134	ug/L	0.260	1	113	33122	1	Standard
⌈>	Ge	72		ug/L			35776	34398	1	KED
|	Ni	60	13.305	ug/L	0.513	3	145	22132	2	KED
|	Ni	62	13.397	ug/L	0.866	6	28	3575	5	KED
|	Cu	63	36.367	ug/L	0.976	2	53	168193	1	KED
|	Cu	65	36.194	ug/L	1.342	3	29	85923	2	KED
|	Zn	66	67.215	ug/L	1.956	2	87	38301	1	KED
|	Zn	67	67.347	ug/L	2.218	3	19	6251	2	KED
⌊	As	75	8.338	ug/L	0.373	4	2	2301	3	KED
	Y	89		ug/L			55660	280878	1	Standard
	Kr	83		ug/L			44	83	13	Standard
⌈>	In-1	115		ug/L			7587	7122	1	KED
|	Cd	111	0.253	ug/L	0.034	13	4	69	11	KED
⌊	Cd	114	0.270	ug/L	0.039	14	1	180	15	KED
⌈>	In	115		ug/L			519229	504674	3	Standard
⌊	Ag	107	0.171	ug/L	0.006	3	33	2876	3	Standard
⌈>	Tb	159		ug/L			190542	219689	1	Standard
⌊	Pb	208	16.464	ug/L	0.545	3	524	1730980	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:54:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	42806	1	Standard
⌈>	Sc	45		ug/L			600447	716286	1	Standard
|	Cr	52	14.519	ug/L	0.159	1	10860	281010	2	Standard
⌊	Cr	53	14.343	ug/L	0.209	1	113	31134	0	Standard
⌈>	Ge	72		ug/L			35776	35309	1	KED
|	Ni	60	11.887	ug/L	0.160	1	145	20315	0	KED
|	Ni	62	12.515	ug/L	0.232	1	28	3432	3	KED
|	Cu	63	30.686	ug/L	0.194	0	53	145729	2	KED
|	Cu	65	30.856	ug/L	0.789	2	29	75198	0	KED
|	Zn	66	59.607	ug/L	0.519	0	87	34885	2	KED
|	Zn	67	59.174	ug/L	0.672	1	19	5643	3	KED
⌊	As	75	6.641	ug/L	0.158	2	2	1883	3	KED
	Y	89		ug/L			55660	284193	1	Standard
	Kr	83		ug/L			44	70	37	Standard
⌈>	In-1	115		ug/L			7587	7365	0	KED
|	Cd	111	0.162	ug/L	0.039	24	4	47	21	KED
⌊	Cd	114	0.184	ug/L	0.024	12	1	128	12	KED
⌈>	In	115		ug/L			519229	495838	1	Standard
⌊	Ag	107	0.144	ug/L	0.007	4	33	2379	5	Standard
⌈>	Tb	159		ug/L			190542	222154	1	Standard
⌊	Pb	208	13.638	ug/L	0.162	1	524	1450648	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 21:59:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	44599	4	Standard
>	Sc	45		ug/L			600447	731713	0	Standard
	Cr	52	14.739	ug/L	0.210	1	10860	291190	1	Standard
	Cr	53	14.638	ug/L	0.276	1	113	32460	2	Standard
>	Ge	72		ug/L			35776	35401	1	KED
	Ni	60	12.912	ug/L	0.463	3	145	22105	1	KED
	Ni	62	13.360	ug/L	0.173	1	28	3671	2	KED
	Cu	63	30.949	ug/L	0.224	0	53	147347	1	KED
	Cu	65	30.919	ug/L	0.887	2	29	75545	1	KED
	Zn	66	59.526	ug/L	1.559	2	87	34920	1	KED
	Zn	67	58.622	ug/L	1.849	3	19	5602	1	KED
	As	75	6.546	ug/L	0.025	0	2	1860	2	KED
	Y	89		ug/L			55660	287110	1	Standard
	Kr	83		ug/L			44	80	8	Standard
>	In-1	115		ug/L			7587	7523	1	KED
	Cd	111	0.226	ug/L	0.023	10	4	65	8	KED
	Cd	114	0.271	ug/L	0.051	18	1	192	19	KED
>	In	115		ug/L			519229	509267	1	Standard
	Ag	107	0.139	ug/L	0.004	2	33	2357	2	Standard
>	Tb	159		ug/L			190542	226516	2	Standard
	Pb	208	13.207	ug/L	0.260	1	524	1431982	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0578-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:03:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	45160	2	Standard
⌈>	Sc	45		ug/L			600447	709676	1	Standard
|	Cr	52	15.013	ug/L	0.150	0	10860	287439	2	Standard
⌊	Cr	53	14.978	ug/L	0.160	1	113	32210	0	Standard
⌈>	Ge	72		ug/L			35776	35230	1	KED
|	Ni	60	13.396	ug/L	0.331	2	145	22823	1	KED
|	Ni	62	13.330	ug/L	0.172	1	28	3645	2	KED
|	Cu	63	30.968	ug/L	0.110	0	53	146728	1	KED
|	Cu	65	31.310	ug/L	0.657	2	29	76161	2	KED
|	Zn	66	63.015	ug/L	0.738	1	87	36788	0	KED
|	Zn	67	62.204	ug/L	1.138	1	19	5916	2	KED
⌊	As	75	6.961	ug/L	0.186	2	2	1968	1	KED
	Y	89		ug/L			55660	283560	1	Standard
	Kr	83		ug/L			44	85	22	Standard
⌈>	In-1	115		ug/L			7587	7404	1	KED
|	Cd	111	0.232	ug/L	0.043	18	4	66	17	KED
⌊	Cd	114	0.233	ug/L	0.017	7	1	162	8	KED
⌈>	In	115		ug/L			519229	492481	0	Standard
⌊	Ag	107	0.145	ug/L	0.004	2	33	2386	3	Standard
⌈>	Tb	159		ug/L			190542	220224	3	Standard
⌊	Pb	208	13.158	ug/L	0.300	2	524	1386701	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0578-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:08:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	41520	3	Standard
>	Sc	45		ug/L			600447	717446	3	Standard
	Cr	52	33.556	ug/L	0.650	1	10860	633326	3	Standard
	Cr	53	33.648	ug/L	0.689	2	113	72972	2	Standard
>	Ge	72		ug/L			35776	35212	3	KED
	Ni	60	35.184	ug/L	2.100	5	145	59616	2	KED
	Ni	62	34.676	ug/L	1.662	4	28	9422	1	KED
	Cu	63	52.193	ug/L	2.020	3	53	246942	1	KED
	Cu	65	52.053	ug/L	2.137	4	29	126415	1	KED
	Zn	66	126.817	ug/L	6.484	5	87	73838	2	KED
	Zn	67	124.720	ug/L	2.442	1	19	11832	1	KED
	As	75	27.696	ug/L	0.850	3	2	7818	0	KED
	Y	89		ug/L			55660	271396	0	Standard
	Kr	83		ug/L			44	100	14	Standard
>	In-1	115		ug/L			7587	7455	2	KED
	Cd	111	22.716	ug/L	0.408	1	4	6142	1	KED
	Cd	114	22.248	ug/L	0.741	3	1	15469	2	KED
>	In	115		ug/L			519229	514419	4	Standard
	Ag	107	18.205	ug/L	0.801	4	33	307640	0	Standard
>	Tb	159		ug/L			190542	221393	0	Standard
	Pb	208	33.456	ug/L	0.468	1	524	3545238	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0578-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:12:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	44015	3	Standard
>	Sc	45		ug/L			600447	721052	3	Standard
	Cr	52	36.977	ug/L	0.616	1	10860	700011	2	Standard
	Cr	53	37.171	ug/L	1.010	2	113	80983	2	Standard
>	Ge	72		ug/L			35776	34237	2	KED
	Ni	60	39.106	ug/L	0.914	2	145	64469	0	KED
	Ni	62	38.644	ug/L	0.795	2	28	10214	0	KED
	Cu	63	57.815	ug/L	0.699	1	53	266134	1	KED
	Cu	65	57.115	ug/L	0.664	1	29	134960	1	KED
	Zn	66	142.699	ug/L	4.197	2	87	80822	0	KED
	Zn	67	135.117	ug/L	3.802	2	19	12463	1	KED
	As	75	30.878	ug/L	0.621	2	2	8478	0	KED
	Y	89		ug/L			55660	287252	1	Standard
	Kr	83		ug/L			44	95	12	Standard
>	In-1	115		ug/L			7587	7377	2	KED
	Cd	111	25.360	ug/L	0.541	2	4	6784	0	KED
	Cd	114	25.469	ug/L	0.366	1	1	17530	3	KED
>	In	115		ug/L			519229	497333	1	Standard
	Ag	107	19.764	ug/L	0.913	4	33	323142	2	Standard
>	Tb	159		ug/L			190542	219212	0	Standard
	Pb	208	37.388	ug/L	0.368	0	524	3923097	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLD0578-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:16:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	45372	6	Standard
⌈>	**Sc**	**45**		ug/L			600447	718540	2	Standard
|	**Cr**	**52**	**36.741**	ug/L	0.599	1	10860	693185	1	Standard
⌊	**Cr**	**53**	**36.056**	ug/L	0.837	2	113	78288	0	Standard
⌈>	**Ge**	**72**		ug/L			35776	34859	1	KED
|	**Ni**	**60**	**37.401**	ug/L	0.136	0	145	62811	1	KED
|	**Ni**	**62**	**38.589**	ug/L	0.944	2	28	10387	2	KED
|	**Cu**	**63**	**56.121**	ug/L	0.896	1	53	263033	0	KED
|	**Cu**	**65**	**55.252**	ug/L	1.012	1	29	132930	0	KED
|	**Zn**	**66**	**138.618**	ug/L	1.496	1	87	79980	1	KED
|	**Zn**	**67**	**132.100**	ug/L	4.039	3	19	12408	2	KED
⌊	**As**	**75**	**30.730**	ug/L	0.687	2	2	8591	0	KED
	Y	**89**		ug/L			55660	288018	2	Standard
	Kr	**83**		ug/L			44	80	8	Standard
⌈>	**In-1**	**115**		ug/L			7587	7491	3	KED
|	**Cd**	**111**	**24.290**	ug/L	0.743	3	4	6597	1	KED
⌊	**Cd**	**114**	**24.183**	ug/L	0.272	1	1	16899	2	KED
⌈>	**In**	**115**		ug/L			519229	508102	0	Standard
⌊	**Ag**	**107**	**24.891**	ug/L	0.312	1	33	416033	1	Standard
⌈>	**Tb**	**159**		ug/L			190542	220946	1	Standard
⌊	**Pb**	**208**	**37.236**	ug/L	0.193	0	524	3937864	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:21:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	27642	4	Standard
⌈>	**Sc**	**45**		ug/L			600447	603813	2	Standard
|	**Cr**	**52**	**-0.051**	ug/L	0.021	41	10860	10122	2	Standard
⌊	**Cr**	**53**	**-0.013**	ug/L	0.005	41	113	90	8	Standard
⌈>	**Ge**	**72**		ug/L			35776	35433	2	KED
|	**Ni**	**60**	**0.021**	ug/L	0.007	33	145	179	6	KED
|	**Ni**	**62**	**0.047**	ug/L	0.030	63	28	41	20	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	110	53	62	15	KED
|	**Cu**	**65**	**0.002**	ug/L	0.001	43	29	34	5	KED
|	**Zn**	**66**	**-0.045**	ug/L	0.015	32	87	60	13	KED
|	**Zn**	**67**	**-0.092**	ug/L	0.078	84	19	10	71	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.004	850	2	2	48	KED
	Y	**89**		ug/L			55660	56192	1	Standard
	Kr	**83**		ug/L			44	38	7	Standard
⌈>	**In-1**	**115**		ug/L			7587	7673	1	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.003	40	4	1	50	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.005	205	1	3	104	KED
⌈>	**In**	**115**		ug/L			519229	511235	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	5	33	62	0	Standard
⌈>	**Tb**	**159**		ug/L			190542	202248	1	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	102	524	535	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:25:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	27192	3	Standard
⌈>	**Sc**	**45**		ug/L			600447	608622	1	Standard
|	**Cr**	**52**	**50.684**	ug/L	0.378	0	10860	805976	1	Standard
⌊	**Cr**	**53**	**49.678**	ug/L	1.026	2	113	91340	1	Standard
⌈>	**Ge**	**72**		ug/L			35776	35568	0	KED
|	**Ni**	**60**	**48.330**	ug/L	0.870	1	145	82768	1	KED
|	**Ni**	**62**	**48.442**	ug/L	0.639	1	28	13298	1	KED
|	**Cu**	**63**	**49.417**	ug/L	0.579	1	53	236363	1	KED
|	**Cu**	**65**	**48.231**	ug/L	1.469	3	29	118414	2	KED
|	**Zn**	**66**	**49.608**	ug/L	0.551	1	87	29261	1	KED
|	**Zn**	**67**	**49.324**	ug/L	1.186	2	19	4740	2	KED
⌊	**As**	**75**	**49.969**	ug/L	0.076	0	2	14256	0	KED
	Y	**89**		ug/L			55660	56809	4	Standard
	Kr	**83**		ug/L			44	47	18	Standard
⌈>	**In-1**	**115**		ug/L			7587	7389	1	KED
|	**Cd**	**111**	**49.546**	ug/L	1.061	2	4	13275	1	KED
⌊	**Cd**	**114**	**49.494**	ug/L	0.422	0	1	34117	1	KED
⌈>	**In**	**115**		ug/L			519229	506372	2	Standard
⌊	**Ag**	**107**	**49.532**	ug/L	0.924	1	33	824893	2	Standard
⌈>	**Tb**	**159**		ug/L			190542	201346	2	Standard
⌊	**Pb**	**208**	**50.146**	ug/L	1.169	2	524	4830970	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:32:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	27637	6	Standard
⌈>	**Sc**	**45**		ug/L			600447	601964	1	Standard
|	**Cr**	**52**	**-0.026**	ug/L	0.016	62	10860	10474	1	Standard
⌊	**Cr**	**53**	**-0.005**	ug/L	0.003	63	113	103	4	Standard
⌈>	**Ge**	**72**		ug/L			35776	36137	1	KED
|	**Ni**	**60**	**0.016**	ug/L	0.012	73	145	174	12	KED
|	**Ni**	**62**	**-0.044**	ug/L	0.014	32	28	16	24	KED
|	**Cu**	**63**	**0.002**	ug/L	0.003	112	53	66	21	KED
|	**Cu**	**65**	**0.002**	ug/L	0.001	67	29	33	8	KED
|	**Zn**	**66**	**-0.036**	ug/L	0.015	41	87	66	12	KED
|	**Zn**	**67**	**-0.081**	ug/L	0.028	34	19	12	24	KED
⌊	**As**	**75**	**0.003**	ug/L	0.007	258	2	3	65	KED
	Y	**89**		ug/L			55660	54450	2	Standard
	Kr	**83**		ug/L			44	43	21	Standard
⌈>	**In-1**	**115**		ug/L			7587	7720	2	KED
|	**Cd**	**111**	**-0.009**	ug/L	0.005	57	4	1	91	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.003	180	1	2	70	KED
⌈>	**In**	**115**		ug/L			519229	507656	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	25	33	67	14	Standard
⌈>	**Tb**	**159**		ug/L			190542	194063	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	133	524	566	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:37:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	44112	4	Standard
⌈>	Sc	45		ug/L			600447	709054	2	Standard
|	Cr	52	13.866	ug/L	0.406	2	10860	266055	0	Standard
⌊	Cr	53	14.000	ug/L	0.297	2	113	30081	1	Standard
⌈>	Ge	72		ug/L			35776	34999	2	KED
|	Ni	60	11.928	ug/L	0.327	2	145	20201	1	KED
|	Ni	62	11.602	ug/L	0.091	0	28	3155	1	KED
|	Cu	63	30.347	ug/L	0.908	2	53	142788	1	KED
|	Cu	65	29.640	ug/L	1.166	3	29	71581	1	KED
|	Zn	66	67.932	ug/L	2.944	4	87	39370	2	KED
|	Zn	67	65.305	ug/L	2.153	3	19	6167	1	KED
⌊	As	75	7.893	ug/L	0.118	1	2	2217	1	KED
	Y	89		ug/L			55660	269034	2	Standard
	Kr	83		ug/L			44	83	10	Standard
⌈>	In-1	115		ug/L			7587	7517	0	KED
|	Cd	111	0.202	ug/L	0.025	12	4	59	11	KED
⌊	Cd	114	0.197	ug/L	0.029	14	1	139	14	KED
⌈>	In	115		ug/L			519229	510602	1	Standard
⌊	Ag	107	0.120	ug/L	0.002	1	33	2052	2	Standard
⌈>	Tb	159		ug/L			190542	219802	3	Standard
⌊	Pb	208	11.171	ug/L	0.325	2	524	1174869	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:41:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	42440	3	Standard
>	Sc	45		ug/L			600447	715357	1	Standard
	Cr	52	12.859	ug/L	0.040	0	10860	250000	1	Standard
	Cr	53	13.009	ug/L	0.357	2	113	28218	3	Standard
>	Ge	72		ug/L			35776	34864	1	KED
	Ni	60	13.775	ug/L	0.257	1	145	23223	1	KED
	Ni	62	13.798	ug/L	0.584	4	28	3734	5	KED
	Cu	63	24.510	ug/L	0.357	1	53	114927	0	KED
	Cu	65	24.470	ug/L	0.195	0	29	58904	0	KED
	Zn	66	53.122	ug/L	1.279	2	87	30701	1	KED
	Zn	67	53.087	ug/L	0.536	1	19	4999	0	KED
	As	75	6.441	ug/L	0.043	0	2	1803	0	KED
	Y	89		ug/L			55660	266859	1	Standard
	Kr	83		ug/L			44	73	3	Standard
>	In-1	115		ug/L			7587	7219	2	KED
	Cd	111	0.125	ug/L	0.023	18	4	36	14	KED
	Cd	114	0.155	ug/L	0.036	23	1	106	25	KED
>	In	115		ug/L			519229	505027	1	Standard
	Ag	107	0.096	ug/L	0.002	2	33	1635	3	Standard
>	Tb	159		ug/L			190542	222110	1	Standard
	Pb	208	9.491	ug/L	0.215	2	524	1009179	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:46:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	42216	5	Standard
⌈>	Sc	45		ug/L			600447	737126	2	Standard
|	Cr	52	15.985	ug/L	0.581	3	10860	316818	1	Standard
⌊	Cr	53	15.684	ug/L	0.237	1	113	35018	1	Standard
⌈>	Ge	72		ug/L			35776	34661	1	KED
|	Ni	60	13.792	ug/L	0.237	1	145	23115	0	KED
|	Ni	62	13.986	ug/L	0.109	0	28	3761	1	KED
|	Cu	63	36.202	ug/L	0.537	1	53	168737	0	KED
|	Cu	65	36.196	ug/L	0.297	0	29	86607	0	KED
|	Zn	66	68.237	ug/L	0.710	1	87	39187	0	KED
|	Zn	67	64.700	ug/L	1.108	1	19	6053	0	KED
⌊	As	75	7.814	ug/L	0.160	2	2	2174	0	KED
	Y	89		ug/L			55660	305716	1	Standard
	Kr	83		ug/L			44	94	9	Standard
⌈>	In-1	115		ug/L			7587	7387	3	KED
|	Cd	111	0.230	ug/L	0.034	14	4	65	10	KED
⌊	Cd	114	0.189	ug/L	0.020	10	1	132	12	KED
⌈>	In	115		ug/L			519229	504320	1	Standard
⌊	Ag	107	0.173	ug/L	0.003	1	33	2906	2	Standard
⌈>	Tb	159		ug/L			190542	220823	3	Standard
⌊	Pb	208	16.723	ug/L	0.540	3	524	1766569	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:50:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	36941	3	Standard
>	Sc	45		ug/L			600447	707482	1	Standard
	Cr	52	13.403	ug/L	0.125	0	10860	257172	1	Standard
	Cr	53	12.977	ug/L	0.121	0	113	27843	2	Standard
>	Ge	72		ug/L			35776	35020	0	KED
	Ni	60	12.070	ug/L	0.218	1	145	20458	1	KED
	Ni	62	12.224	ug/L	0.385	3	28	3325	3	KED
	Cu	63	25.027	ug/L	0.373	1	53	117881	1	KED
	Cu	65	24.754	ug/L	0.415	1	29	59854	1	KED
	Zn	66	60.844	ug/L	0.755	1	87	35314	0	KED
	Zn	67	108.303	ug/L	2.395	2	19	10225	1	KED
	As	75	5.746	ug/L	0.088	1	2	1616	1	KED
	Y	89		ug/L			55660	254580	0	Standard
	Kr	83		ug/L			44	77	7	Standard
>	In-1	115		ug/L			7587	7416	2	KED
	Cd	111	0.125	ug/L	0.025	19	4	37	19	KED
	Cd	114	0.136	ug/L	0.011	7	1	95	8	KED
>	In	115		ug/L			519229	494495	1	Standard
	Ag	107	0.103	ug/L	0.004	3	33	1702	2	Standard
>	Tb	159		ug/L			190542	218399	1	Standard
	Pb	208	11.623	ug/L	0.140	1	524	1215246	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:54:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27881	28956	0	Standard
> Sc	45		ug/L			600447	632927	2	Standard
Cr	52	83.030	ug/L	1.894	2	10860	1365955	3	Standard
Cr	53	82.553	ug/L	2.117	2	113	157762	1	Standard
> Ge	72		ug/L			35776	31287	1	KED
Ni	60	23.659	ug/L	0.556	2	145	35697	0	KED
Ni	62	27.194	ug/L	0.581	2	28	6576	0	KED
Cu	63	2498.049	ug/L	48.349	1	53	10506397	1	KED
Cu	65	2569.123	ug/L	57.301	2	29	5546287	0	KED
Zn	66	7354.329	ug/L	288.789	3	87	3803532	3	KED
Zn	67	6774.525	ug/L	131.191	1	19	570411	2	KED
As	75	1054.444	ug/L	16.893	1	2	264562	0	KED
Y	89		ug/L			55660	282337	3	Standard
Kr	83		ug/L			44	108	15	Standard
> In-1	115		ug/L			7587	16696	0	KED
Cd	111	2.127	ug/L	0.026	1	4	1296	1	KED
Cd	114	2.036	ug/L	0.022	1	1	3175	0	KED
> In	115		ug/L			519229	910777	0	Standard
Ag	107	0.753	ug/L	0.018	2	33	22621	2	Standard
> Tb	159		ug/L			190542	158646	1	Standard
Pb	208	1211.380	ug/L	38.633	3	524	91952848	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 22:59:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27881	30314	5	Standard
> Sc	45		ug/L			600447	626535	3	Standard
Cr	52	85.240	ug/L	2.397	2	10860	1386839	0	Standard
Cr	53	84.038	ug/L	2.060	2	113	158948	2	Standard
> Ge	72		ug/L			35776	30534	0	KED
Ni	60	24.774	ug/L	0.555	2	145	36484	2	KED
Ni	62	29.303	ug/L	0.311	1	28	6915	0	KED
Cu	63	2817.731	ug/L	58.540	2	53	11567687	2	KED
Cu	65	2764.990	ug/L	27.962	1	29	5826764	0	KED
Zn	66	7637.721	ug/L	56.656	0	87	3856088	0	KED
Zn	67	7060.766	ug/L	69.114	0	19	580207	0	KED
As	75	1082.369	ug/L	5.384	0	2	265078	0	KED
Y	89		ug/L			55660	316457	1	Standard
Kr	83		ug/L			44	93	15	Standard
> In-1	115		ug/L			7587	15962	1	KED
Cd	111	2.478	ug/L	0.072	2	4	1442	3	KED
Cd	114	2.439	ug/L	0.022	0	1	3635	0	KED
> In	115		ug/L			519229	899865	0	Standard
Ag	107	0.832	ug/L	0.021	2	33	24686	1	Standard
> Tb	159		ug/L			190542	160807	0	Standard
Pb	208	1201.329	ug/L	19.280	1	524	92444349	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:03:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	27291	5	Standard
>	Sc	45		ug/L			600447	608593	1	Standard
	Cr	52	110.095	ug/L	3.295	2	10860	1737242	1	Standard
	Cr	53	108.219	ug/L	1.529	1	113	198841	0	Standard
>	Ge	72		ug/L			35776	29436	2	KED
	Ni	60	48.982	ug/L	1.875	3	145	69379	1	KED
	Ni	62	54.981	ug/L	2.524	4	28	12479	1	KED
	Cu	63	3042.849	ug/L	134.473	4	53	12033133	1	KED
	Cu	65	3048.235	ug/L	86.303	2	29	6189784	1	KED
	Zn	66	7993.790	ug/L	257.905	3	87	3888434	0	KED
	Zn	67	7334.042	ug/L	256.573	3	19	580633	0	KED
	As	75	1176.119	ug/L	32.073	2	2	277546	0	KED
	Y	89		ug/L			55660	297960	0	Standard
	Kr	83		ug/L			44	105	19	Standard
>	In-1	115		ug/L			7587	15976	1	KED
	Cd	111	10.853	ug/L	0.123	1	4	6294	0	KED
	Cd	114	10.994	ug/L	0.247	2	1	16388	2	KED
>	In	115		ug/L			519229	904235	1	Standard
	Ag	107	4.491	ug/L	0.132	2	33	133599	1	Standard
>	Tb	159		ug/L			190542	157324	0	Standard
	Pb	208	1280.635	ug/L	22.743	1	524	96414758	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:08:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	26877	3	Standard
>	Sc	45		ug/L			600447	611441	1	Standard
	Cr	52	111.436	ug/L	3.976	3	10860	1766516	2	Standard
	Cr	53	110.105	ug/L	4.573	4	113	203202	2	Standard
>	Ge	72		ug/L			35776	29152	0	KED
	Ni	60	48.618	ug/L	0.881	1	145	68250	2	KED
	Ni	62	51.789	ug/L	1.011	1	28	11653	2	KED
	Cu	63	2806.959	ug/L	37.381	1	53	11000916	0	KED
	Cu	65	2816.731	ug/L	71.420	2	29	5666231	1	KED
	Zn	66	8265.905	ug/L	136.269	1	87	3984176	1	KED
	Zn	67	7616.692	ug/L	44.699	0	19	597534	0	KED
	As	75	1296.431	ug/L	11.821	0	2	303108	0	KED
	Y	89		ug/L			55660	289686	0	Standard
	Kr	83		ug/L			44	106	18	Standard
>	In-1	115		ug/L			7587	16333	1	KED
	Cd	111	11.000	ug/L	0.211	1	4	6521	0	KED
	Cd	114	10.726	ug/L	0.114	1	1	16343	0	KED
>	In	115		ug/L			519229	951207	3	Standard
	Ag	107	4.378	ug/L	0.114	2	33	136944	1	Standard
>	Tb	159		ug/L			190542	157453	1	Standard
	Pb	208	1380.771	ug/L	20.785	1	524	104030860	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-PS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:12:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	27119	1	Standard
⌈>	**Sc**	**45**		ug/L			600447	605688	1	Standard
|	**Cr**	**52**	**107.946**	ug/L	4.648	4	10860	1695312	3	Standard
⌊	**Cr**	**53**	**105.056**	ug/L	2.621	2	113	192093	1	Standard
⌈>	**Ge**	**72**		ug/L			35776	29173	1	KED
|	**Ni**	**60**	**48.441**	ug/L	1.072	2	145	68035	1	KED
|	**Ni**	**62**	**51.887**	ug/L	1.933	3	28	11679	2	KED
|	**Cu**	**63**	**2659.663**	ug/L	25.993	0	53	10431378	0	KED
|	**Cu**	**65**	**2674.653**	ug/L	89.805	3	29	5383864	2	KED
|	**Zn**	**66**	**7740.478**	ug/L	41.895	0	87	3733813	1	KED
|	**Zn**	**67**	**7109.067**	ug/L	112.602	1	19	558068	0	KED
⌊	**As**	**75**	**1097.144**	ug/L	7.742	0	2	256700	0	KED
	Y	**89**		ug/L			55660	287334	1	Standard
	Kr	**83**		ug/L			44	88	2	Standard
⌈>	**In-1**	**115**		ug/L			7587	15754	1	KED
|	**Cd**	**111**	**11.382**	ug/L	0.376	3	4	6507	1	KED
⌊	**Cd**	**114**	**11.428**	ug/L	0.447	3	1	16790	2	KED
⌈>	**In**	**115**		ug/L			519229	924163	2	Standard
⌊	**Ag**	**107**	**11.450**	ug/L	0.297	2	33	347999	1	Standard
⌈>	**Tb**	**159**		ug/L			190542	158980	1	Standard
⌊	**Pb**	**208**	**1253.989**	ug/L	4.849	0	524	95406487	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:16:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	22829	2	Standard
⌈>	**Sc**	**45**		ug/L			600447	564251	0	Standard
|	**Cr**	**52**	**0.030**	ug/L	0.034	113	10860	10641	4	Standard
⌊	**Cr**	**53**	**0.025**	ug/L	0.031	125	113	148	35	Standard
⌈>	**Ge**	**72**		ug/L			35776	31647	0	KED
|	**Ni**	**60**	**0.041**	ug/L	0.020	47	145	190	15	KED
|	**Ni**	**62**	**0.027**	ug/L	0.012	44	28	31	9	KED
|	**Cu**	**63**	**0.082**	ug/L	0.007	8	53	398	7	KED
|	**Cu**	**65**	**0.082**	ug/L	0.013	15	29	205	13	KED
|	**Zn**	**66**	**0.206**	ug/L	0.036	17	87	185	10	KED
|	**Zn**	**67**	**0.094**	ug/L	0.046	48	19	25	15	KED
⌊	**As**	**75**	**0.075**	ug/L	0.010	13	2	20	12	KED
	Y	**89**		ug/L			55660	54412	1	Standard
	Kr	**83**		ug/L			44	53	15	Standard
⌈>	**In-1**	**115**		ug/L			7587	6568	3	KED
|	**Cd**	**111**	**-0.012**	ug/L	0.002	18	4	0	86	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.001	26	1	2	8	KED
⌈>	**In**	**115**		ug/L			519229	523168	3	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.008	104	33	168	86	Standard
⌈>	**Tb**	**159**		ug/L			190542	194825	1	Standard
⌊	**Pb**	**208**	**0.275**	ug/L	0.271	98	524	25917	95	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:21:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	24653	5	Standard
⌈>	**Sc**	**45**		ug/L			600447	591563	1	Standard
|	**Cr**	**52**	**49.379**	ug/L	0.755	1	10860	763476	1	Standard
⌊	**Cr**	**53**	**48.410**	ug/L	0.314	0	113	86533	1	Standard
⌈>	**Ge**	**72**		ug/L			35776	32024	1	KED
|	**Ni**	**60**	**49.999**	ug/L	0.359	0	145	77097	2	KED
|	**Ni**	**62**	**50.338**	ug/L	0.599	1	28	12440	0	KED
|	**Cu**	**63**	**50.853**	ug/L	0.479	0	53	218983	1	KED
|	**Cu**	**65**	**50.279**	ug/L	0.509	1	29	111154	1	KED
|	**Zn**	**66**	**50.970**	ug/L	0.590	1	87	27069	2	KED
|	**Zn**	**67**	**51.946**	ug/L	1.180	2	19	4493	1	KED
⌊	**As**	**75**	**50.153**	ug/L	1.115	2	2	12882	1	KED
	Y	**89**		ug/L			55660	54346	3	Standard
	Kr	**83**		ug/L			44	41	30	Standard
⌈>	**In-1**	**115**		ug/L			7587	6872	2	KED
|	**Cd**	**111**	**49.954**	ug/L	1.477	2	4	12444	0	KED
⌊	**Cd**	**114**	**50.060**	ug/L	0.658	1	1	32090	1	KED
⌈>	**In**	**115**		ug/L			519229	500870	0	Standard
⌊	**Ag**	**107**	**48.812**	ug/L	0.335	0	33	804173	0	Standard
⌈>	**Tb**	**159**		ug/L			190542	196347	1	Standard
⌊	**Pb**	**208**	**52.229**	ug/L	0.704	1	524	4907728	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:28:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	24509	6	Standard
⌈>	**Sc**	**45**		ug/L			600447	583759	2	Standard
|	**Cr**	**52**	**-0.028**	ug/L	0.018	66	10860	10137	2	Standard
⌊	**Cr**	**53**	**-0.011**	ug/L	0.006	52	113	90	13	Standard
⌈>	**Ge**	**72**		ug/L			35776	33371	3	KED
|	**Ni**	**60**	**-0.006**	ug/L	0.007	114	145	125	11	KED
|	**Ni**	**62**	**-0.014**	ug/L	0.022	152	28	22	22	KED
|	**Cu**	**63**	**0.016**	ug/L	0.007	43	53	120	27	KED
|	**Cu**	**65**	**0.018**	ug/L	0.005	27	29	69	15	KED
|	**Zn**	**66**	**0.001**	ug/L	0.018	3110	87	81	10	KED
|	**Zn**	**67**	**-0.063**	ug/L	0.009	14	19	12	8	KED
⌊	**As**	**75**	**0.023**	ug/L	0.007	31	2	8	20	KED
	Y	**89**		ug/L			55660	54110	1	Standard
	Kr	**83**		ug/L			44	46	13	Standard
⌈>	**In-1**	**115**		ug/L			7587	6862	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.004	201	4	3	34	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	180	1	2	81	KED
⌈>	**In**	**115**		ug/L			519229	515794	3	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	26	33	82	17	Standard
⌈>	**Tb**	**159**		ug/L			190542	195697	2	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	1	524	1220	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0071-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:33:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	41800	4	Standard
⌈>	Sc	45		ug/L			600447	694893	1	Standard
|	Cr	52	14.760	ug/L	0.330	2	10860	276862	1	Standard
⌊	Cr	53	14.749	ug/L	0.355	2	113	31060	2	Standard
⌈>	Ge	72		ug/L			35776	33387	1	KED
|	Ni	60	12.096	ug/L	0.354	2	145	19540	1	KED
|	Ni	62	12.236	ug/L	0.141	1	28	3173	2	KED
|	Cu	63	34.440	ug/L	0.616	1	53	154616	0	KED
|	Cu	65	33.554	ug/L	0.420	1	29	77335	1	KED
|	Zn	66	61.897	ug/L	0.534	0	87	34249	1	KED
|	Zn	67	60.911	ug/L	2.396	3	19	5489	2	KED
⌊	As	75	7.068	ug/L	0.157	2	2	1894	2	KED
	Y	89		ug/L			55660	279345	1	Standard
	Kr	83		ug/L			44	90	13	Standard
⌈>	In-1	115		ug/L			7587	6934	2	KED
|	Cd	111	0.195	ug/L	0.047	24	4	52	21	KED
⌊	Cd	114	0.219	ug/L	0.014	6	1	143	8	KED
⌈>	In	115		ug/L			519229	517494	0	Standard
⌊	Ag	107	0.165	ug/L	0.003	1	33	2844	1	Standard
⌈>	Tb	159		ug/L			190542	224144	0	Standard
⌊	Pb	208	14.987	ug/L	0.095	0	524	1608279	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0071-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:37:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	41920	5	Standard
⌈>	Sc	45		ug/L			600447	707279	1	Standard
|	Cr	52	13.606	ug/L	0.173	1	10860	260824	2	Standard
⌊	Cr	53	13.450	ug/L	0.128	0	113	28839	1	Standard
⌈>	Ge	72		ug/L			35776	33813	2	KED
|	Ni	60	12.474	ug/L	0.318	2	145	20402	0	KED
|	Ni	62	12.568	ug/L	0.337	2	28	3298	0	KED
|	Cu	63	27.102	ug/L	0.625	2	53	123211	0	KED
|	Cu	65	26.633	ug/L	0.700	2	29	62154	0	KED
|	Zn	66	53.856	ug/L	2.290	4	87	30171	1	KED
|	Zn	67	53.534	ug/L	0.966	1	19	4890	3	KED
⌊	As	75	6.504	ug/L	0.322	4	2	1764	2	KED
	Y	89		ug/L			55660	279415	2	Standard
	Kr	83		ug/L			44	85	14	Standard
⌈>	In-1	115		ug/L			7587	7109	2	KED
|	Cd	111	0.169	ug/L	0.030	17	4	47	16	KED
⌊	Cd	114	0.154	ug/L	0.036	23	1	103	20	KED
⌈>	In	115		ug/L			519229	506285	1	Standard
⌊	Ag	107	0.112	ug/L	0.003	2	33	1899	2	Standard
⌈>	Tb	159		ug/L			190542	221252	0	Standard
⌊	Pb	208	10.941	ug/L	0.016	0	524	1159070	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0071-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:41:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	41624	4	Standard
>	Sc	45		ug/L			600447	641883	18	Standard
	Cr	52	16.175	ug/L	2.585	15	10860	274088	4	Standard
	Cr	53	16.107	ug/L	2.732	16	113	30688	3	Standard
>	Ge	72		ug/L			35776	33460	0	KED
	Ni	60	13.007	ug/L	0.126	0	145	21054	1	KED
	Ni	62	12.937	ug/L	0.251	1	28	3360	1	KED
	Cu	63	34.231	ug/L	0.569	1	53	154049	2	KED
	Cu	65	33.408	ug/L	0.682	2	29	77167	1	KED
	Zn	66	66.941	ug/L	2.382	3	87	37107	2	KED
	Zn	67	64.779	ug/L	1.290	1	19	5850	1	KED
	As	75	7.501	ug/L	0.124	1	2	2015	1	KED
	Y	89		ug/L			55660	272445	5	Standard
	Kr	83		ug/L			44	93	25	Standard
>	In-1	115		ug/L			7587	7083	2	KED
	Cd	111	0.206	ug/L	0.024	11	4	56	9	KED
	Cd	114	0.231	ug/L	0.024	10	1	153	9	KED
>	In	115		ug/L			519229	441955	19	Standard
	Ag	107	0.171	ug/L	0.035	20	33	2452	1	Standard
>	Tb	159		ug/L			190542	205536	15	Standard
	Pb	208	15.984	ug/L	2.361	14	524	1548517	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0071-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:46:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	41611	5	Standard
⌈>	Sc	45		ug/L			600447	699791	2	Standard
|	Cr	52	14.261	ug/L	0.110	0	10860	269809	2	Standard
⌊	Cr	53	14.245	ug/L	0.285	2	113	30206	1	Standard
⌈>	Ge	72		ug/L			35776	33878	0	KED
|	Ni	60	12.340	ug/L	0.198	1	145	20233	1	KED
|	Ni	62	11.929	ug/L	0.375	3	28	3139	2	KED
|	Cu	63	32.200	ug/L	0.998	3	53	146699	2	KED
|	Cu	65	31.622	ug/L	0.386	1	29	73963	1	KED
|	Zn	66	61.960	ug/L	0.332	0	87	34789	0	KED
|	Zn	67	62.225	ug/L	1.387	2	19	5691	1	KED
⌊	As	75	7.169	ug/L	0.232	3	2	1949	2	KED
	Y	89		ug/L			55660	273102	1	Standard
	Kr	83		ug/L			44	73	25	Standard
⌈>	In-1	115		ug/L			7587	6963	1	KED
|	Cd	111	0.182	ug/L	0.016	8	4	49	9	KED
⌊	Cd	114	0.260	ug/L	0.013	4	1	170	3	KED
⌈>	In	115		ug/L			519229	502263	0	Standard
⌊	Ag	107	0.134	ug/L	0.006	4	33	2247	4	Standard
⌈>	Tb	159		ug/L			190542	223559	0	Standard
⌊	Pb	208	13.661	ug/L	0.263	1	524	1462194	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0071-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:50:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	40115	3	Standard
⌈>	Sc	45		ug/L			600447	696541	1	Standard
|	Cr	52	13.972	ug/L	0.171	1	10860	263366	0	Standard
⌊	Cr	53	14.084	ug/L	0.546	3	113	29722	2	Standard
⌈>	Ge	72		ug/L			35776	34063	0	KED
|	Ni	60	12.153	ug/L	0.004	0	145	20035	0	KED
|	Ni	62	12.203	ug/L	0.252	2	28	3228	2	KED
|	Cu	63	30.621	ug/L	0.182	0	53	140286	1	KED
|	Cu	65	30.888	ug/L	0.529	1	29	72636	1	KED
|	Zn	66	61.152	ug/L	1.552	2	87	34527	3	KED
|	Zn	67	60.193	ug/L	0.541	0	19	5536	0	KED
⌊	As	75	6.442	ug/L	0.173	2	2	1761	2	KED
	Y	89		ug/L			55660	267558	1	Standard
	Kr	83		ug/L			44	67	5	Standard
⌈>	In-1	115		ug/L			7587	7095	0	KED
|	Cd	111	0.200	ug/L	0.033	16	4	55	15	KED
⌊	Cd	114	0.229	ug/L	0.041	17	1	153	18	KED
⌈>	In	115		ug/L			519229	499273	1	Standard
⌊	Ag	107	0.139	ug/L	0.012	8	33	2310	7	Standard
⌈>	Tb	159		ug/L			190542	219835	0	Standard
⌊	Pb	208	14.358	ug/L	0.249	1	524	1511199	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0071-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:55:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	40341	3	Standard
⌈>	Sc	45		ug/L			600447	679727	1	Standard
|	Cr	52	13.576	ug/L	0.280	2	10860	250134	2	Standard
⌊	Cr	53	13.642	ug/L	0.301	2	113	28109	1	Standard
⌈>	Ge	72		ug/L			35776	33903	1	KED
|	Ni	60	11.924	ug/L	0.282	2	145	19565	1	KED
|	Ni	62	11.936	ug/L	0.534	4	28	3142	3	KED
|	Cu	63	27.743	ug/L	0.140	0	53	126506	1	KED
|	Cu	65	27.736	ug/L	0.201	0	29	64920	1	KED
|	Zn	66	58.405	ug/L	1.496	2	87	32817	2	KED
|	Zn	67	57.184	ug/L	1.965	3	19	5233	1	KED
⌊	As	75	5.879	ug/L	0.200	3	2	1600	2	KED
	Y	89		ug/L			55660	253187	1	Standard
	Kr	83		ug/L			44	62	15	Standard
⌈>	In-1	115		ug/L			7587	7134	2	KED
|	Cd	111	0.173	ug/L	0.033	19	4	48	16	KED
⌊	Cd	114	0.200	ug/L	0.032	15	1	134	17	KED
⌈>	In	115		ug/L			519229	507129	2	Standard
⌊	Ag	107	0.133	ug/L	0.005	4	33	2255	2	Standard
⌈>	Tb	159		ug/L			190542	221170	1	Standard
⌊	Pb	208	19.884	ug/L	0.450	2	524	2104767	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0109-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Wednesday, May 10, 2023 23:59:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	41351	4	Standard
⌈>	Sc	45		ug/L			600447	689065	1	Standard
|	Cr	52	13.277	ug/L	0.115	0	10860	248242	1	Standard
⌊	Cr	53	13.127	ug/L	0.146	1	113	27430	2	Standard
⌈>	Ge	72		ug/L			35776	33601	1	KED
|	Ni	60	10.961	ug/L	0.105	0	145	17839	1	KED
|	Ni	62	10.953	ug/L	0.166	1	28	2861	0	KED
|	Cu	63	37.403	ug/L	0.776	2	53	169002	1	KED
|	Cu	65	37.230	ug/L	1.137	3	29	86342	1	KED
|	Zn	66	54.195	ug/L	0.498	0	87	30188	0	KED
|	Zn	67	51.947	ug/L	1.758	3	19	4714	2	KED
⌊	As	75	8.383	ug/L	0.093	1	2	2260	0	KED
	Y	89		ug/L			55660	253081	2	Standard
	Kr	83		ug/L			44	70	4	Standard
⌈>	In-1	115		ug/L			7587	7085	2	KED
|	Cd	111	0.178	ug/L	0.018	10	4	49	8	KED
⌊	Cd	114	0.173	ug/L	0.014	7	1	116	9	KED
⌈>	In	115		ug/L			519229	506436	3	Standard
⌊	Ag	107	0.140	ug/L	0.009	6	33	2360	2	Standard
⌈>	Tb	159		ug/L			190542	218914	0	Standard
⌊	Pb	208	13.032	ug/L	0.026	0	524	1365955	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0109-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:03:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	44730	2	Standard
>	Sc	45		ug/L			600447	695996	0	Standard
	Cr	52	13.163	ug/L	0.197	1	10860	248690	1	Standard
	Cr	53	12.957	ug/L	0.368	2	113	27345	2	Standard
>	Ge	72		ug/L			35776	33265	1	KED
	Ni	60	11.039	ug/L	0.401	3	145	17780	2	KED
	Ni	62	11.096	ug/L	0.292	2	28	2868	1	KED
	Cu	63	33.534	ug/L	0.794	2	53	150033	2	KED
	Cu	65	33.030	ug/L	0.499	1	29	75849	0	KED
	Zn	66	55.322	ug/L	0.971	1	87	30504	0	KED
	Zn	67	55.166	ug/L	1.585	2	19	4957	3	KED
	As	75	8.674	ug/L	0.314	3	2	2315	2	KED
	Y	89		ug/L			55660	251821	1	Standard
	Kr	83		ug/L			44	67	20	Standard
>	In-1	115		ug/L			7587	6853	1	KED
	Cd	111	0.200	ug/L	0.020	10	4	53	7	KED
	Cd	114	0.185	ug/L	0.031	16	1	119	14	KED
>	In	115		ug/L			519229	504230	4	Standard
	Ag	107	0.143	ug/L	0.009	6	33	2395	1	Standard
>	Tb	159		ug/L			190542	215455	1	Standard
	Pb	208	13.720	ug/L	0.338	2	524	1415046	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0108-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:08:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	43300	5	Standard
⌈>	**Sc**	**45**		ug/L			600447	713310	1	Standard
|	**Cr**	**52**	**16.422**	ug/L	0.161	0	10860	314787	1	Standard
⌊	**Cr**	**53**	**16.361**	ug/L	0.435	2	113	35354	3	Standard
⌈>	**Ge**	**72**		ug/L			35776	32638	0	KED
|	**Ni**	**60**	**15.409**	ug/L	0.351	2	145	24305	2	KED
|	**Ni**	**62**	**15.069**	ug/L	0.298	1	28	3813	1	KED
|	**Cu**	**63**	**38.928**	ug/L	0.502	1	53	170861	0	KED
|	**Cu**	**65**	**39.033**	ug/L	0.216	0	29	87953	1	KED
|	**Zn**	**66**	**75.753**	ug/L	0.903	1	87	40958	1	KED
|	**Zn**	**67**	**73.795**	ug/L	1.061	1	19	6499	1	KED
⌊	**As**	**75**	**8.223**	ug/L	0.084	1	2	2154	0	KED
	Y	**89**		ug/L			55660	331620	1	Standard
	Kr	**83**		ug/L			44	85	5	Standard
⌈>	**In-1**	**115**		ug/L			7587	7151	0	KED
|	**Cd**	**111**	**0.175**	ug/L	0.028	15	4	49	14	KED
⌊	**Cd**	**114**	**0.189**	ug/L	0.041	21	1	127	20	KED
⌈>	**In**	**115**		ug/L			519229	494671	2	Standard
⌊	**Ag**	**107**	**0.155**	ug/L	0.005	3	33	2553	5	Standard
⌈>	**Tb**	**159**		ug/L			190542	226865	1	Standard
⌊	**Pb**	**208**	**15.700**	ug/L	0.343	2	524	1704869	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:12:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	26146	3	Standard
⌈>	**Sc**	**45**		ug/L			600447	573930	1	Standard
|	**Cr**	**52**	**-0.020**	ug/L	0.012	58	10860	10084	3	Standard
⌊	**Cr**	**53**	**-0.009**	ug/L	0.008	84	113	92	15	Standard
⌈>	**Ge**	**72**		ug/L			35776	32582	1	KED
|	**Ni**	**60**	**0.015**	ug/L	0.010	68	145	155	11	KED
|	**Ni**	**62**	**0.005**	ug/L	0.030	607	28	27	28	KED
|	**Cu**	**63**	**0.014**	ug/L	0.002	14	53	111	6	KED
|	**Cu**	**65**	**0.010**	ug/L	0.005	55	29	48	25	KED
|	**Zn**	**66**	**-0.030**	ug/L	0.021	69	87	63	16	KED
|	**Zn**	**67**	**-0.067**	ug/L	0.011	16	19	12	9	KED
⌊	**As**	**75**	**0.003**	ug/L	0.005	152	2	2	44	KED
	Y	**89**		ug/L			55660	54155	0	Standard
	Kr	**83**		ug/L			44	38	2	Standard
⌈>	**In-1**	**115**		ug/L			7587	6900	0	KED
|	**Cd**	**111**	**-0.012**	ug/L	0.002	17	4	0	86	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	101	1	0	207	KED
⌈>	**In**	**115**		ug/L			519229	511559	0	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	5	33	10	10	Standard
⌈>	**Tb**	**159**		ug/L			190542	194216	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	31	524	634	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:16:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	25538	4	Standard
⌈>	**Sc**	**45**		ug/L			600447	594963	3	Standard
|	**Cr**	**52**	**50.178**	ug/L	0.793	1	10860	779879	1	Standard
⌊	**Cr**	**53**	**49.353**	ug/L	1.384	2	113	88670	0	Standard
⌈>	**Ge**	**72**		ug/L			35776	34074	1	KED
|	**Ni**	**60**	**48.680**	ug/L	0.968	1	145	79858	2	KED
|	**Ni**	**62**	**47.611**	ug/L	0.229	0	28	12521	1	KED
|	**Cu**	**63**	**49.180**	ug/L	0.308	0	53	225338	1	KED
|	**Cu**	**65**	**48.634**	ug/L	0.916	1	29	114372	0	KED
|	**Zn**	**66**	**48.427**	ug/L	0.650	1	87	27362	1	KED
|	**Zn**	**67**	**50.458**	ug/L	2.031	4	19	4643	2	KED
⌊	**As**	**75**	**49.054**	ug/L	1.109	2	2	13404	0	KED
	Y	**89**		ug/L			55660	54653	1	Standard
	Kr	**83**		ug/L			44	55	9	Standard
⌈>	**In-1**	**115**		ug/L			7587	7138	3	KED
|	**Cd**	**111**	**49.973**	ug/L	2.395	4	4	12921	0	KED
⌊	**Cd**	**114**	**49.890**	ug/L	1.571	3	1	33197	1	KED
⌈>	**In**	**115**		ug/L			519229	506488	1	Standard
⌊	**Ag**	**107**	**48.935**	ug/L	1.204	2	33	815045	1	Standard
⌈>	**Tb**	**159**		ug/L			190542	196385	0	Standard
⌊	**Pb**	**208**	**51.586**	ug/L	0.606	1	524	4848875	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:24:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	25562	4	Standard
⌈>	**Sc**	**45**		ug/L			600447	584484	0	Standard
|	**Cr**	**52**	**-0.033**	ug/L	0.013	38	10860	10071	2	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.004	52	113	96	8	Standard
⌈>	**Ge**	**72**		ug/L			35776	33932	0	KED
|	**Ni**	**60**	**-0.017**	ug/L	0.007	39	145	109	9	KED
|	**Ni**	**62**	**-0.031**	ug/L	0.030	96	28	19	40	KED
|	**Cu**	**63**	**0.003**	ug/L	0.001	48	53	64	10	KED
|	**Cu**	**65**	**0.004**	ug/L	0.003	56	29	38	15	KED
|	**Zn**	**66**	**-0.058**	ug/L	0.002	3	87	50	2	KED
|	**Zn**	**67**	**-0.135**	ug/L	0.031	23	19	6	45	KED
⌊	**As**	**75**	**0.007**	ug/L	0.004	63	2	3	30	KED
	Y	**89**		ug/L			55660	54405	2	Standard
	Kr	**83**		ug/L			44	37	28	Standard
⌈>	**In-1**	**115**		ug/L			7587	7340	1	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.006	81	4	1	86	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.002	175	1	2	47	KED
⌈>	**In**	**115**		ug/L			519229	506728	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	46	33	59	22	Standard
⌈>	**Tb**	**159**		ug/L			190542	195679	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	5	524	691	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0108-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:28:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	42152	3	Standard
⌈>	Sc	45		ug/L			600447	701617	2	Standard
|	Cr	52	13.784	ug/L	0.159	1	10860	261945	2	Standard
⌊	Cr	53	13.824	ug/L	0.149	1	113	29404	2	Standard
⌈>	Ge	72		ug/L			35776	33631	1	KED
|	Ni	60	11.683	ug/L	0.169	1	145	19022	2	KED
|	Ni	62	11.656	ug/L	0.112	0	28	3046	0	KED
|	Cu	63	32.720	ug/L	0.427	1	53	147993	1	KED
|	Cu	65	32.727	ug/L	0.710	2	29	75985	2	KED
|	Zn	66	58.096	ug/L	1.862	3	87	32377	1	KED
|	Zn	67	57.353	ug/L	1.009	1	19	5208	1	KED
⌊	As	75	8.068	ug/L	0.212	2	2	2178	2	KED
	Y	89		ug/L			55660	268399	1	Standard
	Kr	83		ug/L			44	84	7	Standard
⌈>	In-1	115		ug/L			7587	7254	0	KED
|	Cd	111	0.183	ug/L	0.012	6	4	52	5	KED
⌊	Cd	114	0.196	ug/L	0.027	13	1	134	13	KED
⌈>	In	115		ug/L			519229	505482	0	Standard
⌊	Ag	107	0.143	ug/L	0.008	5	33	2409	6	Standard
⌈>	Tb	159		ug/L			190542	222718	0	Standard
⌊	Pb	208	13.876	ug/L	0.125	0	524	1479618	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0108-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:32:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	40027	8	Standard
>	Sc	45		ug/L			600447	698775	1	Standard
	Cr	52	14.213	ug/L	0.080	0	10860	268577	1	Standard
	Cr	53	14.164	ug/L	0.155	1	113	30003	2	Standard
>	Ge	72		ug/L			35776	33832	0	KED
	Ni	60	11.465	ug/L	0.137	1	145	18781	0	KED
	Ni	62	11.563	ug/L	0.199	1	28	3040	2	KED
	Cu	63	33.675	ug/L	0.564	1	53	153215	1	KED
	Cu	65	32.656	ug/L	0.151	0	29	76276	0	KED
	Zn	66	57.957	ug/L	1.470	2	87	32501	2	KED
	Zn	67	55.816	ug/L	1.269	2	19	5099	1	KED
	As	75	8.291	ug/L	0.137	1	2	2251	1	KED
	Y	89		ug/L			55660	265350	3	Standard
	Kr	83		ug/L			44	74	5	Standard
>	In-1	115		ug/L			7587	7022	2	KED
	Cd	111	0.241	ug/L	0.056	23	4	65	23	KED
	Cd	114	0.248	ug/L	0.041	16	1	163	15	KED
>	In	115		ug/L			519229	507693	0	Standard
	Ag	107	0.154	ug/L	0.006	3	33	2596	4	Standard
>	Tb	159		ug/L			190542	218126	0	Standard
	Pb	208	14.843	ug/L	0.185	1	524	1550062	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0108-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:37:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	38717	0	Standard
⌈>	Sc	45		ug/L			600447	703681	1	Standard
|	Cr	52	13.446	ug/L	0.155	1	10860	256553	0	Standard
⌊	Cr	53	13.362	ug/L	0.125	0	113	28507	1	Standard
⌈>	Ge	72		ug/L			35776	33183	1	KED
|	Ni	60	12.093	ug/L	0.381	3	145	19417	2	KED
|	Ni	62	12.156	ug/L	0.093	0	28	3133	2	KED
|	Cu	63	28.972	ug/L	0.594	2	53	129274	0	KED
|	Cu	65	28.921	ug/L	0.252	0	29	66254	0	KED
|	Zn	66	56.544	ug/L	1.297	2	87	31099	1	KED
|	Zn	67	56.684	ug/L	1.162	2	19	5079	1	KED
⌊	As	75	6.999	ug/L	0.103	1	2	1864	1	KED
	Y	89		ug/L			55660	267168	0	Standard
	Kr	83		ug/L			44	76	8	Standard
⌈>	In-1	115		ug/L			7587	6892	3	KED
|	Cd	111	0.172	ug/L	0.019	11	4	46	9	KED
⌊	Cd	114	0.224	ug/L	0.026	11	1	145	14	KED
⌈>	In	115		ug/L			519229	502886	1	Standard
⌊	Ag	107	0.124	ug/L	0.000	0	33	2079	1	Standard
⌈>	Tb	159		ug/L			190542	220269	0	Standard
⌊	Pb	208	11.496	ug/L	0.252	2	524	1212380	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0108-09
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:41:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	36163	3	Standard
⌈>	Sc	45		ug/L			600447	675390	2	Standard
|	Cr	52	11.612	ug/L	0.348	2	10860	214261	1	Standard
⌊	Cr	53	11.687	ug/L	0.277	2	113	23940	1	Standard
⌈>	Ge	72		ug/L			35776	33264	0	KED
|	Ni	60	9.904	ug/L	0.159	1	145	15969	1	KED
|	Ni	62	9.757	ug/L	0.454	4	28	2526	4	KED
|	Cu	63	26.785	ug/L	0.607	2	53	119830	1	KED
|	Cu	65	26.312	ug/L	0.547	2	29	60427	1	KED
|	Zn	66	52.519	ug/L	0.742	1	87	28964	0	KED
|	Zn	67	51.518	ug/L	2.705	5	19	4630	5	KED
⌊	As	75	6.060	ug/L	0.120	1	2	1618	1	KED
	Y	89		ug/L			55660	234210	0	Standard
	Kr	83		ug/L			44	67	25	Standard
⌈>	In-1	115		ug/L			7587	7065	1	KED
|	Cd	111	0.155	ug/L	0.017	10	4	43	10	KED
⌊	Cd	114	0.153	ug/L	0.016	10	1	102	11	KED
⌈>	In	115		ug/L			519229	505119	2	Standard
⌊	Ag	107	0.108	ug/L	0.003	3	33	1821	3	Standard
⌈>	Tb	159		ug/L			190542	217502	2	Standard
⌊	Pb	208	10.645	ug/L	0.144	1	524	1108469	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0008-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:46:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	36904	6	Standard
⌈>	Sc	45		ug/L			600447	658482	8	Standard
|	Cr	52	13.364	ug/L	1.275	9	10860	237528	1	Standard
⌊	Cr	53	13.224	ug/L	1.165	8	113	26285	3	Standard
⌈>	Ge	72		ug/L			35776	33385	1	KED
|	Ni	60	11.756	ug/L	0.301	2	145	18995	0	KED
|	Ni	62	11.718	ug/L	0.482	4	28	3038	2	KED
|	Cu	63	26.959	ug/L	0.285	1	53	121042	0	KED
|	Cu	65	26.749	ug/L	0.537	2	29	61646	0	KED
|	Zn	66	95.776	ug/L	0.264	0	87	52948	1	KED
|	Zn	67	93.257	ug/L	3.356	3	19	8393	2	KED
⌊	As	75	5.155	ug/L	0.087	1	2	1382	0	KED
	Y	89		ug/L			55660	267607	3	Standard
	Kr	83		ug/L			44	82	18	Standard
⌈>	In-1	115		ug/L			7587	7025	1	KED
|	Cd	111	0.159	ug/L	0.028	17	4	44	17	KED
⌊	Cd	114	0.164	ug/L	0.003	1	1	109	1	KED
⌈>	In	115		ug/L			519229	476583	10	Standard
⌊	Ag	107	0.109	ug/L	0.012	10	33	1730	1	Standard
⌈>	Tb	159		ug/L			190542	212482	8	Standard
⌊	Pb	208	11.065	ug/L	1.013	9	524	1119922	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0008-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:50:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	35181	3	Standard
⌈>	Sc	45		ug/L			600447	694840	0	Standard
|	Cr	52	12.759	ug/L	0.166	1	10860	241055	1	Standard
⌊	Cr	53	12.803	ug/L	0.260	2	113	26979	2	Standard
⌈>	Ge	72		ug/L			35776	32911	1	KED
|	Ni	60	11.463	ug/L	0.048	0	145	18267	0	KED
|	Ni	62	11.716	ug/L	0.618	5	28	2995	5	KED
|	Cu	63	30.419	ug/L	0.228	0	53	134653	1	KED
|	Cu	65	30.125	ug/L	0.324	1	29	68448	1	KED
|	Zn	66	63.456	ug/L	1.666	2	87	34603	1	KED
|	Zn	67	61.360	ug/L	1.215	1	19	5452	2	KED
⌊	As	75	6.807	ug/L	0.171	2	2	1798	1	KED
	Y	89		ug/L			55660	270124	3	Standard
	Kr	83		ug/L			44	94	9	Standard
⌈>	In-1	115		ug/L			7587	7021	2	KED
|	Cd	111	0.179	ug/L	0.037	20	4	49	17	KED
⌊	Cd	114	0.173	ug/L	0.024	14	1	114	16	KED
⌈>	In	115		ug/L			519229	499685	2	Standard
⌊	Ag	107	0.116	ug/L	0.008	6	33	1932	4	Standard
⌈>	Tb	159		ug/L			190542	221804	0	Standard
⌊	Pb	208	11.749	ug/L	0.083	0	524	1247680	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0037-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:54:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	37636	5	Standard
>	Sc	45		ug/L			600447	685486	0	Standard
	Cr	52	16.521	ug/L	0.526	3	10860	304236	2	Standard
	Cr	53	16.594	ug/L	0.435	2	113	34456	2	Standard
>	Ge	72		ug/L			35776	32742	0	KED
	Ni	60	12.901	ug/L	0.250	1	145	20434	1	KED
	Ni	62	12.820	ug/L	0.316	2	28	3258	1	KED
	Cu	63	32.180	ug/L	0.702	2	53	141691	1	KED
	Cu	65	32.801	ug/L	0.389	1	29	74144	0	KED
	Zn	66	71.544	ug/L	1.069	1	87	38808	0	KED
	Zn	67	69.189	ug/L	1.002	1	19	6114	2	KED
	As	75	7.614	ug/L	0.071	0	2	2001	1	KED
	Y	89		ug/L			55660	259985	1	Standard
	Kr	83		ug/L			44	85	9	Standard
>	In-1	115		ug/L			7587	7023	1	KED
	Cd	111	0.137	ug/L	0.009	6	4	38	7	KED
	Cd	114	0.144	ug/L	0.012	8	1	95	6	KED
>	In	115		ug/L			519229	496722	1	Standard
	Ag	107	0.113	ug/L	0.004	3	33	1883	2	Standard
>	Tb	159		ug/L			190542	218818	0	Standard
	Pb	208	17.415	ug/L	0.324	1	524	1824272	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0037-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 00:59:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27881	37582	3	Standard
⌈>	Sc	45		ug/L			600447	669281	2	Standard
|	Cr	52	22.029	ug/L	0.384	1	10860	392004	2	Standard
⌊	Cr	53	21.690	ug/L	0.339	1	113	43926	1	Standard
⌈>	Ge	72		ug/L			35776	32667	2	KED
|	Ni	60	18.945	ug/L	0.600	3	145	29864	0	KED
|	Ni	62	18.494	ug/L	0.363	1	28	4678	1	KED
|	Cu	63	103.407	ug/L	2.883	2	53	454006	0	KED
|	Cu	65	102.730	ug/L	1.556	1	29	231623	2	KED
|	Zn	66	178.533	ug/L	4.616	2	87	96485	2	KED
|	Zn	67	170.011	ug/L	2.949	1	19	14964	3	KED
⌊	As	75	16.375	ug/L	0.240	1	2	4291	1	KED
	Y	89		ug/L			55660	241132	1	Standard
	Kr	83		ug/L			44	73	26	Standard
⌈>	In-1	115		ug/L			7587	6780	0	KED
|	Cd	111	0.418	ug/L	0.049	11	4	106	10	KED
⌊	Cd	114	0.454	ug/L	0.060	13	1	288	12	KED
⌈>	In	115		ug/L			519229	502468	3	Standard
⌊	Ag	107	0.118	ug/L	0.002	1	33	1979	1	Standard
⌈>	Tb	159		ug/L			190542	213368	0	Standard
⌊	Pb	208	48.910	ug/L	0.730	1	524	4994590	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0037-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:03:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	42891	2	Standard
⌈>	**Sc**	**45**		ug/L			600447	690386	1	Standard
|	**Cr**	**52**	**15.879**	ug/L	0.081	0	10860	295013	1	Standard
⌊	**Cr**	**53**	**15.797**	ug/L	0.231	1	113	33044	2	Standard
⌈>	**Ge**	**72**		ug/L			35776	32570	1	KED
|	**Ni**	**60**	**15.329**	ug/L	0.559	3	145	24120	2	KED
|	**Ni**	**62**	**15.503**	ug/L	0.390	2	28	3914	1	KED
|	**Cu**	**63**	**35.760**	ug/L	0.959	2	53	156594	1	KED
|	**Cu**	**65**	**34.988**	ug/L	0.447	1	29	78674	2	KED
|	**Zn**	**66**	**81.273**	ug/L	1.022	1	87	43842	1	KED
|	**Zn**	**67**	**78.630**	ug/L	2.118	2	19	6908	1	KED
⌊	**As**	**75**	**6.077**	ug/L	0.117	1	2	1589	0	KED
	Y	**89**		ug/L			55660	293531	0	Standard
	Kr	**83**		ug/L			44	81	11	Standard
⌈>	**In-1**	**115**		ug/L			7587	6877	0	KED
|	**Cd**	**111**	**0.163**	ug/L	0.024	14	4	44	14	KED
⌊	**Cd**	**114**	**0.184**	ug/L	0.033	18	1	119	17	KED
⌈>	**In**	**115**		ug/L			519229	497287	2	Standard
⌊	**Ag**	**107**	**0.123**	ug/L	0.006	4	33	2042	6	Standard
⌈>	**Tb**	**159**		ug/L			190542	220337	0	Standard
⌊	**Pb**	**208**	**18.272**	ug/L	0.349	1	524	1927197	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:08:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	24843	3	Standard
⌈>	**Sc**	**45**		ug/L			600447	570538	2	Standard
|	**Cr**	**52**	**-0.031**	ug/L	0.013	43	10860	9866	1	Standard
⌊	**Cr**	**53**	**-0.012**	ug/L	0.015	128	113	86	27	Standard
⌈>	**Ge**	**72**		ug/L			35776	32250	0	KED
|	**Ni**	**60**	**0.020**	ug/L	0.011	56	145	161	10	KED
|	**Ni**	**62**	**0.016**	ug/L	0.016	99	28	29	13	KED
|	**Cu**	**63**	**0.008**	ug/L	0.002	30	53	81	12	KED
|	**Cu**	**65**	**0.004**	ug/L	0.004	103	29	34	24	KED
|	**Zn**	**66**	**-0.028**	ug/L	0.030	106	87	64	25	KED
|	**Zn**	**67**	**-0.109**	ug/L	0.034	30	19	8	35	KED
⌊	**As**	**75**	**0.001**	ug/L	0.002	122	2	2	20	KED
	Y	**89**		ug/L			55660	53022	1	Standard
	Kr	**83**		ug/L			44	46	24	Standard
⌈>	**In-1**	**115**		ug/L			7587	6858	1	KED
|	**Cd**	**111**	**-0.010**	ug/L	0.009	88	4	1	173	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.003	915	1	1	106	KED
⌈>	**In**	**115**		ug/L			519229	507926	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	23	33	12	37	Standard
⌈>	**Tb**	**159**		ug/L			190542	192482	2	Standard
⌊	**Pb**	**208**	**0.004**	ug/L	0.004	126	524	860	50	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:12:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	24688	5	Standard
⌈>	**Sc**	**45**		ug/L			600447	587821	1	Standard
|	**Cr**	**52**	**50.267**	ug/L	0.836	1	10860	772260	3	Standard
⌊	**Cr**	**53**	**49.039**	ug/L	1.119	2	113	87116	3	Standard
⌈>	**Ge**	**72**		ug/L			35776	33250	0	KED
|	**Ni**	**60**	**48.819**	ug/L	0.971	1	145	78156	1	KED
|	**Ni**	**62**	**48.209**	ug/L	1.520	3	28	12372	2	KED
|	**Cu**	**63**	**49.620**	ug/L	0.752	1	53	221871	1	KED
|	**Cu**	**65**	**48.668**	ug/L	0.371	0	29	111709	0	KED
|	**Zn**	**66**	**50.023**	ug/L	1.122	2	87	27580	1	KED
|	**Zn**	**67**	**49.741**	ug/L	2.604	5	19	4468	4	KED
⌊	**As**	**75**	**49.558**	ug/L	0.239	0	2	13218	0	KED
	Y	**89**		ug/L			55660	53986	1	Standard
	Kr	**83**		ug/L			44	40	28	Standard
⌈>	**In-1**	**115**		ug/L			7587	7116	3	KED
|	**Cd**	**111**	**48.527**	ug/L	2.801	5	4	12510	3	KED
⌊	**Cd**	**114**	**48.916**	ug/L	3.450	7	1	32427	4	KED
⌈>	**In**	**115**		ug/L			519229	497812	2	Standard
⌊	**Ag**	**107**	**48.787**	ug/L	0.812	1	33	798652	0	Standard
⌈>	**Tb**	**159**		ug/L			190542	199063	0	Standard
⌊	**Pb**	**208**	**51.680**	ug/L	0.781	1	524	4923450	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:19:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27881	24490	0	Standard
⌈>	**Sc**	**45**		ug/L			600447	572095	1	Standard
|	**Cr**	**52**	**-0.016**	ug/L	0.007	47	10860	10114	2	Standard
⌊	**Cr**	**53**	**-0.010**	ug/L	0.005	52	113	90	10	Standard
⌈>	**Ge**	**72**		ug/L			35776	33107	1	KED
|	**Ni**	**60**	**-0.019**	ug/L	0.017	93	145	104	25	KED
|	**Ni**	**62**	**-0.036**	ug/L	0.021	57	28	17	29	KED
|	**Cu**	**63**	**0.007**	ug/L	0.003	36	53	81	14	KED
|	**Cu**	**65**	**0.011**	ug/L	0.011	102	29	50	46	KED
|	**Zn**	**66**	**-0.055**	ug/L	0.037	66	87	50	38	KED
|	**Zn**	**67**	**-0.111**	ug/L	0.077	68	19	8	81	KED
⌊	**As**	**75**	**0.006**	ug/L	0.002	30	2	3	15	KED
	Y	**89**		ug/L			55660	53252	4	Standard
	Kr	**83**		ug/L			44	46	16	Standard
⌈>	**In-1**	**115**		ug/L			7587	7049	3	KED
|	**Cd**	**111**	**-0.011**	ug/L	0.007	58	4	0	173	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	226	1	1	94	KED
⌈>	**In**	**115**		ug/L			519229	500651	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	50	33	55	22	Standard
⌈>	**Tb**	**159**		ug/L			190542	194761	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	22	524	665	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:24:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				23951	1	Standard
⌈>	**Sc**	**45**		ug/L				579638	2	Standard
|	**Cr**	**52**		ug/L				10138	1	Standard
⌊	**Cr**	**53**		ug/L				92	13	Standard
⌈>	**Ge**	**72**		ug/L				33052	2	KED
|	**Ni**	**60**		ug/L				97	25	KED
|	**Ni**	**62**		ug/L				15	49	KED
|	**Cu**	**63**		ug/L				198	57	KED
|	**Cu**	**65**		ug/L				107	77	KED
|	**Zn**	**66**		ug/L				67	36	KED
|	**Zn**	**67**		ug/L				15	13	KED
⌊	**As**	**75**		ug/L				4	114	KED
	Y	**89**		ug/L				53627	1	Standard
	Kr	**83**		ug/L				34	20	Standard
⌈>	**In-1**	**115**		ug/L				7114	5	KED
|	**Cd**	**111**		ug/L				2	24	KED
⌊	**Cd**	**114**		ug/L				0	293	KED
⌈>	**In**	**115**		ug/L				522018	2	Standard
⌊	**Ag**	**107**		ug/L				24	23	Standard
⌈>	**Tb**	**159**		ug/L				194588	1	Standard
⌊	**Pb**	**208**		ug/L				589	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:28:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	24643	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	604497	1	Standard
|	**Cr**	**52**	**48.978**	ug/L	0.531	1	10138	773644	2	Standard
⌊	**Cr**	**53**	**48.354**	ug/L	0.493	1	92	88313	2	Standard
⌈>	**Ge**	**72**		ug/L			33052	33370	0	KED
|	**Ni**	**60**	**49.324**	ug/L	1.040	2	97	79207	1	KED
|	**Ni**	**62**	**47.977**	ug/L	1.281	2	15	12345	1	KED
|	**Cu**	**63**	**49.978**	ug/L	1.244	2	198	224398	1	KED
|	**Cu**	**65**	**48.605**	ug/L	0.688	1	107	112041	0	KED
|	**Zn**	**66**	**50.089**	ug/L	0.902	1	67	27704	1	KED
|	**Zn**	**67**	**50.597**	ug/L	2.408	4	15	4559	4	KED
⌊	**As**	**75**	**49.659**	ug/L	1.424	2	4	13295	2	KED
	Y	**89**		ug/L			53627	55035	2	Standard
	Kr	**83**		ug/L			34	50	21	Standard
⌈>	**In-1**	**115**		ug/L			7114	7142	0	KED
|	**Cd**	**111**	**49.790**	ug/L	0.467	0	2	12894	1	KED
⌊	**Cd**	**114**	**49.917**	ug/L	0.583	1	0	33256	1	KED
⌈>	**In**	**115**		ug/L			522018	505738	4	Standard
⌊	**Ag**	**107**	**48.105**	ug/L	1.906	3	24	799289	0	Standard
⌈>	**Tb**	**159**		ug/L			194588	199862	1	Standard
⌊	**Pb**	**208**	**51.228**	ug/L	1.038	2	589	4900055	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:35:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	24390	5	Standard
⌈>	**Sc**	**45**		ug/L			579638	570057	2	Standard
|	**Cr**	**52**	**0.018**	ug/L	0.030	170	10138	10227	2	Standard
⌊	**Cr**	**53**	**-0.003**	ug/L	0.005	170	92	86	11	Standard
⌈>	**Ge**	**72**		ug/L			33052	34200	3	KED
|	**Ni**	**60**	**0.005**	ug/L	0.011	211	97	109	18	KED
|	**Ni**	**62**	**-0.016**	ug/L	0.016	101	15	12	32	KED
|	**Cu**	**63**	**-0.017**	ug/L	0.005	27	198	128	14	KED
|	**Cu**	**65**	**-0.024**	ug/L	0.005	19	107	55	15	KED
|	**Zn**	**66**	**-0.023**	ug/L	0.025	111	67	57	28	KED
|	**Zn**	**67**	**-0.062**	ug/L	0.046	74	15	10	40	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.005	104	4	3	37	KED
	Y	**89**		ug/L			53627	53691	4	Standard
	Kr	**83**		ug/L			34	40	9	Standard
⌈>	**In-1**	**115**		ug/L			7114	7219	0	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.006	147	2	1	114	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.002	907	0	0	218	KED
⌈>	**In**	**115**		ug/L			522018	508569	2	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	30	24	77	18	Standard
⌈>	**Tb**	**159**		ug/L			194588	192635	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	55	589	699	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0037-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:40:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	37083	2	Standard
⌈>	**Sc**	**45**		ug/L			579638	666315	2	Standard
|	**Cr**	**52**	**14.778**	ug/L	0.414	2	10138	265352	2	Standard
⌊	**Cr**	**53**	**14.846**	ug/L	0.408	2	92	29949	2	Standard
⌈>	**Ge**	**72**		ug/L			33052	33256	2	KED
|	**Ni**	**60**	**13.070**	ug/L	0.294	2	97	20983	0	KED
|	**Ni**	**62**	**13.519**	ug/L	0.640	4	15	3476	2	KED
|	**Cu**	**63**	**33.896**	ug/L	0.667	1	198	151715	0	KED
|	**Cu**	**65**	**34.294**	ug/L	1.367	3	107	78776	1	KED
|	**Zn**	**66**	**78.001**	ug/L	1.335	1	67	42946	0	KED
|	**Zn**	**67**	**76.310**	ug/L	3.075	4	15	6841	2	KED
⌊	**As**	**75**	**7.516**	ug/L	0.211	2	4	2008	1	KED
	Y	**89**		ug/L			53627	253479	2	Standard
	Kr	**83**		ug/L			34	67	14	Standard
⌈>	**In-1**	**115**		ug/L			7114	7022	2	KED
|	**Cd**	**111**	**0.173**	ug/L	0.026	14	2	46	15	KED
⌊	**Cd**	**114**	**0.168**	ug/L	0.032	19	0	110	19	KED
⌈>	**In**	**115**		ug/L			522018	501570	2	Standard
⌊	**Ag**	**107**	**0.124**	ug/L	0.008	6	24	2072	3	Standard
⌈>	**Tb**	**159**		ug/L			194588	216254	2	Standard
⌊	**Pb**	**208**	**24.655**	ug/L	0.542	2	589	2551303	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0063-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:44:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			23951	36093	5	Standard
>	Sc	45		ug/L			579638	675816	1	Standard
	Cr	52	12.093	ug/L	0.292	2	10138	222478	3	Standard
	Cr	53	11.925	ug/L	0.087	0	92	24429	1	Standard
>	Ge	72		ug/L			33052	32692	0	KED
	Ni	60	10.569	ug/L	0.056	0	97	16704	0	KED
	Ni	62	10.693	ug/L	0.267	2	15	2708	2	KED
	Cu	63	28.415	ug/L	0.362	1	198	125086	0	KED
	Cu	65	27.586	ug/L	0.411	1	107	62347	1	KED
	Zn	66	54.295	ug/L	1.764	3	67	29412	2	KED
	Zn	67	54.009	ug/L	0.750	1	15	4767	0	KED
	As	75	6.145	ug/L	0.125	2	4	1615	1	KED
	Y	89		ug/L			53627	247657	1	Standard
	Kr	83		ug/L			34	70	10	Standard
>	In-1	115		ug/L			7114	6869	3	KED
	Cd	111	0.128	ug/L	0.034	26	2	33	26	KED
	Cd	114	0.143	ug/L	0.032	22	0	91	23	KED
>	In	115		ug/L			522018	498017	1	Standard
	Ag	107	0.114	ug/L	0.004	3	24	1886	1	Standard
>	Tb	159		ug/L			194588	218860	2	Standard
	Pb	208	11.885	ug/L	0.301	2	589	1244967	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0063-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:49:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			23951	35499	1	Standard
⌈>	Sc	45		ug/L			579638	667168	1	Standard
|	Cr	52	12.476	ug/L	0.197	1	10138	226180	1	Standard
⌊	Cr	53	12.216	ug/L	0.084	0	92	24701	1	Standard
⌈>	Ge	72		ug/L			33052	32239	3	KED
|	Ni	60	10.330	ug/L	0.214	2	97	16096	1	KED
|	Ni	62	10.576	ug/L	0.168	1	15	2640	2	KED
|	Cu	63	29.293	ug/L	0.285	0	198	127139	2	KED
|	Cu	65	28.863	ug/L	0.751	2	107	64290	0	KED
|	Zn	66	56.772	ug/L	2.696	4	67	30296	1	KED
|	Zn	67	55.840	ug/L	3.137	5	15	4854	2	KED
⌊	As	75	7.812	ug/L	0.264	3	4	2022	1	KED
	Y	89		ug/L			53627	245815	2	Standard
	Kr	83		ug/L			34	64	9	Standard
⌈>	In-1	115		ug/L			7114	6861	2	KED
|	Cd	111	0.175	ug/L	0.040	22	2	45	19	KED
⌊	Cd	114	0.161	ug/L	0.030	18	0	103	17	KED
⌈>	In	115		ug/L			522018	506848	1	Standard
⌊	Ag	107	0.117	ug/L	0.005	4	24	1968	5	Standard
⌈>	Tb	159		ug/L			194588	214654	2	Standard
⌊	Pb	208	11.626	ug/L	0.374	3	589	1194319	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0452-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:53:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	105848	5	Standard
⌈>	**Sc**	**45**		ug/L			579638	461044	2	Standard
|	**Cr**	**52**	**2.573**	ug/L	0.016	0	10138	38630	2	Standard
⌊	**Cr**	**53**	**2.140**	ug/L	0.084	3	92	3048	1	Standard
⌈>	**Ge**	**72**		ug/L			33052	25757	1	KED
|	**Ni**	**60**	**3.973**	ug/L	0.094	2	97	4995	2	KED
|	**Ni**	**62**	**3.970**	ug/L	0.157	3	15	800	4	KED
|	**Cu**	**63**	**0.400**	ug/L	0.004	1	198	1539	0	KED
|	**Cu**	**65**	**0.392**	ug/L	0.035	8	107	780	7	KED
|	**Zn**	**66**	**2.796**	ug/L	0.241	8	67	1243	8	KED
|	**Zn**	**67**	**2.790**	ug/L	0.296	10	15	205	9	KED
⌊	**As**	**75**	**0.134**	ug/L	0.017	12	4	31	10	KED
	Y	**89**		ug/L			53627	44123	1	Standard
	Kr	**83**		ug/L			34	34	27	Standard
⌈>	**In-1**	**115**		ug/L			7114	5449	7	KED
|	**Cd**	**111**	**0.033**	ug/L	0.004	11	2	8	13	KED
⌊	**Cd**	**114**	**0.026**	ug/L	0.009	35	0	13	39	KED
⌈>	**In**	**115**		ug/L			522018	421633	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.005	111	24	76	82	Standard
⌈>	**Tb**	**159**		ug/L			194588	165473	1	Standard
⌊	**Pb**	**208**	**0.040**	ug/L	0.001	1	589	3659	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0462-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 01:58:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	27229	5	Standard
⌈>	**Sc**	**45**		ug/L			579638	536374	1	Standard
|	**Cr**	**52**	**0.130**	ug/L	0.034	26	10138	11176	4	Standard
⌊	**Cr**	**53**	**0.395**	ug/L	0.027	6	92	725	7	Standard
⌈>	**Ge**	**72**		ug/L			33052	27488	2	KED
|	**Ni**	**60**	**1.680**	ug/L	0.028	1	97	2301	2	KED
|	**Ni**	**62**	**1.689**	ug/L	0.045	2	15	370	1	KED
|	**Cu**	**63**	**0.581**	ug/L	0.032	5	198	2311	3	KED
|	**Cu**	**65**	**0.564**	ug/L	0.036	6	107	1158	5	KED
|	**Zn**	**66**	**1.179**	ug/L	0.101	8	67	591	5	KED
|	**Zn**	**67**	**1.938**	ug/L	0.261	13	15	156	14	KED
⌊	**As**	**75**	**0.362**	ug/L	0.010	2	4	83	0	KED
	Y	**89**		ug/L			53627	49793	3	Standard
	Kr	**83**		ug/L			34	47	16	Standard
⌈>	**In-1**	**115**		ug/L			7114	5876	2	KED
|	**Cd**	**111**	**0.015**	ug/L	0.008	49	2	5	28	KED
⌊	**Cd**	**114**	**0.019**	ug/L	0.008	42	0	10	38	KED
⌈>	**In**	**115**		ug/L			522018	482911	0	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	276	24	24	20	Standard
⌈>	**Tb**	**159**		ug/L			194588	180457	1	Standard
⌊	**Pb**	**208**	**0.029**	ug/L	0.001	2	589	3029	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0135-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:03:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	37969	3	Standard
⌈>	**Sc**	**45**		ug/L			579638	547722	2	Standard
|	**Cr**	**52**	**0.714**	ug/L	0.028	3	10138	19664	2	Standard
⌊	**Cr**	**53**	**0.678**	ug/L	0.015	2	92	1207	0	Standard
⌈>	**Ge**	**72**		ug/L			33052	30087	2	KED
|	**Ni**	**60**	**0.612**	ug/L	0.033	5	97	975	6	KED
|	**Ni**	**62**	**0.639**	ug/L	0.038	5	15	162	7	KED
|	**Cu**	**63**	**5.288**	ug/L	0.088	1	198	21568	0	KED
|	**Cu**	**65**	**5.255**	ug/L	0.116	2	107	11007	0	KED
|	**Zn**	**66**	**140.941**	ug/L	1.920	1	67	70163	1	KED
|	**Zn**	**67**	**133.083**	ug/L	3.879	2	15	10786	2	KED
⌊	**As**	**75**	**1.106**	ug/L	0.012	1	4	270	1	KED
	Y	**89**		ug/L			53627	51171	1	Standard
	Kr	**83**		ug/L			34	71	15	Standard
⌈>	**In-1**	**115**		ug/L			7114	6329	1	KED
|	**Cd**	**111**	**0.112**	ug/L	0.013	12	2	27	12	KED
⌊	**Cd**	**114**	**0.097**	ug/L	0.002	2	0	57	2	KED
⌈>	**In**	**115**		ug/L			522018	493757	1	Standard
⌊	**Ag**	**107**	**0.009**	ug/L	0.001	7	24	170	6	Standard
⌈>	**Tb**	**159**		ug/L			194588	185755	1	Standard
⌊	**Pb**	**208**	**0.563**	ug/L	0.020	3	589	50598	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0135-02
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:08:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	36538	6	Standard
⌈>	**Sc**	**45**		ug/L			579638	578838	2	Standard
|	**Cr**	**52**	**0.519**	ug/L	0.007	1	10138	17866	2	Standard
⌊	**Cr**	**53**	**0.988**	ug/L	0.059	5	92	1818	5	Standard
⌈>	**Ge**	**72**		ug/L			33052	29808	1	KED
|	**Ni**	**60**	**0.569**	ug/L	0.017	2	97	904	3	KED
|	**Ni**	**62**	**0.530**	ug/L	0.027	5	15	135	3	KED
|	**Cu**	**63**	**3.554**	ug/L	0.126	3	198	14417	2	KED
|	**Cu**	**65**	**3.585**	ug/L	0.056	1	107	7470	0	KED
|	**Zn**	**66**	**2.359**	ug/L	0.068	2	67	1222	1	KED
|	**Zn**	**67**	**2.363**	ug/L	0.363	15	15	203	14	KED
⌊	**As**	**75**	**1.123**	ug/L	0.031	2	4	272	1	KED
	Y	**89**		ug/L			53627	59933	0	Standard
	Kr	**83**		ug/L			34	63	13	Standard
⌈>	**In-1**	**115**		ug/L			7114	6300	2	KED
|	**Cd**	**111**	**0.004**	ug/L	0.009	216	2	2	66	KED
⌊	**Cd**	**114**	**0.010**	ug/L	0.002	17	0	6	16	KED
⌈>	**In**	**115**		ug/L			522018	486907	0	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.000	2	24	141	1	Standard
⌈>	**Tb**	**159**		ug/L			194588	189476	1	Standard
⌊	**Pb**	**208**	**0.205**	ug/L	0.005	2	589	19197	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0135-03
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:12:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	38119	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	558704	1	Standard
|	**Cr**	**52**	**0.554**	ug/L	0.023	4	10138	17750	3	Standard
⌊	**Cr**	**53**	**0.562**	ug/L	0.027	4	92	1036	4	Standard
⌈>	**Ge**	**72**		ug/L			33052	30571	1	KED
|	**Ni**	**60**	**0.746**	ug/L	0.032	4	97	1186	2	KED
|	**Ni**	**62**	**0.744**	ug/L	0.118	15	15	189	14	KED
|	**Cu**	**63**	**5.766**	ug/L	0.128	2	198	23876	0	KED
|	**Cu**	**65**	**5.570**	ug/L	0.189	3	107	11848	2	KED
|	**Zn**	**66**	**60.188**	ug/L	2.507	4	67	30468	2	KED
|	**Zn**	**67**	**58.288**	ug/L	1.458	2	15	4810	3	KED
⌊	**As**	**75**	**0.270**	ug/L	0.016	6	4	70	6	KED
	Y	**89**		ug/L			53627	54774	3	Standard
	Kr	**83**		ug/L			34	70	10	Standard
⌈>	**In-1**	**115**		ug/L			7114	6555	0	KED
|	**Cd**	**111**	**0.049**	ug/L	0.020	40	2	13	34	KED
⌊	**Cd**	**114**	**0.048**	ug/L	0.005	9	0	29	9	KED
⌈>	**In**	**115**		ug/L			522018	515795	2	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.001	14	24	168	11	Standard
⌈>	**Tb**	**159**		ug/L			194588	191287	1	Standard
⌊	**Pb**	**208**	**0.846**	ug/L	0.012	1	589	78051	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0135-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:17:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	38665	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	566861	1	Standard
|	**Cr**	**52**	**0.728**	ug/L	0.010	1	10138	20546	2	Standard
⌊	**Cr**	**53**	**0.803**	ug/L	0.062	7	92	1465	8	Standard
⌈>	**Ge**	**72**		ug/L			33052	31153	1	KED
|	**Ni**	**60**	**1.149**	ug/L	0.046	3	97	1813	4	KED
|	**Ni**	**62**	**1.105**	ug/L	0.081	7	15	280	5	KED
|	**Cu**	**63**	**6.771**	ug/L	0.129	1	198	28541	0	KED
|	**Cu**	**65**	**6.596**	ug/L	0.167	2	107	14285	3	KED
|	**Zn**	**66**	**65.082**	ug/L	0.876	1	67	33581	0	KED
|	**Zn**	**67**	**61.094**	ug/L	4.276	6	15	5132	5	KED
⌊	**As**	**75**	**0.523**	ug/L	0.041	7	4	134	6	KED
	Y	**89**		ug/L			53627	59942	1	Standard
	Kr	**83**		ug/L			34	76	13	Standard
⌈>	**In-1**	**115**		ug/L			7114	6559	2	KED
|	**Cd**	**111**	**0.061**	ug/L	0.030	48	2	16	42	KED
⌊	**Cd**	**114**	**0.056**	ug/L	0.002	4	0	34	6	KED
⌈>	**In**	**115**		ug/L			522018	504265	0	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.001	12	24	164	11	Standard
⌈>	**Tb**	**159**		ug/L			194588	192160	1	Standard
⌊	**Pb**	**208**	**2.595**	ug/L	0.038	1	589	239201	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:21:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	21544	3	Standard
⌈>	**Sc**	**45**		ug/L			579638	545161	2	Standard
|	**Cr**	**52**	**-0.044**	ug/L	0.022	49	10138	8919	2	Standard
⌊	**Cr**	**53**	**0.008**	ug/L	0.003	39	92	100	4	Standard
⌈>	**Ge**	**72**		ug/L			33052	30281	2	KED
|	**Ni**	**60**	**0.028**	ug/L	0.008	27	97	130	5	KED
|	**Ni**	**62**	**0.036**	ug/L	0.016	46	15	22	16	KED
|	**Cu**	**63**	**0.014**	ug/L	0.008	60	198	236	11	KED
|	**Cu**	**65**	**0.010**	ug/L	0.009	99	107	118	16	KED
|	**Zn**	**66**	**-0.013**	ug/L	0.015	120	67	55	13	KED
|	**Zn**	**67**	**-0.085**	ug/L	0.021	24	15	7	25	KED
⌊	**As**	**75**	**-0.007**	ug/L	0.006	79	4	2	60	KED
	Y	**89**		ug/L			53627	50064	2	Standard
	Kr	**83**		ug/L			34	67	16	Standard
⌈>	**In-1**	**115**		ug/L			7114	6136	0	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.007	168	2	0	173	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.000	12	0	0	50	KED
⌈>	**In**	**115**		ug/L			522018	493408	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	30	24	7	66	Standard
⌈>	**Tb**	**159**		ug/L			194588	186807	0	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	396	589	558	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:26:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	21516	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	550260	3	Standard
|	**Cr**	**52**	**49.898**	ug/L	0.736	1	10138	717062	2	Standard
⌊	**Cr**	**53**	**48.905**	ug/L	0.774	1	92	81286	2	Standard
⌈>	**Ge**	**72**		ug/L			33052	30601	1	KED
|	**Ni**	**60**	**49.258**	ug/L	1.105	2	97	72531	1	KED
|	**Ni**	**62**	**49.062**	ug/L	0.777	1	15	11579	2	KED
|	**Cu**	**63**	**50.423**	ug/L	1.755	3	198	207598	2	KED
|	**Cu**	**65**	**50.155**	ug/L	0.422	0	107	106033	2	KED
|	**Zn**	**66**	**51.110**	ug/L	1.440	2	67	25916	1	KED
|	**Zn**	**67**	**50.481**	ug/L	0.741	1	15	4171	0	KED
⌊	**As**	**75**	**49.333**	ug/L	0.457	0	4	12111	0	KED
	Y	**89**		ug/L			53627	51421	2	Standard
	Kr	**83**		ug/L			34	50	35	Standard
⌈>	**In-1**	**115**		ug/L			7114	6373	2	KED
|	**Cd**	**111**	**51.144**	ug/L	0.617	1	2	11817	1	KED
⌊	**Cd**	**114**	**51.111**	ug/L	1.372	2	0	30374	0	KED
⌈>	**In**	**115**		ug/L			522018	491126	0	Standard
⌊	**Ag**	**107**	**46.025**	ug/L	0.868	1	24	743507	2	Standard
⌈>	**Tb**	**159**		ug/L			194588	193039	1	Standard
⌊	**Pb**	**208**	**53.346**	ug/L	0.719	1	589	4928316	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:33:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	20958	3	Standard
⌈>	**Sc**	**45**		ug/L			579638	544844	3	Standard
|	**Cr**	**52**	**-0.036**	ug/L	0.007	18	10138	9030	2	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.008	108	92	73	17	Standard
⌈>	**Ge**	**72**		ug/L			33052	30925	2	KED
|	**Ni**	**60**	**0.009**	ug/L	0.032	345	97	106	47	KED
|	**Ni**	**62**	**0.017**	ug/L	0.041	236	15	19	51	KED
|	**Cu**	**63**	**0.011**	ug/L	0.031	286	198	232	57	KED
|	**Cu**	**65**	**0.003**	ug/L	0.019	572	107	108	39	KED
|	**Zn**	**66**	**-0.038**	ug/L	0.026	68	67	43	32	KED
|	**Zn**	**67**	**-0.087**	ug/L	0.023	26	15	7	25	KED
⌊	**As**	**75**	**0.012**	ug/L	0.013	106	4	7	46	KED
	Y	**89**		ug/L			53627	51661	1	Standard
	Kr	**83**		ug/L			34	57	21	Standard
⌈>	**In-1**	**115**		ug/L			7114	6496	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.006	191	2	1	114	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.000	5	0	0	21	KED
⌈>	**In**	**115**		ug/L			522018	495425	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	9	24	44	4	Standard
⌈>	**Tb**	**159**		ug/L			194588	187990	1	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	9	589	317	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0138-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:37:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			23951	26731	3	Standard
⌈>	Sc	45		ug/L			579638	510919	2	Standard
|	Cr	52	3.536	ug/L	0.053	1	10138	55491	1	Standard
⌊	Cr	53	3.450	ug/L	0.048	1	92	5401	3	Standard
⌈>	Ge	72		ug/L			33052	27574	0	KED
|	Ni	60	0.373	ug/L	0.022	5	97	576	5	KED
|	Ni	62	0.368	ug/L	0.037	9	15	91	8	KED
|	Cu	63	2.632	ug/L	0.032	1	198	9922	1	KED
|	Cu	65	2.576	ug/L	0.005	0	107	4991	0	KED
|	Zn	66	1.731	ug/L	0.144	8	67	845	6	KED
|	Zn	67	1.654	ug/L	0.275	16	15	135	14	KED
⌊	As	75	0.040	ug/L	0.010	23	4	12	17	KED
	Y	89		ug/L			53627	46957	1	Standard
	Kr	83		ug/L			34	50	22	Standard
⌈>	In-1	115		ug/L			7114	5630	4	KED
|	Cd	111	0.012	ug/L	0.007	62	2	4	35	KED
⌊	Cd	114	0.005	ug/L	0.002	32	0	2	32	KED
⌈>	In	115		ug/L			522018	454440	3	Standard
⌊	Ag	107	0.001	ug/L	0.001	86	24	35	32	Standard
⌈>	Tb	159		ug/L			194588	177445	0	Standard
⌊	Pb	208	0.009	ug/L	0.000	4	589	1292	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0139-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:42:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			23951	25305	6	Standard
⌈>	Sc	45		ug/L			579638	495840	2	Standard
|	Cr	52	6.970	ug/L	0.074	1	10138	97727	1	Standard
⌊	Cr	53	6.889	ug/L	0.140	2	92	10389	3	Standard
⌈>	Ge	72		ug/L			33052	26357	0	KED
|	Ni	60	0.396	ug/L	0.027	6	97	579	5	KED
|	Ni	62	0.351	ug/L	0.046	13	15	83	10	KED
|	Cu	63	2.634	ug/L	0.022	0	198	9492	0	KED
|	Cu	65	2.580	ug/L	0.023	0	107	4779	1	KED
|	Zn	66	1.552	ug/L	0.050	3	67	730	2	KED
|	Zn	67	1.324	ug/L	0.279	21	15	106	19	KED
⌊	As	75	0.037	ug/L	0.004	10	4	11	7	KED
	Y	89		ug/L			53627	45441	0	Standard
	Kr	83		ug/L			34	40	33	Standard
⌈>	In-1	115		ug/L			7114	5374	2	KED
|	Cd	111	0.009	ug/L	0.014	150	2	3	78	KED
⌊	Cd	114	0.027	ug/L	0.012	46	0	13	43	KED
⌈>	In	115		ug/L			522018	432964	3	Standard
⌊	Ag	107	0.001	ug/L	0.000	45	24	31	12	Standard
⌈>	Tb	159		ug/L			194588	174764	1	Standard
⌊	Pb	208	0.034	ug/L	0.001	1	589	3409	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0139-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:47:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			23951	26683	4	Standard
⌈>	Sc	45		ug/L			579638	489659	3	Standard
|	Cr	52	3.753	ug/L	0.073	1	10138	55912	1	Standard
⌊	Cr	53	3.762	ug/L	0.018	0	92	5636	2	Standard
⌈>	Ge	72		ug/L			33052	26552	0	KED
|	Ni	60	0.369	ug/L	0.018	4	97	549	4	KED
|	Ni	62	0.345	ug/L	0.078	22	15	83	18	KED
|	Cu	63	2.510	ug/L	0.028	1	198	9120	0	KED
|	Cu	65	2.433	ug/L	0.067	2	107	4546	3	KED
|	Zn	66	1.083	ug/L	0.028	2	67	529	2	KED
|	Zn	67	0.817	ug/L	0.129	15	15	71	12	KED
⌊	As	75	0.036	ug/L	0.011	29	4	11	19	KED
	Y	89		ug/L			53627	46118	3	Standard
	Kr	83		ug/L			34	36	7	Standard
⌈>	In-1	115		ug/L			7114	5389	1	KED
|	Cd	111	0.017	ug/L	0.006	33	2	5	21	KED
⌊	Cd	114	0.010	ug/L	0.007	70	0	5	65	KED
⌈>	In	115		ug/L			522018	441133	2	Standard
⌊	Ag	107	-0.001	ug/L	0.000	46	24	12	31	Standard
⌈>	Tb	159		ug/L			194588	175179	1	Standard
⌊	Pb	208	0.007	ug/L	0.001	12	589	1111	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0139-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:53:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			23951	26767	4	Standard
⌈>	Sc	45		ug/L			579638	504015	1	Standard
|	Cr	52	3.513	ug/L	0.093	2	10138	54463	4	Standard
⌊	Cr	53	3.463	ug/L	0.043	1	92	5348	3	Standard
⌈>	Ge	72		ug/L			33052	26771	0	KED
|	Ni	60	0.451	ug/L	0.023	5	97	659	4	KED
|	Ni	62	0.489	ug/L	0.039	8	15	113	6	KED
|	Cu	63	2.660	ug/L	0.052	1	198	9732	0	KED
|	Cu	65	2.699	ug/L	0.079	2	107	5073	1	KED
|	Zn	66	1.768	ug/L	0.133	7	67	836	6	KED
|	Zn	67	1.750	ug/L	0.245	13	15	139	13	KED
⌊	As	75	0.035	ug/L	0.007	21	4	11	15	KED
	Y	89		ug/L			53627	46971	2	Standard
	Kr	83		ug/L			34	48	12	Standard
⌈>	In-1	115		ug/L			7114	5586	1	KED
|	Cd	111	0.010	ug/L	0.005	47	2	3	25	KED
⌊	Cd	114	0.010	ug/L	0.004	41	0	5	37	KED
⌈>	In	115		ug/L			522018	433798	0	Standard
⌊	Ag	107	0.002	ug/L	0.001	54	24	53	34	Standard
⌈>	Tb	159		ug/L			194588	175484	1	Standard
⌊	Pb	208	0.014	ug/L	0.001	5	589	1719	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 02:57:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	20581	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	514460	2	Standard
|	**Cr**	**52**	**0.023**	ug/L	0.028	121	10138	9300	1	Standard
⌊	**Cr**	**53**	**-0.009**	ug/L	0.001	15	92	67	3	Standard
⌈>	**Ge**	**72**		ug/L			33052	29561	0	KED
|	**Ni**	**60**	**0.037**	ug/L	0.010	28	97	139	10	KED
|	**Ni**	**62**	**0.010**	ug/L	0.040	389	15	16	54	KED
|	**Cu**	**63**	**-0.030**	ug/L	0.002	8	198	57	16	KED
|	**Cu**	**65**	**-0.036**	ug/L	0.003	6	107	22	22	KED
|	**Zn**	**66**	**-0.017**	ug/L	0.016	93	67	52	15	KED
|	**Zn**	**67**	**-0.107**	ug/L	0.041	38	15	5	57	KED
⌊	**As**	**75**	**-0.007**	ug/L	0.005	67	4	2	53	KED
	Y	**89**		ug/L			53627	48791	1	Standard
	Kr	**83**		ug/L			34	54	43	Standard
⌈>	**In-1**	**115**		ug/L			7114	6083	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.005	315	2	1	69	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.002	123	0	1	90	KED
⌈>	**In**	**115**		ug/L			522018	488801	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	49	24	18	11	Standard
⌈>	**Tb**	**159**		ug/L			194588	184314	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	30	589	479	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0136-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:02:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	32770	3	Standard
⌈>	**Sc**	**45**		ug/L			579638	557739	0	Standard
|	**Cr**	**52**	**67.274**	ug/L	2.653	3	10138	976668	3	Standard
⌊	**Cr**	**53**	**66.446**	ug/L	0.652	0	92	111934	1	Standard
⌈>	**Ge**	**72**		ug/L			33052	29236	0	KED
|	**Ni**	**60**	**1.121**	ug/L	0.050	4	97	1661	3	KED
|	**Ni**	**62**	**1.234**	ug/L	0.177	14	15	292	14	KED
|	**Cu**	**63**	**7.027**	ug/L	0.005	0	198	27797	0	KED
|	**Cu**	**65**	**6.877**	ug/L	0.141	2	107	13973	2	KED
|	**Zn**	**66**	**6.382**	ug/L	0.084	1	67	3144	1	KED
|	**Zn**	**67**	**6.911**	ug/L	0.750	10	15	557	9	KED
⌊	**As**	**75**	**2.137**	ug/L	0.056	2	4	504	2	KED
	Y	**89**		ug/L			53627	87368	1	Standard
	Kr	**83**		ug/L			34	57	10	Standard
⌈>	**In-1**	**115**		ug/L			7114	6172	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.007	235	2	2	57	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.010	69	0	8	65	KED
⌈>	**In**	**115**		ug/L			522018	485517	3	Standard
⌊	**Ag**	**107**	**0.011**	ug/L	0.000	2	24	199	4	Standard
⌈>	**Tb**	**159**		ug/L			194588	194873	2	Standard
⌊	**Pb**	**208**	**1.553**	ug/L	0.050	3	589	145383	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0137-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:06:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	35755	6	Standard
⌈>	**Sc**	**45**		ug/L			579638	535473	2	Standard
|	**Cr**	**52**	**0.338**	ug/L	0.032	9	10138	14033	5	Standard
⌊	**Cr**	**53**	**0.343**	ug/L	0.012	3	92	639	4	Standard
⌈>	**Ge**	**72**		ug/L			33052	29985	1	KED
|	**Ni**	**60**	**0.275**	ug/L	0.028	10	97	484	6	KED
|	**Ni**	**62**	**0.284**	ug/L	0.052	18	15	80	14	KED
|	**Cu**	**63**	**4.731**	ug/L	0.041	0	198	19250	1	KED
|	**Cu**	**65**	**4.659**	ug/L	0.101	2	107	9738	2	KED
|	**Zn**	**66**	**45.233**	ug/L	0.593	1	67	22489	2	KED
|	**Zn**	**67**	**42.656**	ug/L	1.352	3	15	3456	3	KED
⌊	**As**	**75**	**0.172**	ug/L	0.015	8	4	45	9	KED
	Y	**89**		ug/L			53627	51488	2	Standard
	Kr	**83**		ug/L			34	48	35	Standard
⌈>	**In-1**	**115**		ug/L			7114	6231	1	KED
|	**Cd**	**111**	**0.026**	ug/L	0.011	39	2	7	30	KED
⌊	**Cd**	**114**	**0.040**	ug/L	0.007	16	0	23	17	KED
⌈>	**In**	**115**		ug/L			522018	499250	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.001	15	24	86	10	Standard
⌈>	**Tb**	**159**		ug/L			194588	189397	1	Standard
⌊	**Pb**	**208**	**0.787**	ug/L	0.023	2	589	71873	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-21
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:11:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			23951	33248	2	Standard
⌈>	Sc	45		ug/L			579638	537208	1	Standard
|	Cr	52	0.097	ug/L	0.020	20	10138	10742	2	Standard
⌊	Cr	53	0.104	ug/L	0.004	3	92	253	3	Standard
⌈>	Ge	72		ug/L			33052	29942	2	KED
|	Ni	60	0.000	ug/L	0.010	5753	97	88	17	KED
|	Ni	62	0.026	ug/L	0.014	53	15	20	14	KED
|	Cu	63	0.081	ug/L	0.008	9	198	505	6	KED
|	Cu	65	0.080	ug/L	0.008	10	107	262	4	KED
|	Zn	66	0.867	ug/L	0.118	13	67	490	11	KED
|	Zn	67	0.698	ug/L	0.164	23	15	70	16	KED
⌊	As	75	0.000	ug/L	0.007	1825	4	4	43	KED
	Y	89		ug/L			53627	50819	1	Standard
	Kr	83		ug/L			34	50	11	Standard
⌈>	In-1	115		ug/L			7114	6279	2	KED
|	Cd	111	0.005	ug/L	0.002	39	2	3	17	KED
⌊	Cd	114	0.004	ug/L	0.002	46	0	2	39	KED
⌈>	In	115		ug/L			522018	507431	1	Standard
⌊	Ag	107	-0.000	ug/L	0.001	2064	24	23	46	Standard
⌈>	Tb	159		ug/L			194588	187192	0	Standard
⌊	Pb	208	0.021	ug/L	0.001	6	589	2460	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-22
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:15:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	33216	5	Standard
⌈>	**Sc**	**45**		ug/L			579638	540455	2	Standard
|	**Cr**	**52**	**0.193**	ug/L	0.007	3	10138	12141	2	Standard
⌊	**Cr**	**53**	**0.213**	ug/L	0.006	2	92	432	1	Standard
⌈>	**Ge**	**72**		ug/L			33052	29934	2	KED
|	**Ni**	**60**	**-0.016**	ug/L	0.007	43	97	65	13	KED
|	**Ni**	**62**	**-0.013**	ug/L	0.015	121	15	11	28	KED
|	**Cu**	**63**	**0.144**	ug/L	0.010	6	198	760	2	KED
|	**Cu**	**65**	**0.145**	ug/L	0.007	4	107	398	4	KED
|	**Zn**	**66**	**0.558**	ug/L	0.016	2	67	337	2	KED
|	**Zn**	**67**	**0.635**	ug/L	0.206	32	15	65	24	KED
⌊	**As**	**75**	**-0.008**	ug/L	0.004	48	4	2	48	KED
	Y	**89**		ug/L			53627	51381	1	Standard
	Kr	**83**		ug/L			34	43	45	Standard
⌈>	**In-1**	**115**		ug/L			7114	6475	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.004	87	2	0	100	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.000	18	0	0	91	KED
⌈>	**In**	**115**		ug/L			522018	506450	0	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	27	24	15	13	Standard
⌈>	**Tb**	**159**		ug/L			194588	190548	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.001	18	589	829	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:20:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	21935	7	Standard
⌈>	**Sc**	**45**		ug/L			579638	534807	2	Standard
|	**Cr**	**52**	**-0.045**	ug/L	0.003	6	10138	8736	2	Standard
⌊	**Cr**	**53**	**-0.006**	ug/L	0.004	69	92	75	6	Standard
⌈>	**Ge**	**72**		ug/L			33052	29971	2	KED
|	**Ni**	**60**	**0.025**	ug/L	0.011	45	97	123	11	KED
|	**Ni**	**62**	**0.043**	ug/L	0.040	95	15	24	37	KED
|	**Cu**	**63**	**-0.031**	ug/L	0.002	6	198	53	16	KED
|	**Cu**	**65**	**-0.033**	ug/L	0.009	26	107	29	59	KED
|	**Zn**	**66**	**-0.013**	ug/L	0.015	121	67	54	12	KED
|	**Zn**	**67**	**-0.060**	ug/L	0.096	158	15	9	80	KED
⌊	**As**	**75**	**-0.009**	ug/L	0.009	99	4	1	108	KED
	Y	**89**		ug/L			53627	51479	1	Standard
	Kr	**83**		ug/L			34	55	15	Standard
⌈>	**In-1**	**115**		ug/L			7114	6208	1	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.004	3385	2	1	50	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	255	0	1	184	KED
⌈>	**In**	**115**		ug/L			522018	496396	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	8	24	8	12	Standard
⌈>	**Tb**	**159**		ug/L			194588	186482	2	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	16	589	459	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:24:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	22807	7	Standard
⌈>	**Sc**	**45**		ug/L			579638	556000	2	Standard
|	**Cr**	**52**	**48.851**	ug/L	0.760	1	10138	709575	1	Standard
⌊	**Cr**	**53**	**48.141**	ug/L	0.705	1	92	80877	3	Standard
⌈>	**Ge**	**72**		ug/L			33052	29925	0	KED
|	**Ni**	**60**	**50.748**	ug/L	0.354	0	97	73083	1	KED
|	**Ni**	**62**	**50.531**	ug/L	1.699	3	15	11660	3	KED
|	**Cu**	**63**	**51.681**	ug/L	0.769	1	198	208097	1	KED
|	**Cu**	**65**	**50.635**	ug/L	1.471	2	107	104669	2	KED
|	**Zn**	**66**	**51.834**	ug/L	0.857	1	67	25705	1	KED
|	**Zn**	**67**	**50.952**	ug/L	0.559	1	15	4117	0	KED
⌊	**As**	**75**	**50.274**	ug/L	0.907	1	4	12069	1	KED
	Y	**89**		ug/L			53627	50922	0	Standard
	Kr	**83**		ug/L			34	59	6	Standard
⌈>	**In-1**	**115**		ug/L			7114	6455	1	KED
|	**Cd**	**111**	**50.608**	ug/L	1.004	1	2	11844	0	KED
⌊	**Cd**	**114**	**51.083**	ug/L	1.456	2	0	30752	1	KED
⌈>	**In**	**115**		ug/L			522018	489404	3	Standard
⌊	**Ag**	**107**	**46.320**	ug/L	1.660	3	24	744936	0	Standard
⌈>	**Tb**	**159**		ug/L			194588	189215	1	Standard
⌊	**Pb**	**208**	**54.914**	ug/L	0.055	0	589	4973228	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:31:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	22233	3	Standard
⌈>	**Sc**	**45**		ug/L			579638	549986	1	Standard
|	**Cr**	**52**	**-0.050**	ug/L	0.020	40	10138	8905	3	Standard
⌊	**Cr**	**53**	**-0.014**	ug/L	0.005	36	92	64	12	Standard
⌈>	**Ge**	**72**		ug/L			33052	30190	2	KED
|	**Ni**	**60**	**-0.022**	ug/L	0.003	15	97	57	10	KED
|	**Ni**	**62**	**-0.005**	ug/L	0.013	257	15	13	24	KED
|	**Cu**	**63**	**-0.035**	ug/L	0.004	12	198	38	45	KED
|	**Cu**	**65**	**-0.040**	ug/L	0.002	6	107	15	30	KED
|	**Zn**	**66**	**-0.071**	ug/L	0.013	18	67	26	23	KED
|	**Zn**	**67**	**-0.155**	ug/L	0.024	15	15	1	100	KED
⌊	**As**	**75**	**-0.006**	ug/L	0.006	114	4	2	56	KED
	Y	**89**		ug/L			53627	49886	1	Standard
	Kr	**83**		ug/L			34	40	18	Standard
⌈>	**In-1**	**115**		ug/L			7114	6635	3	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.000	41	2	1		KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.002	42	0	3	37	KED
⌈>	**In**	**115**		ug/L			522018	502273	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.002	86	24	62	52	Standard
⌈>	**Tb**	**159**		ug/L			194588	186108	1	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.002	146	589	411	53	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-11
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:36:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	31765	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	563677	2	Standard
|	**Cr**	**52**	**0.516**	ug/L	0.028	5	10138	17347	1	Standard
⌊	**Cr**	**53**	**0.528**	ug/L	0.028	5	92	987	7	Standard
⌈>	**Ge**	**72**		ug/L			33052	31098	3	KED
|	**Ni**	**60**	**0.485**	ug/L	0.004	0	97	817	3	KED
|	**Ni**	**62**	**0.513**	ug/L	0.019	3	15	137	2	KED
|	**Cu**	**63**	**4.141**	ug/L	0.127	3	198	17492	1	KED
|	**Cu**	**65**	**4.064**	ug/L	0.150	3	107	8818	0	KED
|	**Zn**	**66**	**14.845**	ug/L	0.550	3	67	7690	1	KED
|	**Zn**	**67**	**13.795**	ug/L	1.052	7	15	1168	6	KED
⌊	**As**	**75**	**0.979**	ug/L	0.034	3	4	248	1	KED
	Y	**89**		ug/L			53627	58044	1	Standard
	Kr	**83**		ug/L			34	40	45	Standard
⌈>	**In-1**	**115**		ug/L			7114	6522	1	KED
|	**Cd**	**111**	**0.010**	ug/L	0.015	148	2	4	81	KED
⌊	**Cd**	**114**	**0.024**	ug/L	0.022	92	0	15	90	KED
⌈>	**In**	**115**		ug/L			522018	517383	2	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	12	24	112	7	Standard
⌈>	**Tb**	**159**		ug/L			194588	192288	0	Standard
⌊	**Pb**	**208**	**0.297**	ug/L	0.004	1	589	27902	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-13
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:40:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	33420	6	Standard
⌈>	**Sc**	**45**		ug/L			579638	597184	2	Standard
|	**Cr**	**52**	**0.086**	ug/L	0.003	3	10138	11761	2	Standard
⌊	**Cr**	**53**	**0.672**	ug/L	0.020	3	92	1306	5	Standard
⌈>	**Ge**	**72**		ug/L			33052	29672	0	KED
|	**Ni**	**60**	**0.873**	ug/L	0.063	7	97	1333	7	KED
|	**Ni**	**62**	**0.796**	ug/L	0.037	4	15	196	3	KED
|	**Cu**	**63**	**2.671**	ug/L	0.041	1	198	10832	1	KED
|	**Cu**	**65**	**2.604**	ug/L	0.067	2	107	5428	2	KED
|	**Zn**	**66**	**4.566**	ug/L	0.064	1	67	2300	0	KED
|	**Zn**	**67**	**4.512**	ug/L	0.361	8	15	374	8	KED
⌊	**As**	**75**	**8.446**	ug/L	0.070	0	4	2013	0	KED
	Y	**89**		ug/L			53627	52902	3	Standard
	Kr	**83**		ug/L			34	40	29	Standard
⌈>	**In-1**	**115**		ug/L			7114	6338	3	KED
|	**Cd**	**111**	**0.044**	ug/L	0.017	39	2	12	35	KED
⌊	**Cd**	**114**	**0.047**	ug/L	0.021	45	0	28	48	KED
⌈>	**In**	**115**		ug/L			522018	485458	1	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	11	24	130	8	Standard
⌈>	**Tb**	**159**		ug/L			194588	190390	1	Standard
⌊	**Pb**	**208**	**0.116**	ug/L	0.005	4	589	11107	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-02
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:45:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	38314	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	646981	2	Standard
|	**Cr**	**52**	**0.888**	ug/L	0.023	2	10138	26120	2	Standard
⌊	**Cr**	**53**	**1.076**	ug/L	0.017	1	92	2203	2	Standard
⌈>	**Ge**	**72**		ug/L			33052	29945	1	KED
|	**Ni**	**60**	**1.543**	ug/L	0.011	0	97	2310	0	KED
|	**Ni**	**62**	**1.604**	ug/L	0.107	6	15	384	5	KED
|	**Cu**	**63**	**8.861**	ug/L	0.062	0	198	35851	0	KED
|	**Cu**	**65**	**8.710**	ug/L	0.233	2	107	18094	1	KED
|	**Zn**	**66**	**59.363**	ug/L	1.858	3	67	29443	1	KED
|	**Zn**	**67**	**55.640**	ug/L	1.116	2	15	4497	2	KED
⌊	**As**	**75**	**13.552**	ug/L	0.241	1	4	3258	0	KED
	Y	**89**		ug/L			53627	53454	1	Standard
	Kr	**83**		ug/L			34	42	31	Standard
⌈>	**In-1**	**115**		ug/L			7114	6255	2	KED
|	**Cd**	**111**	**0.095**	ug/L	0.028	29	2	23	26	KED
⌊	**Cd**	**114**	**0.094**	ug/L	0.028	29	0	55	31	KED
⌈>	**In**	**115**		ug/L			522018	483384	2	Standard
⌊	**Ag**	**107**	**0.020**	ug/L	0.003	14	24	338	11	Standard
⌈>	**Tb**	**159**		ug/L			194588	187521	0	Standard
⌊	**Pb**	**208**	**0.498**	ug/L	0.005	1	589	45223	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0480-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:49:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			23951	70854	3	Standard
>	Sc	45		ug/L			579638	449320	6	Standard
	Cr	52	7.887	ug/L	0.328	4	10138	99022	2	Standard
	Cr	53	7.426	ug/L	0.154	2	92	10131	4	Standard
>	Ge	72		ug/L			33052	25478	2	KED
	Ni	60	1.547	ug/L	0.066	4	97	1969	4	KED
	Ni	62	1.644	ug/L	0.112	6	15	334	4	KED
	Cu	63	0.100	ug/L	0.014	13	198	497	9	KED
	Cu	65	0.093	ug/L	0.018	19	107	246	10	KED
	Zn	66	11.574	ug/L	0.487	4	67	4924	2	KED
	Zn	67	10.735	ug/L	0.983	9	15	747	6	KED
	As	75	0.044	ug/L	0.003	6	4	12	3	KED
	Y	89		ug/L			53627	44728	0	Standard
	Kr	83		ug/L			34	46	9	Standard
>	In-1	115		ug/L			7114	5192	0	KED
	Cd	111	0.170	ug/L	0.024	13	2	33	13	KED
	Cd	114	0.224	ug/L	0.028	12	0	108	11	KED
>	In	115		ug/L			522018	411063	1	Standard
	Ag	107	0.000	ug/L	0.000	143	24	23	26	Standard
>	Tb	159		ug/L			194588	163966	1	Standard
	Pb	208	0.025	ug/L	0.001	5	589	2473	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 03:57:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	20319	5	Standard
⌈>	**Sc**	**45**		ug/L			579638	499605	1	Standard
|	**Cr**	**52**	**-0.046**	ug/L	0.012	25	10138	8150	1	Standard
⌊	**Cr**	**53**	**-0.005**	ug/L	0.004	73	92	71	6	Standard
⌈>	**Ge**	**72**		ug/L			33052	27777	0	KED
|	**Ni**	**60**	**-0.024**	ug/L	0.014	58	97	50	38	KED
|	**Ni**	**62**	**-0.003**	ug/L	0.031	991	15	12	52	KED
|	**Cu**	**63**	**-0.034**	ug/L	0.004	10	198	38	34	KED
|	**Cu**	**65**	**-0.036**	ug/L	0.001	2	107	20	9	KED
|	**Zn**	**66**	**-0.045**	ug/L	0.043	96	67	36	55	KED
|	**Zn**	**67**	**-0.059**	ug/L	0.097	163	15	8	81	KED
⌊	**As**	**75**	**-0.008**	ug/L	0.004	52	4	1	50	KED
	Y	**89**		ug/L			53627	46991	0	Standard
	Kr	**83**		ug/L			34	40	50	Standard
⌈>	**In-1**	**115**		ug/L			7114	5646	3	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.003	50	2	0	86	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.006	134	0	2	115	KED
⌈>	**In**	**115**		ug/L			522018	478274	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	134	24	15	56	Standard
⌈>	**Tb**	**159**		ug/L			194588	177490	1	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	8	589	291	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0537-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:02:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	25567	1	Standard
⌈>	**Sc**	**45**		ug/L			579638	570472	2	Standard
|	**Cr**	**52**	**0.037**	ug/L	0.013	34	10138	10522	1	Standard
⌊	**Cr**	**53**	**0.161**	ug/L	0.007	4	92	368	5	Standard
⌈>	**Ge**	**72**		ug/L			33052	27813	1	KED
|	**Ni**	**60**	**0.117**	ug/L	0.020	17	97	238	9	KED
|	**Ni**	**62**	**0.157**	ug/L	0.051	32	15	46	23	KED
|	**Cu**	**63**	**0.061**	ug/L	0.008	13	198	394	9	KED
|	**Cu**	**65**	**0.056**	ug/L	0.007	12	107	198	5	KED
|	**Zn**	**66**	**0.314**	ug/L	0.053	16	67	201	13	KED
|	**Zn**	**67**	**0.544**	ug/L	0.135	24	15	53	17	KED
⌊	**As**	**75**	**0.881**	ug/L	0.057	6	4	200	5	KED
	Y	**89**		ug/L			53627	51535	1	Standard
	Kr	**83**		ug/L			34	35	18	Standard
⌈>	**In-1**	**115**		ug/L			7114	5808	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.003	97	2	1	43	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.006	216	0	1	180	KED
⌈>	**In**	**115**		ug/L			522018	466235	0	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	647	24	23	38	Standard
⌈>	**Tb**	**159**		ug/L			194588	184807	1	Standard
⌊	**Pb**	**208**	**0.009**	ug/L	0.001	10	589	1353	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-DUP3
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:06:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	25921	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	571398	1	Standard
|	**Cr**	**52**	**0.026**	ug/L	0.018	67	10138	10378	1	Standard
⌊	**Cr**	**53**	**0.167**	ug/L	0.014	8	92	378	6	Standard
⌈>	**Ge**	**72**		ug/L			33052	27769	2	KED
|	**Ni**	**60**	**0.146**	ug/L	0.011	7	97	276	3	KED
|	**Ni**	**62**	**0.101**	ug/L	0.050	49	15	34	30	KED
|	**Cu**	**63**	**0.017**	ug/L	0.017	97	198	231	27	KED
|	**Cu**	**65**	**0.013**	ug/L	0.008	62	107	114	13	KED
|	**Zn**	**66**	**0.357**	ug/L	0.064	17	67	220	12	KED
|	**Zn**	**67**	**0.443**	ug/L	0.103	23	15	46	14	KED
⌊	**As**	**75**	**0.944**	ug/L	0.075	7	4	213	5	KED
	Y	**89**		ug/L			53627	51598	1	Standard
	Kr	**83**		ug/L			34	38	23	Standard
⌈>	**In-1**	**115**		ug/L			7114	5735	1	KED
|	**Cd**	**111**	**0.007**	ug/L	0.003	39	2	3	17	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.004	80	0	2	73	KED
⌈>	**In**	**115**		ug/L			522018	473625	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	51	24	15	25	Standard
⌈>	**Tb**	**159**		ug/L			194588	184642	1	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.000	7	589	1104	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-MS3
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:11:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	26225	3	Standard
⌈>	**Sc**	**45**		ug/L			579638	578116	3	Standard
|	**Cr**	**52**	**4.784**	ug/L	0.234	4	10138	81350	3	Standard
⌊	**Cr**	**53**	**4.812**	ug/L	0.226	4	92	8479	1	Standard
⌈>	**Ge**	**72**		ug/L			33052	28372	0	KED
|	**Ni**	**60**	**5.500**	ug/L	0.057	1	97	7584	1	KED
|	**Ni**	**62**	**5.488**	ug/L	0.209	3	15	1212	2	KED
|	**Cu**	**63**	**5.297**	ug/L	0.107	2	198	20376	2	KED
|	**Cu**	**65**	**5.293**	ug/L	0.035	0	107	10457	1	KED
|	**Zn**	**66**	**17.411**	ug/L	0.199	1	67	8225	1	KED
|	**Zn**	**67**	**16.806**	ug/L	0.629	3	15	1296	2	KED
⌊	**As**	**75**	**6.246**	ug/L	0.164	2	4	1424	1	KED
	Y	**89**		ug/L			53627	53132	2	Standard
	Kr	**83**		ug/L			34	51	45	Standard
⌈>	**In-1**	**115**		ug/L			7114	5936	1	KED
|	**Cd**	**111**	**5.302**	ug/L	0.017	0	2	1142	1	KED
⌊	**Cd**	**114**	**5.212**	ug/L	0.091	1	0	2887	3	KED
⌈>	**In**	**115**		ug/L			522018	478703	2	Standard
⌊	**Ag**	**107**	**4.852**	ug/L	0.119	2	24	76442	4	Standard
⌈>	**Tb**	**159**		ug/L			194588	185283	0	Standard
⌊	**Pb**	**208**	**5.696**	ug/L	0.049	0	589	505647	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0120-MSD3
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:17:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	26543	2	Standard
⌈>	**Sc**	**45**		ug/L			579638	587593	2	Standard
|	**Cr**	**52**	**4.909**	ug/L	0.087	1	10138	84614	2	Standard
⌊	**Cr**	**53**	**4.941**	ug/L	0.054	1	92	8855	2	Standard
⌈>	**Ge**	**72**		ug/L			33052	29168	1	KED
|	**Ni**	**60**	**5.411**	ug/L	0.139	2	97	7671	2	KED
|	**Ni**	**62**	**5.517**	ug/L	0.086	1	15	1253	1	KED
|	**Cu**	**63**	**5.427**	ug/L	0.106	1	198	21457	1	KED
|	**Cu**	**65**	**5.392**	ug/L	0.133	2	107	10947	1	KED
|	**Zn**	**66**	**17.608**	ug/L	0.518	2	67	8549	1	KED
|	**Zn**	**67**	**16.790**	ug/L	0.367	2	15	1332	3	KED
⌊	**As**	**75**	**6.344**	ug/L	0.141	2	4	1487	0	KED
	Y	**89**		ug/L			53627	54403	3	Standard
	Kr	**83**		ug/L			34	43	19	Standard
⌈>	**In-1**	**115**		ug/L			7114	6065	1	KED
|	**Cd**	**111**	**5.441**	ug/L	0.071	1	2	1198	1	KED
⌊	**Cd**	**114**	**5.437**	ug/L	0.220	4	0	3075	2	KED
⌈>	**In**	**115**		ug/L			522018	480828	1	Standard
⌊	**Ag**	**107**	**4.983**	ug/L	0.032	0	24	78821	0	Standard
⌈>	**Tb**	**159**		ug/L			194588	183019	2	Standard
⌊	**Pb**	**208**	**5.992**	ug/L	0.152	2	589	525164	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:21:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	21528	5	Standard
⌈>	**Sc**	**45**		ug/L			579638	504587	2	Standard
|	**Cr**	**52**	**-0.049**	ug/L	0.013	26	10138	8189	4	Standard
⌊	**Cr**	**53**	**-0.001**	ug/L	0.010	914	92	78	20	Standard
⌈>	**Ge**	**72**		ug/L			33052	29052	2	KED
|	**Ni**	**60**	**-0.027**	ug/L	0.002	9	97	48	6	KED
|	**Ni**	**62**	**-0.020**	ug/L	0.008	39	15	9	20	KED
|	**Cu**	**63**	**-0.035**	ug/L	0.001	4	198	38	13	KED
|	**Cu**	**65**	**-0.041**	ug/L	0.002	5	107	12	31	KED
|	**Zn**	**66**	**-0.064**	ug/L	0.013	20	67	28	24	KED
|	**Zn**	**67**	**-0.122**	ug/L	0.028	22	15	4	49	KED
⌊	**As**	**75**	**-0.007**	ug/L	0.008	108	4	2	81	KED
	Y	**89**		ug/L			53627	49637	1	Standard
	Kr	**83**		ug/L			34	38	20	Standard
⌈>	**In-1**	**115**		ug/L			7114	6027	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.007	226	2	1	114	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.002	394	0	0	180	KED
⌈>	**In**	**115**		ug/L			522018	479515	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	299	24	20	32	Standard
⌈>	**Tb**	**159**		ug/L			194588	179966	0	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	6	589	288	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:26:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	21819	4	Standard
⌈>	**Sc**	**45**		ug/L			579638	537241	1	Standard
|	**Cr**	**52**	**48.713**	ug/L	0.418	0	10138	683894	1	Standard
⌊	**Cr**	**53**	**47.716**	ug/L	0.941	1	92	77447	2	Standard
⌈>	**Ge**	**72**		ug/L			33052	28563	3	KED
|	**Ni**	**60**	**50.357**	ug/L	1.050	2	97	69185	1	KED
|	**Ni**	**62**	**49.360**	ug/L	2.641	5	15	10859	2	KED
|	**Cu**	**63**	**50.236**	ug/L	1.591	3	198	192937	0	KED
|	**Cu**	**65**	**49.314**	ug/L	2.387	4	107	97191	1	KED
|	**Zn**	**66**	**51.840**	ug/L	1.972	3	67	24518	1	KED
|	**Zn**	**67**	**50.726**	ug/L	2.388	4	15	3909	3	KED
⌊	**As**	**75**	**49.845**	ug/L	2.221	4	4	11411	2	KED
	Y	**89**		ug/L			53627	50469	1	Standard
	Kr	**83**		ug/L			34	51	9	Standard
⌈>	**In-1**	**115**		ug/L			7114	6035	1	KED
|	**Cd**	**111**	**50.348**	ug/L	1.040	2	2	11017	1	KED
⌊	**Cd**	**114**	**49.801**	ug/L	1.740	3	0	28030	2	KED
⌈>	**In**	**115**		ug/L			522018	483754	2	Standard
⌊	**Ag**	**107**	**45.747**	ug/L	1.559	3	24	727585	1	Standard
⌈>	**Tb**	**159**		ug/L			194588	186391	1	Standard
⌊	**Pb**	**208**	**55.271**	ug/L	0.646	1	589	4930661	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:33:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23951	21106	1	Standard
⌈>	**Sc**	**45**		ug/L			579638	522344	0	Standard
|	**Cr**	**52**	**-0.061**	ug/L	0.019	31	10138	8310	2	Standard
⌊	**Cr**	**53**	**-0.006**	ug/L	0.004	59	92	73	8	Standard
⌈>	**Ge**	**72**		ug/L			33052	29478	2	KED
|	**Ni**	**60**	**-0.012**	ug/L	0.009	77	97	69	16	KED
|	**Ni**	**62**	**0.005**	ug/L	0.010	201	15	15	12	KED
|	**Cu**	**63**	**-0.037**	ug/L	0.002	5	198	30	27	KED
|	**Cu**	**65**	**-0.038**	ug/L	0.004	9	107	18	41	KED
|	**Zn**	**66**	**-0.070**	ug/L	0.007	9	67	26	15	KED
|	**Zn**	**67**	**-0.130**	ug/L	0.025	19	15	3	50	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.003	62	4	2	26	KED
	Y	**89**		ug/L			53627	49249	1	Standard
	Kr	**83**		ug/L			34	43	24	Standard
⌈>	**In-1**	**115**		ug/L			7114	6244	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.009	593	2	1	124	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	251	0	1	184	KED
⌈>	**In**	**115**		ug/L			522018	496790	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	101	24	40	40	Standard
⌈>	**Tb**	**159**		ug/L			194588	181353	2	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	9	589	283	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:37:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				21210	4	Standard
⌈>	**Sc**	**45**		ug/L				512571	4	Standard
|	**Cr**	**52**		ug/L				7952	2	Standard
⌊	**Cr**	**53**		ug/L				75	19	Standard
⌈>	**Ge**	**72**		ug/L				28784	1	KED
|	**Ni**	**60**		ug/L				75	11	KED
|	**Ni**	**62**		ug/L				12	56	KED
|	**Cu**	**63**		ug/L				53	8	KED
|	**Cu**	**65**		ug/L				25	37	KED
|	**Zn**	**66**		ug/L				52	8	KED
|	**Zn**	**67**		ug/L				8	13	KED
⌊	**As**	**75**		ug/L				3	33	KED
	Y	**89**		ug/L				50088	0	Standard
	Kr	**83**		ug/L				44	32	Standard
⌈>	**In-1**	**115**		ug/L				6034	0	KED
|	**Cd**	**111**		ug/L				1	34	KED
⌊	**Cd**	**114**		ug/L				1	102	KED
⌈>	**In**	**115**		ug/L				486697	0	Standard
⌊	**Ag**	**107**		ug/L				29	39	Standard
⌈>	**Tb**	**159**		ug/L				178618	1	Standard
⌊	**Pb**	**208**		ug/L				534	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:42:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	22837	2	Standard
⌈>	**Sc**	**45**		ug/L			512571	535240	2	Standard
|	**Cr**	**52**	**49.491**	ug/L	0.986	1	7952	690998	3	Standard
⌊	**Cr**	**53**	**48.754**	ug/L	0.390	0	75	78819	1	Standard
⌈>	**Ge**	**72**		ug/L			28784	29525	1	KED
|	**Ni**	**60**	**50.055**	ug/L	0.415	0	75	71110	0	KED
|	**Ni**	**62**	**49.979**	ug/L	1.344	2	12	11377	1	KED
|	**Cu**	**63**	**50.840**	ug/L	1.123	2	53	201840	1	KED
|	**Cu**	**65**	**49.659**	ug/L	0.970	1	25	101204	1	KED
|	**Zn**	**66**	**50.552**	ug/L	0.931	1	52	24728	0	KED
|	**Zn**	**67**	**49.626**	ug/L	2.134	4	8	3950	3	KED
⌊	**As**	**75**	**48.478**	ug/L	0.311	0	3	11483	0	KED
	Y	**89**		ug/L			50088	50850	3	Standard
	Kr	**83**		ug/L			44	46	16	Standard
⌈>	**In-1**	**115**		ug/L			6034	6252	1	KED
|	**Cd**	**111**	**49.549**	ug/L	0.377	0	1	11233	2	KED
⌊	**Cd**	**114**	**50.157**	ug/L	0.178	0	1	29252	1	KED
⌈>	**In**	**115**		ug/L			486697	479759	2	Standard
⌊	**Ag**	**107**	**46.667**	ug/L	0.707	1	29	736349	2	Standard
⌈>	**Tb**	**159**		ug/L			178618	186665	1	Standard
⌊	**Pb**	**208**	**55.001**	ug/L	1.042	1	534	4913677	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:49:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	21997	3	Standard
⌈>	**Sc**	**45**		ug/L			512571	533122	1	Standard
|	**Cr**	**52**	**0.014**	ug/L	0.006	43	7952	8458	2	Standard
⌊	**Cr**	**53**	**-0.009**	ug/L	0.006	71	75	64	15	Standard
⌈>	**Ge**	**72**		ug/L			28784	29712	0	KED
|	**Ni**	**60**	**-0.021**	ug/L	0.008	39	75	48	24	KED
|	**Ni**	**62**	**-0.024**	ug/L	0.000	0	12	7	0	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.001	17	53	36	9	KED
|	**Cu**	**65**	**-0.004**	ug/L	0.002	41	25	17	22	KED
|	**Zn**	**66**	**-0.068**	ug/L	0.025	37	52	20	59	KED
|	**Zn**	**67**	**-0.059**	ug/L	0.041	70	8	3	86	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.005	212	3	3	37	KED
	Y	**89**		ug/L			50088	49727	2	Standard
	Kr	**83**		ug/L			44	43	24	Standard
⌈>	**In-1**	**115**		ug/L			6034	6050	0	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.003	57	1	0	86	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.004	6243	1	1	192	KED
⌈>	**In**	**115**		ug/L			486697	490182	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	61	29	45	23	Standard
⌈>	**Tb**	**159**		ug/L			178618	181329	1	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.001	22	534	307	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:53:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	41125	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	553406	2	Standard
|	**Cr**	**52**	**0.370**	ug/L	0.014	3	7952	13862	0	Standard
⌊	**Cr**	**53**	**0.421**	ug/L	0.015	3	75	784	3	Standard
⌈>	**Ge**	**72**		ug/L			28784	29957	1	KED
|	**Ni**	**60**	**0.870**	ug/L	0.040	4	75	1330	3	KED
|	**Ni**	**62**	**0.872**	ug/L	0.054	6	12	214	6	KED
|	**Cu**	**63**	**2.805**	ug/L	0.089	3	53	11350	2	KED
|	**Cu**	**65**	**2.680**	ug/L	0.062	2	25	5568	2	KED
|	**Zn**	**66**	**10.735**	ug/L	0.292	2	52	5370	1	KED
|	**Zn**	**67**	**10.167**	ug/L	0.647	6	8	827	5	KED
⌊	**As**	**75**	**1.857**	ug/L	0.005	0	3	450	1	KED
	Y	**89**		ug/L			50088	52074	0	Standard
	Kr	**83**		ug/L			44	43	2	Standard
⌈>	**In-1**	**115**		ug/L			6034	6279	0	KED
|	**Cd**	**111**	**0.015**	ug/L	0.005	32	1	5	21	KED
⌊	**Cd**	**114**	**0.018**	ug/L	0.004	21	1	11	19	KED
⌈>	**In**	**115**		ug/L			486697	500655	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	40	29	55	19	Standard
⌈>	**Tb**	**159**		ug/L			178618	186090	1	Standard
⌊	**Pb**	**208**	**0.043**	ug/L	0.002	3	534	4388	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-06
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 04:58:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	37818	3	Standard
⌈>	**Sc**	**45**		ug/L			512571	620959	3	Standard
|	**Cr**	**52**	**0.750**	ug/L	0.035	4	7952	21630	0	Standard
⌊	**Cr**	**53**	**0.850**	ug/L	0.037	4	75	1682	2	Standard
⌈>	**Ge**	**72**		ug/L			28784	28362	2	KED
|	**Ni**	**60**	**1.873**	ug/L	0.124	6	75	2627	7	KED
|	**Ni**	**62**	**2.080**	ug/L	0.104	5	12	466	2	KED
|	**Cu**	**63**	**6.207**	ug/L	0.041	0	53	23720	1	KED
|	**Cu**	**65**	**5.944**	ug/L	0.210	3	25	11654	1	KED
|	**Zn**	**66**	**13.939**	ug/L	0.181	1	52	6588	1	KED
|	**Zn**	**67**	**13.056**	ug/L	0.606	4	8	1005	6	KED
⌊	**As**	**75**	**13.044**	ug/L	0.191	1	3	2970	0	KED
	Y	**89**		ug/L			50088	52960	3	Standard
	Kr	**83**		ug/L			44	37	12	Standard
⌈>	**In-1**	**115**		ug/L			6034	5947	1	KED
|	**Cd**	**111**	**0.186**	ug/L	0.014	7	1	41	5	KED
⌊	**Cd**	**114**	**0.208**	ug/L	0.016	7	1	116	6	KED
⌈>	**In**	**115**		ug/L			486697	479901	1	Standard
⌊	**Ag**	**107**	**0.012**	ug/L	0.001	8	29	218	5	Standard
⌈>	**Tb**	**159**		ug/L			178618	184864	1	Standard
⌊	**Pb**	**208**	**0.644**	ug/L	0.011	1	534	57486	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-08
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:02:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	35079	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	617244	2	Standard
|	**Cr**	**52**	**0.125**	ug/L	0.020	15	7952	11566	2	Standard
⌊	**Cr**	**53**	**0.244**	ug/L	0.006	2	75	546	4	Standard
⌈>	**Ge**	**72**		ug/L			28784	27855	1	KED
|	**Ni**	**60**	**0.829**	ug/L	0.066	7	75	1181	6	KED
|	**Ni**	**62**	**0.946**	ug/L	0.098	10	12	215	9	KED
|	**Cu**	**63**	**3.890**	ug/L	0.068	1	53	14619	1	KED
|	**Cu**	**65**	**3.923**	ug/L	0.106	2	25	7565	1	KED
|	**Zn**	**66**	**3.697**	ug/L	0.051	1	52	1753	2	KED
|	**Zn**	**67**	**3.953**	ug/L	0.258	6	8	304	5	KED
⌊	**As**	**75**	**20.959**	ug/L	0.676	3	3	4684	1	KED
	Y	**89**		ug/L			50088	50382	1	Standard
	Kr	**83**		ug/L			44	40	12	Standard
⌈>	**In-1**	**115**		ug/L			6034	5808	2	KED
|	**Cd**	**111**	**0.055**	ug/L	0.019	34	1	13	27	KED
⌊	**Cd**	**114**	**0.072**	ug/L	0.029	40	1	40	39	KED
⌈>	**In**	**115**		ug/L			486697	470446	1	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.000	7	29	123	6	Standard
⌈>	**Tb**	**159**		ug/L			178618	183524	1	Standard
⌊	**Pb**	**208**	**0.140**	ug/L	0.003	1	534	12872	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-10
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:07:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	36815	5	Standard
⌈>	**Sc**	**45**		ug/L			512571	612003	2	Standard
|	**Cr**	**52**	**0.190**	ug/L	0.013	7	7952	12489	1	Standard
⌊	**Cr**	**53**	**0.324**	ug/L	0.013	4	75	687	5	Standard
⌈>	**Ge**	**72**		ug/L			28784	27936	0	KED
|	**Ni**	**60**	**0.814**	ug/L	0.060	7	75	1165	6	KED
|	**Ni**	**62**	**0.884**	ug/L	0.083	9	12	202	8	KED
|	**Cu**	**63**	**3.939**	ug/L	0.170	4	53	14843	3	KED
|	**Cu**	**65**	**3.916**	ug/L	0.044	1	25	7575	0	KED
|	**Zn**	**66**	**4.135**	ug/L	0.215	5	52	1961	5	KED
|	**Zn**	**67**	**4.277**	ug/L	0.228	5	8	329	4	KED
⌊	**As**	**75**	**20.891**	ug/L	0.311	1	3	4684	0	KED
	Y	**89**		ug/L			50088	50782	1	Standard
	Kr	**83**		ug/L			44	56	10	Standard
⌈>	**In-1**	**115**		ug/L			6034	5897	1	KED
|	**Cd**	**111**	**0.072**	ug/L	0.012	16	1	16	14	KED
⌊	**Cd**	**114**	**0.084**	ug/L	0.026	31	1	47	31	KED
⌈>	**In**	**115**		ug/L			486697	476512	1	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	21	29	111	17	Standard
⌈>	**Tb**	**159**		ug/L			178618	184815	0	Standard
⌊	**Pb**	**208**	**0.113**	ug/L	0.001	0	534	10555	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-12
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:11:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	37614	3	Standard
⌈>	**Sc**	**45**		ug/L			512571	541924	1	Standard
|	**Cr**	**52**	**0.444**	ug/L	0.005	1	7952	14603	1	Standard
⌊	**Cr**	**53**	**0.458**	ug/L	0.009	2	75	828	2	Standard
⌈>	**Ge**	**72**		ug/L			28784	29366	1	KED
|	**Ni**	**60**	**0.438**	ug/L	0.038	8	75	694	6	KED
|	**Ni**	**62**	**0.467**	ug/L	0.046	9	12	118	9	KED
|	**Cu**	**63**	**4.007**	ug/L	0.099	2	53	15872	0	KED
|	**Cu**	**65**	**3.821**	ug/L	0.120	3	25	7768	2	KED
|	**Zn**	**66**	**15.485**	ug/L	0.769	4	52	7568	3	KED
|	**Zn**	**67**	**14.598**	ug/L	0.300	2	8	1161	2	KED
⌊	**As**	**75**	**1.412**	ug/L	0.061	4	3	336	5	KED
	Y	**89**		ug/L			50088	54650	2	Standard
	Kr	**83**		ug/L			44	40	21	Standard
⌈>	**In-1**	**115**		ug/L			6034	6075	2	KED
|	**Cd**	**111**	**0.006**	ug/L	0.008	134	1	2	57	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.010	194	1	4	138	KED
⌈>	**In**	**115**		ug/L			486697	485971	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	66	29	45	23	Standard
⌈>	**Tb**	**159**		ug/L			178618	187970	2	Standard
⌊	**Pb**	**208**	**0.026**	ug/L	0.001	3	534	2930	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-20
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:16:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21210	40097	3	Standard
⌈>	Sc	45		ug/L			512571	603458	1	Standard
|	Cr	52	0.809	ug/L	0.013	1	7952	21936	1	Standard
⌊	Cr	53	0.815	ug/L	0.006	0	75	1573	2	Standard
⌈>	Ge	72		ug/L			28784	28977	2	KED
|	Ni	60	1.925	ug/L	0.145	7	75	2754	5	KED
|	Ni	62	1.888	ug/L	0.139	7	12	433	5	KED
|	Cu	63	8.198	ug/L	0.187	2	53	31985	1	KED
|	Cu	65	8.011	ug/L	0.219	2	25	16040	1	KED
|	Zn	66	2.547	ug/L	0.146	5	52	1273	5	KED
|	Zn	67	2.986	ug/L	0.210	7	8	241	8	KED
⌊	As	75	2.558	ug/L	0.105	4	3	598	5	KED
	Y	89		ug/L			50088	93417	2	Standard
	Kr	83		ug/L			44	48	4	Standard
⌈>	In-1	115		ug/L			6034	6056	1	KED
|	Cd	111	0.001	ug/L	0.004	303	1	1	50	KED
⌊	Cd	114	0.013	ug/L	0.008	56	1	8	49	KED
⌈>	In	115		ug/L			486697	499578	1	Standard
⌊	Ag	107	0.009	ug/L	0.001	8	29	184	6	Standard
⌈>	Tb	159		ug/L			178618	188351	0	Standard
⌊	Pb	208	0.237	ug/L	0.005	1	534	21965	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0106-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:20:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	41033	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	600732	2	Standard
|	**Cr**	**52**	**0.798**	ug/L	0.026	3	7952	21676	3	Standard
⌊	**Cr**	**53**	**0.812**	ug/L	0.040	4	75	1561	6	Standard
⌈>	**Ge**	**72**		ug/L			28784	29419	1	KED
|	**Ni**	**60**	**1.815**	ug/L	0.049	2	75	2643	0	KED
|	**Ni**	**62**	**1.980**	ug/L	0.134	6	12	461	6	KED
|	**Cu**	**63**	**8.139**	ug/L	0.123	1	53	32242	0	KED
|	**Cu**	**65**	**8.017**	ug/L	0.020	0	25	16304	1	KED
|	**Zn**	**66**	**2.465**	ug/L	0.142	5	52	1252	4	KED
|	**Zn**	**67**	**2.747**	ug/L	0.140	5	8	226	6	KED
⌊	**As**	**75**	**2.471**	ug/L	0.116	4	3	586	2	KED
	Y	**89**		ug/L			50088	90128	3	Standard
	Kr	**83**		ug/L			44	61	25	Standard
⌈>	**In-1**	**115**		ug/L			6034	6203	0	KED
|	**Cd**	**111**	**0.010**	ug/L	0.007	76	1	3	43	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.004	42	1	6	34	KED
⌈>	**In**	**115**		ug/L			486697	491241	1	Standard
⌊	**Ag**	**107**	**0.008**	ug/L	0.001	9	29	165	7	Standard
⌈>	**Tb**	**159**		ug/L			178618	190226	0	Standard
⌊	**Pb**	**208**	**0.240**	ug/L	0.006	2	534	22402	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0106-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:24:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21210	39760	3	Standard
⌈>	Sc	45		ug/L			512571	584445	1	Standard
|	Cr	52	24.504	ug/L	0.768	3	7952	378151	3	Standard
⌊	Cr	53	24.330	ug/L	0.333	1	75	42999	2	Standard
⌈>	Ge	72		ug/L			28784	29130	0	KED
|	Ni	60	29.233	ug/L	0.300	1	75	41006	0	KED
|	Ni	62	28.687	ug/L	1.279	4	12	6447	3	KED
|	Cu	63	35.588	ug/L	0.038	0	53	139434	0	KED
|	Cu	65	35.292	ug/L	0.441	1	25	70972	0	KED
|	Zn	66	85.618	ug/L	1.238	1	52	41287	0	KED
|	Zn	67	85.737	ug/L	1.395	1	8	6729	1	KED
⌊	As	75	28.239	ug/L	0.482	1	3	6601	0	KED
	Y	89		ug/L			50088	90513	2	Standard
	Kr	83		ug/L			44	48	20	Standard
⌈>	In-1	115		ug/L			6034	6109	2	KED
|	Cd	111	26.780	ug/L	0.465	1	1	5932	0	KED
⌊	Cd	114	26.945	ug/L	0.773	2	1	15357	3	KED
⌈>	In	115		ug/L			486697	492130	1	Standard
⌊	Ag	107	24.738	ug/L	0.495	2	29	400420	2	Standard
⌈>	Tb	159		ug/L			178618	191727	1	Standard
⌊	Pb	208	29.314	ug/L	0.364	1	534	2689958	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0106-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:29:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	38779	2	Standard
⌈>	**Sc**	**45**		ug/L			512571	593612	0	Standard
|	**Cr**	**52**	**24.128**	ug/L	0.502	2	7952	378325	1	Standard
⌊	**Cr**	**53**	**23.584**	ug/L	0.272	1	75	42336	1	Standard
⌈>	**Ge**	**72**		ug/L			28784	29134	1	KED
|	**Ni**	**60**	**28.208**	ug/L	0.262	0	75	39574	1	KED
|	**Ni**	**62**	**28.944**	ug/L	0.377	1	12	6506	1	KED
|	**Cu**	**63**	**35.573**	ug/L	0.102	0	53	139393	1	KED
|	**Cu**	**65**	**35.339**	ug/L	0.595	1	25	71081	2	KED
|	**Zn**	**66**	**89.540**	ug/L	0.536	0	52	43185	2	KED
|	**Zn**	**67**	**85.104**	ug/L	1.844	2	8	6679	0	KED
⌊	**As**	**75**	**27.745**	ug/L	0.236	0	3	6486	1	KED
	Y	**89**		ug/L			50088	91556	2	Standard
	Kr	**83**		ug/L			44	59	21	Standard
⌈>	**In-1**	**115**		ug/L			6034	6041	2	KED
|	**Cd**	**111**	**26.686**	ug/L	0.564	2	1	5845	0	KED
⌊	**Cd**	**114**	**26.924**	ug/L	1.283	4	1	15164	2	KED
⌈>	**In**	**115**		ug/L			486697	492919	2	Standard
⌊	**Ag**	**107**	**24.337**	ug/L	1.058	4	29	394333	2	Standard
⌈>	**Tb**	**159**		ug/L			178618	189477	1	Standard
⌊	**Pb**	**208**	**29.445**	ug/L	0.796	2	534	2669694	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLG
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:33:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23042	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	504065	2	Standard
|	**Cr**	**52**	**0.021**	ug/L	0.003	14	7952	8096	2	Standard
⌊	**Cr**	**53**	**0.004**	ug/L	0.004	98	75	80	8	Standard
⌈>	**Ge**	**72**		ug/L			28784	29215	1	KED
|	**Ni**	**60**	**-0.017**	ug/L	0.006	36	75	52	16	KED
|	**Ni**	**62**	**-0.032**	ug/L	0.022	68	12	5	88	KED
|	**Cu**	**63**	**-0.004**	ug/L	0.002	43	53	40	17	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.004	230	25	22	39	KED
|	**Zn**	**66**	**-0.055**	ug/L	0.018	32	52	26	31	KED
|	**Zn**	**67**	**-0.018**	ug/L	0.028	158	8	6	31	KED
⌊	**As**	**75**	**-0.007**	ug/L	0.001	16	3	2	12	KED
	Y	**89**		ug/L			50088	47701	0	Standard
	Kr	**83**		ug/L			44	36	21	Standard
⌈>	**In-1**	**115**		ug/L			6034	6006	0	KED
|	**Cd**	**111**	**0.001**	ug/L	0.009	596	1	1	100	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.005	220	1	2	118	KED
⌈>	**In**	**115**		ug/L			486697	485981	4	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.002	91	29	71	52	Standard
⌈>	**Tb**	**159**		ug/L			178618	179589	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.006	1138	534	580	82	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:38:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23250	6	Standard
⌈>	**Sc**	**45**		ug/L			512571	528228	1	Standard
|	**Cr**	**52**	**49.500**	ug/L	0.901	1	7952	681993	1	Standard
⌊	**Cr**	**53**	**48.349**	ug/L	0.150	0	75	77149	1	Standard
⌈>	**Ge**	**72**		ug/L			28784	30008	0	KED
|	**Ni**	**60**	**48.196**	ug/L	0.665	1	75	69599	1	KED
|	**Ni**	**62**	**47.638**	ug/L	0.836	1	12	11023	1	KED
|	**Cu**	**63**	**48.752**	ug/L	0.851	1	53	196743	1	KED
|	**Cu**	**65**	**49.349**	ug/L	0.352	0	25	102234	1	KED
|	**Zn**	**66**	**49.407**	ug/L	0.678	1	52	24567	0	KED
|	**Zn**	**67**	**49.504**	ug/L	0.874	1	8	4006	1	KED
⌊	**As**	**75**	**48.304**	ug/L	0.703	1	3	11630	1	KED
	Y	**89**		ug/L			50088	50276	3	Standard
	Kr	**83**		ug/L			44	66	8	Standard
⌈>	**In-1**	**115**		ug/L			6034	6120	0	KED
|	**Cd**	**111**	**51.184**	ug/L	0.659	1	1	11358	0	KED
⌊	**Cd**	**114**	**51.083**	ug/L	0.638	1	1	29165	1	KED
⌈>	**In**	**115**		ug/L			486697	478764	0	Standard
⌊	**Ag**	**107**	**46.724**	ug/L	0.422	0	29	735777	0	Standard
⌈>	**Tb**	**159**		ug/L			178618	184982	1	Standard
⌊	**Pb**	**208**	**55.526**	ug/L	1.157	2	534	4914953	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:45:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	22826	1	Standard
⌈>	**Sc**	**45**		ug/L			512571	514605	2	Standard
|	**Cr**	**52**	**-0.006**	ug/L	0.008	138	7952	7911	3	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.004	46	75	63	11	Standard
⌈>	**Ge**	**72**		ug/L			28784	29448	0	KED
|	**Ni**	**60**	**-0.017**	ug/L	0.016	91	75	53	40	KED
|	**Ni**	**62**	**-0.007**	ug/L	0.017	238	12	11	33	KED
|	**Cu**	**63**	**-0.004**	ug/L	0.007	195	53	40	68	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.001	21	25	20	5	KED
|	**Zn**	**66**	**-0.051**	ug/L	0.018	36	52	29	30	KED
|	**Zn**	**67**	**-0.082**	ug/L	0.024	29	8	1	100	KED
⌊	**As**	**75**	**0.006**	ug/L	0.006	98	3	5	26	KED
	Y	**89**		ug/L			50088	48607	1	Standard
	Kr	**83**		ug/L			44	52	12	Standard
⌈>	**In-1**	**115**		ug/L			6034	6091	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	139	1	0	100	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.002	90	1	2	45	KED
⌈>	**In**	**115**		ug/L			486697	473300	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	11	29	50	5	Standard
⌈>	**Tb**	**159**		ug/L			178618	179990	0	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.001	15	534	251	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-14
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:50:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	40592	5	Standard
⌈>	**Sc**	**45**		ug/L			512571	625583	3	Standard
|	**Cr**	**52**	**0.332**	ug/L	0.007	1	7952	15056	3	Standard
⌊	**Cr**	**53**	**1.924**	ug/L	0.015	0	75	3723	3	Standard
⌈>	**Ge**	**72**		ug/L			28784	28463	2	KED
|	**Ni**	**60**	**1.957**	ug/L	0.061	3	75	2750	1	KED
|	**Ni**	**62**	**2.020**	ug/L	0.030	1	12	455	1	KED
|	**Cu**	**63**	**9.385**	ug/L	0.272	2	53	35960	2	KED
|	**Cu**	**65**	**9.404**	ug/L	0.188	2	25	18493	0	KED
|	**Zn**	**66**	**10.817**	ug/L	0.187	1	52	5141	1	KED
|	**Zn**	**67**	**11.789**	ug/L	0.263	2	8	911	2	KED
⌊	**As**	**75**	**20.812**	ug/L	0.559	2	3	4753	0	KED
	Y	**89**		ug/L			50088	53972	1	Standard
	Kr	**83**		ug/L			44	42	15	Standard
⌈>	**In-1**	**115**		ug/L			6034	6071	0	KED
|	**Cd**	**111**	**0.141**	ug/L	0.013	8	1	32	8	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.004	4	1	57	5	KED
⌈>	**In**	**115**		ug/L			486697	454002	2	Standard
⌊	**Ag**	**107**	**0.026**	ug/L	0.002	7	29	414	5	Standard
⌈>	**Tb**	**159**		ug/L			178618	181226	2	Standard
⌊	**Pb**	**208**	**0.990**	ug/L	0.014	1	534	86358	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-16
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:54:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	43420	6	Standard
⌈>	**Sc**	**45**		ug/L			512571	546125	1	Standard
|	**Cr**	**52**	**0.647**	ug/L	0.033	5	7952	17577	4	Standard
⌊	**Cr**	**53**	**0.675**	ug/L	0.033	4	75	1193	4	Standard
⌈>	**Ge**	**72**		ug/L			28784	30240	0	KED
|	**Ni**	**60**	**0.675**	ug/L	0.035	5	75	1059	4	KED
|	**Ni**	**62**	**0.602**	ug/L	0.023	3	12	153	3	KED
|	**Cu**	**63**	**5.711**	ug/L	0.106	1	53	23274	1	KED
|	**Cu**	**65**	**5.569**	ug/L	0.142	2	25	11649	2	KED
|	**Zn**	**66**	**29.892**	ug/L	0.254	0	52	15000	0	KED
|	**Zn**	**67**	**28.725**	ug/L	0.734	2	8	2346	2	KED
⌊	**As**	**75**	**3.914**	ug/L	0.061	1	3	953	1	KED
	Y	**89**		ug/L			50088	54733	0	Standard
	Kr	**83**		ug/L			44	45	8	Standard
⌈>	**In-1**	**115**		ug/L			6034	6139	2	KED
|	**Cd**	**111**	**0.037**	ug/L	0.002	5	1	9	5	KED
⌊	**Cd**	**114**	**0.014**	ug/L	0.004	28	1	8	22	KED
⌈>	**In**	**115**		ug/L			486697	497849	1	Standard
⌊	**Ag**	**107**	**0.003**	ug/L	0.001	25	29	85	15	Standard
⌈>	**Tb**	**159**		ug/L			178618	190840	1	Standard
⌊	**Pb**	**208**	**0.300**	ug/L	0.005	1	534	27994	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-18
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 05:58:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21210	41506	5	Standard
⌈>	Sc	45		ug/L			512571	563971	1	Standard
|	Cr	52	0.879	ug/L	0.056	6	7952	21514	2	Standard
⌊	Cr	53	0.921	ug/L	0.009	1	75	1650	1	Standard
⌈>	Ge	72		ug/L			28784	29591	0	KED
|	Ni	60	0.841	ug/L	0.034	4	75	1274	4	KED
|	Ni	62	0.988	ug/L	0.174	17	12	238	16	KED
|	Cu	63	3.718	ug/L	0.097	2	53	14845	2	KED
|	Cu	65	3.603	ug/L	0.056	1	25	7384	1	KED
|	Zn	66	16.875	ug/L	0.347	2	52	8310	1	KED
|	Zn	67	16.131	ug/L	1.579	9	8	1292	9	KED
⌊	As	75	1.797	ug/L	0.041	2	3	430	1	KED
	Y	89		ug/L			50088	56214	2	Standard
	Kr	83		ug/L			44	30	21	Standard
⌈>	In-1	115		ug/L			6034	6314	4	KED
|	Cd	111	0.008	ug/L	0.006	69	1	3	31	KED
⌊	Cd	114	0.011	ug/L	0.006	60	1	7	52	KED
⌈>	In	115		ug/L			486697	482029	1	Standard
⌊	Ag	107	0.005	ug/L	0.001	24	29	115	18	Standard
⌈>	Tb	159		ug/L			178618	192728	0	Standard
⌊	Pb	208	0.200	ug/L	0.003	1	534	19033	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-01
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:03:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	35873	2	Standard
⌈>	**Sc**	**45**		ug/L			512571	619987	1	Standard
|	**Cr**	**52**	**1.104**	ug/L	0.004	0	7952	27252	2	Standard
⌊	**Cr**	**53**	**1.258**	ug/L	0.032	2	75	2444	3	Standard
⌈>	**Ge**	**72**		ug/L			28784	29585	1	KED
|	**Ni**	**60**	**1.906**	ug/L	0.066	3	75	2788	4	KED
|	**Ni**	**62**	**1.874**	ug/L	0.068	3	12	440	2	KED
|	**Cu**	**63**	**11.407**	ug/L	0.361	3	53	45418	2	KED
|	**Cu**	**65**	**10.967**	ug/L	0.111	1	25	22416	0	KED
|	**Zn**	**66**	**60.525**	ug/L	0.205	0	52	29659	1	KED
|	**Zn**	**67**	**58.668**	ug/L	1.256	2	8	4678	1	KED
⌊	**As**	**75**	**14.694**	ug/L	0.332	2	3	3490	1	KED
	Y	**89**		ug/L			50088	54055	0	Standard
	Kr	**83**		ug/L			44	48	13	Standard
⌈>	**In-1**	**115**		ug/L			6034	6021	0	KED
|	**Cd**	**111**	**0.100**	ug/L	0.018	17	1	23	16	KED
⌊	**Cd**	**114**	**0.090**	ug/L	0.014	15	1	51	15	KED
⌈>	**In**	**115**		ug/L			486697	482814	0	Standard
⌊	**Ag**	**107**	**0.034**	ug/L	0.002	6	29	575	6	Standard
⌈>	**Tb**	**159**		ug/L			178618	185868	0	Standard
⌊	**Pb**	**208**	**1.077**	ug/L	0.010	0	534	96390	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-03
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:07:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	43263	3	Standard
⌈>	**Sc**	**45**		ug/L			512571	531042	1	Standard
|	**Cr**	**52**	**0.707**	ug/L	0.019	2	7952	17913	1	Standard
⌊	**Cr**	**53**	**0.767**	ug/L	0.021	2	75	1306	3	Standard
⌈>	**Ge**	**72**		ug/L			28784	29609	0	KED
|	**Ni**	**60**	**0.786**	ug/L	0.054	6	75	1195	5	KED
|	**Ni**	**62**	**0.839**	ug/L	0.050	5	12	204	5	KED
|	**Cu**	**63**	**5.822**	ug/L	0.067	1	53	23229	0	KED
|	**Cu**	**65**	**5.535**	ug/L	0.116	2	25	11336	1	KED
|	**Zn**	**66**	**13.078**	ug/L	0.235	1	52	6456	0	KED
|	**Zn**	**67**	**12.540**	ug/L	0.549	4	8	1007	4	KED
⌊	**As**	**75**	**1.716**	ug/L	0.082	4	3	411	5	KED
	Y	**89**		ug/L			50088	53989	0	Standard
	Kr	**83**		ug/L			44	57	29	Standard
⌈>	**In-1**	**115**		ug/L			6034	6197	2	KED
|	**Cd**	**111**	**0.015**	ug/L	0.005	29	1	5	21	KED
⌊	**Cd**	**114**	**0.014**	ug/L	0.014	94	1	9	80	KED
⌈>	**In**	**115**		ug/L			486697	493755	1	Standard
⌊	**Ag**	**107**	**0.089**	ug/L	0.007	7	29	1466	6	Standard
⌈>	**Tb**	**159**		ug/L			178618	188017	0	Standard
⌊	**Pb**	**208**	**0.305**	ug/L	0.004	1	534	28030	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-07
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:12:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	36616	2	Standard
⌈>	**Sc**	**45**		ug/L			512571	609800	2	Standard
|	**Cr**	**52**	**0.487**	ug/L	0.028	5	7952	17107	3	Standard
⌊	**Cr**	**53**	**0.596**	ug/L	0.001	0	75	1187	2	Standard
⌈>	**Ge**	**72**		ug/L			28784	28812	2	KED
|	**Ni**	**60**	**1.347**	ug/L	0.050	3	75	1939	0	KED
|	**Ni**	**62**	**1.268**	ug/L	0.098	7	12	293	6	KED
|	**Cu**	**63**	**10.734**	ug/L	0.298	2	53	41615	0	KED
|	**Cu**	**65**	**10.264**	ug/L	0.203	1	25	20429	0	KED
|	**Zn**	**66**	**7.755**	ug/L	0.118	1	52	3746	1	KED
|	**Zn**	**67**	**8.262**	ug/L	0.482	5	8	648	3	KED
⌊	**As**	**75**	**27.631**	ug/L	0.581	2	3	6386	0	KED
	Y	**89**		ug/L			50088	52863	1	Standard
	Kr	**83**		ug/L			44	45	7	Standard
⌈>	**In-1**	**115**		ug/L			6034	5973	0	KED
|	**Cd**	**111**	**0.142**	ug/L	0.021	14	1	32	13	KED
⌊	**Cd**	**114**	**0.136**	ug/L	0.023	17	1	76	16	KED
⌈>	**In**	**115**		ug/L			486697	471762	1	Standard
⌊	**Ag**	**107**	**0.032**	ug/L	0.001	3	29	520	5	Standard
⌈>	**Tb**	**159**		ug/L			178618	184829	1	Standard
⌊	**Pb**	**208**	**2.682**	ug/L	0.056	2	534	237695	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-09
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:16:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	35157	5	Standard
⌈>	**Sc**	**45**		ug/L			512571	618826	2	Standard
|	**Cr**	**52**	**0.520**	ug/L	0.025	4	7952	17896	2	Standard
⌊	**Cr**	**53**	**0.627**	ug/L	0.026	4	75	1260	3	Standard
⌈>	**Ge**	**72**		ug/L			28784	28728	0	KED
|	**Ni**	**60**	**1.391**	ug/L	0.040	2	75	1996	3	KED
|	**Ni**	**62**	**1.401**	ug/L	0.054	3	12	322	2	KED
|	**Cu**	**63**	**10.972**	ug/L	0.175	1	53	42431	1	KED
|	**Cu**	**65**	**10.761**	ug/L	0.087	0	25	21361	0	KED
|	**Zn**	**66**	**7.901**	ug/L	0.123	1	52	3805	2	KED
|	**Zn**	**67**	**8.117**	ug/L	0.560	6	8	635	6	KED
⌊	**As**	**75**	**29.103**	ug/L	0.478	1	3	6709	1	KED
	Y	**89**		ug/L			50088	55720	3	Standard
	Kr	**83**		ug/L			44	47	21	Standard
⌈>	**In-1**	**115**		ug/L			6034	6067	2	KED
|	**Cd**	**111**	**0.152**	ug/L	0.036	23	1	35	24	KED
⌊	**Cd**	**114**	**0.154**	ug/L	0.026	16	1	88	18	KED
⌈>	**In**	**115**		ug/L			486697	464844	1	Standard
⌊	**Ag**	**107**	**0.031**	ug/L	0.002	7	29	503	6	Standard
⌈>	**Tb**	**159**		ug/L			178618	185300	1	Standard
⌊	**Pb**	**208**	**2.712**	ug/L	0.064	2	534	240965	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-15
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:20:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	39624	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	537265	2	Standard
|	**Cr**	**52**	**1.179**	ug/L	0.044	3	7952	24668	3	Standard
⌊	**Cr**	**53**	**1.177**	ug/L	0.016	1	75	1987	3	Standard
⌈>	**Ge**	**72**		ug/L			28784	29689	1	KED
|	**Ni**	**60**	**1.227**	ug/L	0.038	3	75	1828	1	KED
|	**Ni**	**62**	**1.280**	ug/L	0.124	9	12	306	10	KED
|	**Cu**	**63**	**25.781**	ug/L	1.054	4	53	102918	2	KED
|	**Cu**	**65**	**25.054**	ug/L	0.251	1	25	51356	0	KED
|	**Zn**	**66**	**49.987**	ug/L	1.395	2	52	24584	1	KED
|	**Zn**	**67**	**48.808**	ug/L	1.051	2	8	3907	0	KED
⌊	**As**	**75**	**7.808**	ug/L	0.282	3	3	1862	2	KED
	Y	**89**		ug/L			50088	56736	3	Standard
	Kr	**83**		ug/L			44	47	12	Standard
⌈>	**In-1**	**115**		ug/L			6034	6201	2	KED
|	**Cd**	**111**	**0.093**	ug/L	0.012	13	1	22	9	KED
⌊	**Cd**	**114**	**0.076**	ug/L	0.022	28	1	44	25	KED
⌈>	**In**	**115**		ug/L			486697	493967	0	Standard
⌊	**Ag**	**107**	**0.082**	ug/L	0.002	2	29	1368	2	Standard
⌈>	**Tb**	**159**		ug/L			178618	190178	2	Standard
⌊	**Pb**	**208**	**5.513**	ug/L	0.179	3	534	502033	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0487-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:26:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	35825	0	Standard
⌈>	**Sc**	**45**		ug/L			512571	562560	1	Standard
|	**Cr**	**52**	**1.220**	ug/L	0.017	1	7952	26415	1	Standard
⌊	**Cr**	**53**	**1.264**	ug/L	0.015	1	75	2229	1	Standard
⌈>	**Ge**	**72**		ug/L			28784	29752	1	KED
|	**Ni**	**60**	**6.548**	ug/L	0.096	1	75	9441	0	KED
|	**Ni**	**62**	**6.686**	ug/L	0.384	5	12	1544	5	KED
|	**Cu**	**63**	**0.176**	ug/L	0.010	5	53	761	4	KED
|	**Cu**	**65**	**0.180**	ug/L	0.017	9	25	395	8	KED
|	**Zn**	**66**	**0.527**	ug/L	0.056	10	52	313	7	KED
|	**Zn**	**67**	**0.901**	ug/L	0.142	15	8	80	13	KED
⌊	**As**	**75**	**15.233**	ug/L	0.237	1	3	3638	1	KED
	Y	**89**		ug/L			50088	79316	0	Standard
	Kr	**83**		ug/L			44	40	4	Standard
⌈>	**In-1**	**115**		ug/L			6034	6266	0	KED
|	**Cd**	**111**	**0.003**	ug/L	0.013	536	1	2	137	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.000	0	1	3	0	KED
⌈>	**In**	**115**		ug/L			486697	468178	0	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.000	7	29	112	6	Standard
⌈>	**Tb**	**159**		ug/L			178618	187920	2	Standard
⌊	**Pb**	**208**	**0.034**	ug/L	0.001	3	534	3577	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLH
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:31:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23115	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	517740	2	Standard
|	**Cr**	**52**	**0.013**	ug/L	0.006	48	7952	8202	1	Standard
⌊	**Cr**	**53**	**0.001**	ug/L	0.008	1453	75	77	19	Standard
⌈>	**Ge**	**72**		ug/L			28784	29261	1	KED
|	**Ni**	**60**	**-0.015**	ug/L	0.011	73	75	55	29	KED
|	**Ni**	**62**	**-0.018**	ug/L	0.018	103	12	8	44	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.001	27	53	33	17	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.005	613	25	24	43	KED
|	**Zn**	**66**	**-0.060**	ug/L	0.017	28	52	24	33	KED
|	**Zn**	**67**	**-0.082**	ug/L	0.000	0	8	1		KED
⌊	**As**	**75**	**-0.004**	ug/L	0.009	212	3	2	72	KED
	Y	**89**		ug/L			50088	49988	1	Standard
	Kr	**83**		ug/L			44	55	15	Standard
⌈>	**In-1**	**115**		ug/L			6034	6137	0	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	144	1	0	100	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	176	1	0	180	KED
⌈>	**In**	**115**		ug/L			486697	486698	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	57	29	12	77	Standard
⌈>	**Tb**	**159**		ug/L			178618	183514	1	Standard
⌊	**Pb**	**208**	**-0.004**	ug/L	0.000	3	534	240	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:35:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23784	6	Standard
⌈>	**Sc**	**45**		ug/L			512571	524165	1	Standard
|	**Cr**	**52**	**50.223**	ug/L	1.690	3	7952	686346	2	Standard
⌊	**Cr**	**53**	**48.285**	ug/L	0.163	0	75	76453	1	Standard
⌈>	**Ge**	**72**		ug/L			28784	29553	1	KED
|	**Ni**	**60**	**49.754**	ug/L	0.656	1	75	70745	0	KED
|	**Ni**	**62**	**50.882**	ug/L	3.005	5	12	11590	4	KED
|	**Cu**	**63**	**50.319**	ug/L	1.412	2	53	199933	1	KED
|	**Cu**	**65**	**49.530**	ug/L	0.589	1	25	101036	0	KED
|	**Zn**	**66**	**50.795**	ug/L	1.374	2	52	24867	1	KED
|	**Zn**	**67**	**50.525**	ug/L	1.241	2	8	4025	1	KED
⌊	**As**	**75**	**50.135**	ug/L	0.843	1	3	11885	1	KED
	Y	**89**		ug/L			50088	50673	2	Standard
	Kr	**83**		ug/L			44	55	21	Standard
⌈>	**In-1**	**115**		ug/L			6034	6213	2	KED
|	**Cd**	**111**	**49.407**	ug/L	1.725	3	1	11124	0	KED
⌊	**Cd**	**114**	**50.485**	ug/L	1.873	3	1	29245	1	KED
⌈>	**In**	**115**		ug/L			486697	478603	2	Standard
⌊	**Ag**	**107**	**46.759**	ug/L	0.518	1	29	736095	2	Standard
⌈>	**Tb**	**159**		ug/L			178618	187493	1	Standard
⌊	**Pb**	**208**	**54.257**	ug/L	1.080	1	534	4867949	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:42:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	22705	3	Standard
⌈>	**Sc**	**45**		ug/L			512571	510222	2	Standard
|	**Cr**	**52**	**0.004**	ug/L	0.015	349	7952	7968	2	Standard
⌊	**Cr**	**53**	**0.001**	ug/L	0.003	207	75	77	6	Standard
⌈>	**Ge**	**72**		ug/L			28784	29563	0	KED
|	**Ni**	**60**	**-0.021**	ug/L	0.008	38	75	48	23	KED
|	**Ni**	**62**	**-0.021**	ug/L	0.032	151	12	8	87	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.002	42	53	33	27	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.004	155	25	20	43	KED
|	**Zn**	**66**	**-0.064**	ug/L	0.010	15	52	22	22	KED
|	**Zn**	**67**	**-0.051**	ug/L	0.060	118	8	4	107	KED
⌊	**As**	**75**	**0.002**	ug/L	0.007	315	3	4	37	KED
	Y	**89**		ug/L			50088	49119	4	Standard
	Kr	**83**		ug/L			44	40	5	Standard
⌈>	**In-1**	**115**		ug/L			6034	6359	0	KED
|	**Cd**	**111**	**0.004**	ug/L	0.005	126	1	2	43	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	182	1	2	92	KED
⌈>	**In**	**115**		ug/L			486697	484923	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.002	141	29	45	50	Standard
⌈>	**Tb**	**159**		ug/L			178618	182782	1	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	6	534	264	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0487-06
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:47:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	32134	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	622588	1	Standard
|	**Cr**	**52**	**0.373**	ug/L	0.016	4	7952	15647	2	Standard
⌊	**Cr**	**53**	**0.480**	ug/L	0.009	1	75	994	3	Standard
⌈>	**Ge**	**72**		ug/L			28784	28304	2	KED
|	**Ni**	**60**	**1.014**	ug/L	0.054	5	75	1452	2	KED
|	**Ni**	**62**	**1.030**	ug/L	0.099	9	12	236	7	KED
|	**Cu**	**63**	**0.040**	ug/L	0.006	14	53	205	8	KED
|	**Cu**	**65**	**0.036**	ug/L	0.013	35	25	94	23	KED
|	**Zn**	**66**	**0.740**	ug/L	0.013	1	52	398	4	KED
|	**Zn**	**67**	**1.054**	ug/L	0.107	10	8	88	6	KED
⌊	**As**	**75**	**19.230**	ug/L	0.660	3	3	4366	1	KED
	Y	**89**		ug/L			50088	69538	3	Standard
	Kr	**83**		ug/L			44	30	16	Standard
⌈>	**In-1**	**115**		ug/L			6034	5855	1	KED
|	**Cd**	**111**	**0.005**	ug/L	0.005	108	1	2	43	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.003	349	1	1	112	KED
⌈>	**In**	**115**		ug/L			486697	442888	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.000	14	29	52	5	Standard
⌈>	**Tb**	**159**		ug/L			178618	176146	1	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	4	534	1141	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0487-05
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:51:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	32551	2	Standard
⌈>	**Sc**	**45**		ug/L			512571	622587	2	Standard
|	**Cr**	**52**	**0.412**	ug/L	0.016	3	7952	16267	3	Standard
⌊	**Cr**	**53**	**0.486**	ug/L	0.013	2	75	1004	5	Standard
⌈>	**Ge**	**72**		ug/L			28784	27718	2	KED
|	**Ni**	**60**	**1.154**	ug/L	0.065	5	75	1610	4	KED
|	**Ni**	**62**	**1.189**	ug/L	0.121	10	12	266	10	KED
|	**Cu**	**63**	**0.037**	ug/L	0.001	3	53	189	3	KED
|	**Cu**	**65**	**0.039**	ug/L	0.008	21	25	99	15	KED
|	**Zn**	**66**	**0.454**	ug/L	0.039	8	52	259	7	KED
|	**Zn**	**67**	**0.737**	ug/L	0.045	6	8	62	3	KED
⌊	**As**	**75**	**17.452**	ug/L	0.167	0	3	3882	1	KED
	Y	**89**		ug/L			50088	70299	3	Standard
	Kr	**83**		ug/L			44	43	23	Standard
⌈>	**In-1**	**115**		ug/L			6034	5780	1	KED
|	**Cd**	**111**	**0.008**	ug/L	0.010	120	1	3	62	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	267	1	1	106	KED
⌈>	**In**	**115**		ug/L			486697	454628	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	19	29	44	6	Standard
⌈>	**Tb**	**159**		ug/L			178618	178896	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.001	20	534	808	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0487-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 06:55:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	43951	2	Standard
⌈>	**Sc**	**45**		ug/L			512571	611223	0	Standard
|	**Cr**	**52**	**0.674**	ug/L	0.028	4	7952	20103	2	Standard
⌊	**Cr**	**53**	**0.801**	ug/L	0.030	3	75	1567	4	Standard
⌈>	**Ge**	**72**		ug/L			28784	27657	2	KED
|	**Ni**	**60**	**4.379**	ug/L	0.108	2	75	5891	1	KED
|	**Ni**	**62**	**4.412**	ug/L	0.139	3	12	951	2	KED
|	**Cu**	**63**	**5.152**	ug/L	0.035	0	53	19209	2	KED
|	**Cu**	**65**	**5.031**	ug/L	0.155	3	25	9622	1	KED
|	**Zn**	**66**	**9.989**	ug/L	0.373	3	52	4615	1	KED
|	**Zn**	**67**	**10.437**	ug/L	0.353	3	8	784	4	KED
⌊	**As**	**75**	**4.605**	ug/L	0.101	2	3	1024	1	KED
	Y	**89**		ug/L			50088	69977	3	Standard
	Kr	**83**		ug/L			44	36	15	Standard
⌈>	**In-1**	**115**		ug/L			6034	5721	3	KED
|	**Cd**	**111**	**0.307**	ug/L	0.017	5	1	65	3	KED
⌊	**Cd**	**114**	**0.269**	ug/L	0.048	17	1	143	14	KED
⌈>	**In**	**115**		ug/L			486697	463308	0	Standard
⌊	**Ag**	**107**	**0.017**	ug/L	0.002	11	29	289	9	Standard
⌈>	**Tb**	**159**		ug/L			178618	184294	0	Standard
⌊	**Pb**	**208**	**0.306**	ug/L	0.004	1	534	27565	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0487-03
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:00:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	34930	6	Standard
⌈>	**Sc**	**45**		ug/L			512571	627875	1	Standard
|	**Cr**	**52**	**0.380**	ug/L	0.019	5	7952	15891	1	Standard
⌊	**Cr**	**53**	**0.553**	ug/L	0.025	4	75	1139	4	Standard
⌈>	**Ge**	**72**		ug/L			28784	27514	0	KED
|	**Ni**	**60**	**2.436**	ug/L	0.075	3	75	3293	3	KED
|	**Ni**	**62**	**2.256**	ug/L	0.038	1	12	490	1	KED
|	**Cu**	**63**	**1.485**	ug/L	0.027	1	53	5545	1	KED
|	**Cu**	**65**	**1.415**	ug/L	0.035	2	25	2711	2	KED
|	**Zn**	**66**	**1.359**	ug/L	0.066	4	52	668	4	KED
|	**Zn**	**67**	**1.908**	ug/L	0.317	16	8	149	15	KED
⌊	**As**	**75**	**1.535**	ug/L	0.082	5	3	342	5	KED
	Y	**89**		ug/L			50088	68173	1	Standard
	Kr	**83**		ug/L			44	43	9	Standard
⌈>	**In-1**	**115**		ug/L			6034	5812	3	KED
|	**Cd**	**111**	**0.046**	ug/L	0.015	32	1	11	24	KED
⌊	**Cd**	**114**	**0.042**	ug/L	0.011	26	1	23	25	KED
⌈>	**In**	**115**		ug/L			486697	461876	0	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.000	2	29	84	1	Standard
⌈>	**Tb**	**159**		ug/L			178618	183150	1	Standard
⌊	**Pb**	**208**	**0.017**	ug/L	0.001	6	534	2074	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:05:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	24777	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	495765	2	Standard
|	**Cr**	**52**	**0.016**	ug/L	0.006	40	7952	7890	2	Standard
⌊	**Cr**	**53**	**0.005**	ug/L	0.003	57	75	79	6	Standard
⌈>	**Ge**	**72**		ug/L			28784	28451	2	KED
|	**Ni**	**60**	**-0.016**	ug/L	0.012	71	75	52	29	KED
|	**Ni**	**62**	**-0.014**	ug/L	0.001	8	12	9	0	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.002	38	53	34	20	KED
|	**Cu**	**65**	**-0.005**	ug/L	0.002	41	25	15	25	KED
|	**Zn**	**66**	**-0.054**	ug/L	0.016	29	52	26	25	KED
|	**Zn**	**67**	**-0.064**	ug/L	0.039	60	8	3	91	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.004	96	3	2	36	KED
	Y	**89**		ug/L			50088	48564	3	Standard
	Kr	**83**		ug/L			44	48	37	Standard
⌈>	**In-1**	**115**		ug/L			6034	5785	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.007	204	1	2	65	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.002	881	1	1	94	KED
⌈>	**In**	**115**		ug/L			486697	478635	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	34	29	12	45	Standard
⌈>	**Tb**	**159**		ug/L			178618	179215	1	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	11	534	261	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0636-01
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:09:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21210	27281	2	Standard
⌈>	Sc	45		ug/L			512571	527974	2	Standard
|	Cr	52	0.531	ug/L	0.004	0	7952	15415	2	Standard
⌊	Cr	53	0.556	ug/L	0.057	10	75	962	8	Standard
⌈>	Ge	72		ug/L			28784	27707	0	KED
|	Ni	60	0.997	ug/L	0.030	3	75	1400	2	KED
|	Ni	62	0.972	ug/L	0.145	14	12	219	14	KED
|	Cu	63	1.671	ug/L	0.041	2	53	6275	1	KED
|	Cu	65	1.694	ug/L	0.063	3	25	3263	3	KED
|	Zn	66	3.878	ug/L	0.013	0	52	1827	0	KED
|	Zn	67	3.658	ug/L	0.276	7	8	280	6	KED
⌊	As	75	0.526	ug/L	0.028	5	3	120	4	KED
	Y	89		ug/L			50088	65167	0	Standard
	Kr	83		ug/L			44	40	24	Standard
⌈>	In-1	115		ug/L			6034	5801	4	KED
|	Cd	111	0.000	ug/L	0.006	1388	1	1	69	KED
⌊	Cd	114	0.005	ug/L	0.004	74	1	3	50	KED
⌈>	In	115		ug/L			486697	473435	2	Standard
⌊	Ag	107	0.001	ug/L	0.000	28	29	48	9	Standard
⌈>	Tb	159		ug/L			178618	186385	0	Standard
⌊	Pb	208	0.744	ug/L	0.012	1	534	66913	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0298-DUP1
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:14:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21210	28530	3	Standard
⌈>	Sc	45		ug/L			512571	538334	0	Standard
|	Cr	52	0.537	ug/L	0.030	5	7952	15807	2	Standard
⌊	Cr	53	0.592	ug/L	0.045	7	75	1040	6	Standard
⌈>	Ge	72		ug/L			28784	28724	0	KED
|	Ni	60	0.998	ug/L	0.070	6	75	1452	6	KED
|	Ni	62	1.102	ug/L	0.076	6	12	256	6	KED
|	Cu	63	1.729	ug/L	0.041	2	53	6729	2	KED
|	Cu	65	1.667	ug/L	0.038	2	25	3329	1	KED
|	Zn	66	4.091	ug/L	0.104	2	52	1995	2	KED
|	Zn	67	4.288	ug/L	0.718	16	8	339	16	KED
⌊	As	75	0.560	ug/L	0.031	5	3	132	5	KED
	Y	89		ug/L			50088	65772	1	Standard
	Kr	83		ug/L			44	57	36	Standard
⌈>	In-1	115		ug/L			6034	6012	3	KED
|	Cd	111	0.014	ug/L	0.018	129	1	4	81	KED
⌊	Cd	114	0.010	ug/L	0.002	16	1	6	16	KED
⌈>	In	115		ug/L			486697	480605	1	Standard
⌊	Ag	107	0.001	ug/L	0.000	42	29	38	10	Standard
⌈>	Tb	159		ug/L			178618	189596	0	Standard
⌊	Pb	208	0.754	ug/L	0.014	1	534	68955	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0298-MS1
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:19:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21210	27955	5	Standard
⌈>	Sc	45		ug/L			512571	525581	2	Standard
|	Cr	52	2.936	ug/L	0.034	1	7952	47911	2	Standard
⌊	Cr	53	2.885	ug/L	0.053	1	75	4653	3	Standard
⌈>	Ge	72		ug/L			28784	28593	2	KED
|	Ni	60	3.498	ug/L	0.051	1	75	4881	1	KED
|	Ni	62	3.654	ug/L	0.214	5	12	816	3	KED
|	Cu	63	4.341	ug/L	0.156	3	53	16732	0	KED
|	Cu	65	4.320	ug/L	0.187	4	25	8544	2	KED
|	Zn	66	12.514	ug/L	0.258	2	52	5966	0	KED
|	Zn	67	11.781	ug/L	0.398	3	8	914	5	KED
⌊	As	75	3.033	ug/L	0.163	5	3	698	2	KED
	Y	89		ug/L			50088	67142	3	Standard
	Kr	83		ug/L			44	37	12	Standard
⌈>	In-1	115		ug/L			6034	5883	2	KED
|	Cd	111	2.582	ug/L	0.073	2	1	552	1	KED
⌊	Cd	114	2.689	ug/L	0.054	2	1	1476	1	KED
⌈>	In	115		ug/L			486697	479355	0	Standard
⌊	Ag	107	2.061	ug/L	0.025	1	29	32527	1	Standard
⌈>	Tb	159		ug/L			178618	182686	0	Standard
⌊	Pb	208	3.600	ug/L	0.075	2	534	315263	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0298-MSD1
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:25:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			21210	28749	4	Standard
⌈>	Sc	45		ug/L			512571	530124	2	Standard
|	Cr	52	2.822	ug/L	0.034	1	7952	46777	2	Standard
⌊	Cr	53	2.760	ug/L	0.057	2	75	4491	1	Standard
⌈>	Ge	72		ug/L			28784	28834	0	KED
|	Ni	60	3.466	ug/L	0.040	1	75	4878	1	KED
|	Ni	62	3.268	ug/L	0.068	2	12	738	2	KED
|	Cu	63	4.176	ug/L	0.095	2	53	16242	2	KED
|	Cu	65	4.187	ug/L	0.061	1	25	8358	1	KED
|	Zn	66	12.041	ug/L	0.301	2	52	5792	2	KED
|	Zn	67	11.364	ug/L	0.700	6	8	890	6	KED
⌊	As	75	2.958	ug/L	0.065	2	3	687	1	KED
	Y	89		ug/L			50088	66898	0	Standard
	Kr	83		ug/L			44	43	18	Standard
⌈>	In-1	115		ug/L			6034	6008	3	KED
|	Cd	111	2.402	ug/L	0.153	6	1	524	3	KED
⌊	Cd	114	2.457	ug/L	0.086	3	1	1378	4	KED
⌈>	In	115		ug/L			486697	486503	2	Standard
⌊	Ag	107	2.042	ug/L	0.032	1	29	32695	0	Standard
⌈>	Tb	159		ug/L			178618	185233	0	Standard
⌊	Pb	208	3.411	ug/L	0.010	0	534	302959	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLJ
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:29:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23093	3	Standard
⌈>	**Sc**	**45**		ug/L			512571	491451	2	Standard
|	**Cr**	**52**	**0.009**	ug/L	0.012	138	7952	7733	3	Standard
⌊	**Cr**	**53**	**-0.002**	ug/L	0.007	369	75	69	16	Standard
⌈>	**Ge**	**72**		ug/L			28784	28042	0	KED
|	**Ni**	**60**	**-0.015**	ug/L	0.005	33	75	53	12	KED
|	**Ni**	**62**	**-0.007**	ug/L	0.014	191	12	10	26	KED
|	**Cu**	**63**	**-0.006**	ug/L	0.002	28	53	28	24	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.002	74	25	19	20	KED
|	**Zn**	**66**	**-0.049**	ug/L	0.032	65	52	28	52	KED
|	**Zn**	**67**	**-0.031**	ug/L	0.025	81	8	5	33	KED
⌊	**As**	**75**	**-0.007**	ug/L	0.005	79	3	2	53	KED
	Y	**89**		ug/L			50088	47507	2	Standard
	Kr	**83**		ug/L			44	39	2	Standard
⌈>	**In-1**	**115**		ug/L			6034	5851	3	KED
|	**Cd**	**111**	**0.002**	ug/L	0.005	256	1	1	50	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	208	1	0	188	KED
⌈>	**In**	**115**		ug/L			486697	482259	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	48	29	13	55	Standard
⌈>	**Tb**	**159**		ug/L			178618	176757	2	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	11	534	247	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:34:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23085	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	510290	2	Standard
|	**Cr**	**52**	**49.845**	ug/L	0.659	1	7952	663306	1	Standard
⌊	**Cr**	**53**	**49.254**	ug/L	0.241	0	75	75919	1	Standard
⌈>	**Ge**	**72**		ug/L			28784	28502	0	KED
|	**Ni**	**60**	**49.022**	ug/L	0.991	2	75	67228	1	KED
|	**Ni**	**62**	**49.233**	ug/L	0.674	1	12	10820	1	KED
|	**Cu**	**63**	**51.028**	ug/L	1.049	2	53	195577	1	KED
|	**Cu**	**65**	**50.266**	ug/L	0.362	0	25	98899	0	KED
|	**Zn**	**66**	**50.246**	ug/L	1.428	2	52	23728	2	KED
|	**Zn**	**67**	**49.533**	ug/L	0.241	0	8	3807	0	KED
⌊	**As**	**75**	**49.156**	ug/L	0.750	1	3	11240	1	KED
	Y	**89**		ug/L			50088	49783	0	Standard
	Kr	**83**		ug/L			44	61	7	Standard
⌈>	**In-1**	**115**		ug/L			6034	6026	1	KED
|	**Cd**	**111**	**50.412**	ug/L	0.446	0	1	11014	0	KED
⌊	**Cd**	**114**	**50.125**	ug/L	0.823	1	1	28176	2	KED
⌈>	**In**	**115**		ug/L			486697	469523	3	Standard
⌊	**Ag**	**107**	**45.677**	ug/L	1.580	3	29	704992	1	Standard
⌈>	**Tb**	**159**		ug/L			178618	183887	1	Standard
⌊	**Pb**	**208**	**55.762**	ug/L	1.321	2	534	4906643	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:41:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23317	1	Standard
⌈>	**Sc**	**45**		ug/L			512571	498254	1	Standard
|	**Cr**	**52**	**0.014**	ug/L	0.004	27	7952	7906	0	Standard
⌊	**Cr**	**53**	**-0.003**	ug/L	0.007	202	75	68	15	Standard
⌈>	**Ge**	**72**		ug/L			28784	28666	1	KED
|	**Ni**	**60**	**0.001**	ug/L	0.015	3020	75	76	29	KED
|	**Ni**	**62**	**-0.014**	ug/L	0.037	258	12	9	87	KED
|	**Cu**	**63**	**0.008**	ug/L	0.019	252	53	83	90	KED
|	**Cu**	**65**	**0.012**	ug/L	0.028	241	25	48	116	KED
|	**Zn**	**66**	**-0.042**	ug/L	0.036	85	52	33	53	KED
|	**Zn**	**67**	**-0.033**	ug/L	0.041	123	8	5	57	KED
⌊	**As**	**75**	**0.007**	ug/L	0.018	259	3	5	77	KED
	Y	**89**		ug/L			50088	47888	0	Standard
	Kr	**83**		ug/L			44	58	21	Standard
⌈>	**In-1**	**115**		ug/L			6034	5978	1	KED
|	**Cd**	**111**	**0.003**	ug/L	0.005	168	1	2	49	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.002	2472	1	1	86	KED
⌈>	**In**	**115**		ug/L			486697	472919	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	115	29	41	35	Standard
⌈>	**Tb**	**159**		ug/L			178618	178659	0	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	7	534	267	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:45:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	25958	3	Standard
⌈>	**Sc**	**45**		ug/L			512571	564678	1	Standard
|	**Cr**	**52**	**0.004**	ug/L	0.014	382	7952	8811	1	Standard
⌊	**Cr**	**53**	**-0.007**	ug/L	0.004	53	75	70	7	Standard
⌈>	**Ge**	**72**		ug/L			28784	28993	1	KED
|	**Ni**	**60**	**-0.013**	ug/L	0.008	60	75	58	17	KED
|	**Ni**	**62**	**-0.023**	ug/L	0.009	37	12	7	25	KED
|	**Cu**	**63**	**-0.003**	ug/L	0.001	50	53	43	14	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.003	109	25	20	24	KED
|	**Zn**	**66**	**-0.015**	ug/L	0.013	81	52	45	14	KED
|	**Zn**	**67**	**-0.000**	ug/L	0.052	15913	8	8	48	KED
⌊	**As**	**75**	**-0.008**	ug/L	0.008	108	3	2	96	KED
	Y	**89**		ug/L			50088	54349	1	Standard
	Kr	**83**		ug/L			44	48	48	Standard
⌈>	**In-1**	**115**		ug/L			6034	6353	3	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.005	1172	1	1	69	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.002	166	1	0	205	KED
⌈>	**In**	**115**		ug/L			486697	523133	3	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	200	29	36	26	Standard
⌈>	**Tb**	**159**		ug/L			178618	196229	1	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.000	12	534	414	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:50:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	26612	5	Standard
⌈>	**Sc**	**45**		ug/L			512571	549525	3	Standard
|	**Cr**	**52**	**0.023**	ug/L	0.007	31	7952	8850	1	Standard
⌊	**Cr**	**53**	**-0.003**	ug/L	0.001	43	75	75	5	Standard
⌈>	**Ge**	**72**		ug/L			28784	29286	2	KED
|	**Ni**	**60**	**-0.020**	ug/L	0.016	81	75	48	43	KED
|	**Ni**	**62**	**-0.013**	ug/L	0.024	188	12	10	54	KED
|	**Cu**	**63**	**-0.003**	ug/L	0.003	86	53	43	25	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.002	53	25	19	14	KED
|	**Zn**	**66**	**-0.008**	ug/L	0.028	351	52	49	25	KED
|	**Zn**	**67**	**-0.001**	ug/L	0.051	3767	8	8	48	KED
⌊	**As**	**75**	**-0.011**	ug/L	0.003	28	3	1	57	KED
	Y	**89**		ug/L			50088	54172	0	Standard
	Kr	**83**		ug/L			44	42	13	Standard
⌈>	**In-1**	**115**		ug/L			6034	6173	0	KED
|	**Cd**	**111**	**0.001**	ug/L	0.004	340	1	1	50	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	339	1	1	115	KED
⌈>	**In**	**115**		ug/L			486697	514395	3	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	1870	29	31	18	Standard
⌈>	**Tb**	**159**		ug/L			178618	194120	0	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.000	15	534	381	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:54:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	25778	3	Standard
⌈>	**Sc**	**45**		ug/L			512571	553078	2	Standard
|	**Cr**	**52**	**0.011**	ug/L	0.009	77	7952	8737	2	Standard
⌊	**Cr**	**53**	**0.005**	ug/L	0.006	133	75	89	11	Standard
⌈>	**Ge**	**72**		ug/L			28784	29423	0	KED
|	**Ni**	**60**	**-0.011**	ug/L	0.006	56	75	60	14	KED
|	**Ni**	**62**	**-0.004**	ug/L	0.027	647	12	12	50	KED
|	**Cu**	**63**	**-0.006**	ug/L	0.002	29	53	32	21	KED
|	**Cu**	**65**	**-0.005**	ug/L	0.002	36	25	15	25	KED
|	**Zn**	**66**	**-0.005**	ug/L	0.045	918	52	51	42	KED
|	**Zn**	**67**	**-0.018**	ug/L	0.037	204	8	6	41	KED
⌊	**As**	**75**	**-0.010**	ug/L	0.002	19	3	1	33	KED
	Y	**89**		ug/L			50088	54582	3	Standard
	Kr	**83**		ug/L			44	37	19	Standard
⌈>	**In-1**	**115**		ug/L			6034	6229	3	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.004	129	1	0	100	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	1785	1	1	98	KED
⌈>	**In**	**115**		ug/L			486697	520624	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	61	29	22	26	Standard
⌈>	**Tb**	**159**		ug/L			178618	196970	0	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.000	7	534	358	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 07:59:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23586	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	467022	2	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.015	218	7952	7326	2	Standard
⌊	**Cr**	**53**	**-0.002**	ug/L	0.004	211	75	65	11	Standard
⌈>	**Ge**	**72**		ug/L			28784	27849	0	KED
|	**Ni**	**60**	**-0.039**	ug/L	0.002	6	75	20	15	KED
|	**Ni**	**62**	**-0.040**	ug/L	0.018	44	12	3	100	KED
|	**Cu**	**63**	**-0.009**	ug/L	0.001	14	53	19	26	KED
|	**Cu**	**65**	**-0.009**	ug/L	0.004	40	25	6	103	KED
|	**Zn**	**66**	**-0.064**	ug/L	0.006	9	52	21	13	KED
|	**Zn**	**67**	**-0.090**	ug/L	0.029	32	8	1	173	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.006	157	3	2	44	KED
	Y	**89**		ug/L			50088	45718	0	Standard
	Kr	**83**		ug/L			44	45	4	Standard
⌈>	**In-1**	**115**		ug/L			6034	5676	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.011	1009	1	1	173	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.002	909	1	1	90	KED
⌈>	**In**	**115**		ug/L			486697	443034	2	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	30	29	8	66	Standard
⌈>	**Tb**	**159**		ug/L			178618	170677	0	Standard
⌊	**Pb**	**208**	**-0.005**	ug/L	0.000	5	534	131	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 08:03:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23858	2	Standard
⌈>	**Sc**	**45**		ug/L			512571	471059	2	Standard
|	**Cr**	**52**	**0.009**	ug/L	0.006	67	7952	7422	1	Standard
⌊	**Cr**	**53**	**-0.006**	ug/L	0.006	86	75	60	12	Standard
⌈>	**Ge**	**72**		ug/L			28784	28025	1	KED
|	**Ni**	**60**	**-0.034**	ug/L	0.005	13	75	27	22	KED
|	**Ni**	**62**	**-0.022**	ug/L	0.015	70	12	7	43	KED
|	**Cu**	**63**	**-0.007**	ug/L	0.001	15	53	25	17	KED
|	**Cu**	**65**	**-0.009**	ug/L	0.004	40	25	6	103	KED
|	**Zn**	**66**	**-0.072**	ug/L	0.014	19	52	17	34	KED
|	**Zn**	**67**	**-0.090**	ug/L	0.015	16	8	1	86	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.005	147	3	3	32	KED
	Y	**89**		ug/L			50088	46999	2	Standard
	Kr	**83**		ug/L			44	50	21	Standard
⌈>	**In-1**	**115**		ug/L			6034	5675	3	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.011	1342	1	1	173	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.002	47	1	3	33	KED
⌈>	**In**	**115**		ug/L			486697	453748	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	9	29	5	33	Standard
⌈>	**Tb**	**159**		ug/L			178618	170230	0	Standard
⌊	**Pb**	**208**	**-0.005**	ug/L	0.000	5	534	110	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 08:08:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051023_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			21210	23298	4	Standard
⌈>	**Sc**	**45**		ug/L			512571	476857	3	Standard
|	**Cr**	**52**	**0.009**	ug/L	0.007	78	7952	7511	2	Standard
⌊	**Cr**	**53**	**-0.004**	ug/L	0.002	35	75	63	0	Standard
⌈>	**Ge**	**72**		ug/L			28784	27968	1	KED
|	**Ni**	**60**	**-0.032**	ug/L	0.007	20	75	30	28	KED
|	**Ni**	**62**	**-0.031**	ug/L	0.017	56	12	5	66	KED
|	**Cu**	**63**	**-0.009**	ug/L	0.001	9	53	17	19	KED
|	**Cu**	**65**	**-0.008**	ug/L	0.002	24	25	9	40	KED
|	**Zn**	**66**	**-0.050**	ug/L	0.005	10	52	27	7	KED
|	**Zn**	**67**	**-0.073**	ug/L	0.015	20	8	2	43	KED
⌊	**As**	**75**	**-0.008**	ug/L	0.004	46	3	1	43	KED
	Y	**89**		ug/L			50088	46307	0	Standard
	Kr	**83**		ug/L			44	41	18	Standard
⌈>	**In-1**	**115**		ug/L			6034	5740	3	KED
|	**Cd**	**111**	**0.007**	ug/L	0.012	183	1	2	88	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.000	8	1	0	124	KED
⌈>	**In**	**115**		ug/L			486697	464061	3	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	23	29	10	43	Standard
⌈>	**Tb**	**159**		ug/L			178618	172358	0	Standard
⌊	**Pb**	**208**	**-0.005**	ug/L	0.000	2	534	118	7	Standard

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00042	Instrument:	ICPMS1
Calibration Date:	05/11/2023 13:56		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Silver-107	0	0	0.2	14605	10	14850.5	20	14243.6	50	13620.14	100	13175.56
Chromium-52	0	0	0.5	31826	10	14601.9	20	13940.65	50	12586.68	100	12285.63
Chromium-53	0	0	0.5	1730	10	1565.3	20	1561.7	50	1453.62	100	1404.46
Lead-208	0	0	0.1	90790	10	90159.3	20	88189.75	50	84692.68	100	81042.75

INITIAL CALIBRATION DATA

EPA 6020B

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00042
Calibration Date: 5/11/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Silver-107	11749.13	49.3	0.9995		0.998	
Chromium-52	14206.81	71.7	0.9995		0.998	
Chromium-53	1285.847	49.8	0.9994		0.998	
Lead-208	72479.08	49.2	0.9993		0.998	

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00042
Instrument: ICPMS1
Calibration Date: 05/11/2023 13:56

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Arsenic-75a	0	0	0.2	260	10	254.7	20	249.25	50	236.26	100	229.57
Cadmium-111	0	0	0.1	210	10	239.4	20	229.7	50	220.12	100	211.69
Cadmium-114	0	0	0.1	650	10	611.2	20	584.95	50	559.7	100	540.5
Copper-63	0	0	0.5	4706	10	4491.6	20	4340.5	50	3994.12	100	3756.22
Copper-65	0	0	0.5	2382	10	2215.3	20	2202.9	50	1984.34	100	1919.1
Zinc-66	0	0	6	543.5	10	545.3	20	526.4	50	490.02	100	469.18
Zinc-67	0	0	6	80.33334	10	86.7	20	87.1	50	81.8	100	76.06

INITIAL CALIBRATION DATA

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Instrument: ICPMS1
Calibration: GE00042
Calibration Date: 5/11/2023

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Arsenic-75a	204.9633	49.3	0.9996		0.998	
Cadmium-111	185.1517	49.4	0.9994		0.998	
Cadmium-114	491.0583	49.6	0.9995		0.998	
Copper-63	3548.073	49.9	0.9984		0.998	
Copper-65	1783.94	49.9	0.9990		0.998	
Zinc-66	429.0667	49.5	0.9993		0.998	
Zinc-67	68.66556	49.4	0.9983		0.998	

Analytical Resources, Incorporated
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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** SLEΦ2Φ9 **Cal:** GEΦΦΦ42

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CAL1	L5316		
		-CAL2	L5225		
		-CAL3	L5226		
		-CAL4	L5227		In-1 sl. noisy - %R ΦAnalytes OK
		-CAL5	L5317		
		-CAL6	L5229		
		-IBL1	—		
		-ICV1	L3575		
		-ICB1	L5316		
	✓	-CAL1	—		
	✓	-CAL1	—		
	✓	-CCV1	—		Std Mode Sl. noisy
		-CCV1	L5317		
		-CCB1	L5316		
		-CRL1	L5225		
		-IFA1	L5318		Cr^{53} ↑
		-IFB1	L5319		
		-MCV1	L4780		
		-MCV2	L4781		
		-IBL2	—		(Cd↑/Cd noisy)
		-IBL3	—		
		-CCV2			
		-CCB2			
	✓	-CAL1			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCV3			
		↓ -CCB3			
		BLEΦΦ72-BS2	SWN	20	Ag, Cr, Pb only
		BLEΦ342-BLK1	REN		
		↓ -BS1	↓		
	✓	BS TEST OLD SPIKE			TEST ONLY
	✓	↓ NEW SPIKE			↓
		23EΦ271-Φ1		5	
		23EΦ239-Φ1	↓	2	
		SEQ-IBL4			
		23DΦΦ74-13	REN	100	Mn only
		SEQ-IBL5			
		↓ -CCV4			
		↓ -CCB4			
		23DΦ477-Φ4	REN		Pb only
		↓ -Φ8	↓		↓
		-1Φ			
		-12			
		-18			
		↓ -2Φ		2	
		BLEΦ1Φ6-DUP2		↓	
		↓ -MS2			
		↓ -MSD2	↓	↓	
		SEQ-IBL6			TUBE Empty

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCV5			
		↓ -CCB5			
		230Φ477-Φ1	REN	5	Pb only
		-Φ7	↓	↓	↓
		↓ -Φ9			
		230Φ48Φ-Φ1			
		SEQ-IBL7			
		230Φ477-Φ2	REN	2	Pb only
		-Φ3	↓	↓	↓
		-Φ6			
		-11			
		SEQ-IBL8			
		-CCV6			
		↓ -CCB6			
		230Φ477-13	REN	2	Pb only
		-14	↓	↓	↓
		-16			
		↓ -15		10	
		SEQ-IBL9			
		230Φ7Φ2-Φ4	REN		
		BLEΦ342-DUP1	↓		
		-MS1			
		↓ -MSD1			
		SEQ-IBLA			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCV7			
		-CCB7			
	✓	-CAL1			
		-CCV8			
		-CCB8			
	✓	23D0171-01	REN	20	Sc↑ Mn only
		-02			
		-10			
		-11		100	
		-12			
		-DL0		50	
		SEQ-IBLB			
		-CCV9			Sc↑
		-CCB9			
	✓	-CAL1			
		-CCVA			
		-CCBA			
		23D0636-01	REN	10	Ba, Pb only
		BLE0298-DUP2			
		-MS2			
		-MSD2			
		SEQ-IBLC			
		23D0568-08	SWN	20	Cr NR
		BLE0143-DUP1			As, Pb RPD↑

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLEΦ143-MS1	SWN	20	Pb %R↓ Cr NR
		↓ -MS01	↓	↓	Se↑/As %R↓/ω STL ↓
		SEQ-IBLD			(Ge noisy)
		-CCVB			
		↓ -CCBB			
		23DΦ568-Φ2	SWN	20	
		-Φ3			Pb↑ Pb NR
		-Φ4			
		-Φ5			
		-Φ6			
		↓ -Φ7	↓	↓	Sc, Tb↑ Cr, Pb NR
		SEQ-IBLE			
	✓	BLEΦ143-MS01	SWN	20	Se, Tb↑
		SEQ-IBLF			
		-CCVC			
		-CCBC			
	✓	-CAL1			Ba, Mn, N. Removed
		-CCVD			
		↓ -CCBD			
		23AΦ467-Φ3	SWN	20	Ag, Cr, Pb only
		23CΦΦ71-Φ3			↓
		230ΦΦΦ8-Φ1			
		230Φ136-Φ1			
		↓ -Φ3	↓	↓	

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0396-01	SWN	20	
		↓ -03	↓	↓	
		23D0394-02	↓	↓	
		↓ -04	↓	↓	
		SEQ-IBLG			
		↓ -CCVE			
		↓ -CCBE			
		23D0394-06	SWN	20	
		↓ -07	↓	↓	
		-08	↓	↓	
		-11	↓	↓	Zn↑/Cd noisy — No Cd, Zn
		-12	↓	↓	
		↓ -13	↓	↓	
		23D0393-24	↓	↓	
		↓ -28	↓	↓	
		↓ -29	↓	↓	
		SEQ-IBLH			
		↓ -CCVF			
		↓ -CCBF			
		23D0393-10	SWN	20	
		↓ -11	↓	↓	
		-12	↓	↓	In-1st.noisy-%R/Ge noisy + Analytes OK — No As, Cu, Zn
		-15	↓	↓	
		↓ -16	↓	↓	

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/14/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ393-17	SWN	20	
		-18	↓	↓	
		-19	↓	↓	
		-22	↓	↓	Cu↑ No Cu
		SEQ-IBL1			
		-CCVG			
		-CCBG			
		230Φ393-Φ4RE1	SWN	2000	Cu, Zn only
		BLEΦΦ72-DUP3	↓	↓	↓
		-MS3	↓	↓	Cu, Zn STL
		-MSD3	↓	↓	↓
		230Φ393-Φ4	↓	200	Cu, Zn↑ Ag, As, Cd, Pb only / Cu, Zn NR
		BLEΦΦ72-DUP2	↓	↓	↓
		-MS2	↓	↓	Ag %R↓ / As, Pb STL
		-MSD2	↓	↓	↓
		-PS2	↓	↓	↓ 50 mL IK7409
		SEQ-IBL3			
		-CCVH			
		-CCBH			
		230Φ568-Φ3RE1	SWN	200	Pb only
		230Φ568-Φ7RE1	↓	50	Cr, Pb only
		-Φ8RE1	↓	↓	Cr only
		BLEΦ143-DUP2	↓	↓	↓
		-MS2	↓	↓	↓

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted. MB 5/11/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		BLEΦ143-MSD2	SWN	50	Cr only
		SEQ-IBLK			
	✓	230Φ393-Φ2	SWN	200	Re-run @ 20x
	✓	↓ -Φ3	↓	↓	↓
		SEQ-IBLL			
		-CCVI			
		-CCBI			
	✓	-CAL1			
		-CCVJ			
		-CCBJ			
		230Φ393-Φ5	SWN	200	Zn↑ - Not Needed ~~No Zn~~
		-Φ6			
	✓	-Φ8			Re-run @ 20x
		SEQ-IBLM			
		230Φ412-Φ2	REN		
		-Φ3			
		-Φ4			
		-Φ5			
		-Φ6			
		SEQ-IBLN			
		-CCVK			
		-CCBK			
		230Φ412-Φ7	REN		
		↓ -Φ8	↓		

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** ——— **Cal:** ———

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		23D0412-09	REN		
		-10			
		-11			
		-12			
		-13			
		-14			
		-15			
		SEQ-IBL0			
		-CCVL			
		-CCBL			
		23D0442-03	REN		Sc↑ - Not Needed
		-04			
	✓	-05			Sc↑ - Not Needed / Ge noisy
		-06			↓ ↓
	✓	23D0598-04			Sc, Ge, In, In-1, Tb ↓
		-06			Ge, In-1, In, Tb ↓ Cr only
		-08			Sc↑ No Cr
		-10			↓ ↓
		-12			
		SEQ-IBLP			(Cr53↑)
		-CCVM			
		-CCBM			
		23D0514-02	REN		Sc↑ - Not Needed
		-03			↓ ↓

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexlon ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** _____ **Cal:** _____

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		230Φ514-Φ4	REN		ScT - Not Needed
		↓ -Φ6	↓		
		SEQ-IBLQ			
	✓	230Φ598-Φ2	REN		Int. STDs↓
		BLEΦ119-DUP1			
		-MS1			
		-MSD1			
		SEQ-IBLR			(Sc, GeT / Cr53T)
		-CCVN			CrL
		-CCBN			
	✓	-CAL1			
		-CCVO			CrL
		-CCBO			
		230Φ537-Φ2	REN	2	
		-Φ3		↓	
		-Φ4			ScT - Not Needed
		230Φ494-Φ1			
		-Φ2			
		-Φ3			ScT - Not Needed
		-Φ4			
		-Φ5			
		-Φ6			
		SEQ-IBLS			
		↓ -CCVP			CrL / PbT

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** — **Cal:** —

All corrections made by analyst unless otherwise noted. MB 5/14/23

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCBP			
		230Φ494-Φ7	REN		
	✓	-Φ8			As noisy
		-Φ9			
		-1Φ			
		-11			
		230Φ578-Φ2		25	As only
		BLEΦ134-OUP1		↓	↓
		-MS1			
	✓	-MSD1	↓	↓	Ge noisy
		SEQ-IBLT			
		-CCVQ			
		-CCBQ			
		230Φ588-Φ1	REN		
		-Φ3			
		-Φ5			
		-Φ7			
		-Φ9			
		-11			
		-13			
		-15			
		230Φ587-Φ3			
		SEQ-IBLU			
		-CCVR			

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ICP/MS - 01 SAMPLE RUN LOG

PE Nexion ICP-MS Serial No. 85DN5032601

Analysis Date: 5/11/23 **Analyst:** MB **Sequence:** ~~~~ **Cal:** ~~~~

All corrections made by analyst unless otherwise noted.

Edit Label	Delete Data	ARI Sample ID	Prep Code	Dilution	Comments
		SEQ-CCBR			
		230ϕ587-ϕ2	REN	2	
		-ϕ4		5	
		-ϕ5		↓	
		230ϕ578-ϕ7			
		-ϕ8		↓	
		-ϕ4		2	
		-ϕ6		↓	
		-ϕ3			
		-ϕ5	↓		
		SEQ-IBLV			
		-CCVS			
		-CCBS			
		Rinse/DF			
			MB 5/11/23		

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Thursday, May 11, 2023 12:49:24
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.159
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	6461.2	6461.194	108.647	1.7	Standard
	In	114.9	67625.0	67624.969	851.616	1.3	Standard
	U	238.1	94250.1	94250.125	1957.526	2.1	Standard
⎡	CeO	155.9	1249.3	0.013	0.000	1.9	Standard
| >	Ce	139.9	93503.0	93502.957	927.845	1.0	Standard
⎣	Ce++	70.0	612.9	0.007	0.000	6.9	Standard
	Bkgd	220.0	1.7	1.667	0.264	15.8	Standard

Current Conditions File Data

Current Value	Description
0.92	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.92	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/11/2023 12:49:13 PM
End Time: 5/11/2023 12:54:25 PM

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 6461.19
Obtained Intensity (In 115): 67624.97
Obtained Intensity (U 238): 94250.13
Obtained Intensity (Bkgd 220): 1.67
Obtained Formula (Ce++ 70 / Ce 140): 0.007 (=612.88 / 93502.96)
Obtained Formula (CeO 156 / Ce 140): 0.013 (=1249.32 / 93502.96)
Obtained RSD (Be 9): 0.0168
Obtained RSD (In 115): 0.0126
Obtained RSD (U 238): 0.0208

Torch Alignment - [Passed]

Vertical	Horizontal	Intensity
1.14 mm	1.04 mm	76323.34

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.93
Obtained Intensity (In 115): 79740.93
Obtained Formula (CeO 156 / Ce 140): 0.0170 (=1741.11 / 102470.19)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.713)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.675)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.680)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.703)

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/11/2023 12:49:13 PM

STD Performance Check
	Optimization Settings:
		Method: STD Performance Check.mth.
		Intensity Criterion: Be 9 > 2000
		Intensity Criterion: In 115 > 40000
		Intensity Criterion: U 238 > 30000
		Intensity Criterion: Bkgd 220 <= 5
		Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
		Formula Criterion: CeO 156 / Ce 140 <= 0.025
		RSD Criterion: Be 9.0122 < 0.05
		RSD Criterion: In 114.904 < 0.05
		RSD Criterion: U 238.05 < 0.05

	Optimization Results:
	Initial Try
		Obtained Intensity (Be 9): 6461.19
		Obtained Intensity (In 115): 67624.97
		Obtained Intensity (U 238): 94250.13
		Obtained Intensity (Bkgd 220): 1.67
		Obtained Formula (Ce++ 70 / Ce 140): 0.007 (=612.88 / 93502.96)
		Obtained Formula (CeO 156 / Ce 140): 0.013 (=1249.32 / 93502.96)
		Obtained RSD (Be 9): 0.0168
		Obtained RSD (In 115): 0.0126
		Obtained RSD (U 238): 0.0208

[Passed] Optimum value(s): N/A

Torch Alignment
	Optimization Settings:
		Method: Torch Alignment.mth.
		Intensity Criterion: In 115 Maximum

	Optimization Results:
		Vertical	Horizontal	Intensity
[Passed]	1.14 mm	1.04 mm	76323.34

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 0.91/0.93/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 79740.93
		Obtained Formula (CeO 156 / Ce 140): 0.0170 (=1741.11 / 102470.19)
[Passed] Optimum value(s): 0.93

Mass Calibration and Resolution
Optimization Settings:
Method: Tuning.mth.
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Iterations: 6
Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
Peak height (%) for Res. Opt.: 10

Optimization Results:
Initial Try
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.713)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.675)
Target/Obtained mass (114.904/114.925), Target/Obtained resolution (0.7/0.680)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.703)
[Passed] Optimum value(s): N/A

End Time: 5/11/2023 12:54:25 PM

Performance Check Report

Sample ID: STD Performance Check
Sample Date/Time: Thursday, May 11, 2023 12:59:23
Sample Description:
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\STD Performance Check.mth
Dataset File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\DataSet\Default\STD Performance Check.167
MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Dual Detector Mode: Pulse
Acq. Dead Time (ns): 35
Current Dead Time (ns): 35
Torch Z position (mm): 0.00

Summary

	Analyte	Mass	Meas. Intens. Mean	Net Intens. Mean	Net Intens. SD	Net Intens. RSD	Mode
	Be	9.0	7408.7	7408.655	153.896	2.1	Standard
	In	114.9	77950.1	77950.141	1370.420	1.8	Standard
	U	238.1	111916.6	111916.599	2616.965	2.3	Standard
⌈	CeO	155.9	1830.2	0.018	0.001	3.8	Standard
| >	Ce	139.9	104042.3	104042.336	1986.057	1.9	Standard
⌊	Ce++	70.0	670.5	0.006	0.000	3.2	Standard
	Bkgd	220.0	1.6	1.633	0.701	42.9	Standard

Current Conditions File Data

Current Value	Description
0.93	Nebulizer Gas Flow STD/KED [NEB]
1.20	Auxiliary Gas Flow
17.50	Plasma Gas Flow
-10.75	Deflector Voltage
1600.00	ICP RF Power
-1600.00	Analog Stage Voltage
1000.00	Pulse Stage Voltage
0.00	Quadrupole Rod Offset STD [QRO]
-10.00	Cell Rod Offset STD [CRO]
14.00	Discriminator Threshold
-5.00	Cell Entrance/Exit Voltage STD
0.00	RPa
0.45	RPq
0.93	DRC Mode NEB
-7.50	DRC Mode QRO
-2.00	DRC Mode CRO
-5.00	DRC Mode Cell Entrance/Exit Voltage
0.60	Cell Gas A
0.00	Cell Gas B
200.00	Axial Field Voltage
-11.00	KED Mode CRO
-12.00	KED Mode QRO
-11.00	KED Mode Cell Entrance Voltage
-33.00	KED Mode Cell Exit Voltage
0.00	KED Cell Gas A
3.00	KED Cell Gas B
0.00	KED RPa
0.25	KED RPq
125.00	KED Mode Axial Field Voltage

SmartTune Wizard - Summary

Optimization Summary

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Start Time: 5/11/2023 12:54:40 PM
End Time: 5/11/2023 1:01:27 PM

Nebulizer Gas Flow STD/KED [NEB] - [Passed] Optimum value(s): 0.93
Obtained Intensity (In 115): 84178.28
Obtained Formula (CeO 156 / Ce 140): 0.0181 (=1892.13 / 104805.04)

Mass Calibration and Resolution - [Passed] Optimum value(s): N/A
Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.707)
Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.687)
Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.692)
Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.694)

QID STD/DRC - Optimum value(s): Correlation Coefficient = 0.997; Intercept = -15.68

KED Mode QID - Optimum value(s): Correlation Coefficient = 0.996; Intercept = -14.78

STD Performance Check - [Passed] Optimum value(s): N/A
Obtained Intensity (Be 9): 7408.65
Obtained Intensity (In 115): 77950.14
Obtained Intensity (U 238): 111916.60
Obtained Intensity (Bkgd 220): 1.63
Obtained Formula (Ce++ 70 / Ce 140): 0.006 (=670.55 / 104042.34)
Obtained Formula (CeO 156 / Ce 140): 0.018 (=1830.18 / 104042.34)
Obtained RSD (Be 9): 0.0208
Obtained RSD (In 115): 0.0176
Obtained RSD (U 238): 0.0234

SmartTune Wizard - Details

Optimization Details

SmartTune file: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Wizard\SmartTune\ARISmartTuneDailyUCT.swz

Optimization Status

Start Time: 5/11/2023 12:54:40 PM

Nebulizer Gas Flow STD/KED [NEB]
	Optimization Settings:
		Method: Optimize.mth.
			Initial Try - Start/End/Step: 0.93/0.96/0.01.
		Intensity Criterion: In 115 Maximum
		Formula Criterion: CeO 156 / Ce 140 <= 0.025

	Optimization Results:
	Initial Try

		Obtained Intensity (In 115): 84178.28
		Obtained Formula (CeO 156 / Ce 140): 0.0181 (=1892.13 / 104805.04)
[Passed] Optimum value(s): 0.93

Mass Calibration and Resolution
	Optimization Settings:
		Method: Tuning.mth.
		MassCal File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
		Iterations: 6
		Target accuracy (+/- amu): 0.05 for Mass Cal. and 0.03 for Resolution
		Peak height (%) for Res. Opt.: 10

	Optimization Results:
	Initial Try
		Target/Obtained mass (7.016/7.025), Target/Obtained resolution (0.7/0.707)
		Target/Obtained mass (23.985/23.975), Target/Obtained resolution (0.7/0.687)
		Target/Obtained mass (114.904/114.875), Target/Obtained resolution (0.7/0.692)
		Target/Obtained mass (238.05/238.025), Target/Obtained resolution (0.7/0.694)
[Passed] Optimum value(s): N/A

QID STD/DRC
	Optimization Settings:
		Method: QID Calibration.mth.
			Initial Try - Start/End/Step: -20/0/0.5.

	Optimization Results:
	Initial Try

  Optimum value(s): Correlation Coefficient = 0.997; Intercept = -15.68

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-16	50196
Mg	24	41	-16.5	36699.1
In	115	41	-13	81861.9
Ce	140	41	-12.5	103929
Pb	208	41	-11.5	62620.9
U	238	41	-11.5	115279

KED Mode QID

Optimization Settings:
Method: QID Calibration.mth.
Initial Try - Start/End/Step: -20/0/0.5.

Optimization Results:
Initial Try

Optimum value(s): Correlation Coefficient = 0.996; Intercept = -14.78

Analyte	Mass	Points	DAC	MaxIntensity
Li	7	41	-15	35371.7
Mg	24	41	-15	56081.9
In	115	41	-12.5	122297
Ce	140	41	-11.5	105528
Pb	208	41	-11	58326.8
U	238	41	-10.5	137434

STD Performance Check
Optimization Settings:
Method: STD Performance Check.mth.
Intensity Criterion: Be 9 > 2000
Intensity Criterion: In 115 > 40000
Intensity Criterion: U 238 > 30000
Intensity Criterion: Bkgd 220 <= 5
Formula Criterion: Ce++ 70 / Ce 140 <= 0.03
Formula Criterion: CeO 156 / Ce 140 <= 0.025
RSD Criterion: Be 9.0122 < 0.05
RSD Criterion: In 114.904 < 0.05
RSD Criterion: U 238.05 < 0.05

Optimization Results:
Initial Try
Obtained Intensity (Be 9): 7408.65
Obtained Intensity (In 115): 77950.14
Obtained Intensity (U 238): 111916.60
Obtained Intensity (Bkgd 220): 1.63
Obtained Formula (Ce++ 70 / Ce 140): 0.006 (=670.55 / 104042.34)
Obtained Formula (CeO 156 / Ce 140): 0.018 (=1830.18 / 104042.34)
Obtained RSD (Be 9): 0.0208
Obtained RSD (In 115): 0.0176
Obtained RSD (U 238): 0.0234

[Passed] Optimum value(s): N/A

End Time: 5/11/2023 1:01:27 PM

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 13:56:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				29450	1	Standard
	Cl	**37**		ug/L				2929441	2	Standard
⎡>	**Sc**	**45**		ug/L				500966	2	Standard
⎢	**Cr**	**52**		ug/L				9079	1	Standard
⎢	**Cr**	**53**		ug/L				93	12	Standard
⎣	**Mn**	**55**		ug/L				264	2	Standard
⎡>	**Ge**	**72**		ug/L				31052	2	KED
⎢	**Ni**	**60**		ug/L				26	31	KED
⎢	**Ni**	**62**		ug/L				6	62	KED
⎢	**Cu**	**63**		ug/L				43	5	KED
⎢	**Cu**	**65**		ug/L				30	21	KED
⎢	**Zn**	**66**		ug/L				36	31	KED
⎢	**Zn**	**67**		ug/L				6	31	KED
⎣	**As**	**75**		ug/L				3	18	KED
	Y	**89**		ug/L				40261	2	Standard
	Kr	**83**		ug/L				50	4	Standard
⎡>	**In-1**	**115**		ug/L				6674	2	KED
⎢	**Cd**	**111**		ug/L				2	115	KED
⎣	**Cd**	**114**		ug/L				3	72	KED
⎡>	**In**	**115**		ug/L				458892	1	Standard
⎢	**Ag**	**107**		ug/L				13	24	Standard
⎢	**Ba**	**135**		ug/L				43	11	Standard
⎣	**Ba**	**137**		ug/L				78	10	Standard
⎡>	**Tb**	**159**		ug/L				181387	1	Standard
⎣	**Pb**	**208**		ug/L				323	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:00:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			29450	31832	4	Standard
	Cl	**37**		ug/L			2929441	2839755	4	Standard
⌈>	**Sc**	**45**		ug/L			500966	496983	3	Standard
|	**Cr**	**52**	**0.500**	ug/L	0.014	2	9079	15913	2	Standard
|	**Cr**	**53**	**0.500**	ug/L	0.035	6	93	865	3	Standard
⌊	**Mn**	**55**	**0.500**	ug/L	0.011	2	264	9923	5	Standard
⌈>	**Ge**	**72**		ug/L			31052	31441	1	KED
|	**Ni**	**60**	**0.500**	ug/L	0.026	5	26	775	5	KED
|	**Ni**	**62**	**0.500**	ug/L	0.077	15	6	130	13	KED
|	**Cu**	**63**	**0.500**	ug/L	0.006	1	43	2353	0	KED
|	**Cu**	**65**	**0.500**	ug/L	0.019	3	30	1191	4	KED
|	**Zn**	**66**	**6.000**	ug/L	0.188	3	36	3261	4	KED
|	**Zn**	**67**	**6.000**	ug/L	0.586	9	6	482	8	KED
⌊	**As**	**75**	**0.200**	ug/L	0.018	8	3	52	9	KED
	Y	**89**		ug/L			40261	40194	3	Standard
	Kr	**83**		ug/L			50	41	23	Standard
⌈>	**In-1**	**115**		ug/L			6674	6464	1	KED
|	**Cd**	**111**	**0.100**	ug/L	0.023	22	2	21	18	KED
⌊	**Cd**	**114**	**0.100**	ug/L	0.011	10	3	65	9	KED
⌈>	**In**	**115**		ug/L			458892	444022	3	Standard
|	**Ag**	**107**	**0.200**	ug/L	0.003	1	13	2921	2	Standard
|	**Ba**	**135**	**0.500**	ug/L	0.038	7	43	2729	4	Standard
⌊	**Ba**	**137**	**0.500**	ug/L	0.011	2	78	4854	3	Standard
⌈>	**Tb**	**159**		ug/L			181387	179115	3	Standard
⌊	**Pb**	**208**	**0.100**	ug/L	0.003	3	323	9079	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:05:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			29450	38615	2	Standard
	Cl	**37**		ug/L			2929441	2965976	5	Standard
⌈>	**Sc**	**45**		ug/L			500966	492932	2	Standard
|	**Cr**	**52**	**10.000**	ug/L	0.241	2	9079	146019	1	Standard
|	**Cr**	**53**	**10.000**	ug/L	0.340	3	93	15653	2	Standard
⌊	**Mn**	**55**	**10.001**	ug/L	0.292	2	264	199231	2	Standard
⌈>	**Ge**	**72**		ug/L			31052	30729	2	KED
|	**Ni**	**60**	**10.001**	ug/L	0.207	2	26	15213	1	KED
|	**Ni**	**62**	**10.000**	ug/L	0.242	2	6	2455	1	KED
|	**Cu**	**63**	**10.000**	ug/L	0.230	2	43	44916	3	KED
|	**Cu**	**65**	**9.999**	ug/L	0.275	2	30	22153	0	KED
|	**Zn**	**66**	**10.082**	ug/L	0.165	1	36	5453	1	KED
|	**Zn**	**67**	**10.273**	ug/L	0.327	3	6	867	2	KED
⌊	**As**	**75**	**10.000**	ug/L	0.240	2	3	2547	0	KED
	Y	**89**		ug/L			40261	41417	3	Standard
	Kr	**83**		ug/L			50	38	27	Standard
⌈>	**In-1**	**115**		ug/L			6674	6340	1	KED
|	**Cd**	**111**	**10.000**	ug/L	0.152	1	2	2394	2	KED
⌊	**Cd**	**114**	**10.000**	ug/L	0.216	2	3	6112	2	KED
⌈>	**In**	**115**		ug/L			458892	456528	2	Standard
|	**Ag**	**107**	**10.000**	ug/L	0.035	0	13	148505	2	Standard
|	**Ba**	**135**	**10.000**	ug/L	0.120	1	43	55666	1	Standard
⌊	**Ba**	**137**	**10.000**	ug/L	0.049	0	78	97151	2	Standard
⌈>	**Tb**	**159**		ug/L			181387	182174	3	Standard
⌊	**Pb**	**208**	**10.000**	ug/L	0.225	2	323	901593	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:10:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			29450	37598	5	Standard
	Cl	**37**		ug/L			2929441	3016985	5	Standard
⌈>	**Sc**	**45**		ug/L			500966	495356	3	Standard
|	**Cr**	**52**	**19.915**	ug/L	0.230	1	9079	278813	3	Standard
|	**Cr**	**53**	**19.982**	ug/L	0.307	1	93	31234	2	Standard
⌊	**Mn**	**55**	**19.853**	ug/L	0.270	1	264	385814	2	Standard
⌈>	**Ge**	**72**		ug/L			31052	31142	1	KED
|	**Ni**	**60**	**19.875**	ug/L	0.193	0	26	29873	1	KED
|	**Ni**	**62**	**19.829**	ug/L	0.427	2	6	4767	2	KED
|	**Cu**	**63**	**19.810**	ug/L	0.617	3	43	86810	1	KED
|	**Cu**	**65**	**19.924**	ug/L	0.406	2	30	44058	2	KED
|	**Zn**	**66**	**19.808**	ug/L	0.324	1	36	10528	1	KED
|	**Zn**	**67**	**20.108**	ug/L	0.353	1	6	1742	0	KED
⌊	**As**	**75**	**19.858**	ug/L	0.037	0	3	4985	1	KED
	Y	**89**		ug/L			40261	40956	0	Standard
	Kr	**83**		ug/L			50	36	10	Standard
⌈>	**In-1**	**115**		ug/L			6674	6162	6	KED
|	**Cd**	**111**	**19.961**	ug/L	1.156	5	2	4594	0	KED
⌊	**Cd**	**114**	**19.948**	ug/L	1.052	5	3	11699	1	KED
⌈>	**In**	**115**		ug/L			458892	442261	2	Standard
|	**Ag**	**107**	**19.961**	ug/L	0.488	2	13	284872	2	Standard
|	**Ba**	**135**	**19.961**	ug/L	0.460	2	43	106756	1	Standard
⌊	**Ba**	**137**	**20.053**	ug/L	0.424	2	78	190616	0	Standard
⌈>	**Tb**	**159**		ug/L			181387	182067	1	Standard
⌊	**Pb**	**208**	**19.912**	ug/L	0.188	0	323	1763795	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:15:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			29450	27882	6	Standard
	Cl	**37**		ug/L			2929441	3034849	2	Standard
⌈>	**Sc**	**45**		ug/L			500966	458587	1	Standard
|	**Cr**	**52**	**49.922**	ug/L	1.876	3	9079	629334	1	Standard
|	**Cr**	**53**	**50.053**	ug/L	0.603	1	93	72681	0	Standard
⌊	**Mn**	**55**	**49.996**	ug/L	0.842	1	264	898883	1	Standard
⌈>	**Ge**	**72**		ug/L			31052	29579	0	KED
|	**Ni**	**60**	**49.802**	ug/L	0.895	1	26	69689	2	KED
|	**Ni**	**62**	**49.780**	ug/L	1.236	2	6	11116	3	KED
|	**Cu**	**63**	**49.652**	ug/L	0.326	0	43	199706	1	KED
|	**Cu**	**65**	**49.521**	ug/L	0.703	1	30	99217	1	KED
|	**Zn**	**66**	**49.752**	ug/L	0.177	0	36	24501	0	KED
|	**Zn**	**67**	**49.966**	ug/L	1.333	2	6	4090	1	KED
⌊	**As**	**75**	**49.927**	ug/L	0.338	0	3	11813	0	KED
	Y	**89**		ug/L			40261	39593	0	Standard
	Kr	**83**		ug/L			50	45	19	Standard
⌈>	**In-1**	**115**		ug/L			6674	6012	0	KED
|	**Cd**	**111**	**49.812**	ug/L	0.438	0	2	11006	1	KED
⌊	**Cd**	**114**	**49.795**	ug/L	0.668	1	3	27985	0	KED
⌈>	**In**	**115**		ug/L			458892	422438	0	Standard
|	**Ag**	**107**	**49.993**	ug/L	1.404	2	13	681007	2	Standard
|	**Ba**	**135**	**49.990**	ug/L	0.567	1	43	255103	0	Standard
⌊	**Ba**	**137**	**49.864**	ug/L	1.049	2	78	446649	1	Standard
⌈>	**Tb**	**159**		ug/L			181387	174003	0	Standard
⌊	**Pb**	**208**	**50.004**	ug/L	0.350	0	323	4234634	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:21:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			29450	34721	5	Standard
	Cl	**37**		ug/L			2929441	3166160	3	Standard
⌈>	**Sc**	**45**		ug/L			500966	449933	0	Standard
|	**Cr**	**52**	**99.986**	ug/L	2.146	2	9079	1228563	2	Standard
|	**Cr**	**53**	**99.676**	ug/L	2.337	2	93	140446	3	Standard
⌊	**Mn**	**55**	**100.252**	ug/L	0.264	0	264	1783305	0	Standard
⌈>	**Ge**	**72**		ug/L			31052	28460	0	KED
|	**Ni**	**60**	**100.032**	ug/L	0.974	0	26	134792	1	KED
|	**Ni**	**62**	**99.699**	ug/L	0.385	0	6	21199	0	KED
|	**Cu**	**63**	**99.310**	ug/L	1.347	1	43	375622	0	KED
|	**Cu**	**65**	**99.902**	ug/L	1.609	1	30	191910	0	KED
|	**Zn**	**66**	**99.787**	ug/L	2.048	2	36	46918	1	KED
|	**Zn**	**67**	**99.193**	ug/L	0.682	0	6	7606	0	KED
⌊	**As**	**75**	**100.196**	ug/L	1.478	1	3	22957	0	KED
	Y	**89**		ug/L			40261	38715	1	Standard
	Kr	**83**		ug/L			50	53	10	Standard
⌈>	**In-1**	**115**		ug/L			6674	5881	2	KED
|	**Cd**	**111**	**99.523**	ug/L	0.347	0	2	21169	2	KED
⌊	**Cd**	**114**	**99.612**	ug/L	1.244	1	3	54050	1	KED
⌈>	**In**	**115**		ug/L			458892	403500	0	Standard
|	**Ag**	**107**	**100.284**	ug/L	0.965	0	13	1317556	1	Standard
|	**Ba**	**135**	**100.098**	ug/L	1.034	1	43	489484	0	Standard
⌊	**Ba**	**137**	**100.577**	ug/L	1.052	1	78	877436	1	Standard
⌈>	**Tb**	**159**		ug/L			181387	168275	2	Standard
⌊	**Pb**	**208**	**99.769**	ug/L	2.754	2	323	8104275	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:29:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			29450	27815	3	Standard
	Cl	**37**		ug/L			2929441	2895451	4	Standard
⌈>	**Sc**	**45**		ug/L			500966	437362	3	Standard
|	**Cr**	**52**	**0.041**	ug/L	0.030	72	9079	8419	7	Standard
|	**Cr**	**53**	**0.006**	ug/L	0.037	599	93	91	59	Standard
⌊	**Mn**	**55**	**0.029**	ug/L	0.051	179	264	743	124	Standard
⌈>	**Ge**	**72**		ug/L			31052	28653	0	KED
|	**Ni**	**60**	**0.002**	ug/L	0.010	401	26	27	47	KED
|	**Ni**	**62**	**0.005**	ug/L	0.005	97	6	6	15	KED
|	**Cu**	**63**	**0.002**	ug/L	0.004	188	43	48	34	KED
|	**Cu**	**65**	**-0.004**	ug/L	0.002	37	30	20	14	KED
|	**Zn**	**66**	**-0.016**	ug/L	0.023	147	36	26	41	KED
|	**Zn**	**67**	**-0.034**	ug/L	0.025	72	6	3	50	KED
⌊	**As**	**75**	**0.011**	ug/L	0.009	76	3	5	36	KED
	Y	**89**		ug/L			40261	37510	2	Standard
	Kr	**83**		ug/L			50	50	13	Standard
⌈>	**In-1**	**115**		ug/L			6674	5933	1	KED
|	**Cd**	**111**	**0.006**	ug/L	0.015	259	2	3	86	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.002	367	3	3	35	KED
⌈>	**In**	**115**		ug/L			458892	409881	3	Standard
|	**Ag**	**107**	**0.035**	ug/L	0.051	145	13	488	142	Standard
|	**Ba**	**135**	**0.021**	ug/L	0.038	176	43	145	130	Standard
⌊	**Ba**	**137**	**0.022**	ug/L	0.042	189	78	267	139	Standard
⌈>	**Tb**	**159**		ug/L			181387	165152	2	Standard
⌊	**Pb**	**208**	**0.018**	ug/L	0.032	172	323	1800	144	Standard

Sample Information

Sample Date/Time: Thursday, May 11, 2023 14:21:46
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.m
Mass Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Conditions File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

Calibration

Analyte	Mass	**r Corr Coef**	Slope	Std 1 Conc	Std 2 Conc	Std 3 Conc	Std 4 Conc	Std 5 Conc
C	13							
Cl	37							
Sc	45							
Cr	52	**1.0000**	0.027	0.50	10	20	50	100
Cr	53	**1.0000**	0.003	0.50	10	20	50	100
Mn	55	**1.0000**	0.040	0.50	10	20	50	100
Ge	72							
Ni	60	**1.0000**	0.047	0.50	10	20	50	100
Ni	62	**1.0000**	0.007	0.50	10	20	50	100
Cu	63	**0.9999**	0.133	0.50	10	20	50	100
Cu	65	**0.9999**	0.067	0.50	10	20	50	100
Zn	66	**1.0000**	0.017	6.00	10	20	50	100
Zn	67	**0.9999**	0.003	6.00	10	20	50	100
As	75	**1.0000**	0.008	0.20	10	20	50	100
Y	89							
Kr	83							
In-1	115							
Cd	111	**1.0000**	0.036	0.10	10	20	50	100
Cd	114	**1.0000**	0.092	0.10	10	20	50	100
In	115							
Ag	107	**1.0000**	0.033	0.20	10	20	50	100
Ba	135	**1.0000**	0.012	0.50	10	20	50	100
Ba	137	**0.9999**	0.022	0.50	10	20	50	100
Tb	159							
Pb	208	**1.0000**	0.483	0.10	10	20	50	100

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:34:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			29450	32734	2	Standard
	Cl	**37**		ug/L			2929441	3121402	2	Standard
⌈>	**Sc**	**45**		ug/L			500966	460267	1	Standard
|	**Cr**	**52**	**51.318**	ug/L	0.712	1	9079	649020	0	Standard
|	**Cr**	**53**	**51.236**	ug/L	0.611	1	93	73879	0	Standard
⌊	**Mn**	**55**	**51.172**	ug/L	0.995	1	264	931167	1	Standard
⌈>	**Ge**	**72**		ug/L			31052	29525	1	KED
|	**Ni**	**60**	**52.057**	ug/L	0.958	1	26	72781	1	KED
|	**Ni**	**62**	**52.067**	ug/L	1.276	2	6	11487	2	KED
|	**Cu**	**63**	**52.782**	ug/L	0.236	0	43	207145	1	KED
|	**Cu**	**65**	**51.949**	ug/L	0.255	0	30	103549	1	KED
|	**Zn**	**66**	**50.602**	ug/L	1.227	2	36	24700	2	KED
|	**Zn**	**67**	**50.874**	ug/L	3.016	5	6	4052	6	KED
⌊	**As**	**75**	**48.312**	ug/L	0.218	0	3	11486	1	KED
	Y	**89**		ug/L			40261	39977	0	Standard
	Kr	**83**		ug/L			50	42	20	Standard
⌈>	**In-1**	**115**		ug/L			6674	6124	0	KED
|	**Cd**	**111**	**50.931**	ug/L	1.126	2	2	11283	2	KED
⌊	**Cd**	**114**	**50.926**	ug/L	1.309	2	3	28780	2	KED
⌈>	**In**	**115**		ug/L			458892	418731	1	Standard
|	**Ag**	**107**	**51.018**	ug/L	0.913	1	13	695521	1	Standard
|	**Ba**	**135**	**50.635**	ug/L	0.899	1	43	256949	0	Standard
⌊	**Ba**	**137**	**51.005**	ug/L	0.239	0	78	461777	0	Standard
⌈>	**Tb**	**159**		ug/L			181387	173193	1	Standard
⌊	**Pb**	**208**	**51.355**	ug/L	1.100	2	323	4294627	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-ICB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:42:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			29450	27252	2	Standard
	Cl	**37**		ug/L			2929441	2901324	2	Standard
⎡>	**Sc**	**45**		ug/L			500966	435323	2	Standard
⎢	**Cr**	**52**	**0.031**	ug/L	0.014	45	9079	8249	2	Standard
⎢	**Cr**	**53**	**-0.007**	ug/L	0.002	27	93	71	0	Standard
⎣	**Mn**	**55**	**-0.001**	ug/L	0.001	81	264	219	2	Standard
⎡>	**Ge**	**72**		ug/L			31052	29290	1	KED
⎢	**Ni**	**60**	**-0.000**	ug/L	0.004	1473	26	24	20	KED
⎢	**Ni**	**62**	**0.019**	ug/L	0.014	72	6	10	28	KED
⎢	**Cu**	**63**	**-0.004**	ug/L	0.001	17	43	24	12	KED
⎢	**Cu**	**65**	**-0.008**	ug/L	0.000	1	30	13	0	KED
⎢	**Zn**	**66**	**0.000**	ug/L	0.009	2333	36	34	11	KED
⎢	**Zn**	**67**	**-0.051**	ug/L	0.014	28	6	2	43	KED
⎣	**As**	**75**	**0.002**	ug/L	0.005	257	3	3	37	KED
	Y	**89**		ug/L			40261	37372	2	Standard
	Kr	**83**		ug/L			50	38	10	Standard
⎡>	**In-1**	**115**		ug/L			6674	6114	0	KED
⎢	**Cd**	**111**	**0.004**	ug/L	0.015	382	2	3	95	KED
⎣	**Cd**	**114**	**0.000**	ug/L	0.002	438	3	3	34	KED
⎡>	**In**	**115**		ug/L			458892	415249	2	Standard
⎢	**Ag**	**107**	**0.004**	ug/L	0.000	8	13	63	9	Standard
⎢	**Ba**	**135**	**-0.001**	ug/L	0.003	537	43	36	37	Standard
⎣	**Ba**	**137**	**-0.001**	ug/L	0.001	158	78	62	18	Standard
⎡>	**Tb**	**159**		ug/L			181387	163951	1	Standard
⎣	**Pb**	**208**	**-0.001**	ug/L	0.001	113	323	249	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:46:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				27246	4	Standard
	Cl	**37**		ug/L				2837394	3	Standard
⎡>	**Sc**	**45**		ug/L				433133	1	Standard
⎢	**Cr**	**52**		ug/L				8166	2	Standard
⎢	**Cr**	**53**		ug/L				76	12	Standard
⎣	**Mn**	**55**		ug/L				206	7	Standard
⎡>	**Ge**	**72**		ug/L				28633	1	KED
⎢	**Ni**	**60**		ug/L				24	13	KED
⎢	**Ni**	**62**		ug/L				1	86	KED
⎢	**Cu**	**63**		ug/L				24	19	KED
⎢	**Cu**	**65**		ug/L				15	33	KED
⎢	**Zn**	**66**		ug/L				23	32	KED
⎢	**Zn**	**67**		ug/L				6	124	KED
⎣	**As**	**75**		ug/L				1	78	KED
	Y	**89**		ug/L				37407	4	Standard
	Kr	**83**		ug/L				39	7	Standard
⎡>	**In-1**	**115**		ug/L				6039	1	KED
⎢	**Cd**	**111**		ug/L				2	145	KED
⎣	**Cd**	**114**		ug/L				2	117	KED
⎡>	**In**	**115**		ug/L				409433	1	Standard
⎢	**Ag**	**107**		ug/L				34	22	Standard
⎢	**Ba**	**135**		ug/L				38	7	Standard
⎣	**Ba**	**137**		ug/L				64	17	Standard
⎡>	**Tb**	**159**		ug/L				161761	1	Standard
⎣	**Pb**	**208**		ug/L				227	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 14:54:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				27289	5	Standard
⎡>	**Sc**	**45**		ug/L				453480	1	Standard
⎢	**Cr**	**52**		ug/L				8256	1	Standard
⎢	**Cr**	**53**		ug/L				77	3	Standard
⎣	**Mn**	**55**		ug/L				193	3	Standard
⎡>	**Ge**	**72**		ug/L				28304	1	KED
⎢	**Ni**	**60**		ug/L				22	14	KED
⎢	**Ni**	**62**		ug/L				1	86	KED
⎢	**Cu**	**63**		ug/L				24	44	KED
⎢	**Cu**	**65**		ug/L				12	18	KED
⎢	**Zn**	**66**		ug/L				26	18	KED
⎢	**Zn**	**67**		ug/L				5	0	KED
⎣	**As**	**75**		ug/L				2	10	KED
	Y	**89**		ug/L				38013	1	Standard
	Kr	**83**		ug/L				36	13	Standard
⎡>	**In-1**	**115**		ug/L				5725	0	KED
⎢	**Cd**	**111**		ug/L				4	70	KED
⎣	**Cd**	**114**		ug/L				3	87	KED
⎡>	**In**	**115**		ug/L				411490	1	Standard
⎢	**Ag**	**107**		ug/L				27	3	Standard
⎢	**Ba**	**135**		ug/L				32	0	Standard
⎣	**Ba**	**137**		ug/L				62	16	Standard
⎡>	**Tb**	**159**		ug/L				164240	3	Standard
⎣	**Pb**	**208**		ug/L				214	14	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Thursday, May 11, 2023 14:59:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27289	27062	2	Standard
>	Sc	45		ug/L			453480	440161	7	Standard
	Cr	52	50.337	ug/L	3.140	6	8256	607294	2	Standard
	Cr	53	51.443	ug/L	3.485	6	77	70699	1	Standard
	Mn	55	50.441	ug/L	2.492	4	193	875712	2	Standard
>	Ge	72		ug/L			28304	29116	2	KED
	Ni	60	50.025	ug/L	0.415	0	22	68966	2	KED
	Ni	62	50.660	ug/L	1.091	2	1	11014	1	KED
	Cu	63	50.669	ug/L	0.680	1	24	196030	1	KED
	Cu	65	50.092	ug/L	1.903	3	12	98378	1	KED
	Zn	66	50.553	ug/L	1.736	3	26	24313	1	KED
	Zn	67	51.938	ug/L	2.526	4	5	4074	3	KED
	As	75	49.544	ug/L	1.372	2	2	11609	0	KED
	Y	89		ug/L			38013	37634	8	Standard
	Kr	83		ug/L			36	52	23	Standard
>	In-1	115		ug/L			5725	6030	2	KED
	Cd	111	50.347	ug/L	1.224	2	4	10979	0	KED
	Cd	114	50.833	ug/L	1.154	2	3	28277	0	KED
>	In	115		ug/L			411490	395011	7	Standard
	Ag	107	51.162	ug/L	2.079	4	27	656715	3	Standard
	Ba	135	51.093	ug/L	2.849	5	32	243997	3	Standard
	Ba	137	50.478	ug/L	3.171	6	62	429804	1	Standard
>	Tb	159		ug/L			164240	165110	7	Standard
	Pb	208	51.095	ug/L	3.200	6	214	4061166	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:06:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	28083	4	Standard
⌈>	**Sc**	**45**		ug/L			453480	460376	2	Standard
|	**Cr**	**52**	**49.268**	ug/L	0.237	0	8256	623624	2	Standard
|	**Cr**	**53**	**48.687**	ug/L	0.344	0	77	70224	2	Standard
⌊	**Mn**	**55**	**49.182**	ug/L	0.910	1	193	895012	1	Standard
⌈>	**Ge**	**72**		ug/L			28304	29239	2	KED
|	**Ni**	**60**	**50.169**	ug/L	0.848	1	22	69473	3	KED
|	**Ni**	**62**	**50.974**	ug/L	1.193	2	1	11133	3	KED
|	**Cu**	**63**	**50.018**	ug/L	0.409	0	24	194361	1	KED
|	**Cu**	**65**	**49.969**	ug/L	0.555	1	12	98612	1	KED
|	**Zn**	**66**	**50.950**	ug/L	0.867	1	26	24617	0	KED
|	**Zn**	**67**	**50.684**	ug/L	0.714	1	5	3994	0	KED
⌊	**As**	**75**	**49.714**	ug/L	0.612	1	2	11702	0	KED
	Y	**89**		ug/L			38013	39217	2	Standard
	Kr	**83**		ug/L			36	42	25	Standard
⌈>	**In-1**	**115**		ug/L			5725	6156	1	KED
|	**Cd**	**111**	**50.268**	ug/L	0.769	1	4	11197	1	KED
⌊	**Cd**	**114**	**49.967**	ug/L	0.817	1	3	28389	1	KED
⌈>	**In**	**115**		ug/L			411490	411382	1	Standard
|	**Ag**	**107**	**50.038**	ug/L	0.943	1	27	670246	2	Standard
|	**Ba**	**135**	**48.789**	ug/L	1.142	2	32	243298	3	Standard
⌊	**Ba**	**137**	**49.603**	ug/L	0.657	1	62	441251	2	Standard
⌈>	**Tb**	**159**		ug/L			164240	172225	2	Standard
⌊	**Pb**	**208**	**49.434**	ug/L	0.951	1	214	4111011	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:13:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	27314	3	Standard
⌈>	**Sc**	**45**		ug/L			453480	456632	1	Standard
|	**Cr**	**52**	**0.002**	ug/L	0.009	627	8256	8331	1	Standard
|	**Cr**	**53**	**-0.012**	ug/L	0.007	63	77	61	18	Standard
⌊	**Mn**	**55**	**0.002**	ug/L	0.001	58	193	228	9	Standard
⌈>	**Ge**	**72**		ug/L			28304	29402	1	KED
|	**Ni**	**60**	**0.001**	ug/L	0.009	676	22	25	45	KED
|	**Ni**	**62**	**0.017**	ug/L	0.019	107	1	5	78	KED
|	**Cu**	**63**	**0.003**	ug/L	0.001	47	24	36	16	KED
|	**Cu**	**65**	**0.002**	ug/L	0.003	167	12	16	40	KED
|	**Zn**	**66**	**0.011**	ug/L	0.007	64	26	32	11	KED
|	**Zn**	**67**	**0.005**	ug/L	0.015	286	5	6	17	KED
⌊	**As**	**75**	**0.008**	ug/L	0.002	26	2	4	11	KED
	Y	**89**		ug/L			38013	38102	2	Standard
	Kr	**83**		ug/L			36	40	26	Standard
⌈>	**In-1**	**115**		ug/L			5725	6168	0	KED
|	**Cd**	**111**	**-0.013**	ug/L	0.007	51	4	1	91	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.003	89	3	1	103	KED
⌈>	**In**	**115**		ug/L			411490	415787	1	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.000	15	27	70	9	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.002	81	32	43	20	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	97	62	74	14	Standard
⌈>	**Tb**	**159**		ug/L			164240	164798	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	46	214	285	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CRL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:18:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	31340	3	Standard
⌈>	**Sc**	**45**		ug/L			453480	457759	1	Standard
|	**Cr**	**52**	**0.497**	ug/L	0.030	6	8256	14505	1	Standard
|	**Cr**	**53**	**0.480**	ug/L	0.006	1	77	766	2	Standard
⌊	**Mn**	**55**	**0.503**	ug/L	0.008	1	193	9302	0	Standard
⌈>	**Ge**	**72**		ug/L			28304	29147	0	KED
|	**Ni**	**60**	**0.526**	ug/L	0.038	7	22	749	6	KED
|	**Ni**	**62**	**0.510**	ug/L	0.024	4	1	112	5	KED
|	**Cu**	**63**	**0.700**	ug/L	0.033	4	24	2736	4	KED
|	**Cu**	**65**	**0.654**	ug/L	0.037	5	12	1299	5	KED
|	**Zn**	**66**	**6.516**	ug/L	0.092	1	26	3162	1	KED
|	**Zn**	**67**	**5.954**	ug/L	0.279	4	5	473	4	KED
⌊	**As**	**75**	**0.199**	ug/L	0.021	10	2	49	9	KED
	Y	**89**		ug/L			38013	38127	2	Standard
	Kr	**83**		ug/L			36	44	40	Standard
⌈>	**In-1**	**115**		ug/L			5725	5964	0	KED
|	**Cd**	**111**	**0.083**	ug/L	0.014	16	4	22	13	KED
⌊	**Cd**	**114**	**0.085**	ug/L	0.020	23	3	50	21	KED
⌈>	**In**	**115**		ug/L			411490	416552	1	Standard
|	**Ag**	**107**	**0.206**	ug/L	0.010	4	27	2817	4	Standard
|	**Ba**	**135**	**0.486**	ug/L	0.006	1	32	2485	1	Standard
⌊	**Ba**	**137**	**0.497**	ug/L	0.008	1	62	4542	2	Standard
⌈>	**Tb**	**159**		ug/L			164240	163726	0	Standard
⌊	**Pb**	**208**	**0.113**	ug/L	0.001	0	214	9144	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFA1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:23:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27289	97217	3	Standard
>	Sc	45		ug/L			453480	450990	1	Standard
	Cr	52	0.619	ug/L	0.009	1	8256	15784	2	Standard
	Cr	53	1.691	ug/L	0.026	1	77	2463	3	Standard
	Mn	55	0.128	ug/L	0.002	1	193	2482	1	Standard
>	Ge	72		ug/L			28304	27762	1	KED
	Ni	60	0.098	ug/L	0.014	14	22	151	12	KED
	Ni	62	0.126	ug/L	0.038	30	1	27	28	KED
	Cu	63	0.045	ug/L	0.008	17	24	189	14	KED
	Cu	65	0.054	ug/L	0.007	13	12	112	11	KED
	Zn	66	0.231	ug/L	0.023	10	26	131	7	KED
	Zn	67	0.163	ug/L	0.041	25	5	17	16	KED
	As	75	0.021	ug/L	0.011	52	2	7	35	KED
	Y	89		ug/L			38013	38861	1	Standard
	Kr	83		ug/L			36	71	17	Standard
>	In-1	115		ug/L			5725	5764	1	KED
	Cd	111	0.047	ug/L	0.016	33	4	13	21	KED
	Cd	114	0.044	ug/L	0.005	11	3	27	8	KED
>	In	115		ug/L			411490	393779	0	Standard
	Ag	107	0.004	ug/L	0.002	42	27	79	28	Standard
	Ba	135	0.107	ug/L	0.010	9	32	544	9	Standard
	Ba	137	0.101	ug/L	0.006	6	62	920	6	Standard
>	Tb	159		ug/L			164240	161181	0	Standard
	Pb	208	0.017	ug/L	0.001	6	214	1535	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IFB1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:28:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	95582	3	Standard
⌈>	**Sc**	**45**		ug/L			453480	451501	3	Standard
|	**Cr**	**52**	**19.309**	ug/L	0.190	0	8256	244658	2	Standard
|	**Cr**	**53**	**20.701**	ug/L	0.085	0	77	29324	3	Standard
⌊	**Mn**	**55**	**19.005**	ug/L	0.376	1	193	339259	1	Standard
⌈>	**Ge**	**72**		ug/L			28304	27187	1	KED
|	**Ni**	**60**	**20.096**	ug/L	0.486	2	22	25881	1	KED
|	**Ni**	**62**	**20.993**	ug/L	0.239	1	1	4264	1	KED
|	**Cu**	**63**	**20.032**	ug/L	0.187	0	24	72395	1	KED
|	**Cu**	**65**	**20.081**	ug/L	0.166	0	12	36858	1	KED
|	**Zn**	**66**	**19.222**	ug/L	0.170	0	26	8652	0	KED
|	**Zn**	**67**	**18.232**	ug/L	0.644	3	5	1339	3	KED
⌊	**As**	**75**	**19.554**	ug/L	0.554	2	2	4280	1	KED
	Y	**89**		ug/L			38013	38083	1	Standard
	Kr	**83**		ug/L			36	75	20	Standard
⌈>	**In-1**	**115**		ug/L			5725	5656	2	KED
|	**Cd**	**111**	**18.852**	ug/L	0.493	2	4	3859	1	KED
⌊	**Cd**	**114**	**18.980**	ug/L	0.824	4	3	9903	2	KED
⌈>	**In**	**115**		ug/L			411490	394438	3	Standard
|	**Ag**	**107**	**18.557**	ug/L	0.095	0	27	238342	3	Standard
|	**Ba**	**135**	**0.109**	ug/L	0.004	3	32	553	6	Standard
⌊	**Ba**	**137**	**0.103**	ug/L	0.003	3	62	939	2	Standard
⌈>	**Tb**	**159**		ug/L			164240	161935	2	Standard
⌊	**Pb**	**208**	**0.019**	ug/L	0.001	6	214	1687	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:32:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	31805	1	Standard
⌈>	**Sc**	**45**		ug/L			453480	454340	1	Standard
|	**Cr**	**52**	**193.447**	ug/L	1.846	0	8256	2392229	0	Standard
|	**Cr**	**53**	**189.875**	ug/L	3.302	1	77	269997	0	Standard
⌊	**Mn**	**55**	**197.868**	ug/L	1.246	0	193	3553689	1	Standard
⌈>	**Ge**	**72**		ug/L			28304	27450	1	KED
|	**Ni**	**60**	**192.267**	ug/L	5.856	3	22	249819	2	KED
|	**Ni**	**62**	**196.530**	ug/L	4.033	2	1	40290	0	KED
|	**Cu**	**63**	**191.286**	ug/L	3.025	1	24	697752	0	KED
|	**Cu**	**65**	**190.234**	ug/L	3.652	1	12	352415	0	KED
|	**Zn**	**66**	**192.981**	ug/L	3.879	2	26	87475	0	KED
|	**Zn**	**67**	**189.380**	ug/L	2.775	1	5	14001	1	KED
⌊	**As**	**75**	**197.010**	ug/L	2.672	1	2	43533	0	KED
	Y	**89**		ug/L			38013	39134	3	Standard
	Kr	**83**		ug/L			36	62	16	Standard
⌈>	**In-1**	**115**		ug/L			5725	5844	2	KED
|	**Cd**	**111**	**192.594**	ug/L	5.941	3	4	40691	1	KED
⌊	**Cd**	**114**	**193.758**	ug/L	8.282	4	3	104415	1	KED
⌈>	**In**	**115**		ug/L			411490	380931	1	Standard
|	**Ag**	**107**	**200.601**	ug/L	2.547	1	27	2487769	0	Standard
|	**Ba**	**135**	**198.373**	ug/L	1.293	0	32	915840	2	Standard
⌊	**Ba**	**137**	**195.380**	ug/L	0.838	0	62	1609046	1	Standard
⌈>	**Tb**	**159**		ug/L			164240	163550	1	Standard
⌊	**Pb**	**208**	**195.400**	ug/L	2.950	1	214	15432200	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-HCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:37:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	33722	4	Standard
⌈>	**Sc**	**45**		ug/L			453480	441731	1	Standard
|	**Cr**	**52**	**305.091**	ug/L	5.565	1	8256	3663729	2	Standard
|	**Cr**	**53**	**291.524**	ug/L	3.403	1	77	403107	2	Standard
⌊	**Mn**	**55**	**309.118**	ug/L	3.307	1	193	5397400	0	Standard
⌈>	**Ge**	**72**		ug/L			28304	27437	2	KED
|	**Ni**	**60**	**286.248**	ug/L	4.261	1	22	371797	2	KED
|	**Ni**	**62**	**294.176**	ug/L	9.832	3	1	60269	2	KED
|	**Cu**	**63**	**283.486**	ug/L	4.433	1	24	1033499	1	KED
|	**Cu**	**65**	**282.457**	ug/L	3.737	1	12	522986	0	KED
|	**Zn**	**66**	**280.790**	ug/L	3.654	1	26	127206	1	KED
|	**Zn**	**67**	**275.224**	ug/L	2.531	0	5	20333	1	KED
⌊	**As**	**75**	**296.499**	ug/L	4.791	1	2	65477	0	KED
	Y	**89**		ug/L			38013	36418	0	Standard
	Kr	**83**		ug/L			36	125	5	Standard
⌈>	**In-1**	**115**		ug/L			5725	5693	1	KED
|	**Cd**	**111**	**284.581**	ug/L	0.587	0	4	58604	1	KED
⌊	**Cd**	**114**	**287.279**	ug/L	2.990	1	3	150943	2	KED
⌈>	**In**	**115**		ug/L			411490	368922	1	Standard
|	**Ag**	**107**	**295.425**	ug/L	4.404	1	27	3548209	0	Standard
|	**Ba**	**135**	**285.410**	ug/L	2.244	0	32	1275959	0	Standard
⌊	**Ba**	**137**	**297.174**	ug/L	7.652	2	62	2369613	1	Standard
⌈>	**Tb**	**159**		ug/L			164240	153395	0	Standard
⌊	**Pb**	**208**	**299.935**	ug/L	6.119	2	214	22217572	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:50:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	32080	5	Standard
>	**Sc**	**45**		ug/L			453480	462017	3	Standard
	Cr	**52**	**0.029**	ug/L	0.011	37	8256	8782	4	Standard
	Cr	**53**	**0.033**	ug/L	0.009	27	77	126	12	Standard
	Mn	**55**	**0.008**	ug/L	0.000	4	193	346	5	Standard
>	**Ge**	**72**		ug/L			28304	31188	2	KED
	Ni	**60**	**0.010**	ug/L	0.003	31	22	40	12	KED
	Ni	**62**	**0.018**	ug/L	0.028	152	1	5	115	KED
	Cu	**63**	**0.005**	ug/L	0.002	33	24	46	14	KED
	Cu	**65**	**0.008**	ug/L	0.004	50	12	31	30	KED
	Zn	**66**	**0.067**	ug/L	0.033	48	26	63	27	KED
	Zn	**67**	**0.030**	ug/L	0.033	107	5	8	32	KED
	As	**75**	**0.035**	ug/L	0.003	8	2	11	8	KED
	Y	**89**		ug/L			38013	37074	2	Standard
	Kr	**83**		ug/L			36	41	16	Standard
>	**In-1**	**115**		ug/L			5725	6678	0	KED
	Cd	**111**	**0.344**	ug/L	0.610	177	4	88	167	KED
	Cd	**114**	**0.415**	ug/L	0.712	171	3	260	168	KED
>	**In**	**115**		ug/L			411490	405907	5	Standard
	Ag	**107**	**0.008**	ug/L	0.000	4	27	138	3	Standard
	Ba	**135**	**0.011**	ug/L	0.002	15	32	84	9	Standard
	Ba	**137**	**0.012**	ug/L	0.001	10	62	166	9	Standard
>	**Tb**	**159**		ug/L			164240	165413	2	Standard
	Pb	**208**	**0.007**	ug/L	0.001	7	214	765	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 15:56:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	32817	6	Standard
⌈>	**Sc**	**45**		ug/L			453480	465595	0	Standard
|	**Cr**	**52**	**0.033**	ug/L	0.029	89	8256	8891	4	Standard
|	**Cr**	**53**	**0.022**	ug/L	0.008	36	77	112	10	Standard
⌊	**Mn**	**55**	**0.007**	ug/L	0.001	16	193	324	6	Standard
⌈>	**Ge**	**72**		ug/L			28304	30609	0	KED
|	**Ni**	**60**	**0.006**	ug/L	0.004	63	22	33	16	KED
|	**Ni**	**62**	**0.022**	ug/L	0.005	21	1	6	17	KED
|	**Cu**	**63**	**0.007**	ug/L	0.001	12	24	53	7	KED
|	**Cu**	**65**	**0.006**	ug/L	0.002	42	12	24	20	KED
|	**Zn**	**66**	**0.061**	ug/L	0.030	49	26	59	25	KED
|	**Zn**	**67**	**0.110**	ug/L	0.022	20	5	15	12	KED
⌊	**As**	**75**	**0.017**	ug/L	0.009	50	2	6	30	KED
	Y	**89**		ug/L			38013	37828	1	Standard
	Kr	**83**		ug/L			36	46	19	Standard
⌈>	**In-1**	**115**		ug/L			5725	6380	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.009	141	4	3	62	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.004	208	3	3	71	KED
⌈>	**In**	**115**		ug/L			411490	411081	2	Standard
|	**Ag**	**107**	**0.003**	ug/L	0.001	38	27	61	18	Standard
|	**Ba**	**135**	**0.009**	ug/L	0.000	2	32	76	1	Standard
⌊	**Ba**	**137**	**0.008**	ug/L	0.001	19	62	129	8	Standard
⌈>	**Tb**	**159**		ug/L			164240	168060	0	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.000	6	214	699	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:02:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	28875	4	Standard
⎡>	**Sc**	**45**		ug/L			453480	482814	0	Standard
⎢	**Cr**	**52**	**48.915**	ug/L	1.071	2	8256	649472	2	Standard
⎢	**Cr**	**53**	**48.922**	ug/L	0.840	1	77	74007	2	Standard
⎣	**Mn**	**55**	**48.618**	ug/L	1.178	2	193	928265	3	Standard
⎡>	**Ge**	**72**		ug/L			28304	31467	1	KED
⎢	**Ni**	**60**	**47.900**	ug/L	0.847	1	22	71376	2	KED
⎢	**Ni**	**62**	**48.879**	ug/L	1.757	3	1	11486	2	KED
⎢	**Cu**	**63**	**48.723**	ug/L	0.352	0	24	203768	0	KED
⎢	**Cu**	**65**	**48.305**	ug/L	0.286	0	12	102604	1	KED
⎢	**Zn**	**66**	**49.318**	ug/L	0.810	1	26	25649	1	KED
⎢	**Zn**	**67**	**49.869**	ug/L	0.085	0	5	4231	1	KED
⎣	**As**	**75**	**48.603**	ug/L	0.330	0	2	12314	0	KED
	Y	**89**		ug/L			38013	39328	2	Standard
	Kr	**83**		ug/L			36	48	6	Standard
⎡>	**In-1**	**115**		ug/L			5725	6414	1	KED
⎢	**Cd**	**111**	**48.597**	ug/L	0.674	1	4	11277	0	KED
⎣	**Cd**	**114**	**47.948**	ug/L	0.913	1	3	28379	0	KED
⎡>	**In**	**115**		ug/L			411490	417201	1	Standard
⎢	**Ag**	**107**	**49.941**	ug/L	0.254	0	27	678388	1	Standard
⎢	**Ba**	**135**	**50.373**	ug/L	0.671	1	32	254680	0	Standard
⎣	**Ba**	**137**	**50.599**	ug/L	0.533	1	62	456395	1	Standard
⎡>	**Tb**	**159**		ug/L			164240	175544	1	Standard
⎣	**Pb**	**208**	**48.892**	ug/L	0.986	2	214	4144705	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB2
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:09:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27289	27823	4	Standard
⌈>	**Sc**	**45**		ug/L			453480	465227	3	Standard
|	**Cr**	**52**	**0.015**	ug/L	0.021	141	8256	8652	0	Standard
|	**Cr**	**53**	**0.001**	ug/L	0.006	536	77	81	8	Standard
⌊	**Mn**	**55**	**0.002**	ug/L	0.001	58	193	232	8	Standard
⌈>	**Ge**	**72**		ug/L			28304	30317	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.007	437	22	26	35	KED
|	**Ni**	**62**	**0.016**	ug/L	0.005	30	1	5	21	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	88	24	32	17	KED
|	**Cu**	**65**	**0.005**	ug/L	0.002	42	12	22	17	KED
|	**Zn**	**66**	**0.047**	ug/L	0.018	38	26	51	18	KED
|	**Zn**	**67**	**0.057**	ug/L	0.047	82	5	10	36	KED
⌊	**As**	**75**	**0.016**	ug/L	0.005	33	2	6	18	KED
	Y	**89**		ug/L			38013	37122	1	Standard
	Kr	**83**		ug/L			36	37	32	Standard
⌈>	**In-1**	**115**		ug/L			5725	6495	4	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.006	118	4	3	41	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.002	61	3	2	45	KED
⌈>	**In**	**115**		ug/L			411490	406741	3	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.001	22	27	74	16	Standard
|	**Ba**	**135**	**0.003**	ug/L	0.001	26	32	47	6	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.000	28	62	73	1	Standard
⌈>	**Tb**	**159**		ug/L			164240	165879	2	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	24	214	357	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:15:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				27225	3	Standard
>	**Sc**	**45**		ug/L				460122	1	Standard
	Cr	**52**		ug/L				8551	1	Standard
	Cr	**53**		ug/L				93	7	Standard
	Mn	**55**		ug/L				219	2	Standard
>	**Ge**	**72**		ug/L				30494	0	KED
	Ni	**60**		ug/L				28	24	KED
	Ni	**62**		ug/L				3	0	KED
	Cu	**63**		ug/L				26	37	KED
	Cu	**65**		ug/L				10	54	KED
	Zn	**66**		ug/L				19	49	KED
	Zn	**67**		ug/L				3	91	KED
	As	**75**		ug/L				2	57	KED
	Y	**89**		ug/L				38927	1	Standard
	Kr	**83**		ug/L				46	28	Standard
>	**In-1**	**115**		ug/L				6386	0	KED
	Cd	**111**		ug/L				4	135	KED
	Cd	**114**		ug/L				13	137	KED
>	**In**	**115**		ug/L				414575	1	Standard
	Ag	**107**		ug/L				42	6	Standard
	Ba	**135**		ug/L				38	10	Standard
	Ba	**137**		ug/L				52	20	Standard
>	**Tb**	**159**		ug/L				165965	0	Standard
	Pb	**208**		ug/L				210	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:19:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	28719	3	Standard
⌈>	**Sc**	**45**		ug/L			460122	479980	1	Standard
|	**Cr**	**52**	**48.714**	ug/L	0.892	1	8551	643070	0	Standard
|	**Cr**	**53**	**49.494**	ug/L	0.747	1	93	74427	0	Standard
⌊	**Mn**	**55**	**49.581**	ug/L	1.295	2	219	940735	1	Standard
⌈>	**Ge**	**72**		ug/L			30494	30799	1	KED
|	**Ni**	**60**	**49.076**	ug/L	0.404	0	28	71585	1	KED
|	**Ni**	**62**	**50.137**	ug/L	0.582	1	3	11536	0	KED
|	**Cu**	**63**	**49.653**	ug/L	0.328	0	26	203267	1	KED
|	**Cu**	**65**	**49.757**	ug/L	0.853	1	10	103428	0	KED
|	**Zn**	**66**	**51.089**	ug/L	0.637	1	19	25996	0	KED
|	**Zn**	**67**	**49.790**	ug/L	0.492	0	3	4132	2	KED
⌊	**As**	**75**	**49.584**	ug/L	0.515	1	2	12295	0	KED
	Y	**89**		ug/L			38927	40383	1	Standard
	Kr	**83**		ug/L			46	45	18	Standard
⌈>	**In-1**	**115**		ug/L			6386	6468	3	KED
|	**Cd**	**111**	**48.415**	ug/L	0.738	1	4	11326	1	KED
⌊	**Cd**	**114**	**48.721**	ug/L	0.964	1	13	29080	1	KED
⌈>	**In**	**115**		ug/L			414575	414534	0	Standard
|	**Ag**	**107**	**51.238**	ug/L	1.337	2	42	691635	2	Standard
|	**Ba**	**135**	**50.227**	ug/L	0.731	1	38	252349	1	Standard
⌊	**Ba**	**137**	**50.308**	ug/L	0.936	1	52	450887	1	Standard
⌈>	**Tb**	**159**		ug/L			165965	174759	1	Standard
⌊	**Pb**	**208**	**48.648**	ug/L	1.114	2	210	4105611	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB3
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:27:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	27300	2	Standard
⌈>	**Sc**	**45**		ug/L			460122	470436	2	Standard
|	**Cr**	**52**	**-0.018**	ug/L	0.009	52	8551	8514	4	Standard
|	**Cr**	**53**	**-0.003**	ug/L	0.004	131	93	90	5	Standard
⌊	**Mn**	**55**	**-0.000**	ug/L	0.002	781	219	220	13	Standard
⌈>	**Ge**	**72**		ug/L			30494	30726	0	KED
|	**Ni**	**60**	**-0.001**	ug/L	0.005	459	28	27	24	KED
|	**Ni**	**62**	**0.008**	ug/L	0.029	350	3	5	115	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	93	26	32	15	KED
|	**Cu**	**65**	**0.004**	ug/L	0.001	39	10	17	16	KED
|	**Zn**	**66**	**-0.005**	ug/L	0.008	142	19	17	22	KED
|	**Zn**	**67**	**0.007**	ug/L	0.023	312	3	3	50	KED
⌊	**As**	**75**	**0.006**	ug/L	0.006	100	2	4	33	KED
	Y	**89**		ug/L			38927	38371	2	Standard
	Kr	**83**		ug/L			46	50	12	Standard
⌈>	**In-1**	**115**		ug/L			6386	6581	0	KED
|	**Cd**	**111**	**-0.011**	ug/L	0.005	40	4	1	69	KED
⌊	**Cd**	**114**	**-0.018**	ug/L	0.004	20	13	2	74	KED
⌈>	**In**	**115**		ug/L			414575	415511	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	45	42	74	17	Standard
|	**Ba**	**135**	**0.004**	ug/L	0.002	41	38	56	14	Standard
⌊	**Ba**	**137**	**0.002**	ug/L	0.001	31	52	67	5	Standard
⌈>	**Tb**	**159**		ug/L			165965	170390	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	34	210	278	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-BS2
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:37:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27225	36179	3	Standard
⌈>	Sc	45		ug/L			460122	489899	1	Standard
|	Cr	52	24.960	ug/L	0.316	1	8551	340780	0	Standard
|	Cr	53	25.380	ug/L	0.338	1	93	39004	0	Standard
⌊	Mn	55	25.393	ug/L	0.561	2	219	491901	0	Standard
⌈>	Ge	72		ug/L			30494	32242	1	KED
|	Ni	60	25.240	ug/L	0.314	1	28	38550	1	KED
|	Ni	62	25.783	ug/L	0.109	0	3	6213	1	KED
|	Cu	63	26.359	ug/L	0.566	2	26	112958	1	KED
|	Cu	65	25.384	ug/L	0.481	1	10	55248	2	KED
|	Zn	66	79.567	ug/L	1.920	2	19	42370	1	KED
|	Zn	67	75.736	ug/L	2.160	2	3	6576	1	KED
⌊	As	75	24.433	ug/L	0.538	2	2	6343	1	KED
	Y	89		ug/L			38927	40159	1	Standard
	Kr	83		ug/L			46	43	4	Standard
⌈>	In-1	115		ug/L			6386	6957	2	KED
|	Cd	111	23.957	ug/L	0.603	2	4	6030	1	KED
⌊	Cd	114	24.072	ug/L	0.683	2	13	15459	0	KED
⌈>	In	115		ug/L			414575	431799	0	Standard
|	Ag	107	26.127	ug/L	0.824	3	42	367351	3	Standard
|	Ba	135	25.404	ug/L	0.211	0	38	132968	0	Standard
⌊	Ba	137	25.330	ug/L	0.211	0	52	236512	1	Standard
⌈>	Tb	159		ug/L			165965	174231	1	Standard
⌊	Pb	208	25.433	ug/L	0.192	0	210	2140092	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0342-BLK1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:42:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27225	40021	2	Standard
⌈>	Sc	45		ug/L			460122	473873	0	Standard
|	Cr	52	0.097	ug/L	0.010	10	8551	10051	0	Standard
|	Cr	53	0.105	ug/L	0.018	17	93	251	9	Standard
⌊	Mn	55	0.033	ug/L	0.002	5	219	837	3	Standard
⌈>	Ge	72		ug/L			30494	31264	2	KED
|	Ni	60	0.022	ug/L	0.015	70	28	60	35	KED
|	Ni	62	0.016	ug/L	0.016	103	3	7	50	KED
|	Cu	63	0.049	ug/L	0.014	29	26	232	24	KED
|	Cu	65	0.056	ug/L	0.016	28	10	128	24	KED
|	Zn	66	0.470	ug/L	0.069	14	19	262	12	KED
|	Zn	67	0.497	ug/L	0.014	2	3	45	4	KED
⌊	As	75	0.015	ug/L	0.027	177	2	6	98	KED
	Y	89		ug/L			38927	39917	0	Standard
	Kr	83		ug/L			46	39	7	Standard
⌈>	In-1	115		ug/L			6386	6540	1	KED
|	Cd	111	-0.002	ug/L	0.012	633	4	3	75	KED
⌊	Cd	114	-0.006	ug/L	0.013	209	13	9	77	KED
⌈>	In	115		ug/L			414575	415543	1	Standard
|	Ag	107	0.003	ug/L	0.000	11	42	83	6	Standard
|	Ba	135	0.026	ug/L	0.003	12	38	171	9	Standard
⌊	Ba	137	0.029	ug/L	0.003	9	52	314	6	Standard
⌈>	Tb	159		ug/L			165965	169922	1	Standard
⌊	Pb	208	0.006	ug/L	0.001	14	210	718	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0342-BS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:46:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27225	39027	2	Standard
>	Sc	45		ug/L			460122	461654	2	Standard
	Cr	52	25.238	ug/L	0.287	1	8551	324601	2	Standard
	Cr	53	25.440	ug/L	0.296	1	93	36851	3	Standard
	Mn	55	25.373	ug/L	0.120	0	219	463229	2	Standard
>	Ge	72		ug/L			30494	30211	2	KED
	Ni	60	26.185	ug/L	0.273	1	28	37483	3	KED
	Ni	62	26.338	ug/L	0.301	1	3	5947	3	KED
	Cu	63	27.433	ug/L	0.170	0	26	110164	2	KED
	Cu	65	26.596	ug/L	0.313	1	10	54234	2	KED
	Zn	66	83.932	ug/L	1.655	1	19	41884	3	KED
	Zn	67	80.250	ug/L	2.169	2	3	6529	3	KED
	As	75	25.370	ug/L	0.056	0	2	6172	2	KED
	Y	89		ug/L			38927	38192	1	Standard
	Kr	83		ug/L			46	52	11	Standard
>	In-1	115		ug/L			6386	6501	3	KED
	Cd	111	25.134	ug/L	1.192	4	4	5907	1	KED
	Cd	114	25.194	ug/L	0.793	3	13	15119	1	KED
>	In	115		ug/L			414575	410527	2	Standard
	Ag	107	25.608	ug/L	0.856	3	42	342138	0	Standard
	Ba	135	25.741	ug/L	0.306	1	38	128095	2	Standard
	Ba	137	25.254	ug/L	0.068	0	52	224183	2	Standard
>	Tb	159		ug/L			165965	165111	0	Standard
	Pb	208	25.619	ug/L	0.557	2	210	2043320	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BS TEST OLD SPIKE
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Thursday, May 11, 2023 16:51:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	40627	4	Standard
>	**Sc**	**45**		ug/L			460122	458950	2	Standard
	Cr	**52**	**26.766**	ug/L	0.345	1	8551	341750	2	Standard
	Cr	**53**	**26.847**	ug/L	0.458	1	93	38641	0	Standard
	Mn	**55**	**27.372**	ug/L	0.430	1	219	496744	2	Standard
>	**Ge**	**72**		ug/L			30494	30230	0	KED
	Ni	**60**	**27.633**	ug/L	0.426	1	28	39570	1	KED
	Ni	**62**	**28.064**	ug/L	0.431	1	3	6340	1	KED
	Cu	**63**	**29.127**	ug/L	0.178	0	26	117038	0	KED
	Cu	**65**	**28.454**	ug/L	0.497	1	10	58061	1	KED
	Zn	**66**	**89.908**	ug/L	0.386	0	19	44892	0	KED
	Zn	**67**	**86.177**	ug/L	1.866	2	3	7016	1	KED
	As	**75**	**27.188**	ug/L	0.020	0	2	6619	0	KED
	Y	**89**		ug/L			38927	38692	1	Standard
	Kr	**83**		ug/L			46	45	39	Standard
>	**In-1**	**115**		ug/L			6386	6224	1	KED
	Cd	**111**	**27.062**	ug/L	0.623	2	4	6094	0	KED
	Cd	**114**	**27.613**	ug/L	0.405	1	13	15870	0	KED
>	**In**	**115**		ug/L			414575	412256	1	Standard
	Ag	**107**	**27.469**	ug/L	0.347	1	42	368710	1	Standard
	Ba	**135**	**26.960**	ug/L	0.678	2	38	134694	1	Standard
	Ba	**137**	**26.753**	ug/L	0.291	1	52	238470	1	Standard
>	**Tb**	**159**		ug/L			165965	167858	1	Standard
	Pb	**208**	**26.566**	ug/L	0.294	1	210	2153961	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BS TEST NEW SPIKE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 16:55:43

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	38854	7	Standard
⌈>	**Sc**	**45**		ug/L			460122	468192	3	Standard
|	**Cr**	**52**	**23.853**	ug/L	0.197	0	8551	311663	3	Standard
|	**Cr**	**53**	**23.892**	ug/L	0.082	0	93	35097	3	Standard
⌊	**Mn**	**55**	**24.567**	ug/L	0.042	0	219	454908	3	Standard
⌈>	**Ge**	**72**		ug/L			30494	30816	1	KED
|	**Ni**	**60**	**24.684**	ug/L	0.484	1	28	36037	2	KED
|	**Ni**	**62**	**24.520**	ug/L	0.523	2	3	5646	1	KED
|	**Cu**	**63**	**25.318**	ug/L	0.217	0	26	103704	1	KED
|	**Cu**	**65**	**25.251**	ug/L	0.532	2	10	52519	1	KED
|	**Zn**	**66**	**78.571**	ug/L	1.426	1	19	39990	1	KED
|	**Zn**	**67**	**74.287**	ug/L	2.241	3	3	6164	1	KED
⌊	**As**	**75**	**23.647**	ug/L	0.271	1	2	5868	0	KED
	Y	**89**		ug/L			38927	39003	4	Standard
	Kr	**83**		ug/L			46	53	14	Standard
⌈>	**In-1**	**115**		ug/L			6386	6281	2	KED
|	**Cd**	**111**	**24.475**	ug/L	0.467	1	4	5562	0	KED
⌊	**Cd**	**114**	**24.380**	ug/L	0.860	3	13	14138	1	KED
⌈>	**In**	**115**		ug/L			414575	423587	2	Standard
|	**Ag**	**107**	**24.883**	ug/L	0.677	2	42	343351	4	Standard
|	**Ba**	**135**	**23.986**	ug/L	0.495	2	38	123196	3	Standard
⌊	**Ba**	**137**	**23.662**	ug/L	0.444	1	52	216790	3	Standard
⌈>	**Tb**	**159**		ug/L			165965	168602	1	Standard
⌊	**Pb**	**208**	**24.317**	ug/L	0.313	1	210	1980323	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0271-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:00:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27225	142251	4	Standard
>	Sc	45		ug/L			460122	446369	1	Standard
	Cr	52	1.076	ug/L	0.027	2	8551	21317	1	Standard
	Cr	53	0.715	ug/L	0.034	4	93	1087	3	Standard
	Mn	55	5.426	ug/L	0.020	0	219	95958	1	Standard
>	Ge	72		ug/L			30494	28103	0	KED
	Ni	60	0.941	ug/L	0.024	2	28	1278	2	KED
	Ni	62	0.875	ug/L	0.099	11	3	187	11	KED
	Cu	63	0.069	ug/L	0.007	9	26	280	9	KED
	Cu	65	0.063	ug/L	0.007	11	10	128	10	KED
	Zn	66	0.679	ug/L	0.039	5	19	333	5	KED
	Zn	67	1.086	ug/L	0.037	3	3	85	3	KED
	As	75	0.096	ug/L	0.026	26	2	24	23	KED
	Y	89		ug/L			38927	39499	0	Standard
	Kr	83		ug/L			46	41	20	Standard
>	In-1	115		ug/L			6386	5644	1	KED
	Cd	111	-0.006	ug/L	0.010	172	4	2	78	KED
	Cd	114	-0.012	ug/L	0.008	67	13	5	79	KED
>	In	115		ug/L			414575	389922	0	Standard
	Ag	107	0.003	ug/L	0.001	22	42	83	12	Standard
	Ba	135	5.108	ug/L	0.029	0	38	24174	1	Standard
	Ba	137	5.077	ug/L	0.055	1	52	42850	1	Standard
>	Tb	159		ug/L			165965	163179	1	Standard
	Pb	208	0.011	ug/L	0.001	10	210	1069	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23E0239-01
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:05:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			27225	40361	4	Standard
> Sc	45		ug/L			460122	468394	2	Standard
Cr	52	100.505	ug/L	1.370	1	8551	1285499	0	Standard
Cr	53	102.580	ug/L	0.852	0	93	150438	1	Standard
Mn	55	1.875	ug/L	0.033	1	219	34923	0	Standard
> Ge	72		ug/L			30494	28568	2	KED
Ni	60	1.933	ug/L	0.084	4	28	2638	2	KED
Ni	62	1.986	ug/L	0.028	1	3	427	1	KED
Cu	63	15.980	ug/L	0.165	1	26	60693	2	KED
Cu	65	15.923	ug/L	0.257	1	10	30705	0	KED
Zn	66	12.253	ug/L	0.340	2	19	5796	1	KED
Zn	67	11.501	ug/L	0.878	7	3	888	9	KED
As	75	0.246	ug/L	0.030	12	2	59	9	KED
Y	89		ug/L			38927	38347	2	Standard
Kr	83		ug/L			46	35	17	Standard
> In-1	115		ug/L			6386	5914	2	KED
Cd	111	0.242	ug/L	0.044	18	4	55	17	KED
Cd	114	0.250	ug/L	0.010	3	13	148	5	KED
> In	115		ug/L			414575	390354	0	Standard
Ag	107	0.013	ug/L	0.003	21	42	200	17	Standard
Ba	135	1.685	ug/L	0.029	1	38	8004	1	Standard
Ba	137	1.639	ug/L	0.020	1	52	13878	1	Standard
> Tb	159		ug/L			165965	163119	1	Standard
Pb	208	0.270	ug/L	0.002	0	210	21458	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:10:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	31547	4	Standard
⌈>	**Sc**	**45**		ug/L			460122	443747	2	Standard
|	**Cr**	**52**	**0.140**	ug/L	0.050	35	8551	9920	3	Standard
|	**Cr**	**53**	**0.065**	ug/L	0.038	58	93	179	27	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.001	34	219	256	5	Standard
⌈>	**Ge**	**72**		ug/L			30494	28983	0	KED
|	**Ni**	**60**	**0.007**	ug/L	0.004	57	28	36	13	KED
|	**Ni**	**62**	**0.018**	ug/L	0.023	126	3	7	66	KED
|	**Cu**	**63**	**0.004**	ug/L	0.002	61	26	39	22	KED
|	**Cu**	**65**	**0.008**	ug/L	0.004	47	10	25	30	KED
|	**Zn**	**66**	**0.104**	ug/L	0.017	16	19	68	12	KED
|	**Zn**	**67**	**0.124**	ug/L	0.038	30	3	12	22	KED
⌊	**As**	**75**	**0.003**	ug/L	0.008	231	2	3	51	KED
	Y	**89**		ug/L			38927	38028	2	Standard
	Kr	**83**		ug/L			46	40	21	Standard
⌈>	**In-1**	**115**		ug/L			6386	5864	1	KED
|	**Cd**	**111**	**-0.010**	ug/L	0.005	48	4	1	69	KED
⌊	**Cd**	**114**	**-0.013**	ug/L	0.004	30	13	4	44	KED
⌈>	**In**	**115**		ug/L			414575	408589	0	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	68	42	33	16	Standard
|	**Ba**	**135**	**0.006**	ug/L	0.003	56	38	67	24	Standard
⌊	**Ba**	**137**	**0.010**	ug/L	0.002	18	52	135	11	Standard
⌈>	**Tb**	**159**		ug/L			165965	162358	0	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	3	210	469	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0074-13
Sample Dil Factor: 100
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:16:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	49095	3	Standard
⌈>	**Sc**	**45**		ug/L			460122	458570	1	Standard
|	**Cr**	**52**	**0.121**	ug/L	0.004	3	8551	10023	0	Standard
|	**Cr**	**53**	**0.117**	ug/L	0.006	5	93	260	3	Standard
⌊	**Mn**	**55**	**62.290**	ug/L	0.696	1	219	1129343	1	Standard
⌈>	**Ge**	**72**		ug/L			30494	29462	1	KED
|	**Ni**	**60**	**0.271**	ug/L	0.028	10	28	405	10	KED
|	**Ni**	**62**	**0.312**	ug/L	0.043	13	3	72	14	KED
|	**Cu**	**63**	**0.012**	ug/L	0.004	34	26	73	23	KED
|	**Cu**	**65**	**0.017**	ug/L	0.007	38	10	43	30	KED
|	**Zn**	**66**	**0.253**	ug/L	0.025	9	19	142	7	KED
|	**Zn**	**67**	**0.330**	ug/L	0.119	36	3	29	32	KED
⌊	**As**	**75**	**0.024**	ug/L	0.006	23	2	8	17	KED
	Y	**89**		ug/L			38927	38051	5	Standard
	Kr	**83**		ug/L			46	41	4	Standard
⌈>	**In-1**	**115**		ug/L			6386	6228	4	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.003	106	4	3	15	KED
⌊	**Cd**	**114**	**-0.017**	ug/L	0.004	21	13	3	72	KED
⌈>	**In**	**115**		ug/L			414575	414433	0	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.001	51	42	29	22	Standard
|	**Ba**	**135**	**1.303**	ug/L	0.021	1	38	6583	1	Standard
⌊	**Ba**	**137**	**1.275**	ug/L	0.021	1	52	11471	1	Standard
⌈>	**Tb**	**159**		ug/L			165965	164391	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	15	210	306	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:21:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	32250	3	Standard
⌈>	**Sc**	**45**		ug/L			460122	448029	3	Standard
|	**Cr**	**52**	**0.100**	ug/L	0.015	14	8551	9535	1	Standard
|	**Cr**	**53**	**0.007**	ug/L	0.002	32	93	99	4	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.000	15	219	269	6	Standard
⌈>	**Ge**	**72**		ug/L			30494	29530	2	KED
|	**Ni**	**60**	**0.005**	ug/L	0.004	76	28	34	14	KED
|	**Ni**	**62**	**0.015**	ug/L	0.026	175	3	6	83	KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	31	26	53	15	KED
|	**Cu**	**65**	**0.009**	ug/L	0.006	67	10	27	45	KED
|	**Zn**	**66**	**0.101**	ug/L	0.022	21	19	68	16	KED
|	**Zn**	**67**	**0.145**	ug/L	0.017	11	3	14	7	KED
⌊	**As**	**75**	**-0.006**	ug/L	0.000	2	2	1	0	KED
	Y	**89**		ug/L			38927	37386	3	Standard
	Kr	**83**		ug/L			46	36	27	Standard
⌈>	**In-1**	**115**		ug/L			6386	6171	1	KED
|	**Cd**	**111**	**-0.011**	ug/L	0.002	22	4	1	34	KED
⌊	**Cd**	**114**	**-0.019**	ug/L	0.003	17	13	1	107	KED
⌈>	**In**	**115**		ug/L			414575	410481	2	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	39	42	17	53	Standard
|	**Ba**	**135**	**0.009**	ug/L	0.001	12	38	81	8	Standard
⌊	**Ba**	**137**	**0.010**	ug/L	0.002	16	52	140	7	Standard
⌈>	**Tb**	**159**		ug/L			165965	159373	2	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	6	210	454	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:25:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	28398	4	Standard
⌈>	**Sc**	**45**		ug/L			460122	469913	2	Standard
|	**Cr**	**52**	**48.856**	ug/L	0.643	1	8551	631392	1	Standard
|	**Cr**	**53**	**49.223**	ug/L	1.281	2	93	72464	2	Standard
⌊	**Mn**	**55**	**49.560**	ug/L	1.224	2	219	920566	1	Standard
⌈>	**Ge**	**72**		ug/L			30494	30063	1	KED
|	**Ni**	**60**	**49.867**	ug/L	0.782	1	28	70999	2	KED
|	**Ni**	**62**	**50.197**	ug/L	0.689	1	3	11275	1	KED
|	**Cu**	**63**	**50.159**	ug/L	0.576	1	26	200413	0	KED
|	**Cu**	**65**	**48.899**	ug/L	0.492	1	10	99227	1	KED
|	**Zn**	**66**	**51.739**	ug/L	1.386	2	19	25699	2	KED
|	**Zn**	**67**	**50.185**	ug/L	0.498	0	3	4065	2	KED
⌊	**As**	**75**	**50.172**	ug/L	0.623	1	2	12145	1	KED
	Y	**89**		ug/L			38927	39969	1	Standard
	Kr	**83**		ug/L			46	45	37	Standard
⌈>	**In-1**	**115**		ug/L			6386	6279	1	KED
|	**Cd**	**111**	**49.539**	ug/L	0.842	1	4	11251	0	KED
⌊	**Cd**	**114**	**49.229**	ug/L	0.544	1	13	28533	0	KED
⌈>	**In**	**115**		ug/L			414575	411972	1	Standard
|	**Ag**	**107**	**50.177**	ug/L	0.802	1	42	673041	1	Standard
|	**Ba**	**135**	**49.679**	ug/L	1.413	2	38	248006	1	Standard
⌊	**Ba**	**137**	**49.119**	ug/L	1.140	2	52	437442	1	Standard
⌈>	**Tb**	**159**		ug/L			165965	171214	1	Standard
⌊	**Pb**	**208**	**49.862**	ug/L	0.645	1	210	4122760	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB4
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:32:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	27717	4	Standard
⌈>	**Sc**	**45**		ug/L			460122	450724	2	Standard
|	**Cr**	**52**	**0.003**	ug/L	0.014	418	8551	8421	4	Standard
|	**Cr**	**53**	**-0.005**	ug/L	0.009	182	93	84	12	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.000	23	219	200	3	Standard
⌈>	**Ge**	**72**		ug/L			30494	29445	3	KED
|	**Ni**	**60**	**0.006**	ug/L	0.005	79	28	35	15	KED
|	**Ni**	**62**	**0.012**	ug/L	0.036	300	3	6	124	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	144	26	31	23	KED
|	**Cu**	**65**	**0.003**	ug/L	0.005	179	10	15	62	KED
|	**Zn**	**66**	**0.011**	ug/L	0.008	78	19	24	16	KED
|	**Zn**	**67**	**0.002**	ug/L	0.029	1588	3	3	69	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.001	460	2	2	10	KED
	Y	**89**		ug/L			38927	37726	1	Standard
	Kr	**83**		ug/L			46	40	4	Standard
⌈>	**In-1**	**115**		ug/L			6386	6165	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.003	78	4	3	17	KED
⌊	**Cd**	**114**	**-0.017**	ug/L	0.002	11	13	3	35	KED
⌈>	**In**	**115**		ug/L			414575	396753	2	Standard
|	**Ag**	**107**	**0.001**	ug/L	0.000	50	42	48	9	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.002	114	38	46	26	Standard
⌊	**Ba**	**137**	**0.004**	ug/L	0.001	13	52	86	5	Standard
⌈>	**Tb**	**159**		ug/L			165965	158887	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	54	210	264	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:42:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	**13**		ug/L			27225	61757	0	Standard
Kr	**83**		ug/L			46	46	14	Standard
Tb	**159**		ug/L			165965	165213	1	Standard
Pb	**208**	**0.043**	ug/L	0.001	1	210	3630	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-08
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:43:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	58213	2	Standard
	Kr	**83**		ug/L			46	52	9	Standard
>	**Tb**	**159**		ug/L			165965	164898	0	Standard
	Pb	**208**	**0.131**	ug/L	0.002	1	210	10648	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-10
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:44:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	58428	1	Standard
	Kr	**83**		ug/L			46	45	11	Standard
>	**Tb**	**159**		ug/L			165965	163874	1	Standard
	Pb	**208**	**0.109**	ug/L	0.003	2	210	8815	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-12
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:46:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	61012	1	Standard
	Kr	**83**		ug/L			46	47	28	Standard
>	**Tb**	**159**		ug/L			165965	164973	2	Standard
	Pb	**208**	**0.029**	ug/L	0.001	3	210	2478	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-18
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:47:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	61398	0	Standard
	Kr	**83**		ug/L			46	51	16	Standard
>	**Tb**	**159**		ug/L			165965	165020	0	Standard
	Pb	**208**	**0.197**	ug/L	0.005	2	210	15939	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-20
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:48:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	50771	1	Standard
	Kr	**83**		ug/L			46	48	13	Standard
>	**Tb**	**159**		ug/L			165965	171143	0	Standard
	Pb	**208**	**0.113**	ug/L	0.002	1	210	9556	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0106-DUP2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:50:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	49235	1	Standard
	Kr	**83**		ug/L			46	48	43	Standard
>	**Tb**	**159**		ug/L			165965	167068	1	Standard
	Pb	**208**	**0.116**	ug/L	0.001	1	210	9571	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0106-MS2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:51:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	49614	2	Standard
	Kr	**83**		ug/L			46	50	9	Standard
>	**Tb**	**159**		ug/L			165965	170031	2	Standard
	Pb	**208**	**13.734**	ug/L	0.344	2	210	1127528	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0106-MSD2
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:53:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	48805	2	Standard
	Kr	**83**		ug/L			46	50	14	Standard
>	**Tb**	**159**		ug/L			165965	167377	0	Standard
	Pb	**208**	**13.869**	ug/L	0.177	1	210	1121192	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:54:24

TUBE EMPTY

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	27210	4	Standard
	Kr	**83**		ug/L			46	144	17	Standard
>	**Tb**	**159**		ug/L			165965	327175	4	Standard
	Pb	**208**	**-0.001**	ug/L	0.000	9	210	260	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:55:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	34810	2	Standard
	Kr	**83**		ug/L			46	52	17	Standard
>	**Tb**	**159**		ug/L			165965	161330	1	Standard
	Pb	**208**	**50.918**	ug/L	1.253	2	210	3966283	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB5
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 17:59:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	34296	0	Standard
	Kr	**83**		ug/L			46	49	26	Standard
⌈>	**Tb**	**159**		ug/L			165965	159481	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	24	210	259	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:02:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	44018	1	Standard
	Kr	**83**		ug/L			46	46	26	Standard
>	**Tb**	**159**		ug/L			165965	161506	3	Standard
	Pb	**208**	**0.215**	ug/L	0.005	2	210	16953	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-07
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:03:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	44977	1	Standard
	Kr	**83**		ug/L			46	49	3	Standard
>	**Tb**	**159**		ug/L			165965	163185	2	Standard
	Pb	**208**	**0.528**	ug/L	0.010	1	210	41772	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-09
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:05:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	44276	1	Standard
	Kr	**83**		ug/L			46	57	30	Standard
>	**Tb**	**159**		ug/L			165965	165180	0	Standard
	Pb	**208**	**0.532**	ug/L	0.007	1	210	42672	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0480-01
Sample Dil Factor: 5
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:06:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	122185	1	Standard
	Kr	**83**		ug/L			46	67	9	Standard
>	**Tb**	**159**		ug/L			165965	154453	0	Standard
	Pb	**208**	**0.031**	ug/L	0.001	2	210	2487	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:08:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	38187	0	Standard
	Kr	**83**		ug/L			46	53	19	Standard
⌈>	**Tb**	**159**		ug/L			165965	155231	2	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	290	210	190	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:09:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	49595	1	Standard
	Kr	**83**		ug/L			46	44	8	Standard
>	**Tb**	**159**		ug/L			165965	163100	0	Standard
	Pb	**208**	**0.240**	ug/L	0.001	0	210	19113	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:10:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	51006	1	Standard
	Kr	**83**		ug/L			46	44	6	Standard
>	**Tb**	**159**		ug/L			165965	164539	0	Standard
	Pb	**208**	**0.146**	ug/L	0.002	1	210	11808	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-06
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:12:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	50541	0	Standard
	Kr	**83**		ug/L			46	42	6	Standard
>	**Tb**	**159**		ug/L			165965	165015	2	Standard
	Pb	**208**	**0.314**	ug/L	0.005	1	210	25260	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-11
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:13:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	49047	2	Standard
	Kr	**83**		ug/L			46	53	25	Standard
>	**Tb**	**159**		ug/L			165965	163377	0	Standard
	Pb	**208**	**0.285**	ug/L	0.003	1	210	22689	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:15:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	39344	0	Standard
	Kr	**83**		ug/L			46	51	14	Standard
>	**Tb**	**159**		ug/L			165965	155831	1	Standard
	Pb	**208**	**0.000**	ug/L	0.000	3427	210	198	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:16:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	36226	0	Standard
	Kr	**83**		ug/L			46	58	6	Standard
>	**Tb**	**159**		ug/L			165965	164187	0	Standard
	Pb	**208**	**50.229**	ug/L	0.094	0	210	3982976	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB6
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:20:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	34920	2	Standard
	Kr	**83**		ug/L			46	49	10	Standard
⌈>	**Tb**	**159**		ug/L			165965	158492	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	129	210	228	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-13
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:24:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	51951	0	Standard
	Kr	**83**		ug/L			46	52	12	Standard
>	**Tb**	**159**		ug/L			165965	160838	0	Standard
	Pb	**208**	**0.115**	ug/L	0.000	0	210	9164	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-14
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:25:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	53936	0	Standard
	Kr	**83**		ug/L			46	53	22	Standard
>	**Tb**	**159**		ug/L			165965	160287	1	Standard
	Pb	**208**	**0.483**	ug/L	0.007	1	210	37574	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-16
Sample Dil Factor: 2
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:26:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	56772	2	Standard
	Kr	**83**		ug/L			46	48	8	Standard
>	**Tb**	**159**		ug/L			165965	163973	0	Standard
	Pb	**208**	**0.145**	ug/L	0.004	2	210	11656	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0477-15
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:28:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_pb only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	42521	0	Standard
	Kr	**83**		ug/L			46	53	16	Standard
>	**Tb**	**159**		ug/L			165965	161089	0	Standard
	Pb	**208**	**0.551**	ug/L	0.003	0	210	43096	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBL9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:29:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	33768	5	Standard
⌈>	**Sc**	**45**		ug/L			460122	479753	3	Standard
|	**Cr**	**52**	**0.041**	ug/L	0.014	35	8551	9448	2	Standard
|	**Cr**	**53**	**0.006**	ug/L	0.009	149	93	106	16	Standard
⌊	**Mn**	**55**	**-0.001**	ug/L	0.000	25	219	206	4	Standard
⌈>	**Ge**	**72**		ug/L			30494	30106	2	KED
|	**Ni**	**60**	**0.011**	ug/L	0.003	30	28	43	11	KED
|	**Ni**	**62**	**0.012**	ug/L	0.028	237	3	6	96	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	101	26	33	23	KED
|	**Cu**	**65**	**0.002**	ug/L	0.002	118	10	13	28	KED
|	**Zn**	**66**	**0.035**	ug/L	0.003	9	19	36	2	KED
|	**Zn**	**67**	**0.040**	ug/L	0.015	37	3	6	17	KED
⌊	**As**	**75**	**-0.006**	ug/L	0.009	154	2	1	145	KED
	Y	**89**		ug/L			38927	40722	4	Standard
	Kr	**83**		ug/L			46	36	13	Standard
⌈>	**In-1**	**115**		ug/L			6386	7035	3	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.002	39	4	3	17	KED
⌊	**Cd**	**114**	**-0.015**	ug/L	0.005	30	13	5	58	KED
⌈>	**In**	**115**		ug/L			414575	426936	2	Standard
|	**Ag**	**107**	**-0.002**	ug/L	0.001	38	42	20	47	Standard
|	**Ba**	**135**	**0.004**	ug/L	0.002	61	38	58	21	Standard
⌊	**Ba**	**137**	**0.003**	ug/L	0.002	60	52	85	23	Standard
⌈>	**Tb**	**159**		ug/L			165965	162029	1	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	24	210	219	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0702-04
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:34:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27225	50071	6	Standard
>	Sc	45		ug/L			460122	559108	3	Standard
	Cr	52	2.801	ug/L	0.106	3	8551	52852	2	Standard
	Cr	53	5.604	ug/L	0.159	2	93	9911	0	Standard
	Mn	55	89.383	ug/L	2.391	2	219	1974612	1	Standard
>	Ge	72		ug/L			30494	29308	1	KED
	Ni	60	4.352	ug/L	0.054	1	28	6064	1	KED
	Ni	62	4.366	ug/L	0.070	1	3	959	1	KED
	Cu	63	2.289	ug/L	0.036	1	26	8941	1	KED
	Cu	65	2.249	ug/L	0.100	4	10	4457	3	KED
	Zn	66	3.039	ug/L	0.133	4	19	1489	4	KED
	Zn	67	3.825	ug/L	0.302	7	3	304	7	KED
	As	75	10.055	ug/L	0.105	1	2	2374	0	KED
	Y	89		ug/L			38927	89604	2	Standard
	Kr	83		ug/L			46	51	9	Standard
>	In-1	115		ug/L			6386	6158	1	KED
	Cd	111	0.002	ug/L	0.017	872	4	4	86	KED
	Cd	114	-0.004	ug/L	0.009	233	13	10	49	KED
>	In	115		ug/L			414575	377047	1	Standard
	Ag	107	0.011	ug/L	0.002	21	42	168	14	Standard
	Ba	135	15.590	ug/L	0.479	3	38	71246	1	Standard
	Ba	137	15.628	ug/L	0.167	1	52	127422	0	Standard
>	Tb	159		ug/L			165965	170609	1	Standard
	Pb	208	0.223	ug/L	0.005	2	210	18620	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0342-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:40:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27225	51084	4	Standard
⌈>	Sc	45		ug/L			460122	568350	2	Standard
|	Cr	52	2.833	ug/L	0.035	1	8551	54242	2	Standard
|	Cr	53	5.610	ug/L	0.098	1	93	10090	2	Standard
⌊	Mn	55	89.613	ug/L	3.327	3	219	2014004	5	Standard
⌈>	Ge	72		ug/L			30494	28802	0	KED
|	Ni	60	4.291	ug/L	0.110	2	28	5876	2	KED
|	Ni	62	4.641	ug/L	0.202	4	3	1001	3	KED
|	Cu	63	2.274	ug/L	0.042	1	26	8728	1	KED
|	Cu	65	2.249	ug/L	0.100	4	10	4381	4	KED
|	Zn	66	2.824	ug/L	0.077	2	19	1361	2	KED
|	Zn	67	3.785	ug/L	0.579	15	3	296	15	KED
⌊	As	75	10.016	ug/L	0.092	0	2	2324	0	KED
	Y	89		ug/L			38927	89267	1	Standard
	Kr	83		ug/L			46	47	8	Standard
⌈>	In-1	115		ug/L			6386	5985	1	KED
|	Cd	111	0.003	ug/L	0.009	346	4	4	44	KED
⌊	Cd	114	-0.007	ug/L	0.003	51	13	8	22	KED
⌈>	In	115		ug/L			414575	388034	3	Standard
|	Ag	107	0.011	ug/L	0.001	6	42	176	8	Standard
|	Ba	135	15.387	ug/L	0.337	2	38	72354	1	Standard
⌊	Ba	137	15.411	ug/L	0.319	2	52	129265	1	Standard
⌈>	Tb	159		ug/L			165965	172113	0	Standard
⌊	Pb	208	0.238	ug/L	0.003	1	210	20000	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0342-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:45:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27225	51186	5	Standard
>	Sc	45		ug/L			460122	570416	2	Standard
	Cr	52	21.874	ug/L	0.296	1	8551	349015	1	Standard
	Cr	53	24.410	ug/L	0.481	1	93	43677	0	Standard
	Mn	55	112.129	ug/L	1.042	0	219	2528412	1	Standard
>	Ge	72		ug/L			30494	29271	0	KED
	Ni	60	27.840	ug/L	0.280	1	28	38602	0	KED
	Ni	62	27.779	ug/L	0.122	0	3	6076	0	KED
	Cu	63	25.033	ug/L	0.213	0	26	97401	0	KED
	Cu	65	25.046	ug/L	0.184	0	10	49488	0	KED
	Zn	66	72.190	ug/L	1.687	2	19	34903	1	KED
	Zn	67	69.774	ug/L	2.572	3	3	5500	3	KED
	As	75	33.963	ug/L	0.148	0	2	8005	0	KED
	Y	89		ug/L			38927	86850	1	Standard
	Kr	83		ug/L			46	47	10	Standard
>	In-1	115		ug/L			6386	5917	3	KED
	Cd	111	22.714	ug/L	1.260	5	4	4858	2	KED
	Cd	114	22.672	ug/L	0.714	3	13	12384	2	KED
>	In	115		ug/L			414575	385596	1	Standard
	Ag	107	21.779	ug/L	0.668	3	42	273430	2	Standard
	Ba	135	41.119	ug/L	0.845	2	38	192158	1	Standard
	Ba	137	40.806	ug/L	0.502	1	52	340176	0	Standard
>	Tb	159		ug/L			165965	173214	0	Standard
	Pb	208	21.567	ug/L	0.124	0	210	1804350	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0342-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:50:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			27225	50121	5	Standard
>	Sc	45		ug/L			460122	566649	2	Standard
	Cr	52	21.819	ug/L	0.163	0	8551	345942	3	Standard
	Cr	53	24.581	ug/L	0.115	0	93	43704	2	Standard
	Mn	55	110.088	ug/L	0.947	0	219	2466602	3	Standard
>	Ge	72		ug/L			30494	28743	0	KED
	Ni	60	27.761	ug/L	0.348	1	28	37800	1	KED
	Ni	62	28.514	ug/L	0.618	2	3	6125	1	KED
	Cu	63	25.533	ug/L	0.214	0	26	97557	1	KED
	Cu	65	25.563	ug/L	0.514	2	10	49604	2	KED
	Zn	66	73.567	ug/L	1.366	1	19	34930	1	KED
	Zn	67	71.696	ug/L	1.628	2	3	5550	2	KED
	As	75	34.650	ug/L	0.590	1	2	8020	1	KED
	Y	89		ug/L			38927	87094	1	Standard
	Kr	83		ug/L			46	47	4	Standard
>	In-1	115		ug/L			6386	5969	3	KED
	Cd	111	22.427	ug/L	0.921	4	4	4840	0	KED
	Cd	114	22.421	ug/L	0.824	3	13	12352	1	KED
>	In	115		ug/L			414575	377052	2	Standard
	Ag	107	21.519	ug/L	0.480	2	42	264134	1	Standard
	Ba	135	41.712	ug/L	0.827	1	38	190601	2	Standard
	Ba	137	41.496	ug/L	0.365	0	52	338248	1	Standard
>	Tb	159		ug/L			165965	171228	0	Standard
	Pb	208	21.433	ug/L	0.437	2	210	1772521	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:55:21
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	32104	2	Standard
⌈>	**Sc**	**45**		ug/L			460122	484185	0	Standard
|	**Cr**	**52**	**0.052**	ug/L	0.019	37	8551	9682	2	Standard
|	**Cr**	**53**	**0.125**	ug/L	0.020	16	93	287	10	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.001	20	219	288	4	Standard
⌈>	**Ge**	**72**		ug/L			30494	31140	1	KED
|	**Ni**	**60**	**0.002**	ug/L	0.008	354	28	32	35	KED
|	**Ni**	**62**	**0.008**	ug/L	0.022	275	3	5	88	KED
|	**Cu**	**63**	**0.004**	ug/L	0.000	10	26	44	4	KED
|	**Cu**	**65**	**0.005**	ug/L	0.002	32	10	20	15	KED
|	**Zn**	**66**	**0.050**	ug/L	0.004	8	19	45	4	KED
|	**Zn**	**67**	**0.007**	ug/L	0.022	337	3	3	50	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.001	23	2	1	15	KED
	Y	**89**		ug/L			38927	38904	1	Standard
	Kr	**83**		ug/L			46	44	25	Standard
⌈>	**In-1**	**115**		ug/L			6386	6374	1	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.002	27	4	2	24	KED
⌊	**Cd**	**114**	**-0.018**	ug/L	0.002	11	13	2	47	KED
⌈>	**In**	**115**		ug/L			414575	414400	0	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	199	42	39	16	Standard
|	**Ba**	**135**	**0.005**	ug/L	0.002	36	38	62	13	Standard
⌊	**Ba**	**137**	**0.005**	ug/L	0.000	5	52	99	3	Standard
⌈>	**Tb**	**159**		ug/L			165965	170024	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	22	210	321	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 18:59:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	29882	5	Standard
⌈>	**Sc**	**45**		ug/L			460122	492719	1	Standard
|	**Cr**	**52**	**46.862**	ug/L	0.898	1	8551	635602	3	Standard
|	**Cr**	**53**	**47.446**	ug/L	0.957	2	93	73242	0	Standard
⌊	**Mn**	**55**	**47.412**	ug/L	0.375	0	219	923706	1	Standard
⌈>	**Ge**	**72**		ug/L			30494	31679	0	KED
|	**Ni**	**60**	**49.451**	ug/L	0.657	1	28	74185	0	KED
|	**Ni**	**62**	**50.710**	ug/L	1.000	1	3	12004	2	KED
|	**Cu**	**63**	**50.219**	ug/L	0.881	1	26	211426	0	KED
|	**Cu**	**65**	**49.462**	ug/L	0.399	0	10	105774	1	KED
|	**Zn**	**66**	**51.028**	ug/L	0.143	0	19	26710	1	KED
|	**Zn**	**67**	**51.839**	ug/L	0.935	1	3	4424	2	KED
⌊	**As**	**75**	**49.952**	ug/L	0.538	1	2	12741	0	KED
	Y	**89**		ug/L			38927	39628	2	Standard
	Kr	**83**		ug/L			46	42	9	Standard
⌈>	**In-1**	**115**		ug/L			6386	6648	0	KED
|	**Cd**	**111**	**49.226**	ug/L	1.079	2	4	11839	1	KED
⌊	**Cd**	**114**	**49.147**	ug/L	0.723	1	13	30162	0	KED
⌈>	**In**	**115**		ug/L			414575	414854	2	Standard
|	**Ag**	**107**	**48.728**	ug/L	1.030	2	42	657999	1	Standard
|	**Ba**	**135**	**49.989**	ug/L	0.737	1	38	251298	1	Standard
⌊	**Ba**	**137**	**49.163**	ug/L	1.103	2	52	440803	0	Standard
⌈>	**Tb**	**159**		ug/L			165965	172287	1	Standard
⌊	**Pb**	**208**	**49.027**	ug/L	0.734	1	210	4078768	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB7
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:07:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			27225	44107	2	Standard
⌈>	**Sc**	**45**		ug/L			460122	467848	1	Standard
|	**Cr**	**52**	**0.056**	ug/L	0.025	44	8551	9400	1	Standard
|	**Cr**	**53**	**0.022**	ug/L	0.020	92	93	126	21	Standard
⌊	**Mn**	**55**	**0.009**	ug/L	0.013	149	219	383	61	Standard
⌈>	**Ge**	**72**		ug/L			30494	30626	1	KED
|	**Ni**	**60**	**0.009**	ug/L	0.002	19	28	41	4	KED
|	**Ni**	**62**	**0.042**	ug/L	0.017	41	3	13	28	KED
|	**Cu**	**63**	**0.003**	ug/L	0.003	87	26	39	26	KED
|	**Cu**	**65**	**0.007**	ug/L	0.002	31	10	24	16	KED
|	**Zn**	**66**	**0.020**	ug/L	0.005	25	19	29	9	KED
|	**Zn**	**67**	**0.023**	ug/L	0.059	256	3	5	94	KED
⌊	**As**	**75**	**0.004**	ug/L	0.005	127	2	3	33	KED
	Y	**89**		ug/L			38927	37362	2	Standard
	Kr	**83**		ug/L			46	31	27	Standard
⌈>	**In-1**	**115**		ug/L			6386	6407	3	KED
|	**Cd**	**111**	**-0.012**	ug/L	0.002	17	4	1	43	KED
⌊	**Cd**	**114**	**-0.019**	ug/L	0.003	17	13	1	100	KED
⌈>	**In**	**115**		ug/L			414575	406141	1	Standard
|	**Ag**	**107**	**0.010**	ug/L	0.015	155	42	172	116	Standard
|	**Ba**	**135**	**0.014**	ug/L	0.019	129	38	107	83	Standard
⌊	**Ba**	**137**	**0.014**	ug/L	0.017	117	52	173	82	Standard
⌈>	**Tb**	**159**		ug/L			165965	163351	3	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.016	144	210	1026	113	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:14:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				35375	4	Standard
⎡>	**Sc**	**45**		ug/L				473417	1	Standard
⎢	**Cr**	**52**		ug/L				9091	2	Standard
⎢	**Cr**	**53**		ug/L				128	3	Standard
⎣	**Mn**	**55**		ug/L				216	3	Standard
⎡>	**Ge**	**72**		ug/L				31041	1	KED
⎢	**Ni**	**60**		ug/L				38	41	KED
⎢	**Ni**	**62**		ug/L				3	50	KED
⎢	**Cu**	**63**		ug/L				33	3	KED
⎢	**Cu**	**65**		ug/L				13	78	KED
⎢	**Zn**	**66**		ug/L				24	7	KED
⎢	**Zn**	**67**		ug/L				5	141	KED
⎣	**As**	**75**		ug/L				2	52	KED
	Y	**89**		ug/L				39379	3	Standard
	Kr	**83**		ug/L				33	20	Standard
⎡>	**In-1**	**115**		ug/L				6479	2	KED
⎢	**Cd**	**111**		ug/L				0	173	KED
⎣	**Cd**	**114**		ug/L				3	50	KED
⎡>	**In**	**115**		ug/L				411466	2	Standard
⎢	**Ag**	**107**		ug/L				26	25	Standard
⎢	**Ba**	**135**		ug/L				57	20	Standard
⎣	**Ba**	**137**		ug/L				109	19	Standard
⎡>	**Tb**	**159**		ug/L				168748	1	Standard
⎣	**Pb**	**208**		ug/L				245	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:18:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	31956	3	Standard
⌈>	**Sc**	**45**		ug/L			473417	483579	1	Standard
|	**Cr**	**52**	**48.033**	ug/L	1.112	2	9091	639308	1	Standard
|	**Cr**	**53**	**48.743**	ug/L	0.741	1	128	73885	0	Standard
⌊	**Mn**	**55**	**48.910**	ug/L	0.430	0	216	935147	1	Standard
⌈>	**Ge**	**72**		ug/L			31041	31531	2	KED
|	**Ni**	**60**	**48.774**	ug/L	2.327	4	38	72774	1	KED
|	**Ni**	**62**	**49.943**	ug/L	0.902	1	3	11762	1	KED
|	**Cu**	**63**	**49.777**	ug/L	1.894	3	33	208463	0	KED
|	**Cu**	**65**	**48.767**	ug/L	1.443	2	13	103739	0	KED
|	**Zn**	**66**	**50.712**	ug/L	1.224	2	24	26415	1	KED
|	**Zn**	**67**	**51.263**	ug/L	0.826	1	5	4356	3	KED
⌊	**As**	**75**	**49.678**	ug/L	1.461	2	2	12605	0	KED
	Y	**89**		ug/L			39379	39569	1	Standard
	Kr	**83**		ug/L			33	34	25	Standard
⌈>	**In-1**	**115**		ug/L			6479	6461	1	KED
|	**Cd**	**111**	**49.132**	ug/L	0.667	1	0	11482	2	KED
⌊	**Cd**	**114**	**48.849**	ug/L	0.955	1	3	29126	2	KED
⌈>	**In**	**115**		ug/L			411466	414070	2	Standard
|	**Ag**	**107**	**49.450**	ug/L	1.680	3	26	666438	2	Standard
|	**Ba**	**135**	**49.266**	ug/L	1.389	2	57	247159	0	Standard
⌊	**Ba**	**137**	**49.289**	ug/L	1.165	2	109	441153	0	Standard
⌈>	**Tb**	**159**		ug/L			168748	170066	1	Standard
⌊	**Pb**	**208**	**49.517**	ug/L	0.438	0	245	4066889	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB8
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:25:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	30742	2	Standard
⌈>	**Sc**	**45**		ug/L			473417	484633	4	Standard
|	**Cr**	**52**	**-0.019**	ug/L	0.032	173	9091	9049	1	Standard
|	**Cr**	**53**	**-0.016**	ug/L	0.017	102	128	106	19	Standard
⌊	**Mn**	**55**	**0.008**	ug/L	0.014	178	216	363	67	Standard
⌈>	**Ge**	**72**		ug/L			31041	31356	0	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.011	291	38	33	46	KED
|	**Ni**	**62**	**0.035**	ug/L	0.013	36	3	12	24	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	267	33	36	20	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.002	192	13	11	44	KED
|	**Zn**	**66**	**-0.008**	ug/L	0.003	44	24	20	9	KED
|	**Zn**	**67**	**-0.008**	ug/L	0.047	590	5	4	89	KED
⌊	**As**	**75**	**0.003**	ug/L	0.004	130	2	3	31	KED
	Y	**89**		ug/L			39379	40092	3	Standard
	Kr	**83**		ug/L			33	52	21	Standard
⌈>	**In-1**	**115**		ug/L			6479	6545	2	KED
|	**Cd**	**111**	**0.003**	ug/L	0.004	149	0	0	100	KED
⌊	**Cd**	**114**	**-0.001**	ug/L	0.003	271	3	3	71	KED
⌈>	**In**	**115**		ug/L			411466	418771	3	Standard
|	**Ag**	**107**	**0.008**	ug/L	0.012	139	26	137	111	Standard
|	**Ba**	**135**	**0.007**	ug/L	0.013	191	57	92	69	Standard
⌊	**Ba**	**137**	**0.005**	ug/L	0.013	257	109	154	70	Standard
⌈>	**Tb**	**159**		ug/L			168748	167031	2	Standard
⌊	**Pb**	**208**	**0.010**	ug/L	0.016	161	245	1004	121	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0171-01
Sample Dil Factor: 20
DEL
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:33:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	40750	2	Standard
>	**Sc**	**45**		ug/L			473417	593182	1	Standard
	Mn	**55**	**83.233**	ug/L	1.216	1	216	1952262	3	Standard
	Kr	**83**		ug/L			33	43	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0171-02
Sample Dil Factor: 20
Comments:

DEL

Sample Date/Time: Thursday, May 11, 2023 19:35:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	42093	1	Standard
>	**Sc**	**45**		ug/L			473417	615694	3	Standard
	Mn	**55**	**78.026**	ug/L	0.148	0	216	1899382	3	Standard
	Kr	**83**		ug/L			33	39	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0171-10
Sample Dil Factor: 20
DEL
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:37:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	43142	3	Standard
>	**Sc**	**45**		ug/L			473417	601761	2	Standard
	Mn	**55**	**232.522**	ug/L	2.348	1	216	5531685	3	Standard
	Kr	**83**		ug/L			33	54	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0171-11
Sample Dil Factor: 100
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:38:35

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	39783	0	Standard
>	**Sc**	**45**		ug/L			473417	599154	0	Standard
	Mn	**55**	**79.755**	ug/L	2.106	2	216	1889365	3	Standard
	Kr	**83**		ug/L			33	48	29	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0171-12
Sample Dil Factor: 100
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:39:56

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	**13**		ug/L			35375	40719	0	Standard
> **Sc**	**45**		ug/L			473417	604640	2	Standard
Mn	**55**	**76.016**	ug/L	1.025	1	216	1817530	3	Standard
Kr	**83**		ug/L			33	45	31	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0171-06

Sample Dil Factor: 50

DEL

Comments:

Sample Date/Time: Thursday, May 11, 2023 19:41:18

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	40463	2	Standard
>	**Sc**	**45**		ug/L			473417	603703	4	Standard
	Mn	**55**	**56.639**	ug/L	1.334	2	216	1351242	3	Standard
	Kr	**83**		ug/L			33	48	33	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:42:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	40240	2	Standard
⌈>	**Sc**	**45**		ug/L			473417	591422	1	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.001	27	216	365	5	Standard
	Kr	**83**		ug/L			33	42	41	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCV9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:44:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	36689	1	Standard
>	**Sc**	**45**		ug/L			473417	610131	2	Standard
	Mn	**55**	**45.712**	ug/L	0.619	1	216	1103017	3	Standard
	Kr	**83**		ug/L			33	55	27	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCB9
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:48:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_mn only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			35375	35587	0	Standard
⌈>	**Sc**	**45**		ug/L			473417	576301	3	Standard
⌊	**Mn**	**55**	**0.001**	ug/L	0.001	46	216	287	2	Standard
	Kr	**83**		ug/L			33	41	25	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:51:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				30125	1	Standard
>	**Sc**	**45**		ug/L				488451	2	Standard
	Cr	**52**		ug/L				8929	3	Standard
	Cr	**53**		ug/L				95	11	Standard
	Mn	**55**		ug/L				208	10	Standard
>	**Ge**	**72**		ug/L				31094	1	KED
	Ni	**60**		ug/L				36	9	KED
	Ni	**62**		ug/L				5	78	KED
	Cu	**63**		ug/L				24	13	KED
	Cu	**65**		ug/L				18	36	KED
	Zn	**66**		ug/L				23	23	KED
	Zn	**67**		ug/L				4	49	KED
	As	**75**		ug/L				2	68	KED
	Y	**89**		ug/L				40140	3	Standard
	Kr	**83**		ug/L				40	38	Standard
>	**In-1**	**115**		ug/L				6950	2	KED
	Cd	**111**		ug/L				3	56	KED
	Cd	**114**		ug/L				0	180	KED
>	**In**	**115**		ug/L				429431	3	Standard
	Ag	**107**		ug/L				24	13	Standard
	Ba	**135**		ug/L				46	4	Standard
	Ba	**137**		ug/L				85	12	Standard
>	**Tb**	**159**		ug/L				166755	2	Standard
	Pb	**208**		ug/L				213	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 19:55:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	31068	6	Standard
⌈>	**Sc**	**45**		ug/L			488451	496953	2	Standard
|	**Cr**	**52**	**47.887**	ug/L	0.305	0	8929	654584	1	Standard
|	**Cr**	**53**	**48.282**	ug/L	0.759	1	95	75177	2	Standard
⌊	**Mn**	**55**	**48.329**	ug/L	0.366	0	208	949563	1	Standard
⌈>	**Ge**	**72**		ug/L			31094	31335	1	KED
|	**Ni**	**60**	**49.504**	ug/L	1.097	2	36	73453	0	KED
|	**Ni**	**62**	**50.840**	ug/L	1.958	3	5	11900	2	KED
|	**Cu**	**63**	**49.902**	ug/L	1.103	2	24	207822	2	KED
|	**Cu**	**65**	**49.025**	ug/L	0.755	1	18	103691	0	KED
|	**Zn**	**66**	**51.257**	ug/L	1.113	2	23	26540	2	KED
|	**Zn**	**67**	**51.830**	ug/L	2.221	4	4	4375	3	KED
⌊	**As**	**75**	**50.761**	ug/L	0.849	1	2	12805	0	KED
	Y	**89**		ug/L			40140	41623	2	Standard
	Kr	**83**		ug/L			40	43	15	Standard
⌈>	**In-1**	**115**		ug/L			6950	6586	1	KED
|	**Cd**	**111**	**48.710**	ug/L	0.857	1	3	11605	0	KED
⌊	**Cd**	**114**	**49.769**	ug/L	0.997	2	0	30244	0	KED
⌈>	**In**	**115**		ug/L			429431	422607	0	Standard
|	**Ag**	**107**	**50.288**	ug/L	1.632	3	24	691847	2	Standard
|	**Ba**	**135**	**48.585**	ug/L	0.946	1	46	248842	1	Standard
⌊	**Ba**	**137**	**48.718**	ug/L	0.733	1	85	445176	1	Standard
⌈>	**Tb**	**159**		ug/L			166755	174363	1	Standard
⌊	**Pb**	**208**	**48.985**	ug/L	1.030	2	213	4124375	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBA
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:00:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	29186	4	Standard
⌈>	**Sc**	**45**		ug/L			488451	490772	1	Standard
|	**Cr**	**52**	**0.009**	ug/L	0.042	453	8929	9089	4	Standard
|	**Cr**	**53**	**0.023**	ug/L	0.036	157	95	130	41	Standard
⌊	**Mn**	**55**	**0.019**	ug/L	0.031	161	208	581	102	Standard
⌈>	**Ge**	**72**		ug/L			31094	31384	2	KED
|	**Ni**	**60**	**-0.004**	ug/L	0.004	106	36	31	18	KED
|	**Ni**	**62**	**-0.000**	ug/L	0.012	3657	5	5	57	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	59	24	38	20	KED
|	**Cu**	**65**	**0.001**	ug/L	0.002	433	18	19	24	KED
|	**Zn**	**66**	**0.010**	ug/L	0.020	208	23	28	35	KED
|	**Zn**	**67**	**0.022**	ug/L	0.034	155	4	6	45	KED
⌊	**As**	**75**	**0.003**	ug/L	0.003	90	2	3	24	KED
	Y	**89**		ug/L			40140	40666	1	Standard
	Kr	**83**		ug/L			40	40	25	Standard
⌈>	**In-1**	**115**		ug/L			6950	6471	0	KED
|	**Cd**	**111**	**0.001**	ug/L	0.002	220	3	3	15	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.004	50	0	5	43	KED
⌈>	**In**	**115**		ug/L			429431	430476	1	Standard
|	**Ag**	**107**	**0.022**	ug/L	0.034	155	24	335	144	Standard
|	**Ba**	**135**	**0.015**	ug/L	0.027	179	46	126	113	Standard
⌊	**Ba**	**137**	**0.014**	ug/L	0.023	164	85	219	101	Standard
⌈>	**Tb**	**159**		ug/L			166755	169298	1	Standard
⌊	**Pb**	**208**	**0.017**	ug/L	0.027	157	213	1621	137	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0636-01
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:07:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	37533	4	Standard
⌈>	**Sc**	**45**		ug/L			488451	529062	2	Standard
|	**Cr**	**52**	**0.541**	ug/L	0.003	0	8929	17434	2	Standard
|	**Cr**	**53**	**0.601**	ug/L	0.008	1	95	1098	1	Standard
⌊	**Mn**	**55**	**88.376**	ug/L	0.740	0	208	1848790	3	Standard
⌈>	**Ge**	**72**		ug/L			31094	31864	2	KED
|	**Ni**	**60**	**0.988**	ug/L	0.024	2	36	1526	2	KED
|	**Ni**	**62**	**1.021**	ug/L	0.115	11	5	247	8	KED
|	**Cu**	**63**	**1.647**	ug/L	0.021	1	24	6997	1	KED
|	**Cu**	**65**	**1.686**	ug/L	0.054	3	18	3643	1	KED
|	**Zn**	**66**	**4.041**	ug/L	0.149	3	23	2151	6	KED
|	**Zn**	**67**	**3.780**	ug/L	0.373	9	4	328	7	KED
⌊	**As**	**75**	**0.565**	ug/L	0.012	2	2	147	4	KED
	Y	**89**		ug/L			40140	56560	3	Standard
	Kr	**83**		ug/L			40	39	14	Standard
⌈>	**In-1**	**115**		ug/L			6950	6868	0	KED
|	**Cd**	**111**	**0.005**	ug/L	0.015	289	3	4	80	KED
⌊	**Cd**	**114**	**0.012**	ug/L	0.004	30	0	8	28	KED
⌈>	**In**	**115**		ug/L			429431	448110	1	Standard
|	**Ag**	**107**	**0.004**	ug/L	0.001	29	24	85	19	Standard
|	**Ba**	**135**	**2.679**	ug/L	0.043	1	46	14596	2	Standard
⌊	**Ba**	**137**	**2.633**	ug/L	0.026	0	85	25592	1	Standard
⌈>	**Tb**	**159**		ug/L			166755	178597	0	Standard
⌊	**Pb**	**208**	**0.679**	ug/L	0.008	1	213	58760	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0298-DUP2
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:11:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	37041	3	Standard
⌈>	Sc	45		ug/L			488451	517410	0	Standard
|	Cr	52	0.555	ug/L	0.014	2	8929	17251	1	Standard
|	Cr	53	0.620	ug/L	0.016	2	95	1105	2	Standard
⌊	Mn	55	90.495	ug/L	1.649	1	208	1851260	2	Standard
⌈>	Ge	72		ug/L			31094	31715	1	KED
|	Ni	60	0.992	ug/L	0.041	4	36	1525	2	KED
|	Ni	62	1.008	ug/L	0.067	6	5	243	5	KED
|	Cu	63	1.724	ug/L	0.022	1	24	7293	2	KED
|	Cu	65	1.698	ug/L	0.014	0	18	3653	1	KED
|	Zn	66	4.083	ug/L	0.167	4	23	2161	2	KED
|	Zn	67	3.985	ug/L	0.154	3	4	344	3	KED
⌊	As	75	0.571	ug/L	0.021	3	2	147	2	KED
	Y	89		ug/L			40140	56345	3	Standard
	Kr	83		ug/L			40	34	11	Standard
⌈>	In-1	115		ug/L			6950	6841	0	KED
|	Cd	111	-0.004	ug/L	0.006	159	3	2	57	KED
⌊	Cd	114	0.007	ug/L	0.001	21	0	4	19	KED
⌈>	In	115		ug/L			429431	437724	2	Standard
|	Ag	107	0.002	ug/L	0.001	47	24	54	24	Standard
|	Ba	135	2.795	ug/L	0.102	3	46	14868	1	Standard
⌊	Ba	137	2.763	ug/L	0.058	2	85	26229	0	Standard
⌈>	Tb	159		ug/L			166755	175911	0	Standard
⌊	Pb	208	0.692	ug/L	0.006	0	213	59009	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0298-MS2
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:16:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	37834	4	Standard
⌈>	Sc	45		ug/L			488451	509796	3	Standard
|	Cr	52	2.928	ug/L	0.050	1	8929	49799	3	Standard
|	Cr	53	3.034	ug/L	0.078	2	95	4936	1	Standard
⌊	Mn	55	95.427	ug/L	2.392	2	208	1922397	2	Standard
⌈>	Ge	72		ug/L			31094	32404	0	KED
|	Ni	60	3.516	ug/L	0.048	1	36	5431	1	KED
|	Ni	62	3.710	ug/L	0.182	4	5	902	3	KED
|	Cu	63	4.318	ug/L	0.048	1	24	18621	0	KED
|	Cu	65	4.255	ug/L	0.153	3	18	9322	2	KED
|	Zn	66	12.225	ug/L	0.290	2	23	6564	1	KED
|	Zn	67	11.985	ug/L	0.075	0	4	1050	1	KED
⌊	As	75	3.013	ug/L	0.134	4	2	788	5	KED
	Y	89		ug/L			40140	57255	3	Standard
	Kr	83		ug/L			40	37	36	Standard
⌈>	In-1	115		ug/L			6950	6696	3	KED
|	Cd	111	2.447	ug/L	0.099	4	3	595	4	KED
⌊	Cd	114	2.438	ug/L	0.131	5	0	1507	7	KED
⌈>	In	115		ug/L			429431	437727	1	Standard
|	Ag	107	2.205	ug/L	0.040	1	24	31452	3	Standard
|	Ba	135	5.278	ug/L	0.058	1	46	28043	1	Standard
⌊	Ba	137	5.274	ug/L	0.063	1	85	49996	1	Standard
⌈>	Tb	159		ug/L			166755	177766	1	Standard
⌊	Pb	208	3.166	ug/L	0.042	1	213	272094	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0298-MSD2
Sample Dil Factor: 10
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:20:33
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	36979	2	Standard
>	Sc	45		ug/L			488451	525686	2	Standard
	Cr	52	2.854	ug/L	0.078	2	8929	50302	2	Standard
	Cr	53	2.930	ug/L	0.007	0	95	4922	2	Standard
	Mn	55	91.394	ug/L	1.596	1	208	1899162	2	Standard
>	Ge	72		ug/L			31094	31781	0	KED
	Ni	60	3.555	ug/L	0.073	2	36	5384	1	KED
	Ni	62	3.613	ug/L	0.131	3	5	862	3	KED
	Cu	63	4.211	ug/L	0.090	2	24	17809	2	KED
	Cu	65	4.197	ug/L	0.110	2	18	9021	2	KED
	Zn	66	12.756	ug/L	0.172	1	23	6717	0	KED
	Zn	67	12.102	ug/L	0.236	1	4	1040	2	KED
	As	75	3.007	ug/L	0.093	3	2	771	2	KED
	Y	89		ug/L			40140	58514	3	Standard
	Kr	83		ug/L			40	45	23	Standard
>	In-1	115		ug/L			6950	6582	3	KED
	Cd	111	2.475	ug/L	0.049	1	3	592	2	KED
	Cd	114	2.509	ug/L	0.189	7	0	1521	3	KED
>	In	115		ug/L			429431	439755	2	Standard
	Ag	107	2.234	ug/L	0.064	2	24	32023	5	Standard
	Ba	135	5.335	ug/L	0.152	2	46	28465	0	Standard
	Ba	137	5.240	ug/L	0.130	2	85	49891	1	Standard
>	Tb	159		ug/L			166755	179008	1	Standard
	Pb	208	3.173	ug/L	0.034	1	213	274515	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLC
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:25:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	32810	3	Standard
⌈>	**Sc**	**45**		ug/L			488451	483754	2	Standard
|	**Cr**	**52**	**0.011**	ug/L	0.007	59	8929	8990	3	Standard
|	**Cr**	**53**	**0.002**	ug/L	0.003	137	95	97	4	Standard
⌊	**Mn**	**55**	**0.004**	ug/L	0.001	24	208	274	5	Standard
⌈>	**Ge**	**72**		ug/L			31094	32249	0	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.008	290	36	33	38	KED
|	**Ni**	**62**	**0.012**	ug/L	0.017	133	5	8	48	KED
|	**Cu**	**63**	**0.003**	ug/L	0.002	58	24	39	20	KED
|	**Cu**	**65**	**-0.000**	ug/L	0.001	410	18	18	15	KED
|	**Zn**	**66**	**0.043**	ug/L	0.009	20	23	46	9	KED
|	**Zn**	**67**	**0.086**	ug/L	0.054	63	4	12	39	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.002	78	2	1	34	KED
	Y	**89**		ug/L			40140	40596	0	Standard
	Kr	**83**		ug/L			40	33	8	Standard
⌈>	**In-1**	**115**		ug/L			6950	6409	1	KED
|	**Cd**	**111**	**-0.000**	ug/L	0.002	1237	3	3	17	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.003	59	0	3	51	KED
⌈>	**In**	**115**		ug/L			429431	430809	3	Standard
|	**Ag**	**107**	**-0.000**	ug/L	0.000	73	24	20	15	Standard
|	**Ba**	**135**	**0.001**	ug/L	0.002	228	46	50	17	Standard
⌊	**Ba**	**137**	**0.001**	ug/L	0.001	53	85	95	2	Standard
⌈>	**Tb**	**159**		ug/L			166755	168692	2	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	26	213	286	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:30:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	37172	2	Standard
>	Sc	45		ug/L			488451	585054	3	Standard
	Cr	52	19.035	ug/L	0.241	1	8929	312715	2	Standard
	Cr	53	19.184	ug/L	0.461	2	95	35219	0	Standard
	Mn	55	408.963	ug/L	6.469	1	208	9455468	1	Standard
>	Ge	72		ug/L			31094	29441	1	KED
	Ni	60	49.353	ug/L	1.005	2	36	68810	1	KED
	Ni	62	50.923	ug/L	1.247	2	5	11201	1	KED
	Cu	63	159.251	ug/L	4.042	2	24	623033	2	KED
	Cu	65	156.890	ug/L	1.546	0	18	311752	0	KED
	Zn	66	74.362	ug/L	1.528	2	23	36163	1	KED
	Zn	67	68.154	ug/L	1.445	2	4	5407	3	KED
	As	75	2.157	ug/L	0.080	3	2	513	3	KED
	Y	89		ug/L			40140	317948	1	Standard
	Kr	83		ug/L			40	200	9	Standard
>	In-1	115		ug/L			6950	6095	0	KED
	Cd	111	0.136	ug/L	0.011	8	3	33	7	KED
	Cd	114	0.132	ug/L	0.037	28	0	74	28	KED
>	In	115		ug/L			429431	379319	1	Standard
	Ag	107	0.141	ug/L	0.009	6	24	1757	6	Standard
	Ba	135	13.381	ug/L	0.231	1	46	61552	2	Standard
	Ba	137	13.256	ug/L	0.124	0	85	108769	0	Standard
>	Tb	159		ug/L			166755	185408	1	Standard
	Pb	208	11.928	ug/L	0.058	0	213	1068245	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-DUP1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:35:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	38308	4	Standard
>	Sc	45		ug/L			488451	581455	1	Standard
	Cr	52	18.454	ug/L	0.322	1	8929	301660	0	Standard
	Cr	53	18.605	ug/L	0.072	0	95	33968	1	Standard
	Mn	55	351.407	ug/L	4.276	1	208	8077094	1	Standard
>	Ge	72		ug/L			31094	29946	1	KED
	Ni	60	41.402	ug/L	0.644	1	36	58719	0	KED
	Ni	62	42.603	ug/L	1.363	3	5	9532	2	KED
	Cu	63	160.484	ug/L	4.473	2	24	638555	1	KED
	Cu	65	157.043	ug/L	1.660	1	18	317422	1	KED
	Zn	66	72.547	ug/L	1.040	1	23	35889	1	KED
	Zn	67	70.143	ug/L	1.933	2	4	5659	3	KED
	As	75	3.128	ug/L	0.080	2	2	756	1	KED
	Y	89		ug/L			40140	333817	0	Standard
	Kr	83		ug/L			40	213	3	Standard
>	In-1	115		ug/L			6950	6142	2	KED
	Cd	111	0.193	ug/L	0.048	24	3	46	22	KED
	Cd	114	0.180	ug/L	0.019	10	0	102	9	KED
>	In	115		ug/L			429431	386154	1	Standard
	Ag	107	0.157	ug/L	0.005	3	24	2002	4	Standard
	Ba	135	13.196	ug/L	0.309	2	46	61784	1	Standard
	Ba	137	12.810	ug/L	0.121	0	85	107005	0	Standard
>	Tb	159		ug/L			166755	190251	0	Standard
	Pb	208	15.187	ug/L	0.119	0	213	1395652	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-MS1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:40:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	35682	6	Standard
>	Sc	45		ug/L			488451	602861	3	Standard
	Cr	52	40.501	ug/L	0.519	1	8929	673139	2	Standard
	Cr	53	40.134	ug/L	0.661	1	95	75801	2	Standard
	Mn	55	403.696	ug/L	9.605	2	208	9614903	1	Standard
>	Ge	72		ug/L			31094	29627	2	KED
	Ni	60	71.332	ug/L	2.031	2	36	100046	1	KED
	Ni	62	72.084	ug/L	1.289	1	5	15953	1	KED
	Cu	63	178.612	ug/L	3.276	1	24	703091	0	KED
	Cu	65	175.823	ug/L	4.358	2	18	351477	0	KED
	Zn	66	139.753	ug/L	1.404	1	23	68375	1	KED
	Zn	67	133.587	ug/L	5.323	3	4	10654	2	KED
	As	75	22.806	ug/L	0.374	1	2	5440	2	KED
	Y	89		ug/L			40140	354871	3	Standard
	Kr	83		ug/L			40	207	16	Standard
>	In-1	115		ug/L			6950	6155	1	KED
	Cd	111	24.652	ug/L	0.177	0	3	5491	2	KED
	Cd	114	24.512	ug/L	0.441	1	0	13920	0	KED
>	In	115		ug/L			429431	386831	1	Standard
	Ag	107	24.681	ug/L	0.253	1	24	310888	2	Standard
	Ba	135	34.380	ug/L	0.768	2	46	161198	2	Standard
	Ba	137	33.167	ug/L	0.625	1	85	277407	1	Standard
>	Tb	159		ug/L			166755	193863	2	Standard
	Pb	208	30.586	ug/L	0.566	1	213	2863025	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:44:34
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	36215	3	Standard
>	Sc	45		ug/L			488451	614737	1	Standard
	Cr	52	38.157	ug/L	0.751	1	8929	647469	1	Standard
	Cr	53	38.387	ug/L	0.645	1	95	73963	1	Standard
	Mn	55	373.236	ug/L	6.598	1	208	9069303	1	Standard
>	Ge	72		ug/L			31094	30940	0	KED
	Ni	60	64.989	ug/L	0.830	1	36	95219	1	KED
	Ni	62	66.779	ug/L	0.835	1	5	15436	0	KED
	Cu STL	63	158.301	ug/L	0.895	0	24	650906	0	KED
	Cu	65	158.710	ug/L	3.040	1	18	331427	1	KED
	Zn	66	144.837	ug/L	0.207	0	23	74011	0	KED
	Zn	67	137.610	ug/L	0.372	0	4	11466	0	KED
	As	75	20.547	ug/L	0.227	1	2	5119	0	KED
	Y	89		ug/L			40140	374892	2	Standard
	Kr	83		ug/L			40	194	15	Standard
>	In-1	115		ug/L			6950	6616	2	KED
	Cd	111	23.308	ug/L	0.995	4	3	5576	1	KED
	Cd	114	23.131	ug/L	0.515	2	0	14117	1	KED
>	In	115		ug/L			429431	390014	1	Standard
	Ag	107	25.024	ug/L	0.651	2	24	317728	1	Standard
	Ba	135	34.183	ug/L	0.292	0	46	161600	1	Standard
	Ba	137	33.671	ug/L	0.711	2	85	283919	0	Standard
>	Tb	159		ug/L			166755	198813	0	Standard
	Pb	208	31.952	ug/L	0.481	1	213	3067852	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLD
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:49:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	33486	2	Standard
>	**Sc**	**45**		ug/L			488451	492138	0	Standard
	Cr	**52**	**-0.020**	ug/L	0.018	90	8929	8729	3	Standard
	Cr	**53**	**-0.008**	ug/L	0.003	44	95	84	6	Standard
	Mn	**55**	**0.017**	ug/L	0.004	23	208	536	13	Standard
>	**Ge**	**72**		ug/L			31094	29224	18	KED
	Ni	**60**	**0.004**	ug/L	0.010	275	36	37	15	KED
	Ni	**62**	**0.001**	ug/L	0.024	1900	5	5	114	KED
	Cu	**63**	**0.016**	ug/L	0.004	28	24	81	4	KED
	Cu	**65**	**0.009**	ug/L	0.004	44	18	33	3	KED
	Zn	**66**	**0.058**	ug/L	0.014	23	23	49	7	KED
	Zn	**67**	**0.080**	ug/L	0.103	128	4	9	60	KED
	As	**75**	**0.006**	ug/L	0.005	91	2	3	43	KED
	Y	**89**		ug/L			40140	40341	2	Standard
	Kr	**83**		ug/L			40	39	12	Standard
>	**In-1**	**115**		ug/L			6950	6607	3	KED
	Cd	**111**	**0.053**	ug/L	0.050	94	3	15	75	KED
	Cd	**114**	**0.057**	ug/L	0.050	88	0	34	86	KED
>	**In**	**115**		ug/L			429431	424681	1	Standard
	Ag	**107**	**0.002**	ug/L	0.001	61	24	47	28	Standard
	Ba	**135**	**0.001**	ug/L	0.003	304	46	51	29	Standard
	Ba	**137**	**0.002**	ug/L	0.001	35	85	102	5	Standard
>	**Tb**	**159**		ug/L			166755	172906	0	Standard
	Pb	**208**	**0.002**	ug/L	0.000	18	213	376	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 20:53:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	30349	2	Standard
⌈>	**Sc**	**45**		ug/L			488451	500151	1	Standard
|	**Cr**	**52**	**47.797**	ug/L	0.682	1	8929	657554	0	Standard
|	**Cr**	**53**	**47.780**	ug/L	0.772	1	95	74890	2	Standard
⌊	**Mn**	**55**	**48.138**	ug/L	0.695	1	208	951850	0	Standard
⌈>	**Ge**	**72**		ug/L			31094	31557	1	KED
|	**Ni**	**60**	**49.111**	ug/L	0.948	1	36	73390	1	KED
|	**Ni**	**62**	**50.092**	ug/L	1.814	3	5	11808	2	KED
|	**Cu**	**63**	**50.292**	ug/L	0.819	1	24	210903	0	KED
|	**Cu**	**65**	**49.462**	ug/L	0.808	1	18	105355	1	KED
|	**Zn**	**66**	**50.887**	ug/L	0.866	1	23	26532	0	KED
|	**Zn**	**67**	**50.159**	ug/L	1.636	3	4	4266	4	KED
⌊	**As**	**75**	**50.279**	ug/L	1.185	2	2	12772	0	KED
	Y	**89**		ug/L			40140	41165	1	Standard
	Kr	**83**		ug/L			40	45	19	Standard
⌈>	**In-1**	**115**		ug/L			6950	6605	2	KED
|	**Cd**	**111**	**48.346**	ug/L	0.954	1	3	11548	0	KED
⌊	**Cd**	**114**	**49.017**	ug/L	1.180	2	0	29865	0	KED
⌈>	**In**	**115**		ug/L			429431	430018	0	Standard
|	**Ag**	**107**	**48.606**	ug/L	0.839	1	24	680582	1	Standard
|	**Ba**	**135**	**48.913**	ug/L	0.978	2	46	254944	2	Standard
⌊	**Ba**	**137**	**48.708**	ug/L	0.267	0	85	452897	0	Standard
⌈>	**Tb**	**159**		ug/L			166755	176847	0	Standard
⌊	**Pb**	**208**	**48.974**	ug/L	0.478	0	213	4182898	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBB
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:00:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	29643	3	Standard
⌈>	**Sc**	**45**		ug/L			488451	487286	0	Standard
|	**Cr**	**52**	**0.000**	ug/L	0.006	21725	8929	8908	0	Standard
|	**Cr**	**53**	**-0.004**	ug/L	0.005	120	95	89	7	Standard
⌊	**Mn**	**55**	**0.002**	ug/L	0.000	12	208	253	2	Standard
⌈>	**Ge**	**72**		ug/L			31094	32611	0	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.006	214	36	33	27	KED
|	**Ni**	**62**	**0.009**	ug/L	0.020	219	5	7	66	KED
|	**Cu**	**63**	**0.004**	ug/L	0.002	51	24	41	19	KED
|	**Cu**	**65**	**-0.001**	ug/L	0.003	424	18	17	37	KED
|	**Zn**	**66**	**0.020**	ug/L	0.002	9	23	35	3	KED
|	**Zn**	**67**	**0.041**	ug/L	0.013	31	4	8	13	KED
⌊	**As**	**75**	**0.003**	ug/L	0.008	234	2	3	62	KED
	Y	**89**		ug/L			40140	39383	1	Standard
	Kr	**83**		ug/L			40	33	18	Standard
⌈>	**In-1**	**115**		ug/L			6950	6576	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.005	105	3	2	49	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.008	97	0	5	88	KED
⌈>	**In**	**115**		ug/L			429431	427806	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	35	24	45	14	Standard
|	**Ba**	**135**	**0.000**	ug/L	0.003	825	46	48	25	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.003	817	85	88	26	Standard
⌈>	**Tb**	**159**		ug/L			166755	168082	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	33	213	311	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:06:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	46985	4	Standard
>	Sc	45		ug/L			488451	534721	1	Standard
	Cr	52	27.742	ug/L	0.720	2	8929	412240	3	Standard
	Cr	53	28.038	ug/L	0.287	1	95	47020	1	Standard
	Mn	55	1064.142	ug/L	28.598	2	208	22494749	3	Standard
>	Ge	72		ug/L			31094	32051	1	KED
	Ni	60	15.678	ug/L	0.036	0	36	23824	1	KED
	Ni	62	16.233	ug/L	0.031	0	5	3891	1	KED
	Cu	63	46.517	ug/L	0.453	0	24	198148	0	KED
	Cu	65	45.801	ug/L	0.802	1	18	99088	1	KED
	Zn	66	173.657	ug/L	4.375	2	23	91903	1	KED
	Zn	67	165.252	ug/L	1.668	1	4	14262	0	KED
	As	75	12.925	ug/L	0.220	1	2	3336	0	KED
	Y	89		ug/L			40140	142103	1	Standard
	Kr	83		ug/L			40	71	10	Standard
>	In-1	115		ug/L			6950	6885	2	KED
	Cd	111	0.414	ug/L	0.001	0	3	106	2	KED
	Cd	114	0.366	ug/L	0.022	5	0	233	4	KED
>	In	115		ug/L			429431	393324	2	Standard
	Ag	107	0.162	ug/L	0.006	3	24	2101	6	Standard
	Ba	135	31.697	ug/L	0.823	2	46	151057	0	Standard
	Ba	137	30.637	ug/L	0.149	0	85	260595	2	Standard
>	Tb	159		ug/L			166755	168476	0	Standard
	Pb	208	151.589	ug/L	2.471	1	213	12335180	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:11:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	46502	4	Standard
>	Sc	45		ug/L			488451	543996	2	Standard
	Cr	52	30.867	ug/L	0.240	0	8929	465460	2	Standard
	Cr	53	31.076	ug/L	0.581	1	95	53005	2	Standard
	Mn	55	455.053	ug/L	4.939	1	208	9786918	3	Standard
>	Ge	72		ug/L			31094	30784	1	KED
	Ni	60	15.099	ug/L	0.155	1	36	22037	1	KED
	Ni	62	14.992	ug/L	0.644	4	5	3451	3	KED
	Cu	63	131.128	ug/L	5.499	4	24	536254	2	KED
	Cu	65	131.305	ug/L	2.284	1	18	272796	0	KED
	Zn	66	169.823	ug/L	4.654	2	23	86314	1	KED
	Zn	67	157.006	ug/L	1.585	1	4	13016	1	KED
	As	75	18.607	ug/L	0.104	0	2	4613	1	KED
	Y	89		ug/L			40140	155497	1	Standard
	Kr	83		ug/L			40	89	14	Standard
>	In-1	115		ug/L			6950	6472	1	KED
	Cd	111	12.622	ug/L	0.366	2	3	2957	2	KED
	Cd	114	12.499	ug/L	0.041	0	0	7466	1	KED
>	In	115		ug/L			429431	414369	2	Standard
	Ag	107	0.148	ug/L	0.002	1	24	2024	3	Standard
	Ba	135	21.870	ug/L	0.587	2	46	109854	2	Standard
	Ba	137	21.381	ug/L	0.340	1	85	191573	1	Standard
>	Tb	159		ug/L			166755	179904	3	Standard
	Pb	208	745.655	ug/L	14.614	1	213	64757164	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:15:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	49445	4	Standard
>	Sc	45		ug/L			488451	557144	2	Standard
	Cr	52	21.947	ug/L	0.141	0	8929	341879	2	Standard
	Cr	53	22.190	ug/L	0.381	1	95	38788	2	Standard
	Mn	55	329.777	ug/L	2.960	0	208	7262106	1	Standard
>	Ge	72		ug/L			31094	31410	1	KED
	Ni	60	12.193	ug/L	0.133	1	36	18167	1	KED
	Ni	62	12.756	ug/L	0.087	0	5	2997	0	KED
	Cu	63	87.915	ug/L	0.516	0	24	366988	0	KED
	Cu	65	86.966	ug/L	1.593	1	18	184386	2	KED
	Zn	66	133.428	ug/L	1.490	1	23	69214	0	KED
	Zn	67	126.587	ug/L	0.681	0	4	10708	0	KED
	As	75	6.938	ug/L	0.154	2	2	1756	1	KED
	Y	89		ug/L			40140	162765	0	Standard
	Kr	83		ug/L			40	78	14	Standard
>	In-1	115		ug/L			6950	6408	2	KED
	Cd	111	0.222	ug/L	0.004	1	3	54	1	KED
	Cd	114	0.192	ug/L	0.008	4	0	114	6	KED
>	In	115		ug/L			429431	423474	3	Standard
	Ag	107	0.121	ug/L	0.012	9	24	1683	6	Standard
	Ba	135	23.608	ug/L	0.725	3	46	121113	0	Standard
	Ba	137	23.286	ug/L	0.661	2	85	213135	1	Standard
>	Tb	159		ug/L			166755	190018	1	Standard
	Pb	208	268.236	ug/L	5.726	2	213	24611827	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-05
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:20:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	43125	3	Standard
>	Sc	45		ug/L			488451	568425	3	Standard
	Cr	52	11.128	ug/L	0.256	2	8929	181902	1	Standard
	Cr	53	11.274	ug/L	0.144	1	95	20167	3	Standard
	Mn	55	78.112	ug/L	0.641	0	208	1755331	3	Standard
>	Ge	72		ug/L			31094	31370	1	KED
	Ni	60	8.987	ug/L	0.100	1	36	13381	1	KED
	Ni	62	9.507	ug/L	0.203	2	5	2232	1	KED
	Cu	63	15.324	ug/L	0.349	2	24	63896	0	KED
	Cu	65	15.022	ug/L	0.351	2	18	31818	1	KED
	Zn	66	62.987	ug/L	1.489	2	23	32641	1	KED
	Zn	67	62.205	ug/L	0.150	0	4	5258	1	KED
	As	75	4.223	ug/L	0.106	2	2	1068	2	KED
	Y	89		ug/L			40140	164869	4	Standard
	Kr	83		ug/L			40	59	23	Standard
>	In-1	115		ug/L			6950	6674	2	KED
	Cd	111	0.164	ug/L	0.029	17	3	42	13	KED
	Cd	114	0.184	ug/L	0.005	2	0	113	1	KED
>	In	115		ug/L			429431	436073	0	Standard
	Ag	107	0.055	ug/L	0.004	7	24	800	8	Standard
	Ba	135	31.748	ug/L	0.181	0	46	167824	1	Standard
	Ba	137	31.695	ug/L	0.503	1	85	298917	2	Standard
>	Tb	159		ug/L			166755	198717	1	Standard
	Pb	208	11.851	ug/L	0.067	0	213	1137514	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:24:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			30125	52682	5	Standard
>	Sc	45		ug/L			488451	588362	2	Standard
	Cr	52	9.639	ug/L	0.081	0	8929	164582	2	Standard
	Cr	53	9.847	ug/L	0.196	1	95	18240	1	Standard
	Mn	55	236.529	ug/L	1.621	0	208	5500825	2	Standard
>	Ge	72		ug/L			31094	33225	0	KED
	Ni	60	8.532	ug/L	0.131	1	36	13457	1	KED
	Ni	62	8.750	ug/L	0.263	3	5	2176	2	KED
	Cu	63	18.273	ug/L	0.399	2	24	80703	1	KED
	Cu	65	18.279	ug/L	0.790	4	18	41002	3	KED
	Zn	66	78.244	ug/L	1.706	2	23	42943	1	KED
	Zn	67	75.675	ug/L	1.756	2	4	6773	2	KED
	As	75	5.178	ug/L	0.031	0	2	1387	0	KED
	Y	89		ug/L			40140	155868	1	Standard
	Kr	83		ug/L			40	63	14	Standard
>	In-1	115		ug/L			6950	6990	1	KED
	Cd	111	0.159	ug/L	0.055	34	3	43	32	KED
	Cd	114	0.216	ug/L	0.010	4	0	139	5	KED
>	In	115		ug/L			429431	457253	0	Standard
	Ag	107	0.098	ug/L	0.004	3	24	1487	3	Standard
	Ba	135	26.043	ug/L	0.215	0	46	144364	1	Standard
	Ba	137	26.184	ug/L	0.847	3	85	258950	3	Standard
>	Tb	159		ug/L			166755	203335	0	Standard
	Pb	208	44.443	ug/L	0.772	1	213	4364411	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:29:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30125	50602	3	Standard
> Sc	45		ug/L			488451	631146	5	Standard
Cr	52	15.659	ug/L	0.589	3	8929	279291	2	Standard
Cr	53	15.823	ug/L	0.301	1	95	31355	3	Standard
Mn	55	235.921	ug/L	3.276	1	208	5884205	4	Standard
> Ge	72		ug/L			31094	33332	1	KED
Ni	60	19.230	ug/L	0.351	1	36	30377	0	KED
Ni	62	19.008	ug/L	0.180	0	5	4737	1	KED
Cu	63	54.270	ug/L	0.333	0	24	240431	1	KED
Cu	65	54.135	ug/L	0.602	1	18	121818	2	KED
Zn	66	194.999	ug/L	3.341	1	23	107329	1	KED
Zn	67	185.832	ug/L	0.783	0	4	16680	1	KED
As	75	5.114	ug/L	0.095	1	2	1374	1	KED
Y	89		ug/L			40140	233218	3	Standard
Kr	83		ug/L			40	90	12	Standard
> In-1	115		ug/L			6950	6868	1	KED
Cd	111	0.418	ug/L	0.031	7	3	107	5	KED
Cd	114	0.429	ug/L	0.029	6	0	272	6	KED
> In	115		ug/L			429431	446354	3	Standard
Ag	107	0.123	ug/L	0.002	1	24	1805	2	Standard
Ba	135	34.836	ug/L	0.436	1	46	188478	3	Standard
Ba	137	34.431	ug/L	0.869	2	85	332185	2	Standard
> Tb	159		ug/L			166755	209030	2	Standard
Pb	208	24.530	ug/L	0.094	0	213	2476421	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:34:12
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	33902	4	Standard
⌈>	**Sc**	**45**		ug/L			488451	509317	2	Standard
|	**Cr**	**52**	**-0.010**	ug/L	0.003	34	8929	9169	1	Standard
|	**Cr**	**53**	**-0.014**	ug/L	0.004	29	95	76	10	Standard
⌊	**Mn**	**55**	**0.009**	ug/L	0.002	25	208	392	11	Standard
⌈>	**Ge**	**72**		ug/L			31094	33105	3	KED
|	**Ni**	**60**	**-0.010**	ug/L	0.004	40	36	23	28	KED
|	**Ni**	**62**	**-0.014**	ug/L	0.000	1	5	1		KED
|	**Cu**	**63**	**0.007**	ug/L	0.002	25	24	58	14	KED
|	**Cu**	**65**	**0.005**	ug/L	0.004	80	18	30	28	KED
|	**Zn**	**66**	**0.032**	ug/L	0.022	68	23	42	29	KED
|	**Zn**	**67**	**0.061**	ug/L	0.054	88	4	10	47	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.002	98	2	1	31	KED
	Y	**89**		ug/L			40140	40283	2	Standard
	Kr	**83**		ug/L			40	36	9	Standard
⌈>	**In-1**	**115**		ug/L			6950	6626	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.002	66	3	2	21	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.003	40	0	5	35	KED
⌈>	**In**	**115**		ug/L			429431	437233	1	Standard
|	**Ag**	**107**	**-0.001**	ug/L	0.000	21	24	14	15	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.000	64	46	44	6	Standard
⌊	**Ba**	**137**	**0.000**	ug/L	0.001	198	85	91	7	Standard
⌈>	**Tb**	**159**		ug/L			166755	178936	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	6	213	482	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-MSD1
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:40:52

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			30125	38182	4	Standard
> Sc	45		ug/L			488451	677388	3	Standard
Cr	52	38.068	ug/L	0.685	1	8929	711624	1	Standard
Cr	53	38.733	ug/L	1.470	3	95	82170	1	Standard
Mn	55	373.479	ug/L	7.490	2	208	9996495	1	Standard
> Ge	72		ug/L			31094	32777	1	KED
Ni	60	66.532	ug/L	2.386	3	36	103242	2	KED
Ni	62	67.162	ug/L	1.345	2	5	16448	2	KED
Cu	63	165.307	ug/L	1.190	0	24	720130	1	KED
Cu	65	163.973	ug/L	2.411	1	18	362734	0	KED
Zn	66	148.455	ug/L	3.061	2	23	80352	0	KED
Zn	67	141.313	ug/L	2.921	2	4	12472	0	KED
As	75	21.021	ug/L	0.453	2	2	5548	0	KED
Y	89		ug/L			40140	388292	2	Standard
Kr	83		ug/L			40	179	8	Standard
> In-1	115		ug/L			6950	6715	2	KED
Cd	111	24.505	ug/L	0.693	2	3	5952	1	KED
Cd	114	24.265	ug/L	0.380	1	0	15034	0	KED
> In	115		ug/L			429431	410418	2	Standard
Ag	107	24.850	ug/L	0.270	1	24	332055	1	Standard
Ba	135	35.070	ug/L	0.499	1	46	174462	2	Standard
Ba	137	33.654	ug/L	0.449	1	85	298697	3	Standard
> Tb	159		ug/L			166755	214273	1	Standard
Pb	208	31.024	ug/L	0.787	2	213	3210544	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLF
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:46:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	34214	5	Standard
⌈>	**Sc**	**45**		ug/L			488451	519979	1	Standard
|	**Cr**	**52**	**-0.024**	ug/L	0.004	16	8929	9169	2	Standard
|	**Cr**	**53**	**-0.017**	ug/L	0.004	24	95	73	11	Standard
⌊	**Mn**	**55**	**0.005**	ug/L	0.001	25	208	320	5	Standard
⌈>	**Ge**	**72**		ug/L			31094	33035	3	KED
|	**Ni**	**60**	**0.061**	ug/L	0.059	95	36	132	68	KED
|	**Ni**	**62**	**0.033**	ug/L	0.048	144	5	13	86	KED
|	**Cu**	**63**	**0.179**	ug/L	0.156	87	24	801	85	KED
|	**Cu**	**65**	**0.164**	ug/L	0.157	95	18	382	91	KED
|	**Zn**	**66**	**0.164**	ug/L	0.147	89	23	113	69	KED
|	**Zn**	**67**	**0.135**	ug/L	0.173	128	4	16	93	KED
⌊	**As**	**75**	**0.029**	ug/L	0.026	86	2	10	67	KED
	Y	**89**		ug/L			40140	40195	1	Standard
	Kr	**83**		ug/L			40	44	19	Standard
⌈>	**In-1**	**115**		ug/L			6950	6917	1	KED
|	**Cd**	**111**	**0.001**	ug/L	0.004	291	3	3	25	KED
⌊	**Cd**	**114**	**0.005**	ug/L	0.003	61	0	3	51	KED
⌈>	**In**	**115**		ug/L			429431	432133	1	Standard
|	**Ag**	**107**	**0.000**	ug/L	0.001	905	24	26	37	Standard
|	**Ba**	**135**	**-0.001**	ug/L	0.002	129	46	40	21	Standard
⌊	**Ba**	**137**	**-0.003**	ug/L	0.001	43	85	56	21	Standard
⌈>	**Tb**	**159**		ug/L			166755	179540	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	44	213	278	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVC
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:50:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	31361	3	Standard
⌈>	**Sc**	**45**		ug/L			488451	510631	1	Standard
|	**Cr**	**52**	**48.852**	ug/L	1.102	2	8929	685926	1	Standard
|	**Cr**	**53**	**48.864**	ug/L	0.948	1	95	78172	1	Standard
⌊	**Mn**	**55**	**48.790**	ug/L	1.863	3	208	984808	2	Standard
⌈>	**Ge**	**72**		ug/L			31094	33139	0	KED
|	**Ni**	**60**	**49.000**	ug/L	0.527	1	36	76909	1	KED
|	**Ni**	**62**	**49.629**	ug/L	0.936	1	5	12290	2	KED
|	**Cu**	**63**	**49.216**	ug/L	0.050	0	24	216780	0	KED
|	**Cu**	**65**	**48.963**	ug/L	0.852	1	18	109532	1	KED
|	**Zn**	**66**	**51.210**	ug/L	1.079	2	23	28043	1	KED
|	**Zn**	**67**	**50.210**	ug/L	0.199	0	4	4484	0	KED
⌊	**As**	**75**	**49.346**	ug/L	0.471	0	2	13167	1	KED
	Y	**89**		ug/L			40140	40043	0	Standard
	Kr	**83**		ug/L			40	41	15	Standard
⌈>	**In-1**	**115**		ug/L			6950	6706	1	KED
|	**Cd**	**111**	**49.190**	ug/L	1.141	2	3	11934	2	KED
⌊	**Cd**	**114**	**48.845**	ug/L	0.837	1	0	30229	2	KED
⌈>	**In**	**115**		ug/L			429431	427274	0	Standard
|	**Ag**	**107**	**49.191**	ug/L	1.107	2	24	684390	2	Standard
|	**Ba**	**135**	**50.763**	ug/L	0.378	0	46	262894	0	Standard
⌊	**Ba**	**137**	**50.712**	ug/L	1.304	2	85	468482	2	Standard
⌈>	**Tb**	**159**		ug/L			166755	182549	2	Standard
⌊	**Pb**	**208**	**48.451**	ug/L	0.915	1	213	4270718	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBC
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 21:58:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			30125	29097	5	Standard
⌈>	**Sc**	**45**		ug/L			488451	490683	2	Standard
|	**Cr**	**52**	**-0.027**	ug/L	0.016	57	8929	8604	2	Standard
|	**Cr**	**53**	**-0.020**	ug/L	0.005	26	95	65	10	Standard
⌊	**Mn**	**55**	**0.003**	ug/L	0.001	42	208	264	6	Standard
⌈>	**Ge**	**72**		ug/L			31094	31437	2	KED
|	**Ni**	**60**	**-0.003**	ug/L	0.004	119	36	31	21	KED
|	**Ni**	**62**	**0.002**	ug/L	0.001	26	5	5	0	KED
|	**Cu**	**63**	**0.007**	ug/L	0.001	7	24	54	4	KED
|	**Cu**	**65**	**0.006**	ug/L	0.004	71	18	31	30	KED
|	**Zn**	**66**	**0.027**	ug/L	0.015	56	23	38	22	KED
|	**Zn**	**67**	**0.007**	ug/L	0.012	172	4	5	21	KED
⌊	**As**	**75**	**0.007**	ug/L	0.006	88	2	3	36	KED
	Y	**89**		ug/L			40140	39951	3	Standard
	Kr	**83**		ug/L			40	38	10	Standard
⌈>	**In-1**	**115**		ug/L			6950	6671	1	KED
|	**Cd**	**111**	**-0.005**	ug/L	0.004	94	3	2	49	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.004	50	0	4	45	KED
⌈>	**In**	**115**		ug/L			429431	425844	1	Standard
|	**Ag**	**107**	**0.002**	ug/L	0.001	42	24	47	20	Standard
|	**Ba**	**135**	**0.002**	ug/L	0.002	99	46	59	19	Standard
⌊	**Ba**	**137**	**-0.002**	ug/L	0.000	17	85	68	2	Standard
⌈>	**Tb**	**159**		ug/L			166755	170214	1	Standard
⌊	**Pb**	**208**	**0.003**	ug/L	0.000	17	213	433	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:03:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				28285	5	Standard
⎡>	**Sc**	**45**		ug/L				489773	1	Standard
⎢	**Cr**	**52**		ug/L				8505	2	Standard
⎣	**Cr**	**53**		ug/L				60	5	Standard
⎡>	**Ge**	**72**		ug/L				31037	2	KED
⎢	**Cu**	**63**		ug/L				42	18	KED
⎢	**Cu**	**65**		ug/L				15	79	KED
⎢	**Zn**	**66**		ug/L				22	36	KED
⎢	**Zn**	**67**		ug/L				4	65	KED
⎣	**As**	**75**		ug/L				3	34	KED
	Y	**89**		ug/L				38706	2	Standard
	Kr	**83**		ug/L				31	34	Standard
⎡>	**In-1**	**115**		ug/L				6431	1	KED
⎢	**Cd**	**111**		ug/L				3	75	KED
⎣	**Cd**	**114**		ug/L				0	208	KED
⎡>	**In**	**115**		ug/L				415168	1	Standard
⎣	**Ag**	**107**		ug/L				37	32	Standard
⎡>	**Tb**	**159**		ug/L				170846	0	Standard
⎣	**Pb**	**208**		ug/L				364	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVD
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:08:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	29789	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	492820	1	Standard
|	**Cr**	**52**	**47.526**	ug/L	0.881	1	8505	643953	2	Standard
⌊	**Cr**	**53**	**48.003**	ug/L	0.353	0	60	74096	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	31517	1	KED
|	**Cu**	**63**	**48.957**	ug/L	0.528	1	42	205076	0	KED
|	**Cu**	**65**	**48.445**	ug/L	0.610	1	15	103059	1	KED
|	**Zn**	**66**	**50.910**	ug/L	0.274	0	22	26515	1	KED
|	**Zn**	**67**	**49.932**	ug/L	2.398	4	4	4240	4	KED
⌊	**As**	**75**	**49.739**	ug/L	0.385	0	3	12622	0	KED
	Y	**89**		ug/L			38706	39760	2	Standard
	Kr	**83**		ug/L			31	36	10	Standard
⌈>	**In-1**	**115**		ug/L			6431	6548	0	KED
|	**Cd**	**111**	**48.693**	ug/L	0.226	0	3	11534	0	KED
⌊	**Cd**	**114**	**49.288**	ug/L	0.311	0	0	29781	0	KED
⌈>	**In**	**115**		ug/L			415168	405853	1	Standard
⌊	**Ag**	**107**	**50.361**	ug/L	1.548	3	37	665305	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	174104	1	Standard
⌊	**Pb**	**208**	**49.105**	ug/L	0.386	0	364	4128822	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBD
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:15:13
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	28697	2	Standard
⌈>	**Sc**	**45**		ug/L			489773	484962	1	Standard
|	**Cr**	**52**	**-0.004**	ug/L	0.008	205	8505	8370	2	Standard
⌊	**Cr**	**53**	**0.007**	ug/L	0.006	90	60	70	14	Standard
⌈>	**Ge**	**72**		ug/L			31037	31012	0	KED
|	**Cu**	**63**	**0.002**	ug/L	0.002	78	42	52	14	KED
|	**Cu**	**65**	**0.006**	ug/L	0.005	87	15	27	37	KED
|	**Zn**	**66**	**0.030**	ug/L	0.010	32	22	38	13	KED
|	**Zn**	**67**	**0.023**	ug/L	0.095	417	4	6	124	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.002	343	3	3	18	KED
	Y	**89**		ug/L			38706	38893	2	Standard
	Kr	**83**		ug/L			31	50	28	Standard
⌈>	**In-1**	**115**		ug/L			6431	6579	1	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.006	138	3	2	65	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.002	190	0	1	99	KED
⌈>	**In**	**115**		ug/L			415168	423463	0	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	205	37	43	26	Standard
⌈>	**Tb**	**159**		ug/L			170846	170623	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.001	203	364	394	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23A0467-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:22:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	48851	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	577049	3	Standard
|	**Cr**	**52**	**13.738**	ug/L	0.110	0	8505	225029	3	Standard
⌊	**Cr**	**53**	**13.944**	ug/L	0.189	1	60	25244	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	31520	0	KED
|	**Cu**	**63**	**31.485**	ug/L	1.089	3	42	131942	3	KED
|	**Cu**	**65**	**31.317**	ug/L	0.931	2	15	66646	3	KED
|	**Zn**	**66**	**59.634**	ug/L	0.617	1	22	31058	1	KED
|	**Zn**	**67**	**56.517**	ug/L	1.374	2	4	4800	2	KED
⌊	**As**	**75**	**6.809**	ug/L	0.157	2	3	1731	2	KED
	Y	**89**		ug/L			38706	202589	3	Standard
	Kr	**83**		ug/L			31	67	21	Standard
⌈>	**In-1**	**115**		ug/L			6431	6849	3	KED
|	**Cd**	**111**	**0.194**	ug/L	0.034	17	3	51	16	KED
⌊	**Cd**	**114**	**0.228**	ug/L	0.029	12	0	143	9	KED
⌈>	**In**	**115**		ug/L			415168	425958	2	Standard
⌊	**Ag**	**107**	**0.147**	ug/L	0.007	4	37	2083	5	Standard
⌈>	**Tb**	**159**		ug/L			170846	199303	2	Standard
⌊	**Pb**	**208**	**12.702**	ug/L	0.088	0	364	1223123	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23C0071-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:27:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	52612	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	588040	1	Standard
|	**Cr**	**52**	**14.298**	ug/L	0.054	0	8505	238304	2	Standard
⌊	**Cr**	**53**	**14.269**	ug/L	0.142	0	60	26330	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	31325	1	KED
|	**Cu**	**63**	**34.136**	ug/L	0.313	0	42	142137	0	KED
|	**Cu**	**65**	**33.400**	ug/L	0.799	2	15	70615	0	KED
|	**Zn**	**66**	**65.895**	ug/L	1.586	2	22	34095	0	KED
|	**Zn**	**67**	**65.267**	ug/L	0.838	1	4	5508	1	KED
⌊	**As**	**75**	**7.587**	ug/L	0.122	1	3	1916	1	KED
	Y	**89**		ug/L			38706	205508	0	Standard
	Kr	**83**		ug/L			31	71	24	Standard
⌈>	**In-1**	**115**		ug/L			6431	6667	2	KED
|	**Cd**	**111**	**0.243**	ug/L	0.027	11	3	61	9	KED
⌊	**Cd**	**114**	**0.225**	ug/L	0.042	18	0	138	16	KED
⌈>	**In**	**115**		ug/L			415168	427225	1	Standard
⌊	**Ag**	**107**	**0.148**	ug/L	0.004	2	37	2103	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	203411	2	Standard
⌊	**Pb**	**208**	**13.736**	ug/L	0.326	2	364	1349193	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0008-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:31:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	47376	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	581887	0	Standard
|	**Cr**	**52**	**12.314**	ug/L	0.033	0	8505	204488	0	Standard
⌊	**Cr**	**53**	**12.138**	ug/L	0.153	1	60	22175	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	30368	4	KED
|	**Cu**	**63**	**27.278**	ug/L	0.612	2	42	110055	2	KED
|	**Cu**	**65**	**26.800**	ug/L	0.990	3	15	54888	1	KED
|	**Zn**	**66**	**96.499**	ug/L	2.661	2	22	48366	1	KED
|	**Zn**	**67**	**93.435**	ug/L	1.571	1	4	7639	2	KED
⌊	**As**	**75**	**5.151**	ug/L	0.287	5	3	1260	1	KED
	Y	**89**		ug/L			38706	199023	1	Standard
	Kr	**83**		ug/L			31	67	18	Standard
⌈>	**In-1**	**115**		ug/L			6431	6421	1	KED
|	**Cd**	**111**	**0.175**	ug/L	0.034	19	3	43	19	KED
⌊	**Cd**	**114**	**0.155**	ug/L	0.039	24	0	91	22	KED
⌈>	**In**	**115**		ug/L			415168	421474	3	Standard
⌊	**Ag**	**107**	**0.108**	ug/L	0.006	5	37	1521	2	Standard
⌈>	**Tb**	**159**		ug/L			170846	200348	1	Standard
⌊	**Pb**	**208**	**10.076**	ug/L	0.105	1	364	975298	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0136-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:35:50
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	53073	3	Standard
⌈>	Sc	45		ug/L			489773	576636	1	Standard
|	Cr	52	14.019	ug/L	0.167	1	8505	229281	1	Standard
⌊	Cr	53	14.292	ug/L	0.280	1	60	25856	1	Standard
⌈>	Ge	72		ug/L			31037	30759	0	KED
|	Cu	63	37.943	ug/L	0.461	1	42	155136	0	KED
|	Cu	65	37.261	ug/L	0.388	1	15	77367	0	KED
|	Zn	66	84.809	ug/L	1.417	1	22	43090	1	KED
|	Zn	67	82.483	ug/L	1.771	2	4	6834	2	KED
⌊	As	75	9.140	ug/L	0.287	3	3	2266	2	KED
	Y	89		ug/L			38706	203759	0	Standard
	Kr	83		ug/L			31	71	15	Standard
⌈>	In-1	115		ug/L			6431	6435	0	KED
|	Cd	111	0.194	ug/L	0.021	10	3	48	10	KED
⌊	Cd	114	0.249	ug/L	0.007	2	0	148	3	KED
⌈>	In	115		ug/L			415168	422509	1	Standard
⌊	Ag	107	0.157	ug/L	0.006	3	37	2198	4	Standard
⌈>	Tb	159		ug/L			170846	198005	0	Standard
⌊	Pb	208	15.362	ug/L	0.160	1	364	1469423	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0136-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:40:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	50849	3	Standard
⌈>	Sc	45		ug/L			489773	582688	1	Standard
|	Cr	52	14.489	ug/L	0.118	0	8505	239127	1	Standard
⌊	Cr	53	14.675	ug/L	0.275	1	60	26833	3	Standard
⌈>	Ge	72		ug/L			31037	31484	1	KED
|	Cu	63	35.162	ug/L	0.415	1	42	147153	0	KED
|	Cu	65	34.804	ug/L	0.505	1	15	73971	1	KED
|	Zn	66	65.580	ug/L	0.825	1	22	34111	0	KED
|	Zn	67	63.513	ug/L	0.902	1	4	5387	1	KED
⌊	As	75	8.323	ug/L	0.120	1	3	2112	0	KED
	Y	89		ug/L			38706	200945	1	Standard
	Kr	83		ug/L			31	82	5	Standard
⌈>	In-1	115		ug/L			6431	6536	1	KED
|	Cd	111	0.233	ug/L	0.021	8	3	58	8	KED
⌊	Cd	114	0.235	ug/L	0.013	5	0	142	4	KED
⌈>	In	115		ug/L			415168	431832	2	Standard
⌊	Ag	107	0.161	ug/L	0.009	5	37	2299	3	Standard
⌈>	Tb	159		ug/L			170846	200028	1	Standard
⌊	Pb	208	14.745	ug/L	0.110	0	364	1424758	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0396-01
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:44:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	55864	5	Standard
⌈>	**Sc**	**45**		ug/L			489773	589497	0	Standard
|	**Cr**	**52**	**14.311**	ug/L	0.130	0	8505	239086	0	Standard
⌊	**Cr**	**53**	**14.650**	ug/L	0.191	1	60	27097	0	Standard
⌈>	**Ge**	**72**		ug/L			31037	31122	1	KED
|	**Cu**	**63**	**38.316**	ug/L	0.293	0	42	158513	1	KED
|	**Cu**	**65**	**38.064**	ug/L	0.356	0	15	79961	1	KED
|	**Zn**	**66**	**71.053**	ug/L	1.084	1	22	36536	2	KED
|	**Zn**	**67**	**67.339**	ug/L	2.040	3	4	5646	3	KED
⌊	**As**	**75**	**7.097**	ug/L	0.133	1	3	1781	3	KED
	Y	**89**		ug/L			38706	215059	2	Standard
	Kr	**83**		ug/L			31	78	33	Standard
⌈>	**In-1**	**115**		ug/L			6431	6493	3	KED
|	**Cd**	**111**	**0.193**	ug/L	0.054	27	3	48	21	KED
⌊	**Cd**	**114**	**0.220**	ug/L	0.020	9	0	132	8	KED
⌈>	**In**	**115**		ug/L			415168	424926	1	Standard
⌊	**Ag**	**107**	**0.157**	ug/L	0.006	4	37	2216	3	Standard
⌈>	**Tb**	**159**		ug/L			170846	201951	1	Standard
⌊	**Pb**	**208**	**15.085**	ug/L	0.363	2	364	1471359	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0396-03
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:48:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	55777	3	Standard
⌈>	Sc	45		ug/L			489773	572796	2	Standard
|	Cr	52	14.013	ug/L	0.199	1	8505	227627	1	Standard
⌊	Cr	53	14.110	ug/L	0.283	2	60	25353	1	Standard
⌈>	Ge	72		ug/L			31037	31260	0	KED
|	Cu	63	34.557	ug/L	0.140	0	42	143608	1	KED
|	Cu	65	34.753	ug/L	0.496	1	15	73336	1	KED
|	Zn	66	66.426	ug/L	0.936	1	22	34305	1	KED
|	Zn	67	63.224	ug/L	1.361	2	4	5325	2	KED
⌊	As	75	6.306	ug/L	0.132	2	3	1589	1	KED
	Y	89		ug/L			38706	202469	0	Standard
	Kr	83		ug/L			31	66	5	Standard
⌈>	In-1	115		ug/L			6431	6464	0	KED
|	Cd	111	0.194	ug/L	0.009	4	3	48	5	KED
⌊	Cd	114	0.184	ug/L	0.007	3	0	110	3	KED
⌈>	In	115		ug/L			415168	425206	0	Standard
⌊	Ag	107	0.138	ug/L	0.002	1	37	1953	0	Standard
⌈>	Tb	159		ug/L			170846	197182	1	Standard
⌊	Pb	208	13.939	ug/L	0.210	1	364	1327642	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-02
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:53:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	46448	5	Standard
⌈>	Sc	45		ug/L			489773	549846	2	Standard
|	Cr	52	17.371	ug/L	0.291	1	8505	268634	2	Standard
⌊	Cr	53	17.651	ug/L	0.219	1	60	30439	3	Standard
⌈>	Ge	72		ug/L			31037	31365	0	KED
|	Cu	63	25.021	ug/L	0.154	0	42	104333	0	KED
|	Cu	65	24.851	ug/L	0.217	0	15	52626	1	KED
|	Zn	66	57.690	ug/L	0.363	0	22	29897	0	KED
|	Zn	67	56.329	ug/L	3.259	5	4	4759	4	KED
⌊	As	75	5.835	ug/L	0.052	0	3	1476	1	KED
	Y	89		ug/L			38706	164691	2	Standard
	Kr	83		ug/L			31	52	18	Standard
⌈>	In-1	115		ug/L			6431	6493	1	KED
|	Cd	111	0.078	ug/L	0.024	30	3	21	24	KED
⌊	Cd	114	0.080	ug/L	0.018	22	0	48	20	KED
⌈>	In	115		ug/L			415168	421529	1	Standard
⌊	Ag	107	0.242	ug/L	0.008	3	37	3355	4	Standard
⌈>	Tb	159		ug/L			170846	194334	0	Standard
⌊	Pb	208	11.882	ug/L	0.325	2	364	1115373	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-04
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 22:57:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	43461	2	Standard
⌈>	Sc	45		ug/L			489773	545974	1	Standard
|	Cr	52	17.152	ug/L	0.276	1	8505	263488	1	Standard
⌊	Cr	53	16.985	ug/L	0.153	0	60	29086	0	Standard
⌈>	Ge	72		ug/L			31037	31095	0	KED
|	Cu	63	43.419	ug/L	1.078	2	42	179456	2	KED
|	Cu	65	43.123	ug/L	0.628	1	15	90515	0	KED
|	Zn	66	109.906	ug/L	1.583	1	22	56445	0	KED
|	Zn	67	104.388	ug/L	2.835	2	4	8742	2	KED
⌊	As	75	4.796	ug/L	0.203	4	3	1203	3	KED
	Y	89		ug/L			38706	160463	1	Standard
	Kr	83		ug/L			31	53	15	Standard
⌈>	In-1	115		ug/L			6431	6538	2	KED
|	Cd	111	0.076	ug/L	0.028	37	3	21	33	KED
⌊	Cd	114	0.090	ug/L	0.014	15	0	54	13	KED
⌈>	In	115		ug/L			415168	418749	2	Standard
⌊	Ag	107	0.052	ug/L	0.003	6	37	748	3	Standard
⌈>	Tb	159		ug/L			170846	193022	1	Standard
⌊	Pb	208	23.659	ug/L	0.416	1	364	2205491	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLG
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:02:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	31345	5	Standard
⌈>	**Sc**	**45**		ug/L			489773	473998	2	Standard
|	**Cr**	**52**	**0.011**	ug/L	0.017	149	8505	8374	2	Standard
⌊	**Cr**	**53**	**-0.002**	ug/L	0.001	62	60	55	5	Standard
⌈>	**Ge**	**72**		ug/L			31037	31201	1	KED
|	**Cu**	**63**	**0.014**	ug/L	0.023	158	42	101	91	KED
|	**Cu**	**65**	**0.017**	ug/L	0.023	134	15	51	91	KED
|	**Zn**	**66**	**0.030**	ug/L	0.050	168	22	38	66	KED
|	**Zn**	**67**	**0.030**	ug/L	0.048	159	4	6	56	KED
⌊	**As**	**75**	**-0.008**	ug/L	0.003	38	3	1	57	KED
	Y	**89**		ug/L			38706	39592	4	Standard
	Kr	**83**		ug/L			31	40	23	Standard
⌈>	**In-1**	**115**		ug/L			6431	6544	1	KED
|	**Cd**	**111**	**0.001**	ug/L	0.003	223	3	3	15	KED
⌊	**Cd**	**114**	**-0.000**	ug/L	0.002	7103	0	0	209	KED
⌈>	**In**	**115**		ug/L			415168	422329	2	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	17	37	15	25	Standard
⌈>	**Tb**	**159**		ug/L			170846	170875	1	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.000	17	364	216	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:07:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	28899	5	Standard
⌈>	**Sc**	**45**		ug/L			489773	482605	1	Standard
|	**Cr**	**52**	**48.592**	ug/L	0.483	0	8505	644491	1	Standard
⌊	**Cr**	**53**	**48.168**	ug/L	0.910	1	60	72792	0	Standard
⌈>	**Ge**	**72**		ug/L			31037	31124	2	KED
|	**Cu**	**63**	**49.252**	ug/L	0.912	1	42	203714	1	KED
|	**Cu**	**65**	**49.051**	ug/L	1.631	3	15	103007	1	KED
|	**Zn**	**66**	**50.122**	ug/L	1.329	2	22	25769	0	KED
|	**Zn**	**67**	**50.418**	ug/L	2.174	4	4	4226	2	KED
⌊	**As**	**75**	**49.790**	ug/L	1.321	2	3	12473	0	KED
	Y	**89**		ug/L			38706	40740	2	Standard
	Kr	**83**		ug/L			31	43	13	Standard
⌈>	**In-1**	**115**		ug/L			6431	6726	3	KED
|	**Cd**	**111**	**48.091**	ug/L	1.867	3	3	11693	1	KED
⌊	**Cd**	**114**	**48.760**	ug/L	1.508	3	0	30247	0	KED
⌈>	**In**	**115**		ug/L			415168	420228	3	Standard
⌊	**Ag**	**107**	**49.016**	ug/L	1.974	4	37	670195	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	175745	2	Standard
⌊	**Pb**	**208**	**49.189**	ug/L	0.972	1	364	4174139	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBE
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:14:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	28266	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	475445	3	Standard
|	**Cr**	**52**	**-0.004**	ug/L	0.009	207	8505	8197	2	Standard
⌊	**Cr**	**53**	**-0.000**	ug/L	0.005	7964	60	58	11	Standard
⌈>	**Ge**	**72**		ug/L			31037	31118	1	KED
|	**Cu**	**63**	**0.002**	ug/L	0.001	39	42	50	5	KED
|	**Cu**	**65**	**0.007**	ug/L	0.005	67	15	31	33	KED
|	**Zn**	**66**	**0.026**	ug/L	0.007	27	22	36	9	KED
|	**Zn**	**67**	**0.038**	ug/L	0.047	122	4	7	50	KED
⌊	**As**	**75**	**0.001**	ug/L	0.005	385	3	3	34	KED
	Y	**89**		ug/L			38706	38769	1	Standard
	Kr	**83**		ug/L			31	29	43	Standard
⌈>	**In-1**	**115**		ug/L			6431	6283	2	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.011	917	3	2	88	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.003	54	0	3	49	KED
⌈>	**In**	**115**		ug/L			415168	422915	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	294	37	35	24	Standard
⌈>	**Tb**	**159**		ug/L			170846	169400	1	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	639	364	356	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-06
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:18:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	38997	5	Standard
⌈>	**Sc**	**45**		ug/L			489773	553643	1	Standard
|	**Cr**	**52**	**9.316**	ug/L	0.259	2	8505	149520	2	Standard
⌊	**Cr**	**53**	**9.373**	ug/L	0.208	2	60	16308	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	31627	2	KED
|	**Cu**	**63**	**29.984**	ug/L	0.541	1	42	126045	0	KED
|	**Cu**	**65**	**29.430**	ug/L	0.324	1	15	62837	2	KED
|	**Zn**	**66**	**52.353**	ug/L	1.686	3	22	27351	1	KED
|	**Zn**	**67**	**52.332**	ug/L	1.242	2	4	4459	0	KED
⌊	**As**	**75**	**3.039**	ug/L	0.073	2	3	777	3	KED
	Y	**89**		ug/L			38706	164478	3	Standard
	Kr	**83**		ug/L			31	56	15	Standard
⌈>	**In-1**	**115**		ug/L			6431	6291	1	KED
|	**Cd**	**111**	**0.028**	ug/L	0.007	25	3	9	17	KED
⌊	**Cd**	**114**	**0.043**	ug/L	0.005	11	0	25	12	KED
⌈>	**In**	**115**		ug/L			415168	427999	3	Standard
⌊	**Ag**	**107**	**0.030**	ug/L	0.002	8	37	455	11	Standard
⌈>	**Tb**	**159**		ug/L			170846	198983	0	Standard
⌊	**Pb**	**208**	**3.822**	ug/L	0.050	1	364	367686	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-07
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:23:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	38286	3	Standard
⌈>	Sc	45		ug/L			489773	519453	1	Standard
|	Cr	52	7.712	ug/L	0.073	0	8505	117692	1	Standard
⌊	Cr	53	7.871	ug/L	0.226	2	60	12861	4	Standard
⌈>	Ge	72		ug/L			31037	31448	2	KED
|	Cu	63	14.996	ug/L	0.166	1	42	62705	1	KED
|	Cu	65	14.792	ug/L	0.208	1	15	31405	0	KED
|	Zn	66	25.340	ug/L	0.850	3	22	13173	1	KED
|	Zn	67	26.232	ug/L	0.411	1	4	2224	0	KED
⌊	As	75	2.215	ug/L	0.093	4	3	563	1	KED
	Y	89		ug/L			38706	152163	1	Standard
	Kr	83		ug/L			31	47	22	Standard
⌈>	In-1	115		ug/L			6431	6420	1	KED
|	Cd	111	0.030	ug/L	0.016	53	3	10	35	KED
⌊	Cd	114	0.035	ug/L	0.004	11	0	21	11	KED
⌈>	In	115		ug/L			415168	430376	2	Standard
⌊	Ag	107	0.025	ug/L	0.002	8	37	391	7	Standard
⌈>	Tb	159		ug/L			170846	195224	1	Standard
⌊	Pb	208	1.547	ug/L	0.006	0	364	146221	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-08
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:27:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	42020	3	Standard
⌈>	Sc	45		ug/L			489773	531122	1	Standard
|	Cr	52	41.170	ug/L	0.332	0	8505	602419	2	Standard
⌊	Cr	53	40.854	ug/L	0.232	0	60	67969	1	Standard
⌈>	Ge	72		ug/L			31037	31204	0	KED
|	Cu	63	64.749	ug/L	0.743	1	42	268545	1	KED
|	Cu	65	63.857	ug/L	0.789	1	15	134517	2	KED
|	Zn	66	98.107	ug/L	1.480	1	22	50571	2	KED
|	Zn	67	104.940	ug/L	1.572	1	4	8819	1	KED
⌊	As	75	7.411	ug/L	0.058	0	3	1865	1	KED
	Y	89		ug/L			38706	146162	2	Standard
	Kr	83		ug/L			31	64	15	Standard
⌈>	In-1	115		ug/L			6431	6268	1	KED
|	Cd	111	0.233	ug/L	0.047	19	3	55	17	KED
⌊	Cd	114	0.227	ug/L	0.012	5	0	131	5	KED
⌈>	In	115		ug/L			415168	410437	2	Standard
⌊	Ag	107	0.161	ug/L	0.004	2	37	2188	3	Standard
⌈>	Tb	159		ug/L			170846	186241	1	Standard
⌊	Pb	208	49.354	ug/L	0.874	1	364	4438659	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:31:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	46824	4	Standard
>	Sc	45		ug/L			489773	553481	1	Standard
	Cr	52	16.703	ug/L	0.354	2	8505	260343	0	Standard
	Cr	53	16.901	ug/L	0.438	2	60	29335	1	Standard
>	Ge	72		ug/L			31037	31314	1	KED
	Cu	63	117.753	ug/L	1.729	1	42	490034	0	KED
	Cu	65	115.655	ug/L	2.577	2	15	244431	1	KED
	Zn	66	370.231	ug/L	7.694	2	22	191412	1	KED
	Zn	67	351.821	ug/L	4.197	1	4	29662	0	KED
	As	75	11.920	ug/L	0.103	0	3	3008	0	KED
	Y	89		ug/L			38706	209610	2	Standard
	Kr	83		ug/L			31	71	24	Standard
>	In-1	115		ug/L			6431	6464	4	KED
	Cd	111	0.784	ug/L	0.104	13	3	185	8	KED
	Cd	114	0.780	ug/L	0.055	7	0	466	11	KED
>	In	115		ug/L			415168	414094	1	Standard
	Ag	107	0.213	ug/L	0.008	3	37	2914	5	Standard
>	Tb	159		ug/L			170846	199232	1	Standard
	Pb	208	155.646	ug/L	2.153	1	364	14974835	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:36:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	43502	3	Standard
⌈>	Sc	45		ug/L			489773	536443	1	Standard
|	Cr	52	15.990	ug/L	0.351	2	8505	241957	1	Standard
⌊	Cr	53	16.015	ug/L	0.115	0	60	26951	1	Standard
⌈>	Ge	72		ug/L			31037	31252	0	KED
|	Cu	63	23.396	ug/L	0.365	1	42	97218	2	KED
|	Cu	65	23.203	ug/L	0.190	0	15	48957	0	KED
|	Zn	66	55.790	ug/L	0.407	0	22	28810	0	KED
|	Zn	67	53.318	ug/L	1.275	2	4	4490	1	KED
⌊	As	75	5.847	ug/L	0.035	0	3	1474	0	KED
	Y	89		ug/L			38706	147591	2	Standard
	Kr	83		ug/L			31	50	12	Standard
⌈>	In-1	115		ug/L			6431	6546	2	KED
|	Cd	111	0.077	ug/L	0.019	24	3	21	21	KED
⌊	Cd	114	0.058	ug/L	0.020	33	0	36	35	KED
⌈>	In	115		ug/L			415168	418793	1	Standard
⌊	Ag	107	0.049	ug/L	0.002	5	37	704	4	Standard
⌈>	Tb	159		ug/L			170846	192806	0	Standard
⌊	Pb	208	23.560	ug/L	0.293	1	364	2194229	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0394-13
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:40:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	40353	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	529737	1	Standard
|	**Cr**	**52**	**14.653**	ug/L	0.363	2	8505	219719	1	Standard
⌊	**Cr**	**53**	**14.593**	ug/L	0.216	1	60	24257	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	31322	0	KED
|	**Cu**	**63**	**21.651**	ug/L	0.262	1	42	90163	0	KED
|	**Cu**	**65**	**21.097**	ug/L	0.151	0	15	44614	0	KED
|	**Zn**	**66**	**67.677**	ug/L	0.813	1	22	35021	1	KED
|	**Zn**	**67**	**66.149**	ug/L	2.076	3	4	5582	2	KED
⌊	**As**	**75**	**4.939**	ug/L	0.116	2	3	1248	2	KED
	Y	**89**		ug/L			38706	148354	1	Standard
	Kr	**83**		ug/L			31	45	0	Standard
⌈>	**In-1**	**115**		ug/L			6431	6500	1	KED
|	**Cd**	**111**	**0.116**	ug/L	0.022	19	3	30	16	KED
⌊	**Cd**	**114**	**0.122**	ug/L	0.045	37	0	73	36	KED
⌈>	**In**	**115**		ug/L			415168	418029	0	Standard
⌊	**Ag**	**107**	**0.073**	ug/L	0.002	2	37	1027	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	195302	0	Standard
⌊	**Pb**	**208**	**32.536**	ug/L	0.079	0	364	3069165	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-24
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:44:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	46655	4	Standard
⎡>	**Sc**	**45**		ug/L			489773	577415	1	Standard
⎢	**Cr**	**52**	**15.546**	ug/L	0.231	1	8505	253510	1	Standard
⎣	**Cr**	**53**	**15.712**	ug/L	0.183	1	60	28460	1	Standard
⎡>	**Ge**	**72**		ug/L			31037	30637	0	KED
⎢	**Cu**	**63**	**39.182**	ug/L	0.791	2	42	159565	1	KED
⎢	**Cu**	**65**	**38.956**	ug/L	0.839	2	15	80566	1	KED
⎢	**Zn**	**66**	**72.613**	ug/L	0.513	0	22	36752	0	KED
⎢	**Zn**	**67**	**72.912**	ug/L	3.167	4	4	6017	4	KED
⎣	**As**	**75**	**7.143**	ug/L	0.074	1	3	1764	1	KED
	Y	**89**		ug/L			38706	212682	1	Standard
	Kr	**83**		ug/L			31	72	9	Standard
⎡>	**In-1**	**115**		ug/L			6431	6400	2	KED
⎢	**Cd**	**111**	**0.210**	ug/L	0.016	7	3	51	8	KED
⎣	**Cd**	**114**	**0.220**	ug/L	0.010	4	0	130	7	KED
⎡>	**In**	**115**		ug/L			415168	420678	0	Standard
⎣	**Ag**	**107**	**0.179**	ug/L	0.003	1	37	2485	1	Standard
⎡>	**Tb**	**159**		ug/L			170846	202518	1	Standard
⎣	**Pb**	**208**	**17.818**	ug/L	0.280	1	364	1742837	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-28
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:49:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	51881	3	Standard
⌈>	Sc	45		ug/L			489773	566930	1	Standard
|	Cr	52	14.201	ug/L	0.102	0	8505	228254	1	Standard
⌊	Cr	53	14.083	ug/L	0.278	1	60	25058	2	Standard
⌈>	Ge	72		ug/L			31037	30561	1	KED
|	Cu	63	28.446	ug/L	0.330	1	42	115562	1	KED
|	Cu	65	28.645	ug/L	0.218	0	15	59097	1	KED
|	Zn	66	56.512	ug/L	0.566	1	22	28538	2	KED
|	Zn	67	53.910	ug/L	1.956	3	4	4438	1	KED
⌊	As	75	7.179	ug/L	0.024	0	3	1769	1	KED
	Y	89		ug/L			38706	208995	2	Standard
	Kr	83		ug/L			31	51	20	Standard
⌈>	In-1	115		ug/L			6431	6279	2	KED
|	Cd	111	0.182	ug/L	0.035	19	3	44	19	KED
⌊	Cd	114	0.199	ug/L	0.017	8	0	115	9	KED
⌈>	In	115		ug/L			415168	417569	1	Standard
⌊	Ag	107	0.138	ug/L	0.006	4	37	1912	4	Standard
⌈>	Tb	159		ug/L			170846	201351	0	Standard
⌊	Pb	208	10.669	ug/L	0.139	1	364	1037851	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-29
Sample Dil Factor: 20
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:53:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	49899	2	Standard
⌈>	Sc	45		ug/L			489773	567089	0	Standard
|	Cr	52	12.901	ug/L	0.140	1	8505	208311	1	Standard
⌊	Cr	53	13.083	ug/L	0.127	0	60	23287	1	Standard
⌈>	Ge	72		ug/L			31037	30821	0	KED
|	Cu	63	28.687	ug/L	0.561	1	42	117542	2	KED
|	Cu	65	28.326	ug/L	0.191	0	15	58942	1	KED
|	Zn	66	52.330	ug/L	0.021	0	22	26652	0	KED
|	Zn	67	50.585	ug/L	1.246	2	4	4201	1	KED
⌊	As	75	6.717	ug/L	0.081	1	3	1669	1	KED
	Y	89		ug/L			38706	187086	0	Standard
	Kr	83		ug/L			31	66	7	Standard
⌈>	In-1	115		ug/L			6431	6311	1	KED
|	Cd	111	0.155	ug/L	0.022	13	3	38	12	KED
⌊	Cd	114	0.143	ug/L	0.032	22	0	83	22	KED
⌈>	In	115		ug/L			415168	420809	2	Standard
⌊	Ag	107	0.143	ug/L	0.009	6	37	1999	6	Standard
⌈>	Tb	159		ug/L			170846	200244	0	Standard
⌊	Pb	208	11.420	ug/L	0.084	0	364	1104767	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLH
Sample Dil Factor:
Comments:
Sample Date/Time: Thursday, May 11, 2023 23:58:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	31832	0	Standard
⌈>	**Sc**	**45**		ug/L			489773	467299	0	Standard
|	**Cr**	**52**	**0.004**	ug/L	0.018	499	8505	8160	2	Standard
⌊	**Cr**	**53**	**-0.009**	ug/L	0.006	64	60	44	20	Standard
⌈>	**Ge**	**72**		ug/L			31037	29981	2	KED
|	**Cu**	**63**	**0.002**	ug/L	0.004	215	42	47	28	KED
|	**Cu**	**65**	**0.005**	ug/L	0.001	11	15	25	4	KED
|	**Zn**	**66**	**-0.004**	ug/L	0.003	85	22	20	5	KED
|	**Zn**	**67**	**-0.014**	ug/L	0.036	251	4	3	91	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.003	67	3	2	35	KED
	Y	**89**		ug/L			38706	38062	2	Standard
	Kr	**83**		ug/L			31	41	19	Standard
⌈>	**In-1**	**115**		ug/L			6431	6328	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.006	254	3	2	57	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.002	61	0	2	47	KED
⌈>	**In**	**115**		ug/L			415168	418180	1	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	12	37	9	34	Standard
⌈>	**Tb**	**159**		ug/L			170846	168893	0	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.000	3	364	226	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVF
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 00:02:30
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	29659	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	480703	0	Standard
|	**Cr**	**52**	**48.479**	ug/L	0.498	1	8505	640524	1	Standard
⌊	**Cr**	**53**	**48.514**	ug/L	0.954	1	60	73036	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	31103	1	KED
|	**Cu**	**63**	**49.409**	ug/L	1.022	2	42	204227	0	KED
|	**Cu**	**65**	**48.614**	ug/L	0.529	1	15	102058	0	KED
|	**Zn**	**66**	**49.228**	ug/L	0.915	1	22	25297	0	KED
|	**Zn**	**67**	**50.442**	ug/L	1.345	2	4	4227	1	KED
⌊	**As**	**75**	**49.437**	ug/L	0.931	1	3	12379	0	KED
	Y	**89**		ug/L			38706	40704	0	Standard
	Kr	**83**		ug/L			31	31	3	Standard
⌈>	**In-1**	**115**		ug/L			6431	6305	2	KED
|	**Cd**	**111**	**48.641**	ug/L	1.833	3	3	11089	1	KED
⌊	**Cd**	**114**	**49.361**	ug/L	0.357	0	0	28717	1	KED
⌈>	**In**	**115**		ug/L			415168	414363	1	Standard
⌊	**Ag**	**107**	**50.273**	ug/L	1.203	2	37	678201	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	177904	0	Standard
⌊	**Pb**	**208**	**49.193**	ug/L	0.355	0	364	4226831	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBF
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 00:09:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	27567	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	470683	3	Standard
|	**Cr**	**52**	**0.001**	ug/L	0.013	1520	8505	8184	3	Standard
⌊	**Cr**	**53**	**0.000**	ug/L	0.001	1858	60	58	6	Standard
⌈>	**Ge**	**72**		ug/L			31037	30027	1	KED
|	**Cu**	**63**	**0.001**	ug/L	0.005	399	42	45	40	KED
|	**Cu**	**65**	**0.006**	ug/L	0.003	57	15	27	26	KED
|	**Zn**	**66**	**0.016**	ug/L	0.003	20	22	29	3	KED
|	**Zn**	**67**	**0.057**	ug/L	0.076	132	4	8	68	KED
⌊	**As**	**75**	**0.002**	ug/L	0.004	183	3	3	30	KED
	Y	**89**		ug/L			38706	39448	2	Standard
	Kr	**83**		ug/L			31	39	18	Standard
⌈>	**In-1**	**115**		ug/L			6431	6410	1	KED
|	**Cd**	**111**	**-0.010**	ug/L	0.000	0	3	0		KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.007	103	0	4	91	KED
⌈>	**In**	**115**		ug/L			415168	414592	2	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	12572	37	37	36	Standard
⌈>	**Tb**	**159**		ug/L			170846	169619	2	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	58	364	342	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-10
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:14:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	41192	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	537924	1	Standard
|	**Cr**	**52**	**17.195**	ug/L	0.038	0	8505	260259	1	Standard
⌊	**Cr**	**53**	**17.114**	ug/L	0.108	0	60	28878	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	30751	1	KED
|	**Cu**	**63**	**32.218**	ug/L	0.519	1	42	131679	0	KED
|	**Cu**	**65**	**32.308**	ug/L	0.742	2	15	67054	1	KED
|	**Zn**	**66**	**103.263**	ug/L	1.686	1	22	52440	0	KED
|	**Zn**	**67**	**99.525**	ug/L	3.246	3	4	8240	1	KED
⌊	**As**	**75**	**24.542**	ug/L	0.621	2	3	6077	1	KED
	Y	**89**		ug/L			38706	170292	1	Standard
	Kr	**83**		ug/L			31	60	10	Standard
⌈>	**In-1**	**115**		ug/L			6431	6331	1	KED
|	**Cd**	**111**	**0.161**	ug/L	0.013	7	3	40	8	KED
⌊	**Cd**	**114**	**0.152**	ug/L	0.010	6	0	89	5	KED
⌈>	**In**	**115**		ug/L			415168	437202	2	Standard
⌊	**Ag**	**107**	**0.058**	ug/L	0.004	6	37	866	3	Standard
⌈>	**Tb**	**159**		ug/L			170846	199684	1	Standard
⌊	**Pb**	**208**	**42.091**	ug/L	0.667	1	364	4059151	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-11
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:19:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	46899	1	Standard
⌈>	Sc	45		ug/L			489773	576312	1	Standard
|	Cr	52	13.207	ug/L	0.143	1	8505	216473	1	Standard
⌊	Cr	53	13.305	ug/L	0.255	1	60	24062	1	Standard
⌈>	Ge	72		ug/L			31037	30903	1	KED
|	Cu	63	26.300	ug/L	0.203	0	42	108053	1	KED
|	Cu	65	26.266	ug/L	0.263	0	15	54801	1	KED
|	Zn	66	67.223	ug/L	1.562	2	22	34315	1	KED
|	Zn	67	64.105	ug/L	1.911	2	4	5338	3	KED
⌊	As	75	7.939	ug/L	0.077	0	3	1978	2	KED
	Y	89		ug/L			38706	227750	2	Standard
	Kr	83		ug/L			31	74	23	Standard
⌈>	In-1	115		ug/L			6431	6240	1	KED
|	Cd	111	0.262	ug/L	0.029	11	3	62	11	KED
⌊	Cd	114	0.272	ug/L	0.019	6	0	157	8	KED
⌈>	In	115		ug/L			415168	425917	1	Standard
⌊	Ag	107	0.191	ug/L	0.006	3	37	2691	2	Standard
⌈>	Tb	159		ug/L			170846	202880	0	Standard
⌊	Pb	208	11.807	ug/L	0.091	0	364	1157220	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-12
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:23:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	41484	3	Standard
>	Sc	45		ug/L			489773	546627	3	Standard
	Cr	52	9.010	ug/L	0.019	0	8505	143092	3	Standard
	Cr	53	9.160	ug/L	0.059	0	60	15738	3	Standard
>	Ge	72		ug/L			31037	28599	12	KED
	Cu	63	14.960	ug/L	1.707	11	42	56374	1	KED
	Cu	65	14.786	ug/L	1.491	10	15	28324	2	KED
	Zn	66	34.869	ug/L	3.250	9	22	16363	3	KED
	Zn	67	33.803	ug/L	2.720	8	4	2591	6	KED
	As	75	2.476	ug/L	0.217	8	3	569	6	KED
	Y	89		ug/L			38706	154862	1	Standard
	Kr	83		ug/L			31	59	6	Standard
>	In-1	115		ug/L			6431	6434	6	KED
	Cd	111	0.075	ug/L	0.026	34	3	20	23	KED
	Cd	114	0.103	ug/L	0.042	40	0	60	33	KED
>	In	115		ug/L			415168	445756	1	Standard
	Ag	107	0.045	ug/L	0.002	4	37	696	3	Standard
>	Tb	159		ug/L			170846	199553	2	Standard
	Pb	208	5.418	ug/L	0.046	0	364	522497	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-15
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:27:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	42224	2	Standard
⌈>	Sc	45		ug/L			489773	535637	0	Standard
|	Cr	52	9.457	ug/L	0.202	2	8505	146712	2	Standard
⌊	Cr	53	9.378	ug/L	0.119	1	60	15786	1	Standard
⌈>	Ge	72		ug/L			31037	31058	1	KED
|	Cu	63	75.439	ug/L	1.685	2	42	311361	1	KED
|	Cu	65	74.439	ug/L	0.979	1	15	156046	1	KED
|	Zn	66	43.994	ug/L	0.484	1	22	22580	0	KED
|	Zn	67	42.128	ug/L	0.370	0	4	3526	0	KED
⌊	As	75	8.261	ug/L	0.192	2	3	2069	3	KED
	Y	89		ug/L			38706	139700	1	Standard
	Kr	83		ug/L			31	55	3	Standard
⌈>	In-1	115		ug/L			6431	6514	2	KED
|	Cd	111	0.032	ug/L	0.007	22	3	10	13	KED
⌊	Cd	114	0.043	ug/L	0.012	28	0	26	28	KED
⌈>	In	115		ug/L			415168	444508	1	Standard
⌊	Ag	107	0.042	ug/L	0.001	2	37	654	2	Standard
⌈>	Tb	159		ug/L			170846	195982	1	Standard
⌊	Pb	208	28.410	ug/L	0.566	1	364	2689074	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-16
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:34:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	43330	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	543847	1	Standard
|	**Cr**	**52**	**14.647**	ug/L	0.188	1	8505	225535	2	Standard
⌊	**Cr**	**53**	**14.718**	ug/L	0.010	0	60	25116	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	30556	0	KED
|	**Cu**	**63**	**14.442**	ug/L	0.034	0	42	58689	0	KED
|	**Cu**	**65**	**14.013**	ug/L	0.412	2	15	28913	2	KED
|	**Zn**	**66**	**41.095**	ug/L	0.502	1	22	20756	1	KED
|	**Zn**	**67**	**40.225**	ug/L	0.124	0	4	3313	0	KED
⌊	**As**	**75**	**2.709**	ug/L	0.046	1	3	669	1	KED
	Y	**89**		ug/L			38706	151607	1	Standard
	Kr	**83**		ug/L			31	50	19	Standard
⌈>	**In-1**	**115**		ug/L			6431	6526	3	KED
|	**Cd**	**111**	**0.069**	ug/L	0.014	20	3	19	15	KED
⌊	**Cd**	**114**	**0.034**	ug/L	0.006	16	0	21	19	KED
⌈>	**In**	**115**		ug/L			415168	430357	1	Standard
⌊	**Ag**	**107**	**0.046**	ug/L	0.005	11	37	678	8	Standard
⌈>	**Tb**	**159**		ug/L			170846	196157	0	Standard
⌊	**Pb**	**208**	**8.682**	ug/L	0.035	0	364	822876	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-17
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:38:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	39815	5	Standard
⌈>	**Sc**	**45**		ug/L			489773	532303	1	Standard
|	**Cr**	**52**	**12.534**	ug/L	0.232	1	8505	190251	2	Standard
⌊	**Cr**	**53**	**12.561**	ug/L	0.168	1	60	20988	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	30796	1	KED
|	**Cu**	**63**	**14.010**	ug/L	0.306	2	42	57374	1	KED
|	**Cu**	**65**	**13.817**	ug/L	0.060	0	15	28734	0	KED
|	**Zn**	**66**	**45.726**	ug/L	0.267	0	22	23273	1	KED
|	**Zn**	**67**	**44.094**	ug/L	1.961	4	4	3659	3	KED
⌊	**As**	**75**	**3.287**	ug/L	0.027	0	3	818	0	KED
	Y	**89**		ug/L			38706	134234	3	Standard
	Kr	**83**		ug/L			31	50	15	Standard
⌈>	**In-1**	**115**		ug/L			6431	6444	1	KED
|	**Cd**	**111**	**0.048**	ug/L	0.004	9	3	14	6	KED
⌊	**Cd**	**114**	**0.053**	ug/L	0.005	9	0	32	9	KED
⌈>	**In**	**115**		ug/L			415168	439159	1	Standard
⌊	**Ag**	**107**	**0.041**	ug/L	0.002	5	37	619	4	Standard
⌈>	**Tb**	**159**		ug/L			170846	196027	0	Standard
⌊	**Pb**	**208**	**19.957**	ug/L	0.049	0	364	1889730	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-18
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:43:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	50409	2	Standard
⌈>	Sc	45		ug/L			489773	544792	1	Standard
|	Cr	52	7.985	ug/L	0.015	0	8505	127459	1	Standard
⌊	Cr	53	8.110	ug/L	0.084	1	60	13892	1	Standard
⌈>	Ge	72		ug/L			31037	30737	1	KED
|	Cu	63	15.977	ug/L	0.152	0	42	65303	0	KED
|	Cu	65	16.043	ug/L	0.241	1	15	33296	0	KED
|	Zn	66	16.443	ug/L	0.313	1	22	8366	0	KED
|	Zn	67	16.934	ug/L	0.147	0	4	1405	1	KED
⌊	As	75	3.950	ug/L	0.069	1	3	980	0	KED
	Y	89		ug/L			38706	126181	1	Standard
	Kr	83		ug/L			31	52	5	Standard
⌈>	In-1	115		ug/L			6431	6406	2	KED
|	Cd	111	0.022	ug/L	0.018	80	3	8	48	KED
⌊	Cd	114	0.022	ug/L	0.003	15	0	13	15	KED
⌈>	In	115		ug/L			415168	442957	1	Standard
⌊	Ag	107	0.047	ug/L	0.000	0	37	723	1	Standard
⌈>	Tb	159		ug/L			170846	195223	1	Standard
⌊	Pb	208	4.130	ug/L	0.011	0	364	389818	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-19
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:47:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	37159	5	Standard
⌈>	Sc	45		ug/L			489773	548709	2	Standard
|	Cr	52	15.393	ug/L	0.345	2	8505	238573	0	Standard
⌊	Cr	53	15.508	ug/L	0.188	1	60	26691	1	Standard
⌈>	Ge	72		ug/L			31037	30172	1	KED
|	Cu	63	48.799	ug/L	0.476	0	42	195698	0	KED
|	Cu	65	48.099	ug/L	0.245	0	15	97965	1	KED
|	Zn	66	140.370	ug/L	0.622	0	22	69950	1	KED
|	Zn	67	133.546	ug/L	3.576	2	4	10852	3	KED
⌊	As	75	15.238	ug/L	0.247	1	3	3703	0	KED
	Y	89		ug/L			38706	186543	3	Standard
	Kr	83		ug/L			31	55	5	Standard
⌈>	In-1	115		ug/L			6431	6548	1	KED
|	Cd	111	0.120	ug/L	0.036	30	3	31	27	KED
⌊	Cd	114	0.071	ug/L	0.012	16	0	43	16	KED
⌈>	In	115		ug/L			415168	438647	1	Standard
⌊	Ag	107	0.043	ug/L	0.002	5	37	652	6	Standard
⌈>	Tb	159		ug/L			170846	199150	1	Standard
⌊	Pb	208	28.845	ug/L	0.420	1	364	2774307	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-22
Sample Dil Factor: 20
Comments:
Sample Date/Time: Friday, May 12, 2023 00:51:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	43064	3	Standard
⌈>	Sc	45		ug/L			489773	558439	1	Standard
|	Cr	52	44.150	ug/L	0.302	0	8505	678482	0	Standard
⌊	Cr	53	43.988	ug/L	0.585	1	60	76948	2	Standard
⌈>	Ge	72		ug/L			31037	30590	0	KED
|	Cu	63	595.340	ug/L	7.490	1	42	2420198	1	KED
|	Cu	65	551.170	ug/L	3.704	0	15	1137954	0	KED
|	Zn	66	207.307	ug/L	3.398	1	22	104721	1	KED
|	Zn	67	197.681	ug/L	3.122	1	4	16283	1	KED
⌊	As	75	8.626	ug/L	0.068	0	3	2127	1	KED
	Y	89		ug/L			38706	220432	1	Standard
	Kr	83		ug/L			31	66	9	Standard
⌈>	In-1	115		ug/L			6431	6200	1	KED
|	Cd	111	0.300	ug/L	0.036	12	3	70	10	KED
⌊	Cd	114	0.328	ug/L	0.046	14	0	188	15	KED
⌈>	In	115		ug/L			415168	414710	1	Standard
⌊	Ag	107	0.141	ug/L	0.008	5	37	1944	7	Standard
⌈>	Tb	159		ug/L			170846	198068	1	Standard
⌊	Pb	208	104.657	ug/L	2.616	2	364	10008661	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 00:56:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	31692	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	462144	1	Standard
|	**Cr**	**52**	**0.022**	ug/L	0.008	38	8505	8304	2	Standard
⌊	**Cr**	**53**	**-0.004**	ug/L	0.003	82	60	52	6	Standard
⌈>	**Ge**	**72**		ug/L			31037	30135	0	KED
|	**Cu**	**63**	**0.053**	ug/L	0.005	9	42	253	7	KED
|	**Cu**	**65**	**0.060**	ug/L	0.004	7	15	137	6	KED
|	**Zn**	**66**	**0.032**	ug/L	0.016	49	22	38	20	KED
|	**Zn**	**67**	**0.025**	ug/L	0.076	300	4	6	96	KED
⌊	**As**	**75**	**0.001**	ug/L	0.002	185	3	3	14	KED
	Y	**89**		ug/L			38706	38668	3	Standard
	Kr	**83**		ug/L			31	33	37	Standard
⌈>	**In-1**	**115**		ug/L			6431	6204	1	KED
|	**Cd**	**111**	**-0.008**	ug/L	0.002	29	3	1	43	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.002	38	0	2	32	KED
⌈>	**In**	**115**		ug/L			415168	416951	4	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	21	37	13	34	Standard
⌈>	**Tb**	**159**		ug/L			170846	171074	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	20	364	461	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVG
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 01:00:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	28687	6	Standard
⌈>	**Sc**	**45**		ug/L			489773	479894	2	Standard
|	**Cr**	**52**	**48.044**	ug/L	0.832	1	8505	633573	1	Standard
⌊	**Cr**	**53**	**48.145**	ug/L	0.311	0	60	72354	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	30420	1	KED
|	**Cu**	**63**	**50.248**	ug/L	1.371	2	42	203123	1	KED
|	**Cu**	**65**	**49.783**	ug/L	0.973	1	15	102219	1	KED
|	**Zn**	**66**	**50.436**	ug/L	1.595	3	22	25347	2	KED
|	**Zn**	**67**	**52.050**	ug/L	1.297	2	4	4266	0	KED
⌊	**As**	**75**	**49.192**	ug/L	0.767	1	3	12048	0	KED
	Y	**89**		ug/L			38706	39850	1	Standard
	Kr	**83**		ug/L			31	45	7	Standard
⌈>	**In-1**	**115**		ug/L			6431	6340	1	KED
|	**Cd**	**111**	**48.689**	ug/L	0.297	0	3	11168	1	KED
⌊	**Cd**	**114**	**49.469**	ug/L	1.021	2	0	28938	0	KED
⌈>	**In**	**115**		ug/L			415168	415978	1	Standard
⌊	**Ag**	**107**	**48.907**	ug/L	0.542	1	37	662378	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	177816	0	Standard
⌊	**Pb**	**208**	**49.451**	ug/L	0.721	1	364	4246608	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBG
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 01:07:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	27566	2	Standard
⌈>	**Sc**	**45**		ug/L			489773	475006	1	Standard
|	**Cr**	**52**	**-0.004**	ug/L	0.008	216	8505	8199	2	Standard
⌊	**Cr**	**53**	**-0.008**	ug/L	0.008	92	60	46	26	Standard
⌈>	**Ge**	**72**		ug/L			31037	29889	0	KED
|	**Cu**	**63**	**0.014**	ug/L	0.007	50	42	95	28	KED
|	**Cu**	**65**	**0.019**	ug/L	0.004	21	15	53	15	KED
|	**Zn**	**66**	**0.013**	ug/L	0.017	125	22	28	29	KED
|	**Zn**	**67**	**0.010**	ug/L	0.037	360	4	5	57	KED
⌊	**As**	**75**	**0.000**	ug/L	0.006	1348	3	3	48	KED
	Y	**89**		ug/L			38706	38925	1	Standard
	Kr	**83**		ug/L			31	48	8	Standard
⌈>	**In-1**	**115**		ug/L			6431	6244	0	KED
|	**Cd**	**111**	**0.006**	ug/L	0.010	161	3	4	49	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.002	185	0	1	102	KED
⌈>	**In**	**115**		ug/L			415168	430066	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	220	37	32	45	Standard
⌈>	**Tb**	**159**		ug/L			170846	168062	0	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	17	364	328	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-04RE1
Sample Dil Factor: 2000
Comments:
Sample Date/Time: Friday, May 12, 2023 01:12:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	30551	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	472324	2	Standard
|	**Cr**	**52**	**1.000**	ug/L	0.022	2	8505	21019	2	Standard
⌊	**Cr**	**53**	**1.004**	ug/L	0.006	0	60	1541	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	30398	2	KED
|	**Cu**	**63**	**28.936**	ug/L	0.761	2	42	116874	0	KED
|	**Cu**	**65**	**29.260**	ug/L	0.186	0	15	60048	3	KED
|	**Zn**	**66**	**87.620**	ug/L	1.525	1	22	43982	1	KED
|	**Zn**	**67**	**83.917**	ug/L	1.102	1	4	6870	1	KED
⌊	**As**	**75**	**11.907**	ug/L	0.373	3	3	2915	1	KED
	Y	**89**		ug/L			38706	41079	3	Standard
	Kr	**83**		ug/L			31	46	31	Standard
⌈>	**In-1**	**115**		ug/L			6431	6427	0	KED
|	**Cd**	**111**	**0.057**	ug/L	0.014	23	3	16	18	KED
⌊	**Cd**	**114**	**0.069**	ug/L	0.014	20	0	41	20	KED
⌈>	**In**	**115**		ug/L			415168	427647	2	Standard
⌊	**Ag**	**107**	**0.017**	ug/L	0.002	9	37	274	10	Standard
⌈>	**Tb**	**159**		ug/L			170846	174643	0	Standard
⌊	**Pb**	**208**	**11.481**	ug/L	0.110	0	364	968692	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-DUP3
Sample Dil Factor: 2000
Comments:
Sample Date/Time: Friday, May 12, 2023 01:16:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	30898	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	488984	1	Standard
|	**Cr**	**52**	**0.958**	ug/L	0.014	1	8505	21205	2	Standard
⌊	**Cr**	**53**	**0.982**	ug/L	0.028	2	60	1564	3	Standard
⌈>	**Ge**	**72**		ug/L			31037	31407	0	KED
|	**Cu**	**63**	**31.207**	ug/L	0.191	0	42	130300	1	KED
|	**Cu**	**65**	**30.125**	ug/L	0.377	1	15	63877	1	KED
|	**Zn**	**66**	**86.830**	ug/L	0.595	0	22	45047	0	KED
|	**Zn**	**67**	**84.346**	ug/L	1.688	2	4	7135	1	KED
⌊	**As**	**75**	**11.642**	ug/L	0.015	0	3	2946	0	KED
	Y	**89**		ug/L			38706	43238	2	Standard
	Kr	**83**		ug/L			31	40	2	Standard
⌈>	**In-1**	**115**		ug/L			6431	6515	3	KED
|	**Cd**	**111**	**0.052**	ug/L	0.019	36	3	15	30	KED
⌊	**Cd**	**114**	**0.078**	ug/L	0.002	2	0	47	1	KED
⌈>	**In**	**115**		ug/L			415168	444475	1	Standard
⌊	**Ag**	**107**	**0.016**	ug/L	0.002	10	37	276	7	Standard
⌈>	**Tb**	**159**		ug/L			170846	175642	1	Standard
⌊	**Pb**	**208**	**11.306**	ug/L	0.135	1	364	959316	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-MS3
Sample Dil Factor: 2000
Comments:
Sample Date/Time: Friday, May 12, 2023 01:20:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		13		ug/L			28285	30807	4	Standard
⌈>	Sc		45		ug/L			489773	490648	1	Standard
|	Cr		52	1.258	ug/L	0.023	1	8505	25260	2	Standard
⌊	Cr		53	1.264	ug/L	0.044	3	60	2001	3	Standard
⌈>	Ge		72		ug/L			31037	31055	2	KED
|	Cu	STL	63	33.693	ug/L	0.891	2	42	139054	2	KED
|	Cu		65	33.044	ug/L	0.837	2	15	69247	0	KED
|	Zn	STL	66	94.281	ug/L	1.711	1	22	48349	0	KED
|	Zn		67	86.973	ug/L	1.658	1	4	7273	0	KED
⌊	As		75	12.936	ug/L	0.137	1	3	3237	2	KED
	Y		89		ug/L			38706	42287	1	Standard
	Kr		83		ug/L			31	35	18	Standard
⌈>	In-1		115		ug/L			6431	6456	2	KED
|	Cd		111	0.280	ug/L	0.068	24	3	68	24	KED
⌊	Cd		114	0.306	ug/L	0.047	15	0	182	13	KED
⌈>	In		115		ug/L			415168	450507	2	Standard
⌊	Ag		107	0.101	ug/L	0.002	2	37	1523	3	Standard
⌈>	Tb		159		ug/L			170846	179202	1	Standard
⌊	Pb		208	11.787	ug/L	0.139	1	364	1020315	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-MSD3
Sample Dil Factor: 2000
Comments:
Sample Date/Time: Friday, May 12, 2023 01:25:04
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		13		ug/L			28285	30391	3	Standard
>	Sc		45		ug/L			489773	486050	0	Standard
	Cr		52	1.289	ug/L	0.016	1	8505	25435	0	Standard
	Cr		53	1.272	ug/L	0.034	2	60	1995	2	Standard
>	Ge		72		ug/L			31037	30597	0	KED
	Cu	STL	63	31.232	ug/L	0.304	0	42	127032	0	KED
	Cu		65	30.820	ug/L	0.571	1	15	63657	1	KED
	Zn	STL	66	95.342	ug/L	2.089	2	22	48183	1	KED
	Zn		67	92.251	ug/L	0.612	0	4	7603	0	KED
	As		75	14.360	ug/L	0.327	2	3	3539	1	KED
	Y		89		ug/L			38706	43671	3	Standard
	Kr		83		ug/L			31	26	14	Standard
>	In-1		115		ug/L			6431	6440	1	KED
	Cd		111	0.295	ug/L	0.047	15	3	71	14	KED
	Cd		114	0.338	ug/L	0.041	12	0	201	11	KED
>	In		115		ug/L			415168	449398	1	Standard
	Ag		107	0.102	ug/L	0.001	1	37	1530	2	Standard
>	Tb		159		ug/L			170846	179486	1	Standard
	Pb		208	12.545	ug/L	0.158	1	364	1087663	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-04
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 01:29:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	30631	5	Standard
⌈>	Sc	45		ug/L			489773	493335	3	Standard
|	Cr	52	9.547	ug/L	0.169	1	8505	136286	1	Standard
⌊	Cr	53	9.509	ug/L	0.285	2	60	14734	2	Standard
⌈>	Ge	72		ug/L			31037	31482	0	KED
|	Cu	63	281.221	ug/L	1.937	0	42	1176615	0	KED
|	Cu	65	277.319	ug/L	2.161	0	15	589274	0	KED
|	Zn	66	852.097	ug/L	9.023	1	22	442931	1	KED
|	Zn	67	803.366	ug/L	16.409	2	4	68094	2	KED
⌊	As	75	115.076	ug/L	0.981	0	3	29167	0	KED
	Y	89		ug/L			38706	61146	0	Standard
	Kr	83		ug/L			31	47	8	Standard
⌈>	In-1	115		ug/L			6431	7352	1	KED
|	Cd	111	0.508	ug/L	0.035	6	3	138	5	KED
⌊	Cd	114	0.493	ug/L	0.037	7	0	334	6	KED
⌈>	In	115		ug/L			415168	503740	1	Standard
⌊	Ag	107	0.156	ug/L	0.005	3	37	2600	2	Standard
⌈>	Tb	159		ug/L			170846	182208	1	Standard
⌊	Pb	208	115.229	ug/L	1.114	0	364	10140173	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-DUP2
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 01:34:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	30139	3	Standard
⌈>	Sc	45		ug/L			489773	482233	0	Standard
|	Cr	52	9.224	ug/L	0.039	0	8505	129036	0	Standard
⌊	Cr	53	9.294	ug/L	0.107	1	60	14085	0	Standard
⌈>	Ge	72		ug/L			31037	31019	0	KED
|	Cu	63	296.799	ug/L	8.170	2	42	1223536	2	KED
|	Cu	65	290.840	ug/L	4.591	1	15	608916	1	KED
|	Zn	66	837.327	ug/L	7.595	0	22	428850	0	KED
|	Zn	67	797.723	ug/L	16.671	2	4	66622	2	KED
⌊	As	75	113.575	ug/L	1.088	0	3	28363	0	KED
	Y	89		ug/L			38706	62481	1	Standard
	Kr	83		ug/L			31	47	6	Standard
⌈>	In-1	115		ug/L			6431	7466	2	KED
|	Cd	111	0.597	ug/L	0.075	12	3	164	11	KED
⌊	Cd	114	0.556	ug/L	0.063	11	0	384	12	KED
⌈>	In	115		ug/L			415168	489865	2	Standard
⌊	Ag	107	0.164	ug/L	0.005	3	37	2658	4	Standard
⌈>	Tb	159		ug/L			170846	177530	2	Standard
⌊	Pb	208	114.260	ug/L	2.317	2	364	9793943	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-MS2
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 01:38:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte		Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C		13		ug/L			28285	29199	3	Standard
>	Sc		45		ug/L			489773	481935	1	Standard
	Cr		52	12.086	ug/L	0.171	1	8505	166389	2	Standard
	Cr		53	12.337	ug/L	0.230	1	60	18663	1	Standard
>	Ge		72		ug/L			31037	30385	2	KED
	Cu		63	324.911	ug/L	8.767	2	42	1311520	1	KED
	Cu		65	320.907	ug/L	4.283	1	15	657992	1	KED
	Zn		66	913.322	ug/L	20.769	2	22	458051	0	KED
	Zn		67	843.494	ug/L	16.438	1	4	68983	0	KED
	As	STL	75	126.687	ug/L	2.649	2	3	30981	0	KED
	Y		89		ug/L			38706	60811	5	Standard
	Kr		83		ug/L			31	49	7	Standard
>	In-1		115		ug/L			6431	7279	1	KED
	Cd		111	2.577	ug/L	0.147	5	3	681	4	KED
	Cd		114	2.545	ug/L	0.104	4	0	1709	2	KED
>	In		115		ug/L			415168	491629	0	Standard
	Ag		107	0.914	ug/L	0.033	3	37	14672	3	Standard
>	Tb		159		ug/L			170846	175848	2	Standard
	Pb	STL	208	123.651	ug/L	2.529	2	364	10499446	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-MSD2
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 01:43:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			28285	29253	2	Standard
>	Sc	45		ug/L			489773	478491	1	Standard
	Cr	52	12.000	ug/L	0.155	1	8505	164058	1	Standard
	Cr	53	12.342	ug/L	0.018	0	60	18540	1	Standard
>	Ge	72		ug/L			31037	29516	1	KED
	Cu	63	298.398	ug/L	6.261	2	42	1170402	1	KED
	Cu	65	299.647	ug/L	9.493	3	15	596840	2	KED
	Zn	66	934.941	ug/L	10.807	1	22	455607	0	KED
	Zn	67	876.581	ug/L	20.255	2	4	69647	1	KED
	As STL	75	139.598	ug/L	2.184	1	3	33169	0	KED
	Y	89		ug/L			38706	61352	0	Standard
	Kr	83		ug/L			31	49	0	Standard
>	In-1	115		ug/L			6431	7369	0	KED
	Cd	111	2.591	ug/L	0.172	6	3	694	6	KED
	Cd	114	2.626	ug/L	0.197	7	0	1786	8	KED
>	In	115		ug/L			415168	485755	2	Standard
	Ag	107	0.915	ug/L	0.014	1	37	14513	1	Standard
>	Tb	159		ug/L			170846	177756	1	Standard
	Pb STL	208	127.749	ug/L	2.128	1	364	10965682	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0072-PS2
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 01:49:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	30713	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	480926	2	Standard
|	**Cr**	**52**	**33.128**	ug/L	0.619	1	8505	440421	1	Standard
⌊	**Cr**	**53**	**33.458**	ug/L	0.662	1	60	50398	0	Standard
⌈>	**Ge**	**72**		ug/L			31037	29561	0	KED
|	**Cu**	**63**	**308.592**	ug/L	4.739	1	42	1212252	0	KED
|	**Cu**	**65**	**304.340**	ug/L	5.202	1	15	607177	0	KED
|	**Zn**	**66**	**946.721**	ug/L	8.030	0	22	462068	0	KED
|	**Zn**	**67**	**878.577**	ug/L	8.175	0	4	69928	1	KED
⌊	**As**	**75**	**140.870**	ug/L	1.866	1	3	33524	0	KED
	Y	**89**		ug/L			38706	65298	1	Standard
	Kr	**83**		ug/L			31	56	10	Standard
⌈>	**In-1**	**115**		ug/L			6431	6960	1	KED
|	**Cd**	**111**	**22.267**	ug/L	0.592	2	3	5608	2	KED
⌊	**Cd**	**114**	**22.783**	ug/L	0.148	0	0	14632	0	KED
⌈>	**In**	**115**		ug/L			415168	488552	0	Standard
⌊	**Ag**	**107**	**22.205**	ug/L	0.197	0	37	353249	0	Standard
⌈>	**Tb**	**159**		ug/L			170846	174800	0	Standard
⌊	**Pb**	**208**	**146.960**	ug/L	0.816	0	364	12406204	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLJ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 01:54:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	29657	1	Standard
⌈>	**Sc**	**45**		ug/L			489773	453739	1	Standard
|	**Cr**	**52**	**0.003**	ug/L	0.008	251	8505	7919	1	Standard
⌊	**Cr**	**53**	**-0.012**	ug/L	0.002	16	60	39	6	Standard
⌈>	**Ge**	**72**		ug/L			31037	28655	1	KED
|	**Cu**	**63**	**0.053**	ug/L	0.003	5	42	242	5	KED
|	**Cu**	**65**	**0.049**	ug/L	0.002	4	15	109	2	KED
|	**Zn**	**66**	**0.043**	ug/L	0.013	29	22	41	14	KED
|	**Zn**	**67**	**0.013**	ug/L	0.029	227	4	5	43	KED
⌊	**As**	**75**	**0.018**	ug/L	0.009	50	3	7	29	KED
	Y	**89**		ug/L			38706	39024	2	Standard
	Kr	**83**		ug/L			31	44	19	Standard
⌈>	**In-1**	**115**		ug/L			6431	6089	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.005	222	3	2	43	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.015	166	0	5	151	KED
⌈>	**In**	**115**		ug/L			415168	420505	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	261	37	40	17	Standard
⌈>	**Tb**	**159**		ug/L			170846	168070	1	Standard
⌊	**Pb**	**208**	**0.002**	ug/L	0.000	11	364	556	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVH
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 01:58:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	28472	1	Standard
⌈>	**Sc**	**45**		ug/L			489773	474949	1	Standard
|	**Cr**	**52**	**47.965**	ug/L	0.470	0	8505	626152	1	Standard
⌊	**Cr**	**53**	**47.875**	ug/L	0.742	1	60	71220	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	29215	0	KED
|	**Cu**	**63**	**50.335**	ug/L	0.996	1	42	195466	1	KED
|	**Cu**	**65**	**50.159**	ug/L	1.239	2	15	98918	2	KED
|	**Zn**	**66**	**49.688**	ug/L	0.599	1	22	23989	1	KED
|	**Zn**	**67**	**50.926**	ug/L	2.453	4	4	4010	5	KED
⌊	**As**	**75**	**50.121**	ug/L	0.499	0	3	11791	0	KED
	Y	**89**		ug/L			38706	40881	2	Standard
	Kr	**83**		ug/L			31	43	18	Standard
⌈>	**In-1**	**115**		ug/L			6431	6076	4	KED
|	**Cd**	**111**	**49.124**	ug/L	0.705	1	3	10793	3	KED
⌊	**Cd**	**114**	**49.453**	ug/L	1.521	3	0	27702	1	KED
⌈>	**In**	**115**		ug/L			415168	418925	2	Standard
⌊	**Ag**	**107**	**49.536**	ug/L	1.188	2	37	675500	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	174901	0	Standard
⌊	**Pb**	**208**	**50.663**	ug/L	0.504	0	364	4279485	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBH
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 02:05:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	26731	1	Standard
⌈>	**Sc**	**45**		ug/L			489773	453624	3	Standard
|	**Cr**	**52**	**0.014**	ug/L	0.017	125	8505	8044	1	Standard
⌊	**Cr**	**53**	**0.002**	ug/L	0.005	261	60	59	11	Standard
⌈>	**Ge**	**72**		ug/L			31037	29444	1	KED
|	**Cu**	**63**	**0.032**	ug/L	0.005	15	42	165	12	KED
|	**Cu**	**65**	**0.029**	ug/L	0.003	11	15	71	9	KED
|	**Zn**	**66**	**0.025**	ug/L	0.016	65	22	33	23	KED
|	**Zn**	**67**	**-0.021**	ug/L	0.036	168	4	2	114	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.004	330	3	2	36	KED
	Y	**89**		ug/L			38706	38946	2	Standard
	Kr	**83**		ug/L			31	37	32	Standard
⌈>	**In-1**	**115**		ug/L			6431	6118	1	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.007	303	3	2	57	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.002	39	0	2	34	KED
⌈>	**In**	**115**		ug/L			415168	413830	2	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	422	37	39	21	Standard
⌈>	**Tb**	**159**		ug/L			170846	164294	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	30	364	455	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-03RE1
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 02:09:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	30624	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	487192	2	Standard
|	**Cr**	**52**	**3.273**	ug/L	0.129	3	8505	51694	1	Standard
⌊	**Cr**	**53**	**3.350**	ug/L	0.083	2	60	5165	0	Standard
⌈>	**Ge**	**72**		ug/L			31037	29906	1	KED
|	**Cu**	**63**	**13.945**	ug/L	0.345	2	42	55451	1	KED
|	**Cu**	**65**	**13.640**	ug/L	0.160	1	15	27545	0	KED
|	**Zn**	**66**	**18.522**	ug/L	0.095	0	22	9167	0	KED
|	**Zn**	**67**	**17.125**	ug/L	0.234	1	4	1382	0	KED
⌊	**As**	**75**	**1.939**	ug/L	0.093	4	3	470	5	KED
	Y	**89**		ug/L			38706	51426	1	Standard
	Kr	**83**		ug/L			31	39	7	Standard
⌈>	**In-1**	**115**		ug/L			6431	6213	2	KED
|	**Cd**	**111**	**1.349**	ug/L	0.021	1	3	306	3	KED
⌊	**Cd**	**114**	**1.338**	ug/L	0.052	3	0	767	4	KED
⌈>	**In**	**115**		ug/L			415168	433493	2	Standard
⌊	**Ag**	**107**	**0.013**	ug/L	0.001	7	37	228	4	Standard
⌈>	**Tb**	**159**		ug/L			170846	176763	1	Standard
⌊	**Pb**	**208**	**78.292**	ug/L	0.952	1	364	6682947	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-07RE1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, May 12, 2023 02:14:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	35262	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	498833	2	Standard
|	**Cr**	**52**	**6.919**	ug/L	0.161	2	8505	102262	1	Standard
⌊	**Cr**	**53**	**7.160**	ug/L	0.284	3	60	11232	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	29425	2	KED
|	**Cu**	**63**	**21.746**	ug/L	0.149	0	42	85074	2	KED
|	**Cu**	**65**	**21.605**	ug/L	0.331	1	15	42917	2	KED
|	**Zn**	**66**	**78.657**	ug/L	1.499	1	22	38225	0	KED
|	**Zn**	**67**	**75.072**	ug/L	3.238	4	4	5947	1	KED
⌊	**As**	**75**	**2.013**	ug/L	0.032	1	3	479	1	KED
	Y	**89**		ug/L			38706	110324	2	Standard
	Kr	**83**		ug/L			31	43	5	Standard
⌈>	**In-1**	**115**		ug/L			6431	6245	0	KED
|	**Cd**	**111**	**0.158**	ug/L	0.056	35	3	38	31	KED
⌊	**Cd**	**114**	**0.213**	ug/L	0.003	1	0	122	2	KED
⌈>	**In**	**115**		ug/L			415168	417940	1	Standard
⌊	**Ag**	**107**	**0.054**	ug/L	0.002	3	37	767	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	184577	1	Standard
⌊	**Pb**	**208**	**10.989**	ug/L	0.080	0	364	979909	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0568-08RE1
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, May 12, 2023 02:18:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	31596	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	517960	2	Standard
|	**Cr**	**52**	**8.543**	ug/L	0.115	1	8505	129008	2	Standard
⌊	**Cr**	**53**	**8.743**	ug/L	0.132	1	60	14233	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	29166	1	KED
|	**Cu**	**63**	**65.938**	ug/L	0.910	1	42	255577	0	KED
|	**Cu**	**65**	**66.039**	ug/L	2.091	3	15	129965	1	KED
|	**Zn**	**66**	**30.904**	ug/L	1.722	5	22	14892	3	KED
|	**Zn**	**67**	**29.801**	ug/L	1.213	4	4	2343	2	KED
⌊	**As**	**75**	**0.908**	ug/L	0.052	5	3	216	3	KED
	Y	**89**		ug/L			38706	155291	2	Standard
	Kr	**83**		ug/L			31	84	7	Standard
⌈>	**In-1**	**115**		ug/L			6431	5942	1	KED
|	**Cd**	**111**	**0.044**	ug/L	0.019	43	3	12	33	KED
⌊	**Cd**	**114**	**0.065**	ug/L	0.016	24	0	35	23	KED
⌈>	**In**	**115**		ug/L			415168	407971	1	Standard
⌊	**Ag**	**107**	**0.050**	ug/L	0.006	11	37	695	10	Standard
⌈>	**Tb**	**159**		ug/L			170846	188018	3	Standard
⌊	**Pb**	**208**	**5.214**	ug/L	0.135	2	364	473576	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-DUP2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, May 12, 2023 02:22:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	32188	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	514224	0	Standard
|	**Cr**	**52**	**8.460**	ug/L	0.137	1	8505	126940	1	Standard
⌊	**Cr**	**53**	**8.562**	ug/L	0.143	1	60	13842	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	28889	0	KED
|	**Cu**	**63**	**67.265**	ug/L	0.792	1	42	258273	0	KED
|	**Cu**	**65**	**68.236**	ug/L	0.153	0	15	133063	0	KED
|	**Zn**	**66**	**31.600**	ug/L	0.647	2	22	15092	1	KED
|	**Zn**	**67**	**30.536**	ug/L	1.112	3	4	2379	3	KED
⌊	**As**	**75**	**1.361**	ug/L	0.052	3	3	319	3	KED
	Y	**89**		ug/L			38706	163418	3	Standard
	Kr	**83**		ug/L			31	85	25	Standard
⌈>	**In-1**	**115**		ug/L			6431	5786	1	KED
|	**Cd**	**111**	**0.070**	ug/L	0.027	38	3	17	33	KED
⌊	**Cd**	**114**	**0.068**	ug/L	0.017	25	0	36	26	KED
⌈>	**In**	**115**		ug/L			415168	413285	2	Standard
⌊	**Ag**	**107**	**0.063**	ug/L	0.006	9	37	889	6	Standard
⌈>	**Tb**	**159**		ug/L			170846	188901	1	Standard
⌊	**Pb**	**208**	**6.697**	ug/L	0.064	0	364	611329	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-MS2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, May 12, 2023 02:27:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	31313	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	510684	2	Standard
|	**Cr**	**52**	**18.655**	ug/L	0.323	1	8505	267255	1	Standard
⌊	**Cr**	**53**	**18.746**	ug/L	0.348	1	60	30022	2	Standard
⌈>	**Ge**	**72**		ug/L			31037	28790	1	KED
|	**Cu**	**63**	**76.495**	ug/L	0.327	0	42	292713	1	KED
|	**Cu**	**65**	**76.368**	ug/L	0.858	1	15	148397	0	KED
|	**Zn**	**66**	**60.624**	ug/L	0.247	0	22	28838	1	KED
|	**Zn**	**67**	**56.389**	ug/L	2.283	4	4	4375	4	KED
⌊	**As**	**75**	**9.360**	ug/L	0.068	0	3	2172	0	KED
	Y	**89**		ug/L			38706	166225	3	Standard
	Kr	**83**		ug/L			31	65	24	Standard
⌈>	**In-1**	**115**		ug/L			6431	5934	1	KED
|	**Cd**	**111**	**10.090**	ug/L	0.243	2	3	2168	2	KED
⌊	**Cd**	**114**	**10.347**	ug/L	0.182	1	0	5666	1	KED
⌈>	**In**	**115**		ug/L			415168	407600	1	Standard
⌊	**Ag**	**107**	**9.938**	ug/L	0.212	2	37	131911	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	186852	1	Standard
⌊	**Pb**	**208**	**13.748**	ug/L	0.170	1	364	1240887	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0143-MSD2
Sample Dil Factor: 50
Comments:
Sample Date/Time: Friday, May 12, 2023 02:31:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	31044	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	518699	1	Standard
|	**Cr**	**52**	**17.572**	ug/L	0.147	0	8505	256239	1	Standard
⌊	**Cr**	**53**	**17.644**	ug/L	0.164	0	60	28701	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	29185	0	KED
|	**Cu**	**63**	**69.683**	ug/L	0.325	0	42	270307	0	KED
|	**Cu**	**65**	**68.472**	ug/L	1.336	1	15	134892	2	KED
|	**Zn**	**66**	**64.007**	ug/L	1.086	1	22	30862	1	KED
|	**Zn**	**67**	**63.315**	ug/L	1.110	1	4	4978	1	KED
⌊	**As**	**75**	**8.715**	ug/L	0.136	1	3	2050	1	KED
	Y	**89**		ug/L			38706	175850	1	Standard
	Kr	**83**		ug/L			31	71	8	Standard
⌈>	**In-1**	**115**		ug/L			6431	6045	1	KED
|	**Cd**	**111**	**10.400**	ug/L	0.308	2	3	2276	1	KED
⌊	**Cd**	**114**	**10.110**	ug/L	0.094	0	0	5640	2	KED
⌈>	**In**	**115**		ug/L			415168	412014	1	Standard
⌊	**Ag**	**107**	**9.935**	ug/L	0.244	2	37	133316	2	Standard
⌈>	**Tb**	**159**		ug/L			170846	191323	0	Standard
⌊	**Pb**	**208**	**14.236**	ug/L	0.104	0	364	1315763	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 02:36:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	30359	5	Standard
⌈>	**Sc**	**45**		ug/L			489773	453998	1	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.007	104	8505	7970	1	Standard
⌊	**Cr**	**53**	**-0.007**	ug/L	0.007	105	60	46	21	Standard
⌈>	**Ge**	**72**		ug/L			31037	28893	1	KED
|	**Cu**	**63**	**0.016**	ug/L	0.002	12	42	100	8	KED
|	**Cu**	**65**	**0.013**	ug/L	0.004	30	15	40	17	KED
|	**Zn**	**66**	**0.014**	ug/L	0.009	66	22	27	14	KED
|	**Zn**	**67**	**0.037**	ug/L	0.077	206	4	6	83	KED
⌊	**As**	**75**	**-0.006**	ug/L	0.006	96	3	1	100	KED
	Y	**89**		ug/L			38706	38306	2	Standard
	Kr	**83**		ug/L			31	40	33	Standard
⌈>	**In-1**	**115**		ug/L			6431	5811	3	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.003	193	3	2	21	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	309	0	1	188	KED
⌈>	**In**	**115**		ug/L			415168	413827	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.001	151	37	29	43	Standard
⌈>	**Tb**	**159**		ug/L			170846	166016	1	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	68	364	330	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-02

Sample Dil Factor: 200

DEL

Comments:

Sample Date/Time: Friday, May 12, 2023 02:40:32

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	45434	2	Standard
⌈>	**Sc**	**45**		ug/L			489773	482968	3	Standard
|	**Cr**	**52**	**2.353**	ug/L	0.019	0	8505	39210	2	Standard
⌊	**Cr**	**53**	**2.336**	ug/L	0.038	1	60	3590	3	Standard
⌈>	**Ge**	**72**		ug/L			31037	29490	1	KED
|	**Cu**	**63**	**7.628**	ug/L	0.205	2	42	29929	1	KED
|	**Cu**	**65**	**7.670**	ug/L	0.201	2	15	15279	2	KED
|	**Zn**	**66**	**15.420**	ug/L	0.323	2	22	7528	0	KED
|	**Zn**	**67**	**15.652**	ug/L	0.735	4	4	1247	5	KED
⌊	**As**	**75**	**2.343**	ug/L	0.048	2	3	559	1	KED
	Y	**89**		ug/L			38706	70245	4	Standard
	Kr	**83**		ug/L			31	35	3	Standard
⌈>	**In-1**	**115**		ug/L			6431	6169	1	KED
|	**Cd**	**111**	**0.026**	ug/L	0.011	43	3	8	26	KED
⌊	**Cd**	**114**	**0.028**	ug/L	0.007	26	0	16	23	KED
⌈>	**In**	**115**		ug/L			415168	420907	1	Standard
⌊	**Ag**	**107**	**0.034**	ug/L	0.002	6	37	505	5	Standard
⌈>	**Tb**	**159**		ug/L			170846	177257	1	Standard
⌊	**Pb**	**208**	**2.067**	ug/L	0.021	0	364	177307	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-03
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 02:48:17

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	33604	1	Standard
⌈>	**Sc**	**45**		ug/L			489773	487278	2	Standard
|	**Cr**	**52**	**2.160**	ug/L	0.027	1	8505	37006	1	Standard
⌊	**Cr**	**53**	**2.152**	ug/L	0.038	1	60	3341	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	30046	1	KED
|	**Cu**	**63**	**8.181**	ug/L	0.073	0	42	32709	1	KED
|	**Cu**	**65**	**8.188**	ug/L	0.175	2	15	16622	3	KED
|	**Zn**	**66**	**14.978**	ug/L	0.559	3	22	7450	2	KED
|	**Zn**	**67**	**15.756**	ug/L	0.427	2	4	1278	2	KED
⌊	**As**	**75**	**1.829**	ug/L	0.095	5	3	445	6	KED
	Y	**89**		ug/L			38706	83285	1	Standard
	Kr	**83**		ug/L			31	36	10	Standard
⌈>	**In-1**	**115**		ug/L			6431	6234	1	KED
|	**Cd**	**111**	**0.016**	ug/L	0.008	48	3	6	24	KED
⌊	**Cd**	**114**	**0.021**	ug/L	0.012	57	0	12	54	KED
⌈>	**In**	**115**		ug/L			415168	418765	2	Standard
⌊	**Ag**	**107**	**0.023**	ug/L	0.001	3	37	356	0	Standard
⌈>	**Tb**	**159**		ug/L			170846	178718	0	Standard
⌊	**Pb**	**208**	**2.555**	ug/L	0.004	0	364	220947	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLL
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 02:56:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	30836	3	Standard
⌈>	**Sc**	**45**		ug/L			489773	469752	4	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.010	348	8505	8120	3	Standard
⌊	**Cr**	**53**	**-0.006**	ug/L	0.004	62	60	49	15	Standard
⌈>	**Ge**	**72**		ug/L			31037	29085	0	KED
|	**Cu**	**63**	**0.017**	ug/L	0.003	17	42	104	10	KED
|	**Cu**	**65**	**0.019**	ug/L	0.002	8	15	52	5	KED
|	**Zn**	**66**	**0.014**	ug/L	0.002	14	22	27	3	KED
|	**Zn**	**67**	**-0.021**	ug/L	0.014	68	4	2	43	KED
⌊	**As**	**75**	**-0.007**	ug/L	0.003	42	3	1	57	KED
	Y	**89**		ug/L			38706	40136	2	Standard
	Kr	**83**		ug/L			31	29	24	Standard
⌈>	**In-1**	**115**		ug/L			6431	6211	3	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.012	1346	3	2	88	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.002	61	0	2	47	KED
⌈>	**In**	**115**		ug/L			415168	424538	4	Standard
⌊	**Ag**	**107**	**-0.002**	ug/L	0.000	9	37	17	11	Standard
⌈>	**Tb**	**159**		ug/L			170846	172024	1	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	19	364	267	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:00:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	27412	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	472142	2	Standard
|	**Cr**	**52**	**48.525**	ug/L	0.359	0	8505	629678	2	Standard
⌊	**Cr**	**53**	**48.055**	ug/L	0.480	0	60	71053	1	Standard
⌈>	**Ge**	**72**		ug/L			31037	29986	0	KED
|	**Cu**	**63**	**49.546**	ug/L	0.423	0	42	197473	0	KED
|	**Cu**	**65**	**49.314**	ug/L	0.707	1	15	99822	1	KED
|	**Zn**	**66**	**49.844**	ug/L	0.989	1	22	24698	1	KED
|	**Zn**	**67**	**50.845**	ug/L	1.890	3	4	4108	3	KED
⌊	**As**	**75**	**49.357**	ug/L	0.317	0	3	11917	0	KED
	Y	**89**		ug/L			38706	40632	1	Standard
	Kr	**83**		ug/L			31	43	11	Standard
⌈>	**In-1**	**115**		ug/L			6431	6181	2	KED
|	**Cd**	**111**	**48.743**	ug/L	1.451	2	3	10895	1	KED
⌊	**Cd**	**114**	**49.281**	ug/L	1.152	2	0	28100	0	KED
⌈>	**In**	**115**		ug/L			415168	420245	0	Standard
⌊	**Ag**	**107**	**48.692**	ug/L	0.848	1	37	666249	1	Standard
⌈>	**Tb**	**159**		ug/L			170846	174791	1	Standard
⌊	**Pb**	**208**	**50.739**	ug/L	1.441	2	364	4282243	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:07:55
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			28285	27232	4	Standard
⌈>	**Sc**	**45**		ug/L			489773	460997	2	Standard
|	**Cr**	**52**	**-0.015**	ug/L	0.013	86	8505	7820	2	Standard
⌊	**Cr**	**53**	**-0.006**	ug/L	0.003	56	60	48	8	Standard
⌈>	**Ge**	**72**		ug/L			31037	28836	1	KED
|	**Cu**	**63**	**0.004**	ug/L	0.005	138	42	53	37	KED
|	**Cu**	**65**	**0.005**	ug/L	0.005	102	15	23	37	KED
|	**Zn**	**66**	**0.056**	ug/L	0.019	33	22	47	17	KED
|	**Zn**	**67**	**0.004**	ug/L	0.015	360	4	4	24	KED
⌊	**As**	**75**	**-0.005**	ug/L	0.004	88	3	1	50	KED
	Y	**89**		ug/L			38706	38610	2	Standard
	Kr	**83**		ug/L			31	39	48	Standard
⌈>	**In-1**	**115**		ug/L			6431	6029	4	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.011	312	3	2	107	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	370	0	1	205	KED
⌈>	**In**	**115**		ug/L			415168	414487	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	275	37	38	5	Standard
⌈>	**Tb**	**159**		ug/L			170846	165442	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	87	364	398	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:12:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				26244	0	Standard
⎡>	**Sc**	**45**		ug/L				448237	0	Standard
⎢	**Cr**	**52**		ug/L				8038	0	Standard
⎣	**Cr**	**53**		ug/L				50	7	Standard
⎡>	**Ge**	**72**		ug/L				28647	1	KED
⎢	**Cu**	**63**		ug/L				51	22	KED
⎢	**Cu**	**65**		ug/L				25	22	KED
⎢	**Zn**	**66**		ug/L				36	18	KED
⎢	**Zn**	**67**		ug/L				6	15	KED
⎣	**As**	**75**		ug/L				2	21	KED
	Y	**89**		ug/L				38752	1	Standard
	Kr	**83**		ug/L				40	21	Standard
⎡>	**In-1**	**115**		ug/L				6124	1	KED
⎢	**Cd**	**111**		ug/L				4	48	KED
⎣	**Cd**	**114**		ug/L				3	51	KED
⎡>	**In**	**115**		ug/L				412702	0	Standard
⎣	**Ag**	**107**		ug/L				17	19	Standard
⎡>	**Tb**	**159**		ug/L				165777	0	Standard
⎣	**Pb**	**208**		ug/L				350	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVJ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:16:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	27528	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	465302	1	Standard
|	**Cr**	**52**	**48.195**	ug/L	1.071	2	8038	616725	3	Standard
⌊	**Cr**	**53**	**48.451**	ug/L	1.053	2	50	70619	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	29088	1	KED
|	**Cu**	**63**	**49.523**	ug/L	0.747	1	51	191468	0	KED
|	**Cu**	**65**	**49.587**	ug/L	0.811	1	25	97364	0	KED
|	**Zn**	**66**	**50.764**	ug/L	1.787	3	36	24410	2	KED
|	**Zn**	**67**	**51.486**	ug/L	0.785	1	6	4038	0	KED
⌊	**As**	**75**	**49.815**	ug/L	0.738	1	2	11666	0	KED
	Y	**89**		ug/L			38752	39682	1	Standard
	Kr	**83**		ug/L			40	38	10	Standard
⌈>	**In-1**	**115**		ug/L			6124	5986	1	KED
|	**Cd**	**111**	**50.165**	ug/L	0.768	1	4	10864	0	KED
⌊	**Cd**	**114**	**50.376**	ug/L	0.553	1	3	27830	1	KED
⌈>	**In**	**115**		ug/L			412702	414779	3	Standard
⌊	**Ag**	**107**	**48.657**	ug/L	0.166	0	17	657183	3	Standard
⌈>	**Tb**	**159**		ug/L			165777	173047	1	Standard
⌊	**Pb**	**208**	**51.251**	ug/L	0.610	1	350	4282878	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBJ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:23:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	27346	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	461077	0	Standard
|	**Cr**	**52**	**-0.024**	ug/L	0.006	22	8038	7967	1	Standard
⌊	**Cr**	**53**	**-0.003**	ug/L	0.003	107	50	47	11	Standard
⌈>	**Ge**	**72**		ug/L			28647	29348	3	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.002	94	51	45	18	KED
|	**Cu**	**65**	**0.004**	ug/L	0.005	131	25	33	27	KED
|	**Zn**	**66**	**-0.007**	ug/L	0.009	130	36	34	9	KED
|	**Zn**	**67**	**-0.010**	ug/L	0.016	161	6	6	17	KED
⌊	**As**	**75**	**0.000**	ug/L	0.005	1211	2	2	44	KED
	Y	**89**		ug/L			38752	38899	0	Standard
	Kr	**83**		ug/L			40	36	32	Standard
⌈>	**In-1**	**115**		ug/L			6124	6057	3	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.007	242	4	3	41	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.003	104	3	1	101	KED
⌈>	**In**	**115**		ug/L			412702	421771	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	50	17	44	31	Standard
⌈>	**Tb**	**159**		ug/L			165777	166182	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.001	74	350	409	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-05
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 03:28:07
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	28967	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	473662	1	Standard
|	**Cr**	**52**	**6.951**	ug/L	0.009	0	8038	97812	1	Standard
⌊	**Cr**	**53**	**7.122**	ug/L	0.149	2	50	10613	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	29878	1	KED
|	**Cu**	**63**	**140.074**	ug/L	4.444	3	51	556090	2	KED
|	**Cu**	**65**	**137.686**	ug/L	3.184	2	25	277626	1	KED
|	**Zn**	**66**	**432.085**	ug/L	1.353	0	36	213184	1	KED
|	**Zn**	**67**	**396.702**	ug/L	8.330	2	6	31911	1	KED
⌊	**As**	**75**	**58.904**	ug/L	1.212	2	2	14168	1	KED
	Y	**89**		ug/L			38752	55902	2	Standard
	Kr	**83**		ug/L			40	50	26	Standard
⌈>	**In-1**	**115**		ug/L			6124	6550	1	KED
|	**Cd**	**111**	**0.239**	ug/L	0.038	15	4	60	13	KED
⌊	**Cd**	**114**	**0.272**	ug/L	0.015	5	3	168	6	KED
⌈>	**In**	**115**		ug/L			412702	459125	2	Standard
⌊	**Ag**	**107**	**0.090**	ug/L	0.003	3	17	1366	3	Standard
⌈>	**Tb**	**159**		ug/L			165777	177424	1	Standard
⌊	**Pb**	**208**	**56.336**	ug/L	1.570	2	350	4826184	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-06
Sample Dil Factor: 200
Comments:
Sample Date/Time: Friday, May 12, 2023 03:32:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26244	30367	2	Standard
⌈>	Sc	45		ug/L			448237	479266	1	Standard
|	Cr	52	3.211	ug/L	0.045	1	8038	50334	0	Standard
⌊	Cr	53	3.248	ug/L	0.092	2	50	4923	1	Standard
⌈>	Ge	72		ug/L			28647	30135	1	KED
|	~~Cu~~	~~63~~	50.976	ug/L	0.858	1	51	204186	1	KED
|	Cu	65	49.940	ug/L	0.275	0	25	101598	1	KED
|	Zn	66	188.164	ug/L	2.067	1	36	93651	0	KED
|	Zn	67	176.994	ug/L	2.872	1	6	14365	1	KED
⌊	As	75	26.612	ug/L	0.314	1	2	6457	0	KED
	Y	89		ug/L			38752	53142	2	Standard
	Kr	83		ug/L			40	43	19	Standard
⌈>	In-1	115		ug/L			6124	6312	2	KED
|	Cd	111	0.085	ug/L	0.040	46	4	23	38	KED
⌊	Cd	114	0.093	ug/L	0.015	16	3	58	17	KED
⌈>	In	115		ug/L			412702	435687	2	Standard
⌊	Ag	107	0.036	ug/L	0.001	3	17	523	2	Standard
⌈>	Tb	159		ug/L			165777	175550	0	Standard
⌊	Pb	208	25.843	ug/L	0.460	1	350	2191176	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0393-08

Sample Dil Factor: 200

DEL

Comments:

Sample Date/Time: Friday, May 12, 2023 03:40:38

Number of Replicates: 3

Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth

Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun

Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac

Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	31181	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	478509	1	Standard
|	**Cr**	**52**	**1.220**	ug/L	0.043	3	8038	24407	0	Standard
⌊	**Cr**	**53**	**1.282**	ug/L	0.063	4	50	1973	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	30151	1	KED
|	**Cu**	**63**	**6.754**	ug/L	0.133	1	51	27113	1	KED
|	**Cu**	**65**	**6.604**	ug/L	0.067	1	25	13465	0	KED
|	**Zn**	**66**	**6.390**	ug/L	0.314	4	36	3218	3	KED
|	**Zn**	**67**	**6.099**	ug/L	0.366	5	6	502	5	KED
⌊	**As**	**75**	**0.351**	ug/L	0.020	5	2	87	6	KED
	Y	**89**		ug/L			38752	50471	3	Standard
	Kr	**83**		ug/L			40	45	8	Standard
⌈>	**In-1**	**115**		ug/L			6124	6249	2	KED
|	**Cd**	**111**	**0.001**	ug/L	0.007	618	4	4	32	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.004	79	3	6	34	KED
⌈>	**In**	**115**		ug/L			412702	436235	1	Standard
⌊	**Ag**	**107**	**0.007**	ug/L	0.001	18	17	115	17	Standard
⌈>	**Tb**	**159**		ug/L			165777	178703	0	Standard
⌊	**Pb**	**208**	**2.526**	ug/L	0.011	0	350	218384	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLM
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:46:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	30527	5	Standard
⌈>	**Sc**	**45**		ug/L			448237	458442	0	Standard
|	**Cr**	**52**	**-0.015**	ug/L	0.025	167	8038	8039	3	Standard
⌊	**Cr**	**53**	**-0.006**	ug/L	0.005	93	50	43	18	Standard
⌈>	**Ge**	**72**		ug/L			28647	29142	1	KED
|	**Cu**	**63**	**-0.001**	ug/L	0.001	98	51	48	8	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.002	84	25	22	13	KED
|	**Zn**	**66**	**-0.020**	ug/L	0.026	134	36	27	43	KED
|	**Zn**	**67**	**-0.058**	ug/L	0.037	63	6	2	114	KED
⌊	**As**	**75**	**0.000**	ug/L	0.004	856	2	2	36	KED
	Y	**89**		ug/L			38752	38600	1	Standard
	Kr	**83**		ug/L			40	36	5	Standard
⌈>	**In-1**	**115**		ug/L			6124	6084	3	KED
|	**Cd**	**111**	**-0.001**	ug/L	0.005	392	4	3	25	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.010	432	3	4	111	KED
⌈>	**In**	**115**		ug/L			412702	419892	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	154	17	13	49	Standard
⌈>	**Tb**	**159**		ug/L			165777	169399	0	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.001	83	350	293	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-02
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:50:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	42650	4	Standard
⌈>	**Sc**	**45**		ug/L			448237	530401	2	Standard
|	**Cr**	**52**	**0.120**	ug/L	0.007	5	8038	11239	1	Standard
⌊	**Cr**	**53**	**0.474**	ug/L	0.007	1	50	846	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	28591	0	KED
|	**Cu**	**63**	**1.290**	ug/L	0.027	2	51	4951	1	KED
|	**Cu**	**65**	**1.301**	ug/L	0.021	1	25	2536	0	KED
|	**Zn**	**66**	**1.290**	ug/L	0.052	4	36	645	4	KED
|	**Zn**	**67**	**1.518**	ug/L	0.137	9	6	123	8	KED
⌊	**As**	**75**	**0.485**	ug/L	0.024	5	2	114	4	KED
	Y	**89**		ug/L			38752	47886	3	Standard
	Kr	**83**		ug/L			40	40	23	Standard
⌈>	**In-1**	**115**		ug/L			6124	5788	1	KED
|	**Cd**	**111**	**0.012**	ug/L	0.007	62	4	6	22	KED
⌊	**Cd**	**114**	**0.017**	ug/L	0.004	20	3	12	17	KED
⌈>	**In**	**115**		ug/L			412702	424716	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	132	17	27	48	Standard
⌈>	**Tb**	**159**		ug/L			165777	173082	0	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.000	7	350	953	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:55:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	36089	1	Standard
⌈>	**Sc**	**45**		ug/L			448237	508981	1	Standard
|	**Cr**	**52**	**0.007**	ug/L	0.014	208	8038	9222	2	Standard
⌊	**Cr**	**53**	**0.471**	ug/L	0.036	7	50	807	7	Standard
⌈>	**Ge**	**72**		ug/L			28647	27519	2	KED
|	**Cu**	**63**	**0.413**	ug/L	0.017	4	51	1558	1	KED
|	**Cu**	**65**	**0.399**	ug/L	0.054	13	25	765	12	KED
|	**Zn**	**66**	**1.670**	ug/L	0.134	8	36	793	6	KED
|	**Zn**	**67**	**1.816**	ug/L	0.419	23	6	140	20	KED
⌊	**As**	**75**	**0.386**	ug/L	0.025	6	2	87	3	KED
	Y	**89**		ug/L			38752	41667	3	Standard
	Kr	**83**		ug/L			40	36	7	Standard
⌈>	**In-1**	**115**		ug/L			6124	5550	0	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.010	220	4	2	66	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.002	38	3	6	17	KED
⌈>	**In**	**115**		ug/L			412702	419007	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	74	17	25	24	Standard
⌈>	**Tb**	**159**		ug/L			165777	168327	2	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.000	2	350	1228	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-04
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 03:59:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	36160	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	501329	0	Standard
|	**Cr**	**52**	**0.098**	ug/L	0.027	27	8038	10320	3	Standard
⌊	**Cr**	**53**	**0.469**	ug/L	0.026	5	50	792	5	Standard
⌈>	**Ge**	**72**		ug/L			28647	26746	0	KED
|	**Cu**	**63**	**0.693**	ug/L	0.024	3	51	2510	3	KED
|	**Cu**	**65**	**0.676**	ug/L	0.022	3	25	1245	3	KED
|	**Zn**	**66**	**1.511**	ug/L	0.056	3	36	701	2	KED
|	**Zn**	**67**	**1.478**	ug/L	0.150	10	6	113	10	KED
⌊	**As**	**75**	**0.114**	ug/L	0.017	14	2	26	14	KED
	Y	**89**		ug/L			38752	40879	1	Standard
	Kr	**83**		ug/L			40	35	26	Standard
⌈>	**In-1**	**115**		ug/L			6124	5352	2	KED
|	**Cd**	**111**	**0.006**	ug/L	0.010	170	4	4	40	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.004	126	3	1	112	KED
⌈>	**In**	**115**		ug/L			412702	403498	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	116	17	24	35	Standard
⌈>	**Tb**	**159**		ug/L			165777	165184	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.001	11	350	784	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-05
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:03:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	42590	6	Standard
⌈>	**Sc**	**45**		ug/L			448237	522766	2	Standard
|	**Cr**	**52**	**0.344**	ug/L	0.007	1	8038	14260	2	Standard
⌊	**Cr**	**53**	**0.595**	ug/L	0.019	3	50	1031	1	Standard
⌈>	**Ge**	**72**		ug/L			28647	26398	0	KED
|	**Cu**	**63**	**0.272**	ug/L	0.019	6	51	1002	6	KED
|	**Cu**	**65**	**0.264**	ug/L	0.020	7	25	493	6	KED
|	**Zn**	**66**	**1.455**	ug/L	0.138	9	36	667	8	KED
|	**Zn**	**67**	**1.581**	ug/L	0.242	15	6	118	14	KED
⌊	**As**	**75**	**1.568**	ug/L	0.081	5	2	335	4	KED
	Y	**89**		ug/L			38752	48893	0	Standard
	Kr	**83**		ug/L			40	33	31	Standard
⌈>	**In-1**	**115**		ug/L			6124	5519	2	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.007	120	4	2	57	KED
⌊	**Cd**	**114**	**0.007**	ug/L	0.006	83	3	6	41	KED
⌈>	**In**	**115**		ug/L			412702	410491	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	299	17	20	48	Standard
⌈>	**Tb**	**159**		ug/L			165777	168884	2	Standard
⌊	**Pb**	**208**	**0.014**	ug/L	0.001	3	350	1517	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-06
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:08:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	37374	6	Standard
⌈>	**Sc**	**45**		ug/L			448237	543142	1	Standard
|	**Cr**	**52**	**0.110**	ug/L	0.011	10	8038	11359	1	Standard
⌊	**Cr**	**53**	**0.280**	ug/L	0.014	5	50	536	4	Standard
⌈>	**Ge**	**72**		ug/L			28647	26365	1	KED
|	**Cu**	**63**	**0.140**	ug/L	0.007	5	51	536	4	KED
|	**Cu**	**65**	**0.131**	ug/L	0.015	11	25	256	9	KED
|	**Zn**	**66**	**2.253**	ug/L	0.100	4	36	1014	2	KED
|	**Zn**	**67**	**2.603**	ug/L	0.114	4	6	191	3	KED
⌊	**As**	**75**	**1.190**	ug/L	0.034	2	2	255	4	KED
	Y	**89**		ug/L			38752	41959	1	Standard
	Kr	**83**		ug/L			40	33	26	Standard
⌈>	**In-1**	**115**		ug/L			6124	5401	2	KED
|	**Cd**	**111**	**-0.004**	ug/L	0.005	117	4	2	33	KED
⌊	**Cd**	**114**	**0.003**	ug/L	0.006	180	3	4	57	KED
⌈>	**In**	**115**		ug/L			412702	406534	2	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	39	17	22	8	Standard
⌈>	**Tb**	**159**		ug/L			165777	172296	2	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.001	14	350	834	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLN
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:12:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	27561	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	445679	2	Standard
|	**Cr**	**52**	**0.037**	ug/L	0.012	31	8038	8433	2	Standard
⌊	**Cr**	**53**	**0.005**	ug/L	0.007	155	50	56	17	Standard
⌈>	**Ge**	**72**		ug/L			28647	28593	1	KED
|	**Cu**	**63**	**-0.004**	ug/L	0.002	44	51	36	18	KED
|	**Cu**	**65**	**-0.007**	ug/L	0.003	53	25	12	52	KED
|	**Zn**	**66**	**-0.023**	ug/L	0.019	82	36	26	32	KED
|	**Zn**	**67**	**-0.033**	ug/L	0.028	86	6	4	49	KED
⌊	**As**	**75**	**-0.001**	ug/L	0.009	1538	2	2	87	KED
	Y	**89**		ug/L			38752	38260	2	Standard
	Kr	**83**		ug/L			40	36	13	Standard
⌈>	**In-1**	**115**		ug/L			6124	5663	2	KED
|	**Cd**	**111**	**-0.009**	ug/L	0.005	50	4	1	50	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.004	117	3	1	104	KED
⌈>	**In**	**115**		ug/L			412702	414879	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	41	17	10	28	Standard
⌈>	**Tb**	**159**		ug/L			165777	167727	0	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	30	350	254	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:17:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	25817	5	Standard
⌈>	**Sc**	**45**		ug/L			448237	458964	2	Standard
|	**Cr**	**52**	**47.339**	ug/L	0.616	1	8038	597481	1	Standard
⌊	**Cr**	**53**	**47.127**	ug/L	1.094	2	50	67723	2	Standard
⌈>	**Ge**	**72**		ug/L			28647	28285	1	KED
|	**Cu**	**63**	**49.769**	ug/L	1.510	3	51	187053	1	KED
|	**Cu**	**65**	**49.726**	ug/L	1.311	2	25	94927	1	KED
|	**Zn**	**66**	**50.171**	ug/L	1.805	3	36	23455	1	KED
|	**Zn**	**67**	**50.152**	ug/L	1.339	2	6	3824	1	KED
⌊	**As**	**75**	**49.459**	ug/L	1.582	3	2	11259	1	KED
	Y	**89**		ug/L			38752	39627	0	Standard
	Kr	**83**		ug/L			40	34	16	Standard
⌈>	**In-1**	**115**		ug/L			6124	5651	4	KED
|	**Cd**	**111**	**51.104**	ug/L	1.817	3	4	10440	2	KED
⌊	**Cd**	**114**	**51.219**	ug/L	2.169	4	3	26683	1	KED
⌈>	**In**	**115**		ug/L			412702	416361	1	Standard
⌊	**Ag**	**107**	**47.224**	ug/L	1.028	2	17	640079	0	Standard
⌈>	**Tb**	**159**		ug/L			165777	173175	2	Standard
⌊	**Pb**	**208**	**52.054**	ug/L	1.042	2	350	4352693	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBK
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:24:14
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	25999	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	447350	1	Standard
|	**Cr**	**52**	**-0.006**	ug/L	0.013	225	8038	7953	3	Standard
⌊	**Cr**	**53**	**0.002**	ug/L	0.004	191	50	53	11	Standard
⌈>	**Ge**	**72**		ug/L			28647	28109	1	KED
|	**Cu**	**63**	**-0.005**	ug/L	0.001	14	51	31	9	KED
|	**Cu**	**65**	**-0.003**	ug/L	0.002	88	25	19	22	KED
|	**Zn**	**66**	**-0.022**	ug/L	0.005	22	36	26	8	KED
|	**Zn**	**67**	**0.010**	ug/L	0.090	914	6	7	90	KED
⌊	**As**	**75**	**0.000**	ug/L	0.004	1855	2	2	39	KED
	Y	**89**		ug/L			38752	38816	1	Standard
	Kr	**83**		ug/L			40	33	28	Standard
⌈>	**In-1**	**115**		ug/L			6124	5534	2	KED
|	**Cd**	**111**	**-0.012**	ug/L	0.007	57	4	1	114	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.002	36	3	6	17	KED
⌈>	**In**	**115**		ug/L			412702	422383	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	36	17	43	21	Standard
⌈>	**Tb**	**159**		ug/L			165777	167282	0	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	62	350	417	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-07
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:28:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	34980	4	Standard
⌈>	**Sc**	**45**		ug/L			448237	507391	2	Standard
|	**Cr**	**52**	**-0.000**	ug/L	0.011	2810	8038	9093	2	Standard
⌊	**Cr**	**53**	**0.283**	ug/L	0.019	6	50	507	7	Standard
⌈>	**Ge**	**72**		ug/L			28647	26697	1	KED
|	**Cu**	**63**	**0.111**	ug/L	0.003	3	51	440	2	KED
|	**Cu**	**65**	**0.116**	ug/L	0.014	11	25	232	10	KED
|	**Zn**	**66**	**1.554**	ug/L	0.157	10	36	718	8	KED
|	**Zn**	**67**	**2.143**	ug/L	0.179	8	6	160	8	KED
⌊	**As**	**75**	**0.679**	ug/L	0.053	7	2	148	7	KED
	Y	**89**		ug/L			38752	40544	3	Standard
	Kr	**83**		ug/L			40	34	14	Standard
⌈>	**In-1**	**115**		ug/L			6124	5355	3	KED
|	**Cd**	**111**	**-0.009**	ug/L	0.000	3	4	1		KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.010	458	3	4	111	KED
⌈>	**In**	**115**		ug/L			412702	406592	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	121	17	26	42	Standard
⌈>	**Tb**	**159**		ug/L			165777	167561	1	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.001	4	350	1221	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-08
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:32:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	34708	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	521894	3	Standard
|	**Cr**	**52**	**0.034**	ug/L	0.013	37	8038	9842	3	Standard
⌊	**Cr**	**53**	**0.532**	ug/L	0.008	1	50	927	4	Standard
⌈>	**Ge**	**72**		ug/L			28647	25650	1	KED
|	**Cu**	**63**	**0.549**	ug/L	0.013	2	51	1918	2	KED
|	**Cu**	**65**	**0.549**	ug/L	0.010	1	25	972	1	KED
|	**Zn**	**66**	**2.235**	ug/L	0.080	3	36	979	4	KED
|	**Zn**	**67**	**2.713**	ug/L	0.101	3	6	193	4	KED
⌊	**As**	**75**	**0.376**	ug/L	0.019	4	2	80	4	KED
	Y	**89**		ug/L			38752	42727	2	Standard
	Kr	**83**		ug/L			40	34	20	Standard
⌈>	**In-1**	**115**		ug/L			6124	5228	2	KED
|	**Cd**	**111**	**0.018**	ug/L	0.002	12	4	6	7	KED
⌊	**Cd**	**114**	**0.023**	ug/L	0.005	23	3	14	20	KED
⌈>	**In**	**115**		ug/L			412702	418045	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	3271	17	17	50	Standard
⌈>	**Tb**	**159**		ug/L			165777	167064	0	Standard
⌊	**Pb**	**208**	**0.012**	ug/L	0.001	5	350	1348	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-09
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:37:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	39008	4	Standard
⌈>	**Sc**	**45**		ug/L			448237	523709	2	Standard
|	**Cr**	**52**	**-0.003**	ug/L	0.009	298	8038	9348	1	Standard
⌊	**Cr**	**53**	**0.423**	ug/L	0.025	5	50	751	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	25094	2	KED
|	**Cu**	**63**	**1.206**	ug/L	0.033	2	51	4065	1	KED
|	**Cu**	**65**	**1.210**	ug/L	0.034	2	25	2071	0	KED
|	**Zn**	**66**	**2.156**	ug/L	0.124	5	36	925	5	KED
|	**Zn**	**67**	**2.797**	ug/L	0.633	22	6	194	19	KED
⌊	**As**	**75**	**0.379**	ug/L	0.019	5	2	78	4	KED
	Y	**89**		ug/L			38752	56516	3	Standard
	Kr	**83**		ug/L			40	35	24	Standard
⌈>	**In-1**	**115**		ug/L			6124	5268	2	KED
|	**Cd**	**111**	**0.056**	ug/L	0.012	21	4	14	17	KED
⌊	**Cd**	**114**	**0.050**	ug/L	0.008	16	3	27	16	KED
⌈>	**In**	**115**		ug/L			412702	413918	1	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	24	17	24	7	Standard
⌈>	**Tb**	**159**		ug/L			165777	165395	1	Standard
⌊	**Pb**	**208**	**0.009**	ug/L	0.001	10	350	1075	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-10
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:41:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	37328	5	Standard
⌈>	**Sc**	**45**		ug/L			448237	514346	2	Standard
|	**Cr**	**52**	**0.138**	ug/L	0.014	10	8038	11152	3	Standard
⌊	**Cr**	**53**	**1.128**	ug/L	0.011	1	50	1873	1	Standard
⌈>	**Ge**	**72**		ug/L			28647	25872	0	KED
|	**Cu**	**63**	**0.438**	ug/L	0.009	1	51	1551	1	KED
|	**Cu**	**65**	**0.422**	ug/L	0.030	7	25	759	7	KED
|	**Zn**	**66**	**3.277**	ug/L	0.134	4	36	1433	3	KED
|	**Zn**	**67**	**3.610**	ug/L	0.275	7	6	257	7	KED
⌊	**As**	**75**	**0.154**	ug/L	0.008	5	2	34	4	KED
	Y	**89**		ug/L			38752	45722	0	Standard
	Kr	**83**		ug/L			40	34	14	Standard
⌈>	**In-1**	**115**		ug/L			6124	5294	3	KED
|	**Cd**	**111**	**0.013**	ug/L	0.010	77	4	6	32	KED
⌊	**Cd**	**114**	**0.008**	ug/L	0.007	88	3	7	52	KED
⌈>	**In**	**115**		ug/L			412702	418437	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	74	17	13	24	Standard
⌈>	**Tb**	**159**		ug/L			165777	172510	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	6	350	793	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-11
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:46:02
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	36551	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	478649	2	Standard
|	**Cr**	**52**	**0.539**	ug/L	0.040	7	8038	15579	1	Standard
⌊	**Cr**	**53**	**0.643**	ug/L	0.009	1	50	1016	1	Standard
⌈>	**Ge**	**72**		ug/L			28647	27659	0	KED
|	**Cu**	**63**	**0.716**	ug/L	0.012	1	51	2680	1	KED
|	**Cu**	**65**	**0.697**	ug/L	0.024	3	25	1325	3	KED
|	**Zn**	**66**	**1.435**	ug/L	0.052	3	36	690	3	KED
|	**Zn**	**67**	**1.726**	ug/L	0.266	15	6	135	14	KED
⌊	**As**	**75**	**0.107**	ug/L	0.004	3	2	26	3	KED
	Y	**89**		ug/L			38752	44581	2	Standard
	Kr	**83**		ug/L			40	34	14	Standard
⌈>	**In-1**	**115**		ug/L			6124	5619	1	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.006	90	4	2	43	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.004	104	3	1	115	KED
⌈>	**In**	**115**		ug/L			412702	423122	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	42	17	12	18	Standard
⌈>	**Tb**	**159**		ug/L			165777	172262	1	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.001	17	350	942	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-12
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:50:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	37463	6	Standard
⌈>	**Sc**	**45**		ug/L			448237	481580	2	Standard
|	**Cr**	**52**	**0.475**	ug/L	0.016	3	8038	14843	2	Standard
⌊	**Cr**	**53**	**0.571**	ug/L	0.031	5	50	914	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	27543	0	KED
|	**Cu**	**63**	**0.659**	ug/L	0.006	0	51	2462	1	KED
|	**Cu**	**65**	**0.637**	ug/L	0.030	4	25	1208	3	KED
|	**Zn**	**66**	**1.718**	ug/L	0.054	3	36	816	3	KED
|	**Zn**	**67**	**1.809**	ug/L	0.237	13	6	140	13	KED
⌊	**As**	**75**	**0.103**	ug/L	0.014	13	2	25	11	KED
	Y	**89**		ug/L			38752	44952	0	Standard
	Kr	**83**		ug/L			40	34	14	Standard
⌈>	**In-1**	**115**		ug/L			6124	5573	3	KED
|	**Cd**	**111**	**-0.014**	ug/L	0.005	35	4	0	100	KED
⌊	**Cd**	**114**	**0.004**	ug/L	0.010	228	3	5	91	KED
⌈>	**In**	**115**		ug/L			412702	425006	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	511	17	15	54	Standard
⌈>	**Tb**	**159**		ug/L			165777	174747	2	Standard
⌊	**Pb**	**208**	**0.006**	ug/L	0.001	11	350	860	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-13
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:54:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	50151	4	Standard
⌈>	**Sc**	**45**		ug/L			448237	515471	4	Standard
|	**Cr**	**52**	**1.036**	ug/L	0.051	4	8038	23717	2	Standard
⌊	**Cr**	**53**	**1.163**	ug/L	0.031	2	50	1932	2	Standard
⌈>	**Ge**	**72**		ug/L			28647	26794	2	KED
|	**Cu**	**63**	**4.548**	ug/L	0.126	2	51	16238	1	KED
|	**Cu**	**65**	**4.399**	ug/L	0.140	3	25	7976	1	KED
|	**Zn**	**66**	**1.833**	ug/L	0.087	4	36	845	3	KED
|	**Zn**	**67**	**2.737**	ug/L	0.334	12	6	203	10	KED
⌊	**As**	**75**	**0.367**	ug/L	0.023	6	2	81	4	KED
	Y	**89**		ug/L			38752	55318	0	Standard
	Kr	**83**		ug/L			40	29	7	Standard
⌈>	**In-1**	**115**		ug/L			6124	5465	4	KED
|	**Cd**	**111**	**0.011**	ug/L	0.014	128	4	5	44	KED
⌊	**Cd**	**114**	**0.012**	ug/L	0.015	119	3	9	74	KED
⌈>	**In**	**115**		ug/L			412702	417323	2	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	11	17	34	3	Standard
⌈>	**Tb**	**159**		ug/L			165777	171029	1	Standard
⌊	**Pb**	**208**	**0.011**	ug/L	0.000	4	350	1292	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-14
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 04:59:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	60913	5	Standard
⌈>	**Sc**	**45**		ug/L			448237	519319	2	Standard
|	**Cr**	**52**	**0.917**	ug/L	0.019	2	8038	22240	3	Standard
⌊	**Cr**	**53**	**1.086**	ug/L	0.010	0	50	1823	2	Standard
⌈>	**Ge**	**72**		ug/L			28647	26673	0	KED
|	**Cu**	**63**	**12.597**	ug/L	0.095	0	51	44697	0	KED
|	**Cu**	**65**	**12.583**	ug/L	0.156	1	25	22674	0	KED
|	**Zn**	**66**	**1.341**	ug/L	0.039	2	36	624	3	KED
|	**Zn**	**67**	**1.414**	ug/L	0.270	19	6	107	17	KED
⌊	**As**	**75**	**54.959**	ug/L	0.366	0	2	11803	1	KED
	Y	**89**		ug/L			38752	51441	2	Standard
	Kr	**83**		ug/L			40	36	7	Standard
⌈>	**In-1**	**115**		ug/L			6124	5208	1	KED
|	**Cd**	**111**	**0.064**	ug/L	0.017	26	4	15	19	KED
⌊	**Cd**	**114**	**0.052**	ug/L	0.025	47	3	28	41	KED
⌈>	**In**	**115**		ug/L			412702	399894	2	Standard
⌊	**Ag**	**107**	**0.021**	ug/L	0.001	6	17	295	7	Standard
⌈>	**Tb**	**159**		ug/L			165777	171823	1	Standard
⌊	**Pb**	**208**	**3.243**	ug/L	0.018	0	350	269471	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0412-15
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:03:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	35421	4	Standard
⌈>	**Sc**	**45**		ug/L			448237	497187	2	Standard
|	**Cr**	**52**	**1.002**	ug/L	0.021	2	8038	22430	1	Standard
⌊	**Cr**	**53**	**1.130**	ug/L	0.046	4	50	1815	5	Standard
⌈>	**Ge**	**72**		ug/L			28647	27665	0	KED
|	**Cu**	**63**	**0.293**	ug/L	0.005	1	51	1126	2	KED
|	**Cu**	**65**	**0.310**	ug/L	0.011	3	25	603	2	KED
|	**Zn**	**66**	**1.461**	ug/L	0.088	6	36	702	5	KED
|	**Zn**	**67**	**1.589**	ug/L	0.353	22	6	125	20	KED
⌊	**As**	**75**	**0.176**	ug/L	0.005	2	2	41	2	KED
	Y	**89**		ug/L			38752	41465	0	Standard
	Kr	**83**		ug/L			40	33	34	Standard
⌈>	**In-1**	**115**		ug/L			6124	5424	0	KED
|	**Cd**	**111**	**-0.014**	ug/L	0.008	61	4	0	173	KED
⌊	**Cd**	**114**	**0.006**	ug/L	0.006	102	3	6	47	KED
⌈>	**In**	**115**		ug/L			412702	422790	3	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	186	17	14	41	Standard
⌈>	**Tb**	**159**		ug/L			165777	173661	1	Standard
⌊	**Pb**	**208**	**0.005**	ug/L	0.000	8	350	790	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLO
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:08:08
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	26979	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	446006	2	Standard
|	**Cr**	**52**	**0.014**	ug/L	0.020	146	8038	8160	1	Standard
⌊	**Cr**	**53**	**0.005**	ug/L	0.008	143	50	57	16	Standard
⌈>	**Ge**	**72**		ug/L			28647	27330	2	KED
|	**Cu**	**63**	**-0.008**	ug/L	0.001	10	51	19	14	KED
|	**Cu**	**65**	**-0.008**	ug/L	0.002	27	25	8	44	KED
|	**Zn**	**66**	**-0.033**	ug/L	0.006	18	36	20	14	KED
|	**Zn**	**67**	**-0.004**	ug/L	0.041	1039	6	6	45	KED
⌊	**As**	**75**	**-0.003**	ug/L	0.005	169	2	1	62	KED
	Y	**89**		ug/L			38752	39183	1	Standard
	Kr	**83**		ug/L			40	40	37	Standard
⌈>	**In-1**	**115**		ug/L			6124	5504	2	KED
|	**Cd**	**111**	**-0.012**	ug/L	0.005	44	4	1	86	KED
⌊	**Cd**	**114**	**-0.003**	ug/L	0.004	123	3	1	100	KED
⌈>	**In**	**115**		ug/L			412702	427851	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	45	17	10	26	Standard
⌈>	**Tb**	**159**		ug/L			165777	170202	0	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	15	350	252	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVL
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:12:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	24982	6	Standard
⌈>	**Sc**	**45**		ug/L			448237	453215	3	Standard
|	**Cr**	**52**	**46.451**	ug/L	0.802	1	8038	579315	4	Standard
⌊	**Cr**	**53**	**46.660**	ug/L	1.299	2	50	66213	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	27759	1	KED
|	**Cu**	**63**	**50.342**	ug/L	0.608	1	51	185775	2	KED
|	**Cu**	**65**	**49.546**	ug/L	0.295	0	25	92845	0	KED
|	**Zn**	**66**	**51.625**	ug/L	0.166	0	36	23695	1	KED
|	**Zn**	**67**	**50.095**	ug/L	1.491	2	6	3749	2	KED
⌊	**As**	**75**	**49.557**	ug/L	0.556	1	2	11076	1	KED
	Y	**89**		ug/L			38752	39500	1	Standard
	Kr	**83**		ug/L			40	34	16	Standard
⌈>	**In-1**	**115**		ug/L			6124	5581	2	KED
|	**Cd**	**111**	**50.088**	ug/L	2.172	4	4	10108	2	KED
⌊	**Cd**	**114**	**50.711**	ug/L	2.220	4	3	26104	1	KED
⌈>	**In**	**115**		ug/L			412702	408762	1	Standard
⌊	**Ag**	**107**	**47.187**	ug/L	0.917	1	17	628146	3	Standard
⌈>	**Tb**	**159**		ug/L			165777	170367	0	Standard
⌊	**Pb**	**208**	**53.286**	ug/L	0.162	0	350	4384594	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBL
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:19:36
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	24546	5	Standard
⌈>	**Sc**	**45**		ug/L			448237	439611	0	Standard
|	**Cr**	**52**	**-0.027**	ug/L	0.003	10	8038	7559	0	Standard
⌊	**Cr**	**53**	**0.001**	ug/L	0.003	232	50	51	6	Standard
⌈>	**Ge**	**72**		ug/L			28647	27443	2	KED
|	**Cu**	**63**	**0.019**	ug/L	0.029	156	51	119	93	KED
|	**Cu**	**65**	**0.012**	ug/L	0.026	220	25	46	106	KED
|	**Zn**	**66**	**0.036**	ug/L	0.050	137	36	52	46	KED
|	**Zn**	**67**	**-0.023**	ug/L	0.051	227	6	5	78	KED
⌊	**As**	**75**	**0.028**	ug/L	0.028	101	2	8	75	KED
	Y	**89**		ug/L			38752	38324	0	Standard
	Kr	**83**		ug/L			40	34	39	Standard
⌈>	**In-1**	**115**		ug/L			6124	5670	1	KED
|	**Cd**	**111**	**-0.011**	ug/L	0.005	48	4	1	69	KED
⌊	**Cd**	**114**	**0.002**	ug/L	0.004	225	3	4	49	KED
⌈>	**In**	**115**		ug/L			412702	412049	0	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.000	8	17	31	3	Standard
⌈>	**Tb**	**159**		ug/L			165777	164866	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	67	350	402	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0442-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:23:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	40373	7	Standard
>	**Sc**	**45**		ug/L			448237	599787	2	Standard
	Cr	**52**	**0.551**	ug/L	0.022	3	8038	19717	3	Standard
	Cr	**53**	**0.814**	ug/L	0.039	4	50	1596	5	Standard
>	**Ge**	**72**		ug/L			28647	24092	0	KED
	Cu	**63**	**0.283**	ug/L	0.020	7	51	950	7	KED
	Cu	**65**	**0.276**	ug/L	0.023	8	25	469	7	KED
	Zn	**66**	**1.464**	ug/L	0.041	2	36	613	1	KED
	Zn	**67**	**2.906**	ug/L	0.225	7	6	194	6	KED
	As	**75**	**12.475**	ug/L	0.185	1	2	2421	0	KED
	Y	**89**		ug/L			38752	68837	1	Standard
	Kr	**83**		ug/L			40	35	8	Standard
>	**In-1**	**115**		ug/L			6124	4859	2	KED
	Cd	**111**	**0.005**	ug/L	0.013	259	4	4	53	KED
	Cd	**114**	**0.007**	ug/L	0.007	88	3	6	45	KED
>	**In**	**115**		ug/L			412702	328354	3	Standard
	Ag	**107**	**0.010**	ug/L	0.002	20	17	118	19	Standard
>	**Tb**	**159**		ug/L			165777	138260	3	Standard
	Pb	**208**	**0.026**	ug/L	0.001	3	350	2038	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0442-04
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:28:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	34260	5	Standard
⌈>	**Sc**	**45**		ug/L			448237	526058	2	Standard
|	**Cr**	**52**	**0.649**	ug/L	0.021	3	8038	18686	2	Standard
⌊	**Cr**	**53**	**0.860**	ug/L	0.041	4	50	1475	7	Standard
⌈>	**Ge**	**72**		ug/L			28647	24934	2	KED
|	**Cu**	**63**	**3.118**	ug/L	0.123	3	51	10370	2	KED
|	**Cu**	**65**	**3.010**	ug/L	0.078	2	25	5085	2	KED
|	**Zn**	**66**	**8.387**	ug/L	0.245	2	36	3483	1	KED
|	**Zn**	**67**	**8.270**	ug/L	0.453	5	6	561	5	KED
⌊	**As**	**75**	**1.589**	ug/L	0.068	4	2	320	2	KED
	Y	**89**		ug/L			38752	57215	1	Standard
	Kr	**83**		ug/L			40	37	25	Standard
⌈>	**In-1**	**115**		ug/L			6124	4993	2	KED
|	**Cd**	**111**	**0.004**	ug/L	0.011	258	4	4	48	KED
⌊	**Cd**	**114**	**0.009**	ug/L	0.013	140	3	7	80	KED
⌈>	**In**	**115**		ug/L			412702	389749	2	Standard
⌊	**Ag**	**107**	**0.011**	ug/L	0.001	7	17	161	4	Standard
⌈>	**Tb**	**159**		ug/L			165777	166152	1	Standard
⌊	**Pb**	**208**	**0.068**	ug/L	0.002	2	350	5824	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0442-05
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Friday, May 12, 2023 05:32:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	33105	5	Standard
>	**Sc**	**45**		ug/L			448237	607600	1	Standard
	Cr	**52**	**0.733**	ug/L	0.031	4	8038	22967	0	Standard
	Cr	**53**	**0.959**	ug/L	0.018	1	50	1891	0	Standard
>	**Ge**	**72**		ug/L			28647	21788	15	KED
	Cu	**63**	**0.125**	ug/L	0.022	17	51	395	4	KED
	Cu	**65**	**0.137**	ug/L	0.035	25	25	215	6	KED
	Zn	**66**	**1.022**	ug/L	0.258	25	36	386	6	KED
	Zn	**67**	**2.284**	ug/L	0.788	34	6	134	15	KED
	As	**75**	**21.548**	ug/L	2.498	11	2	3736	4	KED
	Y	**89**		ug/L			38752	64840	2	Standard
	Kr	**83**		ug/L			40	35	15	Standard
>	**In-1**	**115**		ug/L			6124	4804	2	KED
	Cd	**111**	**-0.008**	ug/L	0.005	70	4	1	50	KED
	Cd	**114**	**-0.005**	ug/L	0.002	45	3	0	135	KED
>	**In**	**115**		ug/L			412702	373853	1	Standard
	Ag	**107**	**0.005**	ug/L	0.001	14	17	74	11	Standard
>	**Tb**	**159**		ug/L			165777	159311	2	Standard
	Pb	**208**	**0.019**	ug/L	0.001	5	350	1763	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0442-06
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:36:56
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	38801	5	Standard
> Sc	45		ug/L			448237	625527	2	Standard
Cr	52	0.747	ug/L	0.006	0	8038	23900	2	Standard
Cr	53	1.077	ug/L	0.007	0	50	2178	2	Standard
> Ge	72		ug/L			28647	23769	0	KED
Cu	63	0.058	ug/L	0.006	9	51	226	7	KED
Cu	65	0.058	ug/L	0.007	12	25	113	10	KED
Zn	66	0.539	ug/L	0.030	5	36	241	4	KED
Zn	67	2.082	ug/L	0.155	7	6	139	7	KED
As	75	5.811	ug/L	0.095	1	2	1114	1	KED
Y	89		ug/L			38752	67879	0	Standard
Kr	83		ug/L			40	35	17	Standard
> In-1	115		ug/L			6124	4815	3	KED
Cd	111	0.005	ug/L	0.009	175	4	4	35	KED
Cd	114	-0.002	ug/L	0.005	305	3	2	101	KED
> In	115		ug/L			412702	358808	1	Standard
Ag	107	0.004	ug/L	0.000	10	17	57	8	Standard
> Tb	159		ug/L			165777	152290	1	Standard
Pb	208	0.009	ug/L	0.000	2	350	1012	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0598-04
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Friday, May 12, 2023 05:42:41
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	17761	6	Standard
> Sc	45		ug/L			448237	231078	5	Standard
Cr	52	0.723	ug/L	0.026	3	8038	8673	3	Standard
Cr	53	52.191	ug/L	0.345	0	50	37759	4	Standard
> Ge	72		ug/L			28647	8352	0	KED
Cu	63	1.544	ug/L	0.059	3	51	1729	4	KED
Cu	65	1.599	ug/L	0.122	7	25	908	6	KED
Zn	66	8.637	ug/L	0.767	8	36	1201	7	KED
Zn	67	10.530	ug/L	1.169	11	6	238	10	KED
As	75	1.235	ug/L	0.043	3	2	83	4	KED
Y	89		ug/L			38752	19425	4	Standard
Kr	83		ug/L			40	1582	3	Standard
> In-1	115		ug/L			6124	1935	1	KED
Cd	111	0.108	ug/L	0.063	58	4	8	50	KED
Cd	114	0.056	ug/L	0.012	21	3	11	17	KED
> In	115		ug/L			412702	116852	4	Standard
Ag	107	0.011	ug/L	0.000	3	17	48	6	Standard
> Tb	159		ug/L			165777	51852	3	Standard
Pb	208	0.021	ug/L	0.000	1	350	647	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0598-06
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:47:03
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	30698	5	Standard
> Sc	45		ug/L			448237	363422	3	Standard
Cr	52	0.375	ug/L	0.020	5	8038	10218	3	Standard
Cr	53	22.456	ug/L	0.436	1	50	25575	3	Standard
> Ge	72		ug/L			28647	15417	1	KED
Cu	63	0.551	ug/L	0.018	3	51	1156	3	KED
Cu	65	0.543	ug/L	0.028	5	25	578	4	KED
Zn	66	2.326	ug/L	0.100	4	36	612	5	KED
Zn	67	5.124	ug/L	0.163	3	6	216	4	KED
As	75	1.788	ug/L	0.044	2	2	223	3	KED
Y	89		ug/L			38752	26993	4	Standard
Kr	83		ug/L			40	332	6	Standard
> In-1	115		ug/L			6124	3207	1	KED
Cd	111	0.058	ug/L	0.013	22	4	8	16	KED
Cd	114	0.042	ug/L	0.010	23	3	14	20	KED
> In	115		ug/L			412702	197126	2	Standard
Ag	107	0.003	ug/L	0.002	58	17	24	38	Standard
> Tb	159		ug/L			165777	90869	2	Standard
Pb	208	0.018	ug/L	0.000	1	350	984	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0598-08
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:51:24
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	59809	4	Standard
> Sc	45		ug/L			448237	608571	1	Standard
Cr	52	0.829	ug/L	0.027	3	8038	24593	1	Standard
Cr	53	5.633	ug/L	0.074	1	50	10796	2	Standard
> Ge	72		ug/L			28647	31934	0	KED
Cu	63	3.272	ug/L	0.072	2	51	13944	1	KED
Cu	65	3.165	ug/L	0.081	2	25	6849	2	KED
Zn	66	0.823	ug/L	0.007	0	36	474	0	KED
Zn	67	0.803	ug/L	0.073	9	6	76	7	KED
As	75	1.529	ug/L	0.088	5	2	395	5	KED
Y	89		ug/L			38752	57187	1	Standard
Kr	83		ug/L			40	43	11	Standard
> In-1	115		ug/L			6124	6343	2	KED
Cd	111	-0.001	ug/L	0.012	1465	4	4	70	KED
Cd	114	-0.001	ug/L	0.005	539	3	3	98	KED
> In	115		ug/L			412702	392034	3	Standard
Ag	107	0.001	ug/L	0.001	70	17	25	22	Standard
> Tb	159		ug/L			165777	178669	0	Standard
Pb	208	0.014	ug/L	0.000	3	350	1605	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0598-10
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 05:55:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26244	58330	4	Standard
>	Sc	45		ug/L			448237	572775	1	Standard
	Cr	52	0.948	ug/L	0.041	4	8038	24998	1	Standard
	Cr	53	4.323	ug/L	0.041	0	50	7812	1	Standard
>	Ge	72		ug/L			28647	30641	1	KED
	Cu	63	3.485	ug/L	0.041	1	51	14244	0	KED
	Cu	65	3.457	ug/L	0.077	2	25	7174	0	KED
	Zn	66	1.100	ug/L	0.065	5	36	595	5	KED
	Zn	67	0.972	ug/L	0.110	11	6	87	9	KED
	As	75	1.541	ug/L	0.122	7	2	382	6	KED
	Y	89		ug/L			38752	53861	2	Standard
	Kr	83		ug/L			40	51	25	Standard
>	In-1	115		ug/L			6124	6056	1	KED
	Cd	111	-0.006	ug/L	0.011	196	4	2	88	KED
	Cd	114	-0.002	ug/L	0.005	286	3	2	110	KED
>	In	115		ug/L			412702	378024	1	Standard
	Ag	107	0.002	ug/L	0.001	49	17	37	28	Standard
>	Tb	159		ug/L			165777	174038	1	Standard
	Pb	208	0.022	ug/L	0.001	4	350	2214	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0598-12
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:00:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	46185	4	Standard
⌈>	**Sc**	**45**		ug/L			448237	544548	1	Standard
|	**Cr**	**52**	**0.246**	ug/L	0.027	10	8038	13403	2	Standard
⌊	**Cr**	**53**	**0.968**	ug/L	0.041	4	50	1710	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	33646	1	KED
|	**Cu**	**63**	**0.532**	ug/L	0.002	0	51	2440	1	KED
|	**Cu**	**65**	**0.517**	ug/L	0.033	6	25	1203	7	KED
|	**Zn**	**66**	**0.649**	ug/L	0.047	7	36	403	5	KED
|	**Zn**	**67**	**0.792**	ug/L	0.115	14	6	80	13	KED
⌊	**As**	**75**	**0.001**	ug/L	0.003	384	2	3	22	KED
	Y	**89**		ug/L			38752	38286	3	Standard
	Kr	**83**		ug/L			40	50	30	Standard
⌈>	**In-1**	**115**		ug/L			6124	6661	2	KED
|	**Cd**	**111**	**-0.011**	ug/L	0.004	38	4	1	50	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.005	4473	3	4	70	KED
⌈>	**In**	**115**		ug/L			412702	424435	1	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	66	17	15	12	Standard
⌈>	**Tb**	**159**		ug/L			165777	183413	1	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.001	7	350	1083	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLP
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:04:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	31558	2	Standard
⌈>	**Sc**	**45**		ug/L			448237	504623	2	Standard
|	**Cr**	**52**	**0.042**	ug/L	0.026	61	8038	9628	4	Standard
⌊	**Cr**	**53**	**0.566**	ug/L	0.015	2	50	950	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	32567	3	KED
|	**Cu**	**63**	**-0.006**	ug/L	0.001	11	51	33	6	KED
|	**Cu**	**65**	**-0.007**	ug/L	0.003	43	25	13	51	KED
|	**Zn**	**66**	**-0.011**	ug/L	0.005	47	36	36	10	KED
|	**Zn**	**67**	**-0.040**	ug/L	0.032	79	6	4	65	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.006	8494	2	2	50	KED
	Y	**89**		ug/L			38752	36421	2	Standard
	Kr	**83**		ug/L			40	50	28	Standard
⌈>	**In-1**	**115**		ug/L			6124	6465	1	KED
|	**Cd**	**111**	**0.002**	ug/L	0.008	469	4	4	40	KED
⌊	**Cd**	**114**	**-0.005**	ug/L	0.002	39	3	1	94	KED
⌈>	**In**	**115**		ug/L			412702	404097	3	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.000	250	17	14	41	Standard
⌈>	**Tb**	**159**		ug/L			165777	173806	2	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	62	350	307	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVM
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:09:09
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	28089	4	Standard
⌈>	**Sc**	**45**		ug/L			448237	500238	2	Standard
|	**Cr**	**52**	**46.342**	ug/L	1.666	3	8038	637635	2	Standard
⌊	**Cr**	**53**	**46.258**	ug/L	1.384	2	50	72443	1	Standard
⌈>	**Ge**	**72**		ug/L			28647	31798	1	KED
|	**Cu**	**63**	**49.989**	ug/L	0.628	1	51	211286	0	KED
|	**Cu**	**65**	**48.835**	ug/L	0.757	1	25	104828	1	KED
|	**Zn**	**66**	**50.384**	ug/L	0.727	1	36	26491	1	KED
|	**Zn**	**67**	**50.846**	ug/L	1.716	3	6	4360	2	KED
⌊	**As**	**75**	**49.456**	ug/L	0.873	1	2	12661	0	KED
	Y	**89**		ug/L			38752	36596	0	Standard
	Kr	**83**		ug/L			40	48	17	Standard
⌈>	**In-1**	**115**		ug/L			6124	6257	4	KED
|	**Cd**	**111**	**48.679**	ug/L	2.211	4	4	11005	0	KED
⌊	**Cd**	**114**	**50.875**	ug/L	1.485	2	3	29353	1	KED
⌈>	**In**	**115**		ug/L			412702	394200	1	Standard
⌊	**Ag**	**107**	**48.362**	ug/L	1.578	3	17	620685	3	Standard
⌈>	**Tb**	**159**		ug/L			165777	177982	1	Standard
⌊	**Pb**	**208**	**50.250**	ug/L	0.383	0	350	4319833	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBM
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:16:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	26594	2	Standard
⌈>	**Sc**	**45**		ug/L			448237	488958	3	Standard
|	**Cr**	**52**	**-0.022**	ug/L	0.004	18	8038	8484	4	Standard
⌊	**Cr**	**53**	**0.321**	ug/L	0.023	7	50	546	9	Standard
⌈>	**Ge**	**72**		ug/L			28647	31070	2	KED
|	**Cu**	**63**	**-0.007**	ug/L	0.004	62	51	27	64	KED
|	**Cu**	**65**	**-0.007**	ug/L	0.004	59	25	12	67	KED
|	**Zn**	**66**	**-0.017**	ug/L	0.001	5	36	31	3	KED
|	**Zn**	**67**	**0.024**	ug/L	0.024	103	6	9	20	KED
⌊	**As**	**75**	**0.007**	ug/L	0.003	34	2	4	11	KED
	Y	**89**		ug/L			38752	37149	2	Standard
	Kr	**83**		ug/L			40	43	15	Standard
⌈>	**In-1**	**115**		ug/L			6124	6245	1	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.007	207	4	3	41	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.004	412	3	4	50	KED
⌈>	**In**	**115**		ug/L			412702	405028	1	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	23	17	45	15	Standard
⌈>	**Tb**	**159**		ug/L			165777	173523	1	Standard
⌊	**Pb**	**208**	**0.001**	ug/L	0.000	7	350	428	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0514-02
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:20:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	42525	2	Standard
⌈>	**Sc**	**45**		ug/L			448237	694230	1	Standard
|	**Cr**	**52**	**0.236**	ug/L	0.020	8	8038	16904	2	Standard
⌊	**Cr**	**53**	**0.703**	ug/L	0.020	2	50	1605	2	Standard
⌈>	**Ge**	**72**		ug/L			28647	28128	1	KED
|	**Cu**	**63**	**0.138**	ug/L	0.007	4	51	566	5	KED
|	**Cu**	**65**	**0.147**	ug/L	0.014	9	25	304	8	KED
|	**Zn**	**66**	**1.017**	ug/L	0.040	3	36	508	4	KED
|	**Zn**	**67**	**1.370**	ug/L	0.197	14	6	110	11	KED
⌊	**As**	**75**	**2.219**	ug/L	0.058	2	2	504	2	KED
	Y	**89**		ug/L			38752	47039	3	Standard
	Kr	**83**		ug/L			40	53	30	Standard
⌈>	**In-1**	**115**		ug/L			6124	5687	4	KED
|	**Cd**	**111**	**0.017**	ug/L	0.012	70	4	7	32	KED
⌊	**Cd**	**114**	**0.015**	ug/L	0.010	62	3	11	43	KED
⌈>	**In**	**115**		ug/L			412702	371523	1	Standard
⌊	**Ag**	**107**	**0.004**	ug/L	0.002	47	17	64	35	Standard
⌈>	**Tb**	**159**		ug/L			165777	163663	1	Standard
⌊	**Pb**	**208**	**0.071**	ug/L	0.003	3	350	5976	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0514-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:24:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	13		ug/L			26244	49735	5	Standard
>	Sc	45		ug/L			448237	570785	3	Standard
	Cr	52	0.511	ug/L	0.020	3	8038	18141	1	Standard
	Cr	53	0.873	ug/L	0.037	4	50	1624	5	Standard
>	Ge	72		ug/L			28647	29362	0	KED
	Cu	63	5.258	ug/L	0.024	0	51	20569	0	KED
	Cu	65	5.291	ug/L	0.056	1	25	10511	1	KED
	Zn	66	11.958	ug/L	0.123	1	36	5834	1	KED
	Zn	67	11.733	ug/L	0.504	4	6	934	4	KED
	As	75	1.838	ug/L	0.059	3	2	437	3	KED
	Y	89		ug/L			38752	48599	3	Standard
	Kr	83		ug/L			40	41	23	Standard
>	In-1	115		ug/L			6124	5717	3	KED
	Cd	111	0.126	ug/L	0.016	12	4	29	10	KED
	Cd	114	0.101	ug/L	0.030	29	3	56	26	KED
>	In	115		ug/L			412702	403369	0	Standard
	Ag	107	0.016	ug/L	0.003	21	17	224	20	Standard
>	Tb	159		ug/L			165777	178062	0	Standard
	Pb	208	0.305	ug/L	0.006	1	350	26620	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0514-04
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:29:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	41883	1	Standard
>	**Sc**	**45**		ug/L			448237	685666	2	Standard
	Cr	**52**	**0.283**	ug/L	0.016	5	8038	17558	2	Standard
	Cr	**53**	**0.708**	ug/L	0.006	0	50	1596	2	Standard
>	**Ge**	**72**		ug/L			28647	26983	1	KED
	Cu	**63**	**0.137**	ug/L	0.006	4	51	539	5	KED
	Cu	**65**	**0.142**	ug/L	0.007	4	25	282	5	KED
	Zn	**66**	**1.440**	ug/L	0.092	6	36	676	6	KED
	Zn	**67**	**2.462**	ug/L	0.159	6	6	185	5	KED
	As	**75**	**1.745**	ug/L	0.086	4	2	381	5	KED
	Y	**89**		ug/L			38752	46722	1	Standard
	Kr	**83**		ug/L			40	34	22	Standard
>	**In-1**	**115**		ug/L			6124	5415	3	KED
	Cd	**111**	**-0.004**	ug/L	0.010	231	4	2	66	KED
	Cd	**114**	**0.008**	ug/L	0.004	45	3	7	28	KED
>	**In**	**115**		ug/L			412702	366298	3	Standard
	Ag	**107**	**0.002**	ug/L	0.000	23	17	34	15	Standard
>	**Tb**	**159**		ug/L			165777	159318	1	Standard
	Pb	**208**	**0.019**	ug/L	0.001	5	350	1767	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0514-06
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:33:35
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	47810	6	Standard
⌈>	**Sc**	**45**		ug/L			448237	543763	2	Standard
|	**Cr**	**52**	**0.830**	ug/L	0.029	3	8038	21986	1	Standard
⌊	**Cr**	**53**	**1.101**	ug/L	0.010	0	50	1935	3	Standard
⌈>	**Ge**	**72**		ug/L			28647	26460	0	KED
|	**Cu**	**63**	**2.170**	ug/L	0.030	1	51	7677	1	KED
|	**Cu**	**65**	**2.101**	ug/L	0.035	1	25	3775	1	KED
|	**Zn**	**66**	**2.952**	ug/L	0.169	5	36	1323	5	KED
|	**Zn**	**67**	**3.421**	ug/L	0.336	9	6	250	9	KED
⌊	**As**	**75**	**3.319**	ug/L	0.074	2	2	709	1	KED
	Y	**89**		ug/L			38752	45453	1	Standard
	Kr	**83**		ug/L			40	45	17	Standard
⌈>	**In-1**	**115**		ug/L			6124	5459	3	KED
|	**Cd**	**111**	**0.041**	ug/L	0.006	15	4	11	9	KED
⌊	**Cd**	**114**	**0.061**	ug/L	0.023	37	3	34	30	KED
⌈>	**In**	**115**		ug/L			412702	373404	1	Standard
⌊	**Ag**	**107**	**0.011**	ug/L	0.002	16	17	153	14	Standard
⌈>	**Tb**	**159**		ug/L			165777	163816	0	Standard
⌊	**Pb**	**208**	**0.135**	ug/L	0.004	3	350	11014	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLQ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:37:58
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	27742	3	Standard
⌈>	**Sc**	**45**		ug/L			448237	457309	2	Standard
|	**Cr**	**52**	**-0.042**	ug/L	0.020	48	8038	7672	2	Standard
⌊	**Cr**	**53**	**0.192**	ug/L	0.011	5	50	326	6	Standard
⌈>	**Ge**	**72**		ug/L			28647	28109	0	KED
|	**Cu**	**63**	**-0.007**	ug/L	0.001	15	51	24	16	KED
|	**Cu**	**65**	**-0.002**	ug/L	0.001	60	25	20	14	KED
|	**Zn**	**66**	**-0.045**	ug/L	0.011	24	36	15	33	KED
|	**Zn**	**67**	**-0.049**	ug/L	0.014	29	6	3	34	KED
⌊	**As**	**75**	**-0.002**	ug/L	0.004	227	2	2	48	KED
	Y	**89**		ug/L			38752	36044	2	Standard
	Kr	**83**		ug/L			40	33	13	Standard
⌈>	**In-1**	**115**		ug/L			6124	5782	2	KED
|	**Cd**	**111**	**-0.014**	ug/L	0.004	31	4	0	100	KED
⌊	**Cd**	**114**	**-0.002**	ug/L	0.002	92	3	2	46	KED
⌈>	**In**	**115**		ug/L			412702	400011	1	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	79	17	8	68	Standard
⌈>	**Tb**	**159**		ug/L			165777	168328	1	Standard
⌊	**Pb**	**208**	**-0.002**	ug/L	0.000	1	350	154	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0598-02
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Friday, May 12, 2023 06:42:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	17383	7	Standard
> Sc	45		ug/L			448237	262738	5	Standard
Cr	52	1.775	ug/L	0.041	2	8038	17357	4	Standard
Cr	53	28.313	ug/L	0.623	2	50	23306	5	Standard
> Ge	72		ug/L			28647	9849	3	KED
Cu	63	1.282	ug/L	0.041	3	51	1695	4	KED
Cu	65	1.311	ug/L	0.020	1	25	880	3	KED
Zn	66	1.433	ug/L	0.203	14	36	245	10	KED
Zn	67	2.135	ug/L	0.094	4	6	59	6	KED
As	75	0.799	ug/L	0.049	6	2	64	9	KED
Y	89		ug/L			38752	21862	3	Standard
Kr	83		ug/L			40	427	11	Standard
> In-1	115		ug/L			6124	2264	3	KED
Cd	111	0.047	ug/L	0.012	24	4	5	20	KED
Cd	114	0.032	ug/L	0.011	33	3	7	26	KED
> In	115		ug/L			412702	153829	2	Standard
Ag	107	0.009	ug/L	0.001	7	17	50	5	Standard
> Tb	159		ug/L			165777	69804	1	Standard
Pb	208	0.022	ug/L	0.002	7	350	878	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-DUP1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:46:41

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	19225	8	Standard
> Sc	45		ug/L			448237	275105	4	Standard
Cr	52	1.762	ug/L	0.046	2	8038	18085	5	Standard
Cr	53	26.406	ug/L	0.418	1	50	22755	3	Standard
> Ge	72		ug/L			28647	10607	1	KED
Cu	63	1.177	ug/L	0.025	2	51	1678	2	KED
Cu	65	1.181	ug/L	0.074	6	25	855	7	KED
Zn	66	1.257	ug/L	0.109	8	36	233	7	KED
Zn	67	2.666	ug/L	0.397	14	6	78	14	KED
As	75	0.734	ug/L	0.064	8	2	63	9	KED
Y	89		ug/L			38752	21868	3	Standard
Kr	83		ug/L			40	403	11	Standard
> In-1	115		ug/L			6124	2247	3	KED
Cd	111	0.021	ug/L	0.029	137	4	3	69	KED
Cd	114	0.031	ug/L	0.036	115	3	8	98	KED
> In	115		ug/L			412702	153606	3	Standard
Ag	107	0.008	ug/L	0.002	22	17	47	17	Standard
> Tb	159		ug/L			165777	70087	1	Standard
Pb	208	0.022	ug/L	0.001	4	350	903	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-MS1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:50:57

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	19786	7	Standard
> Sc	45		ug/L			448237	271230	3	Standard
Cr	52	22.694	ug/L	0.111	0	8038	171840	3	Standard
Cr	53	48.152	ug/L	0.772	1	50	40887	1	Standard
> Ge	72		ug/L			28647	10203	0	KED
Cu	63	23.880	ug/L	0.347	1	51	32394	0	KED
Cu	65	23.525	ug/L	0.285	1	25	16209	1	KED
Zn	66	54.684	ug/L	1.607	2	36	9223	2	KED
Zn	67	52.527	ug/L	1.653	3	6	1445	2	KED
As	75	22.030	ug/L	0.207	0	2	1810	0	KED
Y	89		ug/L			38752	21673	2	Standard
Kr	83		ug/L			40	396	7	Standard
> In-1	115		ug/L			6124	2158	4	KED
Cd	111	18.081	ug/L	0.659	3	4	1411	0	KED
Cd	114	18.159	ug/L	1.307	7	3	3610	2	KED
> In	115		ug/L			412702	146661	2	Standard
Ag	107	19.086	ug/L	0.043	0	17	91147	2	Standard
> Tb	159		ug/L			165777	68582	0	Standard
Pb	208	18.976	ug/L	0.354	1	350	628618	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0119-MSD1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 06:55:42

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	18283	7	Standard
> Sc	45		ug/L			448237	267654	4	Standard
Cr	52	22.434	ug/L	0.131	0	8038	167669	3	Standard
Cr	53	47.760	ug/L	1.118	2	50	40059	6	Standard
> Ge	72		ug/L			28647	9434	10	KED
Cu	63	25.810	ug/L	2.584	10	51	32147	1	KED
Cu	65	25.541	ug/L	2.840	11	25	16143	1	KED
Zn	66	58.973	ug/L	6.566	11	36	9126	2	KED
Zn	67	59.017	ug/L	7.534	12	6	1487	2	KED
As	75	24.201	ug/L	2.608	10	2	1824	0	KED
Y	89		ug/L			38752	21695	2	Standard
Kr	83		ug/L			40	455	15	Standard
> In-1	115		ug/L			6124	2156	4	KED
Cd	111	17.767	ug/L	1.089	6	4	1384	3	KED
Cd	114	18.136	ug/L	1.419	7	3	3601	3	KED
> In	115		ug/L			412702	143050	1	Standard
Ag	107	19.186	ug/L	0.138	0	17	89372	2	Standard
> Tb	159		ug/L			165777	67422	1	Standard
Pb	208	19.372	ug/L	0.410	2	350	630859	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLR
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:00:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			26244	31830	1	Standard
> Sc	45		ug/L			448237	567342	1	Standard
Cr	52	0.053	ug/L	0.016	29	8038	10997	3	Standard
Cr	53	0.841	ug/L	0.029	3	50	1557	4	Standard
> Ge	72		ug/L			28647	36154	0	KED
Cu	63	-0.003	ug/L	0.001	21	51	51	6	KED
Cu	65	-0.005	ug/L	0.001	13	25	19	10	KED
Zn	66	-0.003	ug/L	0.012	356	36	44	16	KED
Zn	67	-0.013	ug/L	0.051	408	6	7	66	KED
As	75	0.000	ug/L	0.009	1846	2	3	75	KED
Y	89		ug/L			38752	37108	4	Standard
Kr	83		ug/L			40	24	7	Standard
> In-1	115		ug/L			6124	6953	2	KED
Cd	111	-0.001	ug/L	0.009	836	4	4	53	KED
Cd	114	0.000	ug/L	0.002	3619	3	4	26	KED
> In	115		ug/L			412702	402007	1	Standard
Ag	107	0.001	ug/L	0.000	28	17	25	11	Standard
> Tb	159		ug/L			165777	180143	0	Standard
Pb	208	0.004	ug/L	0.001	16	350	743	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVN
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:04:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	25754	4	Standard
⌈>	**Sc**	**45**		ug/L			448237	474757	2	Standard
|	**Cr**	**52**	**43.291**	ug/L	1.489	3	8038	565734	1	Standard
⌊	**Cr**	**53**	**42.910**	ug/L	1.575	3	50	63770	1	Standard
⌈>	**Ge**	**72**		ug/L			28647	30689	1	KED
|	**Cu**	**63**	**49.123**	ug/L	1.272	2	51	200344	1	KED
|	**Cu**	**65**	**49.656**	ug/L	1.766	3	25	102847	2	KED
|	**Zn**	**66**	**50.650**	ug/L	1.285	2	36	25703	2	KED
|	**Zn**	**67**	**49.862**	ug/L	0.427	0	6	4127	2	KED
⌊	**As**	**75**	**50.245**	ug/L	1.001	1	2	12413	0	KED
	Y	**89**		ug/L			38752	35167	1	Standard
	Kr	**83**		ug/L			40	36	24	Standard
⌈>	**In-1**	**115**		ug/L			6124	5715	1	KED
|	**Cd**	**111**	**51.094**	ug/L	0.347	0	4	10567	2	KED
⌊	**Cd**	**114**	**52.390**	ug/L	0.384	0	3	27634	1	KED
⌈>	**In**	**115**		ug/L			412702	369882	1	Standard
⌊	**Ag**	**107**	**49.464**	ug/L	1.593	3	17	595465	1	Standard
⌈>	**Tb**	**159**		ug/L			165777	164981	1	Standard
⌊	**Pb**	**208**	**51.634**	ug/L	0.630	1	350	4113891	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBN
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:11:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			26244	23764	2	Standard
⌈>	**Sc**	**45**		ug/L			448237	443773	0	Standard
|	**Cr**	**52**	**-0.062**	ug/L	0.026	41	8038	7214	3	Standard
⌊	**Cr**	**53**	**0.364**	ug/L	0.031	8	50	554	7	Standard
⌈>	**Ge**	**72**		ug/L			28647	28900	2	KED
|	**Cu**	**63**	**-0.004**	ug/L	0.003	71	51	36	32	KED
|	**Cu**	**65**	**-0.006**	ug/L	0.001	16	25	13	15	KED
|	**Zn**	**66**	**-0.024**	ug/L	0.036	153	36	26	67	KED
|	**Zn**	**67**	**-0.009**	ug/L	0.016	184	6	6	17	KED
⌊	**As**	**75**	**0.009**	ug/L	0.003	36	2	4	15	KED
	Y	**89**		ug/L			38752	34249	3	Standard
	Kr	**83**		ug/L			40	29	24	Standard
⌈>	**In-1**	**115**		ug/L			6124	5750	0	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.009	511	4	3	56	KED
⌊	**Cd**	**114**	**0.001**	ug/L	0.007	1391	3	3	102	KED
⌈>	**In**	**115**		ug/L			412702	368942	2	Standard
⌊	**Ag**	**107**	**0.002**	ug/L	0.001	58	17	40	37	Standard
⌈>	**Tb**	**159**		ug/L			165777	159010	0	Standard
⌊	**Pb**	**208**	**0.000**	ug/L	0.000	89	350	368	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CAL1
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:15:54
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L				23953	4	Standard
⎡>	**Sc**	**45**		ug/L				443281	1	Standard
⎢	**Cr**	**52**		ug/L				7163	2	Standard
⎣	**Cr**	**53**		ug/L				487	7	Standard
⎡>	**Ge**	**72**		ug/L				28284	0	KED
⎢	**Cu**	**63**		ug/L				33	17	KED
⎢	**Cu**	**65**		ug/L				11	60	KED
⎢	**Zn**	**66**		ug/L				33	8	KED
⎢	**Zn**	**67**		ug/L				6	62	KED
⎣	**As**	**75**		ug/L				2	0	KED
	Y	**89**		ug/L				34497	2	Standard
	Kr	**83**		ug/L				33	8	Standard
⎡>	**In-1**	**115**		ug/L				5536	3	KED
⎢	**Cd**	**111**		ug/L				4	107	KED
⎣	**Cd**	**114**		ug/L				6	129	KED
⎡>	**In**	**115**		ug/L				370942	2	Standard
⎣	**Ag**	**107**		ug/L				18	51	Standard
⎡>	**Tb**	**159**		ug/L				161944	3	Standard
⎣	**Pb**	**208**		ug/L				380	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVO
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:20:16
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	23823	6	Standard
⌈>	**Sc**	**45**		ug/L			443281	457972	4	Standard
|	**Cr**	**52**	**43.059**	ug/L	0.364	0	7163	542248	3	Standard
⌊	**Cr**	**53**	**42.527**	ug/L	0.121	0	487	61452	4	Standard
⌈>	**Ge**	**72**		ug/L			28284	28052	2	KED
|	**Cu**	**63**	**49.368**	ug/L	1.094	2	33	184033	2	KED
|	**Cu**	**65**	**47.907**	ug/L	1.398	2	11	90672	0	KED
|	**Zn**	**66**	**49.389**	ug/L	0.984	1	33	22904	2	KED
|	**Zn**	**67**	**49.684**	ug/L	1.707	3	6	3756	1	KED
⌊	**As**	**75**	**49.256**	ug/L	1.063	2	2	11121	0	KED
	Y	**89**		ug/L			34497	36275	2	Standard
	Kr	**83**		ug/L			33	35	34	Standard
⌈>	**In-1**	**115**		ug/L			5536	5491	2	KED
|	**Cd**	**111**	**49.085**	ug/L	1.079	2	4	9749	1	KED
⌊	**Cd**	**114**	**50.502**	ug/L	0.827	1	6	25592	1	KED
⌈>	**In**	**115**		ug/L			370942	367831	2	Standard
⌊	**Ag**	**107**	**49.011**	ug/L	1.052	2	18	586941	2	Standard
⌈>	**Tb**	**159**		ug/L			161944	163763	1	Standard
⌊	**Pb**	**208**	**51.969**	ug/L	0.843	1	380	4110823	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBO
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:27:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	23985	3	Standard
⌈>	**Sc**	**45**		ug/L			443281	435790	1	Standard
|	**Cr**	**52**	**-0.005**	ug/L	0.004	87	7163	6989	2	Standard
⌊	**Cr**	**53**	**-0.046**	ug/L	0.015	31	487	416	5	Standard
⌈>	**Ge**	**72**		ug/L			28284	28183	2	KED
|	**Cu**	**63**	**0.001**	ug/L	0.002	135	33	37	17	KED
|	**Cu**	**65**	**0.001**	ug/L	0.005	440	11	13	65	KED
|	**Zn**	**66**	**-0.005**	ug/L	0.007	128	33	31	12	KED
|	**Zn**	**67**	**0.066**	ug/L	0.087	133	6	11	60	KED
⌊	**As**	**75**	**0.006**	ug/L	0.008	120	2	3	45	KED
	Y	**89**		ug/L			34497	34563	2	Standard
	Kr	**83**		ug/L			33	38	18	Standard
⌈>	**In-1**	**115**		ug/L			5536	5562	2	KED
|	**Cd**	**111**	**-0.006**	ug/L	0.008	121	4	3	45	KED
⌊	**Cd**	**114**	**-0.010**	ug/L	0.004	38	6	1	105	KED
⌈>	**In**	**115**		ug/L			370942	361618	3	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	57	18	34	28	Standard
⌈>	**Tb**	**159**		ug/L			161944	156559	2	Standard
⌊	**Pb**	**208**	**-0.000**	ug/L	0.000	322	380	358	6	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0537-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 12, 2023 07:31:44
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	32368	2	Standard
⌈>	**Sc**	**45**		ug/L			443281	546623	2	Standard
|	**Cr**	**52**	**0.360**	ug/L	0.012	3	7163	14164	2	Standard
⌊	**Cr**	**53**	**0.388**	ug/L	0.008	2	487	1265	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	26609	2	KED
|	**Cu**	**63**	**0.390**	ug/L	0.026	6	33	1410	7	KED
|	**Cu**	**65**	**0.375**	ug/L	0.008	2	11	683	1	KED
|	**Zn**	**66**	**4.759**	ug/L	0.218	4	33	2121	2	KED
|	**Zn**	**67**	**5.219**	ug/L	0.327	6	6	379	5	KED
⌊	**As**	**75**	**0.789**	ug/L	0.033	4	2	171	4	KED
	Y	**89**		ug/L			34497	42005	1	Standard
	Kr	**83**		ug/L			33	32	21	Standard
⌈>	**In-1**	**115**		ug/L			5536	5208	2	KED
|	**Cd**	**111**	**0.033**	ug/L	0.036	106	4	10	63	KED
⌊	**Cd**	**114**	**0.041**	ug/L	0.052	126	6	26	94	KED
⌈>	**In**	**115**		ug/L			370942	353505	0	Standard
⌊	**Ag**	**107**	**0.005**	ug/L	0.001	15	18	74	12	Standard
⌈>	**Tb**	**159**		ug/L			161944	154792	1	Standard
⌊	**Pb**	**208**	**0.225**	ug/L	0.004	1	380	17208	0	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0537-03
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 12, 2023 07:36:05
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	34681	2	Standard
⌈>	**Sc**	**45**		ug/L			443281	547793	2	Standard
|	**Cr**	**52**	**0.346**	ug/L	0.018	5	7163	13991	1	Standard
⌊	**Cr**	**53**	**0.376**	ug/L	0.020	5	487	1246	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	26586	0	KED
|	**Cu**	**63**	**0.085**	ug/L	0.008	9	33	332	7	KED
|	**Cu**	**65**	**0.093**	ug/L	0.008	8	11	177	7	KED
|	**Zn**	**66**	**0.616**	ug/L	0.002	0	33	302	0	KED
|	**Zn**	**67**	**0.972**	ug/L	0.185	19	6	75	17	KED
⌊	**As**	**75**	**40.903**	ug/L	0.639	1	2	8755	0	KED
	Y	**89**		ug/L			34497	56833	3	Standard
	Kr	**83**		ug/L			33	43	31	Standard
⌈>	**In-1**	**115**		ug/L			5536	5061	1	KED
|	**Cd**	**111**	**0.023**	ug/L	0.047	204	4	8	103	KED
⌊	**Cd**	**114**	**0.016**	ug/L	0.038	236	6	13	128	KED
⌈>	**In**	**115**		ug/L			370942	354300	2	Standard
⌊	**Ag**	**107**	**0.006**	ug/L	0.003	61	18	81	49	Standard
⌈>	**Tb**	**159**		ug/L			161944	154731	1	Standard
⌊	**Pb**	**208**	**0.019**	ug/L	0.004	22	380	1782	16	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0537-04
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:40:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			23953	38975	5	Standard
> Sc	45		ug/L			443281	600053	3	Standard
Cr	52	0.158	ug/L	0.011	7	7163	12262	2	Standard
Cr	53	0.223	ug/L	0.010	4	487	1079	3	Standard
> Ge	72		ug/L			28284	25951	1	KED
Cu	63	0.081	ug/L	0.011	13	33	309	12	KED
Cu	65	0.076	ug/L	0.015	19	11	143	19	KED
Zn	66	0.845	ug/L	0.080	9	33	393	9	KED
Zn	67	1.434	ug/L	0.338	23	6	106	22	KED
As	75	1.392	ug/L	0.082	5	2	293	6	KED
Y	89		ug/L			34497	41556	1	Standard
Kr	83		ug/L			33	31	27	Standard
> In-1	115		ug/L			5536	5022	3	KED
Cd	111	-0.005	ug/L	0.006	137	4	3	34	KED
Cd	114	-0.007	ug/L	0.006	80	6	2	94	KED
> In	115		ug/L			370942	343665	0	Standard
Ag	107	0.001	ug/L	0.000	58	18	22	14	Standard
> Tb	159		ug/L			161944	152798	1	Standard
Pb	208	0.005	ug/L	0.000	4	380	755	3	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-01
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:45:06
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	32947	4	Standard
⌈>	**Sc**	**45**		ug/L			443281	523130	1	Standard
|	**Cr**	**52**	**3.049**	ug/L	0.019	0	7163	51723	0	Standard
⌊	**Cr**	**53**	**2.997**	ug/L	0.101	3	487	5480	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	26198	1	KED
|	**Cu**	**63**	**0.207**	ug/L	0.013	6	33	751	6	KED
|	**Cu**	**65**	**0.197**	ug/L	0.016	8	11	359	6	KED
|	**Zn**	**66**	**0.798**	ug/L	0.056	6	33	376	6	KED
|	**Zn**	**67**	**1.112**	ug/L	0.183	16	6	84	16	KED
⌊	**As**	**75**	**1.668**	ug/L	0.095	5	2	353	6	KED
	Y	**89**		ug/L			34497	35978	1	Standard
	Kr	**83**		ug/L			33	37	20	Standard
⌈>	**In-1**	**115**		ug/L			5536	5284	2	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.009	119	4	2	57	KED
⌊	**Cd**	**114**	**-0.010**	ug/L	0.004	37	6	1	126	KED
⌈>	**In**	**115**		ug/L			370942	365163	1	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.000	264	18	20	28	Standard
⌈>	**Tb**	**159**		ug/L			161944	158726	1	Standard
⌊	**Pb**	**208**	**0.012**	ug/L	0.001	7	380	1262	5	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-02
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:49:27
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	34191	0	Standard
⌈>	**Sc**	**45**		ug/L			443281	516002	2	Standard
|	**Cr**	**52**	**-0.006**	ug/L	0.011	179	7163	8248	1	Standard
⌊	**Cr**	**53**	**0.032**	ug/L	0.005	15	487	619	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25749	0	KED
|	**Cu**	**63**	**0.378**	ug/L	0.009	2	33	1324	2	KED
|	**Cu**	**65**	**0.373**	ug/L	0.016	4	11	659	4	KED
|	**Zn**	**66**	**1.026**	ug/L	0.143	13	33	467	13	KED
|	**Zn**	**67**	**1.694**	ug/L	0.044	2	6	123	2	KED
⌊	**As**	**75**	**1.550**	ug/L	0.094	6	2	323	5	KED
	Y	**89**		ug/L			34497	36548	0	Standard
	Kr	**83**		ug/L			33	38	5	Standard
⌈>	**In-1**	**115**		ug/L			5536	4911	2	KED
|	**Cd**	**111**	**0.028**	ug/L	0.014	50	4	8	26	KED
⌊	**Cd**	**114**	**0.011**	ug/L	0.005	42	6	10	17	KED
⌈>	**In**	**115**		ug/L			370942	370348	2	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	579	18	19	39	Standard
⌈>	**Tb**	**159**		ug/L			161944	160625	1	Standard
⌊	**Pb**	**208**	**0.026**	ug/L	0.003	9	380	2387	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:53:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
C	13		ug/L			23953	35272	2	Standard
> Sc	45		ug/L			443281	555008	1	Standard
Cr	52	1.088	ug/L	0.016	1	7163	25353	2	Standard
Cr	53	1.102	ug/L	0.017	1	487	2524	0	Standard
> Ge	72		ug/L			28284	26216	2	KED
Cu	63	0.672	ug/L	0.029	4	33	2370	3	KED
Cu	65	0.645	ug/L	0.018	2	11	1151	2	KED
Zn	66	1.342	ug/L	0.058	4	33	612	4	KED
Zn	67	2.072	ug/L	0.217	10	6	152	12	KED
As	75	1.109	ug/L	0.036	3	2	236	1	KED
Y	89		ug/L			34497	35884	0	Standard
Kr	83		ug/L			33	29	39	Standard
> In-1	115		ug/L			5536	5217	0	KED
Cd	111	0.001	ug/L	0.015	1144	4	4	65	KED
Cd	114	-0.005	ug/L	0.006	113	6	4	72	KED
> In	115		ug/L			370942	366141	1	Standard
Ag	107	0.008	ug/L	0.001	9	18	116	8	Standard
> Tb	159		ug/L			161944	158946	1	Standard
Pb	208	0.018	ug/L	0.001	3	380	1760	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-04
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 07:58:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	36798	3	Standard
⌈>	**Sc**	**45**		ug/L			443281	544050	2	Standard
|	**Cr**	**52**	**-0.054**	ug/L	0.011	20	7163	7999	2	Standard
⌊	**Cr**	**53**	**-0.025**	ug/L	0.011	43	487	556	6	Standard
⌈>	**Ge**	**72**		ug/L			28284	26708	0	KED
|	**Cu**	**63**	**0.838**	ug/L	0.016	1	33	3003	0	KED
|	**Cu**	**65**	**0.846**	ug/L	0.014	1	11	1535	1	KED
|	**Zn**	**66**	**0.633**	ug/L	0.066	10	33	311	10	KED
|	**Zn**	**67**	**1.047**	ug/L	0.035	3	6	81	2	KED
⌊	**As**	**75**	**1.910**	ug/L	0.048	2	2	412	1	KED
	Y	**89**		ug/L			34497	36725	2	Standard
	Kr	**83**		ug/L			33	29	3	Standard
⌈>	**In-1**	**115**		ug/L			5536	5148	2	KED
|	**Cd**	**111**	**-0.002**	ug/L	0.006	341	4	3	25	KED
⌊	**Cd**	**114**	**-0.004**	ug/L	0.004	117	6	4	46	KED
⌈>	**In**	**115**		ug/L			370942	365824	4	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	338	18	22	71	Standard
⌈>	**Tb**	**159**		ug/L			161944	160908	1	Standard
⌊	**Pb**	**208**	**0.007**	ug/L	0.001	14	380	956	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-05
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:02:31
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	33011	2	Standard
⌈>	**Sc**	**45**		ug/L			443281	509288	2	Standard
|	**Cr**	**52**	**-0.004**	ug/L	0.002	69	7163	8181	2	Standard
⌊	**Cr**	**53**	**-0.019**	ug/L	0.020	105	487	530	8	Standard
⌈>	**Ge**	**72**		ug/L			28284	26402	2	KED
|	**Cu**	**63**	**0.237**	ug/L	0.027	11	33	859	8	KED
|	**Cu**	**65**	**0.242**	ug/L	0.021	8	11	441	10	KED
|	**Zn**	**66**	**1.050**	ug/L	0.024	2	33	488	0	KED
|	**Zn**	**67**	**1.334**	ug/L	0.162	12	6	100	14	KED
⌊	**As**	**75**	**4.736**	ug/L	0.192	4	2	1007	1	KED
	Y	**89**		ug/L			34497	35818	2	Standard
	Kr	**83**		ug/L			33	32	10	Standard
⌈>	**In-1**	**115**		ug/L			5536	5114	2	KED
|	**Cd**	**111**	**-0.003**	ug/L	0.006	162	4	3	31	KED
⌊	**Cd**	**114**	**-0.006**	ug/L	0.000	1	6	3	1	KED
⌈>	**In**	**115**		ug/L			370942	371382	2	Standard
⌊	**Ag**	**107**	**-0.000**	ug/L	0.001	185	18	14	52	Standard
⌈>	**Tb**	**159**		ug/L			161944	160844	0	Standard
⌊	**Pb**	**208**	**0.022**	ug/L	0.000	0	380	2106	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-06
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:06:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	33260	5	Standard
⌈>	**Sc**	**45**		ug/L			443281	520994	3	Standard
|	**Cr**	**52**	**0.001**	ug/L	0.021	4047	7163	8419	0	Standard
⌊	**Cr**	**53**	**-0.004**	ug/L	0.018	446	487	566	7	Standard
⌈>	**Ge**	**72**		ug/L			28284	25960	2	KED
|	**Cu**	**63**	**0.316**	ug/L	0.022	7	33	1118	5	KED
|	**Cu**	**65**	**0.311**	ug/L	0.013	4	11	554	4	KED
|	**Zn**	**66**	**0.932**	ug/L	0.103	11	33	430	10	KED
|	**Zn**	**67**	**1.015**	ug/L	0.185	18	6	76	17	KED
⌊	**As**	**75**	**12.863**	ug/L	0.161	1	2	2690	1	KED
	Y	**89**		ug/L			34497	35627	1	Standard
	Kr	**83**		ug/L			33	32	15	Standard
⌈>	**In-1**	**115**		ug/L			5536	5174	1	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.005	78	4	2	33	KED
⌊	**Cd**	**114**	**0.000**	ug/L	0.012	3000	6	6	86	KED
⌈>	**In**	**115**		ug/L			370942	378984	3	Standard
⌊	**Ag**	**107**	**0.001**	ug/L	0.001	67	18	36	33	Standard
⌈>	**Tb**	**159**		ug/L			161944	157933	1	Standard
⌊	**Pb**	**208**	**0.008**	ug/L	0.000	1	380	960	1	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLS
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:11:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	24312	3	Standard
⌈>	**Sc**	**45**		ug/L			443281	423709	1	Standard
|	**Cr**	**52**	**-0.017**	ug/L	0.018	103	7163	6650	4	Standard
⌊	**Cr**	**53**	**-0.157**	ug/L	0.017	11	487	257	9	Standard
⌈>	**Ge**	**72**		ug/L			28284	26243	0	KED
|	**Cu**	**63**	**-0.002**	ug/L	0.004	200	33	24	55	KED
|	**Cu**	**65**	**0.003**	ug/L	0.001	43	11	15	12	KED
|	**Zn**	**66**	**-0.031**	ug/L	0.003	8	33	17	6	KED
|	**Zn**	**67**	**-0.030**	ug/L	0.071	236	6	3	132	KED
⌊	**As**	**75**	**0.001**	ug/L	0.002	271	2	2	20	KED
	Y	**89**		ug/L			34497	34766	2	Standard
	Kr	**83**		ug/L			33	34	8	Standard
⌈>	**In-1**	**115**		ug/L			5536	5110	2	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.010	146	4	2	66	KED
⌊	**Cd**	**114**	**-0.009**	ug/L	0.006	72	6	2	125	KED
⌈>	**In**	**115**		ug/L			370942	363346	3	Standard
⌊	**Ag**	**107**	**-0.001**	ug/L	0.000	31	18	7	43	Standard
⌈>	**Tb**	**159**		ug/L			161944	156921	0	Standard
⌊	**Pb**	**208**	**-0.003**	ug/L	0.000	5	380	127	11	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVP
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:15:37
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	23131	6	Standard
⌈>	**Sc**	**45**		ug/L			443281	429452	4	Standard
|	**Cr**	**52**	**43.137**	ug/L	1.283	2	7163	509091	2	Standard
⌊	**Cr**	**53**	**42.532**	ug/L	1.016	2	487	57617	4	Standard
⌈>	**Ge**	**72**		ug/L			28284	26845	1	KED
|	**Cu**	**63**	**48.586**	ug/L	1.204	2	33	173318	0	KED
|	**Cu**	**65**	**47.759**	ug/L	1.161	2	11	86522	1	KED
|	**Zn**	**66**	**48.700**	ug/L	0.829	1	33	21613	1	KED
|	**Zn**	**67**	**49.974**	ug/L	1.175	2	6	3617	2	KED
⌊	**As**	**75**	**48.187**	ug/L	0.497	1	2	10414	0	KED
	Y	**89**		ug/L			34497	35680	2	Standard
	Kr	**83**		ug/L			33	40	7	Standard
⌈>	**In-1**	**115**		ug/L			5536	5483	1	KED
|	**Cd**	**111**	**47.087**	ug/L	0.889	1	4	9340	0	KED
⌊	**Cd**	**114**	**47.831**	ug/L	1.184	2	6	24201	0	KED
⌈>	**In**	**115**		ug/L			370942	373329	1	Standard
⌊	**Ag**	**107**	**48.273**	ug/L	0.181	0	18	586801	1	Standard
⌈>	**Tb**	**159**		ug/L			161944	157225	4	Standard
⌊	**Pb**	**208**	**55.524**	ug/L	1.115	2	380	4214059	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBP
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:22:42
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_DailyMethod_KED_UCT.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\System\051123_A.cal

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	23153	6	Standard
⌈>	**Sc**	**45**		ug/L			443281	426749	1	Standard
|	**Cr**	**52**	**-0.033**	ug/L	0.016	49	7163	6515	2	Standard
⌊	**Cr**	**53**	**-0.183**	ug/L	0.014	7	487	225	9	Standard
⌈>	**Ge**	**72**		ug/L			28284	27054	1	KED
|	**Cu**	**63**	**0.001**	ug/L	0.001	206	33	33	13	KED
|	**Cu**	**65**	**0.001**	ug/L	0.001	59	11	12	8	KED
|	**Zn**	**66**	**-0.029**	ug/L	0.016	53	33	19	36	KED
|	**Zn**	**67**	**-0.014**	ug/L	0.031	226	6	5	43	KED
⌊	**As**	**75**	**0.011**	ug/L	0.006	51	2	4	26	KED
	Y	**89**		ug/L			34497	35176	3	Standard
	Kr	**83**		ug/L			33	33	28	Standard
⌈>	**In-1**	**115**		ug/L			5536	5166	3	KED
|	**Cd**	**111**	**-0.007**	ug/L	0.006	81	4	2	33	KED
⌊	**Cd**	**114**	**-0.008**	ug/L	0.006	72	6	2	122	KED
⌈>	**In**	**115**		ug/L			370942	374701	4	Standard
⌊	**Ag**	**107**	**0.000**	ug/L	0.001	150	18	24	35	Standard
⌈>	**Tb**	**159**		ug/L			161944	156776	3	Standard
⌊	**Pb**	**208**	**-0.001**	ug/L	0.000	60	380	318	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-07
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:27:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	30709	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	26538	1	KED
⌊	**As**	**75**	**12.441**	ug/L	0.226	1	2	2660	2	KED
	Y	**89**		ug/L			34497	36716	2	Standard
	Kr	**83**		ug/L			33	37	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-08
Sample Dil Factor:
Comments:

DEL

Sample Date/Time: Friday, May 12, 2023 08:30:59
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	32393	0	Standard
⌈>	**Ge**	**72**		ug/L			28284	25720	1	KED
⌊	**As**	**75**	**1.257**	ug/L	0.241	19	2	262	17	KED
	Y	**89**		ug/L			34497	35640	3	Standard
	Kr	**83**		ug/L			33	45	21	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-09
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:34:26
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	38746	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25415	1	KED
⌊	**As**	**75**	**1.516**	ug/L	0.073	4	2	312	4	KED
	Y	**89**		ug/L			34497	36620	0	Standard
	Kr	**83**		ug/L			33	33	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-10
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:37:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	57220	3	Standard
⌈>	**Ge**	**72**		ug/L			28284	25650	1	KED
⌊	**As**	**75**	**3.368**	ug/L	0.033	0	2	697	0	KED
	Y	**89**		ug/L			34497	44371	2	Standard
	Kr	**83**		ug/L			33	36	9	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0494-11
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 08:41:40
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	39588	3	Standard
⌈>	**Ge**	**72**		ug/L			28284	26578	1	KED
⌊	**As**	**75**	**1.334**	ug/L	0.072	5	2	287	5	KED
	Y	**89**		ug/L			34497	37588	2	Standard
	Kr	**83**		ug/L			33	37	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0578-02
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, May 12, 2023 08:46:32
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	25866	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25532	1	KED
⌊	**As**	**75**	**2.267**	ug/L	0.082	3	2	468	4	KED
	Y	**89**		ug/L			34497	41271	3	Standard
	Kr	**83**		ug/L			33	34	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-DUP1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, May 12, 2023 08:50:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	25448	0	Standard
⌈>	**Ge**	**72**		ug/L			28284	25336	0	KED
⌊	**As**	**75**	**2.271**	ug/L	0.019	0	2	465	1	KED
	Y	**89**		ug/L			34497	40019	5	Standard
	Kr	**83**		ug/L			33	24	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-MS1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, May 12, 2023 08:53:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	25656	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25138	0	KED
⌊	**As**	**75**	**7.526**	ug/L	0.068	0	2	1525	0	KED
	Y	**89**		ug/L			34497	40825	2	Standard
	Kr	**83**		ug/L			33	40	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: BLE0134-MSD1
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, May 12, 2023 08:57:14

DEL

Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	25165	4	Standard
⌈>	**Ge**	**72**		ug/L			28284	22831	11	KED
⌊	**As**	**75**	**8.315**	ug/L	0.579	6	2	1523	6	KED
	Y	**89**		ug/L			34497	41090	2	Standard
	Kr	**83**		ug/L			33	44	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLT
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:00:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	21044	3	Standard
⌈>	**Ge**	**72**		ug/L			28284	25195	1	KED
⌊	**As**	**75**	**0.005**	ug/L	0.005	97	2	3	31	KED
	Y	**89**		ug/L			34497	36387	4	Standard
	Kr	**83**		ug/L			33	32	21	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVQ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:04:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	19365	3	Standard
⌈>	**Ge**	**72**		ug/L			28284	25866	2	KED
⌊	**As**	**75**	**48.718**	ug/L	1.079	2	2	10142	0	KED
	Y	**89**		ug/L			34497	35732	3	Standard
	Kr	**83**		ug/L			33	40	2	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBQ
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:10:23
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	19521	6	Standard
⌈>	**Ge**	**72**		ug/L			28284	26236	1	KED
⌊	**As**	**75**	**0.004**	ug/L	0.007	188	2	3	50	KED
	Y	**89**		ug/L			34497	36358	4	Standard
	Kr	**83**		ug/L			33	42	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0588-01
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:13:52
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	32027	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	26007	1	KED
⌊	**As**	**75**	**0.890**	ug/L	0.049	5	2	188	4	KED
	Y	**89**		ug/L			34497	40247	1	Standard
	Kr	**83**		ug/L			33	39	27	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0588-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:17:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	30397	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25458	1	KED
⌊	**As**	**75**	**0.855**	ug/L	0.006	0	2	177	2	KED
	Y	**89**		ug/L			34497	38663	1	Standard
	Kr	**83**		ug/L			33	40	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0588-05
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:20:47
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	31369	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25256	1	KED
⌊	**As**	**75**	**0.674**	ug/L	0.013	1	2	139	3	KED
	Y	**89**		ug/L			34497	37846	4	Standard
	Kr	**83**		ug/L			33	38	31	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0588-07
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:24:15
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	31068	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25354	1	KED
⌊	**As**	**75**	**0.819**	ug/L	0.024	2	2	169	3	KED
	Y	**89**		ug/L			34497	38519	3	Standard
	Kr	**83**		ug/L			33	41	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0588-09
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:27:43
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	28545	3	Standard
>	**Ge**	**72**		ug/L			28284	25863	0	KED
	As	**75**	**1.364**	ug/L	0.085	6	2	286	5	KED
	Y	**89**		ug/L			34497	41558	3	Standard
	Kr	**83**		ug/L			33	36	13	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0588-11
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:31:10
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	30064	0	Standard
⌈>	**Ge**	**72**		ug/L			28284	25241	1	KED
⌊	**As**	**75**	**0.975**	ug/L	0.091	9	2	200	8	KED
	Y	**89**		ug/L			34497	41326	4	Standard
	Kr	**83**		ug/L			33	38	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0588-13
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:34:38
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	34038	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25584	0	KED
⌊	**As**	**75**	**0.431**	ug/L	0.040	9	2	90	8	KED
	Y	**89**		ug/L			34497	37964	2	Standard
	Kr	**83**		ug/L			33	34	29	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0588-15
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:38:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	31176	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25211	1	KED
⌊	**As**	**75**	**0.971**	ug/L	0.064	6	2	199	5	KED
	Y	**89**		ug/L			34497	38058	1	Standard
	Kr	**83**		ug/L			33	44	10	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0587-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:41:51
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	29462	1	Standard
[>	**Ge**	**72**		ug/L			28284	26481	1	KED
[	**As**	**75**	**-0.001**	ug/L	0.002	158	2	1	25	KED
	Y	**89**		ug/L			34497	37168	0	Standard
	Kr	**83**		ug/L			33	33	43	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLU
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:45:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	21654	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25096	1	KED
⌊	**As**	**75**	**0.007**	ug/L	0.007	97	2	3	39	KED
	Y	**89**		ug/L			34497	35617	3	Standard
	Kr	**83**		ug/L			33	26	7	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVR
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:48:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	20136	4	Standard
⌈>	**Ge**	**72**		ug/L			28284	25943	0	KED
⌊	**As**	**75**	**48.782**	ug/L	0.808	1	2	10190	1	KED
	Y	**89**		ug/L			34497	35774	1	Standard
	Kr	**83**		ug/L			33	40	4	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBR
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 09:55:00
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	20341	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	26117	1	KED
⌊	**As**	**75**	**0.002**	ug/L	0.009	576	2	2	75	KED
	Y	**89**		ug/L			34497	36037	3	Standard
	Kr	**83**		ug/L			33	38	15	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0587-02
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 12, 2023 09:58:29
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	25634	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25170	1	KED
⌊	**As**	**75**	**1.899**	ug/L	0.067	3	2	386	1	KED
	Y	**89**		ug/L			34497	47569	1	Standard
	Kr	**83**		ug/L			33	41	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0587-04
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, May 12, 2023 10:01:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	23088	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25083	0	KED
⌊	**As**	**75**	**2.690**	ug/L	0.083	3	2	545	3	KED
	Y	**89**		ug/L			34497	39491	2	Standard
	Kr	**83**		ug/L			33	38	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0587-05
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, May 12, 2023 10:05:19
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	24086	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25297	0	KED
⌊	**As**	**75**	**2.679**	ug/L	0.061	2	2	547	2	KED
	Y	**89**		ug/L			34497	39866	2	Standard
	Kr	**83**		ug/L			33	38	43	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0578-07
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, May 12, 2023 10:09:11
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	28092	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	24265	2	KED
⌊	**As**	**75**	**3.647**	ug/L	0.045	1	2	714	2	KED
	Y	**89**		ug/L			34497	36517	3	Standard
	Kr	**83**		ug/L			33	48	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0578-08
Sample Dil Factor: 5
Comments:
Sample Date/Time: Friday, May 12, 2023 10:12:39
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	24129	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	24842	1	KED
⌊	**As**	**75**	**1.946**	ug/L	0.065	3	2	391	2	KED
	Y	**89**		ug/L			34497	39994	1	Standard
	Kr	**83**		ug/L			33	40	19	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0578-04
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 12, 2023 10:16:01
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	27316	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25745	2	KED
⌊	**As**	**75**	**0.925**	ug/L	0.064	6	2	193	4	KED
	Y	**89**		ug/L			34497	51126	1	Standard
	Kr	**83**		ug/L			33	34	24	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0578-06
Sample Dil Factor: 2
Comments:
Sample Date/Time: Friday, May 12, 2023 10:19:28
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	26836	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	24007	0	KED
⌊	**As**	**75**	**3.754**	ug/L	0.071	1	2	727	2	KED
	Y	**89**		ug/L			34497	40963	1	Standard
	Kr	**83**		ug/L			33	40	28	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0578-03
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:23:20
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	29306	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25776	3	KED
⌊	**As**	**75**	**0.007**	ug/L	0.005	71	2	3	27	KED
	Y	**89**		ug/L			34497	36300	2	Standard
	Kr	**83**		ug/L			33	45	17	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: 23D0578-05
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:26:48
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	31168	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	23049	3	KED
⌊	**As**	**75**	**12.233**	ug/L	0.459	3	2	2270	1	KED
	Y	**89**		ug/L			34497	42422	0	Standard
	Kr	**83**		ug/L			33	52	20	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-IBLV
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:30:17
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	22595	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25718	0	KED
⌊	**As**	**75**	**-0.000**	ug/L	0.001	291	2	2	13	KED
	Y	**89**		ug/L			34497	35195	5	Standard
	Kr	**83**		ug/L			33	40	18	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCVS
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:33:45
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	20551	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	24988	0	KED
⌊	**As**	**75**	**50.067**	ug/L	1.149	2	2	10073	2	KED
	Y	**89**		ug/L			34497	35581	2	Standard
	Kr	**83**		ug/L			33	49	21	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: SEQ-CCBS
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:39:57
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	20489	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	25090	0	KED
⌊	**As**	**75**	**0.002**	ug/L	0.006	279	2	2	47	KED
	Y	**89**		ug/L			34497	35714	2	Standard
	Kr	**83**		ug/L			33	38	8	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:43:25
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	25632	2	Standard
⌈>	**Ge**	**72**		ug/L			28284	26454	1	KED
⌊	**As**	**75**	**0.006**	ug/L	0.010	169	2	3	61	KED
	Y	**89**		ug/L			34497	41214	3	Standard
	Kr	**83**		ug/L			33	38	24	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:46:53
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	24859	4	Standard
⌈>	**Ge**	**72**		ug/L			28284	26414	1	KED
⌊	**As**	**75**	**0.000**	ug/L	0.005	9977	2	2	49	KED
	Y	**89**		ug/L			34497	38257	2	Standard
	Kr	**83**		ug/L			33	41	25	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: RINSE
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:50:22
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	25074	4	Standard
⌈>	**Ge**	**72**		ug/L			28284	25856	5	KED
⌊	**As**	**75**	**0.004**	ug/L	0.009	256	2	3	71	KED
	Y	**89**		ug/L			34497	40670	1	Standard
	Kr	**83**		ug/L			33	42	28	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:53:49
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	21544	0	Standard
⌈>	**Ge**	**72**		ug/L			28284	24979	2	KED
⌊	**As**	**75**	**-0.004**	ug/L	0.001	29	2	1	21	KED
	Y	**89**		ug/L			34497	33632	2	Standard
	Kr	**83**		ug/L			33	40	12	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 10:57:18
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	21498	3	Standard
⌈>	**Ge**	**72**		ug/L			28284	24196	2	KED
⌊	**As**	**75**	**0.000**	ug/L	0.004	2080	2	2	35	KED
	Y	**89**		ug/L			34497	33753	1	Standard
	Kr	**83**		ug/L			33	36	26	Standard

ICP-MS Quantitative Analysis - Summary Report

Sample ID: DI
Sample Dil Factor:
Comments:
Sample Date/Time: Friday, May 12, 2023 11:00:46
Number of Replicates: 3
Method File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Method\200.8_dailymethod_ked_uct_as only.mth
Tuning File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\MassCal\Default.tun
Optimization File: C:\Users\Public\Documents\PerkinElmer Syngistix\ICPMS\Conditions\Default.dac
Calibration File:

	Analyte	Mass	Conc. Mean	Units	Conc. SD	Conc. RSD	Blank Intens.	Meas. Intens.	Intens. RSD	Mode
	C	**13**		ug/L			23953	21398	1	Standard
⌈>	**Ge**	**72**		ug/L			28284	25308	0	KED
⌊	**As**	**75**	**0.000**	ug/L	0.010	2112	2	2	89	KED
	Y	**89**		ug/L			34497	34273	1	Standard
	Kr	**83**		ug/L			33	34	14	Standard

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Control Limt: +/- 10.00%
Sequence: SLE0163

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0163-ICV1	Arsenic-75a	50.000	47.6	95.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.6	99.3	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.1	100	ug/L	PA 6020B UCT-KE
SLE0163-CCV1	Arsenic-75a	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.6	101	ug/L	PA 6020B UCT-KE
SLE0163-CCV2	Arsenic-75a	50.000	49.4	98.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.8	104	ug/L	PA 6020B UCT-KE
SLE0163-CCV3	Arsenic-75a	50.000	49.2	98.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.5	105	ug/L	PA 6020B UCT-KE
SLE0163-CCV4	Arsenic-75a	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.8	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.5	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.5	103	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Control Limt: +/- 10.00%
Sequence: SLE0163

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0163-CCV4	Zinc-67	50.000	50.9	102	ug/L	PA 6020B UCT-KE
SLE0163-CCV5	Arsenic-75a	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.4	103	ug/L	PA 6020B UCT-KE
SLE0163-CCV6	Arsenic-75a	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.1	104	ug/L	PA 6020B UCT-KE
SLE0163-CCV7	Arsenic-75a	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	53.4	107	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.2	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.6	103	ug/L	PA 6020B UCT-KE
SLE0163-CCV8	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.0	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.6	105	ug/L	PA 6020B UCT-KE
SLE0163-CCV9	Arsenic-75a	50.000	49.0	97.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.1	102	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Control Limt: +/- 10.00%
Sequence: SLE0163

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0163-CCV9	Zinc-66	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
SLE0163-CCVA	Arsenic-75a	50.000	48.6	97.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.8	102	ug/L	PA 6020B UCT-KE
SLE0163-CCVB	Arsenic-75a	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.1	104	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.1	100	ug/L	PA 6020B UCT-KE
SLE0163-CCVC	Arsenic-75a	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	53.5	107	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	53.3	107	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.7	107	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	53.3	107	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.5	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.2	104	ug/L	PA 6020B UCT-KE
SLE0163-CCVD	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	53.3	107	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.9	106	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.5	105	ug/L	PA 6020B UCT-KE
SLE0163-CCVE	Arsenic-75a	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.8	106	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Control Limt: +/- 10.00%
Sequence: SLE0163

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0163-CCVE	Copper-65	50.000	52.7	105	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.3	103	ug/L	PA 6020B UCT-KE
SLE0163-CCVF	Arsenic-75a	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.5	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	53.2	106	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	52.6	105	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.7	105	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Control Limt: +/- 10.00%

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Sequence: SLE0204

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0204-ICV1	Arsenic-75a	50.000	48.2	96.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.7	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.3	105	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.6	101	ug/L	PA 6020B UCT-KE
SLE0204-CCV1	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.9	99.7	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.3	101	ug/L	PA 6020B UCT-KE
SLE0204-CCV2	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.8	104	ug/L	PA 6020B UCT-KE
SLE0204-CCV3	Arsenic-75a	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.4	96.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.1	100	ug/L	PA 6020B UCT-KE
SLE0204-CCV4	Arsenic-75a	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.3	103	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Control Limt: +/- 10.00%
Sequence: SLE0204

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0204-CCV4	Zinc-67	50.000	52.0	104	ug/L	PA 6020B UCT-KE
SLE0204-CCV5	Arsenic-75a	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.5	103	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.8	102	ug/L	PA 6020B UCT-KE
SLE0204-CCV6	Arsenic-75a	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.0	100	ug/L	PA 6020B UCT-KE
SLE0204-CCV7	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.4	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.1	104	ug/L	PA 6020B UCT-KE
SLE0204-CCV8	Arsenic-75a	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.2	96.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
SLE0204-CCV9	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.3	101	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Control Limt: +/- 10.00%
Sequence: SLE0204

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0204-CCV9	Zinc-66	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.9	104	ug/L	PA 6020B UCT-KE
SLE0204-CCVA	Arsenic-75a	50.000	49.1	98.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.6	97.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.4	96.9	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.5	101	ug/L	PA 6020B UCT-KE
SLE0204-CCVB	Arsenic-75a	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.5	97.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.7	97.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
SLE0204-CCVC	Arsenic-75a	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.6	97.2	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.6	101	ug/L	PA 6020B UCT-KE
SLE0204-CCVD	Arsenic-75a	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.5	101	ug/L	PA 6020B UCT-KE
SLE0204-CCVE	Arsenic-75a	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	51.7	103	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Control Limt: +/- 10.00%
Sequence: SLE0204

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0204-CCVE	Copper-65	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.0	102	ug/L	PA 6020B UCT-KE
SLE0204-CCVF	Arsenic-75a	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.8	104	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLE0204-CCVG	Arsenic-75a	50.000	48.5	97.0	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.6	99.3	ug/L	PA 6020B UCT-KE
SLE0204-CCVH	Arsenic-75a	50.000	48.3	96.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
SLE0204-CCVI	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.5	101	ug/L	PA 6020B UCT-KE
SLE0204-CCVJ	Arsenic-75a	50.000	49.2	98.3	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.1	100	ug/L	PA 6020B UCT-KE

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Control Limt: +/- 10.00%
Sequence: SLE0204

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0204-CCVJ	Copper-63	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Control Limt: +/- 10.00%
Sequence: SLE0209

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0209-ICV1	Arsenic-75a	50.000	48.3	96.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	52.8	106	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	51.9	104	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.6	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.9	102	ug/L	PA 6020B UCT-KE
SLE0209-CCV1	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.7	101	ug/L	PA 6020B UCT-KE
SLE0209-CCV2	Arsenic-75a	50.000	48.6	97.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.6	97.2	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.9	95.9	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.3	96.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.9	99.7	ug/L	PA 6020B UCT-KE
SLE0209-CCV3	Arsenic-75a	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.4	96.8	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
SLE0209-CCV4	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.2	98.5	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.9	97.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.7	103	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Control Limt: +/- 10.00%
Sequence: SLE0209

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0209-CCV4	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLE0209-CCV7	Arsenic-75a	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.2	98.5	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.0	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.8	104	ug/L	PA 6020B UCT-KE
SLE0209-CCV8	Arsenic-75a	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.8	97.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.3	103	ug/L	PA 6020B UCT-KE
SLE0209-CCVA	Arsenic-75a	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.9	99.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.0	98.1	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.3	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.8	104	ug/L	PA 6020B UCT-KE
SLE0209-CCVB	Arsenic-75a	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.3	96.7	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.0	98.0	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLE0209-CCVC	Arsenic-75a	50.000	49.3	98.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.8	97.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.0	97.9	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Control Limt: +/- 10.00%
Sequence: SLE0209

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0209-CCVC	Zinc-66	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLE0209-CCVD	Arsenic-75a	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.0	97.9	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.4	96.9	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.9	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.9	99.9	ug/L	PA 6020B UCT-KE
SLE0209-CCVE	Arsenic-75a	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.1	96.2	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	48.8	97.5	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.1	98.1	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.4	101	ug/L	PA 6020B UCT-KE
SLE0209-CCVF	Arsenic-75a	50.000	49.4	98.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.6	97.3	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.4	98.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.6	97.2	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.2	98.5	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.4	101	ug/L	PA 6020B UCT-KE
SLE0209-CCVG	Arsenic-75a	50.000	49.2	98.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	52.1	104	ug/L	PA 6020B UCT-KE
SLE0209-CCVH	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Control Limt: +/- 10.00%
Sequence: SLE0209

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0209-CCVH	Copper-65	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.9	102	ug/L	PA 6020B UCT-KE
SLE0209-CCVI	Arsenic-75a	50.000	49.4	98.7	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.5	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.3	98.6	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.8	99.7	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.8	102	ug/L	PA 6020B UCT-KE
SLE0209-CCVJ	Arsenic-75a	50.000	49.8	99.6	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.5	99.0	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.6	99.2	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.8	102	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	51.5	103	ug/L	PA 6020B UCT-KE
SLE0209-CCVK	Arsenic-75a	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	51.2	102	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.8	99.5	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.7	99.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.2	100	ug/L	PA 6020B UCT-KE
SLE0209-CCVL	Arsenic-75a	50.000	49.6	99.1	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	50.1	100	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	50.3	101	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.5	99.1	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	51.6	103	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.1	100	ug/L	PA 6020B UCT-KE
SLE0209-CCVM	Arsenic-75a	50.000	49.5	98.9	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.9	102	ug/L	PA 6020B UCT-KE

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Control Limt: +/- 10.00%
Sequence: SLE0209

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0209-CCVM	Copper-63	50.000	50.0	100	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	48.8	97.7	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.4	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.8	102	ug/L	PA 6020B UCT-KE
SLE0209-CCVN	Arsenic-75a	50.000	50.2	100	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	51.1	102	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	52.4	105	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	49.7	99.3	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	50.7	101	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.9	99.7	ug/L	PA 6020B UCT-KE
SLE0209-CCVO	Arsenic-75a	50.000	49.3	98.5	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	49.1	98.2	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	50.5	101	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	49.4	98.7	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.9	95.8	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	49.4	98.8	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	49.7	99.4	ug/L	PA 6020B UCT-KE
SLE0209-CCVP	Arsenic-75a	50.000	48.2	96.4	ug/L	PA 6020B UCT-KE
	Cadmium-111	50.000	47.1	94.2	ug/L	PA 6020B UCT-KE
	Cadmium-114	50.000	47.8	95.7	ug/L	PA 6020B UCT-KE
	Copper-63	50.000	48.6	97.2	ug/L	PA 6020B UCT-KE
	Copper-65	50.000	47.8	95.5	ug/L	PA 6020B UCT-KE
	Zinc-66	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
	Zinc-67	50.000	50.0	99.9	ug/L	PA 6020B UCT-KE
SLE0209-CCVQ	Arsenic-75a	50.000	48.7	97.4	ug/L	PA 6020B UCT-KE
SLE0209-CCVR	Arsenic-75a	50.000	48.8	97.6	ug/L	PA 6020B UCT-KE
SLE0209-CCVS	Arsenic-75a	50.000	50.1	100	ug/L	PA 6020B UCT-KE

* Values outside of QC limits

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/09/23 15:55

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-IBL1	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0163-IBL1	Cadmium-111	0.0170	0.03	0.100	ug/L	
SLE0163-IBL1	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0163-IBL1	Copper-63	-0.00900	0.173	0.500	ug/L	
SLE0163-IBL1	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0163-IBL1	Zinc-66	0.0270	2.92	6.00	ug/L	
SLE0163-IBL1	Zinc-67	0.00	0.94	6.00	ug/L	
SLE0163-ICB1	Arsenic-75a	-0.0110	0.0373	0.200	ug/L	
SLE0163-ICB1	Cadmium-111	0.0110	0.03	0.100	ug/L	
SLE0163-ICB1	Cadmium-114	-0.00700	0.04	0.100	ug/L	
SLE0163-ICB1	Copper-63	-0.0100	0.173	0.500	ug/L	
SLE0163-ICB1	Copper-65	-0.00300	0.35	0.500	ug/L	
SLE0163-ICB1	Zinc-66	0.0220	2.92	6.00	ug/L	
SLE0163-ICB1	Zinc-67	0.0130	0.94	6.00	ug/L	
SLE0163-CCB1	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLE0163-CCB1	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLE0163-CCB1	Cadmium-114	-0.00500	0.04	0.100	ug/L	
SLE0163-CCB1	Copper-63	-0.00700	0.173	0.500	ug/L	
SLE0163-CCB1	Copper-65	-0.00500	0.35	0.500	ug/L	
SLE0163-CCB1	Zinc-66	0.0270	2.92	6.00	ug/L	
SLE0163-CCB1	Zinc-67	0.0130	0.94	6.00	ug/L	
SLE0163-IBL2	Arsenic-75a	0.0880	0.0373	0.200	ug/L	
SLE0163-IBL2	Cadmium-111	0.0100	0.03	0.100	ug/L	
SLE0163-IBL2	Cadmium-114	0.00800	0.04	0.100	ug/L	
SLE0163-IBL2	Copper-63	0.0890	0.173	0.500	ug/L	
SLE0163-IBL2	Copper-65	0.0860	0.35	0.500	ug/L	
SLE0163-IBL2	Zinc-66	0.158	2.92	6.00	ug/L	
SLE0163-IBL2	Zinc-67	0.222	0.94	6.00	ug/L	
SLE0163-IBL3	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0163-IBL3	Cadmium-111	0.0230	0.03	0.100	ug/L	
SLE0163-IBL3	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0163-IBL3	Copper-63	-0.00100	0.173	0.500	ug/L	
SLE0163-IBL3	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0163-IBL3	Zinc-66	0.0840	2.92	6.00	ug/L	
SLE0163-IBL3	Zinc-67	0.132	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/09/23 17:36

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-CCB2	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLE0163-CCB2	Cadmium-111	0.0160	0.03	0.100	ug/L	
SLE0163-CCB2	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0163-CCB2	Copper-63	-0.00700	0.173	0.500	ug/L	
SLE0163-CCB2	Copper-65	0.00	0.35	0.500	ug/L	
SLE0163-CCB2	Zinc-66	0.0130	2.92	6.00	ug/L	
SLE0163-CCB2	Zinc-67	0.0420	0.94	6.00	ug/L	
SLE0163-IBL4	Arsenic-75a	-0.0100	0.0373	0.200	ug/L	
SLE0163-IBL4	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLE0163-IBL4	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLE0163-IBL4	Copper-63	-0.00500	0.173	0.500	ug/L	
SLE0163-IBL4	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0163-IBL4	Zinc-66	0.145	2.92	6.00	ug/L	
SLE0163-IBL4	Zinc-67	0.239	0.94	6.00	ug/L	
SLE0163-IBL5	Arsenic-75a	-0.0120	0.0373	0.200	ug/L	
SLE0163-IBL5	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLE0163-IBL5	Cadmium-114	-0.00600	0.04	0.100	ug/L	
SLE0163-IBL5	Copper-63	-0.00600	0.173	0.500	ug/L	
SLE0163-IBL5	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0163-IBL5	Zinc-66	0.158	2.92	6.00	ug/L	
SLE0163-IBL5	Zinc-67	0.0930	0.94	6.00	ug/L	
SLE0163-CCB3	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLE0163-CCB3	Cadmium-111	0.00800	0.03	0.100	ug/L	
SLE0163-CCB3	Cadmium-114	-0.00500	0.04	0.100	ug/L	
SLE0163-CCB3	Copper-63	-0.00900	0.173	0.500	ug/L	
SLE0163-CCB3	Copper-65	-0.00300	0.35	0.500	ug/L	
SLE0163-CCB3	Zinc-66	0.0350	2.92	6.00	ug/L	
SLE0163-CCB3	Zinc-67	0.0680	0.94	6.00	ug/L	
SLE0163-CCB4	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0163-CCB4	Cadmium-111	0.0330	0.03	0.100	ug/L	
SLE0163-CCB4	Cadmium-114	0.0340	0.04	0.100	ug/L	
SLE0163-CCB4	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0163-CCB4	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0163-CCB4	Zinc-66	-0.0040	2.92	6.00	ug/L	
SLE0163-CCB4	Zinc-67	0.0320	0.94	6.00	ug/L	
SLE0163-IBL6	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/09/23 19:57

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-IBL6	Cadmium-111	0.00800	0.03	0.100	ug/L	
SLE0163-IBL6	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0163-IBL6	Copper-63	0.00800	0.173	0.500	ug/L	
SLE0163-IBL6	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0163-IBL6	Zinc-66	0.131	2.92	6.00	ug/L	
SLE0163-IBL6	Zinc-67	0.117	0.94	6.00	ug/L	
SLE0163-CCB5	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0163-CCB5	Cadmium-111	0.00900	0.03	0.100	ug/L	
SLE0163-CCB5	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0163-CCB5	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0163-CCB5	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0163-CCB5	Zinc-66	0.0010	2.92	6.00	ug/L	
SLE0163-CCB5	Zinc-67	0.0200	0.94	6.00	ug/L	
SLE0163-IBL7	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0163-IBL7	Cadmium-111	0.0130	0.03	0.100	ug/L	
SLE0163-IBL7	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0163-IBL7	Copper-63	0.00600	0.173	0.500	ug/L	
SLE0163-IBL7	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0163-IBL7	Zinc-66	0.166	2.92	6.00	ug/L	
SLE0163-IBL7	Zinc-67	0.0850	0.94	6.00	ug/L	
SLE0163-CCB6	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0163-CCB6	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLE0163-CCB6	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0163-CCB6	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0163-CCB6	Copper-65	0.00	0.35	0.500	ug/L	
SLE0163-CCB6	Zinc-66	-0.0050	2.92	6.00	ug/L	
SLE0163-CCB6	Zinc-67	0.0060	0.94	6.00	ug/L	
SLE0163-CCB7	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0163-CCB7	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0163-CCB7	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0163-CCB7	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0163-CCB7	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0163-CCB7	Zinc-66	0.0270	2.92	6.00	ug/L	
SLE0163-CCB7	Zinc-67	0.0320	0.94	6.00	ug/L	
SLE0163-IBL8	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0163-IBL8	Cadmium-111	0.0120	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/09/23 22:22

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-IBL8	Cadmium-114	0.0130	0.04	0.100	ug/L	
SLE0163-IBL8	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0163-IBL8	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0163-IBL8	Zinc-66	0.0260	2.92	6.00	ug/L	
SLE0163-IBL8	Zinc-67	0.0020	0.94	6.00	ug/L	
SLE0163-CCB8	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0163-CCB8	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLE0163-CCB8	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0163-CCB8	Copper-63	0.00600	0.173	0.500	ug/L	
SLE0163-CCB8	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0163-CCB8	Zinc-66	0.0580	2.92	6.00	ug/L	
SLE0163-CCB8	Zinc-67	0.0410	0.94	6.00	ug/L	
SLE0163-IBL9	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0163-IBL9	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLE0163-IBL9	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0163-IBL9	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0163-IBL9	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0163-IBL9	Zinc-66	0.0090	2.92	6.00	ug/L	
SLE0163-IBL9	Zinc-67	0.0150	0.94	6.00	ug/L	
SLE0163-CCB9	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0163-CCB9	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0163-CCB9	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0163-CCB9	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0163-CCB9	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0163-CCB9	Zinc-66	0.0440	2.92	6.00	ug/L	
SLE0163-CCB9	Zinc-67	0.0200	0.94	6.00	ug/L	
SLE0163-IBLA	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0163-IBLA	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0163-IBLA	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0163-IBLA	Copper-63	0.0240	0.173	0.500	ug/L	
SLE0163-IBLA	Copper-65	0.0220	0.35	0.500	ug/L	
SLE0163-IBLA	Zinc-66	0.0900	2.92	6.00	ug/L	
SLE0163-IBLA	Zinc-67	0.0190	0.94	6.00	ug/L	
SLE0163-CCBA	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0163-CCBA	Cadmium-111	0.0110	0.03	0.100	ug/L	
SLE0163-CCBA	Cadmium-114	-0.00100	0.04	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/10/23 00:23

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-CCBA	Copper-63	0.00800	0.173	0.500	ug/L	
SLE0163-CCBA	Copper-65	0.0130	0.35	0.500	ug/L	
SLE0163-CCBA	Zinc-66	0.0470	2.92	6.00	ug/L	
SLE0163-CCBA	Zinc-67	0.0180	0.94	6.00	ug/L	
SLE0163-IBLB	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0163-IBLB	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLE0163-IBLB	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0163-IBLB	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0163-IBLB	Copper-65	0.00700	0.35	0.500	ug/L	
SLE0163-IBLB	Zinc-66	0.0170	2.92	6.00	ug/L	
SLE0163-IBLB	Zinc-67	0.0080	0.94	6.00	ug/L	
SLE0163-CCBB	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0163-CCBB	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLE0163-CCBB	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0163-CCBB	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0163-CCBB	Copper-65	0.00700	0.35	0.500	ug/L	
SLE0163-CCBB	Zinc-66	0.0550	2.92	6.00	ug/L	
SLE0163-CCBB	Zinc-67	0.0610	0.94	6.00	ug/L	
SLE0163-IBLC	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0163-IBLC	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0163-IBLC	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0163-IBLC	Copper-63	0.0140	0.173	0.500	ug/L	
SLE0163-IBLC	Copper-65	0.0160	0.35	0.500	ug/L	
SLE0163-IBLC	Zinc-66	0.0150	2.92	6.00	ug/L	
SLE0163-IBLC	Zinc-67	0.0290	0.94	6.00	ug/L	
SLE0163-IBLD	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0163-IBLD	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0163-IBLD	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0163-IBLD	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0163-IBLD	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0163-IBLD	Zinc-66	0.0070	2.92	6.00	ug/L	
SLE0163-IBLD	Zinc-67	0.0240	0.94	6.00	ug/L	
SLE0163-CCBC	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0163-CCBC	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLE0163-CCBC	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0163-CCBC	Copper-63	0.00500	0.173	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/10/23 02:12

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-CCBC	Copper-65	0.00900	0.35	0.500	ug/L	
SLE0163-CCBC	Zinc-66	0.0380	2.92	6.00	ug/L	
SLE0163-CCBC	Zinc-67	0.0550	0.94	6.00	ug/L	
SLE0163-IBLE	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0163-IBLE	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLE0163-IBLE	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0163-IBLE	Copper-63	0.0160	0.173	0.500	ug/L	
SLE0163-IBLE	Copper-65	0.0150	0.35	0.500	ug/L	
SLE0163-IBLE	Zinc-66	0.0460	2.92	6.00	ug/L	
SLE0163-IBLE	Zinc-67	0.0590	0.94	6.00	ug/L	
SLE0163-IBLF	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0163-IBLF	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0163-IBLF	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0163-IBLF	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0163-IBLF	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0163-IBLF	Zinc-66	0.0130	2.92	6.00	ug/L	
SLE0163-IBLF	Zinc-67	0.0600	0.94	6.00	ug/L	
SLE0163-CCBD	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLE0163-CCBD	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0163-CCBD	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0163-CCBD	Copper-63	0.00500	0.173	0.500	ug/L	
SLE0163-CCBD	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0163-CCBD	Zinc-66	0.0530	2.92	6.00	ug/L	
SLE0163-CCBD	Zinc-67	-0.0030	0.94	6.00	ug/L	
SLE0163-IBLG	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0163-IBLG	Cadmium-111	0.00500	0.03	0.100	ug/L	
SLE0163-IBLG	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0163-IBLG	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0163-IBLG	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0163-IBLG	Zinc-66	-0.0070	2.92	6.00	ug/L	
SLE0163-IBLG	Zinc-67	-0.0030	0.94	6.00	ug/L	
SLE0163-IBLH	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0163-IBLH	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0163-IBLH	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0163-IBLH	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0163-IBLH	Copper-65	0.00500	0.35	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00034
Date Analyzed: 05/10/23 03:55

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0163-IBLH	Zinc-66	-0.0110	2.92	6.00	ug/L	
SLE0163-IBLH	Zinc-67	-0.0240	0.94	6.00	ug/L	
SLE0163-CCBE	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0163-CCBE	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLE0163-CCBE	Cadmium-114	0.00800	0.04	0.100	ug/L	
SLE0163-CCBE	Copper-63	0.00600	0.173	0.500	ug/L	
SLE0163-CCBE	Copper-65	0.00900	0.35	0.500	ug/L	
SLE0163-CCBE	Zinc-66	0.0450	2.92	6.00	ug/L	
SLE0163-CCBE	Zinc-67	0.0450	0.94	6.00	ug/L	
SLE0163-IBLI	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0163-IBLI	Cadmium-111	0.0100	0.03	0.100	ug/L	
SLE0163-IBLI	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0163-IBLI	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0163-IBLI	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0163-IBLI	Zinc-66	0.0010	2.92	6.00	ug/L	
SLE0163-IBLI	Zinc-67	-0.0090	0.94	6.00	ug/L	
SLE0163-CCBF	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0163-CCBF	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0163-CCBF	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0163-CCBF	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0163-CCBF	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0163-CCBF	Zinc-66	0.0570	2.92	6.00	ug/L	
SLE0163-CCBF	Zinc-67	0.0730	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/10/23 16:19

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-IBL1	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0204-IBL1	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0204-IBL1	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0204-IBL1	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0204-IBL1	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0204-IBL1	Zinc-66	0.0070	2.92	6.00	ug/L	
SLE0204-IBL1	Zinc-67	-0.0250	0.94	6.00	ug/L	
SLE0204-ICB1	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0204-ICB1	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0204-ICB1	Cadmium-114	-0.00600	0.04	0.100	ug/L	
SLE0204-ICB1	Copper-63	0.00500	0.173	0.500	ug/L	
SLE0204-ICB1	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0204-ICB1	Zinc-66	0.0200	2.92	6.00	ug/L	
SLE0204-ICB1	Zinc-67	-0.0030	0.94	6.00	ug/L	
SLE0204-CCB1	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0204-CCB1	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0204-CCB1	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0204-CCB1	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0204-CCB1	Copper-65	-0.00500	0.35	0.500	ug/L	
SLE0204-CCB1	Zinc-66	0.0050	2.92	6.00	ug/L	
SLE0204-CCB1	Zinc-67	0.0230	0.94	6.00	ug/L	
SLE0204-IBL2	Arsenic-75a	0.0130	0.0373	0.200	ug/L	
SLE0204-IBL2	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0204-IBL2	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0204-IBL2	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0204-IBL2	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0204-IBL2	Zinc-66	0.0190	2.92	6.00	ug/L	
SLE0204-IBL2	Zinc-67	0.0310	0.94	6.00	ug/L	
SLE0204-CCB2	Arsenic-75a	0.00800	0.0373	0.200	ug/L	
SLE0204-CCB2	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0204-CCB2	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0204-CCB2	Copper-63	0.00	0.173	0.500	ug/L	
SLE0204-CCB2	Copper-65	0.00	0.35	0.500	ug/L	
SLE0204-CCB2	Zinc-66	0.0090	2.92	6.00	ug/L	
SLE0204-CCB2	Zinc-67	-0.0040	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/10/23 17:49

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-CCB3	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0204-CCB3	Cadmium-111	0.00700	0.03	0.100	ug/L	
SLE0204-CCB3	Cadmium-114	0.0270	0.04	0.100	ug/L	
SLE0204-CCB3	Copper-63	0.00	0.173	0.500	ug/L	
SLE0204-CCB3	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0204-CCB3	Zinc-66	0.0010	2.92	6.00	ug/L	
SLE0204-CCB3	Zinc-67	-0.0230	0.94	6.00	ug/L	
SLE0204-IBL3	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0204-IBL3	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0204-IBL3	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0204-IBL3	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0204-IBL3	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0204-IBL3	Zinc-66	0.0820	2.92	6.00	ug/L	
SLE0204-IBL3	Zinc-67	0.0490	0.94	6.00	ug/L	
SLE0204-CCB4	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0204-CCB4	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLE0204-CCB4	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0204-CCB4	Copper-63	0.00600	0.173	0.500	ug/L	
SLE0204-CCB4	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0204-CCB4	Zinc-66	-0.0020	2.92	6.00	ug/L	
SLE0204-CCB4	Zinc-67	0.0040	0.94	6.00	ug/L	
SLE0204-IBL4	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0204-IBL4	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0204-IBL4	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0204-IBL4	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0204-IBL4	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0204-IBL4	Zinc-66	0.0700	2.92	6.00	ug/L	
SLE0204-IBL4	Zinc-67	0.0350	0.94	6.00	ug/L	
SLE0204-IBL5	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0204-IBL5	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0204-IBL5	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0204-IBL5	Copper-63	-0.00100	0.173	0.500	ug/L	
SLE0204-IBL5	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0204-IBL5	Zinc-66	0.0530	2.92	6.00	ug/L	
SLE0204-IBL5	Zinc-67	0.0420	0.94	6.00	ug/L	
SLE0204-CCB5	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/10/23 19:56

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-CCB5	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLE0204-CCB5	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-CCB5	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0204-CCB5	Copper-65	0.00	0.35	0.500	ug/L	
SLE0204-CCB5	Zinc-66	-0.0150	2.92	6.00	ug/L	
SLE0204-CCB5	Zinc-67	0.0150	0.94	6.00	ug/L	
SLE0204-CCB6	Arsenic-75a	0.0100	0.0373	0.200	ug/L	
SLE0204-CCB6	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLE0204-CCB6	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-CCB6	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0204-CCB6	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0204-CCB6	Zinc-66	-0.0240	2.92	6.00	ug/L	
SLE0204-CCB6	Zinc-67	-0.0910	0.94	6.00	ug/L	
SLE0204-IBL6	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0204-IBL6	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0204-IBL6	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0204-IBL6	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0204-IBL6	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0204-IBL6	Zinc-66	0.0170	2.92	6.00	ug/L	
SLE0204-IBL6	Zinc-67	-0.0430	0.94	6.00	ug/L	
SLE0204-CCB7	Arsenic-75a	0.0140	0.0373	0.200	ug/L	
SLE0204-CCB7	Cadmium-111	-0.00900	0.03	0.100	ug/L	
SLE0204-CCB7	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0204-CCB7	Copper-63	0.0230	0.173	0.500	ug/L	
SLE0204-CCB7	Copper-65	0.0230	0.35	0.500	ug/L	
SLE0204-CCB7	Zinc-66	-0.0280	2.92	6.00	ug/L	
SLE0204-CCB7	Zinc-67	-0.0330	0.94	6.00	ug/L	
SLE0204-IBL7	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0204-IBL7	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLE0204-IBL7	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0204-IBL7	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0204-IBL7	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0204-IBL7	Zinc-66	-0.0450	2.92	6.00	ug/L	
SLE0204-IBL7	Zinc-67	-0.0920	0.94	6.00	ug/L	
SLE0204-CCB8	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0204-CCB8	Cadmium-111	-0.00900	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/10/23 22:32

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-CCB8	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-CCB8	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0204-CCB8	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0204-CCB8	Zinc-66	-0.0360	2.92	6.00	ug/L	
SLE0204-CCB8	Zinc-67	-0.0810	0.94	6.00	ug/L	
SLE0204-IBL8	Arsenic-75a	0.0750	0.0373	0.200	ug/L	
SLE0204-IBL8	Cadmium-111	-0.0120	0.03	0.100	ug/L	
SLE0204-IBL8	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-IBL8	Copper-63	0.0820	0.173	0.500	ug/L	
SLE0204-IBL8	Copper-65	0.0820	0.35	0.500	ug/L	
SLE0204-IBL8	Zinc-66	0.206	2.92	6.00	ug/L	
SLE0204-IBL8	Zinc-67	0.0940	0.94	6.00	ug/L	
SLE0204-CCB9	Arsenic-75a	0.0230	0.0373	0.200	ug/L	
SLE0204-CCB9	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0204-CCB9	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-CCB9	Copper-63	0.0160	0.173	0.500	ug/L	
SLE0204-CCB9	Copper-65	0.0180	0.35	0.500	ug/L	
SLE0204-CCB9	Zinc-66	0.0010	2.92	6.00	ug/L	
SLE0204-CCB9	Zinc-67	-0.0630	0.94	6.00	ug/L	
SLE0204-IBL9	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0204-IBL9	Cadmium-111	-0.0120	0.03	0.100	ug/L	
SLE0204-IBL9	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0204-IBL9	Copper-63	0.0140	0.173	0.500	ug/L	
SLE0204-IBL9	Copper-65	0.0100	0.35	0.500	ug/L	
SLE0204-IBL9	Zinc-66	-0.0300	2.92	6.00	ug/L	
SLE0204-IBL9	Zinc-67	-0.0670	0.94	6.00	ug/L	
SLE0204-CCBA	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0204-CCBA	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLE0204-CCBA	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0204-CCBA	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0204-CCBA	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0204-CCBA	Zinc-66	-0.0580	2.92	6.00	ug/L	
SLE0204-CCBA	Zinc-67	-0.135	0.94	6.00	ug/L	
SLE0204-IBLA	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0204-IBLA	Cadmium-111	-0.0100	0.03	0.100	ug/L	
SLE0204-IBLA	Cadmium-114	0.00	0.04	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/11/23 01:08

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-IBLA	Copper-63	0.00800	0.173	0.500	ug/L	
SLE0204-IBLA	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0204-IBLA	Zinc-66	-0.0280	2.92	6.00	ug/L	
SLE0204-IBLA	Zinc-67	-0.109	0.94	6.00	ug/L	
SLE0204-CCBB	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0204-CCBB	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLE0204-CCBB	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0204-CCBB	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0204-CCBB	Copper-65	0.0110	0.35	0.500	ug/L	
SLE0204-CCBB	Zinc-66	-0.0550	2.92	6.00	ug/L	
SLE0204-CCBB	Zinc-67	-0.111	0.94	6.00	ug/L	
SLE0204-CCBC	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0204-CCBC	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0204-CCBC	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0204-CCBC	Copper-63	-0.0170	0.173	0.500	ug/L	
SLE0204-CCBC	Copper-65	-0.0240	0.35	0.500	ug/L	
SLE0204-CCBC	Zinc-66	-0.0230	2.92	6.00	ug/L	
SLE0204-CCBC	Zinc-67	-0.0620	0.94	6.00	ug/L	
SLE0204-IBLB	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLE0204-IBLB	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0204-IBLB	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0204-IBLB	Copper-63	0.0140	0.173	0.500	ug/L	
SLE0204-IBLB	Copper-65	0.0100	0.35	0.500	ug/L	
SLE0204-IBLB	Zinc-66	-0.0130	2.92	6.00	ug/L	
SLE0204-IBLB	Zinc-67	-0.0850	0.94	6.00	ug/L	
SLE0204-CCBD	Arsenic-75a	0.0120	0.0373	0.200	ug/L	
SLE0204-CCBD	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0204-CCBD	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0204-CCBD	Copper-63	0.0110	0.173	0.500	ug/L	
SLE0204-CCBD	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0204-CCBD	Zinc-66	-0.0380	2.92	6.00	ug/L	
SLE0204-CCBD	Zinc-67	-0.0870	0.94	6.00	ug/L	
SLE0204-IBLC	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLE0204-IBLC	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0204-IBLC	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-IBLC	Copper-63	-0.0300	0.173	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/11/23 02:57

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-IBLC	Copper-65	-0.0360	0.35	0.500	ug/L	
SLE0204-IBLC	Zinc-66	-0.0170	2.92	6.00	ug/L	
SLE0204-IBLC	Zinc-67	-0.107	0.94	6.00	ug/L	
SLE0204-IBLD	Arsenic-75a	-0.00900	0.0373	0.200	ug/L	
SLE0204-IBLD	Cadmium-111	0.00	0.03	0.100	ug/L	
SLE0204-IBLD	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0204-IBLD	Copper-63	-0.0310	0.173	0.500	ug/L	
SLE0204-IBLD	Copper-65	-0.0330	0.35	0.500	ug/L	
SLE0204-IBLD	Zinc-66	-0.0130	2.92	6.00	ug/L	
SLE0204-IBLD	Zinc-67	-0.0600	0.94	6.00	ug/L	
SLE0204-CCBE	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLE0204-CCBE	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0204-CCBE	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0204-CCBE	Copper-63	-0.0350	0.173	0.500	ug/L	
SLE0204-CCBE	Copper-65	-0.0400	0.35	0.500	ug/L	
SLE0204-CCBE	Zinc-66	-0.0710	2.92	6.00	ug/L	
SLE0204-CCBE	Zinc-67	-0.155	0.94	6.00	ug/L	
SLE0204-IBLE	Arsenic-75a	-0.00800	0.0373	0.200	ug/L	
SLE0204-IBLE	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0204-IBLE	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0204-IBLE	Copper-63	-0.0340	0.173	0.500	ug/L	
SLE0204-IBLE	Copper-65	-0.0360	0.35	0.500	ug/L	
SLE0204-IBLE	Zinc-66	-0.0450	2.92	6.00	ug/L	
SLE0204-IBLE	Zinc-67	-0.0590	0.94	6.00	ug/L	
SLE0204-IBLF	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLE0204-IBLF	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0204-IBLF	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0204-IBLF	Copper-63	-0.0350	0.173	0.500	ug/L	
SLE0204-IBLF	Copper-65	-0.0410	0.35	0.500	ug/L	
SLE0204-IBLF	Zinc-66	-0.0640	2.92	6.00	ug/L	
SLE0204-IBLF	Zinc-67	-0.122	0.94	6.00	ug/L	
SLE0204-CCBF	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0204-CCBF	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0204-CCBF	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-CCBF	Copper-63	-0.0370	0.173	0.500	ug/L	
SLE0204-CCBF	Copper-65	-0.0380	0.35	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00040
Date Analyzed: 05/11/23 04:33

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-CCBF	Zinc-66	-0.0700	2.92	6.00	ug/L	
SLE0204-CCBF	Zinc-67	-0.130	0.94	6.00	ug/L	
SLE0204-CCBG	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLE0204-CCBG	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0204-CCBG	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0204-CCBG	Copper-63	-0.00500	0.173	0.500	ug/L	
SLE0204-CCBG	Copper-65	-0.00400	0.35	0.500	ug/L	
SLE0204-CCBG	Zinc-66	-0.0680	2.92	6.00	ug/L	
SLE0204-CCBG	Zinc-67	-0.0590	0.94	6.00	ug/L	
SLE0204-IBLG	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLE0204-IBLG	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLE0204-IBLG	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-IBLG	Copper-63	-0.00400	0.173	0.500	ug/L	
SLE0204-IBLG	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0204-IBLG	Zinc-66	-0.0550	2.92	6.00	ug/L	
SLE0204-IBLG	Zinc-67	-0.0180	0.94	6.00	ug/L	
SLE0204-CCBH	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0204-CCBH	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0204-CCBH	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-CCBH	Copper-63	-0.00400	0.173	0.500	ug/L	
SLE0204-CCBH	Copper-65	-0.00300	0.35	0.500	ug/L	
SLE0204-CCBH	Zinc-66	-0.0510	2.92	6.00	ug/L	
SLE0204-CCBH	Zinc-67	-0.0820	0.94	6.00	ug/L	
SLE0204-IBLH	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0204-IBLH	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0204-IBLH	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0204-IBLH	Copper-63	-0.00500	0.173	0.500	ug/L	
SLE0204-IBLH	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0204-IBLH	Zinc-66	-0.0600	2.92	6.00	ug/L	
SLE0204-IBLH	Zinc-67	-0.0820	0.94	6.00	ug/L	
SLE0204-CCBI	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0204-CCBI	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLE0204-CCBI	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0204-CCBI	Copper-63	-0.00500	0.173	0.500	ug/L	
SLE0204-CCBI	Copper-65	-0.00300	0.35	0.500	ug/L	
SLE0204-CCBI	Zinc-66	-0.0640	2.92	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Sequence: SLE0204
Date Analyzed: 05/11/23 06:42

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0204-CCBI	Zinc-67	-0.0510	0.94	6.00	ug/L	
SLE0204-IBLI	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0204-IBLI	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0204-IBLI	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0204-IBLI	Copper-63	-0.00500	0.173	0.500	ug/L	
SLE0204-IBLI	Copper-65	-0.00500	0.35	0.500	ug/L	
SLE0204-IBLI	Zinc-66	-0.0540	2.92	6.00	ug/L	
SLE0204-IBLI	Zinc-67	-0.0640	0.94	6.00	ug/L	
SLE0204-IBLJ	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLE0204-IBLJ	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLE0204-IBLJ	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0204-IBLJ	Copper-63	-0.00600	0.173	0.500	ug/L	
SLE0204-IBLJ	Copper-65	-0.00300	0.35	0.500	ug/L	
SLE0204-IBLJ	Zinc-66	-0.0490	2.92	6.00	ug/L	
SLE0204-IBLJ	Zinc-67	-0.0310	0.94	6.00	ug/L	
SLE0204-CCBJ	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0204-CCBJ	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0204-CCBJ	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0204-CCBJ	Copper-63	0.00800	0.173	0.500	ug/L	
SLE0204-CCBJ	Copper-65	0.0120	0.35	0.500	ug/L	
SLE0204-CCBJ	Zinc-66	-0.0420	2.92	6.00	ug/L	
SLE0204-CCBJ	Zinc-67	-0.0330	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/11/23 14:29

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBL1	Arsenic-75a	0.0110	0.0373	0.200	ug/L	
SLE0209-IBL1	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLE0209-IBL1	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0209-IBL1	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0209-IBL1	Copper-65	-0.00400	0.35	0.500	ug/L	
SLE0209-IBL1	Zinc-66	-0.0160	2.92	6.00	ug/L	
SLE0209-IBL1	Zinc-67	-0.0340	0.94	6.00	ug/L	
SLE0209-ICB1	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0209-ICB1	Cadmium-111	0.00400	0.03	0.100	ug/L	
SLE0209-ICB1	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0209-ICB1	Copper-63	-0.00400	0.173	0.500	ug/L	
SLE0209-ICB1	Copper-65	-0.00800	0.35	0.500	ug/L	
SLE0209-ICB1	Zinc-66	0.00	2.92	6.00	ug/L	
SLE0209-ICB1	Zinc-67	-0.0510	0.94	6.00	ug/L	
SLE0209-CCB1	Arsenic-75a	0.00800	0.0373	0.200	ug/L	
SLE0209-CCB1	Cadmium-111	-0.0130	0.03	0.100	ug/L	
SLE0209-CCB1	Cadmium-114	-0.00400	0.04	0.100	ug/L	
SLE0209-CCB1	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0209-CCB1	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0209-CCB1	Zinc-66	0.0110	2.92	6.00	ug/L	
SLE0209-CCB1	Zinc-67	0.0050	0.94	6.00	ug/L	
SLE0209-IBL2	Arsenic-75a	0.0350	0.0373	0.200	ug/L	
SLE0209-IBL2	Cadmium-111	0.344	0.03	0.100	ug/L	
SLE0209-IBL2	Cadmium-114	0.415	0.04	0.100	ug/L	
SLE0209-IBL2	Copper-63	0.00500	0.173	0.500	ug/L	
SLE0209-IBL2	Copper-65	0.00800	0.35	0.500	ug/L	
SLE0209-IBL2	Zinc-66	0.0670	2.92	6.00	ug/L	
SLE0209-IBL2	Zinc-67	0.0300	0.94	6.00	ug/L	
SLE0209-IBL3	Arsenic-75a	0.0170	0.0373	0.200	ug/L	
SLE0209-IBL3	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0209-IBL3	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0209-IBL3	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0209-IBL3	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0209-IBL3	Zinc-66	0.0610	2.92	6.00	ug/L	
SLE0209-IBL3	Zinc-67	0.110	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/11/23 16:09

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-CCB2	Arsenic-75a	0.0160	0.0373	0.200	ug/L	
SLE0209-CCB2	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0209-CCB2	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0209-CCB2	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0209-CCB2	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0209-CCB2	Zinc-66	0.0470	2.92	6.00	ug/L	
SLE0209-CCB2	Zinc-67	0.0570	0.94	6.00	ug/L	
SLE0209-CCB3	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0209-CCB3	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLE0209-CCB3	Cadmium-114	-0.0180	0.04	0.100	ug/L	
SLE0209-CCB3	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0209-CCB3	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0209-CCB3	Zinc-66	-0.0050	2.92	6.00	ug/L	
SLE0209-CCB3	Zinc-67	0.0070	0.94	6.00	ug/L	
SLE0209-IBL4	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0209-IBL4	Cadmium-111	-0.0100	0.03	0.100	ug/L	
SLE0209-IBL4	Cadmium-114	-0.0130	0.04	0.100	ug/L	
SLE0209-IBL4	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0209-IBL4	Copper-65	0.00800	0.35	0.500	ug/L	
SLE0209-IBL4	Zinc-66	0.104	2.92	6.00	ug/L	
SLE0209-IBL4	Zinc-67	0.124	0.94	6.00	ug/L	
SLE0209-IBL5	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLE0209-IBL5	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLE0209-IBL5	Cadmium-114	-0.0190	0.04	0.100	ug/L	
SLE0209-IBL5	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0209-IBL5	Copper-65	0.00900	0.35	0.500	ug/L	
SLE0209-IBL5	Zinc-66	0.101	2.92	6.00	ug/L	
SLE0209-IBL5	Zinc-67	0.145	0.94	6.00	ug/L	
SLE0209-CCB4	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0209-CCB4	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0209-CCB4	Cadmium-114	-0.0170	0.04	0.100	ug/L	
SLE0209-CCB4	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0209-CCB4	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0209-CCB4	Zinc-66	0.0110	2.92	6.00	ug/L	
SLE0209-CCB4	Zinc-67	0.0020	0.94	6.00	ug/L	
SLE0209-IBL9	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/11/23 18:29

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBL9	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0209-IBL9	Cadmium-114	-0.0150	0.04	0.100	ug/L	
SLE0209-IBL9	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0209-IBL9	Copper-65	0.00200	0.35	0.500	ug/L	
SLE0209-IBL9	Zinc-66	0.0350	2.92	6.00	ug/L	
SLE0209-IBL9	Zinc-67	0.0400	0.94	6.00	ug/L	
SLE0209-IBLA	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0209-IBLA	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLE0209-IBLA	Cadmium-114	-0.0180	0.04	0.100	ug/L	
SLE0209-IBLA	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0209-IBLA	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0209-IBLA	Zinc-66	0.0500	2.92	6.00	ug/L	
SLE0209-IBLA	Zinc-67	0.0070	0.94	6.00	ug/L	
SLE0209-CCB7	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0209-CCB7	Cadmium-111	-0.0120	0.03	0.100	ug/L	
SLE0209-CCB7	Cadmium-114	-0.0190	0.04	0.100	ug/L	
SLE0209-CCB7	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0209-CCB7	Copper-65	0.00700	0.35	0.500	ug/L	
SLE0209-CCB7	Zinc-66	0.0200	2.92	6.00	ug/L	
SLE0209-CCB7	Zinc-67	0.0230	0.94	6.00	ug/L	
SLE0209-CCB8	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0209-CCB8	Cadmium-111	0.00300	0.03	0.100	ug/L	
SLE0209-CCB8	Cadmium-114	-0.00100	0.04	0.100	ug/L	
SLE0209-CCB8	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0209-CCB8	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0209-CCB8	Zinc-66	-0.0080	2.92	6.00	ug/L	
SLE0209-CCB8	Zinc-67	-0.0080	0.94	6.00	ug/L	
SLE0209-CCBA	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0209-CCBA	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLE0209-CCBA	Cadmium-114	0.00800	0.04	0.100	ug/L	
SLE0209-CCBA	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0209-CCBA	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0209-CCBA	Zinc-66	0.0100	2.92	6.00	ug/L	
SLE0209-CCBA	Zinc-67	0.0220	0.94	6.00	ug/L	
SLE0209-IBLC	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLE0209-IBLC	Cadmium-111	0.00	0.03	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/11/23 20:25

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBLC	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLE0209-IBLC	Copper-63	0.00300	0.173	0.500	ug/L	
SLE0209-IBLC	Copper-65	0.00	0.35	0.500	ug/L	
SLE0209-IBLC	Zinc-66	0.0430	2.92	6.00	ug/L	
SLE0209-IBLC	Zinc-67	0.0860	0.94	6.00	ug/L	
SLE0209-IBLD	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0209-IBLD	Cadmium-111	0.0530	0.03	0.100	ug/L	
SLE0209-IBLD	Cadmium-114	0.0570	0.04	0.100	ug/L	
SLE0209-IBLD	Copper-63	0.0160	0.173	0.500	ug/L	
SLE0209-IBLD	Copper-65	0.00900	0.35	0.500	ug/L	
SLE0209-IBLD	Zinc-66	0.0580	2.92	6.00	ug/L	
SLE0209-IBLD	Zinc-67	0.0800	0.94	6.00	ug/L	
SLE0209-CCBB	Arsenic-75a	0.00300	0.0373	0.200	ug/L	
SLE0209-CCBB	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0209-CCBB	Cadmium-114	0.00800	0.04	0.100	ug/L	
SLE0209-CCBB	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0209-CCBB	Copper-65	-0.00100	0.35	0.500	ug/L	
SLE0209-CCBB	Zinc-66	0.0200	2.92	6.00	ug/L	
SLE0209-CCBB	Zinc-67	0.0410	0.94	6.00	ug/L	
SLE0209-IBLE	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0209-IBLE	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0209-IBLE	Cadmium-114	0.00800	0.04	0.100	ug/L	
SLE0209-IBLE	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0209-IBLE	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0209-IBLE	Zinc-66	0.0320	2.92	6.00	ug/L	
SLE0209-IBLE	Zinc-67	0.0610	0.94	6.00	ug/L	
SLE0209-IBLF	Arsenic-75a	0.0290	0.0373	0.200	ug/L	
SLE0209-IBLF	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLE0209-IBLF	Cadmium-114	0.00500	0.04	0.100	ug/L	
SLE0209-IBLF	Copper-63	0.179	0.173	0.500	ug/L	
SLE0209-IBLF	Copper-65	0.164	0.35	0.500	ug/L	
SLE0209-IBLF	Zinc-66	0.164	2.92	6.00	ug/L	
SLE0209-IBLF	Zinc-67	0.135	0.94	6.00	ug/L	
SLE0209-CCBC	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0209-CCBC	Cadmium-111	-0.00500	0.03	0.100	ug/L	
SLE0209-CCBC	Cadmium-114	0.00700	0.04	0.100	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/11/23 21:58

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-CCBC	Copper-63	0.00700	0.173	0.500	ug/L	
SLE0209-CCBC	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0209-CCBC	Zinc-66	0.0270	2.92	6.00	ug/L	
SLE0209-CCBC	Zinc-67	0.0070	0.94	6.00	ug/L	
SLE0209-CCBD	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0209-CCBD	Cadmium-111	-0.00400	0.03	0.100	ug/L	
SLE0209-CCBD	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0209-CCBD	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0209-CCBD	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0209-CCBD	Zinc-66	0.0300	2.92	6.00	ug/L	
SLE0209-CCBD	Zinc-67	0.0230	0.94	6.00	ug/L	
SLE0209-IBLG	Arsenic-75a	-0.00800	0.0373	0.200	ug/L	
SLE0209-IBLG	Cadmium-111	0.00100	0.03	0.100	ug/L	
SLE0209-IBLG	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0209-IBLG	Copper-63	0.0140	0.173	0.500	ug/L	
SLE0209-IBLG	Copper-65	0.0170	0.35	0.500	ug/L	
SLE0209-IBLG	Zinc-66	0.0300	2.92	6.00	ug/L	
SLE0209-IBLG	Zinc-67	0.0300	0.94	6.00	ug/L	
SLE0209-CCBE	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0209-CCBE	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0209-CCBE	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLE0209-CCBE	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0209-CCBE	Copper-65	0.00700	0.35	0.500	ug/L	
SLE0209-CCBE	Zinc-66	0.0260	2.92	6.00	ug/L	
SLE0209-CCBE	Zinc-67	0.0380	0.94	6.00	ug/L	
SLE0209-IBLH	Arsenic-75a	-0.00400	0.0373	0.200	ug/L	
SLE0209-IBLH	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0209-IBLH	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0209-IBLH	Copper-63	0.00200	0.173	0.500	ug/L	
SLE0209-IBLH	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0209-IBLH	Zinc-66	-0.0040	2.92	6.00	ug/L	
SLE0209-IBLH	Zinc-67	-0.0140	0.94	6.00	ug/L	
SLE0209-CCBF	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0209-CCBF	Cadmium-111	-0.0100	0.03	0.100	ug/L	
SLE0209-CCBF	Cadmium-114	0.00700	0.04	0.100	ug/L	
SLE0209-CCBF	Copper-63	0.00100	0.173	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/12/23 00:09

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-CCBF	Copper-65	0.00600	0.35	0.500	ug/L	
SLE0209-CCBF	Zinc-66	0.0160	2.92	6.00	ug/L	
SLE0209-CCBF	Zinc-67	0.0570	0.94	6.00	ug/L	
SLE0209-IBLI	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0209-IBLI	Cadmium-111	-0.00800	0.03	0.100	ug/L	
SLE0209-IBLI	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0209-IBLI	Copper-63	0.0530	0.173	0.500	ug/L	
SLE0209-IBLI	Copper-65	0.0600	0.35	0.500	ug/L	
SLE0209-IBLI	Zinc-66	0.0320	2.92	6.00	ug/L	
SLE0209-IBLI	Zinc-67	0.0250	0.94	6.00	ug/L	
SLE0209-CCBG	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0209-CCBG	Cadmium-111	0.00600	0.03	0.100	ug/L	
SLE0209-CCBG	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0209-CCBG	Copper-63	0.0140	0.173	0.500	ug/L	
SLE0209-CCBG	Copper-65	0.0190	0.35	0.500	ug/L	
SLE0209-CCBG	Zinc-66	0.0130	2.92	6.00	ug/L	
SLE0209-CCBG	Zinc-67	0.0100	0.94	6.00	ug/L	
SLE0209-IBLJ	Arsenic-75a	0.0180	0.0373	0.200	ug/L	
SLE0209-IBLJ	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0209-IBLJ	Cadmium-114	0.00900	0.04	0.100	ug/L	
SLE0209-IBLJ	Copper-63	0.0530	0.173	0.500	ug/L	
SLE0209-IBLJ	Copper-65	0.0490	0.35	0.500	ug/L	
SLE0209-IBLJ	Zinc-66	0.0430	2.92	6.00	ug/L	
SLE0209-IBLJ	Zinc-67	0.0130	0.94	6.00	ug/L	
SLE0209-CCBH	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0209-CCBH	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0209-CCBH	Cadmium-114	0.00400	0.04	0.100	ug/L	
SLE0209-CCBH	Copper-63	0.0320	0.173	0.500	ug/L	
SLE0209-CCBH	Copper-65	0.0290	0.35	0.500	ug/L	
SLE0209-CCBH	Zinc-66	0.0250	2.92	6.00	ug/L	
SLE0209-CCBH	Zinc-67	-0.0210	0.94	6.00	ug/L	
SLE0209-IBLK	Arsenic-75a	-0.00600	0.0373	0.200	ug/L	
SLE0209-IBLK	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0209-IBLK	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0209-IBLK	Copper-63	0.0160	0.173	0.500	ug/L	
SLE0209-IBLK	Copper-65	0.0130	0.35	0.500	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/12/23 02:36

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBLK	Zinc-66	0.0140	2.92	6.00	ug/L	
SLE0209-IBLK	Zinc-67	0.0370	0.94	6.00	ug/L	
SLE0209-IBLL	Arsenic-75a	-0.00700	0.0373	0.200	ug/L	
SLE0209-IBLL	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0209-IBLL	Cadmium-114	0.00300	0.04	0.100	ug/L	
SLE0209-IBLL	Copper-63	0.0170	0.173	0.500	ug/L	
SLE0209-IBLL	Copper-65	0.0190	0.35	0.500	ug/L	
SLE0209-IBLL	Zinc-66	0.0140	2.92	6.00	ug/L	
SLE0209-IBLL	Zinc-67	-0.0210	0.94	6.00	ug/L	
SLE0209-CCBI	Arsenic-75a	-0.00500	0.0373	0.200	ug/L	
SLE0209-CCBI	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0209-CCBI	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0209-CCBI	Copper-63	0.00400	0.173	0.500	ug/L	
SLE0209-CCBI	Copper-65	0.00500	0.35	0.500	ug/L	
SLE0209-CCBI	Zinc-66	0.0560	2.92	6.00	ug/L	
SLE0209-CCBI	Zinc-67	0.0040	0.94	6.00	ug/L	
SLE0209-CCBJ	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0209-CCBJ	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0209-CCBJ	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0209-CCBJ	Copper-63	-0.00200	0.173	0.500	ug/L	
SLE0209-CCBJ	Copper-65	0.00400	0.35	0.500	ug/L	
SLE0209-CCBJ	Zinc-66	-0.0070	2.92	6.00	ug/L	
SLE0209-CCBJ	Zinc-67	-0.0100	0.94	6.00	ug/L	
SLE0209-IBLM	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0209-IBLM	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0209-IBLM	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0209-IBLM	Copper-63	-0.00100	0.173	0.500	ug/L	
SLE0209-IBLM	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0209-IBLM	Zinc-66	-0.0200	2.92	6.00	ug/L	
SLE0209-IBLM	Zinc-67	-0.0580	0.94	6.00	ug/L	
SLE0209-IBLN	Arsenic-75a	-0.00100	0.0373	0.200	ug/L	
SLE0209-IBLN	Cadmium-111	-0.00900	0.03	0.100	ug/L	
SLE0209-IBLN	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0209-IBLN	Copper-63	-0.00400	0.173	0.500	ug/L	
SLE0209-IBLN	Copper-65	-0.00700	0.35	0.500	ug/L	
SLE0209-IBLN	Zinc-66	-0.0230	2.92	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/12/23 04:12

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBLN	Zinc-67	-0.0330	0.94	6.00	ug/L	
SLE0209-CCBK	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0209-CCBK	Cadmium-111	-0.0120	0.03	0.100	ug/L	
SLE0209-CCBK	Cadmium-114	0.00600	0.04	0.100	ug/L	
SLE0209-CCBK	Copper-63	-0.00500	0.173	0.500	ug/L	
SLE0209-CCBK	Copper-65	-0.00300	0.35	0.500	ug/L	
SLE0209-CCBK	Zinc-66	-0.0220	2.92	6.00	ug/L	
SLE0209-CCBK	Zinc-67	0.0100	0.94	6.00	ug/L	
SLE0209-IBLO	Arsenic-75a	-0.00300	0.0373	0.200	ug/L	
SLE0209-IBLO	Cadmium-111	-0.0120	0.03	0.100	ug/L	
SLE0209-IBLO	Cadmium-114	-0.00300	0.04	0.100	ug/L	
SLE0209-IBLO	Copper-63	-0.00800	0.173	0.500	ug/L	
SLE0209-IBLO	Copper-65	-0.00800	0.35	0.500	ug/L	
SLE0209-IBLO	Zinc-66	-0.0330	2.92	6.00	ug/L	
SLE0209-IBLO	Zinc-67	-0.0040	0.94	6.00	ug/L	
SLE0209-CCBL	Arsenic-75a	0.0280	0.0373	0.200	ug/L	
SLE0209-CCBL	Cadmium-111	-0.0110	0.03	0.100	ug/L	
SLE0209-CCBL	Cadmium-114	0.00200	0.04	0.100	ug/L	
SLE0209-CCBL	Copper-63	0.0190	0.173	0.500	ug/L	
SLE0209-CCBL	Copper-65	0.0120	0.35	0.500	ug/L	
SLE0209-CCBL	Zinc-66	0.0360	2.92	6.00	ug/L	
SLE0209-CCBL	Zinc-67	-0.0230	0.94	6.00	ug/L	
SLE0209-IBLP	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0209-IBLP	Cadmium-111	0.00200	0.03	0.100	ug/L	
SLE0209-IBLP	Cadmium-114	-0.00500	0.04	0.100	ug/L	
SLE0209-IBLP	Copper-63	-0.00600	0.173	0.500	ug/L	
SLE0209-IBLP	Copper-65	-0.00700	0.35	0.500	ug/L	
SLE0209-IBLP	Zinc-66	-0.0110	2.92	6.00	ug/L	
SLE0209-IBLP	Zinc-67	-0.0400	0.94	6.00	ug/L	
SLE0209-CCBM	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0209-CCBM	Cadmium-111	-0.00300	0.03	0.100	ug/L	
SLE0209-CCBM	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0209-CCBM	Copper-63	-0.00700	0.173	0.500	ug/L	
SLE0209-CCBM	Copper-65	-0.00700	0.35	0.500	ug/L	
SLE0209-CCBM	Zinc-66	-0.0170	2.92	6.00	ug/L	
SLE0209-CCBM	Zinc-67	0.0240	0.94	6.00	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: ICPMS1
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00042
Date Analyzed: 05/12/23 06:37

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-IBLQ	Arsenic-75a	-0.00200	0.0373	0.200	ug/L	
SLE0209-IBLQ	Cadmium-111	-0.0140	0.03	0.100	ug/L	
SLE0209-IBLQ	Cadmium-114	-0.00200	0.04	0.100	ug/L	
SLE0209-IBLQ	Copper-63	-0.00700	0.173	0.500	ug/L	
SLE0209-IBLQ	Copper-65	-0.00200	0.35	0.500	ug/L	
SLE0209-IBLQ	Zinc-66	-0.0450	2.92	6.00	ug/L	
SLE0209-IBLQ	Zinc-67	-0.0490	0.94	6.00	ug/L	
SLE0209-IBLR	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0209-IBLR	Cadmium-111	-0.00100	0.03	0.100	ug/L	
SLE0209-IBLR	Cadmium-114	0.00	0.04	0.100	ug/L	
SLE0209-IBLR	Copper-63	-0.00300	0.173	0.500	ug/L	
SLE0209-IBLR	Copper-65	-0.00500	0.35	0.500	ug/L	
SLE0209-IBLR	Zinc-66	-0.0030	2.92	6.00	ug/L	
SLE0209-IBLR	Zinc-67	-0.0130	0.94	6.00	ug/L	
SLE0209-CCBN	Arsenic-75a	0.00900	0.0373	0.200	ug/L	
SLE0209-CCBN	Cadmium-111	-0.00200	0.03	0.100	ug/L	
SLE0209-CCBN	Cadmium-114	0.00100	0.04	0.100	ug/L	
SLE0209-CCBN	Copper-63	-0.00400	0.173	0.500	ug/L	
SLE0209-CCBN	Copper-65	-0.00600	0.35	0.500	ug/L	
SLE0209-CCBN	Zinc-66	-0.0240	2.92	6.00	ug/L	
SLE0209-CCBN	Zinc-67	-0.0090	0.94	6.00	ug/L	
SLE0209-CCBO	Arsenic-75a	0.00600	0.0373	0.200	ug/L	
SLE0209-CCBO	Cadmium-111	-0.00600	0.03	0.100	ug/L	
SLE0209-CCBO	Cadmium-114	-0.0100	0.04	0.100	ug/L	
SLE0209-CCBO	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0209-CCBO	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0209-CCBO	Zinc-66	-0.0050	2.92	6.00	ug/L	
SLE0209-CCBO	Zinc-67	0.0660	0.94	6.00	ug/L	
SLE0209-IBLS	Arsenic-75a	0.00100	0.0373	0.200	ug/L	
SLE0209-IBLS	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLE0209-IBLS	Cadmium-114	-0.00900	0.04	0.100	ug/L	
SLE0209-IBLS	Copper-63	-0.00200	0.173	0.500	ug/L	
SLE0209-IBLS	Copper-65	0.00300	0.35	0.500	ug/L	
SLE0209-IBLS	Zinc-66	-0.0310	2.92	6.00	ug/L	
SLE0209-IBLS	Zinc-67	-0.0300	0.94	6.00	ug/L	
SLE0209-CCBP	Arsenic-75a	0.0110	0.0373	0.200	ug/L	

INSTRUMENT BLANKS
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Sequence: SLE0209
Date Analyzed: 05/12/23 08:22

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0209-CCBP	Cadmium-111	-0.00700	0.03	0.100	ug/L	
SLE0209-CCBP	Cadmium-114	-0.00800	0.04	0.100	ug/L	
SLE0209-CCBP	Copper-63	0.00100	0.173	0.500	ug/L	
SLE0209-CCBP	Copper-65	0.00100	0.35	0.500	ug/L	
SLE0209-CCBP	Zinc-66	-0.0290	2.92	6.00	ug/L	
SLE0209-CCBP	Zinc-67	-0.0140	0.94	6.00	ug/L	
SLE0209-IBLT	Arsenic-75a	0.00500	0.0373	0.200	ug/L	
SLE0209-CCBQ	Arsenic-75a	0.00400	0.0373	0.200	ug/L	
SLE0209-IBLU	Arsenic-75a	0.00700	0.0373	0.200	ug/L	
SLE0209-CCBR	Arsenic-75a	0.00200	0.0373	0.200	ug/L	
SLE0209-IBLV	Arsenic-75a	0.00	0.0373	0.200	ug/L	
SLE0209-CCBS	Arsenic-75a	0.00200	0.0373	0.200	ug/L	

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0163	Instrument:	ICPMS1
		Calibration:	GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0163-CAL1	XDT_m1230509a-001	NA	05/09/23 15:21
CAL 1 - LOW CHECK	SLE0163-CAL2	XDT_m1230509a-002	NA	05/09/23 15:26
CAL 2	SLE0163-CAL3	XDT_m1230509a-003	NA	05/09/23 15:30
CAL 3	SLE0163-CAL4	XDT_m1230509a-004	NA	05/09/23 15:36
CAL 4	SLE0163-CAL5	XDT_m1230509a-005	NA	05/09/23 15:41
CAL 5	SLE0163-CAL6	XDT_m1230509a-006	NA	05/09/23 15:48
RINSE	SLE0163-IBL1	XDT_m1230509a-007	NA	05/09/23 15:55
Initial Cal Check	SLE0163-ICV1	XDT_m1230509a-009	NA	05/09/23 16:02
Initial Cal Blank	SLE0163-ICB1	XDT_m1230509a-011	NA	05/09/23 16:14
Calibration Check	SLE0163-CCV1	XDT_m1230509a-012	NA	05/09/23 16:20
Calibration Blank	SLE0163-CCB1	XDT_m1230509a-014	NA	05/09/23 16:32
Instrument RL Check	SLE0163-CRL1	XDT_m1230509a-015	NA	05/09/23 16:39
Interference Check B	SLE0163-IFB1	XDT_m1230509a-017	NA	05/09/23 16:49
Interference Check A	SLE0163-IFA1	XDT_m1230509a-018	NA	05/09/23 16:54
LR300	SLE0163-HCV2	XDT_m1230509a-020	NA	05/09/23 17:04
LR200	SLE0163-HCV1	XDT_m1230509a-021	NA	05/09/23 17:11
Instrument Blank	SLE0163-IBL2	XDT_m1230509a-022	NA	05/09/23 17:16
Instrument Blank	SLE0163-IBL3	XDT_m1230509a-023	NA	05/09/23 17:23
Calibration Check	SLE0163-CCV2	XDT_m1230509a-024	NA	05/09/23 17:29
Calibration Blank	SLE0163-CCB2	XDT_m1230509a-025	NA	05/09/23 17:36
ZZZZZ	BLE0256-BLK1	XDT_m1230509a-026	Water	05/09/23 17:44
ZZZZZ	BLE0256-BS1	XDT_m1230509a-027	Water	05/09/23 17:49
Instrument Blank	SLE0163-IBL4	XDT_m1230509a-033	NA	05/09/23 18:24
Instrument Blank	SLE0163-IBL5	XDT_m1230509a-035	NA	05/09/23 18:35
Calibration Check	SLE0163-CCV3	XDT_m1230509a-036	NA	05/09/23 18:40
Calibration Blank	SLE0163-CCB3	XDT_m1230509a-037	NA	05/09/23 18:47
Calibration Check	SLE0163-CCV4	XDT_m1230509a-039	NA	05/09/23 18:59
Calibration Blank	SLE0163-CCB4	XDT_m1230509a-040	NA	05/09/23 19:06
ZZZZZ	BLE0134-BLK2	XDT_m1230509a-044	Water	05/09/23 19:29

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0163
SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BLE0134-BS2	XDT_m1230509a-045	Water	05/09/23 19:33
Instrument Blank	SLE0163-IBL6	XDT_m1230509a-050	NA	05/09/23 19:57
Calibration Check	SLE0163-CCV5	XDT_m1230509a-051	NA	05/09/23 20:01
Calibration Blank	SLE0163-CCB5	XDT_m1230509a-052	NA	05/09/23 20:09
Instrument Blank	SLE0163-IBL7	XDT_m1230509a-062	NA	05/09/23 21:00
Calibration Check	SLE0163-CCV6	XDT_m1230509a-063	NA	05/09/23 21:05
Calibration Blank	SLE0163-CCB6	XDT_m1230509a-064	NA	05/09/23 21:12
Calibration Check	SLE0163-CCV7	XDT_m1230509a-067	NA	05/09/23 21:32
Calibration Blank	SLE0163-CCB7	XDT_m1230509a-068	NA	05/09/23 21:39
Blank	BLD0687-BLK1	XDT_m1230509a-069	Solid	05/09/23 21:43
LCS	BLD0687-BS1	XDT_m1230509a-070	Solid	05/09/23 21:48
Instrument Blank	SLE0163-IBL8	XDT_m1230509a-078	NA	05/09/23 22:22
Calibration Check	SLE0163-CCV8	XDT_m1230509a-079	NA	05/09/23 22:26
Calibration Blank	SLE0163-CCB8	XDT_m1230509a-080	NA	05/09/23 22:33
ZZZZZ	BLE0125-BLK1	XDT_m1230509a-081	Solid	05/09/23 22:38
ZZZZZ	BLE0125-BS1	XDT_m1230509a-082	Solid	05/09/23 22:42
Instrument Blank	SLE0163-IBL9	XDT_m1230509a-090	NA	05/09/23 23:17
Calibration Check	SLE0163-CCV9	XDT_m1230509a-091	NA	05/09/23 23:21
Calibration Blank	SLE0163-CCB9	XDT_m1230509a-092	NA	05/09/23 23:28
ZZZZZ	23D0393-09	XDT_m1230509a-093	Solid	05/09/23 23:32
ZZZZZ	23D0393-13	XDT_m1230509a-094	Solid	05/09/23 23:37
ZZZZZ	23D0393-14	XDT_m1230509a-095	Solid	05/09/23 23:41
ZZZZZ	23D0393-20	XDT_m1230509a-096	Solid	05/09/23 23:45
ZZZZZ	23D0393-07	XDT_m1230509a-097	Solid	05/09/23 23:50
ZZZZZ	BLE0125-DUP1	XDT_m1230509a-098	Solid	05/09/23 23:54
ZZZZZ	BLE0125-MS1	XDT_m1230509a-099	Solid	05/09/23 23:58
ZZZZZ	BLE0125-MSD1	XDT_m1230509a-100	Solid	05/10/23 00:03
Instrument Blank	SLE0163-IBLA	XDT_m1230509a-102	NA	05/10/23 00:11
Calibration Check	SLE0163-CCVA	XDT_m1230509a-103	NA	05/10/23 00:15

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0163

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLE0163-CCBA	XDT_m1230509a-104	NA	05/10/23 00:23
ZZZZZ	23D0393-21	XDT_m1230509a-105	Solid	05/10/23 00:27
ZZZZZ	23D0393-23	XDT_m1230509a-106	Solid	05/10/23 00:31
ZZZZZ	23D0394-03	XDT_m1230509a-107	Solid	05/10/23 00:36
ZZZZZ	23D0394-05	XDT_m1230509a-108	Solid	05/10/23 00:40
ZZZZZ	23D0394-01	XDT_m1230509a-109	Solid	05/10/23 00:44
ZZZZZ	23D0394-01	XDT_m1230509a-109	Solid	05/10/23 00:44
ZZZZZ	23D0394-01	XDT_m1230509a-109	Solid	05/10/23 00:44
Instrument Blank	SLE0163-IBLB	XDT_m1230509a-114	NA	05/10/23 01:06
Calibration Check	SLE0163-CCVB	XDT_m1230509a-115	NA	05/10/23 01:10
Calibration Blank	SLE0163-CCBB	XDT_m1230509a-116	NA	05/10/23 01:17
ZZZZZ	23D0394-09	XDT_m1230509a-118	Solid	05/10/23 01:26
ZZZZZ	23D0394-10	XDT_m1230509a-119	Solid	05/10/23 01:30
Instrument Blank	SLE0163-IBLC	XDT_m1230509a-122	NA	05/10/23 01:43
Instrument Blank	SLE0163-IBLD	XDT_m1230509a-126	NA	05/10/23 02:01
Calibration Check	SLE0163-CCVC	XDT_m1230509a-127	NA	05/10/23 02:05
Calibration Blank	SLE0163-CCBC	XDT_m1230509a-128	NA	05/10/23 02:12
Instrument Blank	SLE0163-IBLE	XDT_m1230509a-133	NA	05/10/23 02:36
Instrument Blank	SLE0163-IBLF	XDT_m1230509a-138	NA	05/10/23 02:59
Calibration Check	SLE0163-CCVD	XDT_m1230509a-139	NA	05/10/23 03:04
Calibration Blank	SLE0163-CCBD	XDT_m1230509a-140	NA	05/10/23 03:11
ZZZZZ	23D0537-05	XDT_m1230509a-141	Water	05/10/23 03:15
ZZZZZ	BLE0120-DUP2	XDT_m1230509a-142	Water	05/10/23 03:19
ZZZZZ	BLE0120-MS2	XDT_m1230509a-143	Water	05/10/23 03:24
ZZZZZ	BLE0120-MSD2	XDT_m1230509a-144	Water	05/10/23 03:30
Instrument Blank	SLE0163-IBLG	XDT_m1230509a-145	NA	05/10/23 03:34
Instrument Blank	SLE0163-IBLH	XDT_m1230509a-150	NA	05/10/23 03:55
Calibration Check	SLE0163-CCVE	XDT_m1230509a-151	NA	05/10/23 04:00
Calibration Blank	SLE0163-CCBE	XDT_m1230509a-152	NA	05/10/23 04:07

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0163	Instrument:	ICPMS1
		Calibration:	GE00034

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0477-05	XDT_m1230509a-156	Water	05/10/23 04:24
ZZZZZ	23D0477-05	XDT_m1230509a-156	Water	05/10/23 04:24
ZZZZZ	23D0477-05	XDT_m1230509a-156	Water	05/10/23 04:24
ZZZZZ	23D0477-17	XDT_m1230509a-157	Water	05/10/23 04:28
ZZZZZ	23D0477-17	XDT_m1230509a-157	Water	05/10/23 04:28
ZZZZZ	23D0477-17	XDT_m1230509a-157	Water	05/10/23 04:28
ZZZZZ	23D0477-19	XDT_m1230509a-158	Water	05/10/23 04:32
ZZZZZ	23D0477-19	XDT_m1230509a-158	Water	05/10/23 04:32
ZZZZZ	23D0477-19	XDT_m1230509a-158	Water	05/10/23 04:32
ZZZZZ	BLE0077-DUP1	XDT_m1230509a-159	Water	05/10/23 04:37
ZZZZZ	BLE0077-MSD1	XDT_m1230509a-161	Water	05/10/23 04:47
Instrument Blank	SLE0163-IBLI	XDT_m1230509a-162	NA	05/10/23 04:51
Calibration Check	SLE0163-CCVF	XDT_m1230509a-163	NA	05/10/23 04:56
Calibration Blank	SLE0163-CCBF	XDT_m1230509a-164	NA	05/10/23 05:03

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0204
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0204-CAL1	XDT_m1230510A-008	NA	05/10/23 15:47
CAL 1 - LOW CHECK	SLE0204-CAL2	XDT_m1230510A-009	NA	05/10/23 15:51
CAL 2	SLE0204-CAL3	XDT_m1230510A-010	NA	05/10/23 15:56
CAL 3	SLE0204-CAL4	XDT_m1230510A-011	NA	05/10/23 16:01
CAL 4	SLE0204-CAL5	XDT_m1230510A-012	NA	05/10/23 16:05
CAL 5	SLE0204-CAL6	XDT_m1230510A-013	NA	05/10/23 16:12
RINSE	SLE0204-IBL1	XDT_m1230510A-014	NA	05/10/23 16:19
Initial Cal Check	SLE0204-ICV1	XDT_m1230510A-016	NA	05/10/23 16:25
Initial Cal Blank	SLE0204-ICB1	XDT_m1230510A-017	NA	05/10/23 16:32
Calibration Check	SLE0204-CCV1	XDT_m1230510A-018	NA	05/10/23 16:37
Calibration Blank	SLE0204-CCB1	XDT_m1230510A-019	NA	05/10/23 16:44
Instrument RL Check	SLE0204-CRL1	XDT_m1230510A-020	NA	05/10/23 16:49
Interference Check A	SLE0204-IFA1	XDT_m1230510A-021	NA	05/10/23 16:56
Interference Check B	SLE0204-IFB1	XDT_m1230510A-022	NA	05/10/23 17:00
LR200	SLE0204-HCV1	XDT_m1230510A-023	NA	05/10/23 17:06
LR300	SLE0204-HCV2	XDT_m1230510A-024	NA	05/10/23 17:11
Instrument Blank	SLE0204-IBL2	XDT_m1230510A-025	NA	05/10/23 17:18
Calibration Check	SLE0204-CCV2	XDT_m1230510A-026	NA	05/10/23 17:24
Calibration Blank	SLE0204-CCB2	XDT_m1230510A-027	NA	05/10/23 17:32
Calibration Check	SLE0204-CCV3	XDT_m1230510A-029	NA	05/10/23 17:41
Calibration Blank	SLE0204-CCB3	XDT_m1230510A-030	NA	05/10/23 17:49
Blank	BLD0687-BLK2	XDT_m1230510A-031	Solid	05/10/23 17:54
LCS	BLD0687-BS2	XDT_m1230510A-033	Solid	05/10/23 18:05
ZZZZZ	BLE0298-BLK1	XDT_m1230510A-034	Water	05/10/23 18:11
ZZZZZ	BLE0298-BS1	XDT_m1230510A-035	Water	05/10/23 18:15
ZZZZZ	BLE0077-MS2	XDT_m1230510A-036	Water	05/10/23 18:21
Instrument Blank	SLE0204-IBL3	XDT_m1230510A-040	NA	05/10/23 18:41
Calibration Check	SLE0204-CCV4	XDT_m1230510A-041	NA	05/10/23 18:45
Calibration Blank	SLE0204-CCB4	XDT_m1230510A-042	NA	05/10/23 18:53

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	BLE0143-BLK1	XDT_m1230510A-045	Solid	05/10/23 19:07
ZZZZZ	BLE0143-BS1	XDT_m1230510A-047	Solid	05/10/23 19:19
Instrument Blank	SLE0204-IBL4	XDT_m1230510A-050	NA	05/10/23 19:33
Instrument Blank	SLE0204-IBL5	XDT_m1230510A-052	NA	05/10/23 19:44
Calibration Check	SLE0204-CCV5	XDT_m1230510A-053	NA	05/10/23 19:48
Calibration Blank	SLE0204-CCB5	XDT_m1230510A-054	NA	05/10/23 19:56
Calibration Check	SLE0204-CCV6	XDT_m1230510A-057	NA	05/10/23 20:30
Calibration Blank	SLE0204-CCB6	XDT_m1230510A-058	NA	05/10/23 20:37
ZZZZZ	BLD0578-BLK1	XDT_m1230510A-059	Solid	05/10/23 20:44
ZZZZZ	BLD0578-BS1	XDT_m1230510A-060	Solid	05/10/23 20:48
ZZZZZ	BLE0072-BLK1	XDT_m1230510A-061	Solid	05/10/23 20:53
ZZZZZ	BLE0072-BS1	XDT_m1230510A-062	Solid	05/10/23 20:57
ZZZZZ	23D0394-01	XDT_m1230510A-063	Solid	05/10/23 21:02
Instrument Blank	SLE0204-IBL6	XDT_m1230510A-068	NA	05/10/23 21:25
Calibration Check	SLE0204-CCV7	XDT_m1230510A-069	NA	05/10/23 21:29
Calibration Blank	SLE0204-CCB7	XDT_m1230510A-070	NA	05/10/23 21:37
ZZZZZ	23A0467-02	XDT_m1230510A-071	Solid	05/10/23 21:41
ZZZZZ	23A0467-02	XDT_m1230510A-071	Solid	05/10/23 21:41
ZZZZZ	23A0467-02	XDT_m1230510A-071	Solid	05/10/23 21:41
ZZZZZ	23A0467-02	XDT_m1230510A-071	Solid	05/10/23 21:41
ZZZZZ	23A0467-03	XDT_m1230510A-072	Solid	05/10/23 21:45
ZZZZZ	23A0467-03	XDT_m1230510A-072	Solid	05/10/23 21:45
ZZZZZ	23A0467-03	XDT_m1230510A-072	Solid	05/10/23 21:45
ZZZZZ	23A0467-03	XDT_m1230510A-072	Solid	05/10/23 21:45
ZZZZZ	23A0467-04	XDT_m1230510A-073	Solid	05/10/23 21:50
ZZZZZ	23A0467-04	XDT_m1230510A-073	Solid	05/10/23 21:50
ZZZZZ	23A0467-04	XDT_m1230510A-073	Solid	05/10/23 21:50
ZZZZZ	23A0467-04	XDT_m1230510A-073	Solid	05/10/23 21:50
ZZZZZ	23A0467-05	XDT_m1230510A-074	Solid	05/10/23 21:54

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0204
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23A0467-05	XDT_m1230510A-074	Solid	05/10/23 21:54
ZZZZZ	23A0467-05	XDT_m1230510A-074	Solid	05/10/23 21:54
ZZZZZ	23A0467-05	XDT_m1230510A-074	Solid	05/10/23 21:54
ZZZZZ	23A0467-01	XDT_m1230510A-075	Solid	05/10/23 21:59
ZZZZZ	23A0467-01	XDT_m1230510A-075	Solid	05/10/23 21:59
ZZZZZ	23A0467-01	XDT_m1230510A-075	Solid	05/10/23 21:59
ZZZZZ	23A0467-01	XDT_m1230510A-075	Solid	05/10/23 21:59
ZZZZZ	BLD0578-DUP1	XDT_m1230510A-076	Solid	05/10/23 22:03
ZZZZZ	BLD0578-MS1	XDT_m1230510A-077	Solid	05/10/23 22:08
ZZZZZ	BLD0578-MSD1	XDT_m1230510A-078	Solid	05/10/23 22:12
Instrument Blank	SLE0204-IBL7	XDT_m1230510A-080	NA	05/10/23 22:21
Calibration Check	SLE0204-CCV8	XDT_m1230510A-081	NA	05/10/23 22:25
Calibration Blank	SLE0204-CCB8	XDT_m1230510A-082	NA	05/10/23 22:32
ZZZZZ	23A0467-06	XDT_m1230510A-083	Solid	05/10/23 22:37
ZZZZZ	23A0467-06	XDT_m1230510A-083	Solid	05/10/23 22:37
ZZZZZ	23A0467-06	XDT_m1230510A-083	Solid	05/10/23 22:37
ZZZZZ	23A0467-06	XDT_m1230510A-083	Solid	05/10/23 22:37
ZZZZZ	23A0467-07	XDT_m1230510A-084	Solid	05/10/23 22:41
ZZZZZ	23A0467-07	XDT_m1230510A-084	Solid	05/10/23 22:41
ZZZZZ	23A0467-07	XDT_m1230510A-084	Solid	05/10/23 22:41
ZZZZZ	23A0467-07	XDT_m1230510A-084	Solid	05/10/23 22:41
ZZZZZ	23A0467-08	XDT_m1230510A-085	Solid	05/10/23 22:46
ZZZZZ	23A0467-08	XDT_m1230510A-085	Solid	05/10/23 22:46
ZZZZZ	23A0467-08	XDT_m1230510A-085	Solid	05/10/23 22:46
ZZZZZ	23A0467-08	XDT_m1230510A-085	Solid	05/10/23 22:46
ZZZZZ	23A0467-09	XDT_m1230510A-086	Solid	05/10/23 22:50
ZZZZZ	23A0467-09	XDT_m1230510A-086	Solid	05/10/23 22:50
ZZZZZ	23A0467-09	XDT_m1230510A-086	Solid	05/10/23 22:50
ZZZZZ	23A0467-09	XDT_m1230510A-086	Solid	05/10/23 22:50

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0204
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0204-IBL8	XDT_m1230510A-092	NA	05/10/23 23:16
Calibration Check	SLE0204-CCV9	XDT_m1230510A-093	NA	05/10/23 23:21
Calibration Blank	SLE0204-CCB9	XDT_m1230510A-094	NA	05/10/23 23:28
ZZZZZ	23C0071-01	XDT_m1230510A-095	Solid	05/10/23 23:33
ZZZZZ	23C0071-01	XDT_m1230510A-095	Solid	05/10/23 23:33
ZZZZZ	23C0071-01	XDT_m1230510A-095	Solid	05/10/23 23:33
ZZZZZ	23C0071-01	XDT_m1230510A-095	Solid	05/10/23 23:33
ZZZZZ	23C0071-02	XDT_m1230510A-096	Solid	05/10/23 23:37
ZZZZZ	23C0071-02	XDT_m1230510A-096	Solid	05/10/23 23:37
ZZZZZ	23C0071-02	XDT_m1230510A-096	Solid	05/10/23 23:37
ZZZZZ	23C0071-02	XDT_m1230510A-096	Solid	05/10/23 23:37
ZZZZZ	23C0071-03	XDT_m1230510A-097	Solid	05/10/23 23:41
ZZZZZ	23C0071-03	XDT_m1230510A-097	Solid	05/10/23 23:41
ZZZZZ	23C0071-03	XDT_m1230510A-097	Solid	05/10/23 23:41
ZZZZZ	23C0071-03	XDT_m1230510A-097	Solid	05/10/23 23:41
ZZZZZ	23C0071-04	XDT_m1230510A-098	Solid	05/10/23 23:46
ZZZZZ	23C0071-04	XDT_m1230510A-098	Solid	05/10/23 23:46
ZZZZZ	23C0071-04	XDT_m1230510A-098	Solid	05/10/23 23:46
ZZZZZ	23C0071-04	XDT_m1230510A-098	Solid	05/10/23 23:46
ZZZZZ	23C0071-05	XDT_m1230510A-099	Solid	05/10/23 23:50
ZZZZZ	23C0071-05	XDT_m1230510A-099	Solid	05/10/23 23:50
ZZZZZ	23C0071-05	XDT_m1230510A-099	Solid	05/10/23 23:50
ZZZZZ	23C0071-05	XDT_m1230510A-099	Solid	05/10/23 23:50
ZZZZZ	23C0071-06	XDT_m1230510A-100	Solid	05/10/23 23:55
ZZZZZ	23C0071-06	XDT_m1230510A-100	Solid	05/10/23 23:55
ZZZZZ	23C0071-06	XDT_m1230510A-100	Solid	05/10/23 23:55
ZZZZZ	23C0071-06	XDT_m1230510A-100	Solid	05/10/23 23:55
ZZZZZ	23C0109-02	XDT_m1230510A-101	Solid	05/10/23 23:59
ZZZZZ	23C0109-02	XDT_m1230510A-101	Solid	05/10/23 23:59

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204
SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23C0109-02	XDT_m1230510A-101	Solid	05/10/23 23:59
ZZZZZ	23C0109-02	XDT_m1230510A-101	Solid	05/10/23 23:59
ZZZZZ	23C0109-03	XDT_m1230510A-102	Solid	05/11/23 00:03
ZZZZZ	23C0109-03	XDT_m1230510A-102	Solid	05/11/23 00:03
ZZZZZ	23C0109-03	XDT_m1230510A-102	Solid	05/11/23 00:03
ZZZZZ	23C0109-03	XDT_m1230510A-102	Solid	05/11/23 00:03
ZZZZZ	23C0108-02	XDT_m1230510A-103	Solid	05/11/23 00:08
ZZZZZ	23C0108-02	XDT_m1230510A-103	Solid	05/11/23 00:08
ZZZZZ	23C0108-02	XDT_m1230510A-103	Solid	05/11/23 00:08
ZZZZZ	23C0108-02	XDT_m1230510A-103	Solid	05/11/23 00:08
Instrument Blank	SLE0204-IBL9	XDT_m1230510A-104	NA	05/11/23 00:12
Calibration Check	SLE0204-CCVA	XDT_m1230510A-105	NA	05/11/23 00:16
Calibration Blank	SLE0204-CCBA	XDT_m1230510A-106	NA	05/11/23 00:24
ZZZZZ	23C0108-06	XDT_m1230510A-107	Solid	05/11/23 00:28
ZZZZZ	23C0108-06	XDT_m1230510A-107	Solid	05/11/23 00:28
ZZZZZ	23C0108-06	XDT_m1230510A-107	Solid	05/11/23 00:28
ZZZZZ	23C0108-06	XDT_m1230510A-107	Solid	05/11/23 00:28
ZZZZZ	23C0108-07	XDT_m1230510A-108	Solid	05/11/23 00:32
ZZZZZ	23C0108-07	XDT_m1230510A-108	Solid	05/11/23 00:32
ZZZZZ	23C0108-07	XDT_m1230510A-108	Solid	05/11/23 00:32
ZZZZZ	23C0108-07	XDT_m1230510A-108	Solid	05/11/23 00:32
ZZZZZ	23C0108-08	XDT_m1230510A-109	Solid	05/11/23 00:37
ZZZZZ	23C0108-08	XDT_m1230510A-109	Solid	05/11/23 00:37
ZZZZZ	23C0108-08	XDT_m1230510A-109	Solid	05/11/23 00:37
ZZZZZ	23C0108-08	XDT_m1230510A-109	Solid	05/11/23 00:37
ZZZZZ	23C0108-09	XDT_m1230510A-110	Solid	05/11/23 00:41
ZZZZZ	23C0108-09	XDT_m1230510A-110	Solid	05/11/23 00:41
ZZZZZ	23C0108-09	XDT_m1230510A-110	Solid	05/11/23 00:41
ZZZZZ	23C0108-09	XDT_m1230510A-110	Solid	05/11/23 00:41

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0008-01	XDT_m1230510A-111	Solid	05/11/23 00:46
ZZZZZ	23D0008-01	XDT_m1230510A-111	Solid	05/11/23 00:46
ZZZZZ	23D0008-01	XDT_m1230510A-111	Solid	05/11/23 00:46
ZZZZZ	23D0008-01	XDT_m1230510A-111	Solid	05/11/23 00:46
ZZZZZ	23D0008-03	XDT_m1230510A-112	Solid	05/11/23 00:50
ZZZZZ	23D0008-03	XDT_m1230510A-112	Solid	05/11/23 00:50
ZZZZZ	23D0008-03	XDT_m1230510A-112	Solid	05/11/23 00:50
ZZZZZ	23D0008-03	XDT_m1230510A-112	Solid	05/11/23 00:50
ZZZZZ	23D0037-01	XDT_m1230510A-113	Solid	05/11/23 00:54
ZZZZZ	23D0037-01	XDT_m1230510A-113	Solid	05/11/23 00:54
ZZZZZ	23D0037-01	XDT_m1230510A-113	Solid	05/11/23 00:54
ZZZZZ	23D0037-01	XDT_m1230510A-113	Solid	05/11/23 00:54
ZZZZZ	23D0037-03	XDT_m1230510A-114	Solid	05/11/23 00:59
ZZZZZ	23D0037-03	XDT_m1230510A-114	Solid	05/11/23 00:59
ZZZZZ	23D0037-03	XDT_m1230510A-114	Solid	05/11/23 00:59
ZZZZZ	23D0037-03	XDT_m1230510A-114	Solid	05/11/23 00:59
ZZZZZ	23D0037-02	XDT_m1230510A-115	Solid	05/11/23 01:03
Instrument Blank	SLE0204-IBLA	XDT_m1230510A-116	NA	05/11/23 01:08
Calibration Check	SLE0204-CCVB	XDT_m1230510A-117	NA	05/11/23 01:12
Calibration Blank	SLE0204-CCBB	XDT_m1230510A-118	NA	05/11/23 01:19
Calibration Check	SLE0204-CCVC	XDT_m1230510A-120	NA	05/11/23 01:28
Calibration Blank	SLE0204-CCBC	XDT_m1230510A-121	NA	05/11/23 01:35
ZZZZZ	23D0037-04	XDT_m1230510A-122	Solid	05/11/23 01:40
ZZZZZ	23D0063-01	XDT_m1230510A-123	Solid	05/11/23 01:44
ZZZZZ	23D0063-01	XDT_m1230510A-123	Solid	05/11/23 01:44
ZZZZZ	23D0063-01	XDT_m1230510A-123	Solid	05/11/23 01:44
ZZZZZ	23D0063-01	XDT_m1230510A-123	Solid	05/11/23 01:44
ZZZZZ	23D0063-03	XDT_m1230510A-124	Solid	05/11/23 01:49
ZZZZZ	23D0063-03	XDT_m1230510A-124	Solid	05/11/23 01:49

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0204
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0063-03	XDT_m1230510A-124	Solid	05/11/23 01:49
ZZZZZ	23D0063-03	XDT_m1230510A-124	Solid	05/11/23 01:49
Instrument Blank	SLE0204-IBLB	XDT_m1230510A-131	NA	05/11/23 02:21
Calibration Check	SLE0204-CCVD	XDT_m1230510A-132	NA	05/11/23 02:26
Calibration Blank	SLE0204-CCBD	XDT_m1230510A-133	NA	05/11/23 02:33
Instrument Blank	SLE0204-IBLC	XDT_m1230510A-138	NA	05/11/23 02:57
ZZZZZ	23D0477-21	XDT_m1230510A-141	Water	05/11/23 03:11
ZZZZZ	23D0477-21	XDT_m1230510A-141	Water	05/11/23 03:11
ZZZZZ	23D0477-21	XDT_m1230510A-141	Water	05/11/23 03:11
ZZZZZ	23D0477-22	XDT_m1230510A-142	Water	05/11/23 03:15
ZZZZZ	23D0477-22	XDT_m1230510A-142	Water	05/11/23 03:15
ZZZZZ	23D0477-22	XDT_m1230510A-142	Water	05/11/23 03:15
Instrument Blank	SLE0204-IBLD	XDT_m1230510A-143	NA	05/11/23 03:20
Calibration Check	SLE0204-CCVE	XDT_m1230510A-144	NA	05/11/23 03:24
Calibration Blank	SLE0204-CCBE	XDT_m1230510A-145	NA	05/11/23 03:31
ZZZZZ	23D0477-11	XDT_m1230510A-146	Water	05/11/23 03:36
ZZZZZ	23D0477-11	XDT_m1230510A-146	Water	05/11/23 03:36
ZZZZZ	23D0477-11	XDT_m1230510A-146	Water	05/11/23 03:36
ZZZZZ	23D0477-13	XDT_m1230510A-147	Water	05/11/23 03:40
ZZZZZ	23D0477-13	XDT_m1230510A-147	Water	05/11/23 03:40
ZZZZZ	23D0477-13	XDT_m1230510A-147	Water	05/11/23 03:40
ZZZZZ	23D0477-02	XDT_m1230510A-148	Water	05/11/23 03:45
ZZZZZ	23D0477-02	XDT_m1230510A-148	Water	05/11/23 03:45
ZZZZZ	23D0477-02	XDT_m1230510A-148	Water	05/11/23 03:45
Instrument Blank	SLE0204-IBLE	XDT_m1230510A-150	NA	05/11/23 03:57
Instrument Blank	SLE0204-IBLF	XDT_m1230510A-155	NA	05/11/23 04:21
Calibration Check	SLE0204-CCVF	XDT_m1230510A-156	NA	05/11/23 04:26
Calibration Blank	SLE0204-CCBF	XDT_m1230510A-157	NA	05/11/23 04:33
Calibration Check	SLE0204-CCVG	XDT_m1230510A-159	NA	05/11/23 04:42

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLE0204-CCBG	XDT_m1230510A-160	NA	05/11/23 04:49
ZZZZZ	23D0477-04	XDT_m1230510A-161	Water	05/11/23 04:53
ZZZZZ	23D0477-04	XDT_m1230510A-161	Water	05/11/23 04:53
ZZZZZ	23D0477-04	XDT_m1230510A-161	Water	05/11/23 04:53
ZZZZZ	23D0477-06	XDT_m1230510A-162	Water	05/11/23 04:58
ZZZZZ	23D0477-06	XDT_m1230510A-162	Water	05/11/23 04:58
ZZZZZ	23D0477-06	XDT_m1230510A-162	Water	05/11/23 04:58
ZZZZZ	23D0477-08	XDT_m1230510A-163	Water	05/11/23 05:02
ZZZZZ	23D0477-08	XDT_m1230510A-163	Water	05/11/23 05:02
ZZZZZ	23D0477-08	XDT_m1230510A-163	Water	05/11/23 05:02
ZZZZZ	23D0477-10	XDT_m1230510A-164	Water	05/11/23 05:07
ZZZZZ	23D0477-10	XDT_m1230510A-164	Water	05/11/23 05:07
ZZZZZ	23D0477-10	XDT_m1230510A-164	Water	05/11/23 05:07
ZZZZZ	23D0477-12	XDT_m1230510A-165	Water	05/11/23 05:11
ZZZZZ	23D0477-12	XDT_m1230510A-165	Water	05/11/23 05:11
ZZZZZ	23D0477-12	XDT_m1230510A-165	Water	05/11/23 05:11
ZZZZZ	23D0477-20	XDT_m1230510A-166	Water	05/11/23 05:16
ZZZZZ	23D0477-20	XDT_m1230510A-166	Water	05/11/23 05:16
ZZZZZ	23D0477-20	XDT_m1230510A-166	Water	05/11/23 05:16
Instrument Blank	SLE0204-IBLG	XDT_m1230510A-170	NA	05/11/23 05:33
Calibration Check	SLE0204-CCVH	XDT_m1230510A-171	NA	05/11/23 05:38
Calibration Blank	SLE0204-CCBH	XDT_m1230510A-172	NA	05/11/23 05:45
ZZZZZ	23D0477-14	XDT_m1230510A-173	Water	05/11/23 05:50
ZZZZZ	23D0477-14	XDT_m1230510A-173	Water	05/11/23 05:50
ZZZZZ	23D0477-14	XDT_m1230510A-173	Water	05/11/23 05:50
ZZZZZ	23D0477-16	XDT_m1230510A-174	Water	05/11/23 05:54
ZZZZZ	23D0477-16	XDT_m1230510A-174	Water	05/11/23 05:54
ZZZZZ	23D0477-16	XDT_m1230510A-174	Water	05/11/23 05:54
ZZZZZ	23D0477-18	XDT_m1230510A-175	Water	05/11/23 05:58

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0204

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0477-18	XDT_m1230510A-175	Water	05/11/23 05:58
ZZZZZ	23D0477-18	XDT_m1230510A-175	Water	05/11/23 05:58
ZZZZZ	23D0477-01	XDT_m1230510A-176	Water	05/11/23 06:03
ZZZZZ	23D0477-01	XDT_m1230510A-176	Water	05/11/23 06:03
ZZZZZ	23D0477-01	XDT_m1230510A-176	Water	05/11/23 06:03
ZZZZZ	23D0477-03	XDT_m1230510A-177	Water	05/11/23 06:07
ZZZZZ	23D0477-03	XDT_m1230510A-177	Water	05/11/23 06:07
ZZZZZ	23D0477-03	XDT_m1230510A-177	Water	05/11/23 06:07
ZZZZZ	23D0477-07	XDT_m1230510A-178	Water	05/11/23 06:12
ZZZZZ	23D0477-07	XDT_m1230510A-178	Water	05/11/23 06:12
ZZZZZ	23D0477-07	XDT_m1230510A-178	Water	05/11/23 06:12
ZZZZZ	23D0477-09	XDT_m1230510A-179	Water	05/11/23 06:16
ZZZZZ	23D0477-09	XDT_m1230510A-179	Water	05/11/23 06:16
ZZZZZ	23D0477-09	XDT_m1230510A-179	Water	05/11/23 06:16
ZZZZZ	23D0477-15	XDT_m1230510A-180	Water	05/11/23 06:20
ZZZZZ	23D0477-15	XDT_m1230510A-180	Water	05/11/23 06:20
ZZZZZ	23D0477-15	XDT_m1230510A-180	Water	05/11/23 06:20
ZZZZZ	23D0487-02	XDT_m1230510A-181	Water	05/11/23 06:26
Instrument Blank	SLE0204-IBLH	XDT_m1230510A-182	NA	05/11/23 06:31
Calibration Check	SLE0204-CCVI	XDT_m1230510A-183	NA	05/11/23 06:35
Calibration Blank	SLE0204-CCBI	XDT_m1230510A-184	NA	05/11/23 06:42
ZZZZZ	23D0487-06	XDT_m1230510A-185	Water	05/11/23 06:47
ZZZZZ	23D0487-05	XDT_m1230510A-186	Water	05/11/23 06:51
ZZZZZ	23D0487-04	XDT_m1230510A-187	Water	05/11/23 06:55
ZZZZZ	23D0487-03	XDT_m1230510A-188	Water	05/11/23 07:00
Instrument Blank	SLE0204-IBLI	XDT_m1230510A-189	NA	05/11/23 07:05
ZZZZZ	23D0636-01	XDT_m1230510A-190	Water	05/11/23 07:09
ZZZZZ	23D0636-01	XDT_m1230510A-190	Water	05/11/23 07:09
ZZZZZ	23D0636-01	XDT_m1230510A-190	Water	05/11/23 07:09

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0204	Instrument:	ICPMS1
		Calibration:	GE00040

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0636-01	XDT_m1230510A-190	Water	05/11/23 07:09
ZZZZZ	BLE0298-DUP1	XDT_m1230510A-191	Water	05/11/23 07:14
ZZZZZ	BLE0298-MS1	XDT_m1230510A-192	Water	05/11/23 07:19
ZZZZZ	BLE0298-MSD1	XDT_m1230510A-193	Water	05/11/23 07:25
Instrument Blank	SLE0204-IBLJ	XDT_m1230510A-194	NA	05/11/23 07:29
Calibration Check	SLE0204-CCVJ	XDT_m1230510A-195	NA	05/11/23 07:34
Calibration Blank	SLE0204-CCBJ	XDT_m1230510A-196	NA	05/11/23 07:41

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0209	Instrument:	ICPMS1
		Calibration:	GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
CAL 0	SLE0209-CAL1	XDT_m1230511-006	NA	05/11/23 13:56
CAL 1 - LOW CHECK	SLE0209-CAL2	XDT_m1230511-007	NA	05/11/23 14:00
CAL 2	SLE0209-CAL3	XDT_m1230511-008	NA	05/11/23 14:05
CAL 3	SLE0209-CAL4	XDT_m1230511-009	NA	05/11/23 14:10
CAL 4	SLE0209-CAL5	XDT_m1230511-010	NA	05/11/23 14:15
CAL 5	SLE0209-CAL6	XDT_m1230511-011	NA	05/11/23 14:21
RINSE	SLE0209-IBL1	XDT_m1230511-012	NA	05/11/23 14:29
Initial Cal Check	SLE0209-ICV1	XDT_m1230511-014	NA	05/11/23 14:34
Initial Cal Blank	SLE0209-ICB1	XDT_m1230511-015	NA	05/11/23 14:42
Calibration Check	SLE0209-CCV1	XDT_m1230511-019	NA	05/11/23 15:06
Calibration Blank	SLE0209-CCB1	XDT_m1230511-020	NA	05/11/23 15:13
Instrument RL Check	SLE0209-CRL1	XDT_m1230511-021	NA	05/11/23 15:18
Interference Check A	SLE0209-IFA1	XDT_m1230511-022	NA	05/11/23 15:23
Interference Check B	SLE0209-IFB1	XDT_m1230511-023	NA	05/11/23 15:28
LR200	SLE0209-HCV1	XDT_m1230511-024	NA	05/11/23 15:32
LR300	SLE0209-HCV2	XDT_m1230511-025	NA	05/11/23 15:37
Instrument Blank	SLE0209-IBL2	XDT_m1230511-026	NA	05/11/23 15:50
Instrument Blank	SLE0209-IBL3	XDT_m1230511-027	NA	05/11/23 15:56
Calibration Check	SLE0209-CCV2	XDT_m1230511-028	NA	05/11/23 16:02
Calibration Blank	SLE0209-CCB2	XDT_m1230511-029	NA	05/11/23 16:09
Calibration Check	SLE0209-CCV3	XDT_m1230511-031	NA	05/11/23 16:19
Calibration Blank	SLE0209-CCB3	XDT_m1230511-032	NA	05/11/23 16:27
ZZZZZ	BLE0342-BLK1	XDT_m1230511-034	Water	05/11/23 16:42
ZZZZZ	BLE0342-BS1	XDT_m1230511-035	Water	05/11/23 16:46
Instrument Blank	SLE0209-IBL4	XDT_m1230511-040	NA	05/11/23 17:10
Instrument Blank	SLE0209-IBL5	XDT_m1230511-042	NA	05/11/23 17:21
Calibration Check	SLE0209-CCV4	XDT_m1230511-043	NA	05/11/23 17:25
Calibration Blank	SLE0209-CCB4	XDT_m1230511-044	NA	05/11/23 17:32
Instrument Blank	SLE0209-IBL9	XDT_m1230511-073	NA	05/11/23 18:29

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209
SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0702-04	XDT_m1230511-074	Water	05/11/23 18:34
ZZZZZ	23D0702-04	XDT_m1230511-074	Water	05/11/23 18:34
ZZZZZ	23D0702-04	XDT_m1230511-074	Water	05/11/23 18:34
ZZZZZ	23D0702-04	XDT_m1230511-074	Water	05/11/23 18:34
ZZZZZ	BLE0342-DUP1	XDT_m1230511-075	Water	05/11/23 18:40
ZZZZZ	BLE0342-MS1	XDT_m1230511-076	Water	05/11/23 18:45
ZZZZZ	BLE0342-MSD1	XDT_m1230511-077	Water	05/11/23 18:50
Instrument Blank	SLE0209-IBLA	XDT_m1230511-078	NA	05/11/23 18:55
Calibration Check	SLE0209-CCV7	XDT_m1230511-079	NA	05/11/23 18:59
Calibration Blank	SLE0209-CCB7	XDT_m1230511-080	NA	05/11/23 19:07
Calibration Check	SLE0209-CCV8	XDT_m1230511-082	NA	05/11/23 19:18
Calibration Blank	SLE0209-CCB8	XDT_m1230511-083	NA	05/11/23 19:25
Calibration Check	SLE0209-CCVA	XDT_m1230511-094	NA	05/11/23 19:55
Calibration Blank	SLE0209-CCBA	XDT_m1230511-095	NA	05/11/23 20:00
Instrument Blank	SLE0209-IBLC	XDT_m1230511-100	NA	05/11/23 20:25
ZZZZZ	23D0568-08	XDT_m1230511-101	Solid	05/11/23 20:30
ZZZZZ	23D0568-08	XDT_m1230511-101	Solid	05/11/23 20:30
ZZZZZ	23D0568-08	XDT_m1230511-101	Solid	05/11/23 20:30
ZZZZZ	23D0568-08	XDT_m1230511-101	Solid	05/11/23 20:30
ZZZZZ	BLE0143-DUP1	XDT_m1230511-102	Solid	05/11/23 20:35
ZZZZZ	BLE0143-MS1	XDT_m1230511-103	Solid	05/11/23 20:40
ZZZZZ	BLE0143-MSD1	XDT_m1230511-104	Solid	05/11/23 20:44
Instrument Blank	SLE0209-IBLD	XDT_m1230511-105	NA	05/11/23 20:49
Calibration Check	SLE0209-CCVB	XDT_m1230511-106	NA	05/11/23 20:53
Calibration Blank	SLE0209-CCBB	XDT_m1230511-107	NA	05/11/23 21:00
ZZZZZ	23D0568-02	XDT_m1230511-108	Solid	05/11/23 21:06
ZZZZZ	23D0568-02	XDT_m1230511-108	Solid	05/11/23 21:06
ZZZZZ	23D0568-02	XDT_m1230511-108	Solid	05/11/23 21:06
ZZZZZ	23D0568-02	XDT_m1230511-108	Solid	05/11/23 21:06

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0568-03	XDT_m1230511-109	Solid	05/11/23 21:11
ZZZZZ	23D0568-03	XDT_m1230511-109	Solid	05/11/23 21:11
ZZZZZ	23D0568-03	XDT_m1230511-109	Solid	05/11/23 21:11
ZZZZZ	23D0568-03	XDT_m1230511-109	Solid	05/11/23 21:11
ZZZZZ	23D0568-04	XDT_m1230511-110	Solid	05/11/23 21:15
ZZZZZ	23D0568-04	XDT_m1230511-110	Solid	05/11/23 21:15
ZZZZZ	23D0568-04	XDT_m1230511-110	Solid	05/11/23 21:15
ZZZZZ	23D0568-04	XDT_m1230511-110	Solid	05/11/23 21:15
ZZZZZ	23D0568-05	XDT_m1230511-111	Solid	05/11/23 21:20
ZZZZZ	23D0568-05	XDT_m1230511-111	Solid	05/11/23 21:20
ZZZZZ	23D0568-05	XDT_m1230511-111	Solid	05/11/23 21:20
ZZZZZ	23D0568-05	XDT_m1230511-111	Solid	05/11/23 21:20
ZZZZZ	23D0568-06	XDT_m1230511-112	Solid	05/11/23 21:24
ZZZZZ	23D0568-06	XDT_m1230511-112	Solid	05/11/23 21:24
ZZZZZ	23D0568-06	XDT_m1230511-112	Solid	05/11/23 21:24
ZZZZZ	23D0568-06	XDT_m1230511-112	Solid	05/11/23 21:24
ZZZZZ	23D0568-07	XDT_m1230511-113	Solid	05/11/23 21:29
ZZZZZ	23D0568-07	XDT_m1230511-113	Solid	05/11/23 21:29
ZZZZZ	23D0568-07	XDT_m1230511-113	Solid	05/11/23 21:29
ZZZZZ	23D0568-07	XDT_m1230511-113	Solid	05/11/23 21:29
Instrument Blank	SLE0209-IBLE	XDT_m1230511-114	NA	05/11/23 21:34
Instrument Blank	SLE0209-IBLF	XDT_m1230511-116	NA	05/11/23 21:46
Calibration Check	SLE0209-CCVC	XDT_m1230511-117	NA	05/11/23 21:50
Calibration Blank	SLE0209-CCBC	XDT_m1230511-118	NA	05/11/23 21:58
Calibration Check	SLE0209-CCVD	XDT_m1230511-120	NA	05/11/23 22:08
Calibration Blank	SLE0209-CCBD	XDT_m1230511-121	NA	05/11/23 22:15
ZZZZZ	23D0136-01	XDT_m1230511-125	Solid	05/11/23 22:35
ZZZZZ	23D0136-01	XDT_m1230511-125	Solid	05/11/23 22:35
ZZZZZ	23D0136-01	XDT_m1230511-125	Solid	05/11/23 22:35

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209
SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0136-01	XDT_m1230511-125	Solid	05/11/23 22:35
ZZZZZ	23D0136-03	XDT_m1230511-126	Solid	05/11/23 22:40
ZZZZZ	23D0136-03	XDT_m1230511-126	Solid	05/11/23 22:40
ZZZZZ	23D0136-03	XDT_m1230511-126	Solid	05/11/23 22:40
ZZZZZ	23D0136-03	XDT_m1230511-126	Solid	05/11/23 22:40
LDW23-SS1801	23D0396-01	XDT_m1230511-127	Solid	05/11/23 22:44
LDW23-SS1801	23D0396-01	XDT_m1230511-127	Solid	05/11/23 22:44
LDW23-SS1801	23D0396-01	XDT_m1230511-127	Solid	05/11/23 22:44
LDW23-SS1801	23D0396-01	XDT_m1230511-127	Solid	05/11/23 22:44
LDW23-SS1802	23D0396-03	XDT_m1230511-128	Solid	05/11/23 22:48
LDW23-SS1802	23D0396-03	XDT_m1230511-128	Solid	05/11/23 22:48
LDW23-SS1802	23D0396-03	XDT_m1230511-128	Solid	05/11/23 22:48
LDW23-SS1802	23D0396-03	XDT_m1230511-128	Solid	05/11/23 22:48
ZZZZZ	23D0394-02	XDT_m1230511-129	Solid	05/11/23 22:53
ZZZZZ	23D0394-02	XDT_m1230511-129	Solid	05/11/23 22:53
ZZZZZ	23D0394-02	XDT_m1230511-129	Solid	05/11/23 22:53
ZZZZZ	23D0394-02	XDT_m1230511-129	Solid	05/11/23 22:53
ZZZZZ	23D0394-04	XDT_m1230511-130	Solid	05/11/23 22:57
ZZZZZ	23D0394-04	XDT_m1230511-130	Solid	05/11/23 22:57
ZZZZZ	23D0394-04	XDT_m1230511-130	Solid	05/11/23 22:57
ZZZZZ	23D0394-04	XDT_m1230511-130	Solid	05/11/23 22:57
Instrument Blank	SLE0209-IBLG	XDT_m1230511-131	NA	05/11/23 23:02
Calibration Check	SLE0209-CCVE	XDT_m1230511-132	NA	05/11/23 23:07
Calibration Blank	SLE0209-CCBE	XDT_m1230511-133	NA	05/11/23 23:14
ZZZZZ	23D0394-06	XDT_m1230511-134	Solid	05/11/23 23:18
ZZZZZ	23D0394-06	XDT_m1230511-134	Solid	05/11/23 23:18
ZZZZZ	23D0394-06	XDT_m1230511-134	Solid	05/11/23 23:18
ZZZZZ	23D0394-06	XDT_m1230511-134	Solid	05/11/23 23:18
ZZZZZ	23D0394-07	XDT_m1230511-135	Solid	05/11/23 23:23

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209
SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0394-07	XDT_m1230511-135	Solid	05/11/23 23:23
ZZZZZ	23D0394-07	XDT_m1230511-135	Solid	05/11/23 23:23
ZZZZZ	23D0394-07	XDT_m1230511-135	Solid	05/11/23 23:23
ZZZZZ	23D0394-08	XDT_m1230511-136	Solid	05/11/23 23:27
ZZZZZ	23D0394-08	XDT_m1230511-136	Solid	05/11/23 23:27
ZZZZZ	23D0394-08	XDT_m1230511-136	Solid	05/11/23 23:27
ZZZZZ	23D0394-08	XDT_m1230511-136	Solid	05/11/23 23:27
ZZZZZ	23D0394-11	XDT_m1230511-137	Solid	05/11/23 23:31
ZZZZZ	23D0394-11	XDT_m1230511-137	Solid	05/11/23 23:31
ZZZZZ	23D0394-12	XDT_m1230511-138	Solid	05/11/23 23:36
ZZZZZ	23D0394-12	XDT_m1230511-138	Solid	05/11/23 23:36
ZZZZZ	23D0394-12	XDT_m1230511-138	Solid	05/11/23 23:36
ZZZZZ	23D0394-12	XDT_m1230511-138	Solid	05/11/23 23:36
ZZZZZ	23D0394-13	XDT_m1230511-139	Solid	05/11/23 23:40
ZZZZZ	23D0394-13	XDT_m1230511-139	Solid	05/11/23 23:40
ZZZZZ	23D0394-13	XDT_m1230511-139	Solid	05/11/23 23:40
ZZZZZ	23D0394-13	XDT_m1230511-139	Solid	05/11/23 23:40
ZZZZZ	23D0393-24	XDT_m1230511-140	Solid	05/11/23 23:44
ZZZZZ	23D0393-24	XDT_m1230511-140	Solid	05/11/23 23:44
ZZZZZ	23D0393-24	XDT_m1230511-140	Solid	05/11/23 23:44
ZZZZZ	23D0393-24	XDT_m1230511-140	Solid	05/11/23 23:44
ZZZZZ	23D0393-28	XDT_m1230511-141	Solid	05/11/23 23:49
ZZZZZ	23D0393-28	XDT_m1230511-141	Solid	05/11/23 23:49
ZZZZZ	23D0393-28	XDT_m1230511-141	Solid	05/11/23 23:49
ZZZZZ	23D0393-28	XDT_m1230511-141	Solid	05/11/23 23:49
ZZZZZ	23D0393-29	XDT_m1230511-142	Solid	05/11/23 23:53
ZZZZZ	23D0393-29	XDT_m1230511-142	Solid	05/11/23 23:53
ZZZZZ	23D0393-29	XDT_m1230511-142	Solid	05/11/23 23:53
ZZZZZ	23D0393-29	XDT_m1230511-142	Solid	05/11/23 23:53

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0209-IBLH	XDT_m1230511-143	NA	05/11/23 23:58
Calibration Check	SLE0209-CCVF	XDT_m1230511-144	NA	05/12/23 00:02
Calibration Blank	SLE0209-CCBF	XDT_m1230511-145	NA	05/12/23 00:09
ZZZZZ	23D0393-10	XDT_m1230511-146	Solid	05/12/23 00:14
ZZZZZ	23D0393-10	XDT_m1230511-146	Solid	05/12/23 00:14
ZZZZZ	23D0393-10	XDT_m1230511-146	Solid	05/12/23 00:14
ZZZZZ	23D0393-10	XDT_m1230511-146	Solid	05/12/23 00:14
ZZZZZ	23D0393-11	XDT_m1230511-147	Solid	05/12/23 00:19
ZZZZZ	23D0393-11	XDT_m1230511-147	Solid	05/12/23 00:19
ZZZZZ	23D0393-11	XDT_m1230511-147	Solid	05/12/23 00:19
ZZZZZ	23D0393-11	XDT_m1230511-147	Solid	05/12/23 00:19
ZZZZZ	23D0393-12	XDT_m1230511-148	Solid	05/12/23 00:23
ZZZZZ	23D0393-15	XDT_m1230511-149	Solid	05/12/23 00:27
ZZZZZ	23D0393-15	XDT_m1230511-149	Solid	05/12/23 00:27
ZZZZZ	23D0393-15	XDT_m1230511-149	Solid	05/12/23 00:27
ZZZZZ	23D0393-15	XDT_m1230511-149	Solid	05/12/23 00:27
ZZZZZ	23D0393-16	XDT_m1230511-150	Solid	05/12/23 00:34
ZZZZZ	23D0393-16	XDT_m1230511-150	Solid	05/12/23 00:34
ZZZZZ	23D0393-16	XDT_m1230511-150	Solid	05/12/23 00:34
ZZZZZ	23D0393-16	XDT_m1230511-150	Solid	05/12/23 00:34
ZZZZZ	23D0393-17	XDT_m1230511-151	Solid	05/12/23 00:38
ZZZZZ	23D0393-17	XDT_m1230511-151	Solid	05/12/23 00:38
ZZZZZ	23D0393-17	XDT_m1230511-151	Solid	05/12/23 00:38
ZZZZZ	23D0393-17	XDT_m1230511-151	Solid	05/12/23 00:38
ZZZZZ	23D0393-18	XDT_m1230511-152	Solid	05/12/23 00:43
ZZZZZ	23D0393-18	XDT_m1230511-152	Solid	05/12/23 00:43
ZZZZZ	23D0393-18	XDT_m1230511-152	Solid	05/12/23 00:43
ZZZZZ	23D0393-18	XDT_m1230511-152	Solid	05/12/23 00:43
ZZZZZ	23D0393-19	XDT_m1230511-153	Solid	05/12/23 00:47

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Sequence: SLE0209
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0393-19	XDT_m1230511-153	Solid	05/12/23 00:47
ZZZZZ	23D0393-19	XDT_m1230511-153	Solid	05/12/23 00:47
ZZZZZ	23D0393-19	XDT_m1230511-153	Solid	05/12/23 00:47
ZZZZZ	23D0393-22	XDT_m1230511-154	Solid	05/12/23 00:51
ZZZZZ	23D0393-22	XDT_m1230511-154	Solid	05/12/23 00:51
ZZZZZ	23D0393-22	XDT_m1230511-154	Solid	05/12/23 00:51
Instrument Blank	SLE0209-IBLI	XDT_m1230511-155	NA	05/12/23 00:56
Calibration Check	SLE0209-CCVG	XDT_m1230511-156	NA	05/12/23 01:00
Calibration Blank	SLE0209-CCBG	XDT_m1230511-157	NA	05/12/23 01:07
ZZZZZ	23D0393-04RE1	XDT_m1230511-158	Solid	05/12/23 01:12
ZZZZZ	23D0393-04RE1	XDT_m1230511-158	Solid	05/12/23 01:12
ZZZZZ	BLE0072-DUP3	XDT_m1230511-159	Solid	05/12/23 01:16
ZZZZZ	BLE0072-MS3	XDT_m1230511-160	Solid	05/12/23 01:20
ZZZZZ	BLE0072-MSD3	XDT_m1230511-161	Solid	05/12/23 01:25
ZZZZZ	23D0393-04	XDT_m1230511-162	Solid	05/12/23 01:29
ZZZZZ	23D0393-04	XDT_m1230511-162	Solid	05/12/23 01:29
ZZZZZ	23D0393-04	XDT_m1230511-162	Solid	05/12/23 01:29
ZZZZZ	23D0393-04	XDT_m1230511-162	Solid	05/12/23 01:29
ZZZZZ	BLE0072-DUP2	XDT_m1230511-163	Solid	05/12/23 01:34
ZZZZZ	BLE0072-MS2	XDT_m1230511-164	Solid	05/12/23 01:38
ZZZZZ	BLE0072-MSD2	XDT_m1230511-165	Solid	05/12/23 01:43
Instrument Blank	SLE0209-IBLJ	XDT_m1230511-167	NA	05/12/23 01:54
Calibration Check	SLE0209-CCVH	XDT_m1230511-168	NA	05/12/23 01:58
Calibration Blank	SLE0209-CCBH	XDT_m1230511-169	NA	05/12/23 02:05
Instrument Blank	SLE0209-IBLK	XDT_m1230511-176	NA	05/12/23 02:36
Instrument Blank	SLE0209-IBLL	XDT_m1230511-179	NA	05/12/23 02:56
Calibration Check	SLE0209-CCVI	XDT_m1230511-180	NA	05/12/23 03:00
Calibration Blank	SLE0209-CCBI	XDT_m1230511-181	NA	05/12/23 03:07
Calibration Check	SLE0209-CCVJ	XDT_m1230511-183	NA	05/12/23 03:16

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209
SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Calibration Blank	SLE0209-CCBJ	XDT_m1230511-184	NA	05/12/23 03:23
ZZZZZ	23D0393-05	XDT_m1230511-185	Solid	05/12/23 03:28
ZZZZZ	23D0393-06	XDT_m1230511-186	Solid	05/12/23 03:32
ZZZZZ	23D0393-06	XDT_m1230511-186	Solid	05/12/23 03:32
ZZZZZ	23D0393-06	XDT_m1230511-186	Solid	05/12/23 03:32
ZZZZZ	23D0393-06	XDT_m1230511-186	Solid	05/12/23 03:32
Instrument Blank	SLE0209-IBLM	XDT_m1230511-188	NA	05/12/23 03:46
ZZZZZ	23D0412-02	XDT_m1230511-189	Water	05/12/23 03:50
ZZZZZ	23D0412-03	XDT_m1230511-190	Water	05/12/23 03:55
ZZZZZ	23D0412-04	XDT_m1230511-191	Water	05/12/23 03:59
ZZZZZ	23D0412-05	XDT_m1230511-192	Water	05/12/23 04:03
ZZZZZ	23D0412-06	XDT_m1230511-193	Water	05/12/23 04:08
Instrument Blank	SLE0209-IBLN	XDT_m1230511-194	NA	05/12/23 04:12
Calibration Check	SLE0209-CCVK	XDT_m1230511-195	NA	05/12/23 04:17
Calibration Blank	SLE0209-CCBK	XDT_m1230511-196	NA	05/12/23 04:24
ZZZZZ	23D0412-07	XDT_m1230511-197	Water	05/12/23 04:28
ZZZZZ	23D0412-08	XDT_m1230511-198	Water	05/12/23 04:32
ZZZZZ	23D0412-09	XDT_m1230511-199	Water	05/12/23 04:37
ZZZZZ	23D0412-10	XDT_m1230511-200	Water	05/12/23 04:41
ZZZZZ	23D0412-11	XDT_m1230511-201	Water	05/12/23 04:46
ZZZZZ	23D0412-12	XDT_m1230511-202	Water	05/12/23 04:50
ZZZZZ	23D0412-13	XDT_m1230511-203	Water	05/12/23 04:54
ZZZZZ	23D0412-14	XDT_m1230511-204	Water	05/12/23 04:59
ZZZZZ	23D0412-15	XDT_m1230511-205	Water	05/12/23 05:03
Instrument Blank	SLE0209-IBLO	XDT_m1230511-206	NA	05/12/23 05:08
Calibration Check	SLE0209-CCVL	XDT_m1230511-207	NA	05/12/23 05:12
Calibration Blank	SLE0209-CCBL	XDT_m1230511-208	NA	05/12/23 05:19
ZZZZZ	23D0442-03	XDT_m1230511-209	Water	05/12/23 05:23
ZZZZZ	23D0442-04	XDT_m1230511-210	Water	05/12/23 05:28

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209

SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
ZZZZZ	23D0442-06	XDT_m1230511-212	Water	05/12/23 05:36
ZZZZZ	23D0598-08	XDT_m1230511-215	Water	05/12/23 05:51
ZZZZZ	23D0598-08	XDT_m1230511-215	Water	05/12/23 05:51
ZZZZZ	23D0598-08	XDT_m1230511-215	Water	05/12/23 05:51
ZZZZZ	23D0598-08	XDT_m1230511-215	Water	05/12/23 05:51
ZZZZZ	23D0598-10	XDT_m1230511-216	Water	05/12/23 05:55
ZZZZZ	23D0598-10	XDT_m1230511-216	Water	05/12/23 05:55
ZZZZZ	23D0598-10	XDT_m1230511-216	Water	05/12/23 05:55
ZZZZZ	23D0598-10	XDT_m1230511-216	Water	05/12/23 05:55
ZZZZZ	23D0598-12	XDT_m1230511-217	Water	05/12/23 06:00
ZZZZZ	23D0598-12	XDT_m1230511-217	Water	05/12/23 06:00
ZZZZZ	23D0598-12	XDT_m1230511-217	Water	05/12/23 06:00
ZZZZZ	23D0598-12	XDT_m1230511-217	Water	05/12/23 06:00
Instrument Blank	SLE0209-IBLP	XDT_m1230511-218	NA	05/12/23 06:04
Calibration Check	SLE0209-CCVM	XDT_m1230511-219	NA	05/12/23 06:09
Calibration Blank	SLE0209-CCBM	XDT_m1230511-220	NA	05/12/23 06:16
ZZZZZ	23D0514-02	XDT_m1230511-221	Water	05/12/23 06:20
ZZZZZ	23D0514-03	XDT_m1230511-222	Water	05/12/23 06:24
ZZZZZ	23D0514-04	XDT_m1230511-223	Water	05/12/23 06:29
ZZZZZ	23D0514-06	XDT_m1230511-224	Water	05/12/23 06:33
Instrument Blank	SLE0209-IBLQ	XDT_m1230511-225	NA	05/12/23 06:37
Instrument Blank	SLE0209-IBLR	XDT_m1230511-230	NA	05/12/23 07:00
Calibration Check	SLE0209-CCVN	XDT_m1230511-231	NA	05/12/23 07:04
Calibration Blank	SLE0209-CCBN	XDT_m1230511-232	NA	05/12/23 07:11
Calibration Check	SLE0209-CCVO	XDT_m1230511-234	NA	05/12/23 07:20
Calibration Blank	SLE0209-CCBO	XDT_m1230511-235	NA	05/12/23 07:27
ZZZZZ	23D0537-02	XDT_m1230511-236	Water	05/12/23 07:31
ZZZZZ	23D0537-03	XDT_m1230511-237	Water	05/12/23 07:36
ZZZZZ	23D0537-04	XDT_m1230511-238	Water	05/12/23 07:40

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Sequence: SLE0209
SDG: 23D0396
Project: AOC5 MR Phase 1
Instrument: ICPMS1
Calibration: GE00042

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Instrument Blank	SLE0209-IBLS	XDT_m1230511-245	NA	05/12/23 08:11
Calibration Check	SLE0209-CCVP	XDT_m1230511-246	NA	05/12/23 08:15
Calibration Blank	SLE0209-CCBP	XDT_m1230511-247	NA	05/12/23 08:22
ZZZZZ	23D0578-02	XDT_m1230511-253	Water	05/12/23 08:46
ZZZZZ	BLE0134-DUP1	XDT_m1230511-254	Water	05/12/23 08:50
ZZZZZ	BLE0134-MS1	XDT_m1230511-255	Water	05/12/23 08:53
Instrument Blank	SLE0209-IBLT	XDT_m1230511-257	NA	05/12/23 09:00
Calibration Check	SLE0209-CCVQ	XDT_m1230511-258	NA	05/12/23 09:04
Calibration Blank	SLE0209-CCBQ	XDT_m1230511-259	NA	05/12/23 09:10
ZZZZZ	23D0587-03	XDT_m1230511-268	Water	05/12/23 09:41
Instrument Blank	SLE0209-IBLU	XDT_m1230511-269	NA	05/12/23 09:45
Calibration Check	SLE0209-CCVR	XDT_m1230511-270	NA	05/12/23 09:48
Calibration Blank	SLE0209-CCBR	XDT_m1230511-271	NA	05/12/23 09:55
ZZZZZ	23D0587-02	XDT_m1230511-272	Water	05/12/23 09:58
ZZZZZ	23D0587-04	XDT_m1230511-273	Water	05/12/23 10:01
ZZZZZ	23D0587-05	XDT_m1230511-274	Water	05/12/23 10:05
ZZZZZ	23D0578-07	XDT_m1230511-275	Water	05/12/23 10:09
ZZZZZ	23D0578-08	XDT_m1230511-276	Water	05/12/23 10:12
ZZZZZ	23D0578-04	XDT_m1230511-277	Water	05/12/23 10:16
ZZZZZ	23D0578-06	XDT_m1230511-278	Water	05/12/23 10:19
ZZZZZ	23D0578-03	XDT_m1230511-279	Water	05/12/23 10:23
ZZZZZ	23D0578-05	XDT_m1230511-280	Water	05/12/23 10:26
Instrument Blank	SLE0209-IBLV	XDT_m1230511-281	NA	05/12/23 10:30
Calibration Check	SLE0209-CCVS	XDT_m1230511-282	NA	05/12/23 10:33
Calibration Blank	SLE0209-CCBS	XDT_m1230511-283	NA	05/12/23 10:39

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0163-IFA1	Arsenic-75a	0	0.0210		ug/L
	Cadmium-111	0	0.0830		ug/L
	Cadmium-114	0	0.0720		ug/L
	Copper-63	0	0.0350		ug/L
	Copper-65	0	0.0420		ug/L
	Zinc-66	0	0.3180		ug/L
	Zinc-67	0	0.1970		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0163-IFB1	Arsenic-75a	20.000	18.983	94.9	ug/L
	Cadmium-111	20.000	19.887	99.4	ug/L
	Cadmium-114	20.000	19.859	99.3	ug/L
	Copper-63	20.000	20.310	102	ug/L
	Copper-65	20.000	20.188	101	ug/L
	Zinc-66	20.000	19.206	96.0	ug/L
	Zinc-67	20.000	17.986	89.9	ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Sequence: SLE0204
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0204-IFA1	Arsenic-75a	0	0.0260		ug/L
	Cadmium-111	0	0.0430		ug/L
	Cadmium-114	0	0.0270		ug/L
	Copper-63	0	0.0390		ug/L
	Copper-65	0	0.0330		ug/L
	Zinc-66	0	0.3120		ug/L
	Zinc-67	0	0.2690		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Sequence: SLE0204
Standard ID: L004688

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0204-IFB1	Arsenic-75a	20.000	19.651	98.3	ug/L
	Cadmium-111	20.000	18.519	92.6	ug/L
	Cadmium-114	20.000	18.365	91.8	ug/L
	Copper-63	20.000	20.580	103	ug/L
	Copper-65	20.000	20.103	101	ug/L
	Zinc-66	20.000	19.662	98.3	ug/L
	Zinc-67	20.000	17.951	89.8	ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Sequence: SLE0209
Standard ID: L005318

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0209-IFA1	Arsenic-75a	0	0.0210		ug/L
	Cadmium-111	0	0.0470		ug/L
	Cadmium-114	0	0.0440		ug/L
	Copper-63	0	0.0450		ug/L
	Copper-65	0	0.0540		ug/L
	Zinc-66	0	0.2310		ug/L
	Zinc-67	0	0.1630		ug/L

* Indicates %R outside of QC limits

NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

Analytical Resources, LLC
Analytical Chemists and Consultants

ICP INTERFERENCE CHECK SAMPLE

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Sequence: SLE0209
Standard ID: L005318

Lab Sample ID	Analyte	True	Found	%R	Units
SLE0209-IFB1	Arsenic-75a	20.000	19.554	97.8	ug/L
	Cadmium-111	20.000	18.852	94.3	ug/L
	Cadmium-114	20.000	18.980	94.9	ug/L
	Copper-63	20.000	20.032	100	ug/L
	Copper-65	20.000	20.081	100	ug/L
	Zinc-66	20.000	19.222	96.1	ug/L
	Zinc-67	20.000	18.232	91.2	ug/L

* Indicates %R outside of QC limits
NOTE: True value and %R are populated only for analytes found in the interference check standards, and will be seen only if those analytes were requested.

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00034
Sequence: SLE0163
Lab Sample ID: SLE0163-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.206	103	ug/L	50 - 150
Cadmium-111	0.10000	0.0970	97.0	ug/L	50 - 150
Cadmium-114	0.10000	0.0950	95.0	ug/L	50 - 150
Copper-63	0.50000	0.703	141	ug/L	50 - 150
Copper-65	0.50000	0.709	142	ug/L	50 - 150
Zinc-66	6.0000	6.20	103	ug/L	50 - 150
Zinc-67	6.0000	5.78	96.3	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00040
Sequence: SLE0204
Lab Sample ID: SLE0204-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.213	107	ug/L	50 - 150
Cadmium-111	0.10000	0.113	113	ug/L	50 - 150
Cadmium-114	0.10000	0.0970	97.0	ug/L	50 - 150
Copper-63	0.50000	0.708	142	ug/L	50 - 150
Copper-65	0.50000	0.727	145	ug/L	50 - 150
Zinc-66	6.0000	6.25	104	ug/L	50 - 150
Zinc-67	6.0000	6.11	102	ug/L	50 - 150

* Values outside of QC limits

DETECTION LEVEL STANDARD
EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: ICPMS1
Calibration: GE00042
Sequence: SLE0209
Lab Sample ID: SLE0209-CRL1

Analyte	True	Found	%R	Units	QC Limts
Arsenic-75a	0.20000	0.199	99.5	ug/L	50 - 150
Cadmium-111	0.10000	0.0830	83.0	ug/L	50 - 150
Cadmium-114	0.10000	0.0850	85.0	ug/L	50 - 150
Copper-63	0.50000	0.700	140	ug/L	50 - 150
Copper-65	0.50000	0.654	131	ug/L	50 - 150
Zinc-66	6.0000	6.52	109	ug/L	50 - 150
Zinc-67	6.0000	5.95	99.2	ug/L	50 - 150

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00034
Laboratory ID: SLE0163-HCV1
Sequence: SLE0163
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	196	-2.2	10.00
Cadmium-111	200.00	198	-0.9	10.00
Cadmium-114	200.00	200	0.008	10.00
Copper-63	200.00	197	-1.3	10.00
Copper-65	200.00	197	-1.6	10.00
Zinc-66	200.00	194	-2.9	10.00
Zinc-67	200.00	193	-3.5	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00034
Laboratory ID: SLE0163-HCV2
Sequence: SLE0163
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	294	-1.9	10.00
Cadmium-111	300.00	296	-1.3	10.00
Cadmium-114	300.00	298	-0.7	10.00
Copper-63	300.00	298	-0.6	10.00
Copper-65	300.00	292	-2.6	10.00
Zinc-66	300.00	287	-4.2	10.00
Zinc-67	300.00	281	-6.4	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00040
Laboratory ID: SLE0204-HCV1
Sequence: SLE0204
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	194	-3.1	10.00
Cadmium-111	200.00	220	9.8	10.00
Cadmium-114	200.00	220	10.0	10.00
Copper-63	200.00	188	-6.2	10.00
Copper-65	200.00	186	-7.1	10.00
Zinc-66	200.00	189	-5.4	10.00
Zinc-67	200.00	187	-6.7	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00040
Laboratory ID: SLE0204-HCV2
Sequence: SLE0204
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	305	1.7	10.00
Cadmium-111	300.00	293	-2.4	10.00
Cadmium-114	300.00	294	-1.9	10.00
Copper-63	300.00	287	-4.3	10.00
Copper-65	300.00	287	-4.2	10.00
Zinc-66	300.00	285	-4.9	10.00
Zinc-67	300.00	288	-4.1	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00042
Laboratory ID: SLE0209-HCV1
Sequence: SLE0209
Standard ID: L004780

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	200.00	197	-1.5	10.00
Cadmium-111	200.00	193	-3.7	10.00
Cadmium-114	200.00	194	-3.1	10.00
Copper-63	200.00	191	-4.4	10.00
Copper-65	200.00	190	-4.9	10.00
Zinc-66	200.00	193	-3.5	10.00
Zinc-67	200.00	189	-5.3	10.00

* Values outside of QC limits

HIGH-CONCENTRATION CALIBRATION VERIFICATION

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00042
Laboratory ID: SLE0209-HCV2
Sequence: SLE0209
Standard ID: L004781

ANALYTE	EXPECTED (ug/L)	FOUND (ug/L)	% DRIFT	QC LIMIT
Arsenic-75a	300.00	296	-1.2	10.00
Cadmium-111	300.00	285	-5.1	10.00
Cadmium-114	300.00	287	-4.2	10.00
Copper-63	300.00	283	-5.5	10.00
Copper-65	300.00	282	-5.8	10.00
Zinc-66	300.00	281	-6.4	10.00
Zinc-67	300.00	275	-8.3	10.00

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	04/28/23 15:38	16	180	05/11/23 22:44	30	180	
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	04/28/23 15:38	16	180	05/11/23 22:48	29	180	

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 6020B UCT-KED

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: ICPMS1

Analyte	MDL	RL	Units
Arsenic-75a	0.04	0.20	mg/kg
Cadmium-111	0.03	0.10	mg/kg
Cadmium-114	0.04	0.10	mg/kg
Copper-63	0.17	0.50	mg/kg
Copper-65	0.35	0.50	mg/kg
Zinc-66	2.9	6.0	mg/kg
Zinc-67	0.9	6.0	mg/kg

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCU10
Lot Number:	P2-CU682108
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Copper
Starting Material:	Cu Metal
Starting Material Lot#:	2095
Starting Material Purity:	99.9996%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10013 ± 30 µg/mL

Density: 1.032 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9977 ± 50 µg/mL**
ICP Assay NIST SRM 3114 Lot Number: 121207

Assay Method #2 **10024 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10007 ± 46 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.007542	M	Eu	<	0.000942	O	Na		0.001434	M	Se	<	0.016971	M	Zn	<	0.005657
O	Al	<	0.000609	O	Fe		0.008700	M	Nb	<	0.000942	O	Si		0.003052	M	Zr	<	0.000942
M	As	<	0.010371	M	Ga	<	0.000942	M	Nd	<	0.000942	M	Sm	<	0.000942				
M	Au	<	0.001885	M	Gd	<	0.000942	M	Ni		0.003781	M	Sn	<	0.005657				
O	B		0.003663	M	Ge	<	0.005657	M	Os	<	0.000942	M	Sr	<	0.000942				
M	Ba		0.004253	M	Hf	<	0.000942	O	P	<	0.031668	M	Ta	<	0.000942				
M	Be	<	0.000942	O	Hg	<	0.007064	M	Pb		0.005789	M	Tb	<	0.000942				
M	Bi	<	0.000942	M	Ho	<	0.000942	M	Pd	<	0.000942	M	Te	<	0.004714				
O	Ca		0.002304	M	In	<	0.000942	M	Pr	<	0.000942	M	Th	<	0.000942				
M	Cd	<	0.000942	M	Ir	<	0.000942	M	Pt	<	0.000942	O	Ti	<	0.002801				
M	Ce	<	0.000942	O	K		0.000763	M	Rb	<	0.000942	M	Tl	<	0.000942				
M	Co		0.001890	M	La	<	0.000942	M	Re	<	0.000942	M	Tm	<	0.000942				
M	Cr	<	0.005657	O	Li	<	0.000243	i	Rh	<		M	U	<	0.000942				
M	Cs	<	0.000942	M	Lu	<	0.000942	M	Ru	<	0.039588	M	V	<	0.003771				
s	Cu	<		O	Mg		0.000320	O	S		0.007174	M	W	<	0.005657				
M	Dy	<	0.000942	O	Mn		0.000793	M	Sb	<	0.001885	M	Y	<	0.000942				
M	Er	<	0.000942	M	Mo	<	0.005657	M	Sc	<	0.000942	M	Yb	<	0.000942				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 63.55 +2 6 $Cu(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cu Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 63 amu	10 ppt	n/a	40Ar23Na 47Ti16O, 14N12C37Cl, 16O12C35Cl, 23Na40Ca
ICP-OES 219.958 nm	0.01/.002 µg/mL	1	Th, Ta, Nb, U, Hf
ICP-OES 224.700 nm	0.01/.001 µg/mL	1	Pb, Ir, Ni, W
ICP-OES 324.754 nm	0.06/.001 µg/mL		Nb, U, Th, Mo, Hf

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 24, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 24, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGPB10
Lot Number:	S2-PB713228
Matrix:	0.5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Lead
Starting Material:	Lead Nitrate
Starting Material Lot#:	2343
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10042 ± 31 µg/mL

Density: 1.015 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10024 ± 41 µg/mL**
ICP Assay NIST SRM 3128 Lot Number: 101026

Assay Method #2 **10054 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000310	M	Eu	<	0.000310	M	Na		0.001470	M	Se	<	0.009100	O	Zn		0.006155
O	Al		0.017098	O	Fe		0.002496	M	Nb	<	0.000310	O	Si		0.003761	O	Zr	<	0.001700
M	As	<	0.003100	M	Ga	<	0.000310	M	Nd	<	0.000310	M	Sm	<	0.000310				
M	Au	<	0.000910	M	Gd	<	0.000310	O	Ni		0.001709	M	Sn	<	0.001300				
O	B	<	0.005600	M	Ge	<	0.002200	M	Os	<	0.000310	O	Sr		0.000444				
O	Ba		0.007865	M	Hf	<	0.000310	O	P	<	0.038000	M	Ta	<	0.000310				
O	Be	<	0.000320	M	Hg	<	0.002200	s	Pb	<		M	Tb	<	0.000610				
M	Bi	<	0.028000	M	Ho	<	0.000310	M	Pd	<	0.000610	M	Te	<	0.000310				
O	Ca		0.019834	M	In	<	0.000310	M	Pr	<	0.000310	M	Th	<	0.000310				
O	Cd	<	0.000630	M	Ir	<	0.000310	M	Pt	<	0.000910	O	Ti		0.005129				
M	Ce		0.004787	O	K		0.008207	M	Rb	<	0.006700	M	Tl	<	0.016000				
M	Co	<	0.000610	M	La	<	0.001900	M	Re	<	0.000310	M	Tm	<	0.000310				
O	Cr	<	0.001500	O	Li	<	0.000110	O	Rh	<	0.007700	M	U	<	0.000310				
M	Cs	<	0.006100	M	Lu	<	0.000310	M	Ru	<	0.001300	M	V	<	0.001600				
M	Cu	<	0.001600	O	Mg		0.003317	O	S	<	0.052000	M	W	<	0.000910				
M	Dy	<	0.000310	O	Mn	<	0.001600	O	Sb	<	0.015000	M	Y	<	0.000310				
M	Er	<	0.000310	M	Mo	<	0.000610	O	Sc	<	0.000630	M	Yb	<	0.000310				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 207.20 +2 6 $Pb(H_2O)_6^{+2}$

Chemical Compatibility - Soluble in HCl, HF and HNO_3. Avoid H_2SO_4. Stable with most metals and inorganic anions forming insoluble carbonate, borate, sulfate, sulfite, sulfide, phosphate, oxalate, chromate, tannate, iodate, and cyanide in neutral aqueous media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO_3 / LDPE container.

Pb Containing Samples (Preparation and Solution) -Metal (Best dissolved in 1:1 H_2O / HNO_3); Oxides (The many different Pb oxides are soluble in HNO_3 with the exception of PbO_2 which is soluble in HCl or HF); Ores and Alloys (Best attacked using 1:1 H_2O / HNO_3); Organic Matrices (Dry ash and dissolve in dilute HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 208 amu	5 ppt	n/a	192Pt16O, 192Os16O
ICP-OES 168.215 nm	0.03 / 0.003 µg/mL	1	Co
ICP-OES 217.000 nm	0.09 / 0.03 µg/mL	1	W, Ir, Hf, Sb, Th
ICP-OES 220.353 nm	0.04 / 0.006 µg/mL	1	Bi, Nb

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

January 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **January 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

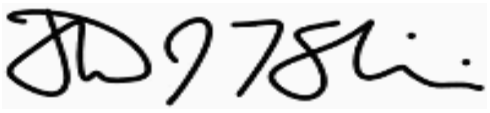
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGZN10
Lot Number:	S2-ZN711249
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Zinc
Starting Material:	Zinc Metal
Starting Material Lot#:	2349
Starting Material Purity:	99.9988%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9981 ± 56 µg/mL**
ICP Assay NIST SRM 3168a Lot Number: 120629

Assay Method #2 **9987 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10002 ± 32 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002000	M	Eu	<	0.000500	O	Na		0.008713	M	Se	<	0.048000	s	Zn	<	
O	Al	<	0.011000	O	Fe		0.015467	M	Nb	<	0.000500	O	Si		0.007842	M	Zr	<	0.000500
O	As	<	0.012000	M	Ga	<	0.004900	M	Nd	<	0.000500	M	Sm	<	0.000500				
M	Au	<	0.006500	M	Gd	<	0.000500	O	Ni		0.003049	M	Sn		0.002614				
O	B	<	0.019000	M	Ge	<	0.009100	M	Os	<	0.000500	M	Sr	<	0.000500				
M	Ba	<	0.000500	M	Hf	<	0.000500	O	P	<	0.059000	M	Ta	<	0.000500				
O	Be	<	0.000230	O	Hg	<	0.003800	M	Pb		0.016774	M	Tb	<	0.000500				
M	Bi	<	0.002400	M	Ho	<	0.000500	M	Pd	<	0.001000	M	Te	<	0.017000				
O	Ca		0.052283	M	In	<	0.003500	M	Pr	<	0.000500	M	Th	<	0.000500				
O	Cd		0.000588	M	Ir	<	0.001000	M	Pt	<	0.000500	M	Ti	<	0.002000				
M	Ce	<	0.000500	O	K		0.017209	M	Rb	<	0.002500	M	Tl	<	0.000500				
M	Co		0.000653	M	La	<	0.000500	M	Re	<	0.000500	M	Tm	<	0.000500				
O	Cr		0.001089	O	Li	<	0.000230	M	Rh	<	0.000500	M	U	<	0.000500				
M	Cs	<	0.000500	M	Lu	<	0.000500	M	Ru	<	0.005000	M	V	<	0.000500				
O	Cu		0.001938	O	Mg		0.000871	O	S	<	0.048000	M	W	<	0.001000				
M	Dy	<	0.000500	O	Mn		0.000172	M	Sb	<	0.004300	M	Y	<	0.000500				
M	Er	<	0.000500	M	Mo	<	0.001500	O	Sc	<	0.000900	M	Yb	<	0.000500				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 65.39 +2 4 Zn(OH)(aq)1+
Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media forming insoluble carbonate and hydroxide. Stable with most metals and inorganic anions in acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
Zn Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3); Organic based (dry ash at 4500C and dissolve ash in HCl) (sulfuric/peroxide acid digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 66 amu	7 ppt	N/A	50Ti16O,50Cr16O, 50V16O, 34S16O2, 32S16O18O, 32S17O2, 33S16O17O, 32S34S, 33S2
ICP-OES 202.548 nm	0.004/0.0002 µg/mL	1	Nb, Cu, Co, Hf
ICP-OES 206.200 nm	0.006/0.0006 µg/mL	1	Sb, Ta, Bi, Os
ICP-OES 213.856 nm	0.002/0.0004 µg/mL	1	Ni, Cu, V

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 22, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 22, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

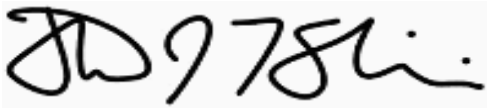
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

P: 800-669-6799/540-585-3030
F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSE10
Lot Number:	S2-SE711004
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Selenium
Starting Material:	Se Metal
Starting Material Lot#:	1962
Starting Material Purity:	99.9991%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9955 ± 61 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9955 ± 50 µg/mL**
ICP Assay NIST SRM 3149 Lot Number: 100901

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002242	M	Eu	<	0.000373	O	Na		0.013654	s	Se	<		O	Zn		0.002374
M	Al		0.004450	M	Fe		0.008478	O	Nb	<	0.002975	O	Si		0.006249	M	Zr	<	0.001868
O	As	<	0.022040	M	Ga	<	0.000373	M	Nd	<	0.000373	M	Sm	<	0.000373				
M	Au	<	0.000373	M	Gd	<	0.000373	O	Ni		0.001843	M	Sn		0.000847				
O	B	<	0.007714	M	Ge	<	0.002616	M	Os	<	0.000373	M	Sr	<	0.001121				
M	Ba	<	0.001495	M	Hf	<	0.000373	O	P	<	0.022040	M	Ta	<	0.000373				
M	Be	<	0.001495	M	Hg	<	0.002240	M	Pb		0.006358	M	Tb	<	0.006353				
M	Bi	<	0.000373	M	Ho	<	0.000373	M	Pd	<	0.000373	M	Te	<	0.012707				
O	Ca		0.006530	M	In	<	0.000373	M	Pr	<	0.001495	M	Th	<	0.002990				
M	Cd		0.001165	M	Ir	<	0.000373	M	Pt	<	0.000373	M	Ti	<	0.003363				
M	Ce	<	0.000373	O	K		0.001999	M	Rb	<	0.001868	M	Tl		0.008584				
M	Co	<	0.000373	M	La	<	0.001121	M	Re	<	0.000373	M	Tm	<	0.000373				
M	Cr		0.002861	O	Li		0.000062	M	Rh	<	0.000373	M	U	<	0.000373				
M	Cs	<	0.001121	M	Lu	<	0.000373	M	Ru	<	0.001493	M	V	<	0.000747				
M	Cu	<	0.000747	O	Mg		0.001156	O	S		0.024591	M	W	<	0.002242				
M	Dy	<	0.000373	M	Mn	<	0.000373	M	Sb	<	0.002242	M	Y	<	0.000373				
M	Er	<	0.000373	O	Mo	<	0.003195	M	Sc	<	0.001121	M	Yb	<	0.000373				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 78.96 +4 6 H_2SeO_3

Chemical Compatibility -Soluble in HCl, HNO_3,H_3PO_4, H_2SO_4 and HF aqueous matrices and water. It is stable with most inorganic anions but many cationic metals form the insoluble selenites under pH neutral conditions. When fluorinated and/or under acidic conditions precipitation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Se Containing Samples (Preparation and Solution) -Metal (soluble in HNO_3); Oxides (readily soluble in water); Minerals and alloys (acid digestion with HNO_3or HNO_3 / HF); Organic Matrices (acid digestion with hot concentrated H_2SO_4 accompanied by the careful dropwise addition of H_2O_2 until clear).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 82 amu	200 ppt	N/A	12C35Cl2
ICP-OES 196.026 nm	0.08/0.006 µg/mL	1	Fe
ICP-OES 203.985 nm	0.2/0.05 µg/mL	1	Sb, Ir, Cr, Ta
ICP-OES 206.279 nm	0.3/0.16 µg/mL	1	Cr, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 17, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
Refine your results. Redefine your industry.

Certificate of Analysis

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F: 540-585-3012
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMO10
Lot Number:	S2-MO706255
Matrix:	H2O tr. NH4OH
Value / Analyte(s):	10 000 µg/mL ea: Molybdenum
Starting Material:	Ammonium Molybdate
Starting Material Lot#:	2361
Starting Material Purity:	99.9893%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10026 ± 47 µg/mL

Density: 1.011 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10032 ± 68 µg/mL**
ICP Assay NIST SRM 3134 Lot Number: 130418

Assay Method #2 **10020 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000590	M	Eu	<	0.000300	M	Na		0.008739	M	Se	<	0.008000	M	Zn		0.005942
M	Al		0.005592	M	Fe	<	0.006500	M	Nb	<	0.029000	i	Si	<		M	Zr	<	0.001800
M	As	<	0.002100	M	Ga	<	0.000300	i	Nd	<		M	Sm	<	0.000300				
M	Au	<	0.000300	M	Gd	<	0.000300	M	Ni	<	0.008000	M	Sn	<	0.008900				
M	B	<	0.003300	M	Ge	<	0.000300	M	Os	<	0.000590	M	Sr		0.001747				
M	Ba		0.016778	M	Hf	<	0.001800	i	P	<		M	Ta	<	0.004200				
M	Be	<	0.000890	M	Hg	<	0.003300	M	Pb	<	0.000300	M	Tb	<	0.000300				
M	Bi	<	0.000890	M	Ho	<	0.000300	M	Pd	<	0.001800	M	Te	<	0.021000				
O	Ca		0.062920	M	In	<	0.032000	M	Pr	<	0.013000	M	Th	<	0.000300				
O	Cd	<	0.026000	M	Ir	<	0.000300	M	Pt	<	0.000300	O	Ti	<	0.032000				
M	Ce	<	0.008300	M	K		1.293372	M	Rb		0.045442	M	Tl		0.012584				
M	Co		0.005942	M	La	<	0.000300	M	Re	<	0.000300	M	Tm	<	0.000300				
M	Cr		0.005243	O	Li		0.000594	M	Rh	<	0.000300	M	U	<	0.005300				
M	Cs		0.005243	M	Lu	<	0.000300	M	Ru	<	0.079000	M	V	<	0.000890				
M	Cu		0.022371	M	Mg		0.005592	i	S	<		M	W		0.873900				
M	Dy	<	0.000300	M	Mn	<	0.005900	M	Sb		0.015031	M	Y	<	0.000300				
M	Er	<	0.000300	s	Mo	<		M	Sc	<	0.001200	M	Yb	<	0.000300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 95.94 +6 6,7,8,9 [MoO4]-2(chemical form as received)

Chemical Compatibility -Mo is received in a NH4OH matrix giving the operator the option of using HCl or HF to stabilize acidic solutions. The [MoO4]-2 is soluble in concentrated HCl [MoOCl5]-2, dilute HF / HNO3 [MoOF5]-2 and basic media [MoO4]-2. Stable at ppm levels with some metals provided it is fluorinated. Do not mix with Alkaline or Rare Earths when HF is present. Stable with most inorganic anions provided it is in the [MoO4]-2 chemical form.

Stability - 2-100 ppb levels stable (alone or mixed with all other metals that are at comparable levels) as the [MoOF5]-2 for months in 1% HNO3 / LDPE container. 1-10,000 ppm single element solutions as the [MoO4]-2 chemically stable for years in 1% NH4OH in a LDPE container.

Mo Containing Samples (Preparation and Solution) -Metal (Soluble in HF / HNO3 or hot dilute HCl); Oxide (soluble in HF or NH4OH) ; Organic Matrices (Dry ash at 450EC in Pt0 and dissolve oxide with HF or HCl).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 95 amu	3 ppt	n/a	40Ar39K16O,79Br16O,190Os2+,190Pt2+
ICP-OES 202.030 nm	0.008 / 0.0002 µg/mL	1	Os, Hf
ICP-OES 203.844 nm	0.012 / 0.002 µg/mL	1	
ICP-OES 204.598 nm	0.012 / 0.001 µg/mL	1	Ir, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

July 04, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **July 04, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

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Christiansburg, VA 24073 USA
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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGTL10
Lot Number:	T2-TL714687
Matrix:	5% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Thallium
Starting Material:	TlNO3
Starting Material Lot#:	2118
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10030 ± 42 µg/mL

Density: 1.036 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10040 ± 43 µg/mL**
ICP Assay NIST SRM 3158 Lot Number: 151215

Assay Method #2 **10010 ± 65 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL(

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000200	O	Na		0.002489	M	Se	<	0.011019	O	Zn		0.002298
O	Al	<	0.004184	O	Fe	<	0.002824	M	Nb	<	0.000200	O	Si		0.003760	M	Zr	<	0.000200
M	As	<	0.002003	M	Ga	<	0.000200	M	Nd	<	0.000200	M	Sm	<	0.000200				
O	Au	<	0.002824	M	Gd	<	0.000200	M	Ni		0.001724	M	Sn	<	0.000601				
O	B	<	0.004184	M	Ge	<	0.000801	M	Os	<	0.000198	O	Sr	<	0.000313				
M	Ba	<	0.000400	M	Hf	<	0.000200	O	P	<	0.010460	M	Ta	<	0.000200				
O	Be	<	0.000104	M	Hg	<	0.000794	M	Pb		0.000811	M	Tb	<	0.000200				
M	Bi	<	0.005209	M	Ho	<	0.000200	M	Pd	<	0.000400	M	Te	<	0.005008				
O	Ca		0.002436	M	In	<	0.000200	M	Pr	<	0.000200	M	Th	<	0.000200				
M	Cd		0.001318	M	Ir	<	0.000198	M	Pt	<	0.000801	O	Ti	<	0.001255				
M	Ce	<	0.000200	O	K		0.006175	M	Rb	<	0.000200	s	Tl	<					
M	Co	<	0.000601	M	La	<	0.000200	M	Re	<	0.000200	M	Tm	<	0.000200				
M	Cr	<	0.000801	O	Li	<	0.000177	M	Rh	<	0.000200	M	U	<	0.000200				
M	Cs	<	0.003606	M	Lu	<	0.000200	M	Ru	<	0.000397	M	V	<	0.002203				
M	Cu	<	0.001001	O	Mg		0.000529	O	S	<	0.015690	M	W	<	0.000601				
M	Dy	<	0.000200	M	Mn	<	0.000801	M	Sb	<	0.000400	M	Y	<	0.000200				
M	Er	<	0.000200	M	Mo	<	0.001202	O	Sc	<	0.000711	M	Yb	<	0.000200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 204.38 +1 6 Tl(H2O)61+
Chemical Compatibility - Soluble in HCl, HNO3, and H2SO4. Stable with most metals and inorganic anions. The sulfite, thiocyanate and oxalate are moderately soluble; the phosphate and arsenite are slightly soluble and the sulfide is insoluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Tl Containing Samples)Preparation and Solution) -Metal (Best dissolved in HNO3 which forms chiefly the Tl1+ ion.); Oxide (The thallous oxide is readily soluble in water. The thallic oxide requires high levels of acid); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric/peroxide digestion or dry ash and dissolution in HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 205 amu	2 ppt	N/A	189Os16O
ICP-OES 190.864 nm	0.04 / 0.004 µg/mL	1	V, Ti
ICP-OES 276.787 nm	0.1 / 0.01 µg/mL	1	Ta, V, Fe, Cr
ICP-OES 351.924 nm	0.2 / 0.02 µg/mL	1	Th, Ce, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

February 08, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **February 08, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

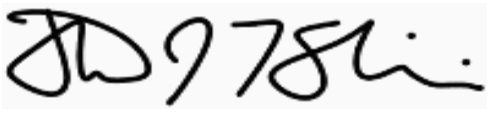
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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Christiansburg, VA 24073 USA
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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCD10
Lot Number:	S2-CD710508
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cadmium
Starting Material:	Cd Metal
Starting Material Lot#:	1953
Starting Material Purity:	99.9995%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10008 ± 30 µg/mL

Density: 1.029 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10010 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #2 **10011 ± 30 µg/mL**
ICP Assay NIST SRM 3108 Lot Number: 130116

Assay Method #3 **10003 ± 30 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag	<	0.003200	O	Eu	<	0.002500	O	Na		0.005499	M	Se	<	0.005700	O	Zn	<	0.001100
O	Al		0.008903	O	Fe		0.000602	M	Nb	<	0.000400	O	Si		0.016758	O	Zr	<	0.002600
M	As	<	0.003600	M	Ga	<	0.001200	M	Nd	<	0.000800	M	Sm	<	0.000400				
M	Au	<	0.000810	M	Gd	<	0.000400	M	Ni	<	0.003600	M	Sn	<	0.003200				
O	B		0.004189	O	Ge	<	0.012000	M	Os	<	0.000810	O	Sr	<	0.000330				
M	Ba	<	0.002400	M	Hf	<	0.000400	O	P	<	0.022000	M	Ta	<	0.000800				
M	Be	<	0.000400	M	Hg	<	0.001700	M	Pb	<	0.002400	M	Tb	<	0.000400				
M	Bi	<	0.000400	M	Ho	<	0.000400	M	Pd	<	0.001200	M	Te	<	0.008000				
O	Ca		0.011259	O	In	<	0.013000	M	Pr	<	0.000400	M	Th	<	0.000400				
s	Cd	<		M	Ir	<	0.000410	M	Pt	<	0.000400	O	Ti		0.000602				
M	Ce	<	0.000400	O	K		0.005237	M	Rb	<	0.004400	M	Tl		0.000523				
M	Co	<	0.000400	M	La	<	0.000400	M	Re	<	0.000400	M	Tm	<	0.000400				
O	Cr	<	0.005100	O	Li	<	0.000054	M	Rh	<	0.000400	M	U	<	0.000400				
M	Cs	<	0.002400	M	Lu	<	0.000400	M	Ru	<	0.002500	M	V	<	0.002000				
O	Cu	<	0.004800	O	Mg		0.000288	O	S	<	0.022000	M	W	<	0.000400				
M	Dy	<	0.000400	O	Mn	<	0.000860	O	Sb	<	0.018000	M	Y	<	0.000400				
M	Er	<	0.000400	M	Mo	<	0.001600	O	Sc	<	0.000430	M	Yb	<	0.000400				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 112.41 +2 4 Cd2(OH) (aq)3+ and Cd(OH)(aq)

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 , and HF. Avoid basic media forming insoluble carbonate and hydroxide.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO3 / LDPE container.

Cd Containing Samples (Preparation and Solution) -Metal (soluble in HNO3); Oxides (soluble in HCl or HNO3); Ores (dissolve in HCl /HNO3 then take to fumes with H2SO4. The silica and lead sulfate are filtered off after the addition of water); Organic based (dry ash at 450°C and dissolve ash in HCl), (sulfuric / peroxide acid digestion).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 111 amu	11 ppt	n/a	95Mo16O
ICP-OES 214.438 nm	0.003 / 0.0003 µg/mL	1	Pt, Ir
ICP-OES 226.502 nm	0.003 / 0.0003 µg/mL	1	Ir
ICP-OES 228.802 nm	0.003 / 0.0003 µg/mL	1	Co, Ir, As, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

November 01, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **November 01, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMN10
Lot Number:	S2-MN704240
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Manganese
Starting Material:	Mn Metal
Starting Material Lot#:	2275
Starting Material Purity:	99.9909%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10011 ± 30 µg/mL

Density: 1.035 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9989 ± 69 µg/mL**
ICP Assay NIST SRM 3132 Lot Number: 050429

Assay Method #2 **10011 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10024 ± 47 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001500	M	Eu	<	0.000730	O	Na		0.176097	M	Se	<	0.006600	M	Zn		0.009925
O	Al		0.004322	M	Fe	<	0.650000	M	Nb	<	0.000730	O	Si		0.097654	M	Zr	<	0.000730
M	As	<	0.008000	M	Ga		0.004322	M	Nd	<	0.001500	M	Sm	<	0.000730				
M	Au	<	0.000730	M	Gd	<	0.000730	M	Ni		0.024013	M	Sn	<	0.002200				
M	B		0.068838	M	Ge	<	0.004400	M	Os	<	0.000730	O	Sr		0.000928				
M	Ba	<	0.001500	M	Hf	<	0.000730	i	P	<		M	Ta	<	0.000730				
M	Be	<	0.000730	M	Hg	<	0.002200	M	Pb		0.007364	M	Tb	<	0.000730				
M	Bi	<	0.003000	M	Ho	<	0.000730	M	Pd	<	0.000730	M	Te	<	0.019000				
O	Ca		0.062434	M	In	<	0.003000	M	Pr	<	0.000730	M	Th	<	0.000730				
M	Cd	<	0.001500	M	Ir	<	0.000730	M	Pt	<	0.000730	O	Ti	<	0.006500				
M	Ce	<	0.007300	O	K		0.006403	M	Rb	<	0.006600	M	Tl	<	0.000730				
O	Co		0.014728	M	La	<	0.003000	M	Re	<	0.000730	M	Tm	<	0.000730				
O	Cr		0.272151	O	Li		0.000416	M	Rh	<	0.003000	M	U	<	0.001500				
M	Cs	<	0.000730	M	Lu	<	0.000730	M	Ru	<	0.004400	M	V	<	0.000730				
O	Cu		0.007684	O	Mg		0.320177	i	S	<		M	W	<	0.004400				
M	Dy	<	0.001500	s	Mn	<		M	Sb	<	0.021000	O	Y		0.001360				
M	Er	<	0.001500	M	Mo		0.010245	O	Sc	<	0.004100	M	Yb	<	0.000730				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 54.94 +2 6 $Mn(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5 % HNO_3/LDPE container.

Mn Containing Samples (Preparation and Solution) -Metal (Soluble in dilute acids); Oxides (Soluble in dilute acids); Ores (Dissolve with HCl. If silica is present add HF and then fume off silica by adding H_2SO_4 and heat to SO_3 fumes - dense white fumes).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 55 amu	10 ppt	n/a	40Ar14N1H,39K16O,37Cl18O,40Ar15N,38Ar17O,36Ar18O1H ,38Ar16O1H,37Cl17O1H,23Na32S
ICP-OES 257.610 nm	0.0014 / 0.00002 µg/mL	1	Ce, W, Re
ICP-OES 259.373 nm	0.0016 / 0.00002 µg/mL	1	U, Ta, Mo, Fe, Nb
ICP-OES 260.569 nm	0.0021 / 0.00002 µg/mL	1	Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 17, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 17, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGSB10
Lot Number:	R2-SB688559
Matrix:	3% (v/v) HNO3 3% (w/v) tartaric acid
Value / Analyte(s):	10 000 µg/mL ea: Antimony
Starting Material:	Antimony Metal
Starting Material Lot#:	1857
Starting Material Purity:	99.9894%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10003 ± 47 µg/mL

Density: 1.061 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10003 ± 41 µg/mL**
ICP Assay NIST SRM 3102a Lot Number: 140911

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

$CRM/RM\ Expanded\ Uncertainty\ (\pm) = U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000200	M	Eu	<	0.000300	O	Na		0.140000	M	Se	<	0.007300	O	Zn	0.005000
M	Al		0.003200	O	Fe		0.060000	M	Nb	<	0.000100	O	Si		0.150000	O	Zr	< 0.006300
M	As	<	0.004400	M	Ga	<	0.000400	M	Nd	<	0.000100	M	Sm	<	0.000100			
M	Au	<	0.000210	M	Gd	<	0.000100	O	Ni		0.004800	M	Sn	<	0.001800			
M	B	<	0.011000	M	Ge	<	0.000600	M	Os	<	0.000110	O	Sr		0.000750			
O	Ba	<	0.004900	M	Hf	<	0.000100	O	P		0.540000	M	Ta		0.003300			
M	Be	<	0.000400	M	Hg	<	0.000110	M	Pb	<	0.000400	M	Tb	<	0.000100			
M	Bi	<	0.000200	M	Ho	<	0.000100	M	Pd	<	0.000210	M	Te	<	0.000600			
O	Ca		0.110000	M	In	<	0.000100	M	Pr	<	0.001600	M	Th	<	0.000100			
M	Cd	<	0.000200	M	Ir	<	0.000110	M	Pt	<	0.000600	M	Ti	<	0.002800			
M	Ce		0.006500	O	K		0.020000	M	Rb	<	0.001000	M	Tl	<	0.000100			
M	Co	<	0.000200	O	La	<	0.016000	M	Re	<	0.000100	M	Tm	<	0.000100			
M	Cr		0.006900	O	Li	<	0.000430	M	Rh	<	0.000300	M	U	<	0.000100			
M	Cs	<	0.000200	M	Lu	<	0.000100	M	Ru	<	0.000310	M	V	<	0.000800			
M	Cu	<	0.000600	O	Mg		0.021000	n	S	<		M	W	<	0.000200			
M	Dy	<	0.000100	O	Mn		0.001900	s	Sb	<		M	Y	<	0.000100			
M	Er	<	0.000100	M	Mo	<	0.000500	O	Sc	<	0.002300	M	Yb	<	0.000100			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 121.75 +3 6 Sb(O)C4H4O6-1

Chemical Compatibility -Stable in conc. HCl, dilute or conc. HF. Stable in dilute HNO3 as the fluoride or tartrate complex. Avoid basic media. Stable with most metals and inorganic anions in acidic media as the tartrate provided the acidity is not too high or the acid is oxidizing causing loss of the stabilizing tartrate ion. The fluoride complex of antimony is stable in strong acid but you should only mix with other metals that are fluorinated.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-2% HNO3 / LDPE container.

Sb Containing Samples (Preparation and Solution) -Metal and alloys (Soluble in H2O / HF / HNO3 mixture); Oxides (Soluble in HCl and tartaric acid or H2O / HF / HNO3 mixtures); Ores (fusion with Na2CO3 in Pt0 followed by dissolving the fuseate in a H2O / HF / HNO3 mixture); Organic based (sulfuric acid / hydrogen peroxide digestion)

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 121 amu	5 ppt	N/A	105Pd16O, 89Y16O2
ICP-OES 206.833 nm	0.03/0.003 µg/mL	1	Ta, Cr, Ge, Hf
ICP-OES 217.581 nm	0.05/0.005 µg/mL	1	Nb, W, Re, Fe
ICP-OES 231.147 nm	0.06/0.006 µg/mL	1	Ni, Co, Pt

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 30, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 30, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

300 Technology Drive
Christiansburg, VA 24073 USA
inorganicventures.com

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAS10
Lot Number:	T2-AS718260
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Arsenic
Starting Material:	As Metal
Starting Material Lot#:	2208
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10060 ± 40 µg/mL

Density: 1.037 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10062 ± 46 µg/mL**
ICP Assay NIST SRM 3103a Lot Number: 100818

Assay Method #2 **10055 ± 76 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.003200	M	Eu	< 0.000530	O	Na	0.032544	M	Se	< 0.006300	O	Zn	0.001952			
M	Al	0.007593	O	Fe	0.001475	O	Nb	< 0.012000	O	Si	0.238658	O	Zr	< 0.004100			
s	As	<	M	Ga	< 0.000530	M	Nd	< 0.000530	M	Sm	< 0.000530						
M	Au	< 0.003100	M	Gd	< 0.000530	M	Ni	< 0.002100	M	Sn	< 0.000530						
M	B	0.026035	M	Ge	< 0.001600	M	Os	< 0.000520	M	Sr	< 0.000530						
M	Ba	< 0.000530	M	Hf	< 0.000530	O	P	< 0.043000	M	Ta	< 0.000530						
O	Be	< 0.000360	M	Hg	< 0.001600	M	Pb	< 0.002100	M	Tb	< 0.000530						
M	Bi	< 0.000530	M	Ho	< 0.000530	M	Pd	< 0.001100	M	Te	< 0.004700						
O	Ca	0.004339	M	In	< 0.023000	M	Pr	< 0.005300	M	Th	< 0.000530						
M	Cd	< 0.001100	M	Ir	< 0.000520	M	Pt	< 0.000530	O	Ti	< 0.002300						
M	Ce	< 0.000530	O	K	0.002061	M	Rb	< 0.000530	M	Tl	< 0.000530						
M	Co	< 0.000530	M	La	< 0.001100	M	Re	< 0.000530	M	Tm	< 0.000530						
O	Cr	< 0.001800	O	Li	< 0.000120	M	Rh	< 0.000530	M	U	< 0.000530						
M	Cs	< 0.005300	M	Lu	< 0.000530	M	Ru	< 0.000520	M	V	< 0.002700						
M	Cu	< 0.001600	O	Mg	0.000154	O	S	0.028205	M	W	< 0.012000						
M	Dy	< 0.000530	O	Mn	0.000154	M	Sb	< 0.000530	M	Y	< 0.000530						
M	Er	< 0.000530	M	Mo	< 0.000530	O	Sc	< 0.001700	M	Yb	< 0.000530						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 74.92 ; mix of +3 and +5 ; 6 ; H3AsO4 and HAsO2

Chemical Compatibility - Arsenic has no cationic chemistry. It is soluble in HCl, HNO3,H3PO4, H2SO4 and HF aqueous matrices water and NH4OH . It is stable with most inorganic anions (forms arsenate when boiled with chromate) but many cationic metals form the insoluble arsenates under pH neutral conditions. When fluorinated and / or under acidic conditions arsenate formation is typically not a problem at moderate to low concentrations.

Stability - 2-100 ppb levels stable for months alone or mixed with other elements at equivalent levels in 1% HNO3 / LDPE container.

As Containing Samples (Preparation and Solution) - Metal (soluble in 1:1 H2O / HNO3); Oxides (the oxide exists in crystalline and amorphous forms where the amorphic form is more water soluble. The oxides typically dissolve in dilute acidic solutions when boiled); Minerals (one gram of powered sample is fused in a Ni crucible with 10 grams of a 1:1 mix of K2CO3 and KNO3 and the melt extracted with hot water); Organic Matrices (0.2 to 0.5 grams of sample are fused with 15 grams of a 1:1 Na2CO3 / Na2O2 mix in a Ni crucible. The fuseate is extracted with water and acidified with HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 75 amu	20 ppt	N/A	40Ar35Cl, 59Co16O, 36Ar38Ar1H,8Ar37Cl,Ar39K, 150Nd2+,150Sm2+
ICP-OES 189.042 nm	0.05/0.005 µg/mL	1	Cr
ICP-OES 193.696 nm	0.1/0.01 µg/mL	1	V, Ge
ICP-OES 228.812 nm	0.1/0.01 µg/mL	1	Cd, Pt, Ir, Co

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 10, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 10, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBA10
Lot Number:	R2-BA692576
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Barium
Starting Material:	Barium Nitrate
Starting Material Lot#:	1969
Starting Material Purity:	99.9982%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10022 ± 30 µg/mL

Density: 1.025 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10018 ± 50 µg/mL** ICP Assay NIST SRM 3104a Lot Number: 140909
Assay Method #2	**10023 ± 31 µg/mL** Gravimetric NIST SRM Lot Number: See Sec. 4.2
Assay Method #3	**10023 ± 30 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000410	O	Eu	<	0.005200	O	Na		0.004610	M	Se	<	0.003700	O	Zn		0.000658
M	Al	<	0.003100	O	Fe		0.015707	M	Nb	<	0.000210	O	Si		0.005573	M	Zr	<	0.001300
M	As	<	0.001300	M	Ga	<	0.000210	M	Nd	<	0.000210	O	Sm	<	0.021000				
M	Au	<	0.001300	M	Gd	<	0.000210	M	Ni	<	0.000810	M	Sn	<	0.000410				
O	B	<	0.005200	M	Ge	<	0.002500	M	Os	<	0.000410	O	Sr		0.003850				
s	Ba	<		M	Hf	<	0.000810	O	P	<	0.026000	M	Ta	<	0.000410				
O	Be	<	0.000320	M	Hg	<	0.000210	M	Pb	<	0.002300	M	Tb	<	0.000210				
M	Bi	<	0.000210	M	Ho	<	0.000210	M	Pd	<	0.000210	M	Te	<	0.001900				
O	Ca		0.007093	M	In	<	0.000210	M	Pr	<	0.000210	M	Th	<	0.000210				
M	Cd	<	0.000210	M	Ir	<	0.000210	M	Pt	<	0.000210	M	Ti	<	0.002100				
M	Ce	<	0.001300	O	K		0.035467	M	Rb	<	0.002100	M	Tl	<	0.000210				
M	Co	<	0.000410	O	La	<	0.005200	M	Re	<	0.000210	M	Tm	<	0.000410				
M	Cr	<	0.001700	O	Li	<	0.000630	M	Rh	<	0.000210	M	U	<	0.000210				
M	Cs	<	0.003300	M	Lu	<	0.001700	M	Ru	<	0.000210	O	V	<	0.005200				
M	Cu	<	0.001300	O	Mg		0.000861	O	S		0.268539	M	W	<	0.000410				
M	Dy	<	0.000210	M	Mn	<	0.000410	M	Sb	<	0.001300	O	Y	<	0.005200				
M	Er	<	0.001300	M	Mo	<	0.000410	M	Sc	<	0.000410	M	Yb	<	0.001300				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 137.33 +2 6 $Ba(H_2O)_6^{+2}$
Chemical Compatibility - Soluble in HCl, and HNO_3. Avoid H_2SO_4, HF and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, iodate, molybdate, sulfite and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1 -10,000 ppm solutions chemically stable for years in 1-3.5% HNO_3 / LDPE container.
Ba Containing Samples (Preparation and Solution) -Metal(is best dissolved in diluted HNO_3); Ores(Carbonate fusion in Pt0 followed by HCl dissolution. If sulfate is present dissolve the fuseate using HCl / tartaric acid to prevent $BaSO_4$ precipitate); Organic Matrices (dry ash and dissolve in dilute HCl.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 138 amu	1 ppt	N/A	122Sn16O, 122Te16O
ICP-OES 230.424 nm	0.004/0.0005 µg/mL	1	Mo, Ir, Co
ICP-OES 233.527 nm	0.004/0.0003 µg/mL	1	
ICP-OES 455.403 nm	0.002/0.0001 µg/mL	1	Zr, U

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

May 11, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 11, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGBE10
Lot Number:	R2-BE692992
Matrix:	6% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Beryllium
Starting Material:	Beryllium Acetate
Starting Material Lot#:	2281
Starting Material Purity:	99.9998%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10032 ± 41 µg/mL

Density: 1.128 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10042 ± 67 µg/mL**
ICP Assay NIST SRM 3105a Lot Number: 090514

Assay Method #2 **10025 ± 51 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	< 0.001100	M	Eu	< 0.000270	O	Na	0.040962	M	Se	< 0.005000	M	Zn	0.013054			
O	Al	0.016205	O	Fe	0.015754	M	Nb	< 0.000270	O	Si	0.024307	O	Zr	< 0.001900			
M	As	< 0.002900	M	Ga	< 0.000270	M	Nd	< 0.000270	M	Sm	< 0.000270						
M	Au	< 0.000520	M	Gd	< 0.000270	M	Ni	< 0.003700	M	Sn	< 0.000790						
M	B	< 0.091000	M	Ge	< 0.000270	M	Os	< 0.000260	M	Sr	0.000630						
M	Ba	0.002700	M	Hf	< 0.000270	O	P	< 0.066000	M	Ta	< 0.000270						
s	Be	<	M	Hg	< 0.000520	M	Pb	< 0.000270	M	Tb	< 0.000270						
M	Bi	< 0.000530	M	Ho	< 0.000270	M	Pd	< 0.000520	M	Te	< 0.003700						
O	Ca	0.072022	M	In	< 0.000790	M	Pr	< 0.000270	M	Th	< 0.000270						
M	Cd	< 0.000790	M	Ir	< 0.000260	M	Pt	< 0.000270	O	Ti	< 0.000400						
M	Ce	< 0.000270	O	K	0.045014	M	Rb	< 0.000270	M	Tl	< 0.000790						
O	Co	< 0.003200	M	La	< 0.000270	M	Re	< 0.000270	M	Tm	< 0.000270						
O	Cr	< 0.001800	O	Li	< 0.000660	M	Rh	< 0.001100	M	U	< 0.000270						
M	Cs	0.001440	M	Lu	< 0.000270	M	Ru	< 0.000260	M	V	< 0.000790						
M	Cu	< 0.002100	O	Mg	0.016205	i	S	<	M	W	< 0.000530						
M	Dy	< 0.000270	M	Mn	0.001215	M	Sb	< 0.000270	M	Y	< 0.000270						
M	Er	< 0.000270	M	Mo	< 0.000530	O	Sc	< 0.000930	M	Yb	< 0.000270						

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 9.01 +2 4 $Be(H_2O)_4^{+2}$

Chemical Compatibility -Soluble in HCl, HNO_3, H_2SO_4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1 % HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 5-10 % HNO_3 / LDPE container.

Be Containing Samples (Preparation and Solution) - Meta l(is best dissolved in diluted H_2SO_4); BeO (boiling nitric, hydrochloric, or sulfuric acids or KHSO4 fusion); Ores (H_2SO_4/HF digestion or carbonate fusion in Pt0); Organic Matrices (sulfuric/peroxide digestion or nitric/sulfuric/perchloric acid decomposition, or dry ash and dissolution according to the BeO procedure above).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 9 amu	4 ppt	N/A	
ICP-OES 234.861 nm	0.0003/0.00016 µg/mL	1	Fe, Ta, Mo
ICP-OES 313.042 nm	0.0003/0.00009 µg/mL	1	V, Ce, U
ICP-OES 313.107 nm	0.0007/0.0005 µg/mL	1	Ce, Th, Tm

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION, PERIOD OF VALIDITY AND REVISION HISTORY

11.1 Certification Issue Date

May 13, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **May 13, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

11.4 Revision Status

- Revision 1 - Revised on Thursday, Jan 14, 2021 by utruong. Revision was made for the following reason: Modified Section 7 Chemical Form in Solution.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES
300 Technology Drive
Christiansburg, VA 24073 · USA
inorganicventures.com

CERTIFICATE OF ANALYSIS

tel: 800.669.6799 · 540.585.3030
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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCO10
Lot Number:	R2-CO695285
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Cobalt
Starting Material:	Co Metal
Starting Material Lot#:	2326
Starting Material Purity:	99.9934%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10012 ± 31 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10031 ± 67 µg/mL**
ICP Assay NIST SRM 3113 Lot Number: 190630

Assay Method #2 **10019 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10000 ± 35 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	0.014660	M	Eu	<	0.000590	O	Na	0.007534	M	Se	<	0.019000	M	Zn	0.003461	
M	Al	< 0.024000	M	Fe	0.050905	M	Nb	<	0.000590	O	Si	0.075340	M	Zr	<	0.001200	
i	As	<	M	Ga	<	0.000590	M	Nd	<	0.000590	M	Sm	<	0.000590			
M	Au	< 0.004100	M	Gd	<	0.000590	O	Ni	0.427608	M	Sn	<	0.001200				
M	B	< 0.031000	M	Ge	<	0.003000	M	Os	<	0.000590	O	Sr	<	0.000260			
M	Ba	< 0.000590	M	Hf	<	0.000590	n	P	<		M	Ta	<	0.001200			
O	Be	< 0.001300	M	Hg	<	0.001800	M	Pb	0.003257	M	Tb	<	0.000590				
M	Bi	< 0.003000	M	Ho	<	0.000590	M	Pd	<	0.000590	M	Te	<	0.005300			
O	Ca	0.010588	M	In	<	0.001200	M	Pr	<	0.000590	M	Th	<	0.000590			
M	Cd	< 0.004700	M	Ir	<	0.001200	M	Pt	<	0.002400	M	Ti	<	0.014000			
M	Ce	< 0.000590	O	K	0.008144	M	Rb	<	0.000590	M	Tl	0.002647					
s	Co	<	M	La	<	0.000590	M	Re	<	0.000590	M	Tm	<	0.000590			
M	Cr	< 0.021000	O	Li	<	0.000130	M	Rh	<	0.000590	M	U	<	0.000590			
M	Cs	< 0.002400	M	Lu	<	0.000590	M	Ru	<	0.007100	O	V	<	0.000880			
M	Cu	0.189369	O	Mg	0.001893	n	S	<		M	W	<	0.000590				
M	Dy	< 0.000590	M	Mn	<	0.001800	M	Sb	<	0.003600	M	Y	<	0.000590			
M	Er	< 0.000590	M	Mo	<	0.002400	O	Sc	<	0.001600	M	Yb	<	0.000590			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.93 +2 6 $Co(H_2O)_6^{2+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4 ,HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Co Containing Samples (Preparation and Solution) - Metal (soluble in HNO_3); Oxides (Soluble in HCl); Ores (dissolve in HCl / HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 59 amu	2 ppt	n/a	42Ca16O1H , 40Ar18O1H , 36Ar23Na, 43Ca16O, 24Mg35Cl
ICP-OES 228.616 nm	0.01/0.001 µg/mL	1	
ICP-OES 237.862 nm	0.01/0.002 µg/mL	1	W, Re, Al, Ta
ICP-OES 238.892 nm	0.01/0.002 µg/mL	1	Fe, W, Ta

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 04, 2020

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 04, 2024**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAG10
Lot Number:	S2-AG712977
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Silver
Starting Material:	Ag Shot
Starting Material Lot#:	2289
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10051 ± 30 µg/mL

Density: 1.056 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10051 ± 52 µg/mL**
ICP Assay NIST SRM 3151 Lot Number: 160729

Assay Method #2 **10051 ± 19 µg/mL**
Volhard NIST SRM 999c Lot Number: 999c

Assay Method #3 **10049 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

s	Ag	<		M	Eu	<	0.000260	O	Na		0.003811	M	Se	<	0.003900	O	Zn		0.048146
M	Al		0.002688	O	Fe		0.006419	M	Nb	<	0.000260	O	Si		0.005215	M	Zr	<	0.000260
M	As	<	0.001100	M	Ga	<	0.000260	M	Nd	<	0.000260	M	Sm	<	0.000260				
M	Au	<	0.000260	M	Gd	<	0.000260	O	Ni		0.001765	M	Sn		0.020060				
O	B	<	0.004300	M	Ge	<	0.002300	M	Os	<	0.001100	O	Sr	<	0.000110				
M	Ba	<	0.000520	M	Hf	<	0.000260	O	P	<	0.017000	M	Ta	<	0.000260				
O	Be	<	0.001100	M	Hg	<	0.000770	M	Pb	<	0.003600	M	Tb	<	0.000260				
M	Bi		0.004814	M	Ho	<	0.000260	M	Pd		0.044134	M	Te	<	0.009000				
O	Ca		0.005215	M	In		0.003691	M	Pr	<	0.000260	M	Th	<	0.000260				
M	Cd	<	0.000260	M	Ir	<	0.000520	M	Pt	<	0.001100	O	Ti	<	0.000440				
M	Ce	<	0.002100	O	K	<	0.008700	M	Rb	<	0.001100	M	Tl	<	0.004100				
O	Co	<	0.000330	M	La	<	0.000260	M	Re	<	0.000260	M	Tm	<	0.000260				
O	Cr	<	0.002500	O	Li	<	0.000110	M	Rh	<	0.000520	M	U	<	0.000260				
M	Cs	<	0.002600	M	Lu	<	0.000260	M	Ru	<	0.000260	M	V	<	0.000260				
O	Cu		0.357085	O	Mg		0.001203	O	S	<	0.017000	M	W	<	0.000260				
M	Dy	<	0.000260	O	Mn	<	0.000220	M	Sb	<	0.014000	M	Y	<	0.000260				
M	Er	<	0.000260	M	Mo	<	0.000260	O	Sc	<	0.000220	M	Yb	<	0.000260				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 107.87 +1 6 $Ag(H_2O)_6^+$

Chemical Compatibility -Stable in HNO_3, and HF. Avoid basic media. Ag forms more insoluble salts than any other metal. It also is subject to photochemical reduction to the metal in HCl media although 10 µg/mL solutions in 10% HCl [$AgCl_{x1-x}$] are commonly used in the analytical laboratory. The most common solubility problems exist with arsenate, arsenite , bromide, chloride, iodide, carbonate , chromate, cyanide, iodate, oxalate, oxide, sulfate, sulfide, tartrate, and thiocyanate in aqueous media. The addition of nitric acid renders many of these salts soluble.

Stability - 2-100 ppb levels stable for 75+ days when mixed with equivalent levels of all other elements including the precious metals (where chloride is present) when in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Ag Containing Samples (Preparation and Solution) -Metal (Soluble in HNO_3); Oxides (Soluble in HNO_3); Ores (Digestion with conc. HNO_3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 107 amu	1 ppt	N/A	91Zr16O
ICP-OES 243.779 nm	0.12/0.01 µg/mL	1	Mn, Th, Ni, Rh
ICP-OES 328.068 nm	0.007/0.0007 µg/mL	1	Ce, Rh, V
ICP-OES 338.289 nm	0.013/0.001 µg/mL	1	Ce, Cr, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Prepared By:

Uyen Truong
Supervisor, Product Documentation

Certificate Approved By:

Michael Booth
Director, Technical

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Refine your results. Redefine your industry.

Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCR(3)10
Lot Number:	S2-CR709784
Matrix:	10% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Chromium
Starting Material:	Cr Metal
Starting Material Lot#:	2328
Starting Material Purity:	99.9951%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10027 ± 41 µg/mL

Density: 1.072 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10027 ± 40 µg/mL**
ICP Assay NIST SRM 3112a Lot Number: 170630

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\ (u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001700	M	Eu	<	0.003400	O	Na		0.090372	M	Se	<	0.012000	O	Zn	<	0.006100
M	Al		0.034916	O	Fe		0.246471	M	Nb	<	0.017000	n	Si	<		M	Zr	<	0.007800
M	As	<	0.028000	O	Ga	<	0.013000	M	Nd	<	0.013000	M	Sm	<	0.006900				
M	Au	<	0.001700	M	Gd	<	0.000560	M	Ni		0.016020	M	Sn		0.006983				
O	B	<	0.025000	O	Ge	<	0.014000	M	Os	<	0.000560	M	Sr		0.006367				
M	Ba	<	0.008900	M	Hf	<	0.000560	i	P	<		M	Ta	<	0.000560				
M	Be	<	0.013000	M	Hg	<	0.001700	M	Pb		0.010064	M	Tb	<	0.000560				
M	Bi	<	0.002300	M	Ho	<	0.000560	M	Pd	<	0.021000	M	Te	<	0.010000				
O	Ca		0.075995	M	In	<	0.000560	M	Pr	<	0.001700	M	Th	<	0.000560				
M	Cd	<	0.000560	M	Ir	<	0.000560	M	Pt	<	0.001200	O	Ti		0.013555				
M	Ce	<	0.001200	O	K		0.043132	i	Rb	<		M	Tl	<	0.000560				
M	Co	<	0.002600	M	La	<	0.001200	M	Re	<	0.001200	O	Tm	<	0.013000				
s	Cr	<		O	Li		0.000390	M	Rh	<	0.095000	M	U	<	0.000560				
M	Cs	<	0.007800	M	Lu	<	0.000560	M	Ru	<	0.087000	O	V		0.014993				
O	Cu		0.007599	O	Mg		0.000883	i	S	<		M	W	<	0.049000				
M	Dy	<	0.000560	M	Mn		0.008626	M	Sb	<	0.003400	M	Y	<	0.001700				
M	Er	<	0.019000	M	Mo	<	0.032000	M	Sc		0.003080	M	Yb	<	0.000560				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 52.00 +3 6 $Cr(H_2O)_6^{3+}$

Chemical Compatibility -Stable in HCl, HNO_3, H_2SO_4, HF, H_3PO_4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO_3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO_3 / LDPE container.

Cr3 Containing Samples (Preparation and Solution) -Metal (soluble in HCl); Oxides/Ores (Chrome ore/oxides are very difficult to dissolve. The following procedures [A-D] are commonly used: A. Fusion with $KHSO_4$ and extraction with hot KCl. The residue fused with Na_2CO_3 and $KClO_3$, 3:1. B. Fusion with $NaKSO_4$ and NaF 2:1, C. Fusion with magnesia or lime and sodium or potassium carbonates, 4:1. D. Fusion with Na_2O_2 or NaOH and KNO_3 or NaOH and Na_2O_2. Nickel, iron, copper, or silver crucibles should be used for D. Platinum may be used for A, <, C); Organic Matrices (ash at 4500C followed by one of the fusion methods above or sulfuric/hydrogen peroxide acid digestions may be applicable to non oxide containing samples).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 52 amu	40 ppt	N/A	36S16O, 36Ar16O - The 50Cr, 53Cr, 54Cr lines suffer from many more potential interferences from sulfur, chlorine and argon compounds of oxygen, nitrogen and carbon.
ICP-OES 205.552 nm	0.006/0.0008 µg/mL	1	Os
ICP-OES 276.654 nm	0.01/0.001 µg/mL	1	Cu, Ta, V
ICP-OES 284.325 nm	0.008/0.0007 µg/mL	1	

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

October 26, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **October 26, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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300 Technology Drive
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CERTIFICATE OF ANALYSIS

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED
Testing Laboratory
Certificate 883.01

ACCREDITED
Reference Material Producer
Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNI10
Lot Number:	P2-NI686384
Matrix:	3% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Nickel
Starting Material:	Ni Metal
Starting Material Lot#:	2277 and 2282
Starting Material Purity:	99.9992%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9979 ± 30 µg/mL

Density: 1.038 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9971 ± 54 µg/mL**
ICP Assay NIST SRM 3136 Lot Number: 120619

Assay Method #2 **9970 ± 32 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **9993 ± 33 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag		0.002606	M	Eu	<	0.001100	O	Na		0.004965	O	Se	<	0.067000	M	Zn		0.006578
M	Al	<	0.013000	O	Fe		0.018618	M	Nb	<	0.001100	O	Si		0.010923	M	Zr	<	0.001100
O	As	<	0.067000	M	Ga	<	0.001100	M	Nd	<	0.001100	M	Sm	<	0.001100				
M	Au	<	0.002100	M	Gd	<	0.001100	s	Ni	<		M	Sn	<	0.016000				
M	B	<	0.017000	M	Ge	<	0.004200	M	Os		0.002110	O	Sr	<	0.000940				
M	Ba	<	0.001100	M	Hf	<	0.001100	i	P	<		M	Ta	<	0.001100				
O	Be	<	0.000410	M	Hg		0.014895	M	Pb		0.006578	M	Tb	<	0.001100				
M	Bi	<	0.004200	M	Ho	<	0.001100	M	Pd	<	0.001100	M	Te	<	0.015000				
O	Ca		0.003351	M	In	<	0.001100	M	Pr	<	0.001100	M	Th	<	0.001100				
M	Cd		0.001365	M	Ir		0.004716	M	Pt	<	0.001100	M	Ti	<	0.004200				
M	Ce	<	0.001100	O	K		0.004716	M	Rb	<	0.001100	M	Tl	<	0.001100				
O	Co		0.017377	M	La	<	0.001100	M	Re		0.001737	M	Tm	<	0.001100				
O	Cr	<	0.006700	O	Li	<	0.000140	M	Rh	<	0.006300	M	U	<	0.001100				
M	Cs	<	0.007300	M	Lu	<	0.001100	M	Ru	<	0.019000	M	V	<	0.002100				
M	Cu		0.004096	O	Mg		0.000372	i	S	<		M	W	<	0.006300				
M	Dy	<	0.001100	O	Mn	<	0.001900	M	Sb		0.005833	O	Y	<	0.000540				
M	Er	<	0.001100	M	Mo	<	0.008400	M	Sc	<	0.002100	M	Yb	<	0.001100				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 58.69 +2 6 Ni(H2O)62+

Chemical Compatibility -Stable in HCl, HNO3, H2SO4 ,HF, H3PO4. Avoid basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Ni Containing Samples (Preparation and Solution) -Metal (Soluble in HNO3); Oxides (Soluble in HCl); Ores (Dissolve in HCl / HNO3).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 60 amu	100 ppt	n/a	43Ca16O1H , 44Ca16O, 23Na37Cl
ICP-OES 221.647 nm	0.01 / 0.0009 µg/mL	1	Si
ICP-OES 231.604 nm	0.02 / 0.002 µg/mL	1	Sb, Ta, Co
ICP-OES 232.003 nm	0.02 / 0.006 µg/mL	1	Cr, Re, Os, Nb, Ag, Pt, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 02, 2019

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 02, 2023**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Manager, Quality Control

Certifying Officer:

Paul Gaines
CEO, Senior Technical Director

INORGANIC VENTURES™
Refine your results. Redefine your industry.

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGV10
Lot Number:	S2-V711005
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Vanadium
Starting Material:	Vanadium Pentoxide
Starting Material Lot#:	1782
Starting Material Purity:	99.9877%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10014 ± 30 µg/mL

Density: 1.104 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10017 ± 42 µg/mL**
ICP Assay NIST SRM 3165 Lot Number: 160906

Assay Method #2 **10013 ± 30 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000110	M	Eu	<	0.000110	O	Na		0.120000	M	Se	<	0.009400	M	Zn		0.009400
O	Al		0.120000	O	Fe		0.460000	M	Nb	<	0.001300	O	Si		0.270000	M	Zr	<	0.002900
M	As	<	0.000210	M	Ga	<	0.009300	M	Nd	<	0.000610	M	Sm	<	0.000110				
M	Au	<	0.004700	M	Gd	<	0.000110	M	Ni		0.012000	M	Sn		0.003900				
M	B		0.051000	M	Ge	<	0.000410	M	Os	<	0.000110	O	Sr		0.007100				
M	Ba		0.003600	M	Hf	<	0.000110	O	P	<	0.034000	M	Ta	<	0.000110				
O	Be	<	0.000560	M	Hg	<	0.000410	M	Pb		0.001400	M	Tb	<	0.000110				
M	Bi	<	0.000210	M	Ho	<	0.000110	M	Pd	<	0.000410	M	Te	<	0.000110				
O	Ca		0.730000	M	In	<	0.000110	M	Pr	<	0.000110	M	Th	<	0.000210				
M	Cd	<	0.000610	M	Ir	<	0.000110	M	Pt	<	0.000110	M	Ti		0.017000				
M	Ce	<	0.000610	M	K		0.052000	M	Rb	<	0.000310	M	Tl	<	0.000110				
M	Co	<	0.001300	M	La	<	0.000410	M	Re		0.001700	M	Tm	<	0.000110				
O	Cr		0.170000	M	Li	<	0.000810	M	Rh	<	0.000110	M	U	<	0.000410				
M	Cs		0.005600	M	Lu	<	0.000110	M	Ru	<	0.000110	s	V	<					
M	Cu	<	0.001300	M	Mg		0.053000	i	S	<		M	W		0.002000				
M	Dy	<	0.000110	M	Mn		0.007900	M	Sb		0.078000	M	Y	<	0.000110				
M	Er	<	0.000110	M	Mo		0.094000	M	Sc	<	0.000410	M	Yb	<	0.000110				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 50.94 +5 6 H2V10O284-

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4, HF, H3PO4 and strong basic media. Stable with most metals and inorganic anions in acidic media.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

V Containing Samples (Preparation and Solution) -Metal (Fusion with NaOH or KOH in Ni0 or Na2CO3 / KNO3); Oxides (V2O3 - use HCl, V2O4 - use HCl or HNO3, V2O5 - use concentrated acids); Ores (Na2CO3 / KNO3 in Pt0 caution - nitrates attack Pto followed by water extraction of fuseate); Organic Matrices (Ash at 450 EC followed by dissolving according to V2O5 above) .

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 51 amu	4 ppt	N/A	34S16O1H, 35Cl16O, 38Ar13C, 36Ar15N, 36Ar14N1H, 37Cl14N,36S15N, 33S18O, 34S17O, 102Ru+2,02Pd+2
ICP-OES 290.882 nm	0.008 / 0.0008 µg/mL	1	Hf, Nb
ICP-OES 292.402 nm	0.006 / 0.001 µg/mL	1	Th
ICP-OES 309.311 nm	0.005 / 0.001 µg/mL	1	Mg, U, Th

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

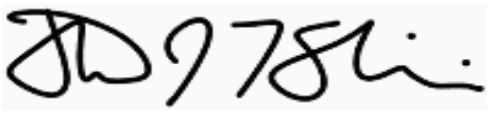
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGAL10
Lot Number:	T2-AL716102
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Aluminum
Starting Material:	Aluminum Nitrate Nonahydrate
Starting Material Lot#:	2460
Starting Material Purity:	99.9938%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10049 ± 31 µg/mL

Density: 1.087 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1	**10059 ± 40 µg/mL** ICP Assay NIST SRM 3101a Lot Number: 140903
Assay Method #2	**10044 ± 26 µg/mL** EDTA NIST SRM 928 Lot Number: 928
Assay Method #3	**10049 ± 35 µg/mL** Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.002100	M	Eu	<	0.002100	O	Na		0.352819	M	Se	<	0.005200	M	Zn	0.006018
s	Al	<		O	Fe		0.074714	M	Nb	<	0.000520	O	Si		0.017848	O	Zr	0.004358
M	As		0.008716	O	Ga		0.112072	M	Nd	<	0.000520	M	Sm	<	0.000520			
M	Au	<	0.008400	M	Gd	<	0.001100	O	Ni	<	0.006000	M	Sn		0.000747			
O	B	<	0.014000	M	Ge	<	0.005200	M	Os	<	0.000650	O	Sr		0.000518			
O	Ba		0.012867	M	Hf	<	0.004100	n	P	<		M	Ta	<	0.000520			
O	Be	<	0.000270	M	Hg	<	0.002000	M	Pb		0.002282	M	Tb	<	0.000520			
M	Bi		0.001930	M	Ho	<	0.000520	M	Pd	<	0.000520	M	Te	<	0.001100			
O	Ca		0.076790	M	In	<	0.002100	M	Pr	<	0.000520	M	Th	<	0.000520			
M	Cd	<	0.000520	M	Ir	<	0.000650	M	Pt	<	0.000520	O	Ti		0.001930			
M	Ce	<	0.001100	O	K		0.043583	M	Rb	<	0.000520	M	Tl	<	0.000520			
O	Co	<	0.005400	M	La	<	0.002100	M	Re	<	0.000520	M	Tm	<	0.000520			
O	Cr		0.006018	O	Li		0.000112	M	Rh	<	0.000520	M	U	<	0.000520			
M	Cs		0.000643	M	Lu	<	0.000520	M	Ru	<	0.002000	M	V		0.001286			
O	Cu	<	0.008300	O	Mg		0.068488	i	S	<		M	W	<	0.009800			
M	Dy	<	0.002100	O	Mn		0.000913	M	Sb	<	0.003100	M	Y	<	0.001100			
M	Er	<	0.000520	M	Mo		0.005396	O	Sc	<	0.000950	M	Yb	<	0.000520			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 26.98 +3 6 Al(H2O)6+3
Chemical Compatibility -Soluble in HCl, HNO3, v F and v 2SO4. Avoid neutral media. Soluble in strongly basic NaOH forming the Al(OH)4(H2O)21- species. Stable with most metals and inorganic anions. The phosphate is insoluble in water and only slightly soluble in acid.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
Al Containing Samples (Preparation and Solution) -Metal (Best dissolved in HCl / HNO3); a- Al2O3 (Na2CO3 fusion in Pt0);
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 27 amu	30 ppt	N/A	12C15N, 13C14N, 1H12C14N, 11B16O, 54Cr2+, 54Fe2+
ICP-OES 167.078 nm	0.1/0.009 µg/mL	1	Fe
ICP-OES 394.401 nm	0.05/0.006 µg/mL	1	U, Ce
ICP-OES 396.152 nm	0.03/0.006 µg/mL	1	Mo, Zr, Ce

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 22, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 22, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

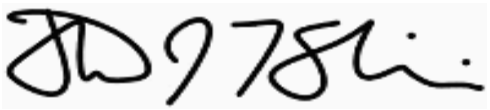
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGK10
Lot Number:	S2-K711973
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Potassium
Starting Material:	KNO3
Starting Material Lot#:	2313
Starting Material Purity:	99.9971%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9992 ± 30 µg/mL

Density: 1.024 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9987 ± 24 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **10004 ± 84 µg/mL**
ICP Assay NIST SRM 3141a Lot Number: 140813

Assay Method #3 **10007 ± 45 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001400	M	Eu	<	0.000660	O	Na		0.246220	M	Se	<	0.007900	O	Zn		0.018056
O	Al		0.001592	O	Fe		0.005909	M	Nb	<	0.000660	O	Si		0.011490	O	Zr	<	0.001600
M	As	<	0.005300	M	Ga	<	0.000660	M	Nd	<	0.000660	M	Sm	<	0.000660				
M	Au	<	0.002000	M	Gd	<	0.000660	O	Ni	<	0.004900	M	Sn	<	0.000660				
O	B	<	0.005600	M	Ge	<	0.002000	M	Os	<	0.003300	O	Sr		0.000055				
O	Ba	<	0.000860	M	Hf	<	0.000660	O	P	<	0.032000	M	Ta	<	0.000660				
O	Be	<	0.000082	M	Hg	<	0.002000	M	Pb	<	0.002300	M	Tb	<	0.000660				
M	Bi	<	0.006600	M	Ho	<	0.000660	M	Pd	<	0.000660	M	Te	<	0.017000				
O	Ca		0.031187	M	In	<	0.000660	M	Pr	<	0.000660	M	Th	<	0.000660				
O	Cd	<	0.000450	M	Ir	<	0.000660	M	Pt	<	0.002700	M	Ti	<	0.000660				
M	Ce	<	0.000660	s	K	<		M	Rb		0.476026	M	Tl	<	0.000660				
O	Co	<	0.000780	M	La	<	0.000660	M	Re	<	0.000660	M	Tm	<	0.000660				
O	Cr		0.000541	O	Li	<	0.000084	M	Rh	<	0.000660	M	U	<	0.000660				
M	Cs	<	0.000660	M	Lu	<	0.000660	M	Ru	<	0.000660	O	V	<	0.001100				
M	Cu	<	0.002700	O	Mg		0.006237	O	S		0.027905	M	W	<	0.000660				
M	Dy	<	0.000660	O	Mn		0.000476	M	Sb	<	0.000660	M	Y	<	0.000660				
M	Er	<	0.000660	M	Mo	<	0.000660	O	Sc	<	0.000340	O	Yb	<	0.000270				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 39.10 +1 (6) K+(aq)
Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Avoid use of HClO4 due to insolubility of the perchlorate. Stable with all metals and inorganic anions except ClO4-.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.
K Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Sodium carbonate fusion in Pt0 followed by HCl dissolution-blank levels of K in sodium carbonate critical); Organic Matrices (Sulfuric/peroxide digestion)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 39 amu	10 ppt	n/a	38ArH, 23Na16O, 78Se
ICP-OES 404.721 nm	1.1 / 0.05 µg/mL	1	U, Ce
ICP-OES 766.490 nm	0.4 / 0.001 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 771.531 nm	1.0 / 0.03 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

December 10, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **December 10, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

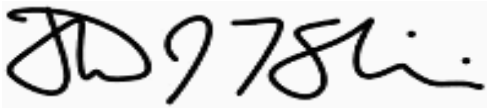
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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inorganicventures.com

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info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGMG10
Lot Number:	S2-MG704239
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Magnesium
Starting Material:	Magnesium Metal
Starting Material Lot#:	2168
Starting Material Purity:	99.9984%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10053 ± 30 µg/mL

Density: 1.053 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10022 ± 62 µg/mL**
ICP Assay NIST SRM 3131a Lot Number: 140110

Assay Method #2 **10078 ± 26 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10033 ± 26 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

O	Ag		0.002106	M	Eu	<	0.000910	O	Na		0.071075	O	Se	<	0.048000	O	Zn	0.003299
M	Al		0.003553	M	Fe		0.002538	M	Nb	<	0.000460	O	Si	<	0.032000	O	Zr	< 0.002700
M	As	<	0.001400	M	Ga	<	0.000460	M	Nd	<	0.000910	M	Sm	<	0.000460			
M	Au	<	0.001400	M	Gd	<	0.000460	O	Ni	<	0.001600	M	Sn	<	0.002300			
O	B		0.006853	M	Ge	<	0.001400	M	Os	<	0.000460	O	Sr		0.000279			
O	Ba		0.000964	M	Hf	<	0.000460	O	P		0.015230	M	Ta	<	0.000460			
O	Be	<	0.000120	M	Hg	<	0.000460	M	Pb	<	0.000460	M	Tb	<	0.000460			
M	Bi	<	0.000460	M	Ho	<	0.000460	M	Pd	<	0.003200	M	Te	<	0.007300			
O	Ca		0.053306	M	In	<	0.000460	M	Pr	<	0.000460	M	Th	<	0.000460			
O	Cd	<	0.000360	M	Ir	<	0.000460	M	Pt	<	0.001900	O	Ti	<	0.001700			
M	Ce	<	0.002300	M	K		0.048229	M	Rb		0.002411	M	Tl		0.003046			
M	Co	<	0.000910	M	La	<	0.002800	M	Re	<	0.000460	M	Tm	<	0.000460			
M	Cr	<	0.002300	O	Li		0.027922	M	Rh	<	0.000460	M	U	<	0.000460			
M	Cs		0.001040	M	Lu	<	0.000460	M	Ru	<	0.000460	M	V	<	0.000460			
O	Cu	<	0.003000	s	Mg	<		O	S	<	0.190000	M	W	<	0.000460			
M	Dy	<	0.000460	O	Mn		0.015230	M	Sb		0.020814	O	Y	<	0.000720			
M	Er	<	0.000460	M	Mo	<	0.000910	O	Sc	<	0.000480	M	Yb	<	0.000460			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 24.31 +2 6 Mg(H2O)6+2
Chemical Compatibility -Soluble in HCl, HNO3, and H2SO4 avoid HF, H3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicates, carbonates, hydroxides, oxides, and tungstates in neutral and slightly acidic media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Mg Containing Samples (Preparation and Solution) -Metal (Best dissolved in diluted HNO3); Oxide (Readily soluble in above compatible aqueous acidic solutions); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (Sulfuric / peroxide digestion or nitric / sulfuric / perchloric acid decomposition, or dry ash and dissolution in dilute HCl).
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 24 amu	42 ppt	n/a	7Li17O, 48Ti+2 , 48Ca+2
ICP-OES 279.553 nm	0.0002 / 0.00003 µg/mL	1	Th
ICP-OES 280.270 nm	0.0003 / 0.00005 µg/mL	1	U, V
ICP-OES 285.213 nm	0.002 / 0.00003 µg/mL	1	U, Hf, Cr, Zr

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 23, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 23, 2025**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGCA10
Lot Number:	T2-CA716103
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Calcium
Starting Material:	CaCO3
Starting Material Lot#:	2472
Starting Material Purity:	99.9950%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 10005 ± 30 µg/mL

Density: 1.039 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **10005 ± 45 µg/mL**
ICP Assay NIST SRM 3109a Lot Number: 130213

Assay Method #2 **10005 ± 25 µg/mL**
EDTA NIST SRM 928 Lot Number: 928

Assay Method #3 **10005 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

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u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.001200	M	Eu	<	0.001200	O	Na		0.006112	M	Se	<	0.024000	M	Zn		0.005362
M	Al		0.065419	O	Fe		0.009115	M	Nb	<	0.001200	O	Si		0.139417	O	Zr	<	0.006700
O	As	<	0.013000	M	Ga	<	0.015000	M	Nd	<	0.020000	M	Sm	<	0.001200				
M	Au	<	0.017000	M	Gd	<	0.004800	O	Ni		0.000793	M	Sn	<	0.003600				
O	B		0.001179	M	Ge	<	0.003600	M	Os	<	0.001200	M	Sr		0.081505				
O	Ba		0.002788	M	Hf	<	0.001200	O	P	<	0.041000	M	Ta	<	0.001200				
O	Be	<	0.000410	M	Hg	<	0.004800	M	Pb		0.001608	M	Tb	<	0.001200				
M	Bi		0.001608	M	Ho	<	0.001200	M	Pd	<	0.001200	M	Te	<	0.003600				
s	Ca	<		M	In	<	0.001200	M	Pr		0.000257	M	Th	<	0.001200				
O	Cd	<	0.001300	M	Ir	<	0.001200	M	Pt	<	0.003600	O	Ti	<	0.001900				
M	Ce		0.001029	O	K		0.009759	M	Rb	<	0.001200	M	Tl	<	0.001200				
O	Co		0.000418	M	La		0.001823	M	Re	<	0.001200	M	Tm	<	0.001200				
O	Cr		0.003324	O	Li	<	0.007300	M	Rh	<	0.001200	M	U		0.002144				
M	Cs		0.007399	M	Lu		0.000128	M	Ru	<	0.001200	M	V		0.001286				
O	Cu	<	0.011000	M	Mg		1.286934	O	S		0.055767	O	W	<	0.024000				
M	Dy	<	0.002400	O	Mn		0.004611	M	Sb	<	0.009600	O	Y		0.000536				
M	Er	<	0.002400	M	Mo		0.003539	O	Sc	<	0.001400	M	Yb	<	0.001200				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 40.08 +2 6 Ca(H2O)6+2
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H2SO4, vF, v3PO4 and neutral to basic media. Stable with most metals and inorganic anions forming insoluble silicate, carbonate, hydroxide, oxide, fluoride, sulfate, oxalate, chromate, arsenate, and tungstate in neutral aqueous media.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-10% HNO3 / LDPE container.
Ca Containing Samples)Preparation and Solution) -Metal (best dissolved in diluted HNO3); Ores (Carbonate fusion in Pt0 followed by HCl dissolution); Organic Matrices (dry ash and dissolution in dilute HCl. Do not heat when dissolving to avoid precipitation of SiO2). The oxide, hydroxide, carbonate, phosphate, and fluoride of calcium are soluble in % levels of HCl or HNO3. The sulfates (gypsum, anhydrite, etc.), certain silicates, and complex compounds require fusion with Na2CO3 followed by HCl / water dissolution. Note that contamination is a very real problem when analyzing for trace levels.
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 44 amu	1200 ppt	n/a	16O212C, 28Si16O, 88Sr
ICP-OES 393.366 nm	0.0002 / 0.00004 µg/mL	1	U, Ce
ICP-OES 396.847 nm	0.0005 / 0.00006 µg/mL	1	Th
ICP-OES 422.673 nm	0.01 / 0.001 µg/mL	1	Ge

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

March 14, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **March 14, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

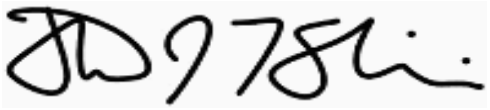
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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F: 540-585-3012
info@inorganicventures.com

1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGNA10
Lot Number:	T2-NA717221
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	10 000 µg/mL ea: Sodium
Starting Material:	Na2CO3
Starting Material Lot#:	2358 and 2453
Starting Material Purity:	99.9977%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 9977 ± 30 µg/mL

Density: 1.033 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **9974 ± 18 µg/mL**
Gravimetric NIST SRM Lot Number: See Sec. 4.2

Assay Method #2 **9977 ± 34 µg/mL**
ICP Assay NIST SRM 3152a Lot Number: 200413

Assay Method #3 **9987 ± 31 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\ (u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\ (u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000930	M	Eu	<	0.000930	s	Na	<		M	Se	<	0.003800	O	Zn		0.000138
M	Al		0.004409	O	Fe		0.002393	M	Nb	<	0.000930	O	Si		0.056696	O	Zr	<	0.003200
O	As	<	0.023000	M	Ga	<	0.000930	M	Nd	<	0.000930	M	Sm	<	0.000930				
O	Au	<	0.004100	M	Gd	<	0.000930	O	Ni	<	0.003000	M	Sn	<	0.002800				
O	B		0.001385	M	Ge	<	0.004700	M	Os	<	0.000930	O	Sr		0.000251				
M	Ba		0.004031	M	Hf	<	0.000930	O	P		0.010205	M	Ta	<	0.000930				
O	Be	<	0.000130	M	Hg	<	0.000930	M	Pb	<	0.000930	M	Tb	<	0.000930				
M	Bi	<	0.000930	M	Ho	<	0.000930	M	Pd	<	0.000930	M	Te	<	0.001900				
O	Ca		0.176388	M	In	<	0.000930	M	Pr	<	0.000930	M	Th		0.000352				
O	Cd	<	0.000860	M	Ir	<	0.000930	M	Pt	<	0.000930	O	Ti		0.000592				
M	Ce	<	0.001900	O	K		0.302380	M	Rb	<	0.000930	M	Tl	<	0.000930				
O	Co	<	0.001800	O	La	<	0.002100	M	Re	<	0.000930	M	Tm	<	0.000930				
M	Cr	<	0.002800	O	Li		0.000031	M	Rh	<	0.000930	M	U	<	0.000930				
M	Cs	<	0.000930	M	Lu	<	0.000930	M	Ru	<	0.001900	O	V	<	0.001600				
O	Cu	<	0.003900	O	Mg		0.026458	O	S		0.040317	O	W	<	0.028000				
M	Dy	<	0.000930	O	Mn	<	0.000740	M	Sb	<	0.000930	O	Y	<	0.000860				
M	Er	<	0.000930	O	Mo	<	0.003600	O	Sc	<	0.000610	O	Yb	<	0.000250				

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 22.99 +1 (6) Na+(aq) largely ionic in nature

Chemical Compatibility -Soluble in HCl, HNO3, H2SO4 and HF aqueous matrices. Stable with all metals and inorganic anions.

Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 1-5% HNO3 / LDPE container.

Na Containing Samples (Preparation and Solution) - Metal (Dissolves very rapidly in water); Ores (Lithium carbonate fusion in graphite crucible followed by HCl dissolution - blank levels of Na in lithium carbonate critical); Organic Matrices (Sulfuric / peroxide digestion or nitric/sulfuric/perchloric acid decomposition).

Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 23 amu	310 ppt	n/a	46Ti+2 , 46Ca+2
ICP-OES 330.237 nm	2.0 / 0.09 µg/mL	1	Pd, Zn
ICP-OES 588.995 nm	0.03 / 0.006 µg/mL	1	2nd order radiation from R.E.s on some optical designs
ICP-OES 589.595 nm	0.07 / 0.00009 µg/mL	1	2nd order radiation from R.E.s on some optical designs

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

April 20, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **April 20, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

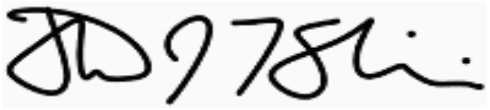
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Single Analyte Custom Grade Solution
Catalog Number:	CGU1
Lot Number:	S2-U707914
Matrix:	2% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Uranium
Starting Material:	Uranyl Nitrate Hexahydrate
Starting Material Lot#:	P2-2322
Starting Material Purity:	99.9997%

3.0 CERTIFIED VALUES AND UNCERTAINTIES

Certified Value: 999 ± 5 µg/mL

Density: 1.010 g/mL (measured at 20 ± 4 ºC)

Assay Information:

Assay Method #1 **998 ± 5 µg/mL**
ICP Assay NIST SRM 3164 Lot Number: 080521

Assay Method #2 **1001 ± 6 µg/mL**
Calculated NIST SRM Lot Number: See Sec. 4.2

- The Calculated Value is a value calculated from the weight of a starting material that has been certified directly vs. a National Institute of Standards and Technology (NIST) SRM/RM. See Sec 4.2 for balance traceability.

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

CRM/RMs are tested for trace metallic impurities by Axial ICP-OES and ICP-MS. The result from the most sensitive method for each element, is reported below. Solutions tested by ICP-MS were analyzed in an ULPA-Filtered Clean Room. An ULPA-Filter is 99.9985% efficient for the removal of particles down to 0.3 µm.

M	Ag	<	0.000270	M	Eu	<	0.000270	M	Na	<	0.011000	M	Se	<	0.009300	M	Zn	0.002358
M	Al	<	0.011000	M	Fe		0.003222	M	Nb	<	0.000270	M	Si	<	0.160000	M	Zr	< 0.001100
M	As	<	0.002400	M	Ga	<	0.000270	M	Nd	<	0.000270	M	Sm	<	0.000270			
M	Au	<	0.000270	M	Gd	<	0.000270	M	Ni	<	0.020000	M	Sn	<	0.011000			
M	B	<	0.000270	M	Ge	<	0.000800	M	Os	<	0.001900	M	Sr	<	0.000270			
M	Ba	<	0.003800	M	Hf	<	0.000270	i	P	<		M	Ta	<	0.000270			
M	Be	<	0.000270	M	Hg	<	0.000540	M	Pb	<	0.002200	M	Tb	<	0.000270			
M	Bi	<	0.000270	M	Ho	<	0.000270	M	Pd	<	0.000540	M	Te	<	0.003800			
M	Ca	<	0.140000	M	In	<	0.000270	M	Pr	<	0.000270	M	Th		0.000129			
M	Cd	<	0.000270	M	Ir	<	0.000270	M	Pt	<	0.000270	M	Ti	<	0.002700			
M	Ce	<	0.000540	O	K	<	0.250000	M	Rb	<	0.000800	M	Tl	<	0.000270			
M	Co	<	0.000800	M	La		0.000117	M	Re	<	0.064000	M	Tm	<	0.000270			
M	Cr		0.000943	M	Li	<	0.003000	M	Rh	<	0.000270	s	U	<				
M	Cs		0.000106	M	Lu	<	0.000270	M	Ru	<	0.000540	M	V	<	0.000540			
M	Cu	<	0.001100	M	Mg	<	0.003000	i	S	<		M	W	<	0.000540			
M	Dy	<	0.000270	M	Mn	<	0.006900	M	Sb	<	0.000270	M	Y	<	0.000270			
M	Er	<	0.000270	M	Mo	<	0.006400	M	Sc	<	0.000540	M	Yb	<	0.000270			

M - Checked by ICP-MS O - Checked by ICP-OES i - Spectral Interference
n - Not Checked For s - Solution Standard Element

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Atomic Weight; Valence; Coordination Number; Chemical Form in Solution - 238.03 +6 8 UO22+(uranyl)
Chemical Compatibility - Soluble in HCl and HNO3. Avoid H3PO4. H2SO4 and HF matrices should not be a problem depending upon [U]. Although the UO22+ ion is distinctly basic, any U+4 will precipitate in basic media. UO22+salts are generally soluble in water and UO22+ is stable with most metals and inorganic anions. The uranyl phosphate is insoluble in water. UF4 and UF6 are water soluble.
Stability - 2-100 ppb levels stable for months in 1% HNO3 / LDPE container. 1-10,000 ppm solutions chemically stable for years in 2-5% HNO3 / LDPE container.
U Containing Samples (Preparation and Solution) -Metal (Dissolves rapidly in HCl and HNO3); Oxide (Soluble in HNO3); Ores (Digest for 1-2 hours with 1 gram of ore to 30 mL 1:1 HNO3. Silica insolubles are removed by filtration after bringing the sample to fumes with conc. H2SO4.)
Atomic Spectroscopic Information (ICP-OES D.L.s are given as radial/axial view):

Technique/Line	**Estimated D.L.**	**Order**	**Interferences** (underlined indicates severe)
ICP-MS 238 amu	2 ppt	N/A	206Pb16O2
ICP-OES 263.553 nm	0.3 / 0.01 µg/mL	1	Ce, Ir, Th, Rh, W, Zr, Ta, Ti, V, Hf, Fe, Re, Ru
ICP-OES 367.007 nm	0.3 / 0.02 µg/mL	1	Th, Ce
ICP-OES 385.958 nm	0.3 / 0.01 µg/mL	1	Th, Fe

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

August 28, 2021

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **August 28, 2026**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Michael Booth
Director, Quality Control

Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

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Refine your results. Redefine your industry.

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-2
Lot Number:	T2-MEB719895
Matrix:	3% (v/v) HNO3 tr. HF
Value / Analyte(s):	2.5 µg/mL ea: Molybdenum, Antimony

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Antimony, Sb	**2.499 ± 0.015 µg/mL**	**Molybdenum, Mo**	**2.500 ± 0.017 µg/mL**

Density: 1.014 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Mo	ICP Assay	3134	130418
Mo	Calculated		See Sec. 4.2
Sb	ICP Assay	3102a	140911
Sb	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

HF Note: This standard should not be prepared or stored in glass.

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

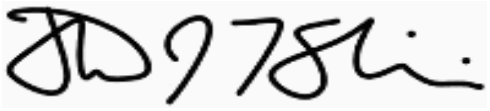
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

INORGANIC VENTURES is accredited to ISO 17034, "General Requirements for the Competence of Reference Material Producers" and ISO/IEC 17025, "General Requirements for the Competence of Testing and Calibration Laboratories". Inorganic Ventures is also an ISO 9001 registered manufacturer (QSR Certificate Number QSR-1034).

ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-ICVMS-3
Lot Number:	T2-MEB719896
Matrix:	7% (v/v) HNO3
Value / Analyte(s):	250 µg/mL ea:

Aluminum, Calcium,
Iron, Potassium,
Magnesium, Sodium,

4 µg/mL ea:
Selenium,

2.5 µg/mL ea:

Thorium, Thallium,
Uranium, Vanadium,
Zinc, Manganese,
Cadmium, Cobalt,
Chromium, Copper,
Arsenic, Barium,
Beryllium, Nickel,
Lead, Silver

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	250.0 ± 0.9 µg/mL	Arsenic, As	2.500 ± 0.018 µg/mL
Barium, Ba	2.501 ± 0.013 µg/mL	Beryllium, Be	2.501 ± 0.015 µg/mL
Cadmium, Cd	2.501 ± 0.013 µg/mL	Calcium, Ca	250.0 ± 1.3 µg/mL
Chromium, Cr	2.500 ± 0.015 µg/mL	Cobalt, Co	2.500 ± 0.014 µg/mL
Copper, Cu	2.500 ± 0.014 µg/mL	Iron, Fe	250.0 ± 1.0 µg/mL
Lead, Pb	2.500 ± 0.013 µg/mL	Magnesium, Mg	250.0 ± 1.3 µg/mL
Manganese, Mn	2.500 ± 0.014 µg/mL	Nickel, Ni	2.500 ± 0.014 µg/mL
Potassium, K	250.0 ± 1.2 µg/mL	Selenium, Se	4.002 ± 0.024 µg/mL
Silver, Ag	2.501 ± 0.017 µg/mL	Sodium, Na	250.0 ± 1.2 µg/mL
Thallium, Tl	2.500 ± 0.017 µg/mL	Thorium, Th	2.499 ± 0.013 µg/mL
Uranium, U	2.501 ± 0.015 µg/mL	Vanadium, V	2.500 ± 0.014 µg/mL
Zinc, Zn	2.500 ± 0.014 µg/mL		

Density: 1.042 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Ag	ICP Assay	3151	160729
Ag	Volhard	999c	999c
Ag	Calculated		See Sec. 4.2
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
As	ICP Assay	3103a	100818
Ba	ICP Assay	3104a	140909
Ba	Calculated		See Sec. 4.2
Ba	Gravimetric		See Sec. 4.2
Be	ICP Assay	3105a	090514
Be	Calculated		See Sec. 4.2
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cd	ICP Assay	3108	130116
Cd	EDTA	928	928
Cd	Calculated		See Sec. 4.2
Co	ICP Assay	3113	190630
Co	EDTA	928	928
Co	Calculated		See Sec. 4.2
Cr	ICP Assay	3112a	170630
Cr	Calculated		See Sec. 4.2
Cu	ICP Assay	3114	121207
Cu	EDTA	928	928
Cu	Calculated		See Sec. 4.2
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mn	ICP Assay	3132	050429
Mn	EDTA	928	928
Mn	Calculated		See Sec. 4.2
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
Ni	ICP Assay	3136	120619
Ni	EDTA	928	928
Ni	Calculated		See Sec. 4.2
Pb	ICP Assay	3128	101026
Pb	EDTA	928	928
Pb	Calculated		See Sec. 4.2
Se	ICP Assay	3149	100901
Se	Calculated		See Sec. 4.2
Th	EDTA	928	928
Th	Calculated		See Sec. 4.2
Tl	ICP Assay	3158	151215
Tl	Calculated		See Sec. 4.2
U	ICP Assay	3164	080521
U	Calculated		See Sec. 4.2

V	ICP Assay	3165	160906
V	EDTA	928	928
Zn	ICP Assay	3168a	120629
Zn	EDTA	928	928
Zn	Calculated		See Sec. 4.2

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Certified Abundance:

IV's Certified Abundance

Isotope	Atom %
Uranium 238U	99.8 ± 0.1
Uranium 235U	0.19 ± 0.05

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

Note: This solution contains Silver (Ag), please refer to our Sample Preparation Guide for more information.

https://www.inorganicventures.com/sample-preparation-guide/samples-containing-silver

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

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11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 06, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 06, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

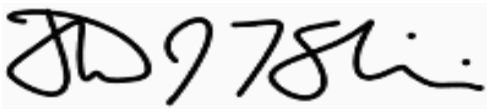
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

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Certificate of Analysis

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1.0 ACCREDITATION / REGISTRATION

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ACCREDITED Testing Laboratory Certificate 883.01
ACCREDITED Reference Material Producer Certificate 883.02

2.0 PRODUCT DESCRIPTION

Product Code:	Multi Analyte Custom Grade Solution
Catalog Number:	AR-6020ICS-0A10
Lot Number:	T2-MEB719898
Matrix:	1.4% (v/v) HNO3
Value / Analyte(s):	1 000 µg/mL ea: Chloride,
	200 µg/mL ea: Carbon,
	100 µg/mL ea: Calcium, Aluminum, Iron, Potassium, Magnesium, Sodium, Phosphorus, Sulfur,
	2 µg/mL ea: Titanium, Molybdenum

3.0 CERTIFIED VALUES AND UNCERTAINTIES

ANALYTE	CERTIFIED VALUE	ANALYTE	CERTIFIED VALUE
Aluminum, Al	**100.0 ± 0.4 µg/mL**	**Calcium, Ca**	**100.0 ± 0.5 µg/mL**
Carbon, C	**200.1 ± 0.5 µg/mL**	**Chloride, Cl**	**1 000 ± 5 µg/mL**
Iron, Fe	**100.0 ± 0.5 µg/mL**	**Magnesium, Mg**	**100.0 ± 0.5 µg/mL**
Molybdenum, Mo	**2.001 ± 0.014 µg/mL**	**Phosphorus, P**	**100.0 ± 0.6 µg/mL**
Potassium, K	**100.0 ± 0.5 µg/mL**	**Sodium, Na**	**100.0 ± 0.5 µg/mL**
Sulfur, S	**100.0 ± 0.5 µg/mL**	**Titanium, Ti**	**2.001 ± 0.015 µg/mL**

Density: 1.009 g/mL (measured at 20 ± 4 ºC)

Assay Information:

ANALYTE	METHOD	NIST SRM#	SRM LOT#
Al	ICP Assay	3101a	140903
Al	EDTA	928	928
C	Acidimetric	84L	84L
Ca	ICP Assay	3109a	130213
Ca	EDTA	928	928
Cl	Acidimetric	84L	84L
Fe	ICP Assay	3126a	140812
Fe	EDTA	928	928
K	ICP Assay	3141a	140813
K	Gravimetric		See Sec. 4.2
Mg	ICP Assay	3131a	140110
Mg	EDTA	928	928
Mo	ICP Assay	3134	130418
Na	ICP Assay	3152a	120715
Na	Gravimetric		See Sec. 4.2
P	ICP Assay	3139a	060717
P	Acidimetric	84L	84L
S	Acidimetric	84L	84L
S	ICP Assay	traceable to 3154	P2-S680745
Ti	ICP Assay	3162a	130925

The following equations are used in the calculation of the certified value and the uncertainty. Reported uncertainties represent expanded uncertainties expressed at approximately the 95% confidence level using a coverage factor of k = 2.

Characterization of CRM/RM by Two or More Methods

Certified Value, $X_{CRM/RM}$, where two or more methods of characterization are used is the weighted mean of the results:

$X_{CRM/RM} = \Sigma(w_i)(X_i)$

X_i = mean of Assay Method i with standard uncertainty $u_{char\ i}$

w_i = the weighting factors for each method calculated using the inverse square of the variance:

$w_i = (1/u_{char\ i})^2 / (\Sigma(1/(u_{char\ i})^2)$

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char} = [\Sigma((w_i)^2\,(u_{char\ i})^2)]^{½}$ where $u_{char\ i}$ are the errors from each characterization method

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

Characterization of CRM/RM by One Method

Certified Value, $X_{CRM/RM}$, where one method of characterization is used is the mean of individual results:

$X_{CRM/RM} = (X_a)\,(u_{char\ a})$

X_a = mean of Assay Method A with

$u_{char\ a}$ = the standard uncertainty of characterization Method A

CRM/RM Expanded Uncertainty (±) = $U_{CRM/RM} = k\,(u^2_{char\ a} + u^2_{bb} + u^2_{lts} + u^2_{ts})^{½}$

k = coverage factor = 2

$u_{char\ a}$ = the errors from characterization

u_{bb} = bottle to bottle homogeneity standard uncertainty

u_{lts} = long term stability standard uncertainty (storage)

u_{ts} = transport stability standard uncertainty

4.0 TRACEABILITY TO NIST

- This product is traceable to NIST via an unbroken chain of comparisons. The uncertainties for each certified value are reported, taking into account the SRM/RM uncertainty error and the measurement, weighing and volume dilution errors. In rare cases where no NIST SRM/RM are available, the term 'in-house std.' is specified.

4.1 Thermometer Calibration

- All thermometers are NIST traceable through thermometers that are calibrated by an accredited calibration laboratory.

4.2 Balance Calibration

- All analytical balances are calibrated by an accredited calibration laboratory and procedure. The weights used for testing are annually compared to master weights and are traceable to NIST.

4.3 Glassware Calibration

- An in-house procedure is used to calibrate all Class A glassware used in the manufacturing and quality control of CRM/RMs.

5.0 TRACE METALLIC IMPURITIES (TMI) DETERMINED BY ICP-MS AND ICP-OES (µg/mL)

N/A

6.0 INTENDED USE

- For the calibration of analytical instruments and validation of analytical methods as appropriate.

7.0 INSTRUCTIONS FOR THE CORRECT USE OF THIS REFERENCE MATERIAL

7.1 Storage and Handling Recommendations

- Store between approximately 4° - 30° C while in sealed TCT bag.

- While stored in the sealed TCT bag, transpiration of this CRM/RM is negligible. After opening the sealed TCT bag transpiration of the CRM/RM will occur, resulting in a gradual increase in the analyte concentration(s). It is the responsibility of the user to account for this effect. When the bottle is weighed both before and after being placed in storage, the mass difference observed will be a measure of transpiration mass loss.

- After opening the sealed TCT bag, keep cap tightly sealed when not in use and store between 4° - 24° C to minimize the effects of transpiration. Use at 20° ± 4° C to minimize volumetric dilution error when using the reported density. Do not pipette from the container. Do not return removed aliquots to container.

- For more information, visit **www.inorganicventures.com/TCT**

8.0 HAZARDOUS INFORMATION

- Please refer to the Safety Data Sheet for information regarding this CRM/RM.

9.0 HOMOGENEITY

- This solution was mixed according to an in-house procedure and is guaranteed to be homogeneous. Homogeneity data indicate that the end user should take a minimum sample size of 0.2 mL to assure homogeneity.

10.0 QUALITY STANDARD DOCUMENTATION

10.1 ISO 9001 Quality Management System Registration

- QSR Certificate Number QSR-1034

10.2 ISO/IEC 17025 "General Requirements for the Competence of Testing and Calibration Laboratories"

- Chemical Testing - Accredited / A2LA Certificate Number 883.01

10.3 ISO 17034 "General Requirements for the Competence of Reference Material Producers"

- Reference Material Producer - Accredited / A2LA Certificate Number 883.02

Inorganic Ventures, 300 Technology Drive, Christiansburg, Va. 24073, USA; Telephone: 800.669.6799; 540.585.3030, Fax: 540.585.3012; inorganicventures.com; info@inorganicventures.com

11.0 CERTIFICATION, LOT EXPIRATION AND PERIOD OF VALIDITY

11.1 Certification Issue Date

June 07, 2022

- The certification is valid within the measurement uncertainty specified provided the CRM/RM is stored and handled in accordance with instructions given in Sec 7.1. This certification is nullified if instructions in Sec 7.1 are not followed or if the CRM/RM is damaged, contaminated, or otherwise modified.

11.2 Lot Expiration Date

- **June 07, 2027**

- The date after which this CRM/RM should not be used.

- The lot expiration date reflects the period of time that the stability of a CRM/RM can be supported by long term stability studies conducted on properly stored and handled CRM/RMs. Lot expiration is limited primarily by transpiration (loss of water from the solution) and infrequently by chemical stability.

11.3 Period of Validity

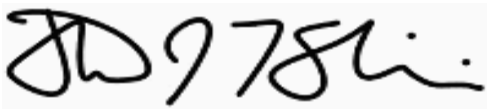
- Sealed TCT Bag Open Date: _____

- This CRM/RM should not be used longer than one year (or six months in the case of a 30 mL bottle) from the date of opening the aluminized bag or after the date given in Sec. 11.2, whichever comes first. This is contingent upon the CRM/RM being stored and handled in accordance with the instructions given in Sec. 7.1.

12.0 NAMES AND SIGNATURES OF CERTIFYING OFFICERS

Certificate Approved By:

Thomas Kozikowski
Manager, Quality Control



Certifying Officer:

Paul Gaines
Chairman / Senior Technical Director

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1801

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-01 A	SDG:	23D0396
Sampled:	04/12/23 09:56	Prepared:	05/13/23 14:02	File ID:	CubeData_05222023@1029-066
% Solids:	48.05	Preparation:	No Prep Wet Chem	Analyzed:	05/20/23 21:14
Batch:	BLE0415	Sequence:	SLE0228	Initial/Final:	0.4197 g Wet / 0.4197 g
Instrument:	TOC Cube			Calibration:	GE00052

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.61	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1801

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-02 A	SDG:	23D0396
Sampled:	04/12/23 10:15	Prepared:	05/13/23 14:02	File ID:	CubeData_05222023@1029-067
% Solids:	50.19	Preparation:	No Prep Wet Chem	Analyzed:	05/20/23 21:44
Batch:	BLE0415	Sequence:	SLE0228	Initial/Final:	0.5175 g Wet / 0.5175 g
Instrument:	TOC Cube			Calibration:	GE00052

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.76	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SS1802

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-03 A	SDG:	23D0396
Sampled:	04/12/23 15:03	Prepared:	05/13/23 14:02	File ID:	CubeData_05222023@1029-068
% Solids:	47.50	Preparation:	No Prep Wet Chem	Analyzed:	05/20/23 22:15
Batch:	BLE0415	Sequence:	SLE0228	Initial/Final:	0.4422 g Wet / 0.4422 g
Instrument:	TOC Cube			Calibration:	GE00052

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.88	1	0.02	0.02	

Analytical Resources, LLC
Analytical Chemists and Consultants

Form I
INORGANIC ANALYSIS DATA SHEET
EPA 9060A m

LDW23-SC1802

Laboratory:	Analytical Resources, LLC				
Client:	Anchor QEA, LLC				
Project:	AOC5 MR Phase 1				
Matrix:	Sediment	Laboratory ID:	23D0396-04 A	SDG:	23D0396
Sampled:	04/12/23 15:40	Prepared:	05/13/23 14:02	File ID:	CubeData_05222023@1029-069
% Solids:	49.45	Preparation:	No Prep Wet Chem	Analyzed:	05/20/23 22:45
Batch:	BLE0415	Sequence:	SLE0228	Initial/Final:	0.4218 g Wet / 0.4218 g
Instrument:	TOC Cube			Calibration:	GE00052

CAS NO.	Analyte	Concentration (% dry)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	2.75	1	0.02	0.02	

PREPARATION BATCH SUMMARY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLE0415 Batch Matrix: Solid
Preparation: No Prep Wet Chem

SAMPLE NAME	LAB SAMPLE ID	LAB FILE ID	DATE PREPARED	OBSERVATIONS
LDW23-SS1801	23D0396-01	eData_05222023@1029-	05/13/23 14:02	
LDW23-SC1801	23D0396-02	eData_05222023@1029-	05/13/23 14:02	
LDW23-SS1802	23D0396-03	eData_05222023@1029-	05/13/23 14:02	
LDW23-SC1802	23D0396-04	eData_05222023@1029-	05/13/23 14:02	
Blank	BLE0415-BLK1	eData_05222023@1029-	05/13/23 14:02	
LCS	BLE0415-BS1	eData_05222023@1029-	05/13/23 14:02	
MRL Check	BLE0415-MRL1	eData_05222023@1029-	05/13/23 14:02	
Reference	BLE0415-SRM1	eData_05222023@1029-	05/13/23 14:02	

Form I

METHOD BLANK DATA SHEET

EPA 9060A m

TotalAnalytes

Blank

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Batch: BLE0415
Laboratory ID: BLE0415-BLK1
Prepared: 05/13/23 14:02
Matrix: Solid
Preparation: No Prep Wet Chem
Analyzed: 05/19/23 15:36
Sequence: SLE0228
Calibration: GE00052
Instrument: TOC Cube

CAS NO.	Analyte	Concentration (% wet)	Dilution Factor	MDL	MRL	Q
	Total Organic Carbon	ND	1	0.02	0.02	U

LCS / LCS DUPLICATE RECOVERY

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Matrix:	Solid	Analyzed:	05/19/23 16:37
Batch:	BLE0415	Laboratory ID:	BLE0415-BS1
Preparation:	No Prep Wet Chem	Sequence Name:	LCS
Initial/Final:	0.0209 g / 0.0209 g		

COMPOUND	SPIKE ADDED (% wet)	LCS CONCENTRATION (% wet)	Q	LCS % REC. #	QC LIMITS REC.
Total Organic Carbon	44.4	44.0		99.0	80 - 120

* Indicates values outside of QC limits

Analytical Resources, LLC
Analytical Chemists and Consultants

ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

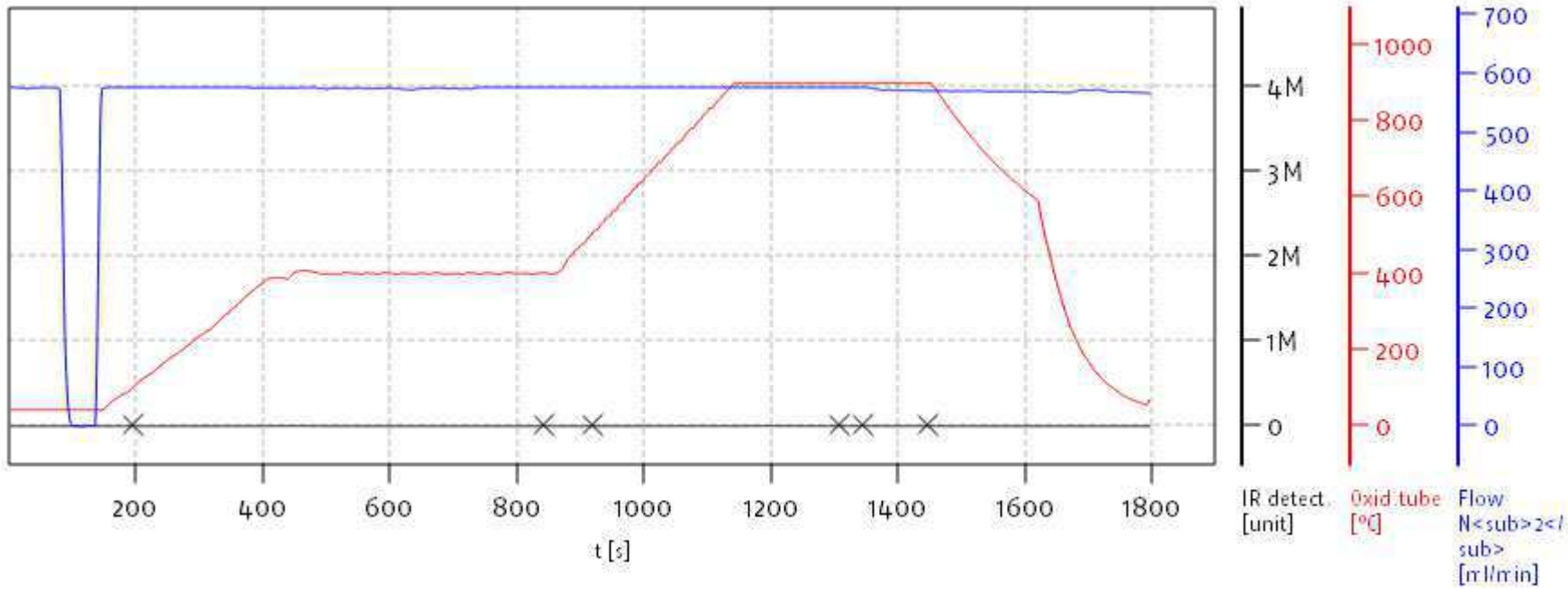
Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0228	Instrument:	TOC Cube
		Calibration:	GE00052

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Initial Cal Check	SLE0228-ICV1	CubeData_05222023@1029-003	NA	05/19/23 13:06
Initial Cal Blank	SLE0228-ICB1	CubeData_05222023@1029-004	NA	05/19/23 13:36
MRL Check	BLE0415-MRL1	CubeData_05222023@1029-006	Solid	05/19/23 14:36
Blank	BLE0415-BLK1	CubeData_05222023@1029-008	Solid	05/19/23 15:36
LCS	BLE0415-BS1	CubeData_05222023@1029-010	Solid	05/19/23 16:37
Reference	BLE0415-SRM1	CubeData_05222023@1029-012	Solid	05/19/23 17:37
Calibration Check	SLE0228-CCV1	CubeData_05222023@1029-015	NA	05/19/23 19:07
Calibration Blank	SLE0228-CCB1	CubeData_05222023@1029-016	NA	05/19/23 19:37
Calibration Check	SLE0228-CCV2	CubeData_05222023@1029-027	NA	05/20/23 01:09
Calibration Blank	SLE0228-CCB2	CubeData_05222023@1029-028	NA	05/20/23 01:39
Calibration Check	SLE0228-CCV3	CubeData_05222023@1029-039	NA	05/20/23 07:10
Calibration Blank	SLE0228-CCB3	CubeData_05222023@1029-040	NA	05/20/23 07:40
Calibration Check	SLE0228-CCV4	CubeData_05222023@1029-050	NA	05/20/23 13:12
Calibration Blank	SLE0228-CCB4	CubeData_05222023@1029-051	NA	05/20/23 13:42
Calibration Check	SLE0228-CCV5	CubeData_05222023@1029-062	NA	05/20/23 19:14
Calibration Blank	SLE0228-CCB5	CubeData_05222023@1029-063	NA	05/20/23 19:44
LDW23-SS1801	23D0396-01	CubeData_05222023@1029-066	Solid	05/20/23 21:14
LDW23-SC1801	23D0396-02	CubeData_05222023@1029-067	Solid	05/20/23 21:44
LDW23-SS1802	23D0396-03	CubeData_05222023@1029-068	Solid	05/20/23 22:15
LDW23-SC1802	23D0396-04	CubeData_05222023@1029-069	Solid	05/20/23 22:45
Calibration Blank	SLE0228-CCB6	CubeData_05222023@1029-073	NA	05/21/23 12:48
Calibration Check	SLE0228-CCV6	CubeData_05222023@1029-074	NA	05/21/23 13:20

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		CARBON	5/ 19/2023 11:36 AM	bl	0.000	15 580	0.000	0.000	4 588	19 466	0.000	0.000	1.0000	1.0000



Name:

Access: soliTOC superuser

Date: Mon May 22 10:19:17 2023

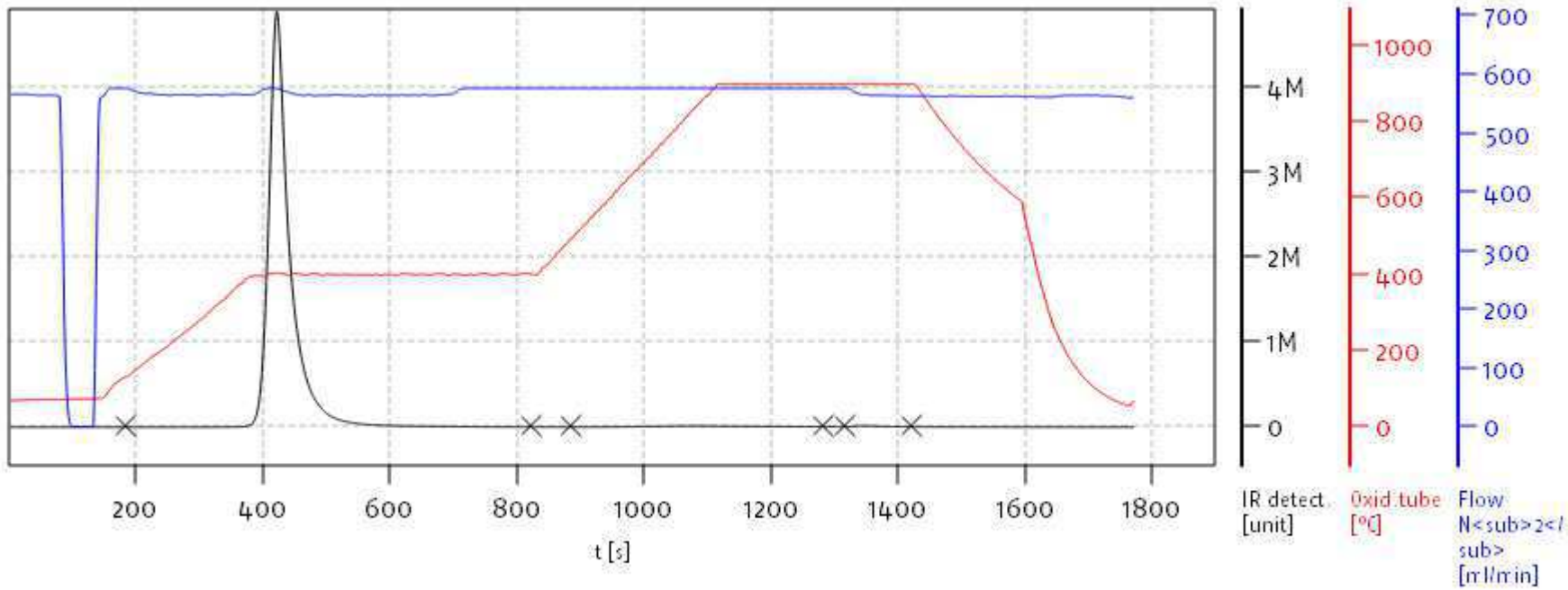
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 051923 CDE from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
2	2	Dfactor	24.30		CARBON	5/19/2023 12:06 PM	bl	44.474	7 069 850	45.003	0.028	33 187	109 976	44.446	0.529	0.9671	1.0000



Name:

Access: soliTOC superuser

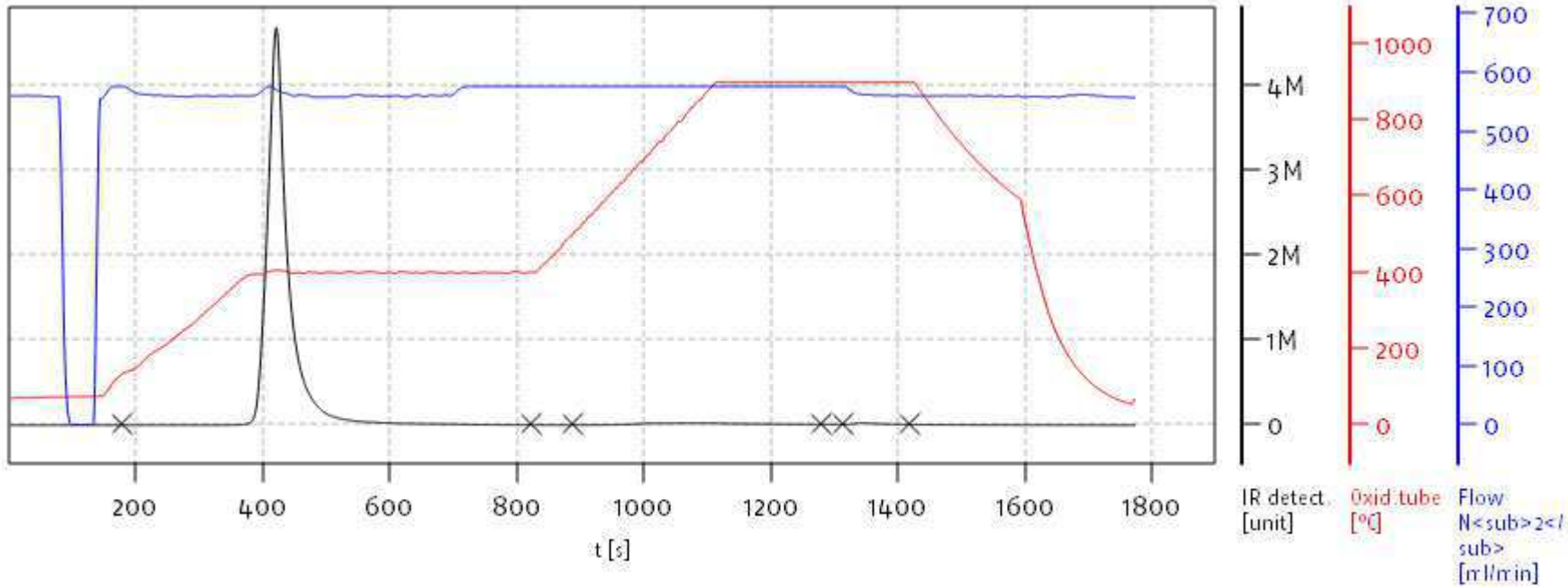
Date: Mon May 22 10:19:17 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
3	3	Dfactor	23.80		CARBON	5/19/2023 12:36 PM	bl	44.623	6 651 110	45.765	0.177	55 461	200 313	44.446	1.143	1.0071	1.0000



Name:

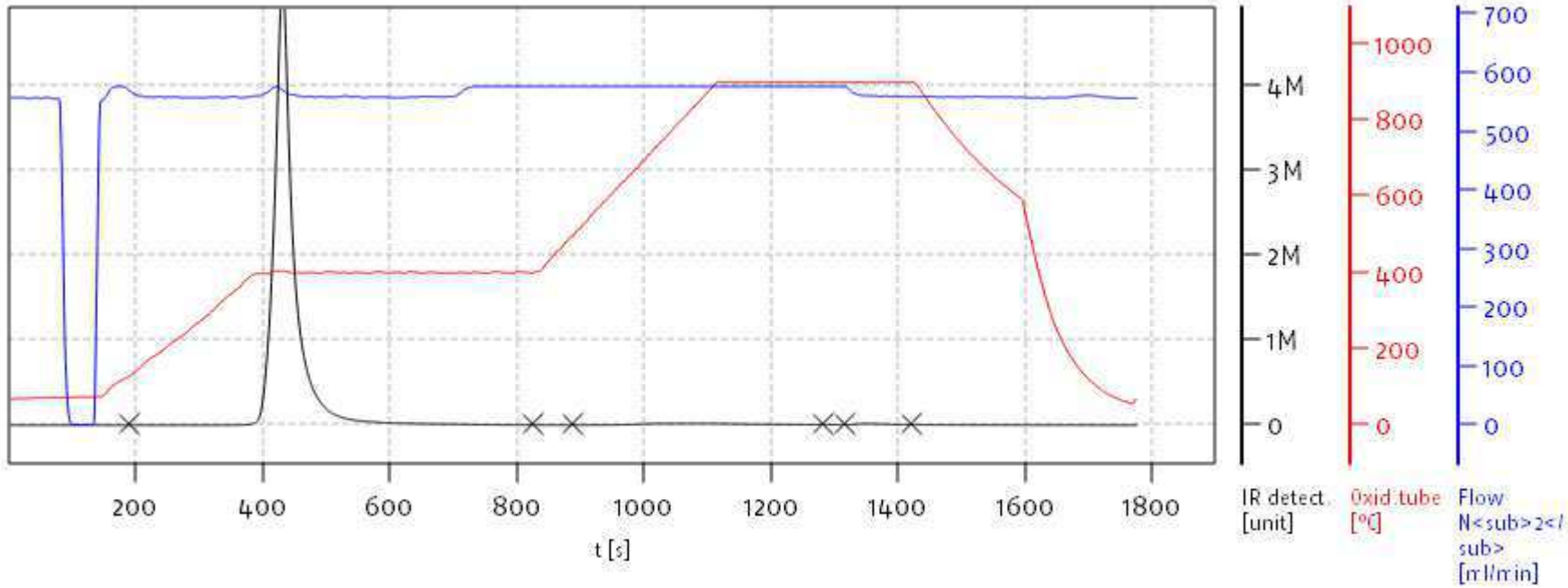
Access: soliTOC superuser

Date: Mon May 22 10:19:17 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
4	4	SLE0228-ICV1	24.30		CARBON	5/19/2023 1:06 PM	bl	44.373	6 903 152	45.232	0.083	41 528	160 379	44.291	0.858	0.9871	1.0000



Name:

Access: soliTOC superuser

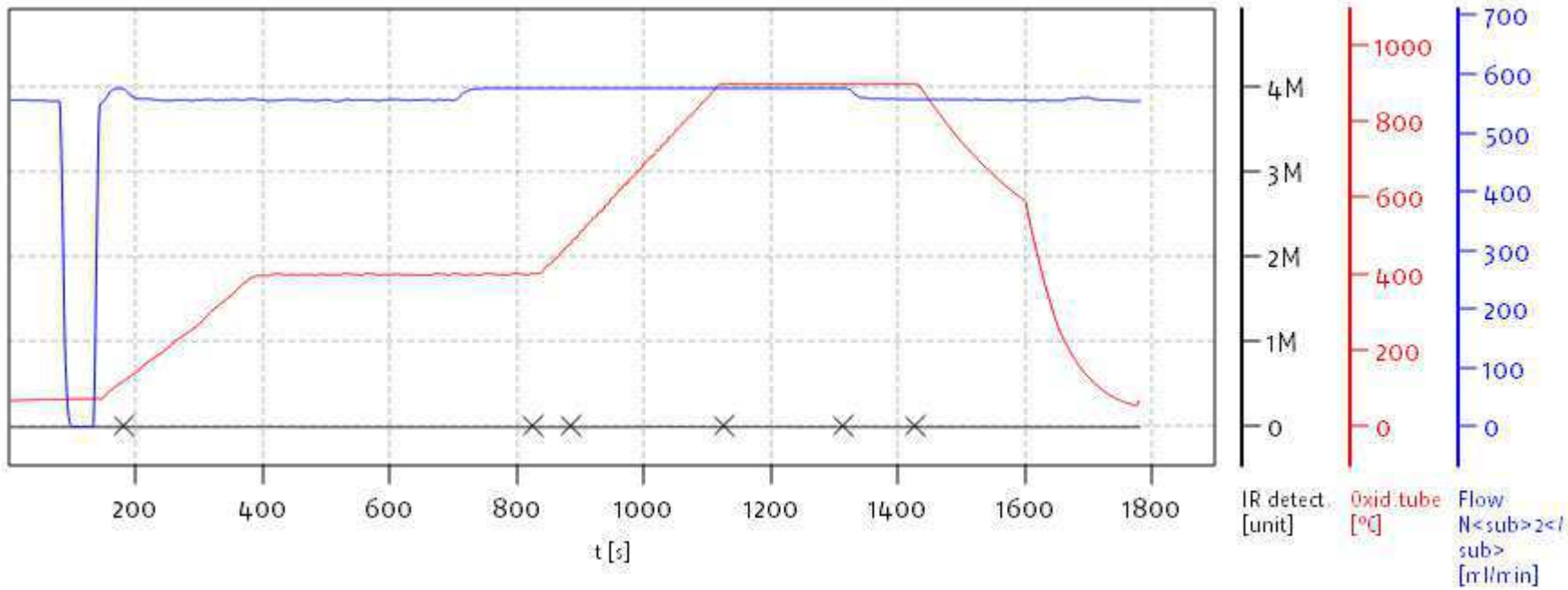
Date: Mon May 22 10:19:17 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
5	5	SLE0228-ICB1	598.50		CARBON	5/19/2023 1:36 PM	bl,C1u,C3u,C2u	0.000	10 855	0.000	0.000	3 290	10 743	0.000	0.000	0.9871	1.0000



Name:

Access: soliTOC superuser

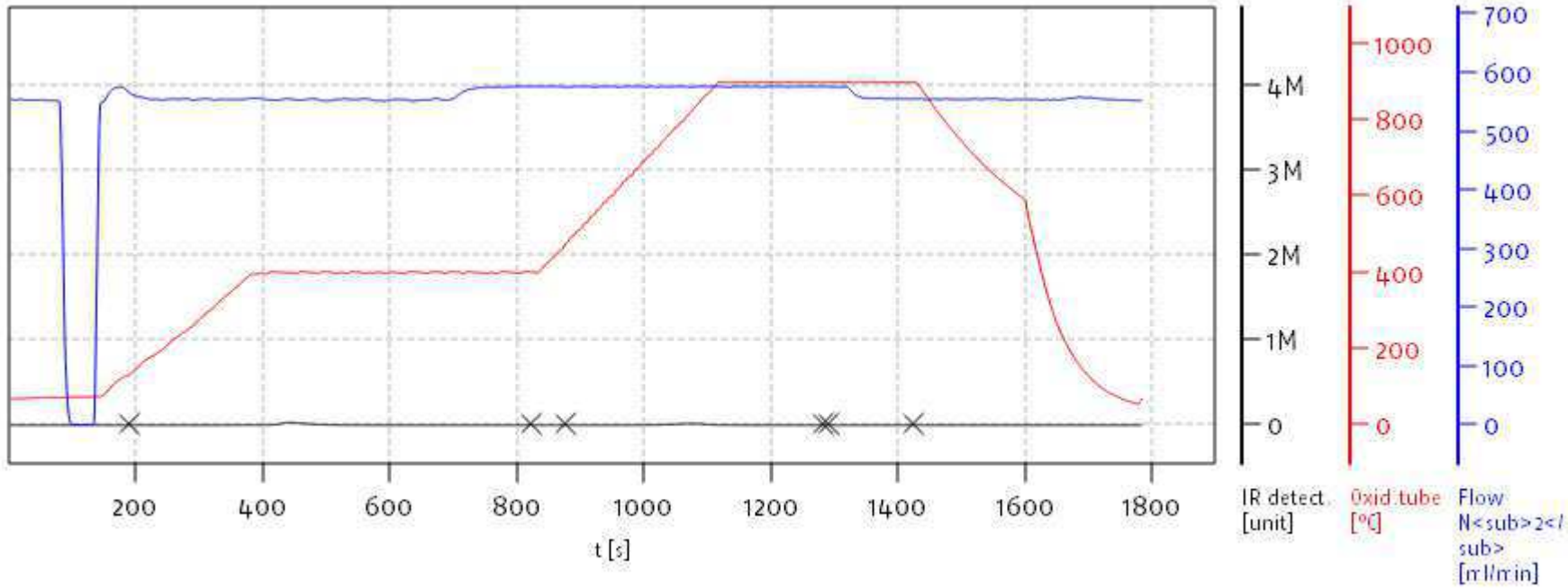
Date: Mon May 22 10:19:17 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
6	6	BLE0414-MRL1	517.10	517.1	CARBON	5/19/2023 2:06 PM	bl,C2u	0.011	66 663	0.016	0.000	1 069	43 275	0.011	0.004	0.9871	1.0000



Name:

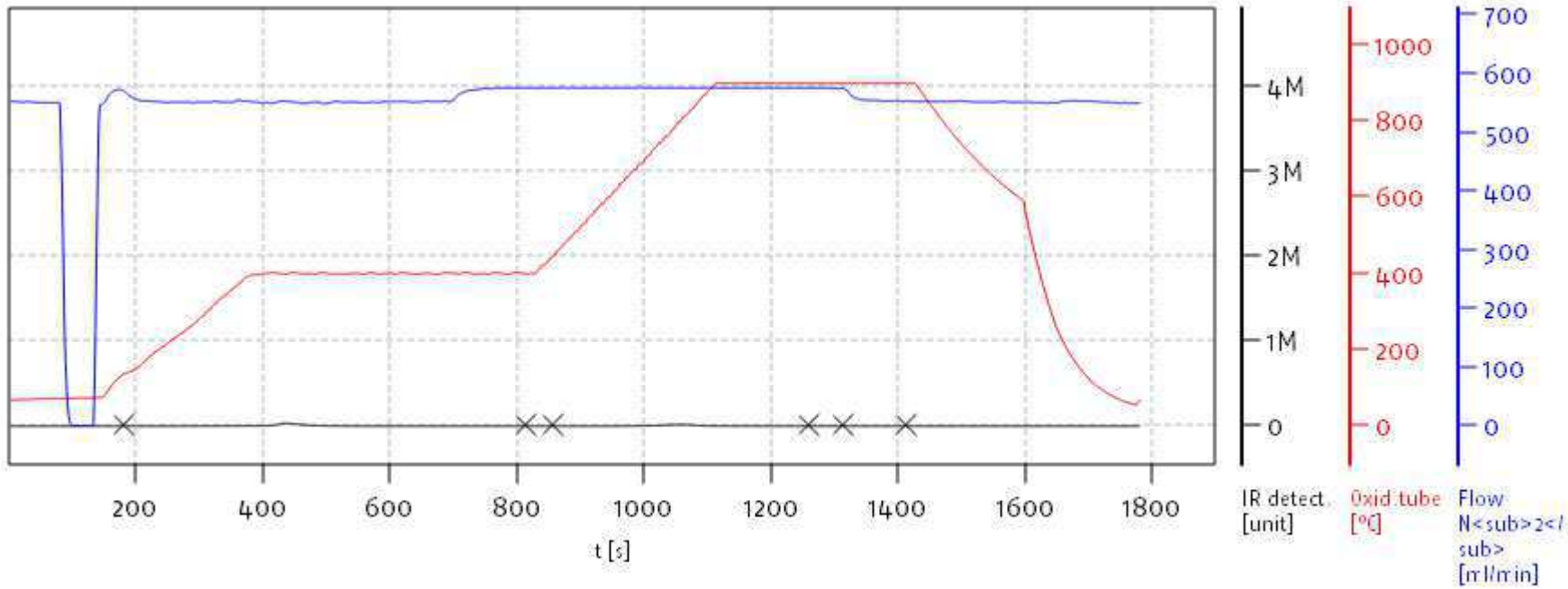
Access: soliTOC superuser

Date: Mon May 22 10:19:17 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
7	7	BLE0415-MRL1	509.50	509.5	CARBON	5/19/2023 2:36 PM	bl,C2u	0.013	72 664	0.020	0.000	1 237	48 923	0.013	0.006	0.9871	1.0000



Name:

Access: soliTOC superuser

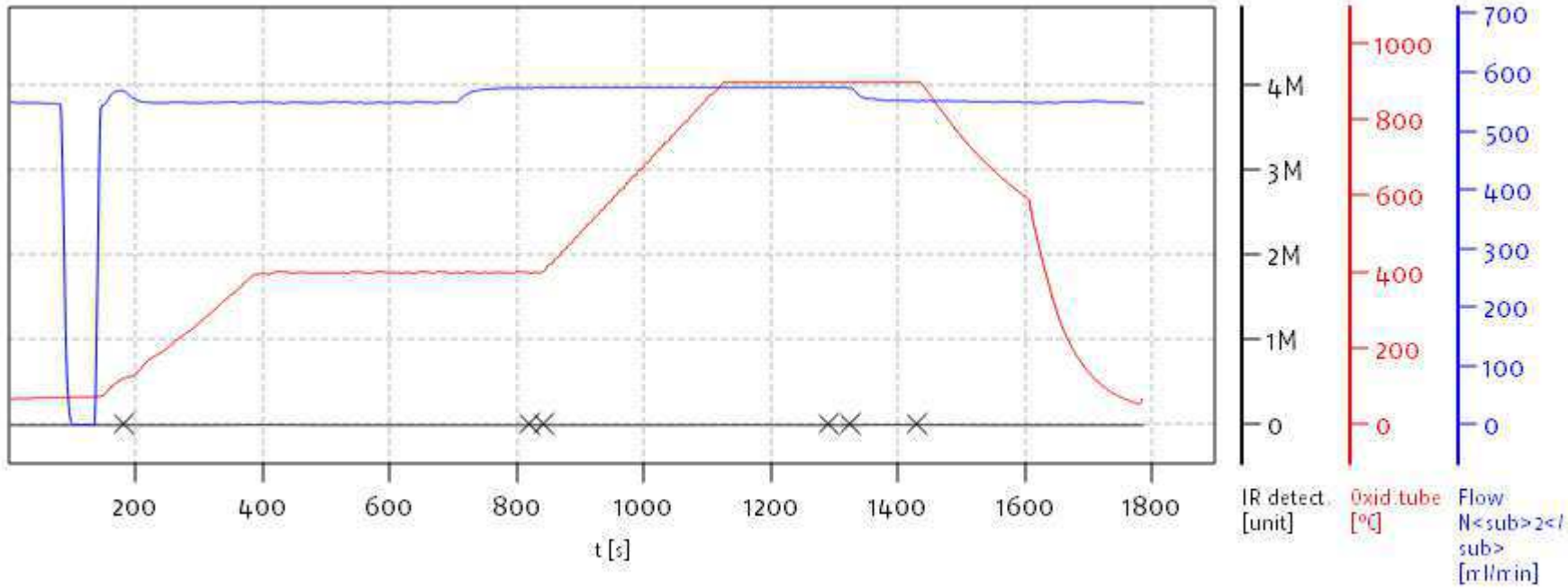
Date: Mon May 22 10:19:17 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
8	8	BLE0414-BLK1	548.00		CARBON	5/19/2023 3:06 PM	bl,C1u,C3u,C2u	0.000	13 702	0.000	0.000	11 222	10 881	0.000	0.000	0.9871	1.0000



Name:

Access: soliTOC superuser

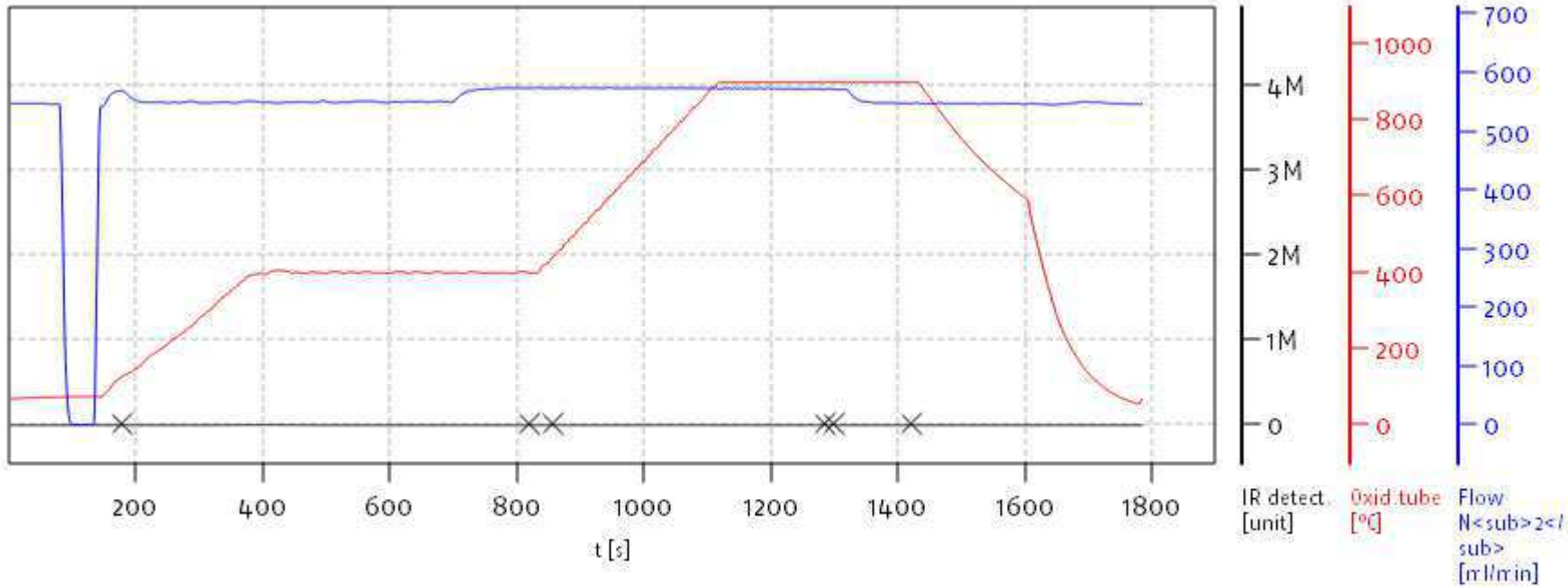
Date: Mon May 22 10:19:17 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
9	9	BLE0415-BLK1	511.70		CARBON	5/19/2023 3:36 PM	bl,C1u,C3u,C2u	0.000	13 930	0.000	0.000	919	5 953	0.000	0.000	0.9871	1.0000



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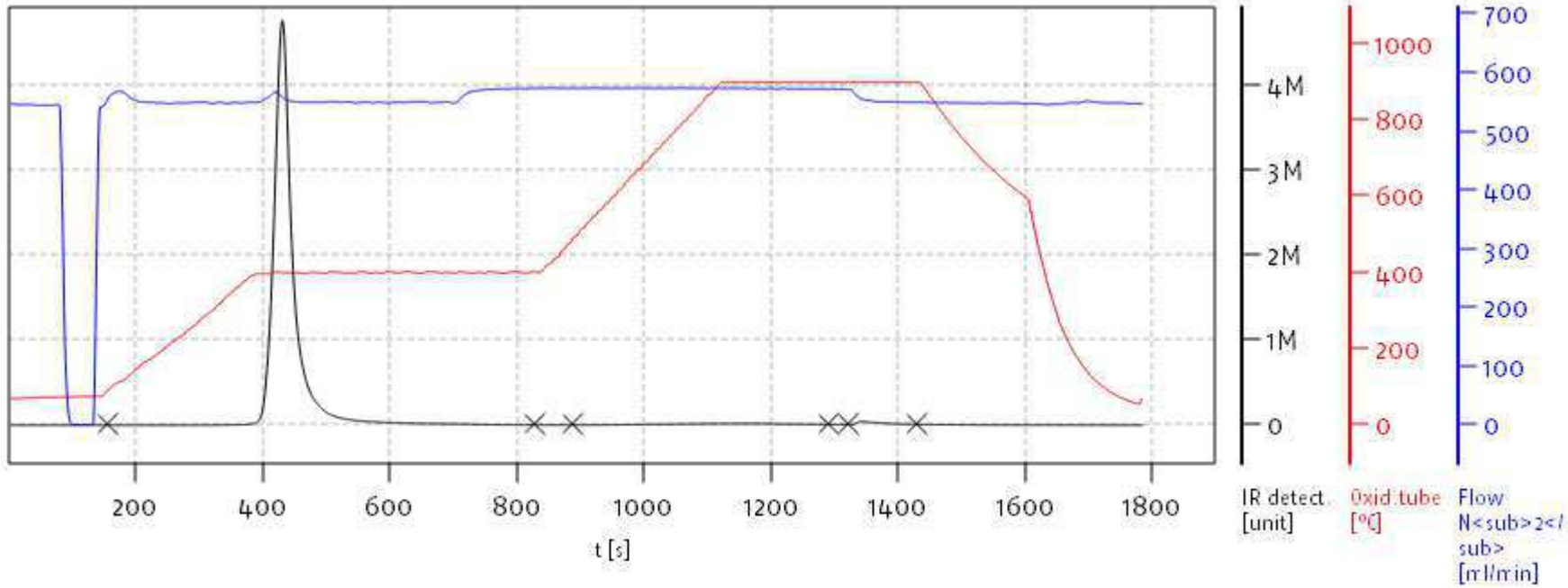
elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
10	10	BLE0414-BS1	21.70	21.7	CARBON	5/19/2023 4:06 PM	bl	45.270	6 246 241	46.308	0.412	85 209	170 918	44.858	1.038	0.9871	1.0000



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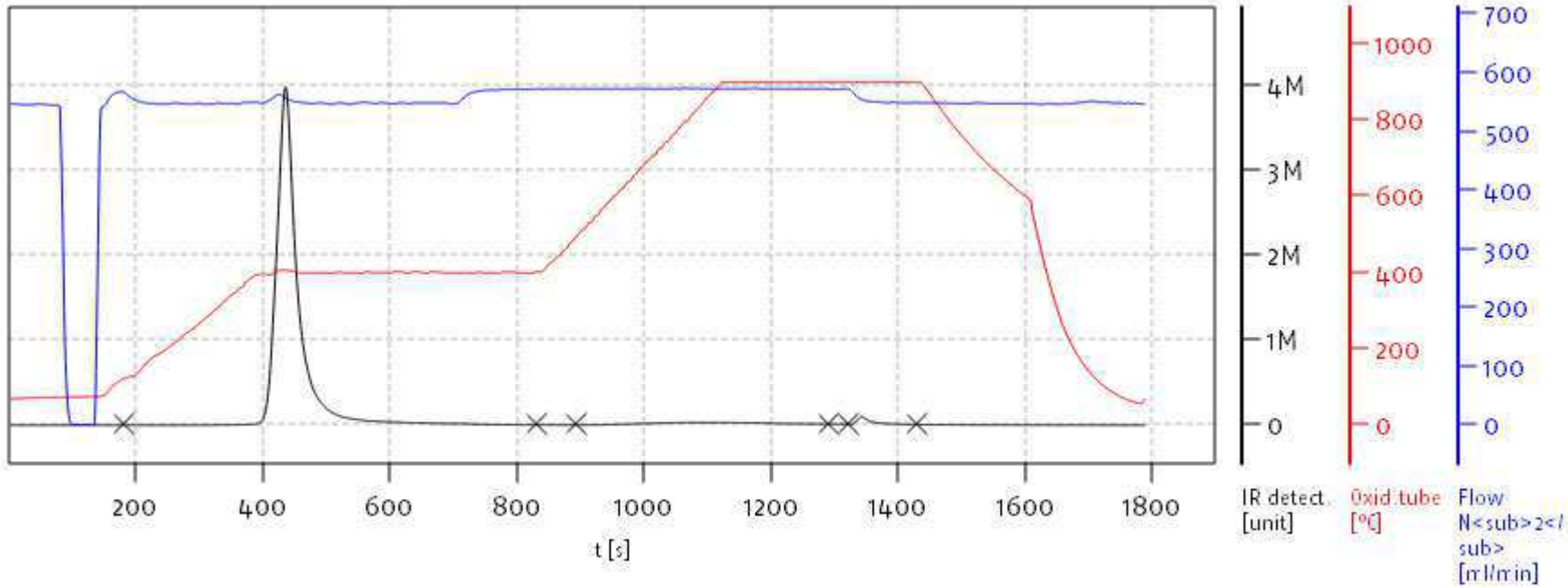
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
11	11	BLE0415-BS1	20.90	20.9	CARBON	5/19/2023 4:37 PM	bl	43.991	5 813 123	46.018	0.660	115 860	296 064	43.330	2.028	0.9871	1.0000



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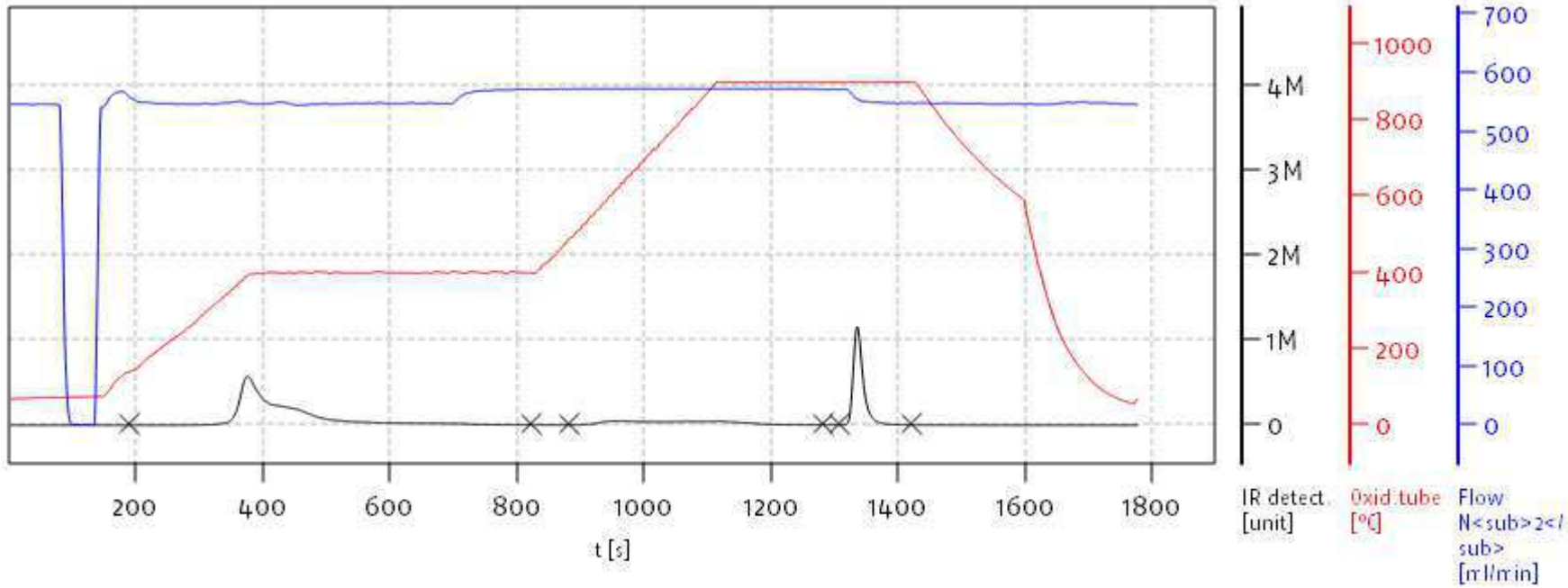
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
12	12	BLE0414-SRM1	136.40	136.4	CARBON	5/19/2023 5:07 PM	bl	2.781	1 677 274	3.225	0.889	793 514	410 879	1.892	0.444	0.9871	1.0000



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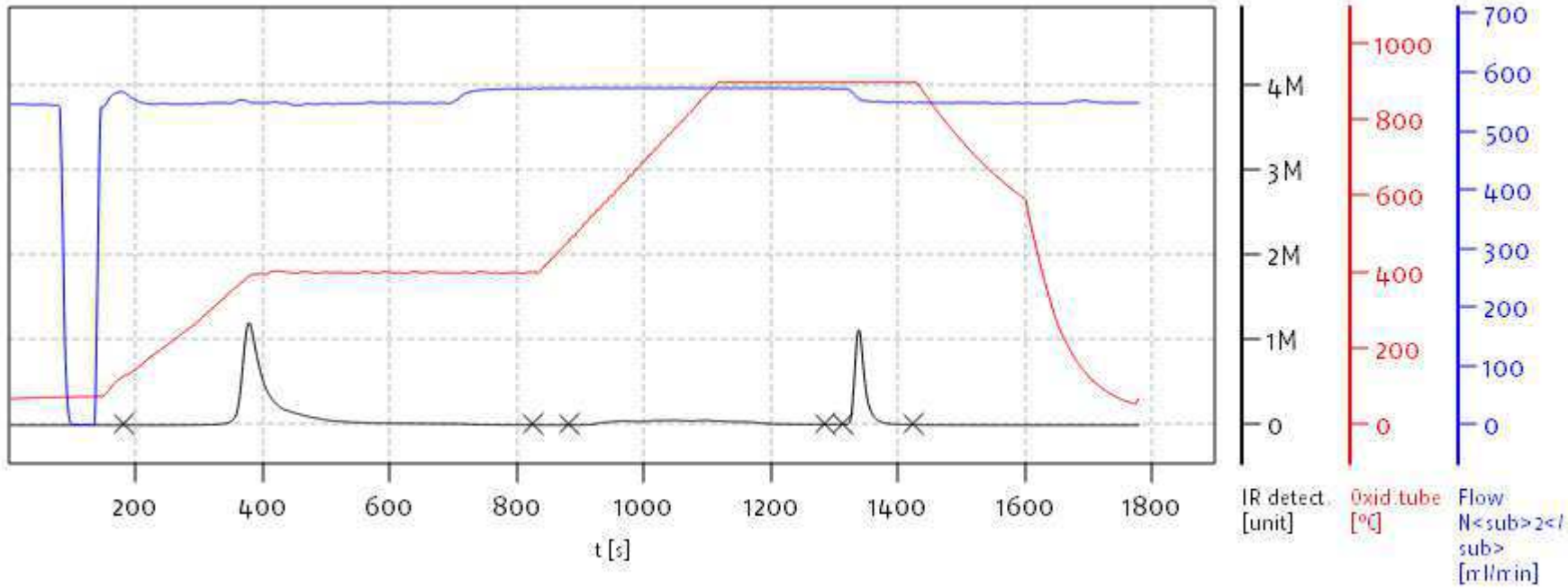
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
13	13	BLE0415-SRM1	159.90	159.9	CARBON	5/19/2023 5:37 PM	bl	2.874	2 184 702	3.339	0.764	798 711	497 276	2.111	0.465	0.9871	1.0000



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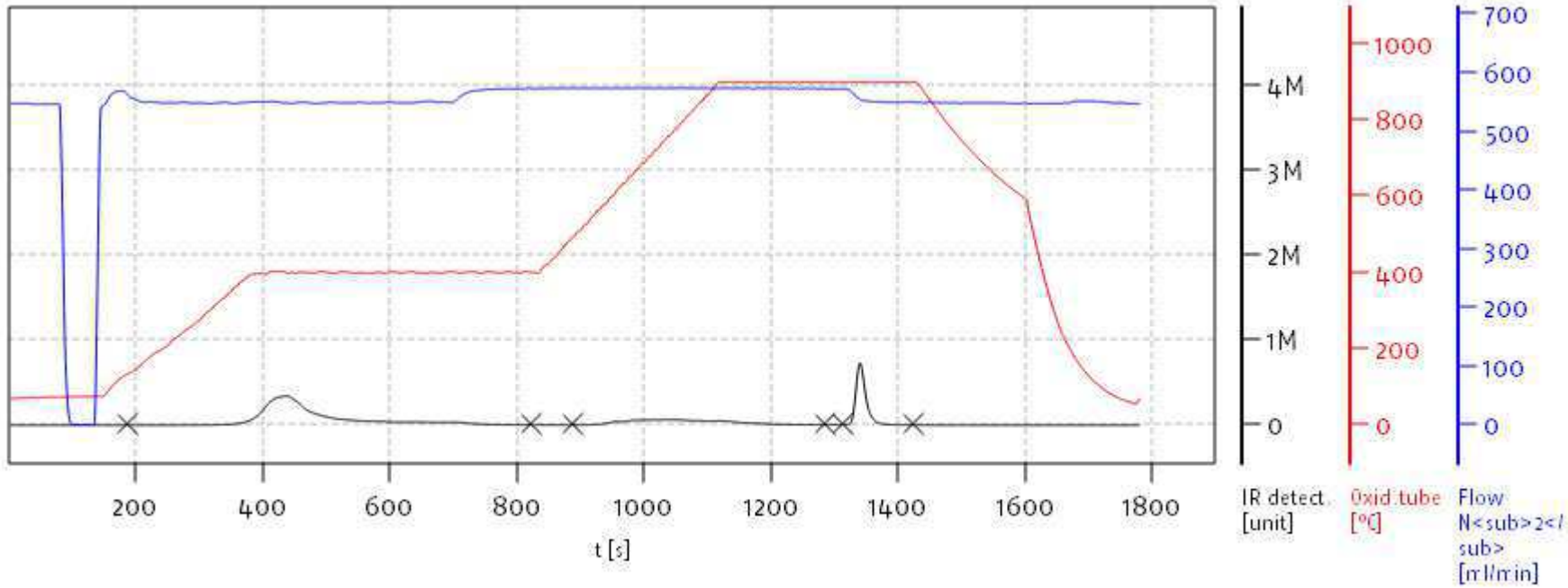
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
14	14	23D0571-01	587.90		CARBON	5/19/2023 6:07 PM	bl	0.495	1 412 232	0.618	0.127	499 555	485 055	0.368	0.123	0.9871	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
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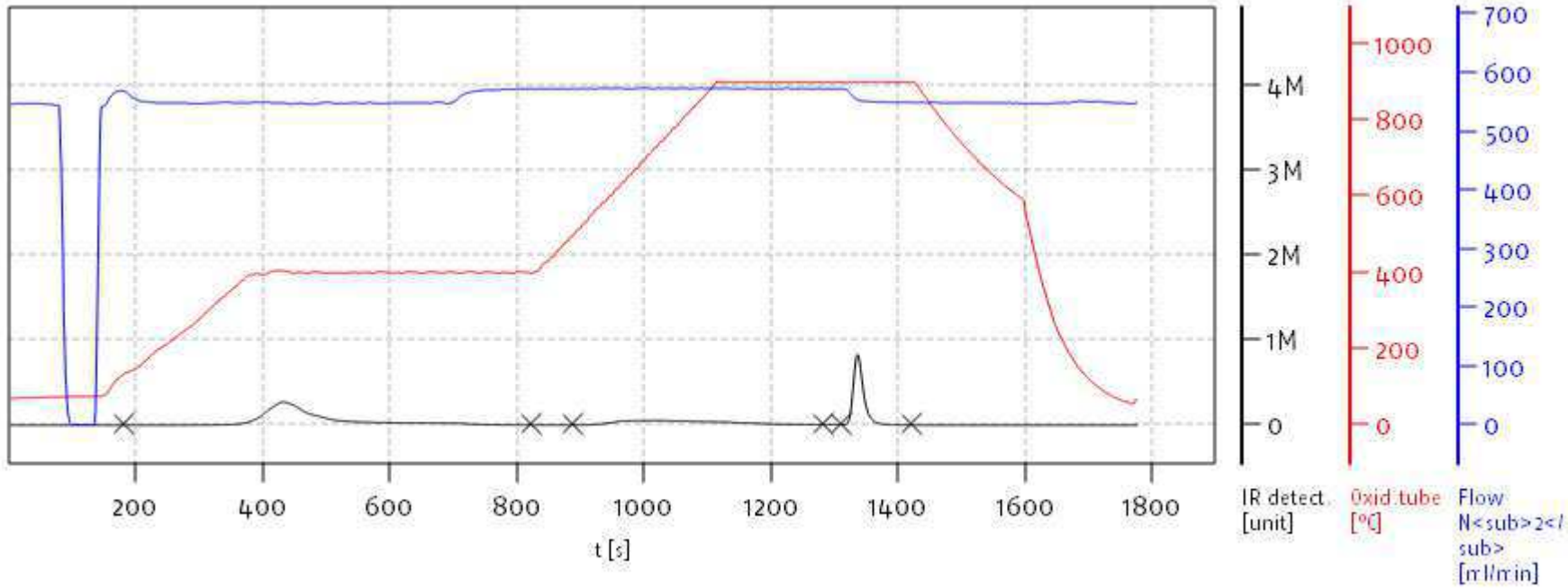
Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
15	15	BLE0414-DUP1	516.80		CARBON	5/19/2023 6:37 PM	bl	0.486	1 068 946	0.609	0.171	585 449	429 445	0.315	0.123	0.9871	1.0000



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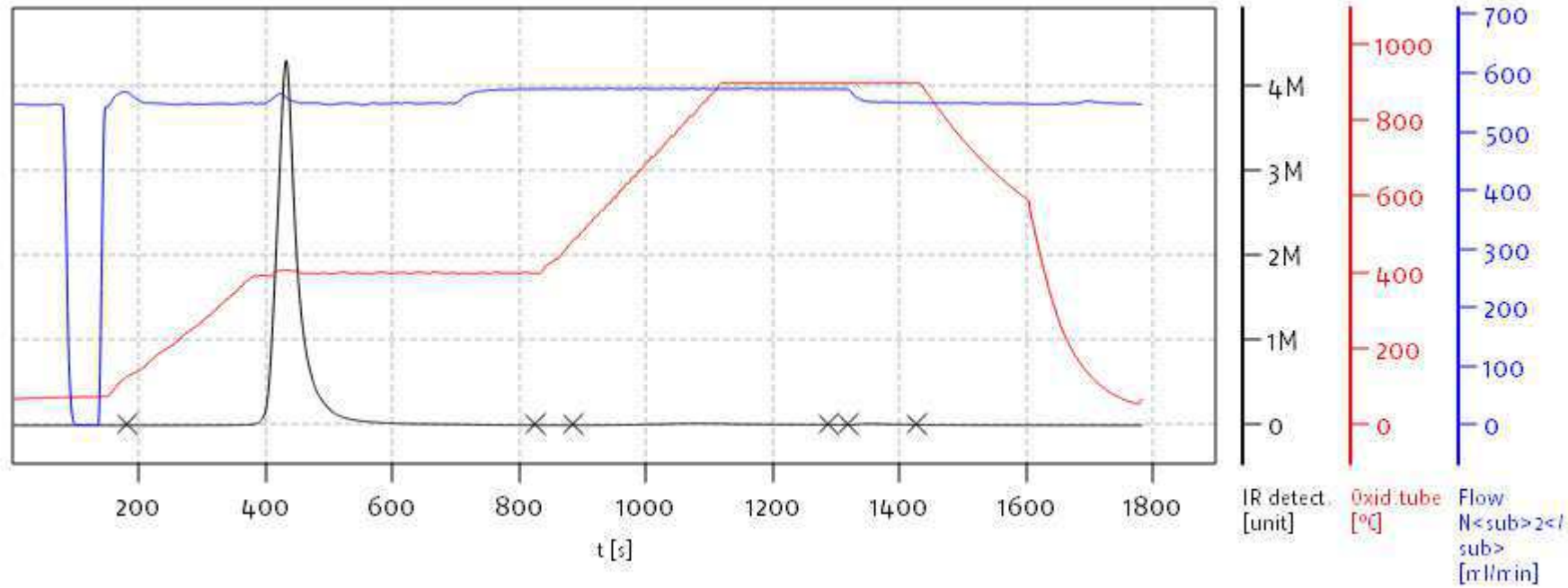
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
16	16	SLE0228-CCV1	21.90		CARBON	5/19/2023 7:07 PM	bl	45.300	6 345 583	46.348	0.142	48 418	173 542	45.158	1.048	0.9871	1.0000



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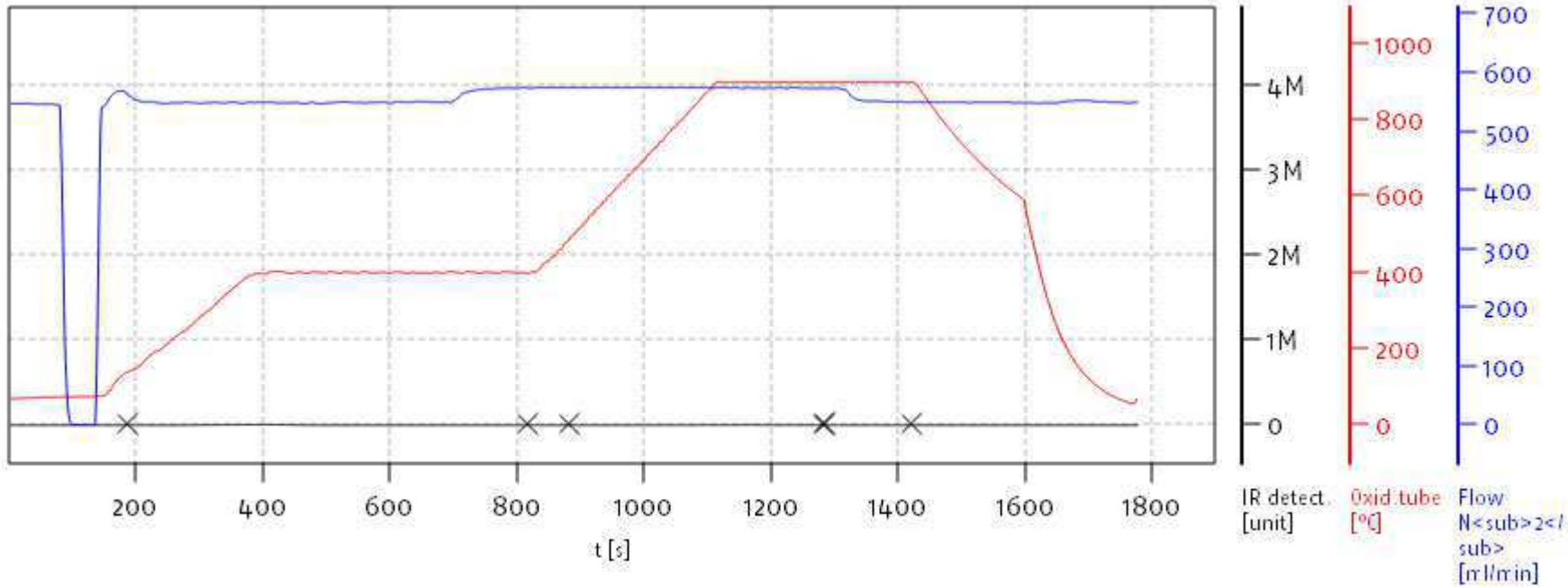
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
17	17	SLE0228-CCB1	505.60		CARBON	5/19/2023 7:37 PM	bl,C3u,C2u	0.000	29 075	0.000	0.000	2 323	14 137	0.000	0.000	0.9871	1.0000



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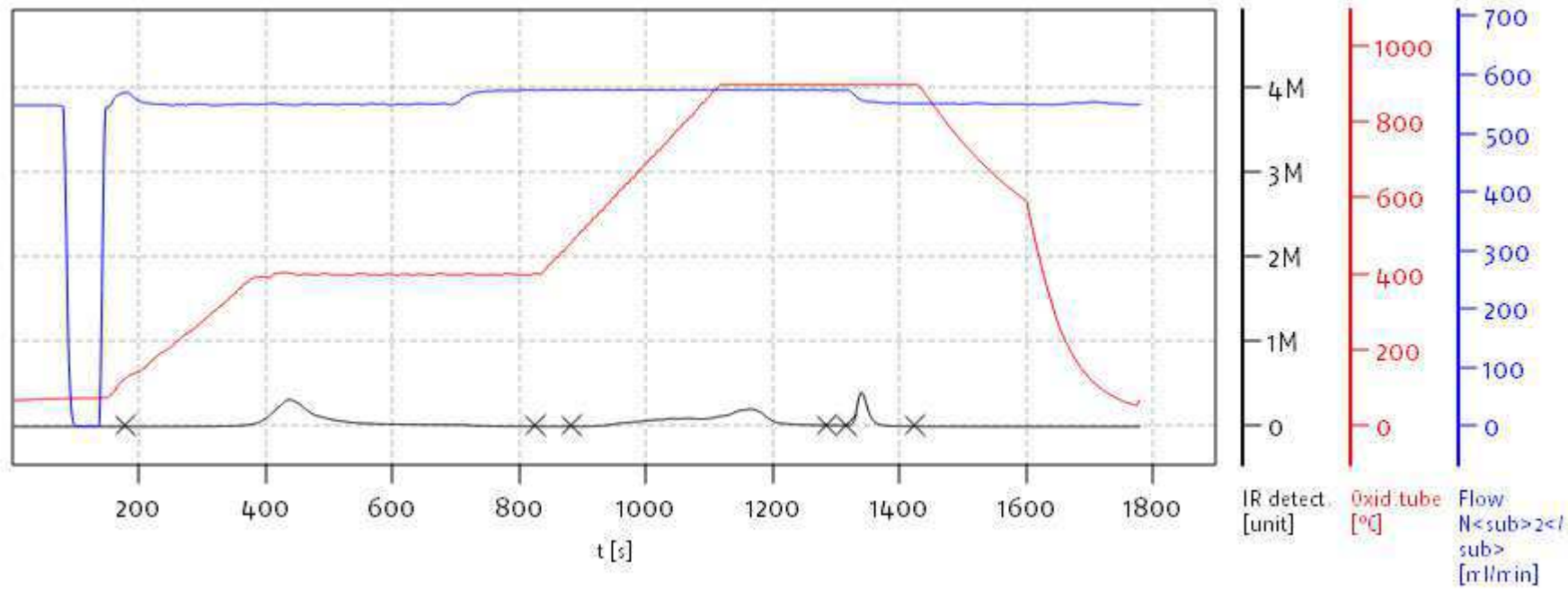
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
18	18	BLE0414-DUP2	516.40		CARBON	5/19/2023 8:07 PM	bl	0.425	1 135 366	0.755	0.089	319 080	1 105 509	0.335	0.331	0.9871	1.0000



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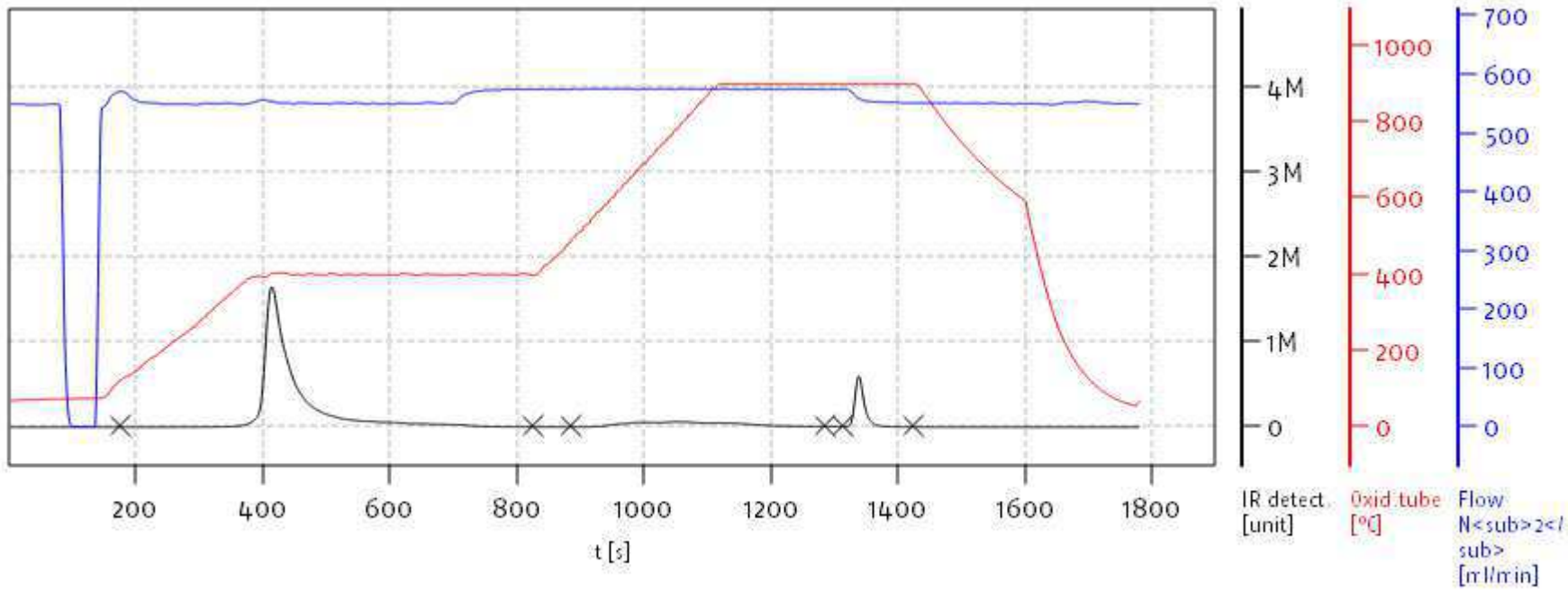
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
19	19	BLE0414-MS1	549.70	0.0079	CARBON	5/19/2023 8:37 PM	bl	1.013	3 215 164	1.145	0.105	393 657	486 288	0.908	0.132	0.9871	1.0000



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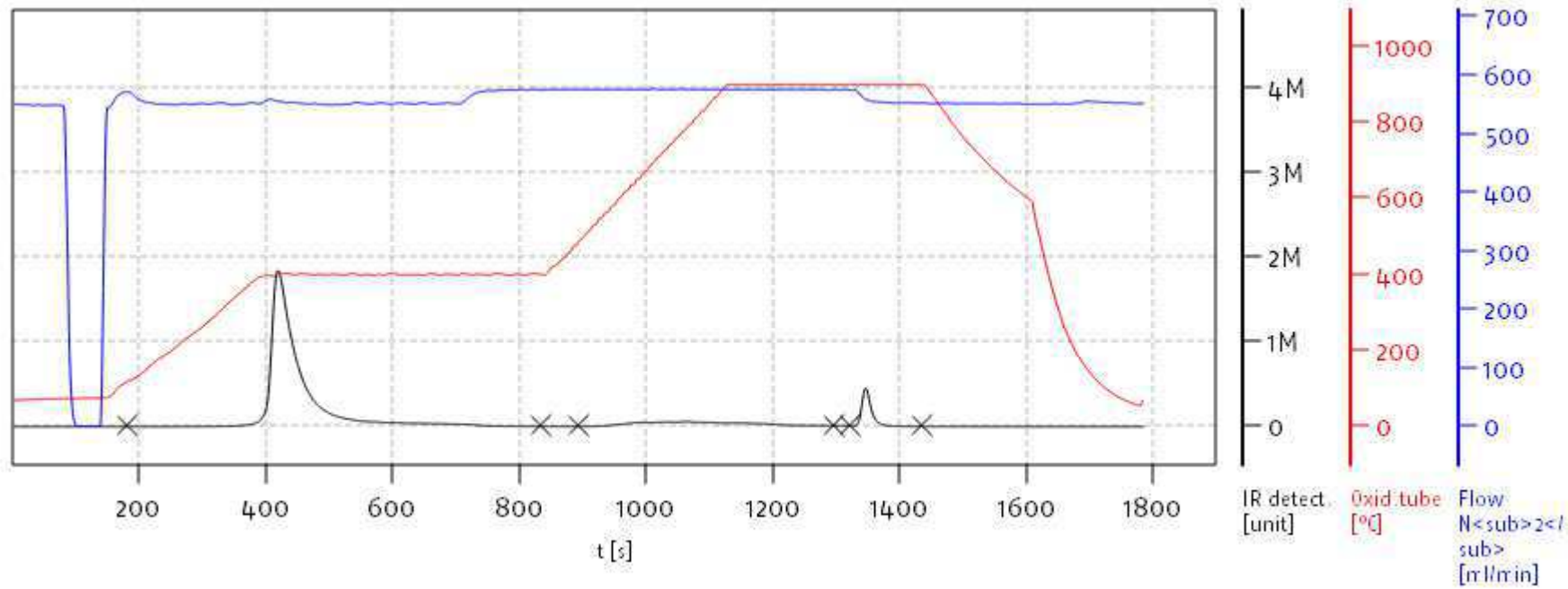
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
20	20	BLE0414-MSD1	520.30	0.0087	CARBON	5/19/2023 9:07 PM	bl	1.127	3 496 016	1.268	0.084	304 106	489 308	1.043	0.140	0.9871	1.0000



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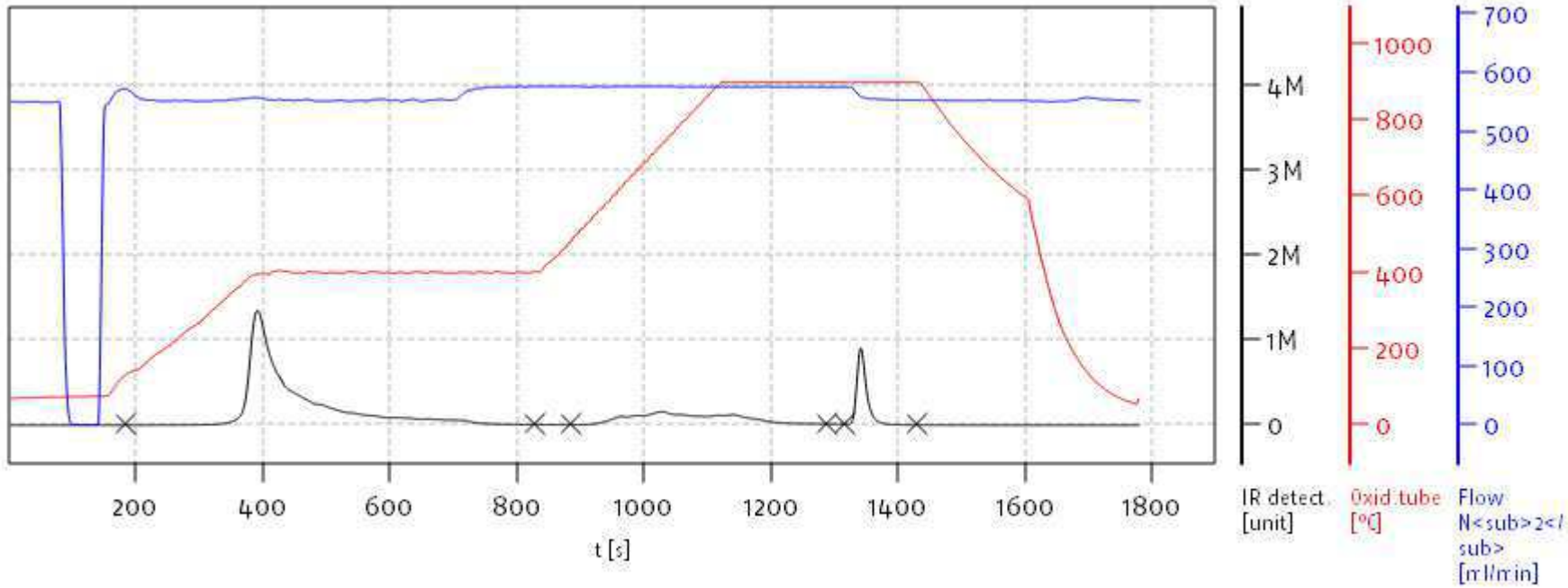
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
21	21	23C0774-01	521.60		CARBON	5/19/2023 9:37 PM	bl	1.310	3 804 413	1.644	0.177	610 980	1 127 165	1.133	0.334	0.9871	1.0000



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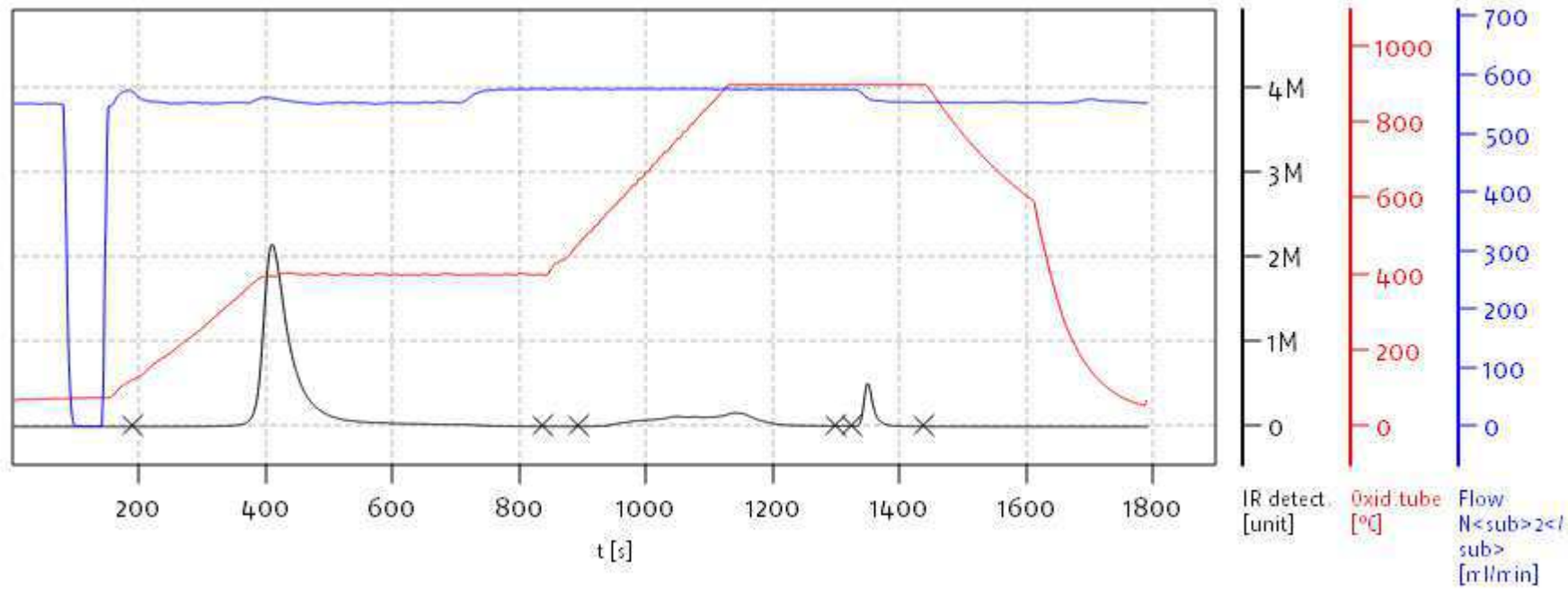
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
22	22	BLE0414-DUP3	509.80		CARBON	5/19/2023 10:07 PM	bl	1.418	4 325 333	1.720	0.099	346 506	997 196	1.319	0.301	0.9871	1.0000



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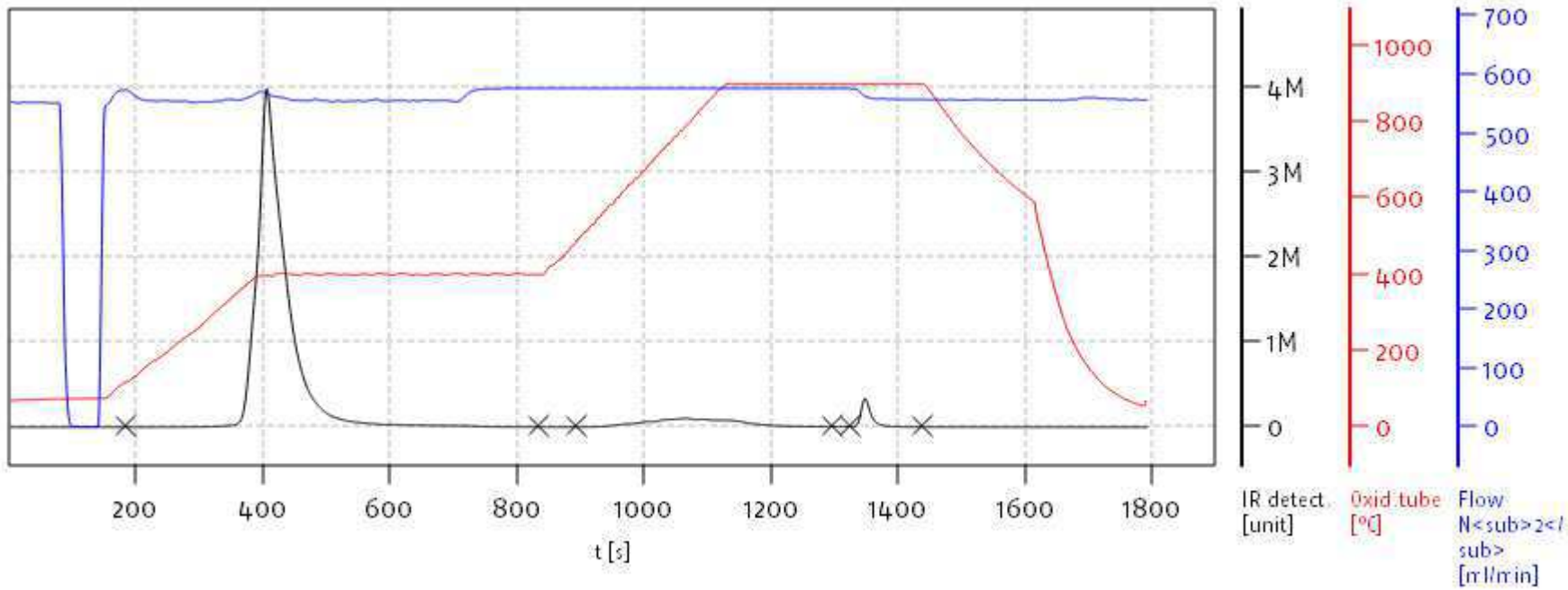
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
23	23	BLE0414-MS2	504.10	0.0086	CARBON	5/19/2023 10:38 PM	bl	2.457	7 731 933	2.655	0.064	233 691	658 903	2.392	0.198	0.9871	1.0000



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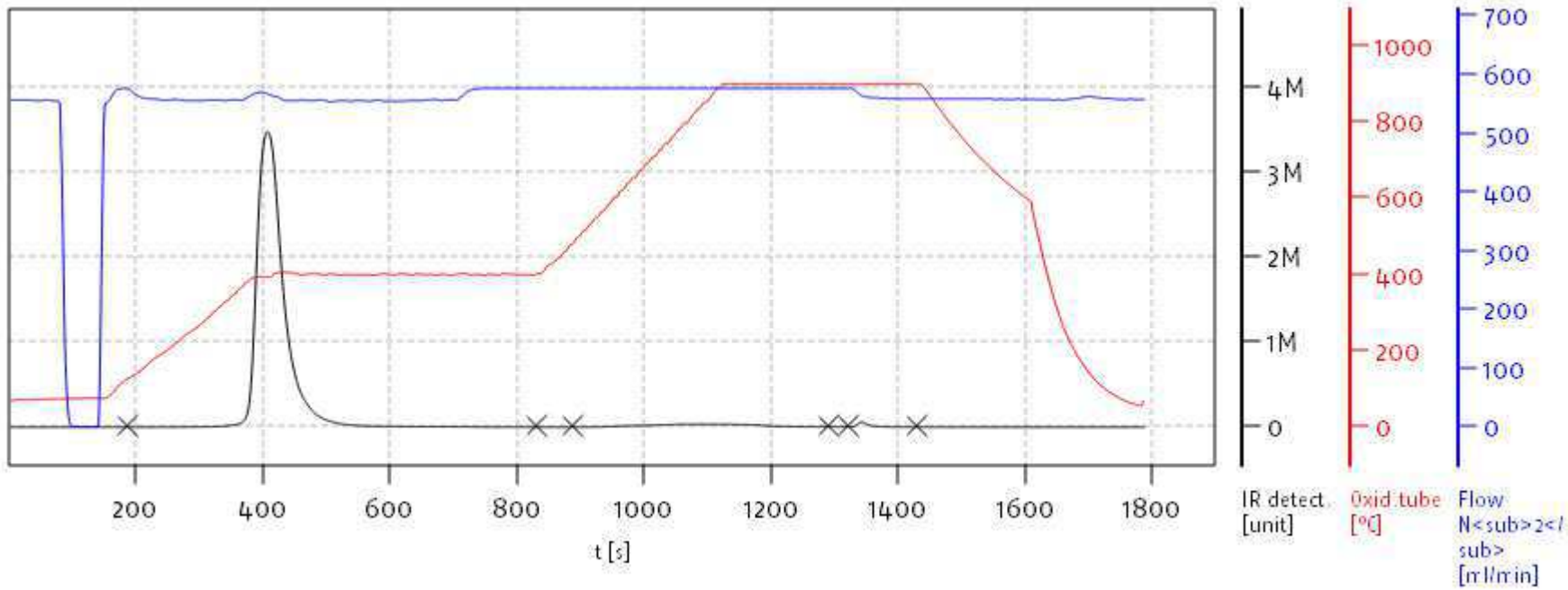
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
24	24	23C0774-02	490.50		CARBON	5/19/2023 11:08 PM	bl	2.021	6 339 841	2.097	0.006	48 072	265 376	2.014	0.076	0.9871	1.0000



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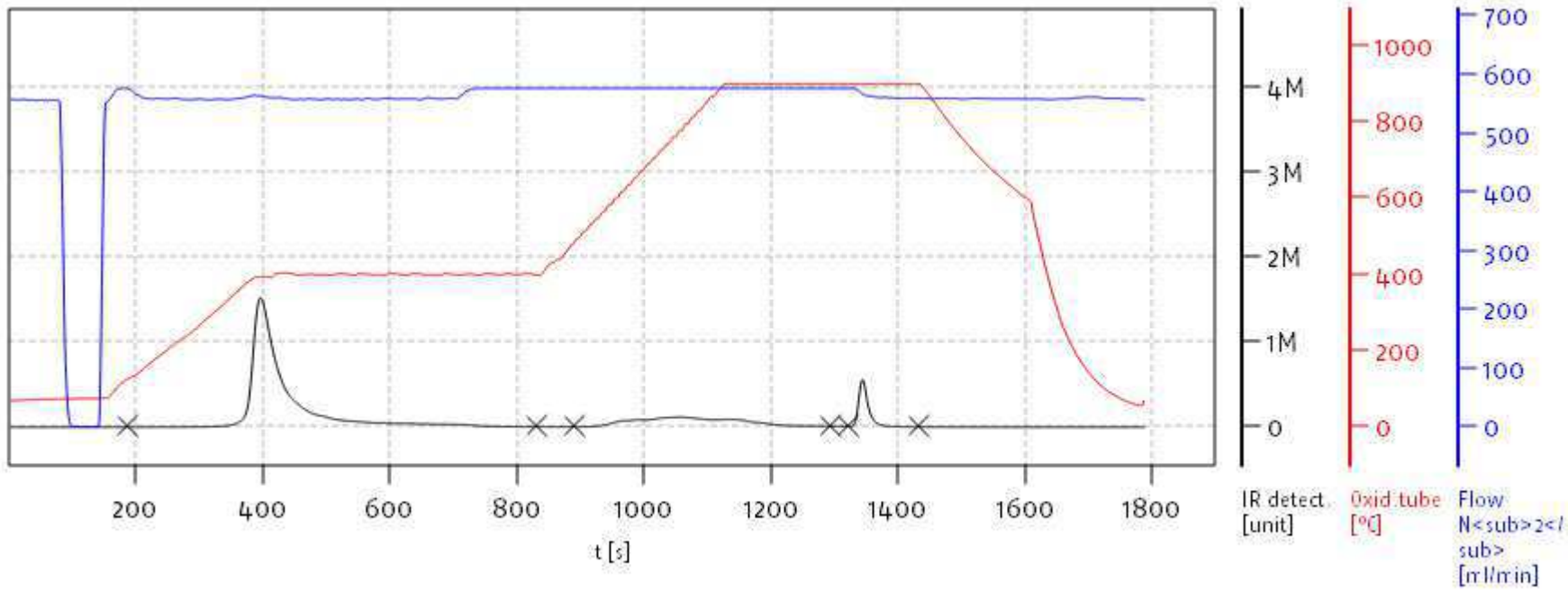
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
25	25	23C0774-03	477.10		CARBON	5/19/2023 11:38 PM	bl	1.164	3 227 786	1.452	0.115	373 429	895 327	1.050	0.288	0.9871	1.0000



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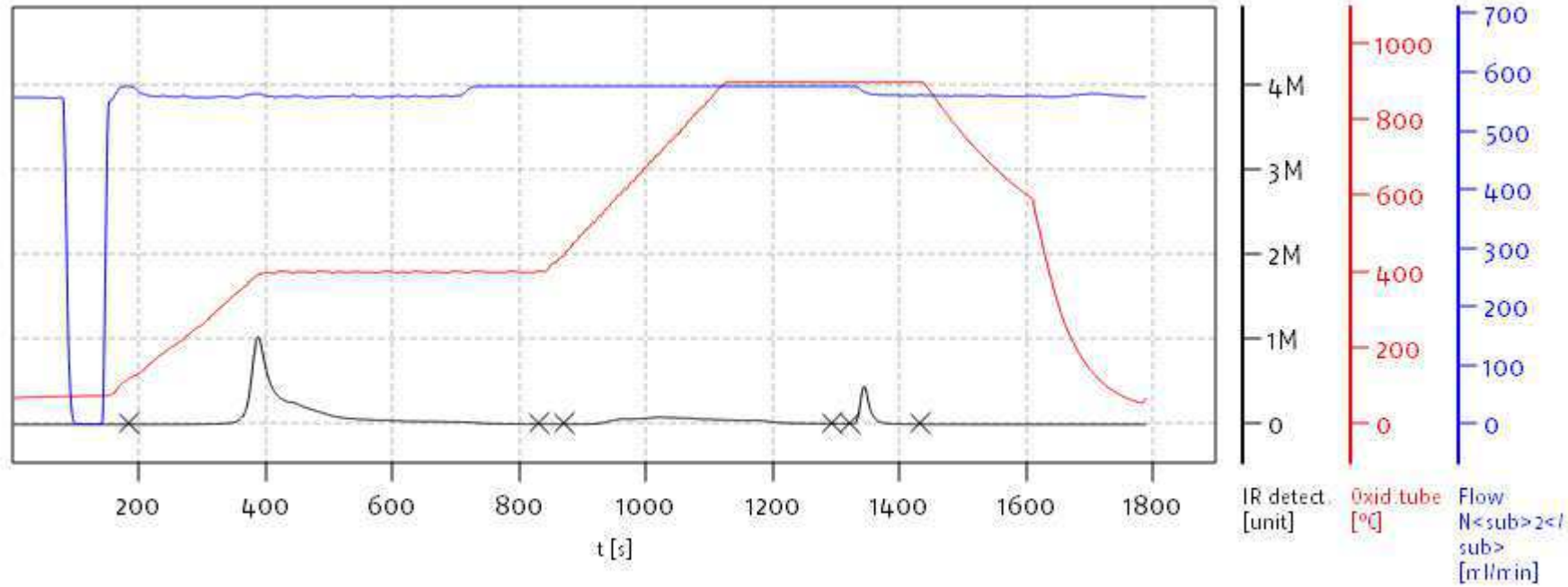
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
26	26	23C0774-04	329.60		CARBON	5/20/2023 12:08 AM	bl	1.222	2 325 170	1.528	0.132	302 149	663 542	1.091	0.305	0.9871	1.0000



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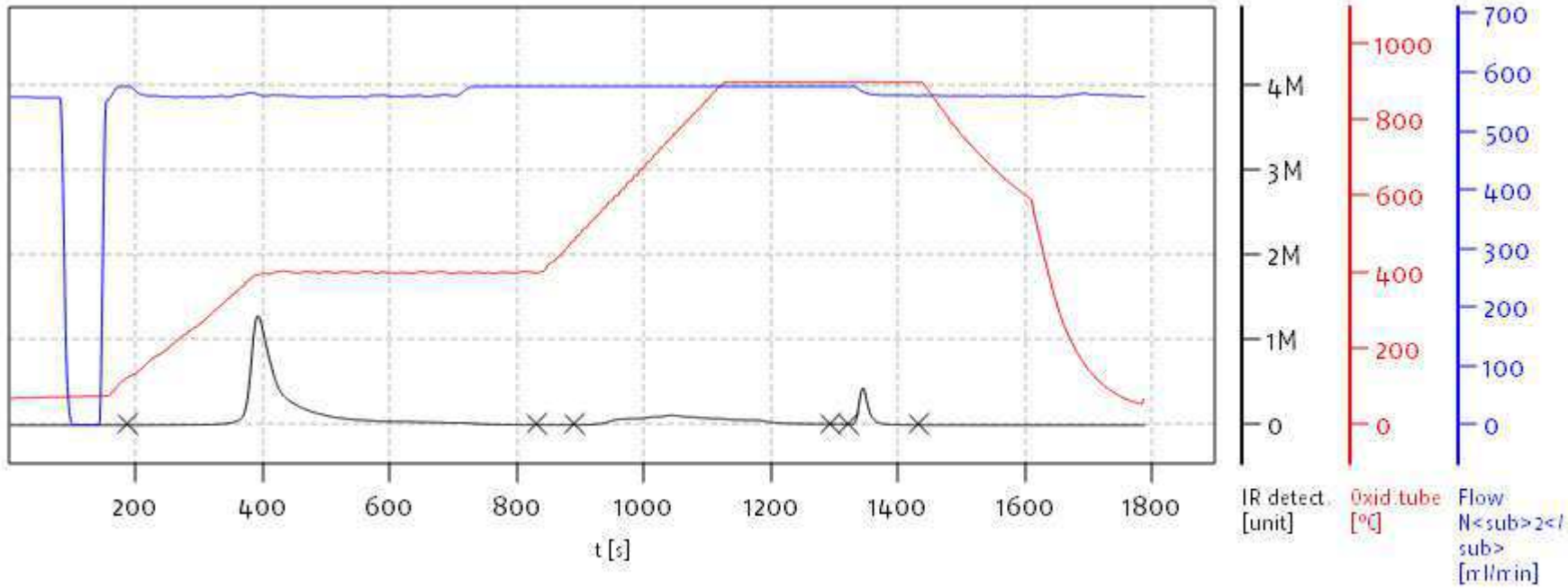
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
27	27	23C0774-05	382.50		CARBON	5/20/2023 12:38 AM	bl	1.232	2 769 364	1.569	0.111	295 985	840 665	1.122	0.337	0.9871	1.0000



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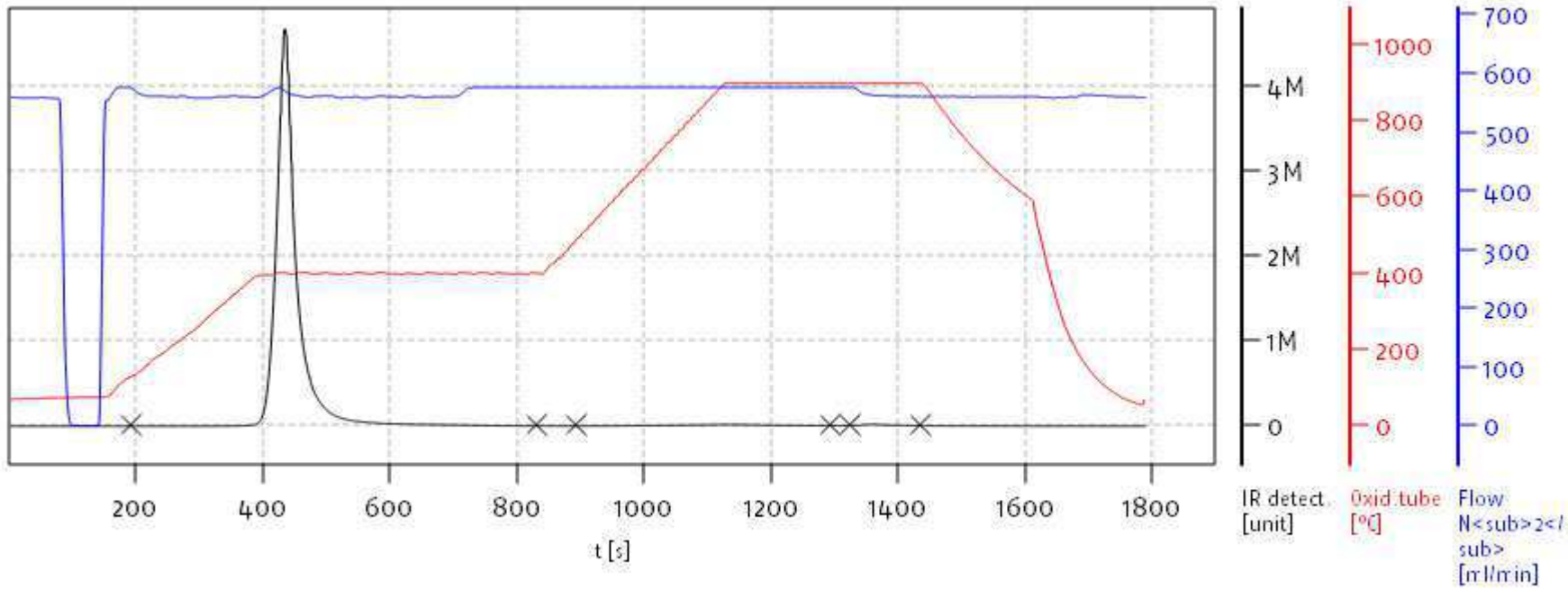
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
28	28	SLE0228-CCV2	22.10		CARBON	5/20/2023 1:09 AM	bl	44.934	6 353 357	45.686	0.129	46 893	133 634	44.805	0.752	0.9871	1.0000



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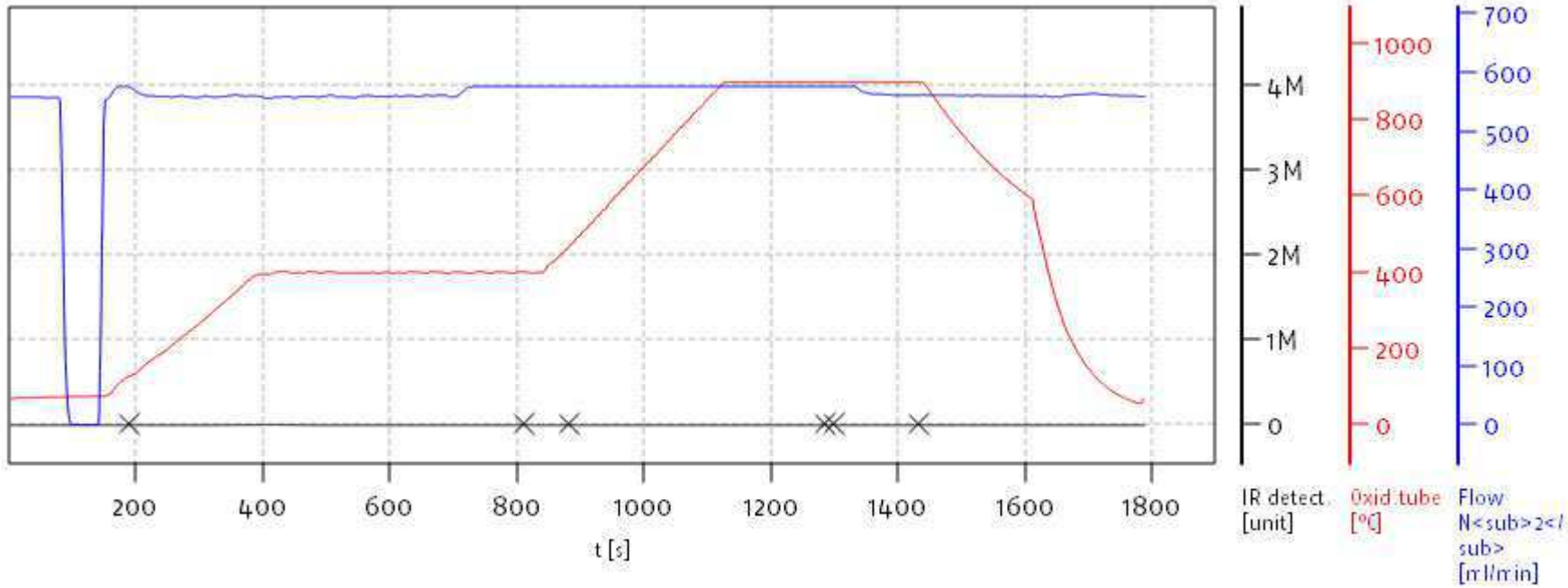
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
29	29	SLE0228-CCB2	504.10		CARBON	5/20/2023 1:39 AM	bl,C1u,C3u,C2u	0.000	15 121	0.000	0.000	1 190	404	0.000	0.000	0.9871	1.0000



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Access: soliTOC superuser

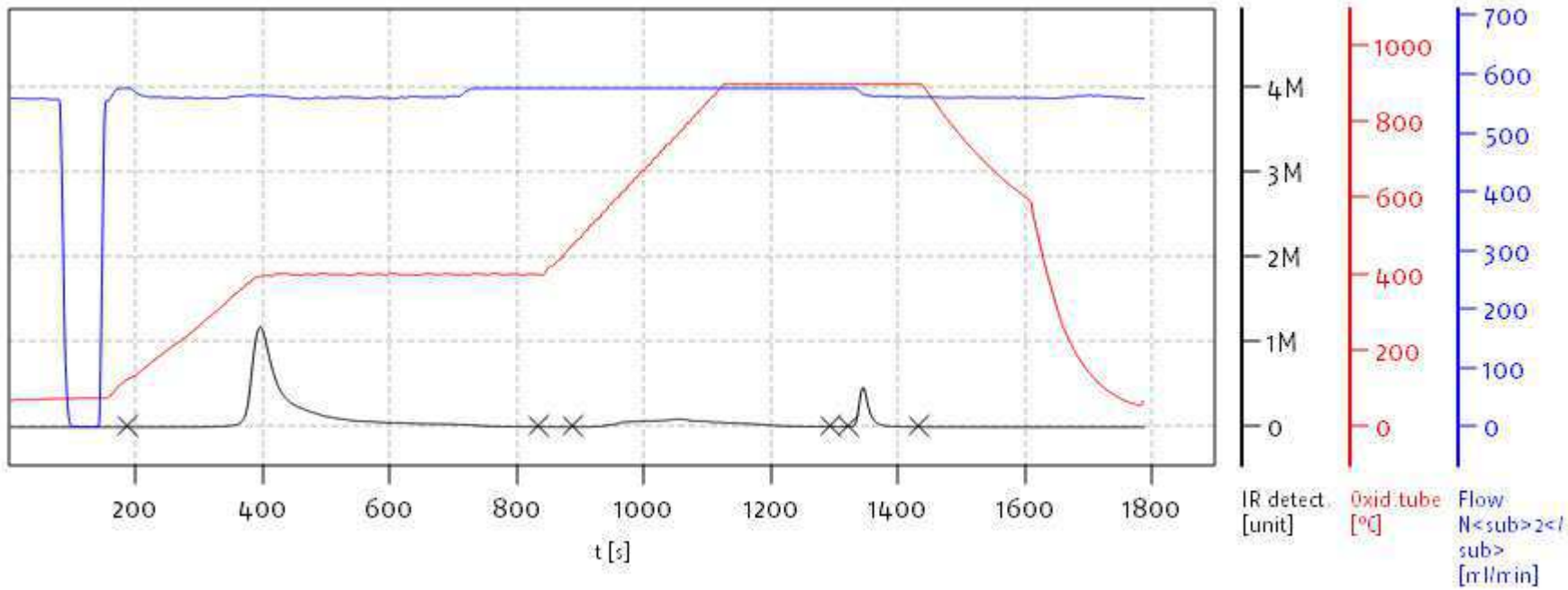
Date: Mon May 22 10:19:17 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
30	30	23C0774-06	363.60		CARBON	5/20/2023 2:09 AM	bl	1.310	2 769 177	1.566	0.130	325 870	616 597	1.180	0.256	0.9871	1.0000



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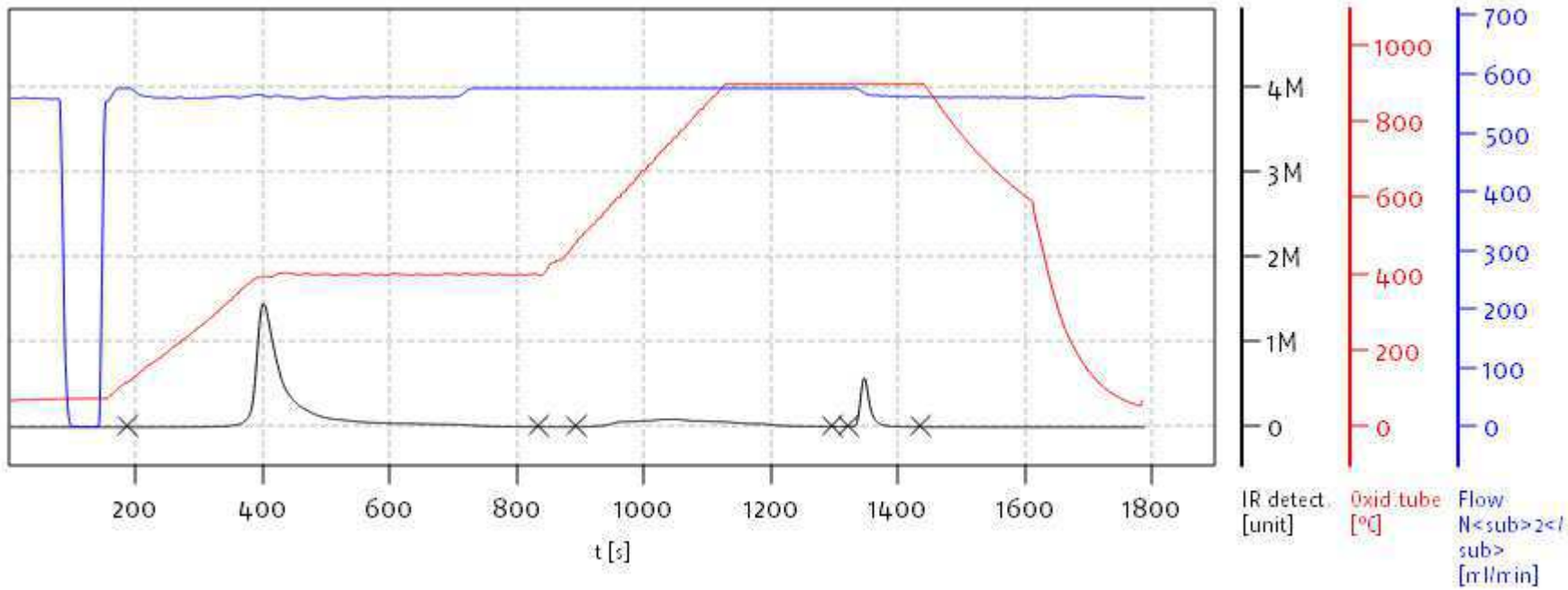
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
31	31	23C0774-07	387.70		CARBON	5/20/2023 2:39 AM	bl	1.314	2 926 905	1.580	0.143	379 147	679 207	1.170	0.266	0.9871	1.0000



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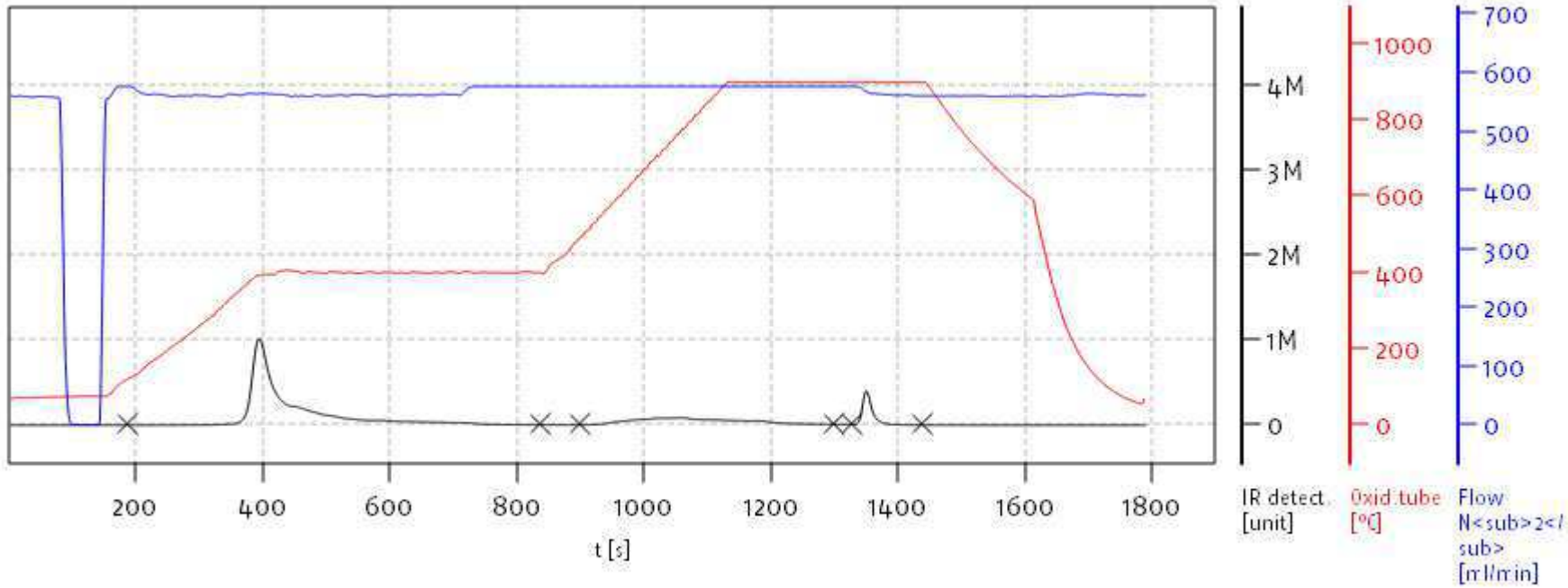
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
32	32	23C0774-08	314.70		CARBON	5/20/2023 3:09 AM	bl	1.244	2 278 697	1.568	0.125	276 206	672 229	1.119	0.324	0.9871	1.0000



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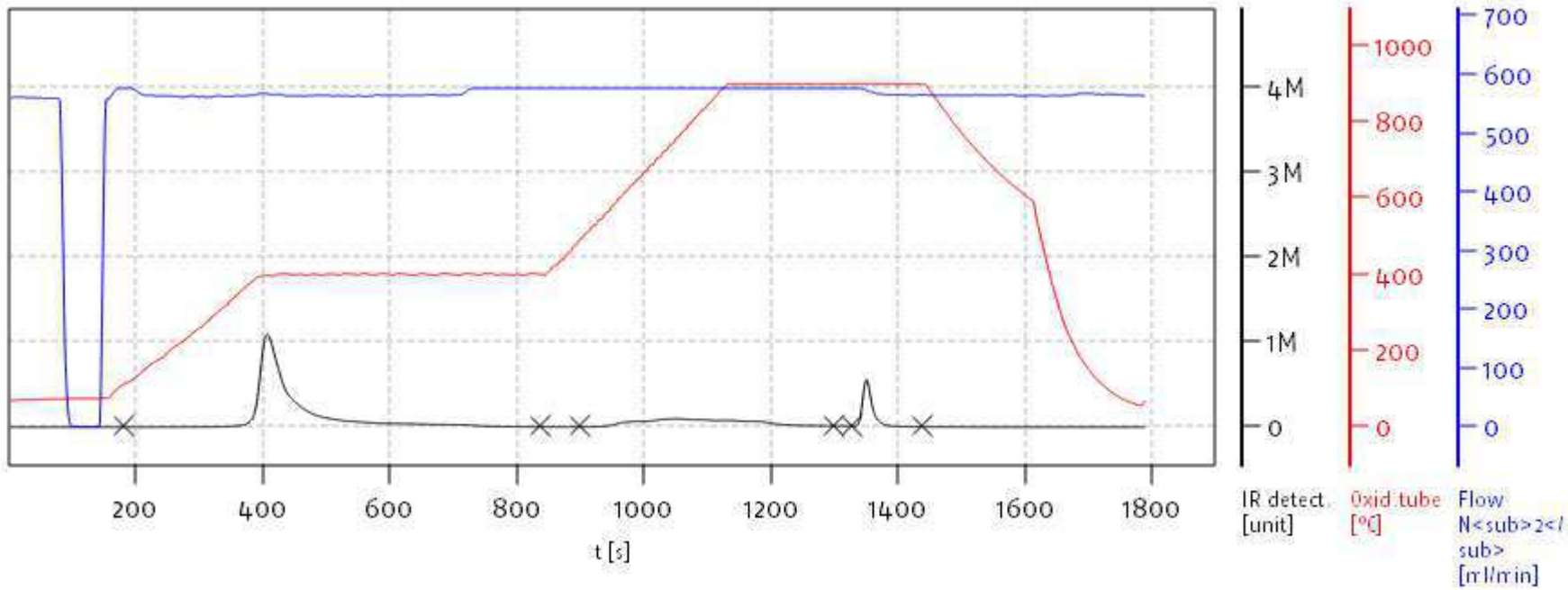
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
33	33	23C0774-09	350.00		CARBON	5/20/2023 3:40 AM	bl	1.210	2 374 588	1.558	0.161	383 562	796 945	1.049	0.348	0.9871	1.0000



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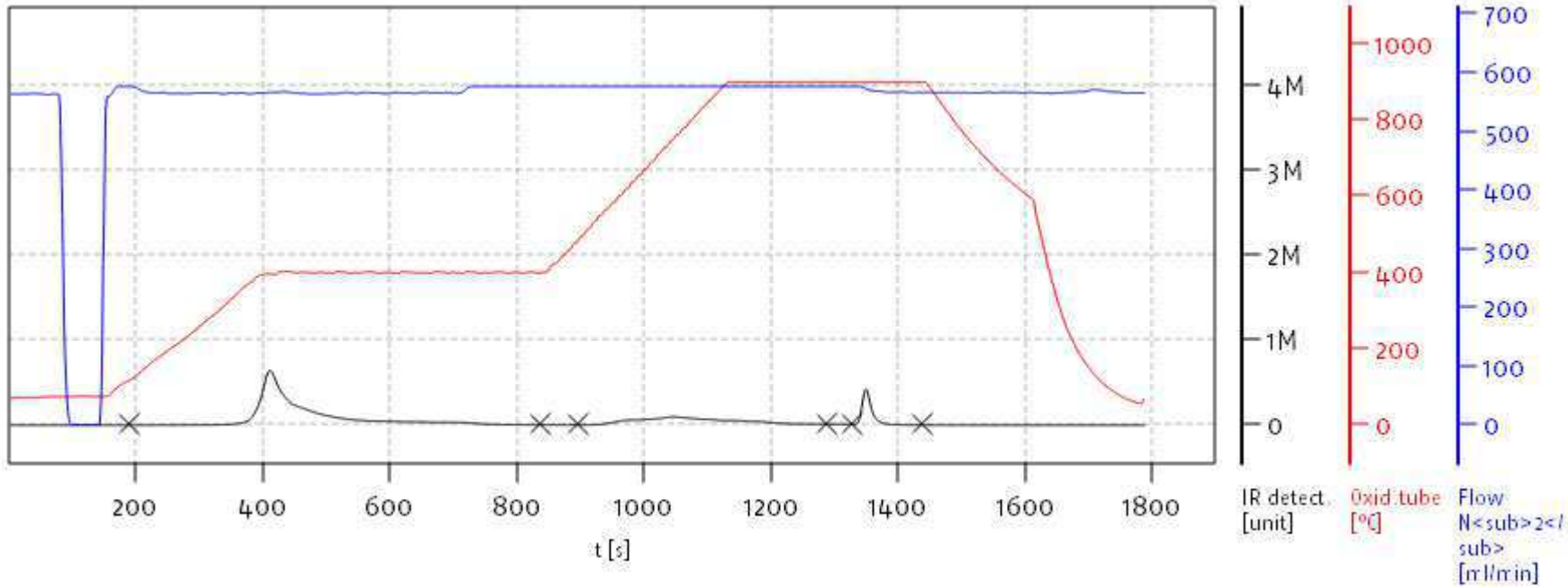
EXCELLENCE IN ELEMENTS

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
34	34	23C0774-10	342.20		CARBON	5/20/2023 4:10 AM	bl	0.921	1 783 455	1.217	0.118	284 350	666 411	0.803	0.296	0.9871	1.0000



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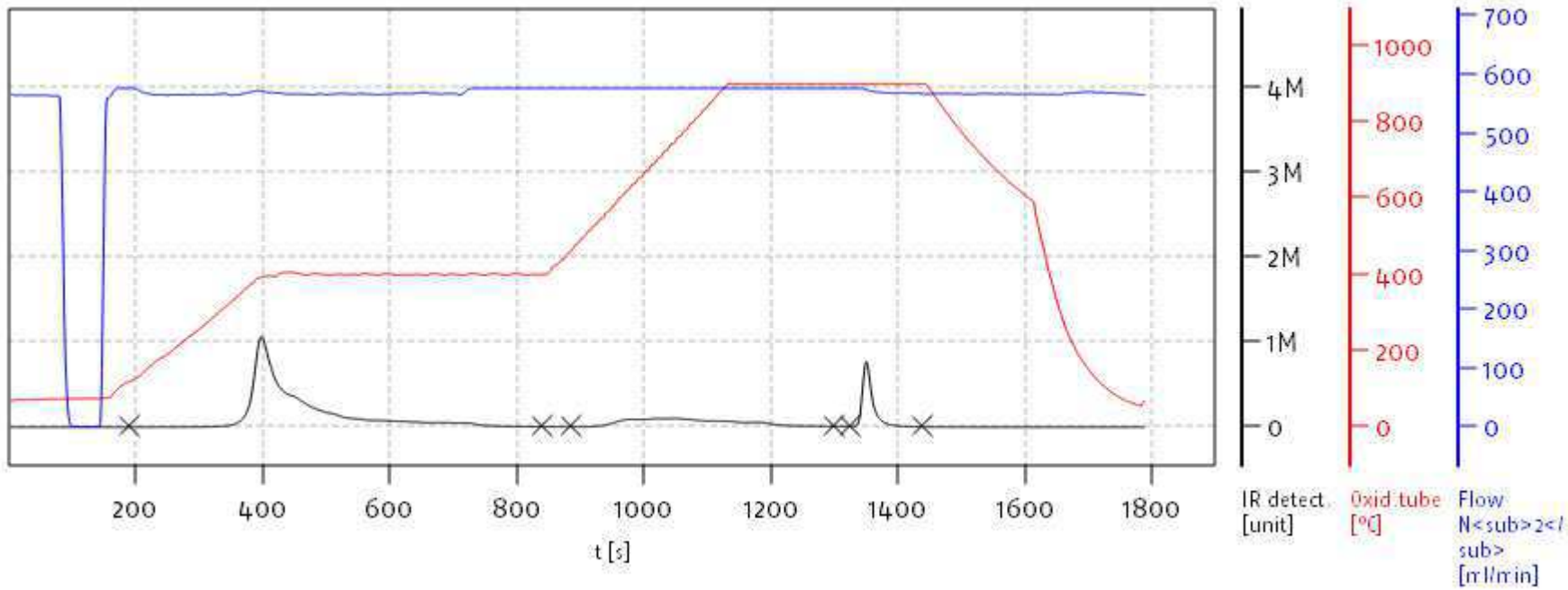
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
35	35	23C0774-11	471.20		CARBON	5/20/2023 4:40 AM	bl	1.147	2 962 595	1.412	0.172	540 139	817 720	0.975	0.266	0.9871	1.0000



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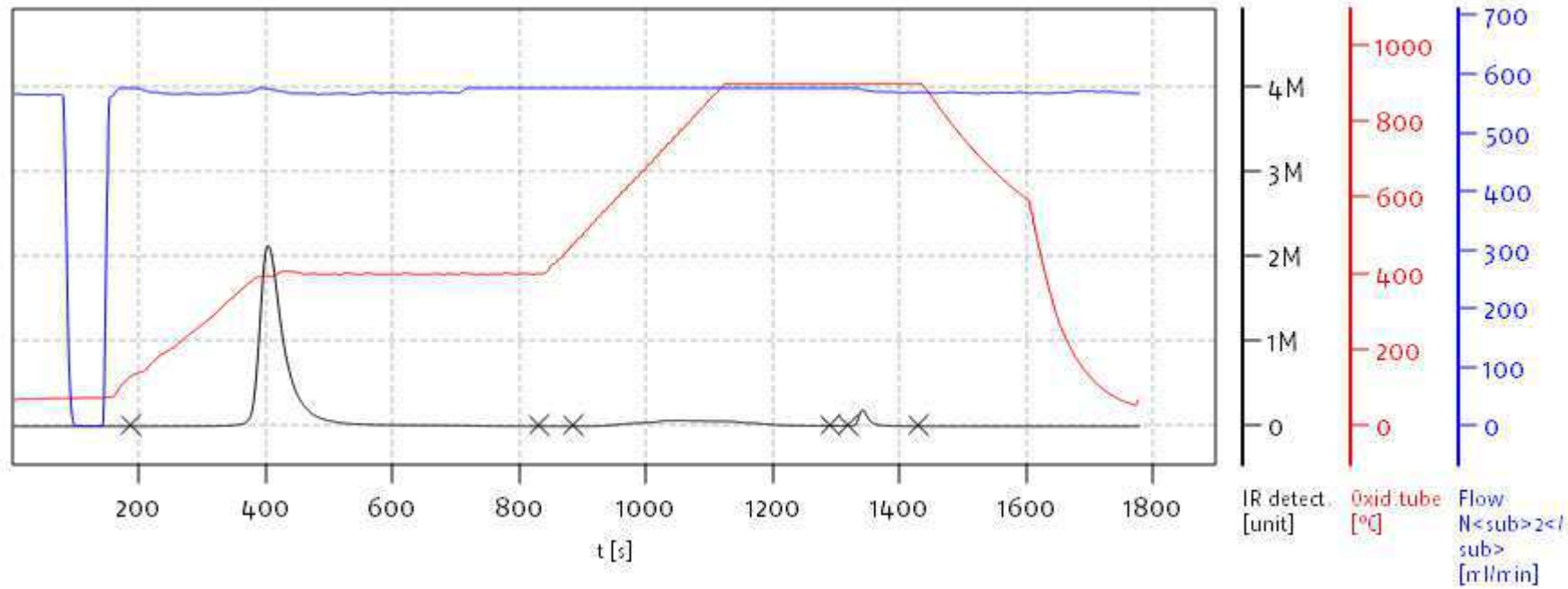
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
36	36	23C0774-12	452.90		CARBON	5/20/2023 5:10 AM	bl	1.318	3 730 962	1.486	0.038	136 768	510 236	1.280	0.169	0.9871	1.0000



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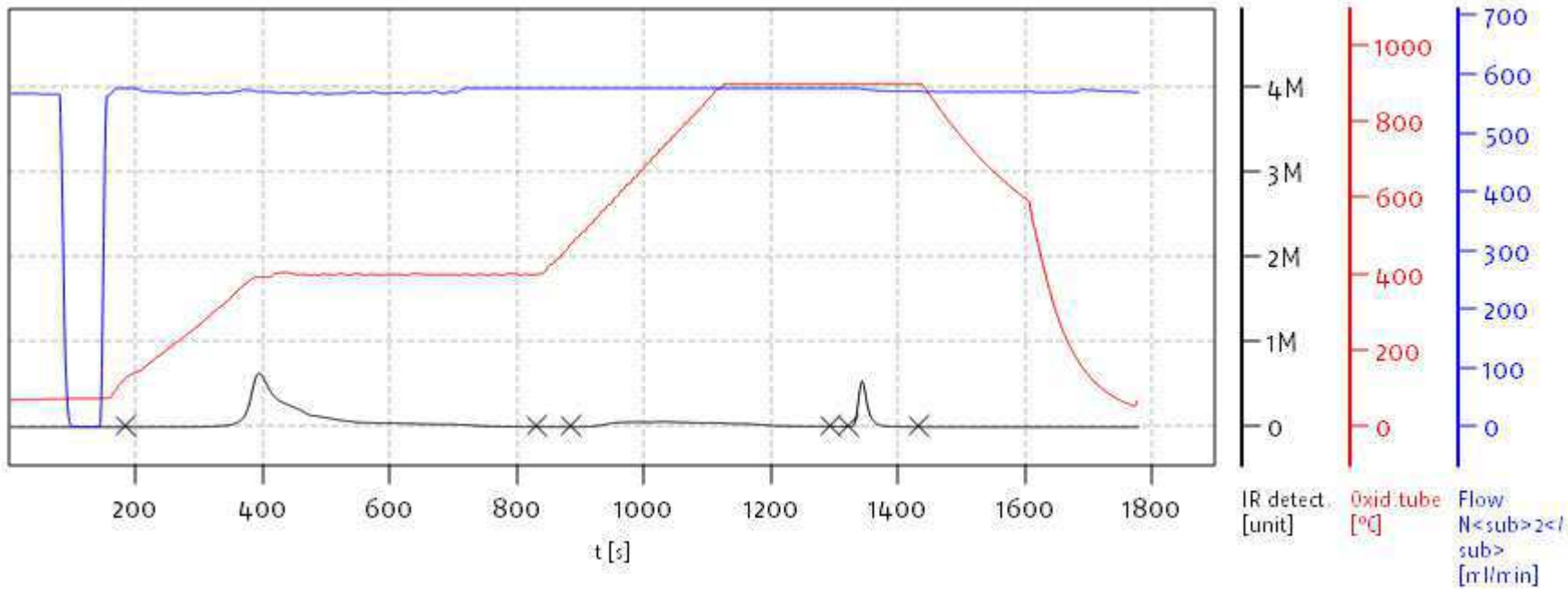
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
37	37	23C0774-13	331.20		CARBON	5/20/2023 5:40 AM	bl	1.062	1 947 746	1.303	0.155	353 103	530 683	0.907	0.240	0.9871	1.0000



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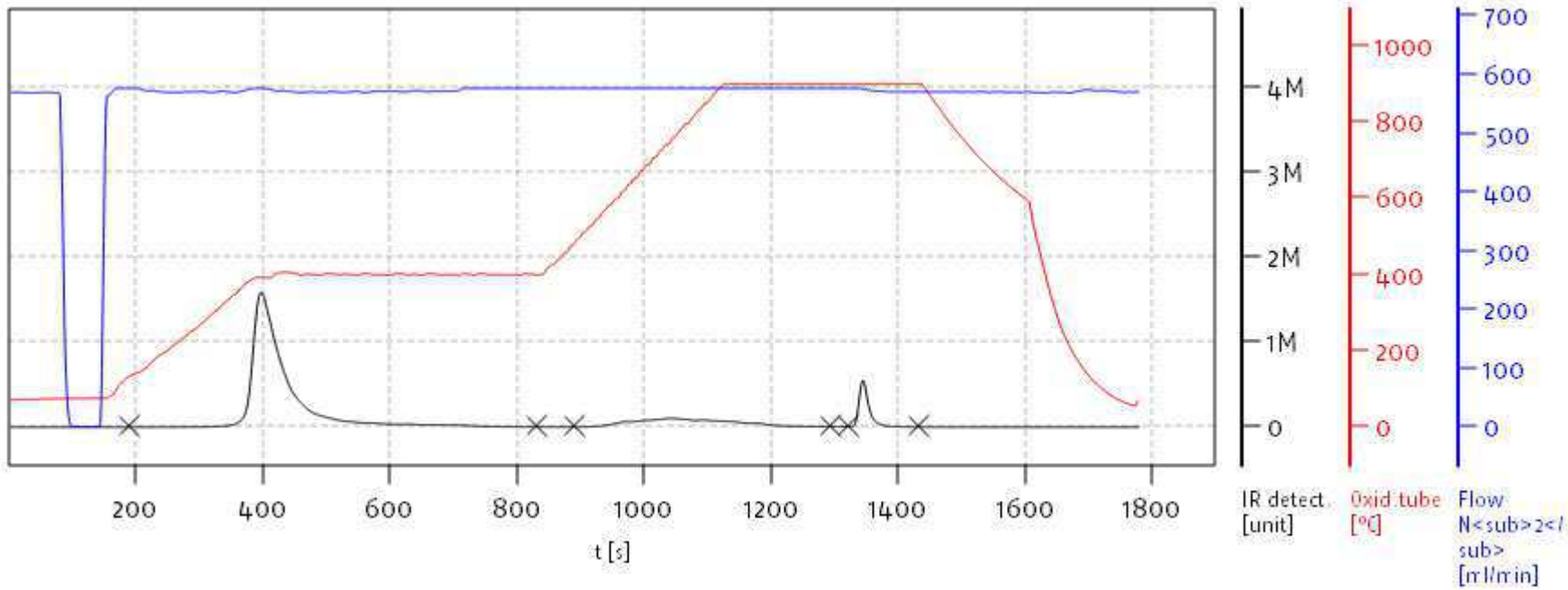
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
38	38	23C0774-14	468.50		CARBON	5/20/2023 6:10 AM	bl	1.287	3 532 112	1.519	0.117	373 470	714 402	1.171	0.232	0.9871	1.0000



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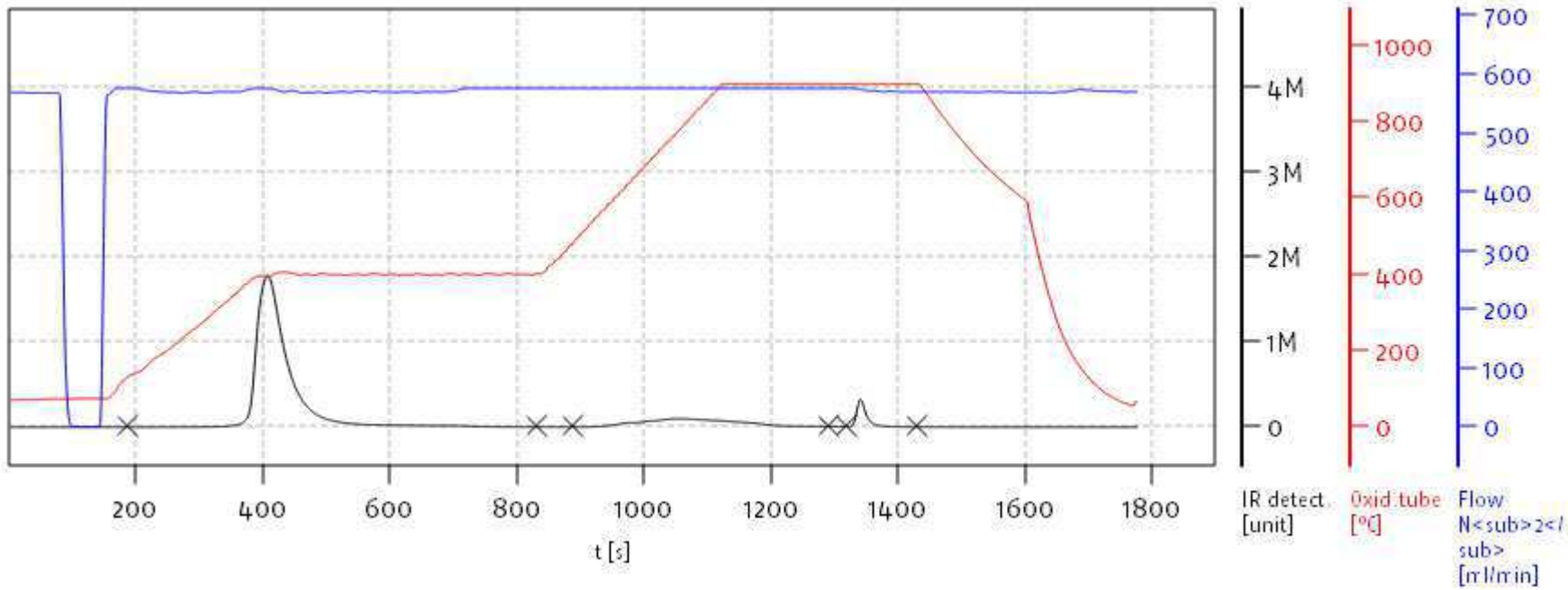
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
39	39	23C0774-15	469.30		CARBON	5/20/2023 6:40 AM	bl	1.322	3 794 278	1.543	0.066	223 394	682 996	1.256	0.221	0.9871	1.0000



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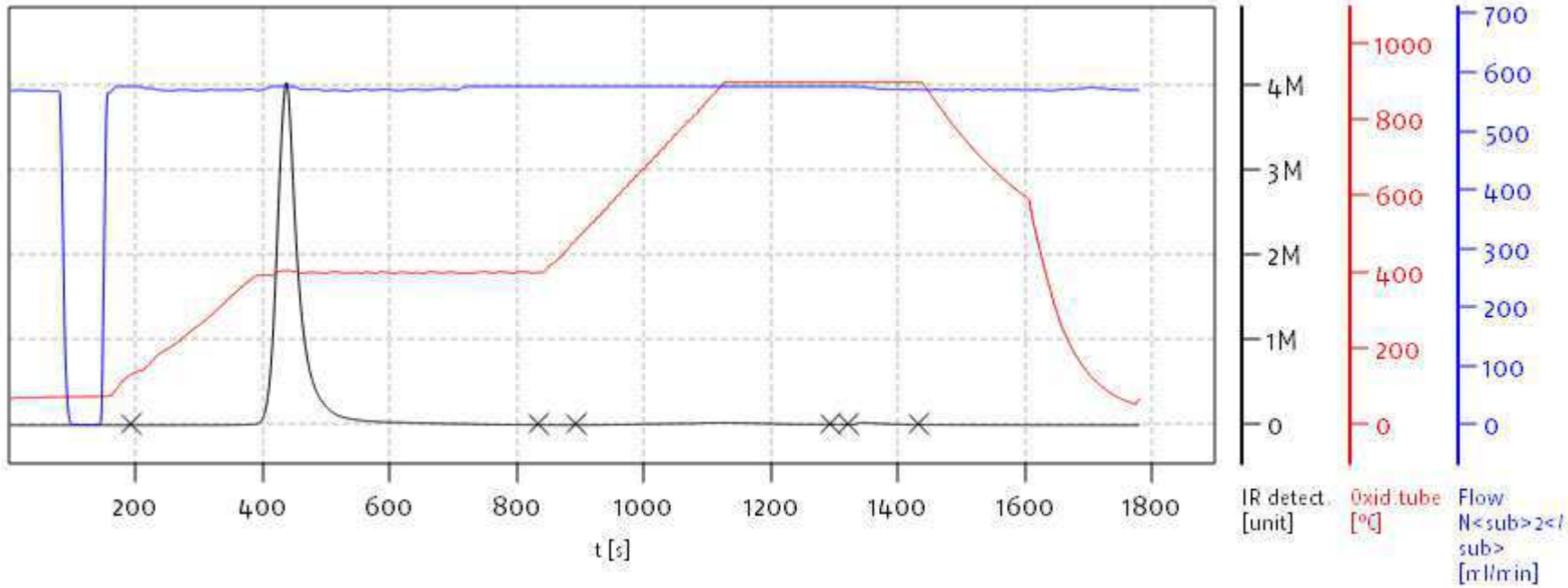
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
40	40	SLE0228-CCV3	22.20		CARBON	5/20/2023 7:10 AM	bl	43.429	6 156 276	44.800	0.216	59 032	220 829	43.213	1.372	0.9871	1.0000



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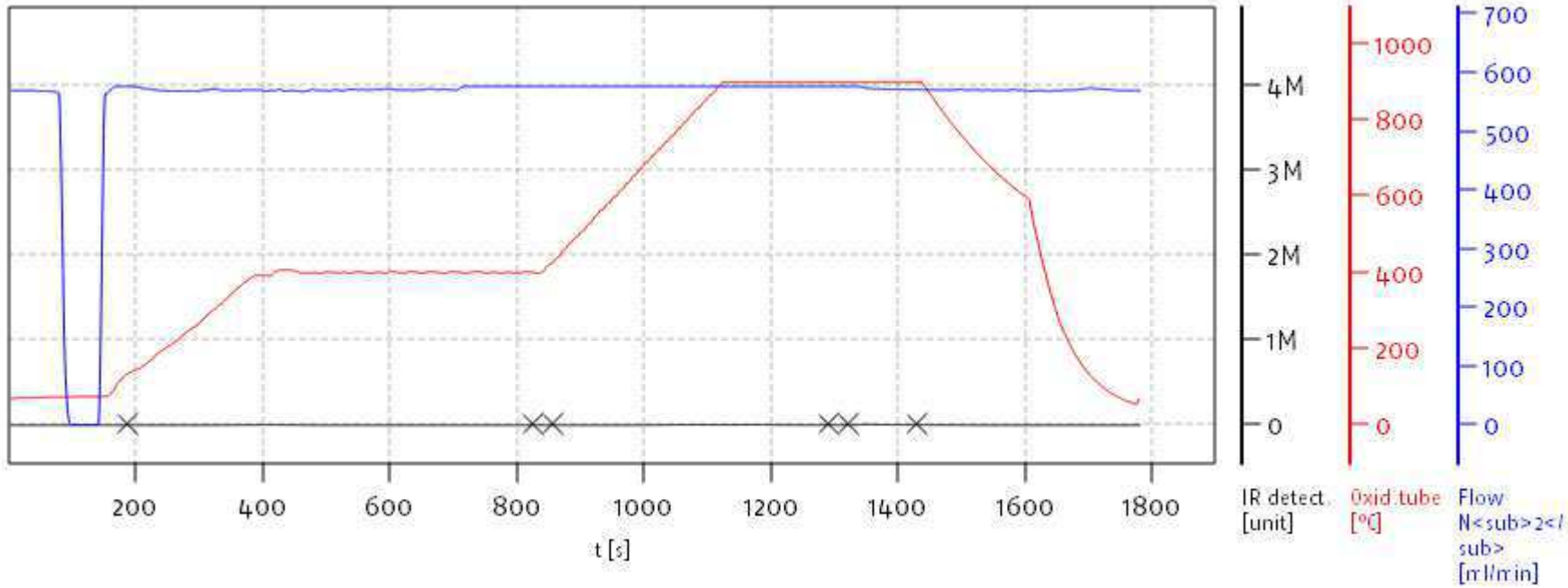
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
41	41	SLE0228-CCB3	502.60		CARBON	5/20/2023 7:40 AM	bl,C1u	0.000	16 046	0.004	0.000	22 070	41 023	0.000	0.004	0.9871	1.0000



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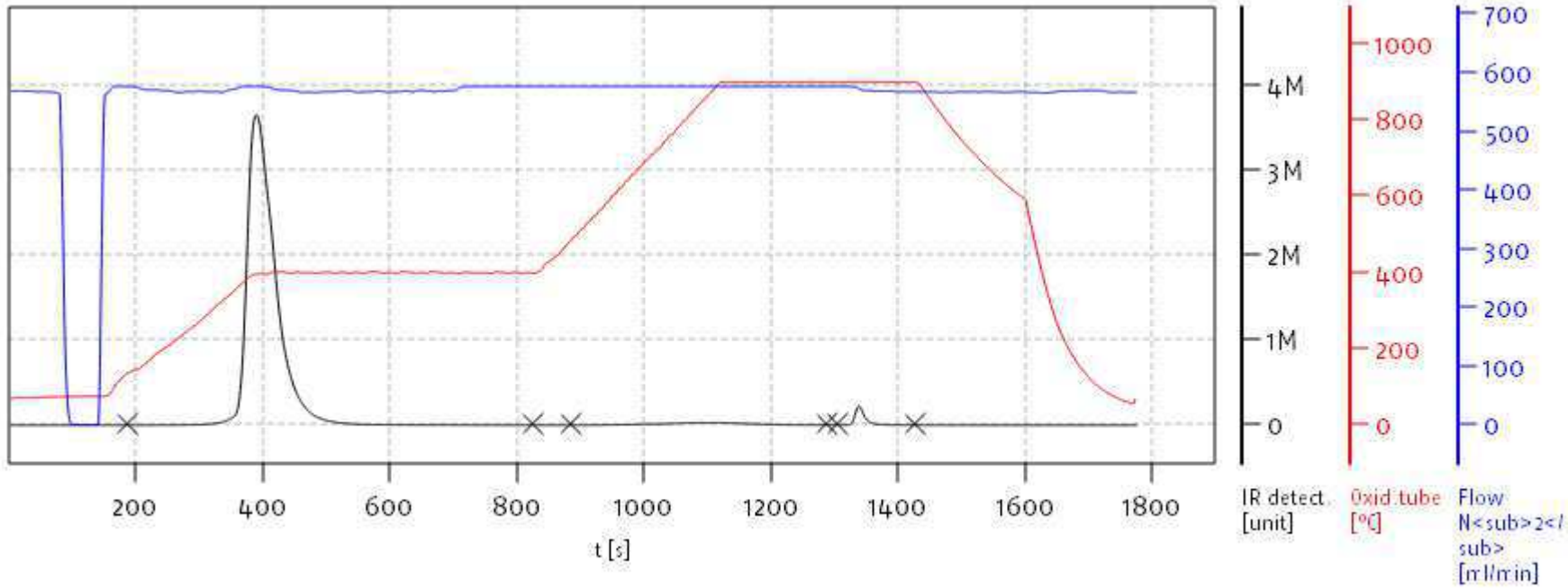
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
42	42	23D0303-01	523.00		CARBON	5/20/2023 8:10 AM	bl	2.133	7 030 918	2.180	0.037	152 020	183 966	2.096	0.047	0.9871	1.0000



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Soli TOC Cube, Carbon
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Analyst: CDE

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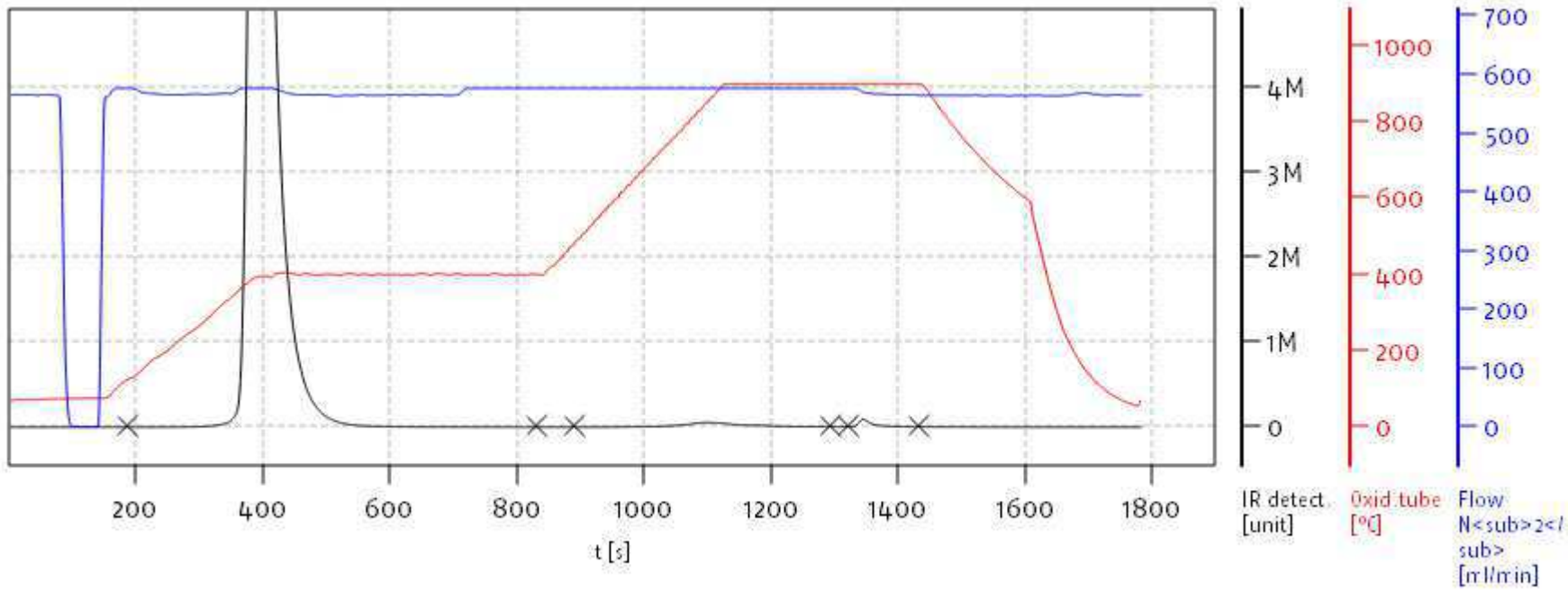
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
43	43	23D0303-02	566.40		CARBON	5/20/2023 8:40 AM	bl,C1o	4.857	17 533 240	4.916	0.018	93 939	239 150	4.839	0.059	0.9871	1.0000



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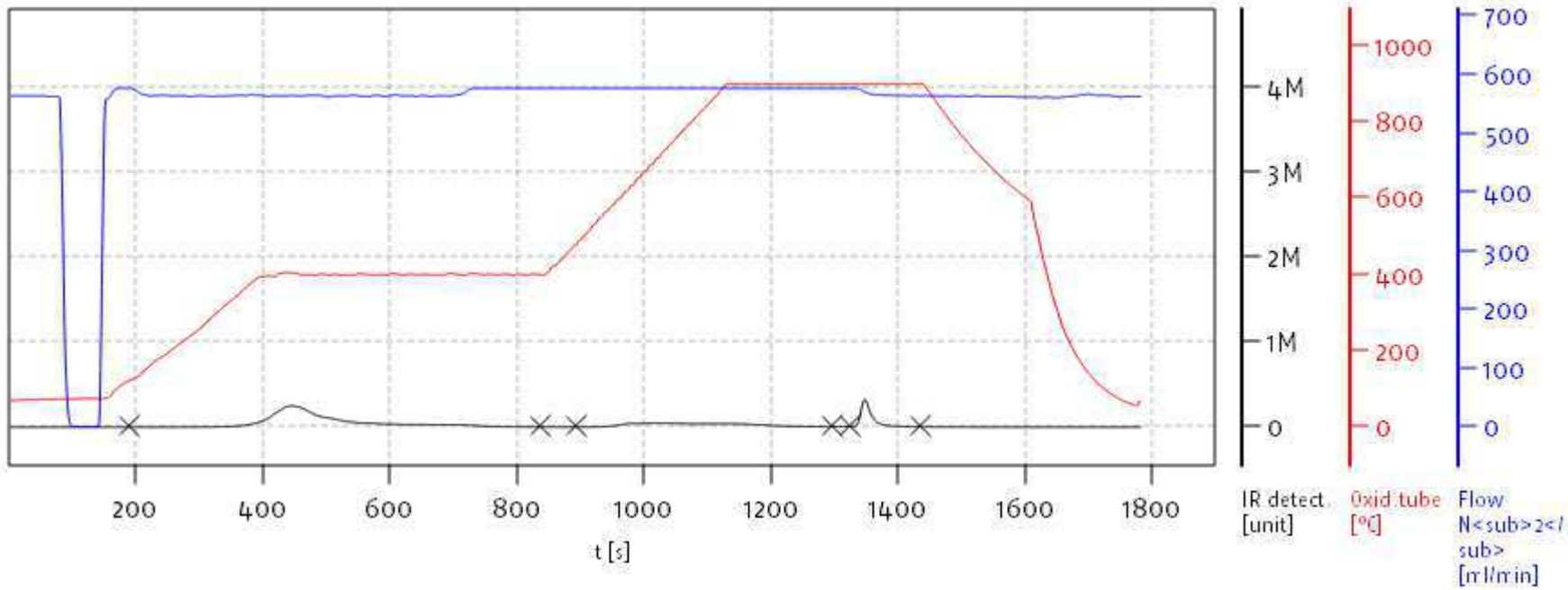
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
44	44	23D0303-03	747.30		CARBON	5/20/2023 9:10 AM	bl	0.276	1 125 843	0.354	0.046	247 019	395 992	0.230	0.078	0.9871	1.0000



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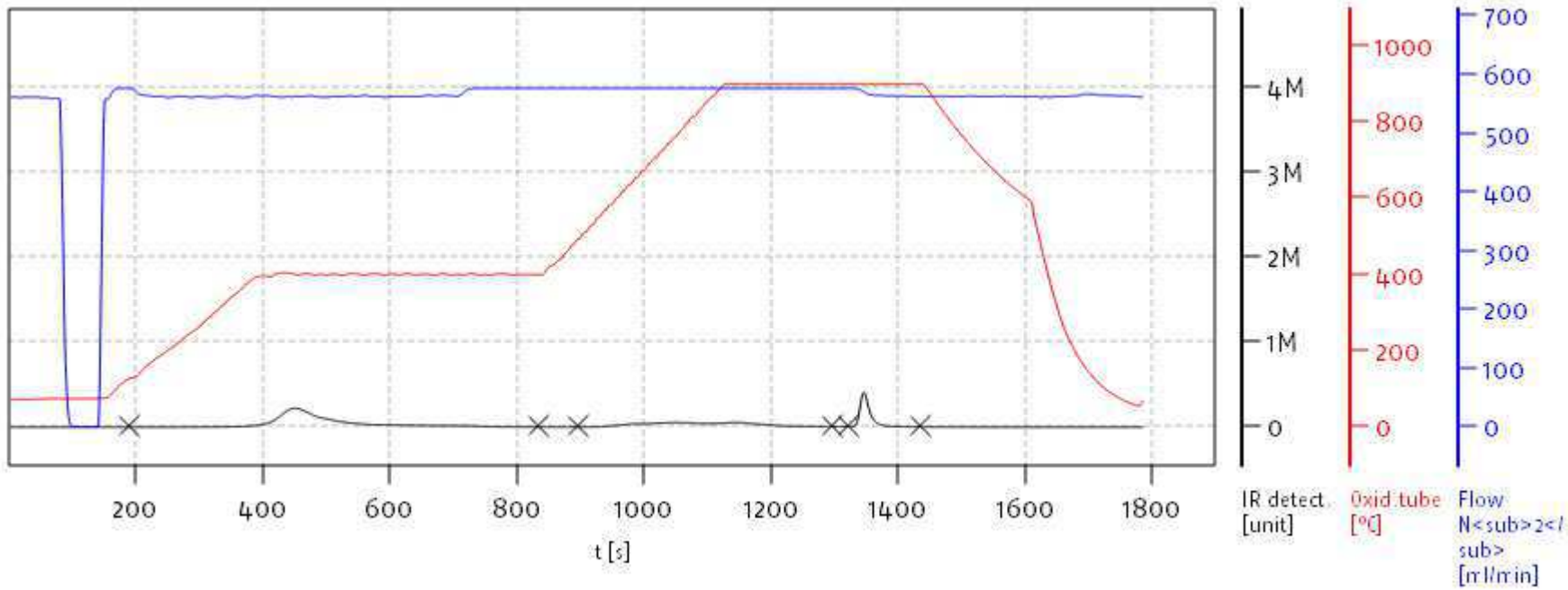
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
45	45	23D0571-02	700.40		CARBON	5/20/2023 9:41 AM	bl	0.240	843 077	0.335	0.058	285 935	446 409	0.182	0.095	0.9871	1.0000



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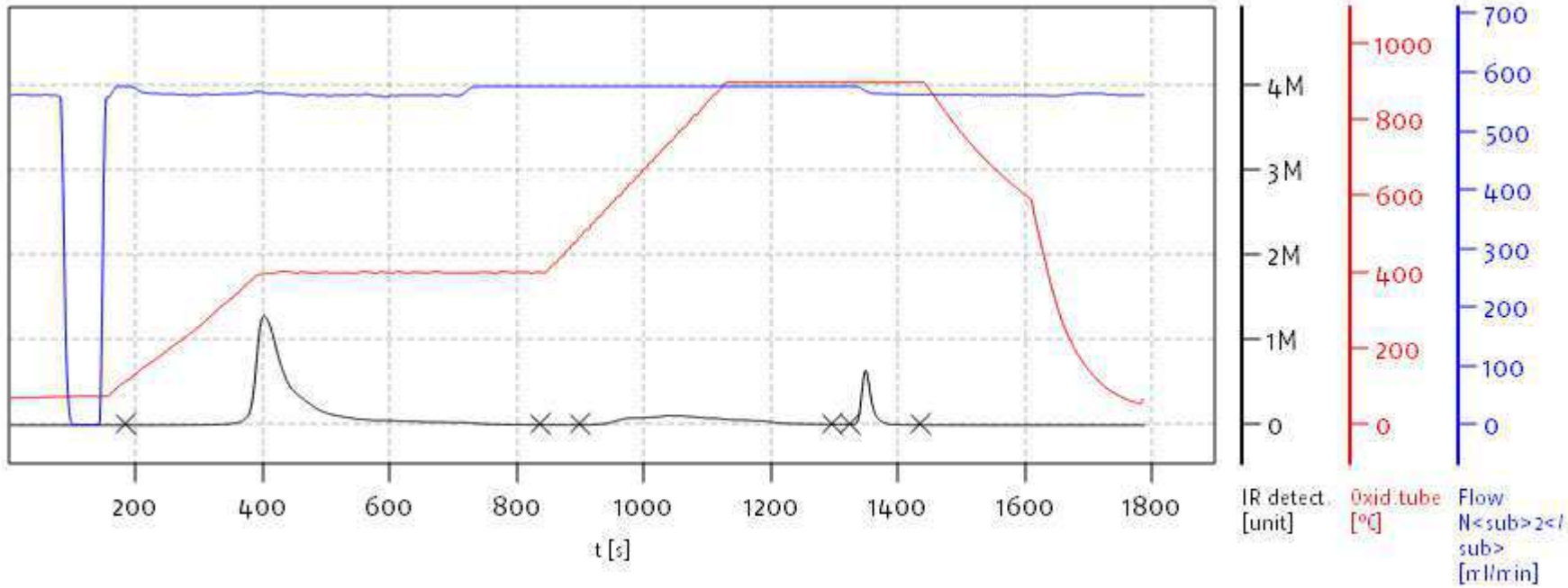
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
46	46	23C0752-01	463.40		CARBON	5/20/2023 10:11 AM	bl	1.210	3 195 012	1.484	0.140	438 430	829 828	1.070	0.274	0.9871	1.0000



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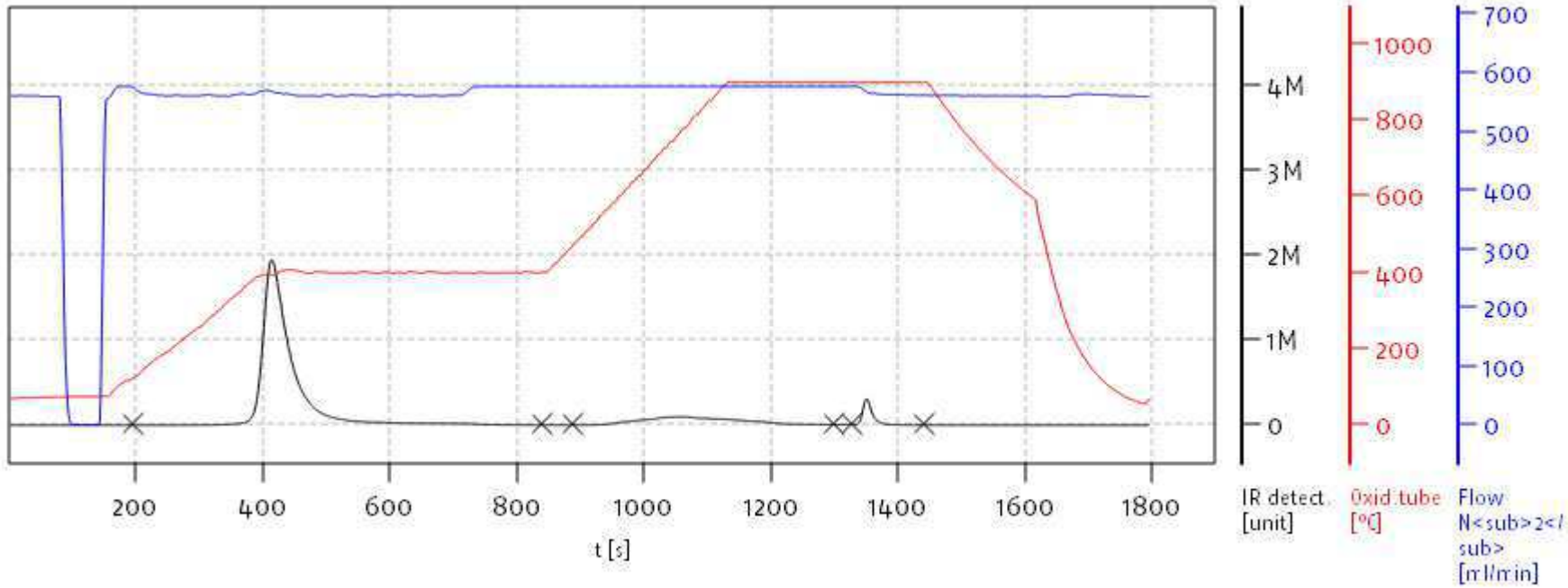
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
47	47	BLE0415-DUP1	488.50		CARBON	5/20/2023 10:41 AM	bl	1.249	3 744 701	1.458	0.058	207 578	672 932	1.191	0.209	0.9871	1.0000



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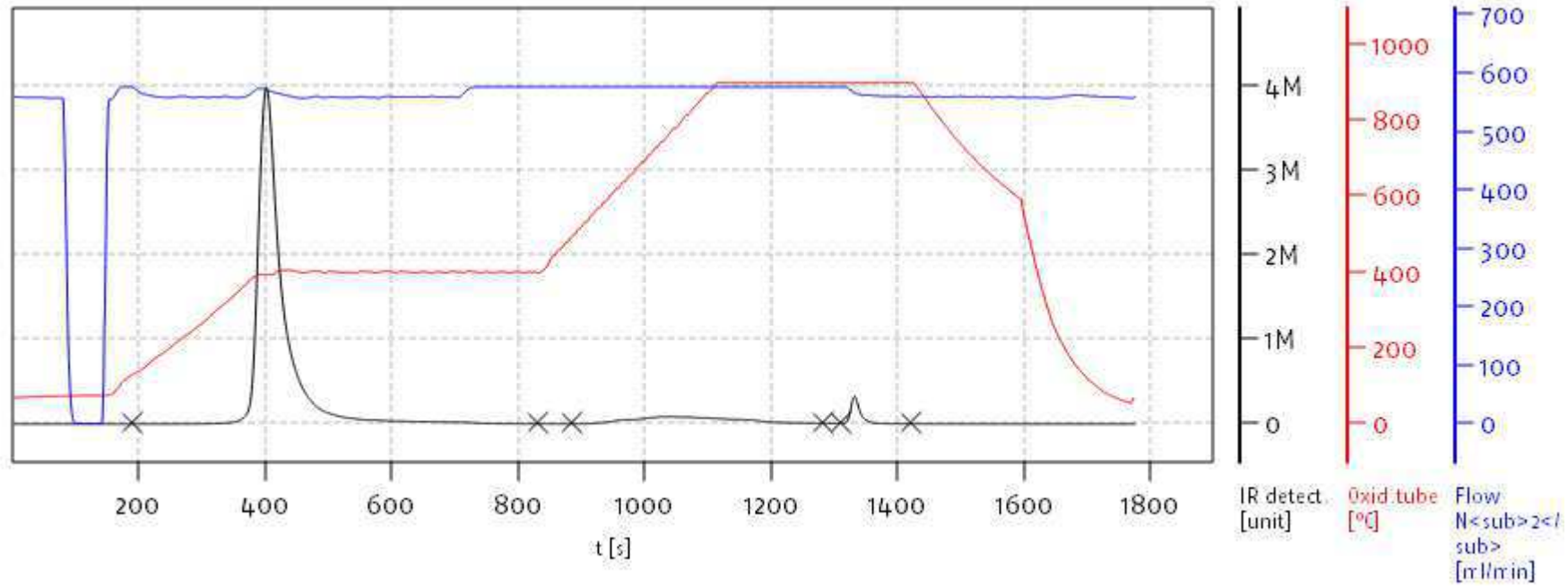
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
48	48	BLE0415-MS1	459.30	0.0084	CARBON	5/20/2023 11:11 AM	bl	2.293	6 565 977	2.504	0.064	214 787	641 129	2.228	0.211	0.9871	1.0000



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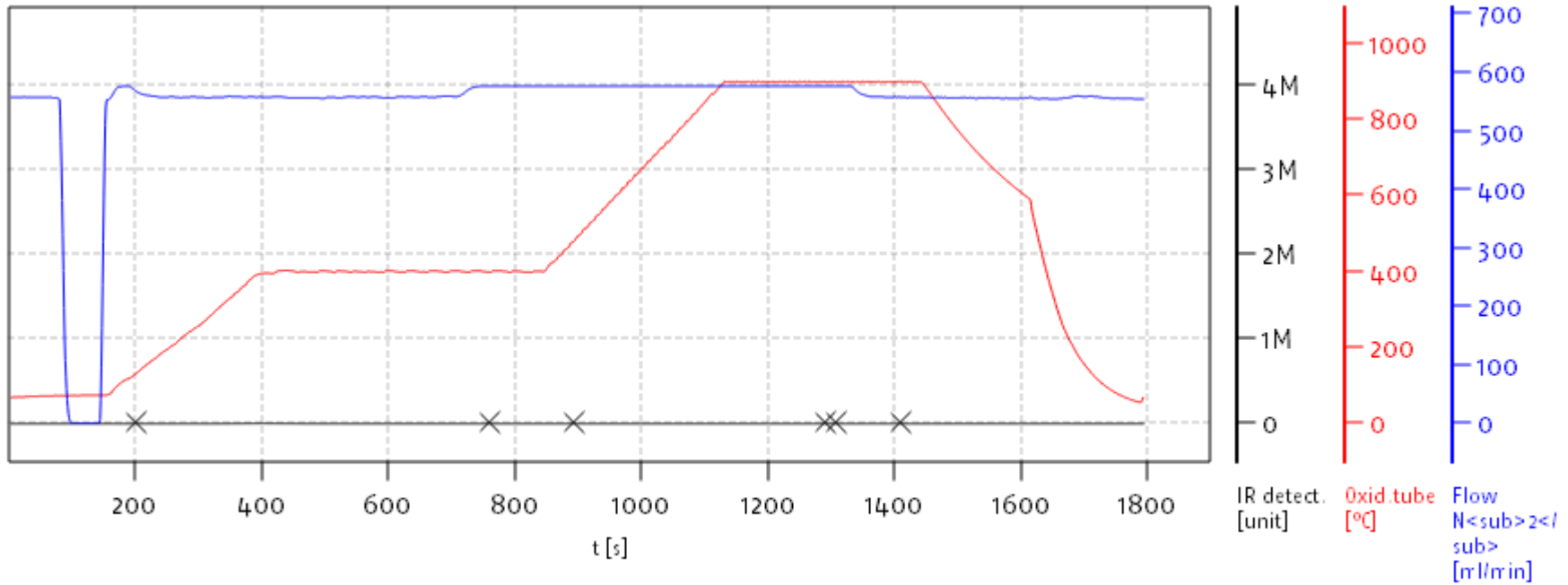
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
49	49	BLANK	1.00		CARBON	5/ 20/2023 11:41 AM	bl	0.000	10 793	0.000	0.000	345	542	0.000	0.000	0.9871	1.0000



Name:

Access: soliTOC superuser

Date: Mon May 22 10:19:17 2023

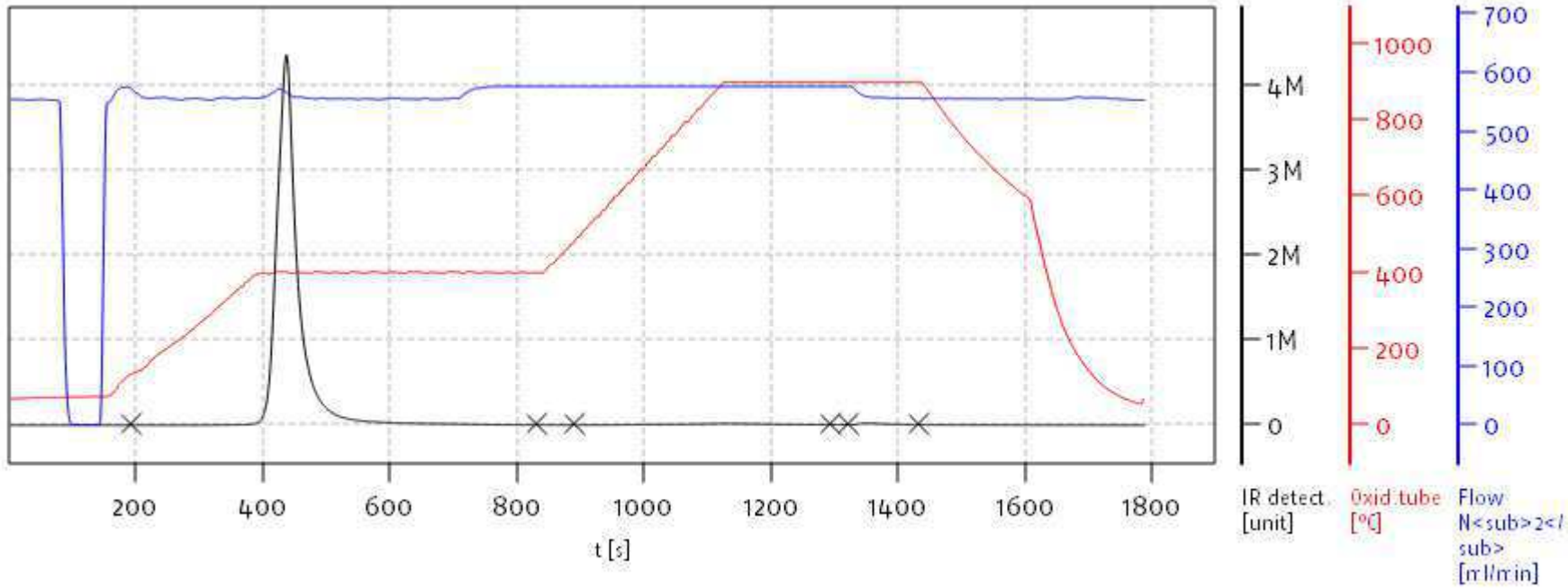
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 051923 CDE from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
50	50	Dfactor	21.90		CARBON	5/20/2023 12:11 PM	bl	44.602	6 288 237	45.404	0.157	50 473	139 578	44.446	0.802	0.9804	1.0000



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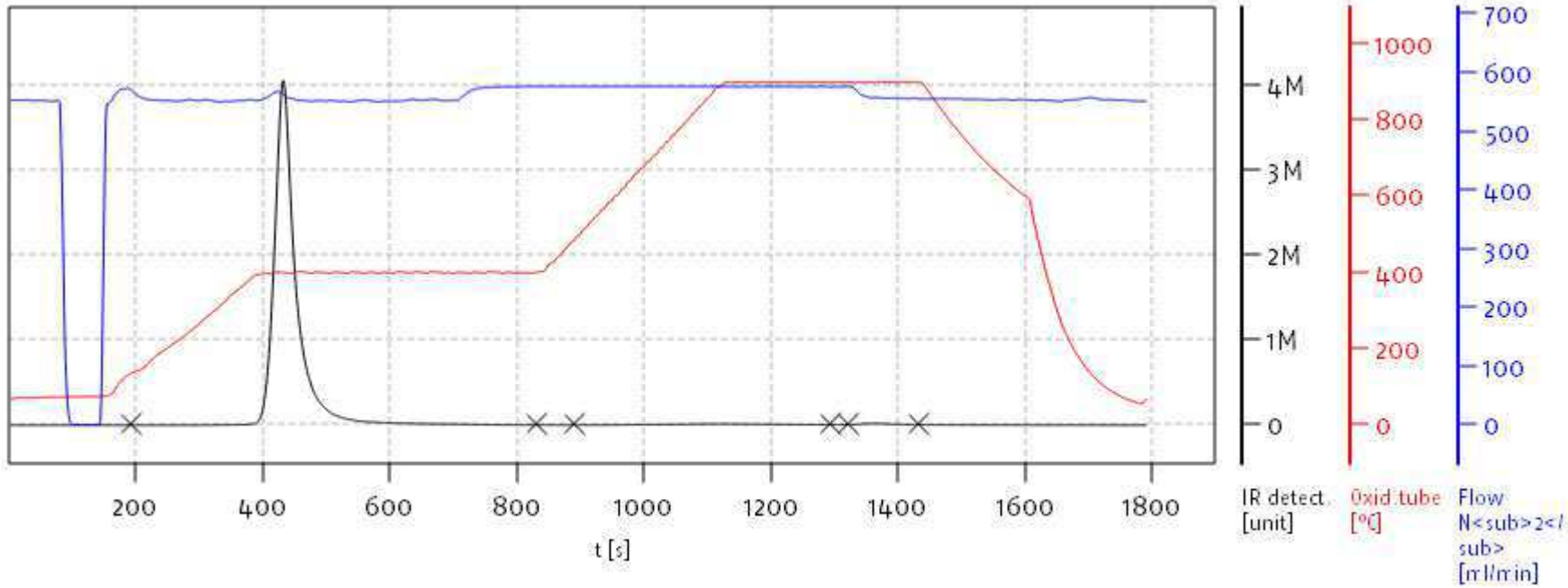
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
51	51	Dfactor	20.90		CARBON	5/20/2023 12:42 PM	bl	44.589	5 988 003	45.259	0.143	47 731	117 180	44.446	0.670	0.9828	1.0000



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Serial No: 0300.181017
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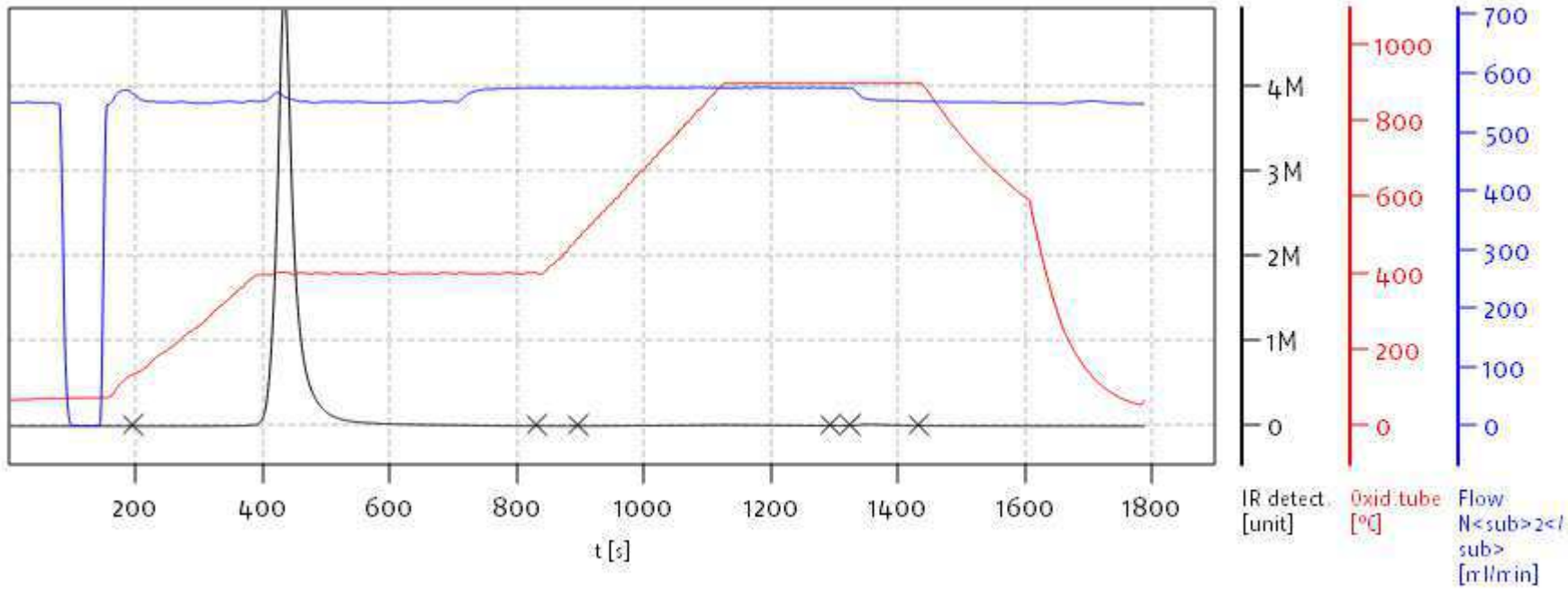
EXCELLENCE IN ELEMENTS

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
52	52	SLE0228-CCV4	21.80		CARBON	5/20/2023 1:12 PM	bl	44.838	6 289 062	45.458	0.128	46 498	114 122	44.709	0.620	0.9816	1.0000



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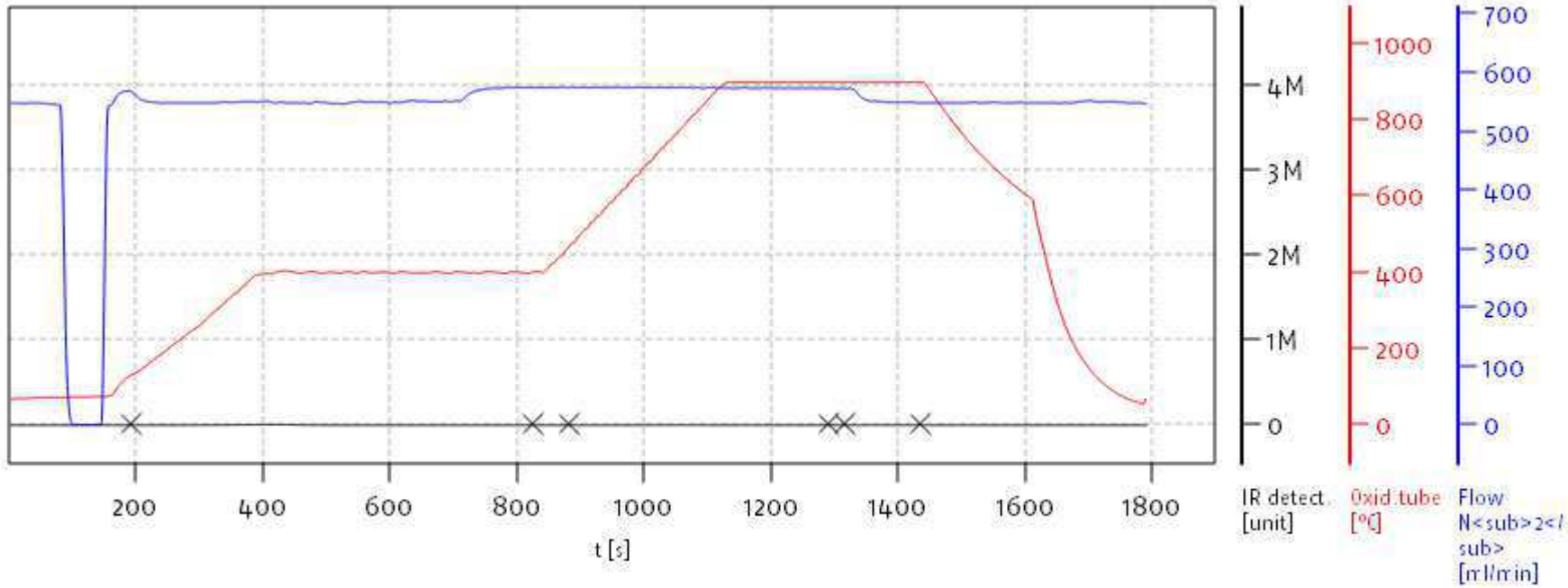
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
53	53	SLE0228-CCB4	503.20		CARBON	5/20/2023 1:42 PM	bl,C3u,C2u	0.000	28 783	0.000	0.000	3 981	6 788	0.000	0.000	0.9816	1.0000



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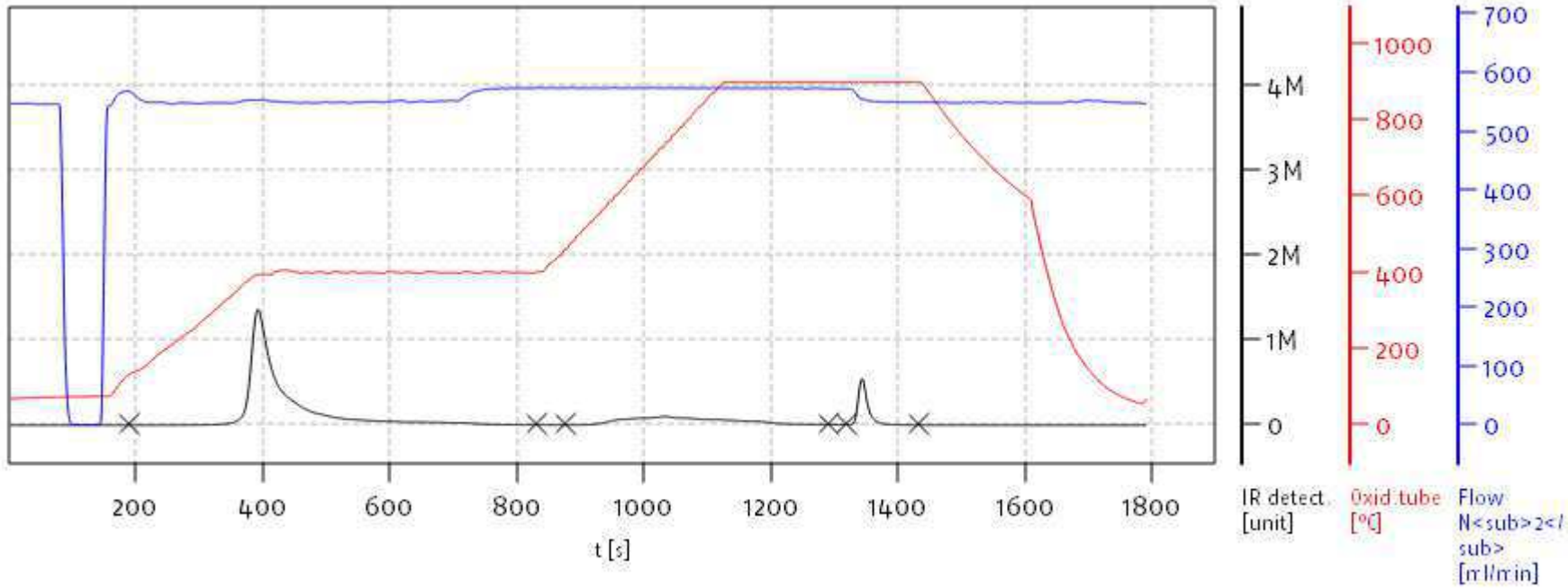
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
54	54	23C0752-02	433.90		CARBON	5/20/2023 2:12 PM	bl	1.128	2 832 921	1.383	0.121	360 859	728 088	1.006	0.256	0.9816	1.0000



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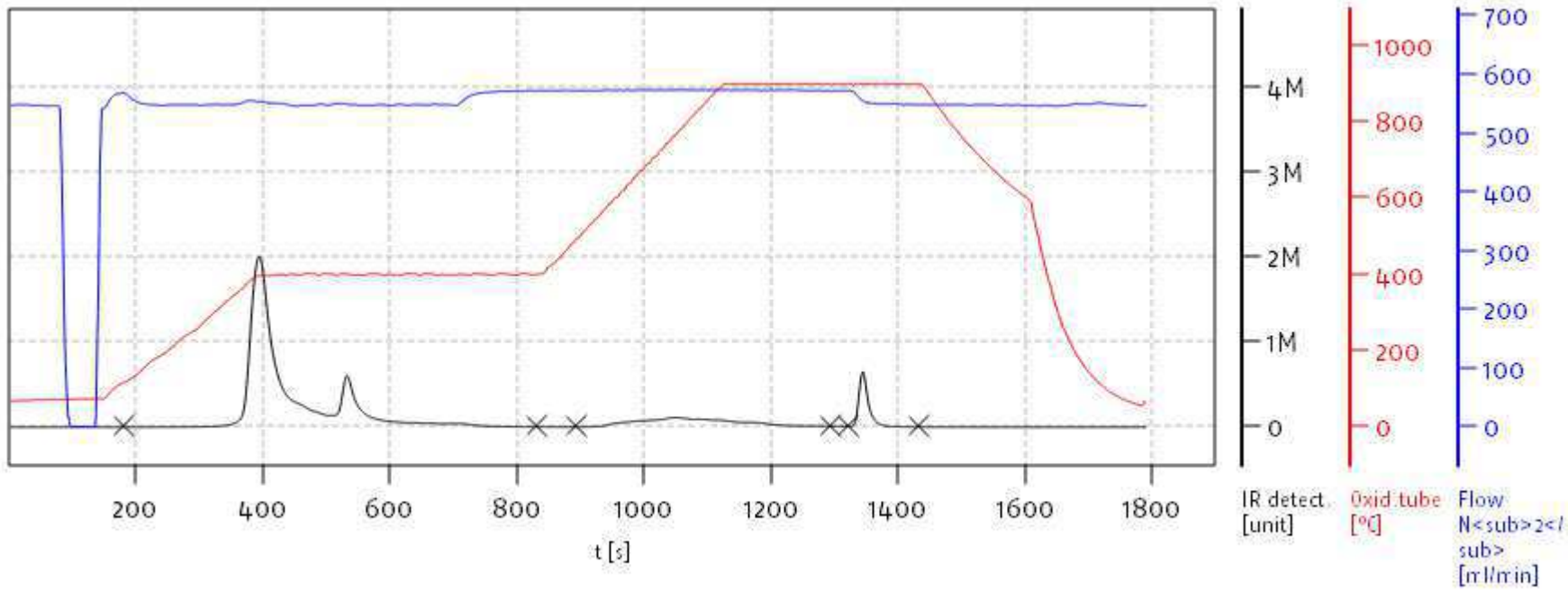
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
55	55	23C0752-03	472.60		CARBON	5/20/2023 2:43 PM	bl	1.597	4 466 865	1.849	0.135	430 666	779 431	1.462	0.252	0.9816	1.0000



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Soli TOC Cube, Carbon
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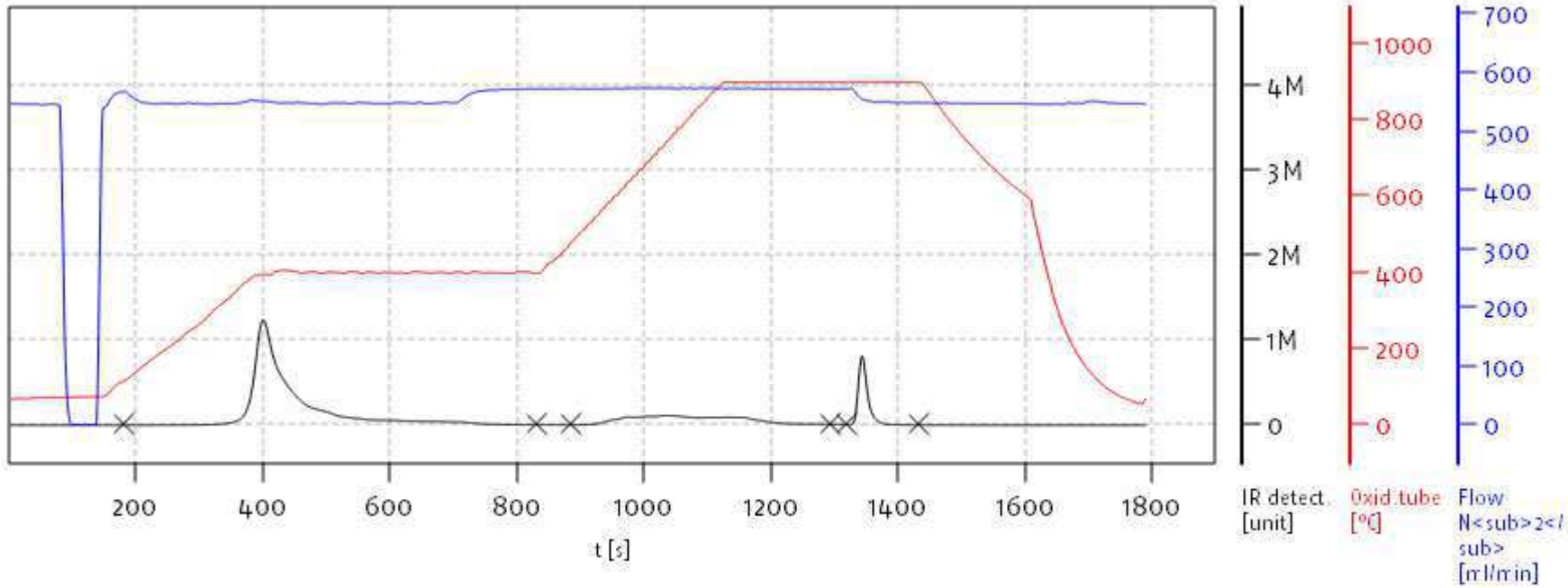
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
56	56	23C0752-04	507.10		CARBON	5/20/2023 3:13 PM	bl	1.092	3 078 839	1.375	0.156	526 115	934 462	0.936	0.283	0.9816	1.0000



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Balance: BAL3
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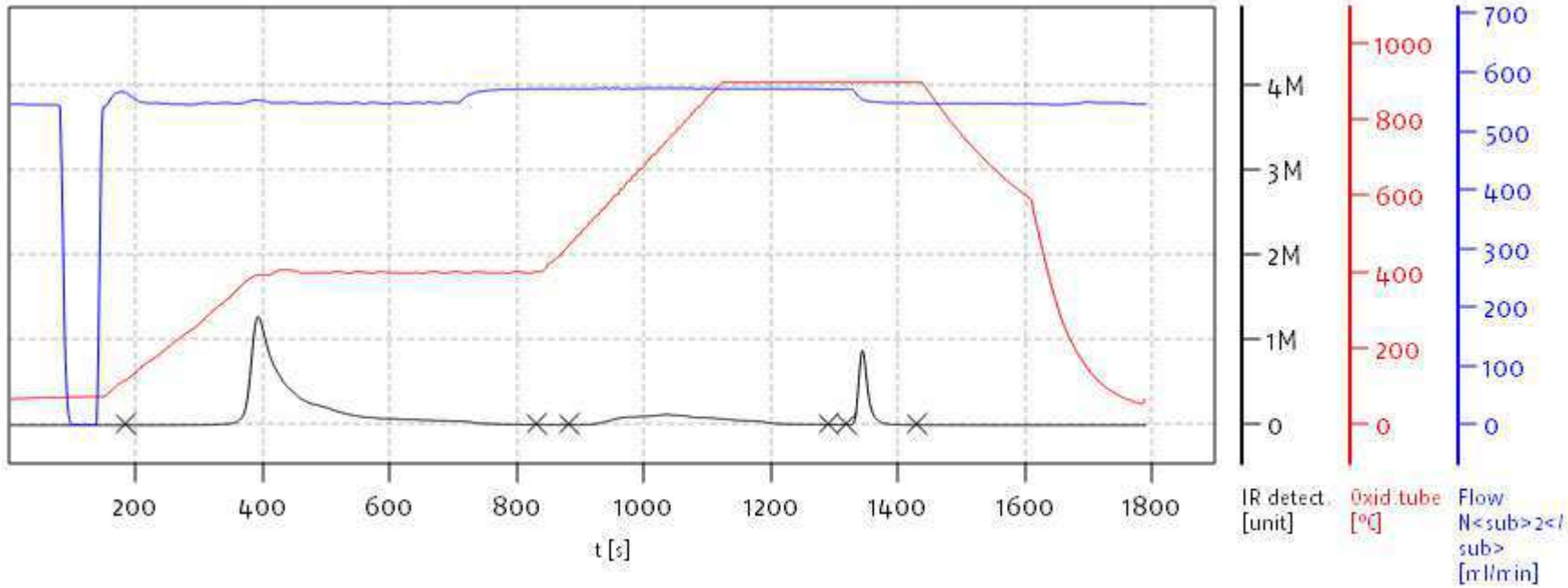
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
57	57	23C0752-05	514.10		CARBON	5/20/2023 3:43 PM	bl	1.215	3 485 356	1.476	0.168	572 560	876 242	1.047	0.261	0.9816	1.0000



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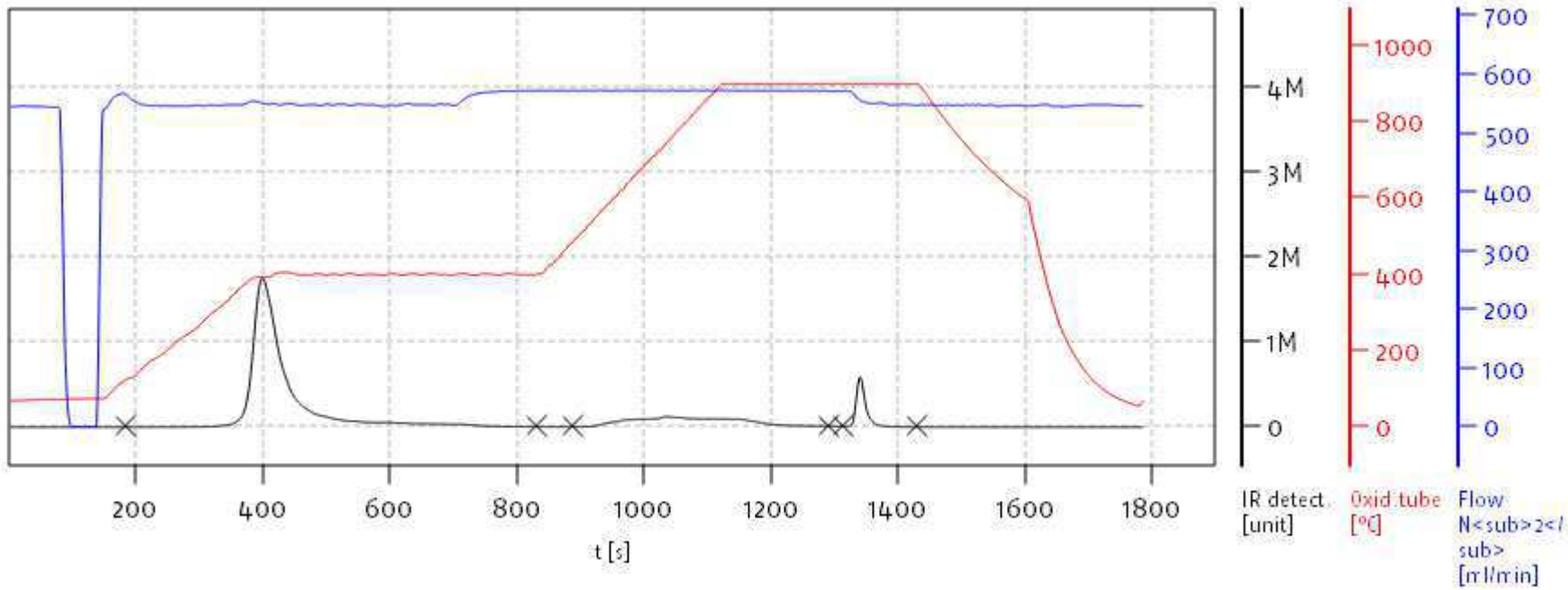
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
58	58	23C0752-06	535.90		CARBON	5/20/2023 4:13 PM	bl	1.224	3 876 493	1.496	0.106	386 361	949 288	1.118	0.272	0.9816	1.0000



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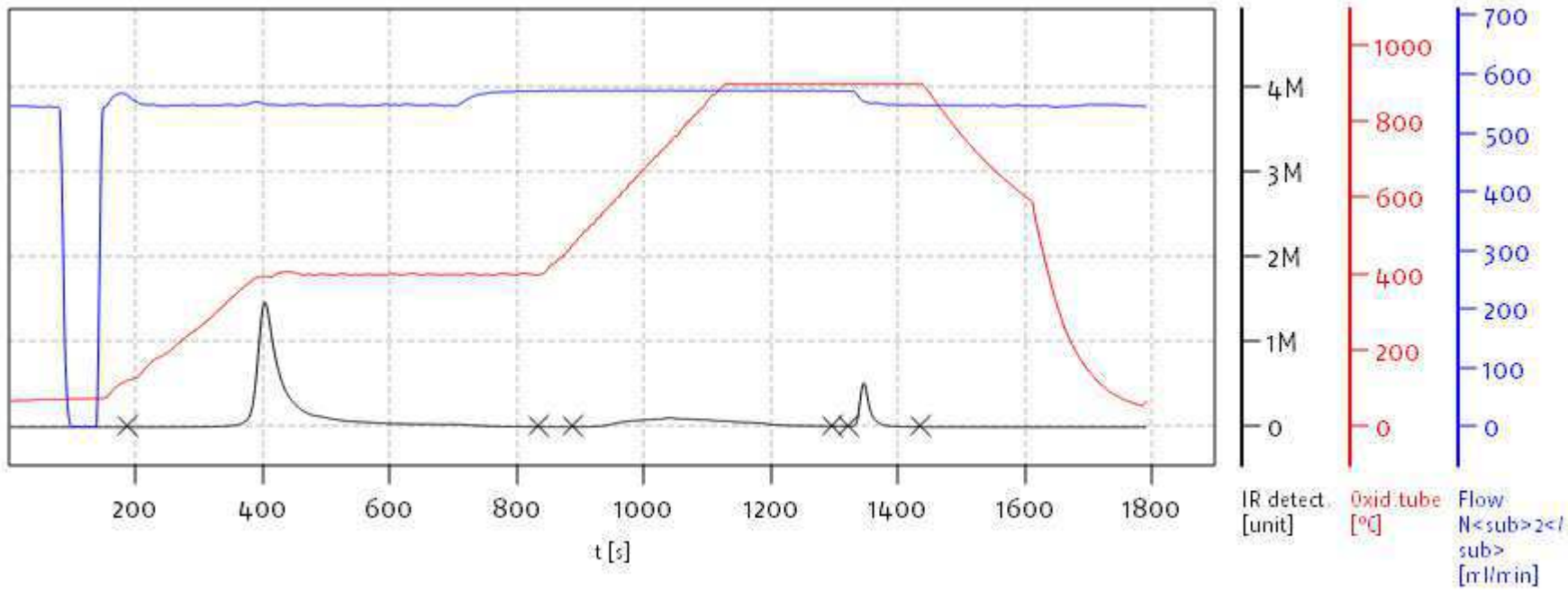
Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
59	59	23C0752-07	433.20		CARBON	5/20/2023 4:43 PM	bl	1.114	2 792 647	1.390	0.120	357 902	782 517	0.993	0.276	0.9816	1.0000



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Balance: BAL3
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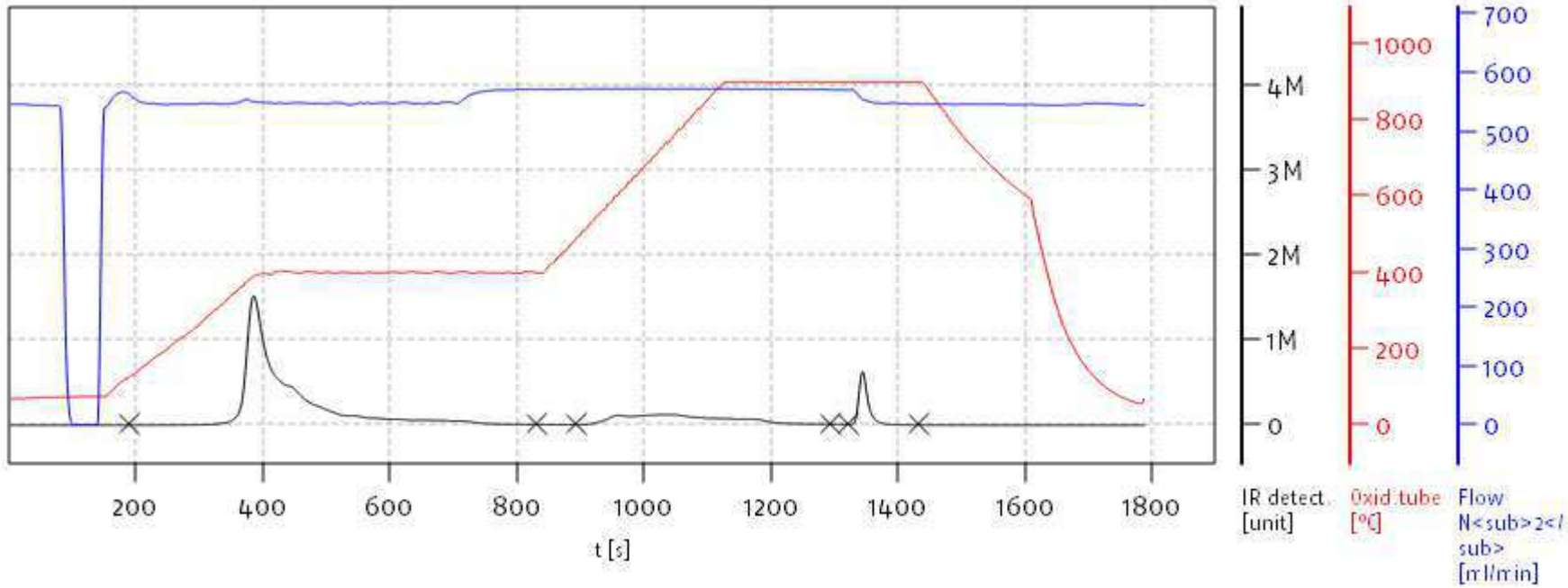
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
60	60	23D0063-01	554.10		CARBON	5/20/2023 5:14 PM	bl	1.181	3 848 200	1.461	0.107	404 287	1 008 584	1.073	0.280	0.9816	1.0000



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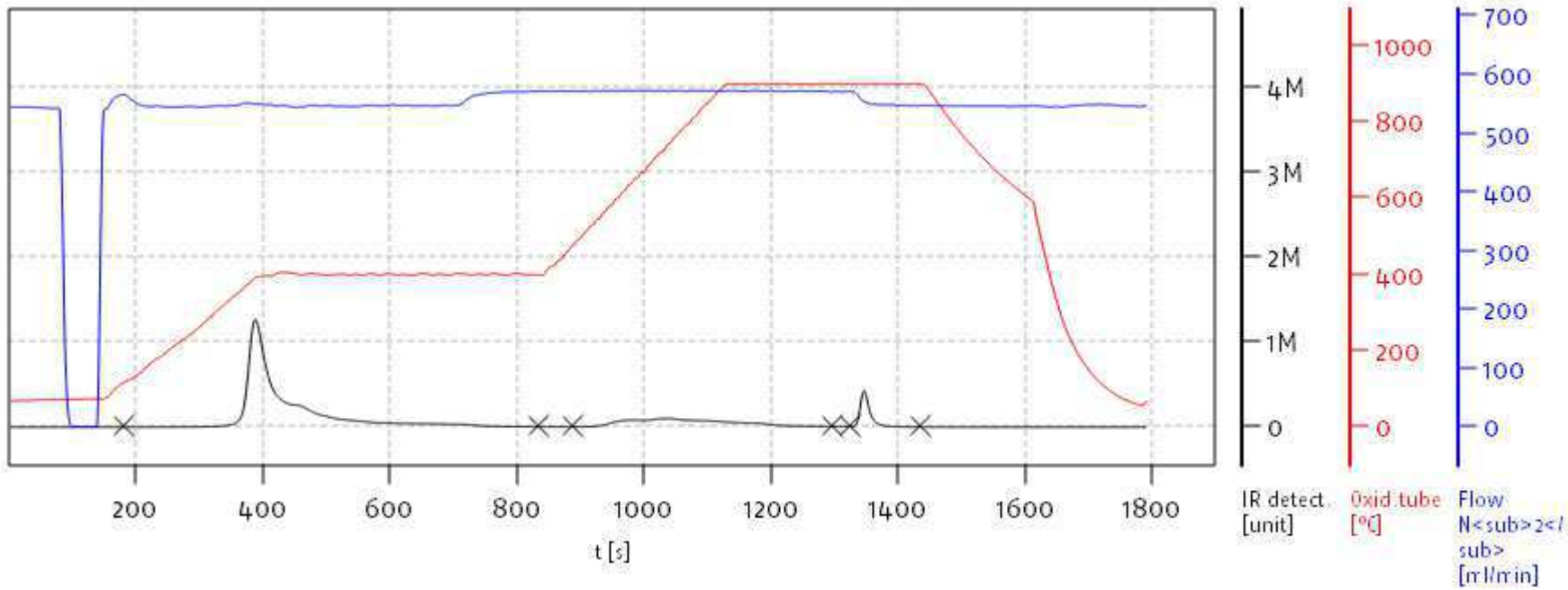
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
61	61	23D0063-02	428.70		CARBON	5/20/2023 5:44 PM	bl	1.093	2 777 095	1.361	0.095	284 885	753 614	0.998	0.268	0.9816	1.0000



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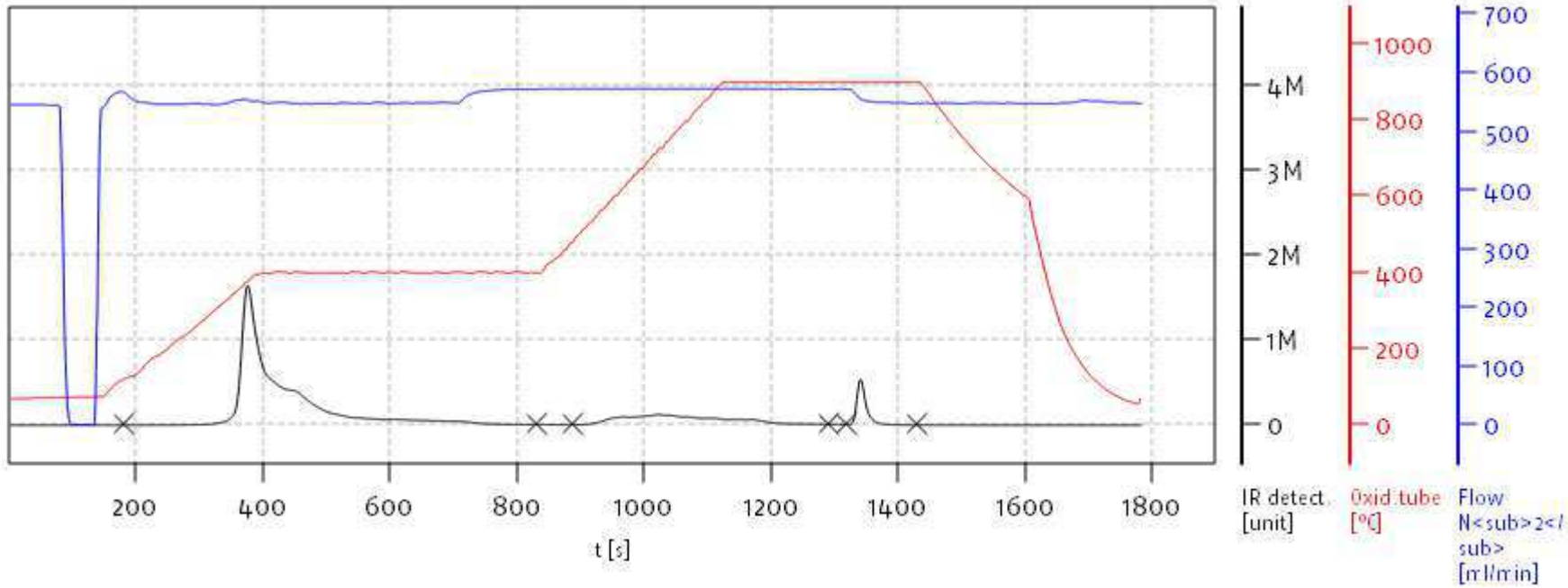
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
62	62	23D0063-03	511.70		CARBON	5/20/2023 6:14 PM	bl	1.263	3 854 600	1.541	0.099	349 429	922 971	1.164	0.277	0.9816	1.0000



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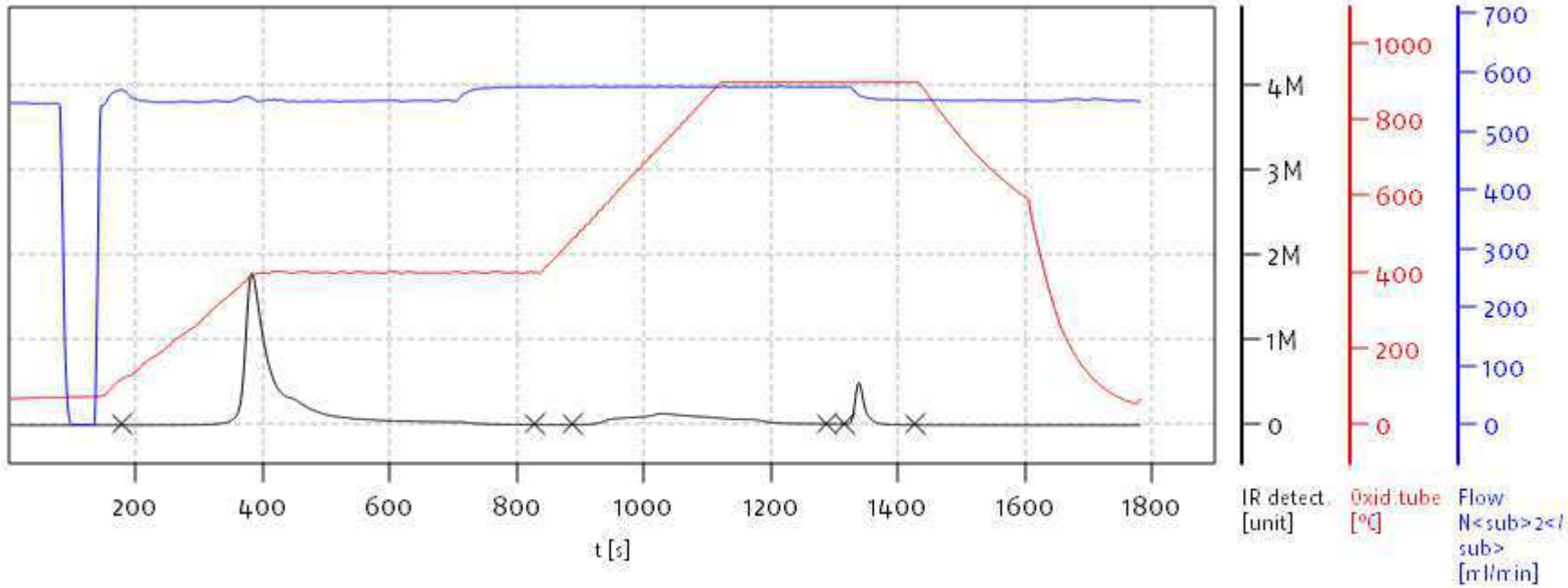
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
63	63	23D0063-04	536.90		CARBON	5/20/2023 6:44 PM	bl	1.135	3 624 692	1.415	0.092	341 876	975 219	1.043	0.280	0.9816	1.0000



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Balance: BAL3
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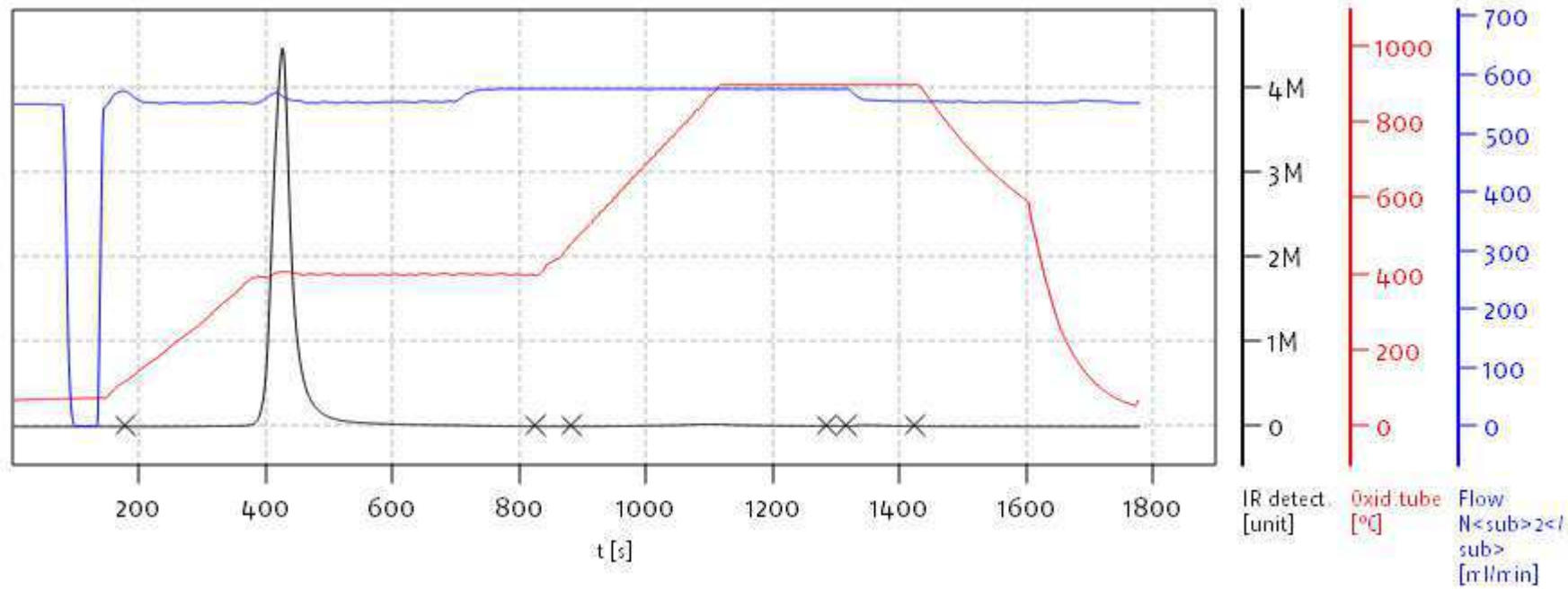
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
64	64	SLE0228-CCV5	21.60		CARBON	5/20/2023 7:14 PM	bl	44.817	6 235 777	45.968	0.077	39 399	185 616	44.739	1.151	0.9816	1.0000



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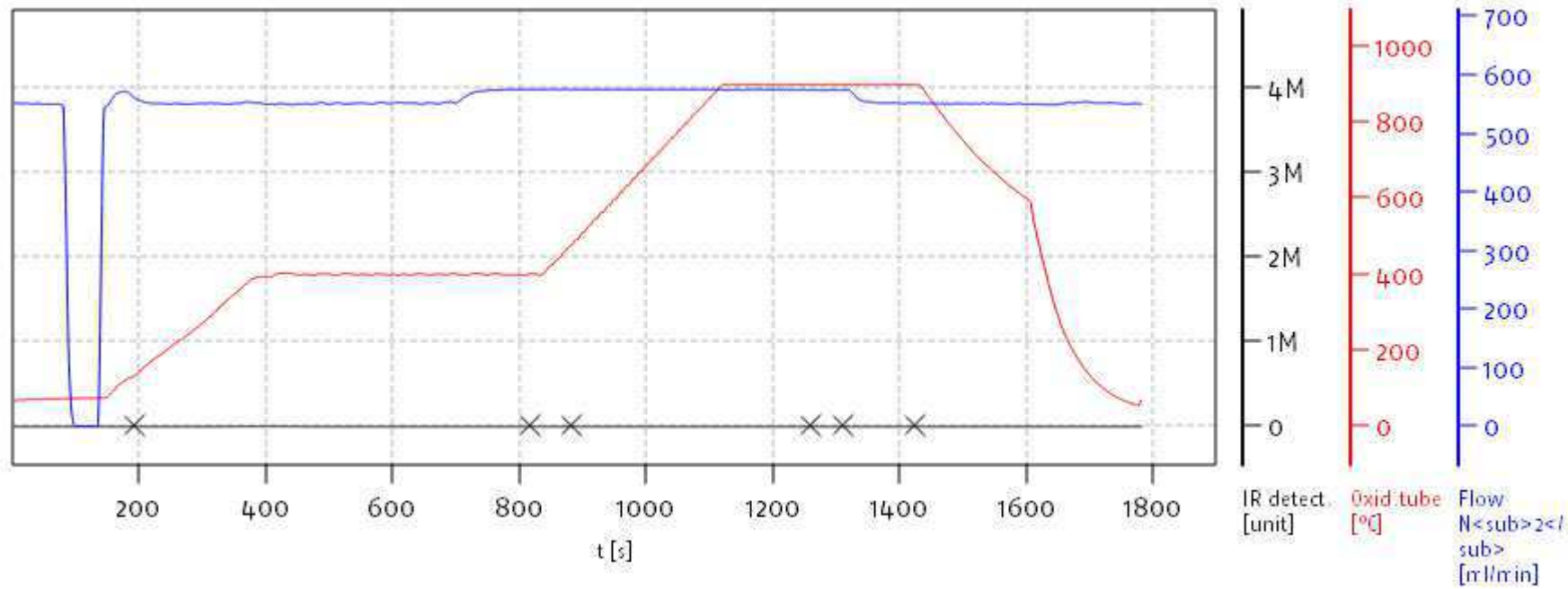
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
65	65	SLE0228-CCB5	522.50		CARBON	5/20/2023 7:44 PM	bl,C1u,C2u	0.000	10 880	0.000	0.000	1 138	0	0.000	0.000	0.9816	1.0000



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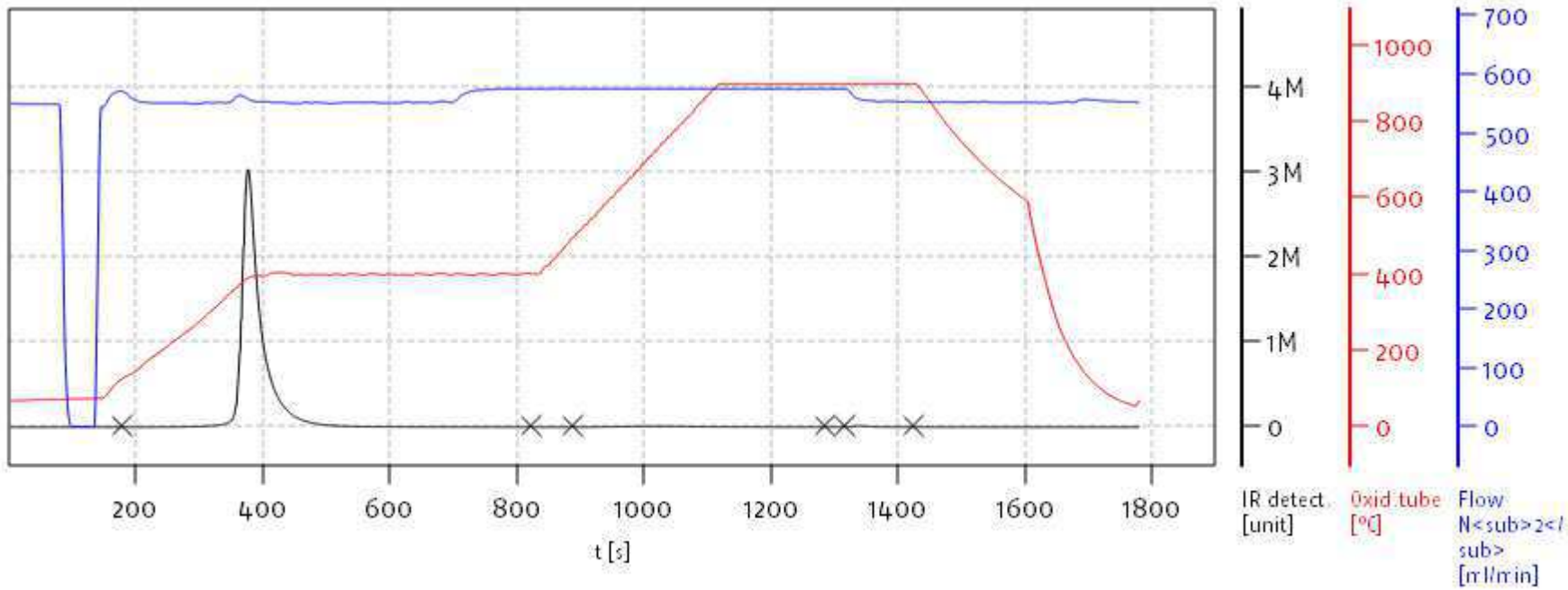
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
66	66	23D0095-01	367.80		CARBON	5/20/2023 8:14 PM	bl,C2u	1.641	3 905 709	1.657	0.000	17 182	64 970	1.641	0.016	0.9816	1.0000



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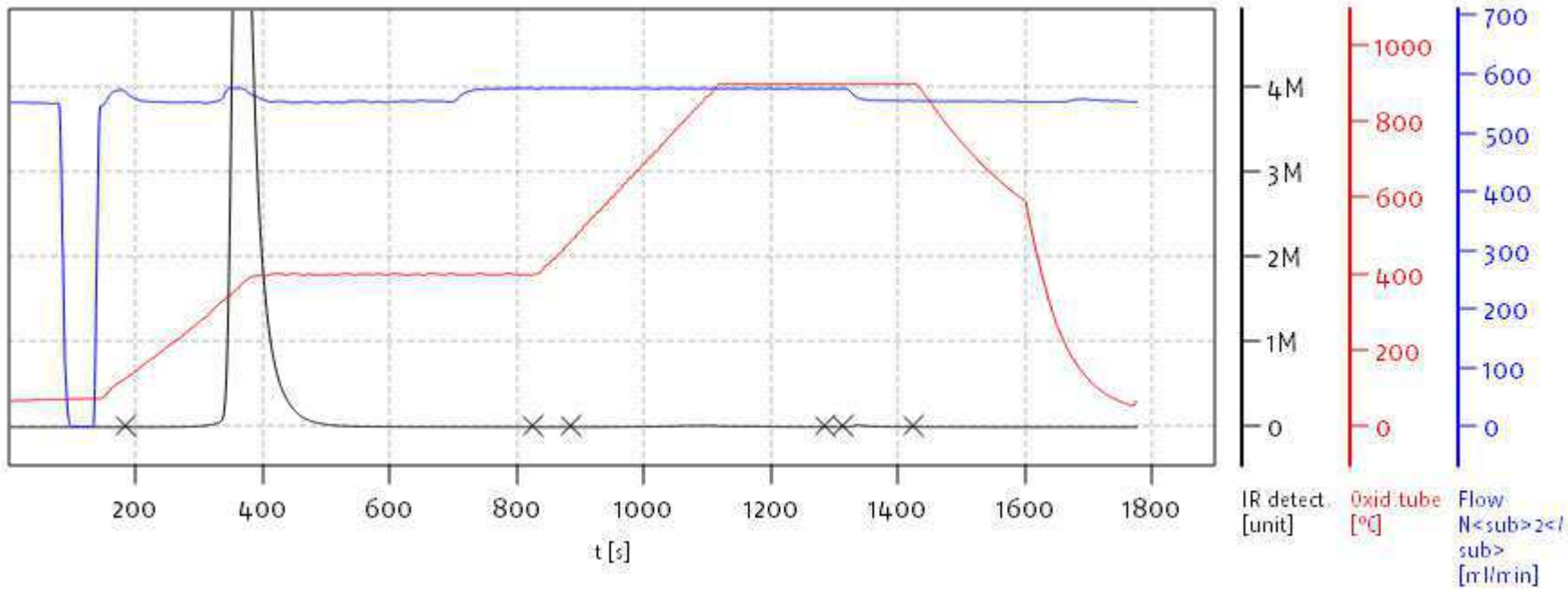
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
67	67	23D0104-01	341.10		CARBON	5/20/2023 8:44 PM	bl,C1o	5.900	12 954 081	5.929	0.000	27 979	92 814	5.900	0.030	0.9816	1.0000



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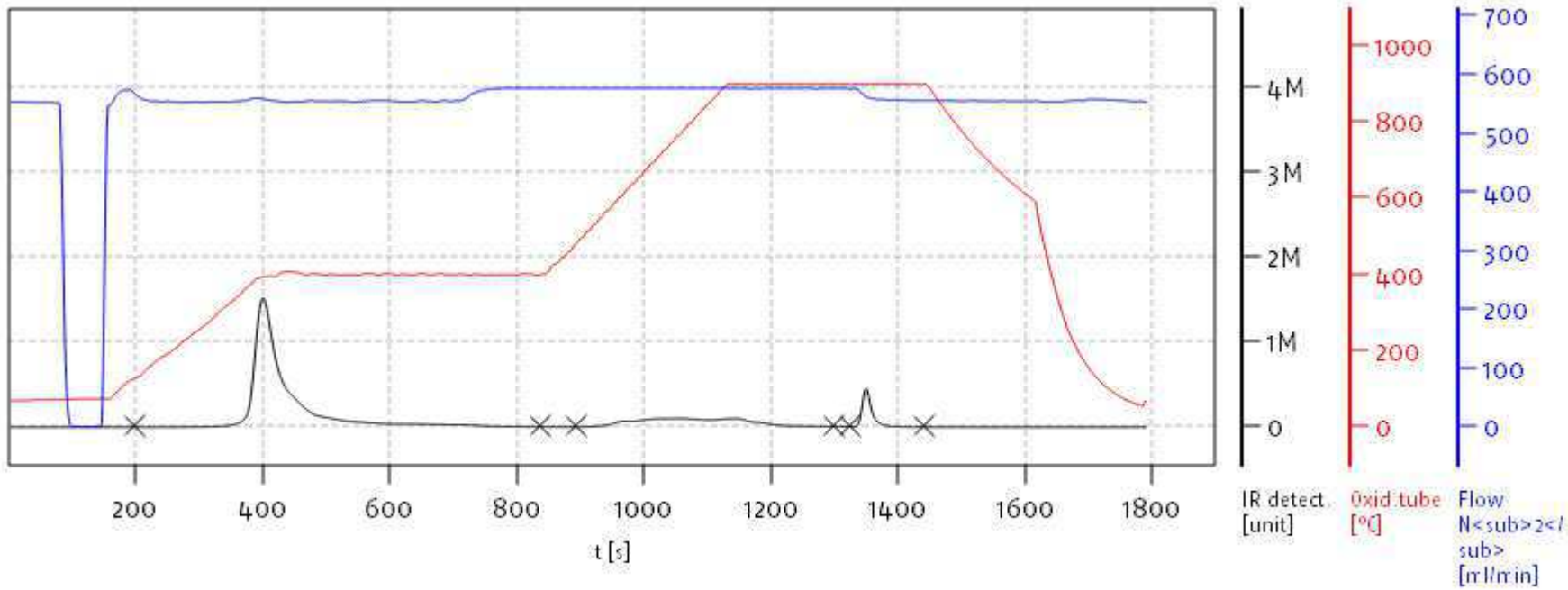
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
68	68	23D0396-01	419.70		CARBON	5/20/2023 9:14 PM	bl	1.256	3 138 239	1.565	0.102	300 035	846 280	1.153	0.309	0.9816	1.0000



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soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

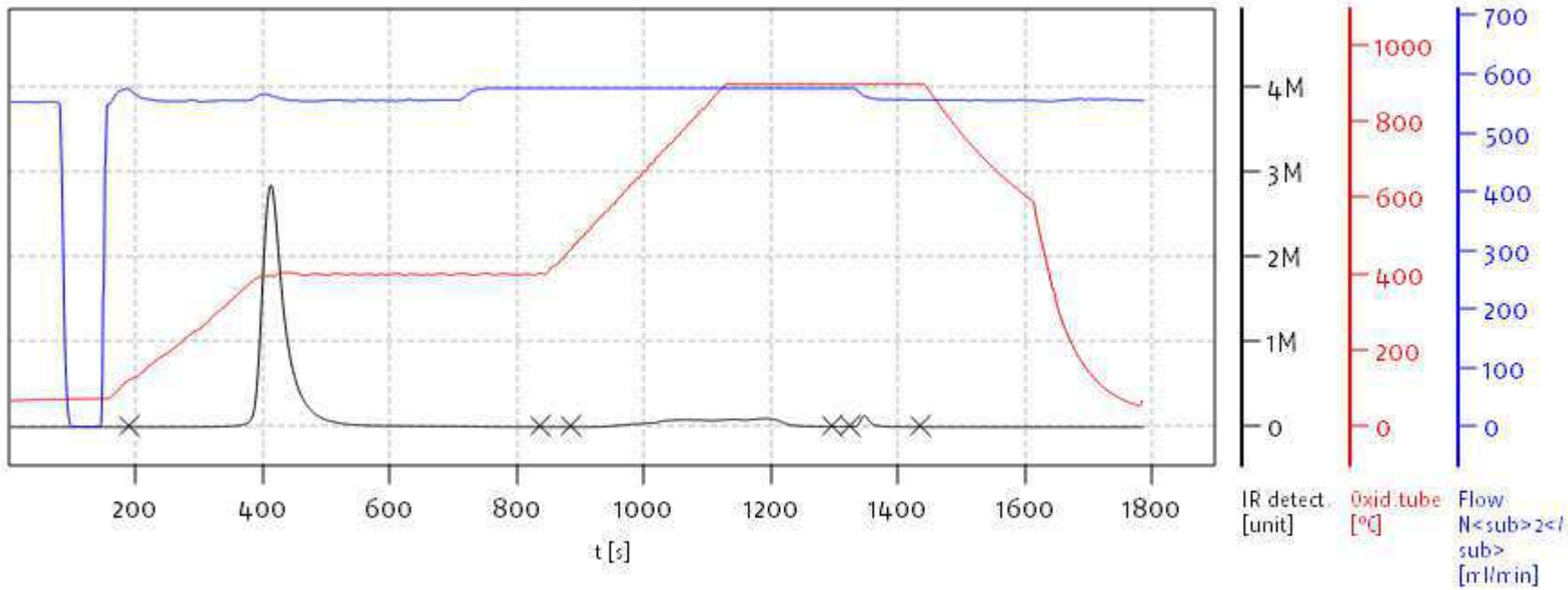
elementar
EXCELLENCE IN ELEMENTS

Document: 051923 CDE from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
69	69	23D0396-02	517.50		CARBON	5/20/2023 9:44 PM	bl	1.386	4 567 543	1.612	0.020	95 058	765 666	1.365	0.226	0.9816	1.0000



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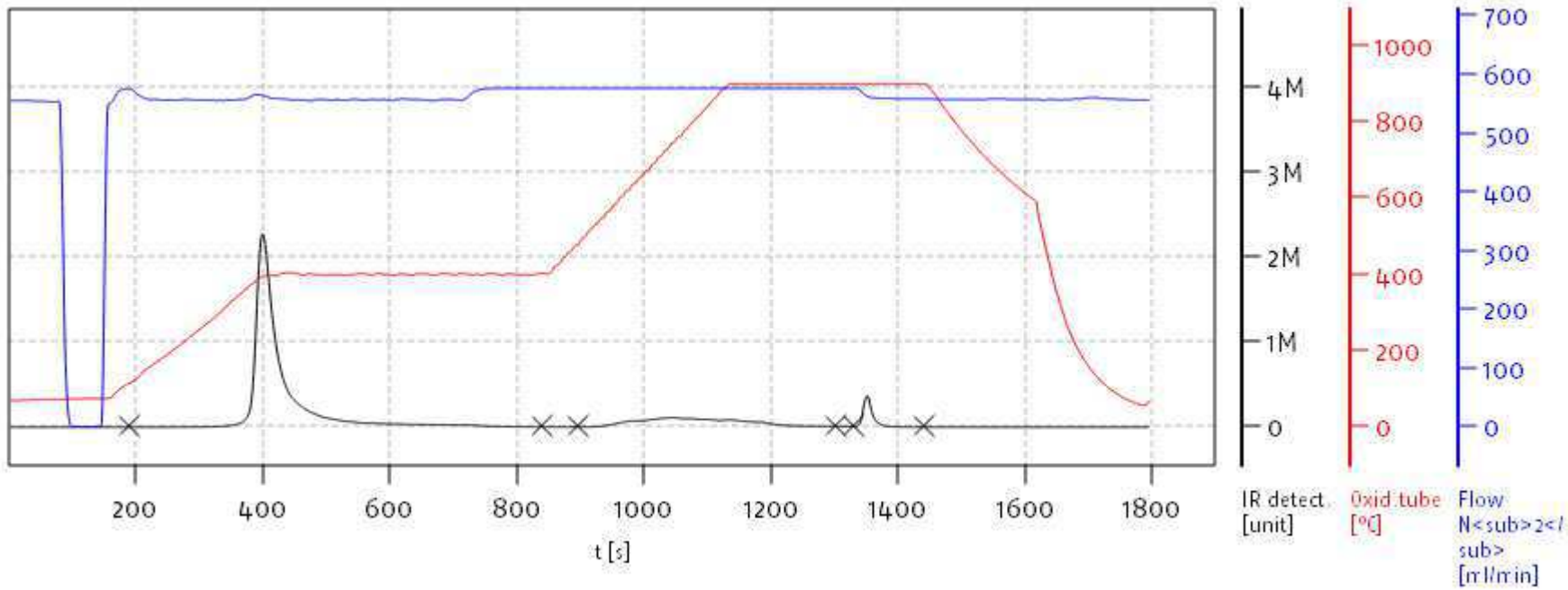
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
70	70	23D0396-03	442.20		CARBON	5/20/2023 10:15 PM	bl	1.366	3 697 018	1.653	0.074	235 882	830 868	1.292	0.288	0.9816	1.0000



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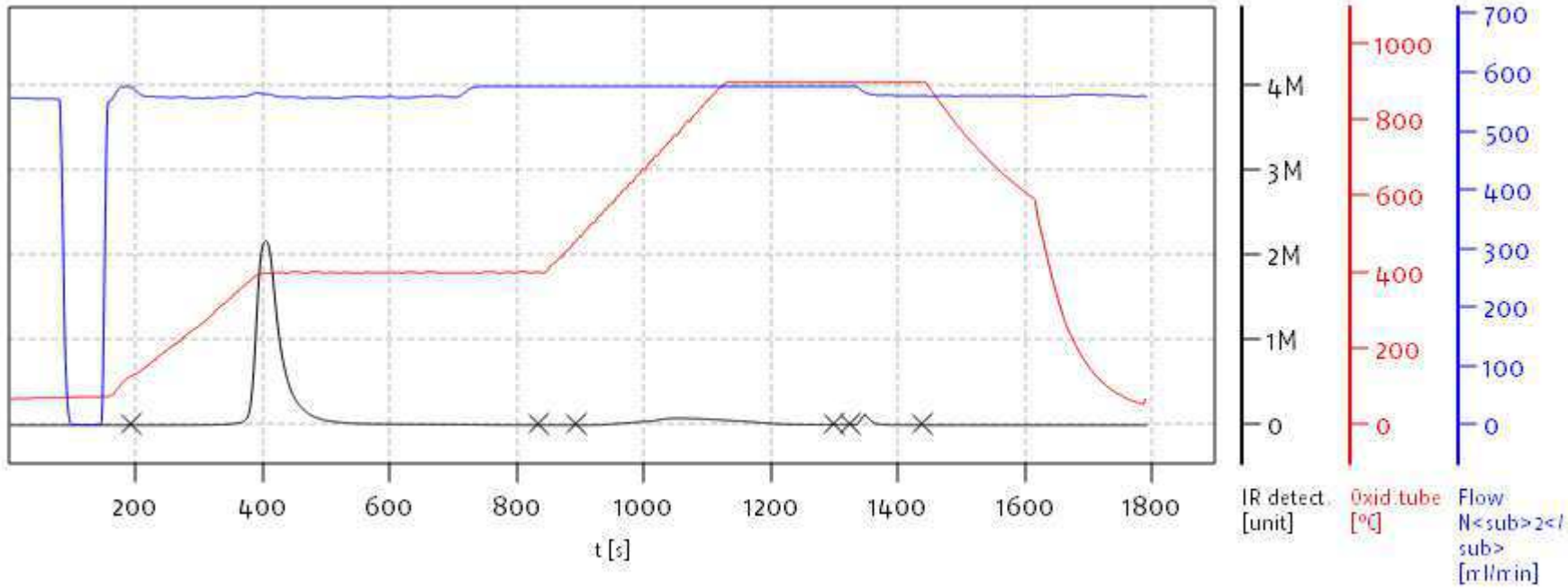
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
71	71	23D0396-04	421.80		CARBON	5/20/2023 10:45 PM	bl	1.361	3 660 276	1.548	0.020	83 150	525 889	1.340	0.187	0.9816	1.0000



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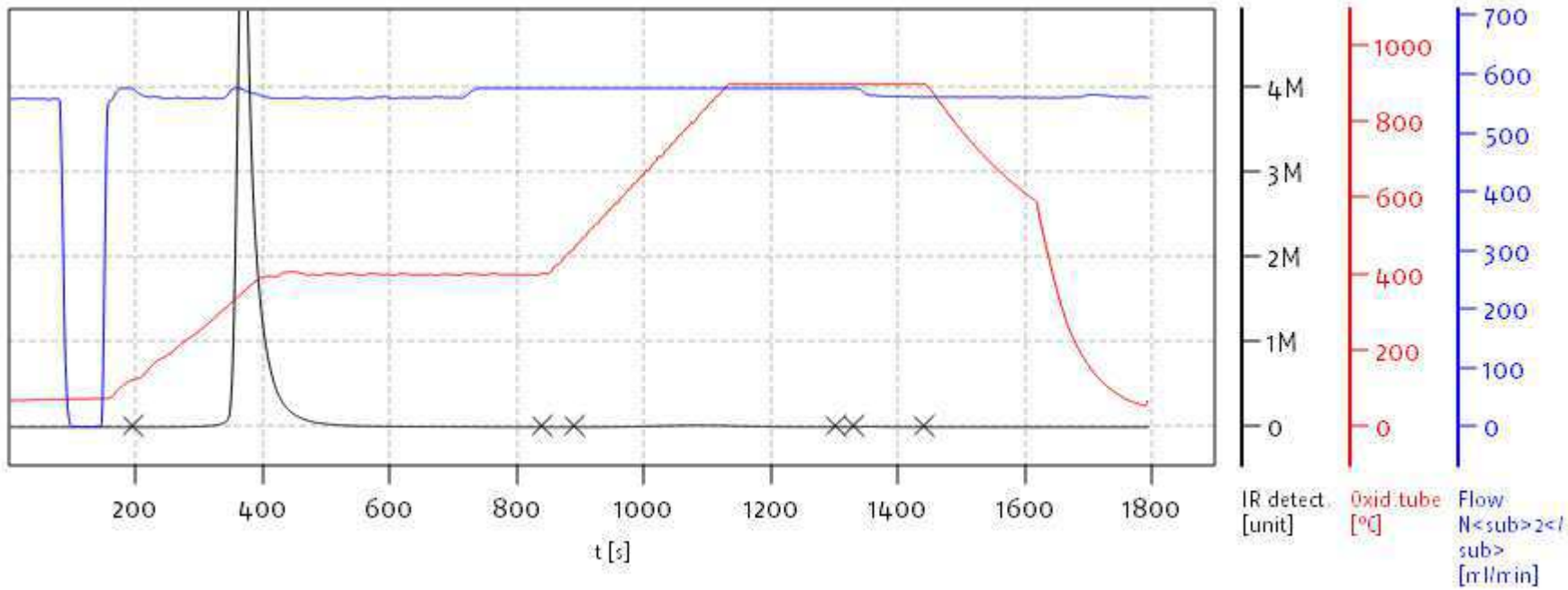
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
72	72	23C0702-01	200.00		CARBON	5/20/2023 11:15 PM	bl,C2u	5.777	7 449 747	5.850	0.000	10 267	120 538	5.777	0.073	0.9816	1.0000



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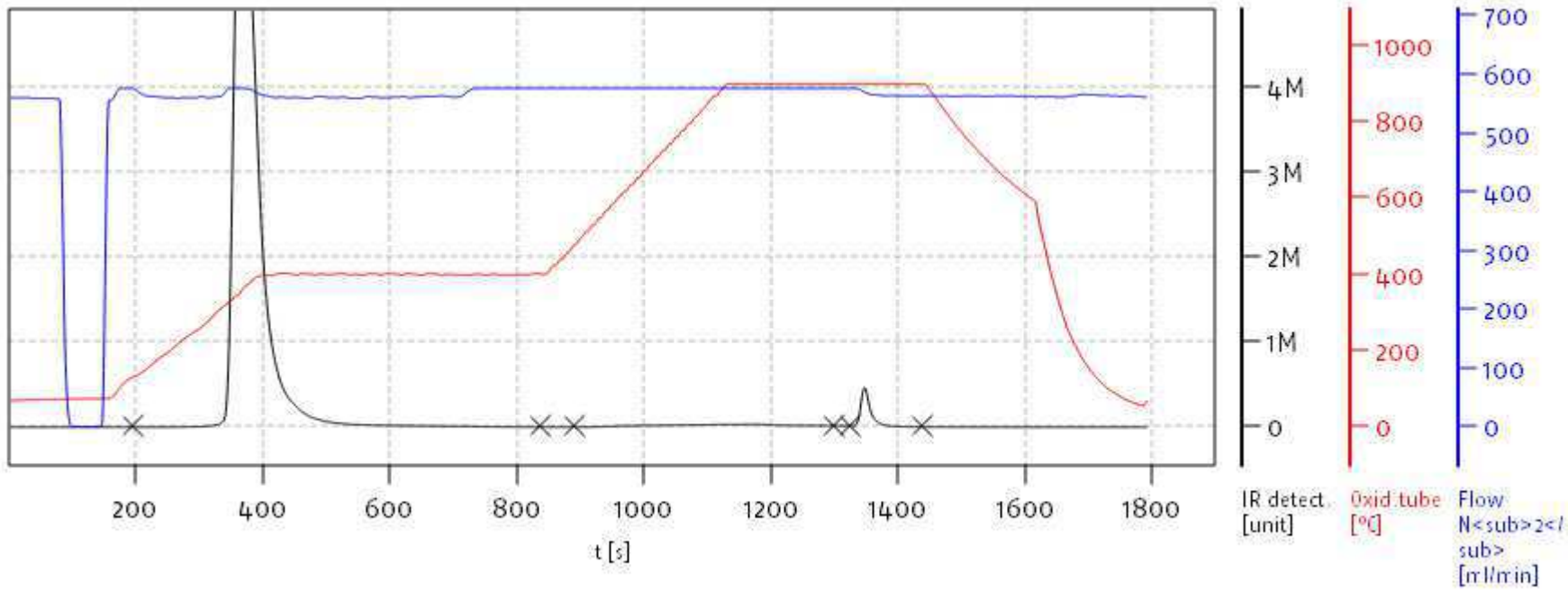
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
73	73	23D0620-01	339.90		CARBON	5/20/2023 11:46 PM	bl,C1o	5.430	11 584 292	5.560	0.137	322 642	307 218	5.293	0.130	0.9816	1.0000



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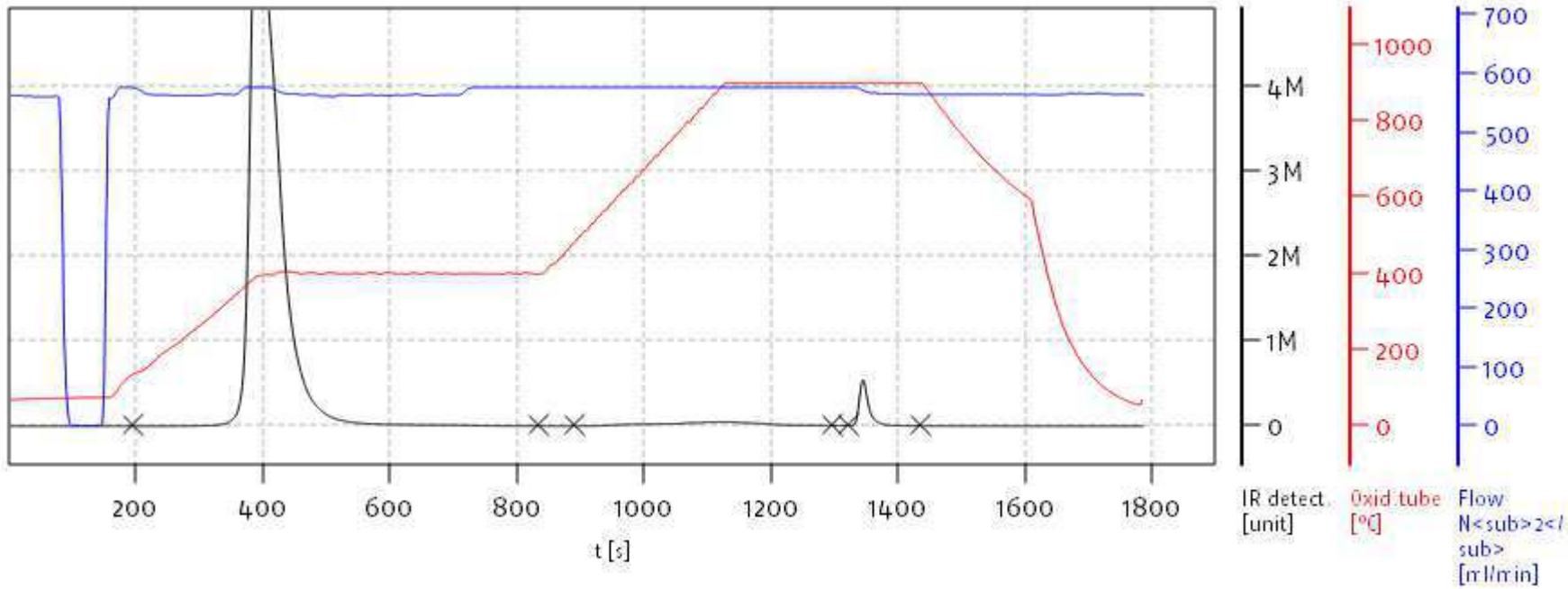
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
74	74	23D0620-02	525.90		CARBON	5/21/2023 12:16 AM	bl,C1o	3.812	12 563 658	3.908	0.101	362 617	349 269	3.711	0.097	0.9816	1.0000



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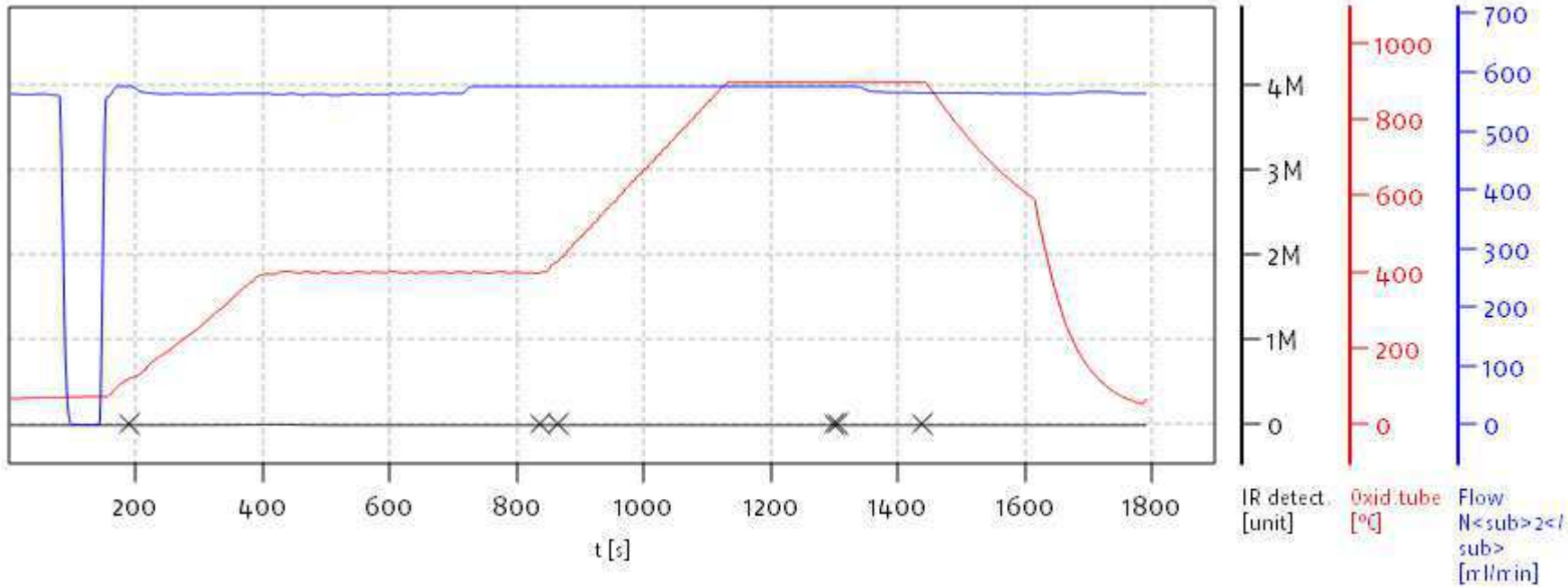
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
75	75	SLE0228-CCB6	516.30		CARBON		bl,C3u,C2u	0.000	29 650	0.000	0.000	435	2 780	0.000	0.000	0.9816	1.0000



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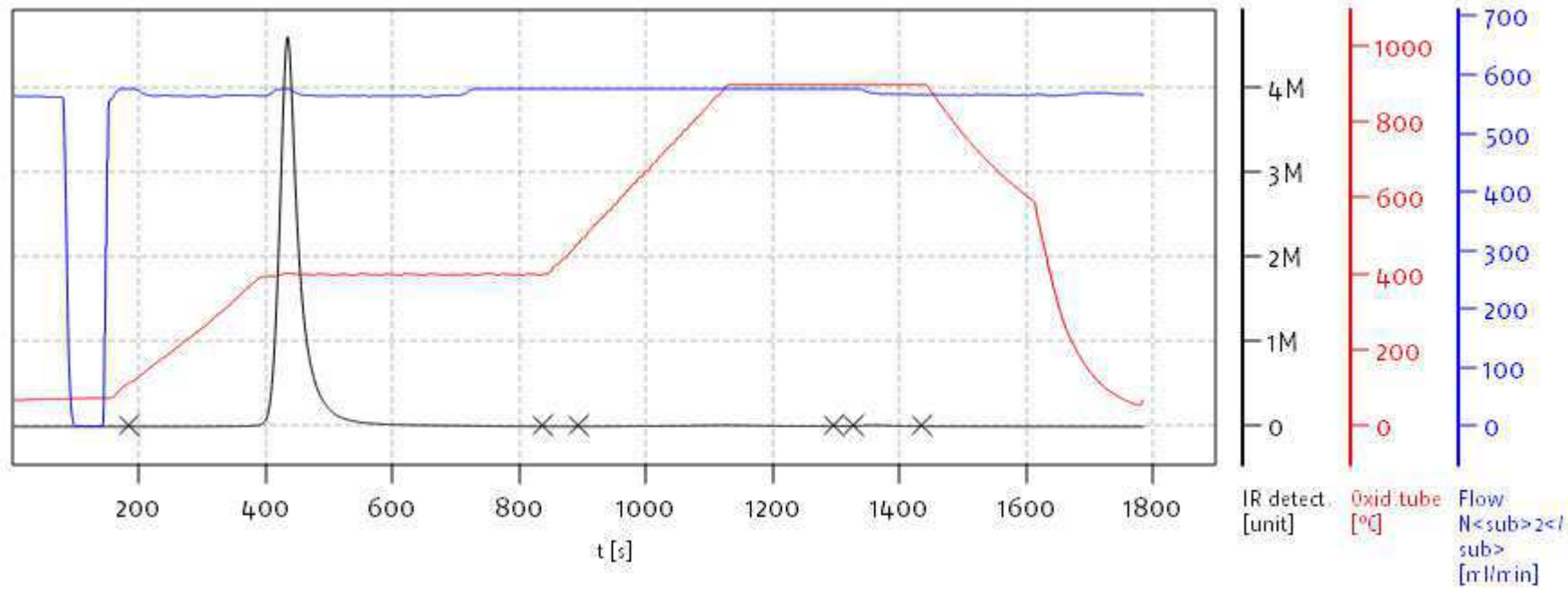
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
76	76	SLE0228-CCV6	21.80		CARBON		bl	45.959	6 456 747	46.607	0.052	36 018	117 924	45.907	0.648	0.9816	1.0000



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ANALYSIS BATCH (SEQUENCE) SUMMARY

EPA 9060A m

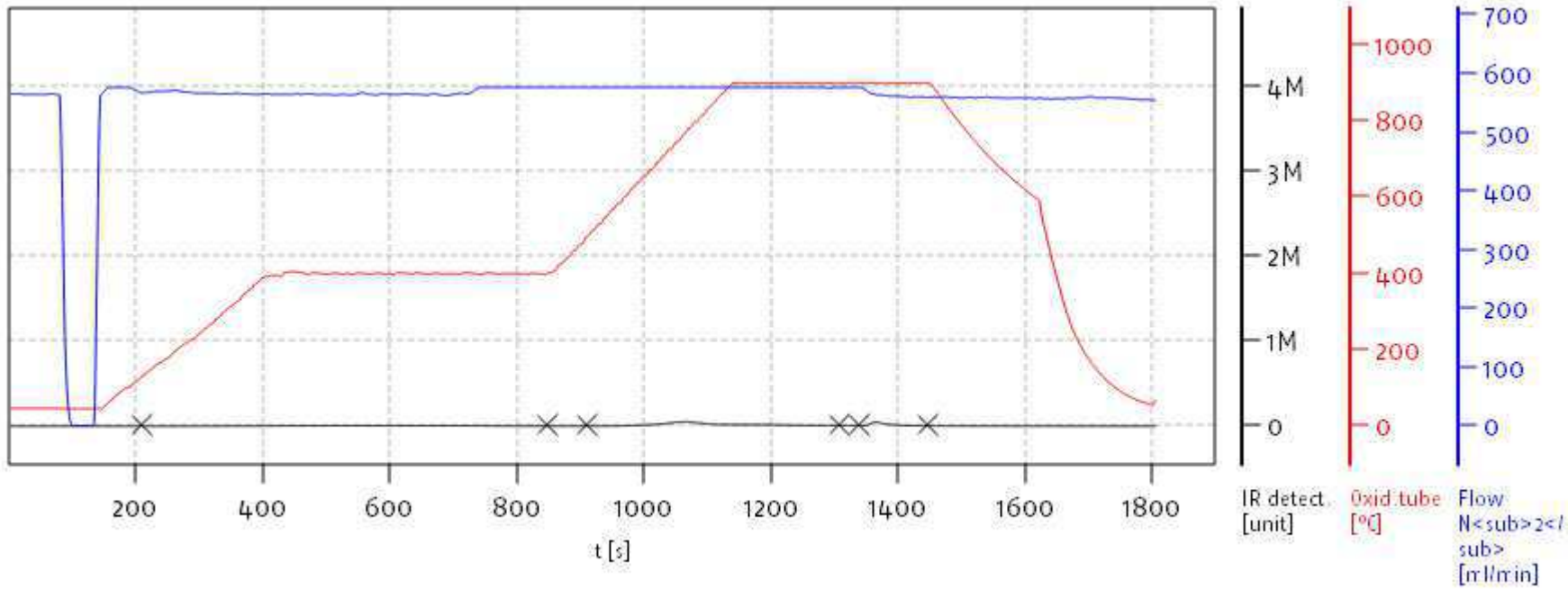
Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Sequence:	SLE0270	Instrument:	TOC Cube
		Calibration:	GE00052

Sample Name	Lab Sample ID	Lab File ID	Matrix	Analysis Date/Time
Cal Standard	SLE0270-CAL1	CubeData_05182023@1024b-101	NA	05/17/23 12:46
Cal Standard	SLE0270-CAL2	CubeData_05182023@1024b-102	NA	05/17/23 13:16
Cal Standard	SLE0270-CAL3	CubeData_05182023@1024b-103	NA	05/17/23 13:46
Cal Standard	SLE0270-CAL4	CubeData_05182023@1024b-104	NA	05/17/23 14:16
Cal Standard	SLE0270-CAL5	CubeData_05182023@1024b-105	NA	05/17/23 14:47
Cal Standard	SLE0270-CAL6	CubeData_05182023@1024b-106	NA	05/17/23 15:17
Cal Standard	SLE0270-CAL7	CubeData_05182023@1024b-107	NA	05/17/23 15:47
Cal Standard	SLE0270-CAL8	CubeData_05182023@1024b-108	NA	05/17/23 16:17
Cal Standard	SLE0270-CAL9	CubeData_05182023@1024b-109	NA	05/17/23 16:47
Cal Standard	SLE0270-CALA	CubeData_05182023@1024b-110	NA	05/17/23 17:17
Cal Standard	SLE0270-CALB	CubeData_05182023@1024b-111	NA	05/17/23 17:47
Cal Standard	SLE0270-CALC	CubeData_05182023@1024b-112	NA	05/17/23 18:18
Cal Standard	SLE0270-CALD	CubeData_05182023@1024b-113	NA	05/17/23 18:48
Cal Standard	SLE0270-CALE	CubeData_05182023@1024b-114	NA	05/17/23 19:18
Cal Standard	SLE0270-CALF	CubeData_05182023@1024b-115	NA	05/17/23 19:48
Cal Standard	SLE0270-CALG	CubeData_05182023@1024b-116	NA	05/17/23 20:18
Cal Standard	SLE0270-CALH	CubeData_05182023@1024b-117	NA	05/17/23 20:48
Cal Standard	SLE0270-CALI	CubeData_05182023@1024b-118	NA	05/17/23 21:19
Cal Standard	SLE0270-CALJ	CubeData_05182023@1024b-119	NA	05/17/23 21:49
Cal Standard	SLE0270-CALK	CubeData_05182023@1024b-120	NA	05/17/23 22:19
Initial Cal Check	SLE0270-ICV1	CubeData_05182023@1024b-128	NA	05/18/23 02:21
Initial Cal Blank	SLE0270-ICB1	CubeData_05182023@1024b-127	NA	05/18/23 02:51
Calibration Check	SLE0270-CCV1	CubeData_05182023@1024b-126	NA	05/18/23 04:21
Calibration Blank	SLE0270-CCB1	CubeData_05182023@1024b-125	NA	05/18/23 04:52
Cal Standard	SLE0270-CALL	CubeData_05182023@1024b-121	NA	05/18/23 09:47
Cal Standard	SLE0270-CALM	CubeData_05182023@1024b-122	NA	05/18/23 09:48
Cal Standard	SLE0270-CALN	CubeData_05182023@1024b-123	NA	05/18/23 09:49
Cal Standard	SLE0270-CALO	CubeData_05182023@1024b-124	NA	05/18/23 09:49

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		CARBON	5/ 17/2023 11:46 AM	bl	0.000	83 718	0.000	0.000	65 731	251 400	0.000	0.000	1.0000	1.0000



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Access: soliTOC superuser

Date: Thu May 18 09:43:39 2023

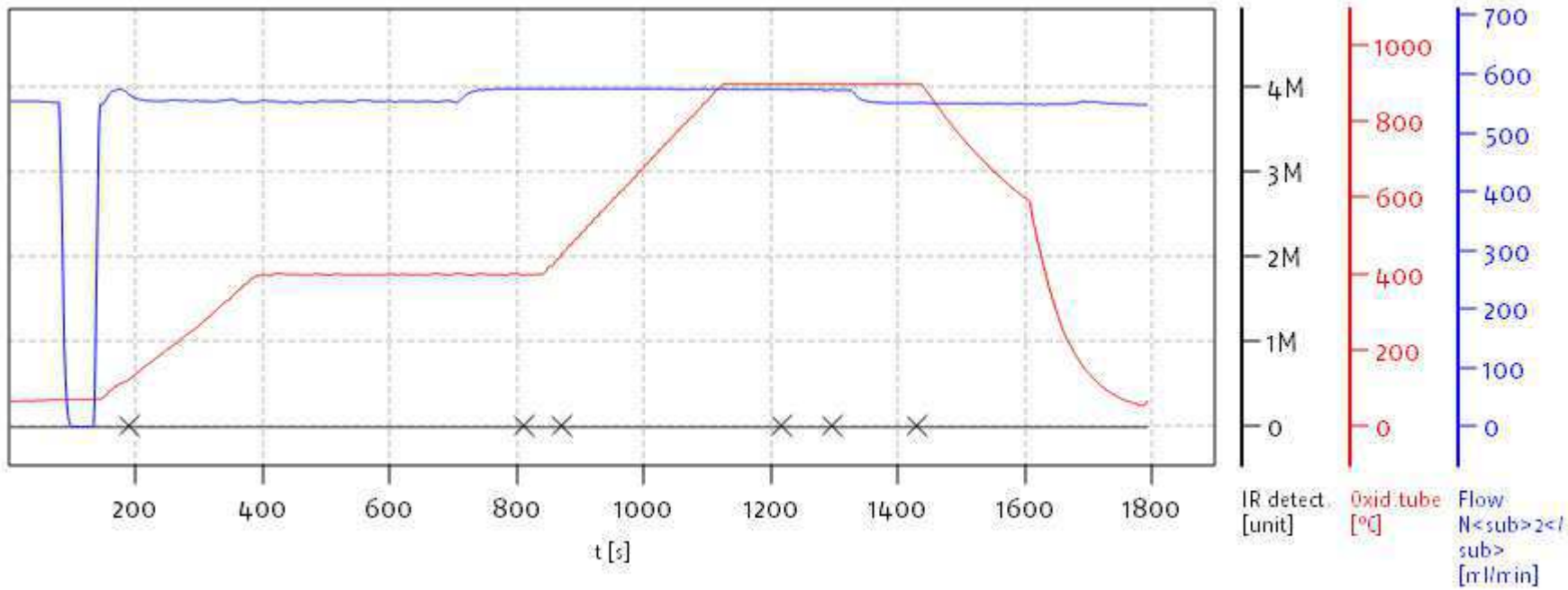
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

elementar
EXCELLENCE IN ELEMENTS

Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
2	2	BLANK	1.00		CARBON	5/ 17/2023 12:16 PM	bl	0.000	3 043	0.000	0.000	273	1	0.000	0.000	1.0000	1.0000



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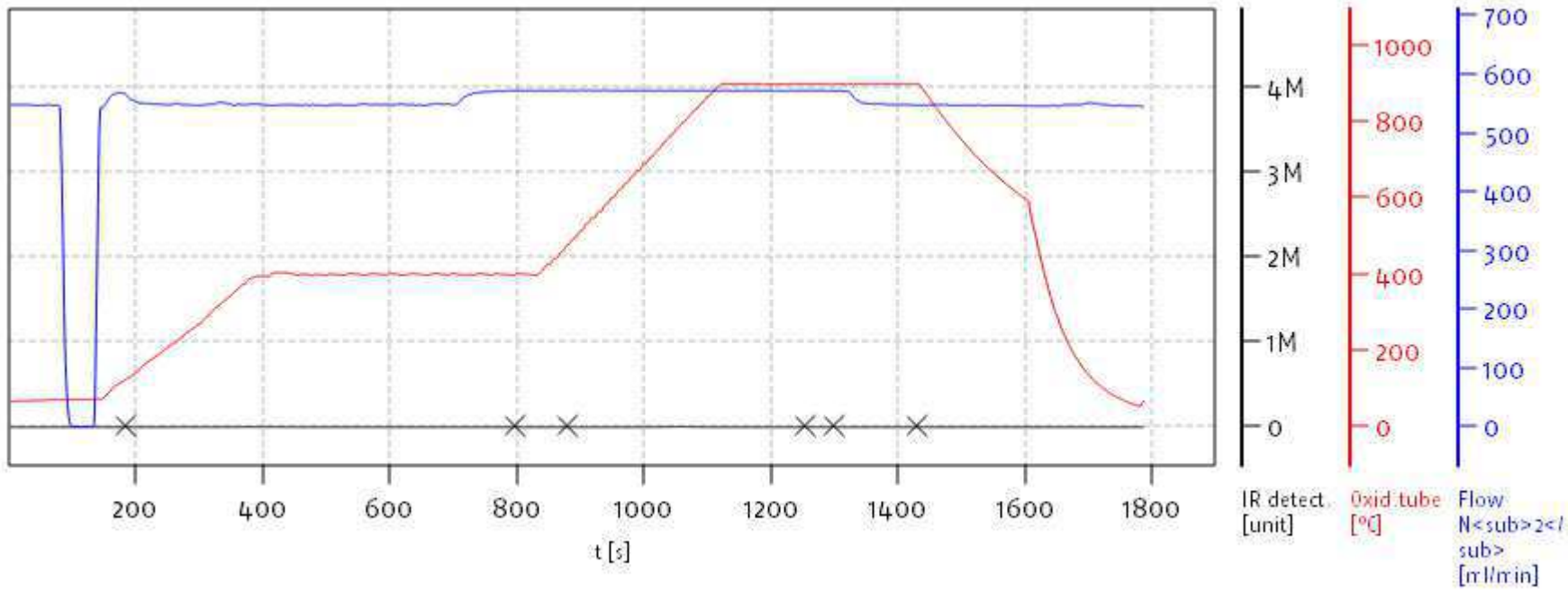
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
3	3	SLE0270-CAL1	200.00	0.0025	CARBON	5/17/2023 12:46 PM	bl,C2u	0.014	12 167	0.024	0.002	431	10 396	0.012	0.010	1.0000	1.0000



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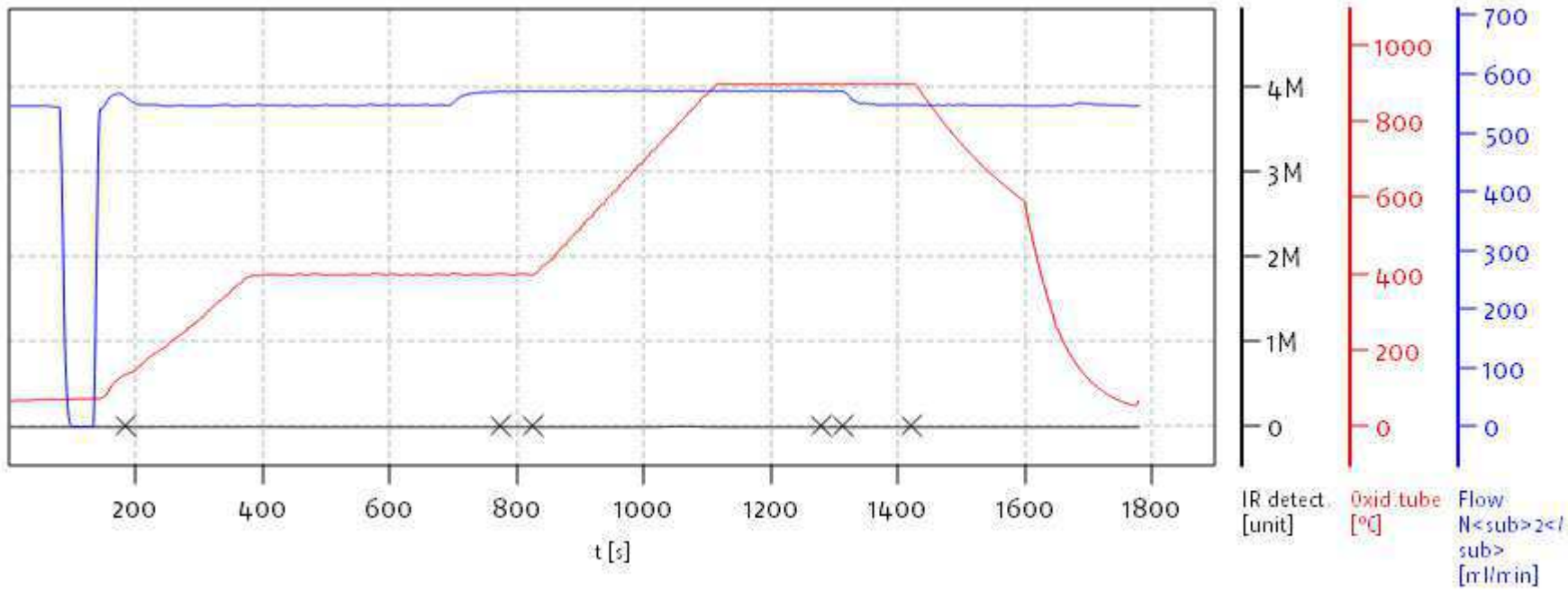
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
4	4	SLE0270-CAL2	200.00	0.0050	CARBON	5/17/2023 1:16 PM	bl,C2u	0.013	10 893	0.029	0.002	141	18 320	0.011	0.017	1.0000	1.0000



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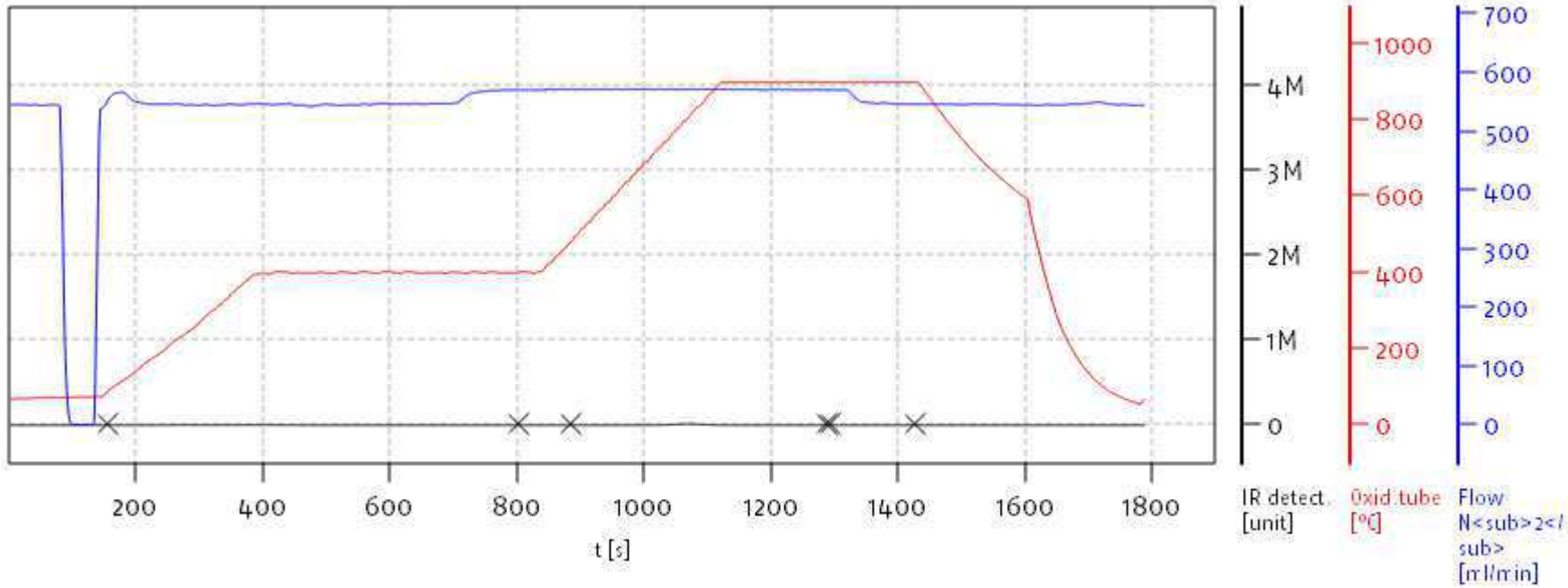
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
5	5	SLE0270-CAL3	200.00	0.0070	CARBON	5/17/2023 1:46 PM	bl,C2u	0.018	16 667	0.043	0.002	387	29 873	0.015	0.026	1.0000	1.0000



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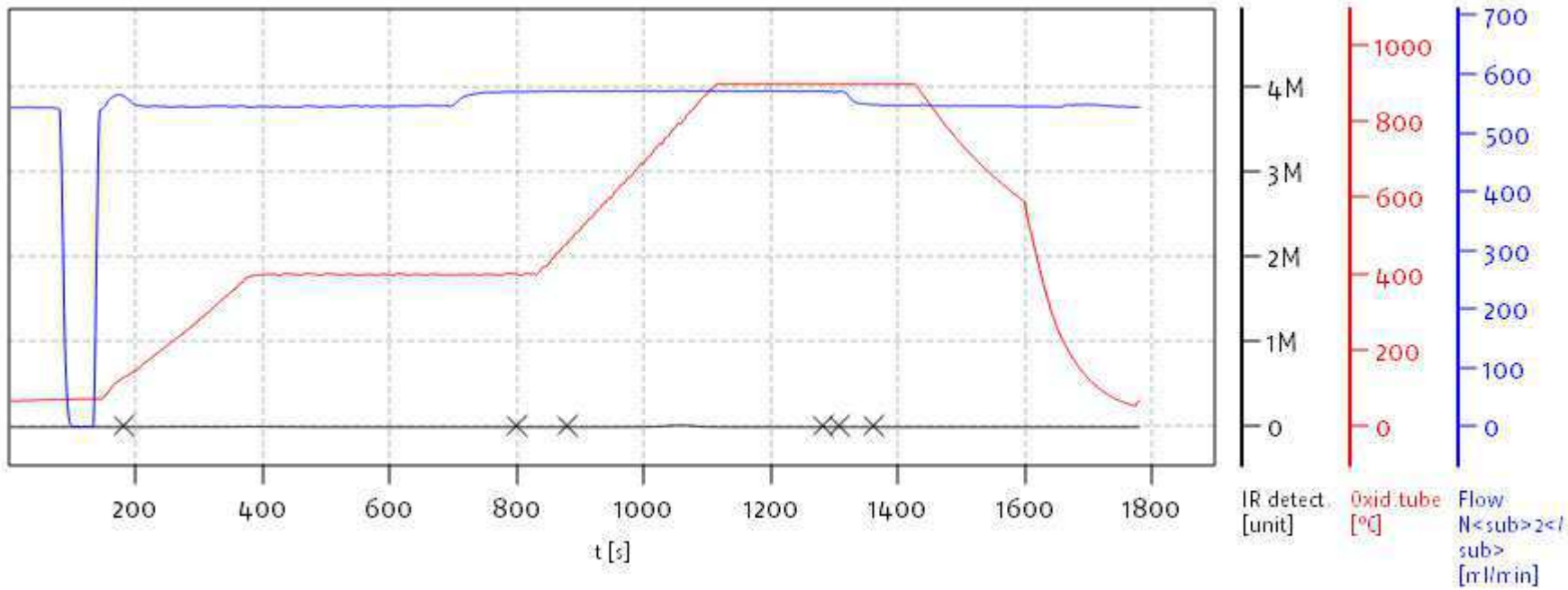
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
6	6	SLE0270-CAL4	200.00	0.0100	CARBON	5/17/2023 2:16 PM	bl,C2u	0.024	24 980	0.062	0.002	130	45 873	0.022	0.038	1.0000	1.0000



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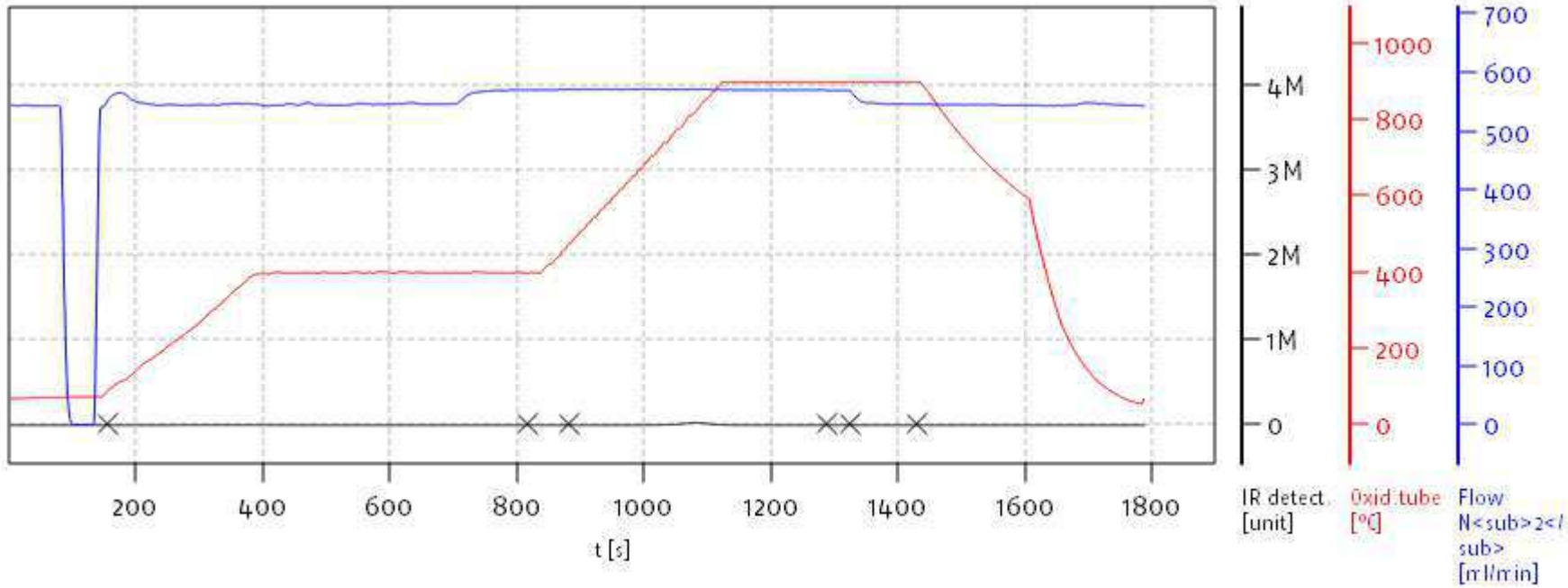
7	7	SLE0270-CAL5	200.00	0.0150	CARBON	5/17/2023 2:47 PM	bl,C2u	0.014	12 413	0.065	0.002	539	61 573	0.012	0.051	1.0000	1.0000



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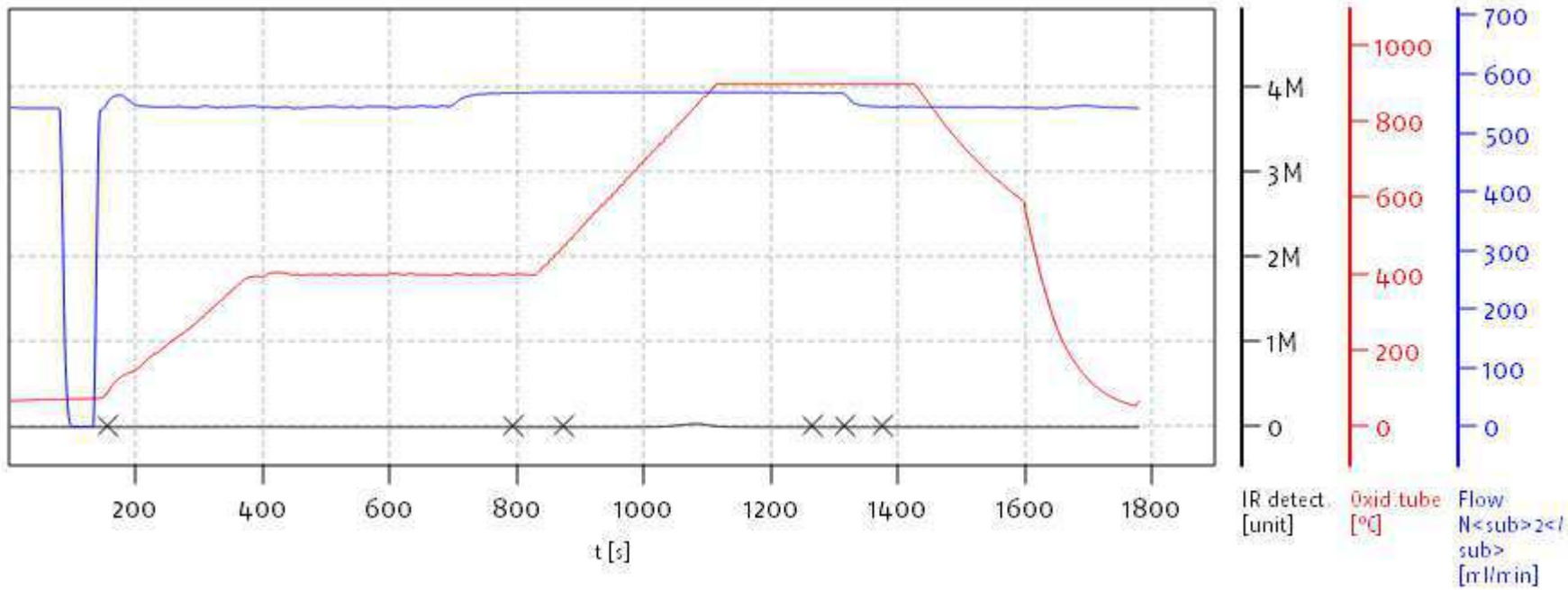
8	8	SLE0270-CAL6	200.00	0.0200	CARBON	5/17/2023 3:17 PM	bl,C1u,C2u	0.011	7 999	0.079	0.002	170	84 086	0.008	0.068	1.0000	1.0000



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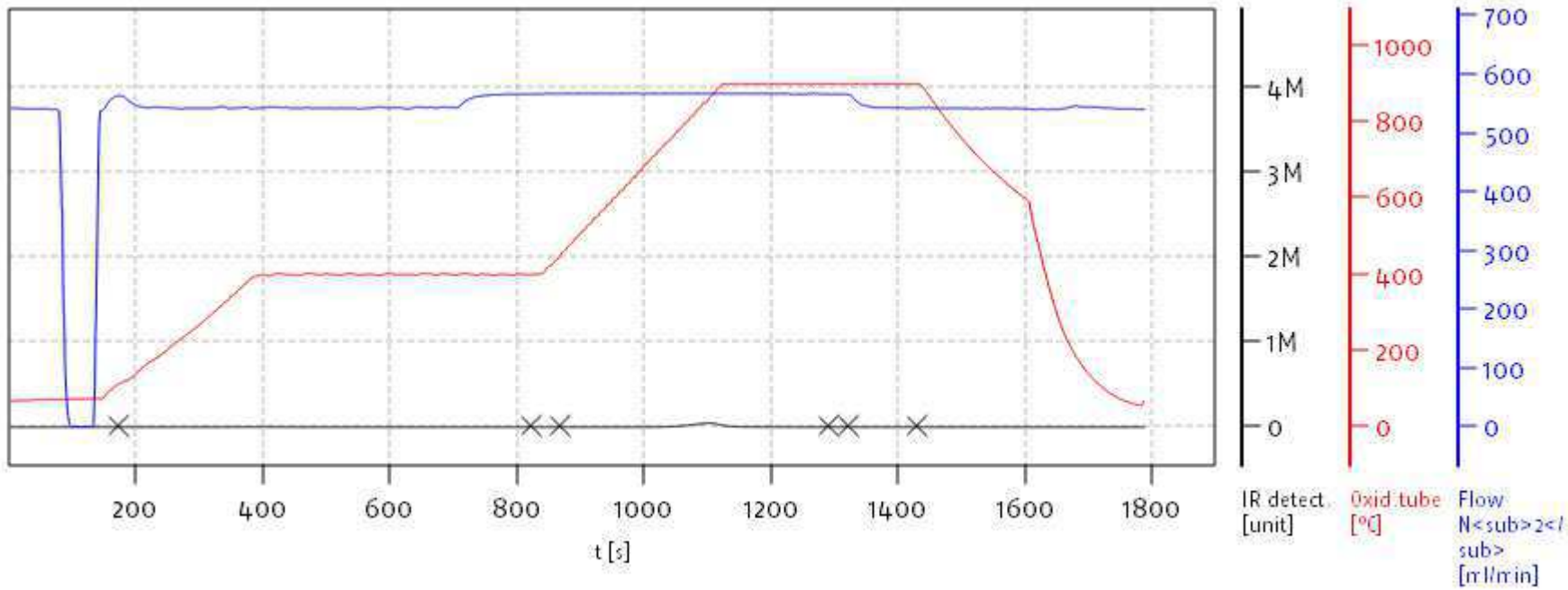
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
9	9	SLE0270-CAL7	200.00	0.0250	CARBON	5/17/2023 3:47 PM	bl,C1u,C2u	0.011	7 612	0.097	0.003	1 386	105 588	0.008	0.085	1.0000	1.0000



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Access: soliTOC superuser

Date: Thu May 18 09:43:39 2023

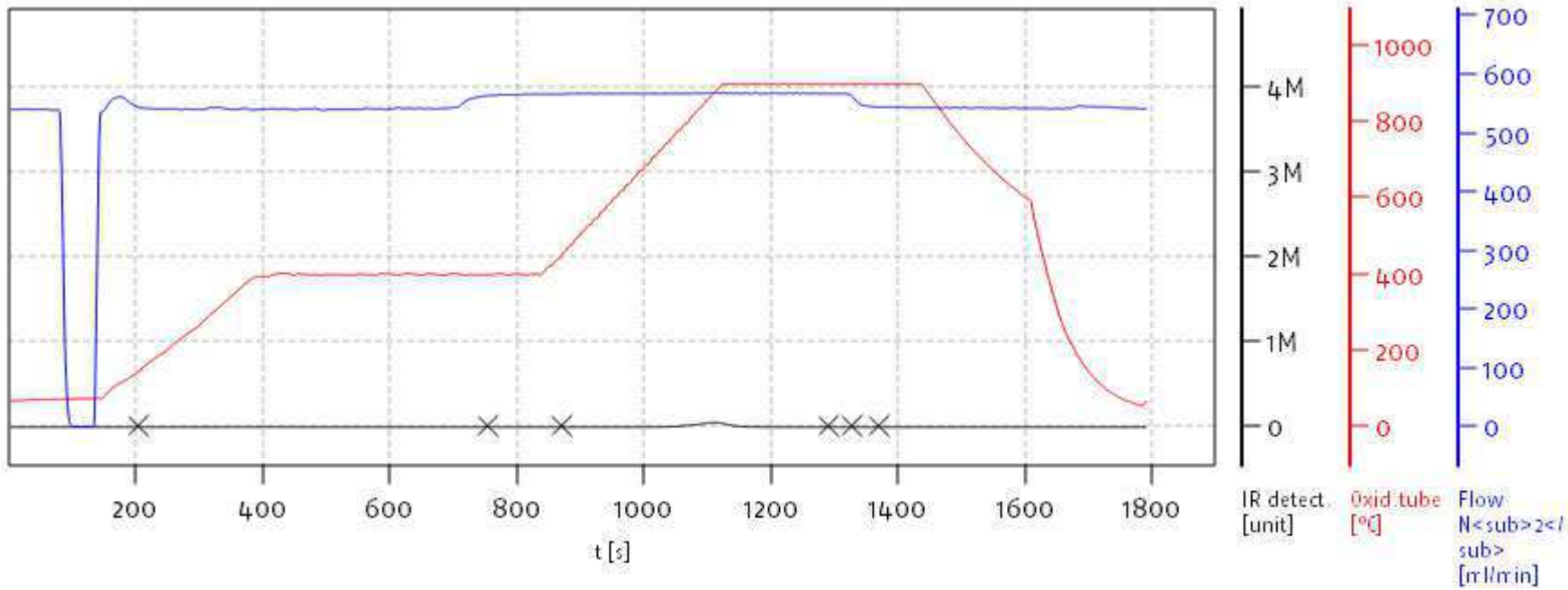
elementar
EXCELLENCE IN ELEMENTS

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
10	10	SLE0270-CAL8	200.00	0.0300	CARBON	5/17/2023 4:17 PM	bl,C1u,C2u	0.008	5 428	0.109	0.002	61	124 731	0.006	0.100	1.0000	1.0000



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soliTOC V2.0.2 (31015f9) 2018-11-19
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Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

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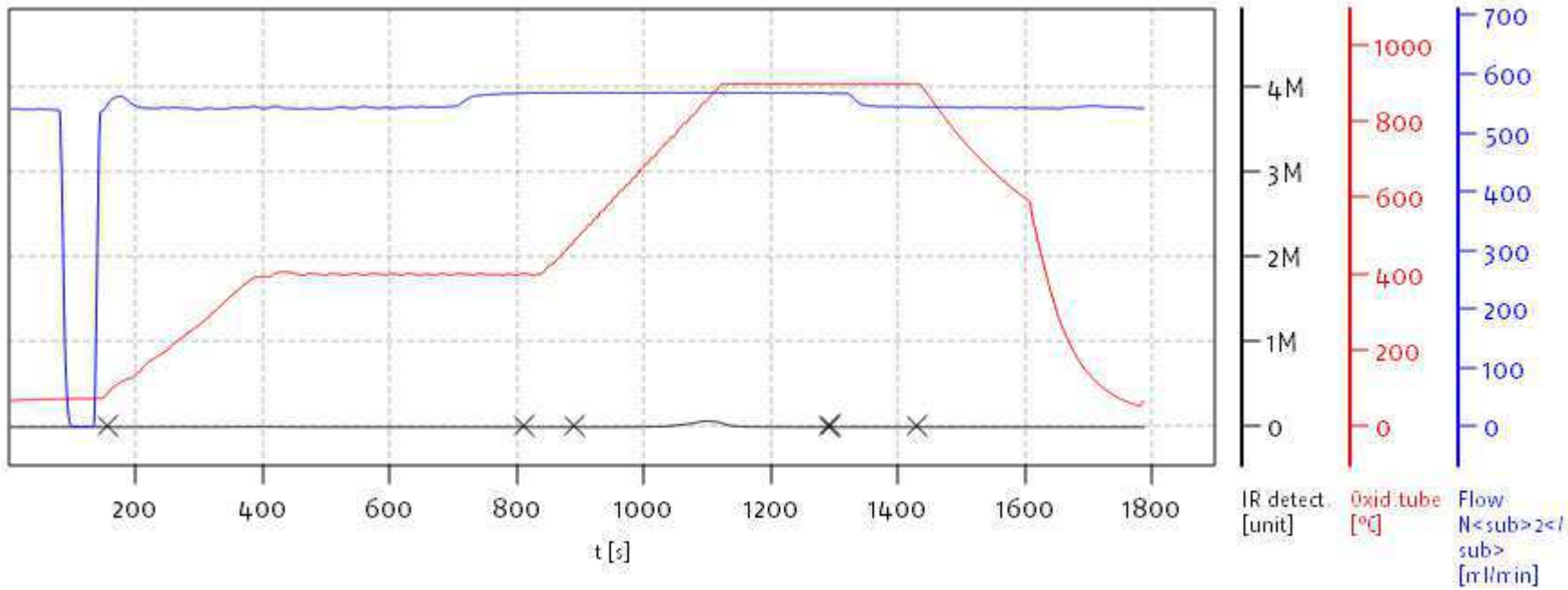
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
11	11	SLE0270-CAL9	200.00	0.0400	CARBON	5/17/2023 4:47 PM	bl,C2u	0.019	17 233	0.167	0.003	1 274	185 567	0.016	0.148	1.0000	1.0000



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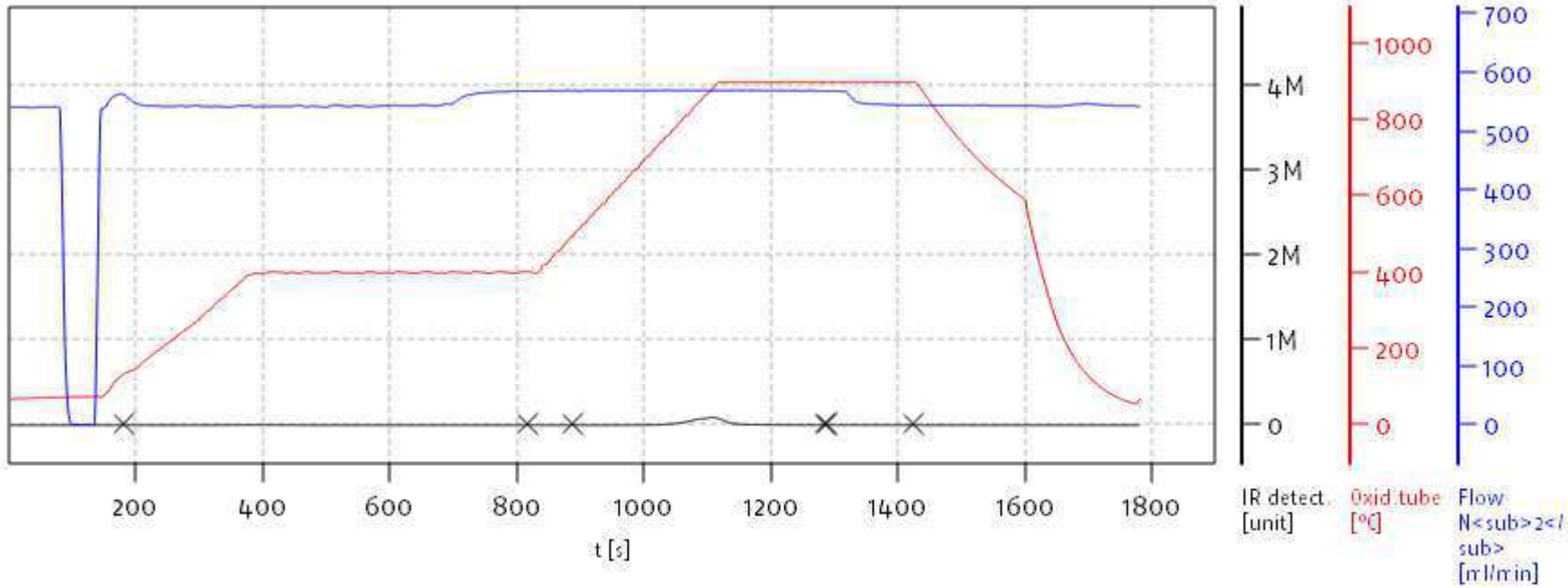
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
12	12	SLE0270-CALA	200.00	0.0500	CARBON	5/17/2023 5:17 PM	bl,C2u	0.018	11 766	0.202	0.007	6 123	230 855	0.011	0.184	1.0000	1.0000



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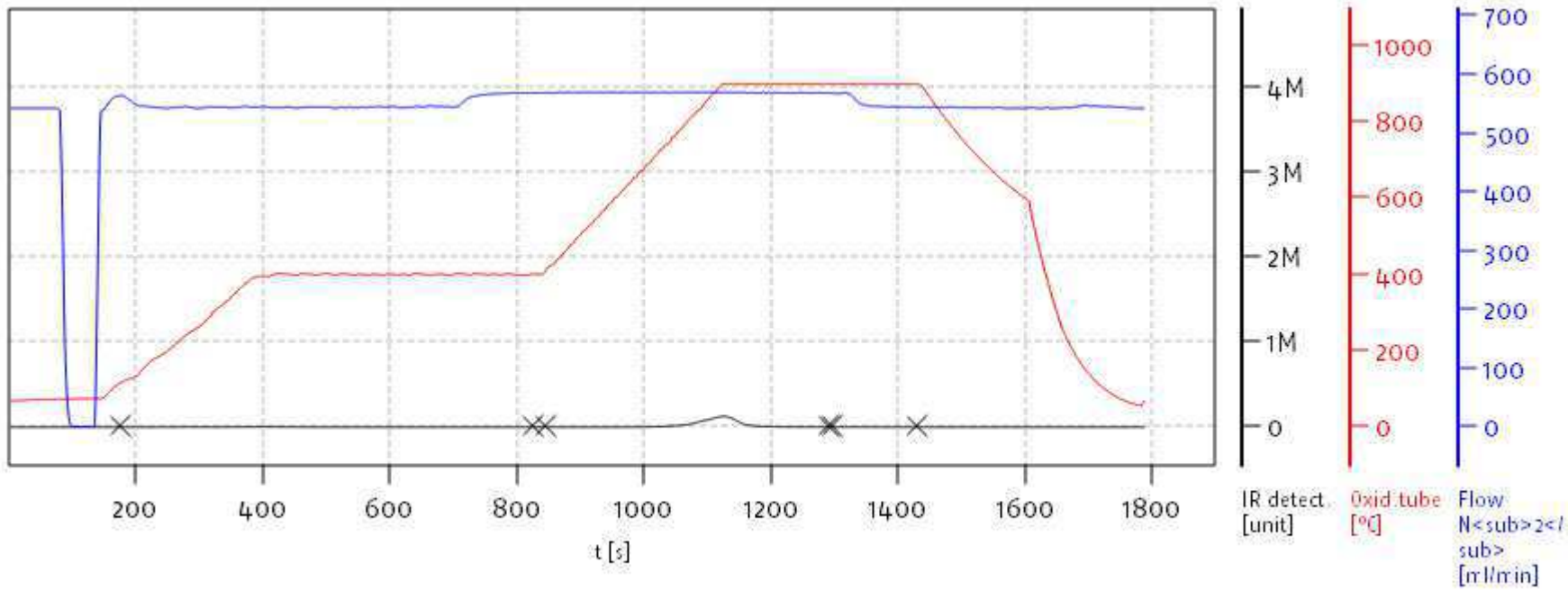
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
13	13	SLE0270-CALB	200.00	0.0040	CARBON	5/17/2023 5:47 PM	bl,C2u	0.022	18 635	0.291	0.005	3 969	339 170	0.017	0.269	1.0000	1.0000



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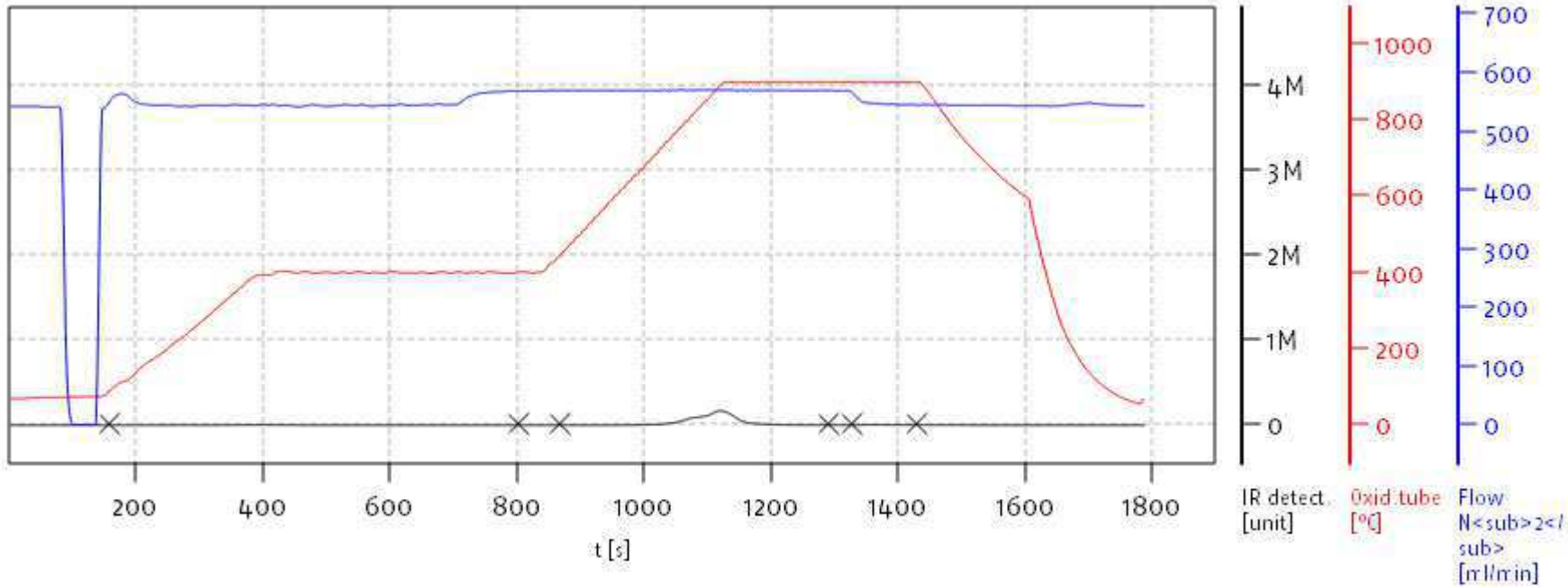
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
14	14	SLE0270-CALC	200.00	0.0050	CARBON	5/17/2023 6:18 PM	bl	0.026	14 893	0.405	0.012	12 639	478 044	0.014	0.379	1.0000	1.0000



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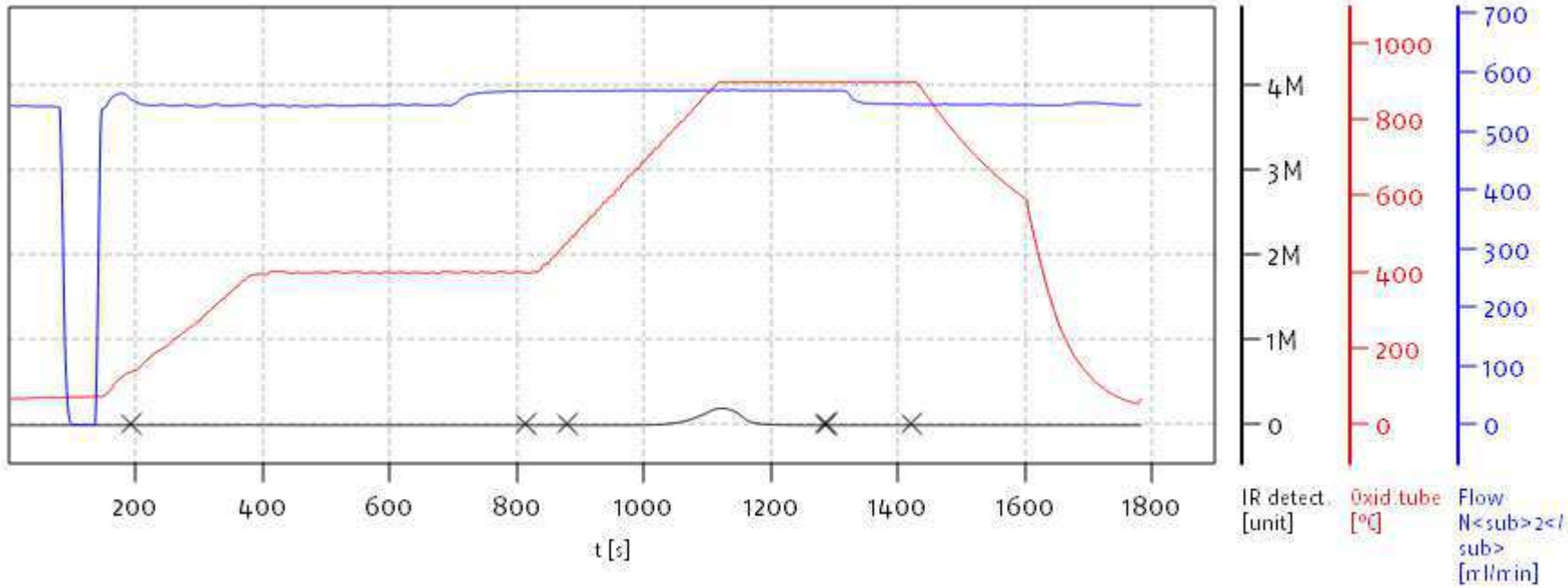
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
15	15	SLE0270-CALD	200.00	0.0070	CARBON	5/17/2023 6:48 PM	bl,C1u,C2u	0.010	6 787	0.465	0.002	420	574 876	0.007	0.455	1.0000	1.0000



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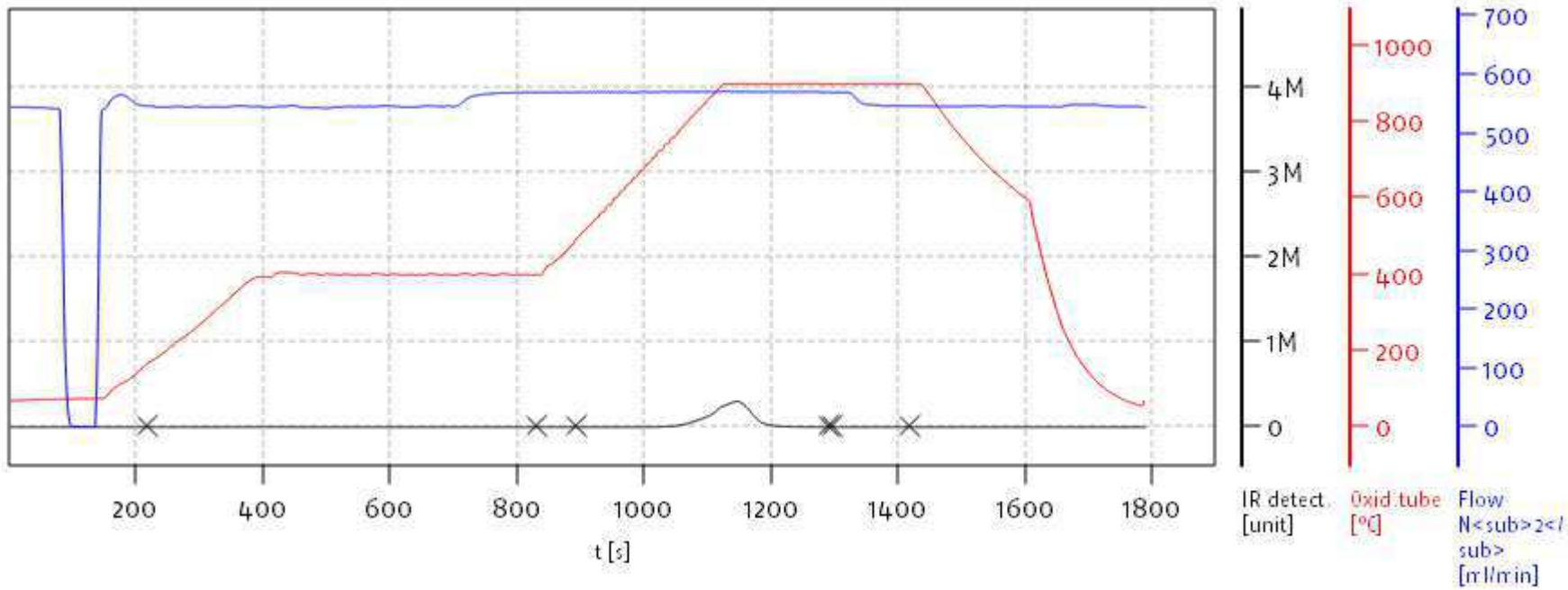
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
16	16	SLE0270-CALE	200.00	0.0100	CARBON	5/17/2023 7:18 PM	bl,C1u,C2u	0.008	4 408	0.667	0.003	771	832 670	0.006	0.658	1.0000	1.0000



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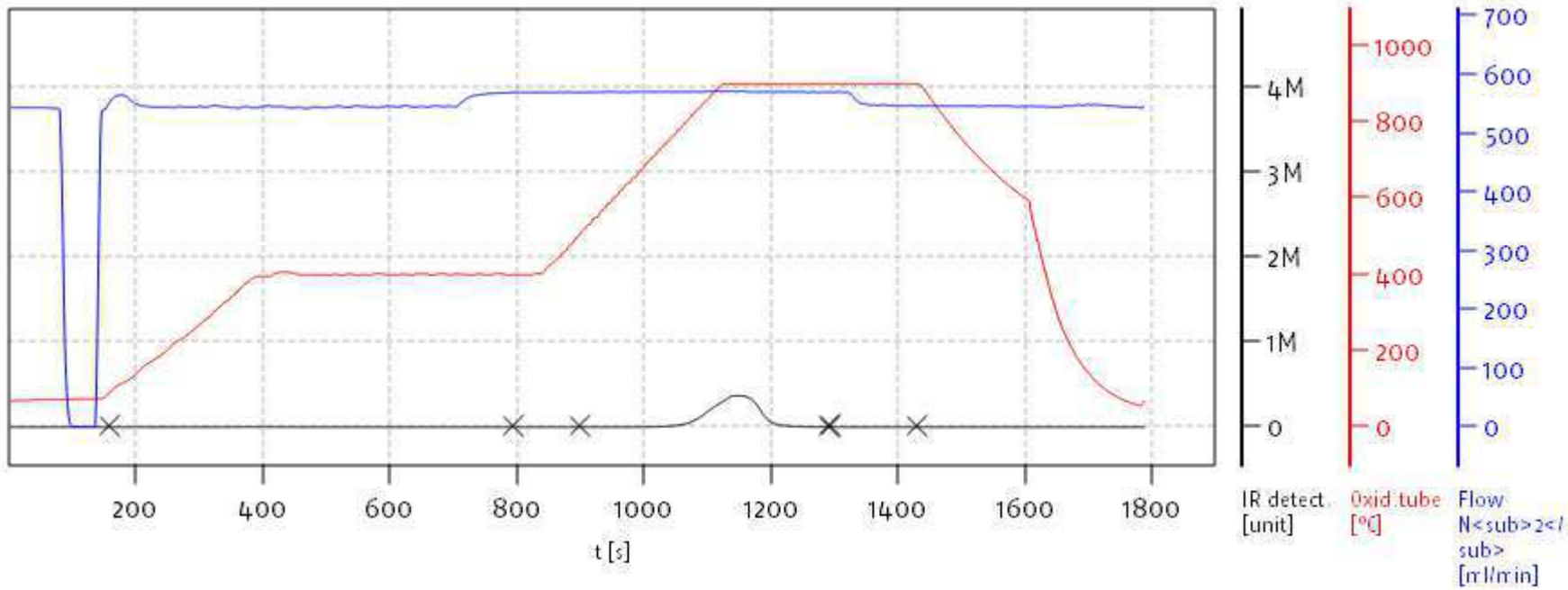
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
17	17	SLE0270-CALF	200.00	0.0150	CARBON	5/17/2023 7:48 PM	bl,C1u,C2u	0.012	8 494	0.984	0.003	1 464	1 230 304	0.009	0.972	1.0000	1.0000



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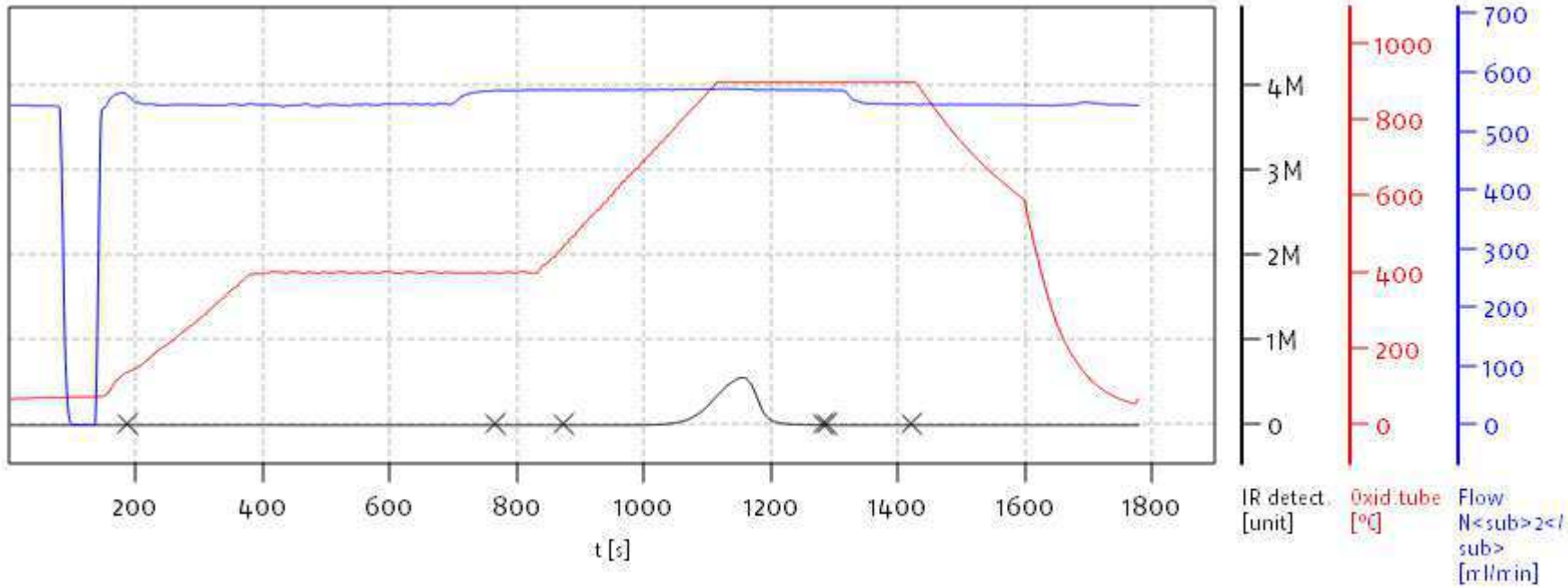
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
18	18	SLE0270-CALG	200.00	0.0200	CARBON	5/17/2023 8:18 PM	bl,C1u,C2u	0.010	5 359	1.331	0.004	1 864	1 673 425	0.006	1.321	1.0000	1.0000



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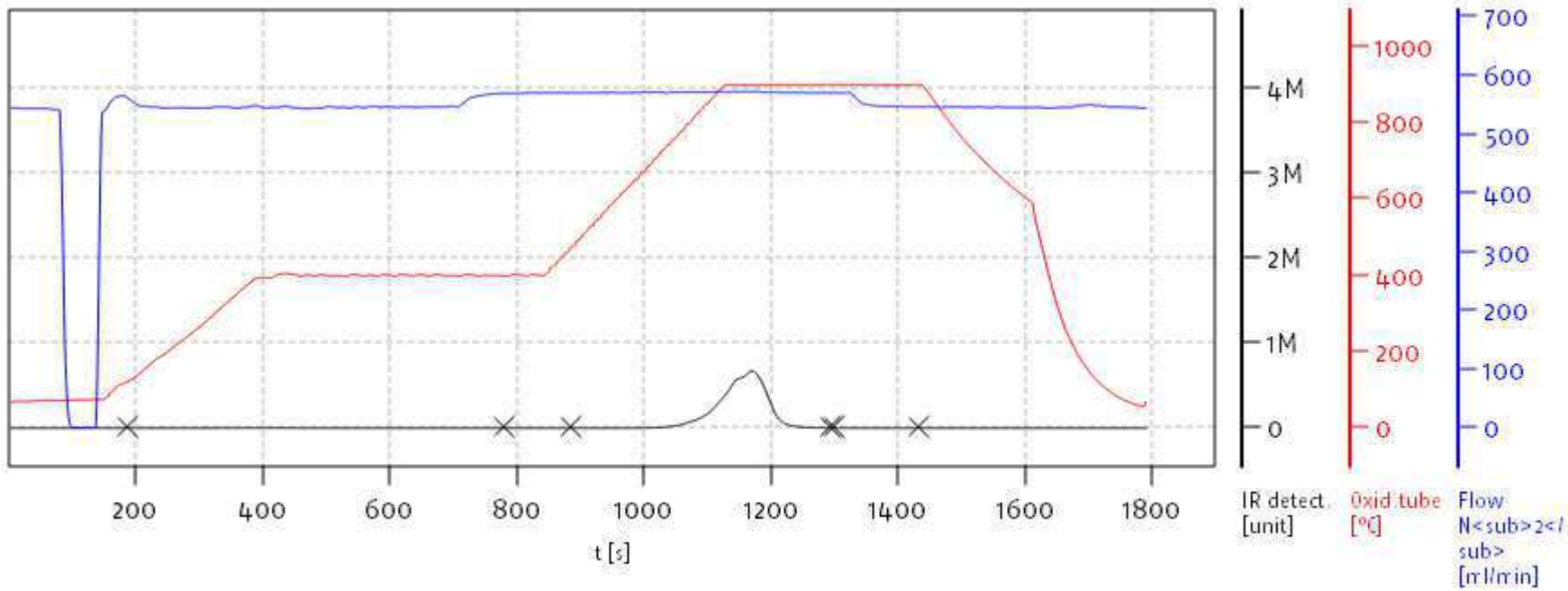
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
19	19	SLE0270-CALH	200.00	0.0250	CARBON	5/17/2023 8:48 PM	bl,C2u	0.015	11 407	1.659	0.004	2 280	2 083 004	0.011	1.644	1.0000	1.0000



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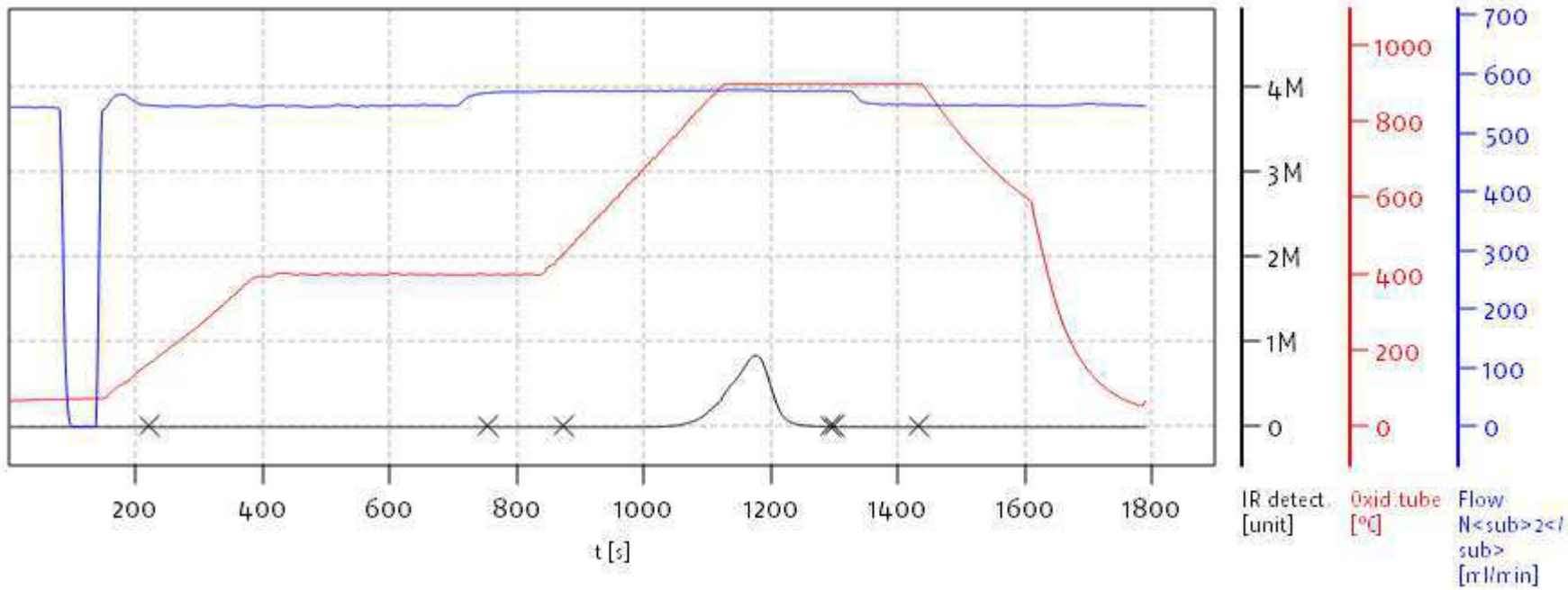
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
20	20	SLE0270-CALI	200.00	0.0300	CARBON	5/17/2023 9:19 PM	bl,C1u,C2u	0.009	2 781	1.981	0.005	3 895	2 498 427	0.004	1.971	1.0000	1.0000



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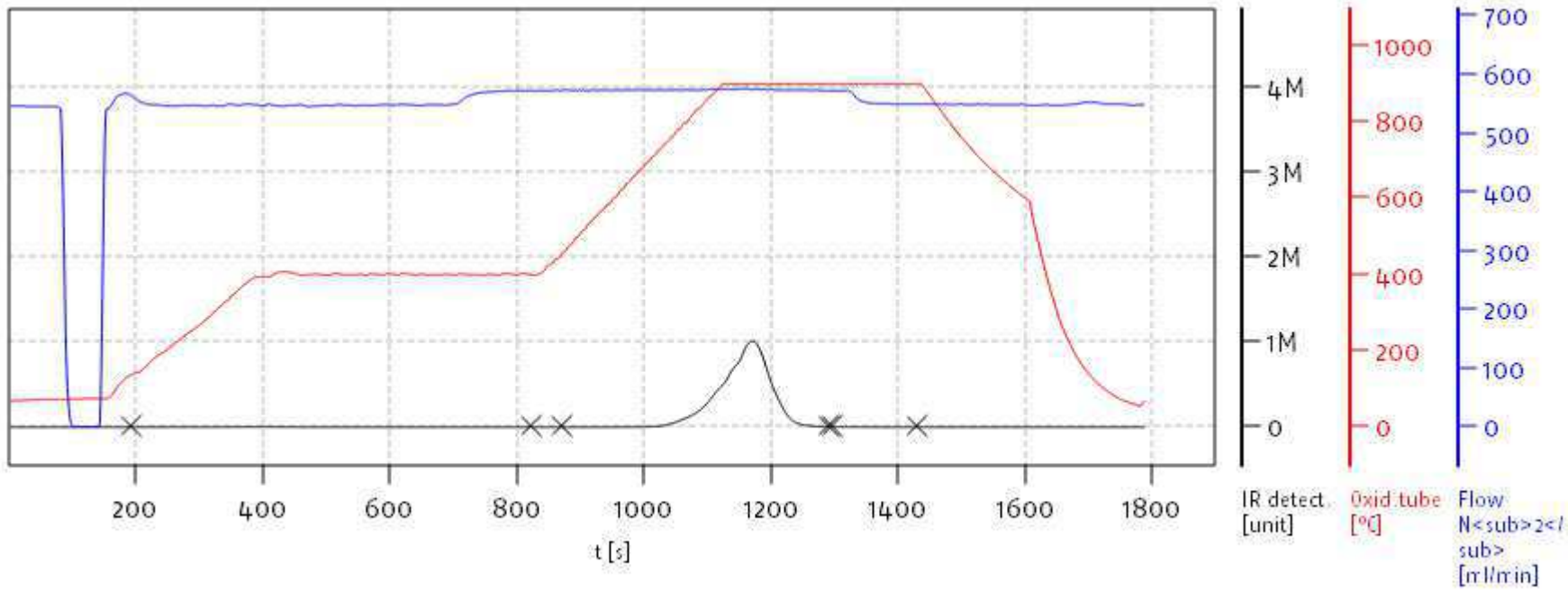
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
21	21	SLE0270-CALJ	200.00	0.0400	CARBON	5/17/2023 9:49 PM	bl,C2u	0.018	13 295	2.629	0.006	4 807	3 309 588	0.013	2.611	1.0000	1.0000



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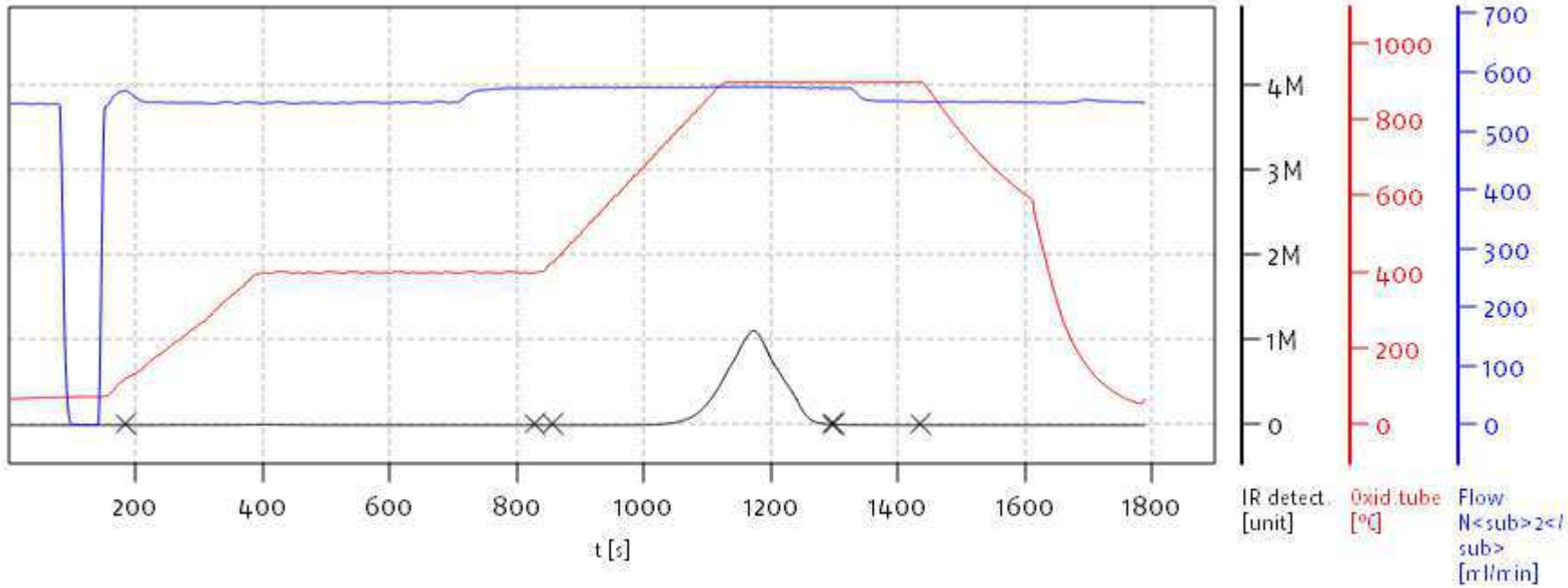
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
22	22	SLE0270-CALK	200.00	0.0500	CARBON	5/17/2023 10:19 PM	bl	0.031	25 022	3.285	0.009	9 148	4 126 050	0.022	3.254	1.0000	1.0000



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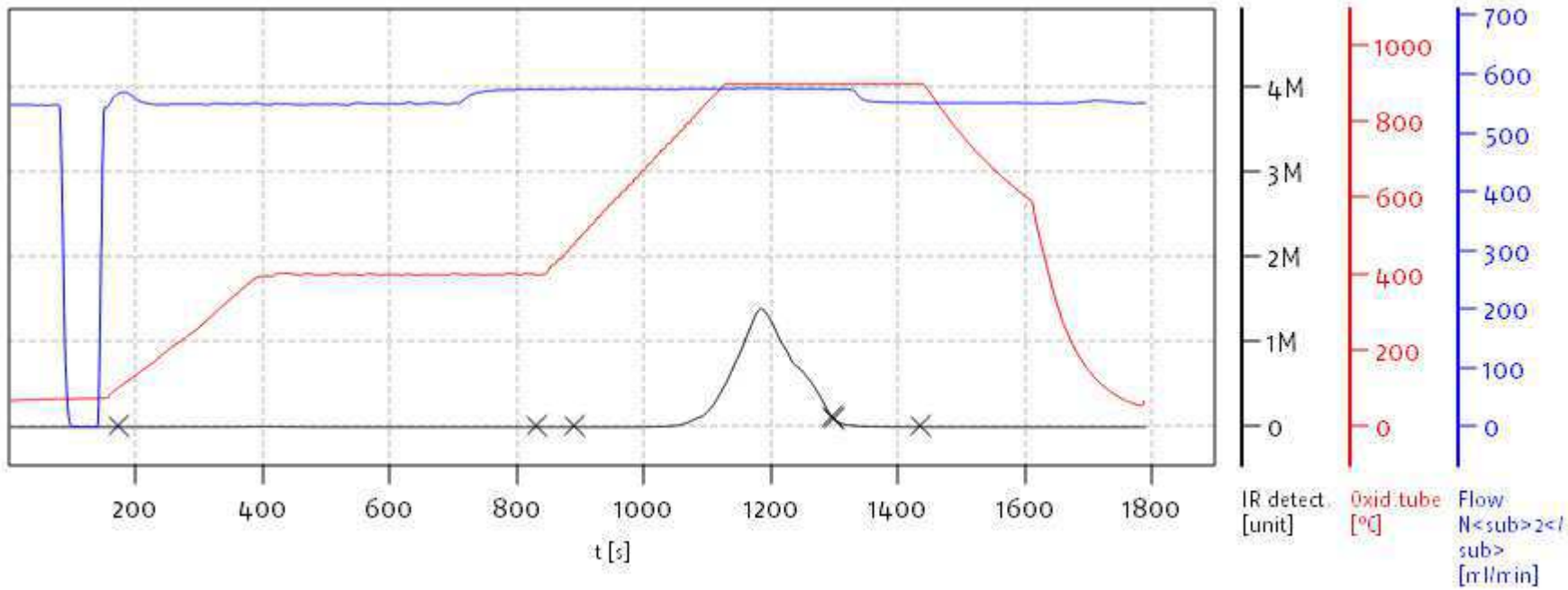
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
23	23	SLE0270-CALL	200.00	0.0700	CARBON	5/17/2023 10:49 PM	bl	0.069	21 598	4.597	0.050	60 794	5 741 652	0.019	4.528	1.0000	1.0000



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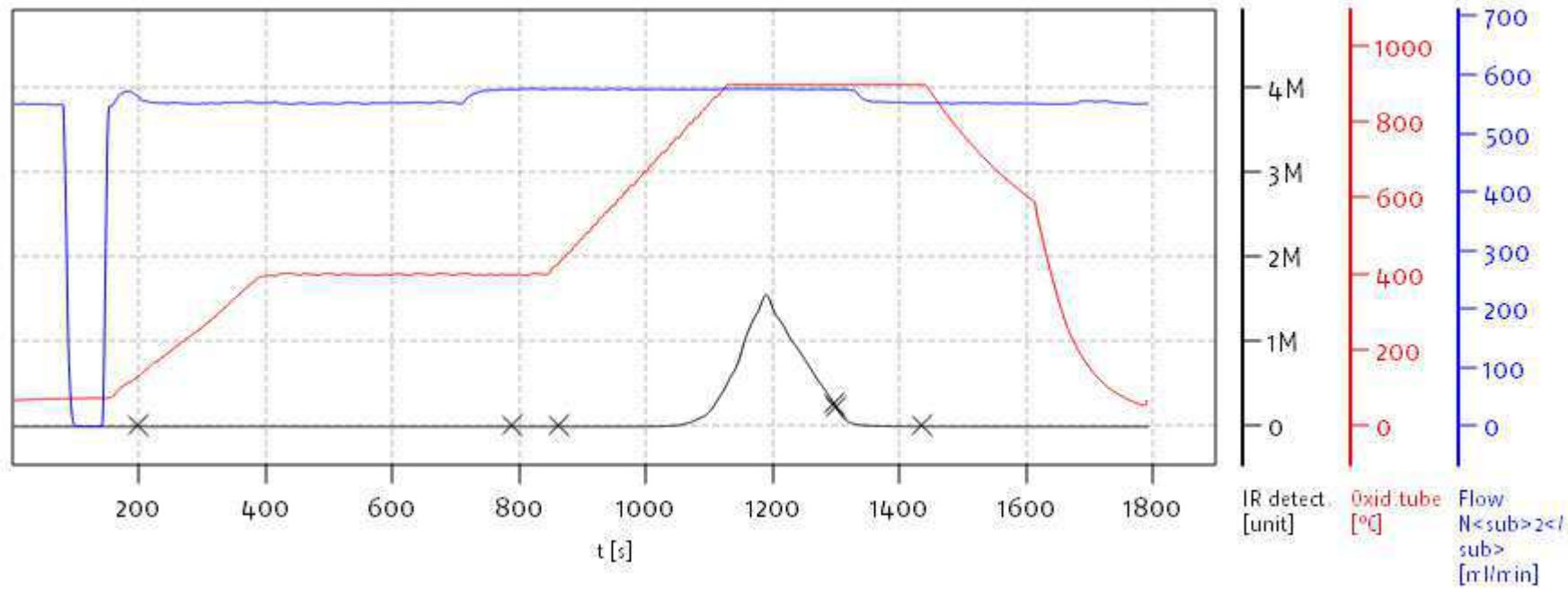
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
24	24	SLE0270-CALM	200.00	0.0800	CARBON	5/17/2023 11:19 PM	bl,C1u	0.112	5 408	5.212	0.106	131 494	6 467 914	0.006	5.100	1.0000	1.0000



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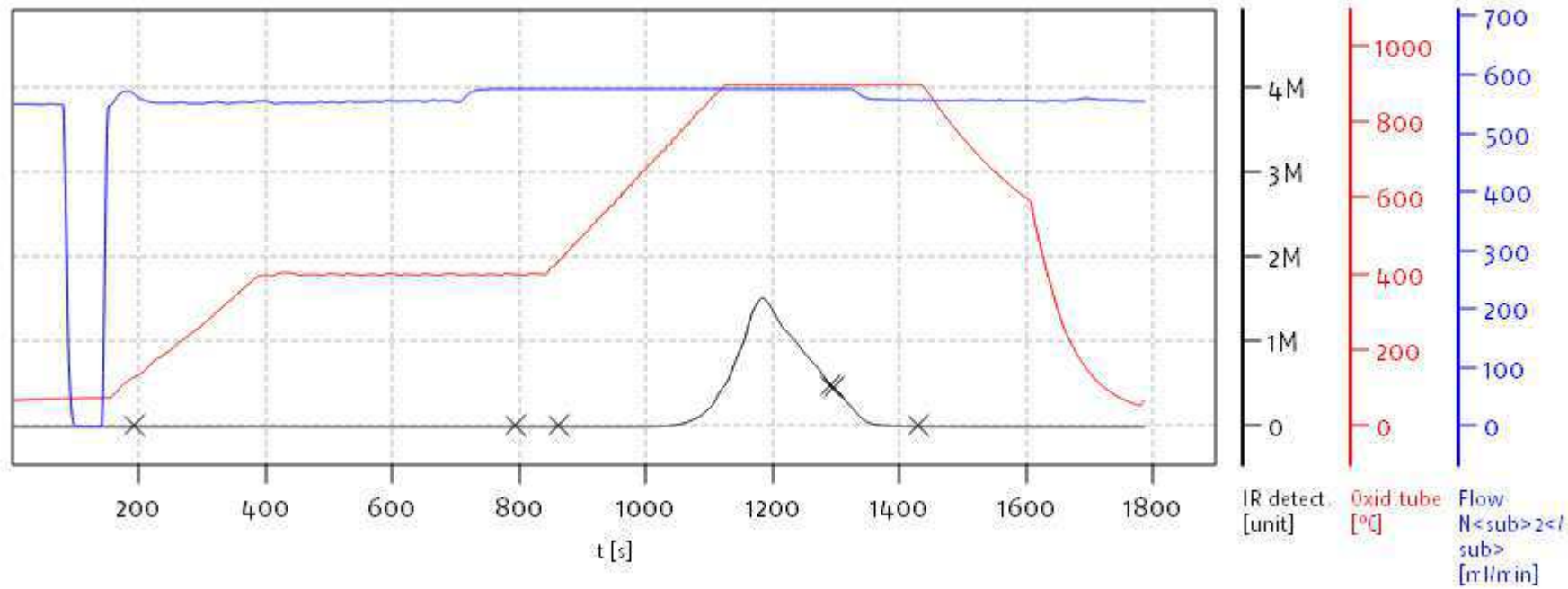
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
25	25	SLE0270-CALN	200.00	0.0900	CARBON	5/17/2023 11:50 PM	bl	0.408	8 745	5.832	0.399	503 842	6 879 212	0.009	5.424	1.0000	1.0000



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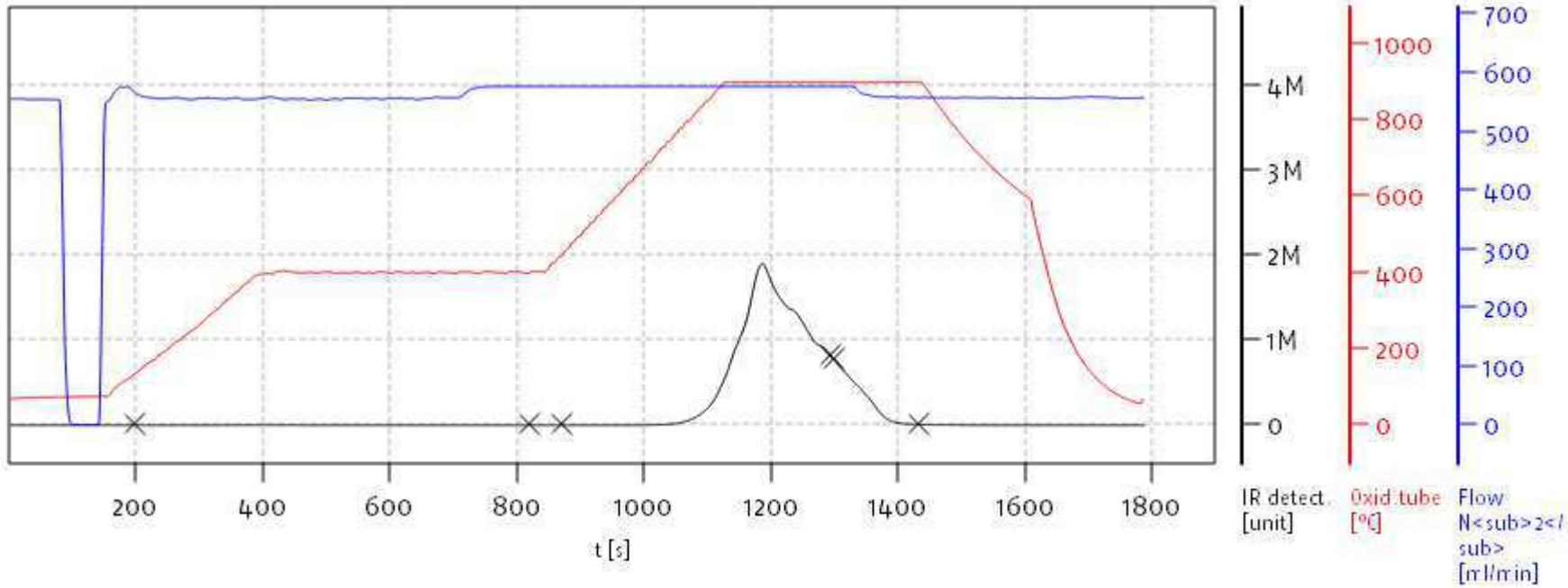
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
26	26	SLE0270-CALO	200.00	0.1200	CARBON	5/18/2023 12:20 AM	bl,C1u	1.074	6 993	7.759	1.066	1 350 231	8 478 912	0.008	6.685	1.0000	1.0000



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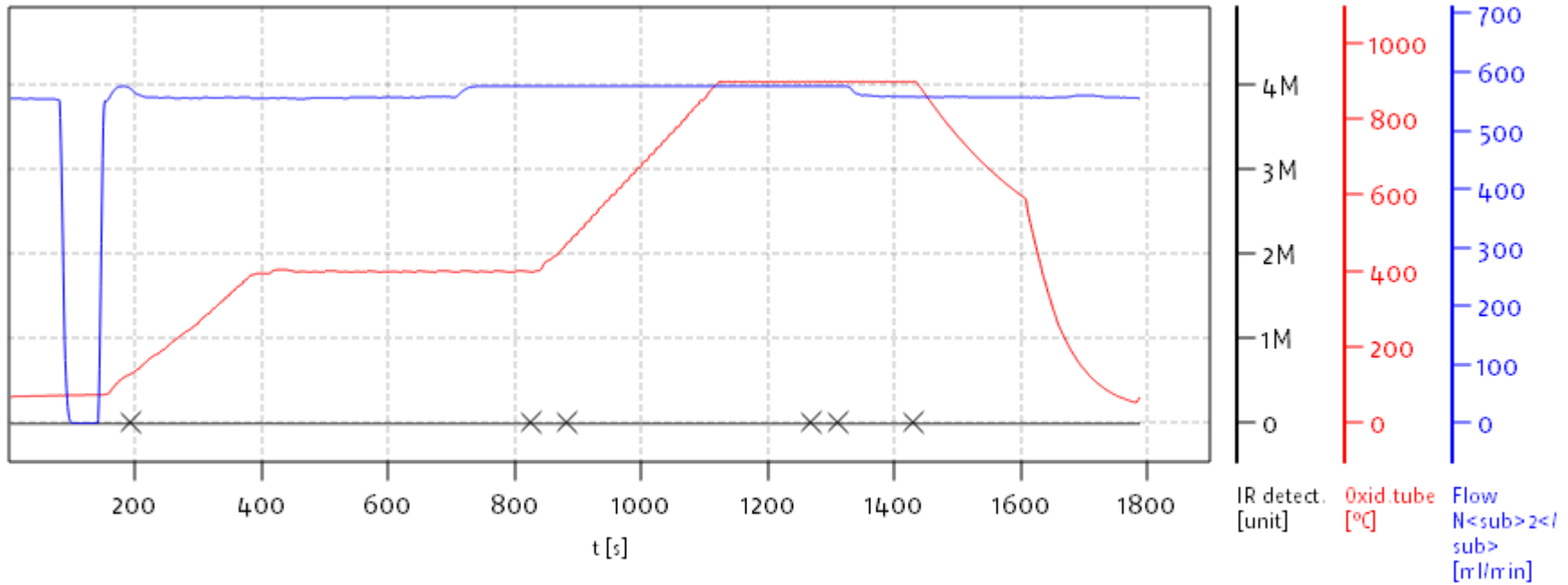
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
27	27	BLANK	1.00		CARBON	5/ 18/2023 12:50 AM	bl	0.000	5 379	0.000	0.000	0	959	0.000	0.000	1.0000	1.0000



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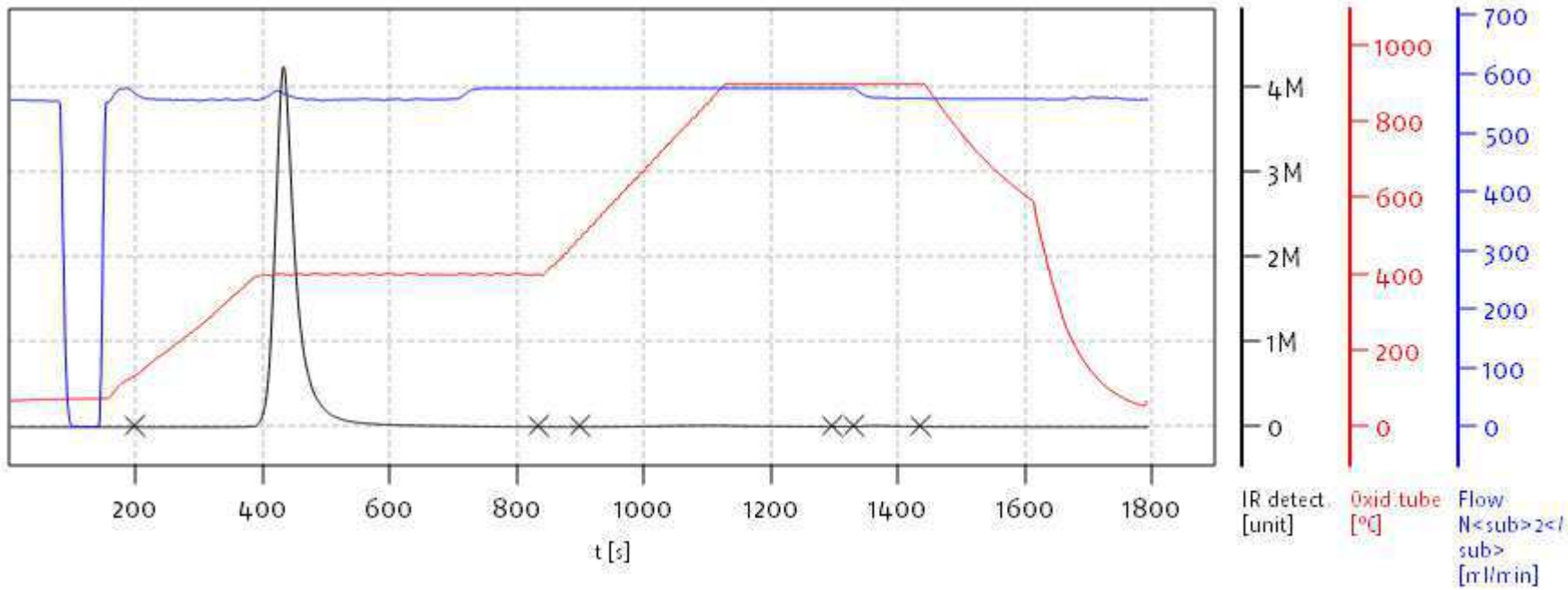
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
28	28	Dfactor	21.70		CARBON	5/18/2023 1:20 AM	bl	44.736	6 218 209	45.755	0.291	37 376	137 647	44.446	1.019	0.9835	1.0000



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Access: soliTOC superuser

Date: Thu May 18 09:43:39 2023

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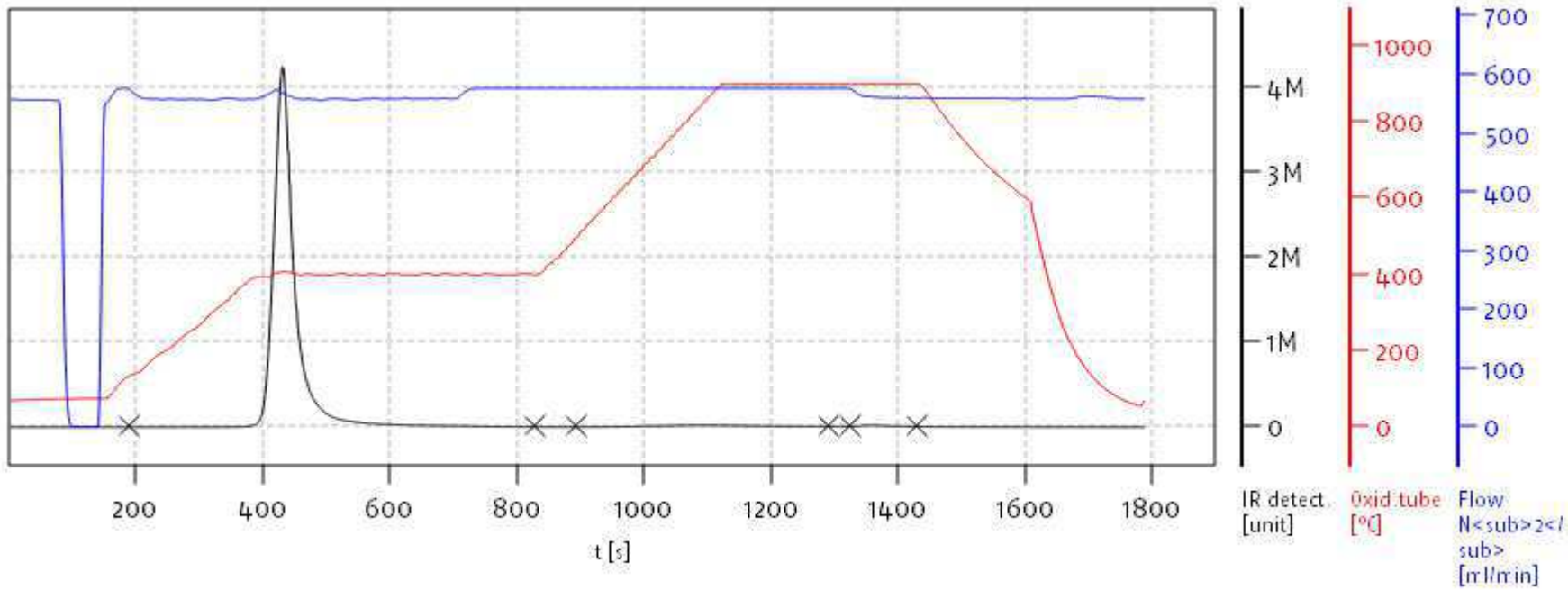
EXCELLENCE IN ELEMENTS

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
29	29	Dfactor	21.20		CARBON	5/18/2023 1:50 AM	bl	44.824	6 030 884	46.116	0.378	48 254	171 095	44.446	1.292	0.9907	1.0000



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Access: soliTOC superuser

Date: Thu May 18 09:43:39 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

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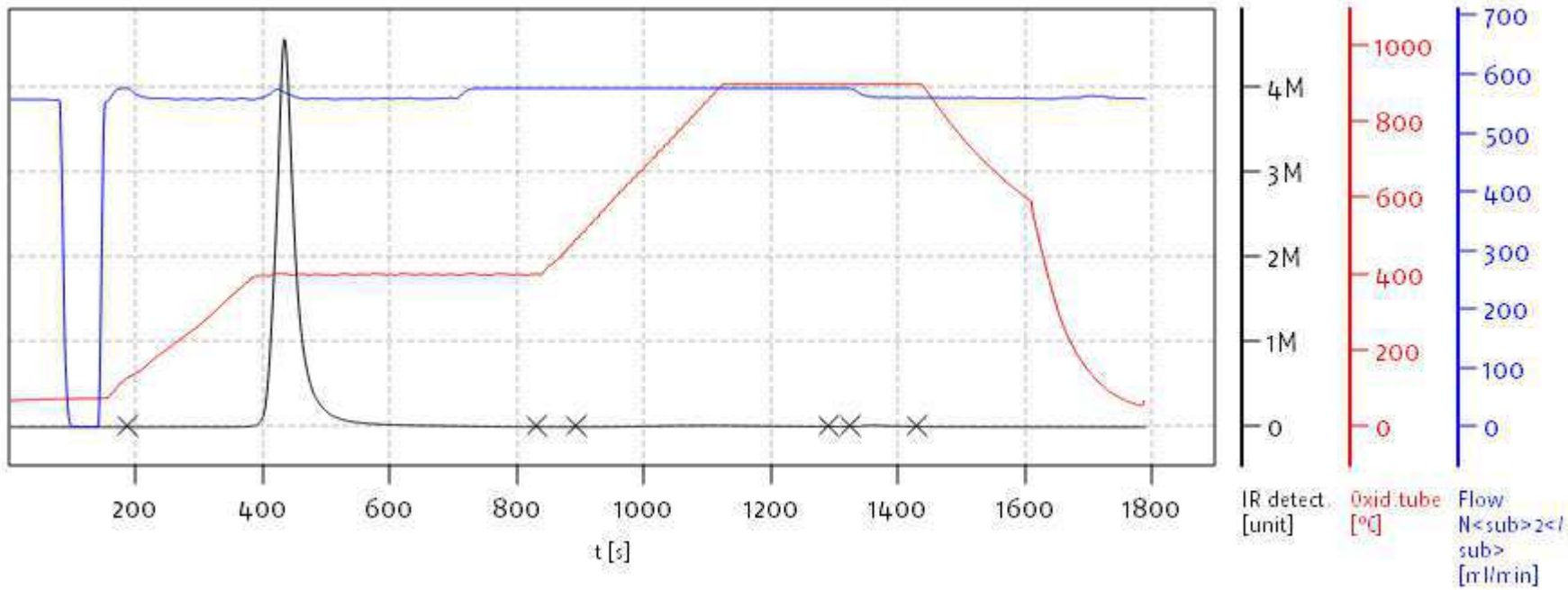
EXCELLENCE IN ELEMENTS

Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
30	30	SLE0270-ICV1	22.30		CARBON	5/18/2023 2:21 AM	bl	44.949	6 392 325	46.022	0.327	43 597	149 127	44.622	1.073	0.9871	1.0000



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Serial No: 0300.181017
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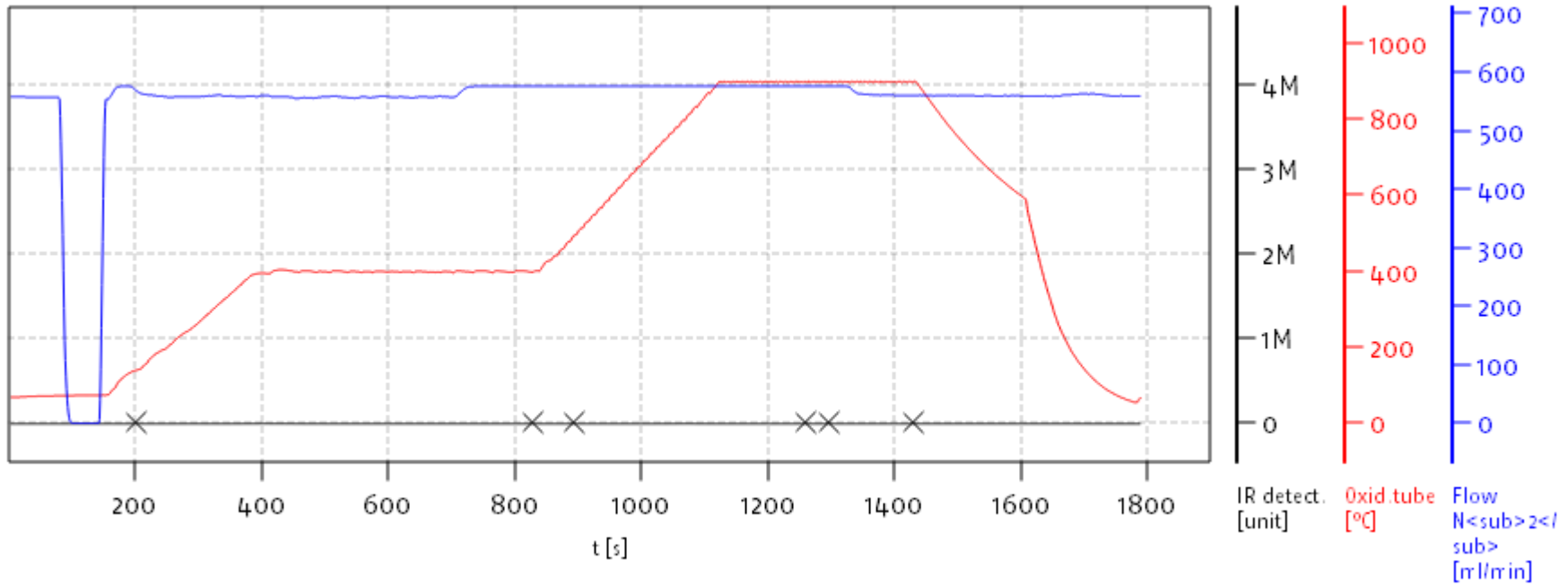
EXCELLENCE IN ELEMENTS

Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
31	31	SLE0270-ICB1	530.50		CARBON	5/18/2023 2:51 AM	bl,C1u,C3u,C2u	0.003	6 198	0.005	0.001	198	1 900	0.003	0.001	0.9871	1.0000



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Date: Thu May 18 09:43:39 2023

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EXCELLENCE IN ELEMENTS

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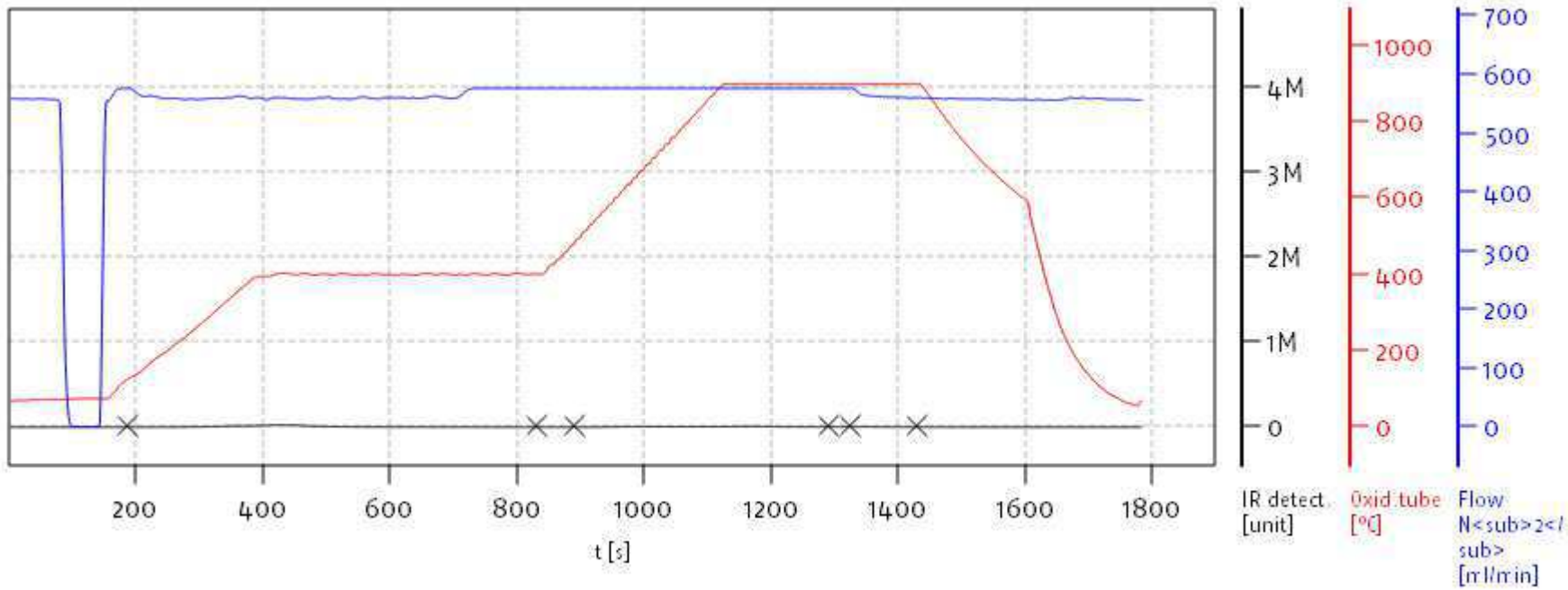
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
32	32	23D0491-10	42.50		CARBON	5/18/2023 3:21 AM	bl	0.560	138 129	0.841	0.044	9 353	73 148	0.515	0.281	0.9871	1.0000



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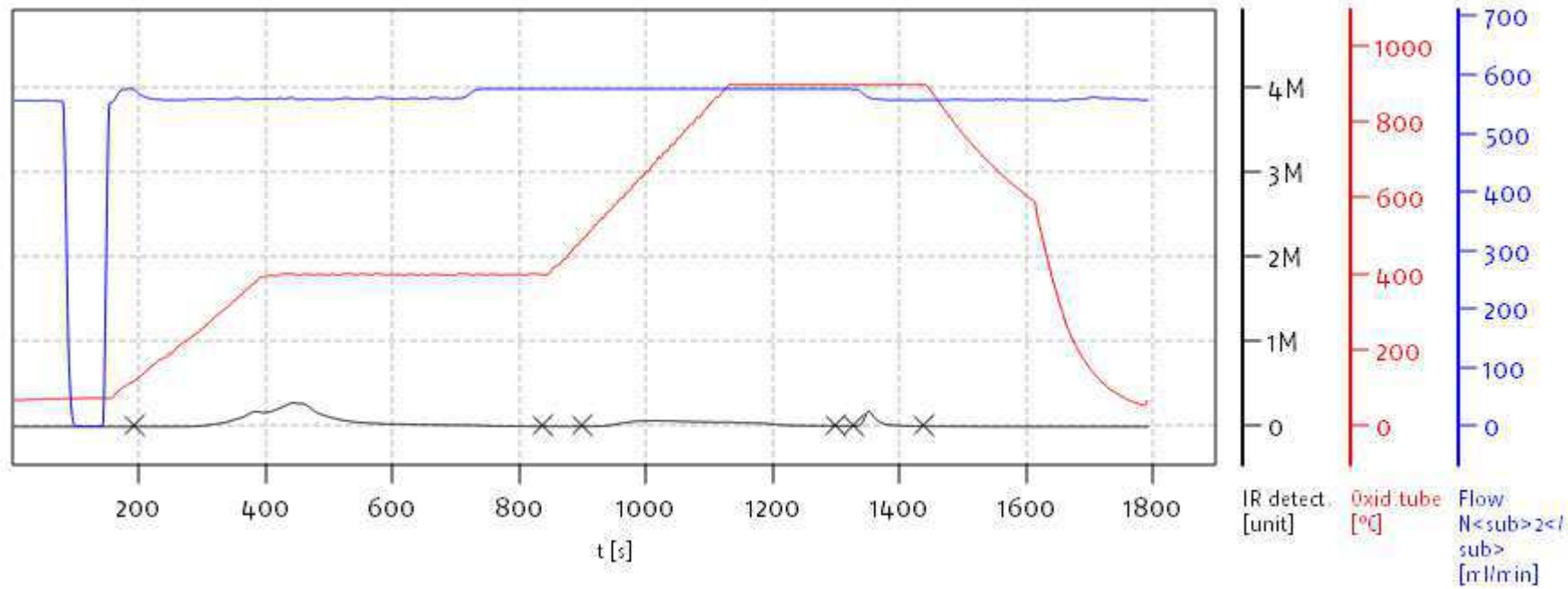
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
33	33	23D0491-10RE1	505.50		CARBON	5/18/2023 3:51 AM	bl	0.513	1 489 627	0.692	0.054	169 645	569 728	0.459	0.178	0.9871	1.0000



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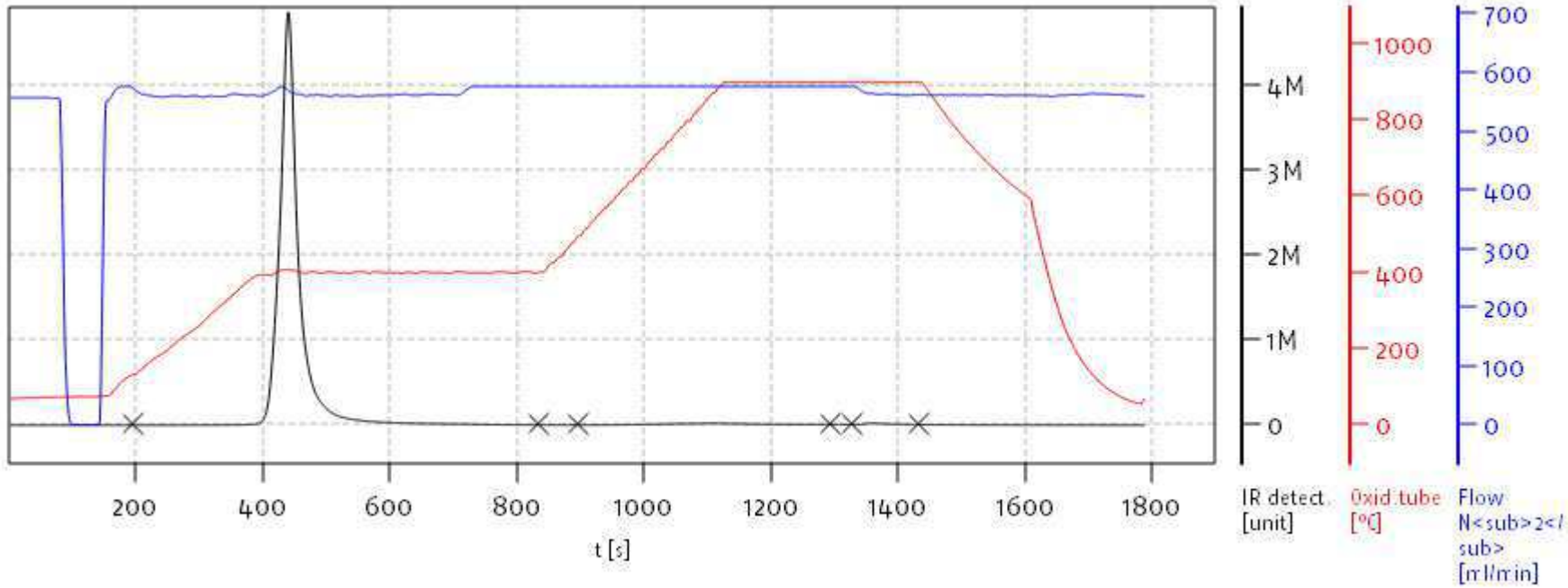
Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
34	34	SLE0270-CCV1	22.20		CARBON	5/18/2023 4:21 AM	bl	44.616	6 309 271	45.769	0.375	50 146	159 806	44.241	1.153	0.9871	1.0000



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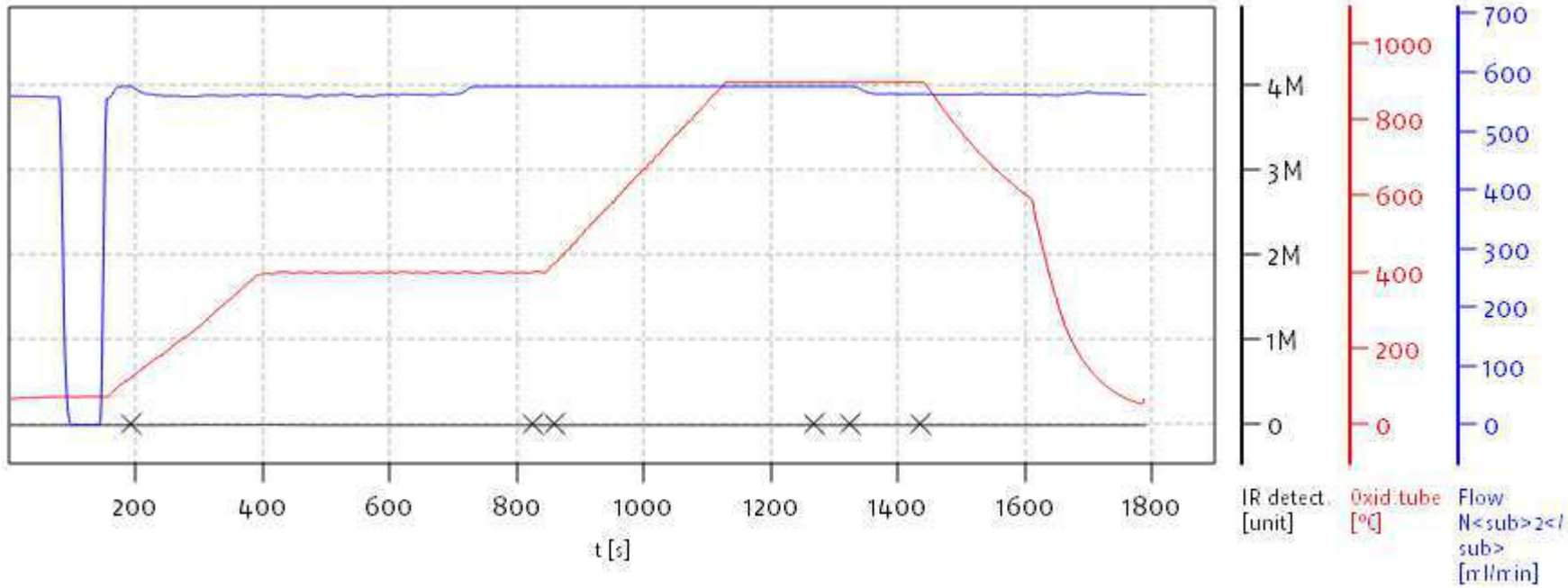
Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
35	35	SLE0270-CCB1	523.30		CARBON	5/18/2023 4:52 AM	bl,C3u,C2u	0.009	22 128	0.010	0.001	2 335	2 184	0.007	0.001	0.9871	1.0000



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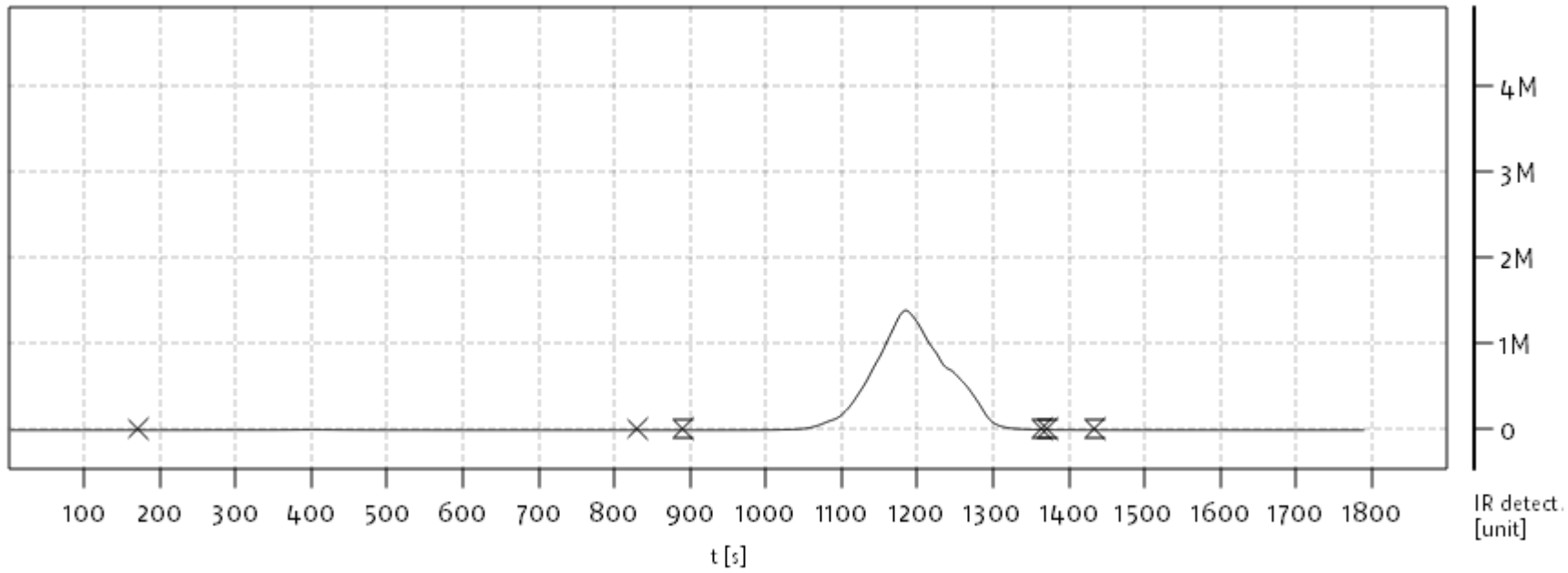
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
23	23	SLE0270-CALL	200.00	0.0700	CARBON	5/18/2023 9:47 AM	bl	0.019	21 598	4.386	0.000	**0**	**5 538 028**	0.019	4.367	1.0000	1.0000



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Date: Thu May 18 09:50:12 2023

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EXCELLENCE IN ELEMENTS

soliTOC V2.0.2 (31015f9) 2018-11-19
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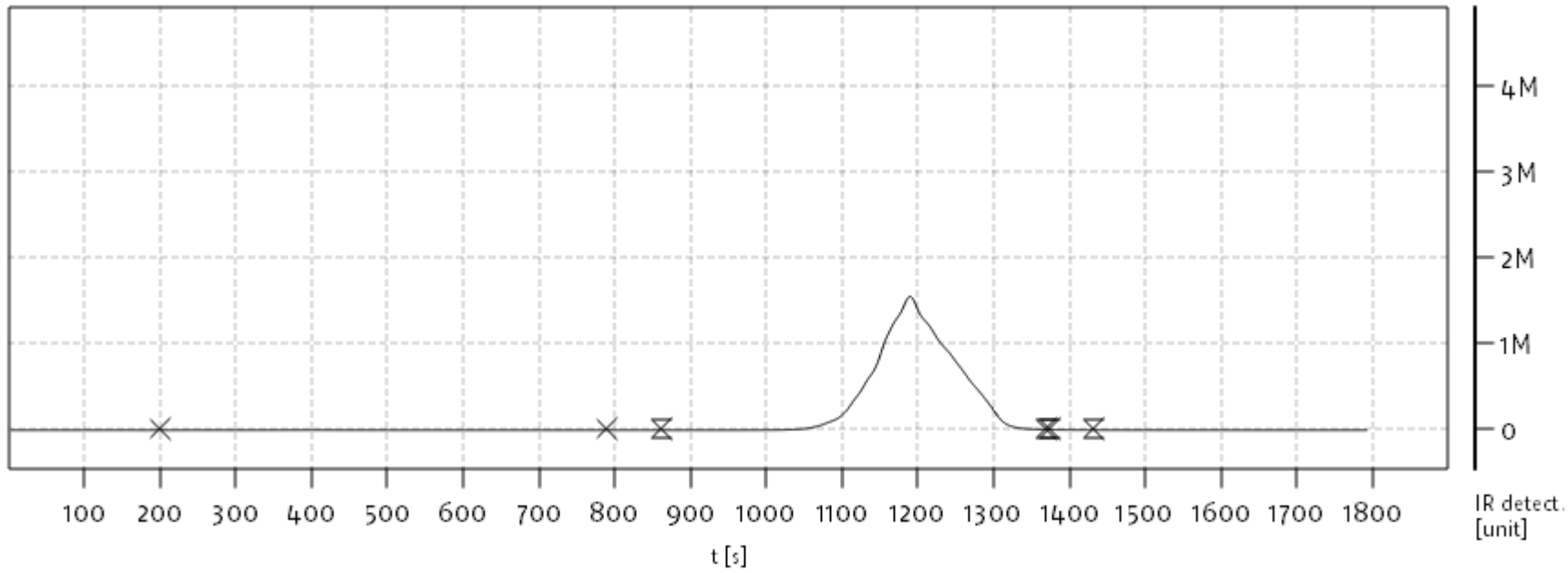
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
24	24	SLE0270-CALM	200.00	0.0800	CARBON	5/18/2023 9:48 AM	bl,C1u	0.006	5 408	4.784	0.000	**0**	**6 058 878**	0.006	4.778	1.0000	1.0000



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EXCELLENCE IN ELEMENTS

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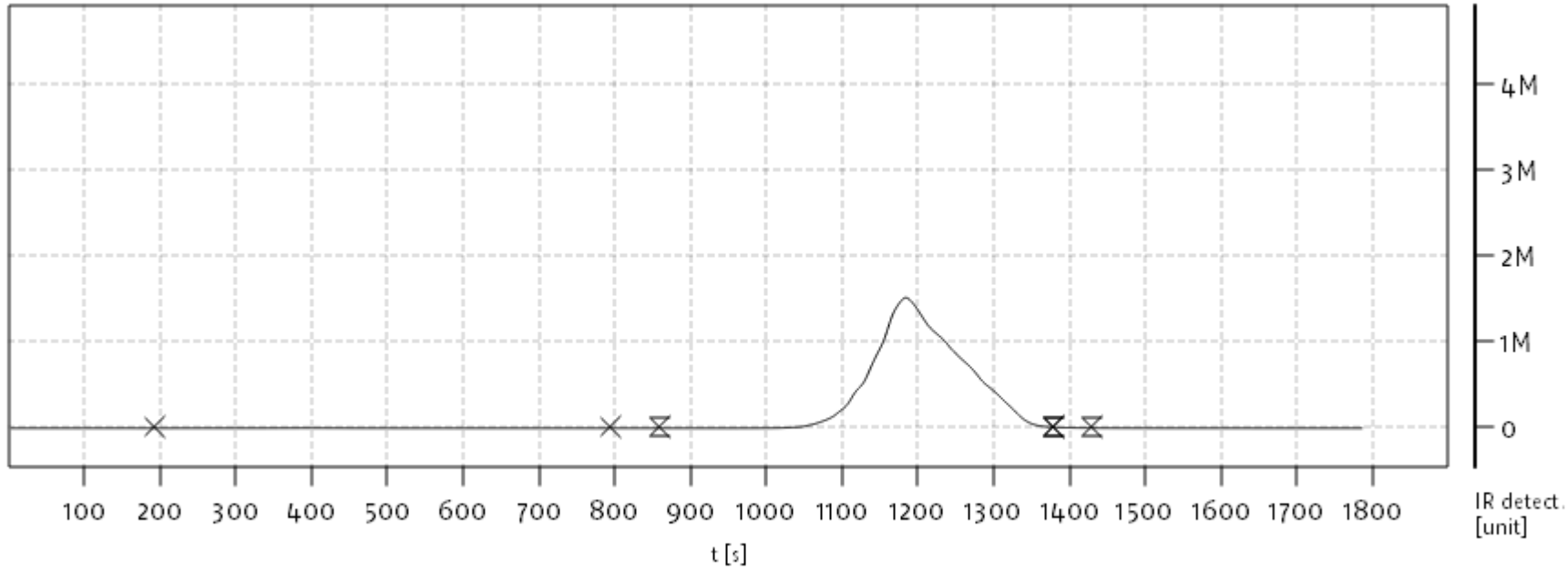
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
25	25	SLE0270-CALN	200.00	0.0900	CARBON	5/18/2023 9:49 AM	bl	0.009	8 745	5.379	0.000	**0**	**6 810 985**	0.009	5.370	1.0000	1.0000



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Date: Thu May 18 09:50:12 2023

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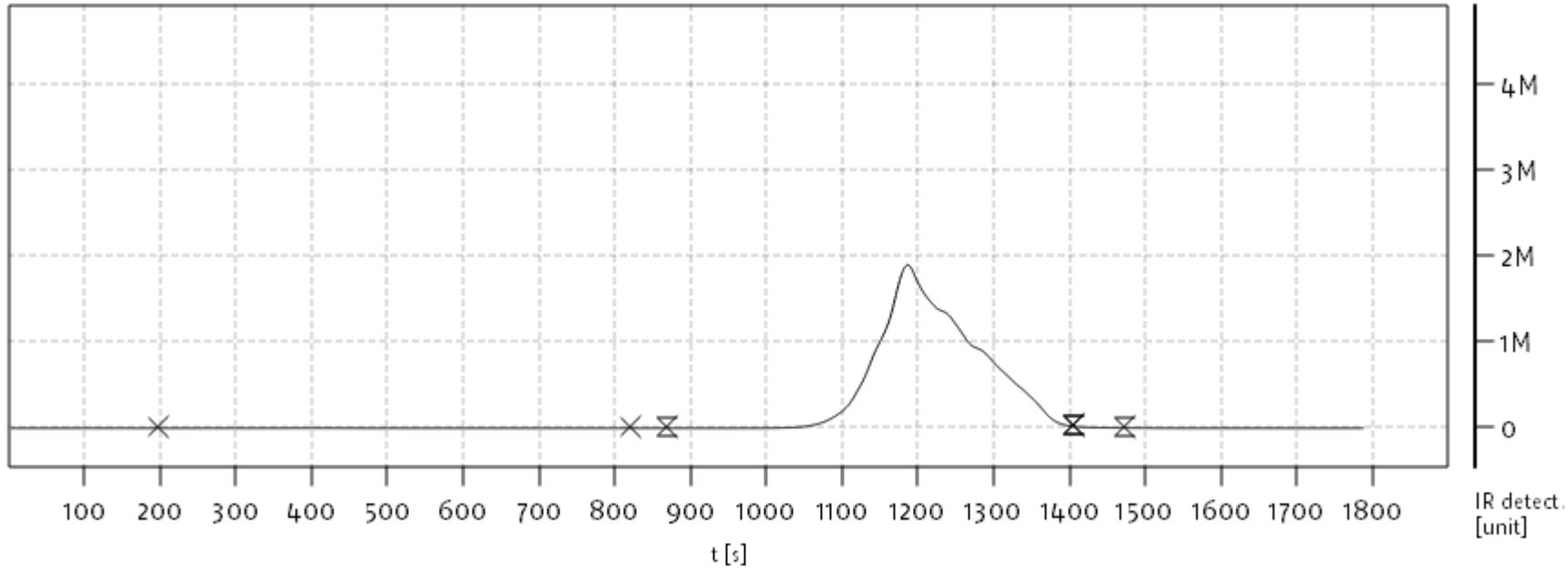
Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
26	26	SLE0270-CALO	200.00	0.1200	CARBON	5/18/2023 9:49 AM	bl,C1u,C3o	0.008	6 993	7.291	0.000	0	9 238 066	0.008	7.283	1.0000	1.0000



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EXCELLENCE IN ELEMENTS

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Serial No: 0300.181017
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Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Analytical Resources, LLC
Analytical Chemists and Consultants

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00052	Instrument:	TOC Cube
Calibration Date:	05/17/2023 10:07		

Compound	Level 01		Level 02		Level 03		Level 04		Level 05		Level 06	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.0081413	2824365	0.015378	1908831	0.02171	2161539	0.030153	2354094	0.04523	1647690	0.060306	1529782
Total Carbon	0.0081413	2824365	0.015378	1908831	0.02171	2161539	0.030153	2354094	0.04523	1647690	0.060306	1529782
Total Inorganic Carbon	0.0081413	2824365	0.015378	1908831	0.02171	2161539	0.030153	2354094	0.04523	1647690	0.060306	1529782
% Soot	0.0081413	2824365	0.015378	1908831	0.02171	2161539	0.030153	2354094	0.04523	1647690	0.060306	1529782

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00052
Instrument: TOC Cube
Calibration Date: 05/17/2023 10:07

Compound	Level 07		Level 08		Level 09		Level 10		Level 11		Level 12	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.075081	1526165	0.092268	1411324	0.12031	1696235	0.15107	1646548	0.24	1507392	0.306	1652209
Total Carbon	0.075081	1526165	0.092268	1411324	0.12031	1696235	0.15107	1646548	0.24	1507392	0.306	1652209
Total Inorganic Carbon	0.075081	1526165	0.092268	1411324	0.12031	1696235	0.15107	1646548	0.24	1507392	0.306	1652209
% Soot	0.075081	1526165	0.092268	1411324	0.12031	1696235	0.15107	1646548	0.24	1507392	0.306	1652209

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00052
Instrument: TOC Cube
Calibration Date: 05/17/2023 10:07

Compound	Level 13		Level 14		Level 15		Level 16		Level 17		Level 18	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	0.426	1366392	0.606	1382589	0.894	1387318	1.206	1393572	1.506	1392225	1.806	1387100
Total Carbon	0.426	1366392	0.606	1382589	0.894	1387318	1.206	1393572	1.506	1392225	1.806	1387100
Total Inorganic Carbon	0.426	1366392	0.606	1382589	0.894	1387318	1.206	1393572	1.506	1392225	1.806	1387100
% Soot	0.426	1366392	0.606	1382589	0.894	1387318	1.206	1393572	1.506	1392225	1.806	1387100

INITIAL CALIBRATION DATA

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Calibration: GE00052
Instrument: TOC Cube
Calibration Date: 05/17/2023 10:07

Compound	Level 19		Level 20		Level 21		Level 22		Level 23		Level 24	
	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF	Conc	RF
Total Organic Carbon	2.406	1383080	2.988	1392309	4.206	1321832	4.788	1266559	5.394	1264318	7.152	1292654
Total Carbon	2.406	1383080	2.988	1392309	4.206	1321832	4.788	1266559	5.394	1264318	7.152	1292654
Total Inorganic Carbon	2.406	1383080	2.988	1392309	4.206	1321832	4.788	1266559	5.394	1264318	7.152	1292654
% Soot	2.406	1383080	2.988	1392309	4.206	1321832	4.788	1266559	5.394	1264318	7.152	1292654

INITIAL CALIBRATION DATA

EPA 9060A m

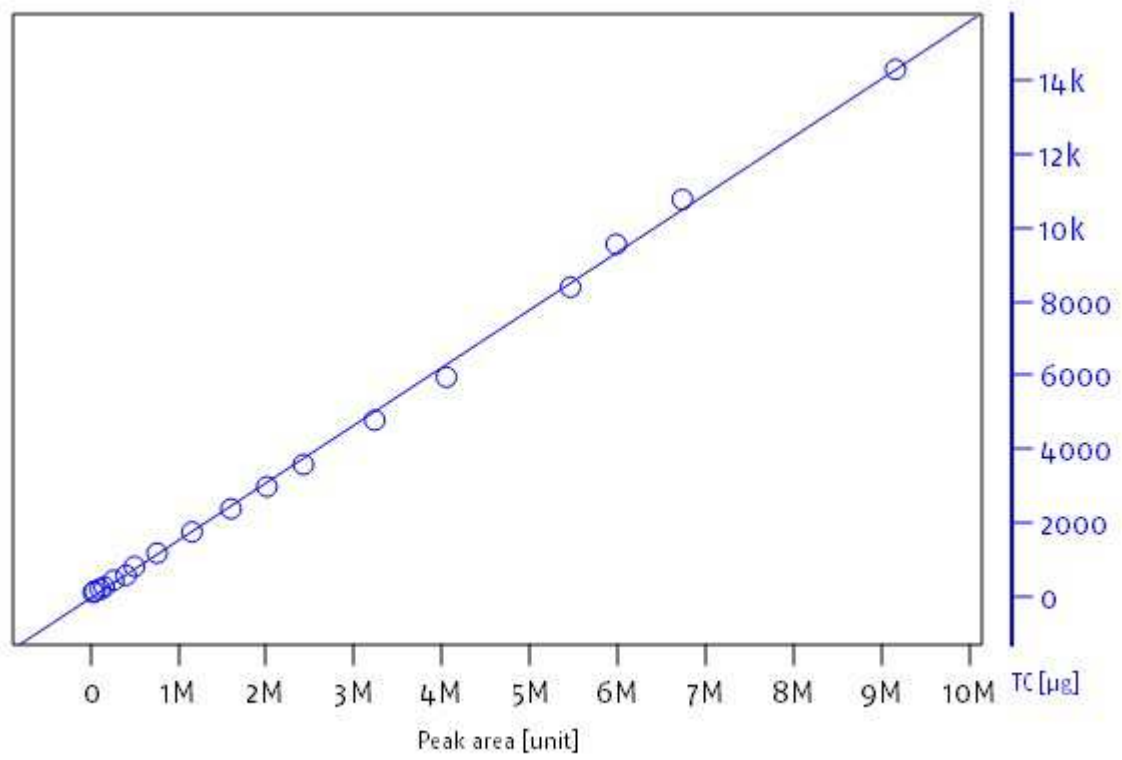
Laboratory:	Analytical Resources, LLC	SDG:	23D0396
Client:	Anchor QEA, LLC	Project:	AOC5 MR Phase 1
Calibration:	GE00052	Instrument:	TOC Cube
Calibration Date:	05/17/2023 10:07		

COMPOUND	Mean RF	RF RSD	Linear COD	Quad COD	COD Limit	Q
Total Organic Carbon	1587338	23.9	0.9987			
Total Carbon	1587338	23.9	0.9987			
Total Inorganic Carbon	1587338	23.9	0.9987			
% Soot	1587338	23.9	0.9987			

Calibration parameters TC, Whole range

a	+9.122373e-03
b	+1.560792e-06
c	+0.000000e+00
d	+0.000000e+00
e	+0.000000e+00
r	0.998690
r_old	0.998690
Proc.-SD	155.562438 µg

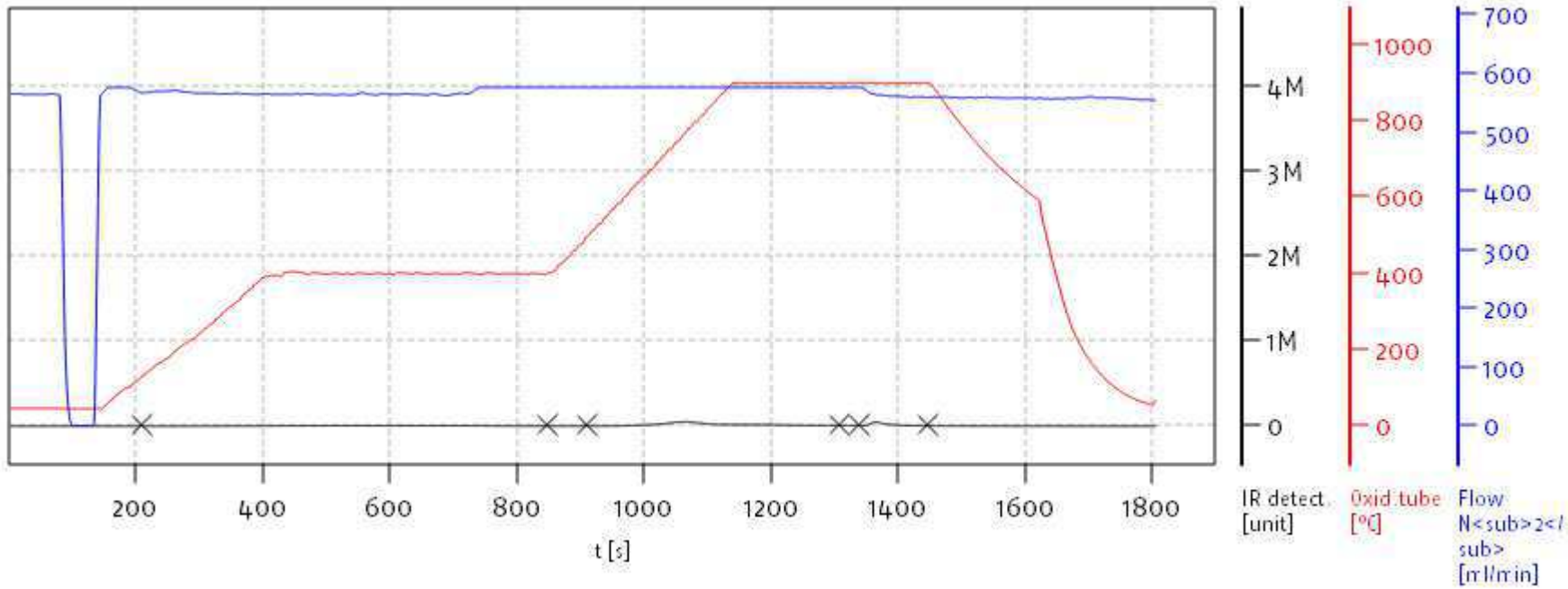
Calibration graph TC, Whole range



Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
1	1	BLANK	1.00		CARBON	5/ 17/2023 11:46 AM	bl	0.000	83 718	0.000	0.000	65 731	251 400	0.000	0.000	1.0000	1.0000



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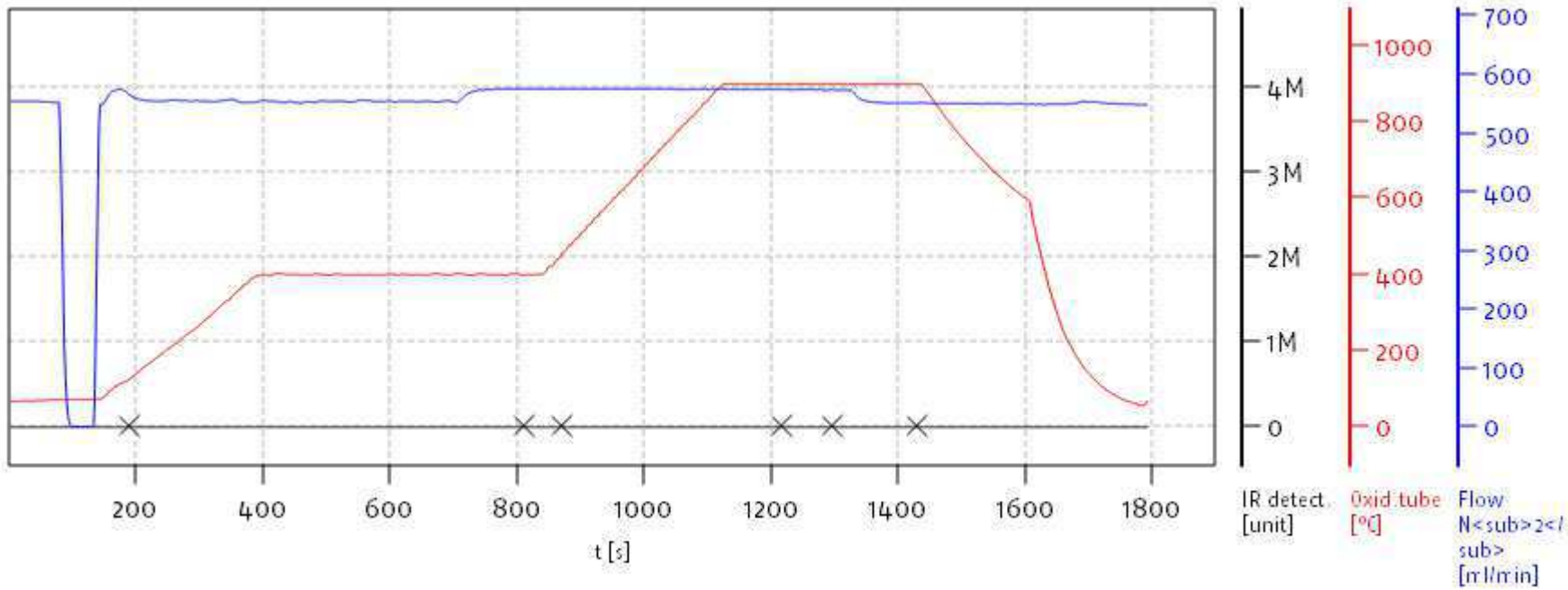
Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
2	2	BLANK	1.00		CARBON	5/ 17/2023 12:16 PM	bl	0.000	3 043	0.000	0.000	273	1	0.000	0.000	1.0000	1.0000



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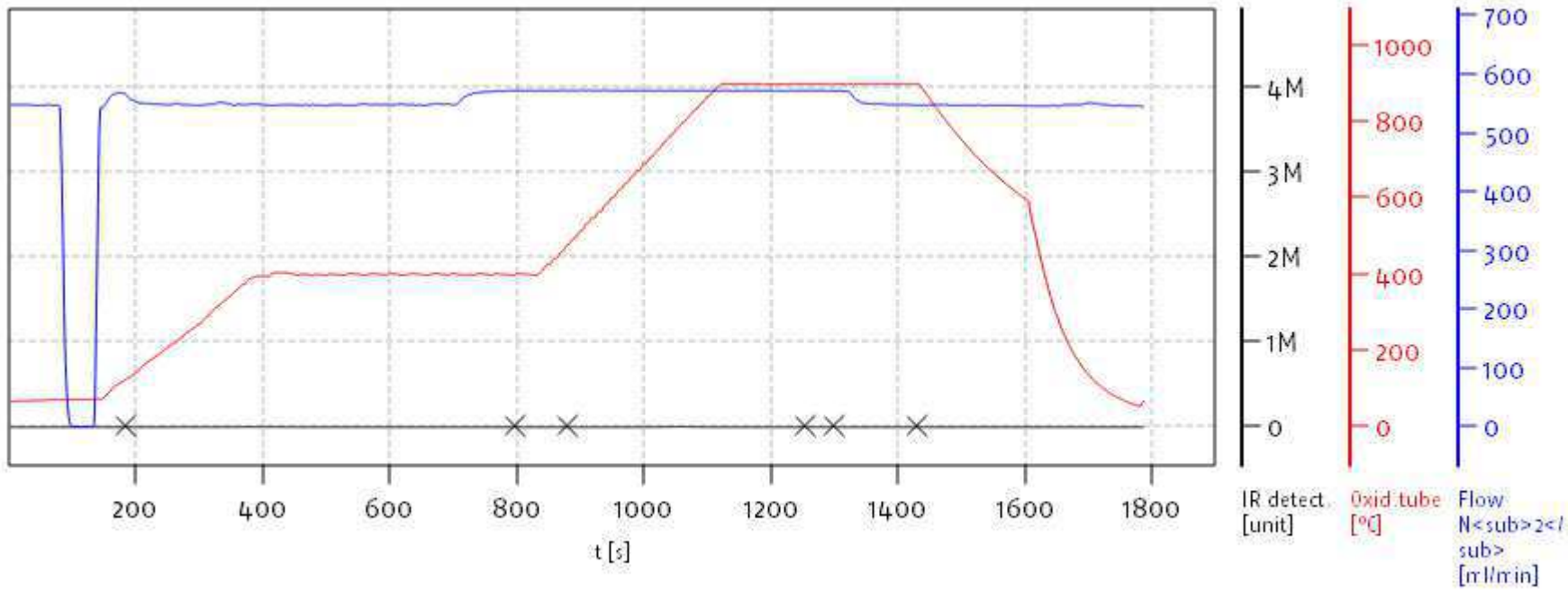
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
3	3	SLE0270-CAL1	200.00	0.0025	CARBON	5/17/2023 12:46 PM	bl,C2u	0.014	12 167	0.024	0.002	431	10 396	0.012	0.010	1.0000	1.0000



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Date: Thu May 18 09:43:39 2023

elementar
EXCELLENCE IN ELEMENTS

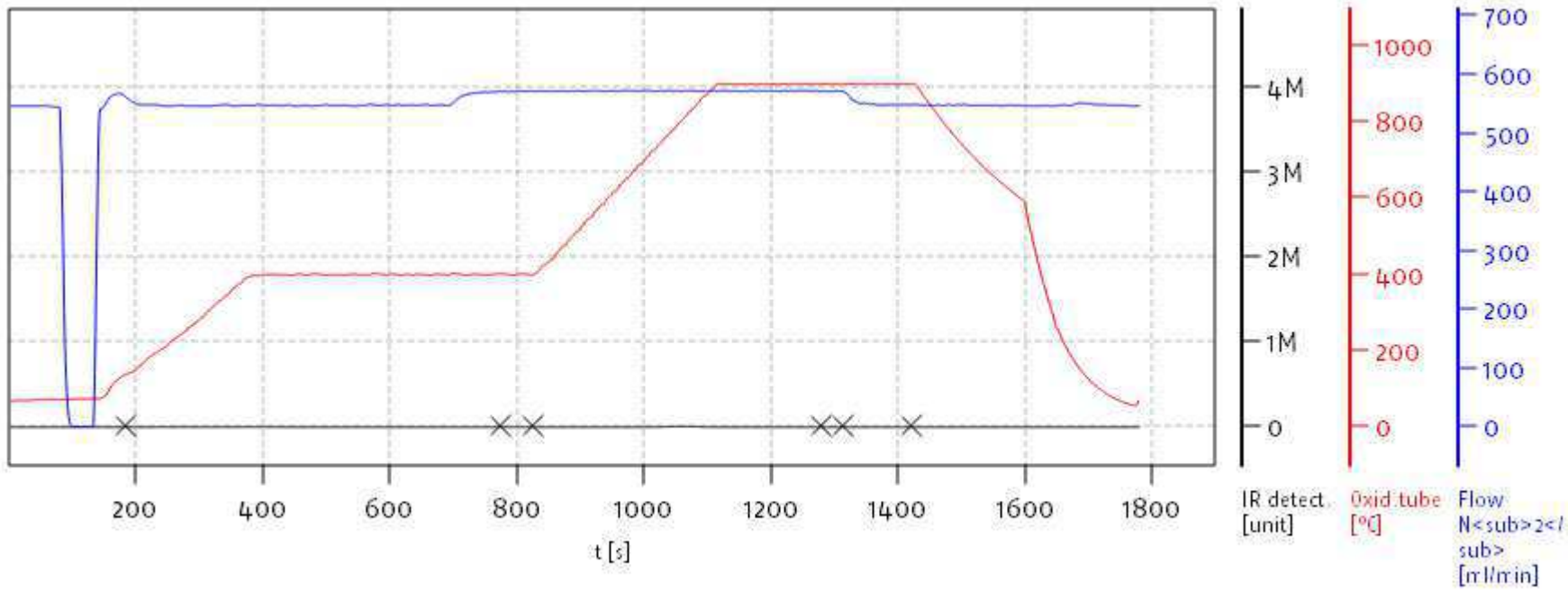
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
4	4	SLE0270-CAL2	200.00	0.0050	CARBON	5/17/2023 1:16 PM	bl,C2u	0.013	10 893	0.029	0.002	141	18 320	0.011	0.017	1.0000	1.0000



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Date: Thu May 18 09:43:39 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
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Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

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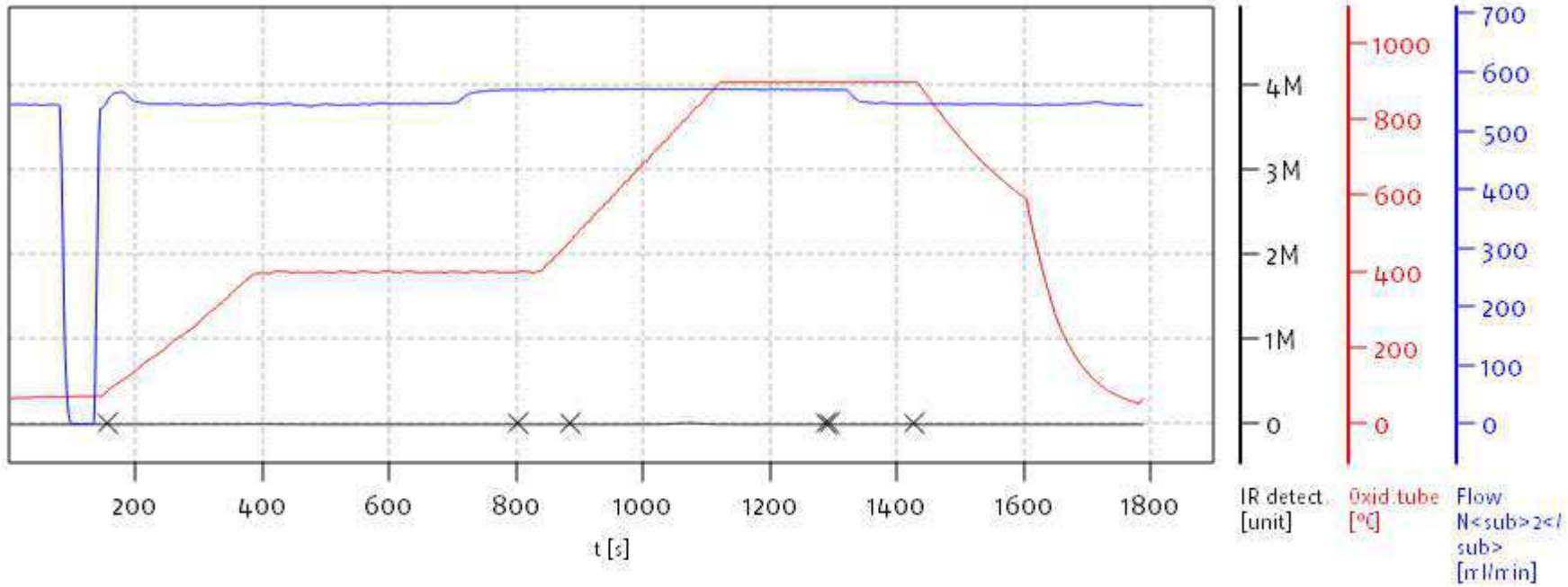
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
5	5	SLE0270-CAL3	200.00	0.0070	CARBON	5/17/2023 1:46 PM	bl,C2u	0.018	16 667	0.043	0.002	387	29 873	0.015	0.026	1.0000	1.0000



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Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

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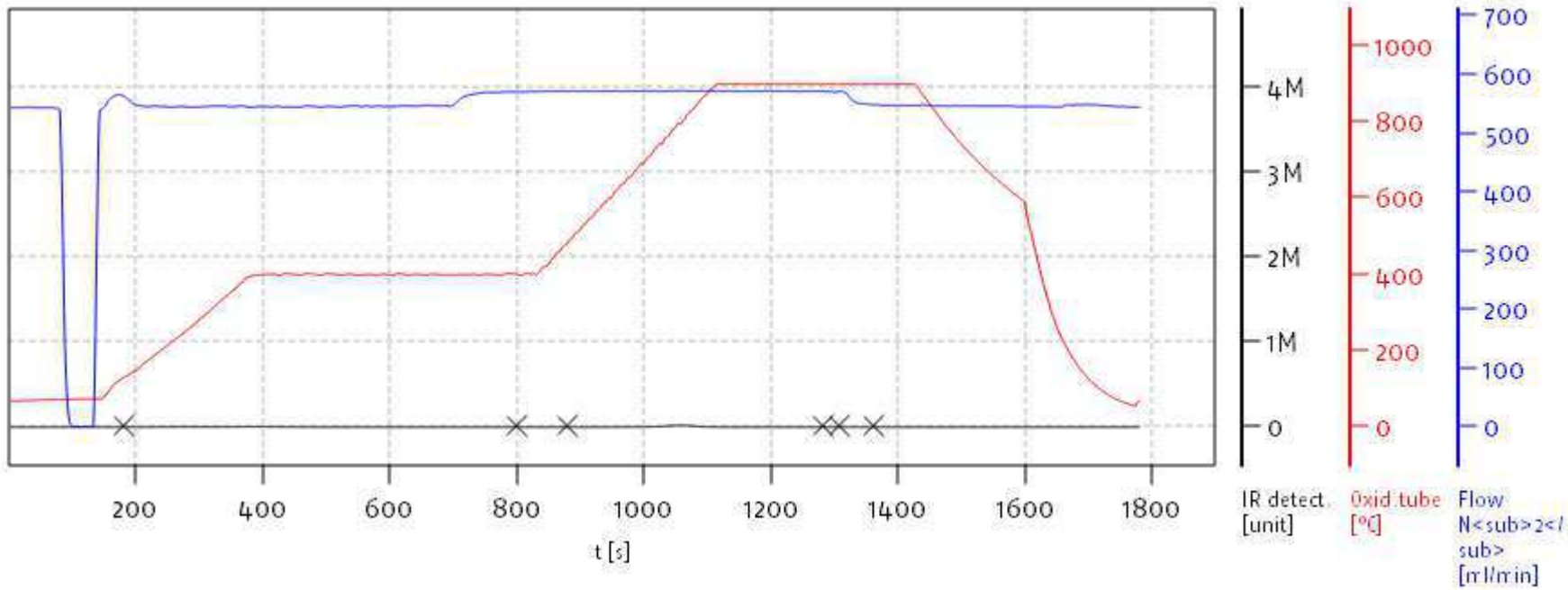
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
6	6	SLE0270-CAL4	200.00	0.0100	CARBON	5/17/2023 2:16 PM	bl,C2u	0.024	24 980	0.062	0.002	130	45 873	0.022	0.038	1.0000	1.0000



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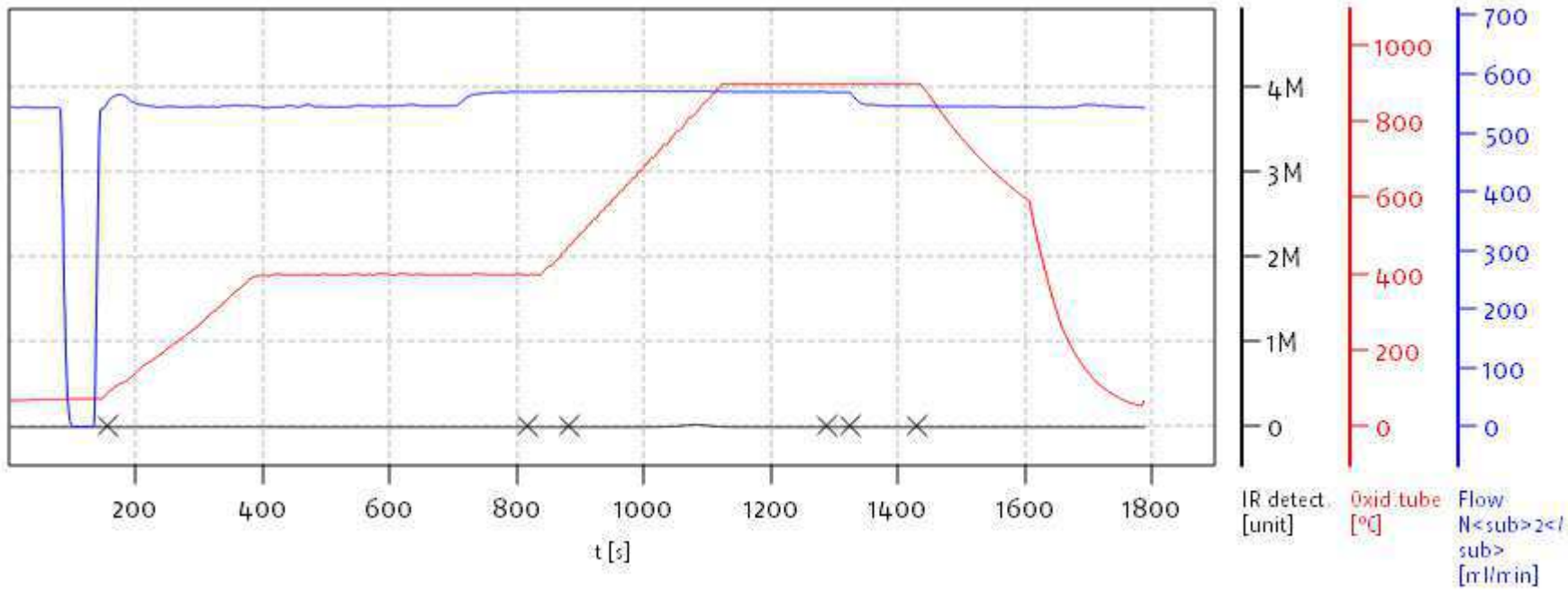
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
7	7	SLE0270-CAL5	200.00	0.0150	CARBON	5/17/2023 2:47 PM	bl,C2u	0.014	12 413	0.065	0.002	539	61 573	0.012	0.051	1.0000	1.0000



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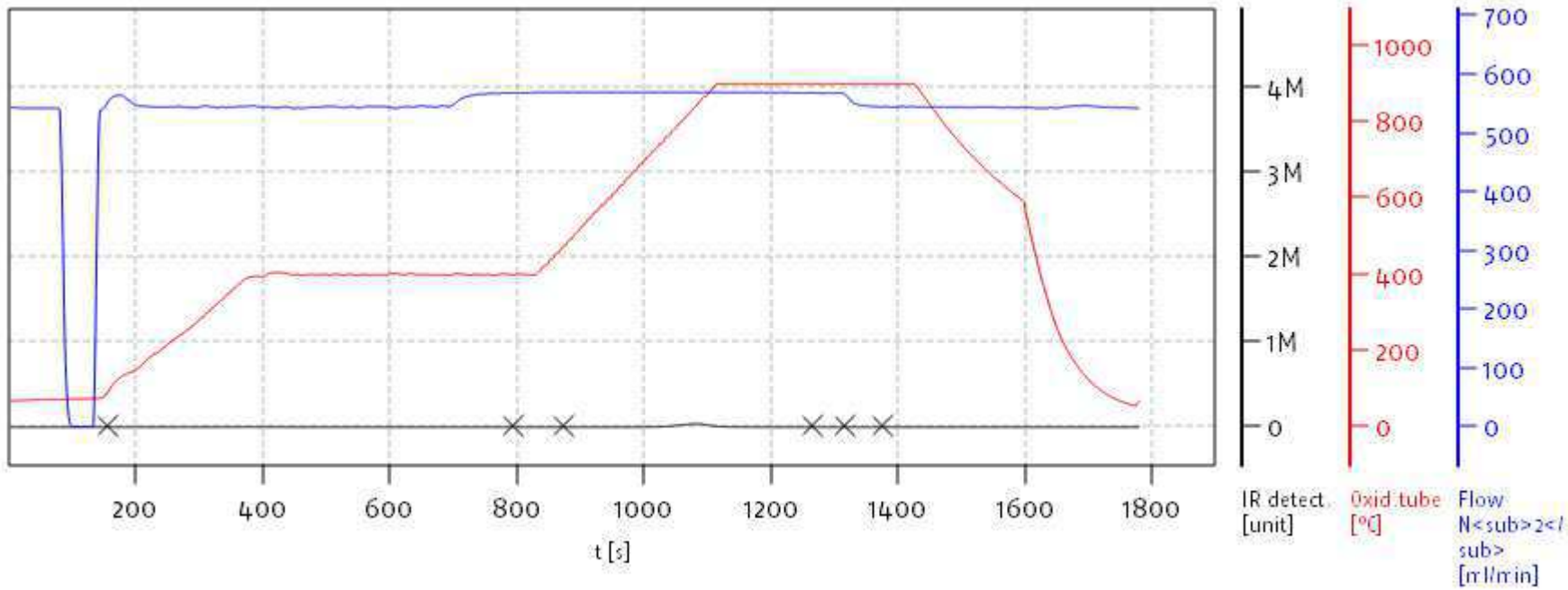
Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
8	8	SLE0270-CAL6	200.00	0.0200	CARBON	5/17/2023 3:17 PM	bl,C1u,C2u	0.011	7 999	0.079	0.002	170	84 086	0.008	0.068	1.0000	1.0000



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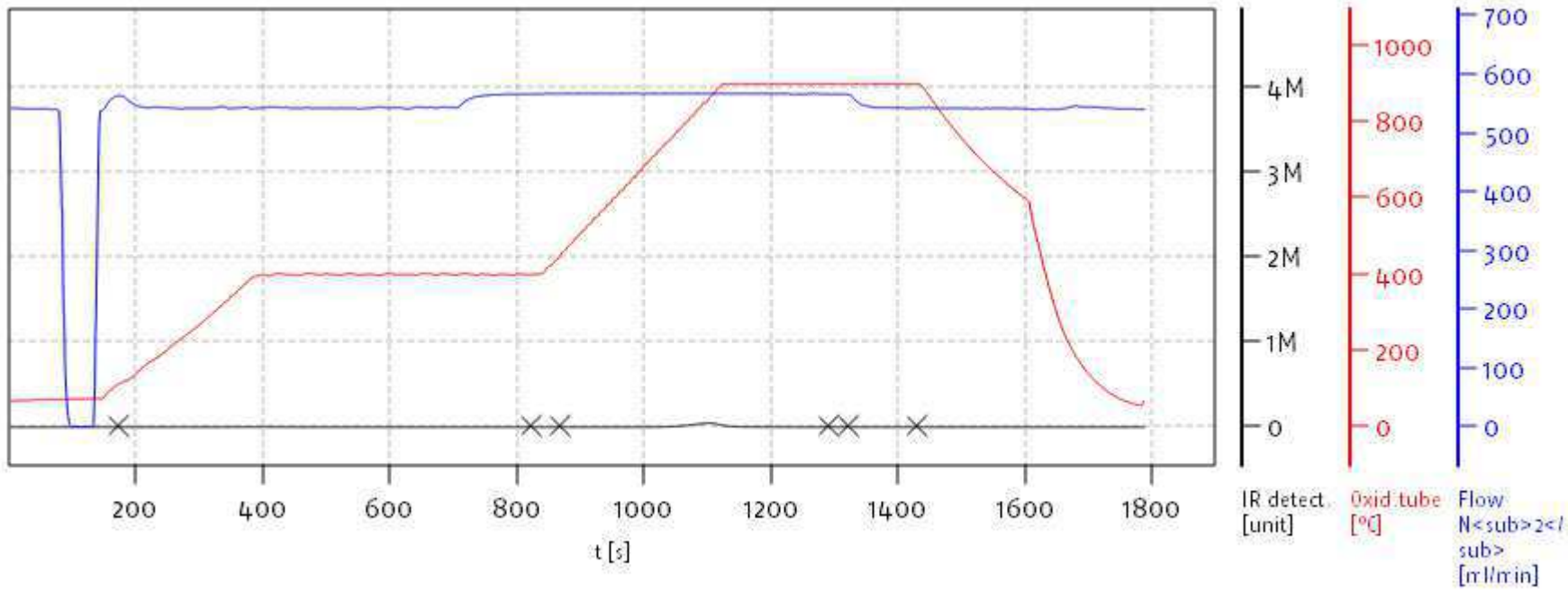
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
9	9	SLE0270-CAL7	200.00	0.0250	CARBON	5/17/2023 3:47 PM	bl,C1u,C2u	0.011	7 612	0.097	0.003	1 386	105 588	0.008	0.085	1.0000	1.0000



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Balance: BAL3
Analyst: CDE

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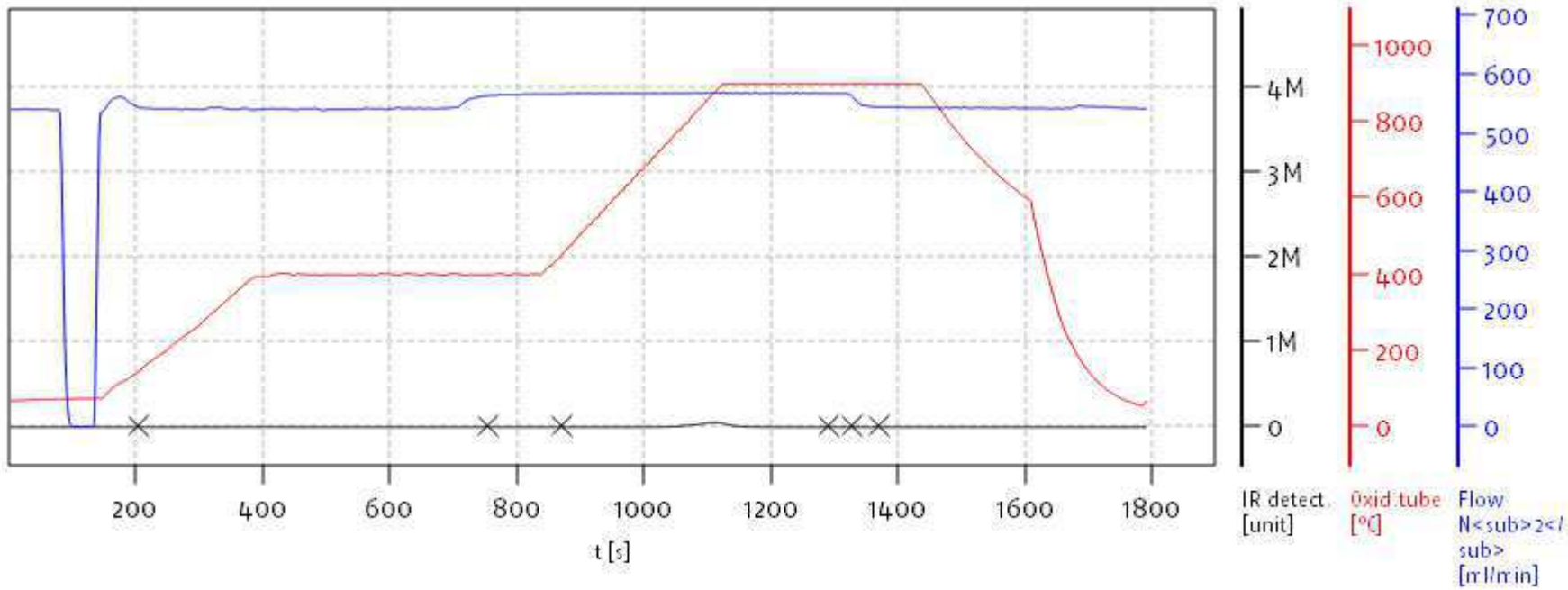
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
10	10	SLE0270-CAL8	200.00	0.0300	CARBON	5/17/2023 4:17 PM	bl,C1u,C2u	0.008	5 428	0.109	0.002	61	124 731	0.006	0.100	1.0000	1.0000



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Soli TOC Cube, Carbon
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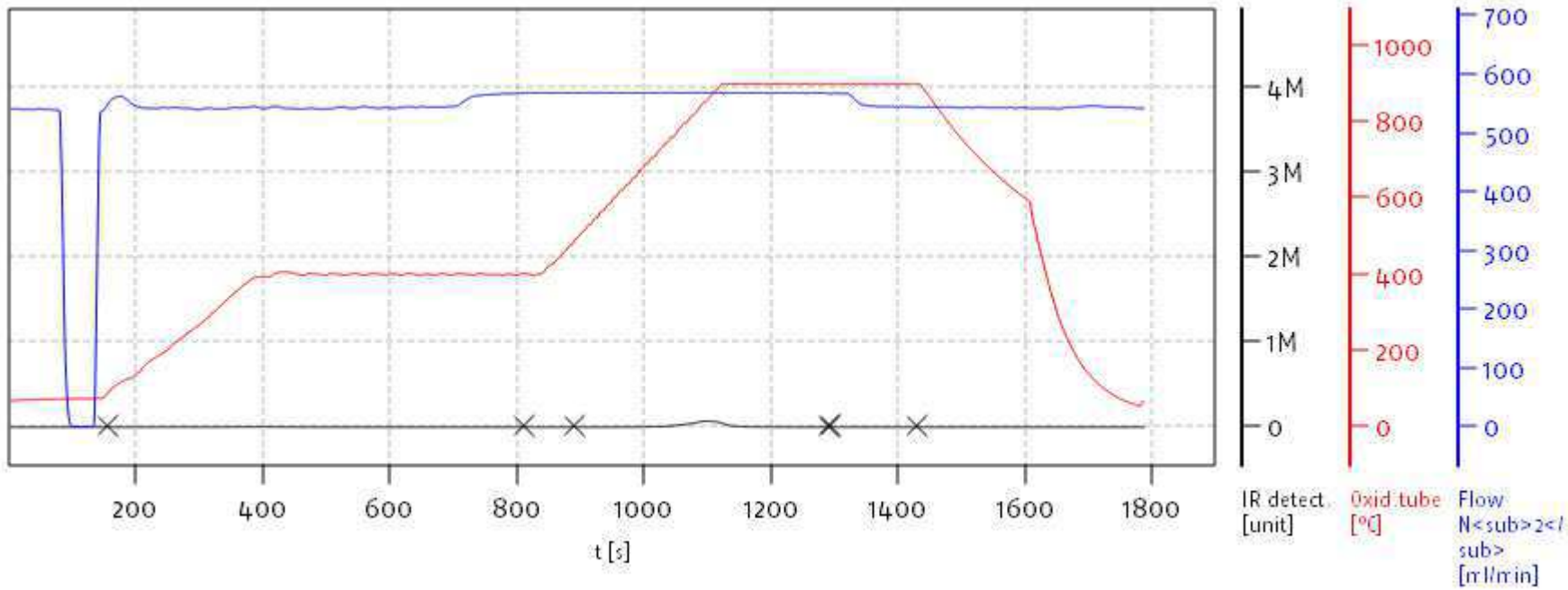
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
11	11	SLE0270-CAL9	200.00	0.0400	CARBON	5/17/2023 4:47 PM	bl,C2u	0.019	17 233	0.167	0.003	1 274	185 567	0.016	0.148	1.0000	1.0000



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Soli TOC Cube, Carbon
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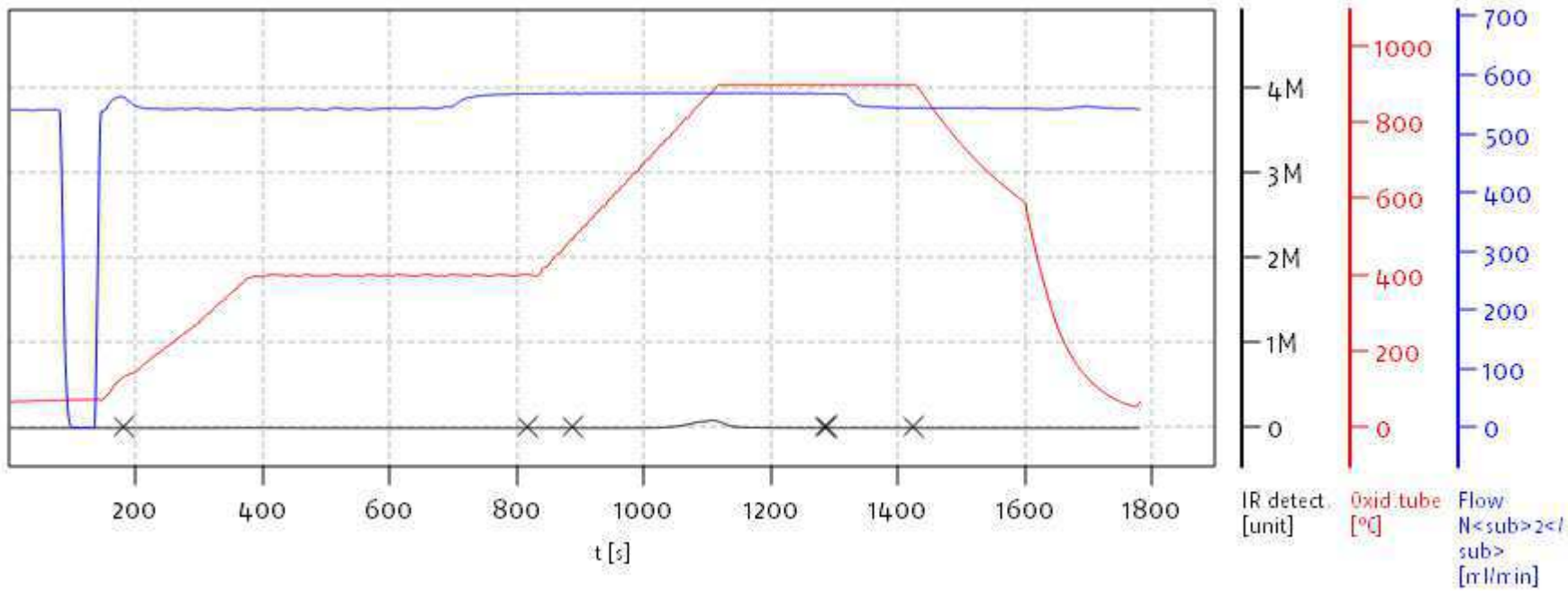
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
12	12	SLE0270-CALA	200.00	0.0500	CARBON	5/17/2023 5:17 PM	bl,C2u	0.018	11 766	0.202	0.007	6 123	230 855	0.011	0.184	1.0000	1.0000



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Soli TOC Cube, Carbon
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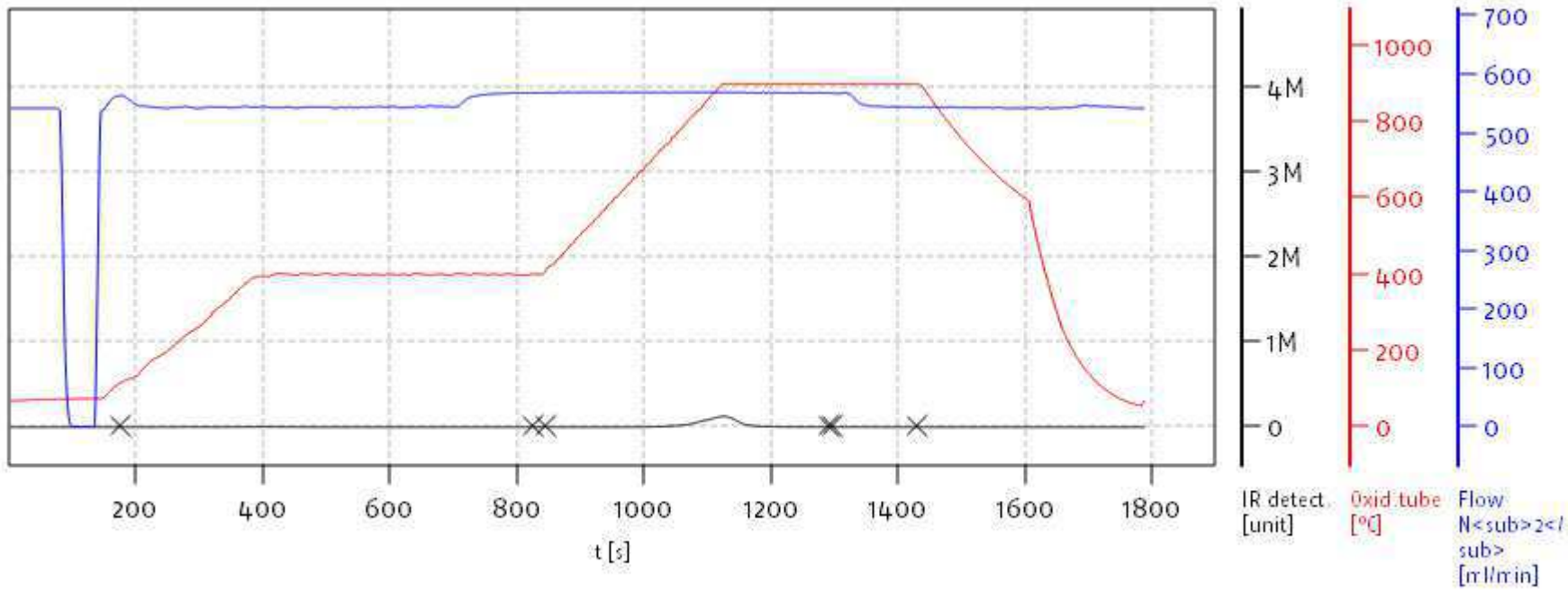
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
13	13	SLE0270-CALB	200.00	0.0040	CARBON	5/17/2023 5:47 PM	bl,C2u	0.022	18 635	0.291	0.005	3 969	339 170	0.017	0.269	1.0000	1.0000



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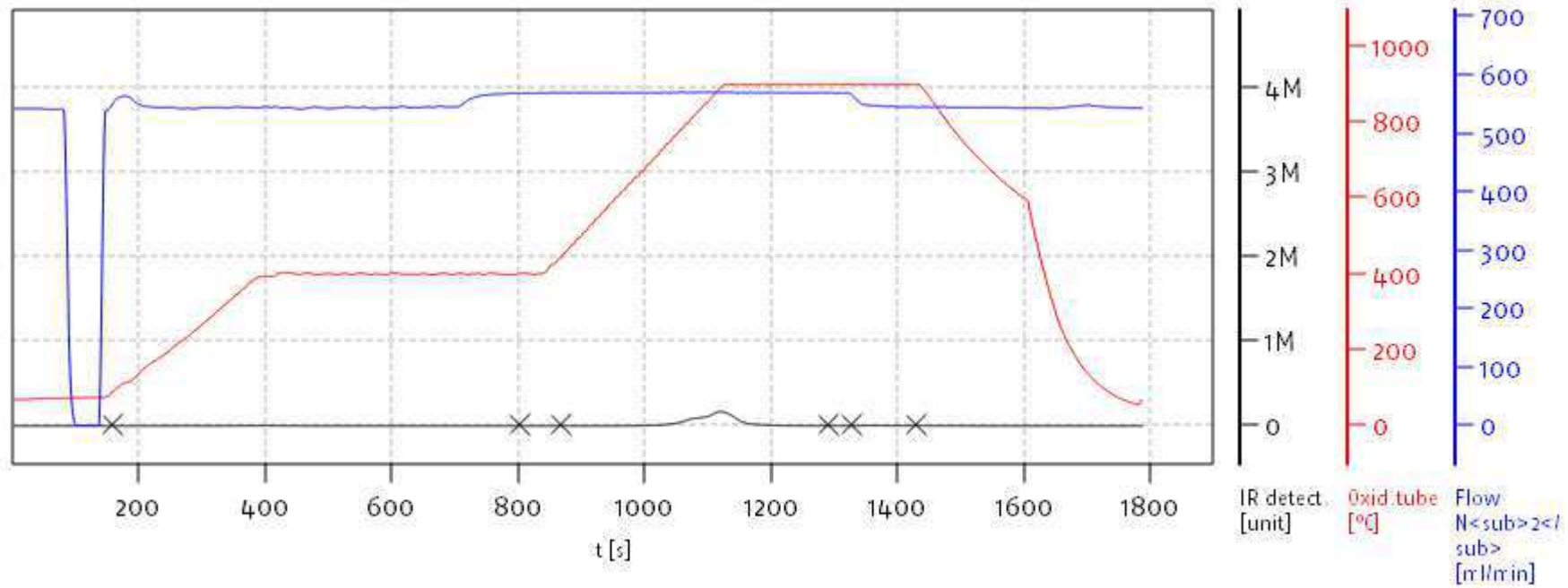
Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
14	14	SLE0270-CALC	200.00	0.0050	CARBON	5/17/2023 6:18 PM	bl	0.026	14 893	0.405	0.012	12 639	478 044	0.014	0.379	1.0000	1.0000



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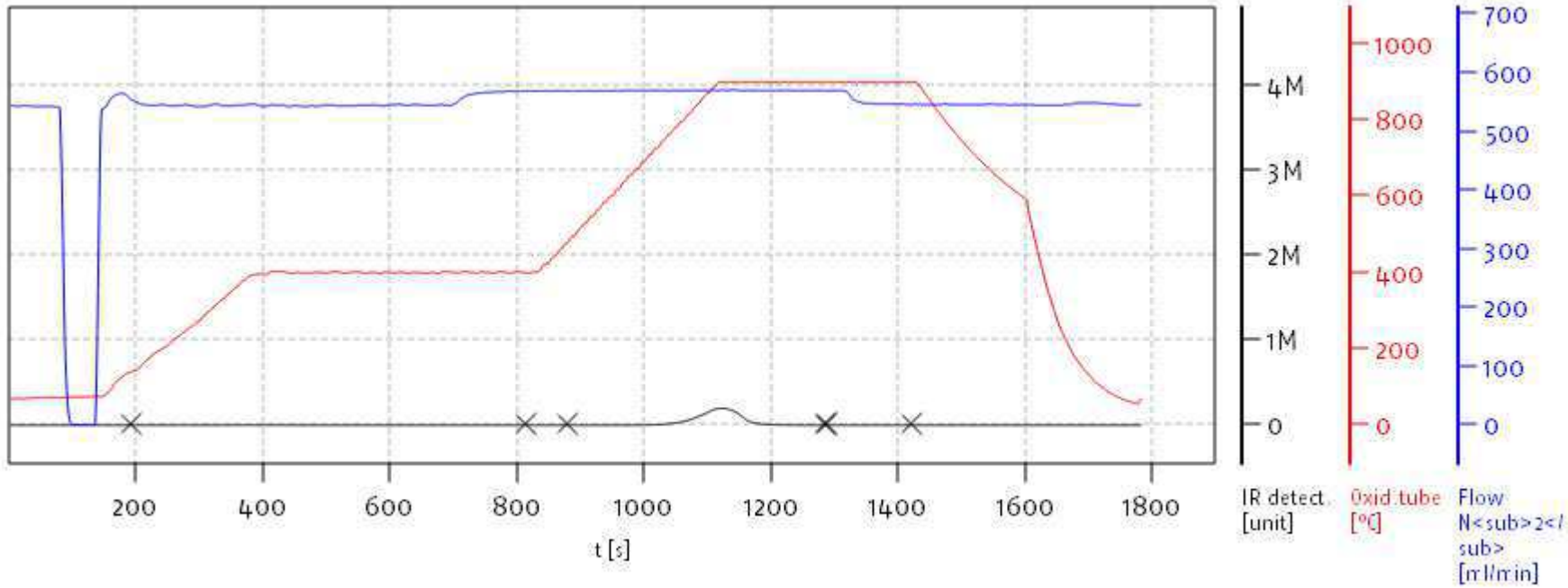
Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
15	15	SLE0270-CALD	200.00	0.0070	CARBON	5/17/2023 6:48 PM	bl,C1u,C2u	0.010	6 787	0.465	0.002	420	574 876	0.007	0.455	1.0000	1.0000



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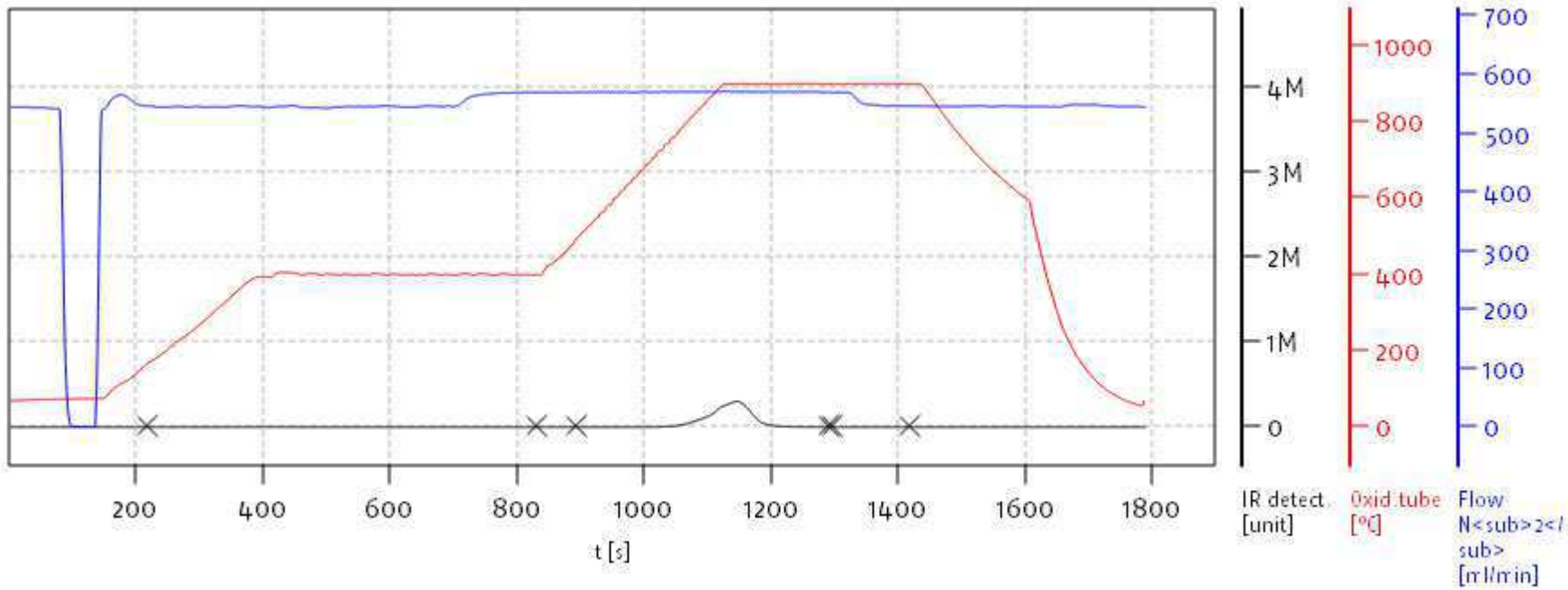
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
16	16	SLE0270-CALE	200.00	0.0100	CARBON	5/17/2023 7:18 PM	bl,C1u,C2u	0.008	4 408	0.667	0.003	771	832 670	0.006	0.658	1.0000	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

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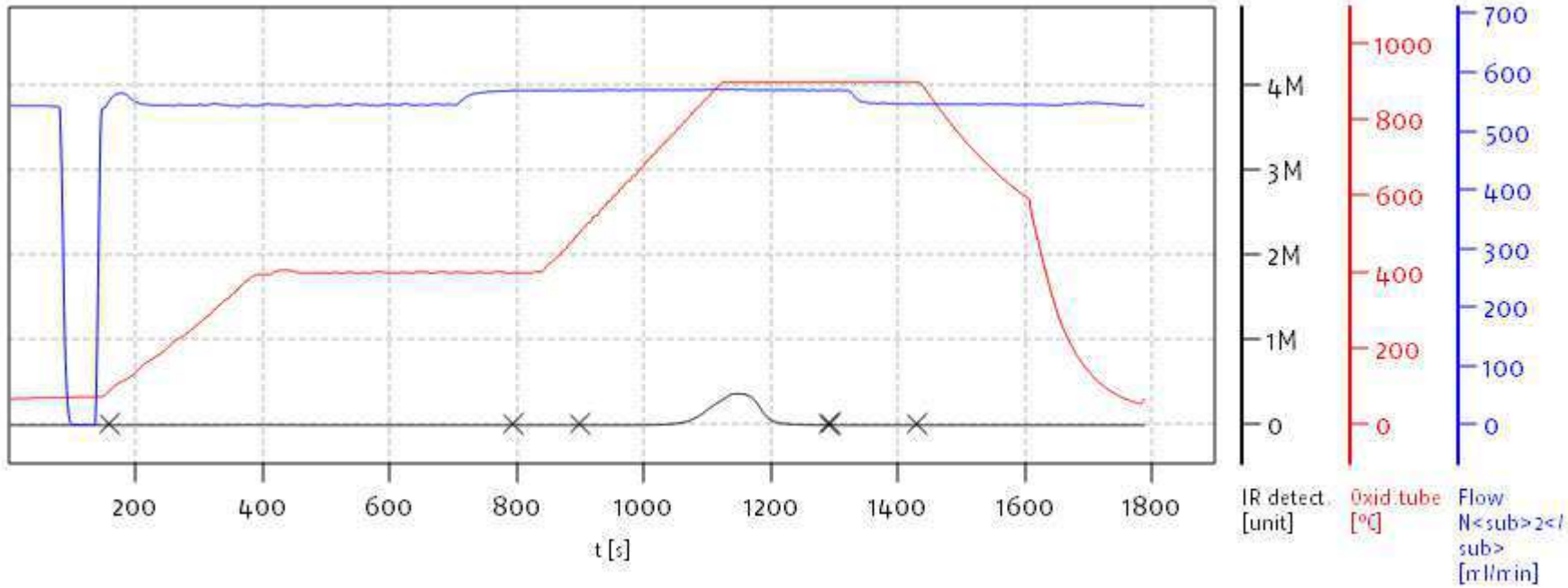
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
17	17	SLE0270-CALF	200.00	0.0150	CARBON	5/17/2023 7:48 PM	bl,C1u,C2u	0.012	8 494	0.984	0.003	1 464	1 230 304	0.009	0.972	1.0000	1.0000



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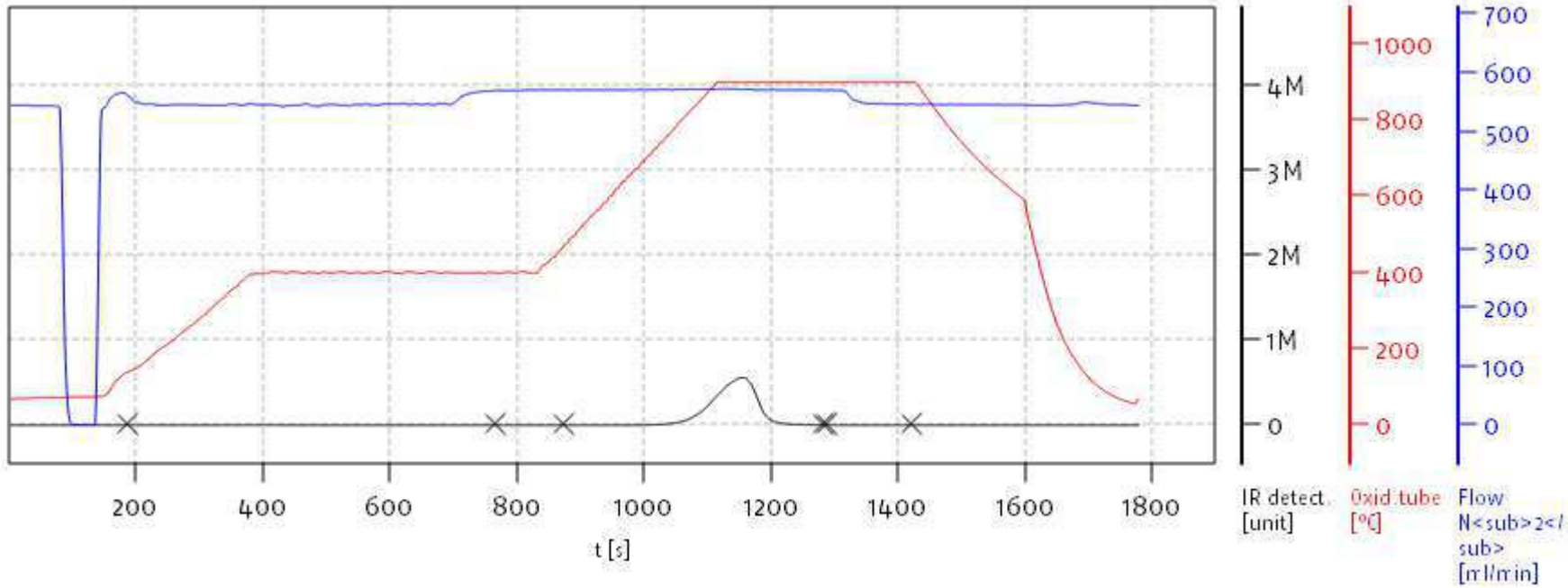
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
18	18	SLE0270-CALG	200.00	0.0200	CARBON	5/17/2023 8:18 PM	bl,C1u,C2u	0.010	5 359	1.331	0.004	1 864	1 673 425	0.006	1.321	1.0000	1.0000



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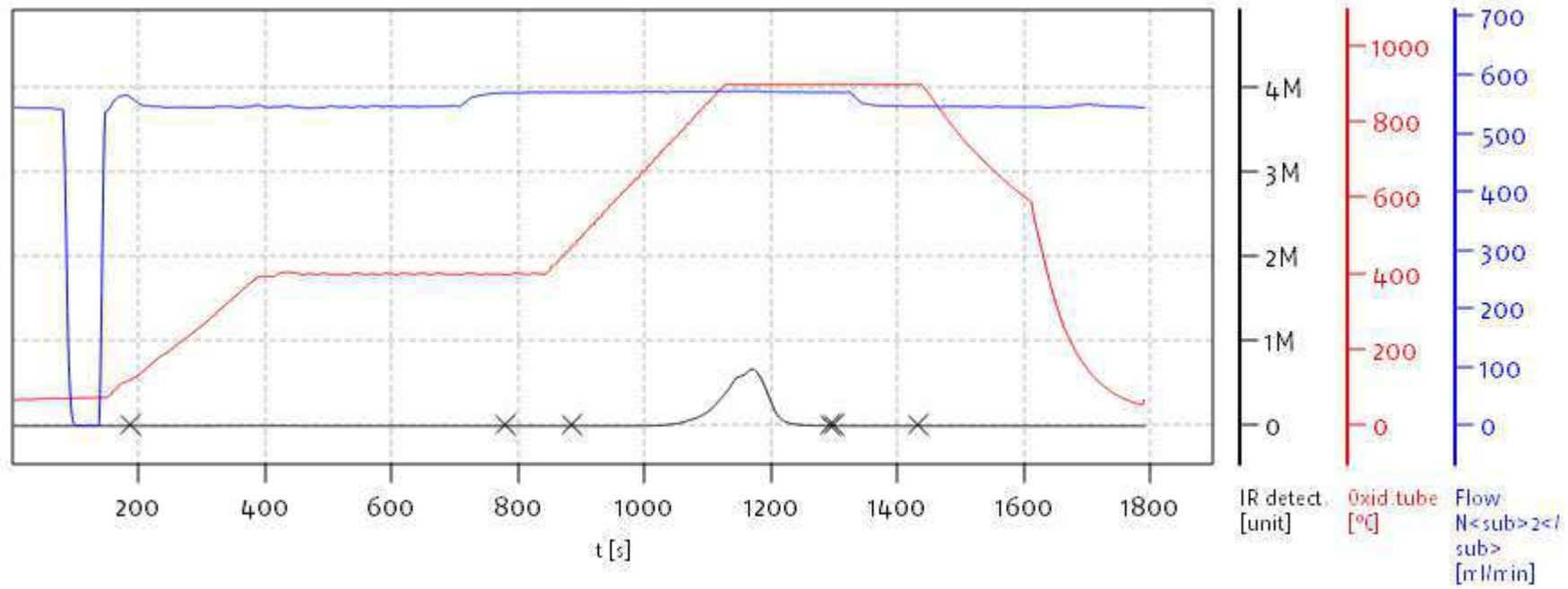
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
19	19	SLE0270-CALH	200.00	0.0250	CARBON	5/17/2023 8:48 PM	bl,C2u	0.015	11 407	1.659	0.004	2 280	2 083 004	0.011	1.644	1.0000	1.0000



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Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

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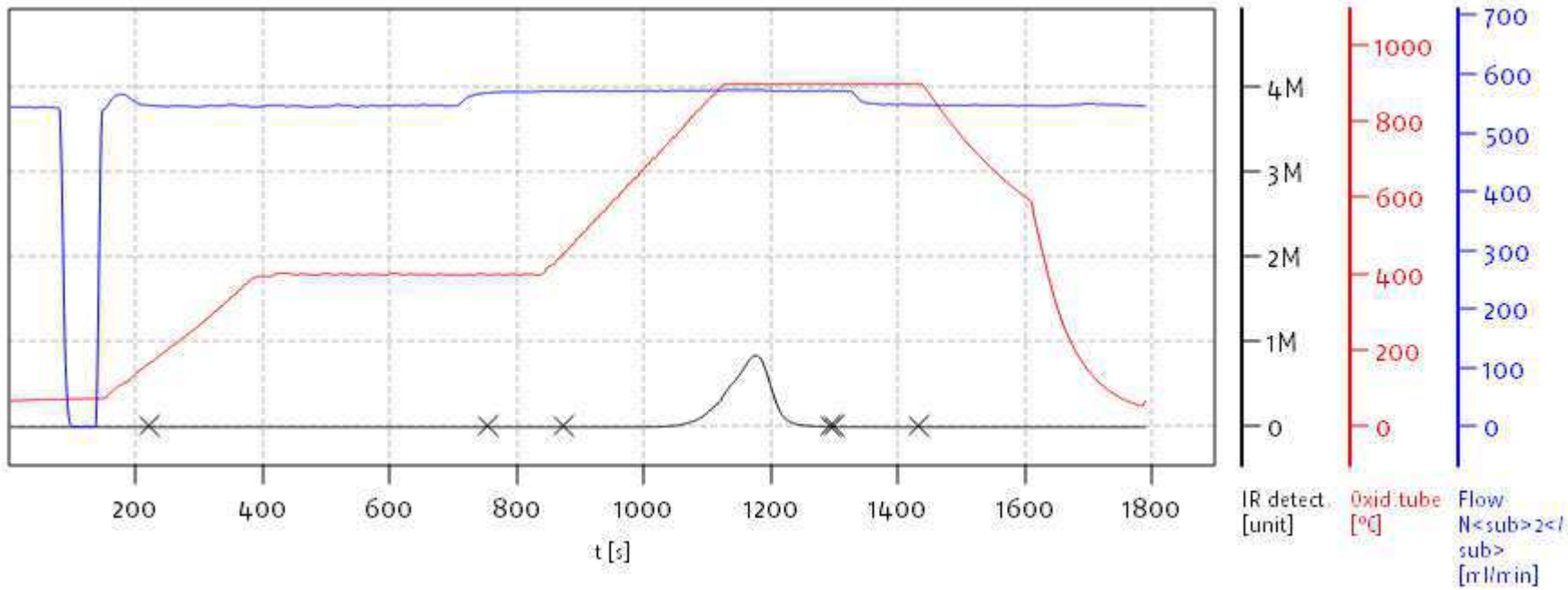
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
20	20	SLE0270-CALI	200.00	0.0300	CARBON	5/17/2023 9:19 PM	bl,C1u,C2u	0.009	2 781	1.981	0.005	3 895	2 498 427	0.004	1.971	1.0000	1.0000



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Balance: BAL3
Analyst: CDE

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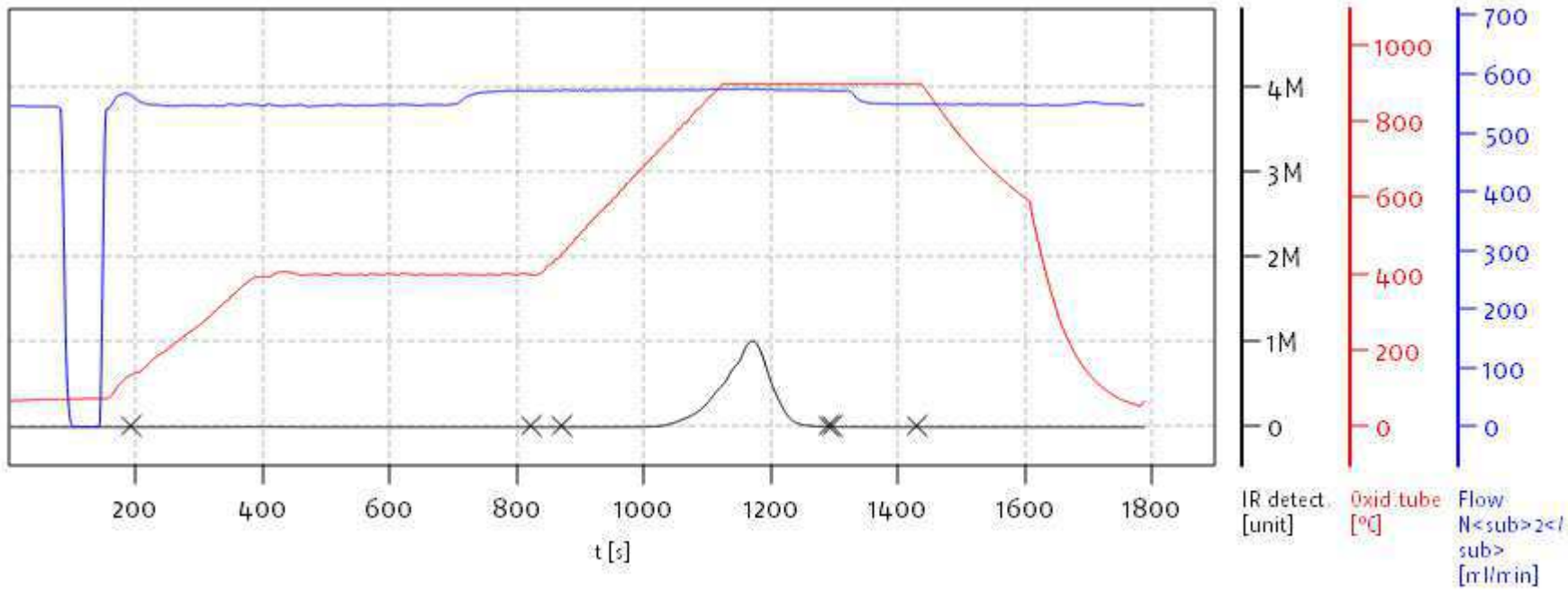
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
21	21	SLE0270-CALJ	200.00	0.0400	CARBON	5/17/2023 9:49 PM	bl,C2u	0.018	13 295	2.629	0.006	4 807	3 309 588	0.013	2.611	1.0000	1.0000



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elementar
EXCELLENCE IN ELEMENTS

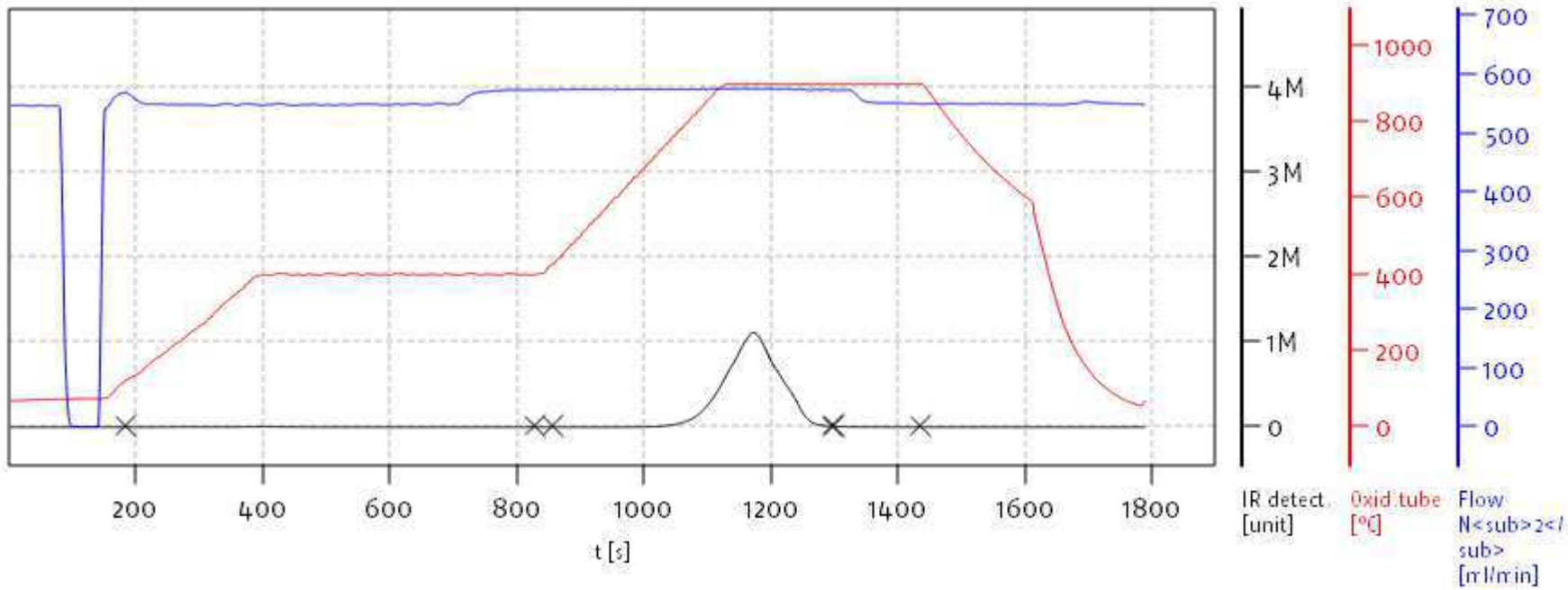
soliTOC V2.0.2 (31015f9) 2018-11-19
Serial No: 0300.181017
Mode CCC

Document: 051723CDE GE00052 Calibration from: --.--.-- (modified)

Soli TOC Cube, Carbon
Balance: BAL3
Analyst: CDE

Analytical Resources, LLC
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
22	22	SLE0270-CALK	200.00	0.0500	CARBON	5/17/2023 10:19 PM	bl	0.031	25 022	3.285	0.009	9 148	4 126 050	0.022	3.254	1.0000	1.0000



Name:

Access: soliTOC superuser

Date: Thu May 18 09:43:39 2023

soliTOC V2.0.2 (31015f9) 2018-11-19
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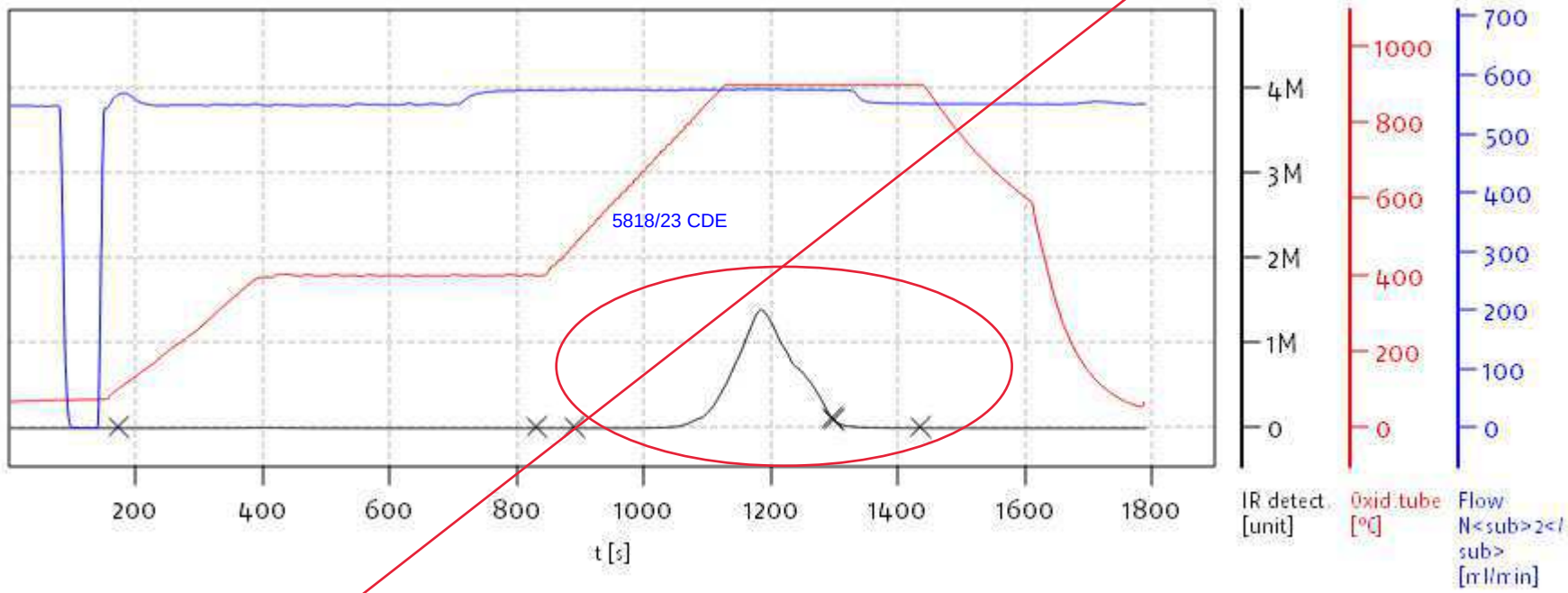
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
23	23	SLE0270-CALL	200.00	0.0700	CARBON	5/17/2023 10:49 PM	bl	0.069	21 598	4.597	0.050	60 794	5 741 652	0.019	4.528	1.0000	1.0000



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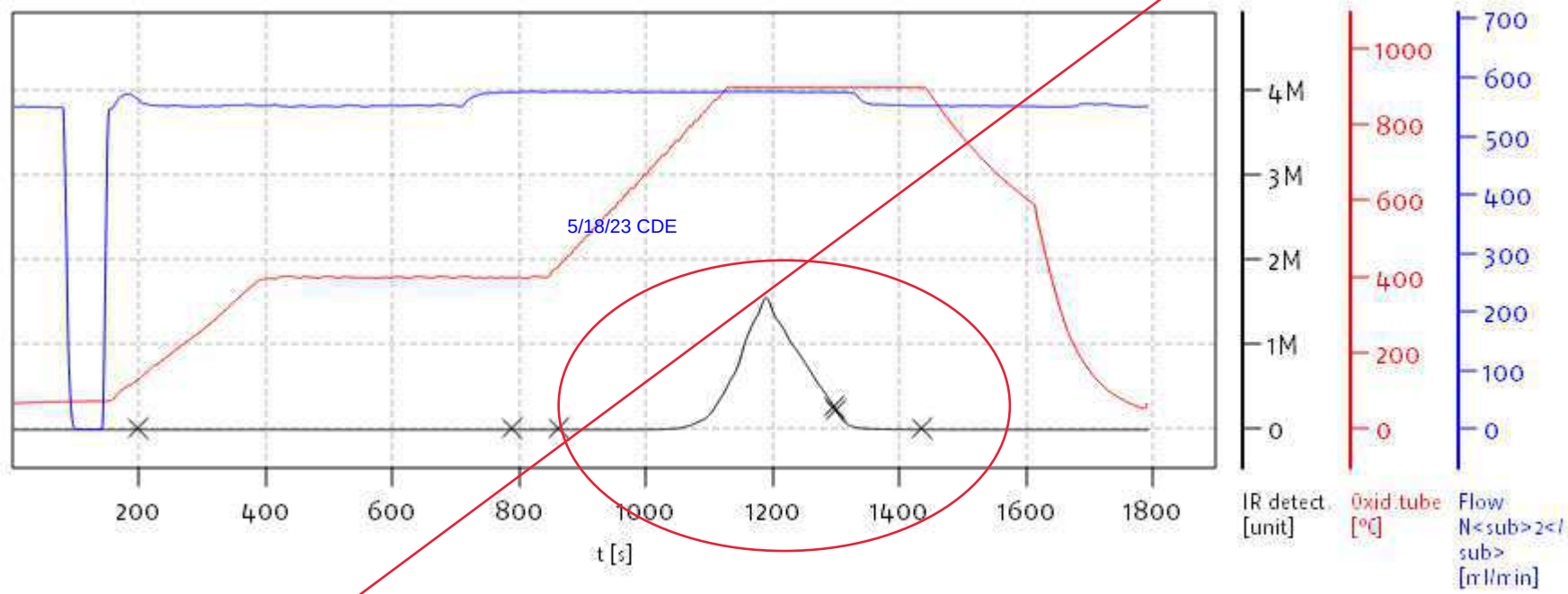
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
24	24	SLE0270-CALM	200.00	0.0800	CARBON	5/17/2023 11:19 PM	bl,C1u	0.112	5 408	5.212	0.106	131 494	6 467 914	0.006	5.100	1.0000	1.0000



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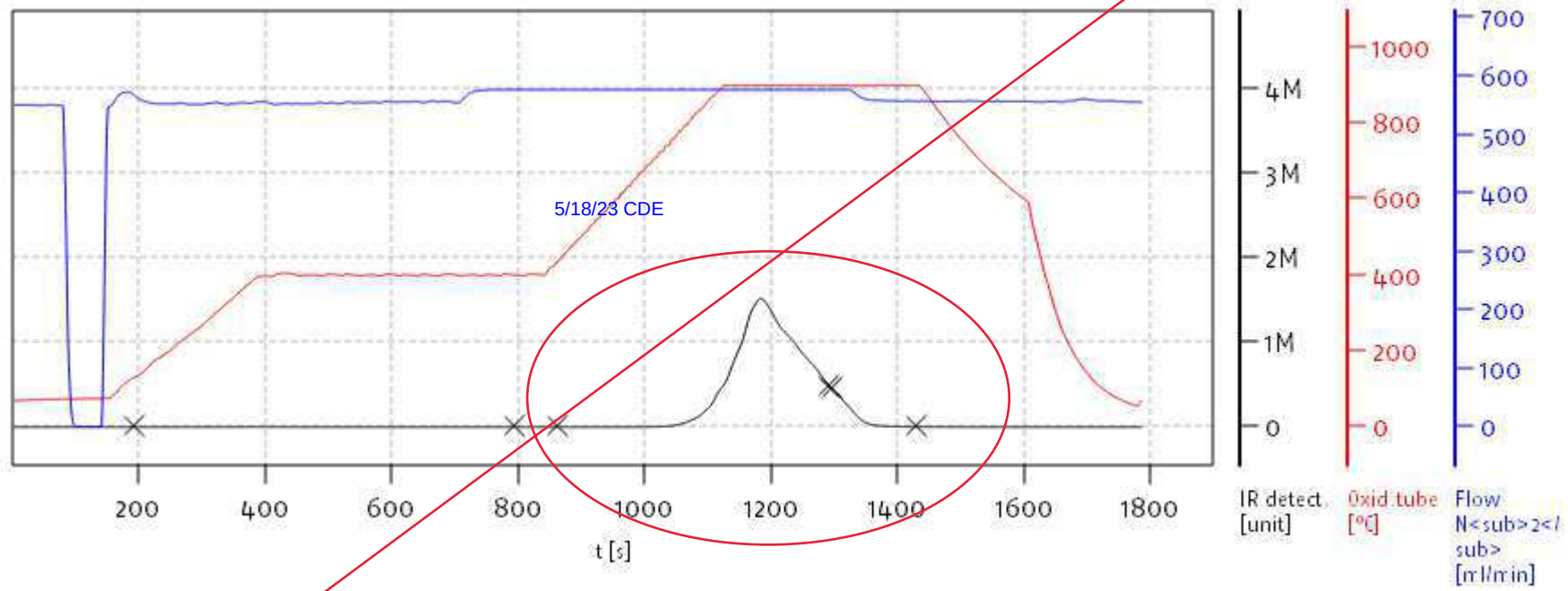
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
25	25	SLE0270-CALN	200.00	0.0900	CARBON	5/17/2023 11:50 PM	bl	0.408	8 745	5.832	0.399	503 842	6 879 212	0.009	5.424	1.0000	1.0000



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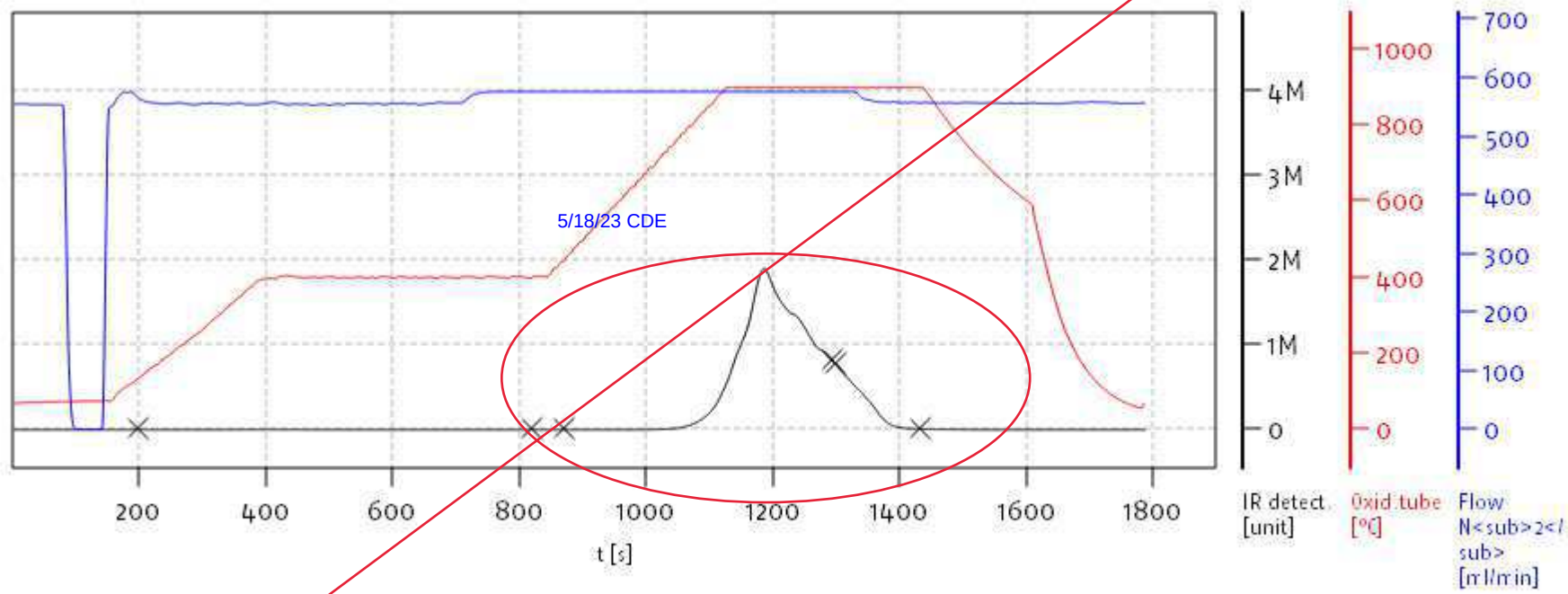
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
26	26	SLE0270-CALO	200.00	0.1200	CARBON	5/18/2023 12:20 AM	bl,C1u	1.074	6 993	7.759	1.066	1 350 231	8 478 912	0.008	6.685	1.0000	1.0000



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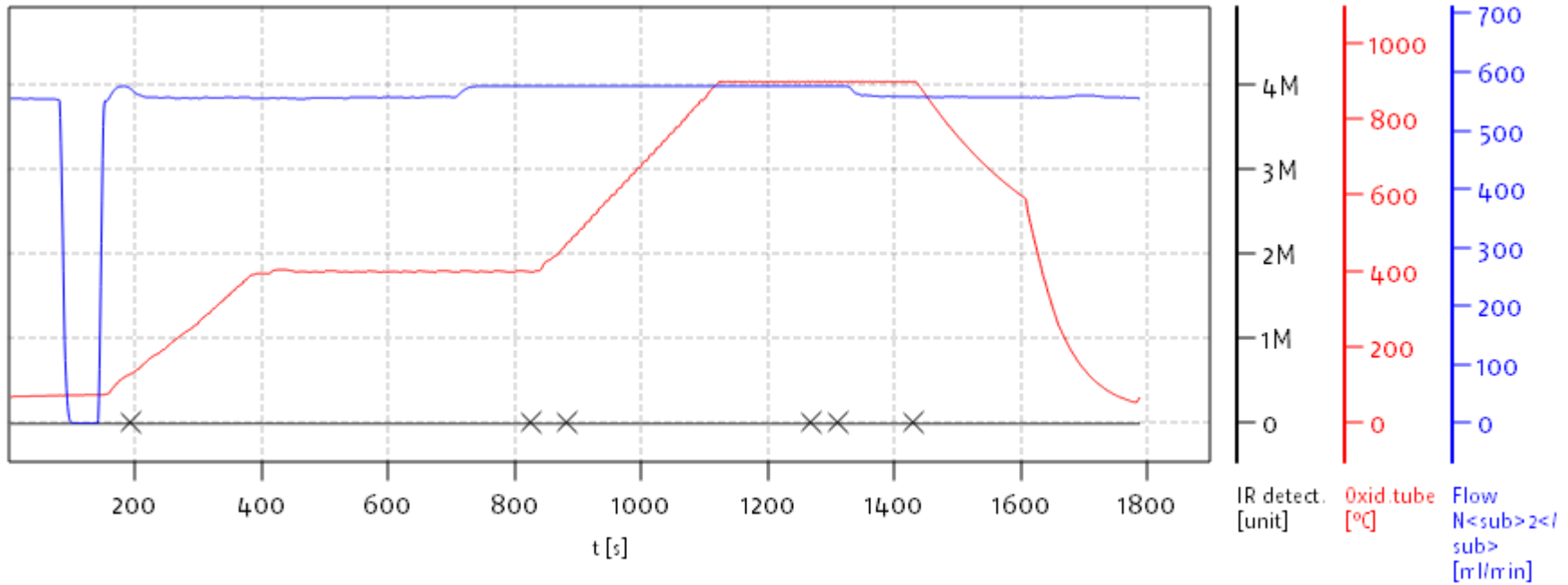
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
27	27	BLANK	1.00		CARBON	5/ 18/2023 12:50 AM	bl	0.000	5 379	0.000	0.000	0	959	0.000	0.000	1.0000	1.0000



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Date: Thu May 18 09:43:39 2023

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Soli TOC Cube, Carbon
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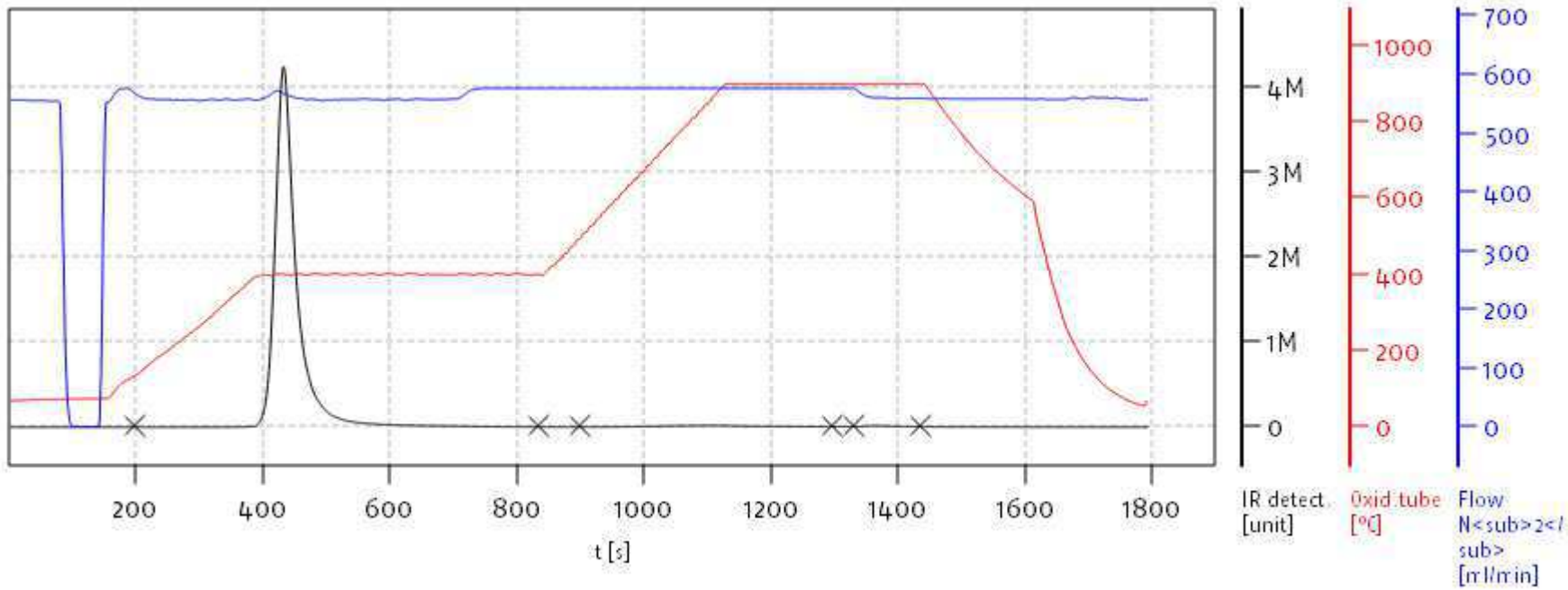
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
28	28	Dfactor	21.70		CARBON	5/18/2023 1:20 AM	bl	44.736	6 218 209	45.755	0.291	37 376	137 647	44.446	1.019	0.9835	1.0000



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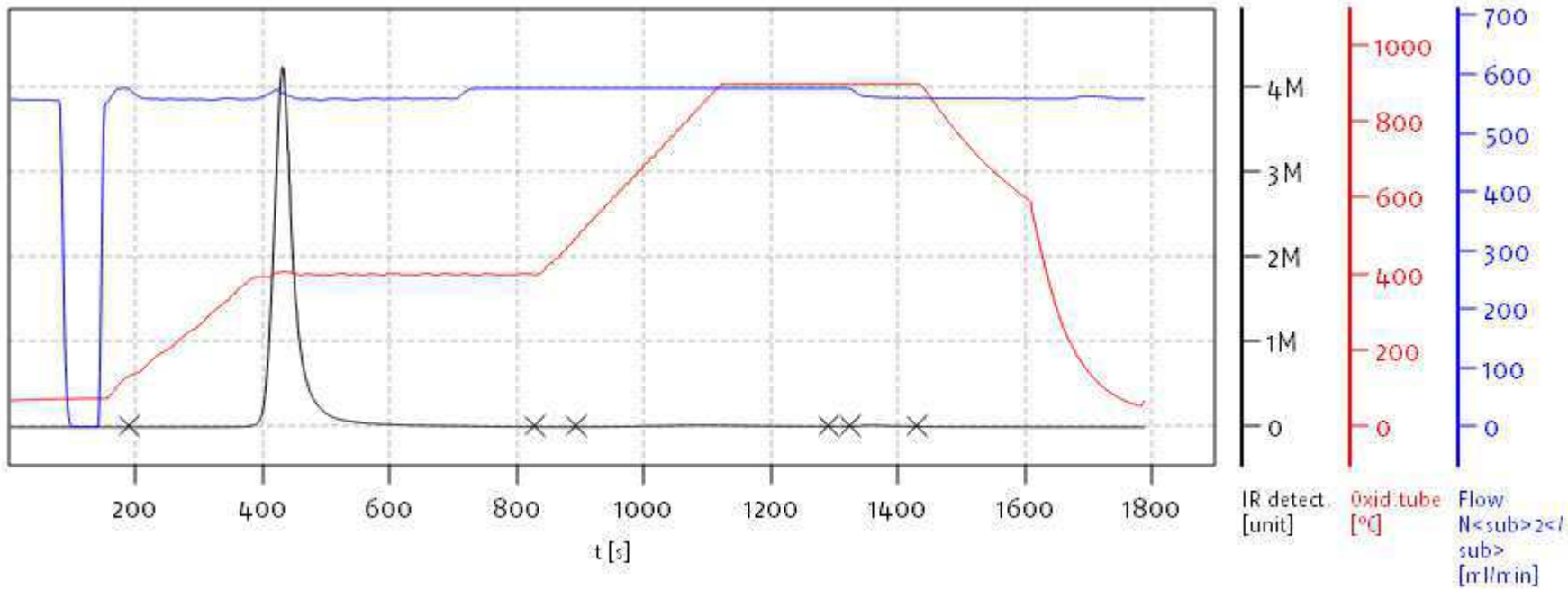
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
29	29	Dfactor	21.20		CARBON	5/18/2023 1:50 AM	bl	44.824	6 030 884	46.116	0.378	48 254	171 095	44.446	1.292	0.9907	1.0000



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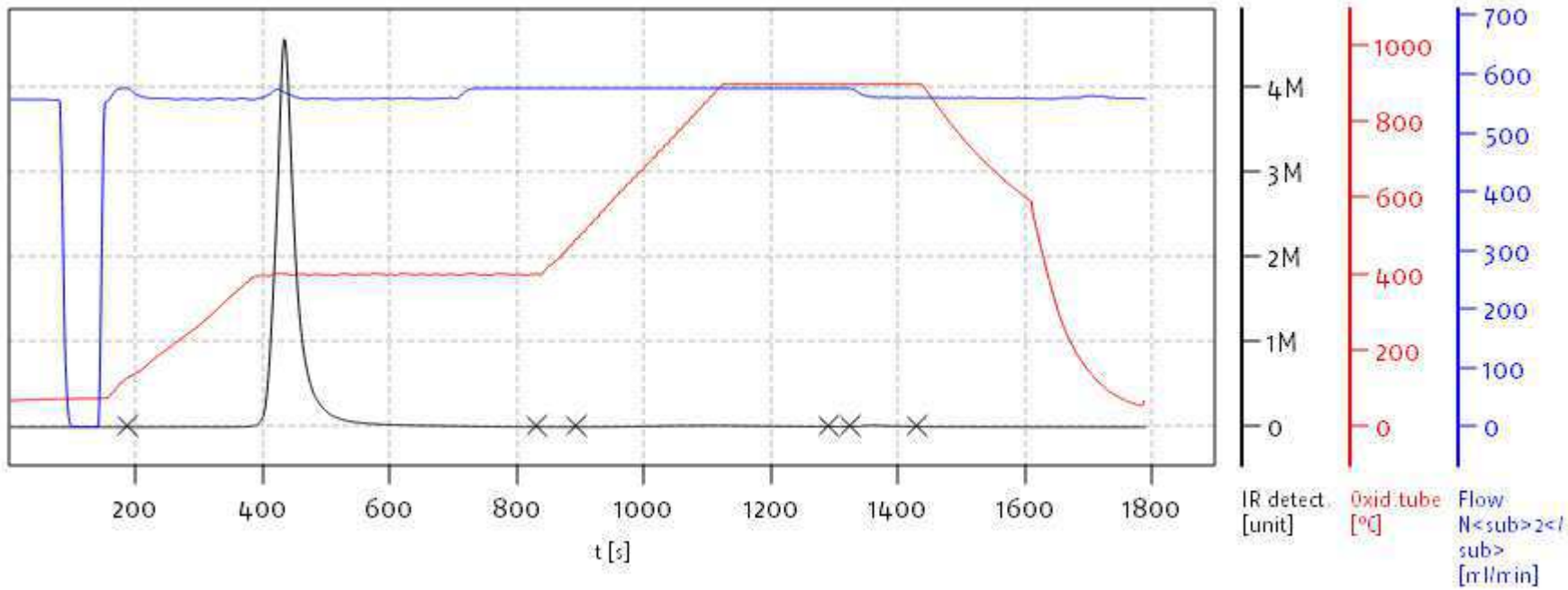
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
30	30	SLE0270-ICV1	22.30		CARBON	5/18/2023 2:21 AM	bl	44.949	6 392 325	46.022	0.327	43 597	149 127	44.622	1.073	0.9871	1.0000



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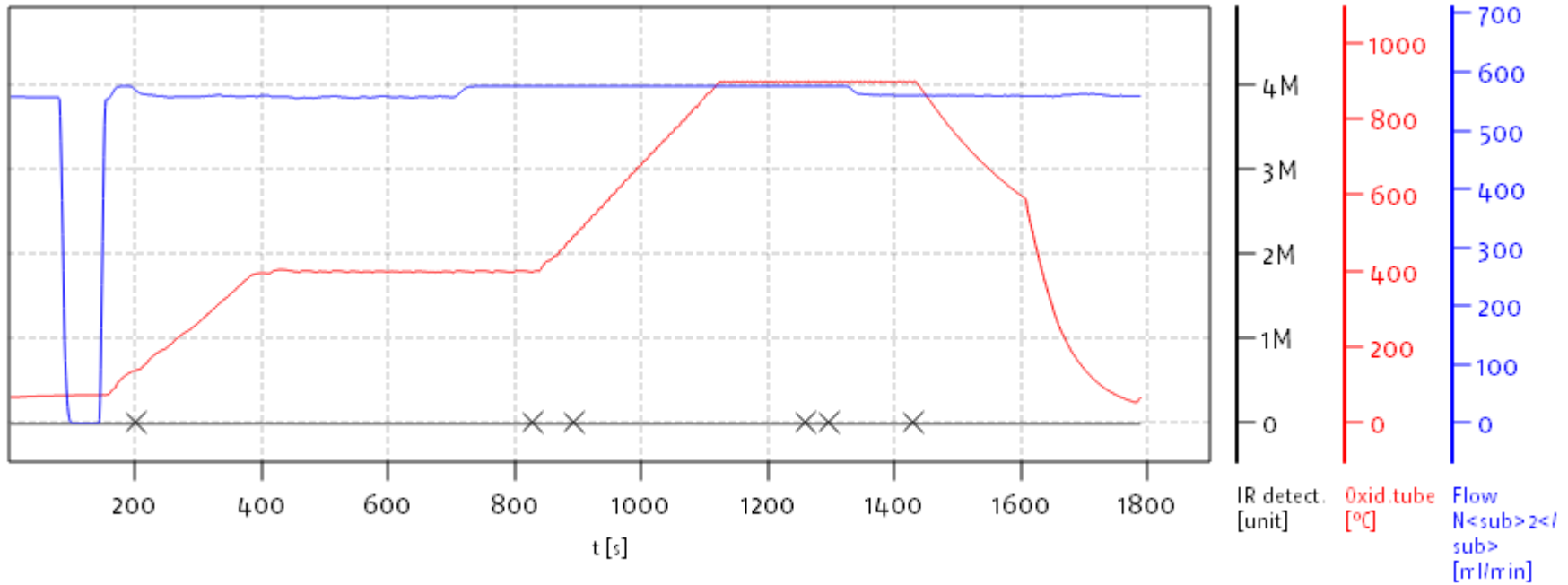
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
31	31	SLE0270-ICB1	530.50		CARBON	5/18/2023 2:51 AM	bl,C1u,C3u,C2u	0.003	6 198	0.005	0.001	198	1 900	0.003	0.001	0.9871	1.0000



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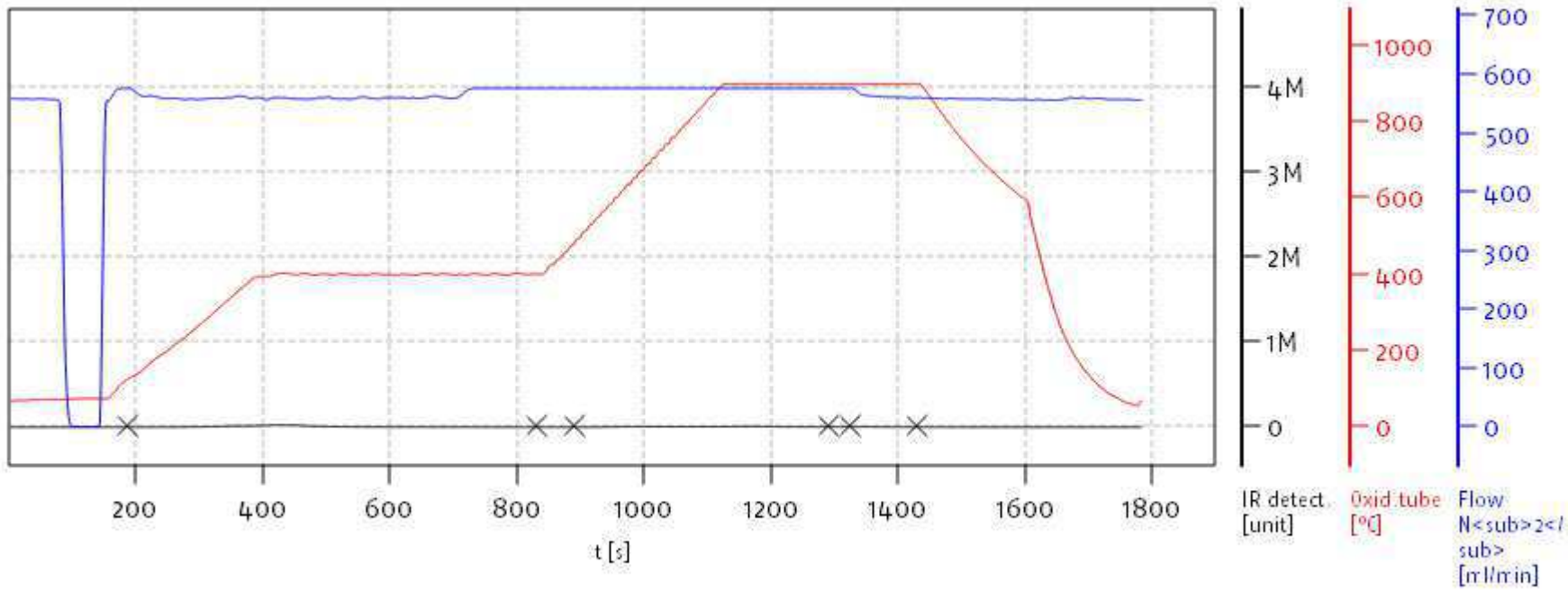
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
32	32	23D0491-10	42.50		CARBON	5/18/2023 3:21 AM	bl	0.560	138 129	0.841	0.044	9 353	73 148	0.515	0.281	0.9871	1.0000



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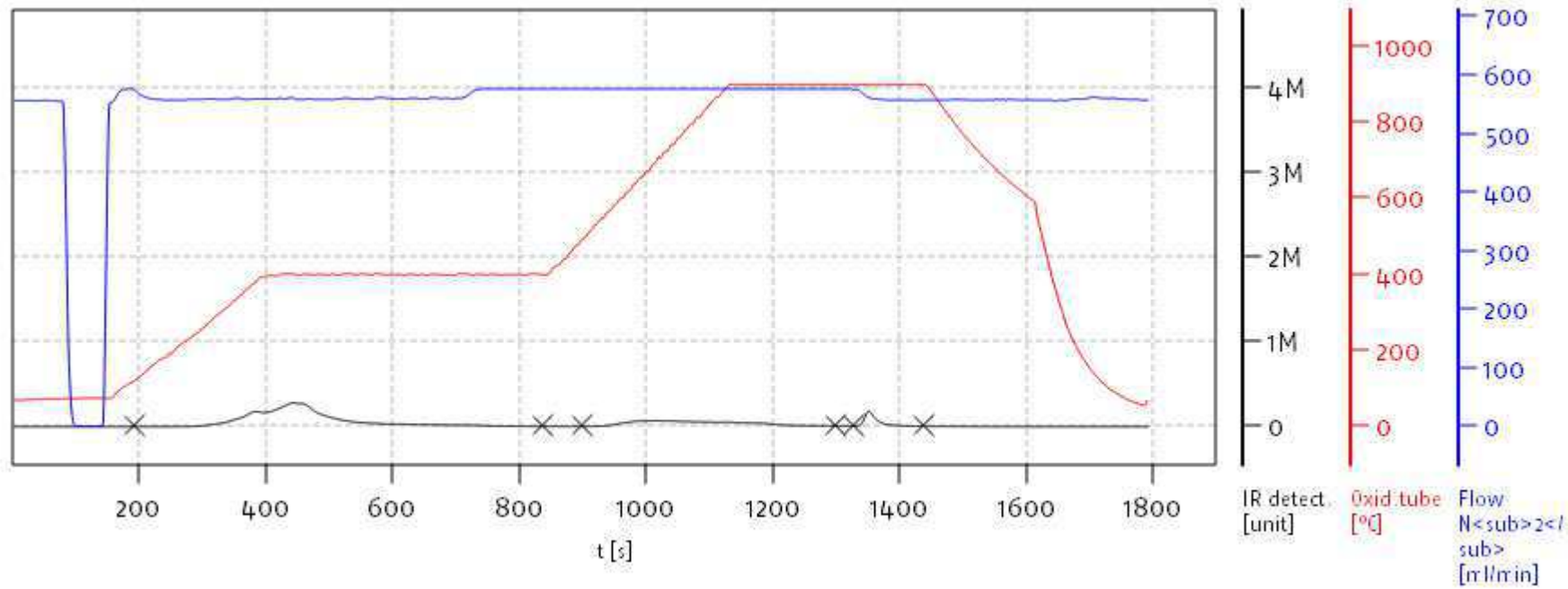
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
33	33	23D0491-10RE1	505.50		CARBON	5/18/2023 3:51 AM	bl	0.513	1 489 627	0.692	0.054	169 645	569 728	0.459	0.178	0.9871	1.0000



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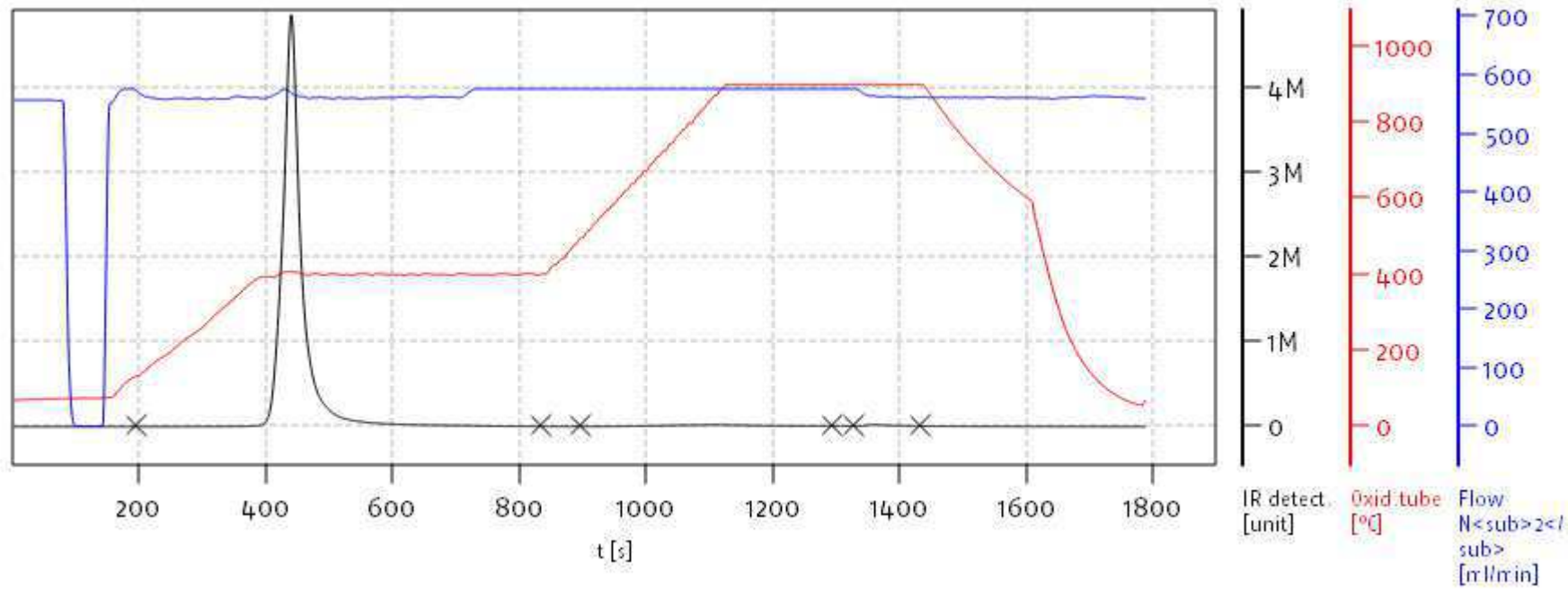
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
34	34	SLE0270-CCV1	22.20		CARBON	5/18/2023 4:21 AM	bl	44.616	6 309 271	45.769	0.375	50 146	159 806	44.241	1.153	0.9871	1.0000



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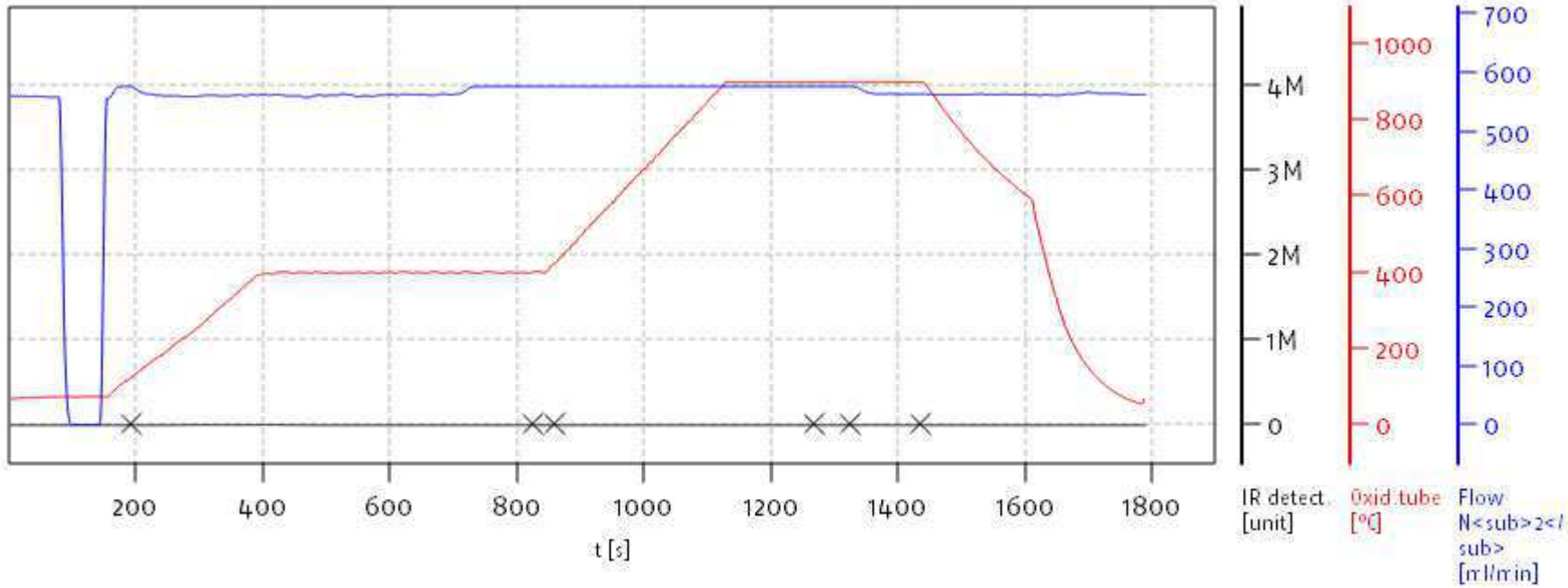
Analytical Chemists and Consultants

	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
35	35	SLE0270-CCB1	523.30		CARBON	5/18/2023 4:52 AM	bl,C3u,C2u	0.009	22 128	0.010	0.001	2 335	2 184	0.007	0.001	0.9871	1.0000



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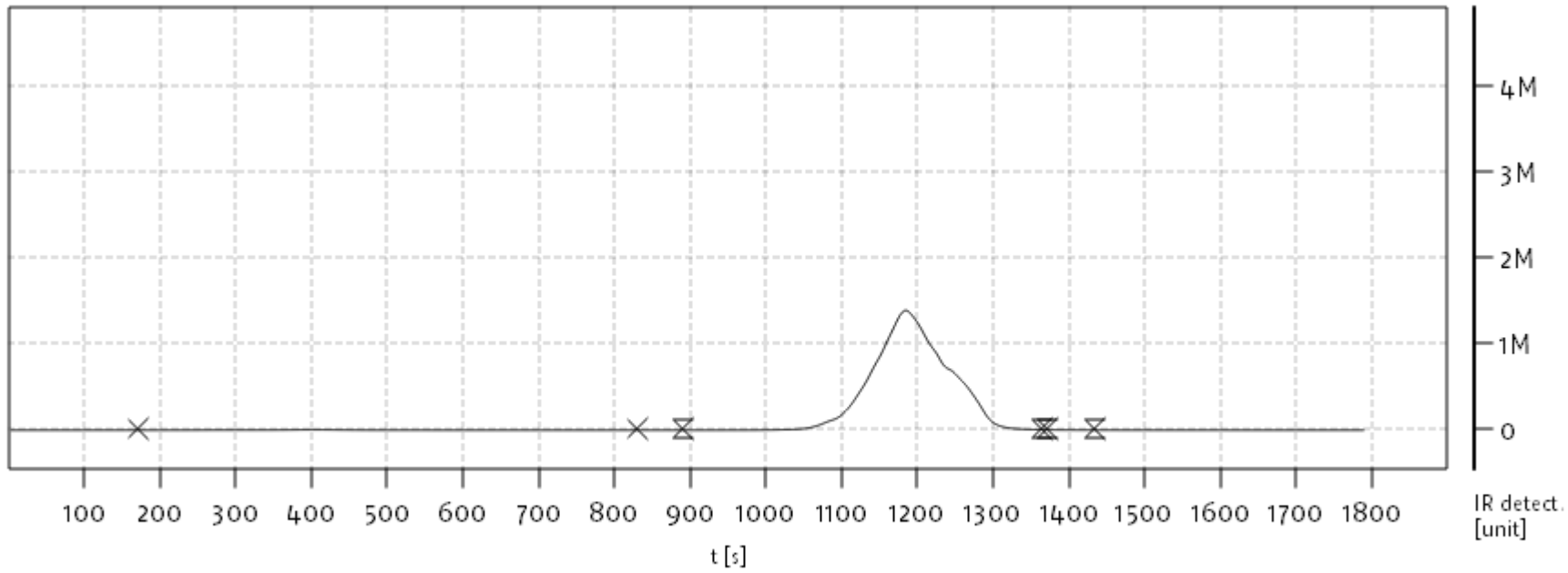
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
23	23	SLE0270-CALL	200.00	0.0700	CARBON	5/18/2023 9:47 AM	bl	0.019	21 598	4.386	0.000	**0**	**5 538 028**	0.019	4.367	1.0000	1.0000



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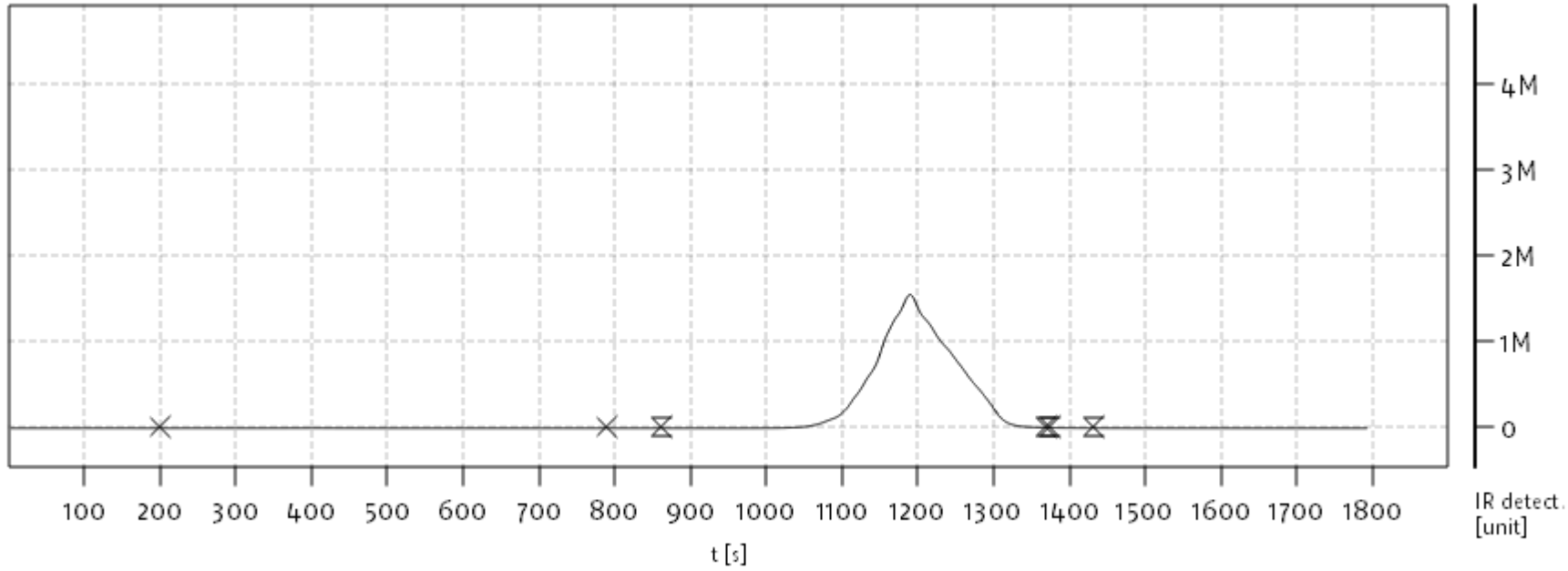
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
24	24	SLE0270-CALM	200.00	0.0800	CARBON	5/18/2023 9:48 AM	bl,C1u	0.006	5 408	4.784	0.000	**0**	**6 058 878**	0.006	4.778	1.0000	1.0000



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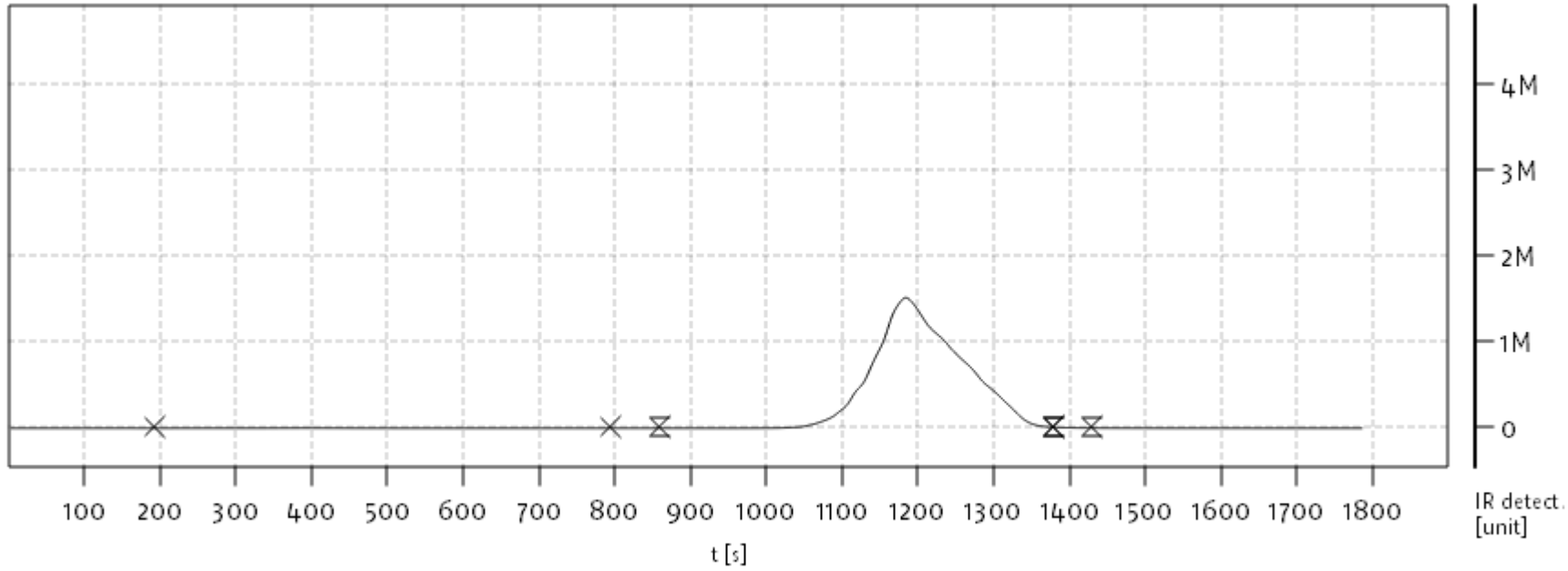
25	25	SLE0270-CALN	200.00	0.0900	CARBON	5/18/2023 9:49 AM	bl	0.009	8 745	5.379	0.000	**0**	**6 810 985**	0.009	5.370	1.0000	1.0000



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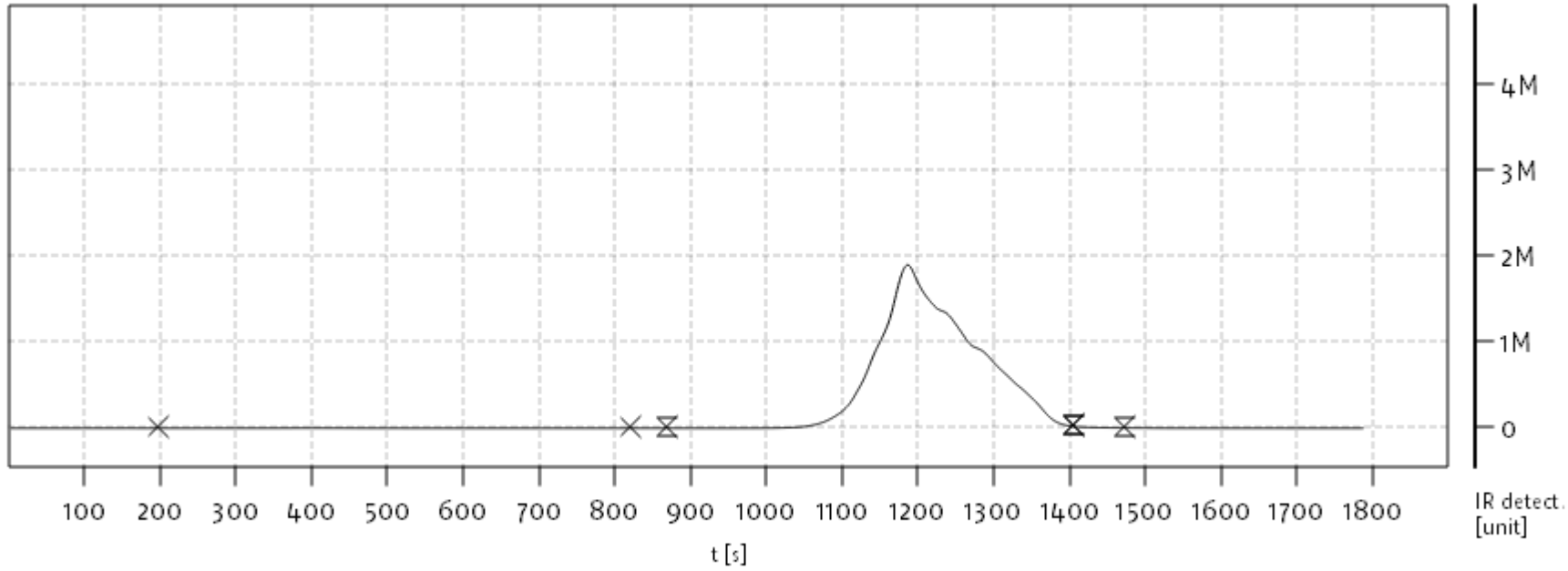
	Pos.	Name	Weight [mg]	Memo	Method	Date Time	Info	TOC [%]	TOC400 Area	TC [%]	ROC [%]	ROC Area	TIC900 Area	TOC400 [%]	TIC900 [%]	TOC400 Factor	TIC900 Factor
26	26	SLE0270-CALO	200.00	0.1200	CARBON	5/18/2023 9:49 AM	bl,C1u,C3o	0.008	6 993	7.291	0.000	0	9 238 066	0.008	7.283	1.0000	1.0000



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INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC
Client: Anchor QEA, LLC
Instrument ID: TOC Cube
Sequence: SLE0228

SDG: 23D0396
Project: AOC5 MR Phase 1
Calibration: GE00052
Date Analyzed: 05/19/23 13:36

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0228-ICB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLE0228-CCB1	Total Organic Carbon	0.00	0.02	0.02	%	
SLE0228-CCB2	Total Organic Carbon	0.00	0.02	0.02	%	
SLE0228-CCB3	Total Organic Carbon	0.00	0.02	0.02	%	
SLE0228-CCB4	Total Organic Carbon	0.00	0.02	0.02	%	
SLE0228-CCB5	Total Organic Carbon	0.00	0.02	0.02	%	
SLE0228-CCB6	Total Organic Carbon	0.00	0.02	0.02	%	

INSTRUMENT BLANKS
EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: GE00052
Sequence: SLE0270
Date Analyzed: 05/18/23 02:51

Lab Sample ID	Analyte	Found	MDL	MRL	Units	C
SLE0270-ICB1	Total Organic Carbon	0.003	0.02	0.02	%	
SLE0270-CCB1	Total Organic Carbon	0.009	0.02	0.02	%	

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: GE00052
Control Limt: +/- 10.00%
Sequence: SLE0228

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0228-ICV1	Total Organic Carbon	44.446	44.4	99.8	%	EPA 9060A m
SLE0228-CCV1	Total Organic Carbon	44.446	45.3	102	%	EPA 9060A m
SLE0228-CCV2	Total Organic Carbon	44.446	44.9	101	%	EPA 9060A m
SLE0228-CCV3	Total Organic Carbon	44.446	43.4	97.7	%	EPA 9060A m
SLE0228-CCV4	Total Organic Carbon	44.446	44.8	101	%	EPA 9060A m
SLE0228-CCV5	Total Organic Carbon	44.446	44.8	101	%	EPA 9060A m
SLE0228-CCV6	Total Organic Carbon	44.446	46.0	103	%	EPA 9060A m

* Values outside of QC limits

INITIAL AND CONTINUING CALIBRATION CHECK

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Instrument ID: TOC Cube
Calibration: GE00052
Control Limt: +/- 10.00%
Sequence: SLE0270

Lab Sample ID	Analyte	True	Found	%R	Units	Method
SLE0270-ICV1	Total Organic Carbon	44.446	45.4	102	%	EPA 9060A m
	Total Carbon	44.446	45.4	102	%	EPA 9060A m
	Total Inorganic Carbon	0.0000	45.4		%	EPA 9060A m
	% Soot	0.0000	45.4		%	EPA 9060A m
SLE0270-CCV1	Total Organic Carbon	44.446	45.2	102	%	EPA 9060A m
	Total Carbon	44.446	45.2	102	%	EPA 9060A m
	Total Inorganic Carbon	0.0000	45.2		%	EPA 9060A m
	% Soot	0.0000	45.2		%	EPA 9060A m

* Values outside of QC limits

STANDARD REFERENCE MATERIAL RECOVERY

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Laboratory ID: BLE0415-SRM1
Batch: BLE0415
Initial/Final: 0.1599 g / 0.1599 g
Preparation: No Prep Wet Chem
Analyzed: 05/19/2023 17:37
Standard ID: L000790
Expires: 05/19/2024
Standard Lot#: NA
Description: 1941B - Organics in Marine Sediment (Conv

ANALYTE	TRUE (% wet)	FOUND (% wet)	MDL	MRL	Q	SRM % REC.	QC LIMITS REC.
Total Organic Carbon	2.9900	2.87	0.02	0.02		96.1	80 - 120

* Values outside of QC limits

HOLDING TIME SUMMARY

Analysis: EPA 9060A m

Laboratory: Analytical Resources, LLC SDG: 23D0396

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

Sample Name	Date Collected	Date Received	Date Prepared	Days to Prep	Max Days to Prep	Date Analyzed	Days to Analysis	Max Days to Analysis	Q
LDW23-SS1801 23D0396-01	04/12/23 09:56	04/12/23 16:32	05/13/23 14:02	31	14	05/20/23 21:14			*
LDW23-SC1801 23D0396-02	04/12/23 10:15	04/12/23 16:32	05/13/23 14:02	31	14	05/20/23 21:44			*
LDW23-SS1802 23D0396-03	04/12/23 15:03	04/12/23 16:32	05/13/23 14:02	30	14	05/20/23 22:15			*
LDW23-SC1802 23D0396-04	04/12/23 15:40	04/12/23 16:32	05/13/23 14:02	30	14	05/20/23 22:45			*

* Indicates hold time exceedance.

METHOD DETECTION AND REPORTING LIMITS

EPA 9060A m

Laboratory: Analytical Resources, LLC
SDG: 23D0396
Client: Anchor QEA, LLC
Project: AOC5 MR Phase 1
Matrix: Solid
Instrument: TOC Cube

Analyte	MDL	RL	Units
Total Organic Carbon	0.02	0.02	%

Analytical Resources, LLC
Analytical Chemists and Consultants

Analytical Standard Record

Standard ID: B000871

Printed: 5/25/2023 9:17:22AM

Description:	Calcium Carbonate 99.9% for Calibration	Expires:	31-Oct-2030
Standard Type:	Reagent	Prepared:	28-Jun-2013
Solvent:	NA/I2605	Prepared By:	Susan Dunnihoo
Final Volume (mls):	500	Department:	Conventionals
Vials:	1	Last Edit:	08-Jul-2019 12:16 by CDE
Vendor:	Mallinckrodt	Lot #:	4072 KDHD
Vendor Catalog #:	4072-03		

Comments

Analyte	CAS Number	Concentration	Units
Total Organic Carbon		120000	ppm
Total Inorganic Carbon		120000	ppm
Total Carbon		120000	ppm
Calcium carbonate	471-34-1	1000000	ppm
% Soot		120000	ppm

National Institute of Standards & Technology

Certificate of Analysis

Standard Reference Material® 1941b

Organics in Marine Sediment

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. Information values are also provided for total organic carbon (TOC), total carbon, hydrogen, and nitrogen. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Certified Mass Fraction Values: Certified mass fraction values for PAHs, PCB congeners, and chlorinated pesticides are provided in Table 1 through Table 3. The certified values for the PAHs, PCB congeners, and chlorinated pesticides are based on the agreement of results obtained at NIST from two or more chemically independent analytical techniques along with results from an interlaboratory comparison study [1]. A NIST certified value is a value for which NIST has the highest confidence in its accuracy in that all known or suspected sources of bias have been investigated or taken into account [1].

Reference Mass Fraction Values: Reference mass fraction values for additional PAHs (some in combination), additional PCB congeners, and additional chlorinated pesticides are provided in Table 4 through Table 7. Reference values for alkylated PAH groups are provided in Table 8 and for selected hopanes and steranes in Table 9. A reference value for total organic carbon is provided in Table 10. Reference values are noncertified values that are the best estimate of the true value; however, the values do not meet the NIST criteria for certification and are provided with associated uncertainties that may reflect only measurement precision, may not include all sources of uncertainty, or may reflect a lack of sufficient statistical agreement among multiple analytical methods [1].

Information Mass Fraction Values: Information mass fraction values are provided in Table 11 for carbon, hydrogen, and nitrogen. An information value is considered to be a value that will be of use to the SRM user, but insufficient information is available to assess the uncertainty associated with the value [1]. Information values cannot be used to establish metrological traceability.

Expiration of Certification: The certification of **SRM 1941b** is valid, within the measurement uncertainty specified, until **01 October 2020**, provided the SRM is handled and stored in accordance with the instructions given in this certificate (see "Instructions for Handling, Storage, and Use"). This certification is nullified if the SRM is damaged, contaminated, or otherwise modified.

Maintenance of SRM Certification: NIST will monitor this SRM over the period of its certification. If substantive technical changes occur that affect the certification before the expiration of this certificate, NIST will notify the purchaser. Registration (see attached sheet or register online) will facilitate notification.

Coordination of the technical measurements leading to the certification of this material was under the leadership of M.M. Schantz and S.A. Wise of the NIST Chemical Sciences Division.

Analytical measurements for the certification of SRM 1941b were performed at NIST by J.R. Kucklick, B.J. Porter, D.L. Poster, M.M. Schantz, P. Schubert, S. Tutschku, and L.L. Yu of the NIST Chemical Sciences Division.

Carlos A. Gonzalez, Chief
Chemical Sciences Division

Gaithersburg, MD 20899
Certificate Issue Date: 16 January 2015

Robert L. Watters, Jr., Director
Office of Reference Materials

Measurements for TOC were provided by a commercial laboratory and T.L. Wade of the Geochemical and Environmental Research Group, Texas A&M University (College Station, TX). The carbon, hydrogen, and nitrogen data were provided by a commercial laboratory. Results for the PAHs, PCBs, and chlorinated pesticides from 38 laboratories (see Appendix A) that participated in an interlaboratory comparison exercise coordinated by NIST were used. Results for the alkylated PAH groups, hopanes, and steranes from 33 laboratories (see Appendix B) that participated in another interlaboratory comparison exercise coordinated by NIST were also used.

Collection and preparation of SRM 1941b were performed by M.P. Cronise and C.N. Fales of the NIST Office of Reference Materials and B.J. Porter and M.M. Schantz of the NIST Chemical Sciences Division. The sediment material was collected with the assistance of G.G. Lauenstein, J. Collier, and J. Lewis (National Oceanic and Atmospheric Administration, Silver Spring, MD).

Consultation on the statistical design of the experimental work and evaluation of the data were provided by S.D. Leigh and J.H. Yen of the NIST Statistical Engineering Division.

Support aspects involved in the issuance of this SRM were coordinated through the NIST Office of Reference Materials.

INSTRUCTIONS FOR HANDLING, STORAGE, AND USE

Handling: This material is naturally occurring marine sediment from an urban area and may contain constituents of unknown toxicities; therefore, caution and care should be exercised during its handling and use.

Storage: SRM 1941b must be stored in its original bottle at temperatures less than 30 °C and away from direct sunlight.

Use: Prior to removal of subsamples for analysis, the contents of the bottle should be mixed. The mass fractions of constituents in SRM 1941b are reported on a dry-mass basis. The SRM, as received, contains a mass fraction of approximately 2.4 % moisture (see "Conversion to Dry-Mass Basis"). The sediment sample should be dried to a constant mass before weighing for analysis; or a separate subsample of the sediment should be removed from the bottle at the time of analysis and dried to determine the mass fraction on a dry-mass basis. If the constituents of interest are volatile, then the moisture must be determined with a separate subsample.

PREPARATION AND ANALYSIS[1]

Sample Collection and Preparation: The sediment used to prepare this SRM was collected from the Chesapeake Bay at the mouth of the Baltimore (MD) Harbor near the Francis Scott Key Bridge (39°12.3'N and 76°31.4'W). This location is very near the site where SRM 1941 and SRM 1941a were collected. The sediment was collected using a Kynar-coated modified Van Veen-type grab sampler. A total of approximately 3300 kg of wet sediment was collected from the site. The sediment was freeze-dried, sieved at 150 μm (100 % passing), homogenized in a cone blender, radiation sterilized (^{60}Co), and then packaged in screw-capped amber glass bottles each containing approximately 50 g.

Conversion to Dry-Mass Basis: The results for the constituents in SRM 1941b are reported on a dry-mass basis; however, the material "as received" contains residual moisture. The amount of moisture in SRM 1941b was determined by measuring the mass loss after freeze-drying subsamples of 1.1 g to 1.3 g for four days at 1 Pa with a –10 °C shelf temperature and a –50 °C condenser temperature. The moisture content in SRM 1941b at the time of the certification analyses was 2.39 % ± 0.08 % (95 % confidence level). Analytical results for the organic constituents were determined on an as-received basis and then converted to a dry-mass basis by dividing by the conversion factor of 0.9761 (gram dry mass per gram as-received mass).

Polycyclic Aromatic Hydrocarbons: The general approach used for the value assignment of the PAHs in SRM 1941b was similar to that reported in detail elsewhere [2]. The approach consisted of combining results from analyses using various combinations of different extraction techniques and solvents, clean-up/isolation procedures, and chromatographic separation and detection techniques: Soxhlet extraction and pressurized-fluid extraction (PFE) using dichloromethane (DCM) or a hexane/acetone mixture, cleanup of the extracts using solid-phase extraction (SPE) or normal-phase liquid chromatography (LC), followed by analysis using the following techniques: (1) reversed-phase liquid chromatography with fluorescence detection (LC-FL) analysis of the total PAH fraction, (2) reversed-phase

[1] Certain commercial equipment, instruments or materials are identified in this certificate to adequately specify the experimental procedure. Such identification does not imply recommendation or endorsement by the National Institute of Standards

LC-FL analysis of isomeric PAH fractions isolated by normal-phase LC (i.e., multidimensional LC), (3) gas chromatography/mass spectrometry (GC/MS) analysis of the PAH fraction on three stationary phases of different selectivity, i.e., a 5 % (all column compositions are given as mole fractions in %) phenyl-substituted methylpolysiloxane phase, a 50 % phenyl-substituted methylpolysiloxane phase, and a relatively non-polar proprietary phase.

Three sets of GC/MS results, designated as GC/MS (I), GC/MS (II), and GC/MS (III), were obtained using three columns with different selectivities for the separation of PAHs. For GC/MS (I) analyses, duplicate subsamples of approximately 1 g from ten bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 2 % DCM in hexane (all solvent concentrations are given as volume fractions in %). The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5 MS, J&W Scientific, Folsom, CA). The GC/MS (II) analyses were performed using 5 g subsamples from six bottles of SRM 1941b. These samples were extracted using PFE with DCM. The high molecular mass compounds were removed from the extracts using size exclusion chromatography (SEC) with a preparative-scale divinylbenzene-polystyrene column (10 μm particle size with 10 nm diameter pores), and the sulfur was removed from the extracts by adding copper powder. The concentrated extract was passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The analysis was by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17 MS, J&W Scientific). For the GC/MS (III), 9 g subsamples from six bottles of SRM 1941b were Soxhlet-extracted for 18 h with 250 mL of a mixture of 50 % hexane/50 % acetone. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific).

Two sets of LC-FL results, designated as LC-FL (total) and LC-FL (isomer), were used in the certification process. For the LC-FL (total), subsamples of approximately 1 g from six bottles of SRM 1941b were extracted using PFE with a mixture of 50 % hexane/50 % acetone. The extracts were concentrated and then processed through an aminopropylsilane SPE cartridge using 2 % DCM in hexane to obtain the total PAH fraction. For the LC-FL (isomer), a 5 g subsample from the six bottles was extracted using PFE with DCM and processed through an aminopropylsilane SPE cartridge using 10 % DCM in hexane; the PAH fraction was then fractionated further on a semi-preparative aminopropylsilane column (μBondapak NH_2, 9 mm i.d. × 30 cm, Waters Associates, Milford, MA) to isolate isomeric PAH fractions as described previously [3–6]. The total PAH fraction and the isomeric PAH fractions were analyzed using a 5 μm particle-size polymeric octadecylsilane (C_{18}) column (4.6 mm i.d. × 25 cm, Hypersil-PAH, Keystone Scientific, Inc., Bellefonte, PA) with wavelength-programmed fluorescence detection [4,5].

For the GC/MS and LC-FL measurements described above, selected perdeuterated PAHs were added to the sediment prior to solvent extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PAHs in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

Homogeneity Assessment for PAHs: The homogeneity of SRM 1941b was assessed by analyzing duplicate samples of approximately 1 g from ten bottles selected by stratified random sampling. Samples were extracted, processed, and analyzed as described above for GC/MS (I). No statistically significant differences among bottles were observed for the PAHs at this sample size.

PAH Isomers of Molecular Mass 300 and 302: For the determination of the molecular mass 300 and 302 isomers, three subsamples of approximately 5 g each were extracted using PFE with DCM. The extracts were then concentrated with a solvent change to hexane and passed through an aminopropyl SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS using a 0.25 mm i.d. × 60 m fused silica capillary column with a 50 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-17MS, J&W Scientific). Perdeuterated dibenzo[*a,i*]pyrene was added to the sediment prior to extraction for use as an internal standard [8].

PCBs and Chlorinated Pesticides: The general approach used for the determination of PCBs and chlorinated pesticides in SRM 1941b consisted of combining results from analyses using various combinations of different extraction techniques and solvents, cleanup/isolation procedures, and chromatographic separation and detection techniques. Techniques and solvents included Soxhlet extraction and PFE using DCM or a hexane/acetone mixture.

clean-up/isolation using SPE or LC, followed by analysis using GC/MS and gas chromatography with electron capture detection (GC-ECD) on two columns with different selectivity for the separation of PCBs and chlorinated pesticides. The analytical methods are described in detail elsewhere [2].

Six sets of results were obtained and designated as GC-ECD (I) A and B, GC/MS (I) A and B, GC/MS (II), and Interlaboratory Comparison Exercise. For the GC-ECD (I) analyses, approximately 10 g subsamples from six bottles of SRM 1941b were extracted using PFE with DCM. Copper powder was added to the extract to remove elemental sulfur, and SEC, as described above, was used to remove the high molecular mass compounds. The concentrated extract was then fractionated on a semi-preparative aminopropylsilane column to isolate two fractions containing: (1) the PCBs and lower-polarity pesticides and (2) the more polar pesticides. GC-ECD analyses of the two fractions were performed on two columns of different selectivities for PCB separations: 0.25 mm × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5, J&W Scientific), and a 0.25 mm × 60 m fused silica capillary column with a non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The results from the 5 % phenyl phase are designated as GC-ECD (IA) and the results from the proprietary phase are designated as GC-ECD (IB). For the GC-ECD analyses, two PCB congeners that are not significantly present in the sediment extract (PCB 103 and PCB 198 [9,10]) and endosulfan I-d_4, 4,4'-DDE-d_8, 4,4'-DD-d_8, and 4,4'-DDT-d_8 were added to the sediment prior to extraction for use as internal standards for quantification purposes.

Two sets of results were obtained by GC/MS. For GC/MS (I), approximately 9 g subsamples from six bottles were Soxhlet- extracted with a mixture of 50 % hexane/50 % acetone for approximately 18 h. Copper powder was added to the extract to remove elemental sulfur, and the concentrated extract was passed through a silica SPE cartridge and eluted with 10 % DCM in hexane. The processed extract was then analyzed by GC/MS with two ionization modes, electron impact (EI) and negative ion chemical ionization (NICI). The GC/MS EI method, GC/MS (IA), used a 0.25 mm i.d. × 60 m fused silica capillary column with a relatively non-polar proprietary phase (0.25 μm film thickness; DB-XLB, J&W Scientific). The GC/MS NICI method, GC/MS (IB), used a 0.25 mm i.d. × 60 m fused silica capillary column with a 5 % phenyl-substituted methylpolysiloxane phase (0.25 μm film thickness; DB-5MS, J&W Scientific). The GC/MS (II) results were obtained in the same manner as the GC/MS (IA) analyses except that three subsamples were Soxhlet-extracted with DCM for approximately 18 h. For the GC/MS analyses, selected carbon-13 labeled PCB congeners and chlorinated pesticides were added to the sediment prior to extraction for use as internal standards for quantification purposes.

In addition to the analyses performed at NIST, SRM 1941b was used in an interlaboratory comparison exercise in 1999 as part of the NIST Intercomparison Exercise Program for Organic Contaminants in the Marine Environment [7]. Results from 38 laboratories that participated in this exercise were used as the sixth data set in the determination of the certified values for PCB congeners and chlorinated pesticides in SRM 1941b. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest.

The reference value for PCB 77 was determined from a separate fraction. The samples were extracted and processed as for GC-ECD (I) above. The first (PCB and lower-polarity pesticide) fraction from the semi-preparative aminopropylsilane column was further fractionated using a Cosmosil PYE (pyrenylethyl group bonded) column (5 μm particle size, 4.6 mm i.d. × 25 cm ; Phenomenex, Torrance, CA) [11]. Three fractions were collected: the first fraction contained the pesticides and multi-*ortho* PCBs, the second fraction contained the polychlorinated naphthalenes, non-*ortho* PCB congeners, and some mono-*ortho* PCB congeners, and the third fraction removed the residual planar compounds from the column. The second fraction was analyzed by GC/MS NICI using the same column as GC/MS (IB) above. Carbon-13 labeled PCB 77 was used as an internal standard for quantification purposes.

Alkylated PAH Groups, Hopanes, and Steranes: SRM 1941b was used in an interlaboratory comparison exercise in 2011 [12]. Results from 33 laboratories that participated in this exercise were used in the determination of the reference values for alkylated PAH groups, hopanes, and steranes in SRM 1941b. Note that not all laboratories returned data for each analyte. The laboratories participating in this exercise used the analytical procedures routinely used in their laboratories to measure the analytes of interest. For the alkylated PAHs, the majority of the laboratories (>90 %) used the parent PAH for determination of the response factor for the corresponding alkylated group.

Total Organic Carbon (TOC): Two laboratories provided results for TOC using similar procedures. Briefly, subsamples of approximately 200 mg were reacted with 6 mol/L hydrochloric acid and rinsed with deionized water prior to combustion in a gas fusion furnace. The carbon monoxide and carbon dioxide produced were measured and compared to a blank for calculation of the percent TOC. Each laboratory analyzed subsamples from three bottles of SRM 1941b. One of the laboratories also analyzed three subsamples from three bottles of SRM 1941b for carbon, hydrogen, and nitrogen.

Table 1. Certified Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions[a] (µg/kg)		
Naphthalene[b,c,d,e,f,g]	848	±	95[h]
Fluorene[b,c,d,e,f,g]	85	±	15[h]
Phenanthrene[b,c,d,e,f,g]	406	±	44[h]
Anthracene[b,c,d,e,f,g]	184	±	18[h]
3-Methylphenanthrene[b,c,d]	105	±	13[h]
2-Methylphenathrene[b,c,d]	128	±	14[h]
1-Methylphenanthrene[b,c,d,g]	73.2	±	5.9[h]
Fluoranthene[b,c,d,e,f,g]	651	±	50[h]
Pyrene[b,c,d,e,f,g]	581	±	39[h]
Benz[*a*]anthracene[b,c,d,e,f,g]	335	±	25[h]
Chrysene[d,f]	291	±	31[h]
Triphenylene[d,f]	108	±	5[i]
Benzo[*b*]fluoranthene[c,e]	453	±	21[h]
Benzo[*k*]fluoranthene[b,c,d,e]	225	±	18[h]
Benzo[*e*]pyrene[b,c,d,g]	325	±	25[h]
Benzo[*a*]pyrene[b,c,d,f,g]	358	±	17[h]
Perylene[b,c,d,f,g]	397	±	45[h]
Benzo[*ghi*]perylene[b,c,d,f,g]	307	±	45[h]
Indeno[1,2,3-*cd*]pyrene[b,c,d,f,g]	341	±	57[h]
Dibenz[*a,j*]anthracene[b,c,d,f]	48.9	±	4.6[h]
Dibenz[*a,c*]anthracene[c,f]	36.7	±	5.2[h]
Dibenz[*a,h*]anthracene[c,f]	53	±	10[h]
Benzo[*b*]chrysene[b,c,d,f]	53	±	12[h]
Picene[b,c,d]	46.6	±	4.7[h]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[c] GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.
[d] GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[e] LC-FL (total) of total PAH fraction after PFE with DCM.
[f] LC-FL (isomer) of isomeric PAH fractions after PFE with DCM.
[g] 1999 Interlaboratory Comparison Study [7] with 21 to 29 laboratories submitting data for each PAH.
[h] Certified values are weighted means of the results from two to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[i] The certified value is an unweighted mean of the results from two analytical methods. The uncertainty listed with the value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the value is metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 2. Certified Mass Fraction Values for PCB Congeners[a] in SRM 1941b

PCB Congeners			Mass Fractions[b] (µg/kg)		
PCB	8	(2,4'-Dichlorobiphenyl)[c,d,e,f,g]	1.65	±	0.19[h]
PCB	18	(2,2',5-Trichlorobiphenyl)[c,d,e,f,g]	2.39	±	0.29[h]
PCB	28	(2,4,4'-Trichlorobiphenyl)[c,d,e,f,g]	4.52	±	0.57[h]
PCB	31	(2,4',5-Trichlorobiphenyl)[c,e,f]	3.18	±	0.41[h]
PCB	44	(2,2'3,5'-Tetrachlorobiphenyl)[c,d,e,f,g]	3.85	±	0.20[i]
PCB	49	(2,2'4,5'-Tetrachlorobiphenyl)[c,d,e,f]	4.34	±	0.28[i]
PCB	52	(2,2',5,5'-Tetrachlorobiphenyl)[c,d,e,f,g]	5.24	±	0.28[i]
PCB	66	(2,3',4,4'-Tetrachlorobiphenyl)[c,e,f,g,j]	4.96	±	0.53[i]
PCB	87	(2,2',3,4,5'-Pentachlorobiphenyl)[c,d,f,j]	1.14	±	0.16[h]
PCB	95	(2,2',3,5',6-Pentachlorobiphenyl)[c,e,f,g]	3.93	±	0.62[i]
PCB	99	(2,2',4,4',5-Pentachlorobiphenyl)[c,d,e,f,g]	2.90	±	0.36[i]
PCB	101	(2,2',4,5,5'-Pentachlorobiphenyl)[c,e,f,g,j]	5.11	±	0.34[i]
PCB	105	(2,3,3',4,4'-Pentachlorobiphenyl)[c,d,e,f,g,j]	1.43	±	0.10[i]
PCB	110	(2,3,3',4',6-Pentachlorobiphenyl)[c,e,f,j]	4.62	±	0.36[i]
PCB	118	(2,3',4,4',5-Pentachlorobiphenyl)[c,d,e,f,g,j]	4.23	±	0.19[i]
PCB	128	(2,2',3,3',4,4'-Hexachlorobiphenyl)[c,d,e,f,g,j]	0.696	±	0.044[i]
PCB	138	(2,2',3,4,4',5'-Hexachlorobiphenyl)[c,e,f,j]	3.60	±	0.28[i]
PCB	149	(2,2',3,4',5',6-Hexachlorobiphenyl)[c,d,e,j]	4.35	±	0.26[h]
PCB	153	(2,2',4,4',5,5'-Hexachlorobiphenyl)[c,d,e,f,g,j]	5.47	±	0.32[i]
PCB	156	(2,3,3',4,4',5-Hexachlorobiphenyl)[c,d,e,f,j]	0.507	±	0.090[h]
PCB	170	(2,2',3,3',4,4',5-Heptachlorobiphenyl)[c,d,e,f,g,j]	1.35	±	0.09[i]
PCB	180	(2,2',3,4,4',5,5'-Heptachlorobiphenyl)[c,d,e,f,g,j]	3.24	±	0.51[i]
PCB	183	(2,2',3,4,4',5',6-Heptachlorobiphenyl)[c,d,e,j]	0.979	±	0.087[h]
PCB	187	(2,2',3,4',5,5',6-Heptachlorobiphenyl)[c,d,e,f,g,j]	2.17	±	0.22[i]
PCB	194	(2,2',3,3',4,4',5,5'-Octachlorobiphenyl)[c,d,e,j]	1.04	±	0.06[h]
PCB	195	(2,2',3,3',4,4',5,6-Octachlorbiphenyl)[c,e,g,j]	0.645	±	0.060[i]
PCB	201	(2,2',3,3',4,5',6,6'-Octachlorobiphenyl)[c,e,j]	0.777	±	0.034[h]
PCB	206	(2,2',3,3',4,4',5,5',6-Nonachlorobiphenyl)[c,e,f,g,j]	2.42	±	0.19[i]
PCB	209	Decachlorobiphenyl[c,d,e,f,g,j]	4.86	±	0.45[i]

[a] PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform to IUPAC rules, except PCB 201. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 201 is listed as PCB 200.

[b] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[c] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[d] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

[e] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

[f] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.

[g] 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each PCB congener.

[h] Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[i] Certified values are weighted means of the results from three to six analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[j] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

Table 3. Certified Mass Fraction Values for Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions[a] (µg/kg)
Hexachlorobenzene[b,c,d,e]	5.83 ± 0.38[f]
cis-Chlordane[b,c,d,e,g]	0.85 ± 0.11[h]
trans-Chlordane[b,c,e]	0.566 ± 0.093[f]
cis-Nonachlor[b,e,g]	0.378 ± 0.053[h]
trans-Nonachlor[b,c,d,e,g]	0.438 ± 0.073[f]
4,4'-DDE[b,d,e,g]	3.22 ± 0.28[h]
4,4'-DDD[b,d,e,g]	4.66 ± 0.46[h]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.
[c] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).
[d] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.
[e] 1999 Interlaboratory Comparison Study [7] with 13 to 31 laboratories submitting data for each pesticide.
[f] Certified values are unweighted means of the results from three to five analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the constituent listed and the values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[g] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.
[h] Certified values are weighted means of the results from three to five analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed and the values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 4. Reference Mass Fraction Values for PAHs in SRM 1941b

PAHs	Mass Fractions[a] (µg/kg)		
1-Methylnaphthalene[b,c,d,e]	127	±	14[f]
2-Methylnaphthalene[b,c,d,e]	276	±	53[f]
2,6-Dimethylnaphthalene[b,c,d,e]	75.9	±	4.5[f]
2,3,5-Trimethylnaphthalene[b,c,d,e]	25.5	±	5.1[f]
Biphenyl[b,c,d,e]	74.0	±	8.0[f]
Acenaphthylene[b,c,d,e]	53.3	±	6.4[f]
Acenaphthene[b,c,d,e]	38.4	±	5.2[f]
9-Methylphenanthrene[c]	63.5	±	2.5[g]
4-Methylphenanthrene and 9-Methylphenanthrene[b,d]	80.1	±	4.8[f]
2-Methylanthracene[c,d]	36	±	15[f]
8-Methylfluoranthene[b]	49.5	±	2.7[g]
7-Methylfluoranthene[b]	45.4	±	1.5[g]
1-Methylfluoranthene[b]	42.4	±	2.1[g]
3-Methylfluoranthene[b]	28.8	±	1.3[g]
2-Methylpyrene[b]	78.7	±	4.0[g]
4-Methylpyrene[b]	66.4	±	2.6[g]
1-Methylpyrene[b]	52.5	±	2.3[g]
Acephenanthrene[d]	30.5	±	1.9[g]
Benzo[*c*]phenanthrene[b,c,d]	58	±	15[f]
Benzo[*a*]fluoranthene[b,c,d]	73	±	18[f]
Benzo[*j*]fluoranthene[c]	217	±	5[g]
Indeno[1,2,3-*cd*]fluoranthene[d]	9.63	±	0.34[g]
Pentaphene[d]	25.3	±	1.0[g]

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[b] GC/MS (I) on 5 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

[c] GC/MS (II) on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM.

[d] GC/MS (III) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[e] 1999 Interlaboratory Comparison Study [7] with 14 to 26 laboratories submitting data for each PAH.

[f] Reference values are weighted means of the results from two to four analytical methods [13]. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of PAHs listed as determined by the methods indicted. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[g] Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution for the associated degrees of freedom (19 for footnote b and 5 for footnotes c and d) and 95 % confidence level for each analyte. The measurand is the total mass fraction of the PAHs listed as determined by the method indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

Table 5. Reference Mass Fraction Values for PAHs of Molecular Mass 300 and 302 in SRM 1941b

PAHs of Molecular Mass 300 and 302	Mass Fractions[a,b,c] (µg/kg)		
Coronene	72.6	±	4.7
Dibenzo[*b,e*]fluoranthene	10.3	±	0.3
Naphtho[1,2-*b*]fluoranthene	91.0	±	3.1
Naphtho[1,2-*k*]fluoranthene and Naphtho[2,3-*j*]fluoranthene	79.8	±	2.5
Naphtho[2,3-*b*]fluoranthene	23.5	±	0.3
Dibenzo[*b,k*]fluoranthene	95.6	±	3.1
Dibenzo[*a,k*]fluoranthene	26.6	±	0.4
Dibenzo[*j,l*]fluoranthene	63.8	±	1.8
Dibenzo[*a,l*]pyrene	11.1	±	1.0
Naphtho[2,3-*k*]fluoranthene	10.7	±	0.6
Naphtho[1,2-*a*]pyrene	16.7	±	1.4
Naphtho[2,3-*e*]pyrene	33.2	±	2.3
Dibenzo[*a,e*]pyrene	76.1	±	3.6
Naphtho[2,1-*a*]pyrene	59.2	±	1.8
Dibenzo[*e,i*]pyrene	35.0	±	2.4
Naphtho[2,3-*a*]pyrene	16.5	±	0.6
Benzo[*b*]perylene	38.2	±	1.2
Dibenzo[*a,i*]pyrene	25.5	±	1.0
Dibenzo[*a,h*]pyrene	6.94	±	0.29

[a] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[b] Reference values are the means of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution for two degrees of freedom and 95 % confidence level for each analyte. The measurand is the total mass fraction of the constituent listed as determined by the method indicted. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.

[c] GC/MS on 50 % phenyl-substituted methylpolysiloxane phase after PFE with DCM [8].

Table 6. Reference Mass Fraction Values for PCB Congeners[a] in SRM 1941b

PCB Congeners			Mass Fractions[b,c] (µg/kg)		
PCB	45	(2,2',3,6-Tetrachlorobiphenyl)[d,e]	0.73	±	0.12
PCB	56	(2,3,3',4'-Tetrachlorobiphenyl)[d,f,g]	1.21	±	0.11
PCB	63	(2,3,4',5-Tetrachlorobiphenyl)[e,f,g]	0.213	±	0.040
PCB	70	(2,3',4',5-Tetrachlorobiphenyl)[e,f,g]	4.99	±	0.29
PCB	74	(2,4,4',5-Tetrachlorobiphenyl)[e,f,g]	2.04	±	0.15
PCB	77	(3,3',4,4'-Tetrachlorobiphenyl)[h]	0.31	±	0.03
PCB	107	(2,3,3',4',5-Pentachlorobiphenyl)[d,e,f,g]	0.628	±	0.028
PCB	132	(2,2',3,3',4,6'-Hexachlorobiphenyl)[d,f,g]	1.28	±	0.27
PCB	146	(2,2',3,4',5,5'-Hexachlorobiphenyl)[e,f,g]	1.22	±	0.12
PCB	158	(2,3,3',4,4',6-Hexachlorobiphenyl)[d,e,f,g]	0.65	±	0.15
PCB	163	(2,3,3',4',5,6-Hexachlorobiphenyl)[e,f,g]	1.28	±	0.06
PCB	174	(2,2',3,3',4,5,6'-Heptachlorobiphenyl)[d,e,f,g]	1.51	±	0.39
PCB	193	(2,3,3',4',5,5',6-Heptachlorobiphenyl)[d,e,f,g]	0.292	±	0.075

[a] PCB congeners are numbered according to the scheme proposed by Ballschmiter and Zell [9] and later revised by Schulte and Malisch [10] to conform with IUPAC rules, except PCB 107. Under the Ballschmiter and Zell numbering system, the IUPAC PCB 107 is listed as PCB 108.

[b] Mass fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.

[c] For these PCB congeners except PCB 77, the reference values are unweighted means of the results from two to four analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled within-method variance following the ISO/JCGM Guide [14,15]. For PCB 77, the reference value is the mean of results obtained by NIST using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the analyte mean, and the coverage factor, k, is determined from the Student's t-distribution corresponding to two degrees of freedom and 95 % confidence level for PCB 77. The measurand is the total mass fraction of the PCB Congeners listed as determined by the method or methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as microgram per kilogram on a dry-mass basis.

[d] GC-ECD (IA) on 5 % phenyl-substituted methylpolysiloxane phase after PFE extraction with DCM.

[e] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).

[f] GC/MS (IA) on a relatively non-polar proprietary phase after Soxhlet extraction with 50 % hexane/50 % acetone mixture.

[g] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).

[h] GC/MS NICI on a 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC-ECD (I) fractionated using a PYE column.

Table 7. Reference Mass Fraction Values for Selected Chlorinated Pesticides in SRM 1941b

Chlorinated Pesticides	Mass Fractions[a,b] (µg/kg)
2,4'-DDE[c,d]	0.38 ± 0.12
4,4'-DDT[e,f]	1.12 ± 0.42

[a] Mass Fractions reported on dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] The reference values are unweighted means of the results from two analytical methods. The uncertainty listed with each value is an expanded uncertainty about the mean, with coverage factor 2, calculated by combining a between-method variance [16] with a pooled, within-method variance following the ISO/JCGM Guide [14,15]. The measurand is the total mass fraction of the chlorinated pesticides listed as determined by the methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[c] GC/MS (IB) on 5 % phenyl-substituted methylpolysiloxane phase; same extracts analyzed as in GC/MS (IA).
[d] GC-ECD (IB) on a relatively non-polar proprietary phase; same extracts analyzed as in GC-ECD (IA).
[e] GC/MS (II) on a relatively non-polar proprietary phase after Soxhlet extraction with DCM.
[f] 1999 Interlaboratory Comparison Study [7] with 10 laboratories submitting data for 4,4'-DDT.

Table 8. Reference Mass Fraction Values for Alkylated PAH Groups in SRM 1941b

Alkylated PAH Group	Mass Fraction[a,b] (µg/kg)
C2-decalins	18 ± 5
C4-decalins	41 ± 4
C2-naphthalenes	187 ± 53
C3-naphthalenes	158 ± 42
C1-benzothiophenes	25 ± 14
C2-benzothiophenes	20 ± 11
C3-benzothiophenes	22 ± 13
C4-benzothiophenes	18 ± 5
C1-fluorenes	57 ± 18
C2-fluorenes	122 ± 43
C3-fluorenes	128 ± 31
C1-phenanthrenes/anthracenes	313 ± 99
C2-phenanthrenes/anthracenes	247 ± 62
C3-phenanthrenes/anthracenes	165 ± 46
C4-phenanthrenes/anthracenes	87 ± 36
C1-dibenzothiophenes	54 ± 13
C2-dibenzothiophenes	91 ± 18
C3-dibenzothiophenes	84 ± 15
C4-dibenzothiophenes	57 ± 13
C1-fluoranthenes/pyrenes	252 ± 48
C2-fluoranthenes/pyrenes	205 ± 38
C3-fluoranthenes/pyrenes	102 ± 22
C4-fluoranthenes/pyrenes	121 ± 59
C1-benzanthraces/chrysenes/triphenylenes	208 ± 43
C2-benzanthraces/chrysenes/triphenylenes	120 ± 24
C3-benzanthraces/chrysenes/triphenylenes	73 ± 31
C4-benzanthraces/chrysenes/triphenylenes	41 ± 11

[a] The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the alkylated PAH groups listed as determined by the interlaboratory study methods. The values listed are metrologically traceable to the SI unit of mass fraction, expressed as micrograms per kilogram on a dry-mass basis.
[b] Data from the interlaboratory study [12].

Table 9. Reference Mass Fraction Values for Hopanes and Steranes in SRM 1941b

Hopane or Sterane	Mass Fraction[a,b] (µg/kg)
17α(H)-22,29,30-Trisnorhopane	54 ± 18
17α(H)-21β(H)-30-Norhopane	137 ± 21
17α(H)-21β(H)-30-Hopane	215 ± 44
17α(H)-21β(H)-22R-Homohopane	44 ± 10
17α(H)-21β(H)-22S-Homohopane	48 ± 13
5α(H)-14α(H),17α(H)-Cholestane 20R	41 ± 11
5α(H)-14β(H),17β(H)-Cholestane 20R	27 ± 6
5α(H)-14β(H),17β(H)-24-Methylcholestane 20R	21 ± 8
5α(H)-14α(H),17α(H)-24-Ethylcholestane 20R	19 ± 5
5α(H)-14β(H),17β(H)-24-Ethylcholestane 20R	41 ± 9

[a] The reference mass fraction value reported on a dry-mass basis is the median of results using one analytical technique. The expanded uncertainty, U, is calculated as $U = ku_c$, where u_c is one standard deviation of the median, and the coverage factor, $k = 2$. The measurand is the total mass fraction of the constituent listed as determined by the methods used during the interlaboratory study. The values are metrologically traceable to the SI unit of mass, expressed as micrograms per kilogram on a dry-mass basis.
[b] Data from the interlaboratory study [12].

Table 10. Reference Mass Fraction Value for Total Organic Carbon in SRM 1941b

Total Organic Carbon (TOC)	2.99 % ± 0.24 %[a,b]

[a] Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.
[b] The reference value for total organic carbon is a weighted mean value from routine measurements made by two laboratories [21]. The uncertainty listed is an expanded uncertainty about the mean, with coverage factor 2 (approximately 95 % confidence), calculated by combining a between-method variance incorporating inter-method bias with a pooled within-method variance. The reporting follows the ISO/JCGM Guides [2]. The measurand is the total mass fraction of TOC listed as determined by the methods indicted. The values listed are metrologically traceable to the SI unit of mass, expressed as a percent on a dry-mass basis.

Table 11. Information Mass Fraction Values for Carbon, Hydrogen, and Nitrogen in SRM 1941b

Elements	Mass Fractions[a] (%)
Carbon	3.3
Hydrogen	1.2
Nitrogen	<0.5

[a] Mass fraction is reported on a dry-mass basis; material as received contains approximately 2.4 % moisture.

REFERENCES

[1] May, W.E.; Parris, R.M.; Beck II, C.M.; Fassett, J.D.; Greenberg, R.R.; Guenther, F.R.; Kramer, G.W.; Wise, S.A.; Gills, T.E.; Colbert, J.C.; Gettings, R.J.; MacDonald, B.R.; *Definition of Terms and Modes Used at NIST for Value-Assignment of Reference Materials for Chemical Measurements*; NIST Special Publication 260-136 (2000); available at http://www.nist.gov/srm/publications.cfm (accessed Jan 2015).

[2] Wise, S.A.; Poster, D.L.; Schantz, M.M.; Kucklick, J.R.; Sander, L.C.; Lopez de Alda, M.; Schubert, P.; Parris, R.M.; Porter, B.J.; *Two New Marine Sediment Standard Reference Materials (SRMs) for the Determination of Organic Contaminants*; Anal. Bioanal. Chem., Vol. 378, pp. 1251–1264 (2004).

[3] Wise, S.A.; Chesler, S.N.; Hertz, H.S.; Hilpert, L.R.; May, W.E.; *Chemically-Bonded Aminosilane Stationary Phase for the High Performance Liquid Chromatographic Separation of Polynuclear Aromatic Hydrocarbons*; Anal. Chem., Vol. 49, pp. 2306–2310 (1977).

[4] May, W.E.; Wise, S.A.; *Liquid Chromatographic Determination of Polycyclic Aromatic Hydrocarbons in Air Particulate Extracts*; Anal. Chem., Vol. 56, pp. 225–232 (1984).

[5] Wise, S.A.; Benner, B.A.; Byrd, G.D.; Chesler, S.N.; Rebbert, R.E.; Schantz, M.M.; *Determination of Polycyclic Aromatic Hydrocarbons in a Coal Tar Standard Reference Material*; Anal. Chem., Vol. 60, pp. 887-894 (1988).

[6] Wise, S.A.; Deissler, A.; Sander, L.C.; *Liquid Chromatographic Determination of Polycyclic Aromatic Hydrocarbon Isomers of Molecular Weight 278 and 302 in Environmental Standard Reference Materials*; Polycyclic Aromat. Compd., Vol. 3, pp. 169–184 (1993).

[7] Schantz, M.M.; Parris, R.M.; Wise, S.A.; *NIST/NOAA Intercomparison Exercise Program for Organic Contaminants in the Marine Environment: Description and Results of 1999 Organic Intercomparison Exercises*; NOAA Technical Memorandum NOS NCCOS CCMA 146, Silver Spring, MD (2000).

[8] Schubert, P.; Schantz, M.M.; Sander, L.C.; Wise, S.A.; *Determination of Polycyclic Aromatic Hydrocarbons with Molecular Mass 300 and 302 in Environmental-Matrix Standard Reference Materials by Gas Chromatography-Mass Spectrometry*; Anal. Chem., Vol. 75, pp. 234–246 (2003).

[9] Ballschmiter, K.; Zell, M.; *Analysis of Polychlorinated Biphenyls (PCB) by Glass Capillary Gas Chromatography - Composition of Technical Aroclor- and Clophen-PCB Mixtures*; Fresenius' Z. Anal. Chem., Vol. 302, pp. 20–31 (1980).

[10] Schulte, E.; Malisch, R.; *Calculation of the Real PCB Content in Environmental Samples. I. Investigation of the Composition of Two Technical PCB Mixtures*; Fresenius' Z. Anal. Chem., Vol. 314, pp. 545–551 (1983).

[11] Brubaker, W.W., Jr.; Schantz, M.M.; Wise, S.A.; *Determination of Non-ortho Polychlorinated Biphenyls in Environmental Standard Reference Materials*; Fresenius' J. Anal. Chem., Vol. 367, pp. 401–406 (2000).

[12] Schantz, M.M.; Kucklick, J.R..; *NIST Interlaboratory Analytical Comparison Study to Support Deepwater Horizon Natural Resource Damage Assessment: Description and Results for Crude Oil QA10OIL01*; NISTIR 7793 (2011).

[13] Ruhkin, A.L.; Vangel, M.G.; *Estimation of a Common Mean and Weighted Means Statistics*; J. Am. Statist. Assoc., Vol. 93, pp. 303–308 (1998).

[14] JCGM 100:2008; *Evaluation of Measurement Data — Guide to the Expression of Uncertainty in Measurement* (GUM 1995 with Minor Corrections); Joint Committee for Guides in Metrology (2008); available at http://www.bipm.org/utils/common/documents/jcgm/JCGM_100_2008_E.pdf (accessed Jan 2015); see also Taylor, B.N.; Kuyatt, C.E.; *Guidelines for Evaluating and Expressing the Uncertainty of NIST Measurement Results*; NIST Technical Note 1297; U.S. Government Printing Office: Washington, DC (1994); available at http://www.nist.gov/pml/pubs/tn1297/index.cfm (accessed Jan 2015).

[15] JCGM 101:2008; *Evaluation of measurement data – Supplement 1 to the "Guide to the expression of uncertainty in measurement" - Propagation of distributions using a Monte Carlo method*; JCGM (2008); available at http://www.bipm.org/utils/common/documents/jcgm/JCGM_101_2008_E.pdf (accessed Jan 2015).

[16] Levenson, M.S.; Banks, D.L.; Eberhardt, K.R.; Gill, L.M.; Guthrie, W.F.; Liu, H.-K.; Vangel, M.G.; Yen, J.H.; Zhang, N.F.; *An Approach to Combining Results from Multiple Methods Motivated by the ISO GUM*; J. Res. Natl. Inst. Stand. Technol., Vol. 105, pp. 571–579 (2000).

Certificate Revision History: 16 January 2015 (Corrected IUPAC name for PCB-56 and PCB-107; editorial changes); 10 June 2014 (Units corrected from mg/kg to µg/kg in Tables 8 and 9; editorial changes); 10 April 2012 (Reference value added for alkylated PAH groups, hopanes, and steranes; extension of certification period; editorial changes); 16 August 2004 (Reference values for the butyl tins removed; editorial changes); 15 July 2002 (Original certificate date).

Users of this SRM should ensure that the Certificate of Analysis in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail srminfo@nist.gov; or via the Internet at http://www.nist.gov/srm.

APPENDIX A

The laboratories listed below performed measurements that contributed to the certification of PAHs, PCBs, and chlorinated pesticides in SRM 1941b Organics in Marine Sediment.

Arthur D. Little, Inc; Cambridge, MA
Axys Analytical Services; Sidney, BC, Canada
B & B Laboratories; College Station, TX
Battelle Ocean Sciences; Duxbury, MA
Bedford Institute of Oceanography; Dartmouth, NS, Canada
California Department of Fish and Game; Rancho Cordova, CA
Central Contra Costa Sanitary District; Martinez, CA
Chesapeake Biological Laboratory; Solomons, MD
Centro de Investigacionies Energeticas Medioambientales y Tecnologicas; Madrid, Spain
City of Los Angeles Environmental Monitoring Division; Playa del Rey, CA
City of San Jose Environmental Services Department; San Jose, CA
Columbia Analytical Services; Kelso, WA
East Bay Municipal Utility District; Oakland, CA
Florida Department of Environmental Protection; Tallahassee, FL
Manchester Environmental Laboratory; Port Orchard, WA
Murray State University; Murray, KY
Massachusetts Water Resources Authority Central Lab; Winthrop, MA
National Research Council of Canada; Ottawa, Ontario, Canada
National Oceanic and Atmospheric Association (NOAA), National Marine Fisheries Service (NMFS), Auke Bay Laboratory; Juneau, AK
NOAA, National Ocean Service/Center for Coastal Environmental Health and Biomolecular Research; Charleston, SC
NOAA, NMFS, Sandy Hook Marine Laboratory; Highlands, NJ
NOAA, NMFS, Northwest Fisheries Science Center; Seattle, WA
Orange County Sanitation District; Fountain Valley, CA
Philip Analytical Services; Burlington, Ontario, Canada
Serv de Hidrografia Naval; Buenos Aires, Argentina
Skidaway Institute of Technology; Savannah, GA
Southwest Laboratory of Oklahoma; Broken Arrow, OK
Severn Trent Knoxville Laboratory; Knoxville, TN
Texas A&M University, Geochemical and Environmental Research Group; College Station, TX
Texas Parks and Wildlife Department; San Marcos, TX
University of California at Los Angeles, Institute of Geophysics and Planetary Physics; Los Angeles, CA
University of Connecticut, Environmental Research Institute; Storrs, CT
University of Rhode Island, Graduate School of Oceanography; Narragansett, RI
US Department of Agriculture, Environmental Chemistry Laboratory; Beltsville, MD
US Environmental Protection Agency, Atlantic Ecology Division; Narragansett, RI
US Geological Survey, National Water Quality Laboratory; Denver, CO
Woods Hole Group Environmental Lab; Raynham, MA
Wright State University; Dayton, OH

APPENDIX B

The laboratories listed below performed measurements that contributed to the certification of alkylated PAH groups, hopanes, and steranes in SRM 1941b Organics in Marine Sediment.

Alpha Analytical, Inc.; Mansfield, MA
Analytical Resources, Inc.; Tukwila, WA
Axys Analytical Services; Sydney, BC, Canada
Battelle Analytical & Environmental Chemistry Laboratory; Duxbury, MA
Center for Laboratory Sciences; Pasco, WA
Columbia Analytical Services; Jacksonville, FL
Columbia Analytical Services; Rochester, NY
Columbia Analytical Services, Kelso, WA
Florida Department of Environmental Protection; Tallahassee, FL
Florida International University; North Miami, FL
Michigan Department of Natural Resources and Environment; Lansing, MI
Mississippi State Chemical Laboratory; Mississippi State, MS
NIST; Charleston, SC
NIST; Gaithersburg, MD
NOAA/NCCOS/NOS; Charleston, SC
NOAA/NMFS/Alaska Fisheries Science Center; Juneau, AK
NY State Department of Health; Albany, NY
Pace Analytical Services, Inc. Minneapolis; Minneapolis, MN
RJ Lee Group, Inc; Monroeville, PA
TDI/B&B Laboratories, Inc.; College Station, TX
TestAmerica Laboratories; Mobile, AL
TestAmerica Laboratories; West Sacramento, CA
TestAmerica Laboratories; University Park, IL
TestAmerica Laboratories; Schriever, LA
TestAmerica Laboratories; Edison, NJ
TestAmerica Laboratories; Knoxville, TN
TestAmerica Laboratories; Pittsburgh, PA
TestAmerica Laboratories; South Burlington, VT
TestAmerica Laboratories; Tacoma, WA
US Army Engineer Research and Development Center; Vicksburg, MS
USGS Columbia Environmental Research Center; Columbia, MO
University of Iowa, State Hygienic Laboratory; Iowa City, IO
Washington State Public Health Laboratories; Shoreline, WA

NIST

Date of Issue:
31 March 2014

SAFETY DATA SHEET

1. Substance and Source Identification

Product Identifier

SRM Number: 1941b
SRM Name: Organics in Marine Sediment
Other Means of Identification: Not applicable.

Recommended Use of This Material and Restrictions of Use

This Standard Reference Material (SRM) is marine sediment collected at the mouth of the Baltimore (MD) Harbor. SRM 1941b is intended for use in evaluating analytical methods for the determination of selected polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and chlorinated pesticides in marine sediment and similar matrices. All of the constituents for which certified, reference, and information values are provided in SRM 1941b were naturally present in the sediment before processing. A unit of SRM 1941b consists of a bottle containing 50 g of radiation-sterilized, freeze-dried sediment.

Company Information

National Institute of Standards and Technology
Standard Reference Materials Program
100 Bureau Drive, Stop 2300
Gaithersburg, Maryland 20899-2300

Telephone: 301-975-2200
FAX: 301-948-3730
E-mail: SRMMSDS@nist.gov
Website: http://www.nist.gov/srm

Emergency Telephone ChemTrec:
1-800-424-9300 (North America)
+1-703-527-3887 (International)

2. Hazards Identification

Classification

Physical Hazard: Not classified.
Health Hazard: Not classified.

Label Elements
Symbol
No Symbol/Pictogram

Signal Word
Not applicable.

Hazard Statement(s): Not applicable.

Precautionary Statement(s): Not applicable.

Hazards Not Otherwise Classified: Not applicable.

Ingredients(s) with Unknown Acute Toxicity: Not applicable.

3. Composition and Information on Hazardous Ingredients

Substance: Marine sediment

Other Designations: Sediment.

This material is naturally occurring marine sediment from an urban area. The material contains trace amounts of polycyclic aromatic hydrocarbons (PAHs), polychlorinated biphenyl (PCB) congeners, and should be handled with care. Components are listed in compliance with OSHA's 29 CFR 1910.1200; for the actual values see the Certificate of Analysis.

Hazardous Component(s)	CAS Number	EC Number (EINECS)	Nominal Mass Concentration (%)
Marine Sediment	Not available	Not available	100

4. First Aid Measures

Description of First Aid Measures:

Inhalation: If adverse effects occur, remove to uncontaminated area. If not breathing, give artificial respiration or oxygen by qualified personnel. Seek immediate medical attention.

Skin Contact: Wash skin with soap and water.

Eye Contact: Flush eyes with water for at least 15 minutes. If necessary, seek medical attention.

Ingestion: If adverse effects occur after ingestion, seek medical treatment.

Most Important Symptoms/Effects, Acute and Delayed: May cause irritation.

Indication of any immediate medical attention and special treatment needed, if necessary: If any of the above symptoms are present, seek medical attention if needed.

5. Fire Fighting Measures

Fire and Explosion Hazards: Negligible fire hazard. Avoid generating dust. See Section 9, "Physical and Chemical Properties" for flammability properties.

Extinguishing Media:
Suitable: Use extinguishing media appropriate for surrounding fire.
Unsuitable: None listed.

Specific Hazards Arising from the Chemical: None listed.

Special Protective Equipment and Precautions for Fire-Fighters: Avoid inhalation of material or combustion byproducts. Wear full protective clothing and NIOSH approved self-contained breathing apparatus (SCBA).

NFPA Ratings (0 = Minimal; 1 = Slight; 2 = Moderate; 3 = Serious; 4 = Severe)

Health = 1 Fire = 0 Reactivity = 0

6. Accidental Release Measures

Personal Precautions, Protective Equipment and Emergency Procedures: Any accumulated material on surfaces should be removed and properly disposed of. Use suitable protective equipment; see Section 8, "Exposure Controls and Personal Protection".

Methods and Materials for Containment and Clean up: Collect spilled material in appropriate container for disposal. Keep out of water supplies and sewers. Keep unnecessary people away, isolate hazard area and deny entry.

7. Handling and Storage

Safe Handling Precautions: Minimize dust generation and accumulation on surfaces. Routine housekeeping should be instituted to ensure that dusts do not accumulate on surfaces. See Section 8, "Exposure Controls and Personal Protection".

Storage: Store and handling in accordance with all current regulations and standards.

8. Exposure Controls and Personal Protection

Exposure Limits: No occupational exposure limits have been established for marine sediment. This material is a particulate matter and adequate inhalation/respiratory protection should be used to minimize exposure. The exposure limits for Particulates Not Otherwise Regulated (PNOR) are applicable.

OSHA (PEL): 15 mg/m^3 (TWA, total particulates not otherwise regulated)
OSHA (PEL) 5 mg/m^3 (TWA, respirable particulates not otherwise regulated)

NIOSH (REL): 10 mg/m^3 (TWA, total particulates not otherwise regulated, 8 h)
NIOSH (REL): 5 mg/m^3 (TWA, respirable particulates not otherwise regulated)

Engineering Controls: Provide local exhaust or process enclosure ventilation system. Ensure compliance with applicable exposure limits.

Personal Protection: In accordance with OSHA 29 CFR 1910.132, subpart I, wear appropriate Personal Protective Equipment (PPE) to minimize exposure to this material.

Respiratory Protection: If workplace conditions warrant a respirator, a respiratory protection program that meets OSHA 29CFR 1910.134 must be followed. Refer to NIOSH 42 CFR 84 for applicable certified respirators.

Eye/Face Protection: Wear splash resistant safety goggles with a face shield. An eye wash station should be readily available near areas of use.

Skin and Body Protection: Personal protective equipment for the body should be selected based on the task being performed and the risks involved and should be approved by a specialist before handling this product. Chemical-resistant gloves should be worn at all times when handling chemicals.

9. PHYSICAL AND CHEMICAL PROPERTIES

Descriptive Properties:

Appearance (physical state, color, etc.):	amorphous powder
Molecular Formula:	not applicable
Molar Mass (g/mol):	not applicable
Odor:	not available
Odor threshold:	not available
pH:	not available
Evaporation rate:	not applicable
Melting point/freezing point (°C):	not available
Specific Gravity (water=1)	not available
Vapor Pressure (mmHg):	not applicable
Vapor Density (air = 1):	not applicable
Viscosity (cP):	not applicable
Solubility(ies):	not available
Partition coefficient (n-octanol/water):	not available
Particle Size:	<150 µm

Thermal Stability Properties:

Autoignition Temperature (°C):	not available
Thermal Decomposition (°C):	not available
Initial boiling point and boiling range (°C):	not available
Explosive Limits, LEL (Volume %):	not available
Explosive Limits, UEL (Volume %):	not available
Flash Point (°C):	not available
Flammability (solid, gas):	not available

10. STABILITY AND REACTIVITY

Reactivity: Stable at normal temperatures and pressure.

Stability: X Stable _____ Unstable

Possible Hazardous Reactions: None listed.

Conditions to Avoid: Avoid generating dust.

Incompatible Materials: None listed.

Fire/Explosion Information: See Section 5, "Fire Fighting Measures".

Hazardous Decomposition: Thermal decomposition will produce oxides of carbon.

Hazardous Polymerization: _____ Will Occur X Will Not Occur

11. TOXICOLOGICAL INFORMATION

Route of Exposure: __X__ Inhalation __X__ Skin _____ Ingestion

Symptoms Related to the Physical, Chemical and Toxicological Characteristics: Generated dust may cause irritation if inhaled.

Potential Health Effects (Acute, Chronic and Delayed):

Inhalation: Generated dust may cause irritation.

Skin Contact: May cause mechanical irritation.

Eye Contact: May cause mechanical irritation.

Ingestion: No data available.

Numerical Measures of Toxicity:

Acute Toxicity: Not classified; no data available.

Skin Corrosion/Irritation: Not classified; no data available.

Serious Eye damage/ Eye irritation: Not classified; no data available.

Respiratory Sensitization: Not classified; no data available.

Skin Sensitization: Not classified; no data available.

Germ Cell Mutagenicity: Not classified; no data available.

Carcinogenicity: Not classified.

Listed as a Carcinogen/Potential Carcinogen _____ Yes __X__ No
Marine sediment is not listed by NTP, IARC or OSHA as a carcinogen.

Reproductive Toxicity: Not classified; no data available.

Specific Target Organ Toxicity, Single Exposure: Not classified; no data available.

Specific Target Organ Toxicity, Repeated Exposure: Not classified; no data available.

Aspiration Hazard: Not classified; no data available.

12. ECOLOGICAL INFORMATION

Ecotoxicity Data: No data available.

Persistence and Degradability: No data available.

Bioaccumulative Potential: No data available.

Mobility in Soil: No data available.

Other Adverse effects: No data available.

13. DISPOSAL CONSIDERATIONS

Waste Disposal: Dispose of waste in accordance with all applicable federal, state, and local regulations.

14. TRANSPORTATION INFORMATION

U.S. DOT and IATA: Not regulated by DOT or IATA.

15. REGULATORY INFORMATION

U.S. Regulations:

CERCLA Sections 102a/103 (40 CFR 302.4): Not regulated.

SARA Title III Section 302 (40 CFR 355.30): Not regulated.

SARA Title III Section 304 (40 CFR 355.40): Not regulated.

SARA Title III Sections 311/312 Hazardous Categories (40 CFR 370.21):

ACUTE HEALTH:	No.
CHRONIC HEALTH:	No.
FIRE:	No.
REACTIVE:	No.
PRESSURE:	No.

State Regulations:
California Proposition 65: Not listed.

U.S. TSCA Inventory: Not listed.

TSCA 12(b), Export Notification: Not listed.

Canadian Regulations:
WHMIS Information: Not provided for this material.

16. OTHER INFORMATION

Issue Date: 31 March 2014

Sources: 29 CFR Occupational Health and Safety Office (OSHA) 1910.1000, *Limits for Air Contaminants*, Table Z-1; available at http://www.osha.gov/pls/oshaweb/owadisp.show_document?p_table=STANDARDS&p_id=9992 (accessed Mar 2014).

Center for Disease Control (CDC) NIOSH Pocket Guide to Chemical Hazards, *Particulates not otherwise regulated*; available at http://www.cdc.gov/niosh/npg/npgd0480.html (accessed Mar 2014).

Key of Acronyms:

ACGIH	American Conference of Governmental Industrial Hygienists	NRC	Nuclear Regulatory Commission
ALI	Annual Limit on Intake	NTP	National Toxicology Program
CAS	Chemical Abstracts Service	OSHA	Occupational Safety and Health Administration
CERCLA	Comprehensive Environmental Response, Compensation, and Liability Act	PEL	Permissible Exposure Limit
CFR	Code of Federal Regulations	RCRA	Resource Conservation and Recovery Act
DOT	Department of Transportation	REL	Recommended Exposure Limit
EC50	Effective Concentration, 50 %	RM	Reference Material
EINECS	European Inventory of Existing Commercial Chemical Substances	RQ	Reportable Quantity
EPCRA	Emergency Planning and Community Right-to-Know Act	RTECS	Registry of Toxic Effects of Chemical Substances
IARC	International Agency for Research on Cancer	SARA	Superfund Amendments and Reauthorization Act
IATA	International Air Transportation Agency	SCBA	Self-Contained Breathing Apparatus
IDLH	Immediately Dangerous to Life and Health	SRM	Standard Reference Material
LC50	Lethal Concentration, 50 %	STEL	Short Term Exposure Limit
LD50	Lethal Dose, 50 %	TLV	Threshold Limit Value
LEL	Lower Explosive Limit	TPQ	Threshold Planning Quantity
MSDS	Material Safety Data Sheet	TSCA	Toxic Substances Control Act
NFPA	National Fire Protection Association	TWA	Time Weighted Average
NIOSH	National Institute for Occupational Safety and Health	UEL	Upper Explosive Limit
NIST	National Institute of Standards and Technology	WHMIS	Workplace Hazardous Materials Information System

Disclaimer: Physical and chemical data contained in this SDS are provided only for use in assessing the hazardous nature of the material. The SDS was prepared carefully, using current references; however, NIST does not certify the data in the SDS. The certified values for this material are given in the NIST Certificate of Analysis.

Users of this SRM should ensure that the SDS in their possession is current. This can be accomplished by contacting the SRM Program: telephone (301) 975-2200; fax (301) 948-3730; e-mail SRMinfo@nist.gov; or via the Internet at http://www.nist.gov/srm.

Bill to:	Ship to:
68455 DAVE MITCHELL ANALYTICAL RESOURCES INC 4611 S 134TH PLACE SUITE 100 TUKWILA, WA 98168-3240 1 (206)695-6205	68456 DAVE MITCHELL ANALYTICAL RESOURCES INC 4611 S 134TH PLACE SUITE 100 TUKWILA, WA 98168-3240 1 (206)695-6205

Ship via	UPS Ground	Description		Ship from	
Salesmen	MCMIDM2	Instructions		Blanket	
Contact	DAVE MITCHELL	Pro#		Truck#	

Order discrepancies (other than back ordered items) must be reported to our Customer Relations Department at 301-975-6776 within 5 days of receipt of shipment or this order will be considered complete. NIST SRMs/RMs are generally not returnable - with the exception of defective goods or shipments made in error by NIST. To return a SRM/RM, please call for instructions and a Return SRM/RM Authorization Number before shipment. Returns WILL NOT BE ACCEPTED without prior authorization.

Order	UOM	Ship	UOM	B/O	UOM	Item	Description
1	EACH	1	EACH	0	EACH	1941B	Organics in Marine Sediment
						Total qty:	1 / EACH
							NOT FOR HUMAN CONSUMPTION, LABORATORY USE ONLY.

9/21/16
04:04 PM

1700101

Picked by	
Packed by	
# of pieces	
Weight	

MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
Toll Free: 800/854-0530

Fax: 440/337-1180
web: www.mpbio.com

Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: $(C_6H_{10}O_5)n$	**Formula Weight:** N/A
CAS #: 9004-34-6	**Storage:** 15 - 30°C
Physical Description: White Powder	

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh +60 mesh +200 mesh	Wt % <8% >45%	 <1% 55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
Heavy Metals	<10 ppm	<10 ppm

H001822
Microcrystalline Cellulose Powder (TOC)
Expires 11/30/2022
Prepared By Casey English 2/22/2019

Identification A & B: Passes
Bulk Density: 0.29 g/ml
Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
Total Aerobic microbial Count: 100 cfu/g
Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um

TUP: <9/600 cm^2
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022

07/26/2018 - *John Huang, PhD*
MP Biomedicals, LLC.
Quality Control Manager

MP Biomedicals, LLC

29525 Fountain Parkway
Solon, Ohio 44139

Telephone: 440/337-1200
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Certificate of Analysis

Product Description: Microcrystalline Cellulose Powder_
Catalog Number: 191499_
Lot: Q9483_

Formula: $(C_6H_{10}O_5)n$	**Formula Weight:** N/A
CAS #: 9004-34-6	**Storage:** 15 - 30°C
Physical Description: White Powder	

Test	Specification	Result
Identity Test	Passes	Passes
Purity	97.0 - 102.0%	97.0 - 102.0%
Moisture	<5.0%	3.4%
Particle Size/Mesh +60 mesh +200 mesh	Wt % <8% >45%	 <1% 55%
pH	5 - 7	6.73
Residue on Ignition	<0.05%	<0.05%
Water Soluble Substances	<12.0 mg/5 g	4.5 mg/5 g
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H001822
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Bulk Density (graduated cylinder): 0.31 g/ml
Conductivity: 18 µS/cm
Starch: Negative
Ether Soluble Substances: 0.01%
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Total Mold and Yeast Count: 20 cfu/g
Staphylococcus aureus: Absent/1 g
Pseudomonas aeruginosa: Absent/1 g
E. coli: Absent/1 g
Salmonella: Absent/10 g
Particle size:

- 450 mesh: 77%
- d10: 37 um
- d50: 139 um
- d90: 271 um

TUP: <9/600 cm^2
Degree of brightness: >88%
Powder flow-angle of repose: <42°
Recommended Retest Date: 11/30/2022

07/26/2018 - *John Huang, PhD*
MP Biomedicals, LLC.
Quality Control Manager

TOTAL SOLIDS BENCHSHEET							Batch:	BLD0432
Method: PSEP 1986							Date:	4/17/2023 12:54
(dry at 103-105 C)							Analyst:	CR
Instrumentation							Drying Oven:	15
							Analytical Balance:	B139298002

Batch drying time					
Record times as mm/dd/yy hh:mm		Oven Temp, C	TS (%) calculated as:	Oven Temps, °C	
Date/time in oven:	4/18/2023 10:52	106	Final dry wt (g) = (Dry Wt - Tare Wt)	Start Temp:	106
Date/time out:	4/19/2023 6:23	100	TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)	End Temp:	100
Elapsed hrs:	19.5				

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23D0396-01	0.7900	11.0900	5.2200	4.43	**43.01%**	No
23D0396-02	0.8100	11.5200	6.0500	5.24	**48.93%**	No
23D0396-03	0.7900	12.4800	5.9200	5.13	**43.88%**	No
23D0396-04	0.7700	11.5600	6.0600	5.29	**49.03%**	No

TOTAL SOLIDS BENCHSHEET

Method: PSEP 1986

(dry at 103-105 C)

Batch:	BLD0432
Date:	4/17/2023 12:54
Analyst:	CR
Drying Oven:	DL5
Analytical Balance:	BL3929[illegible]1

Instrumentation

Batch drying time

Record times as mm/dd/yy hh:mm

			Oven Temp, C
Date/time in oven:	4/18/23	10:52	106
Date/time out:	4/19/23	6:23	100
Elapsed hrs:	0.0		

TS (%) calculated as:

Final dry wt (g) = (Dry Wt - Tare Wt)

TS = (Final Dry Wt X 100)/ (sample & dish -dish tare)

Oven Temps, °C	
Start Temp:	106
End Temp:	100

SAMPLE ID	Dish Tare Wt (g)	Dish with Sample (g)	Dry Wt (g)	Solids Wt (g)	TS (%)	Sample Decanted
23D0396-01 A	0.79	11.09	5.22			No
23D0396-02 I	0.81	11.52	6.05			No
23D0396-03 I	0.79	12.48	5.92			No
23D0396-04 A	0.77	11.56	6.06			No

T/S + Screens
2 copies